

Well Name	Well Number	US Well Number	Lease Number	Case Number	Operator
ELECTRA	101H	3002554577	NMNM10470	NMNM10470	MATADOR
ELECTRA	102H	3002554633	NMNM10470	NMNM10470	MATADOR
ELECTRA	111H	3002554634	NMNM10470	NMNM10470	MATADOR
ELECTRA	112H	3002554636	NMNM10470	NMNM10470	MATADOR
ELECTRA	131H	3002554691	NMNM10470	NMNM10470	MATADOR
ELECTRA	132H	3002554694	NMNM10470	NMNM10470	MATADOR
ELECTRA	135H	3002554695	NMNM10470	NMNM10470	MATADOR
ELECTRA	202H		NMNM10470	NMNM10470	MATADOR

**Notice of Intent**

**Sundry ID:** 2880713

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 10/29/2025

**Time Sundry Submitted:** 01:56

**Date proposed operation will begin:** 11/05/2025

**Procedure Description:** BLM bond number: NMB001079 Surety bond number: RLB0015172 Matador requests the option to amend the well design of the Electra Special 0310 Fed Com 101H, 102H, 111H, 112H, 131H, 132H, 135H, and 202H wells and make the following changes to the current APD: - Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below. - Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below. - Cement volumes will be adjusted accordingly

**NOI Attachments**

**Procedure Description**

- Electra\_Special\_0310\_Fed\_Com\_135H\_Sundry\_Info\_20251029133552.pdf
- Electra\_Special\_0310\_Fed\_Com\_111H\_Sundry\_Info\_20251029133552.pdf
- Electra\_Special\_0310\_Fed\_Com\_132H\_Sundry\_Info\_20251029133552.pdf
- Electra\_Special\_0310\_Fed\_Com\_112H\_Sundry\_Info\_20251029133552.pdf
- Electra\_Special\_0310\_Fed\_Com\_131H\_Sundry\_Info\_20251029133552.pdf
- Electra\_Special\_0310\_Fed\_Com\_102H\_Sundry\_Info\_20251029133551.pdf
- Electra\_Special\_0310\_Fed\_Com\_202H\_Sundry\_Info\_20251029133551.pdf
- Electra\_Special\_0310\_Fed\_Com\_101H\_Sundry\_Info\_20251029133551.pdf

**Conditions of Approval**

**Additional**

ELECTRA\_SPECIAL\_0310\_FED\_COM\_Batch\_Sundry\_2880713\_COA\_20251110150224.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:** ADDISON FISHER

**Signed on:** OCT 29, 2025 01:35 PM

**Name:** MATADOR PRODUCTION COMPANY

**Title:** Surface Land

**Street Address:** 5400 LBJ FREEWAY STE 1500

**City:** DALLAS

**State:** TX

**Phone:** (972) 371-5236

**Email address:** ADDISON.FISHER@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:** 11/12/2025

**Signature:** Chris Walls

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

Well Name	APD ID	US Well #
ELECTRA SPECIAL 0310 FED COM 101H	10400100002	3002554577
ELECTRA SPECIAL 0310 FED COM 102H	10400100478	3002554633
ELECTRA SPECIAL 0310 FED COM 111H	10400100500	3002554634
ELECTRA SPECIAL 0310 FED COM 112H	10400100519	3002554636
ELECTRA SPECIAL 0310 FED COM 131H	10400100497	3002554691
ELECTRA SPECIAL 0310 FED COM 132H	10400100594	3002554694
ELECTRA SPECIAL 0310 FED COM 135H	10400100608	3002554695
ELECTRA SPECIAL 0310 FED COM 202H	10400100611	

COA

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

**SEE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.**

**Note:** This is to confirm that the operator is approved to drill a 17-1/2” surface hole in lieu of a 20” hole, and to run 13-3/8” surface casing instead of 16”. Additionally, the operator is approved to drill a 12-1/4” hole instead of a 13-1/2” hole, and to run 10-3/4” first intermediate casing with BTC-SC couplings instead of BTC couplings.

***APD is within the R-111-Q defined boundary. Operator must follow all applicable procedures and requirements listed within the Order No. R-111-Q.***

1. The 13-3/8 inch surface casing shall be set at approximately **1,590** ft. (a minimum of 70 feet into the Rustler Anhydrite, above the salt, and below usable fresh water) 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 **8 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 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **10-3/4** inch 1<sup>st</sup> intermediate casing shall be set in a competent bed at approximately **3,374 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 **cave/karst, Capitan Reef, and Potash**.

