

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

Well Name: NINA CORTELL FED COM	Well Location: T22S / R32E / SEC 10 / SESE / 32.3996671 / -103.6579934	County or Parish/State: LEA / NM
Well Number: 127H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM086147	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002551611	Operator: MATADOR PRODUCTION COMPANY	

Notice of Intent

Sundry ID: 2779273

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/12/2024

Time Sundry Submitted: 12:04

Date proposed operation will begin: 07/01/2024

Procedure Description: BLM Bond NMB001079 Surety Bond No.: RLB0015172 Matador request the option to amend the well design of the Nina Cortell Fed Com #127H and make the following changes to the current APD: - Amend casing and cementing plan by changing intermediate 1 casing from 7-5/8" to 9-5/8" and revising set depths as described below.

NOI Attachments

Procedure Description

- Nina_Cortell_Fed_Com_127H_Break_Testing_Sundry_20240312120137.pdf
- Nina_Cortell_Fed_Com_127H_3_String_Wellhead_Diagram_20240312120136.pdf
- Nina_Cortell_Fed_Com_127H_Offline_Cementing___Int_20240312120136.pdf
- Nina_Cortell_Fed_Com_127H_Offline_Cementing___Surface_20240312120136.pdf
- Nina_Cortell_Fed_Com_127H_Sundry_Info_20240312120117.pdf

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Conditions of Approval

Specialist Review

NINA_CORTELL_FED_COM_127H_ENG_COA_20240327093932.pdf

Additional

NINA_CORTELL_FED_COM_127H_ENG_COA_20240318132821.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: NICKY FITZGERALD

Signed on: MAR 12, 2024 12:03 PM

Name: MATADOR PRODUCTION COMPANY

Title: Regulatory Consultant

Street Address: 5400 LBJ FREEWAY STE 1500

City: DALLAS **State:** TX

Phone: (972) 371-5448

Email address: nicky.fitzgerald@matadorresources.com

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 04/01/2024

Signature: Chris Walls

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

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.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well

Oil Well Gas Well Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. (include area code)

10. Field and Pool or Exploratory Area

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)

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"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<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"/> 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

Location of Well

0. SHL: SESE / 244 FSL / 1229 FEL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.3996671 / LONG: -103.6579934 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 100 FSL / 1980 FEL / TWSP: 22S / RANGE: 32E / SECTION: 10 / LAT: 32.3992636 / LONG: -103.6604253 (TVD: 10557 feet, MD: 10618 feet)

PPP: SWSE / 0 FNL / 1988 FEL / TWSP: 22S / RANGE: 32E / SECTION: 3 / LAT: 32.4134972 / LONG: -103.6604519 (TVD: 10866 feet, MD: 16000 feet)

BHL: LOT 2 / 60 FNL / 1980 FEL / TWSP: 22S / RANGE: 32E / SECTION: 3 / LAT: 32.4278264 / LONG: -103.6604786 (TVD: 10851 feet, MD: 21130 feet)

CONFIDENTIAL

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
WELL NAME & NO.:	NINA CORTELL FED COM 127H
APD ID:	10400082442
SURFACE HOLE FOOTAGE:	244'/S & 1229'/E
BOTTOM HOLE FOOTAGE:	60'/N & 1980'/E
SURFACE LOCATION:	Section 10, T.22 S., R.32 E. NMP.
COUNTY:	Lea County, New Mexico

COA

H ₂ S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input type="radio"/> None	<input checked="" type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Pilot Hole	<input checked="" type="checkbox"/> BOPE Break testing
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

SEE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING DESIGN

1. The **13-3/8** inch surface casing shall be set at approximately **975 ft.** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. above the salt.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours** or **500 psi compressive strength**, whichever is greater. (This is to

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

Note: Operator has requested to have option to drill either 17-1/2” or 20” surface hole. Both hole sizes meet title 43 CFR 3172 clearance requirements between casing-coupling and hole. This option is granted; adjust cement volume accordingly.

Note: the set depth of intermediate casing has been adjusted per BLM geologist recommendation. *“The operator proposes to set intermediate casing to a depth of 4947 feet in the Bell canyon formation. BLM proposes to set the intermediate casing at a depth of 4900’ in the base of the Lamar limestone formation.”*

2. The 9-5/8 inch intermediate casing shall be set at approximately **4,900 ft.** The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Option 1 (Single stage): Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Option 2 (Two-stage): Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- **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.
- **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 cave/karst or potash.

Note: The intermediate casing must be kept fluid-filled to meet the CFO's minimum collapse design requirement.

Note: Excess cement volume for the 2nd stage is below the CFO's recommendation of 25%. More cement might be needed.

- ❖ In Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- ❖ Operator is responsible to report the following within two miles of mineworking to BLM Geologist jrutley@blm.gov:
 - Any fluid flow outside of casing in the Salado Formation.
 - Any well collision events.

- Sustained annuli pressures 500 psi above maximum allowable wellhead operating pressure (MAWOP) observed in monitored annuli.
- Sustained mud losses occur through the Salado interval for projects within one mile of mineworking and WIPP Boundary.

Note: Intermediate casing must be kept fluid-filled to meet CFO's collapse design requirement.

3. Operator has proposed to set **5-1/2 in.** production casing at approximately **21,130 ft.** (10,851 ft. TVD). The minimum required fill of cement behind the **5-1/2 in.** production casing is:
 - Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a **multi-bowl** wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. The BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172 and API Standard 53**.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

BOPE Break Testing Variance (Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system))

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP**)
- BOPE Break Testing is NOT permitted to drilling the production hole section.

- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (**575-689-5981 Lea County**) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per title 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Offline cementing variance is approved for surface and intermediate casings only. Contact the BLM prior to the commencement of any offline cementing procedure.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

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)

Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

BLM_NM_CFO_DrillingNotifications@BLM.GOV

(575) 361-2822

Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **title 43 CFR 3172**
 - as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. 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-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in the **title 43 CFR 3172** and **API STD 53 Sec. 5.3**.
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:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.
 - e. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead 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).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the 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.)
- c. 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000-psi chart for a 5M BOP/BOPE and on a 15000-psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two-hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **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 03/18/2024

Modified BOP Testing Procedure for Batch Drilling

Nina Cortell Fed Com 127H
SHL: 244' FSL & 1229' FEL Section 10

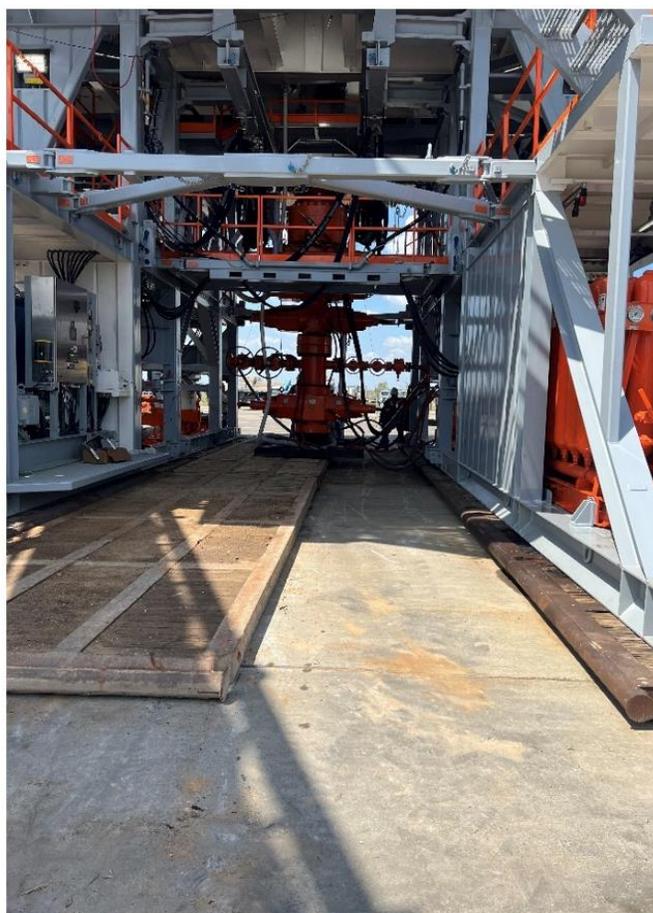
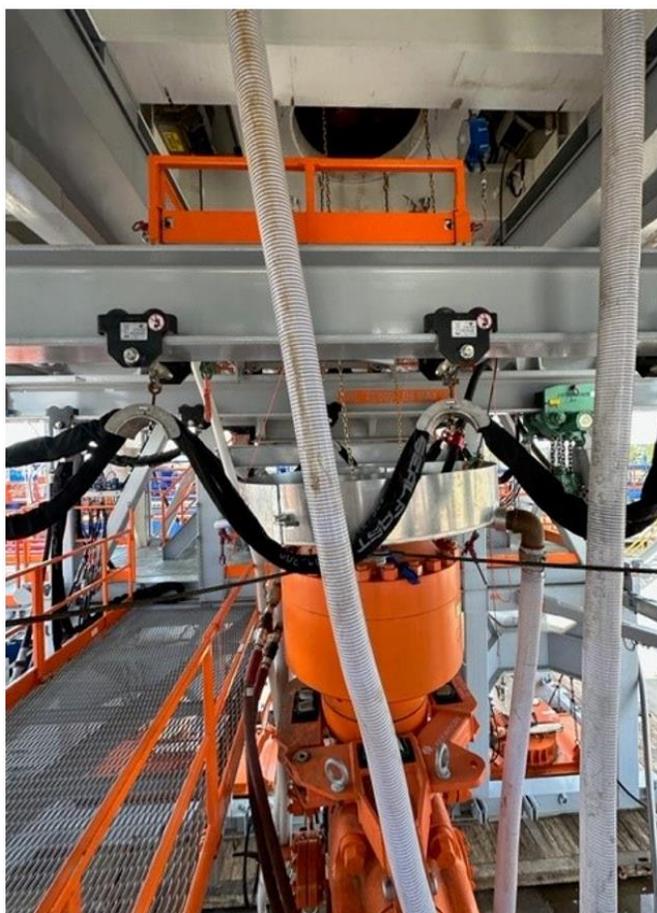
Township/Range: 22S 32E
Elevation Above Sea Level: 3,789"

Matador Production Company requests a variance to allow break testing the Blowout Preventer Equipment (BOPE) as prudent in batch drilling operations. Matador requests a variance from 43 CFR 3172.6(b)(9)(iv)(C) to only test broken pressure seals on the BOPE during batch (skid) drilling operations with multiple wells on the same pad.

Justification

The Bureau of Land Management began issuing and revising Onshore Orders pertaining the exploration and development of oil and gas operations on federal onshore and Indian leases in 1983. These orders were later published in 1988, specifically OOGO No. 2 "Drilling Operations on Federal and Indian Oil and Gas Leases" was published November 18, 1988, and has since been the governing standard for over 30 years. This order was later codified in 43 CFR Subpart 3172 on June 16, 2023 with no substantive changes to the content. During which time, the oil and gas industry has seen significant advancements in technology and processes that facilitate safer and more efficient operations, some of those being improvements in rig and wellhead design. The improvements in rig design allow for the BOP stack to remain connected and intact while skidding and the changes in wellhead design complement this feature by utilizing quick connects from BOP to wellhead. The combination of these technologies allow for the rig to skid to the next well while only breaking two pressure sealing connections.

American Petroleum Institute (API) standards, specifications and recommended practices are considered an industry standard and are commonly referenced in 43 CFR 3172 and routinely used in APD COA's. API Standard 53 "Well Control Equipment Systems for Drilling Wells" recognizes break testing as an acceptable practice during batch drilling operations, specifically in API Std 53 Section 5.3.7.1.



Figures 1 & 2: BOP winch system picture with walking capabilities.

Modified BOP Testing Procedure for Batch Drilling

With these enhancements to operations, Matador Production Company believes that break testing during batch drilling operations meets, and in most cases, exceeds the BLM's intent of 43 CFR 3172.6(b)(9)(iv)(C).

This variance request will be referenced and attached in all APDs seeking approval for break testing and will receive approval prior to implementing this variance.

