AFMSS

U.S. Department of the Interior
Bureau of Land Management

Application for Permit to Drill

APD Package Report

Date Printed:

APD ID:	Well Status:
APD Received Date:	Well Name:
Operator:	Well Number:

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

- Application Report
- Application Attachments
  -- Well Plat: 1 file(s)

- Drilling Plan Report
- Drilling Plan Attachments
  -- Blowout Prevention Choke Diagram Attachment: 2 file(s)
  -- Blowout Prevention BOP Diagram Attachment: 3 file(s)
  -- Casing Taperd String Specs: 4 file(s)
  -- Casing Design Assumptions and Worksheet(s): 5 file(s)
  -- Hydrogen sulfide drilling operations plan: 3 file(s)
  -- Proposed horizontal/directional/multi-lateral plan submission: 3 file(s)
  -- Other Variances: 1 file(s)

- SUPO Report
- SUPO Attachments
  -- Existing Road Map: 1 file(s)
  -- Attach Well map: 1 file(s)
  -- Water source and transportation map: 1 file(s)
  -- Well Site Layout Diagram: 2 file(s)

- PWD Report
- PWD Attachments
  -- None

- Bond Report
- Bond Attachments
  -- None

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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.

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.

2. Name of Operator

9. API Well No.

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.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

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

12. County or Parish

13. State

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

16. No of acres in lease

17. Spacing Unit dedicated to this well

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

19. Proposed Depth

20. BLM/BIA Bond No. in file

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

22. Approximate date work will start*

23. Estimated duration

24. Attachments

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

1. Well plat certified by a registered surveyor.
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

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

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/12/2021

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INSTRUCTIONS

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

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

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

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

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

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

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

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

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

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

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

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Released to Imaging: 4/26/2021 5:10:46 PM

Approval Date: 04/12/2021

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Additional Operator Remarks

Location of Well

0. SHL: NENE / 730 FNL / 700 FEL / TWSP: 26S / RANGE: 32E / SECTION: 1 / LAT: 32.077798 / LONG: -103.622147 (TVD: 0 feet, MD: 0 feet)

PPP: NENE / 100 FNL / 330 FEL / TWSP: 26S / RANGE: 32E / SECTION: 1 / LAT: 32.079535 / LONG: -103.620959 (TVD: 12055 feet, MD: 12110 feet)

BHL: SESE / 50 FSL / 330 FEL / TWSP: 26S / RANGE: 32E / SECTION: 12 / LAT: 32.050531 / LONG: -103.620876 (TVD: 12490 feet, MD: 22917 feet)

BLM Point of Contact

Name: TENILLE ORTIZ
Title: Legal Instruments Examiner
Phone: (575) 234-2224
Email: tortiz@blm.gov

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Review and Appeal Rights

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

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PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA Oil Producers LLC
LEASE NO.:	NMNM014492
COUNTY:	Lea County, NM

Wells:

Well Pad 1
Mesa 8105 11 Federal 58H
Surface Hole Location: 290' FNL & 1730' FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 330' FEL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 59H
Surface Hole Location: 290' FNL & 1760' FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 990' FEL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 60H
Surface Hole Location: 290' FNL & 1790' FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 1650' FEL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 61H
Surface Hole Location: 290' FNL & 1820' FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 2310' FEL, Section 11, T. 26 S, R 32 E.

Well Pad 2
Mesa 8105 11 Federal 62H
Surface Hole Location: 320' FNL & 1700' FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 2310' FWL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 63H
Surface Hole Location: 320' FNL & 1670' FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 1650' FWL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 64H
Surface Hole Location: 320' FNL & 1640' FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 990' FWL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 65H
Surface Hole Location: 320' FNL & 1610' FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 330' FWL, Section 11, T. 26 S, R 32 E.

Well Pad 3
Mesa 8105 11 Federal 74H
Surface Hole Location: 490' FNL & 1730' FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 330' FEL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 75H
Surface Hole Location: 490' FNL & 1760' FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 990' FEL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 76H

Surface Hole Location: 490’ FNL & 1790’ FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 1650’ FEL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 77H
Surface Hole Location: 490’ FNL & 1820’ FEL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 2310’ FEL, Section 11, T. 26 S, R 32 E.

Well Pad 4
Mesa 8105 11 Federal 78H
Surface Hole Location: 490’ FNL & 1560’ FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 2310’ FWL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 79H
Surface Hole Location: 490’ FNL & 1530’ FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 1650’ FWL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 80H
Surface Hole Location: 490’ FNL & 1500’ FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 990’ FWL, Section 11, T. 26 S, R 32 E.

Mesa 8105 11 Federal 81H
Surface Hole Location: 490’ FNL & 1470’ FWL, Section 11, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 330’ FWL, Section 11, T. 26 S, R 32 E.

Well Pad 5
Mesa 8105 1-12 Federal 50H
Surface Hole Location: 530’ FNL & 700’ FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 330’ FEL, Section 12, T. 26 S, R 32 E.

Mesa 8105 1-12 Federal 51H
Surface Hole Location: 530’ FNL & 730’ FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 990’ FEL, Section 12, T. 26 S, R 32 E.

Well Pad 6
Mesa 8105 1-12 Federal 52H
Surface Hole Location: 305’ FNL & 1080’ FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 1650’ FEL, Section 12, T. 26 S, R 32 E.

Mesa 8105 1-12 Federal 53H
Surface Hole Location: 305’ FNL & 1110’ FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 2310’ FEL, Section 12, T. 26 S, R 32 E.

Well Pad 7
Mesa 8105 1-12 Federal 54H
Surface Hole Location: 670’ FNL & 1524’ FWL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 2310’ FWL, Section 12, T. 26 S, R 32 E.

Mesa 8105 1-12 Federal 55H
Surface Hole Location: 670’ FNL & 1494’ FWL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 1650’ FWL, Section 12, T. 26 S, R 32 E.

Well Pad 8
Mesa 8105 1-12 Federal 56H
Surface Hole Location: 480’ FNL & 990’ FWL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50’ FSL & 990’ FWL, Section 12, T. 26 S, R 32 E.

Mesa 8105 1-12 Federal 57H
Surface Hole Location: 480' FNL & 960' FWL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 330' FWL, Section 12, T. 26 S, R 32 E.

Well Pad 9
Mesa 8105 1-12 Federal 66H
Surface Hole Location: 730' FNL & 700' FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 330' FEL, Section 12, T. 26 S, R 32 E.

Mesa 8105 1-12 Federal 67H
Surface Hole Location: 730' FNL & 730' FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 990' FEL, Section 12, T. 26 S, R 32 E.

Well Pad 10
Mesa 8105 1-12 Federal 68H
Surface Hole Location: 505' FNL & 1080' FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 1650' FEL, Section 12, T. 26 S, R 32 E.

Mesa 8105 1-12 Federal 69H
Surface Hole Location: 505' FNL & 1110' FEL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 2310' FEL, Section 12, T. 26 S, R 32 E.

Well Pad 11
Mesa 8105 1-12 Federal 70H
Surface Hole Location: 470' FNL & 1530' FWL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 2310' FWL, Section 12, T. 26 S, R 32 E.

Mesa 8105 1-12 Federal 71H
Surface Hole Location: 470' FNL & 1500' FWL, Section 1, T. 26 S., R. 32 E.
Bottom Hole Location: 50' FSL & 1650' FWL, Section 12, T. 26 S, R 32 E.

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

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☐ **Permit Expiration**
☐ **Archaeology, Paleontology, and Historical Sites**
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☒ **Special Requirements**
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- Well Structures & Facilities
- Pipelines
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☐ **Interim Reclamation**
☐ **Final Abandonment & Reclamation**

 Approval Date: 04/12/2021

I. GENERAL PROVISIONS

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

II. PERMIT EXPIRATION

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

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

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

IV. NOXIOUS WEEDS

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

SPECIAL REQUIREMENT(S)

Watershed:
The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Cave/Karst:

Construction Mitigation

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

General Construction:

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

Pad Construction:

- The pad will be constructed and leveled by adding the necessary fill and caliche – no blasting.

- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

Road Construction:

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

Drilling Mitigation

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

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

- Closed loop system using steel tanks - all fluids and cuttings will be hauled off-site and disposed of properly at an authorized site
- Rotary drilling with fresh water where cave or karst features are expected to prevent contamination of freshwater aquifers.
- Directional drilling is only allowed at depths greater than 100 feet below the cave occurrence zone to prevent additional impacts resulting from directional drilling.
- Lost circulation zones will be logged and reported in the drilling report so BLM can assess the situation and work with the operator on corrective actions.
- Additional drilling, casing, and cementing procedures to protect cave zones and fresh water aquifers. See drilling COAs.

Production Mitigation

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

- Tank battery locations and facilities will be bermed and lined with a 20 mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.
- Development and implementation of a leak detection system to provide an early alert to operators when a leak has occurred.

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

Residual and Cumulative Mitigation
The operator will perform annual pressure monitoring on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be taken to correct the problem to the BLM's approval.

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

Range:

Cattleguards
Where a permanent cattlegaurd is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

Fence Requirement
Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Livestock Watering Requirement
Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

VRM IV:

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

V. CONSTRUCTION

A. NOTIFICATION

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

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

B. TOPSOIL

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

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

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

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

D. FEDERAL MINERAL MATERIALS PIT

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

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

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

F. EXCLOSURE FENCING (CELLARS & PITS)

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

G. ON LEASE ACCESS ROADS

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

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

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

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates,

erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

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

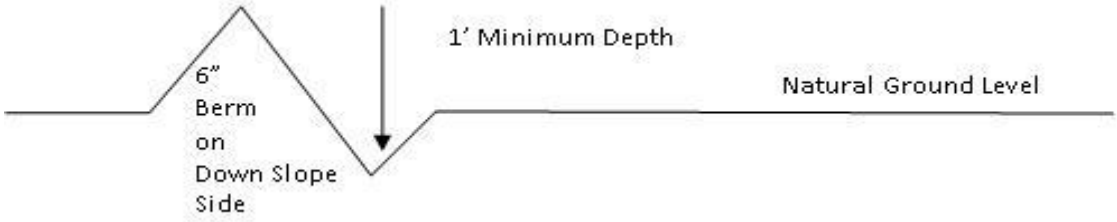
Ditching
Ditching shall be required on both sides of the road.

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

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards
An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be

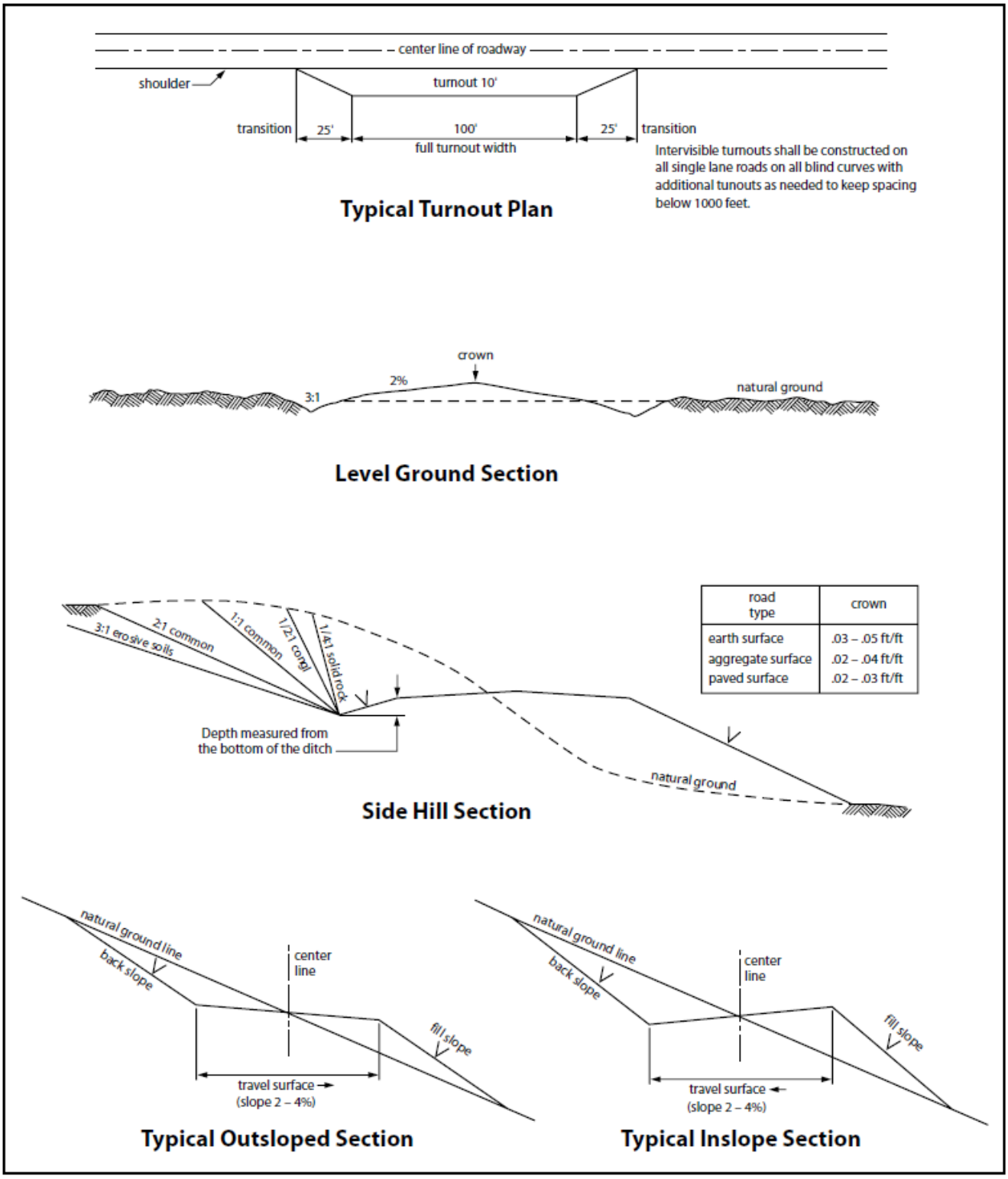
repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

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

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

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes



road type	crown
earth surface	.03 – .05 ft/ft
aggregate surface	.02 – .04 ft/ft
paved surface	.02 – .03 ft/ft

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

 Approval Date: 04/12/2021

VI. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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

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

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

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

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

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

VII. INTERIM RECLAMATION

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

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

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

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

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

VIII. FINAL ABANDONMENT & RECLAMATION

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

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

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

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

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 2, for Sandy Sites

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

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

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

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

*Pounds of pure live seed:

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

Seed Mixture 3, for Shallow Sites

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

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

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

Species	lb/acre
Plains Bristlegrass (*Setaria macrostachya*)	1.0
Green Sprangletop (*Leptochloa dubia*)	2.0
Sideoats Grama (*Bouteloua curtipendula)*	5.0

*Pounds of pure live seed:

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

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**BTA Oil Producers LLC**
LEASE NO.:	**NMNM014492**
WELL NAME & NO.:	MESA 8105 1-12 Federal 66H
SURFACE HOLE FOOTAGE:	730'/N & 700'/E
BOTTOM HOLE FOOTAGE	50'/S & 330'/E
LOCATION:	Section 1, T.26 S., R.32 E., NMP
COUNTY:	Lea County, New Mexico

COA

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

A. HYDROGEN SULFIDE

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

B. CASING

Casing Design:

1. The **10-3/4** inch surface casing shall be set at approximately **860 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after

completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.
Excess cement calculates to 16%, additional cement might be required.

2. The **7-5/8** inch intermediate casing shall be set at approximately **11,992** feet. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**
Excess cement calculates to -44%, additional cement might be required.

Option 2:

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

a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
Excess cement calculates to -6%, additional cement might be required.

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
Wait on cement (WOC) time for a primary cement job is to include tlead cement slurry due to cave/karst or potash.

