

Well Name: DOGWOOD 25 36 20 FED COM	Well Location: T25S / R36E / SEC 20 / SESW / 32.109156 / -103.2901269	County or Parish/State: LEA / NM
Well Number: 113H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM138912	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002552151	Operator: MATADOR PRODUCTION COMPANY	

Notice of Intent

Sundry ID: 2841992

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 03/17/2025	Time Sundry Submitted: 09:13
Date proposed operation will begin: 03/17/2025	

**Procedure Description:** Matador respectfully requests the option to make the following changes to the DOGWOOD 25 36 20 FED COM 113H. Update Well and Casing Design. Details can be found in the attached Drill Plan with updated casing, cement and drilling fluid information. Change from [33813] JAL; WOLFCAMP, WEST pool to [97088] WC-025 G-08 S253534O; BONE SPRING. SHL change from N-20-25S-36E 200' FSL and 1720' FWL to N-20-25S-36E 170' FSL and 1610' FWL. The new SHL remains on the existing drill pad. BHL change from D-17-25S-36E 50' FNL and 331' FWL to C-17-25S-36E 110'FNL and 1654' FWL BHL changed to D-17-25S-36E 50' FNL and 331' FWL by Sundry# 2756784. Proposed TVD 9510'

NOI Attachments

Procedure Description

- Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Drill\_Plan\_Design\_B\_\_4\_string\_\_20250515105606.pdf
- Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Closed\_Loop\_System\_20250515105605.pdf
- Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Co\_Flex\_Hose\_Certs\_20250515105606.pdf
- Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Break\_Testing\_Sundry\_20250515105606.pdf
- Dogwood\_25\_36\_20\_Fed\_Com\_113H\_10M\_Choke\_Manifold\_20250515105606.pdf
- Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Casing\_Table\_Spec\_20250515105604.pdf
- Dogwood\_25\_36\_20\_Fed\_Com\_113H\_10M\_Well\_Control\_Plan\_20250515105605.pdf

Well Name: DOGWOOD 25 36 20 FED COM

Well Location: T25S / R36E / SEC 20 / SESW / 32.109156 / -103.2901269

County or Parish/State: LEA / NM

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Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Offline\_Cementing\_\_\_Int\_20250515105606.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Directional\_AC\_Report\_20250515105605.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Drill\_Plan\_Design\_A\_\_3\_string\_\_20250515105605.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Directional\_Well\_Plan\_20250515105605.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Csg\_Specs\_5.5in\_20lb\_TLW\_SC\_20250515105605.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_10M\_BOP\_20250515105605.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Offline\_Cementing\_\_\_Surface\_20250515105605.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_3\_String\_Wellhead\_Diagram\_20250515105605.pdf

LO\_DOGWOOD\_25\_36\_20\_FED\_COM\_113H\_REV4\_S\_signed\_20250515105606.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Casing\_Design\_Criteria\_20250515105605.pdf

Dogwood\_25\_36\_20\_Fed\_Com\_113H\_Directional\_Wall\_Plot\_20250515105605.pdf

Conditions of Approval

Additional

DOGWOOD\_25\_36\_20\_FED\_COM\_113H\_Sundry\_2841992\_COA\_20250618081959.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: NICKY FITZGERALD

Signed on: JUN 06, 2025 06:29 AM

Name: MATADOR PRODUCTION COMPANY

Title: Regulatory Consultant

Street Address: 5400 LBJ FREEWAY STE 1500

City: DALLAS

State: TX

Phone: (972) 371-5448

Email address: nicky.fitzgerald@matadorresources.com

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

**Well Name:** DOGWOOD 25 36 20 FED  
COM

**Well Location:** T25S / R36E / SEC 20 /  
SESW / 32.109156 / -103.2901269

**County or Parish/State:** LEA /  
NM

**Well Number:** 113H

**Type of Well:** OIL WELL

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**Lease Number:** NMNM138912

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:** 3002552151

**Operator:** MATADOR PRODUCTION  
COMPANY

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:** 06/18/2025

**Signature:** Chris Walls

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No.
		6. If Indian, Allottee or Tribe Name

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

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

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

<b>THE SPACE FOR FEDERAL OR STATE OFFICE USE</b>		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

*Item 13*: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

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

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

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

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

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

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

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

Response to this request is mandatory.

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

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

## Additional Information

### Location of Well

0. SHL: SESW / 200 FSL / 1720 FWL / TWSP: 25S / RANGE: 36E / SECTION: 20 / LAT: 32.109156 / LONG: -103.2901269 ( TVD: 0 feet, MD: 0 feet )

PPP: SESW / 100 FSL / 331 FWL / TWSP: 25S / RANGE: 36E / SECTION: 20 / LAT: 32.1088811 / LONG: -103.2904659 ( TVD: 11562 feet, MD: 11854 feet )

BHL: NENW / 50 FNL / 331 FWL / TWSP: 25S / RANGE: 36E / SECTION: 17 / LAT: 32.1375501 / LONG: -103.2946239 ( TVD: 11562 feet, MD: 22277 feet )

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	MATADOR PRODUCTION COMPANY
<b>WELL NAME &amp; NO.:</b>	DOGWOOD 25 36 20 FED COM 113H
<b>APD ID:</b>	10400088625
<b>LOCATION:</b>	Section 20, T.25 S., R.36 E. NMP.
<b>COUNTY:</b>	Lea County, New Mexico ▼

COA

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

SEE ORIGINAL COA FOR ALL OTHER REQUIREMENTS.

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated **AT SPUD**. As a result, the Hydrogen Sulfide area must meet **43 CFR 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

### B. CASING DESIGN

#### Primary Casing Program (3-string)

**Note:** The surface casing set depth was adjusted per BLM geologist's recommendation. Adjust cement volume accordingly.

1. The **13-3/8** inch surface casing shall be set at approximately **1,296 ft.** (a minimum of **70 ft.** 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 psi compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The 7-5/8 inch intermediate casing shall be set at approximately **8,825 ft.** (8,787 ft. TVD). Hole size changes from 12-1/4" to 9-7/8" at approximately 5,200 ft. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

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

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

- **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
  - **Second stage above DV tool: Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Capitan Reef**.
- ❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.
- ❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
- Switch to freshwater mud to protect the Capitan Reef and use freshwater mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
  - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via



e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. Operator has proposed to set **5-1/2 inch** production casing at approximately **20,165 ft.** (9,510 ft. TVD). The minimum required fill of cement behind the **5-1/2 in.** production casing is:

- Cement should tie-back at least **50 feet** above the Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. Operator shall provide method of verification.

**Note:** Cement volume is insufficient to reach 50 ft. above the Capitan reef top. More cement is needed.

#### **Alternate Casing Program (4-string)**

**Note:** The surface casing set depth was adjusted per BLM geologist's recommendation. Adjust cement volume accordingly.

1. The **13-3/8 inch** surface casing shall be set at approximately **1,296 ft.** (a minimum of **70 ft.** 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 psi compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

**Note:** The intermediate casing set depth was adjusted per BLM geologist's recommendation. Adjust cement volume accordingly.

2. The **10-3/4 inch** 1<sup>st</sup> intermediate casing shall be set in a competent bed (Base of Capitan) at approximately **5,200 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 **Capitan Reef**.

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

- **First stage to DV tool:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- **Second stage above DV tool: Cement to surface.** If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to **Capitan Reef**.