Procedure

1. Matador Production Company will follow the below guidelines prior to implementing break testing variance:
 - a. A full BOP test will be conducted on the first well on the pad.
 - i. Full BOP test will be conducted every 21 days per API Std 53, which is above 43 CFR 3172.6(b)(9)(iv)(D) 30 day requirement.
 - ii. Annular type preventers tested to 70% RWP per API Std 53, which is above 43 CFR 3172.6(b)(9)(iii) 50% requirement.
 - iii. Full BOP test will be conducted prior to drilling out any production hole sections.
 - b. The deepest first intermediate hole section will be drilled first.
 - i. All subsequent intermediate hole sections will be at same depth or shallower.
 - ii. The calculated maximum anticipated surface pressure (MASP) for intermediate hole section will be below 4500 psi.
 - iii. If any well control events are encountered, a full BOP test will be performed on subsequent well.
2. After performing a full BOP test on first well, the intermediate hole section will be drilled and cased per design, two breaks will be made on the BOP equipment:
 - a. One between the BOP quick connect adapter and wellhead.
 - b. One between the HCR valve and choke line connection.
3. Following that, the BOP will be lifted up from the wellhead using a hydraulic or winch system. The two connections will be broken as seen in **Figure 3**.
4. Once skidding to subsequent well is complete, the BOP will be installed on wellhead and the HCR-to-Choke line break will be reconnected.
5. The test plug will then be installed into wellhead.
6. A shell test will then be performed, testing both connections broken as seen in **Figure 4**.
 - a. The test will consist of a 250 psi low test and a high test equal to the BOP rating value submitted in the APD and as approved in COAs.
 - a. Break test procedure is the same for both 5M and 10M systems, only test pressures change.
7. Following a successful shell test, a function test of the lower pipe rams, blind rams, and annular preventer will be performed.
8. For multi-well pads, the same procedure will be followed for subsequent wells only if the next intermediate hole section can be drilled and cased with the 21-day BOP test window. If unable to be drilled in that time, a full BOP test will be performed.