**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 **cave/karst, Capitan Reef, and Potash**.

### **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 Lea County Petroleum Engineering Inspection Staff:**

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 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 11/10/2025**

**Electra Special 0310 Fed Com 135H**  
**SHL: 520' FNL & 1499' FWL Section 3**  
**BHL: 110' FSL & 1254' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3680**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 135H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 24005' MD / 11150' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222097 N / -103.6670745 W

TD Lat/Long (NAD83): 32.4863575 N / -103.6670894 W

### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,553	8,553	1,052	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,605	9,605	298	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	9,903	9,903	231	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,134	10,134	566	Sandstone	Oil/Natural Gas
<b>KOP</b>	<b>10,634</b>	<b>10,577</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>
3rd Bone Spring Carb	10,758	10,700	485	Carbonate	Oil/Natural Gas
<b>TD</b>	<b>24,005</b>	<b>11,150</b>	-	<b>Carbonate</b>	<b>Oil/Natural Gas</b>
3rd Bone Spring Sand	-	11,185	337	Sandstone	Oil/Natural Gas

### 2. Notable Zones

Third 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 24005	0 - 11150	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

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

- All applicable R-111-Q regulations will be adhered to

- 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

- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

Variance Request

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	170	3.66	624	12.5	0%	6114	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	1840	1.35	2490	13.2	0%	9634	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	240	3.66	890	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	170	3.66	624	12.5	0%	6114	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	1840	1.35	2490	13.2	0%	9634	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 24005	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 5914 psi. Maximum anticipated surface pressure is 3461 psi. Expected bottom hole temperature is 193 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.

**Electra Special 0310 Fed Com 111H**  
**SHL: 550' FNL & 1529' FWL Section 3**  
**BHL: 110' FSL & 660' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3680**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 111H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 22593' MD / 9650' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222103 N / -103.6690016 W

TD Lat/Long (NAD83): 32.4863467 N / -103.6690158 W

### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,553	8,553	1,052	Limestone	Oil/Natural Gas
<b>KOP</b>	<b>9,201</b>	<b>9,077</b>	-	<b>Limestone</b>	<b>Oil/Natural Gas</b>
1st Bone Spring Sand	9,872	9,605	298	Sandstone	Oil/Natural Gas
<b>TD</b>	<b>22,593</b>	<b>9,650</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>
2nd Bone Spring Carb	-	9,903	231	Carbonate	Oil/Natural Gas

### 2. Notable Zones

First 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 22593	0 - 9650	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- All applicable R-111-Q regulations will be adhered to
- 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
- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

**Variance Request**

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	100	3.66	370	12.5	0%	6114	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	1850	1.35	2494	13.2	0%	8201	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	170	3.66	636	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	100	3.66	370	12.5	0%	6114	A/C	Bentonite + 1% CaCL <sub>2</sub> + 8% NaCl + LCM
	Stg 1 Tail	1850	1.35	2494	13.2	0%	8201	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 22593	9.2 - 9.6	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

**7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 4817 psi. Maximum anticipated surface pressure is 2694 psi. Expected bottom hole temperature is 175 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H<sub>2</sub>S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H<sub>2</sub>S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H<sub>2</sub>S safety package on all wells, attached is an "H<sub>2</sub>S 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.

**Electra Special 0310 Fed Com 132H**  
**SHL: 520' FNL & 1419' FWL Section 3**  
**BHL: 110' FSL & 2178' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3682**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 132H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 24362' MD / 11480' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222091 N / -103.6640768 W

TD Lat/Long (NAD83): 32.4863742 N / -103.6640929 W

### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,553	8,553	1,052	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,605	9,605	298	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	9,903	9,903	231	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,134	10,134	566	Sandstone	Oil/Natural Gas
3rd Bone Spring Carb	10,700	10,700	485	Carbonate	Oil/Natural Gas
<b>KOP</b>	<b>10,998</b>	<b>10,907</b>	-	<b>Carbonate</b>	<b>Oil/Natural Gas</b>
3rd Bone Spring Sand	11,287	11,185	337	Sandstone	Oil/Natural Gas
<b>TD</b>	<b>24,362</b>	<b>11,480</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>
Wolfcamp A	-	11,522	-	Shale	Oil/Natural Gas

### 2. Notable Zones

Third 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 24362	0 - 11480	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

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

- All applicable R-111-Q regulations will be adhered to

- 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

- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

**Variance Request**

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL <sub>2</sub> + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	210	3.66	777	12.5	0%	5614	A/C	Bentonite + 1% CaCL <sub>2</sub> + 8% NaCl + LCM
	Tail	1840	1.35	2489	13.2	0%	9998	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	260	3.66	954	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	210	3.66	777	12.5	0%	5614	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	1840	1.35	2489	13.2	0%	9998	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 24362	9.5 - 10.1	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 6029 psi. Maximum anticipated surface pressure is 3504 psi. Expected bottom hole temperature is 197 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.