**Note:** Excess cement for 2<sup>nd</sup> stage is below the BLM recommendation of 25%, more cement might be needed.

**Note:** 1<sup>st</sup> intermediate casing must be kept fluid-filled to meet BLM's minimum collapse design requirements.

- ❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3<sup>rd</sup> casing string must come to surface.
- ❖ **Special Capitan Reef Requirement:** Ensure freshwater based mud is used across the Capitan interval.

3. The **7-5/8 inch** 2<sup>nd</sup> intermediate casing shall be set at approximately **8,825 ft.** (8,787 ft. TVD) The minimum required fill of cement behind the **7-5/8 inch** intermediate casing is:

**Option 1 (Single Stage):** Cement should tie-back at least **50 feet** above the Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan reef.

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

- a. First stage to DV tool(s): Cement to circulate. If cement does not circulate off the DV tool(s), contact the appropriate BLM office before proceeding with second stage cement job.
  - b. Second stage above DV tool(s): Cement should tie-back at least **50 feet** above the Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan reef.
4. Operator has proposed to set **5-1/2 inch** production casing at approximately **20,165 ft.** (9,510 ft. TVD). The minimum required fill of cement behind the **5-1/2 in.** production casing is:
- Cement should tie-back **at least 200 feet** into previous casing string. Operator shall provide method of verification.

### Offline Cementing

Operator has been (**Approved**) to pump the proposed cement program offline in the **Surface and intermediate(s) intervals**. Offline cementing should commence within 24 hours of landing the casing for the interval. Notify the BLM 4hrs prior to the commencement of any offline cementing procedure at **Lea County: 575-689-5981**.

### C. PRESSURE CONTROL

1. Variance approved to use **flex line** from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a **multi-bowl wellhead** assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5M annular preventer with 10M BOP/BOPE**. Annular preventer shall be tested to 5,000 psi. The BOP/BOPE shall be pressure-tested in accordance with **title 43 CFR 3172**.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

- e. Whenever any seal subject to test pressure is broken, all the tests in the **title 43 CFR 3172.6(b)(9)** must be followed.

#### **BOPE Break Testing Variance**

- Break testing has been approved for this well ONLY on those intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per title 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

#### **D. SPECIAL REQUIREMENT (S)**

##### **Communitization Agreement**

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

## GENERAL REQUIREMENTS

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

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

### 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 06/18/2025**

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

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**  
**BHL: 110' FNL & 1654' FWL Section 17**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3057**

**Design B (4 string) Differences**

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

**Drilling Operation Plan**

Proposed Drilling Depth: 20165' MD / 9510' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.1075068 N / -103.2903498 W

TD Lat/Long (NAD83): 32.1373661 N / -103.2903511 W

**1. Estimated Tops**

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,172	1,172	543	Anhydrite	Barren
Salado (Top of Salt)	1,715	1,715	1,685	Salt	Barren
Lamar (Base of Salt)	3,400	3,400	1,800	Salt	Barren
Bell Canyon	5,200	5,200	700	Sandstone	Oil/Natural Gas
Cherry Canyon	5,900	5,900	1,075	Sandstone	Oil/Natural Gas
Brushy Canyon	6,975	6,975	1,293	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,306	8,268	1,222	Limestone	Oil/Natural Gas
<b>KOP (ft)</b>	<b>8,975</b>	<b>8,937</b>	-	<b>Limestone</b>	<b>Oil/Natural Gas</b>
1st Bone Spring Sand	9,724	9,490	182	Sandstone	Oil/Natural Gas
<b>TD (ft)</b>	<b>20,165</b>	<b>9,510</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>

**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 183

**3. Pressure Control**

Equipment

## Drill Plan - Design B (4 string)

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

### Testing Procedure

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

A third party company will test the BOPs.

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

### Variance Request

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

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

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

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

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

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

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

**Drill Plan - Design B (4 string)****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 - 1197	0 - 1197	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 5250	0 - 5250	10.75	45.5	HCL-80	BUTT-SC	1.125	1.125	1.8
Intermediate 2	9.875	0 - 8825	0 - 8787	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 20165	0 - 9510	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

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

**Variance Request**

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

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

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

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

**Drill Plan - Design B (4 string)****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	540	1.72	934	13.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	897	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 3450'	Stg 2 Tail	420	1.78	751	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	620	1.84	1146	12.5	50%	0	C	5% NaCl + LCM
	Stg 1 Tail	230	1.33	304	14.8	50%	4250	C	5% NaCl + LCM
Intermediate 2 w/ DV @ 5300'	Stg 2 Tail	660	1.78	1182	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	220	3.66	791	10.3	35%	5050	A/C	Bentonite + 1% CaCL <sub>2</sub> + 8% NaCl + LCM
	Stg 1 Tail	230	1.38	311	13.2	35%	7825	A/C	5% NaCl + LCM
Production	Tail	890	1.35	1203	13.2	25%	8625	A/C	Fluid Loss + Dispersant + Retarder

**5. Mud Program**

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

Hole Section	Hole Size (in)	Mud Type	Interval MD (ft)	Density (lb/gal)	Viscosity	Fluid Loss
Surface	17.5	Spud Mud	0 - 1197	8.6 - 9	28-30	NC
Intermediate 1	12.25	Brine	1197 - 5250	9.4 - 9.8	28-30	NC
Intermediate 2	9.875	Cut Brine	5250 - 8825	9.2 - 10	28-30	NC
Production	6.75	OBM/Cut Brine	8825 - 20165	9.6 - 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.

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

**7. Down Hole Conditions**

No abnormal pressure or temperature is expected. Bottom hole pressure is 5192 psi. Maximum anticipated surface pressure is 3100 psi. Expected bottom hole temperature is 160 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.



## Casing Specs - 10.75" 45.5lb BUTT-SC



## API 5CT 10.750" 45.50lb/ft HCL80 Casing Performance Data Sheet

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

Grade	HCL80
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**Pipe Body Mechanical Properties**