Modified BOP Testing Procedure for Batch Drilling

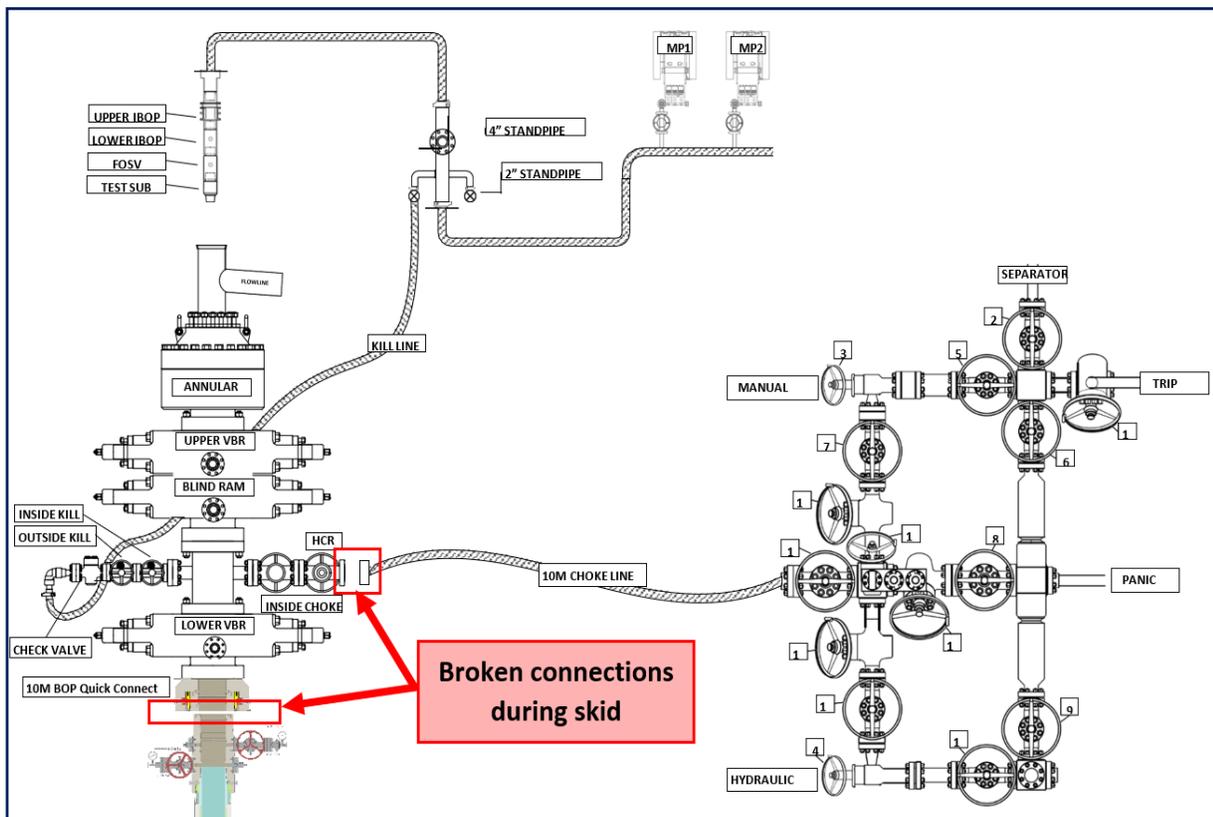


Figure 3: Shows which connections are broken during the skidding process

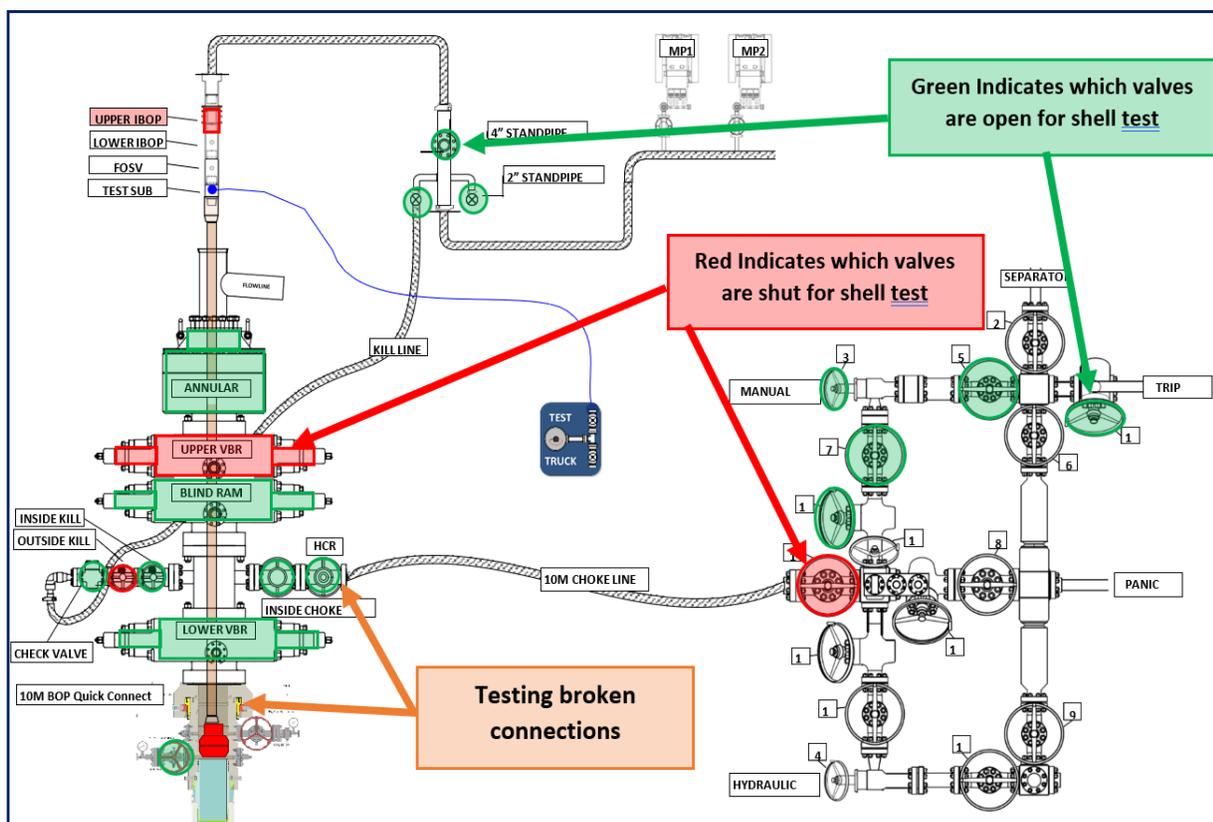
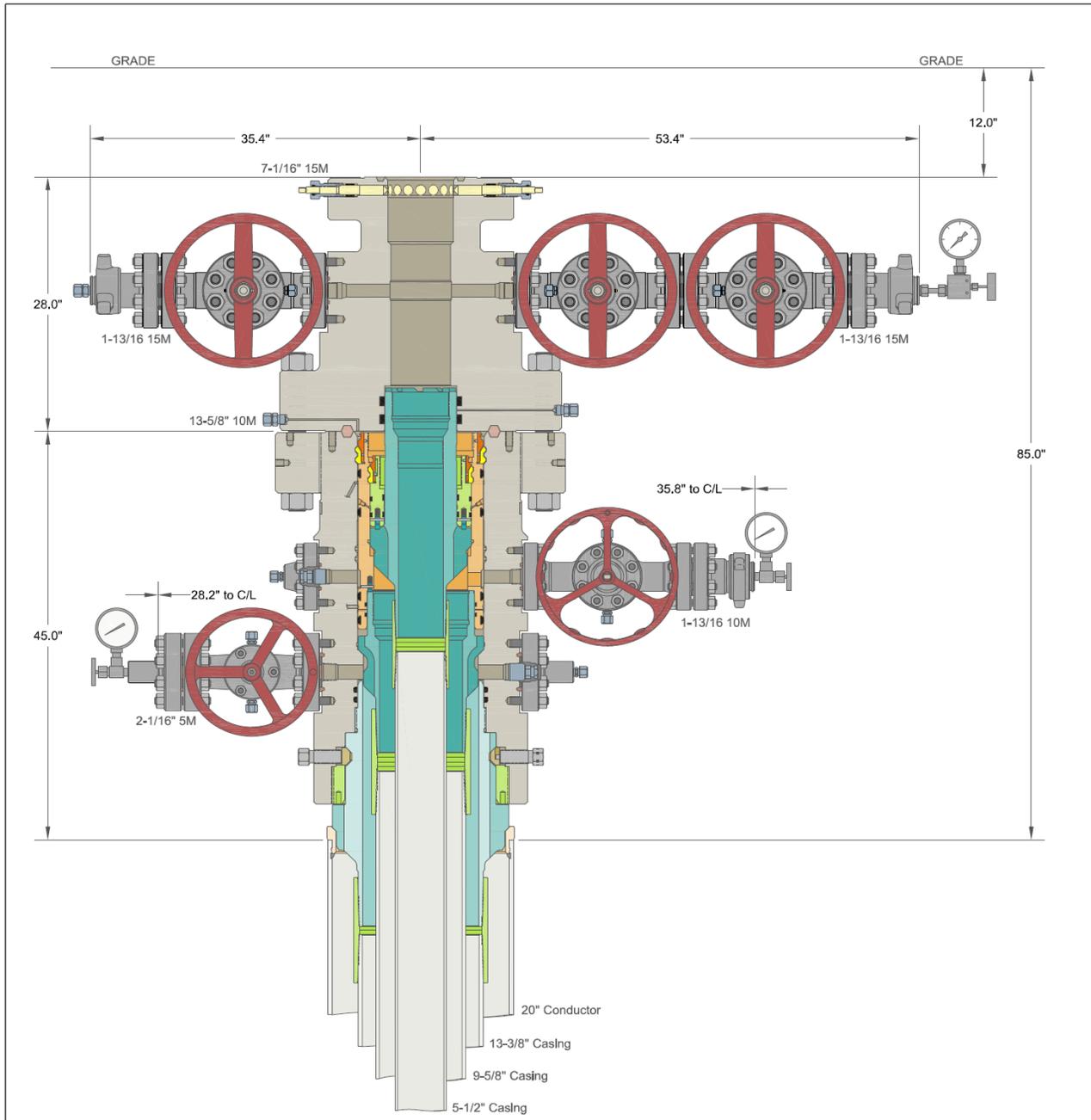


Figure 4: Shows which valves are shut/open for the shell test, testing both broken connections

3-String Wellhead Diagram

Nina Cortell Fed Com 127H
 SHL: 244' FSL & 1229' FEL Section 10

Township/Range: 22S 32E
 Elevation Above Sea Level: 3,789"



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ALL DIMENSIONS APPROXIMATE

<h2>CACTUS WELLHEAD LLC</h2>	MATADOR PRODUCTION COMPANY NEW MEXICO	
	DRAWN	DLE
13-3/8" x 9-5/8" x 5-1/2" MBU-3T Wellhead System With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8" & 5-1/2" Fluted Mandrel Casing Hangers		
DRAWING NO.		HBE0000605

Offline Cementing - Intermediate Casing

Nina Cortell Fed Com 127H
SHL: 244' FSL & 1229' FEL Section 10

Township/Range: 22S 32E
Elevation Above Sea Level: 3,789"

Matador Production Company requests the option to cement the intermediate casing string offline as a prudent batch drilling efficiency of acreage development.

