

| Well Name        | Well Number | US Well Number | Lease Number | Case Number | Operator |
|------------------|-------------|----------------|--------------|-------------|----------|
| JUNIPER 25 36 34 | 094H        | 3002552593     | NMNM136233   | NMNM136233  | MATADOR  |
| JUNIPER 25 36 34 | 123H        | 3002552605     | NMNM136233   | NMNM136233  | MATADOR  |
| JUNIPER 25 36 34 | 082H        | 3002552581     | NMNM136233   | NMNM136233  | MATADOR  |
| JUNIPER 25 36 34 | 103H        | 3002552597     | NMNM136233   | NMNM136233  | MATADOR  |
| JUNIPER 25 36 34 | 114H        | 3002552601     | NMNM136233   | NMNM136233  | MATADOR  |

### Notice of Intent

**Sundry ID:** 2865048

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 07/24/2025

**Time Sundry Submitted:** 08:39

**Date proposed operation will begin:** 07/24/2025

**Procedure Description:** Matador requests the option to amend the well design of the Juniper 25 36 34 Fed Com #103H, #114H, #094H, #082H, and #123H by changing the set depth of the intermediate 1 casing strings as per the drill plans attached. Cement volumes will be adjusted accordingly. Justification for these set depths are included in the form of the Bell Canyon top displayed on directly adjacent logs.

### NOI Attachments

#### Procedure Description

[Juniper\\_Fed\\_Com\\_26\\_36\\_34\\_094H\\_Drill\\_Plan\\_Design\\_B\\_\\_4\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_25\\_36\\_34\\_123H\\_Drill\\_Plan\\_Design\\_A\\_\\_3\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_26\\_36\\_34\\_082H\\_Drill\\_Plan\\_Design\\_B\\_\\_4\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_25\\_36\\_34\\_103H\\_Drill\\_Plan\\_Design\\_B\\_\\_4\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_25\\_36\\_34\\_114H\\_Drill\\_Plan\\_Design\\_B\\_\\_4\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_25\\_36\\_34\\_114H\\_Drill\\_Plan\\_Design\\_A\\_\\_3\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Base\\_Capitan\\_Depths\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_25\\_36\\_34\\_103H\\_Drill\\_Plan\\_Design\\_A\\_\\_3\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_25\\_36\\_34\\_123H\\_Drill\\_Plan\\_Design\\_B\\_\\_4\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_26\\_36\\_34\\_094H\\_Drill\\_Plan\\_Design\\_A\\_\\_3\\_string\\_\\_v2\\_20250724083740.pdf](#)  
[Juniper\\_Fed\\_Com\\_26\\_36\\_34\\_082H\\_Drill\\_Plan\\_Design\\_A\\_\\_3\\_string\\_\\_v2\\_20250724083740.pdf](#)



Form 3160-5  
(October 2024)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**SUNDRY NOTICES AND REPORTS ON WELLS**  
***Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.***FORM APPROVED  
OMB No. 1004-0220  
Expires: October 31, 2027

|   |  |                                   |   |
|---|--|-----------------------------------|---|
| <b>SUBMIT IN TRIPPLICATE - Other instructions on page 2</b>   |  |                                   | 5. Lease Serial No.                         |
| 1. Type of Well<br><input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other |  |                                   | 6. If Indian, Allottee or Tribe Name        |
| 2. Name of Operator   |  |                                   | 7. If Unit of CA/Agreement, Name and/or No. |
| 3a. Address   |  | 3b. Phone No. (include area code) | 8. Well Name and No.                        |
| 4. Location of Well (Footage, Sec., T.R.M., or Survey Description)  |  |                                   | 9. API Well No.                             |
|   |  |                                   | 10. Field and Pool or Exploratory Area      |
|   |  |                                   | 11. Country or Parish, State                |

## 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION                                | TYPE OF ACTION                                |   |  |   |  |
|---|---|---|--|---|--|
| <input type="checkbox"/> Notice of Intent         | <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen               | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |  |
|   | <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Hydraulic Fracturing | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |  |
| <input type="checkbox"/> Subsequent Report        | <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction     | <input type="checkbox"/> Recomplete                | <input type="checkbox"/> Other          |  |
|   | <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon     | <input type="checkbox"/> Temporarily Abandon       |   |  |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back            | <input type="checkbox"/> Water Disposal            |   |  |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

|   |       |  |
|---|-------|--|
| 14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) | Title |  |
| Signature   | Date  |  |

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

|   |       |      |
|---|-------|------|
| Approved by   | Title | Date |
| Conditions of approval, if any, are attached. Approval of this notice 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. |       |      |
| Office  |       |      |

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.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law 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, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. 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 the 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., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

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

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

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

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

## Additional Information

### Batch Well Data

JUNIPER 25 36 34 FED COM 123H, US Well Number: 3002552605, Case Number: NMNM136233, Lease Number: NMNM136233, Operator:MATADOR PRODUCTION COMPANY

JUNIPER 25 36 34 FED COM 094H, US Well Number: 3002552593, Case Number: NMNM136233, Lease Number: NMNM136233, Operator:MATADOR PRODUCTION COMPANY

JUNIPER 25 36 34 FED COM 103H, US Well Number: 3002552597, Case Number: NMNM136233, Lease Number: NMNM136233, Operator:MATADOR PRODUCTION COMPANY

JUNIPER 25 36 34 FED COM 114H, US Well Number: 3002552601, Case Number: NMNM136233, Lease Number: NMNM136233, Operator:MATADOR PRODUCTION COMPANY

JUNIPER 25 36 34 FED COM 082H, US Well Number: 3002552581, Case Number: NMNM136233, Lease Number: NMNM136233, Operator:MATADOR PRODUCTION COMPANY

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

| Well Name & #                 | US Well Number | APD ID      |
|-------------------------------|----------------|-------------|
| JUNIPER 25 36 34 FED COM 094H | 3002552593     | 10400087998 |
| JUNIPER 25 36 34 FED COM 123H | 3002552605     | 10400087996 |
| JUNIPER 25 36 34 FED COM 082H | 3002552581     | 10400088108 |
| JUNIPER 25 36 34 FED COM 103H | 3002552597     | 10400088015 |
| JUNIPER 25 36 34 FED COM 114H | 3002552601     | 10400088018 |

COA

| H <sub>2</sub> S    | <input type="radio"/> No   | <input checked="" type="radio"/> Yes  |
|---------------------|--|---|
| Potash / WIPP       | <input checked="" type="radio"/> None  | <input type="radio"/> Secretary <input type="radio"/> R-111-Q <input type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP                                     |
| Cave / Karst        | <input checked="" type="radio"/> Low   | <input type="radio"/> Medium <input type="radio"/> High <input type="radio"/> Critical  |
| Wellhead            | <input type="radio"/> Conventional   | <input checked="" type="radio"/> Multibowl <input type="radio"/> Both <input type="radio"/> Diverter  |
| Cementing           | <input type="checkbox"/> Primary Squeeze   | <input type="checkbox"/> Cont. Squeeze <input type="checkbox"/> EchoMeter <input checked="" type="checkbox"/> DV Tool   |
| Special Req         | <input checked="" type="checkbox"/> Capitan Reef                                   | <input type="checkbox"/> Water Disposal <input checked="" type="checkbox"/> COM <input type="checkbox"/> Unit   |
| Waste Prev.         | <input type="radio"/> Self-Certification   | <input type="radio"/> Waste Min. Plan <input checked="" type="radio"/> APD Submitted prior to 06/10/2024  |
| Additional Language | <input checked="" type="checkbox"/> Flex Hose <input type="checkbox"/> Four-String | <input type="checkbox"/> Casing Clearance <input type="checkbox"/> Pilot Hole <input checked="" type="checkbox"/> Break Testing <input type="checkbox"/> Fluid-Filled |

SEE ORIGINAL COAs FOR ALL OTHER REQUIREMENTS.

This is to confirm that the operator is approved to set the **10-3/4-inch** 1<sup>st</sup> intermediate casing at approximately **5,801 ft.** in the base of the Capitan Reef in the 4-string casing designs. This depth is an adjustment from the originally approved depth of 3,300 ft.

2. The **10-3/4** inch 1<sup>st</sup> intermediate casing shall be set in a competent bed at approximately **5,801 ft.** The minimum required fill of cement behind the **10-3/4** 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 the presence of Capitan Reef.

**Option 2 (Two-Stage):** The operator has proposed to utilize a DV tool. Operator may adjust depth of DV tool if needed, adjust cement volumes accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. **Second stage above DV tool: Cement to surface.** If cement does not circulate 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 the presence of Capitan Reef.

**Note:** Excess cement for the 2<sup>nd</sup> stage is below %25. More cement might be needed.

- ❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.
- ❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
  - Switch to freshwater mud to protect the Capitan Reef and use freshwater mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
  - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

## **Batch Sundry**

- Approval shall be for wells with surface, intermediate, and production section within 200' TVD tolerance between shoes above the deepest well shoes set depth.
- Approval shall be for wells with same drill plan design. (Casing depth may vary and cement volumes may vary per Condition of Approval.)
- Approval shall be for wells within the same drill pad.
- Cement excess shall be a minimum of 25%, adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

## **GENERAL REQUIREMENTS**

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

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

### **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM

88220; [BLM\\_NM\\_CFO\\_DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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 doghouse or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

#### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the

following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

## B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

- i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (Only applies to single stage cement jobs, prior to the cement setting up.)
  - iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - iv. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular

chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two hour clock.

- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

### **C. DRILLING MUD**

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

### **D. WASTE MATERIAL AND FLUIDS**

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

**SA 07/31/2025**

**Juniper 25 36 34 Fed Com 094H**  
**SHL: 260' FSL & 2050' FWL Section 34**  
**BHL: 110' FNL & 1651' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3000**

#### **Design B (4 string) Differences**

- Design B will add an additional intermediate string of casing set at the top of Bell Canyon if significant losses are observed while drilling 12.25" int 1 hole section. If no losses are observed, Design A will be utilized and hole size will be slimmed down from 12.25" to 9.875" and a single 7.625" int string of casing will be ran. Cement and mud designs are adjusted accordingly below, along with the 10-3/4" BUTT-SC casing spec sheet and 4-string wellhead diagram. Proper notification will be given prior to running and cementing casing.