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

**Sizes**

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

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

**Minimum Performance**

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

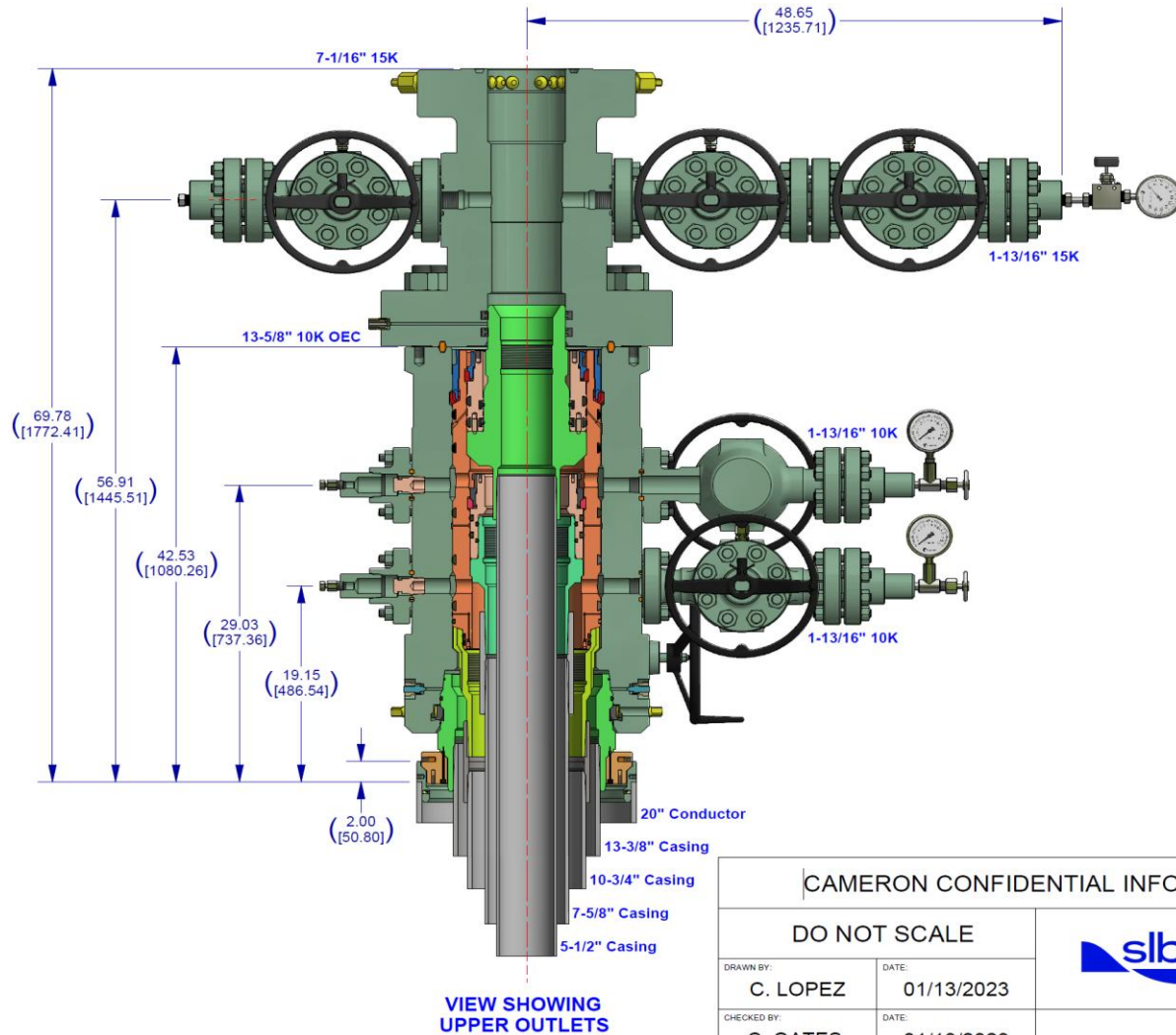
**Inspection and Testing**

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

**Color code**

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

## 4-String Wellhead Diagram



CAMERON CONFIDENTIAL INFORMATION

DO NOT SCALE

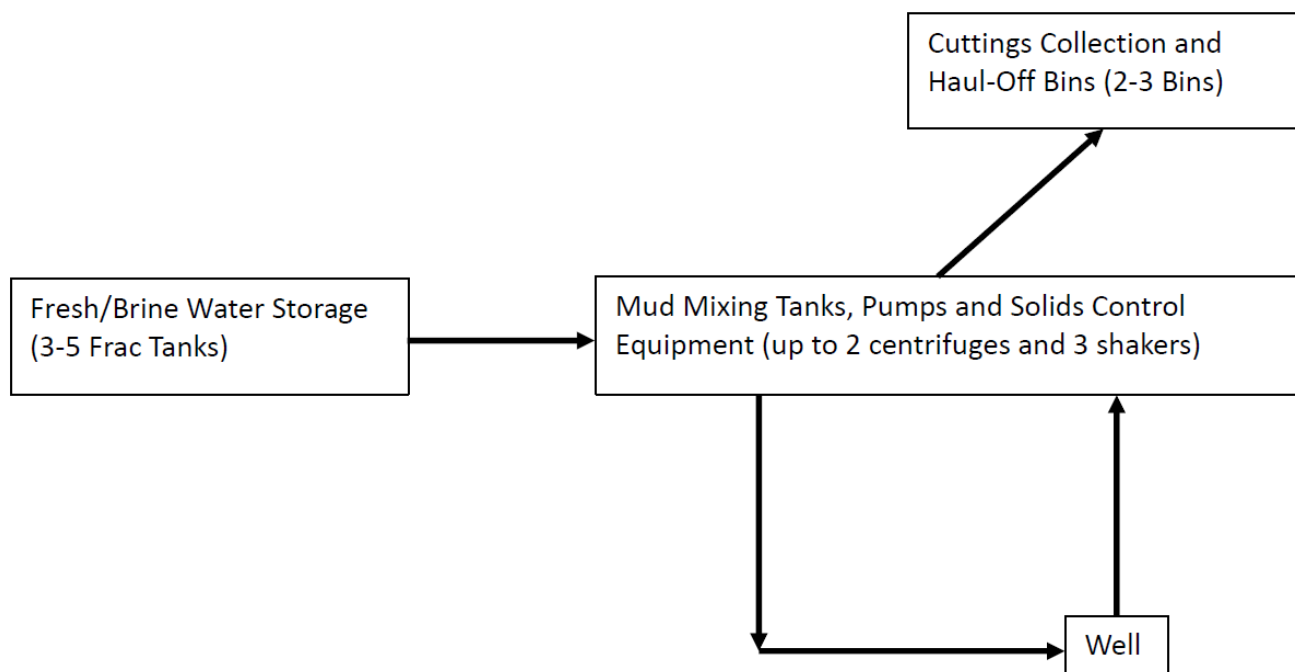
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SYSTEMSDRAWN BY:  
C. LOPEZDATE:  
01/13/2023CHECKED BY:  
C. OATESDATE:  
01/13/2023DRAWING NO:  
QD-06-00259REV:  
0113-5/8" 10K OEC  
'ADAPT-NST' WELLHEAD

## Closed-Loop System

Dogwood 25 36 20 Fed Com 113H  
SHL: 170' FSL & 1610' FWL Section 20

Township/Range: 25S 36E  
Elevation Above Sea Level: 3057'

### Closed-Loop System



#### Operating and Maintenance Plan:

During drilling operations, third party service companies will utilize solids control equipment to remove cuttings from the drilling fluids and collect it in haul-off bins. Equipment will be closely monitored at all times while drilling by the derrick man and the service company employees.

#### Closure Plan:

During drilling operations, third party service companies will haul off drill solids and fluids to an approved disposal facility. At the end of the well, all closed loop equipment will be removed from the location.

Co-Flex Hose Certification

Dogwood 25 36 20 Fed Com 113H  
SHL: 170' FSL & 1610' FWL Section 20

Township/Range: 25S 36E  
Elevation Above Sea Level: 3057'

**POWERTRACK**

CERTIFICATE OF QUALITY

LTTY/QR-5.7.1-19B


No: LT2024-029-002

Customer Name	Austin Hose		
Product Name	Choke And Kill Hose		
Product Specification	3"×10000psi×11.08ft (3.38m)	Quantity	2PCS
Serial Number	7660215、7660216	FSL	FSL3
Temperature Range	-29℃~+121℃	Standard	API Spec 16C 3 <sup>rd</sup> edition
Inspection Department	Q.C. Department	Inspection date	2024.02.20

