Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

**APPLICATION FOR PERMIT TO DRILL OR REENTER**

5. Lease Serial No.: NMNM129260

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.: BRAELYNN FEDERAL COM 1H

2. Name of Operator: BAM PERMIAN OPERATING LLC

9. API Well No.: 30-005-64386

3a. Address: 4416 BRIARWOOD AVE SUITE 110 PMB 53, MIDLAND,

3b. Phone No. *(include area code)*: (432) 242-8851

10. Field and Pool, or Exploratory: ROUND TANK-SAN ANDRES

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: LOT 3 / 200 FSL / 2330 FEL / LAT 32.9659154 / LONG -104.0324765

At proposed prod. zone: NWNE / 30 FNL / 2050 FEL / LAT 32.979591 / LONG -104.0314723

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 33/T15S/R29E/NMP

14. Distance in miles and direction from nearest town or post office*: 10 miles

12. County or Parish: CHAVES

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 200 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 157.25

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 4000 feet

19. Proposed Depth: 3200 feet / 7972 feet

20. BLM/BIA Bond No. in file: FED:

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3773 feet

22. Approximate date work will start*: 11/01/2022

23. Estimated duration: 30 days

24. Attachments

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

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

| 25. Signature | Name *(Printed/Typed)* | Date |
|---|---|---|
| (Electronic Submission) | BRIAN WOOD / Ph: (432) 242-8851 | 08/17/2022 |

Title: President

| Approved by *(Signature)* | Name *(Printed/Typed)* | Date |
|---|---|---|
| (Electronic Submission) | RUBEN J SANCHEZ / Ph: (575) 627-0250 | 05/08/2023 |

| Title | Office |
|---|---|
| Assistant Field Manager, Lands & Minerals | Roswell Field 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

(Continued on page 2)

*(Instructions on page 2)

**Approval Date: 05/08/2023**

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, N.M. 87505

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

☐ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| 30-005-64386 | 52770 | ROUND TANK; SAN ANDRES |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 334031 | Braelynn Federal Com | 1H |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 328565 | Bam Permian Operating, LLC | 3773 |

## [10] Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| O | 33 | 15 S | 29 E | Lot 3 | 200 | South | 2330 | East | Chaves |

## [11] Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| B | 33 | 15 S | 29 E | | 30 | North | 2050 | East | Chaves |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 157.25 | | C | |

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

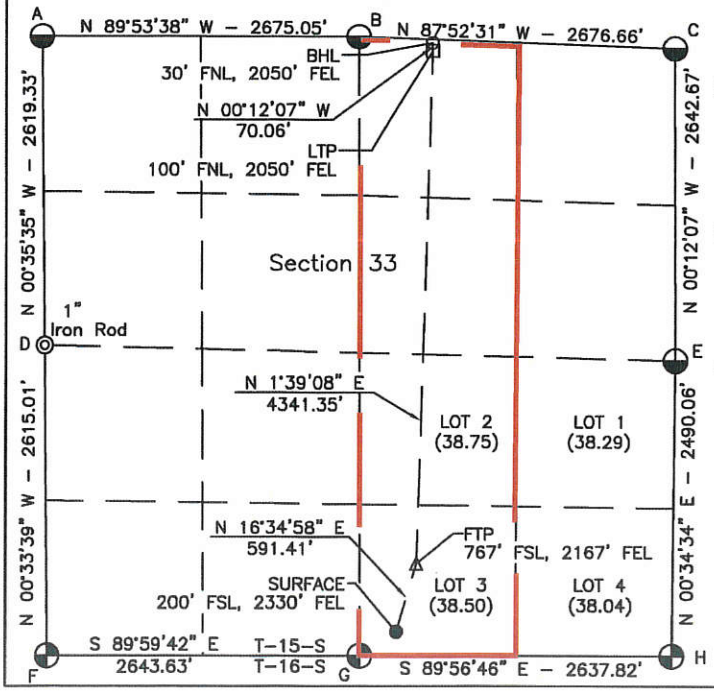
16 Legend:
- ● = Surface Location
- ○ = Bottom Hole Location
- △ = First Take Point (FTP)
- □ = Last Take Point (LTP)
- ◒ = Found 1916 USGLO Brass Cap
- ◒ = Found 1946 USGLO Brass Cap
- ◎ = Found Monument

CORNER COORDINATES TABLE
NAD 83 NMSPC ZONE 3001

| | | |
|---|---|---|
| A | Y= 720302.04 N, | X= 630602.80 E |
| B | Y= 720297.08 N, | X= 633277.85 E |
| C | Y= 720197.85 N, | X= 635952.67 E |
| D | Y= 717682.85 N, | X= 630629.91 E |
| E | Y= 717555.19 N, | X= 635961.99 E |
| F | Y= 715067.96 N, | X= 630655.50 E |
| G | Y= 715067.73 N, | X= 633299.13 E |
| H | Y= 715065.25 N, | X= 635936.95 E |

CORNER COORDINATES TABLE
NAD 83 NMSPC ZONE 3001

| | | |
|---|---|---|
| A | LAT.=32.9797764° N, | LONG.=104.0422322° W |
| B | LAT.=32.9797421° N, | LONG.=104.0335088° W |
| C | LAT.=32.9794481° N, | LONG.=104.0247870° W |
| D | LAT.=32.9725772° N, | LONG.=104.0421674° W |
| E | LAT.=32.9721846° N, | LONG.=104.0247819° W |
| F | LAT.=32.9653899° N, | LONG.=104.0421075° W |
| G | LAT.=32.9653689° N, | LONG.=104.0334880° W |
| H | LAT.=32.9653411° N, | LONG.=104.0248874° W |




SURFACE LOCATION
NAD 83 NMSPC ZONE 3001
Y= 715267.47 N
X= 633608.78 E
LAT.= 32.9659154° N
LONG.= 104.0324765° W

FIRST TAKE POINT
NAD 83 NMSPC ZONE 3001
Y= 715834.28 N
X= 633777.57 E
LAT.= 32.9674720° N
LONG.= 104.0319208° W

LAST TAKE POINT
NAD 83 NMSPC ZONE 3001
Y= 720173.83 N
X= 633902.74 E
LAT.= 32.9793984° N
LONG.= 104.0314721° W

BOTTOM HOLE LOCATION
NAD 83 NMSPC ZONE 3001
Y= 720243.88 N
X= 633902.50 E
LAT.= 32.9795910° N
LONG.= 104.0314723° W

## [17] OPERATOR CERTIFICATION

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

Signature — Date: 8-15-22

BRIAN WOOD
Printed Name

brian@permitswest.com
E-mail Address

505 466-8120

## [18] SURVEYOR CERTIFICATION

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

4/18/22
Date of Survey

Signature and Seal of Professional Surveyor:

MARSHALL W. LINDEEN
NEW MEXICO
17078
PROFESSIONAL SURVEYOR
8-11-22

17078
Certificate Number

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:** BAM PERMIAN OPERATING, LLC **OGRID:** 328565 **Date:** 05 / 09 / 23

**II. Type:** ☑ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name | API | ULSTR | Footages | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|---|---|---|---|---|---|---|
| BRAELYNN FEDERAL COM 1H | 30-005- | O-33-15S-29E | 200 FSL 2330 FEL | 78 | 31 | 612 |

**IV. Central Delivery Point Name:** FRONTIER FIELD SERVICES @ LINLEY STATE 1H IN M-32-15S-29E [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

| Well Name | API | Spud Date | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|---|---|---|---|---|---|---|
| BRAELYNN FEDERAL COM 1H | 30-005- | 7-1-23 | 7-31-23 | 8-1-23 | 8-31-23 | 9-15-23 |

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

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

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

## 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 Start Date | Available Maximum Daily Capacity 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.

**XII. Line Capacity.** The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

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

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information 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 specific information for which confidentiality is asserted and the basis for such assertion.

## Section 3 - Certifications

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☑ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses 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
- **(i)** other alternative beneficial uses approved by the division.