#### **Sundry Request**

Matador would like to adjust documentation to reflect BHL as a standard location

#### **Drilling Operation Plan**

Proposed Drilling Depth: 21732' MD / 11080' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784802 N / -103.2562333 W  
 TD Lat/Long (NAD83): 32.1082924 N / -103.2562294 W

#### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)      | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|---------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325         | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783         | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213         | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751         | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584         | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376         | 1,839          | Limestone        | Oil/Natural Gas        |
| 1st Bone Spring Sand | 9,215         | 9,215         | 140            | Sandstone        | Oil/Natural Gas        |
| 2nd Bone Spring Carb | 9,355         | 9,355         | 416            | Carbonate        | Oil/Natural Gas        |
| 2nd Bone Spring Sand | 9,771         | 9,771         | 113            | Sandstone        | Oil/Natural Gas        |
| 3rd Bone Spring Carb | 9,884         | 9,884         | 1,099          | Carbonate        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>10,559</b> | <b>10,507</b> | -              | <b>Carbonate</b> | <b>Oil/Natural Gas</b> |
| 3rd Bone Spring Sand | 11,121        | 10,983        | 254            | Sandstone        | Oil/Natural Gas        |
| <b>TD</b>            | <b>21,732</b> | <b>11,080</b> | -              | <b>Sandstone</b> | <b>Oil/Natural Gas</b> |
| Wolfcamp A           | -             | 11,237        |                | Shale            | Oil/Natural Gas        |

#### **2. Notable Zones**

Third Bone Spring Sand is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

### **3. Pressure Control**

#### Equipment

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

#### Testing Procedure

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

#### Variance Request

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, Intermediate 2, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

#### 4. Casing & Cement

All casing will be API and new. See attached casing assumption worksheet.

| String         | Hole Size (in) | Set MD (ft) | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade  | Joint          | Collapse | Burst | Tension |
|----------------|----------------|-------------|--------------|------------------|-------------|--------|----------------|----------|-------|---------|
| Surface        | 17.5           | 0 - 1350    | 0 - 1350     | 13.375           | 54.5        | J-55   | BUTT           | 1.125    | 1.125 | 1.8     |
| Intermediate 1 | 12.25          | 0 - 5801    | 0 - 5801     | 10.75            | 45.5        | HCL-80 | BUTT-SC        | 1.125    | 1.125 | 1.8     |
| Intermediate 2 | 9.875          | 0 - 10971   | 0 - 10357    | 7.625            | 29.7        | P-110  | BUTT           | 1.125    | 1.125 | 1.8     |
| Production     | 6.75           | 0 - 21732   | 0 - 11080    | 5.5              | 20          | P-110  | Hunting TLW-SC | 1.125    | 1.125 | 1.8     |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

#### Variance Request

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required. The 10-3/4" SC casing spec sheet along with 4-string wellhead diagram are attached.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                                |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|--------------------------------------|
| Surface                         | Lead       | 640   | 1.72  | 1094    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                        |
| Intermediate 1<br>w/ DV @ 4200' | Stg 2 Tail | 510   | 1.78  | 911     | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 700   | 1.84  | 1295    | 12.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Tail | 230   | 1.33  | 304     | 14.8   | 50%            | 4801               | C     | 5% NaCl + LCM                        |
| Intermediate 2<br>w/ DV @ 5851' | Stg 2 Tail | 730   | 1.78  | 1305    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 300   | 3.66  | 1091    | 10.3   | 35%            | 5601               | A/C   | Bentonite + 1% CaCl2 + 8% NaCl + LCM |
|                                 | Stg 1 Tail | 230   | 1.38  | 311     | 13.2   | 35%            | 9409               | A/C   | 5% NaCl + LCM                        |
| Production                      | Tail       | 880   | 1.35  | 1194    | 13.2   | 25%            | 10209              | A/C   | Fluid Loss + Dispersant + Retarder   |

**5. Mud Program**

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.8        | 28-30     | NC         |
| Intermediate 1 | 12.25          | Brine         | 1350 - 5801      | 9.8 - 10.2       | 28-30     | NC         |
| Intermediate 2 | 9.875          | Cut Brine     | 5801 - 10971     | 8.8 - 9.8        | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 10971 - 21732    | 10.8 - 11.6      | 50-65     | <20        |

**6. Cores, Test, & Logs**

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## **7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 6683 psi. Maximum anticipated surface pressure is 4246 psi. Expected bottom hole temperature is 177 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Casing Specs - 10.75" 45.5lb BUTT-SC****API 5CT 10.750" 45.50lb/ft HCL80 Casing Performance Data Sheet**

Manufactured to specifications of API 5CT 9th edition and bears the API monogram.

|  |            |
|--|------------|
| Grade                                  | HCL80      |
| <b>Pipe Body Mechanical Properties</b> |            |
| Minimum Yield Strength                 | 80,000 psi |
| Maximum Yield Strength                 | 95,000 psi |

## Drill Plan - Design B (4 string)

|                          |            |
|--------------------------|------------|
| Minimum Tensile Strength | 95,000 psi |
| Maximum Hardness         | 23.0 HRC   |

| <u>Sizes</u>           |             |
|------------------------|-------------|
| OD                     | 10 3/4      |
| Nominal Wall Thickness | .400 in     |
| Nominal Weight, T&C    | 45.50 lb/ft |
| Nominal Weight, PE     | 44.26 lb/ft |
| Nominal ID             | 9.950 in    |
| Standard Drift         | 9.794 in    |
| Alternate Drift        | 9.875 in    |

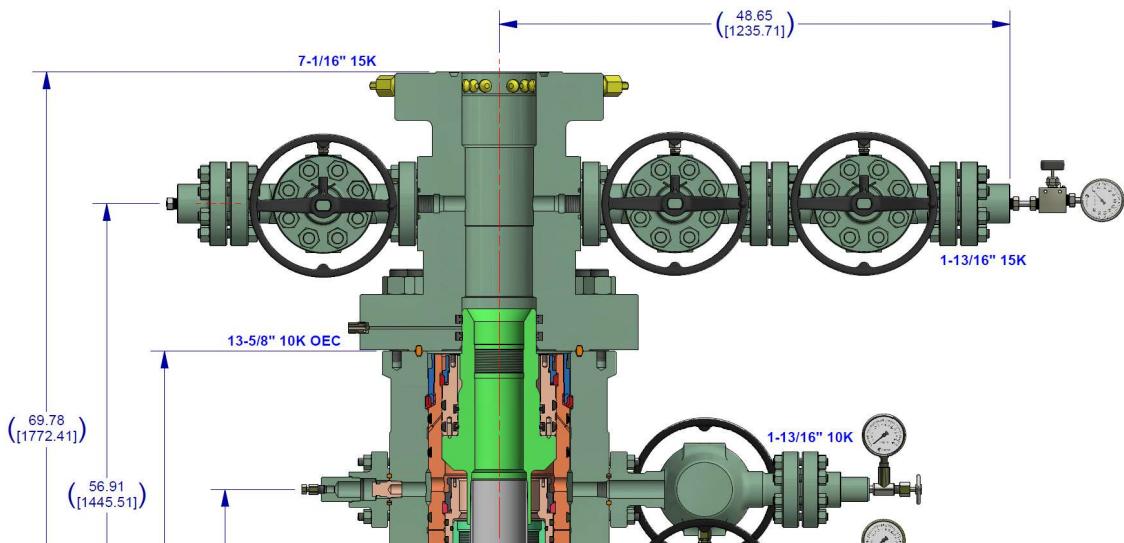
| <u>Coupling Special Clearance</u> | <u>Size</u> |
|-----------------------------------|-------------|
| OD                                | 11.25 in    |
| Min. Length                       | 10.625 in   |
| Diameter of Counter Bore          | 10.890 in   |
| Width of bearing face             | .375 in     |

| <u>Minimum Performance</u> |               |
|----------------------------|---------------|
| Collapse Pressure          | 2,940 psi     |
| Internal Pressure Yield    | 5,210 psi     |
| Pipe body Tension Yield    | 1,040,000 lbs |
| Joint Strength STC         | 692,000 lbs   |
| Joint Strength LTC         | N/A           |
| Joint Strength BTC         | 1,063,000 lbs |

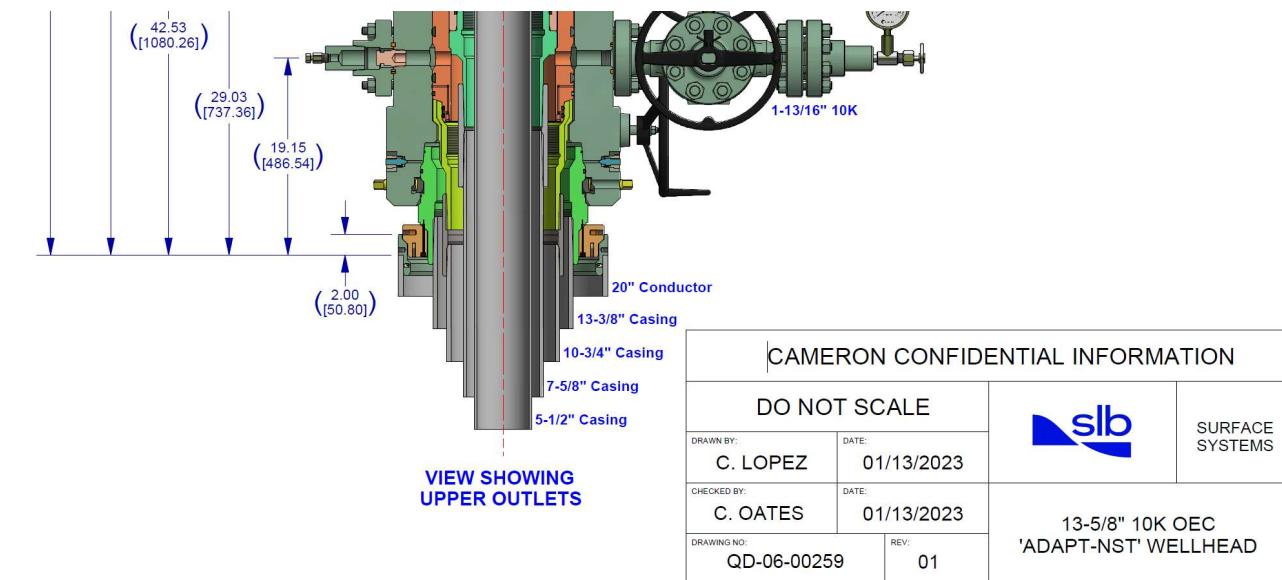
| <u>Inspection and Testing</u> |   |
|-------------------------------|---|
| Visual                        | OD Longitudinal and independent 3rd party SEA   |
| NDT                           | Independent 3rd party full body EMI and End Area Inspection after hydrotest<br>Calibration notch sensitivity: 10% of specified wall thickness |

| <u>Color code</u> |                                      |
|-------------------|--------------------------------------|
| Pipe ends         | One red, one brown and one blue band |
| Couplings         | Red with one brown band              |

## 4-String Wellhead Diagram



## Drill Plan - Design B (4 string)



**Juniper Fed Com 25 36 34 123H**  
**SHL: 230' FSL & 1970' FWL Section 34**  
**BHL: 110' FNL & 660' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 2999**

### Drilling Operation Plan

Proposed Drilling Depth: 20106' MD / 9350' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.078481 N / -103.2594293 W  
 TD Lat/Long (NAD83): 32.1082936 N / -103.2594311 W

### 1. Estimated Tops

| Formation            | MD (ft)       | TVD (ft)     | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|--------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325        | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783        | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213        | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751        | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584        | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376        | 1,839          | Limestone        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>8,933</b>  | <b>8,777</b> | -              | <b>Limestone</b> | <b>Oil/Natural Gas</b> |
| 1st Bone Spring Sand | 9,431         | 9,215        | 140            | Sandstone        | Oil/Natural Gas        |
| <b>TD</b>            | <b>20,106</b> | <b>9,350</b> | -              | <b>Sandstone</b> | <b>Oil/Natural Gas</b> |
| 2nd Bone Spring Carb | 9,355         | 9,355        | 416            | Carbonate        | Oil/Natural Gas        |

### 2. Notable Zones

1st Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

### 3. Pressure Control

#### Equipment

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

### Testing Procedure

**Drill Plan - Design A (3 string)**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

#### Variance Request

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

#### **4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String         | Hole Size (in) | Set MD (ft) | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint          | Collapse | Burst | Tension |
|----------------|----------------|-------------|--------------|------------------|-------------|-------|----------------|----------|-------|---------|
| Surface        | 17.5           | 0 - 1350    | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT           | 1.125    | 1.125 | 1.8     |
| Intermediate 1 | 12.25          | 0 - 5801    | 0 - 5801     | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
|                | 9.875          | 5801 - 8783 | 5801 - 8627  | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
| Production     | 6.75           | 0 - 20106   | 0 - 9350     | 5.5              | 20          | P-110 | Hunting TLW-SC | 1.125    | 1.125 | 1.8     |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)

- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth

## Drill Plan - Design A (3 string)

revised accordingly if needed

- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

#### Variance Request

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required.