**Electra Special 0310 Fed Com 112H**  
**SHL: 520' FNL & 1529' FWL Section 3**  
**BHL: 110' FSL & 1980' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3681**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 112H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 22535' MD / 9650' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222093 N / -103.6647192 W

TD Lat/Long (NAD83): 32.4863706 N / -103.664735 W

### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,553	8,553	1,052	Limestone	Oil/Natural Gas
<b>KOP</b>	<b>9,122</b>	<b>9,077</b>	-	<b>Limestone</b>	<b>Oil/Natural Gas</b>
1st Bone Spring Sand	9,605	9,605	298	Sandstone	Oil/Natural Gas
<b>TD</b>	<b>22,535</b>	<b>9,650</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>
2nd Bone Spring Carb	-	9,903	231	Carbonate	Oil/Natural Gas

### 2. Notable Zones

First 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 22535	0 - 9650	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

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

- All applicable R-111-Q regulations will be adhered to

- 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

- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

**Variance Request**

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	120	3.66	445	12.5	0%	5614	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	1850	1.35	2497	13.2	0%	8122	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	170	3.66	622	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	120	3.66	445	12.5	0%	5614	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	1850	1.35	2497	13.2	0%	8122	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 22535	9.2 - 9.6	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 4817 psi. Maximum anticipated surface pressure is 2694 psi. Expected bottom hole temperature is 175 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.

**Electra Special 0310 Fed Com 131H**  
**SHL: 550' FNL & 1499' FWL Section 3**  
**BHL: 110' FSL & 331' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3680**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 131H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 24412' MD / 11480' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222109 N / -103.6700681 W

TD Lat/Long (NAD83): 32.4863407 N / -103.6700818 W

### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,553	8,553	1,052	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,605	9,605	298	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	9,903	9,903	231	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,134	10,134	566	Sandstone	Oil/Natural Gas
3rd Bone Spring Carb	10,700	10,700	485	Carbonate	Oil/Natural Gas
<b>KOP</b>	<b>11,035</b>	<b>10,907</b>	-	<b>Carbonate</b>	<b>Oil/Natural Gas</b>
3rd Bone Spring Sand	11,326	11,185	337	Sandstone	Oil/Natural Gas
<b>TD</b>	<b>24,412</b>	<b>11,480</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>
Wolfcamp A	-	11,522	-	Shale	Oil/Natural Gas

### 2. Notable Zones

Third 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 24412	0 - 11480	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

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

- All applicable R-111-Q regulations will be adhered to

- 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

- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

**Variance Request**

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	190	3.66	695	12.5	0%	6114	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	1850	1.35	2491	13.2	0%	10035	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	260	3.66	961	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	190	3.66	695	12.5	0%	6114	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	1850	1.35	2491	13.2	0%	10035	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 24412	9.5 - 10.1	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 6029 psi. Maximum anticipated surface pressure is 3504 psi. Expected bottom hole temperature is 197 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.

**Electra Special 0310 Fed Com 102H**  
**SHL: 550' FNL & 1609' FWL Section 3**  
**BHL: 110' FSL & 1980' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3681**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 102H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 21883' MD / 9050' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222093 N / -103.6647192 W

TD Lat/Long (NAD83): 32.4863706 N / -103.664735 W

### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
<b>KOP</b>	<b>8,515</b>	<b>8,477</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>
Bone Spring Lime	8,592	8,553	1,052	Carbonate	Oil/Natural Gas
<b>TD</b>	<b>21,883</b>	<b>9,050</b>	-	<b>Carbonate</b>	<b>Oil/Natural Gas</b>
1st Bone Spring Sand	-	9,605	298	Sandstone	Oil/Natural Gas

### 2. Notable Zones

Avalon 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 21883	0 - 9050	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

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

- All applicable R-111-Q regulations will be adhered to

- 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

- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

**Variance Request**

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	90	3.66	337	12.5	0%	5614	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	1840	1.35	2490	13.2	0%	7515	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	140	3.66	514	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	90	3.66	337	12.5	0%	5614	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	1840	1.35	2490	13.2	0%	7515	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 21883	9 - 10.5	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 4941 psi. Maximum anticipated surface pressure is 2950 psi. Expected bottom hole temperature is 167 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.