Inspection Items	Inspection results
Appearance Checking	In accordance with API Spec 16C 3 <sup>rd</sup> edition
Size and Lengths	In accordance with API Spec 16C 3 <sup>rd</sup> edition
Dimensions and Tolerances	In accordance with API Spec 16C 3 <sup>rd</sup> edition
End Connections: 4-1/16"×10000psi Integral flange for sour gas service	In accordance with API Spec 6A 21 <sup>st</sup> edition
End Connections: 4-1/16"×10000psi Integral flange for sour gas service	In accordance with API Spec 17D 3 <sup>rd</sup> edition
Hydrostatic Testing	In accordance with API Spec 16C 3 <sup>rd</sup> edition
product Marking	In accordance with API Spec 16C 3 <sup>rd</sup> edition
Inspection conclusion	The inspected items meet standard requirements of API Spec 16C 3 <sup>rd</sup> edition
Remarks	

Approver	Jane C	Auditor	Alice D	Inspector	Leo W
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LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

 LETONE

## Co-Flex Hose Certification

**POWERTRACK**

## HYDROSTATIC TESTING REPORT

LTTY/QR-5.7.1-28

№: 240220001

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3 <sup>rd</sup> edition
Product Specification	3"×10000psi×11.08ft (3.38m)	Serial Number	7660215
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
Inspection Department	Q.C. Department	Inspection Date	2024.02.20

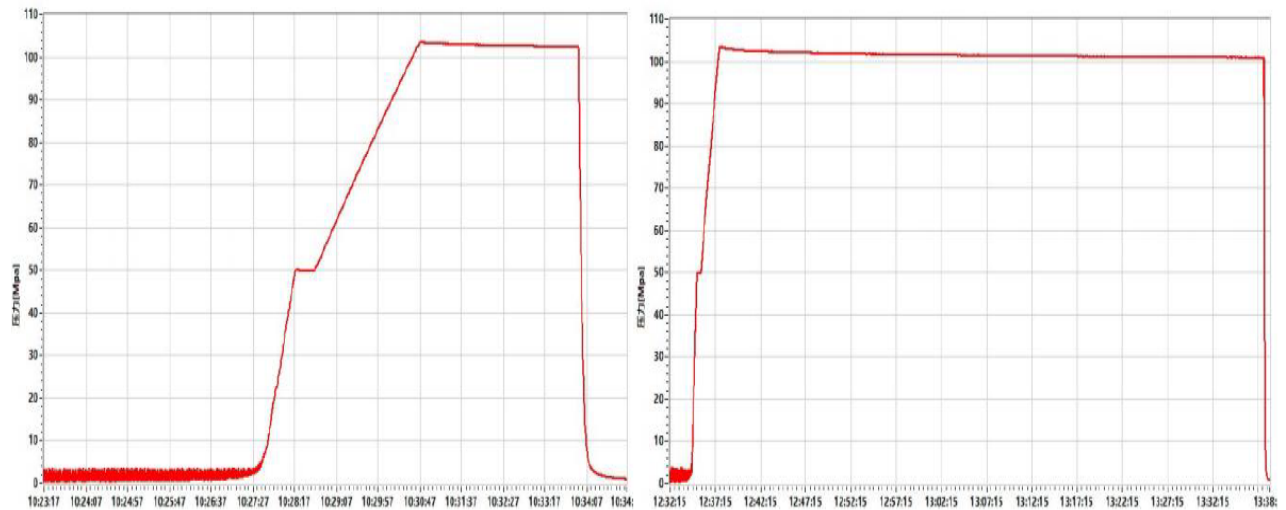
## Rate of length change


Standard requirements	At working pressure ,the rate of length change should not more than 65 mm (2½ in.)+ 0.01 L
Testing result	10000psi (69.0MPa) ,length change 7mm

## Hydrostatic testing

Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leaks.
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage

Graph of pressure testing:



Conclusion	The inspected items meet standard requirements of API Spec 16C 3 <sup>rd</sup> edition				
Approver	Jane C	Auditor	Alice D	Inspector	Leo W
LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD					

Co-Flex Hose Certification



HYDROSTATIC TESTING REPORT

LTTY/QR-5.7.1-28

No: 240220002

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3 <sup>rd</sup> edition
Product Specification	3"×10000psi×11.08ft (3.38m)	Serial Number	7660216
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
Inspection Department	Q.C. Department	Inspection Date	2024.02.19

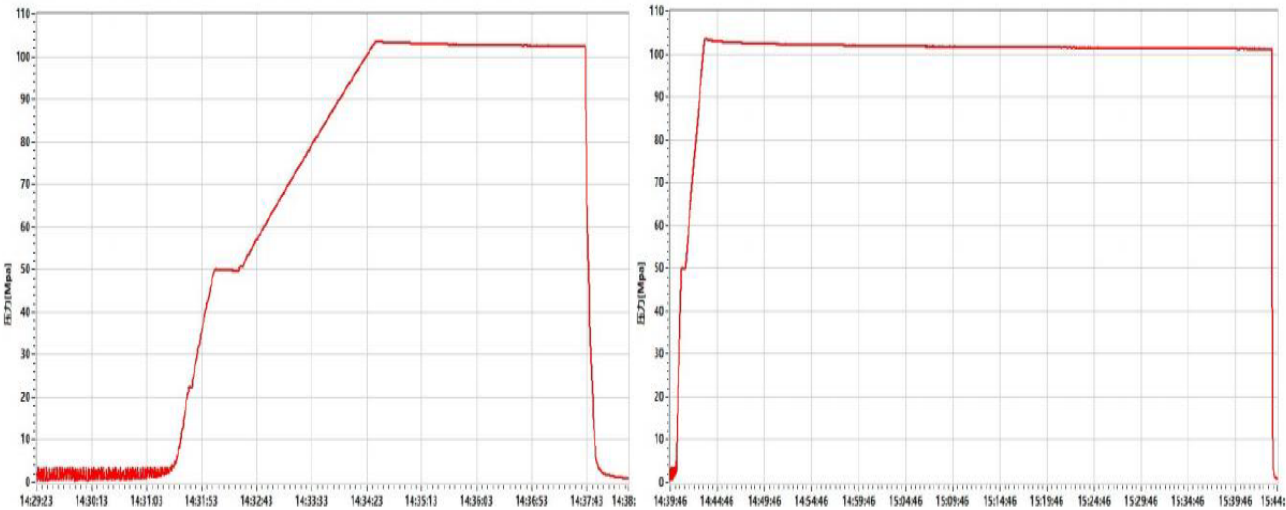
Rate of length change

Standard requirements	At working pressure ,the rate of length change should not more than65 mm (2½ in.)+ 0.01 L
Testing result	10000psi (69.0MPa) ,length change 8mm

Hydrostatic testing

Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leaks.
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage

Graph of pressure testing:



Conclusion	The inspected items meet standard requirements of API Spec 16C 3 <sup>rd</sup> edition				
Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD



Co-Flex Hose Certification



CERTIFICATE OF CONFORMANCE

№:LT240220003

Product Name: Choke And Kill Hose  
Product Specification: 3"×10000psi×11.08ft (3.38m)  
Serial Number: 7660215、7660216  
End Connections: 4-1/16"×10000psi Integral flange for sour gas service

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD.in Feb, 2024, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3<sup>rd</sup> edition on Feb 20, 2024. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3<sup>rd</sup> edition .