#### **Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                              |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|------------------------------------|
| Surface                         | Lead       | 630   | 1.72  | 1091    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                      |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 1460  | 1.78  | 2599    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Lead | 2350  | 1.84  | 4331    | 12.5   | 35%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Tail | 230   | 1.33  | 311     | 13.2   | 35%            | 7783               | C     | 5% NaCl + LCM                      |
| Production                      | Tail       | 890   | 1.35  | 1201    | 13.2   | 25%            | 8583               | A/C   | Fluid Loss + Dispersant + Retarder |

#### **5. Mud Program**

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.6        | 28-30     | NC         |
| Intermediate 1 | 12.25 & 9.875  | WBM           | 1350 - 8783      | 9.6 - 10         | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 8783 - 20106     | 9.4 - 10         | 50-65     | <20        |

#### **6. Cores, Test, & Logs**

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## **7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 4862 psi. Maximum anticipated surface pressure is 2805 psi. Expected bottom hole temperature is 158 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Juniper Fed Com 26 36 34 082H**  
**SHL: 260' FSL & 1970' FWL Section 34**  
**BHL: 110' FNL & 2310' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 2999**

#### **Design B (4 string) Differences**

- Design B will add an additional intermediate string of casing set at the top of Bell Canyon if significant losses are observed while drilling 12.25" int 1 hole section. If no losses are observed, Design A will be utilized and hole size will be slimmed down from 12.25" to 9.875" and a single 7.625" int string of casing will be ran. Cement and mud designs are adjusted accordingly below, along with the 10-3/4" BUTT-SC casing spec sheet and 4-string wellhead diagram. Proper notification will be given prior to running and cementing casing.

#### **Drilling Operation Plan**

Proposed Drilling Depth: 19973' MD / 9320' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784796 N / -103.2541026 W

TD Lat/Long (NAD83): 32.1082915 N / -103.2541027 W

#### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)     | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|--------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325        | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783        | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213        | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751        | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584        | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376        | 1,839          | Limestone        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>8,795</b>  | <b>8,747</b> | -              | <b>Limestone</b> | <b>Oil/Natural Gas</b> |
| 1st Bone Spring Sand | 9,342         | 9,215        | 140            | Sandstone        | Oil/Natural Gas        |
| <b>TD</b>            | <b>19,973</b> | <b>9,320</b> |                | <b>Sandstone</b> | <b>Oil/Natural Gas</b> |
| 2nd Bone Spring Carb | 9,355         | 9,355        | 416            | Carbonate        | Oil/Natural Gas        |

#### **2. Notable Zones**

1st Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

#### **3. Pressure Control**

##### Equipment

**Drill Plan - Design B (4 string)**

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

**Testing Procedure**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

**Variance Request**

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, Intermediate 2, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

**4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String  | Hole Size (in) | Set MD (ft) | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint | Collapse | Burst | Tension |
|---------|----------------|-------------|--------------|------------------|-------------|-------|-------|----------|-------|---------|
| Surface | 17.5           | 0 - 1350    | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT  | 1.125    | 1.125 | 1.8     |

## Drill Plan - Design B (4 string)

|                |       |           |          |       |      |        |                |       |       |     |
|----------------|-------|-----------|----------|-------|------|--------|----------------|-------|-------|-----|
| Intermediate 1 | 12.25 | 0 - 5801  | 0 - 5801 | 10.75 | 45.5 | HCL-80 | BUTT-SC        | 1.125 | 1.125 | 1.8 |
| Intermediate 2 | 9.875 | 0 - 8645  | 0 - 8597 | 7.625 | 29.7 | P-110  | BUTT           | 1.125 | 1.125 | 1.8 |
| Production     | 6.75  | 0 - 19973 | 0 - 9320 | 5.5   | 20   | P-110  | Hunting TLW-SC | 1.125 | 1.125 | 1.8 |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

Variance Request

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required. The 10-3/4" SC casing spec sheet along with 4-string wellhead diagram are attached.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                                |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|--------------------------------------|
| Surface                         | Lead       | 640   | 1.72  | 1094    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                        |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 400   | 1.78  | 717     | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 700   | 1.84  | 1295    | 12.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Tail | 230   | 1.33  | 304     | 14.8   | 50%            | 4801               | C     | 5% NaCl + LCM                        |
| Intermediate 2<br>w/ DV @ 5851' | Stg 2 Tail | 730   | 1.78  | 1305    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 160   | 3.66  | 579     | 10.3   | 35%            | 5601               | A/C   | Bentonite + 1% CaCL2 + 8% NaCl + LCM |
|                                 | Stg 1 Tail | 230   | 1.38  | 311     | 13.2   | 35%            | 7645               | A/C   | 5% NaCl + LCM                        |
| Production                      | Tail       | 890   | 1.35  | 1201    | 13.2   | 25%            | 8445               | A/C   | Fluid Loss + Dispersant + Retarder   |

## 5. Mud Program

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.6        | 28-30     | NC         |
| Intermediate 1 | 12.25          | Brine         | 1350 - 5801      | 9.6 - 10         | 28-30     | NC         |
| Intermediate 2 | 9.875          | Cut Brine     | 5801 - 8645      | 8.8 - 9.4        | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 8645 - 19973     | 9.6 - 10.2       | 50-65     | <20        |

## 6. Cores, Test, & Logs

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## 7. Down Hole Conditions

No abnormal pressure or temperature is expected. Bottom hole pressure is 4846 psi. Maximum anticipated surface pressure is 2796 psi. Expected bottom hole temperature is 158 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Casing Specs - 10.75" 45.5lb BUTT-SC****API 5CT 10.750" 45.50lb/ft HCL80 Casing Performance Data Sheet**

Manufactured to specifications of API 5CT 9th edition and bears the API monogram.

|       |       |
|-------|-------|
| Grade | HCL80 |
|-------|-------|

**Pipe Body Mechanical Properties**

|                          |            |
|--------------------------|------------|
| Minimum Yield Strength   | 80,000 psi |
| Maximum Yield Strength   | 95,000 psi |
| Minimum Tensile Strength | 95,000 psi |
| Maximum Hardness         | 23.0 HRC   |

**Sizes**

|                        |             |
|------------------------|-------------|
| OD                     | 10 3/4      |
| Nominal Wall Thickness | .400 in     |
| Nominal Weight, T&C    | 45.50 lb/ft |
| Nominal Weight, PE     | 44.26 lb/ft |
| Nominal ID             | 9.950 in    |
| Standard Drift         | 9.794 in    |
| Alternate Drift        | 9.875 in    |

| <b><u>Coupling Special Clearance</u></b> | <b><u>Size</u></b> |
|--|--------------------|
| OD                                       | 11.25 in           |
| Min. Length                              | 10.625 in          |
| Diameter of Counter Bore                 | 10.890 in          |
| Width of bearing face                    | .375 in            |

**Minimum Performance**

|                         |               |
|-------------------------|---------------|
| Collapse Pressure       | 2,940 psi     |
| Internal Pressure Yield | 5,210 psi     |
| Pipe body Tension Yield | 1,040,000 lbs |
| Joint Strength STC      | 692,000 lbs   |
| Joint Strength LTC      | N/A           |
| Joint Strength BTC      | 1,063,000 lbs |

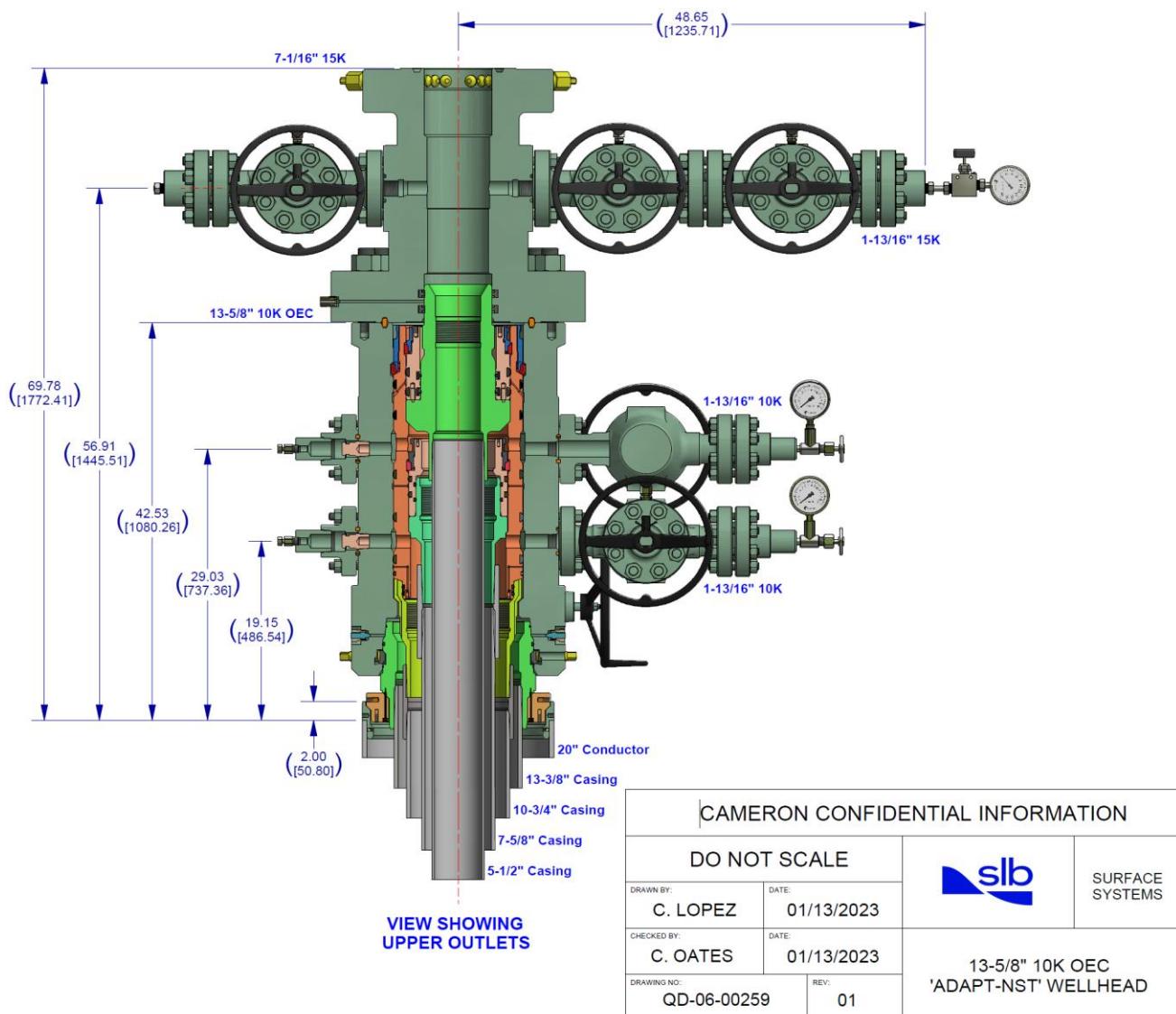
**Inspection and Testing**

|        |   |
|--------|---|
| Visual | OD Longitudinal and independent 3rd party SEA   |
| NDT    | Independent 3rd party full body EMI and End Area Inspection after hydrotest<br>Calibration notch sensitivity: 10% of specified wall thickness |

**Color code**

|           |                                      |
|-----------|--------------------------------------|
| Pipe ends | One red, one brown and one blue band |
| Couplings | Red with one brown band              |

## 4-String Wellhead Diagram





**Juniper Fed Com 25 36 34 103H**  
**SHL: 230' FSL & 2080' FWL Section 34**  
**BHL: 110' FNL & 990' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3000**

#### **Design B (4 string) Differences**

- Design B will add an additional intermediate string of casing set at the top of Bell Canyon if significant losses are observed while drilling 12.25" int 1 hole section. If no losses are observed, Design A will be utilized and hole size will be slimmed down from 12.25" to 9.875" and a single 7.625" int string of casing will be ran. Cement and mud designs are adjusted accordingly below, along with the 10-3/4" BUTT-SC casing spec sheet and 4-string wellhead diagram. Proper notification will be given prior to running and cementing casing.