## Section 4 - Notices

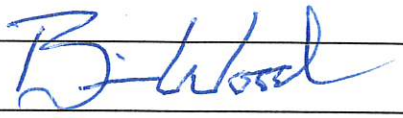
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

**(a)** Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

**(b)** Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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

| | |
|---|---|
| Signature: |  |
| Printed Name: | BRIAN WOOD |
| Title: | CONSULTANT |
| E-mail Address: | brian@permitswest.com |
| Date: | 5-9-23 |
| Phone: | 505 466-8120 |

**OIL CONSERVATION DIVISION**

**(Only applicable when submitted as a standalone form)**

| | |
|---|---|
| Approved By: | |
| Title: | |
| Approval Date: | |
| Conditions of Approval: | |

## VI. SEPARATION EQUIPMENT

BAM Permian Operating, LLC Gas will install its production equipment on the well pad. Production equipment is expected to include separator, vapor recovery tower, vapor recovery pipes for all tanks, gas scrubber, emergency flare, and oil and water tanks. Gas will then be piped 7104.74' west to an existing Frontier Field Services meter at BAM's Linley State 1H well in M-32-15s-29e.

## VII. Operational Practices

NMAC 19.15.27.8 (A) Venting & Flaring of Natural Gas

1. BAM Permian Operating, LLC (BAM) will comply with NMAC 19.15.27.8. Venting and flaring of gas during drilling, completion, or production that constitutes waste as defined in 19.15.2 is banned.

NMAC 19.15.27.8 (B) Venting & Flaring During Drilling

1. BAM will capture or combust gas if technically feasible during drilling operations using best industry practices.
2. A flare stack with a 100% capacity for expected volume will be set on the pad ≥100 feet from the nearest well head and storage tank.
3. In an emergency, BAM will vent gas in order to avoid substantial impact. BAM will report vented or flared gas to the NMOCD.

NMAC 19.15.27.8 (C) Venting & Flaring During Completion or Recompletion

1. Facilities will be built and ready from the first day of flowback
2. Test separator will be properly separate gas and liquids. Temporary test separator will be used initially to process volumes. In addition, separator will be tied into flowback tanks which will be tied into the gas processing equipment for sale down a pipeline.
3. Should the facility not be ready to process gas, or the gas does not meet quality standards, then storage tanks will be set that are tied into gas busters or a temporary flare to manage all gas. This flare would meet the following requirements:
    a) An appropriately sized flare stack with an automatic igniter
    b) BAM analyzes gas samples twice a week
    c) BAM flows the gas into a gathering line as soon as the line specifications are met
    d) BAM provides the NMOCD with pipeline specifications and natural gas data.

NMAC 19.15.27.8 (D) Venting & Flaring During Production

BAM will not vent or flare natural gas except:

1. During an emergency or malfunction
2. To unload or clean-up liquid holdup in a well to atmospheric pressure, provided
    a) BAM does not vent after the well achieves a stabilized rate and pressure
    b) BAM will be on-site while unloading liquids by manual purging and take all reasonable actions to achieve a stabilized rate and pressure as soon as possible
    c) BAM will optimize the system to minimize gas venting if the well is equipped with a plunger lift or auto control system
    d) Best management practices will be used during downhole well maintenance.
3. During the first year of production from an exploratory well provided
    a) BAM receives approval from the NMOCD
    b) BAM stays in compliance with NMOCD gas capture requirements
    c) BAM submits an updated C-129 form to the NMOCD
4. During the following activities unless prohibited
    a) Gauging or sampling a storage tank or low-pressure production vessel
    b) Loading out liquids from a storage tank
    c) Repair and maintenance
    d) Normal operation of a gas-activated pneumatic controller or pump
    e) Normal operation of a storage tank but not including venting from a thief hatch
    f) Normal operation of dehydration units
    g) Normal operations of compressors, engines, turbines, valves, flanges, & connectors
    h) During a bradenhead, packer leakage test, or production test lasting <24 hours
    i) When natural gas does not meet the gathering line specifications
    j) Commissioning of pipes, equipment, or facilities only for as long as necessary to purge introduced impurities.

NMAC 19.15.27.8 (E) Performance Standards

1. BAM used a safety factor to design the separation and storage equipment. The equipment will be routed to a vapor recovery system and uses a flare as back up for startup, shutdown, maintenance, or malfunction of the VRU system.
2. BAM will install a flare that will handle the full volume of vapors from the facility in case of VRU failure. It will have an auto-ignition system.
3. Flare stacks will be appropriately sized and designed to ensure proper combustion efficiency
    a) Flare stacks installed or replaced will be equipped with an automatic ignitor or continuous pilot.
    b) Previously installed flare stacks will be retrofitted within 18 months of May 25, 2021, with an automatic ignitor, continuous pilot, or technology that alerts BAM to flare malfunction.
    c) Flare stacks replaced after May 25, 2021, will be equipped with an automatic ignitor or continuous pilot if at a well or facility with an average production of ≤60 Mcfd of natural gas.

d) Flare stacks will be located >100 feet from well head and storage tanks and securely anchored.

4. BAM will conduct an AVO inspection on all components for leaks and defects every week.
5. BAM will make and keep records of AVO inspections available to the NMOCD for at least 5 years.
6. BAM may use a remote or automated monitoring technology to detect leaks and releases in lieu of AVO inspections with prior NMOCD approval.
7. Facilities will be designed to minimize waste.
8. BAM will resolve emergencies as promptly as possible.

NMAC 19.15.27.8 (F) Measuring or Estimating Vented & Flared Natural Gas

1. BAM will have meters on both the low pressure and high-pressure sides of the flares. Volumes will be recorded in the SCADA system.
2. BAM will install equipment to measure the volume of flared natural gas that has an average production of ≥60 Mcfd.
3. BAM's measuring equipment will conform to industry standards.
4. Measurement system will be designed such that it cannot be bypassed except for inspections and servicing the meters.
5. BAM will estimate the volume of vented or flared gas using a methodology that can be independently verified if metering is not practicable due to low flow rate or pressure.
6. BAM will estimate the volume of vented and flared gas based on the results of an annual GOR test for wells that do not require measuring equipment reported on form C-116.
7. BAM will install measuring equipment whenever the NMOCD determines that metering is necessary.

## VIII. Best Management Practices

BAM Permian Operating, LLC will minimize venting during maintenance by:

1. System will be designed and operated to route storage tank and process equipment emissions to the VRU. If the VRU is not operable, then vapors will be routed to the flare.
2. Scheduling maintenance for multiple tasks to minimize the need for blowdowns.
3. After completion of maintenance, gas will be flared until it meets pipeline specifications.

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

# Drilling Plan Data Report
05/08/2023

**APD ID:** 10400087466 **Submission Date:** 08/17/2022

**Operator Name:** BAM PERMIAN OPERATING LLC

**Well Name:** BRAELYNN FEDERAL COM **Well Number:** 1H

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

Highlighted data reflects the most recent changes

Show Final Text

## Section 1 - Geologic Formations

| Formation ID | Formation Name | Elevation | True Vertical | Measured Depth | Lithologies | Mineral Resources | Producing Formatio |
|---|---|---|---|---|---|---|---|
| 9053305 | QUATERNARY | 3773 | 0 | 0 | OTHER : Caliche | USEABLE WATER | N |
| 9053306 | RUSTLER | 3523 | 250 | 250 | ANHYDRITE | OTHER : Brackish Water | N |
| 9053307 | TOP OF SALT | 3398 | 375 | 375 | ANHYDRITE | NONE | N |
| 9053308 | BASE OF SALT | 2863 | 910 | 910 | ANHYDRITE | NONE | N |
| 9053309 | YATES | 2863 | 910 | 910 | DOLOMITE | NATURAL GAS, OIL | N |
| 9053310 | SEVEN RIVERS | 2643 | 1130 | 1130 | DOLOMITE | NATURAL GAS, OIL | N |
| 9053311 | QUEEN | 2123 | 1650 | 1650 | DOLOMITE | NATURAL GAS, OIL | N |
| 9053312 | SAN ANDRES | 1323 | 2450 | 2450 | DOLOMITE | NATURAL GAS, OIL | Y |

## Section 2 - Blowout Prevention

**Pressure Rating (PSI):** 3M **Rating Depth:** 10000

**Equipment:** A multi-bowl well head will be used. The BOP will be tested per Onshore Order 2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken, then thee system must be tested.
**Requesting Variance?** YES

**Variance request:** A variance is requested to use a multi-bowl well head. The BOP will be tested per Onshore Order 2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken, then the system must be tested.
**Testing Procedure:** A 2M system will be installed and tested before drilling the intermediate hole. Annular will be tested to 1000 psi. Blind, pipe, and double rams will be tested to 2000 psi. A 3M system will be installed and tested before drilling the production hole. Annular will be tested to 1500 psi. Blind, pipe, and double rams will be tested to 3000 psi. BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure described above per Onshore Order 2 requirements. If the system is upgraded to a higher pressure, then it will still be tested to the working pressures described above. If the system is upgraded, then all the components installed will be functional and tested. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOPE will include Kelly cock, floor safety valve (inside BOP), choke lines, and choke manifold.