QC Manager:

Jane C

Date:Feb 20, 2024

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD





## Modified BOP Testing Procedure for Batch Drilling

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**

**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3057'**

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

### Justification

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

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



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

## Modified BOP Testing Procedure for Batch Drilling

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

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

### Procedure

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

## Modified BOP Testing Procedure for Batch Drilling

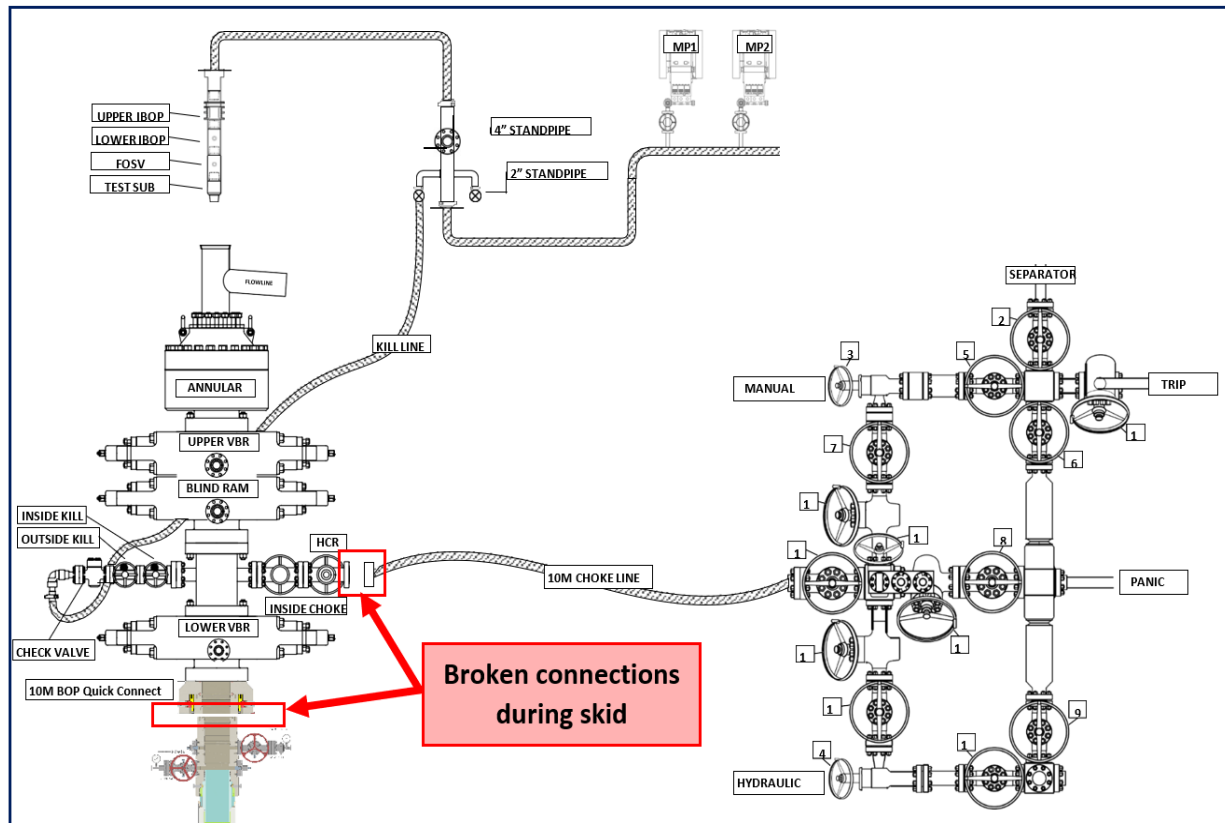


Figure 3: Shows which connections are broken during the skidding process

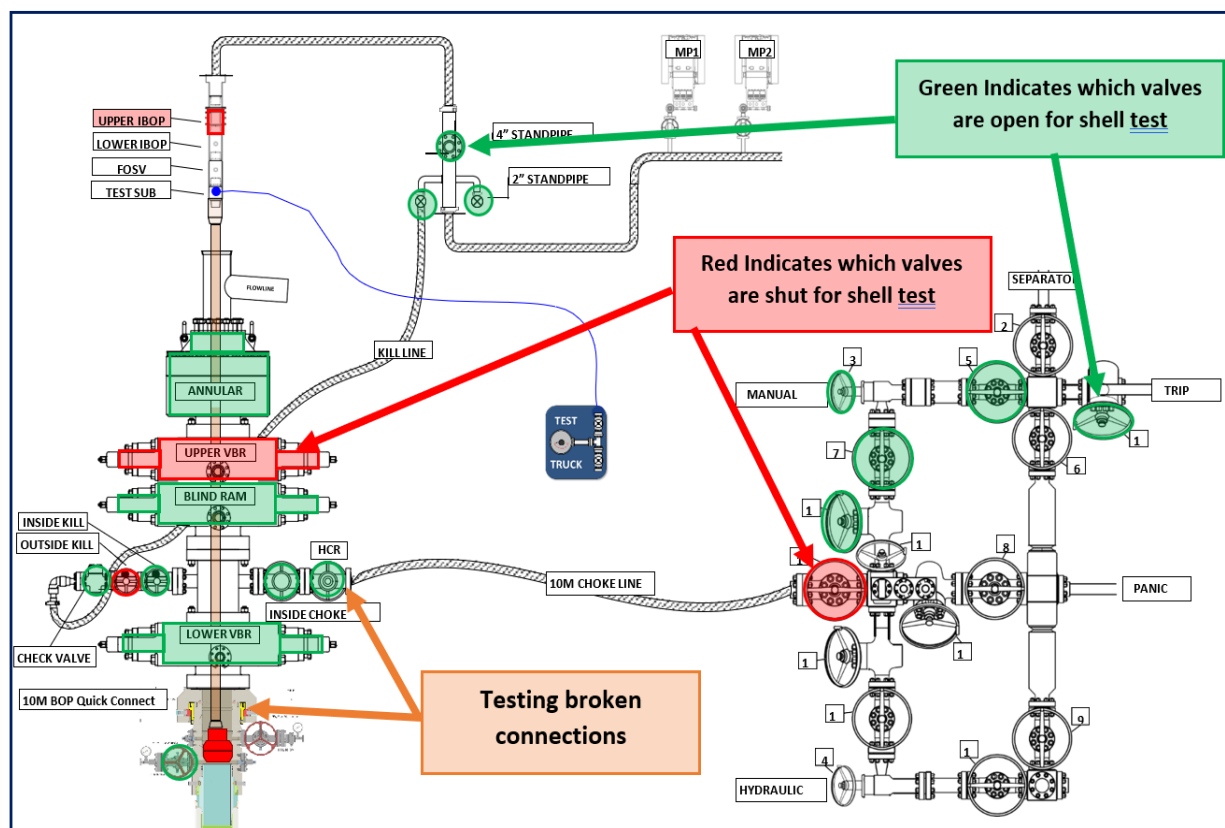


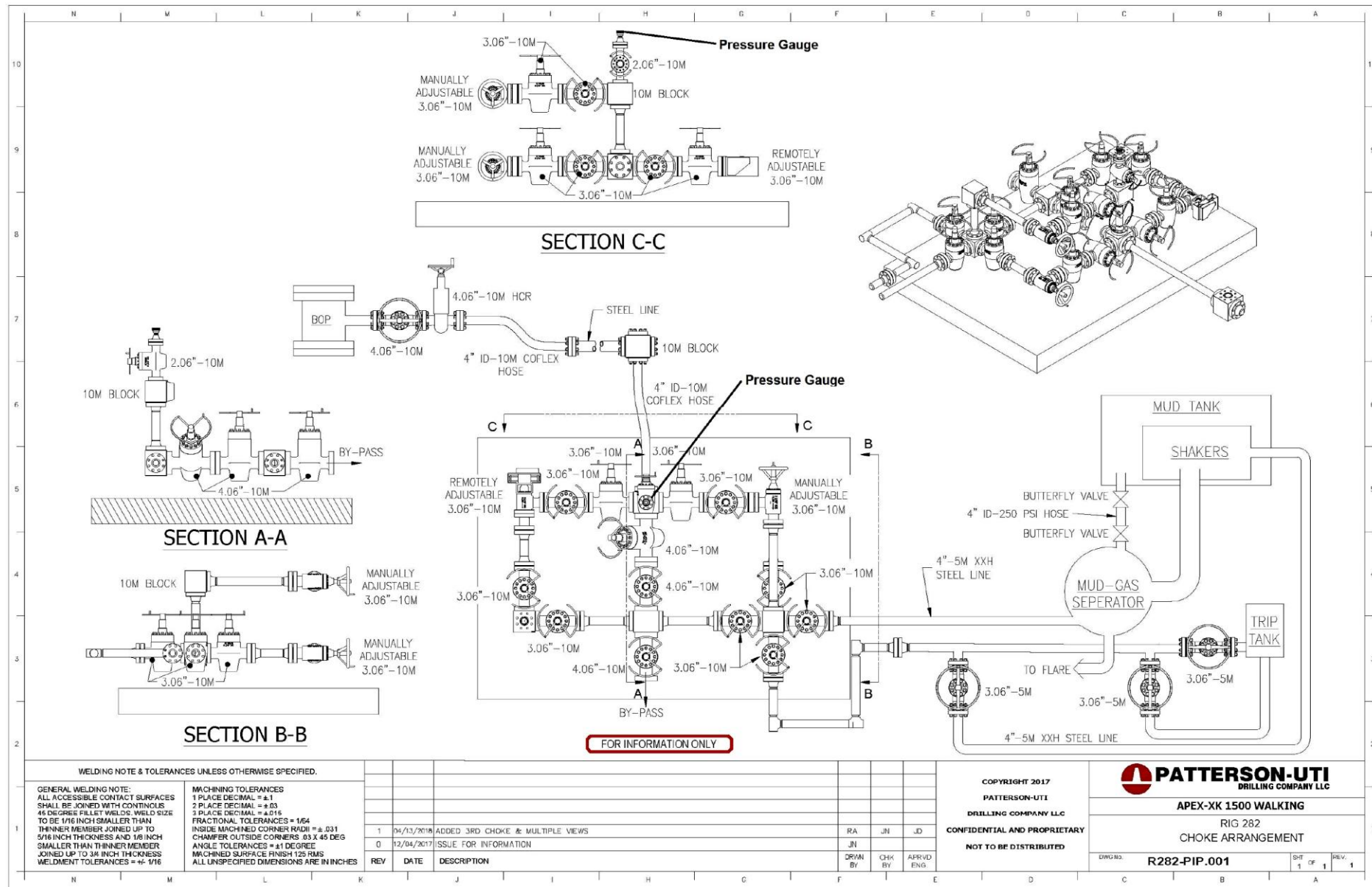
Figure 4: Shows which valves are shut/open for the shell test, testing both broken connections



# 10M Choke Manifold Arrangement

Dogwood 25 36 20 Fed Com 113H  
SHL: 170' FSL & 1610' FWL Section 20

Township/Range: 25S 36E  
Elevation Above Sea Level: 3057'



**Casing Table Specification Sheet - Design A****Dogwood 25 36 20 Fed Com 113H****SHL: 170' FSL & 1610' FWL Section 20****BHL: 110' FNL & 1654' FWL Section 17****Township/Range: 25S 36E****Elevation Above Sea Level: 3057**

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 - 1197	0 - 1197	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25 by 9.875	0 - 8825	0 - 8787	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 20165	0 - 9510	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

## Well Control Plan for 10M MASP Section of Wellbore

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**

**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3057'**

### Component and Preventer Compatibility Table:

The table below covers the drilling and casing of the 10M MASP portion of the well and outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Component	OD	Preventer	Rated Working Pressure
Drill Pipe	4.5"	Lower 3.5-5.5" VBR Upper 3.5-5.5" VBR	10M
HWDP	4.5"		
Jars/Agitator	4.75-5"		
Drill Collars and MWD Tools	4.75-5"		
Mud Motor	4.75-5.5"		
ALL	4.75-5.5"	Annular	5M
Open-Hole	-	Blind Rams	10M

VBR - Variable Bore Ram with compatible ranger listed in chart

HWDP = Heavy Weight Drill Pipe

MWD = Measurement While Drilling

### Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the Bottom Hole Assembly (BHA) through the Blowout Preventers (BOP). The maximum pressure at which well control is transferred from the annular to another compatible ram is 3,000 psi.

#### General Procedure While Drilling

1. Sound Alarm (alert crew)
2. Space out drill string
3. Shut down pumps and stop rotary
4. Shut-in well with the annular preventer (The Hydraulic Control Remote (HCR) valve and choke will already be in the closed position)
5. Confirm shut-in