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

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

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

GENERAL REQUIREMENTS

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

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

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

☒ Eddy County

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

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

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

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be

onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

    c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to

Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

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

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

OTA11032020

AFMSS

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

Operator Certification Data Report
04/14/2021

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

Application Data Report
04/14/2021

APD ID: 10400057820
Submission Date: 06/10/2020
Operator Name: BTA OIL PRODUCERS LLC
Well Name: MESA 8105 1-12 FEDERAL
Well Number: 66H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - General

APD ID: 10400057820
Tie to previous NOS?
Submission Date: 06/10/2020
BLM Office: CARLSBAD
User: Sammy Hajar
Title: Regulatory Analyst
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM014492
Lease Acres:
Surface access agreement in place?
Allotted?
Reservation:
Agreement in place? NO
Federal or Indian agreement:
Agreement number:
Agreement name:
Keep application confidential? Y
Permitting Agent? NO
APD Operator: BTA OIL PRODUCERS LLC
Operator letter of designation:

Operator Info

Operator Organization Name: BTA OIL PRODUCERS LLC
Operator Address: 104 S. Pecos
Zip: 79701
Operator PO Box:
Operator City: Midland
State: TX
Operator Phone: (432)682-3753
Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO
Master Development Plan name:
Well in Master SUPO? NO
Master SUPO name:
Well in Master Drilling Plan? NO
Master Drilling Plan name:
Well Name: MESA 8105 1-12 FEDERAL
Well Number: 66H
Well API Number:
Field/Pool or Exploratory? Field and Pool
Field Name: WC-025
Pool Name: UPPER WOLFCAMP
Is the proposed well in an area containing other mineral resources? NONE

Released to Imaging: 4/26/2021 5:10:46 PM

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

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

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** N **New surface disturbance?**

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** MESA 8105 1-12 FEDERAL **Number:** 66H and 67H

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: **Distance to nearest well:** 496 FT **Distance to lease line:** 700 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: Signed_Mesa_8105_1_12_Federal_66H_C102_20200609093059.pdf

Well work start Date: 11/08/2021 **Duration:** 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NGVD29

Survey number: **Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
SHL Leg #1	730	FNL	700	FEL	26S	32E	1	Aliquot NENE	32.077798	-103.622147	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 014492	3360	0	0	Y
KOP Leg #1	100	FNL	330	FEL	26S	32E	1	Aliquot NENE	32.079535	-103.620959	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 014492	-8652	12067	12012	Y
PPP Leg #1-1	100	FNL	330	FEL	26S	32E	1	Aliquot NENE	32.079535	-103.620959	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 014492	-8695	12110	12055	Y

CONFIDENTIAL

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this lease?
EXIT Leg #1	100	FSL	330	FEL	26S	32E	12	Aliquot SESE	32.050668	-103.620877	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 014492	-9130	22637	12490	Y
BHL Leg #1	50	FSL	330	FEL	26S	32E	12	Aliquot SESE	32.050531	-103.620876	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 014492	-9130	22917	12490	Y

CONFIDENTIAL

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		WC-025 ; Upper Wolfcamp

Property Code	Property Name	Well Number
	MESA 8105 1-12 FEDERAL	66H

OGRID No.	Operator Name	Elevation
260297	BTA OIL PRODUCERS, LLC	3360'

Surface Location

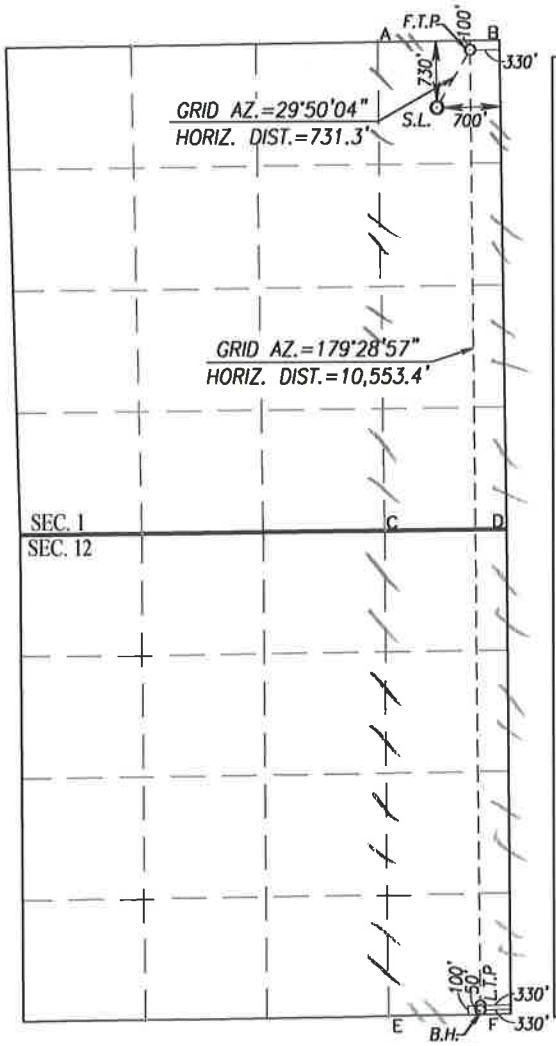
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	1	26-S	32-E		730	NORTH	700	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	26-S	32-E		50	SOUTH	330	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



SCALE: 1"=2000'

GEODETIC COORDINATES
NAD 27 NME
SURFACE LOCATION
Y=392708.5 N
X=720426.3 E
LAT.=32.077673° N
LONG.=103.621676° W

GEODETIC COORDINATES
NAD 83 NME
SURFACE LOCATION
Y=392766.1 N
X=761612.9 E
LAT.=32.077798° N
LONG.=103.622147° W

FIRST TAKE POINT
NAD 27 NME
Y=393342.8 N
X=720790.1 E
LAT.=32.079410° N
LONG.=103.620488° W

FIRST TAKE POINT
NAD 83 NME
Y=393400.3 N
X=761976.7 E
LAT.=32.079535° N
LONG.=103.620959° W

CORNER COORDINATES TABLE
NAD 27 NME
A - Y= 393430.8 N, X= 719783.4 E
B - Y= 393446.7 N, X= 721119.0 E
C - Y= 388065.8 N, X= 719852.3 E
D - Y= 388078.8 N, X= 721180.8 E
E - Y= 382729.0 N, X= 719884.8 E
F - Y= 382746.5 N, X= 721215.1 E

CORNER COORDINATES TABLE
NAD 83 NME
A - Y= 393488.4 N, X= 760970.0 E
B - Y= 393504.2 N, X= 762305.6 E
C - Y= 388123.2 N, X= 761039.1 E
D - Y= 388136.2 N, X= 762367.7 E
E - Y= 382786.2 N, X= 761071.9 E
F - Y= 382803.7 N, X= 762402.2 E

LAST TAKE POINT
NAD 27 NME
Y=382842.1 N
X=720884.4 E
LAT.=32.050543° N
LONG.=103.620407° W

LAST TAKE POINT
NAD 83 NME
Y=382899.4 N
X=762071.5 E
LAT.=32.050668° N
LONG.=103.620877° W

BOTTOM HOLE LOCATION
NAD 27 NME
Y=382792.1 N
X=720884.9 E
LAT.=32.050406° N
LONG.=103.620407° W

BOTTOM HOLE LOCATION
NAD 83 NME
Y=382849.4 N
X=762071.9 E
LAT.=32.050531° N
LONG.=103.620876° W

OPERATOR CERTIFICATION

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

Signature: Sammy Hajar — Date: 5/5/2020

Sammy Hajar
Printed Name

SHAJAR@BTAOIL.COM
E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from 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.

NOVEMBER 19, 2019
Date of Survey

Signature & Seal of Professional Surveyor

GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

Gary G. Eidson 02/17/2020

Certificate Number: Gary G. Eidson 12641; Ronald J. Eidson 3239

ACK — JWSC W.O.: 19.11.1257

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

Drilling Plan Data Report
04/14/2021

APD ID: 10400057820
Submission Date: 06/10/2020
Operator Name: BTA OIL PRODUCERS LLC
Well Name: MESA 8105 1-12 FEDERAL
Well Number: 66H
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 Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
754821	QUATERNARY	3360	0	0	ALLUVIUM	NONE	N
754822	RUSTLER	2538	822	822	ANHYDRITE	NONE	N
754823	TOP SALT	2078	1282	1282	SALT	NONE	N
754824	BASE OF SALT	-1257	4617	4617	SALT	NONE	N
754825	DELAWARE	-1475	4835	4835	LIMESTONE	NATURAL GAS, OIL	N
754834	BELL CANYON	-1503	4863	4863	SANDSTONE	NATURAL GAS, OIL	N
754827	CHERRY CANYON	-2867	6227	6227	SANDSTONE	NATURAL GAS, OIL	N
754828	BRUSHY CANYON	-4114	7474	7474	SANDSTONE	NATURAL GAS, OIL	N
754829	BONE SPRING LIME	-5674	9034	9034	LIMESTONE	NATURAL GAS, OIL	N
754830	FIRST BONE SPRING SAND	-6602	9962	9962	SANDSTONE	NATURAL GAS, OIL	N
754831	BONE SPRING 2ND	-7168	10528	10528	SANDSTONE	NATURAL GAS, OIL	N
754832	BONE SPRING 3RD	-8285	11645	11645	SANDSTONE	NATURAL GAS, OIL	N
754833	WOLFCAMP	-8695	12055	12055	SHALE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

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Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Pressure Rating (PSI): 10M **Rating Depth:** 14000

Equipment: The blowout preventer equipment (BOP) shown in Exhibit A will consist of a (10M system) double ram type (10,000 psi WP) preventer and a bag-type (Hydril) preventer (5000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 5" drill pipe rams on bottom. The BOPs will be installed on the 10-3/4" surface casing and utilized continuously until total depth is reached. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. A remote kill line will be used for the 10M system as per onshore order #2. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 10,000 psi WP rating. The 5M annular will be tested as per BLM drilling Operations Order No. 2, and will be test to 100% of working pressure.
Requesting Variance? NO

Variance request:

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

Choke_Hose___Test_Chart_and_Specs_20190723082742.pdf

10M_choke_mannifold_20200521113335.pdf

BOP Diagram Attachment:

BLM_10M_BOP_with_5M_annular_20200521113411.pptx

5M_annular_well_control_plan_for_BLM_20200521113411.docx

10M_annular_variance_20200521113430.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.75	10.75	NEW	API	N	0	500	0	500	3360	2860	500	J-55	40.5	ST&C	7.3	14.5	DRY	20.7	DRY	31.1
2	INTERMEDIATE	9.875	7.625	NEW	API	Y	0	8055	0	8000	3018	-4640	8055	P-110	29.7	BUTT	1.4	2.4	DRY	4	DRY	3.9
3	PRODUCTION	6.75	5.5	NEW	API	Y	0	11792	0	11737	3018	-8377	11792	P-110	20	BUTT	1.9	1.4	DRY	2.8	DRY	2.7
4	INTERMEDIATE	8.75	7.625	NEW	API	Y	8055	11992	8000	11937	-4635	-8577	3937	P-110	29.7	FJ	1.7	1.6	DRY	2.7	DRY	2.6
5	PRODUCTION	6.75	5.0	NEW	API	Y	11792	22917	11737	12490	-8377	-9130	11125	P-110	18	BUTT	1.9	1.4	DRY	1.5	DRY	1.4

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Casing Attachments

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Mesa_66H_casing_assumption_20200610103241.JPG

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

Inspection Document:

Spec Document:

Tapered String Spec:

7_5_8_tapered_string_9_7_8_hole_spec__20200521134254.jpg

Casing Design Assumptions and Worksheet(s):

Mesa_66H_casing_assumption_20200610103845.JPG

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

Inspection Document:

Spec Document:

Tapered String Spec:

5.5_tapered_string_spec_20190930151650.jpg

Casing Design Assumptions and Worksheet(s):

Mesa_66H_casing_assumption_20200610104029.JPG

CONFIDENTIAL

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Casing Attachments

Casing ID: 4 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

7_5_8_tapered_string_8_3_4_hole_spec_for_FJ_20200521140259.jpg

Casing Design Assumptions and Worksheet(s):

Mesa_66H_casing_assumption_20200610104235.JPG

Casing ID: 5 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

5_tapered_string_spec_20190930151627.jpg

Casing Design Assumptions and Worksheet(s):

Mesa_66H_casing_assumption_20200610102618.JPG

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	255	160	1.8	13.5	288	100	Class C	2% CaCl2
SURFACE	Tail		255	500	200	1.34	14.8	268	100	Class C	2% CaCl2
INTERMEDIATE	Lead	4847	0	4425	710	2.19	12.7	1554.9	50	Class C	0.5% CaCl2
INTERMEDIATE	Tail		4425	4847	150	1.33	14.8	199.5	50	Class C	1% CaCl2
INTERMEDIATE	Lead		4847	8440	365	2.64	10.5	936.6	25	Class H	0.5% CaCl2

CONFIDENTIAL

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Tail		8440	11992	400	1.19	15.6	476	25	Class H	1% CaCl2
PRODUCTION	Lead		10995	11792	0	0	0	0		n/a	n/a
PRODUCTION	Lead		11792	22917	1160	1.27	14.8	1473.2	10	Class H	0.1% Fluid Loss

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	500	OTHER : FW SPUD	8.3	8.4							
500	11992	OTHER : DBE	9	9.4							
11992	12490	OIL-BASED MUD	11	14							

CONFIDENTIAL

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

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: 9093 **Anticipated Surface Pressure:** 6345

Anticipated Bottom Hole Temperature(F): 181

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

BTA_Oil_Producers_LLC___EMERGENCY_CALL_LIST_20190723161502.pdf
H2S_Equipment_Schematic_20190723161502.pdf
H2S_Plan_20190723161502.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Mesa_66H_Wall_plot_20200610105111.pdf
Mesa_66H_directional_plan_20200610105111.pdf
Mesa_8105_66H_Gas_Capture_Plan_20200610105421.pdf

Other proposed operations facets description:

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

Other proposed operations facets attachment:

Other Variance attachment:

BTA_MB_10_34___7_58___5_12_20200521143833.pdf

CONFIDENTIAL

CONFIDENTIAL

Continental

ContiTech

CONTITECH RUBBER Industrial Kft.	No:QC-DB- 599/ 2014
	Page: 16 / 176

Rig 94

Asset 24455

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE			CERT. N°: 1592
PURCHASER:	ContiTech Oil & Marine Corp.		P.O. N°: 4500461753
CONTITECH ORDER N°: 539225		HOSE TYPE: 3" ID	Choke & Kill Hose
HOSE SERIAL N°: 68547		NOMINAL / ACTUAL LENGTH:	7,62 m / 7,66 m
W.P. 68,9 MPa 10000 psi		T.P. 103,4 MPa 15000 psi	Duration: 60 min.

Pressure test with water at ambient temperature

See attachment. (1 page)

→ 10 Min.

↑ 50 MPa

COUPLINGS Type	Serial N°		Quality	Heat N°	
3" coupling with	2574	5533	AISI 4130	A1582N	H8672
4 1/16" 10K API Swivel Flange end			AISI 4130	58855	
Hub			AISI 4130	A1199N	A1423N

Not Designed For Well Testing — **API Spec 16 C**

Fire Rated — **Temperature rate:"B"**

All metal parts are flawless

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

Date:	Inspector	Quality Control
04. September 2014.		ContiTech Rubber Industrial Kft. Quality Control Dept.

ContiTech Rubber Industrial Kft. | Budapesti út 10. H-6728 Szeged | H-6701 P.O.Box 152 Szeged, Hungary
Phone: +36 62 566 737 | Fax: +36 62 566 738 | e-mail: info@fluid.contitech.hu | Internet: www.contitech-rubber.hu, www.contitech.hu
The Court of Csongrád County as Registry Court | Registry Court No. Cg.06-09-002532 | EU VAT No. HU11087206
Deutsche Commerzbank Zrt., Budapest | 14220106-28633003

Received by OCD: 4/15/2021 8:59:56 AM

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE No: 1588, 1590, 1592

Page: 1 / 1

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Serial No.	: S5P606399
Data Count	: 9946
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Print Range	: 2014/09/04 01:53:54.000 - 2014/09/04 04:39:39.000
Comment	:
Sampling Int.	: 1.000 sec
Start Time	: 2014/09/04 01:53:54.000
Stop Time	: 2014/09/04 04:39:39.000

	Cursor A	Cursor B	Difference
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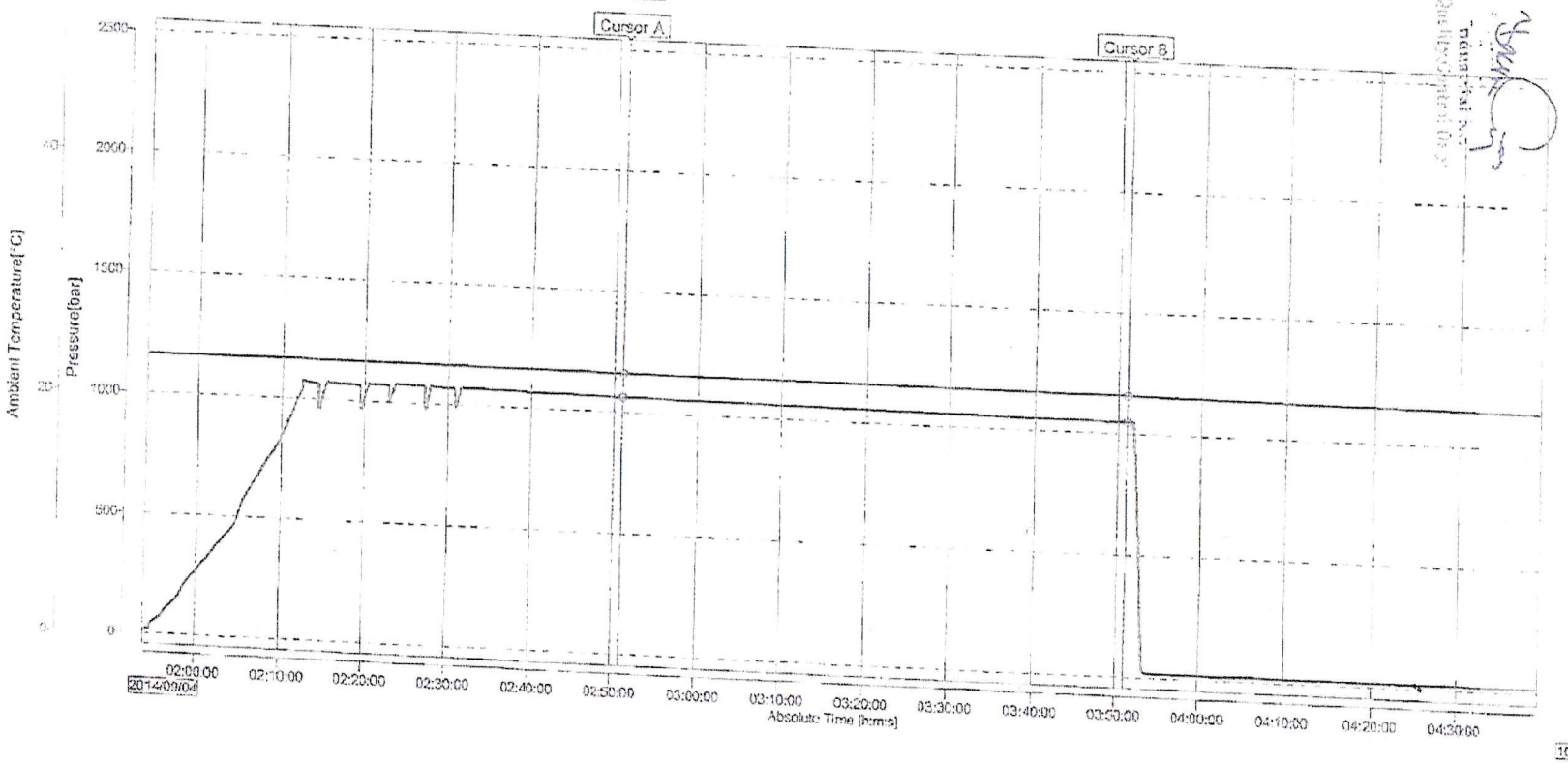

