Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. DRILL REENTER 1a. Type of work: 1b. Type of Well: Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone Multiple Zone 2. Name of Operator 9. API Well No. 30-025-53629 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area At surface At proposed prod. zone 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13. State 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. SUPO must be filed with the appropriate Forest Service Office). 6. Such other site specific information and/or plans as may be requested by the 25. Signature Name (Printed/Typed) Date Title Approved by (Signature) Name (Printed/Typed) Date Title Office Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

APPROVED WITH CONDITIONS

*(Instructions on page 2)

1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (57547)891083 Fax: (575) 748-9720 1000 Rio Brazos Road, Aztec, NM 87410

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

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

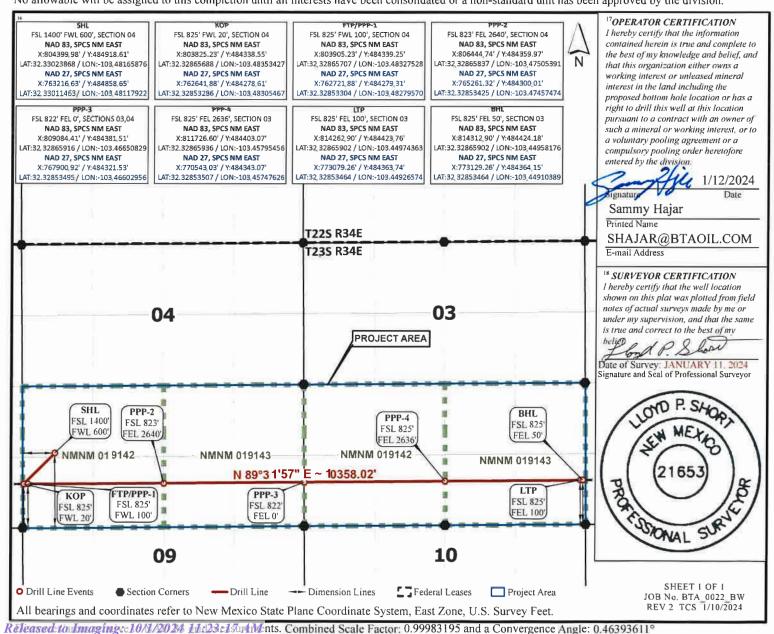
■ AMENDED REPORT

Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

WELL LOCATION AND ACREAGE DEDICATION PLAT

| 30-025-536 | 29 | | | 97292 | Ojo Chiso ; Bone Spring, South | | | | | | | |
|--|--------------|--------------------------|--------------|----------------|--------------------------------|---------------------------|--------------------|--------------------------------|-----|--|--|--|
| 336287 | de | | | BOB | | * Welt Number 4H | | | | | | |
| OGRID No. 260297 BTA OIL PRODUCERS, LLC 3420' | | | | | | | | | | | | |
| | | | | | ¹⁰ Surface Lo | ocation | | | | | | |
| UL or let no. | Section 4 | Township 23S | Range 34E | Lot Idn | Feel from the 1400' | North/South line SOUTH | Feet from the 600' | East/West line County WEST LEA | | | | |
| | | | 11 B | ottom F | Hole Location | n If Different Fi | om Surface | | | | | |
| UL or lot no. | Section 3 | Township 23S | Range 34E | Lot Idn | Feet from the 825' | North/South line SOUTH | Feet from the 50' | East/West line EAST | LEA | | | |
| ¹⁷ Dedicated Acres 640.00 | 13 J | oint or Infill Infill | 1ª Cons | olidation Code | 15 Order No. | | | | | | | |

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



| /ell Number | |
|-------------|--|
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| County | |
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| orizontal | |
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| /ell Number | |
| | |

KZ 06/29/2018

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description Effective May 25, 2021

| I. Operator: _B | ator: BTA Oil Producers, LLC | | | | 260297 | Date: | 3 / | 10/2024 |
|--------------------------------------|------------------------------|-----------|--|-------------------|--------------------------|--------------------------|----------|---------------------------------|
| II. Type: ⊠ Orig | ginal 🗆 | Amendment | due to □ 19.15.27.9 | 0.D(6)(a) NMA | C □ 19.15.27.9.D(| (6)(b) NMAC □ | Other. | |
| If Other, please do | escribe: | | | | | | | |
| | | | ormation for each n or connected to a ce | | | wells proposed to | be dri | lled or proposed to |
| Well Name | | API | ULSTR | Footages | Anticipated Oil BBL/D | Anticipated Gas MCF/D | P | Anticipated roduced Water BBL/D |
| Bobwhite 22304 4-3 I | FED | | L-4-23S-34E | 1400 FSL, 600 FWI | +/- 800 | +/- 2000 | +/- | 1200 |
| | complet | | following informati gle well pad or conn Spud Date | | | ı Initial | Flow | First Production Date |
| Bobwhite 22304 4-3 I | FED | | 12/21/2024 | 1/10/2025 | 1/24/2025 | 2/14/2025 | | 3/16/2025 |
| COM 4H | | | | | | | | |
| - | | | a complete descrip | - | • | | • | 5 1 |
| Subsection A thro | | | h a complete descri NMAC. | ption of the ac | tions Operator wil | I take to comply | with t | he requirements of |
| VIII. Best Mana during active and | | | ☑ Attach a complete e. | e description of | Operator's best r | nanagement prac | tices to | minimize venting |

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

🖾 Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

| Well | API | Anticipated Average Natural Gas Rate MCF/D | Anticipated Volume of Natural Gas for the First Year MCF |
|------|-----|---|--|
| | | | |
| | | | |

X. Natural Gas Gathering System (NGGS):

| Operator | System | ULSTR of Tie-in | Anticipated Gathering | Available Maximum Daily Capacity |
|----------|--------|-----------------|-----------------------|----------------------------------|
| | | | Start Date | of System Segment Tie-in |
| | | | | |
| | | | | |

| XI. Map. Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the |
|---|
| production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of |
| the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected. |

| XI | I. Line Ca | apacity. | The natural | gas gatherin | g system [| □ will □ | □ will no | ot have | capacity to | gather | 100% c | of the ar | nticipated | natural | gas |
|-----|------------|----------|-------------|----------------|---------------|----------|-----------|---------|-------------|--------|--------|-----------|------------|---------|-----|
| pro | duction vo | olume fr | om the well | prior to the d | late of first | produc | tion. | | | | | | | | |

| XIII. Line Pressure. Operator \square does \square does not anticipate that its existing well(s) connected to the same segment, or portion, of | f the |
|--|-------|
| natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well- | (s). |

| | A 1 . | O 1 | , 1 , | | 1 4. | • | 4 41 . | ased line pres | |
|-----|----------|----------|------------|--------|------------|-------------|--------------|----------------|------|
| I I | Affach (| Inerator | 's nian to | manage | nraduction | in rechange | to the incre | aced line nrec | cure |
| | | | | | | | | | |

| XIV. Confidentiality: \square Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information | ion provided in |
|---|------------------|
| Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the spec | ific information |
| for which confidentiality is asserted and the basis for such assertion. | |

(i)

Section 3 - Certifications Effective May 25, 2021

| | <u> </u> |
|---|--|
| Operator certifies that, | after reasonable inquiry and based on the available information at the time of submittal: |
| one hundred percent of | e to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering |
| hundred percent of the into account the current | e able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. The box, Operator will select one of the following: |
| Well Shut-In. ☐ Opera D of 19.15.27.9 NMAC | ttor will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection C; or |
| 2 | Plan. Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential |
| | ses for the natural gas until a natural gas gathering system is available, including: |
| (a) | power generation on lease; |
| (b) | power generation for grid; |
| (c) | compression on lease; |
| (d) | liquids removal on lease; |
| (e) | reinjection for underground storage; |
| (f) | reinjection for temporary storage; |
| (g) | reinjection for enhanced oil recovery; |
| (h) | fuel cell production: and |

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

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

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

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

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

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

Drilling Operations

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

Completions/Recompletions Operations

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

Production Operations

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

Performance Standards

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

Measurement & Estimation

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

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

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



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

Drilling Plan Data Report

09/09/2024

APD ID: 10400097536

Submission Date: 03/15/2024

Highlighted data reflects the most recent changes

Operator Name: BTA OIL PRODUCERS LLC

Well Number: 4H

Well Name: BOBWHITE 22304 4-3 FED COM Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

| Formation ID | Formation Name | Elevation | True Vertical | Measured Depth | Lithologies | Mineral Resources | Producing Formatio |
|--------------|------------------|-----------|---------------|-------------------|-------------|-------------------|-----------------------|
| 14095901 | QUATERNARY | 3420 | 0 | 0 | ALLUVIUM | NONE | N |
| 14095902 | RUSTLER | 1875 | 1545 | 1545 | ANHYDRITE | NONE | N |
| 14095903 | TOP SALT | 1575 | 1845 | 1845 | SALT | NONE | N |
| 14095904 | BASE OF SALT | 425 | 2995 | 2995 | SALT | NONE | N |
| 14095899 | DELAWARE | -1675 | 5095 | 5095 | LIMESTONE | NONE | N |
| 14095905 | BELL CANYON | -1805 | 5225 | 5225 | SANDSTONE | NATURAL GAS, OIL | N |
| 14095914 | CHERRY CANYON | -2640 | 6060 | 6060 | SANDSTONE | NATURAL GAS, OIL | N |
| 14095907 | BRUSHY CANYON | -3695 | 7115 | 7115 | SANDSTONE | NATURAL GAS, OIL | N |
| 14095908 | BONE SPRING LIME | -5045 | 8465 | 8465 | LIMESTONE | NATURAL GAS, OIL | N |
| 14095909 | BONE SPRING 1ST | -6125 | 9545 | 9545 | SANDSTONE | NATURAL GAS, OIL | Y |

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M Rating Depth: 14000

Equipment: The blowout preventer equipment (BOP) shown in Exhibit A will consist of a (5M system) double ram type (5,000 psi WP) preventer and a bag-type (Hydril) preventer (5000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 5" drill pipe rams on bottom. The BOPs will be installed on the 13-3/8" surface casing and utilized continuously until total depth is reached. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. A remote kill line will be used for the 5M system as per onshore order #2. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 5,000 psi WP rating. The 5M annular will be tested as per BLM drilling Operations Order No. 2, and will be test to 100% of working pressure.