6. Notify tool pusher and company representative
7. Read and record the following:
  - SIDPP and SICP
  - Pit Gain
  - Time of Shut in
8. Regroup and identify forward plan
9. If pressure has increased or is anticipated to increase above 3,000 psi, confirm spacing and close the upper pipe rams

#### General Procedure While Tripping

1. Sound Alarm (alert crew)
2. Stab full opening safety valve and close
3. Space out drill string
4. Shut-in well with the annular preventer (The HCR valve and choke will already be in the closed position)
5. Confirm shut-in
6. Notify tool pusher and company representative
7. Read and record the following:
  - SIDPP and SICP
  - Pit Gain

## Well Control Plan for 10M MASP Section of Wellbore

- Time of Shut in
- 8. Regroup and identify forward plan
- 9. If pressure has increased or is anticipated to increase above 3,000 psi, confirm spacing and close the upper pipe rams

### General Procedure While Running Casing

1. Sound Alarm (alert crew)
2. Stab crossover and full opening safety valve and close
3. Space out string
4. Shut-in well with the annular preventer (The HCR valve and choke will already be in the closed position)
5. Confirm shut-in
6. Notify tool pusher and company representative
7. Read and record the following:
  - SIDPP and SICP
  - Pit Gain
  - Time of Shut in
8. Regroup and identify forward plan
9. If pressure has increased or is anticipated to increase above 3,000 psi, confirm spacing and close the upper pipe rams

### General Procedure with No Pipe In Hole

1. At any point when the BOP stack is clear of pipe or BHA, the well will be shut in with blind rams, the HCR valve will be open, and choke will be closed. If pressure increase is observed:
2. Sound alarm (alert crew)
3. Confirm shut-in
4. Notify tool pusher and company representative
5. Read and record the following:
  - ICP
  - Time of Shut in
6. Regroup and identify forward plan

### General Procedure While Pulling BHA through Stack

1. Prior to pulling last joint/stand of drill pipe through the stack, perform flow check. If flowing:
  - a. Sound Alarm (alert crew)
  - b. Stab full opening safety valve and close
  - c. Space out drill string
  - d. Shut-in well with the annular preventer (The HCR valve and choke will already be in the closed position)
  - e. Confirm shut-in
  - f. Notify tool pusher and company representative
  - g. Read and record the following:
    - SIDPP and SICP
    - Pit Gain
    - Time of Shut in
  - h. Regroup and identify forward plan
  - i. If pressure has increased or is anticipated to increase above 3,000 psi, confirm spacing and close the upper pipe rams
2. With BHA in the stack and compatible ram preventer and pipe combo immediately available:
  - a. Sound Alarm (alert crew)
  - b. Stab crossover and full opening safety valve and close
  - c. Space out drill string with the upset just beneath the compatible pipe ram
  - d. Shut-in well with the annular preventer (The HCR valve and choke will already be in the closed position)
  - e. Confirm shut-in