**Electra Special 0310 Fed Com 202H**  
**SHL: 550' FNL & 1419' FWL Section 3**  
**BHL: 110' FSL & 1254' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3682**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 202H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 24411' MD / 11570' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222097 N / -103.6670745 W

TD Lat/Long (NAD83): 32.4863575 N / -103.6670894 W

### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,553	8,553	1,052	Limestone	Oil/Natural Gas
1st Bone Spring Sand	9,605	9,605	298	Sandstone	Oil/Natural Gas
2nd Bone Spring Carb	9,903	9,903	231	Carbonate	Oil/Natural Gas
2nd Bone Spring Sand	10,134	10,134	566	Sandstone	Oil/Natural Gas
3rd Bone Spring Carb	10,700	10,700	485	Carbonate	Oil/Natural Gas
<b>KOP</b>	<b>11,035</b>	<b>10,997</b>	-	<b>Carbonate</b>	<b>Oil/Natural Gas</b>
3rd Bone Spring Sand	11,226	11,185	337	Sandstone	Oil/Natural Gas
Wolfcamp A	11,699	11,522	61	Shale	Oil/Natural Gas
<b>TD</b>	<b>24,411</b>	<b>11,570</b>	-	<b>Shale</b>	<b>Oil/Natural Gas</b>
Wolfcamp B	-	11,583	-	Shale	Oil/Natural Gas

### 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 24411	0 - 11570	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

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

- All applicable R-111-Q regulations will be adhered to

- 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

- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

Variance Request

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL <sub>2</sub> + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	210	3.66	784	12.5	0%	5614	A/C	Bentonite + 1% CaCL <sub>2</sub> + 8% NaCl + LCM
	Tail	1850	1.35	2491	13.2	0%	10035	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	260	3.66	961	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	210	3.66	784	12.5	0%	5614	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	1850	1.35	2491	13.2	0%	10035	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 24411	10.2 - 11.2	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 6738 psi. Maximum anticipated surface pressure is 4193 psi. Expected bottom hole temperature is 198 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.

**Electra Special 0310 Fed Com 101H**  
**SHL: 520' FNL & 1609' FWL Section 3**  
**BHL: 110' FSL & 660' FWL Section 10**  
**Township/Range: 21S 32E**  
**Elevation Above Sea Level: 3681**

### Sundry Request

Matador request the option to amend the well design of the Electra Special 0310 Fed Com 101H and make the following changes to the current APD:

- Amend casing and cementing plan by changing surface section hole size to 17.5" and surface casing size to 13-3/8" as described below.
- Amend casing and cementing plan by changing intermediate 1 section hole size to 12.25" as described below.
- Cement volumes will be adjusted accordingly

### Drilling Operation Plan

Proposed Drilling Depth: 21986' MD / 9050' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.5222103 N / -103.6690016 W

TD Lat/Long (NAD83): 32.4863467 N / -103.6690158 W

#### 1. Estimated Tops

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,495	1,495	420	Anhydrite	Barren
Salado (Top of Salt)	1,915	1,915	1,359	Salt	Barren
Lamar (Base of Salt)	3,274	3,274	529	Salt	Barren
Capitan	3,803	3,803	1,261	Limestone	Barren
Bell Canyon	5,064	5,064	386	Sandstone	Oil/Natural Gas
Cherry Canyon	5,450	5,450	1,155	Sandstone	Oil/Natural Gas
Brushy Canyon	6,605	6,605	1,948	Sandstone	Oil/Natural Gas
<b>KOP</b>	<b>8,596</b>	<b>8,477</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>
Bone Spring Lime	8,672	8,553	1,052	Carbonate	Oil/Natural Gas
<b>TD</b>	<b>21,986</b>	<b>9,050</b>	-	<b>Carbonate</b>	<b>Oil/Natural Gas</b>
1st Bone Spring Sand	-	9,605	298	Sandstone	Oil/Natural Gas

#### 2. Notable Zones

Avalon 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 184'.

### **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, 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 the option to cut off 20" SOW wellhead and run 13-3/8" SOW multi-bowl wellhead system once 1st intermediate string is run and cemented. Both wellhead designs are attached for review.

Matador request the option to offline cement surface casing. The "Offline Cementing - Surface Casing" 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.

Matador request the option to utilize a spudder rig for setting surface and intermediate 1 casing strings.