**Operator Name:** BAM PERMIAN OPERATING LLC

**Well Name:** BRAELYNN FEDERAL COM **Well Number:** 1H

**Choke Diagram Attachment:**

Braelynn_1H_2M_Choke_20220817121612.pdf

Braelynn_1H_3M_Choke_20220817121619.pdf

**BOP Diagram Attachment:**

Braelynn_1H_2M_BOP_20220817121627.pdf

Braelynn_1H_3M_BOP_20220817121635.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 | 325 | 0 | 325 | 3773 | 3448 | 325 | H-40 | 48 | ST&C | 1.125 | 1 | DRY | 1.6 | DRY | 1.6 |
| 2 | INTERMEDIATE | 12.25 | 9.625 | NEW | API | N | 0 | 1500 | 0 | 1500 | 3773 | 2273 | 1500 | J-55 | 36 | LT&C | 1.125 | 1 | DRY | 1.6 | DRY | 1.6 |
| 3 | PRODUCTION | 8.75 | 7.0 | NEW | API | N | 0 | 3375 | 0 | 3191 | 3773 | 582 | 3375 | P-110 | 26 | BUTT | 1.125 | 1 | DRY | 1.6 | DRY | 1.6 |
| 4 | PRODUCTION | 8.75 | 5.5 | NEW | API | Y | 3375 | 7972 | 3191 | 3200 | 582 | 573 | 4597 | P-110 | 17 | BUTT | 1.25 | 1 | DRY | 1.6 | DRY | 1.6 |

**Casing Attachments**

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

Casing_Design_Assumptions_20220817121805.pdf

**Operator Name:** BAM PERMIAN OPERATING LLC

**Well Name:** BRAELYNN FEDERAL COM **Well Number:** 1H

**Casing Attachments**

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

Casing_Design_Assumptions_20220817121859.pdf

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

Casing_Design_Assumptions_20220817122016.pdf

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

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

Casing_Design_Assumptions_20220817122105.pdf

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

Casing_Design_Assumptions_20220817122131.pdf

## Section 4 - Cement

**Operator Name:** BAM PERMIAN OPERATING LLC

**Well Name:** BRAELYNN FEDERAL COM **Well Number:** 1H

| String Type | Lead/Tail | Stage Tool Depth | Top MD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SURFACE | Lead | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Non | None |
| SURFACE | Tail | | 0 | 325 | 260 | 1.33 | 14.8 | 345 | 50 | Class C | 2% CaCl2 |
| INTERMEDIATE | Lead | | 0 | 1500 | 350 | 1.75 | 13.5 | 612 | 50 | Class C | 4% gel |
| INTERMEDIATE | Tail | | 0 | 1500 | 200 | 1.34 | 14.8 | 268 | 50 | Class C | 2% CaCl2 |
| PRODUCTION | Lead | | 1000 | 7972 | 300 | 1.82 | 12.9 | 546 | 25 | 35:65 (C:Poz) | 5% salt + 0.2% retarder + 3 pps Kol-seal + 0.4 pps defoamer+ 1/8 pps cellophane |
| PRODUCTION | Tail | | 1000 | 7972 | 820 | 2.1 | 13 | 1722 | 25 | 50:50 (H:poz) | 5% salr + + 15% pumice + 3% expansion agent + 0.5% fluid loss + 0.05% retarder + 0.05% anti-settling agent + 5% strength enhancer + 3 pps Kol-seal+ 0.4 pps defoamer |

## 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 products (e. g., barite, bentonite, nut shells, cedar bark fiber, cotton seed hulls, paper) will be on site to maintain mud properties and meet minimum lost circulation and weight increase requirements.
**Describe the mud monitoring system utilized:** Mud system will be monitored visually and electronically with a Pason PVT system or its equivalent.

## Circulating Medium Table

**Operator Name:** BAM PERMIAN OPERATING LLC

**Well Name:** BRAELYNN FEDERAL COM **Well Number:** 1H

| 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 | 325 | OTHER : Fresh Water Gel | 8.6 | 8.8 | | | | | | | |
| 325 | 1500 | OTHER : Saturated Briine | 9.9 | 10.1 | | | | | | | |
| 1500 | 7972 | OTHER : Cut Brine | 9.3 | 10.1 | | | | | | | |

## Section 6 - Test, Logging, Coring

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

A mud logger will be used from intermediate shoe to TD. A CBL will be run if the long string cement does not circulate to surface. No other logs are planned at this time.

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

CEMENT BOND LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

**Coring operation description for the well:**

No core or drill stem test is planned.

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 1710 **Anticipated Surface Pressure:** 998

**Anticipated Bottom Hole Temperature(F):** 95

**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**

Braelynn_1H_H2S_Plan_20220817122933.pdf

**Operator Name:** BAM PERMIAN OPERATING LLC

**Well Name:** BRAELYNN FEDERAL COM **Well Number:** 1H

## Section 8 - Other Information

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

Braelynn_1H_Horizontal_Plan_20220817122957.pdf

**Other proposed operations facets description:**

All casing will be new and meet API specifications. Safety factor values will be met or exceeded. All casing will be tested in accordance with Onshore Order 2. Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst is based on 0.7 frac gradient at the shoe with gas gradient 0.1 psi/ft to surface.

**Other proposed operations facets attachment:**

Braelynn_1H_Speedhead_Specs_20220817123132.pdf

Braelynn_1H_Drill_Plan_v2_20221011085812.pdf

**Other Variance attachment:**

BAM Permian Operating, LLC
Project: Chaves County, NM
Site: Sec 33-T15S-R29E
Well: Braelynn Federal Com #1H
Wellbore: Wellbore #1
Plan: Plan #2 (Braelynn Federal Com #1H/Wellbore #1)

WELL DETAILS: Braelynn Federal Com #1H

Ground Elevation:: 3773.0
RKB Elevation: 3773+18 @ 3791.0usft
Rig Name:

| Northing | Easting | Latitude | Longitude |
|---|---|---|---|
| 715267.46 | 633608.77 | 32° 57' 57.295 N | 104° 1' 56.915 W |

DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|---|---|---|---|---|---|---|---|
| BHL Braelynn Federal COm #1H - plan hits target center | 3200.0 | 4976.0 | 296.0 | 720243.46 | 633904.77 | 32° 58' 46.523 N | 104° 1' 53.274 W |

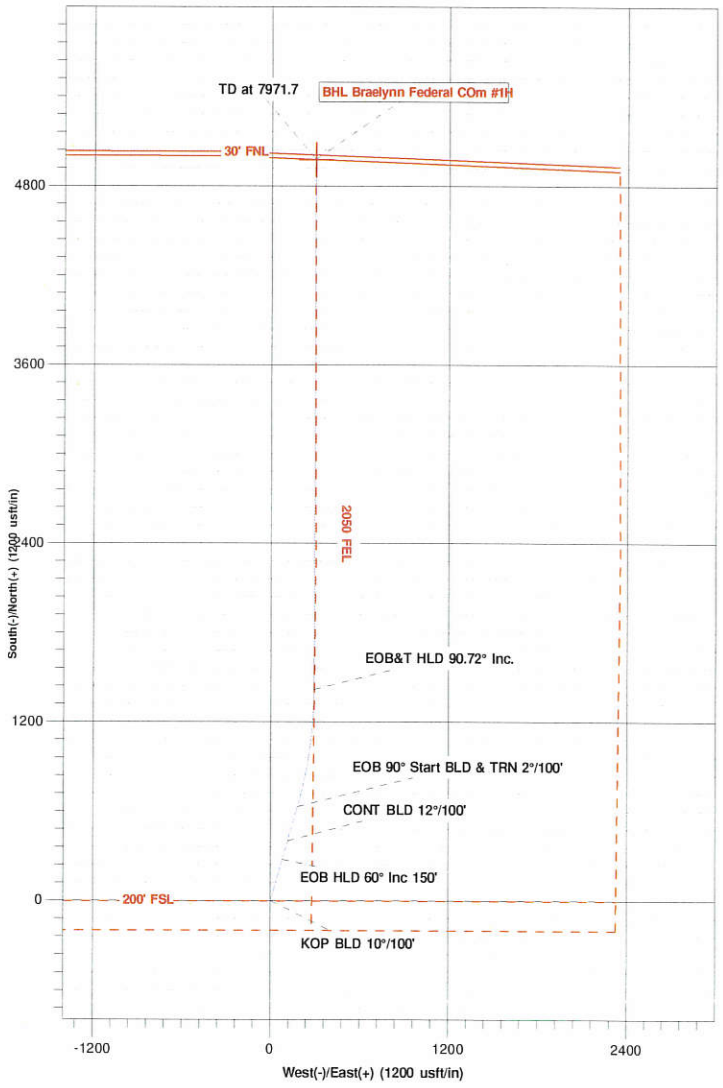
Azimuths to Grid North
True North: -0.16°
Magnetic North: 6.51°