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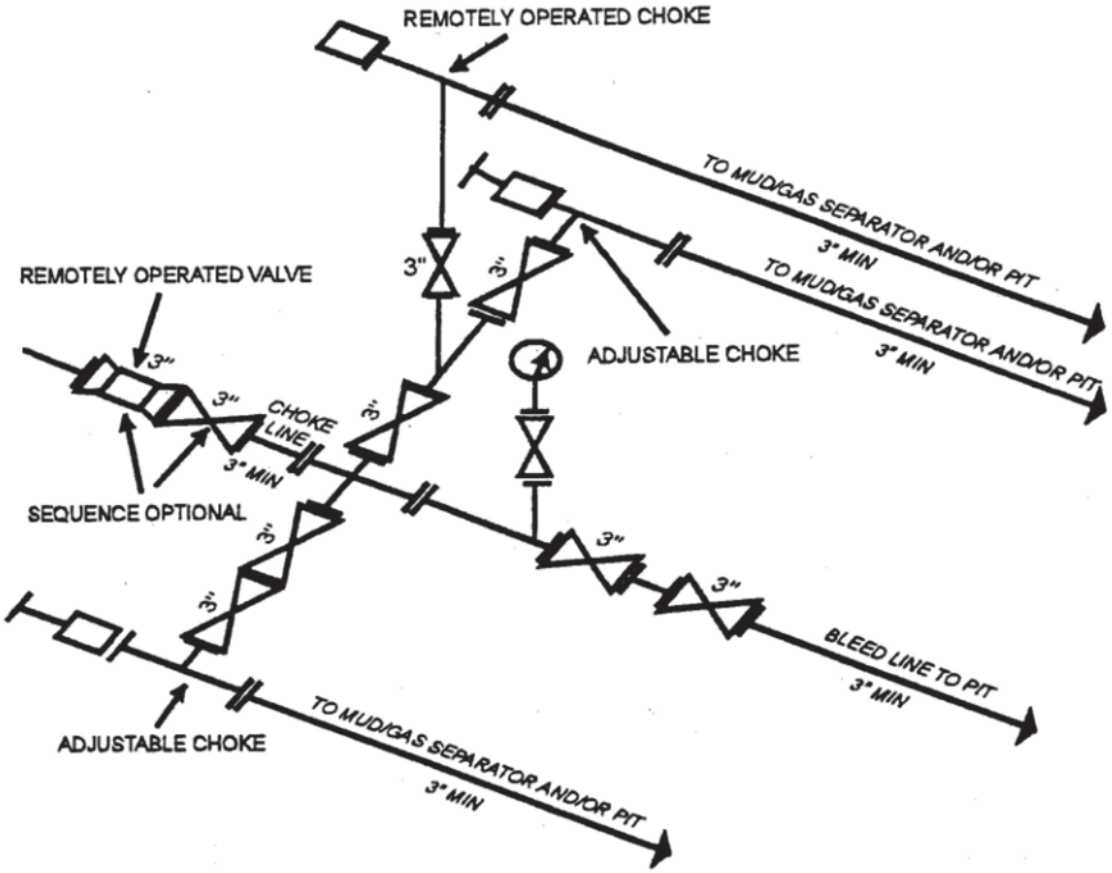
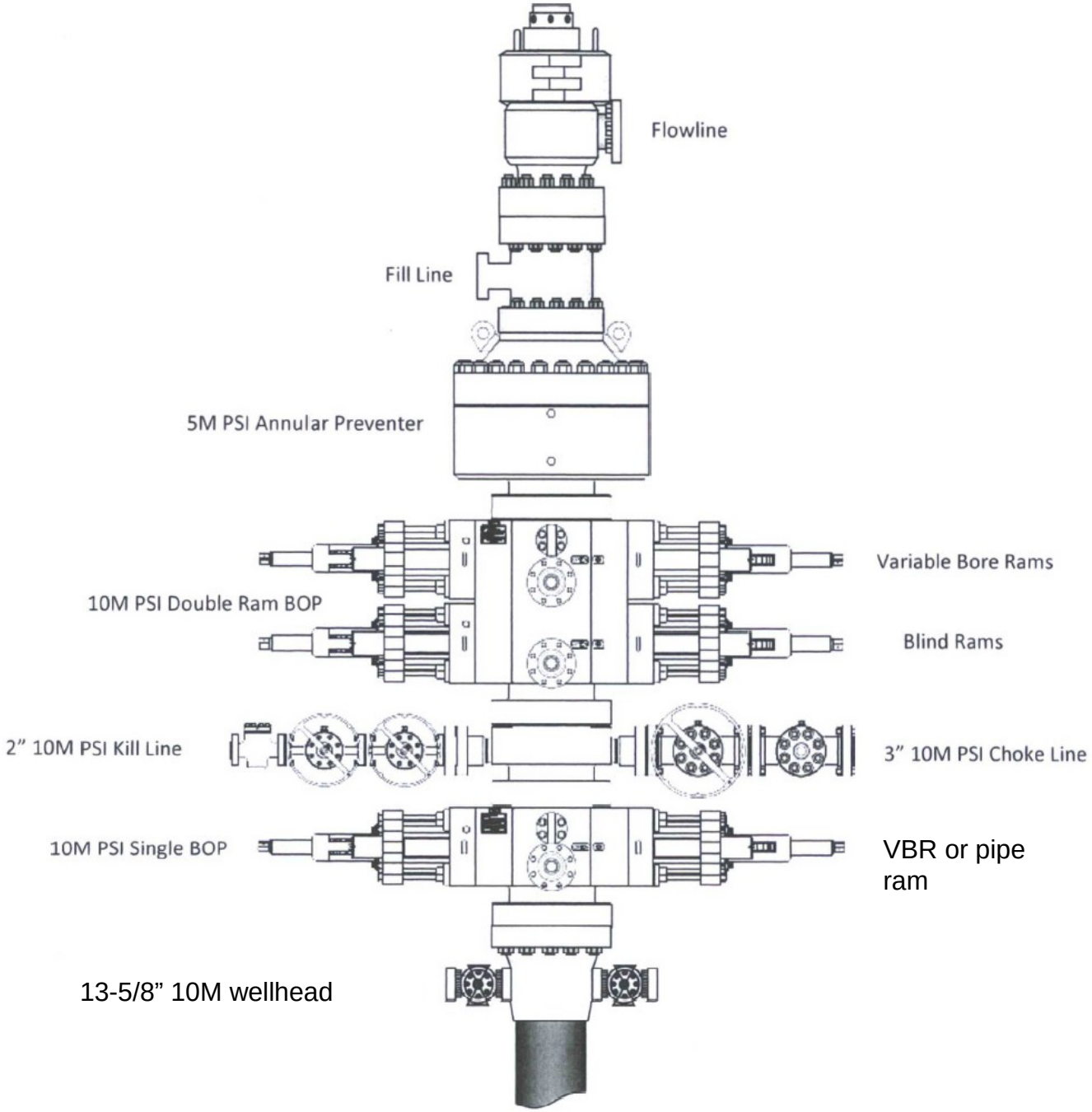


10M AND 15M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY
[53 FR 49661, Dec. 9, 1988 and 54 FR 39528, Sept. 27, 1989]

13-5/8" 10M PSI BOP Stack



Well control plan for 10M BOPE with 5M annular

Drilling

1. Sound alarm (alert crew).
2. Space out drill string.
3. Shut down pumps (stop pumps and rotary).
4. Shut-in Well with annular with HCR and choke in closed position.
5. Confirm shut-in.
6. Notify tool pusher/company representative.
7. Read and record the following:

a. SIDPP & SICP

b. Time of shut in

c. Pit gain

8. Regroup and identify forward plan. If pressure has increased to 2500 psi, confirm spacing and close the upper variable bore rams.
9. Prepare for well kill operation.

Tripping

1. Sound alarm (alert rig crew)
2. Stab full opening safety valve and close valve
3. Sapce out drill string
4. Shut in the well with the annular with HCR and choke in closed position
5. Confirm shut in
6. Notify tool pusher/company representative
7. Read and record the following

a. Time of shut in

b. SIDPP and SICP

c. Pit gain

8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
9. Prepare for well kill operation.

While Running Casing

1. Sound alarm (alert rig crew)
2. Stab crossover and full opening safety valve and close valve
3. Space out casing string
4. Shut in well with annular with HCR and choke in closed position
5. Confirm shut in
6. Notify tool pusher/company representative
7. Read and record the following:

a. SIDPP & SICP

b. Pit gain

c. Time

8. If pressure has increased to 2500 psi, confirm spacing and close the upper most variable bore ram.
9. Prepare for well kill operation.

No Pipe In Hole (Open Hole)

1. Sound alarm (alert rig crew)

Well control plan for 10M BOPE with 5M annular

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

Pulling BHA thru Stack

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

Drilling component and preventer compatibility table for 10M approval

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

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

12-1/4" & 8-3/4" hole sections – 5M BOPE requirement (13-5/8" BOP)			
Component	**OD**	**Preventer**	**RWP**
Drill pipe	5"	3.5"-5.5" VBR or 5" pipe rams	10M
HWDP	5"	3.5"-5.5" VBR or 5" pipe rams	10M
Jars	6-1/4"	Annular	5M
DC's and NMDC's	7"-8"	Annular	5M
Mud motor	7"-8"	Annular	5M
Casing	9-5/8" & 7"	Annular	5M
Open hole	NA	Blind rams	10M

TABLE NO. 203

DIMENSIONS AND STRENGTHS OF CASING

Size O.D. In.	Grade	Wt. Per Ft. With Cplg. Lb.	Inside Dia. In.	Thread & Cplg. Drift Dia. In.	Thread & Cplg. O.D. of Cplg. In.	Extreme Line Drift Dia. In.	Extreme Line O.D. of Box In.	Col'pse Resistance PSI	Internal Yield Pressure PSI** Plain End or Ext. Line	Round Thread Short	Round Thread Long	Buttress Thd.	Body Yield Stgth. 1,000 Lbs.	Joint Strength - 1000 Lbs.** Threaded & Cplg. Joint Round Thread Short	Round Thread Long	Buttress Thd.	Ext. Line Joint
5	C-75*	20.30	4.184	—	—	4.059	5.094	11,240	10,710	—	—	—	—	369†	—	—	529‡‡
	C-75*	23.20	4.044	—	—	3.919	5.094‡	12,970	12,550	—	—	—	—	369†	—	—	529‡‡
	HCL-80+	15.00	4.408	4.283	—	—	—	9,380	8,290	—	8,290	8,290	—	—	311	408	—
	HCL-80+	18.00	4.276	4.151	—	—	—	11,880	10,140	—	10,140	9,910	422	—	396	492	—
	HCL-80+	23.20	4.044	3.919	—	—	—	15,820	13,380	—	10,810	9,910	543	—	540	518	—
	HCN-80+	15.00	4.408	4.283	—	—	—	9,380	8,290	—	8,290	8,290	350	—	311	408	—
	HCN-80+	18.00	4.276	4.151	—	—	—	11,880	10,140	—	10,140	9,910	422	—	396	492	—
	HCN-80+	23.20	4.044	3.919	—	—	—	15,820	13,380	—	10,810	9,910	543	—	540	537	—
	L-80	15.00	4.408	4.283	—	—	—	7,250	8,290	—	8,290	8,290	350	—	295	379	—
	L-80	24.10	4.000	3.875	—	—	—	14,400	14,000	—	10,810	9,910	566	—	538	510	—
	L-80	18.00	4.276	4.151	—	—	—	10,500	10,140	—	10,140	9,910	422	—	377	457	—
	L-80	21.40	4.126	4.001	—	—	—	12,760	12,240	—	10,810	9,910	501	—	466	510	—
	L-80	23.20	4.044	3.919	—	—	—	13,830	13,380	—	10,810	9,910	543	—	513	510	—
	N-80	15.00	4.408	4.283	5.563	4.151	5.360	7,250	8,290	—	8,290	8,290	350	—	311	398	437
	N-80	18.00	4.276	4.151	5.563	4.151	5.360	10,490	10,140	—	10,140	9,910	422	—	396	477	469
	N-80	20.30	4.184	—	—	4.059	5.250	11,990	11,420	—	—	—	—	388†	284††	363‡	556‡‡
	N-80	23.20	4.044	—	—	3.919	5.094‡	13,830	13,380	—	—	—	—	388†	284††	363‡	556‡‡
	N-80	21.40	4.126	4.001	—	—	—	12,760	12,240	—	10,810	9,910	501	—	490	537	—
	N-80	24.10	4.000	3.875	—	—	—	14,400	14,000	—	10,810	9,910	566	—	558	537	—
	C-90	15.00	4.408	4.233	—	—	—	7,840	9,320	—	9,320	9,320	394	—	311	404	—
	C-90	18.00	4.276	4.151	—	—	—	11,530	11,400	—	11,400	11,150	475	—	396	484	—
	C-90	21.40	4.126	4.001	—	—	—	14,360	13,770	—	12,170	11,150	564	—	490	537	—
	C-90	23.20	4.044	3.919	—	—	—	15,560	15,060	—	12,170	11,150	611	—	540	537	—
	C-90	24.10	4.000	3.875	—	—	—	16,200	15,750	—	12,170	11,150	636	—	567	537	—
	C-95	15.00	4.408	4.283	5.563	4.151	5.360	8,090	9,840	—	9,840	9,840	416	—	326	424	459
	C-95	18.00	4.276	4.151	5.563	4.151	5.360	12,010	12,040	—	12,040	11,770	501	—	416	512	493
	C-95	20.30	4.184	—	—	4.059	5.250	14,250	13,560	—	—	—	—	—	—	—	584‡‡
	C-95	23.20	4.044	—	—	3.919	5.094‡	16,430	15,890	—	—	—	—	—	—	—	584‡‡
	C-95	21.40	4.126	4.001	—	—	—	15,160	14,530	—	12,840	11,770	595	—	515	563	—
	C-95	24.10	4.000	3.875	—	—	—	17,100	16,630	—	12,840	11,770	672	—	595	563	—
	S-95+	15.00	4.408	4.283	—	—	—	9,380	9,840	—	9,840	9,840	416	—	342	441	—
	S-95+	18.00	4.276	4.151	—	—	—	12,030	12,040	—	12,040	11,770	501	—	436	532	—
	S-95+	23.20	4.044	3.919	—	—	—	16,430	15,890	—	12,840	11,770	645	—	594	590	—
	T-95	15.00	4.408	4.283	—	—	—	8,110	9,840	—	9,840	9,840	416	—	326	424	—
	T-95	18.00	4.276	4.151	—	—	—	12,030	12,040	—	12,040	11,770	501	—	416	512	—
	T-95	21.40	4.126	4.001	—	—	—	15,160	14,530	—	12,840	11,770	595	—	515	563	—
	T-95	23.20	4.044	3.919	—	—	—	16,430	15,890	—	12,840	11,770	645	—	567	563	—
	T-95	24.10	4.000	3.875	—	—	—	17,100	16,630	—	12,840	11,770	672	—	595	563	—
	P-110	15.00	4.408	4.283	5.563	4.151	5.360	8,830	11,400	—	11,400	11,400	481	—	388	503	547
	P-110	18.00	4.276	4.151	5.563	4.151	5.360	13,450	13,940	—	13,940	13,620	580	—	495	606	587
	P-110	20.30	4.184	—	—	4.059	5.094‡	16,490	15,710	—	—	—	—	[illegible]	[illegible]	[illegible]	[illegible]