Requesting Variance? NO

Variance request:

Well Name: BOBWHITE 22304 4-3 FED COM Well Number: 4H

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

Choke Diagram Attachment:

5M_choke_mannifold_20200917143047.pdf

Choke_Hose___Test_Chart_and_Specs_20190723082742.pdf

BOP Diagram Attachment:

5M_BOP_diagram_20200917143053.pdf

Section 3 - Casing

| Casing ID | String Type | Hole Size | Csg Size | Condition | Standard | Tapered String | Top Set MD | Bottom Set MD | Top Set TVD | Bottom Set TVD | Top Set MSL | Bottom Set MSL | Calculated casing length MD | Grade | Weight | Joint Type | Collapse SF | Burst SF | Joint SF Type | Joint SF | Body SF Type | Body SF |
|-----------|----------------|-----------|----------|-----------|----------|----------------|------------|---------------|-------------|----------------|-------------|----------------|-----------------------------|-----------|--------|------------|-------------|----------|---------------|----------|--------------|---------|
| 1 | SURFACE | 17.5 | 13.375 | NEW | API | N | 0 | 1545 | 0 | 1545 | 3420 | 1875 | 1545 | J-55 | 54.5 | ST&C | 1.7 | 4.1 | DRY | 6.1 | DRY | 10.1 |
| 2 | | 12.2 5 | 9.625 | NEW | API | N | 0 | 5100 | 0 | 5100 | 3419 | -1680 | 5100 | J-55 | 40 | LT&C | 1.9 | 1.6 | DRY | 2.5 | DRY | 3.1 |
| 3 | PRODUCTI ON | 8.75 | 5.5 | NEW | API | N | 0 | 19997 | 0 | 9680 | 3419 | -6260 | 19997 | P- 110 | 17 | BUTT | 1.6 | 2.2 | DRY | 1.7 | DRY | 1.6 |

| Casing | Attac | hmants |
|--------|-------|-----------|
| Casing | Allac | HILLEHICS |

| Casing ID: 1 | String | SURFACE |
|----------------------|--------|---------|
| Inspection Document: | | |

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Well Name: BOBWHITE 22304 4-3 FED COM Well Number: 4H

Casing Attachments

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Bobwhite_4H_Casing_Assumption_20240315082325.pdf

Section 4 - Cement

| String Type | Lead/Tail | Stage Tool Depth | Тор МD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|--------------|-----------|---------------------|--------|-----------|--------------|-------|---------|-------------|---------|------------------------|-----------------|
| SURFACE | Lead | | 0 | 1210 | 975 | 1.73 | 13.5 | 1686. 75 | 100 | Class C | 2% CaCl2 |
| SURFACE | Tail | | 1210 | 1545 | 340 | 1.35 | 14.8 | 459 | 100 | Class C | 2% CaCl2 |
| INTERMEDIATE | Lead | | 0 | 4545 | 1340 | 2.46 | 12.8 | 3296. 4 | 100 | Class C | 0.5% CaCl2 |
| INTERMEDIATE | Tail | | 4545 | 5100 | 200 | 1.34 | 14.8 | 268 | 25 | Class C | 1% CaCl2 |
| PRODUCTION | Lead | | 4100 | 9910 | 570 | 3.9 | 10.5 | 2223 | 60 | 25% Poz 75% Class C | 0.4% Fluid Loss |

Well Name: BOBWHITE 22304 4-3 FED COM

Well Number: 4H

| String Type | Lead/Tail | Stage Tool Depth | Top MD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|-------------|-----------|---------------------|--------|-----------|--------------|-------|---------|------------|---------|-------------|------------------|
| PRODUCTION | Tail | | 9910 | 1999 7 | 2550 | 1.25 | 14.4 | 3187. 5 | 25 | Class H | 0.2% LT Retarder |

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) | НА | Viscosity (CP) | Salinity (ppm) | Filtration (cc) | Additional Characteristics |
|-----------|--------------|----------------------|----------------------|----------------------|---------------------|-----------------------------|----|----------------|----------------|-----------------|----------------------------|
| 0 | 1545 | OTHER : FW SPUD | 8.3 | 8.4 | | | | | | | |
| 1545 | 5100 | OTHER : FW GEL | 9 | 9.4 | | | | | | | |
| 5100 | 9680 | OTHER : CUT BRINE | 8.7 | 9.3 | | | | | | | |

Well Name: BOBWHITE 22304 4-3 FED COM Well Number: 4H

Section 6 - Test, Logging, Coring

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

Drill Stem Tests will be based on geological sample shows.

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

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

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4732 Anticipated Surface Pressure: 2602

Anticipated Bottom Hole Temperature(F): 157

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

BTA_Oil_Producers_LLC___EMERGENCY_CALL_LIST_20190723161502.pdf H2S_Equipment_Schematic_20190723161502.pdf H2S_Plan_20190723161502.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

NGMP___Bobwhite_4H_20240315082842.pdf
Standard_Plan___Geographic___Bobwhite__4H_20240315082853.pdf
Bobwhite__4H_wall_plot_20240315082853.pdf

Other proposed operations facets description:

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

Other proposed operations facets attachment:

Other Variance attachment:

BOP_Break_Testing_Variance_20200917143242.pdf
BTA_Tubing_Requirement_Exception_Request_20230912152227.pdf
Multi_Bowl_Diagram_13_38_x_9_58_x_5_12_20200917143315.pdf

| | _ | BTA Oil l | Producers, LI | C | | | | | | WELL: | Bobwhi | ite 22304 | 4 4-3 F | ed Com # | #4 H |
|------------------|----------|-----------|---------------|------------|----------|--------------|--------------|-------|-------|----------|--------------|-----------|----------------|--------------------|-----------------|
| \mathbb{B}_{b} | | 104 S Pe | cos | | | | | | | TVD: | 9680 | | | | |
| | | Midland, | TX 79701 | | | | | | | MD: | 19997 | | | | |
| | | | DRILLING PLAN | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| Casing Pr | rogram | | | | | | | | | | | | | | |
| Hole Size | | | | _ ,, | _ ,, | Tapered | | | | | | Body | Joint | Dry/ | Mud |
| 11010 0120 | Csg.Size | From (MD) | To (MD) | From (TVD) | To (TVD) | String | Weight (lbs) | Grade | Conn. | Collapse | Burst | Tension | Tension | Buoyant | Weight (ppg) |
| | 13 3/8 | From (MD) | To (MD) | From (TVD) | | String | | | | _ | Burst 4.1 | Tension | Tension | Buoyant | |
| 17 1/2 | | 0 | | From (TVD) | 1545 | String No | 54.5 | J-55 | | 1.7 | 4. 1 | Tension | Tension 6.1 | Buoyant Dry | (ppg) |

BTA Oil Producers, LLC

Lea County, NM (NAD 83) Bobwhite 22304 4-3 Fed Com Bobwhite 22304 4-3 Fed Com #4H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

12 March, 2024

Planning Report - Geographic

Database: EDM5000_OLD
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Bobwhite 22304 4-3 Fed Com
Well: Bobwhite 22304 4-3 Fed Com #4H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Bobwhite 22304 4-3 Fed Com #4H

GL @ 3420.0usft GL @ 3420.0usft

Grid

Minimum Curvature

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

Map System:US State Plane 1983Geo Datum:North American Datum 1983

Map Zone: New Mexico Eastern Zone

System Datum: Ground Level

Using geodetic scale factor

60.36

48.893.54545180

Site Bobwhite 22304 4-3 Fed Com

 Site Position:
 Northing:
 0.00 usft
 Latitude:
 30° 59' 18.404 N

 From:
 Map
 Easting:
 0.00 usft
 Longitude:
 106° 3' 38.987 W

Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 "

Well Bobwhite 22304 4-3 Fed Com #4H

 Well Position
 +N/-S
 0.0 usft
 Northing:
 484,918.61 usft
 Latitude:
 32° 19' 48.859 N

 +E/-W
 0.0 usft
 Easting:
 804,399.98 usft
 Longitude:
 103° 28' 53.972 W

+E/-W 0.0 usft Easting: 804,399.98 usft Longitude: 103*28*53.972 W

Position Uncertainty 0.0 usft Wellhead Elevation: usft Ground Level: 3,420.0 usft

Grid Convergence: $0.46~^{\circ}$

Wellbore #1

Magnetics Model Name Sample Date Declination Dip Angle Field Strength

(°) (°) (nT)

7.72

Design Design #1 Audit Notes: Version: Phase: **PROTOTYPE** Tie On Depth: 0.0 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 92.86