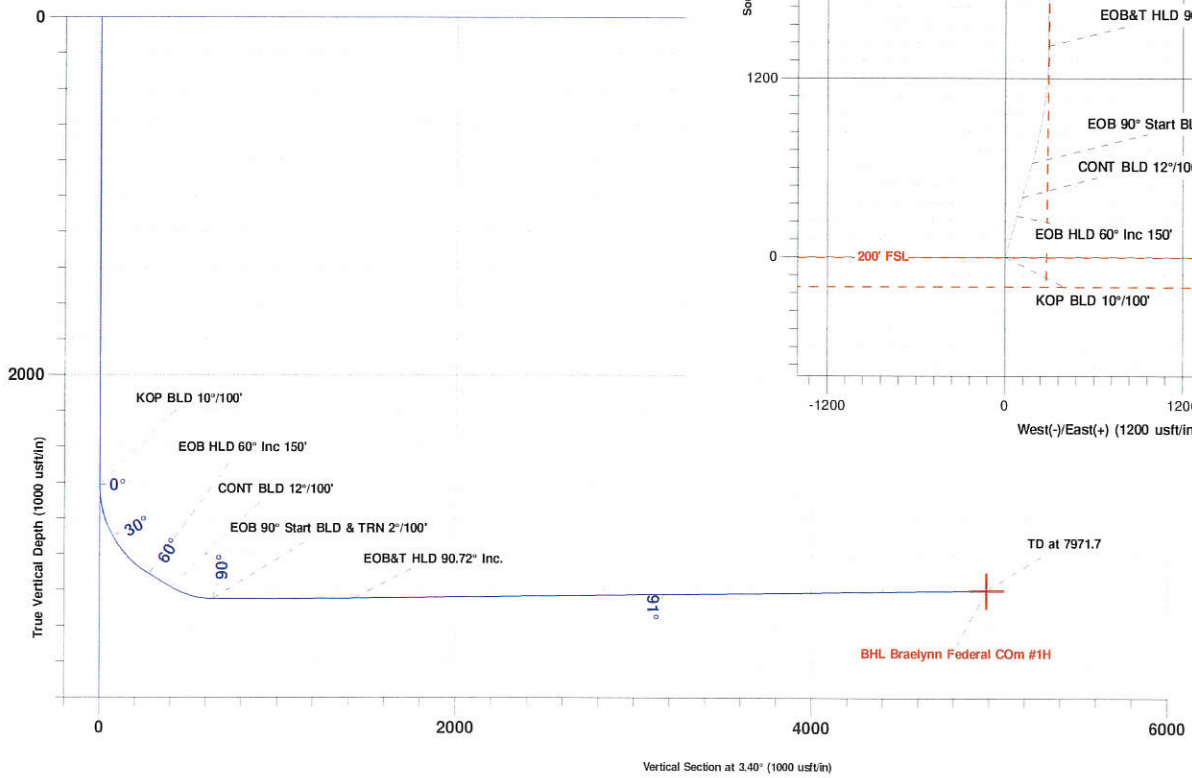
Magnetic Field
Strength: 47801.8nT
Dip Angle: 60.60°
Date: 07/07/2022
Model: IGRF2015

PANTHER

Section Details

| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 |
| 2614.8 | 0.00 | 0.00 | 2614.8 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 |
| 3214.8 | 60.00 | 16.00 | 3111.0 | 275.4 | 79.0 | 10.00 | 16.00 | 279.6 |
| 3364.8 | 60.00 | 16.00 | 3186.0 | 400.3 | 114.8 | 0.00 | 0.00 | 406.4 |
| 3614.8 | 90.00 | 16.00 | 3250.0 | 629.7 | 180.6 | 12.00 | 0.00 | 639.3 |
| 4412.1 | 90.72 | 0.07 | 3244.9 | 1416.7 | 291.7 | 2.00 | -87.37 | 1431.5 |
| 7971.7 | 90.72 | 0.07 | 3200.0 | 4976.0 | 296.0 | 0.00 | 0.00 | 4984.8 |



# Microsoft
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.15 Single User Db | **Local Co-ordinate Reference:** | Well Braelynn Federal Com #1H |
| **Company:** | BAM Permian Operating, LLC | **TVD Reference:** | 3773+18 @ 3791.0usft |
| **Project:** | Chaves County, NM | **MD Reference:** | 3773+18 @ 3791.0usft |
| **Site:** | Sec 33-T15S-R29E | **North Reference:** | Grid |
| **Well:** | Braelynn Federal Com #1H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Plan #2 | | |

| **Project** | Chaves County, NM | | |
|---|---|---|---|
| **Map System:** | US State Plane 1983 | **System Datum:** | Mean Sea Level |
| **Geo Datum:** | North American Datum 1983 | | |
| **Map Zone:** | New Mexico Eastern Zone | | |

| **Site** | Sec 33-T15S-R29E | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 715,267.46 usft | **Latitude:** | 32° 57' 57.295 N |
| **From:** | Lat/Long | **Easting:** | 633,608.78 usft | **Longitude:** | 104° 1' 56.915 W |
| **Position Uncertainty:** | 0.0 usft | **Slot Radius:** | 13-3/16 " | **Grid Convergence:** | 0.16 ° |

| **Well** | Braelynn Federal Com #1H | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.0 usft | **Northing:** | 715,267.46 usft | **Latitude:** | 32° 57' 57.295 N |
| | **+E/-W** | 0.0 usft | **Easting:** | 633,608.78 usft | **Longitude:** | 104° 1' 56.915 W |
| **Position Uncertainty** | | 0.0 usft | **Wellhead Elevation:** | | **Ground Level:** | 3,773.0 usft |

| **Wellbore** | Wellbore #1 | | | |
|---|---|---|---|---|
| **Magnetics** | **Model Name** | **Sample Date** | **Declination (°)** | **Dip Angle (°)** | **Field Strength (nT)** |
| | IGRF2015 | 07/07/22 | 6.68 | 60.60 | 47,801.75376570 |

| **Design** | Plan #2 | | | | |
|---|---|---|---|---|---|
| **Audit Notes:** | | | | | |
| **Version:** | | **Phase:** | PLAN | **Tie On Depth:** | 0.0 |
| **Vertical Section:** | **Depth From (TVD) (usft)** | **+N/-S (usft)** | **+E/-W (usft)** | **Direction (°)** | |
| | 0.0 | 0.0 | 0.0 | 3.40 | |

**Plan Survey Tool Program** **Date** 07/08/22

| | Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks |
|---|---|---|---|---|---|
| 1 | 0.0 | 7,971.7 | Plan #2 (Wellbore #1) | MWD<br>OWSG MWD - Standard | |

**Plan Sections**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,614.8 | 0.00 | 0.00 | 2,614.8 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3,214.8 | 60.00 | 16.00 | 3,111.0 | 275.4 | 79.0 | 10.00 | 10.00 | 0.00 | 16.00 | |
| 3,364.8 | 60.00 | 16.00 | 3,186.0 | 400.3 | 114.8 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3,614.8 | 90.00 | 16.00 | 3,250.0 | 629.7 | 180.6 | 12.00 | 12.00 | 0.00 | 0.00 | |
| 4,412.1 | 90.72 | 0.07 | 3,244.9 | 1,416.7 | 291.7 | 2.00 | 0.09 | -2.00 | -87.37 | |
| 7,971.7 | 90.72 | 0.07 | 3,200.0 | 4,976.0 | 296.0 | 0.00 | 0.00 | 0.00 | 0.00 | BHL Braelynn Federa |