Cement Program

No changes to the cement program will take place for offline cementing.

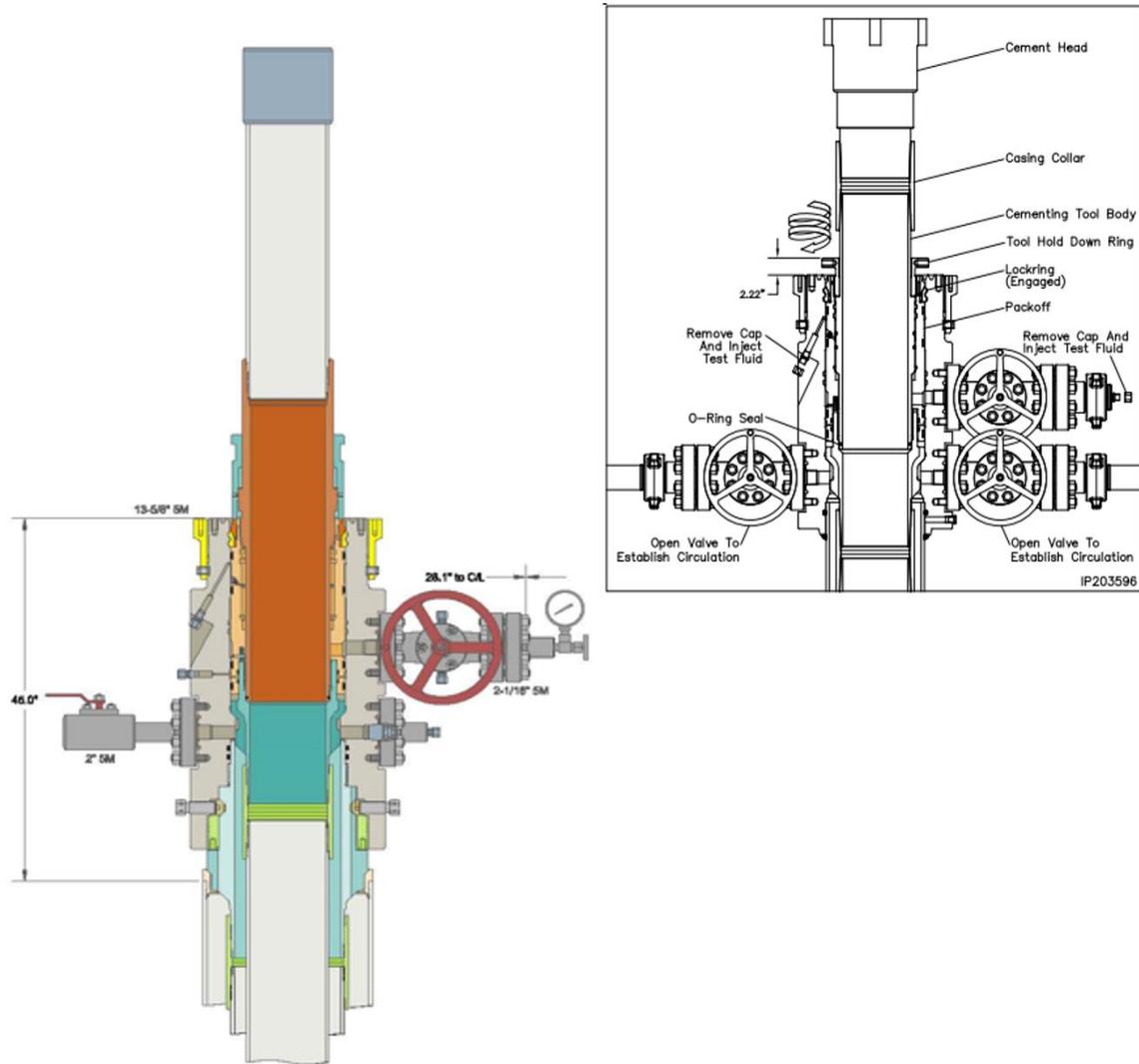
Offline Cementing Procedure

The operational sequence will be as follows. Well must meet the below requirements to be a candidate for offline cementing, if wellbore conditions change, BLM will be notified.

- No noticeable wellbore instability.
 - Casing installed successfully with no issues.
 - No observed shallow gas or other anomalies
 - Intermediate hole section must have a MASP of 5,000 psi or lower.
1. Run casing as per normal operations. While running casing, confirm integrity of the float equipment (float collar and shoe).
 2. Land Intermediate casing with fluted mandrel hanger through BOP stack.
 3. Remove the landing joint and set packoff through BOP. Pressure test seals to 5,000 psi for 10 minutes. After the test, engage the lockring.
 4. Notify the BLM 4 hours prior to N/D BOP and offline cementing. Confirm the following barriers are operational:
 - a. Inside Casing: 2 float valves and mud weight sufficient to hold back pore pressure
 - b. Annulus (outside) Casing: Packoff and mud weight sufficient to hold back pore pressure
 5. Once the well is secure and BLM has been notified, proceed with nipping down BOP and installing cap flange.
 6. Skid rig to the next well on the pad.
 7. Rig up lines to take returns from wellhead through the cement choke manifold to the pits.
 8. Attach a test pump with manifold to the open fitting and pump clean fluid until a stable test pressure of 5,000 psi is achieved. Hold pressure for 15 minutes. After a satisfactory test, bleed off test pressure, remove test pump and reinstall cap flange on the open fitting.
 9. Attach the test pump to the upper outlet valve and pressure up the void area between the upper and lowermost O-rings until a stable test pressure of 5,000 psi is achieved. After a satisfactory test, bleed off all test pressure and leave the upper valve in the open position.
 10. Place a mark across the top of the wellhead to monitor possible rotation of the tool during the cement job.
 11. Install the casing hanger/packoff offline cementing tool. Rig up cement head and cementing lines. Pressure test lines against the cement head as per cement procedure.
 12. Break circulation on well to confirm no restrictions. If shallow gas is encountered, shut in the well and reroute returns through the gas buster.
 - a. Max anticipated time before circulating with cement truck is 24 hours.
 13. Establish circulation and cement casing as per plan, taking returns through the two 2-1/16" 5M gate valves on the housing lower outlets. At plug bump, pressure test casing to 0.22 psi/ft per foot of casing string length or 1,500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield.
 14. With cement in place, confirm well is static and floats are holding. Bleed off the cement pressure and remove cement head.
 15. Remove the casing hanger/packoff offline cementing tool.
 16. Install TA cap with pressure gauge for monitoring.