Plan Survey Tool Program Date 3/12/2024

IGRF200510

Depth From Depth To (usft) (usft) Survey (Wellbore) Tool Name Remarks

12/31/2009

1 0.0 19,997.5 Design #1 (Wellbore #1)

Planning Report - Geographic

Database: EDM5000_OLD

Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Bobwhite 22304 4-3 Fed Com

Well: Bobwhite 22304 4-3 Fed Com #4H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Bobwhite 22304 4-3 Fed Com #4H

GL @ 3420.0usft GL @ 3420.0usft

Grid

Minimum Curvature

| lan Sections | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3,500.0 | 0.00 | 0.00 | 3,500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 4,050.0 | 11.00 | 224.74 | 4,046.6 | -37.4 | -37.0 | 2.00 | 2.00 | 0.00 | 224.74 | |
| 7,777.9 | 11.00 | 224.74 | 7,706.1 | -542.7 | -537.7 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 8,327.9 | 0.00 | 0.00 | 8,252.7 | -580.1 | -574.8 | 2.00 | -2.00 | 0.00 | 180.00 | |
| 8,575.2 | 0.00 | 0.00 | 8,500.0 | -580.1 | -574.8 | 0.00 | 0.00 | 0.00 | 0.00 | KOP Bobwhite #4H |
| 9,182.3 | 0.00 | 0.00 | 9,107.0 | -580.1 | -574.8 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 10,082.3 | 90.00 | 89.53 | 9,680.0 | -575.4 | -1.8 | 10.00 | 10.00 | 0.00 | 89.53 | |
| 19,997.5 | 90.00 | 89.53 | 9,680.0 | -494.4 | 9,913.0 | 0.00 | 0.00 | 0.00 | 0.00 | BHL bobwhite #4h |

Planning Report - Geographic

Database: EDM5000_OLD
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Bobwhite 22304 4-3 Fed Com
Well: Bobwhite 22304 4-3 Fed Com #4H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Bobwhite 22304 4-3 Fed Com #4H

GL @ 3420.0usft GL @ 3420.0usft

Grid Minimum Curvature

| Planned Survey | | | | | | | | | |
|--------------------|----------------|------------------|--------------------|----------------|----------------|--------------------------|--------------------------|--------------------------------------|--|
| Measured | | | Vertical | | | Мар | Мар | | |
| Depth | Inclination | Azimuth | Depth | +N/-S | +E/-W | Northing | Easting | | |
| (usft) | (°) | (°) | (usft) | (usft) | (usft) | (usft) | (usft) | Latitude | Longitude |
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 700.0 800.0 | 0.00 | 0.00 0.00 | 700.0 800.0 | 0.0 0.0 | 0.0 0.0 | 484,918.61 484,918.61 | 804,399.98 804,399.98 | 32° 19' 48.859 N 32° 19' 48.859 N | 103° 28' 53.972 W 103° 28' 53.972 W |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,600.0 | 0.00 | 0.00 | 1,600.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,700.0 | 0.00 | 0.00 | 1,700.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,800.0 | 0.00 | 0.00 | 1,800.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 1,900.0 | 0.00 | 0.00 | 1,900.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,000.0 | 0.00 | 0.00 | 2,000.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,100.0 | 0.00 | 0.00 | 2,100.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,200.0 | 0.00 | 0.00 | 2,200.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,300.0 | 0.00 | 0.00 | 2,300.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,400.0 | 0.00 | 0.00 | 2,400.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,500.0 2,600.0 | 0.00 | 0.00 0.00 | 2,500.0 2,600.0 | 0.0 0.0 | 0.0 0.0 | 484,918.61 484,918.61 | 804,399.98 804,399.98 | 32° 19' 48.859 N 32° 19' 48.859 N | 103° 28' 53.972 W 103° 28' 53.972 W |
| 2,700.0 | 0.00 | 0.00 | 2,700.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,800.0 | 0.00 | 0.00 | 2,800.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 2,900.0 | 0.00 | 0.00 | 2,900.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 3,000.0 | 0.00 | 0.00 | 3,000.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 3,100.0 | 0.00 | 0.00 | 3,100.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 3,200.0 | 0.00 | 0.00 | 3,200.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 3,300.0 | 0.00 | 0.00 | 3,300.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 3,400.0 | 0.00 | 0.00 | 3,400.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 3,500.0 | 0.00 | 0.00 | 3,500.0 | 0.0 | 0.0 | 484,918.61 | 804,399.98 | 32° 19' 48.859 N | 103° 28' 53.972 W |
| 3,600.0 | 2.00 | 224.74 | 3,600.0 | -1.2 | -1.2 | 484,917.37 | 804,398.75 | 32° 19' 48.847 N | 103° 28' 53.986 W |
| 3,700.0 | 4.00 | 224.74 | 3,699.8 | -5.0 | -4.9 | 484,913.65 | 804,395.07 | 32° 19' 48.811 N | 103° 28' 54.029 W |
| 3,800.0 | 6.00 | 224.74 | 3,799.5 | -11.1 | -11.0 | 484,907.46 | 804,388.93 | 32° 19' 48.750 N | 103° 28' 54.101 W |
| 3,900.0 | 8.00 | 224.74 | 3,898.7 | -19.8 | -19.6 | 484,898.81 | 804,380.35 | 32° 19' 48.665 N | 103° 28' 54.202 W |
| 4,000.0 | 10.00 | 224.74 | 3,997.5 | -30.9 | -30.6 | 484,887.69 | 804,369.35 | 32° 19' 48.556 N | 103° 28' 54.331 W |
| 4,050.0 | 11.00 | 224.74 | 4,046.6 | -37.4 | -37.0 | 484,881.22 | 804,362.93 | 32° 19' 48.492 N | 103° 28' 54.407 W |
| 4,100.0 | 11.00 | 224.74 | 4,095.7 | -44.2 | -43.8 | 484,874.45 | 804,356.22 | 32° 19' 48.426 N | 103° 28' 54.486 W |
| 4,200.0 4,300.0 | 11.00 | 224.74 | 4,193.9 | -57.7 -71.3 | -57.2 -70.6 | 484,860.89 | 804,342.79 804,329.36 | 32° 19' 48.293 N | 103° 28' 54.643 W 103° 28' 54.801 W |
| 4,400.0 | 11.00 11.00 | 224.74 224.74 | 4,292.0 4,390.2 | -71.3 -84.8 | -70.6 -84.1 | 484,847.34 484,833.78 | 804,315.93 | 32° 19' 48.160 N 32° 19' 48.026 N | 103° 28' 54.959 W |
| 4,500.0 | 11.00 | 224.74 | 4,390.2 | -04.6 -98.4 | -04.1 -97.5 | 484,820.23 | 804,302.50 | 32° 19' 47.893 N | 103° 28' 55.117 W |
| 4,600.0 | 11.00 | 224.74 | 4,586.5 | -111.9 | -110.9 | 484,806.68 | 804,289.07 | 32° 19' 47.760 N | 103° 28' 55.274 W |
| 4,700.0 | 11.00 | 224.74 | 4,684.7 | -125.5 | -124.3 | 484,793.12 | 804,275.64 | 32° 19' 47.627 N | 103° 28' 55.432 W |
| 4,800.0 | 11.00 | 224.74 | 4,782.8 | -139.0 | -137.8 | 484,779.57 | 804,262.21 | 32° 19' 47.494 N | 103° 28' 55.590 W |
| 4,900.0 | 11.00 | 224.74 | 4,881.0 | -152.6 | -151.2 | 484,766.01 | 804,248.78 | 32° 19' 47.361 N | 103° 28' 55.748 W |
| 5,000.0 | 11.00 | 224.74 | 4,979.2 | -166.2 | -164.6 | 484,752.46 | 804,235.35 | 32° 19' 47.228 N | 103° 28' 55.906 W |
| 5,100.0 | 11.00 | 224.74 | 5,077.3 | -179.7 | -178.1 | 484,738.91 | 804,221.92 | 32° 19' 47.095 N | 103° 28' 56.063 W |
| 5,200.0 | 11.00 | 224.74 | 5,175.5 | -193.3 | -191.5 | 484,725.35 | 804,208.49 | 32° 19' 46.962 N | 103° 28' 56.221 W |
| 5,300.0 | 11.00 | 224.74 | 5,273.7 | -206.8 | -204.9 | 484,711.80 | 804,195.06 | 32° 19' 46.829 N | 103° 28' 56.379 W |

Planning Report - Geographic

Database: EDM5000_OLD
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Bobwhite 22304 4-3 Fed Com
Well: Bobwhite 22304 4-3 Fed Com #4H

Wellbore: Wellbore #1

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Bobwhite 22304 4-3 Fed Com #4H