TABLE

DIMENSIONS AND

Size O.D. In.	Grade	Wt. Per Ft. With Cplg. Lb.	Inside Dia. In.	Thread & Cplg. Drift Dia. In.	Thread & Cplg. O.D. of Cplg. In.	Extreme Line Drift Dia. In.	Extreme Line O.D. of Box In.	** Col'pse Resis-tance PSI
7⅝	S-95	45.30	6.435	6.310	—	—	—	13,660
	S-95+	26.40	6.969	6.844	—	—	—	4,850
	S-95+	29.70	6.875	6.750	—	—	—	7,150
	S-95+	33.70	6.765	6.640	—	—	—	8,800
	S-95+	39.00	6.625	6.500	—	—	—	10,600
	T-95	26.40	6.969	6.844	—	—	—	3,710
	T-95	29.70	6.875	6.750	—	—	—	5,140
	T-95	33.70	6.765	6.640	—	—	—	7,280
	T-95	39.00	6.625	6.500	—	—	—	10,000
	T-95	42.80	6.501	6.376	—	—	—	12,410
	T-95	45.30	6.435	6.310	—	—	—	13,660
	T-95	47.10	6.375	6.250	—	—	—	14,300
	T-95	51.20	6.251	6.126	—	—	—	15,580
	T-95	55.30	6.125	6.000	—	—	—	16,850
	HCP-110+	26.40	6.969	6.844	—	—	—	4,850
	HCP-110+	29.70	6.875	6.750	—	—	—	7,150
	HCP-110+	33.70	6.765	6.640	—	—	—	8,800
	P-110	29.70	6.875	6.750	6.500	6.75	8.010	5,340
	P-110	[illegible]	6.765	6.640	6.500	6.64	8.010	7,850
	P-110	39.00	6.625	6.500	6.500	6.5	8.010	11,060
	P-110	42.80	6.501	6.376	—	—	—	13,920
	P-110	45.30	6.435	6.310	—	—	—	15,430
	P-110	47.10	6.375	6.250	—	—	—	16,550
	HCQ-125+	33.70	6.765	6.640	—	—	—	8,800
	Q-125	45.30	6.435	6.310	—	—	—	17,090
	Q-125+	33.70	6.765	6.640	—	—	—	8,350
	Q-125	39.00	6.625	6.500	—	—	—	12,060
	Q-125	42.80	6.501	6.376	—	—	—	15,350
	Q-125	47.10	6.375	6.250	—	—	—	18,700
	LS-140+	33.70	6.765	6.640	—	—	—	8,690
	LS-140+	39.00	6.625	6.500	—	—	—	12,930
	V-150	33.70	6.765	6.640	8.500	—	—	8,880
	V-150	39.00	6.625	6.500	8.500	—	—	13,450
	V-150	45.30	6.435	6.310	8.500	—	—	19,680
7⅞	HCL-80+	46.10	6.560	6.435	—	—	—	13,320
	L-80	46.10	6.560	6.435	—	—	—	11,340
	C-90	46.10	6.560	6.435	—	—	—	12,740
	H2S-90	46.10	6.560	6.435	—	—	—	12,740
	C-95	46.10	6.560	6.435	—	—	—	13,320
	H2S-95	46.10	6.560	6.435	—	—	—	13,320
	S-95+	46.10	6.560	6.435	—	—	—	13,320
	T-95	46.10	6.560	6.435	—	—	—	13,320
	P-110	46.10	6.560	6.435	—	—	—	14,990
	Q-125	46.10	6.560	6.435	—	—	—	16,580
	LS-140+	46.10	6.560	6.435	—	—	—	18,090
8⅝	F-25*	24.00	8.097	7.972	9.625	—	—	950
	H-40	28.00	8.017	7.892	9.625	—	—	1,640
	H-40	32.00	7.921	7.796	9.625	—	—	2,210
	HCK-55+	24.00	8.097	7.972	—	—	—	1,780
	HCK-55+	28.00	8.017	7.892	—	—	—	2,680
	HCK-55+	32.00	7.921	7.796	—	—	—	4,130
	HCK-55+	36.00	7.825	7.700	—	—	—	5,300

*Non API Standard. Shown for information only. +Lone Star Pipe Data

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NO. 203

STRENGTHS OF CASING

Internal Yield Pressure PSI** Plain End or Ext. Line	Round Thread Short	Round Thread Long	Buttress Thd.	** Body Yield Strength 1,000 Lbs.	Joint Strength - 1000 Lbs.** Threaded & Cplg. Joint Round Thread Short	Round Thread Long	Buttress Thd.	Ext. Line Joint
12,970	—	12,460	11,620	1,248	—	1,116	1,293	—
7,150	—	7,150	7,150	714	—	568	740	—
8,180	—	8,180	8,180	811	—	668	841	—
9,380	—	9,380	9,380	923	—	783	957	—
10,900	—	10,900	10,900	1,063	—	926	1,101	—
7,150	—	7,159	7,150	714	—	560	718	—
8,180	—	8,180	8,180	811	—	659	813	—
9,380	—	9,380	9,380	923	—	772	925	—
10,900	—	10,900	10,900	1,063	—	914	1,065	—
12,250	—	12,250	11,620	1,185	—	1,037	1,187	—
12,970	—	12,460	11,620	1,248	—	1,101	1,251	—
13,630	—	12,460	11,620	1,306	—	1,159	1,300	—
14,980	—	—	—	1,423	—	—	—	—
16,350	—	—	—	1,539	—	—	—	—
8,280	—	8,280	8,280	827	—	654	845	—
9,470	—	9,470	9,470	940	—	769	960	—
10,860	—	10,860	10,860	1,069	—	901	1,093	—
9,470	—	9,470	9,470	940	—	769	960	932
10,860	—	10,860	10,860	1,069	—	901	1,093	1,008
12,620	—	12,620	12,620	1,231	—	1,056	1,258	1,120
14,190	—	14,190	13,460	1,372	—	1,210	1,402	—
15,020	—	14,430	13,460	1,446	—	1,285	1,477	—
15,780	—	14,430	13,460	1,512	—	1,353	1,545	—
12,340	—	12,340	12,340	1,215	—	1,009	1,197	—
17,070	—	16,400	15,290	1,643	—	1,439	1,619	—
12,340	—	12,340	12,340	1,215	—	1,009	1,197	—
14,340	—	14,340	14,340	1,399	—	1,194	1,379	—
16,120	—	16,120	15,290	1,559	—	1,355	1,536	—
17,930	—	16,400	15,290	1,718	—	1,515	1,672	—
13,820	—	13,820	13,820	1,361	—	1,128	1,334	—
16,070	—	16,070	16,070	1,567	—	1,335	1,536	—
—	—	14,800	14,800	1,456	—	1,207	1,482	—
—	—	17,210	17,210	1,679	—	1,428	1,706	—
—	—	19,680	18,350	1,971	—	1,721	1,932	—
10,750	—	10,490	9,790	1,070	—	965	1,091	—
10,750	—	10,490	9,790	1,070	—	841	1,001	—
12,090	—	11,810	11,010	1,204	—	928	1,074	—
12,090	—	11,810	11,010	1,204	—	965	1,091	—
12,760	—	12,460	11,620	1,271	—	978	1,129	—
12,760	—	12,460	11,620	1,271	—	978	1,129	—
12,760	—	12,460	11,620	1,271	—	992	1,168	—
12,760	—	12,460	11,620	1,271	—	978	1,129	—
14,780	—	14,430	13,460	1,471	—	1,142	1,334	—
16,790	—	16,400	15,290	1,672	—	1,279	1,462	—
18,810	—	18,360	17,130	1,872	—	1,429	1,628	—
1,340	—	173	161	—	—	—	—	—
2,470	2,470	—	318	233	—	—	—	—
2,860	2,860	—	366	279	—	—	—	—
2,950	2,950	—	—	381	326	—	—	—
3,390	3,390	3,390	3,390	437	414	464	651	—
3,930	3,930	3,930	3,930	503	497	556	749	—
4,460	4,460	4,460	4,460	568	579	648	847	—

† Hydril TS ‡ Hydril Super FJ-P

†† Hydril FJ-P ‡‡ Hydril Super EU

DIMENSIONS AND STRENGTHS OF CASING

Size O.D. In.	Grade	Wt. Per Ft. With Cplg., Lb.	Inside Dia. In.	Thread & Cplg. Drift Dia. In.	Thread & Cplg. O.D. of Cplg. In.	Extreme Line Drift Dia. In.	Extreme Line O.D. of Box In.	** Col'pse Resistance PSI	Internal Yield Pressure PSI** Plain End or Ext. Line	Round Thread Short	Round Thread Long	Buttress Thd.	** Body Yield Stgth. 1,000 Lbs.	Joint Strength - 1000 Lbs.** Threaded & Cplg. Joint Round Thread Short	Round Thread Long	Buttress Thd.	Ext. Line Joint
5½	T-95	29.70	4.376	4.251	—	—	—	17,430	16,990	—	—	—	828	—	—	—	—
	T-95	32.60	4.250	4.125	—	—	—	19,140	18,810	—	—	—	909	—	—	—	—
	T-95	35.30	4.126	4.001	—	—	—	20,760	20,770	—	—	—	987	—	—	—	—
	T-95	38.00	4.000	3.875	—	—	—	22,380	22,670	—	—	—	1,063	—	—	—	—
	T-95	40.50	3.876	3.751	—	—	—	23,920	24,540	—	—	—	1,136	—	—	—	—
	T-95	43.10	3.750	3.625	—	—	—	25,400	26,450	—	—	—	1,208	—	—	—	—
	HCP-110+	17.00	4.892	4.767	—	—	—	8,580	10,640	—	10,640	10,640	546	—	445	568	—
	P-110	17.00	4.892	4.767	6.050	4.653	5.860	7,460	10,640	—	10,640	10,640	546	—	445	568	620
	P-110	20.00	4.778	4.653	6.050	4.653	5.860	11,080	12,640	—	12,640	12,360	641	—	548	667	654
	P-110	23.00	4.670	4.545	6.050	4.545	5.860	14,520	14,520	—	13,580	12,360	729	—	643	724	722
	P-110*	26.00	4.548	—	—	4.423	5.656‡	17,390	16,660	—	—	—	—	569†	393††	564‡	892‡‡
	HCQ-125+	17.00	4.892	4.767	—	—	—	8,580	12,090	—	12,090	12,090	620	—	481	620	—
	Q-125+	17.00	4.892	4.767	—	—	—	7,890	12,090	—	12,090	12,090	620	—	481	620	—
	Q-125+	20.00	4.778	4.653	—	—	—	12,080	14,360	—	14,360	14,050	729	—	592	728	—
	Q-125	23.00	4.670	4.545	—	—	—	16,070	16,510	—	15,430	14,050	829	—	694	782	—
	Q-125+	26.00	4.548	4.423	—	—	—	19,770	18,930	—	15,430	14,050	939	—	808	782	—
	LS-140+	17.00	4.892	4.767	—	—	—	8,580	13,540	—	13,540	13,540	695	—	534	890	—
	LS-140+	20.00	4.778	4.653	—	—	—	12,950	16,080	—	16,080	15,740	816	—	657	810	—
	LS-140+	23.00	4.670	4.545	—	—	—	17,500	18,490	—	17,290	15,740	928	—	771	869	—
	V-150	20.00	4.778	4.653	—	—	—	13,460	17,230	—	17,230	16,860	874	—	701	865	—
	V-150*	20.00	4.778	4.653	6.050	—	—	13,480	—	—	17,230	16,860	874	—	701	908	—
	V-150'	23.00	4.670	4.545	6.050	—	—	18,390	—	—	18,520	16,860	994	—	823	910	—
	V-150'	26.00	4.548	4.423	6.050	—	—	23,720	—	—	22,720	—	—	—	—	—	722‡
									11,870	—	9,880	8,990	617				

7.625 29.7# P-110 HC Stinger™

Pipe Body Data

Nominal OD	7.625	Inches
Wall Thickness	0.375	Inches
Weight	29.70	lb/ft
PE Weight	29.04	lb/ft
Nominal ID	6.875	Inches
Drift	6.750	Inches
Minimum Yield Strength	110,000	PSI
Minimum Tensile Strength	125,000	PSI
RBW	87.5%	Rating

Connection Data

Connection OD	7.625	Inches
Connection ID	6.875	Inches
Make-Up loss	3.030	Inches
Tension Efficiency	60%	Rating
Compression Efficiency	60%	Rating
Yield Strength in Tension	564,000	LBS.
Yield Strength in Compression	564,000	LBS.
MIYP (Burst)	7,570	PSI
Collapse Pressure	6,150	PSI
Uniaxial Bending	-	degrees

Make-Up torques

Yield torque	25,960	LBS.
Max Operating Torque	23,600	LBS.
Max Make-Up	18,900	LBS.
Optimum Make-Up	17,200	LBS.
Minimum Make-Up	15,500	LBS.

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Midland, TX 79701

WELL: MESA 8105 1-12 FEDERAL #66H (WU
TVD: 12490
MD: 22917

DRILLING PLAN

Casing Program

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	500	0	500	No	40.5	J-55	STC	7.3	14.5	31.1	20.7	Dry	8.3
9 7/8	7 5/8	0	8055	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8055	11992	8000	11937	yes	29.7	P110	FJ	1.7	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11792	0	11737	Yes	20	P110	Buttress	1.9	1.4	2.7	2.8	Dry	14
6 3/4	5	11792	22917	11737	12490	Yes	18	P110	Buttress	1.9	1.4	1.4	1.5	Dry	14

*7 5/8" has DV Tool @ 4847'

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

WELL: MESA 8105 1-12 FEDERAL #66H (WU
TVD: 12490
MD: 22917

DRILLING PLAN

Casing Program

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	500	0	500	No	40.5	J-55	STC	7.3	14.5	31.1	20.7	Dry	8.3
9 7/8	7 5/8	0	8055	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8055	11992	8000	11937	yes	29.7	P110	FJ	1.7	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11792	0	11737	Yes	20	P110	Buttress	1.9	1.4	2.7	2.8	Dry	14
6 3/4	5	11792	22917	11737	12490	Yes	18	P110	Buttress	1.9	1.4	1.4	1.5	Dry	14

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Midland, TX 79701

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MD: 22917

DRILLING PLAN

Casing Program

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6 3/4	5	11792	22917	11737	12490	Yes	18	P110	Buttress	1.9	1.4	1.4	1.5	Dry	14

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104 S Pecos
Midland, TX 79701

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DRILLING PLAN

Casing Program

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
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104 S Pecos
Midland, TX 79701

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DRILLING PLAN

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6 3/4	5 1/2	0	11792	0	11737	Yes	20	P110	Buttress	1.9	1.4	2.7	2.8	Dry	14
6 3/4	5	11792	22917	11737	12490	Yes	18	P110	Buttress	1.9	1.4	1.4	1.5	Dry	14

*7 5/8" has DV Tool @ 4847'

EMERGENCY CALL LIST

	OFFICE	MOBILE
BTA Oil Producers LLC OFFICE	432-682-3753	
BEN GRIMES, Operations	432-682-3753	432-559-4309
NICK EATON, Drilling	432-682-3753	432-260-7841
TRACE WOHLFAHRT, Completions	432-682-3753	

EMERGENCY RESPONSE NUMBERS

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

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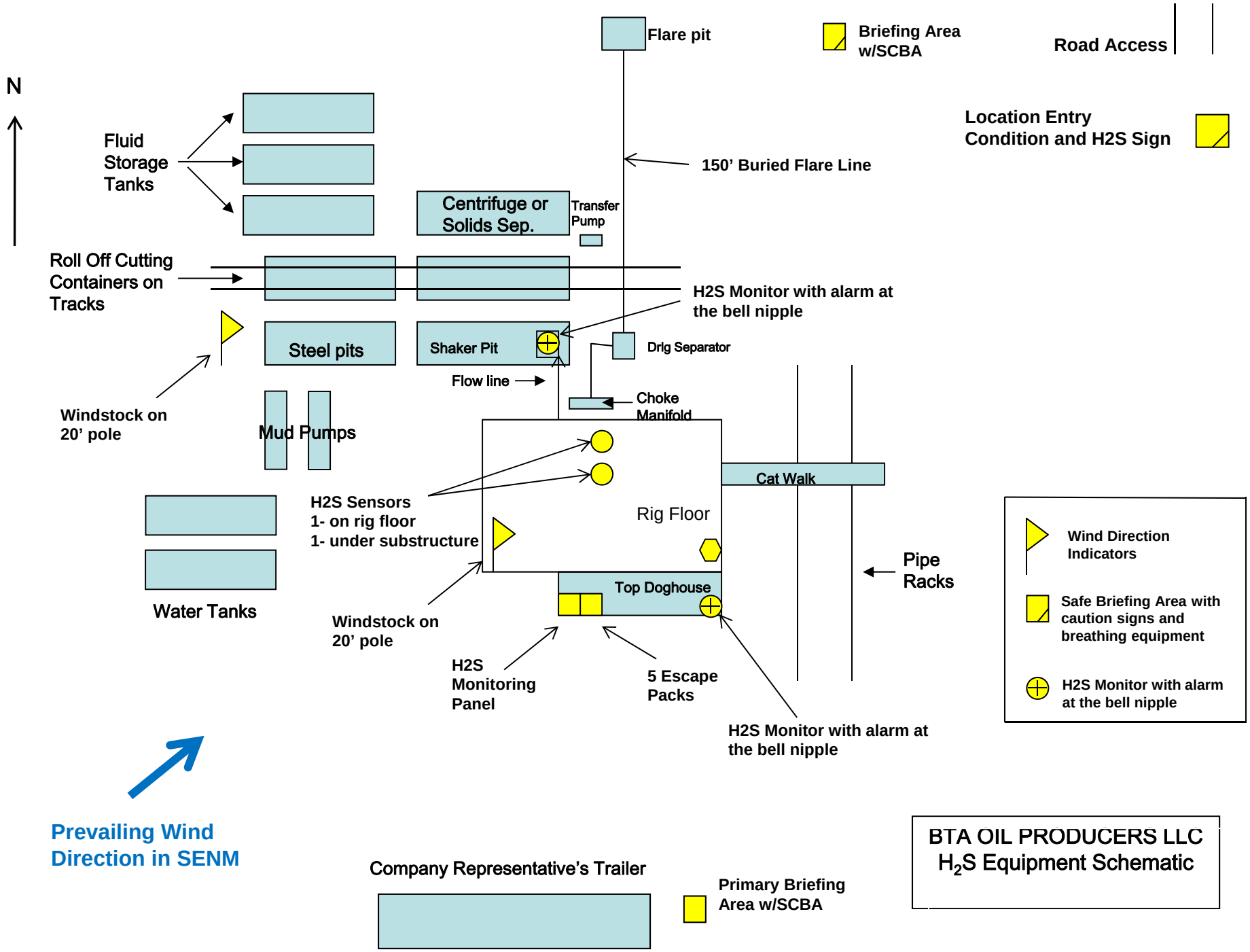