**Microsoft**
Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.15 Single User Db | **Local Co-ordinate Reference:** | Well Braelynn Federal Com #1H |
| **Company:** | BAM Permian Operating, LLC | **TVD Reference:** | 3773+18 @ 3791.0usft |
| **Project:** | Chaves County, NM | **MD Reference:** | 3773+18 @ 3791.0usft |
| **Site:** | Sec 33-T15S-R29E | **North Reference:** | Grid |
| **Well:** | Braelynn Federal Com #1H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Plan #2 | | |

**Planned Survey**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,600.0 | 0.00 | 0.00 | 1,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,700.0 | 0.00 | 0.00 | 1,700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,800.0 | 0.00 | 0.00 | 1,800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,900.0 | 0.00 | 0.00 | 1,900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,000.0 | 0.00 | 0.00 | 2,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,100.0 | 0.00 | 0.00 | 2,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,200.0 | 0.00 | 0.00 | 2,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,300.0 | 0.00 | 0.00 | 2,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 0.00 | 0.00 | 2,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 0.00 | 0.00 | 2,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 0.00 | 0.00 | 2,600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 2,614.8 | 0.00 | 0.00 | 2,614.8 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| KOP BLD 10°/100' | | | | | | | | | |
| 2,650.0 | 3.52 | 16.00 | 2,650.0 | 1.0 | 0.3 | 1.1 | 10.00 | 10.00 | 0.00 |
| 2,700.0 | 8.52 | 16.00 | 2,699.7 | 6.1 | 1.7 | 6.2 | 10.00 | 10.00 | 0.00 |
| 2,750.0 | 13.52 | 16.00 | 2,748.7 | 15.3 | 4.4 | 15.5 | 10.00 | 10.00 | 0.00 |
| 2,800.0 | 18.52 | 16.00 | 2,796.8 | 28.5 | 8.2 | 29.0 | 10.00 | 10.00 | 0.00 |
| 2,850.0 | 23.52 | 16.00 | 2,843.4 | 45.8 | 13.1 | 46.5 | 10.00 | 10.00 | 0.00 |
| 2,900.0 | 28.52 | 16.00 | 2,888.4 | 66.8 | 19.2 | 67.9 | 10.00 | 10.00 | 0.00 |
| 2,950.0 | 33.52 | 16.00 | 2,931.2 | 91.6 | 26.3 | 93.0 | 10.00 | 10.00 | 0.00 |
| 3,000.0 | 38.52 | 16.00 | 2,971.6 | 119.9 | 34.4 | 121.7 | 10.00 | 10.00 | 0.00 |
| 3,050.0 | 43.52 | 16.00 | 3,009.3 | 151.4 | 43.4 | 153.7 | 10.00 | 10.00 | 0.00 |
| 3,100.0 | 48.52 | 16.00 | 3,044.1 | 186.0 | 53.3 | 188.8 | 10.00 | 10.00 | 0.00 |
| 3,150.0 | 53.52 | 16.00 | 3,075.5 | 223.3 | 64.0 | 226.7 | 10.00 | 10.00 | 0.00 |
| 3,200.0 | 58.52 | 16.00 | 3,103.4 | 263.2 | 75.5 | 267.2 | 10.00 | 10.00 | 0.00 |
| 3,214.8 | 60.00 | 16.00 | 3,111.0 | 275.4 | 79.0 | 279.6 | 10.00 | 10.00 | 0.00 |
| EOB HLD 60° Inc 150' | | | | | | | | | |
| 3,300.0 | 60.00 | 16.00 | 3,153.6 | 346.3 | 99.3 | 351.6 | 0.00 | 0.00 | 0.00 |
| 3,364.8 | 60.00 | 16.00 | 3,186.0 | 400.3 | 114.8 | 406.4 | 0.00 | 0.00 | 0.00 |
| CONT BLD 12°/100' | | | | | | | | | |
| 3,375.0 | 61.22 | 16.00 | 3,191.0 | 408.8 | 117.2 | 415.0 | 12.00 | 12.00 | 0.00 |
| 3,400.0 | 64.22 | 16.00 | 3,202.5 | 430.2 | 123.3 | 436.7 | 12.00 | 12.00 | 0.00 |
| 3,425.0 | 67.22 | 16.00 | 3,212.7 | 452.1 | 129.6 | 459.0 | 12.00 | 12.00 | 0.00 |
| 3,450.0 | 70.22 | 16.00 | 3,221.8 | 474.4 | 136.0 | 481.7 | 12.00 | 12.00 | 0.00 |
| 3,475.0 | 73.22 | 16.00 | 3,229.6 | 497.3 | 142.6 | 504.9 | 12.00 | 12.00 | 0.00 |
| 3,500.0 | 76.22 | 16.00 | 3,236.2 | 520.4 | 149.2 | 528.4 | 12.00 | 12.00 | 0.00 |
| 3,525.0 | 79.22 | 16.00 | 3,241.5 | 543.9 | 156.0 | 552.2 | 12.00 | 12.00 | 0.00 |

# Microsoft
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.15 Single User Db | **Local Co-ordinate Reference:** | Well Braelynn Federal Com #1H |
| **Company:** | BAM Permian Operating, LLC | **TVD Reference:** | 3773+18 @ 3791.0usft |
| **Project:** | Chaves County, NM | **MD Reference:** | 3773+18 @ 3791.0usft |
| **Site:** | Sec 33-T15S-R29E | **North Reference:** | Grid |
| **Well:** | Braelynn Federal Com #1H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Plan #2 | | |