GL @ 3420.0usft GL @ 3420.0usft

Grid Minimum Curvature

Wellbore: Wellbore #1

| Planned Survey | , | | | | | | | | |
|-----------------------------|--------------------|------------------|-----------------------------|------------------|------------------|---------------------------|--------------------------|--------------------------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 5,400.0 | 11.00 | 224.74 | 5,371.8 | -220.4 | -218.4 | 484,698.24 | 804,181.63 | 32° 19′ 46.696 N | 103° 28' 56.537 V |
| 5,500.0 | 11.00 | 224.74 | 5,470.0 | -233.9 | -231.8 | 484,684.69 | 804,168.20 | 32° 19' 46.563 N | 103° 28' 56.694 V |
| 5,600.0 | 11.00 | 224.74 | 5,568.1 | -247.5 | -245.2 | 484,671.14 | 804,154.77 | 32° 19' 46.430 N | 103° 28' 56.852 V |
| 5,700.0 | 11.00 | 224.74 | 5,666.3 | -261.0 | -258.6 | 484,657.58 | 804,141.34 | 32° 19' 46.297 N | 103° 28' 57.010 V |
| 5,800.0 | 11.00 | 224.74 | 5,764.5 | -274.6 | -272.1 | 484,644.03 | 804,127.91 | 32° 19' 46.164 N | 103° 28' 57.168 V |
| 5,900.0 | 11.00 | 224.74 | 5,862.6 | -288.1 | -285.5 | 484,630.47 | 804,114.48 | 32° 19' 46.031 N | 103° 28' 57.325 V |
| 6,000.0 | 11.00 | 224.74 | 5,960.8 | -301.7 | -298.9 | 484,616.92 | 804,101.05 | 32° 19' 45.898 N | 103° 28' 57.483 V |
| 6,100.0 | 11.00 | 224.74 | 6,059.0 | -315.2 | -312.4 | 484,603.37 | 804,087.62 | 32° 19' 45.764 N | 103° 28' 57.641 V |
| 6,200.0 | 11.00 | 224.74 | 6,157.1 | -328.8 | -325.8 | 484,589.81 | 804,074.19 | 32° 19' 45.631 N | 103° 28' 57.799 V |
| 6,300.0 | 11.00 | 224.74 | 6,255.3 | -342.4 | -339.2 | 484,576.26 | 804,060.76 | 32° 19' 45.498 N | 103° 28' 57.957 V |
| 6,400.0 | 11.00 | 224.74 | 6,353.5 | -355.9 | -352.7 | 484,562.70 | 804,047.33 | 32° 19' 45.365 N | 103° 28' 58.114 V |
| 6,500.0 | 11.00 | 224.74 | 6,451.6 | -369.5 | -366.1 | 484,549.15 | 804,033.90 | 32° 19' 45.232 N | 103° 28' 58.272 V |
| 6,600.0 | 11.00 | 224.74 | 6,549.8 | -383.0 | -379.5 | 484,535.60 | 804,020.47 | 32° 19' 45.099 N | 103° 28' 58.430 V |
| 6,700.0 | 11.00 | 224.74 224.74 | 6,647.9 6,746.1 | -396.6 -410.1 | -392.9 -406.4 | 484,522.04 | 804,007.04 | 32° 19' 44.966 N | 103° 28' 58.588 V |
| 6,800.0 | 11.00 | | 6,746.1 | | | 484,508.49 484,494.93 | 803,993.61 803,980.18 | 32° 19' 44.833 N | 103° 28' 58.745 \ |
| 6,900.0 7,000.0 | 11.00 11.00 | 224.74 224.74 | 6,844.3 6,942.4 | -423.7 -437.2 | -419.8 -433.2 | 484,494.93 484,481.38 | 803,966.75 | 32° 19' 44.700 N 32° 19' 44.567 N | 103° 28' 58.903 \ 103° 28' 59.061 \ |
| 7,000.0 | 11.00 | 224.74 | 7,040.6 | -457.2 -450.8 | -433.2 -446.7 | 484,467.83 | 803,953.32 | 32° 19' 44.434 N | 103° 28' 59.219 \ |
| 7,100.0 | 11.00 | 224.74 | 7,040.0 | -450.6 -464.3 | -440.7 -460.1 | 484,454.27 | 803,939.89 | 32° 19' 44.301 N | 103° 28' 59.376 \ |
| 7,200.0 | 11.00 | 224.74 | 7,136.6 | -404.3 -477.9 | -473.5 | 484,440.72 | 803,926.46 | 32° 19' 44.168 N | 103° 28' 59.534 \ |
| 7,300.0 | 11.00 | 224.74 | 7,230.9 | -477.9 -491.5 | -473.3 -487.0 | 484,427.16 | 803,913.03 | 32° 19' 44.035 N | 103° 28' 59.692 \ |
| 7,500.0 | 11.00 | 224.74 | 7,433.2 | -505.0 | -500.4 | 484,413.61 | 803,899.60 | 32° 19' 43.902 N | 103° 28' 59.850 \ |
| 7,600.0 | 11.00 | 224.74 | 7,531.4 | -518.6 | -513.8 | 484,400.06 | 803,886.17 | 32° 19' 43.769 N | 103° 29' 0.007 ' |
| 7,700.0 | 11.00 | 224.74 | 7,629.6 | -532.1 | -527.2 | 484,386.50 | 803,872.74 | 32° 19' 43.636 N | 103° 29' 0.165 ' |
| 7,777.9 | 11.00 | 224.74 | 7,706.1 | -542.7 | -537.7 | 484,375.94 | 803,862.27 | 32° 19' 43.532 N | 103° 29' 0.288 \ |
| 7,800.0 | 10.56 | 224.74 | 7,727.7 | -545.6 | -540.6 | 484,373.01 | 803,859.37 | 32° 19' 43.503 N | 103° 29' 0.322 ' |
| 7,900.0 | 8.56 | 224.74 | 7,826.4 | -557.4 | -552.3 | 484,361.21 | 803,847.68 | 32° 19' 43.387 N | 103° 29' 0.460 \ |
| 8,000.0 | 6.56 | 224.74 | 7,925.5 | -566.7 | -561.6 | 484,351.87 | 803,838.42 | 32° 19' 43.296 N | 103° 29' 0.568 \ |
| 8,100.0 | 4.56 | 224.74 | 8,025.0 | -573.6 | -568.4 | 484,344.99 | 803,831.61 | 32° 19' 43.228 N | 103° 29' 0.648 \ |
| 8,200.0 | 2.56 | 224.74 | 8,124.8 | -578.0 | -572.7 | 484,340.58 | 803,827.24 | 32° 19' 43.185 N | 103° 29' 0.700 \ |
| 8,300.0 | 0.56 | 224.74 | 8,224.8 | -580.0 | -574.7 | 484,338.65 | 803,825.32 | 32° 19' 43.166 N | 103° 29' 0.722 \ |
| 8,327.9 | 0.00 | 0.00 | 8,252.7 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 \ |
| 8,400.0 | 0.00 | 0.00 | 8,324.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 \ |
| 8,500.0 | 0.00 | 0.00 | 8,424.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 \ |
| 8,575.2 | 0.00 | 0.00 | 8,500.0 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 ' |
| 8,600.0 | 0.00 | 0.00 | 8,524.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 ' |
| 8,700.0 | 0.00 | 0.00 | 8,624.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 ' |
| 8,800.0 | 0.00 | 0.00 | 8,724.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 ' |
| 8,900.0 | 0.00 | 0.00 | 8,824.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 |
| 9,000.0 | 0.00 | 0.00 | 8,924.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 ' |
| 9,100.0 | 0.00 | 0.00 | 9,024.8 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 ' |
| 9,182.3 | 0.00 | 0.00 | 9,107.0 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 \ |
| 9,200.0 | 1.77 | 89.53 | 9,124.8 | -580.1 | -574.5 | 484,338.55 | 803,825.50 | 32° 19' 43.165 N | 103° 29' 0.720 \ |
| 9,300.0 | 11.77 | 89.53 | 9,223.9 | -580.0 | -562.7 | 484,338.65 | 803,837.28 | 32° 19' 43.165 N | 103° 29' 0.583 ' |
| 9,400.0 | 21.77 | 89.53 | 9,319.6 | -579.7 | -533.9 | 484,338.88 | 803,866.10 | 32° 19' 43.165 N | 103° 29' 0.247 \ |
| 9,500.0 | 31.77 | 89.53 | 9,408.7 | -579.4 | -488.9 | 484,339.25 | 803,911.08 | 32° 19' 43.165 N | 103° 28' 59.723 \ |
| 9,600.0 | 41.77 | 89.53 | 9,488.7 | -578.9 | -429.1 | 484,339.74 | 803,970.87 | 32° 19' 43.165 N | 103° 28' 59.026 \ |
| 9,700.0 | 51.77 | 89.53 | 9,557.1 | -578.3 | -356.3 | 484,340.33 | 804,043.63 | 32° 19' 43.165 N | 103° 28' 58.178 \ |
| 9,800.0 | 61.77 | 89.53 | 9,611.9 | -577.6 | -272.8 | 484,341.02 | 804,127.17 | 32° 19' 43.165 N | 103° 28' 57.204 \ |
| 9,900.0 | 71.77 | 89.53 | 9,651.2 | -576.9 | -181.0 | 484,341.77 | 804,218.95 | 32° 19' 43.166 N | 103° 28' 56.135 |
| 10,000.0 | 81.77 | 89.53 | 9,674.1 | -576.1 | -83.8 | 484,342.56 | 804,316.17 | 32° 19' 43.166 N | 103° 28' 55.002 \ |
| 10,082.3 | 90.00 | 89.53 | 9,680.0 | -575.4 | -1.8 | 484,343.23 | 804,398.16 | 32° 19' 43.166 N | 103° 28' 54.046 \ |
| 10,100.0 | 90.00 | 89.53 | 9,680.0 | -575.2 | 15.9 | 484,343.37 | 804,415.88 | 32° 19' 43.166 N | 103° 28' 53.840 \ |
| 10,200.0 | 90.00 | 89.53 | 9,680.0 | -574.4 | 115.9 | 484,344.19 | 804,515.87 | 32° 19' 43.166 N | 103° 28' 52.674 \ |
| 10,300.0 | 90.00 | 89.53 | 9,680.0 | -573.6 | 215.9 | 484,345.01 | 804,615.87 | 32° 19' 43.167 N | 103° 28' 51.509 ' |