BTA OIL PRODUCERS LLC
H_2S Equipment Schematic

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BTA OIL PRODUCERS LLC

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

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

a. The hazards and characteristics of hydrogen sulfide (H_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 H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
c. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

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

2. H_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 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.

W A R N I N G

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 BTA OIL PRODUCERS LLC FOREMAN AT MAIN OFFICE***

BTA OIL PRODUCERS LLC

1-432-682-3753

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Received by OCD: 4/15/2021 8:59:56 AM

BTA Oil Producers, LLC

Azimuths to Grid North
True North: -0.38°
Magnetic North: 7.38°

Magnetic Field
Strength: 48699.5nT
Dip Angle: 60.10°
Date: 12/31/2009
Model: IGRF200510

WELL DETAILS: Mesa #66H

+N/-S	+E/-W	Northing	Ground Level Easting	3360.0 Latittude	Longitude
0.0	0.0	392766.10	761612.90	32° 4' 40.072 N	103° 37' 19.729 W

SITE DETAILS: Mesa Sec 1 & 12, T26S, R32E

Site Centre Northing: 388415.22
Easting: 759217.78

Positional Uncertainity: 0.0
Convergence: 0.37
Local North: Grid

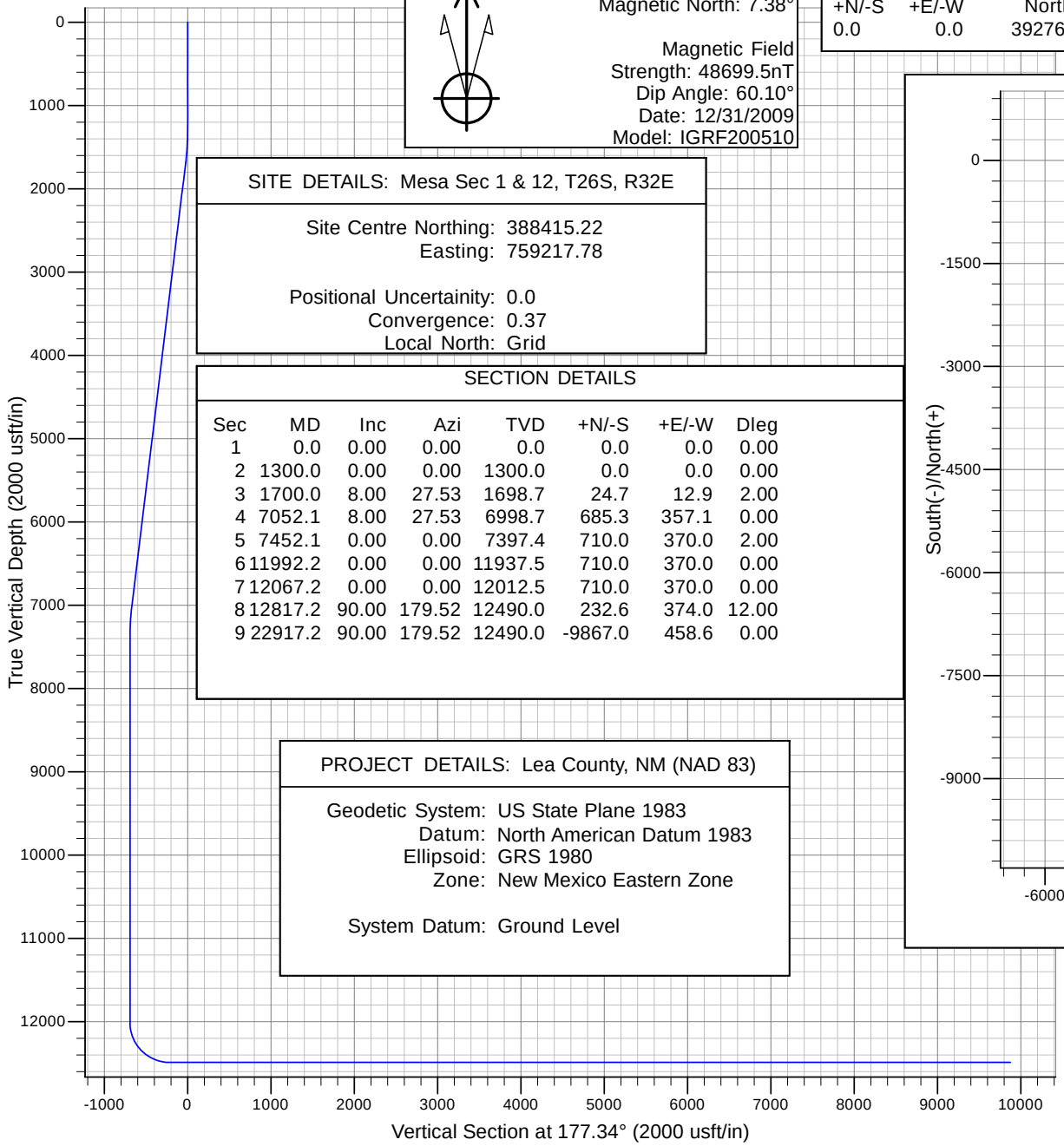
SECTION DETAILS

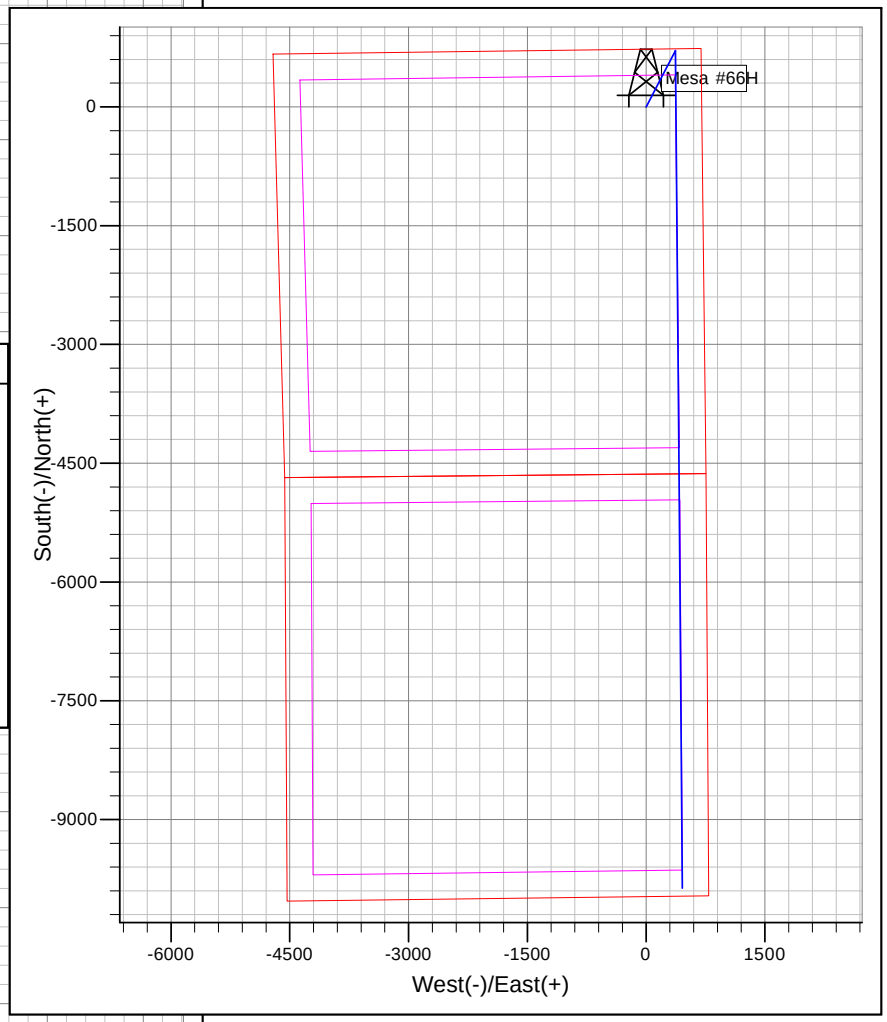
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	1300.0	0.00	0.00	1300.0	0.0	0.0	0.00
3	1700.0	8.00	27.53	1698.7	24.7	12.9	2.00
4	7052.1	8.00	27.53	6998.7	685.3	357.1	0.00
5	7452.1	0.00	0.00	7397.4	710.0	370.0	2.00
6	11992.2	0.00	0.00	11937.5	710.0	370.0	0.00
7	12067.2	0.00	0.00	12012.5	710.0	370.0	0.00
8	12817.2	90.00	179.52	12490.0	232.6	374.0	12.00
9	22917.2	90.00	179.52	12490.0	-9867.0	458.6	0.00

PROJECT DETAILS: Lea County, NM (NAD 83)

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

System Datum: Ground Level





BTA Oil Producers, LLC

Lea County, NM (NAD 83)
Mesa Sec 1 & 12, T26S, R32E
Mesa #66H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

18 May, 2020

Microsoft

Planning Report - Geographic

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa #66H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Site:	Mesa Sec 1 & 12, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #66H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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

Map System:	US State Plane 1983	**System Datum:**	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site Mesa Sec 1 & 12, T26S, R32E

Site Position:		**Northing:**	388,415.22 usft	**Latitude:**	32° 3' 57.173 N
From:	Map	**Easting:**	759,217.78 usft	**Longitude:**	103° 37' 47.896 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.37 °

Well Mesa #66H

Well Position	**+N/-S**	0.0 usft	**Northing:**	392,766.10 usft	**Latitude:**	32° 4' 40.072 N
	+E/-W	0.0 usft	**Easting:**	761,612.90 usft	**Longitude:**	103° 37' 19.729 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,360.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.76	60.10	48,699.47665736

Design Design #1

Audit Notes:

Version:	**Phase:**	PROTOTYPE	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	177.34

Plan Survey Tool Program **Date** 5/18/2020

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,917.2	Design #1 (Wellbore #1)		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,700.0	8.00	27.53	1,698.7	24.7	12.9	2.00	2.00	0.00	27.53	
7,052.1	8.00	27.53	6,998.7	685.3	357.1	0.00	0.00	0.00	0.00	
7,452.1	0.00	0.00	7,397.4	710.0	370.0	2.00	-2.00	0.00	180.00	
11,992.2	0.00	0.00	11,937.5	710.0	370.0	0.00	0.00	0.00	0.00	
12,067.2	0.00	0.00	12,012.5	710.0	370.0	0.00	0.00	0.00	0.00	
12,817.2	90.00	179.52	12,490.0	232.6	374.0	12.00	12.00	0.00	179.52	
22,917.2	90.00	179.52	12,490.0	-9,867.0	458.6	0.00	0.00	0.00	0.00	Mesa #66H BHL

Microsoft

Planning Report - Geographic

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa #66H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Site:	Mesa Sec 1 & 12, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #66H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
100.0	0.00	0.00	100.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
200.0	0.00	0.00	200.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
300.0	0.00	0.00	300.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
400.0	0.00	0.00	400.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
500.0	0.00	0.00	500.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
600.0	0.00	0.00	600.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
700.0	0.00	0.00	700.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
800.0	0.00	0.00	800.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
900.0	0.00	0.00	900.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	392,766.10	761,612.90	32° 4' 40.072 N	103° 37' 19.729 W
1,400.0	2.00	27.53	1,400.0	1.5	0.8	392,767.65	761,613.70	32° 4' 40.087 N	103° 37' 19.720 W
1,500.0	4.00	27.53	1,499.8	6.2	3.2	392,772.29	761,616.12	32° 4' 40.133 N	103° 37' 19.691 W
1,600.0	6.00	27.53	1,599.5	13.9	7.3	392,780.02	761,620.15	32° 4' 40.209 N	103° 37' 19.644 W
1,700.0	8.00	27.53	1,698.7	24.7	12.9	392,790.82	761,625.78	32° 4' 40.316 N	103° 37' 19.578 W
1,800.0	8.00	27.53	1,797.7	37.1	19.3	392,803.16	761,632.21	32° 4' 40.438 N	103° 37' 19.502 W
1,900.0	8.00	27.53	1,896.8	49.4	25.7	392,815.51	761,638.64	32° 4' 40.559 N	103° 37' 19.426 W
2,000.0	8.00	27.53	1,995.8	61.8	32.2	392,827.85	761,645.08	32° 4' 40.681 N	103° 37' 19.351 W
2,100.0	8.00	27.53	2,094.8	74.1	38.6	392,840.19	761,651.51	32° 4' 40.803 N	103° 37' 19.275 W
2,200.0	8.00	27.53	2,193.8	86.4	45.0	392,852.53	761,657.94	32° 4' 40.924 N	103° 37' 19.199 W
2,300.0	8.00	27.53	2,292.9	98.8	51.5	392,864.87	761,664.37	32° 4' 41.046 N	103° 37' 19.123 W
2,400.0	8.00	27.53	2,391.9	111.1	57.9	392,877.21	761,670.80	32° 4' 41.168 N	103° 37' 19.048 W
2,500.0	8.00	27.53	2,490.9	123.5	64.3	392,889.55	761,677.23	32° 4' 41.290 N	103° 37' 18.972 W
2,600.0	8.00	27.53	2,589.9	135.8	70.8	392,901.90	761,683.66	32° 4' 41.411 N	103° 37' 18.896 W
2,700.0	8.00	27.53	2,689.0	148.1	77.2	392,914.24	761,690.10	32° 4' 41.533 N	103° 37' 18.821 W
2,800.0	8.00	27.53	2,788.0	160.5	83.6	392,926.58	761,696.53	32° 4' 41.655 N	103° 37' 18.745 W
2,900.0	8.00	27.53	2,887.0	172.8	90.1	392,938.92	761,702.96	32° 4' 41.776 N	103° 37' 18.669 W
3,000.0	8.00	27.53	2,986.1	185.2	96.5	392,951.26	761,709.39	32° 4' 41.898 N	103° 37' 18.594 W
3,100.0	8.00	27.53	3,085.1	197.5	102.9	392,963.60	761,715.82	32° 4' 42.020 N	103° 37' 18.518 W
3,200.0	8.00	27.53	3,184.1	209.9	109.4	392,975.95	761,722.25	32° 4' 42.141 N	103° 37' 18.442 W
3,300.0	8.00	27.53	3,283.1	222.2	115.8	392,988.29	761,728.69	32° 4' 42.263 N	103° 37' 18.367 W
3,400.0	8.00	27.53	3,382.2	234.5	122.2	393,000.63	761,735.12	32° 4' 42.385 N	103° 37' 18.291 W
3,500.0	8.00	27.53	3,481.2	246.9	128.7	393,012.97	761,741.55	32° 4' 42.507 N	103° 37' 18.215 W
3,600.0	8.00	27.53	3,580.2	259.2	135.1	393,025.31	761,747.98	32° 4' 42.628 N	103° 37' 18.139 W
3,700.0	8.00	27.53	3,679.2	271.6	141.5	393,037.65	761,754.41	32° 4' 42.750 N	103° 37' 18.064 W
3,800.0	8.00	27.53	3,778.3	283.9	148.0	393,049.99	761,760.84	32° 4' 42.872 N	103° 37' 17.988 W
3,900.0	8.00	27.53	3,877.3	296.2	154.4	393,062.34	761,767.27	32° 4' 42.993 N	103° 37' 17.912 W
4,000.0	8.00	27.53	3,976.3	308.6	160.8	393,074.68	761,773.71	32° 4' 43.115 N	103° 37' 17.837 W
4,100.0	8.00	27.53	4,075.3	320.9	167.2	393,087.02	761,780.14	32° 4' 43.237 N	103° 37' 17.761 W
4,200.0	8.00	27.53	4,174.4	333.3	173.7	393,099.36	761,786.57	32° 4' 43.359 N	103° 37' 17.685 W
4,300.0	8.00	27.53	4,273.4	345.6	180.1	393,111.70	761,793.00	32° 4' 43.480 N	103° 37' 17.610 W
4,400.0	8.00	27.53	4,372.4	358.0	186.5	393,124.04	761,799.43	32° 4' 43.602 N	103° 37' 17.534 W
4,500.0	8.00	27.53	4,471.5	370.3	193.0	393,136.39	761,805.86	32° 4' 43.724 N	103° 37' 17.458 W
4,600.0	8.00	27.53	4,570.5	382.6	199.4	393,148.73	761,812.29	32° 4' 43.845 N	103° 37' 17.383 W
4,700.0	8.00	27.53	4,669.5	395.0	205.8	393,161.07	761,818.73	32° 4' 43.967 N	103° 37' 17.307 W
4,800.0	8.00	27.53	4,768.5	407.3	212.3	393,173.41	761,825.16	32° 4' 44.089 N	103° 37' 17.231 W
4,900.0	8.00	27.53	4,867.6	419.7	218.7	393,185.75	761,831.59	32° 4' 44.210 N	103° 37' 17.155 W
5,000.0	8.00	27.53	4,966.6	432.0	225.1	393,198.09	761,838.02	32° 4' 44.332 N	103° 37' 17.080 W
5,100.0	8.00	27.53	5,065.6	444.4	231.6	393,210.43	761,844.45	32° 4' 44.454 N	103° 37' 17.004 W
5,200.0	8.00	27.53	5,164.6	456.7	238.0	393,222.78	761,850.88	32° 4' 44.576 N	103° 37' 16.928 W
5,300.0	8.00	27.53	5,263.7	469.0	244.4	393,235.12	761,857.32	32° 4' 44.697 N	103° 37' 16.853 W
5,400.0	8.00	27.53	5,362.7	481.4	250.9	393,247.46	761,863.75	32° 4' 44.819 N	103° 37' 16.777 W