Offline Cementing - Intermediate Casing

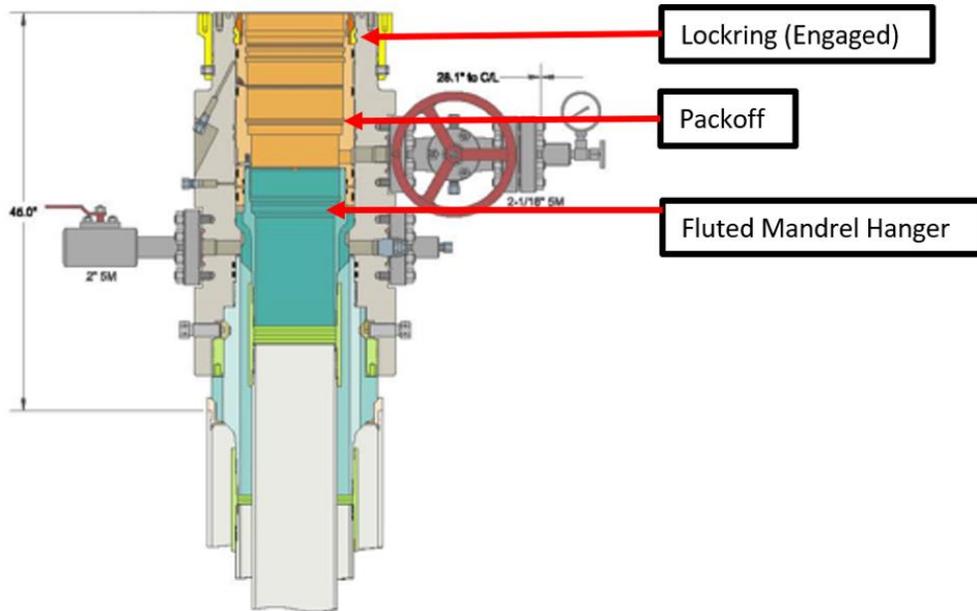
Figure 1: Cactus Offline Cementing Tool Schematic (5M tool)



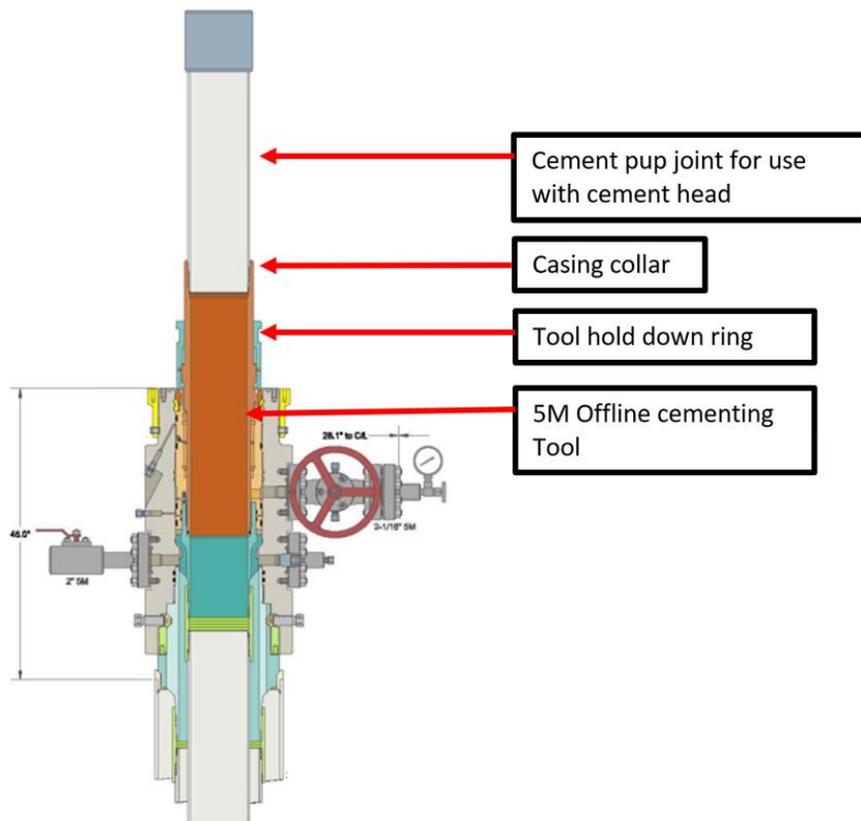
Offline Cementing - Intermediate Casing

Figure 2: Step-by-Step schematics procedure

Step 1: Landing the mandrel hanger and setting the packoff. The well is sealed with mud, two float valves, and packoff.