#### **Drilling Operation Plan**

Proposed Drilling Depth: 22107' MD / 11420' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784807 N / -103.2583639 W

TD Lat/Long (NAD83): 32.1082932 N / -103.2583654 W

#### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)      | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|---------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325         | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783         | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213         | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751         | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584         | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376         | 1,839          | Limestone        | Oil/Natural Gas        |
| 1st Bone Spring Sand | 9,215         | 9,215         | 140            | Sandstone        | Oil/Natural Gas        |
| 2nd Bone Spring Carb | 9,355         | 9,355         | 416            | Carbonate        | Oil/Natural Gas        |
| 2nd Bone Spring Sand | 9,771         | 9,771         | 73             | Sandstone        | Oil/Natural Gas        |
| 3rd Bone Spring Carb | 9,844         | 9,844         | 1,139          | Carbonate        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>10,933</b> | <b>10,847</b> | -              | <b>Carbonate</b> | <b>Oil/Natural Gas</b> |
| 3rd Bone Spring Sand | 11,071        | 10,983        | 254            | Sandstone        | Oil/Natural Gas        |
| Wolfcamp A           | 11,363        | 11,237        | -              | Shale            | Oil/Natural Gas        |
| <b>TD</b>            | <b>22,107</b> | <b>11,420</b> |                | <b>Shale</b>     | <b>Oil/Natural Gas</b> |

#### **2. Notable Zones**

Wolfcamp A is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

#### **3. Pressure Control**

##### Equipment

**Drill Plan - Design B (4 string)**

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

**Testing Procedure**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

**Variance Request**

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, Intermediate 2, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

**4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String  | Hole Size (in) | Set MD (ft) | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint | Collapse | Burst | Tension |
|---------|----------------|-------------|--------------|------------------|-------------|-------|-------|----------|-------|---------|
| Surface | 17.5           | 0 - 1350    | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT  | 1.125    | 1.125 | 1.8     |

## Drill Plan - Design B (4 string)

|                |       |           |           |       |      |        |                |       |       |     |
|----------------|-------|-----------|-----------|-------|------|--------|----------------|-------|-------|-----|
| Intermediate 1 | 12.25 | 0 - 5801  | 0 - 5801  | 10.75 | 45.5 | HCL-80 | BUTT-SC        | 1.125 | 1.125 | 1.8 |
| Intermediate 2 | 9.875 | 0 - 10921 | 0 - 10833 | 7.625 | 29.7 | P-110  | BUTT           | 1.125 | 1.125 | 1.8 |
| Production     | 6.75  | 0 - 22107 | 0 - 11420 | 5.5   | 20   | P-110  | Hunting TLW-SC | 1.125 | 1.125 | 1.8 |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

Variance Request

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required. The 10-3/4" SC casing spec sheet along with 4-string wellhead diagram are attached.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                                |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|--------------------------------------|
| Surface                         | Lead       | 640   | 1.72  | 1094    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                        |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 400   | 1.78  | 717     | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 700   | 1.84  | 1295    | 12.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Tail | 230   | 1.33  | 304     | 14.8   | 50%            | 4801               | C     | 5% NaCl + LCM                        |
| Intermediate 2<br>w/ DV @ 5851' | Stg 2 Tail | 730   | 1.78  | 1305    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 330   | 3.66  | 1199    | 10.3   | 35%            | 5601               | A/C   | Bentonite + 1% CaCL2 + 8% NaCl + LCM |
|                                 | Stg 1 Tail | 230   | 1.38  | 311     | 13.2   | 35%            | 9783               | A/C   | 5% NaCl + LCM                        |
| Production                      | Tail       | 890   | 1.35  | 1199    | 13.2   | 25%            | 10583              | A/C   | Fluid Loss + Dispersant + Retarder   |

## 5. Mud Program

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.8        | 28-30     | NC         |
| Intermediate 1 | 12.25          | Brine         | 1350 - 5801      | 9.8 - 10.2       | 28-30     | NC         |
| Intermediate 2 | 9.875          | Cut Brine     | 5801 - 10921     | 8.6 - 9.2        | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 10921 - 22107    | 10.8 - 11.8      | 50-65     | <20        |

## 6. Cores, Test, & Logs

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## 7. Down Hole Conditions

No abnormal pressure or temperature is expected. Bottom hole pressure is 7007 psi. Maximum anticipated surface pressure is 4495 psi. Expected bottom hole temperature is 181 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Casing Specs - 10.75" 45.5lb BUTT-SC****API 5CT 10.750" 45.50lb/ft HCL80 Casing Performance Data Sheet**

Manufactured to specifications of API 5CT 9th edition and bears the API monogram.

|       |       |
|-------|-------|
| Grade | HCL80 |
|-------|-------|

**Pipe Body Mechanical Properties**

|                          |            |
|--------------------------|------------|
| Minimum Yield Strength   | 80,000 psi |
| Maximum Yield Strength   | 95,000 psi |
| Minimum Tensile Strength | 95,000 psi |
| Maximum Hardness         | 23.0 HRC   |

**Sizes**

|                        |             |
|------------------------|-------------|
| OD                     | 10 3/4      |
| Nominal Wall Thickness | .400 in     |
| Nominal Weight, T&C    | 45.50 lb/ft |
| Nominal Weight, PE     | 44.26 lb/ft |
| Nominal ID             | 9.950 in    |
| Standard Drift         | 9.794 in    |
| Alternate Drift        | 9.875 in    |

| <u>Coupling Special Clearance</u> | <u>Size</u> |
|-----------------------------------|-------------|
| OD                                | 11.25 in    |
| Min. Length                       | 10.625 in   |
| Diameter of Counter Bore          | 10.890 in   |
| Width of bearing face             | .375 in     |

**Minimum Performance**

|                         |               |
|-------------------------|---------------|
| Collapse Pressure       | 2,940 psi     |
| Internal Pressure Yield | 5,210 psi     |
| Pipe body Tension Yield | 1,040,000 lbs |
| Joint Strength STC      | 692,000 lbs   |
| Joint Strength LTC      | N/A           |
| Joint Strength BTC      | 1,063,000 lbs |

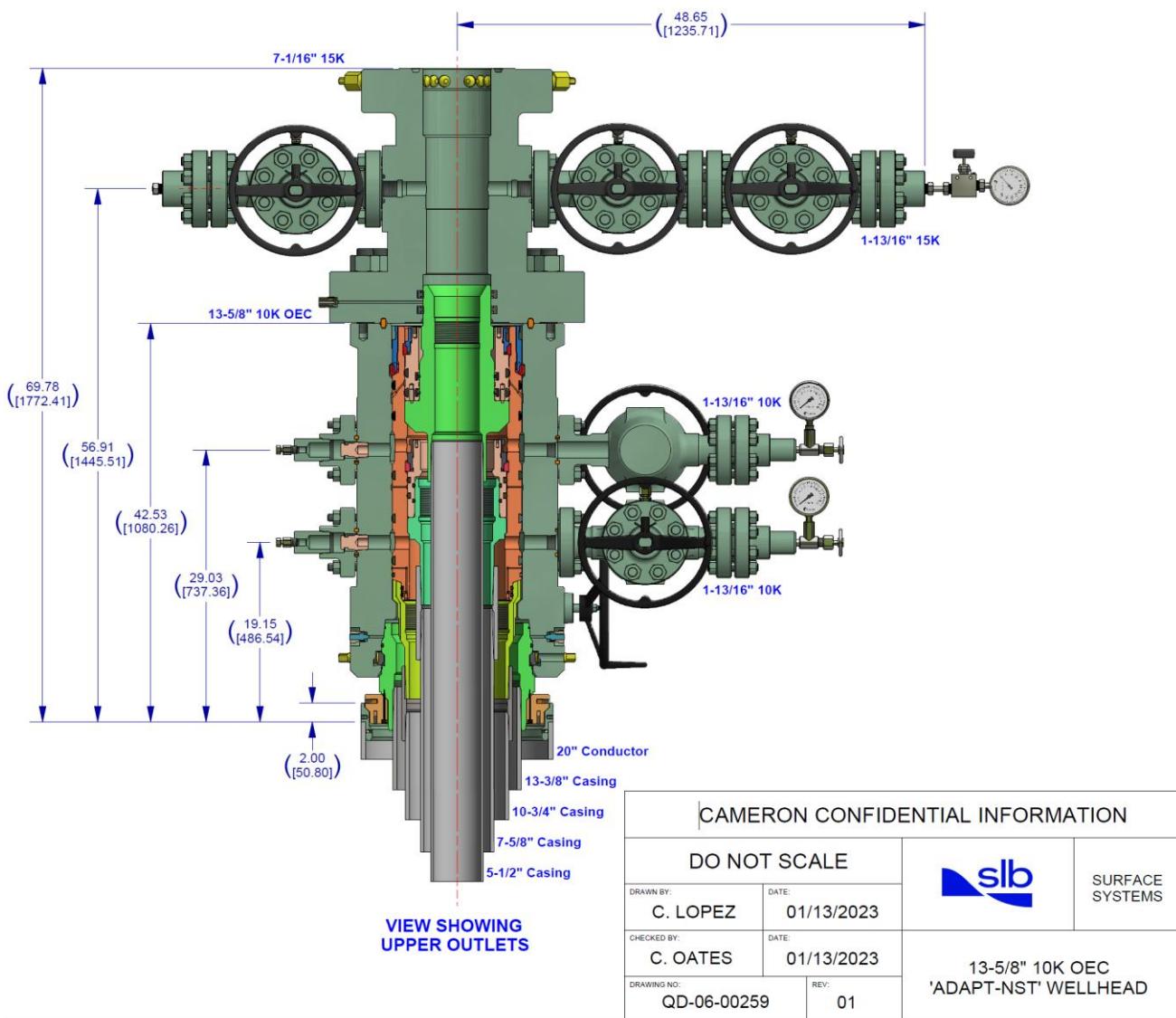
**Inspection and Testing**

|        |   |
|--------|---|
| Visual | OD Longitudinal and independent 3rd party SEA   |
| NDT    | Independent 3rd party full body EMI and End Area Inspection after hydrotest<br>Calibration notch sensitivity: 10% of specified wall thickness |

**Color code**

|           |                                      |
|-----------|--------------------------------------|
| Pipe ends | One red, one brown and one blue band |
| Couplings | Red with one brown band              |

## 4-String Wellhead Diagram





**Juniper Fed Com 25 36 34 114H**  
**SHL: 260' FSL & 2080' FWL Section 34**  
**BHL: 110' FNL & 2310' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3000**

#### **Design B (4 string) Differences**

- Design B will add an additional intermediate string of casing set at the top of Bell Canyon if significant losses are observed while drilling 12.25" int 1 hole section. If no losses are observed, Design A will be utilized and hole size will be slimmed down from 12.25" to 9.875" and a single 7.625" int string of casing will be ran. Cement and mud designs are adjusted accordingly below, along with the 10-3/4" BUTT-SC casing spec sheet and 4-string wellhead diagram. Proper notification will be given prior to running and cementing casing.