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Planning Report - Geographic

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa #66H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Site:	Mesa Sec 1 & 12, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #66H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,500.0	8.00	27.53	5,461.7	493.7	257.3	393,259.80	761,870.18	32° 4' 44.941 N	103° 37' 16.701 W
5,600.0	8.00	27.53	5,560.7	506.1	263.7	393,272.14	761,876.61	32° 4' 45.062 N	103° 37' 16.626 W
5,700.0	8.00	27.53	5,659.8	518.4	270.2	393,284.48	761,883.04	32° 4' 45.184 N	103° 37' 16.550 W
5,800.0	8.00	27.53	5,758.8	530.7	276.6	393,296.83	761,889.47	32° 4' 45.306 N	103° 37' 16.474 W
5,900.0	8.00	27.53	5,857.8	543.1	283.0	393,309.17	761,895.90	32° 4' 45.428 N	103° 37' 16.398 W
6,000.0	8.00	27.53	5,956.9	555.4	289.4	393,321.51	761,902.34	32° 4' 45.549 N	103° 37' 16.323 W
6,100.0	8.00	27.53	6,055.9	567.8	295.9	393,333.85	761,908.77	32° 4' 45.671 N	103° 37' 16.247 W
6,200.0	8.00	27.53	6,154.9	580.1	302.3	393,346.19	761,915.20	32° 4' 45.793 N	103° 37' 16.171 W
6,300.0	8.00	27.53	6,253.9	592.5	308.7	393,358.53	761,921.63	32° 4' 45.914 N	103° 37' 16.096 W
6,400.0	8.00	27.53	6,353.0	604.8	315.2	393,370.87	761,928.06	32° 4' 46.036 N	103° 37' 16.020 W
6,500.0	8.00	27.53	6,452.0	617.1	321.6	393,383.22	761,934.49	32° 4' 46.158 N	103° 37' 15.944 W
6,600.0	8.00	27.53	6,551.0	629.5	328.0	393,395.56	761,940.92	32° 4' 46.279 N	103° 37' 15.869 W
6,700.0	8.00	27.53	6,650.0	641.8	334.5	393,407.90	761,947.36	32° 4' 46.401 N	103° 37' 15.793 W
6,800.0	8.00	27.53	6,749.1	654.2	340.9	393,420.24	761,953.79	32° 4' 46.523 N	103° 37' 15.717 W
6,900.0	8.00	27.53	6,848.1	666.5	347.3	393,432.58	761,960.22	32° 4' 46.645 N	103° 37' 15.641 W
7,000.0	8.00	27.53	6,947.1	678.8	353.8	393,444.92	761,966.65	32° 4' 46.766 N	103° 37' 15.566 W
7,052.1	8.00	27.53	6,998.7	685.3	357.1	393,451.35	761,970.00	32° 4' 46.830 N	103° 37' 15.526 W
7,100.0	7.04	27.53	7,046.2	690.8	360.0	393,456.91	761,972.90	32° 4' 46.885 N	103° 37' 15.492 W
7,200.0	5.04	27.53	7,145.6	700.2	364.9	393,466.25	761,977.76	32° 4' 46.977 N	103° 37' 15.435 W
7,300.0	3.04	27.53	7,245.4	706.4	368.1	393,472.50	761,981.02	32° 4' 47.038 N	103° 37' 15.397 W
7,400.0	1.04	27.53	7,345.3	709.6	369.8	393,475.65	761,982.67	32° 4' 47.069 N	103° 37' 15.377 W
7,452.1	0.00	0.00	7,397.4	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
7,500.0	0.00	0.00	7,445.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
7,600.0	0.00	0.00	7,545.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
7,700.0	0.00	0.00	7,645.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
7,800.0	0.00	0.00	7,745.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
7,900.0	0.00	0.00	7,845.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,000.0	0.00	0.00	7,945.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,100.0	0.00	0.00	8,045.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,200.0	0.00	0.00	8,145.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,300.0	0.00	0.00	8,245.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,400.0	0.00	0.00	8,345.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,500.0	0.00	0.00	8,445.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,600.0	0.00	0.00	8,545.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,700.0	0.00	0.00	8,645.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,800.0	0.00	0.00	8,745.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
8,900.0	0.00	0.00	8,845.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,000.0	0.00	0.00	8,945.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,100.0	0.00	0.00	9,045.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,200.0	0.00	0.00	9,145.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,300.0	0.00	0.00	9,245.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,400.0	0.00	0.00	9,345.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,500.0	0.00	0.00	9,445.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,600.0	0.00	0.00	9,545.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,700.0	0.00	0.00	9,645.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,800.0	0.00	0.00	9,745.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
9,900.0	0.00	0.00	9,845.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,000.0	0.00	0.00	9,945.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,100.0	0.00	0.00	10,045.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,200.0	0.00	0.00	10,145.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,300.0	0.00	0.00	10,245.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,400.0	0.00	0.00	10,345.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,500.0	0.00	0.00	10,445.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,600.0	0.00	0.00	10,545.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,700.0	0.00	0.00	10,645.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W

Microsoft

Planning Report - Geographic

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa #66H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Site:	Mesa Sec 1 & 12, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #66H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,800.0	0.00	0.00	10,745.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
10,900.0	0.00	0.00	10,845.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,000.0	0.00	0.00	10,945.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,100.0	0.00	0.00	11,045.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,200.0	0.00	0.00	11,145.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,300.0	0.00	0.00	11,245.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,400.0	0.00	0.00	11,345.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,500.0	0.00	0.00	11,445.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,600.0	0.00	0.00	11,545.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,700.0	0.00	0.00	11,645.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,800.0	0.00	0.00	11,745.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,900.0	0.00	0.00	11,845.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
11,992.2	0.00	0.00	11,937.5	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
12,000.0	0.00	0.00	11,945.3	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
12,067.2	0.00	0.00	12,012.5	710.0	370.0	393,476.07	761,982.88	32° 4' 47.073 N	103° 37' 15.375 W
12,100.0	3.93	179.52	12,045.3	708.9	370.0	393,474.95	761,982.89	32° 4' 47.062 N	103° 37' 15.375 W
12,200.0	15.93	179.52	12,143.6	691.7	370.2	393,457.73	761,983.04	32° 4' 46.892 N	103° 37' 15.374 W
12,300.0	27.93	179.52	12,236.2	654.4	370.5	393,420.45	761,983.35	32° 4' 46.523 N	103° 37' 15.374 W
12,400.0	39.93	179.52	12,319.0	598.7	370.9	393,364.73	761,983.82	32° 4' 45.972 N	103° 37' 15.372 W
12,500.0	51.93	179.52	12,388.4	526.9	371.5	393,293.01	761,984.42	32° 4' 45.262 N	103° 37' 15.371 W
12,600.0	63.93	179.52	12,441.4	442.3	372.2	393,208.43	761,985.13	32° 4' 44.425 N	103° 37' 15.369 W
12,700.0	75.93	179.52	12,475.7	348.6	373.0	393,114.68	761,985.91	32° 4' 43.497 N	103° 37' 15.367 W
12,800.0	87.93	179.52	12,489.7	249.8	373.9	393,015.86	761,986.74	32° 4' 42.519 N	103° 37' 15.365 W
12,817.2	90.00	179.52	12,490.0	232.6	374.0	392,998.64	761,986.88	32° 4' 42.349 N	103° 37' 15.365 W
12,900.0	90.00	179.52	12,490.0	149.8	374.7	392,915.87	761,987.58	32° 4' 41.530 N	103° 37' 15.363 W
13,000.0	90.00	179.52	12,490.0	49.8	375.5	392,815.87	761,988.42	32° 4' 40.540 N	103° 37' 15.361 W
13,100.0	90.00	179.52	12,490.0	-50.2	376.4	392,715.88	761,989.25	32° 4' 39.551 N	103° 37' 15.359 W
13,200.0	90.00	179.52	12,490.0	-150.2	377.2	392,615.89	761,990.09	32° 4' 38.561 N	103° 37' 15.357 W
13,300.0	90.00	179.52	12,490.0	-250.2	378.0	392,515.89	761,990.93	32° 4' 37.571 N	103° 37' 15.355 W
13,400.0	90.00	179.52	12,490.0	-350.2	378.9	392,415.90	761,991.77	32° 4' 36.582 N	103° 37' 15.353 W
13,500.0	90.00	179.52	12,490.0	-450.2	379.7	392,315.91	761,992.60	32° 4' 35.592 N	103° 37' 15.351 W
13,600.0	90.00	179.52	12,490.0	-550.2	380.6	392,215.92	761,993.44	32° 4' 34.603 N	103° 37' 15.349 W
13,700.0	90.00	179.52	12,490.0	-650.2	381.4	392,115.92	761,994.28	32° 4' 33.613 N	103° 37' 15.347 W
13,800.0	90.00	179.52	12,490.0	-750.2	382.2	392,015.93	761,995.12	32° 4' 32.624 N	103° 37' 15.345 W
13,900.0	90.00	179.52	12,490.0	-850.2	383.1	391,915.94	761,995.96	32° 4' 31.634 N	103° 37' 15.343 W
14,000.0	90.00	179.52	12,490.0	-950.2	383.9	391,815.94	761,996.79	32° 4' 30.645 N	103° 37' 15.340 W
14,100.0	90.00	179.52	12,490.0	-1,050.2	384.7	391,715.95	761,997.63	32° 4' 29.655 N	103° 37' 15.338 W
14,200.0	90.00	179.52	12,490.0	-1,150.2	385.6	391,615.96	761,998.47	32° 4' 28.666 N	103° 37' 15.336 W
14,300.0	90.00	179.52	12,490.0	-1,250.2	386.4	391,515.96	761,999.31	32° 4' 27.676 N	103° 37' 15.334 W
14,400.0	90.00	179.52	12,490.0	-1,350.2	387.3	391,415.97	762,000.14	32° 4' 26.687 N	103° 37' 15.332 W
14,500.0	90.00	179.52	12,490.0	-1,450.2	388.1	391,315.98	762,000.98	32° 4' 25.697 N	103° 37' 15.330 W
14,600.0	90.00	179.52	12,490.0	-1,550.2	388.9	391,215.99	762,001.82	32° 4' 24.707 N	103° 37' 15.328 W
14,700.0	90.00	179.52	12,490.0	-1,650.2	389.8	391,115.99	762,002.66	32° 4' 23.718 N	103° 37' 15.326 W
14,800.0	90.00	179.52	12,490.0	-1,750.2	390.6	391,016.00	762,003.49	32° 4' 22.728 N	103° 37' 15.324 W
14,900.0	90.00	179.52	12,490.0	-1,850.2	391.4	390,916.01	762,004.33	32° 4' 21.739 N	103° 37' 15.322 W
15,000.0	90.00	179.52	12,490.0	-1,950.2	392.3	390,816.01	762,005.17	32° 4' 20.749 N	103° 37' 15.320 W
15,100.0	90.00	179.52	12,490.0	-2,050.1	393.1	390,716.02	762,006.01	32° 4' 19.760 N	103° 37' 15.318 W
15,200.0	90.00	179.52	12,490.0	-2,150.1	394.0	390,616.03	762,006.85	32° 4' 18.770 N	103° 37' 15.316 W
15,300.0	90.00	179.52	12,490.0	-2,250.1	394.8	390,516.04	762,007.68	32° 4' 17.781 N	103° 37' 15.314 W
15,400.0	90.00	179.52	12,490.0	-2,350.1	395.6	390,416.04	762,008.52	32° 4' 16.791 N	103° 37' 15.312 W
15,500.0	90.00	179.52	12,490.0	-2,450.1	396.5	390,316.05	762,009.36	32° 4' 15.802 N	103° 37' 15.310 W
15,600.0	90.00	179.52	12,490.0	-2,550.1	397.3	390,216.06	762,010.20	32° 4' 14.812 N	103° 37' 15.307 W
15,700.0	90.00	179.52	12,490.0	-2,650.1	398.2	390,116.06	762,011.03	32° 4' 13.823 N	103° 37' 15.305 W
15,800.0	90.00	179.52	12,490.0	-2,750.1	399.0	390,016.07	762,011.87	32° 4' 12.833 N	103° 37' 15.303 W
15,900.0	90.00	179.52	12,490.0	-2,850.1	399.8	389,916.08	762,012.71	32° 4' 11.843 N	103° 37' 15.301 W