Planning Report - Geographic

Database: EDM5000_OLD
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Bobwhite 22304 4-3 Fed Com
Well: Bobwhite 22304 4-3 Fed Com #4H

Wellbore: Wellbore #1

Design: Design #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

GL @ 3420.0usft

Well Bobwhite 22304 4-3 Fed Com #4H

GL @ 3420.0usft GL @ 3420.0usft Grid

Minimum Curvature

| Planned Survey | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------------------------|------------------|--------------------|---------------------------|--------------------------|--------------------------------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 10,400.0 | 90.00 | 89.53 | 9,680.0 | -572.8 | 315.9 | 484,345.82 | 804,715.87 | 32° 19' 43.167 N | 103° 28' 50.343 W |
| 10,500.0 | 90.00 | 89.53 | 9,680.0 | -572.0 | 415.9 | 484,346.64 | 804,815.86 | 32° 19' 43.167 N | 103° 28' 49.178 W |
| 10,600.0 | 90.00 | 89.53 | 9,680.0 | -571.2 | 515.9 | 484,347.46 | 804,915.86 | 32° 19' 43.167 N | 103° 28' 48.013 W |
| 10,700.0 | 90.00 | 89.53 | 9,680.0 | -570.3 | 615.9 | 484,348.27 | 805,015.85 | 32° 19' 43.167 N | 103° 28' 46.847 W |
| 10,800.0 | 90.00 | 89.53 | 9,680.0 | -569.5 | 715.9 | 484,349.09 | 805,115.85 | 32° 19' 43.168 N | 103° 28' 45.682 W |
| 10,900.0 | 90.00 | 89.53 | 9,680.0 | -568.7 | 815.9 | 484,349.90 | 805,215.84 | 32° 19' 43.168 N | 103° 28' 44.516 W |
| 11,000.0 | 90.00 | 89.53 | 9,680.0 | -567.9 | 915.9 | 484,350.72 | 805,315.84 | 32° 19' 43.168 N | 103° 28' 43.351 W |
| 11,100.0 11,200.0 | 90.00 90.00 | 89.53 89.53 | 9,680.0 | -567.1 -566.3 | 1,015.9 | 484,351.54 | 805,415.83 | 32° 19' 43.168 N 32° 19' 43.168 N | 103° 28' 42.186 W 103° 28' 41.020 W |
| 11,300.0 | 90.00 | 69.53 89.53 | 9,680.0 9,680.0 | -565.4 | 1,115.9 1,215.9 | 484,352.35 484,353.17 | 805,515.83 805,615.83 | 32° 19' 43.168 N | 103° 28' 39.855 W |
| 11,400.0 | 90.00 | 89.53 | 9,680.0 | -564.6 | 1,315.9 | 484,353.17 | 805,715.82 | 32° 19' 43.169 N | 103° 28' 38.689 W |
| 11,500.0 | 90.00 | 89.53 | 9,680.0 | -563.8 | 1,415.9 | 484,354.80 | 805,815.82 | 32° 19' 43.169 N | 103° 28' 37.524 W |
| 11,600.0 | 90.00 | 89.53 | 9,680.0 | -563.0 | 1,515.9 | 484,355.62 | 805,915.81 | 32° 19' 43.169 N | 103° 28' 36.358 W |
| 11,700.0 | 90.00 | 89.53 | 9,680.0 | -562.2 | 1,615.8 | 484,356.44 | 806,015.81 | 32° 19' 43.169 N | 103° 28' 35.193 W |
| 11,800.0 | 90.00 | 89.53 | 9,680.0 | -561.4 | 1,715.8 | 484,357.25 | 806,115.80 | 32° 19' 43.169 N | 103° 28' 34.028 W |
| 11,900.0 | 90.00 | 89.53 | 9,680.0 | -560.5 | 1,815.8 | 484,358.07 | 806,215.80 | 32° 19' 43.169 N | 103° 28' 32.862 W |
| 12,000.0 | 90.00 | 89.53 | 9,680.0 | -559.7 | 1,915.8 | 484,358.89 | 806,315.79 | 32° 19' 43.170 N | 103° 28' 31.697 W |
| 12,100.0 | 90.00 | 89.53 | 9,680.0 | -558.9 | 2,015.8 | 484,359.70 | 806,415.79 | 32° 19' 43.170 N | 103° 28' 30.531 W |
| 12,200.0 | 90.00 | 89.53 | 9,680.0 | -558.1 | 2,115.8 | 484,360.52 | 806,515.78 | 32° 19' 43.170 N | 103° 28' 29.366 W |
| 12,300.0 | 90.00 | 89.53 | 9,680.0 | -557.3 | 2,215.8 | 484,361.34 | 806,615.78 | 32° 19' 43.170 N | 103° 28' 28.201 W |
| 12,400.0 | 90.00 | 89.53 | 9,680.0 | -556.5 | 2,315.8 | 484,362.15 | 806,715.78 | 32° 19' 43.170 N | 103° 28' 27.035 W |
| 12,500.0 | 90.00 | 89.53 | 9,680.0 | -555.6 | 2,415.8 | 484,362.97 | 806,815.77 | 32° 19' 43.170 N | 103° 28' 25.870 W |
| 12,600.0 | 90.00 | 89.53 | 9,680.0 | -554.8 | 2,515.8 | 484,363.78 | 806,915.77 | 32° 19' 43.170 N | 103° 28' 24.704 W |
| 12,700.0 | 90.00 | 89.53 | 9,680.0 | -554.0 | 2,615.8 | 484,364.60 | 807,015.76 | 32° 19' 43.171 N | 103° 28' 23.539 W |
| 12,800.0 | 90.00 | 89.53 | 9,680.0 | -553.2 | 2,715.8 | 484,365.42 | 807,115.76 | 32° 19' 43.171 N | 103° 28' 22.374 W |
| 12,900.0 | 90.00 | 89.53 | 9,680.0 | -552.4 | 2,815.8 | 484,366.23 | 807,215.75 | 32° 19' 43.171 N | 103° 28' 21.208 W |
| 13,000.0 | 90.00 | 89.53 | 9,680.0 | -551.6 | 2,915.8 | 484,367.05 | 807,315.75 | 32° 19' 43.171 N | 103° 28' 20.043 W |
| 13,100.0 | 90.00 | 89.53 | 9,680.0 | -550.8 | 3,015.8 | 484,367.87 | 807,415.74 | 32° 19' 43.171 N | 103° 28' 18.877 W |
| 13,200.0 | 90.00 | 89.53 | 9,680.0 | -549.9 | 3,115.8 | 484,368.68 | 807,515.74 | 32° 19' 43.171 N | 103° 28' 17.712 W |
| 13,300.0 | 90.00 | 89.53 89.53 | 9,680.0 | -549.1 | 3,215.8 | 484,369.50 | 807,615.74 | 32° 19' 43.171 N | 103° 28' 16.547 W |
| 13,400.0 13,500.0 | 90.00 90.00 | 89.53 89.53 | 9,680.0 9,680.0 | -548.3 -547.5 | 3,315.8 3,415.8 | 484,370.32 484,371.13 | 807,715.73 807,815.73 | 32° 19' 43.171 N 32° 19' 43.172 N | 103° 28' 15.381 W 103° 28' 14.216 W |
| 13,600.0 | 90.00 | 89.53 | 9,680.0 | -547.5 -546.7 | 3,515.8 | 484,371.15 | 807,915.72 | 32° 19' 43.172 N | 103° 28′ 13.050 W |
| 13,700.0 | 90.00 | 89.53 | 9,680.0 | -545.7 -545.9 | 3,615.8 | 484,372.77 | 808,015.72 | 32° 19' 43.172 N | 103° 28' 11.885 W |
| 13,800.0 | 90.00 | 89.53 | 9,680.0 | -545.0 | 3,715.8 | 484,373.58 | 808,115.71 | 32° 19' 43.172 N | 103° 28' 10.720 W |
| 13,900.0 | 90.00 | 89.53 | 9,680.0 | -544.2 | 3,815.8 | 484,374.40 | 808,215.71 | 32° 19' 43.172 N | 103° 28' 9.554 W |
| 14,000.0 | 90.00 | 89.53 | 9,680.0 | -543.4 | 3,915.8 | 484,375.21 | 808,315.70 | 32° 19' 43.172 N | 103° 28' 8.389 W |
| 14,100.0 | 90.00 | 89.53 | 9,680.0 | -542.6 | 4,015.8 | 484,376.03 | 808,415.70 | 32° 19' 43.172 N | 103° 28' 7.223 W |
| 14,200.0 | 90.00 | 89.53 | 9,680.0 | -541.8 | 4,115.8 | 484,376.85 | 808,515.69 | 32° 19' 43.172 N | 103° 28' 6.058 W |
| 14,300.0 | 90.00 | 89.53 | 9,680.0 | -541.0 | 4,215.8 | 484,377.66 | 808,615.69 | 32° 19' 43.172 N | 103° 28' 4.893 W |
| 14,400.0 | 90.00 | 89.53 | 9,680.0 | -540.1 | 4,315.8 | 484,378.48 | 808,715.69 | 32° 19' 43.172 N | 103° 28' 3.727 W |
| 14,500.0 | 90.00 | 89.53 | 9,680.0 | -539.3 | 4,415.8 | 484,379.30 | 808,815.68 | 32° 19' 43.173 N | 103° 28' 2.562 W |
| 14,600.0 | 90.00 | 89.53 | 9,680.0 | -538.5 | 4,515.8 | 484,380.11 | 808,915.68 | 32° 19' 43.173 N | 103° 28' 1.396 W |
| 14,700.0 | 90.00 | 89.53 | 9,680.0 | -537.7 | 4,615.7 | 484,380.93 | 809,015.67 | 32° 19' 43.173 N | 103° 28' 0.231 W |
| 14,800.0 | 90.00 | 89.53 | 9,680.0 | -536.9 | 4,715.7 | 484,381.75 | 809,115.67 | 32° 19' 43.173 N | 103° 27' 59.066 W |
| 14,900.0 | 90.00 | 89.53 | 9,680.0 | -536.1 | 4,815.7 | 484,382.56 | 809,215.66 | 32° 19' 43.173 N | 103° 27' 57.900 W |
| 15,000.0 | 90.00 | 89.53 | 9,680.0 | -535.2 | 4,915.7 | 484,383.38 | 809,315.66 | 32° 19' 43.173 N | 103° 27' 56.735 W |
| 15,100.0 | 90.00 | 89.53 | 9,680.0 | -534.4 | 5,015.7 | 484,384.20 | 809,415.65 | 32° 19' 43.173 N | 103° 27' 55.569 W |
| 15,200.0 | 90.00 | 89.53 | 9,680.0 | -533.6 | 5,115.7 | 484,385.01 | 809,515.65 | 32° 19' 43.173 N | 103° 27' 54.404 W |
| 15,300.0 | 90.00 | 89.53 | 9,680.0 | -532.8 | 5,215.7 | 484,385.83 | 809,615.65 | 32° 19' 43.173 N | 103° 27' 53.239 W |
| 15,400.0 | 90.00 | 89.53 | 9,680.0 | -532.0 | 5,315.7 | 484,386.65 | 809,715.64 | 32° 19' 43.173 N | 103° 27' 52.073 W |
| 15,500.0 | 90.00 | 89.53 | 9,680.0 | -531.2 | 5,415.7 | 484,387.46 | 809,815.64 | 32° 19' 43.173 N | 103° 27' 50.908 W |
| 15,600.0 | 90.00 | 89.53 | 9,680.0 | -530.3 530.5 | 5,515.7 5,615.7 | 484,388.28 | 809,915.63 | 32° 19' 43.173 N | 103° 27' 49.742 W |
| 15,700.0 15,800.0 | 90.00 | 89.53 89.53 | 9,680.0 9,680.0 | -529.5 -528.7 | 5,615.7 5,715.7 | 484,389.09 484 389 91 | 810,015.63 810,115.62 | 32° 19' 43.173 N 32° 19' 43.173 N | 103° 27' 48.577 W 103° 27' 47.412 W |
| 15,800.0 | 90.00 | 89.53 | 9,680.0 | -520.7 | 5,715.7 | 484,389.91 | 810,115.62 | 32 18 43.113 N | 103 ZI 41.412 W |