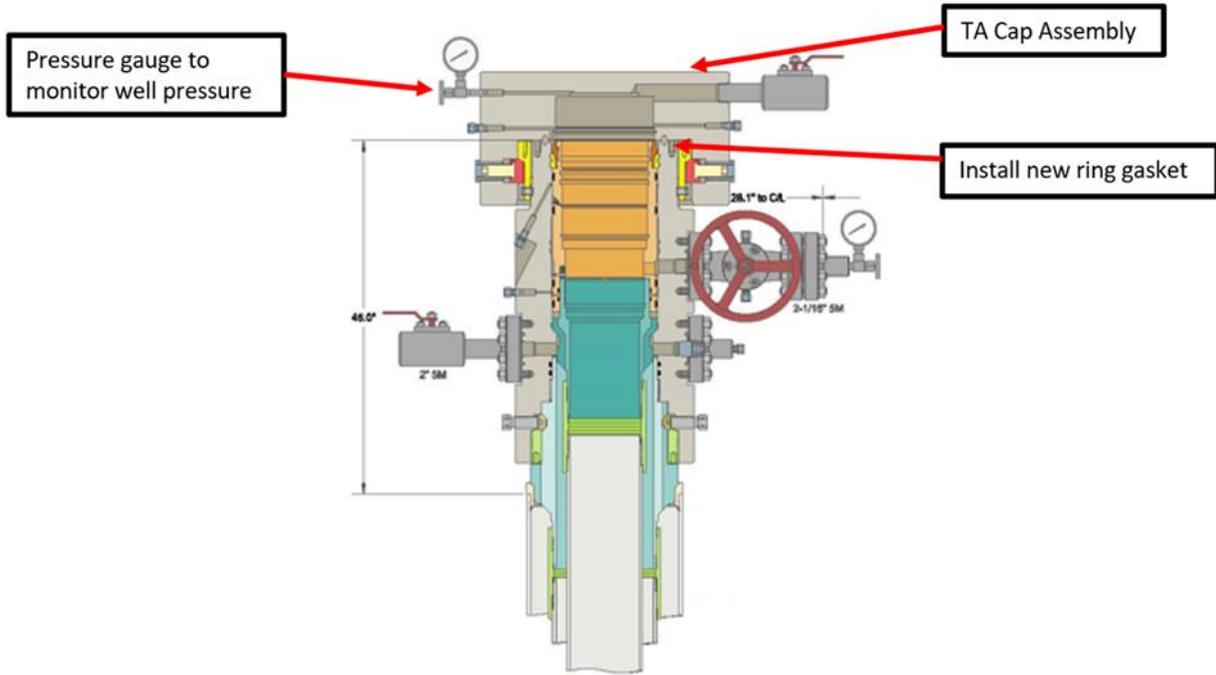


Step 2: Install casing hanger/packoff offline cementing tool.



Offline Cementing - Intermediate Casing

Step 3: Install TA cap with pressure gauge for monitoring.



Offline Cementing - Surface Casing

Nina Cortell Fed Com 127H
SHL: 244' FSL & 1229' FEL Section 10

Township/Range: 22S 32E
Elevation Above Sea Level: 3,789"

Matador Production Company requests the option to cement the surface casing string offline as a prudent batch drilling efficiency of acreage development.

Cement Program

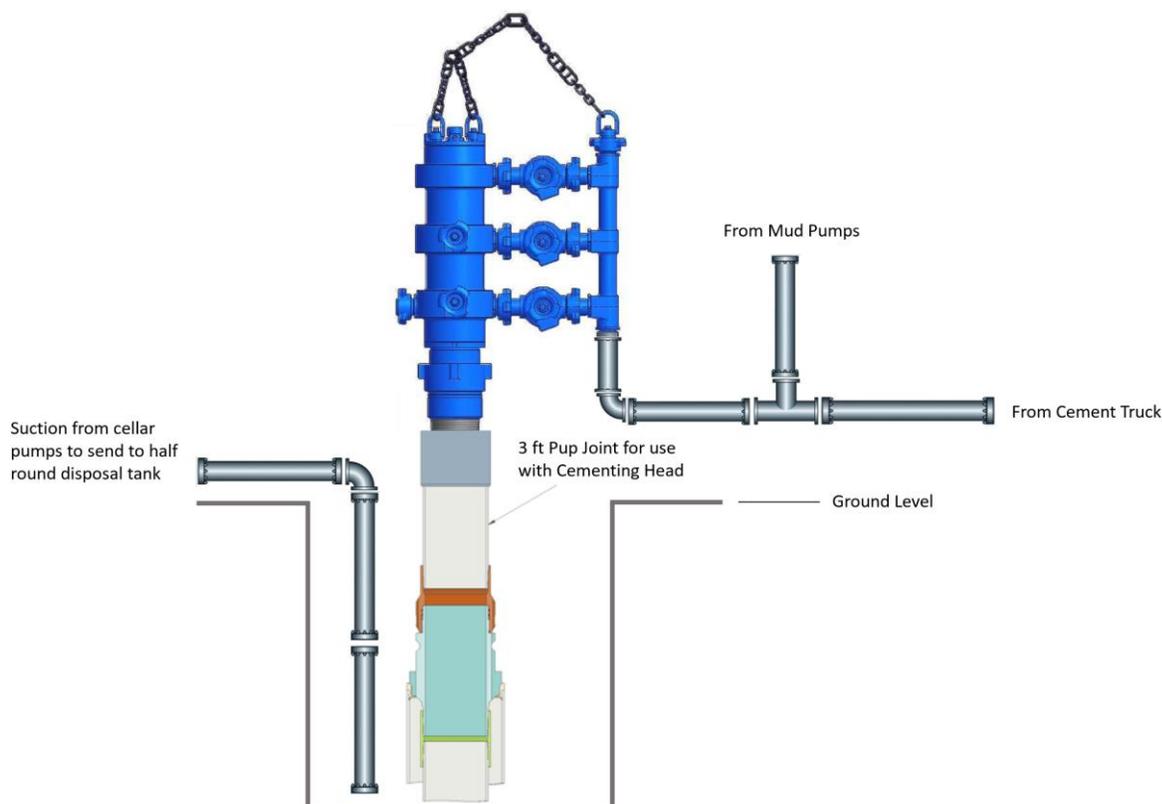
No changes to the cement program will take place for offline cementing.

Offline Cementing Procedure

The operational sequence will be as follows. Well must meet the below requirements to be a candidate for offline cementing, if wellbore conditions change, BLM will be notified.

- No noticeable wellbore instability.
- Casing installed successfully with no issues.
- No observed shallow gas or other anomalies

1. Run casing as per normal operations. While running casing, confirm integrity of the float equipment (float collar and shoe).
2. Land casing with mandrel.
3. Install cap flange.
4. Skid rig to the next well on the pad.
5. Rig up on the well in accordance with the diagram shown below.



6. Circulate bottoms up with cement truck.
 - Max anticipated time before circulating with cement truck is 24 hours.
7. Perform cement job, taking returns in the cellar.
8. Confirm well is static and floats are holding following the cement job.
9. Remove cement equipment and install night cap with pressure gauge for monitoring.

Drill Plan

Nina Cortell Fed Com 127H
SHL: 244' FSL & 1229' FEL Section 10
BHL: 60' FNL & 1980' FEL Section 3
Township/Range: 22S 32E
Elevation Above Sea Level: 3,789'

Sundry Request

Matador request the option to amend the well design of the Nina Cortell Fed Com #127H and make the following changes to the current APD:

- Amend casing and cementing plan by changing intermediate 1 casing from 7-5/8" to 9-5/8" and revising set depths as described below.