## Well Control Plan for 10M MASP Section of Wellbore

- f. Notify tool pusher and company representative
  - g. Read and record the following:
    - SIDPP and SICP
    - Pit Gain
    - Time of Shut in
  - h. Regroup and identify forward plan
  - i. If pressure has increased or is anticipated to increase above 3,000 psi, confirm spacing and close the upper pipe rams
3. With BHA in the stack and no compatible ram preventer and pipe combo immediately available:
- a. Sound Alarm (alert crew)
  - b. If possible to pick up high enough, pull BHA clear of the stack
    - i. Follow "No Pipe in Hole" procedure above
  - c. If impossible to pick up high enough to pull string clear of the stack:
    - i. Stab crossover, make up one joint/stand of drill pipe, and full opening safety valve and close
    - ii. Space out drill string with the upset just beneath the compatible pipe ram
    - iii. Shut-in well using compatible pipe rams (The HCR valve and choke will already be in the closed position)
    - iv. Confirm shut-in
    - v. Notify tool pusher and company representative
    - vi. Read and record the following:
      - SIDPP and SICP
      - Pit Gain
      - Time of Shut in
    - vii. Regroup and identify forward plan

### Well Control Drills

Well control drills are specific to the rig equipment, personnel, and operations. Each crew will execute one drill weekly relevant to ongoing operations, but will make a reasonable attempt to vary the type of drills. The drills will be recorded in the daily drilling log.

## **Well Control Plan for 10M MASP Section of Wellbore**

## Offline Cementing - Intermediate Casing

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**

**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3057'**

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

### Cement Program

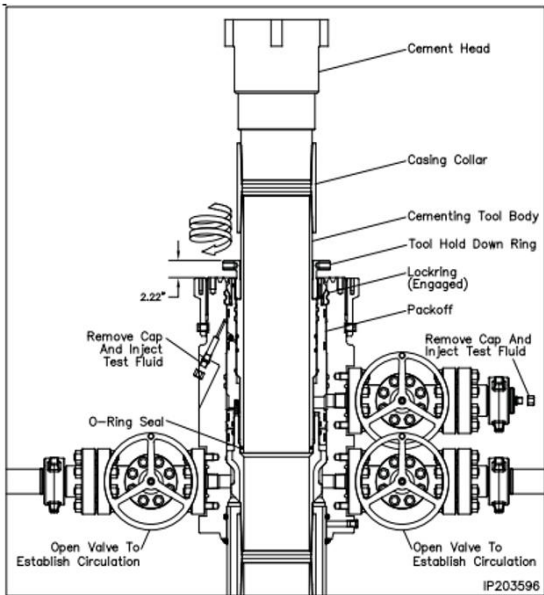
No changes to the cement program will take place for offline cementing.

### Offline Cementing Procedure

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

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

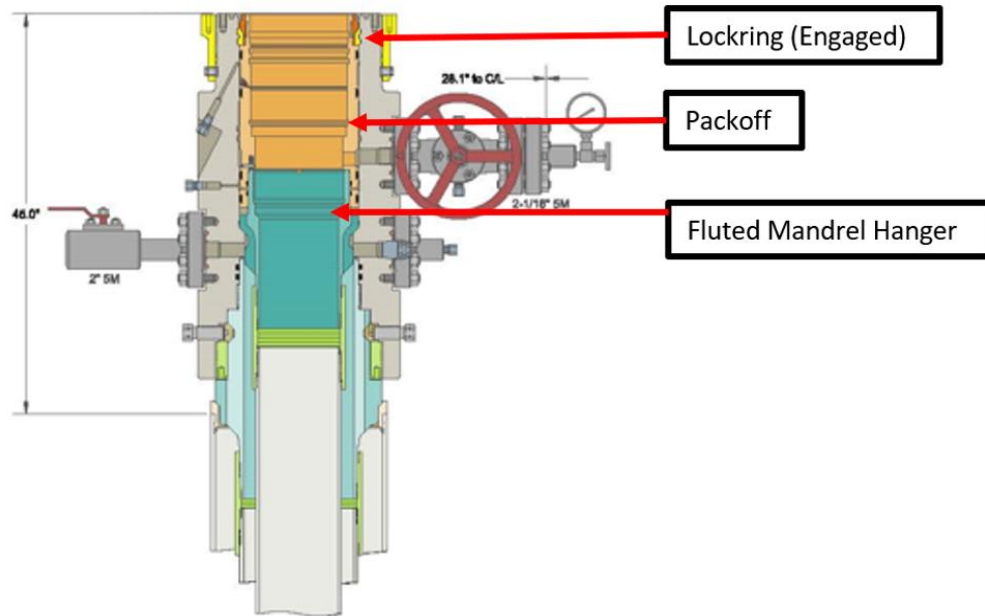
**Figure 1: Cactus Offline Cementing Tool Schematic (5M tool)**



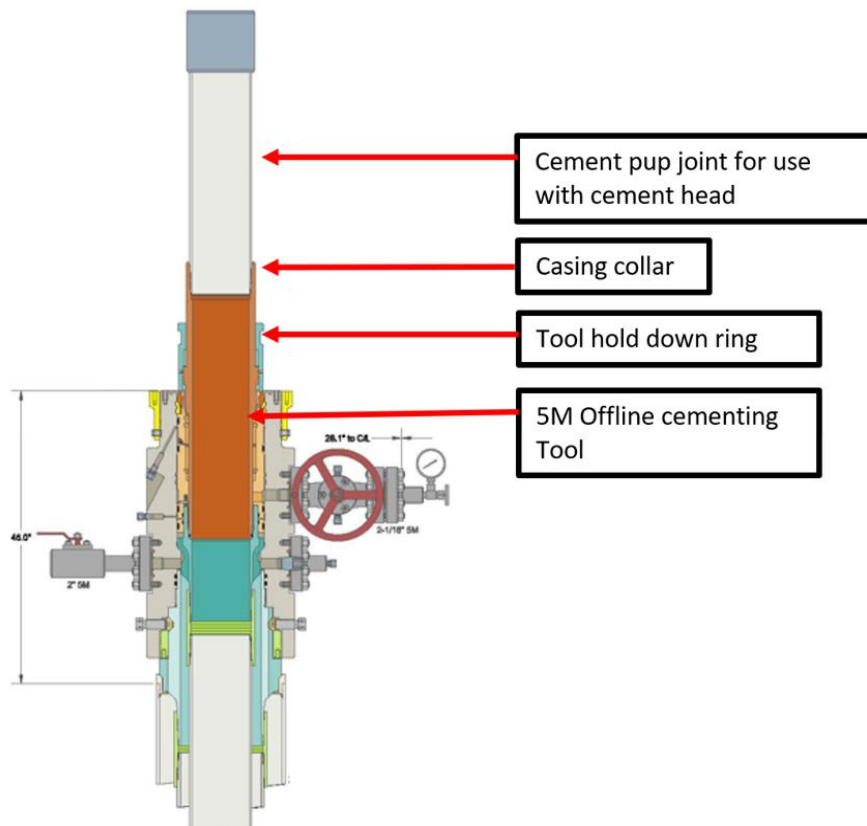
## Offline Cementing - Intermediate Casing