Planning Report - Geographic

Database: EDM5000_OLD
Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Bobwhite 22304 4-3 Fed Com
Well: Bobwhite 22304 4-3 Fed Com #4H

Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Bobwhite 22304 4-3 Fed Com #4H

GL @ 3420.0usft GL @ 3420.0usft

Grid

Minimum Curvature

| anned Survey | | | | | | | | | |
|-----------------------------|-----------------|----------------|-----------------------------|-----------------|-----------------|---------------------------|--------------------------|------------------|-------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (usft) | Map Easting (usft) | Latitude | Longitude |
| 15,900.0 | 90.00 | 89.53 | 9,680.0 | -527.9 | 5,815.7 | 484,390.73 | 810,215.62 | 32° 19' 43.173 N | 103° 27' 46.246 V |
| 16,000.0 | 90.00 | 89.53 | 9,680.0 | -527.1 | 5,915.7 | 484,391.54 | 810,315.61 | 32° 19' 43.173 N | 103° 27' 45.081 V |
| 16,100.0 | 90.00 | 89.53 | 9,680.0 | -526.3 | 6,015.7 | 484,392.36 | 810,415.61 | 32° 19' 43.173 N | 103° 27' 43.915 V |
| 16,200.0 | 90.00 | 89.53 | 9,680.0 | -525.4 | 6,115.7 | 484,393.18 | 810,515.61 | 32° 19' 43.174 N | 103° 27' 42.750 V |
| 16,300.0 | 90.00 | 89.53 | 9,680.0 | -524.6 | 6,215.7 | 484,393.99 | 810,615.60 | 32° 19' 43.174 N | 103° 27' 41.585 V |
| 16,400.0 | 90.00 | 89.53 | 9,680.0 | -523.8 | 6,315.7 | 484,394.81 | 810,715.60 | 32° 19' 43.174 N | 103° 27' 40.419 V |
| 16,500.0 | 90.00 | 89.53 | 9,680.0 | -523.0 | 6,415.7 | 484,395.63 | 810,815.59 | 32° 19' 43.174 N | 103° 27' 39.254 V |
| 16,600.0 | 90.00 | 89.53 | 9,680.0 | -522.2 | 6,515.7 | 484,396.44 | 810,915.59 | 32° 19' 43.174 N | 103° 27' 38.088 V |
| 16,700.0 | 90.00 | 89.53 | 9,680.0 | -521.4 | 6,615.7 | 484,397.26 | 811,015.58 | 32° 19' 43.174 N | 103° 27' 36.923 V |
| 16,800.0 | 90.00 | 89.53 | 9,680.0 | -520.5 | 6,715.7 | 484,398.08 | 811,115.58 | 32° 19' 43.174 N | 103° 27' 35.758 V |
| 16,900.0 | 90.00 | 89.53 | 9,680.0 | -519.7 | 6,815.7 | 484,398.89 | 811,215.57 | 32° 19' 43.174 N | 103° 27' 34.592 V |
| 17,000.0 | 90.00 | 89.53 | 9,680.0 | -518.9 | 6,915.7 | 484,399.71 | 811,315.57 | 32° 19' 43.174 N | 103° 27' 33.427 \ |
| 17,100.0 | 90.00 | 89.53 | 9,680.0 | -518.1 | 7,015.7 | 484,400.52 | 811,415.56 | 32° 19' 43.174 N | 103° 27' 32.261 V |
| 17,200.0 | 90.00 | 89.53 | 9,680.0 | -517.3 | 7,115.7 | 484,401.34 | 811,515.56 | 32° 19' 43.174 N | 103° 27' 31.096 \ |
| 17,300.0 | 90.00 | 89.53 | 9,680.0 | -516.5 | 7,215.7 | 484,402.16 | 811,615.56 | 32° 19' 43.174 N | 103° 27' 29.931 \ |
| 17,400.0 | 90.00 | 89.53 | 9,680.0 | -515.6 | 7,315.7 | 484,402.97 | 811,715.55 | 32° 19' 43.174 N | 103° 27' 28.765 \ |
| 17,500.0 | 90.00 | 89.53 | 9,680.0 | -514.8 | 7,415.7 | 484,403.79 | 811,815.55 | 32° 19' 43.174 N | 103° 27' 27.600 \ |
| 17,600.0 | 90.00 | 89.53 | 9,680.0 | -514.0 | 7,515.7 | 484,404.61 | 811,915.54 | 32° 19' 43.174 N | 103° 27' 26.434 \ |
| 17,700.0 | 90.00 | 89.53 | 9,680.0 | -513.2 | 7,615.6 | 484,405.42 | 812,015.54 | 32° 19' 43.174 N | 103° 27' 25.269 \ |
| 17,800.0 | 90.00 | 89.53 | 9,680.0 | -512.4 | 7,715.6 | 484,406.24 | 812,115.53 | 32° 19' 43.174 N | 103° 27' 24.104 \ |
| 17,900.0 | 90.00 | 89.53 | 9,680.0 | -511.6 | 7,815.6 | 484,407.06 | 812,215.53 | 32° 19' 43.174 N | 103° 27' 22.938 \ |
| 18,000.0 | 90.00 | 89.53 | 9,680.0 | -510.7 | 7,915.6 | 484,407.87 | 812,315.52 | 32° 19' 43.174 N | 103° 27' 21.773 \ |
| 18,100.0 | 90.00 | 89.53 | 9,680.0 | -509.9 | 8,015.6 | 484,408.69 | 812,415.52 | 32° 19' 43.174 N | 103° 27' 20.607 \ |
| 18,200.0 | 90.00 | 89.53 | 9,680.0 | -509.1 | 8,115.6 | 484,409.51 | 812,515.52 | 32° 19' 43.174 N | 103° 27' 19.442 ' |
| 18,300.0 | 90.00 | 89.53 | 9,680.0 | -508.3 | 8,215.6 | 484,410.32 | 812,615.51 | 32° 19' 43.173 N | 103° 27' 18.277 \ |
| 18,400.0 | 90.00 | 89.53 | 9,680.0 | -507.5 | 8,315.6 | 484,411.14 | 812,715.51 | 32° 19' 43.173 N | 103° 27' 17.111 \ |
| 18,500.0 | 90.00 | 89.53 | 9,680.0 | -506.7 | 8,415.6 | 484,411.95 | 812,815.50 | 32° 19' 43.173 N | 103° 27' 15.946 \ |
| 18,600.0 | 90.00 | 89.53 | 9,680.0 | -505.8 | 8,515.6 | 484,412.77 | 812,915.50 | 32° 19' 43.173 N | 103° 27' 14.780 \ |
| 18,700.0 | 90.00 | 89.53 | 9,680.0 | -505.0 | 8,615.6 | 484,413.59 | 813,015.49 | 32° 19' 43.173 N | 103° 27' 13.615 \ |
| 18,800.0 | 90.00 | 89.53 | 9,680.0 | -504.2 | 8,715.6 | 484,414.40 | 813,115.49 | 32° 19' 43.173 N | 103° 27' 12.450 ' |
| 18,900.0 | 90.00 | 89.53 | 9,680.0 | -503.4 | 8,815.6 | 484,415.22 | 813,215.48 | 32° 19' 43.173 N | 103° 27' 11.284 ' |
| 19,000.0 | 90.00 | 89.53 | 9,680.0 | -502.6 | 8,915.6 | 484,416.04 | 813,315.48 | 32° 19' 43.173 N | 103° 27' 10.119 |
| 19,100.0 | 90.00 | 89.53 | 9,680.0 | -501.8 | 9,015.6 | 484,416.85 | 813,415.47 | 32° 19' 43.173 N | 103° 27' 8.953 ' |
| 19,200.0 | 90.00 | 89.53 | 9,680.0 | -500.9 | 9,115.6 | 484,417.67 | 813,515.47 | 32° 19' 43.173 N | 103° 27' 7.788 ' |
| 19,300.0 | 90.00 | 89.53 | 9,680.0 | -500.1 | 9,215.6 | 484,418.49 | 813,615.47 | 32° 19' 43.173 N | 103° 27' 6.623 \ |
| 19,400.0 | 90.00 | 89.53 | 9,680.0 | -499.3 | 9,315.6 | 484,419.30 | 813,715.46 | 32° 19' 43.173 N | 103° 27' 5.457 \ |
| 19,500.0 | 90.00 | 89.53 | 9,680.0 | -498.5 | 9,415.6 | 484,420.12 | 813,815.46 | 32° 19' 43.173 N | 103° 27' 4.292 \ |
| 19,600.0 | 90.00 | 89.53 | 9,680.0 | -497.7 | 9,515.6 | 484,420.94 | 813,915.45 | 32° 19' 43.173 N | 103° 27' 3.126 \ |
| 19,700.0 | 90.00 | 89.53 | 9,680.0 | -496.9 | 9,615.6 | 484,421.75 | 814,015.45 | 32° 19' 43.173 N | 103° 27' 1.961 \ |
| 19,800.0 | 90.00 | 89.53 | 9,680.0 | -496.0 | 9,715.6 | 484,422.57 | 814,115.44 | 32° 19' 43.173 N | 103° 27' 0.796 ' |
| 19,900.0 | 90.00 | 89.53 | 9,680.0 | -495.2 | 9,815.6 | 484,423.39 | 814,215.44 | 32° 19' 43.173 N | 103° 26' 59.630 ' |
| 19,997.5 | 90.00 | 89.53 | 9,680.0 | -494.4 | 9,913.0 | 484,424.18 | 814,312.90 | 32° 19' 43.172 N | 103° 26' 58.494 \ |