**Planned Survey**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 3,550.0 | 82.22 | 16.00 | 3,245.6 | 567.6 | 162.8 | 576.3 | 12.00 | 12.00 | 0.00 |
| 3,575.0 | 85.22 | 16.00 | 3,248.3 | 591.5 | 169.6 | 600.6 | 12.00 | 12.00 | 0.00 |
| 3,600.0 | 88.22 | 16.00 | 3,249.7 | 615.5 | 176.5 | 624.9 | 12.00 | 12.00 | 0.00 |
| 3,614.8 | 90.00 | 16.00 | 3,250.0 | 629.7 | 180.6 | 639.3 | 12.00 | 12.00 | 0.00 |
| EOB 90° Start BLD & TRN 2°/100' | | | | | | | | | |
| 3,700.0 | 90.08 | 14.30 | 3,249.9 | 712.0 | 202.8 | 722.8 | 2.00 | 0.09 | -2.00 |
| 3,800.0 | 90.17 | 12.30 | 3,249.7 | 809.3 | 225.8 | 821.3 | 2.00 | 0.09 | -2.00 |
| 3,900.0 | 90.26 | 10.30 | 3,249.3 | 907.3 | 245.4 | 920.3 | 2.00 | 0.09 | -2.00 |
| 4,000.0 | 90.35 | 8.30 | 3,248.8 | 1,006.0 | 261.6 | 1,019.8 | 2.00 | 0.09 | -2.00 |
| 4,100.0 | 90.44 | 6.31 | 3,248.1 | 1,105.2 | 274.3 | 1,119.5 | 2.00 | 0.09 | -2.00 |
| 4,200.0 | 90.53 | 4.31 | 3,247.2 | 1,204.8 | 283.6 | 1,219.5 | 2.00 | 0.09 | -2.00 |
| 4,300.0 | 90.62 | 2.31 | 3,246.2 | 1,304.6 | 289.3 | 1,319.5 | 2.00 | 0.09 | -2.00 |
| 4,400.0 | 90.71 | 0.31 | 3,245.1 | 1,404.5 | 291.6 | 1,419.4 | 2.00 | 0.09 | -2.00 |
| 4,412.1 | 90.72 | 0.07 | 3,244.9 | 1,416.7 | 291.7 | 1,431.5 | 2.00 | 0.09 | -2.00 |
| EOB&T HLD 90.72° Inc. | | | | | | | | | |
| 4,500.0 | 90.72 | 0.07 | 3,243.8 | 1,504.5 | 291.8 | 1,519.2 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 90.72 | 0.07 | 3,242.5 | 1,604.5 | 291.9 | 1,619.0 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 90.72 | 0.07 | 3,241.3 | 1,704.5 | 292.0 | 1,718.9 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 90.72 | 0.07 | 3,240.0 | 1,804.5 | 292.1 | 1,818.7 | 0.00 | 0.00 | 0.00 |
| 4,900.0 | 90.72 | 0.07 | 3,238.7 | 1,904.5 | 292.3 | 1,918.5 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 90.72 | 0.07 | 3,237.5 | 2,004.5 | 292.4 | 2,018.3 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 90.72 | 0.07 | 3,236.2 | 2,104.5 | 292.5 | 2,118.1 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 90.72 | 0.07 | 3,235.0 | 2,204.5 | 292.6 | 2,218.0 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 90.72 | 0.07 | 3,233.7 | 2,304.5 | 292.7 | 2,317.8 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 90.72 | 0.07 | 3,232.4 | 2,404.5 | 292.9 | 2,417.6 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 90.72 | 0.07 | 3,231.2 | 2,504.5 | 293.0 | 2,517.4 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 90.72 | 0.07 | 3,229.9 | 2,604.5 | 293.1 | 2,617.3 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 90.72 | 0.07 | 3,228.7 | 2,704.4 | 293.2 | 2,717.1 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 90.72 | 0.07 | 3,227.4 | 2,804.4 | 293.4 | 2,816.9 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 90.72 | 0.07 | 3,226.1 | 2,904.4 | 293.5 | 2,916.7 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 90.72 | 0.07 | 3,224.9 | 3,004.4 | 293.6 | 3,016.6 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 90.72 | 0.07 | 3,223.6 | 3,104.4 | 293.7 | 3,116.4 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 90.72 | 0.07 | 3,222.3 | 3,204.4 | 293.8 | 3,216.2 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 90.72 | 0.07 | 3,221.1 | 3,304.4 | 294.0 | 3,316.0 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 90.72 | 0.07 | 3,219.8 | 3,404.4 | 294.1 | 3,415.8 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 90.72 | 0.07 | 3,218.6 | 3,504.4 | 294.2 | 3,515.7 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 90.72 | 0.07 | 3,217.3 | 3,604.4 | 294.3 | 3,615.5 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 90.72 | 0.07 | 3,216.0 | 3,704.4 | 294.4 | 3,715.3 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 90.72 | 0.07 | 3,214.8 | 3,804.4 | 294.6 | 3,815.1 | 0.00 | 0.00 | 0.00 |
| 6,900.0 | 90.72 | 0.07 | 3,213.5 | 3,904.3 | 294.7 | 3,915.0 | 0.00 | 0.00 | 0.00 |
| 7,000.0 | 90.72 | 0.07 | 3,212.3 | 4,004.3 | 294.8 | 4,014.8 | 0.00 | 0.00 | 0.00 |
| 7,100.0 | 90.72 | 0.07 | 3,211.0 | 4,104.3 | 294.9 | 4,114.6 | 0.00 | 0.00 | 0.00 |
| 7,200.0 | 90.72 | 0.07 | 3,209.7 | 4,204.3 | 295.1 | 4,214.4 | 0.00 | 0.00 | 0.00 |
| 7,300.0 | 90.72 | 0.07 | 3,208.5 | 4,304.3 | 295.2 | 4,314.2 | 0.00 | 0.00 | 0.00 |
| 7,400.0 | 90.72 | 0.07 | 3,207.2 | 4,404.3 | 295.3 | 4,414.1 | 0.00 | 0.00 | 0.00 |
| 7,500.0 | 90.72 | 0.07 | 3,206.0 | 4,504.3 | 295.4 | 4,513.9 | 0.00 | 0.00 | 0.00 |
| 7,600.0 | 90.72 | 0.07 | 3,204.7 | 4,604.3 | 295.5 | 4,613.7 | 0.00 | 0.00 | 0.00 |
| 7,700.0 | 90.72 | 0.07 | 3,203.4 | 4,704.3 | 295.7 | 4,713.5 | 0.00 | 0.00 | 0.00 |
| 7,800.0 | 90.72 | 0.07 | 3,202.2 | 4,804.3 | 295.8 | 4,813.4 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 90.72 | 0.07 | 3,200.9 | 4,904.3 | 295.9 | 4,913.2 | 0.00 | 0.00 | 0.00 |
| 7,971.7 | 90.72 | 0.07 | 3,200.0 | 4,976.0 | 296.0 | 4,984.8 | 0.00 | 0.00 | 0.00 |
| TD at 7971.7 | | | | | | | | | |

# Microsoft
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDM 5000.15 Single User Db | **Local Co-ordinate Reference:** | Well Braelynn Federal Com #1H |
| **Company:** | BAM Permian Operating, LLC | **TVD Reference:** | 3773+18 @ 3791.0usft |
| **Project:** | Chaves County, NM | **MD Reference:** | 3773+18 @ 3791.0usft |
| **Site:** | Sec 33-T15S-R29E | **North Reference:** | Grid |
| **Well:** | Braelynn Federal Com #1H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | Wellbore #1 | | |
| **Design:** | Plan #2 | | |

**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 |
|---|---|---|---|---|---|---|---|---|---|
| BHL Braelynn Federal C - plan hits target center - Point | 0.00 | 0.00 | 3,200.0 | 4,976.0 | 296.0 | 720,243.46 | 633,904.77 | 32° 58' 46.523 N | 104° 1' 53.274 W |

**Plan Annotations**

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates +N/-S (usft) | Local Coordinates +E/-W (usft) | Comment |
|---|---|---|---|---|
| 2,614.8 | 2,614.8 | 0.0 | 0.0 | KOP BLD 10°/100' |
| 3,214.8 | 3,111.0 | 275.4 | 79.0 | EOB HLD 60° Inc 150' |
| 3,364.8 | 3,186.0 | 400.3 | 114.8 | CONT BLD 12°/100' |
| 3,614.8 | 3,250.0 | 629.7 | 180.6 | EOB 90° Start BLD & TRN 2°/100' |
| 4,412.1 | 3,244.9 | 1,416.7 | 291.7 | EOB&T HLD 90.72° Inc. |
| 7,971.7 | 3,200.0 | 4,976.0 | 296.0 | TD at 7971.7 |

# PECOS DISTRICT
# DRILLING OPERATIONS
# CONDITIONS OF APPROVAL

| | |
|---|---|
| **OPERATOR'S NAME:** | **Bam Permian Operating, LLC** |
| **LEASE NO.:** | **NMNM-129260** |
| **WELL NAME & NO.:** | **Braelynn Federal Com 1H** |
| **SURFACE HOLE FOOTAGE:** | **0200' FSL & 2330' FEL** |
| **BOTTOM HOLE FOOTAGE** | **0030' FNL & 2050' FEL Sec. 33, T. 15 S., R 29 E.** |
| **LOCATION:** | **Section 33, T. 15 S., R 29 E., NMPM** |
| **COUNTY:** | **Chaves County, New Mexico** |

**Communitization Agreement**

· The operator will submit a Communitization Agreement to the Roswell Field Office, 2909 West 2nd Street Roswell, New Mexico 88220, 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.

· 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.

**The Gamma Ray and Neutron well logs must be run from total depth to surface and e-mailed to Aleksandr Knapowski at cknapowski@blm.gov or hard copy mailed to 2909 West Second Street Roswell, NM 88201 to his attention.**

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 hours cll (575) 627-0205.




**Approval Date: 05/08/2023**

**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.**

2. 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. 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 is located, this does not include the dog house or stairway area.

4. **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.**

**B. CASING**

**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.**

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**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.**

**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.**

**No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.**

**High Cave/Karst**
**Possibility of water flows in the Rustler, Queen, Salado, and Artesia Group.**
**Possibility of lost circulation in the Rustler, Artesia Group, and San Andres.**

**A MINIMUM OF TWO CASING STRINGS CEMENTED TO SURFACE IS REQUIRED IN HIGH CAVE/KARST AREAS. THE CEMENT MUST BE IN A SOLID SHEATH. THEREFORE, ONE INCH OPERATIONS ARE NOT SUFFICIENT TO PROTECT CAVE KARST RESOURCES. A CASING DESIGN THAT HAS A ONE INCH JOB PERFORMED DOES NOT COUNT AS A SOLID SHEATH.**

**ON A THREE STRING DESIGN; IF THE PRIMARY CEMENT JOB ON THE SURFACE CASING DOES NOT CIRCULATE, THEN THE NEXT TWO CASING STRINGS MUST BE CEMENTED TO SURFACE.**

1. The **13-3/8** inch surface casing shall be set at approximately **250** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 feet above the salt.**

    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 is to include the lead cement slurry.**

    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.



 **Approval Date: 05/08/2023**

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.

**Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.**

3. The minimum required fill of cement behind the **7 X 5-1/2** inch production casing is:

   ☒ Cement as proposed. If cement does not circulate, contact the appropriate BLM office.

4. 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.

## C. 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 53.

2. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi (testing to 2,000 psi after setting surface casing and testing to 3,000 psi after setting intermediate casing).**
   - **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. Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
   - **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.**

3. 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. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
    c. 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.

    d. The results of the test shall be reported to the appropriate BLM office.

    e. 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.**

    f. 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.

**D. DRILL STEM TEST**

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

**E. 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.

**JAM 12062022**





**Approval Date: 05/08/2023**

**BAM PERMIAN OPERATING LLC**
**HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**

## 1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

a. The hazards and characteristics of hydrogen sulfide ($H_2S$).
b. The proper use and maintenance of personal protective equipment and life support systems.
c. The proper use of $H_2S$ detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
d. The proper techniques for first aid and rescue procedures.

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

a. The effects of $H_2S$ on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
c. The contents and requirements of the $H_2S$ Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable $H_2S$ zone (within 3 days or 500 feet) and weekly $H_2S$ and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific $H_2S$ Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

## 2. $H_2S$ SAFETY EQUIPMENT AND SYSTEMS

Note: All $H_2S$ safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain $H_2S$. If $H_2S$ greater than 100 ppm is encountered in the gas stream we will shut in and install $H_2S$ 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.

BAM PERMIAN OPERATING 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 $H_2S$ AREA**
**AUTHORIZED PERSONNEL ONLY**

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

BAM PERMIAN OPERATING LLC

1-432-242-8851

# EMERGENCY CALL LIST

| | OFFICE |
|---|---|
| BAM PERMIAN OPERATING LLC OFFICE | 432-242-8851 |
| Blake Morphew | 432-413-9289 |
| Cameron Phillips | 432-230-2887 |

# EMERGENCY RESPONSE NUMBERS

| | OFFICE |
|---|---|
| STATE POLICE | 575-748-9718 |
| CHAVES COUNTY SHERIFF | 575-624-6500 |
| 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 |

# BAM PERMIAN OPERATING, LLC

## BRAELYNN FEDERAL COM 1H PAD
## SECTION 33, T-15-S, R-29-E, N.M.P.M.,
## CHAVES COUNTY, N.M.

highest ground to Northeast

CENTER OF PAD
150' FSL
2329' FEL
LAT: 32.9657780° N
LONG: 104.0324755° W
NAD 83

BUREAU OF LAND MANAGEMENT

flare line (straight) & flare >150' from well head

*iBefore digging call for utility line location!*

ELEVATION: 3772'

S 89°57'03" E
149.93'

TOPSOIL

S 89°56'42" E
150.04'

ELEVATION: 3774'

windsocks on rig floor & at mud tanks

secondary safety briefing area >150' from well head & exit route

v-door

CENTER OF PAD

prevailing winds blow from S-SE

N

0 50 100
SCALE: 1"=100'

PROPOSED PIPELINE
PROPOSED ACCESS ROAD

N 00°12'
199.9'

S 00°11'06" W
100.01'

S 00°14'51" W
200.09'

100'
150'
150'
50'
150'

3771 3772 3773 3774 3770 3769

SECTION 33
SECTION 1

N 89°53'14" W
148.19'

N 89°57'01" W
151.76'

BASIS OF BEARING
S 89°56'46" E - 2637.82'

T-15-S
T-16-S

33 34

Fd. Bc.
U.S.G.L.O.
1916
(1/4 COR.)

Fd. Bc.
U.S.G.L.O.
1916

ELEVATION: 3773'

warning sign & windsock

ATION: 3768'

S 89°58'39" E
159.58'

PRIMARY safety briefing area >150' from well head & exit route

| OWNER | SQ. FT. | ACRES |
|---|---|---|
| BUREAU OF LAND MANAGEMENT | 90,023 | 2.067 |

| WELL FLAG | NAD 83 |
|---|---|
| BRAELYNN FEDERAL COM #1H<br>200' FSL, 2330' FEL | LAT.=32.9659154° N<br>LONG.=104.0324765° W |

NOTES:
1. BASIS OF BEARING: MONUMENTED SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 33, T-15-S, R-29-E, N.M.P.M., CHAVEZ COUNTY, NEW MEXICO. BEARS: S 89°56'46" E - 2637.82'
2. ALL BEARINGS, DISTANCES & COORDINATES SHOWN ARE BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83, IN U.S. SURVEY FEET.
3. CONTRACTOR SHALL CONTACT "ONE-CALL" FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINE OR CABLES ON WELL PAD AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
4. UNITED FIELD SERVICES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.

I, MARSHALL W. LINDEEN, NEW MEXICO PROFESSIONAL SURVEYOR NO. 17078, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT.

NEW MEXICO 17078 PROFESSIONAL SURVEYOR

MARSHALL W. LINDEEN P.S. #17078

5-2-22
DATE

BAM PERMIAN OPERATING, LLC

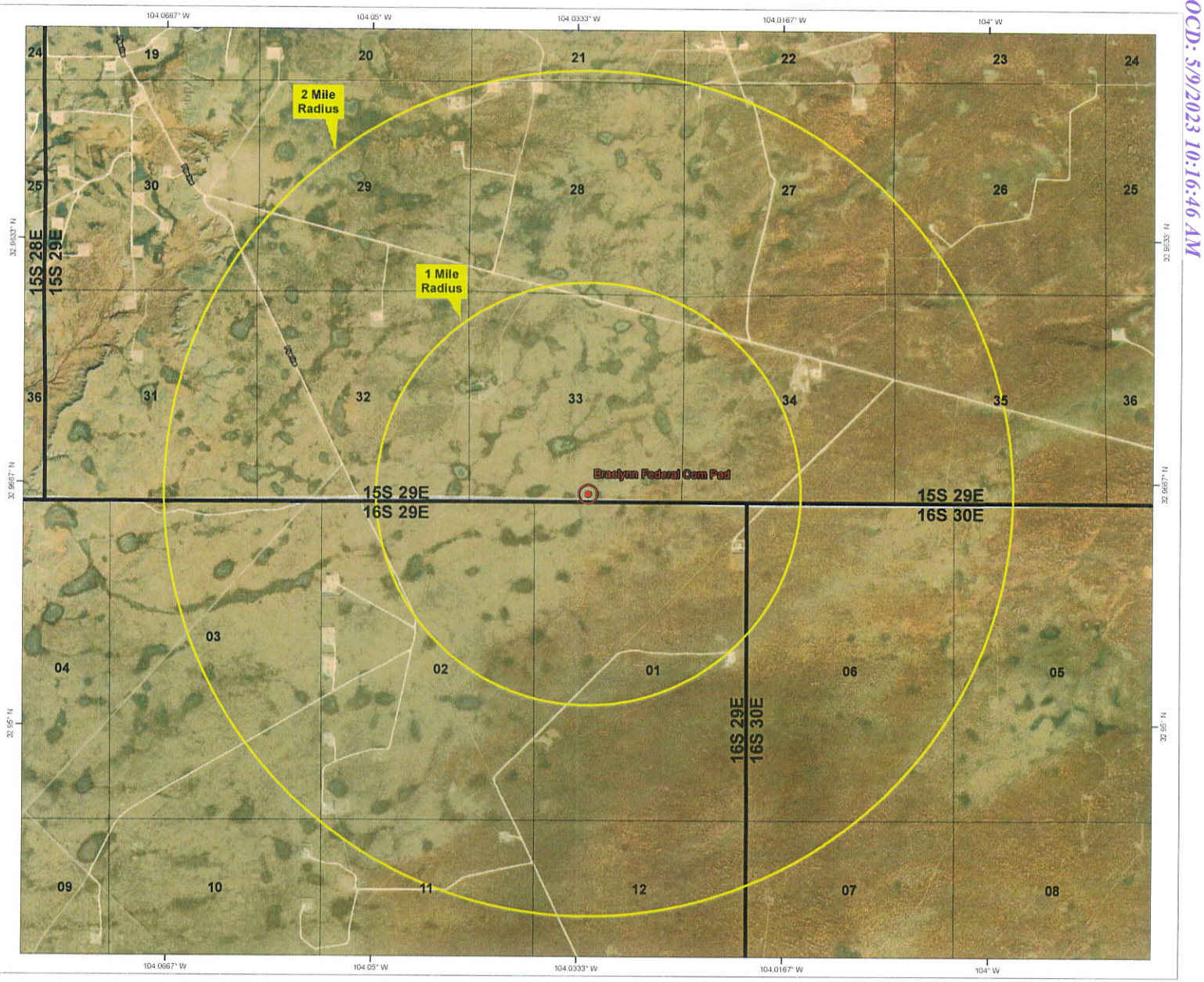
UNITED
FIELD SERVICES INC.
P.O. BOX 3651
FARMINGTON, NM 87499
OFFICE: (505) 334-0408

| SURVEYED: 4/18/22 | REV. DATE: | APP. BY: M.W.L. |
|---|---|---|
| DRAWN BY: A.A.D. | DATE DRAWN: 4/27/22 | FILE NAME: 11661-Pad |