**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 - 1565	0 - 1565	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 3374	0 - 3374	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 5114	0 - 5114	8.625	32	P-110	Hunting TLW	1.125	1.125	1.8
Production	7.875	0 - 21986	0 - 9050	5.5	20	P-110	Hunting TLW	1.125	1.125	1.8

- All casing strings will be tested in accordance with Title 43 CFR 3172.7(b)(8)
- All applicable R-111-Q regulations will be adhered to
- 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
- Request option to drill 6.75" production hole from KOP to TD, cement volumes will be adjusted accordingly.

**Variance Request**

Matador request a variance to wave the centralizer requirement for the 8-5/8" casing and the 5-1/2" SF/Flush casing in the 7-7/8" 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 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	760	1.72	1301	13.5	50%	0	C	5% NaCl + LCM
	Tail	260	1.38	361	14.8	50%	1252	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 1615'	Stg 2 Tail	210	1.78	382	13.5	10%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Lead	430	1.84	784	12.5	50%	0	C	10% NaCl + 1% MgO + LCM
	Stg 1 Tail	160	1.33	212	14.8	50%	2699	C	10% NaCl + 1% MgO + LCM
Intermediate 2 w/ DV @ 3424'	Stg 2 Tail	260	1.78	460	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	260	3.66	967	10.3	35%	0	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Stg 1 Tail	120	1.38	170	13.2	35%	4114	A/C	5% NaCl + LCM
Production	Lead	100	3.66	351	12.5	0%	5614	A/C	Bentonite + 1% CaCL2 + 8% NaCl + LCM
	Tail	1850	1.35	2493	13.2	0%	7596	A/C	Fluid Loss + Dispersant + Retarder

**Post-Completion Cement Design - Bradenhead Squeeze**

String	Type	Sacks	Yield	Cu. Ft.	Weight	Percent Excess	Top of Cement (ft)	Class	Blend
Production	Stg 2 Tail	140	3.66	529	12.5	25%	4614	A/C	Fluid Loss + Dispersant + Retarder
	Stg 1 Lead	100	3.66	351	12.5	0%	5614	A/C	Bentonite + 1% CaCL <sub>2</sub> + 8% NaCl + LCM
	Stg 1 Tail	1850	1.35	2493	13.2	0%	7596	A/C	Fluid Loss + Dispersant + Retarder

Matador plans to cement the production string per R-111-Q.(C).(5).(c).(iii), leaving the annulus open between the 2nd intermediate and production casing strings for a minimum of 500' until hydraulic fracturing operations have been concluded, at which point a bradenhead cementing operation will take place, ensuring at least 500' tie-back into 2nd intermediate casing, but not higher than USGS Marker Bed No. 126. TOC for the primary production job will be determined by CBL prior to hydraulic fracturing. As per R-111-Q.(C).(6).(c).(i), the production cement will have a zero free fluid and a HTHP fluid loss of 150 ml/30min.

As per R-111-Q.(C).(5).(c), the annulus between int. 2 and production casing will be monitored and designed to relieve pressure from annulus below the failure threshold.

**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 - 1565	8.4 - 8.8	28-30	NC
Intermediate 1	12.25	Brine	1565 - 3374	9.8 - 10.2	28-30	NC
Intermediate 2	9.875	Fresh Water	3374 - 5114	8.4 - 8.8	28-30	NC
Production	7.875	OBM/Cut Brine	5114 - 21986	9 - 10.5	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 4941 psi. Maximum anticipated surface pressure is 2950 psi. Expected bottom hole temperature is 167 F.

In accordance with Title 43 CFR 3176, Matador does not anticipate that there will be enough H<sub>2</sub>S from the surface to the Bone Spring formations to meet the BLM's minimum requirements for the submission of an "H<sub>2</sub>S Drilling Operation Plan" or "Public Protection Plan" for the drilling and completion of this well. Since we have an H<sub>2</sub>S safety package on all wells, attached is an "H<sub>2</sub>S 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.

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oecd/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 557630

**CONDITIONS**

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 557630
	Action Type: [C-103A] NOI Change of Plans (C-103A)

**CONDITIONS**

Created By	Condition	Condition Date
jeffrey.harrison	If cement does not circulate to surface on any string, a Cement Bond Log (CBL) is required for that string of casing. If strata isolation is not achieved, remediation will be required before further operations may commence.	4/27/2026
jeffrey.harrison	All conducted logs must be submitted to the OCD.	4/27/2026
jeffrey.harrison	Cement must be in place for at least eight hours AND achieve a minimum compressive strength of 500 PSI before performing any further operations on the well.	4/27/2026
jeffrey.harrison	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.	4/27/2026
jeffrey.harrison	All previous COA's not addressed within the updated COA's still apply.	4/27/2026