Design:

Microsoft

Planning Report - Geographic

EDM5000_OLD Database: Company: BTA Oil Producers, LLC Lea County, NM (NAD 83) Project: Bobwhite 22304 4-3 Fed Com Site: Well:

Bobwhite 22304 4-3 Fed Com #4H Wellbore: Wellbore #1 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Bobwhite 22304 4-3 Fed Com #4H

GL @ 3420.0usft GL @ 3420.0usft

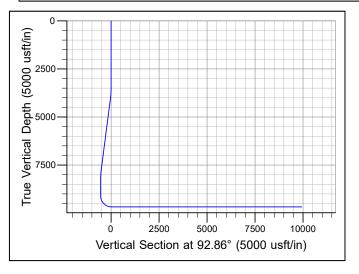
Grid Minimum Curvature

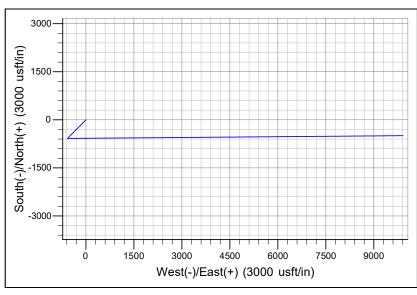
| Design Targets | | | | | | | | | |
|--|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|------------------|-------------------|
| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
| KOP Bobwhite #4H - plan hits target cent - Point | 0.00 er | 0.00 | 8,500.0 | -580.1 | -574.8 | 484,338.55 | 803,825.23 | 32° 19' 43.165 N | 103° 29' 0.723 W |
| BHL bobwhite #4h - plan hits target cent - Point | 0.00 er | 0.00 | 9,680.0 | -494.4 | 9,913.0 | 484,424.18 | 814,312.90 | 32° 19' 43.172 N | 103° 26' 58.494 W |

WELL DETAILS: Bobwhite 22304 4-3 Fed Com #4H

3420.0 Ground Level

+N/-S +E/-W Northing Easting Latittude Longitude
0.0 0.0 484918.61 804399.98 32° 19' 48.859 N 103° 28' 53.972 W







Azimuths to Grid North True North: -0.46° Magnetic North: 7.26°

Magnetic Field Strength: 48893.5nT Dip Angle: 60.36° Date: 12/31/2009 Model: IGRF200510 PROJECT DETAILS: Lea County, NM (NAD 83)

Geodetic System: US State Plane 1983 Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone

System Datum: Ground Level

| 1 0.0 0.00 0.00 0.00 0.0 0.0 0.0 0.0 0.0 | | | | | | SE | CTION | DETAILS | | | |
|---|---------|---|---|--|---|--|---|--|---|--|---|
| 2 3500.0 0.00 0.00 3500.0 0.0 0.0 0.00 0.0 | MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect | Target | Annotation |
| 3 4050.0 11.00 224.74 4046.6 -37.4 -37.0 2.00 224.74 -35.1 4 7777.9 11.00 224.74 7706.1 -542.7 -537.7 0.00 0.00 -510.0 5 8327.9 0.00 0.00 8252.7 -580.1 -574.8 2.00 180.00 -545.1 6 8575.2 0.00 0.00 8500.0 -580.1 -574.8 0.00 0.00 -545.1 KOP Bobwhite #4H 7 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 0.00 -545.1 8 10082.3 90.00 89.53 9680.0 -575.4 -1.8 10.00 89.53 26.8 | 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | | |
| 4 7777.9 11.00 224.74 7706.1 -542.7 -537.7 0.00 0.00 -510.0 5 8327.9 0.00 0.00 8252.7 -580.1 -574.8 2.00 180.00 -545.1 6 8575.2 0.00 0.00 8500.0 -580.1 -574.8 0.00 0.00 -545.1 KOP Bobwhite #4H 7 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 0.00 -545.1 8 10082.3 90.00 89.53 9680.0 -575.4 -1.8 10.00 89.53 26.8 | 3500.0 | 0.00 | 0.00 | 3500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | | |
| 5 8327.9 0.00 0.00 8252.7 -580.1 -574.8 2.00 180.00 -545.1 6 8575.2 0.00 0.00 8500.0 -580.1 -574.8 0.00 0.00 -545.1 KOP Bobwhite #4H 7 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 0.00 -545.1 8 10082.3 90.00 89.53 9680.0 -575.4 -1.8 10.00 89.53 26.8 | 4050.0 | 11.00 | 224.74 | 4046.6 | -37.4 | -37.0 | 2.00 | 224.74 | -35.1 | | |
| 6 8575.2 0.00 0.00 8500.0 -580.1 -574.8 0.00 0.00 -545.1 KOP Bobwhite #4H 7 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 0.00 -545.1 8 10082.3 90.00 89.53 9680.0 -575.4 -1.8 10.00 89.53 26.8 | 7777.9 | 11.00 | 224.74 | 7706.1 | -542.7 | -537.7 | 0.00 | 0.00 | -510.0 | | |
| 7 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 0.00 -545.1 8 10082.3 90.00 89.53 9680.0 -575.4 -1.8 10.00 89.53 26.8 | 8327.9 | 0.00 | 0.00 | 8252.7 | -580.1 | -574.8 | 2.00 | 180.00 | -545.1 | | |
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| | 9182.3 | 0.00 | 0.00 | 9107.0 | -580.1 | -574.8 | 0.00 | 0.00 | -545.1 | | |
| 9 19997 5 90 00 89 53 9680 0 -494 4 9913 0 0 00 0 00 9925 4 BHI bobwhite #4b | 10082.3 | 90.00 | 89.53 | 9680.0 | -575.4 | -1.8 | 10.00 | 89.53 | 26.8 | | |
| σ 10001.0 00.00 00.00 101.1 0010.0 0.00 0.00 0020.4 DHL bobwillo π 411 | 19997.5 | 90.00 | 89.53 | 9680.0 | -494.4 | 9913.0 | 0.00 | 0.00 | 9925.4 | BHL bobwhite #4h | |
| 0 1 | 1 | 0.0 3500.0 4050.0 7777.9 8327.9 8575.2 9182.3 0082.3 | 0.0 0.00 3500.0 0.00 4050.0 11.00 7777.9 11.00 8327.9 0.00 8575.2 0.00 9182.3 0.00 0082.3 90.00 | 0.0 0.00 0.00 3500.0 0.00 0.00 4050.0 11.00 224.74 7777.9 11.00 224.74 8327.9 0.00 0.00 8575.2 0.00 0.00 9182.3 0.00 0.00 0082.3 90.00 89.53 | 0.0 0.00 0.00 0.0 3500.0 0.00 0.00 3500.0 4050.0 11.00 224.74 4046.6 7777.9 11.00 224.74 7706.1 8327.9 0.00 0.00 8252.7 8575.2 0.00 0.00 8500.0 9182.3 0.00 0.00 9107.0 0082.3 90.00 89.53 9680.0 | 0.0 0.00 0.00 0.0 3500.0 0.00 0.00 3500.0 0.0 4050.0 11.00 224.74 4046.6 -37.4 7777.9 11.00 224.74 7706.1 -542.7 8327.9 0.00 0.00 8252.7 -580.1 8575.2 0.00 0.00 8500.0 -580.1 9182.3 0.00 0.00 9107.0 -580.1 0082.3 90.00 89.53 9680.0 -575.4 | 0.0 0.00 0.00 0.0 0.0 3500.0 0.00 0.00 3500.0 0.0 0.0 4050.0 11.00 224.74 4046.6 -37.4 -37.0 7777.9 11.00 224.74 7706.1 -542.7 -537.7 8327.9 0.00 0.00 8252.7 -580.1 -574.8 8575.2 0.00 0.00 8500.0 -580.1 -574.8 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0082.3 90.00 89.53 9680.0 -575.4 -1.8 | 0.0 0.00 0.00 0.0 0.0 0.00 0.00 3500.0 0.00 0.00 0.00 0.00 0.00 4050.0 11.00 224.74 4046.6 -37.4 -37.0 2.00 7777.9 11.00 224.74 7706.1 -542.7 -537.7 0.00 8327.9 0.00 0.00 8252.7 -580.1 -574.8 2.00 8575.2 0.00 0.00 8500.0 -580.1 -574.8 0.00 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 0082.3 90.00 89.53 9680.0 -575.4 -1.8 10.00 | 0.0 0.00 0.00 0.0 0.0 0.00 224.74 7706.1 -542.7 -537.7 0.00 0.00 8327.9 0.00 0.00 8252.7 -580.1 -574.8 2.00 180.00 8575.2 0.00 0.00 8500.0 -580.1 -574.8 0.00 0.00 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 | 0.0 0.00 0.00 0.0 0.0 0.00 224.74 -35.1 -37.7 0.00 0.00 -510.0 0.00 8252.7 -580.1 -574.8 2.00 180.00 -545.1 8575.2 0.00 0.00 8500.0 -580.1 -574.8 0.00 0.00 -545.1 9182.3 0.00 0.00 9107.0 -580.1 -574.8 0.00 0.00 -545.1 0082.3 90.00 89.53 9680.0 -575.4 -1.8 10.00 89.53 26.8 | 0.0 0.00 0.00 0.0 0.0 0.00 <t< td=""></t<> |