Microsoft

Planning Report - Geographic

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa #66H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Site:	Mesa Sec 1 & 12, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #66H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
16,000.0	90.00	179.52	12,490.0	-2,950.1	400.7	389,816.08	762,013.55	32° 4' 10.854 N	103° 37' 15.299 W
16,100.0	90.00	179.52	12,490.0	-3,050.1	401.5	389,716.09	762,014.39	32° 4' 9.864 N	103° 37' 15.297 W
16,200.0	90.00	179.52	12,490.0	-3,150.1	402.3	389,616.10	762,015.22	32° 4' 8.875 N	103° 37' 15.295 W
16,300.0	90.00	179.52	12,490.0	-3,250.1	403.2	389,516.11	762,016.06	32° 4' 7.885 N	103° 37' 15.293 W
16,400.0	90.00	179.52	12,490.0	-3,350.1	404.0	389,416.11	762,016.90	32° 4' 6.896 N	103° 37' 15.291 W
16,500.0	90.00	179.52	12,490.0	-3,450.1	404.9	389,316.12	762,017.74	32° 4' 5.906 N	103° 37' 15.289 W
16,600.0	90.00	179.52	12,490.0	-3,550.1	405.7	389,216.13	762,018.57	32° 4' 4.917 N	103° 37' 15.287 W
16,700.0	90.00	179.52	12,490.0	-3,650.1	406.5	389,116.13	762,019.41	32° 4' 3.927 N	103° 37' 15.285 W
16,800.0	90.00	179.52	12,490.0	-3,750.1	407.4	389,016.14	762,020.25	32° 4' 2.938 N	103° 37' 15.283 W
16,900.0	90.00	179.52	12,490.0	-3,850.1	408.2	388,916.15	762,021.09	32° 4' 1.948 N	103° 37' 15.281 W
17,000.0	90.00	179.52	12,490.0	-3,950.1	409.0	388,816.16	762,021.93	32° 4' 0.959 N	103° 37' 15.279 W
17,100.0	90.00	179.52	12,490.0	-4,050.1	409.9	388,716.16	762,022.76	32° 3' 59.969 N	103° 37' 15.277 W
17,200.0	90.00	179.52	12,490.0	-4,150.1	410.7	388,616.17	762,023.60	32° 3' 58.979 N	103° 37' 15.274 W
17,300.0	90.00	179.52	12,490.0	-4,250.1	411.6	388,516.18	762,024.44	32° 3' 57.990 N	103° 37' 15.272 W
17,400.0	90.00	179.52	12,490.0	-4,350.1	412.4	388,416.18	762,025.28	32° 3' 57.000 N	103° 37' 15.270 W
17,500.0	90.00	179.52	12,490.0	-4,450.1	413.2	388,316.19	762,026.11	32° 3' 56.011 N	103° 37' 15.268 W
17,600.0	90.00	179.52	12,490.0	-4,550.1	414.1	388,216.20	762,026.95	32° 3' 55.021 N	103° 37' 15.266 W
17,700.0	90.00	179.52	12,490.0	-4,650.1	414.9	388,116.20	762,027.79	32° 3' 54.032 N	103° 37' 15.264 W
17,800.0	90.00	179.52	12,490.0	-4,750.1	415.7	388,016.21	762,028.63	32° 3' 53.042 N	103° 37' 15.262 W
17,900.0	90.00	179.52	12,490.0	-4,850.1	416.6	387,916.22	762,029.47	32° 3' 52.053 N	103° 37' 15.260 W
18,000.0	90.00	179.52	12,490.0	-4,950.0	417.4	387,816.23	762,030.30	32° 3' 51.063 N	103° 37' 15.258 W
18,100.0	90.00	179.52	12,490.0	-5,050.0	418.3	387,716.23	762,031.14	32° 3' 50.074 N	103° 37' 15.256 W
18,200.0	90.00	179.52	12,490.0	-5,150.0	419.1	387,616.24	762,031.98	32° 3' 49.084 N	103° 37' 15.254 W
18,300.0	90.00	179.52	12,490.0	-5,250.0	419.9	387,516.25	762,032.82	32° 3' 48.095 N	103° 37' 15.252 W
18,400.0	90.00	179.52	12,490.0	-5,350.0	420.8	387,416.25	762,033.65	32° 3' 47.105 N	103° 37' 15.250 W
18,500.0	90.00	179.52	12,490.0	-5,450.0	421.6	387,316.26	762,034.49	32° 3' 46.115 N	103° 37' 15.248 W
18,600.0	90.00	179.52	12,490.0	-5,550.0	422.4	387,216.27	762,035.33	32° 3' 45.126 N	103° 37' 15.246 W
18,700.0	90.00	179.52	12,490.0	-5,650.0	423.3	387,116.27	762,036.17	32° 3' 44.136 N	103° 37' 15.243 W
18,800.0	90.00	179.52	12,490.0	-5,750.0	424.1	387,016.28	762,037.01	32° 3' 43.147 N	103° 37' 15.241 W
18,900.0	90.00	179.52	12,490.0	-5,850.0	425.0	386,916.29	762,037.84	32° 3' 42.157 N	103° 37' 15.239 W
19,000.0	90.00	179.52	12,490.0	-5,950.0	425.8	386,816.30	762,038.68	32° 3' 41.168 N	103° 37' 15.237 W
19,100.0	90.00	179.52	12,490.0	-6,050.0	426.6	386,716.30	762,039.52	32° 3' 40.178 N	103° 37' 15.235 W
19,200.0	90.00	179.52	12,490.0	-6,150.0	427.5	386,616.31	762,040.36	32° 3' 39.189 N	103° 37' 15.233 W
19,300.0	90.00	179.52	12,490.0	-6,250.0	428.3	386,516.32	762,041.19	32° 3' 38.199 N	103° 37' 15.231 W
19,400.0	90.00	179.52	12,490.0	-6,350.0	429.1	386,416.32	762,042.03	32° 3' 37.210 N	103° 37' 15.229 W
19,500.0	90.00	179.52	12,490.0	-6,450.0	430.0	386,316.33	762,042.87	32° 3' 36.220 N	103° 37' 15.227 W
19,600.0	90.00	179.52	12,490.0	-6,550.0	430.8	386,216.34	762,043.71	32° 3' 35.230 N	103° 37' 15.225 W
19,700.0	90.00	179.52	12,490.0	-6,650.0	431.7	386,116.35	762,044.54	32° 3' 34.241 N	103° 37' 15.223 W
19,800.0	90.00	179.52	12,490.0	-6,750.0	432.5	386,016.35	762,045.38	32° 3' 33.251 N	103° 37' 15.221 W
19,900.0	90.00	179.52	12,490.0	-6,850.0	433.3	385,916.36	762,046.22	32° 3' 32.262 N	103° 37' 15.219 W
20,000.0	90.00	179.52	12,490.0	-6,950.0	434.2	385,816.37	762,047.06	32° 3' 31.272 N	103° 37' 15.217 W
20,100.0	90.00	179.52	12,490.0	-7,050.0	435.0	385,716.37	762,047.90	32° 3' 30.283 N	103° 37' 15.215 W
20,200.0	90.00	179.52	12,490.0	-7,150.0	435.9	385,616.38	762,048.73	32° 3' 29.293 N	103° 37' 15.212 W
20,300.0	90.00	179.52	12,490.0	-7,250.0	436.7	385,516.39	762,049.57	32° 3' 28.304 N	103° 37' 15.210 W
20,400.0	90.00	179.52	12,490.0	-7,350.0	437.5	385,416.39	762,050.41	32° 3' 27.314 N	103° 37' 15.208 W
20,500.0	90.00	179.52	12,490.0	-7,450.0	438.4	385,316.40	762,051.25	32° 3' 26.325 N	103° 37' 15.206 W
20,600.0	90.00	179.52	12,490.0	-7,550.0	439.2	385,216.41	762,052.08	32° 3' 25.335 N	103° 37' 15.204 W
20,700.0	90.00	179.52	12,490.0	-7,650.0	440.0	385,116.42	762,052.92	32° 3' 24.346 N	103° 37' 15.202 W
20,800.0	90.00	179.52	12,490.0	-7,749.9	440.9	385,016.42	762,053.76	32° 3' 23.356 N	103° 37' 15.200 W
20,900.0	90.00	179.52	12,490.0	-7,849.9	441.7	384,916.43	762,054.60	32° 3' 22.366 N	103° 37' 15.198 W
21,000.0	90.00	179.52	12,490.0	-7,949.9	442.6	384,816.44	762,055.44	32° 3' 21.377 N	103° 37' 15.196 W
21,100.0	90.00	179.52	12,490.0	-8,049.9	443.4	384,716.44	762,056.27	32° 3' 20.387 N	103° 37' 15.194 W
21,200.0	90.00	179.52	12,490.0	-8,149.9	444.2	384,616.45	762,057.11	32° 3' 19.398 N	103° 37' 15.192 W
21,300.0	90.00	179.52	12,490.0	-8,249.9	445.1	384,516.46	762,057.95	32° 3' 18.408 N	103° 37' 15.190 W
21,400.0	90.00	179.52	12,490.0	-8,349.9	445.9	384,416.46	762,058.79	32° 3' 17.419 N	103° 37' 15.188 W

Microsoft

Planning Report - Geographic

Database:	Old	**Local Co-ordinate Reference:**	Well Mesa #66H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3360.0usft (Original Well Elev)
Site:	Mesa Sec 1 & 12, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #66H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
21,500.0	90.00	179.52	12,490.0	-8,449.9	446.7	384,316.47	762,059.62	32° 3' 16.429 N	103° 37' 15.186 W
21,600.0	90.00	179.52	12,490.0	-8,549.9	447.6	384,216.48	762,060.46	32° 3' 15.440 N	103° 37' 15.184 W
21,700.0	90.00	179.52	12,490.0	-8,649.9	448.4	384,116.49	762,061.30	32° 3' 14.450 N	103° 37' 15.182 W
21,800.0	90.00	179.52	12,490.0	-8,749.9	449.3	384,016.49	762,062.14	32° 3' 13.461 N	103° 37' 15.179 W
21,900.0	90.00	179.52	12,490.0	-8,849.9	450.1	383,916.50	762,062.98	32° 3' 12.471 N	103° 37' 15.177 W
22,000.0	90.00	179.52	12,490.0	-8,949.9	450.9	383,816.51	762,063.81	32° 3' 11.482 N	103° 37' 15.175 W
22,100.0	90.00	179.52	12,490.0	-9,049.9	451.8	383,716.51	762,064.65	32° 3' 10.492 N	103° 37' 15.173 W
22,200.0	90.00	179.52	12,490.0	-9,149.9	452.6	383,616.52	762,065.49	32° 3' 9.502 N	103° 37' 15.171 W
22,300.0	90.00	179.52	12,490.0	-9,249.9	453.4	383,516.53	762,066.33	32° 3' 8.513 N	103° 37' 15.169 W
22,400.0	90.00	179.52	12,490.0	-9,349.9	454.3	383,416.54	762,067.16	32° 3' 7.523 N	103° 37' 15.167 W
22,500.0	90.00	179.52	12,490.0	-9,449.9	455.1	383,316.54	762,068.00	32° 3' 6.534 N	103° 37' 15.165 W
22,600.0	90.00	179.52	12,490.0	-9,549.9	456.0	383,216.55	762,068.84	32° 3' 5.544 N	103° 37' 15.163 W
22,700.0	90.00	179.52	12,490.0	-9,649.9	456.8	383,116.56	762,069.68	32° 3' 4.555 N	103° 37' 15.161 W
22,800.0	90.00	179.52	12,490.0	-9,749.9	457.6	383,016.56	762,070.52	32° 3' 3.565 N	103° 37' 15.159 W
22,900.0	90.00	179.52	12,490.0	-9,849.9	458.5	382,916.57	762,071.35	32° 3' 2.576 N	103° 37' 15.157 W
22,917.2	90.00	179.52	12,490.0	-9,867.0	458.6	382,899.40	762,071.50	32° 3' 2.406 N	103° 37' 15.156 W

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Mesa #66H BHL - plan hits target center - Point	0.00	0.00	12,490.0	-9,867.0	458.6	382,899.40	762,071.50	32° 3' 2.406 N	103° 37' 15.156 W

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original to Appropriate District Office

GAS CAPTURE PLAN

Date: 5/27/2020

☒ Original
☐ Amended - Reason for Amendment:

Operator & OGRID No.: 260297

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

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

Well(s)/Production Facility – Name of facility

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

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
MESA 8105 1-12		SEC 1 ; 26S ; 32E	730 FNL 700 FEL	2000	Flared	Battery Connected
FEDERAL 66H						To ETP System

Gathering System and Pipeline Notification

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

Flowback Strategy

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

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

Alternatives to Reduce Flaring

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

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

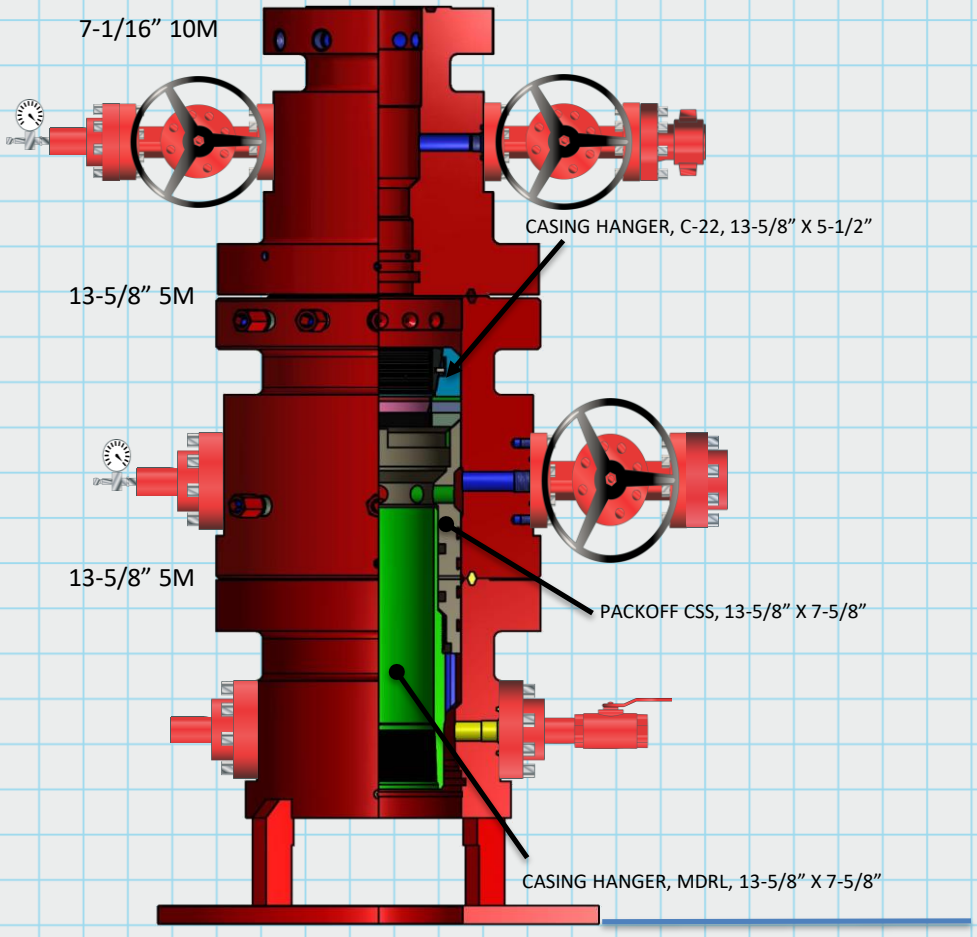
BTA

TOTAL LENGTH = 78’-3/8”

TUBING SPOOL
SW-TCM
13-5/8” 5M x 7-1/16” 10M
5-1/2” PP SEAL
w/ (2) 1-13/16” 10M SSO

SW-MB SPOOL ASSEMBLY
UPPER MBH
13-5/8” 5M x 13-5/8” 5M
w/ (2) 2-1/16” 5M SSO

CASING HEAD ASSEMBLY
LOWER MBH
13-5/8” 5M x 10-3/4” SOW
w/ (2) 2-1/16” 5M SSO



10-3/4” SOW x 7-5/8” x 5-1/2”

McClinton Energy GROUP

QUALITY SERVICE
QUALITY PRODUCTS
QUALITY PERSONNEL

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

SUPO Data Report
04/14/2021

APD ID: 10400057820
Submission Date: 06/10/2020
Operator Name: BTA OIL PRODUCERS LLC
Well Name: MESA 8105 1-12 FEDERAL
Well Number: 66H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

19111257_Mesa_8105_1_12_Fed_66H_Topographical___Access_Rd_20200610105512.pdf

Existing Road Purpose: ACCESS

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

19111257_Mesa_8105_1_12_Fed_66H_1_Mile_Radius_20200610105529.pdf

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

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

Submit or defer a Proposed Production Facilities plan? DEFER

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

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: PIT

Water source use type: SURFACE CASING

STIMULATION

DUST CONTROL

INTERMEDIATE/PRODUCTION CASING

Source latitude: **Source longitude:**

Source datum:

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: PRIVATE

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

Source volume (gal): 4200000

Water source and transportation map:

MESA_8105_FEDERAL_WATER_TRANSPORT_MAP_20200527085530.pdf

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

New water well? N

New Water Well Info

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

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

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

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

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

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

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

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

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: GARBAGE

Waste content description: Trash

Amount of waste: 500 pounds

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal type description:

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

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Waste type: SEWAGE

Waste content description: Human waste and grey water.

Amount of waste: 1000 gallons

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal type description:

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

Waste type: DRILLING

Waste content description: Drilling fluids and cuttings.

Amount of waste: 4164 barrels

Waste disposal frequency : One Time Only

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

Safe containmant attachment:

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

Disposal type description:

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

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Description of cuttings location

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

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

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

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Rig_Layout_20190930140859.pdf

19111257_Mesa_8105_1_12_Fed_66H_Well_Site_Plan__600s__20200610105612.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance **Multiple Well Pad Name:** MESA 8105 1-12 FEDERAL

Multiple Well Pad Number: 66H and 67H

Recontouring attachment:

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

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

Well pad proposed disturbance (acres): 3.95 **Well pad interim reclamation (acres):** 0.46 **Well pad long term disturbance (acres):** 3.49

Road proposed disturbance (acres): 0 **Road interim reclamation (acres):** 0 **Road long term disturbance (acres):** 0

Powerline proposed disturbance (acres): 0 **Powerline interim reclamation (acres):** 0 **Powerline long term disturbance (acres):** 0

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

Other proposed disturbance (acres): 0 **Other interim reclamation (acres):** 0 **Other long term disturbance (acres):** 0

Total interim reclamation: 0.46

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Total proposed disturbance: 3.95 **Total long term disturbance:** 3.49

Disturbance Comments:

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.
Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations.
Soil treatment: To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.
Existing Vegetation at the well pad: The historic climax plant community is a grassland dominated by black grama, dropseeds, and blue stems with sand sage and shinnery oak distributed evenly throughout. Current landscape displays mesquite, shinnery oak, yucca, desert sage, fourwing saltbush, snakeweed, and bunch grasses.
Existing Vegetation at the well pad attachment:

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

Existing Vegetation Community at the road attachment:

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

Existing Vegetation Community at the pipeline attachment:

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

Existing Vegetation Community at other disturbances attachment:

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation?