#### **Drilling Operation Plan**

Proposed Drilling Depth: 21973' MD / 11325' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784796 N / -103.2541026 W

TD Lat/Long (NAD83): 32.1082915 N / -103.2541027 W

#### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)      | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|---------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325         | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783         | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213         | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751         | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584         | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376         | 1,839          | Limestone        | Oil/Natural Gas        |
| 1st Bone Spring Sand | 9,215         | 9,215         | 140            | Sandstone        | Oil/Natural Gas        |
| 2nd Bone Spring Carb | 9,355         | 9,355         | 416            | Carbonate        | Oil/Natural Gas        |
| 2nd Bone Spring Sand | 9,771         | 9,771         | 73             | Sandstone        | Oil/Natural Gas        |
| 3rd Bone Spring Carb | 9,844         | 9,844         | 1,139          | Carbonate        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>10,799</b> | <b>10,752</b> | -              | <b>Carbonate</b> | <b>Oil/Natural Gas</b> |
| 3rd Bone Spring Sand | 11,037        | 10,983        | 254            | Sandstone        | Oil/Natural Gas        |
| Wolfcamp A           | 11,378        | 11,237        | -              | Shale            | Oil/Natural Gas        |
| <b>TD</b>            | <b>21,973</b> | <b>11,325</b> |                | <b>Shale</b>     | <b>Oil/Natural Gas</b> |

#### **2. Notable Zones**

Wolfcamp A is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

#### **3. Pressure Control**

##### Equipment

**Drill Plan - Design B (4 string)**

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

**Testing Procedure**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

**Variance Request**

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, Intermediate 2, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

**4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String  | Hole Size (in) | Set MD (ft) | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint | Collapse | Burst | Tension |
|---------|----------------|-------------|--------------|------------------|-------------|-------|-------|----------|-------|---------|
| Surface | 17.5           | 0 - 1350    | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT  | 1.125    | 1.125 | 1.8     |

## Drill Plan - Design B (4 string)

|                |       |           |           |       |      |        |                |       |       |     |
|----------------|-------|-----------|-----------|-------|------|--------|----------------|-------|-------|-----|
| Intermediate 1 | 12.25 | 0 - 5801  | 0 - 5801  | 10.75 | 45.5 | HCL-80 | BUTT-SC        | 1.125 | 1.125 | 1.8 |
| Intermediate 2 | 9.875 | 0 - 10887 | 0 - 10833 | 7.625 | 29.7 | P-110  | BUTT           | 1.125 | 1.125 | 1.8 |
| Production     | 6.75  | 0 - 21973 | 0 - 11325 | 5.5   | 20   | P-110  | Hunting TLW-SC | 1.125 | 1.125 | 1.8 |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

Variance Request

Matador request a variance to wave the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required. The 10-3/4" SC casing spec sheet along with 4-string wellhead diagram are attached.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                                |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|--------------------------------------|
| Surface                         | Lead       | 640   | 1.72  | 1094    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                        |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 400   | 1.78  | 717     | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 700   | 1.84  | 1295    | 12.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Tail | 230   | 1.33  | 304     | 14.8   | 50%            | 4801               | C     | 5% NaCl + LCM                        |
| Intermediate 2<br>w/ DV @ 5851' | Stg 2 Tail | 730   | 1.78  | 1305    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 320   | 3.66  | 1160    | 10.3   | 35%            | 5601               | A/C   | Bentonite + 1% CaCL2 + 8% NaCl + LCM |
|                                 | Stg 1 Tail | 230   | 1.38  | 311     | 13.2   | 35%            | 9649               | A/C   | 5% NaCl + LCM                        |
| Production                      | Tail       | 890   | 1.35  | 1198    | 13.2   | 25%            | 10449              | A/C   | Fluid Loss + Dispersant + Retarder   |

## 5. Mud Program

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.8        | 28-30     | NC         |
| Intermediate 1 | 12.25          | Brine         | 1350 - 5801      | 9.8 - 10.2       | 28-30     | NC         |
| Intermediate 2 | 9.875          | Cut Brine     | 5801 - 10887     | 8.6 - 9.2        | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 10887 - 21973    | 10.8 - 11.8      | 50-65     | <20        |

## 6. Cores, Test, & Logs

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## 7. Down Hole Conditions

No abnormal pressure or temperature is expected. Bottom hole pressure is 6949 psi. Maximum anticipated surface pressure is 4458 psi. Expected bottom hole temperature is 180 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Casing Specs - 10.75" 45.5lb BUTT-SC****API 5CT 10.750" 45.50lb/ft HCL80 Casing Performance Data Sheet**

Manufactured to specifications of API 5CT 9th edition and bears the API monogram.

|       |       |
|-------|-------|
| Grade | HCL80 |
|-------|-------|

**Pipe Body Mechanical Properties**

|                          |            |
|--------------------------|------------|
| Minimum Yield Strength   | 80,000 psi |
| Maximum Yield Strength   | 95,000 psi |
| Minimum Tensile Strength | 95,000 psi |
| Maximum Hardness         | 23.0 HRC   |

**Sizes**

|                        |             |
|------------------------|-------------|
| OD                     | 10 3/4      |
| Nominal Wall Thickness | .400 in     |
| Nominal Weight, T&C    | 45.50 lb/ft |
| Nominal Weight, PE     | 44.26 lb/ft |
| Nominal ID             | 9.950 in    |
| Standard Drift         | 9.794 in    |
| Alternate Drift        | 9.875 in    |

| <u>Coupling Special Clearance</u> | <u>Size</u> |
|-----------------------------------|-------------|
| OD                                | 11.25 in    |
| Min. Length                       | 10.625 in   |
| Diameter of Counter Bore          | 10.890 in   |
| Width of bearing face             | .375 in     |

**Minimum Performance**

|                         |               |
|-------------------------|---------------|
| Collapse Pressure       | 2,940 psi     |
| Internal Pressure Yield | 5,210 psi     |
| Pipe body Tension Yield | 1,040,000 lbs |
| Joint Strength STC      | 692,000 lbs   |
| Joint Strength LTC      | N/A           |
| Joint Strength BTC      | 1,063,000 lbs |

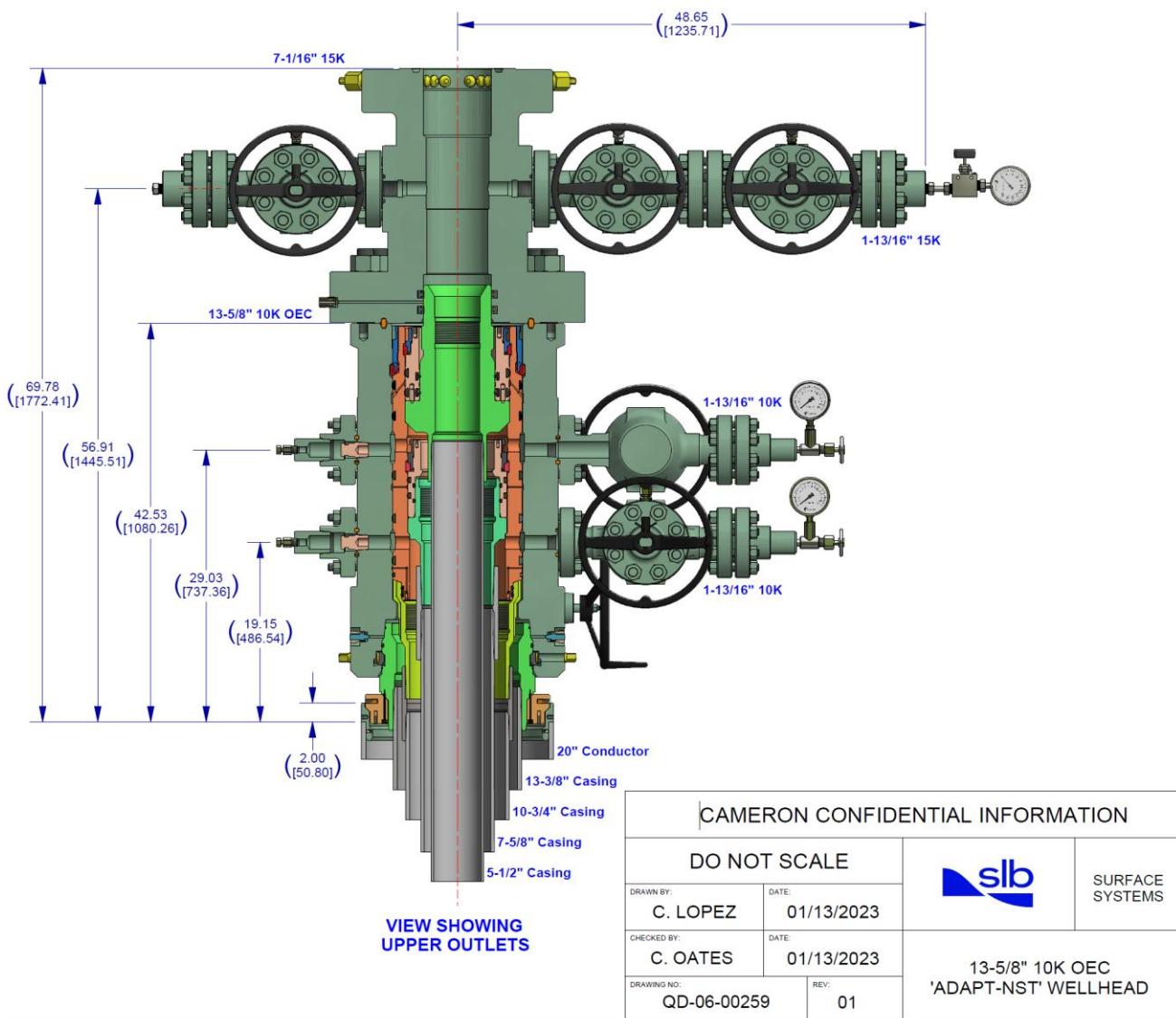
**Inspection and Testing**

|        |   |
|--------|---|
| Visual | OD Longitudinal and independent 3rd party SEA   |
| NDT    | Independent 3rd party full body EMI and End Area Inspection after hydrotest<br>Calibration notch sensitivity: 10% of specified wall thickness |

**Color code**

|           |                                      |
|-----------|--------------------------------------|
| Pipe ends | One red, one brown and one blue band |
| Couplings | Red with one brown band              |

## 4-String Wellhead Diagram





**Juniper Fed Com 25 36 34 114H**  
**SHL: 260' FSL & 2080' FWL Section 34**  
**BHL: 110' FNL & 2310' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3000**

### Drilling Operation Plan

Proposed Drilling Depth: 21973' MD / 11325' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784796 N / -103.2541026 W  
 TD Lat/Long (NAD83): 32.1082915 N / -103.2541027 W

### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)      | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|---------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325         | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783         | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213         | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751         | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584         | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376         | 1,839          | Limestone        | Oil/Natural Gas        |
| 1st Bone Spring Sand | 9,215         | 9,215         | 140            | Sandstone        | Oil/Natural Gas        |
| 2nd Bone Spring Carb | 9,355         | 9,355         | 416            | Carbonate        | Oil/Natural Gas        |
| 2nd Bone Spring Sand | 9,771         | 9,771         | 73             | Sandstone        | Oil/Natural Gas        |
| 3rd Bone Spring Carb | 9,844         | 9,844         | 1,139          | Carbonate        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>10,799</b> | <b>10,752</b> | -              | <b>Carbonate</b> | <b>Oil/Natural Gas</b> |
| 3rd Bone Spring Sand | 11,037        | 10,983        | 254            | Sandstone        | Oil/Natural Gas        |
| Wolfcamp A           | 11,378        | 11,237        | -              | Shale            | Oil/Natural Gas        |
| <b>TD</b>            | <b>21,973</b> | <b>11,325</b> |                | <b>Shale</b>     | <b>Oil/Natural Gas</b> |

### **2. Notable Zones**

Wolfcamp A is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

### **3. Pressure Control**

#### Equipment

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

#### Testing Procedure

**Drill Plan - Design A (3 string)**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

#### Variance Request

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

#### **4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String         | Hole Size (in) | Set MD (ft)  | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint          | Collapse | Burst | Tension |
|----------------|----------------|--------------|--------------|------------------|-------------|-------|----------------|----------|-------|---------|
| Surface        | 17.5           | 0 - 1350     | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT           | 1.125    | 1.125 | 1.8     |
| Intermediate 1 | 12.25          | 0 - 5801     | 0 - 5801     | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
|                | 9.875          | 5801 - 10649 | 5801 - 10602 | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
| Production     | 6.75           | 0 - 21973    | 0 - 11325    | 5.5              | 20          | P-110 | Hunting TLW-SC | 1.125    | 1.125 | 1.8     |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)

- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed

**Drill Plan - Design A (3 string)**

- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

**Variance Request**

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                              |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|------------------------------------|
| Surface                         | Lead       | 630   | 1.72  | 1091    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                      |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 1460  | 1.78  | 2599    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Lead | 2650  | 1.84  | 4872    | 12.5   | 35%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Tail | 230   | 1.33  | 311     | 13.2   | 35%            | 9649               | C     | 5% NaCl + LCM                      |
| Production                      | Tail       | 890   | 1.35  | 1201    | 13.2   | 25%            | 10449              | A/C   | Fluid Loss + Dispersant + Retarder |

**5. Mud Program**

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.8        | 28-30     | NC         |
| Intermediate 1 | 12.25 & 9.875  | WBM           | 1350 - 10649     | 8.8 - 9.6        | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 10649 - 21973    | 10.8 - 11.8      | 50-65     | <20        |

**6. Cores, Test, & Logs**

No core or drill stem test is planned.

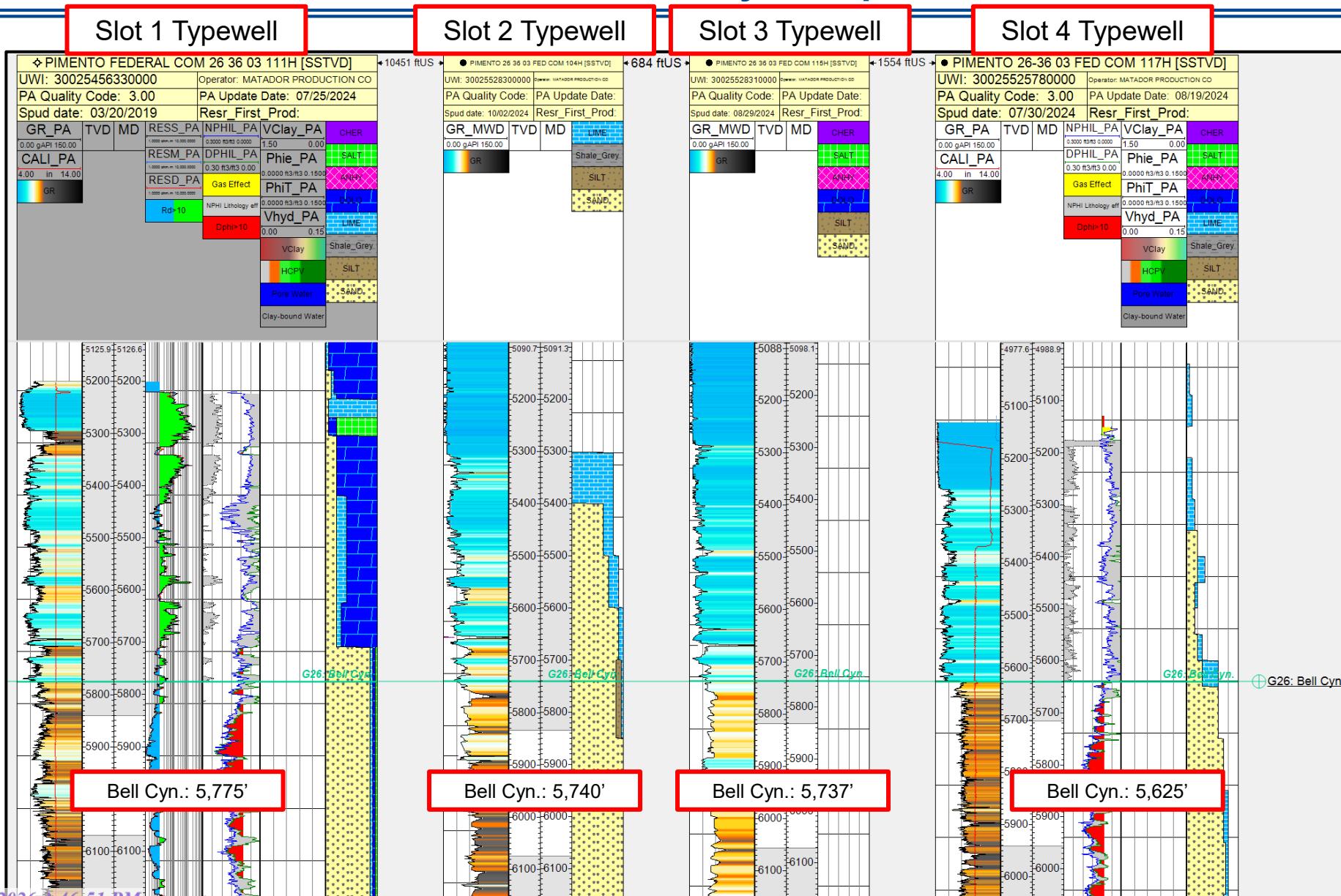
No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## **7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 6949 psi. Maximum anticipated surface pressure is 4458 psi. Expected bottom hole temperature is 180 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

# Pimento Fed Com 111H, 104H, 115H, 117H – Bell Canyon Top



**Juniper Fed Com 25 36 34 103H**  
**SHL: 230' FSL & 2080' FWL Section 34**  
**BHL: 110' FNL & 990' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3000**

### Drilling Operation Plan

Proposed Drilling Depth: 22107' MD / 11420' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784807 N / -103.2583639 W  
 TD Lat/Long (NAD83): 32.1082932 N / -103.2583654 W

### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)      | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|---------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325         | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783         | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213         | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751         | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584         | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376         | 1,839          | Limestone        | Oil/Natural Gas        |
| 1st Bone Spring Sand | 9,215         | 9,215         | 140            | Sandstone        | Oil/Natural Gas        |
| 2nd Bone Spring Carb | 9,355         | 9,355         | 416            | Carbonate        | Oil/Natural Gas        |
| 2nd Bone Spring Sand | 9,771         | 9,771         | 73             | Sandstone        | Oil/Natural Gas        |
| 3rd Bone Spring Carb | 9,844         | 9,844         | 1,139          | Carbonate        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>10,933</b> | <b>10,847</b> | -              | <b>Carbonate</b> | <b>Oil/Natural Gas</b> |
| 3rd Bone Spring Sand | 11,071        | 10,983        | 254            | Sandstone        | Oil/Natural Gas        |
| Wolfcamp A           | 11,363        | 11,237        | -              | Shale            | Oil/Natural Gas        |
| <b>TD</b>            | <b>22,107</b> | <b>11,420</b> |                | <b>Shale</b>     | <b>Oil/Natural Gas</b> |

### **2. Notable Zones**

Wolfcamp A is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

### **3. Pressure Control**

#### Equipment

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

#### Testing Procedure

**Drill Plan - Design A (3 string)**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

#### Variance Request

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

#### **4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String         | Hole Size (in) | Set MD (ft)  | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint          | Collapse | Burst | Tension |
|----------------|----------------|--------------|--------------|------------------|-------------|-------|----------------|----------|-------|---------|
| Surface        | 17.5           | 0 - 1350     | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT           | 1.125    | 1.125 | 1.8     |
| Intermediate 1 | 12.25          | 0 - 5801     | 0 - 5801     | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
|                | 9.875          | 5801 - 10783 | 5801 - 10697 | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
| Production     | 6.75           | 0 - 22107    | 0 - 11420    | 5.5              | 20          | P-110 | Hunting TLW-SC | 1.125    | 1.125 | 1.8     |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)

- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed

**Drill Plan - Design A (3 string)**

- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

**Variance Request**

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                              |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|------------------------------------|
| Surface                         | Lead       | 630   | 1.72  | 1091    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                      |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 1460  | 1.78  | 2599    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Lead | 2670  | 1.84  | 4911    | 12.5   | 35%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Tail | 230   | 1.33  | 311     | 13.2   | 35%            | 9783               | C     | 5% NaCl + LCM                      |
| Production                      | Tail       | 890   | 1.35  | 1201    | 13.2   | 25%            | 10583              | A/C   | Fluid Loss + Dispersant + Retarder |

**5. Mud Program**

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.8        | 28-30     | NC         |
| Intermediate 1 | 12.25 & 9.875  | WBM           | 1350 - 10783     | 8.8 - 9.6        | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 10783 - 22107    | 10.8 - 11.8      | 50-65     | <20        |

**6. Cores, Test, & Logs**

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## **7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 7007 psi. Maximum anticipated surface pressure is 4495 psi. Expected bottom hole temperature is 181 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Juniper Fed Com 25 36 34 123H**  
**SHL: 230' FSL & 1970' FWL Section 34**  
**BHL: 110' FNL & 660' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 2999**

#### **Design B (4 string) Differences**

- Design B will add an additional intermediate string of casing set at the top of Bell Canyon if significant losses are observed while drilling 12.25" int 1 hole section. If no losses are observed, Design A will be utilized and hole size will be slimmed down from 12.25" to 9.875" and a single 7.625" int string of casing will be ran. Cement and mud designs are adjusted accordingly below, along with the 10-3/4" BUTT-SC casing spec sheet and 4-string wellhead diagram. Proper notification will be given prior to running and cementing casing.