Drilling Operation Plan

Proposed Drilling Depth: 21130' MD / 10851' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.3991251748249 N / -103.66042531204583 W

TD Lat/Long (NAD83): 32.4278264328119 N / -103.66047859687673 W

1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	839	839	352	Anhydrite	Barren
Salado (Top of Salt)	1,191	1,191	1,944	Salt	Barren
Castile	3,149	3,135	1,762	Salt	Barren
Lamar (Base of Salt)	4,926	4,897	42	Salt	Barren
Bell Canyon	4,968	4,939	903	Sandstone	Oil/Natural Gas
Cherry Canyon	5,880	5,842	1,143	Sandstone	Oil/Natural Gas
Brushy Canyon	7,034	6,985	1,841	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,879	8,826	1,071	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,950	9,897	281	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	10,231	10,178	379	Carbonate	Oil/Natural Gas
KOP	10,362	10,310	-	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,618	10,557	-	Sandstone	Oil/Natural Gas
TD	21,130	10,851		Sandstone	Oil/Natural Gas

2. Notable Zones

2nd 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 375".

3. Pressure Control

Equipment

A 12,000' 5000-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 5M BOPE system will be installed. Test pressures will be 250 psi low and 5000 psi high with the annular preventer being tested to 250 psi low and 2500 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 5M 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 request the option to offline cement surface casing. The "Offline Cementing - Surface Procedure" 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 - 975	0 - 975	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 4976	0 - 4947	9.625	40	J-55	BUTT	1.125	1.125	1.8

Drill Plan

Production	8.75	0 - 21130	0 - 10851	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8
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- 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 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 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.

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	410	1.72	700	13.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	675	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1025'	Stg 2 Tail	210	1.78	371	13.5	10%	0	A/C	5% NaCl + LCM
	Stg 1 Lead	970	1.84	1783	12.5	50%	0	A/C	Bentonite + 1% CaCl ₂ + 8% NaCl + LCM
	Stg 1 Tail	380	1.33	500	14.8	50%	3981	A/C	5% NaCl + LCM
Production	Lead	380	3.66	1405	11.5	25%	4776	A/C	Fluid Loss + Dispersant + Retarder + LCM
	Tail	2780	1.35	3749	13.2	25%	10162	A/C	Fluid Loss + Dispersant + Retarder + LCM

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 - 975	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	975 - 4976	9.8 - 10.5	28-30	NC
Production	8.75	OBM/Cut Brine	4976 - 21130	8.8 - 10	30-55	<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 5643 psi. Maximum anticipated surface pressure is 3255 psi. Expected bottom hole temperature is 163 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.

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	MATADOR PRODUCTION COMPANY
WELL NAME & NO.:	NINA CORTELL FED COM 127H
APD ID:	10400082442
SURFACE HOLE FOOTAGE:	244'/S & 1229'/E
BOTTOM HOLE FOOTAGE:	60'/N & 1980'/E
SURFACE LOCATION:	Section 10, T.22 S., R.32 E. NMP.
COUNTY:	Lea County, New Mexico

COA

H ₂ S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input type="radio"/> None	<input checked="" type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Pilot Hole	<input checked="" type="checkbox"/> BOPE Break testing
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

SEE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING DESIGN

1. The **13-3/8** inch surface casing shall be set at approximately **975 ft.** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface. **If salt is encountered, set casing at least 25 ft. above the salt.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours** or **500 psi compressive strength**, whichever is greater. (This is to

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

Note: Operator has requested to have option to drill either 17-1/2" or 20" surface hole. Both hole sizes meet title 43 CFR 3172 clearance requirements between casing-coupling and hole. This option is granted; adjust cement volume accordingly.

Note: the set depth of intermediate casing has been adjusted per BLM geologist recommendation. *"The operator proposes to set intermediate casing to a depth of 4947 feet in the Bell canyon formation. BLM proposes to set the intermediate casing at a depth of 4900' in the base of the Lamar limestone formation."*

2. The 9-5/8 inch intermediate casing shall be set at approximately **4,900 ft.** The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Option 1 (Single stage): Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Option 2 (Two-stage): Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- **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.
- **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 cave/karst or potash.

Note: The intermediate casing must be kept fluid-filled to meet the CFO's minimum collapse design requirement.

Note: Excess cement volume for the 2nd stage is below the CFO's recommendation of 25%. More cement might be needed.

- ❖ In Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- ❖ Operator is responsible to report the following within two miles of mineworking to BLM Geologist jrutley@blm.gov:
 - Any fluid flow outside of casing in the Salado Formation.
 - Any well collision events.

- Sustained annuli pressures 500 psi above maximum allowable wellhead operating pressure (MAWOP) observed in monitored annuli.
 - Sustained mud losses occur through the Salado interval for projects within one mile of mineworking and WIPP Boundary.
3. Operator has proposed to set **5-1/2 in.** production casing at approximately **21,130 ft.** (10,851 ft. TVD). The minimum required fill of cement behind the **5-1/2 in.** production casing is:
- Cement should tie-back **at least 500 feet** into previous casing string. Operator shall provide method of verification.

Note: Excess cement volume is below the CFO's recommendation of 25%. More cement might be needed.

C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a **multi-bowl** wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**. The BOP/BOPE and annular preventer shall be pressure-tested in accordance with **title 43 CFR 3172 and API Standard 53**. **Annular shall be pressure tested to 3,500 psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

BOPE Break Testing Variance (Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system))

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**

- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (**575-689-5981 Lea County**) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per title 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Offline cementing variance is approved for surface and intermediate casings only. Contact the BLM prior to the commencement of any offline cementing procedure.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

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)

Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

BLM_NM_CFO_DrillingNotifications@BLM.GOV

(575) 361-2822

Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **title 43 CFR 3172**
 - as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. 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-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in the **title 43 CFR 3172** and **API STD 53 Sec. 5.3**.
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:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.
 - e. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead 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).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the 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.)
- c. 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000-psi chart for a 2-3M BOP/BOP, on a 10000-psi chart for a 5M BOP/BOPE and on a 15000-psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one-hour chart. A circular chart shall have a maximum 2-hour clock. If a twelve hour or twenty-four-hour chart is used, tester shall make a notation that it is run with a two-hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low-pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **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 03/27/2024

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

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

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

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

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

CONDITIONS
 Action 341983

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 341983
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	PREVIOUS COA'S APPLY.	5/10/2024