# BAM Permian Operating, LLC

**Braelynn Federal Com Pad**
**H2S Contingency Plan:**
**Radius Map**

Section 33, Township 15S, Range 29E
Chaves County, New Mexico




Pad Center

1:27,000

0 0.25 0.5 1

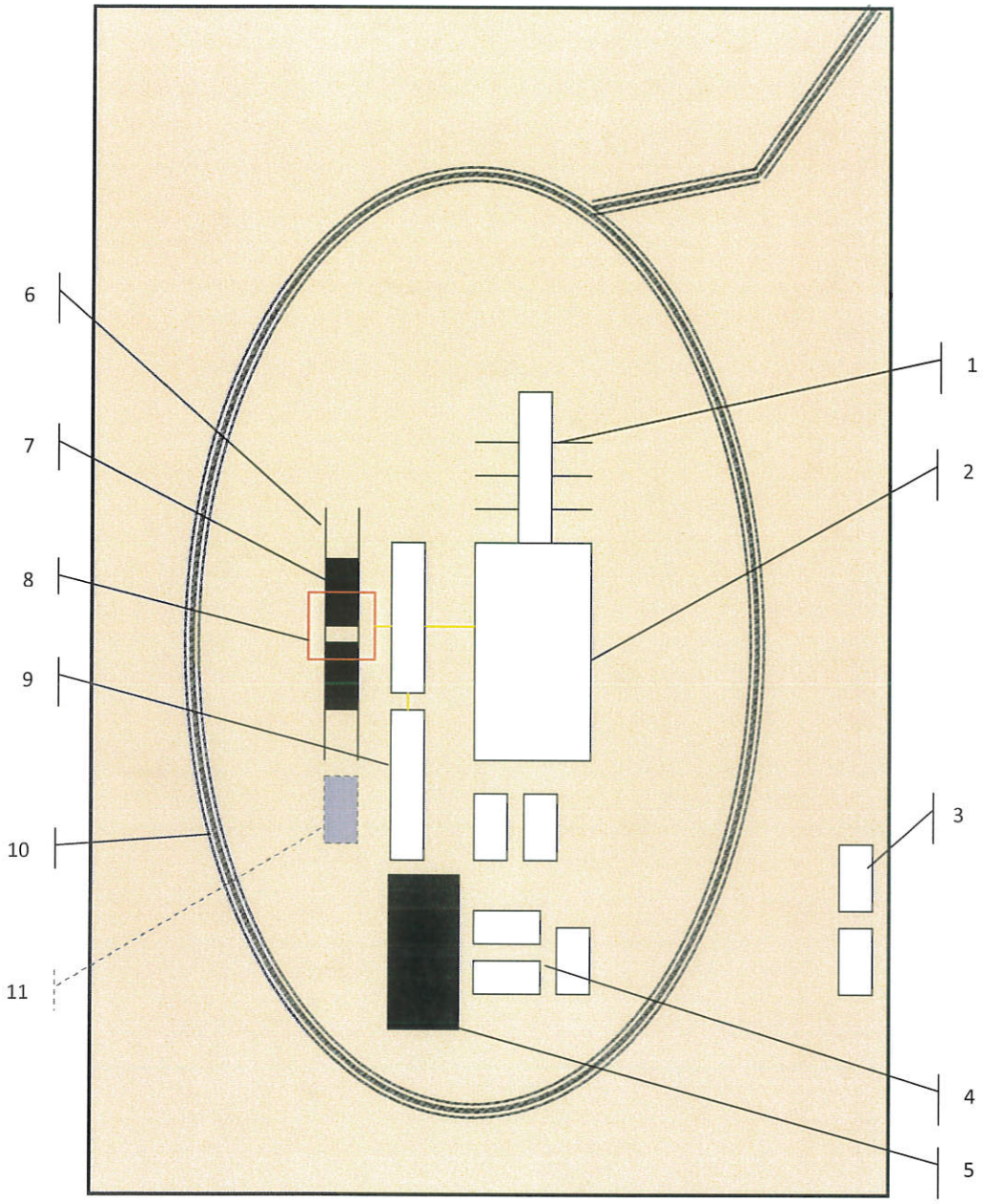
Miles

N

NAD 1983 New Mexico State Plane East
FIPS 3001 Feet

PERMITS WEST

Prepared by Permits West, Inc., August 8, 2022
for BAM Permian Operating, LLC




**Schematic Closed Loop Drilling Rig***

1. Pipe Rack
2. Drill Rig
3. House Trailers/ Offices
4. Generator/Fuel/Storage
5. Overflow-Frac Tank
6. Skids
7. Roll Offs
8. Hopper or Centrifuge
9. Mud Tanks
10. Loop Drive
11. Generator (only for use with centrifuge)

*Not drawn to scale: Closed loop system requires at least 30 feet beyond mud tanks. Ideally 60 feet would be available

Above: Centrifugal Closed Loop System

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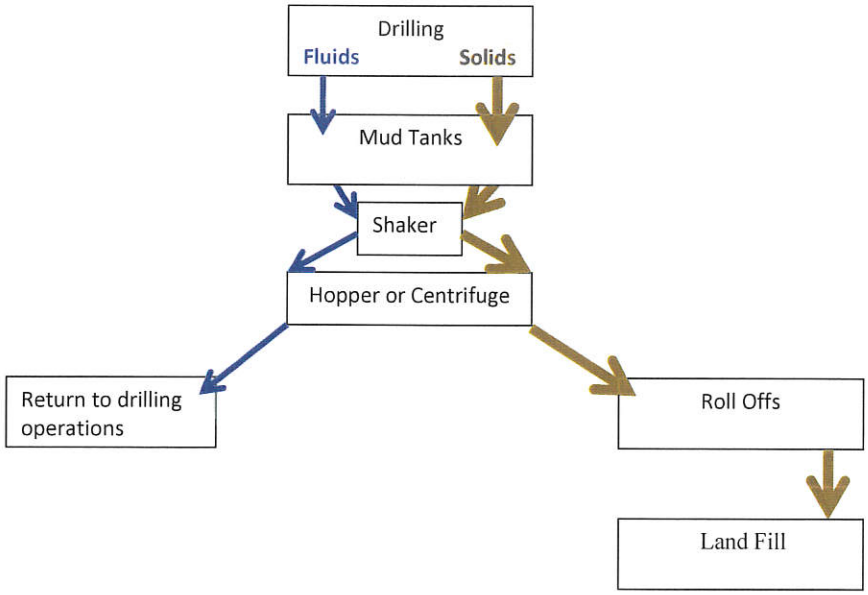
**Closed Loop Drilling System: Mud tanks to right (1)**
**Hopper in air to settle out solids (2)**
**Water return pipe (3)**
**Shaker between hopper and mud tanks (4)**
**Roll offs on skids (5)**

## Flow Chart for Drilling Fluids and Solids




**Photos Courtesy of Gandy Corporation Oil Field Service**

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**District II**
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**District III**
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 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 215102

## CONDITIONS

| | |
|---|---|
| Operator:<br>BAM Permian Operating, LLC<br>4416 Briarwood Ave<br>Midland, TX 79707 | OGRID:<br>328565 |
| | Action Number:<br>215102 |
| | Action Type:<br>[C-101] BLM - Federal/Indian Land Lease (Form 3160-3) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| john.harrison | Will require a File As Drilled C-102 and a Directional Survey with the C-104 | 5/15/2023 |
| john.harrison | Notify OCD 24 hours prior to casing & cement | 5/15/2023 |
| john.harrison | 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 | 5/15/2023 |
| john.harrison | Cement is required to circulate on both surface and intermediate1 strings of casing | 5/15/2023 |
| john.harrison | 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 | 5/15/2023 |