#### **Drilling Operation Plan**

Proposed Drilling Depth: 20106' MD / 9350' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.078481 N / -103.2594293 W

TD Lat/Long (NAD83): 32.1082936 N / -103.2594311 W

#### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)     | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|--------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325        | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783        | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213        | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751        | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584        | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376        | 1,839          | Limestone        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>8,933</b>  | <b>8,777</b> | -              | <b>Limestone</b> | <b>Oil/Natural Gas</b> |
| 1st Bone Spring Sand | 9,431         | 9,215        | 140            | Sandstone        | Oil/Natural Gas        |
| <b>TD</b>            | <b>20,106</b> | <b>9,350</b> |                | <b>Sandstone</b> | <b>Oil/Natural Gas</b> |
| 2nd Bone Spring Carb | 9,355         | 9,355        | 416            | Carbonate        | Oil/Natural Gas        |

#### **2. Notable Zones**

1st Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

#### **3. Pressure Control**

#### Equipment

**Drill Plan - Design B (4 string)**

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

**Testing Procedure**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

**Variance Request**

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, Intermediate 2, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

**4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String  | Hole Size (in) | Set MD (ft) | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint | Collapse | Burst | Tension |
|---------|----------------|-------------|--------------|------------------|-------------|-------|-------|----------|-------|---------|
| Surface | 17.5           | 0 - 1350    | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT  | 1.125    | 1.125 | 1.8     |

## Drill Plan - Design B (4 string)

|                |       |           |          |       |      |        |                |       |       |     |
|----------------|-------|-----------|----------|-------|------|--------|----------------|-------|-------|-----|
| Intermediate 1 | 12.25 | 0 - 5801  | 0 - 5801 | 10.75 | 45.5 | HCL-80 | BUTT-SC        | 1.125 | 1.125 | 1.8 |
| Intermediate 2 | 9.875 | 0 - 8783  | 0 - 8627 | 7.625 | 29.7 | P-110  | BUTT           | 1.125 | 1.125 | 1.8 |
| Production     | 6.75  | 0 - 20106 | 0 - 9350 | 5.5   | 20   | P-110  | Hunting TLW-SC | 1.125 | 1.125 | 1.8 |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

Variance Request

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required. The 10-3/4" SC casing spec sheet along with 4-string wellhead diagram are attached.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                                |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|--------------------------------------|
| Surface                         | Lead       | 640   | 1.72  | 1094    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                        |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 400   | 1.78  | 717     | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 700   | 1.84  | 1295    | 12.5   | 50%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Tail | 230   | 1.33  | 304     | 14.8   | 50%            | 4801               | C     | 5% NaCl + LCM                        |
| Intermediate 2<br>w/ DV @ 5851' | Stg 2 Tail | 730   | 1.78  | 1305    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                        |
|                                 | Stg 1 Lead | 170   | 3.66  | 619     | 10.3   | 35%            | 5601               | A/C   | Bentonite + 1% CaCL2 + 8% NaCl + LCM |
|                                 | Stg 1 Tail | 230   | 1.38  | 311     | 13.2   | 35%            | 7783               | A/C   | 5% NaCl + LCM                        |
| Production                      | Tail       | 890   | 1.35  | 1201    | 13.2   | 25%            | 8583               | A/C   | Fluid Loss + Dispersant + Retarder   |

## 5. Mud Program

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.6        | 28-30     | NC         |
| Intermediate 1 | 12.25          | Brine         | 1350 - 5801      | 9.6 - 10         | 28-30     | NC         |
| Intermediate 2 | 9.875          | Cut Brine     | 5801 - 8783      | 8.8 - 9.4        | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 8783 - 20106     | 9.6 - 10.2       | 50-65     | <20        |

## 6. Cores, Test, & Logs

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## 7. Down Hole Conditions

No abnormal pressure or temperature is expected. Bottom hole pressure is 4862 psi. Maximum anticipated surface pressure is 2805 psi. Expected bottom hole temperature is 158 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Casing Specs - 10.75" 45.5lb BUTT-SC****API 5CT 10.750" 45.50lb/ft HCL80 Casing Performance Data Sheet**

Manufactured to specifications of API 5CT 9th edition and bears the API monogram.

|       |       |
|-------|-------|
| Grade | HCL80 |
|-------|-------|

**Pipe Body Mechanical Properties**

|                          |            |
|--------------------------|------------|
| Minimum Yield Strength   | 80,000 psi |
| Maximum Yield Strength   | 95,000 psi |
| Minimum Tensile Strength | 95,000 psi |
| Maximum Hardness         | 23.0 HRC   |

**Sizes**

|                        |             |
|------------------------|-------------|
| OD                     | 10 3/4      |
| Nominal Wall Thickness | .400 in     |
| Nominal Weight, T&C    | 45.50 lb/ft |
| Nominal Weight, PE     | 44.26 lb/ft |
| Nominal ID             | 9.950 in    |
| Standard Drift         | 9.794 in    |
| Alternate Drift        | 9.875 in    |

| <b><u>Coupling Special Clearance</u></b> | <b><u>Size</u></b> |
|--|--------------------|
| OD                                       | 11.25 in           |
| Min. Length                              | 10.625 in          |
| Diameter of Counter Bore                 | 10.890 in          |
| Width of bearing face                    | .375 in            |

**Minimum Performance**

|                         |               |
|-------------------------|---------------|
| Collapse Pressure       | 2,940 psi     |
| Internal Pressure Yield | 5,210 psi     |
| Pipe body Tension Yield | 1,040,000 lbs |
| Joint Strength STC      | 692,000 lbs   |
| Joint Strength LTC      | N/A           |
| Joint Strength BTC      | 1,063,000 lbs |

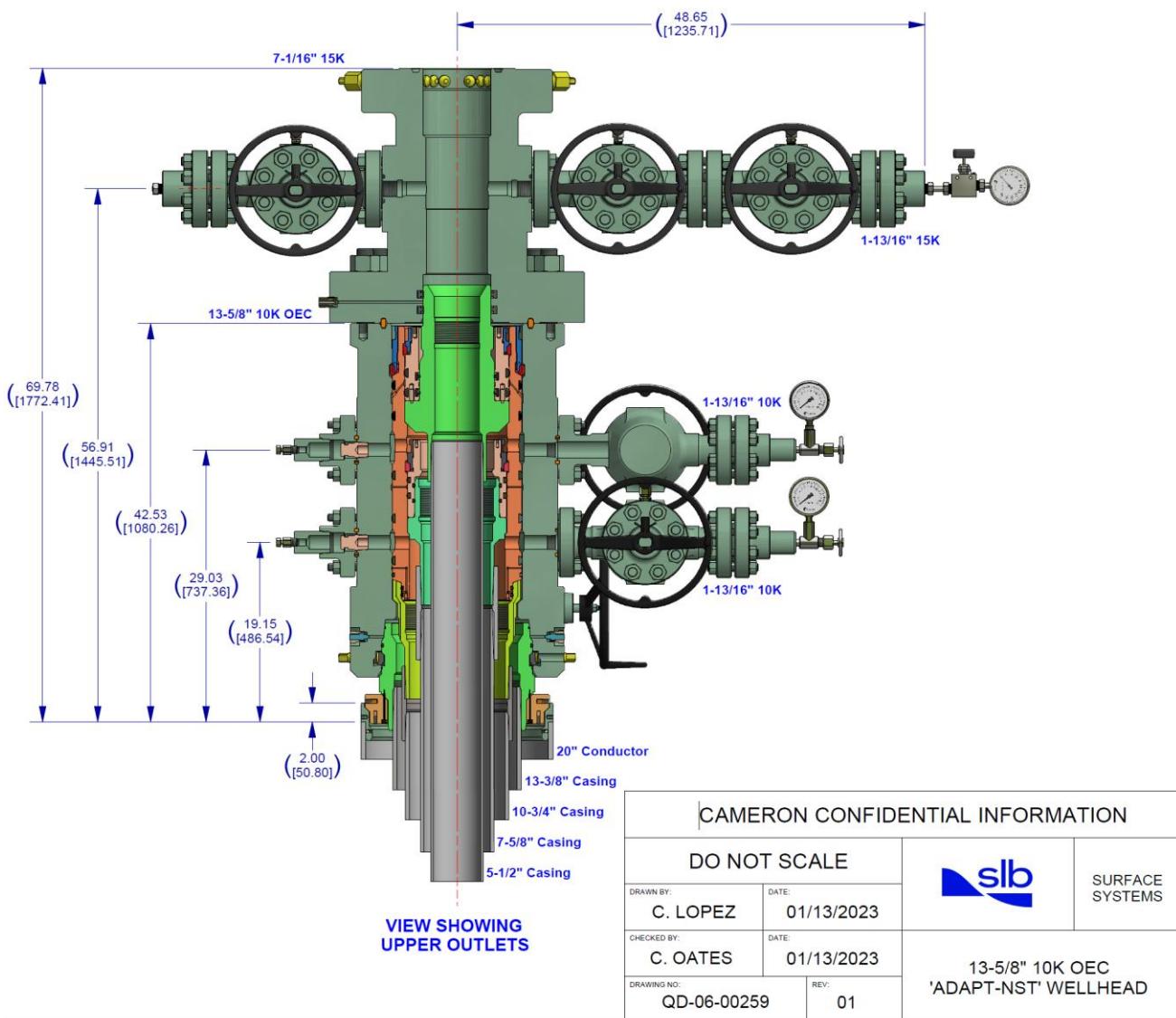
**Inspection and Testing**

|        |   |
|--------|---|
| Visual | OD Longitudinal and independent 3rd party SEA   |
| NDT    | Independent 3rd party full body EMI and End Area Inspection after hydrotest<br>Calibration notch sensitivity: 10% of specified wall thickness |

**Color code**

|           |                                      |
|-----------|--------------------------------------|
| Pipe ends | One red, one brown and one blue band |
| Couplings | Red with one brown band              |

## 4-String Wellhead Diagram





**Juniper 25 36 34 Fed Com 094H**  
**SHL: 260' FSL & 2050' FWL Section 34**  
**BHL: 110' FNL & 1651' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3000**

### Sundry Request

Matador would like to adjust documentation to reflect BHL as a standard location

### Drilling Operation Plan

Proposed Drilling Depth: 21732' MD / 11080' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784802 N / -103.2562333 W

TD Lat/Long (NAD83): 32.1082924 N / -103.2562294 W

### 1. Estimated Tops

| Formation            | MD (ft)       | TVD (ft)      | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|---------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325         | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783         | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213         | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751         | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584         | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376         | 1,839          | Limestone        | Oil/Natural Gas        |
| 1st Bone Spring Sand | 9,215         | 9,215         | 140            | Sandstone        | Oil/Natural Gas        |
| 2nd Bone Spring Carb | 9,355         | 9,355         | 416            | Carbonate        | Oil/Natural Gas        |
| 2nd Bone Spring Sand | 9,771         | 9,771         | 113            | Sandstone        | Oil/Natural Gas        |
| 3rd Bone Spring Carb | 9,884         | 9,884         | 1,099          | Carbonate        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>10,559</b> | <b>10,507</b> | -              | <b>Carbonate</b> | <b>Oil/Natural Gas</b> |
| 3rd Bone Spring Sand | 11,121        | 10,983        | 254            | Sandstone        | Oil/Natural Gas        |
| <b>TD</b>            | <b>21,732</b> | <b>11,080</b> | -              | <b>Sandstone</b> | <b>Oil/Natural Gas</b> |
| Wolfcamp A           | -             | 11,237        |                | Shale            | Oil/Natural Gas        |

### 2. Notable Zones

Third Bone Spring Sand is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

### 3. Pressure Control

#### Equipment

**Drill Plan - Design A (3 string)**

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams. An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

**Testing Procedure**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

**Variance Request**

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

#### 4. Casing & Cement

All casing will be API and new. See attached casing assumption worksheet.

| String         | Hole Size (in) | Set MD (ft)  | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint          | Collapse | Burst | Tension |
|----------------|----------------|--------------|--------------|------------------|-------------|-------|----------------|----------|-------|---------|
| Surface        | 17.5           | 0 - 1350     | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT           | 1.125    | 1.125 | 1.8     |
| Intermediate 1 | 12.25          | 0 - 5801     | 0 - 5801     | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
|                | 9.875          | 5801 - 10409 | 5801 - 10357 | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
| Production     | 6.75           | 0 - 21732    | 0 - 11080    | 5.5              | 20          | P-110 | Hunting TLW-SC | 1.125    | 1.125 | 1.8     |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed
- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

#### Variance Request

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required.