BOP Break Testing Request

BTA requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad.
- When skidding to drill a hole section that does not penetrate into the Wolfcamp.
- Full BOP test will be required prior to drilling any production hole.



TUBING REQUIREMENTS

BTA Oil Producers, LLC respectively requests an exception to the following NMOCD rule:

• 19.15.16.10 Casing AND TUBING RQUIREMENTS:

J (3): "The operator shall set tubing as near the bottom as practical and tubing perforations shall not be more than 250 feet above top of pay zone."

With horizontal flowing and gas lifted wells an end of tubing depth placed at or slightly above KOP is a conservative way to ensure the tubing stays clean from debris, plugging, and allows for fewer well interventions post offset completion. The deeper the tubulars are run into the curve, the higher the probability is that the tubing will become stuck in sand and or well debris as the well produces over time. An additional consideration for EOT placement during artificial lift installations is avoiding the high dog leg severity and inclinations found in the curve section of the wellbore to help improve reliability and performance. Dog leg severity and inclinations tend not to hamper gas lifted or flowing wells, but they do affect other forms of artificial lift like rod pump or ESP (electric submersible pump). Keeping the EOT above KOP is an industry best practice for those respective forms of artificial lift.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: BTA

LEASE NO.: NMNM19142

LOCATION: Sec. 4, T.23 S, R 34 E

COUNTY: Lea County, New Mexico

WELL NAME & NO.: BobWhite 22304 4-3 Fed Com 4H

SURFACE HOLE FOOTAGE: 1400'/S & 600'/W

BOTTOM HOLE FOOTAGE: 825'/S & 50'/E

COA

| H ₂ S | 0 | No | • | Yes |
|------------------|----------------------|-----------------------------|-----------------|----------------------------|
| Potash / | None | Secretary | C R-111-Q | ☐ Open Annulus |
| WIPP | Choose | e an option (including bla | nk option.) | \square WIPP |
| Cave / Karst | • Low | Medium | O High | Critical |
| Wellhead | Conventional | Multibowl | Both | Diverter |
| Cementing | ☐ Primary Squeeze | ☐ Cont. Squeeze | ☐ EchoMeter | □ DV Tool |
| Special Req | Capitan Reef | ☐ Water Disposal | ▼ COM | □ Unit |
| Waste Prev. | C Self-Certification | C Waste Man. Plan | APD Submitted p | prior to 06/10/2024 |
| Additional | ▼ Flex Hose | ☐ Casing Clearance | ☐ Pilot Hole | Break Testing |
| Language | ☐ Four-String | ☐ Offline Cementing | Fluid-Filled | |

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware Group** formation. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

- 1. The 13-3/8 inch surface casing shall be set at approximately 1630 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the

lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

- ❖ In <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- Special Capitan Reef requirements. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
 (Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the Capitan interval)
 - Switch to freshwater mud to protect the Capitan Reef and use freshwater mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
 - O Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **50 feet (4240)** on top of Capitan Reef top. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000** (**5M**) psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.

- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

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)

Contact Lea County Petroleum Engineering Inspection Staff:

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 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
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per **43 CFR 3172** 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

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 of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-Q 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 **43 CFR 3172**.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's

- requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. 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.
 - iii. Manufacturer representative shall install the test plug for the initial BOP
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. 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.
 - i. 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 cement), 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).
 - ii. 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

- open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 43 CFR 3172.

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.

Approved by Zota Stevens on 6/12/2024 575-234-5998 / zstevens@blm.gov

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 (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

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

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

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

2. H₂S SAFETY EQUIPMENT AND SYSTEMS

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

- a. Well Control Equipment:
 - Flare line.
 - Choke manifold with remotely operated choke.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.
- b. Protective equipment for essential personnel:
 - Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H2S detection and monitoring equipment:

- 2 portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems: Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
 The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:
 All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:
 Company vehicles equipped with cellular telephone.

WARNING

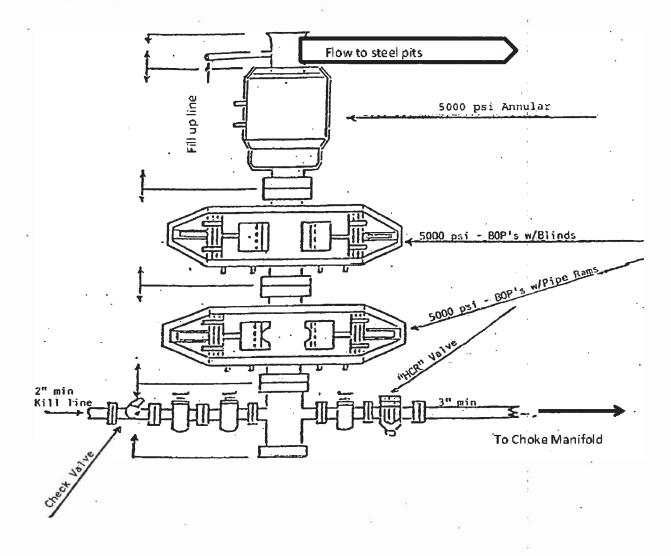
YOU ARE ENTERING AN H₂S AREA AUTHORIZED PERSONNEL ONLY

- 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

13-5/8" 5,000 PSI BOP





District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

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

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

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

CONDITIONS

Action 381839

CONDITIONS

| Operator: | OGRID: |
|------------------------|---|
| BTA OIL PRODUCERS, LLC | 260297 |
| 104 S Pecos | Action Number: |
| Midland, TX 79701 | 381839 |
| | Action Type: |
| | [C-101] BLM - Federal/Indian Land Lease (Form 3160-3) |

CONDITIONS

| Created By | Condition | Condition Date |
|---------------|--|-------------------|
| pkautz | Will require a File As Drilled C-102 and a Directional Survey with the C-104 | 10/1/2024 |
| pkautz | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string | 10/1/2024 |
| pkautz | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system | 10/1/2024 |
| pkautz | Cement is required to circulate on both surface and intermediate1 strings of casing | 10/1/2024 |
| pkautz | If cement does not circulate on any string, a CBL is required for that string of casing | 10/1/2024 |