Seed harvest description:

Seed harvest description attachment:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Seed Management

Seed Table

Seed Summary	
Seed Type	Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Chad **Last Name:** Smith

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

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment attachment:

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

Weed treatment plan attachment:

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

Monitoring plan attachment:

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

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface Ownership

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Disturbance type: WELL PAD

Describe:

Surface Owner:

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Section 12 - Other Information

Right of Way needed? N **Use APD as ROW?**

ROW Type(s):

ROW Applications

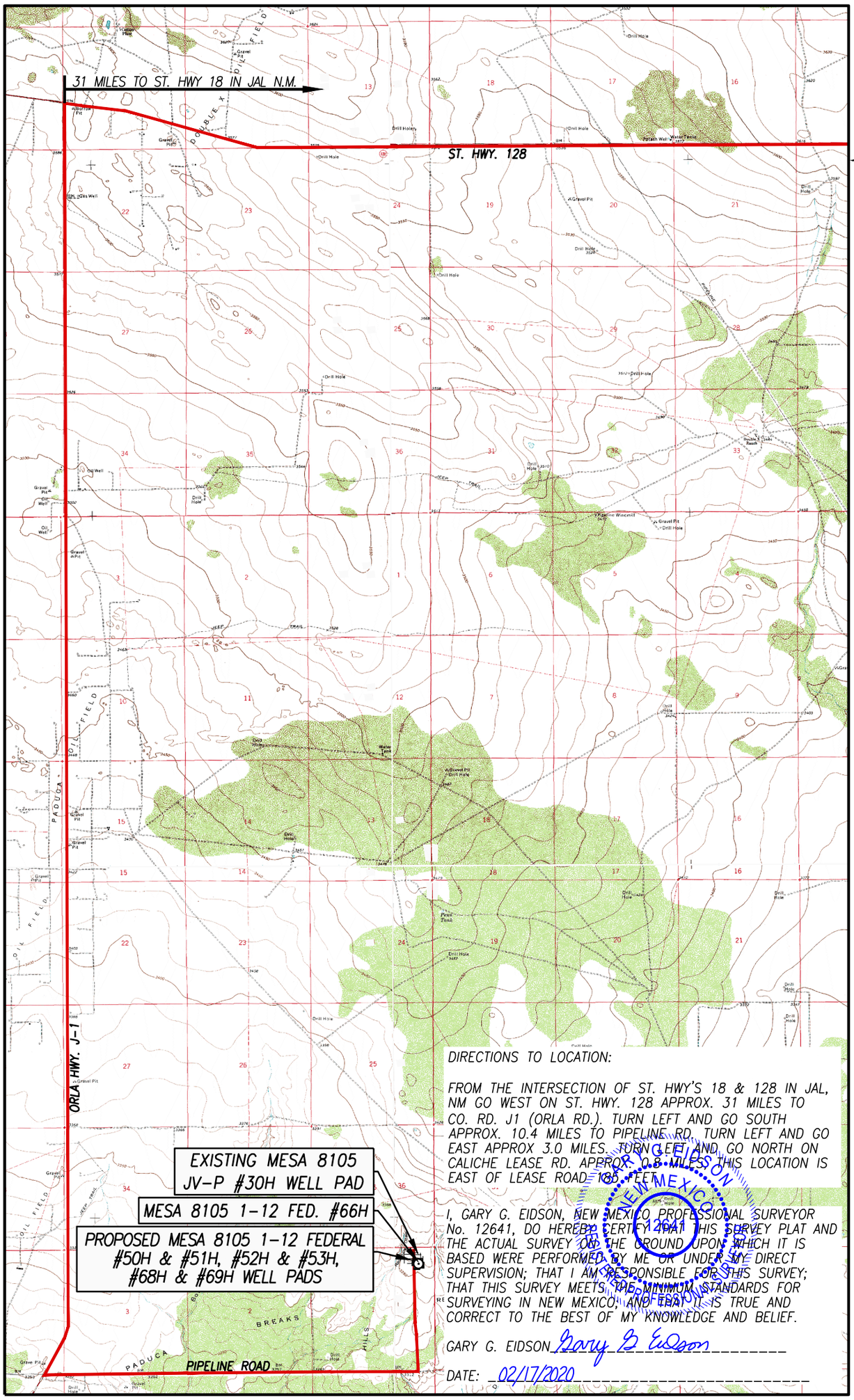
SUPO Additional Information:

Use a previously conducted onsite? Y

Previous Onsite information: Onsite conducted by McKenna Ryder BLM on 2/26/2020

Other SUPO Attachment

VICINITY, TOPOGRAPHIC AND ACCESS ROAD MAP



DIRECTIONS TO LOCATION:

FROM THE INTERSECTION OF ST. HWY'S 18 & 128 IN JAL, NM GO WEST ON ST. HWY. 128 APPROX. 31 MILES TO CO. RD. J1 (ORLA RD.). TURN LEFT AND GO SOUTH APPROX. 10.4 MILES TO PIPELINE RD. TURN LEFT AND GO EAST APPROX 3.0 MILES. TURN LEFT AND GO NORTH ON CALICHE LEASE RD. APPROX. 0.8 MILES. THIS LOCATION IS EAST OF LEASE ROAD 185 FEET.

I, GARY G. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 12641, 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 IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

GARY G. EIDSON Gary G Eidson

DATE: 02/17/2020

SCALE: 1" = 5280'

CONTOUR INTERVAL: PADUCA BREAKS SW, N.M. – 10'
BELL, N.M. – 10', PADUCA BREAKS EAST, N.M. – 10'

SEC. 1 TWP. 26-S RGE. 32-E
COUNTY LEA STATE NEW MEXICO
DESCRIPTION 730' FNL & 700' FEL
ELEVATION 3360'
OPERATOR BTA OIL PRODUCERS, LLC
LEASE MESA 8105 1-12 FED
U.S.G.S. TOPOGRAPHIC MAP
PADUCA BREAKS EAST, N.M. SURVEY N.M.P.M.

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

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		WC-025 ; Upper Wolfcamp

Property Code	Property Name	Well Number
	MESA 8105 1-12 FEDERAL	66H

OGRID No.	Operator Name	Elevation
260297	BTA OIL PRODUCERS, LLC	3360'

Surface Location

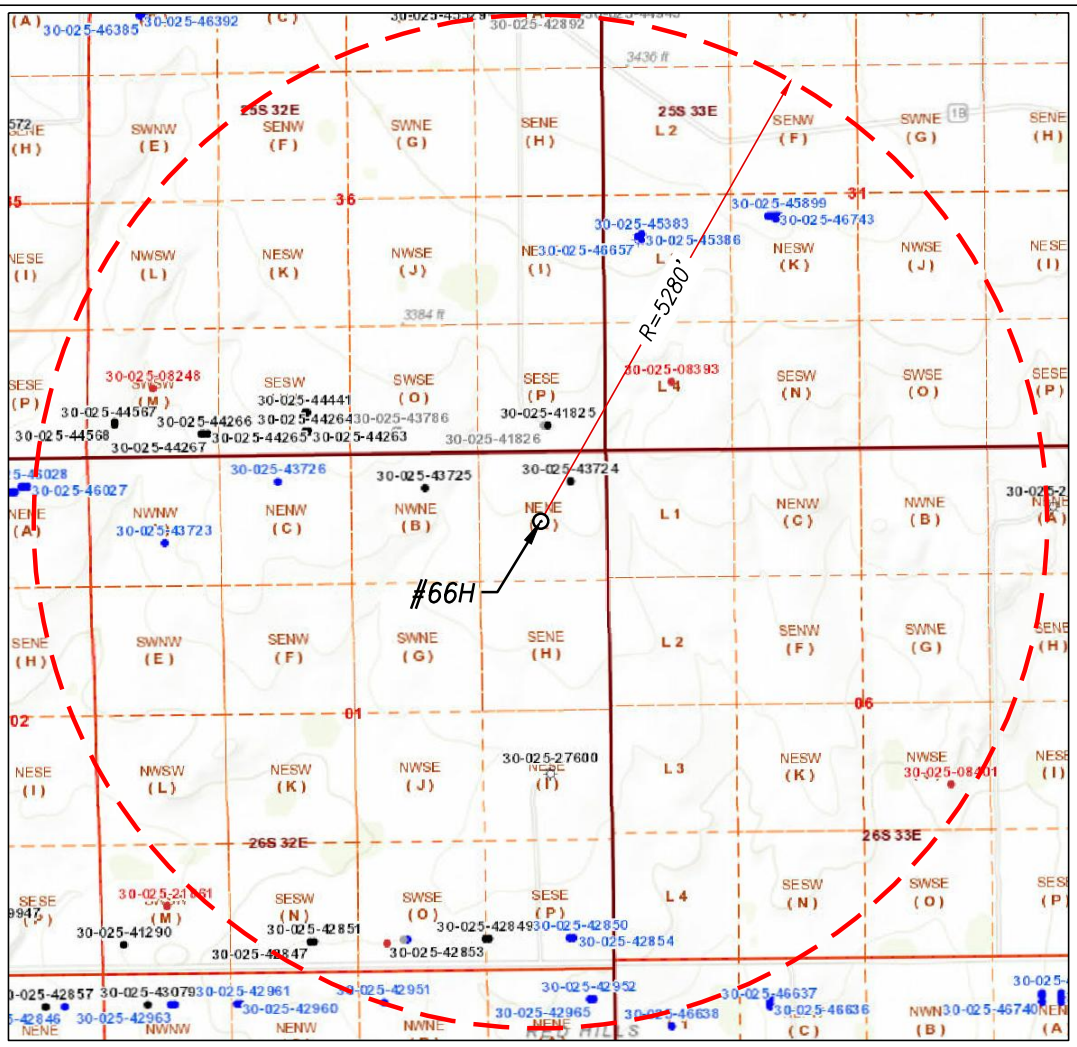
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	1	26-S	32-E		730	NORTH	700	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	26-S	32-E		50	SOUTH	330	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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



Scale:1"=2000'

LEGEND
⊙ DENOTES PROPOSED WELL

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.

NOVEMBER 19, 2019

Date of Survey

Signature & Seal of Professional Surveyor:

GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

Gary G. Eidson 02/17/2020

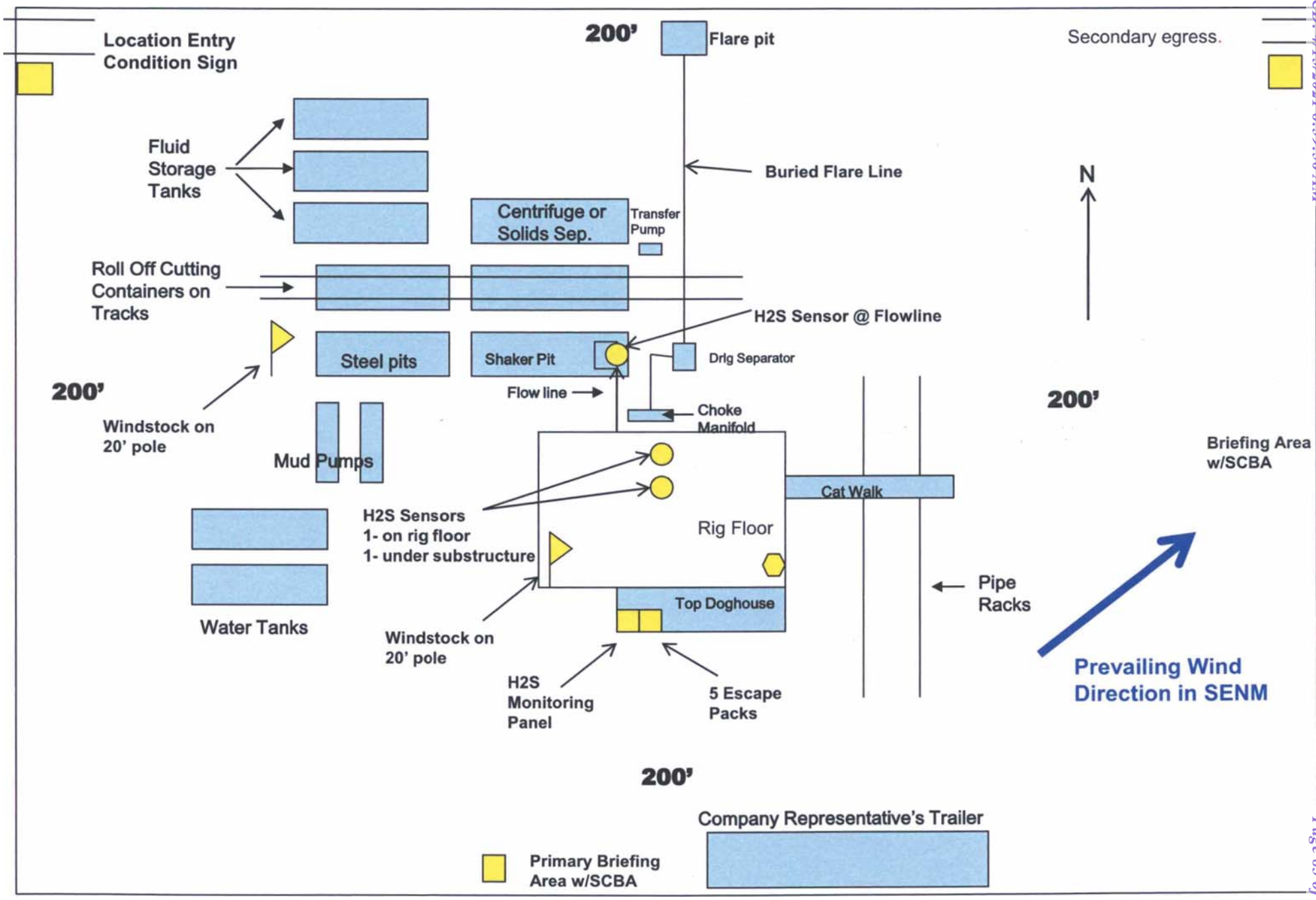
Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239

ACK JWSC W.O.: 19.11.1257

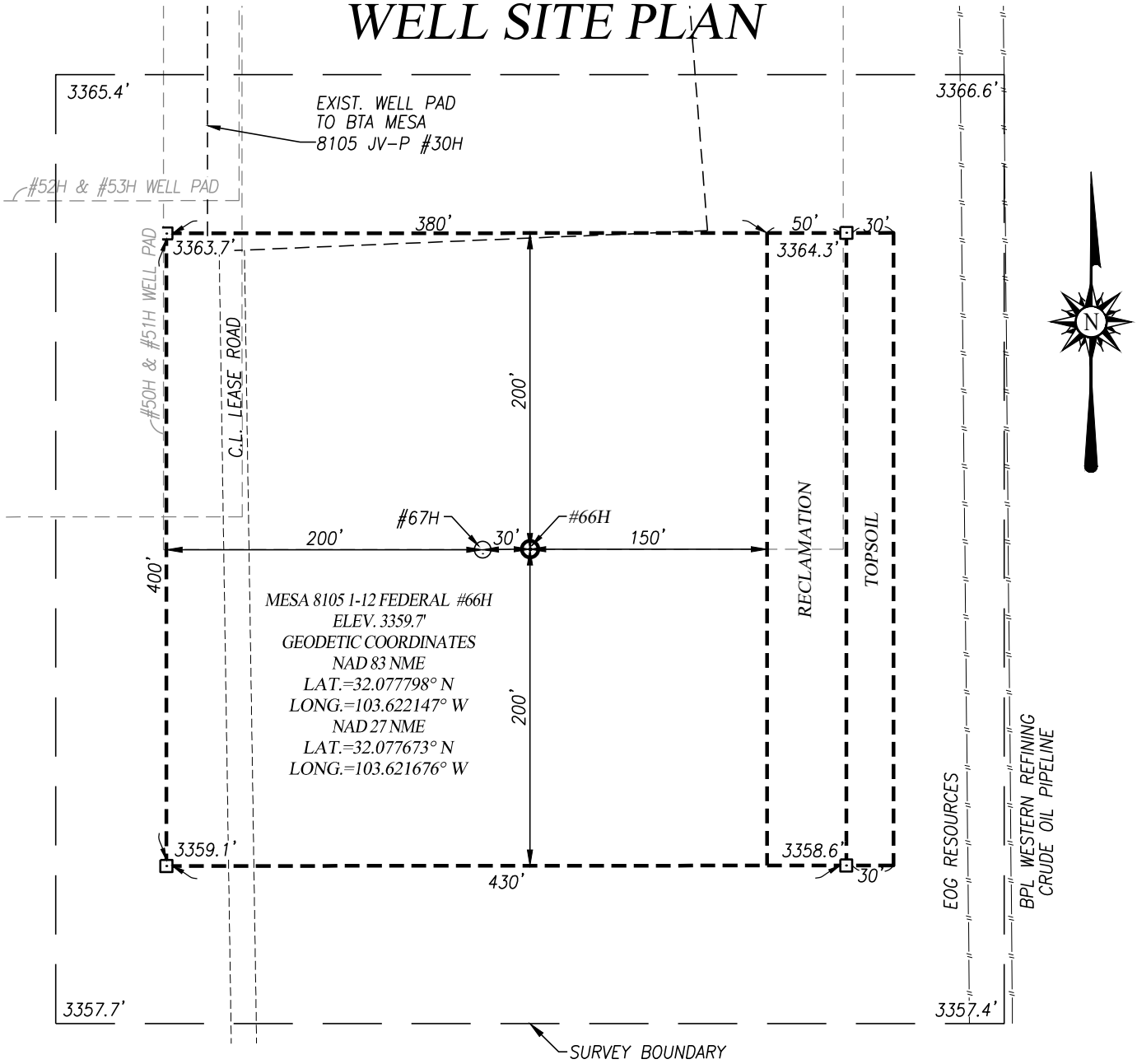
BTA OIL PRODUCERS, LLC
WATER TRANSPORTATION MAP
MESA 8105 FEDERAL WATER TRANSPORT MAP
SEC 1; T26S ; R32E (Water Pit is in SESE QUARTER QUARTER)
LEA COUNTY, NM

Released to Imaging: 4/26/2021 5:10:46 PM

Received by OCD: 4/15/2021 8:59:56 AM



WELL SITE PLAN



GARY G. EIDSON
NEW MEXICO
12641
PROFESSIONAL SURVEYOR

I, GARY G. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 12641, 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 IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

GARY G. EIDSON Gary G Eidson

DATE: 02/17/2020

NOTE:
SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR ACCESS ROAD LOCATION.

100 0 100 200 Feet

Scale: 1"=100'

BTA OIL PRODUCERS, LLC

MESA 8105 1-12 FEDERAL #66H WELL LOCATED 730 FEET FROM THE NORTH LINE AND 700 FEET FROM THE EAST LINE OF SECTION 1, TOWNSHIP 26 SOUTH, RANGE 32 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO

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

Survey Date: 11/19/19	CAD Date: 2/11/2020		Drawn By: ACK
W.O. No.: 19111257	Rev: .	Rel. W.O.:	Sheet 1 of 1

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

PWD Data Report
04/14/2021

APD ID: 10400057820
Submission Date: 06/10/2020
Operator Name: BTA OIL PRODUCERS LLC
Well Name: MESA 8105 1-12 FEDERAL
Well Number: 66H
Well Type: OIL WELL
Well Work Type: Drill

Section 1 - General

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

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): **PWD surface owner:**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

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

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

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

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

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

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL **Well Number:** 66H

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

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

Bond Info Data Report

04/14/2021

APD ID: 10400057820

Submission Date: 06/10/2020

Operator Name: BTA OIL PRODUCERS LLC

Well Name: MESA 8105 1-12 FEDERAL

Well Number: 66H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB001711

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
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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 24131

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX79701	260297	24131	FORM 3160-3

OCD Reviewer	Condition
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
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