#### Primary Cement Design - DV/Packer 2-Stage Cement

| String                       | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend         |
|------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|---------------|
| Surface                      | Lead       | 630   | 1.72  | 1091    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM |
|                              | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM |
| Intermediate 1 w/ DV @ 3263' | Stg 2 Tail | 1460  | 1.78  | 2599    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM |
|                              | Stg 1 Lead | 2610  | 1.84  | 4803    | 12.5   | 35%            | 0                  | C     | 5% NaCl + LCM |
|                              | Stg 1 Tail | 230   | 1.33  | 311     | 13.2   | 35%            | 9409               | C     | 5% NaCl + LCM |

## Drill Plan - Design A (3 string)

|            |      |     |      |      |      |     |       |     |                                    |
|------------|------|-----|------|------|------|-----|-------|-----|------------------------------------|
| Production | Tail | 890 | 1.35 | 1201 | 13.2 | 25% | 10209 | A/C | Fluid Loss + Dispersant + Retarder |
|------------|------|-----|------|------|------|-----|-------|-----|------------------------------------|

**5. Mud Program**

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type              | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|-----------------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud              | 0 - 1350         | 8.4 - 8.8        | 28-30     | NC         |
| Intermediate 1 | 12.25 & 9.875  | Diesel Brine Emulsion | 1350 - 10409     | 9.8 - 10.4       | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine         | 10409 - 21732    | 10.8 - 11.6      | 50-65     | <20        |

**6. Cores, Test, & Logs**

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

**7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 6683 psi. Maximum anticipated surface pressure is 4246 psi. Expected bottom hole temperature is 177 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

**Juniper Fed Com 26 36 34 082H**  
**SHL: 260' FSL & 1970' FWL Section 34**  
**BHL: 110' FNL & 2310' FWL Section 27**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 2999**

### Drilling Operation Plan

Proposed Drilling Depth: 19973' MD / 9320' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.0784796 N / -103.2541026 W  
 TD Lat/Long (NAD83): 32.1082915 N / -103.2541027 W

### **1. Estimated Tops**

| Formation            | MD (ft)       | TVD (ft)     | Thickness (ft) | Lithology        | Resource               |
|----------------------|---------------|--------------|----------------|------------------|------------------------|
| Rustler              | 1,325         | 1,325        | 458            | Anhydrite        | Barren                 |
| Salado (Top of Salt) | 1,783         | 1,783        | 1,430          | Salt             | Barren                 |
| Lamar (Base of Salt) | 3,213         | 3,213        | 2,538          | Salt             | Barren                 |
| Bell Canyon          | 5,751         | 5,751        | 833            | Sandstone        | Oil/Natural Gas        |
| Brushy Canyon        | 6,584         | 6,584        | 792            | Sandstone        | Oil/Natural Gas        |
| Bone Spring Lime     | 7,376         | 7,376        | 1,839          | Limestone        | Oil/Natural Gas        |
| <b>KOP</b>           | <b>8,795</b>  | <b>8,747</b> | -              | <b>Limestone</b> | <b>Oil/Natural Gas</b> |
| 1st Bone Spring Sand | 9,342         | 9,215        | 140            | Sandstone        | Oil/Natural Gas        |
| <b>TD</b>            | <b>19,973</b> | <b>9,320</b> | -              | <b>Sandstone</b> | <b>Oil/Natural Gas</b> |
| 2nd Bone Spring Carb | 9,355         | 9,355        | 416            | Carbonate        | Oil/Natural Gas        |

### **2. Notable Zones**

1st Bone Spring is the goal. All perforations will be within the setback requirements as prescribed or permitted by the New Mexico Oil Conservation Division. OSE estimated ground water depth at this location is 198

### **3. Pressure Control**

#### Equipment

A 18,000' 10,000-psi BOP stack consisting of 3 rams with 2 pipe rams, 1 blind ram, and one annular preventer will be utilized below surface casing to TD. See attachments for BOP and choke manifold diagrams.

An accumulator complying with Title 43 CFR 3172 requirements for the pressure rating of the BOP stack will be present. A rotating head will also be installed as needed.

#### Testing Procedure

**Drill Plan - Design A (3 string)**

BOP will be inspected and operated as required in Title 43 CFR 3172. Kelly cock and sub equipped with a full opening valve sized to fit the drill pipe and collars will be available on the rig floor in the open position.

A third party company will test the BOPs.

After setting surface casing, a minimum 10M BOPE system will be installed. Test pressures will be 250 psi low and 10,000 psi high with the annular preventer being tested to 250 psi low and 5000 psi high before drilling below surface shoe. In the event that the rig drills multiple wells on the pad and any seal subject to test pressures are broken, a full BOP test will be performed when the rig returns and the 10M BOPE system is re-installed.

#### Variance Request

Matador requests a variance to have the option of running a multi-bowl wellhead assembly for setting the Intermediate 1, and Production Strings. The BOPs will not be tested again unless any flanges are separated.

Matador requests a variance to drill this well using a co-flex line between the BOP and choke manifold. Certification for proposed co-flex hose is attached. The hose is not required by the manufacturer to be anchored. If the specific hose is not available, then one of equal or higher rating will be used.

Matador requests a variance to have the option of batch drilling this well with other wells on the same pad. In the event that this well is batch drilled, the wellbore will be secured with a blind flange of like pressure. When the rig returns to this well and BOPs are installed, the operator will perform a full BOP test.

Matador requests a variance to drill this well using a 5M annular preventer with a 10M BOP ram stack. The "Well Control Plan For 10M MASP Section of Wellbore" is attached.

Matador request the option to offline cement surface casing. The "Offline Cement Procedure - Surface Casing" is attached for review. No changes in cement program are necessary.

Matador request the option to offline cement intermediate casing. The "Offline Cementing - Intermediate Casing" Procedure is attached for review. No changes in cement program are necessary.

Matador request the option to break test the BOP during batch drilling operations. The "Modified BOP Testing Procedure for Batch Drilling" Procedure is attached for review.

#### **4. Casing & Cement**

All casing will be API and new. See attached casing assumption worksheet.

| String         | Hole Size (in) | Set MD (ft) | Set TVD (ft) | Casing Size (in) | Wt. (lb/ft) | Grade | Joint          | Collapse | Burst | Tension |
|----------------|----------------|-------------|--------------|------------------|-------------|-------|----------------|----------|-------|---------|
| Surface        | 17.5           | 0 - 1350    | 0 - 1350     | 13.375           | 54.5        | J-55  | BUTT           | 1.125    | 1.125 | 1.8     |
| Intermediate 1 | 12.25          | 0 - 5801    | 0 - 5801     | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
|                | 9.875          | 5801 - 8645 | 5801 - 8597  | 7.625            | 29.7        | P-110 | BUTT           | 1.125    | 1.125 | 1.8     |
| Production     | 6.75           | 0 - 19973   | 0 - 9320     | 5.5              | 20          | P-110 | Hunting TLW-SC | 1.125    | 1.125 | 1.8     |

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)

- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed

## Drill Plan - Design A (3 string)

- All non-API joint connections will be of like or greater quality, and as run specification sheets will be on location for review

Variance Request

Matador request a variance to waive the centralizer requirement for the 7-5/8" casing and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

If a DV tool is used, depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above the current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review. Option to cancel 2nd stage cement if cement is circulated on 1st stage.

Matador request a variance to utilize a surface setting rig. If this is used, Matador request the option to drill either 17.5" or 20" surface hole, cement volumes will be adjusted accordingly.

Matador request option to switch to Design B (4 string) if losses are observed in Capitan Reef. If losses are observed, an additional intermediate casing string will be ran to isolate losses. No other changes in well design are required.

**Primary Cement Design - DV/Packer 2-Stage Cement**

| String                          | Type       | Sacks | Yield | Cu. Ft. | Weight | Percent Excess | Top of Cement (ft) | Class | Blend                              |
|---------------------------------|------------|-------|-------|---------|--------|----------------|--------------------|-------|------------------------------------|
| Surface                         | Lead       | 630   | 1.72  | 1091    | 13.5   | 50%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Tail       | 250   | 1.38  | 347     | 14.8   | 50%            | 1050               | C     | 5% NaCl + LCM                      |
| Intermediate 1<br>w/ DV @ 3263' | Stg 2 Tail | 1460  | 1.78  | 2599    | 13.5   | 10%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Lead | 2330  | 1.84  | 4291    | 12.5   | 35%            | 0                  | C     | 5% NaCl + LCM                      |
|                                 | Stg 1 Tail | 230   | 1.33  | 311     | 13.2   | 35%            | 7645               | C     | 5% NaCl + LCM                      |
| Production                      | Tail       | 890   | 1.35  | 1201    | 13.2   | 25%            | 8445               | A/C   | Fluid Loss + Dispersant + Retarder |

**5. Mud Program**

An electronic Pason mud monitoring system complying with Title 43 CFR 3172 will be used. All necessary mud products (barite, bentonite, LCM) for weight addition and fluid loss control will be on location at all times. Mud program is subject to change due to hole conditions.

| Hole Section   | Hole Size (in) | Mud Type      | Interval MD (ft) | Density (lb/gal) | Viscosity | Fluid Loss |
|----------------|----------------|---------------|------------------|------------------|-----------|------------|
| Surface        | 17.5           | Spud Mud      | 0 - 1350         | 8.4 - 8.6        | 28-30     | NC         |
| Intermediate 1 | 12.25 & 9.875  | WBM           | 1350 - 8645      | 9.6 - 10         | 28-30     | NC         |
| Production     | 6.75           | OBM/Cut Brine | 8645 - 19973     | 9.4 - 10         | 50-65     | <20        |

**6. Cores, Test, & Logs**

No core or drill stem test is planned.

No electric logs are planned at this time. GR will be collected through the MWD tools from Intermediate casing to TD. CBL with CCL will be run as far as gravity will let it fall to top of curve. We will be running a Neutron log on one of the wells on each pad.

## **7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 4846 psi. Maximum anticipated surface pressure is 2796 psi. Expected bottom hole temperature is 158 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H2S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H2S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H2S safety package on all wells, attached is an "H2S Drilling Operations Plan". Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used.

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<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 515764

**CONDITIONS**

|   |  |
|---|--|
| Operator:<br>MATADOR PRODUCTION COMPANY<br>One Lincoln Centre<br>Dallas, TX 75240 | OGRID:<br>228937                                     |
|   | Action Number:<br>515764                             |
|   | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

**CONDITIONS**

| Created By    | Condition  | Condition Date |
|---------------|--|----------------|
| matthew.gomez | The C-103 NOI was not approved or rejected; however, the work requested in the C-103 NOI was performed and completed without NMOCD approval. This action will result in review for potential compliance actions. | 1/29/2026      |