**Figure 2: Step-by-Step schematics procedure**

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

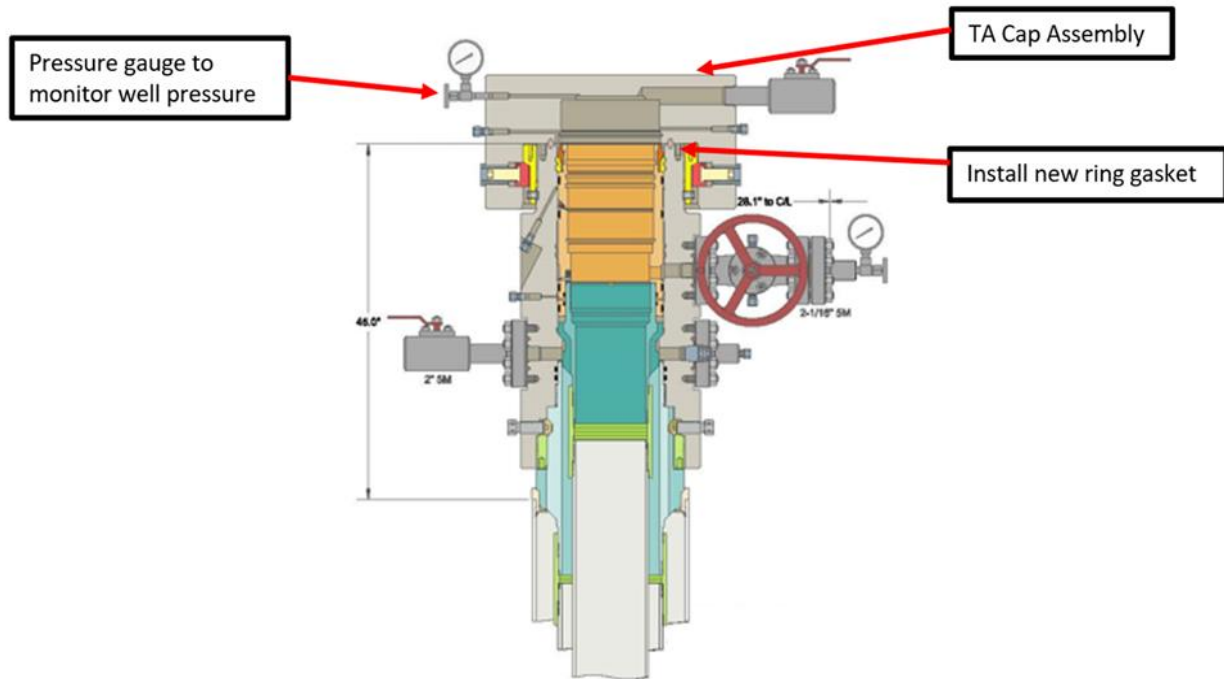


**Step 2:** Install casing hanger/packoff offline cementing tool.



## Offline Cementing - Intermediate Casing

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



# **Matador Production Company**

**Antelope Ridge**

**Dogwood**

**Dogwood 25 36 20 Fed Com #113H**

**Wellbore #1**

**BLM Plan #1**

## **Anticollision Summary Report**

**13 May, 2025**



## Anticollision Summary Report

<b>Company:</b>	Matador Production Company	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Project:</b>	Antelope Ridge	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Reference Site:</b>	Dogwood	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	BLM Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	BLM Plan #1		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD Interval 100.0usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 2,878.0 usft	<b>Error Surface:</b>	Pedal Curve
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b>	2/19/2025		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	20,165.0	BLM Plan #1 (Wellbore #1)	MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Dogwood						
Dogwood 25 36 20 Fed Com #093H - Wellbore #1 - BLM	1,500.0	1,500.0	29.9	19.6	2.908	CC
Dogwood 25 36 20 Fed Com #093H - Wellbore #1 - BLM	1,600.0	1,600.0	30.1	19.1	2.740	ES
Dogwood 25 36 20 Fed Com #093H - Wellbore #1 - BLM	1,700.0	1,700.2	31.3	19.6	2.677	SF
Dogwood 25 36 20 Fed Com #095H - Wellbore #1 - BLM	9,038.7	9,038.2	1,587.1	1,522.0	24.386	CC
Dogwood 25 36 20 Fed Com #095H - Wellbore #1 - BLM	9,200.0	9,206.1	1,587.6	1,521.6	24.036	ES
Dogwood 25 36 20 Fed Com #095H - Wellbore #1 - BLM	20,165.0	21,923.1	2,623.1	2,332.7	9.032	SF
Dogwood 25 36 20 Fed Com #104H - Wellbore #1 - BLM	1,500.0	1,500.0	42.3	32.0	4.111	CC
Dogwood 25 36 20 Fed Com #104H - Wellbore #1 - BLM	1,900.0	1,904.2	43.8	30.9	3.390	ES
Dogwood 25 36 20 Fed Com #104H - Wellbore #1 - BLM	2,800.0	2,795.2	52.7	33.2	2.704	SF
Dogwood 25 36 20 Fed Com #106H - Wellbore #1 - BLM	9,436.9	9,383.9	1,324.8	1,258.3	19.935	CC, ES
Dogwood 25 36 20 Fed Com #106H - Wellbore #1 - BLM	20,165.0	21,975.3	2,395.9	2,152.6	9.847	SF
Dogwood 25 36 20 Fed Com #114H - Wellbore #1 - BLM	1,500.0	1,499.0	1,865.2	1,854.9	181.264	CC, ES
Dogwood 25 36 20 Fed Com #114H - Wellbore #1 - BLM	20,165.0	19,967.8	2,660.6	2,308.8	7.563	SF
Dogwood 25 36 20 Fed Com #115H - Wellbore #1 - BLM	1,500.0	1,499.0	1,785.4	1,775.1	173.512	CC, ES
Dogwood 25 36 20 Fed Com #115H - Wellbore #1 - BLM	9,400.0	8,981.2	2,872.7	2,806.7	43.564	SF
Dogwood 25 36 20 Fed Com #124H - Wellbore #1 - BLM	1,779.0	1,777.0	25.3	13.2	2.089	CC
Dogwood 25 36 20 Fed Com #124H - Wellbore #1 - BLM	1,800.0	1,797.7	25.5	13.2	2.076	ES, SF
Dogwood 25 36 20 Fed Com #126H - Wellbore #1 - BLM	10,239.7	10,165.0	1,328.0	1,258.7	19.160	CC
Dogwood 25 36 20 Fed Com #126H - Wellbore #1 - BLM	20,165.0	20,083.0	1,334.4	982.4	3.791	ES, SF
Dogwood Fed Com 25 36 20 #112H - Wellbore #1 - Actu	9,431.4	9,376.4	502.0	435.1	7.503	CC, ES, SF
Offset Wells in Antelope Ridge						
West Jal B #001 - Wellbore #1 - Actual	16,932.9	9,566.2	1,663.1	1,308.8	4.694	CC, ES
West Jal B #001 - Wellbore #1 - Actual	17,000.0	9,566.2	1,664.4	1,309.1	4.685	SF
West Jal B Deep #001 - Wellbore #1 - Actual						Out of range

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

## Anticollision Summary Report

<b>Company:</b>	Matador Production Company	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Project:</b>	Antelope Ridge	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Reference Site:</b>	Dogwood	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	BLM Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

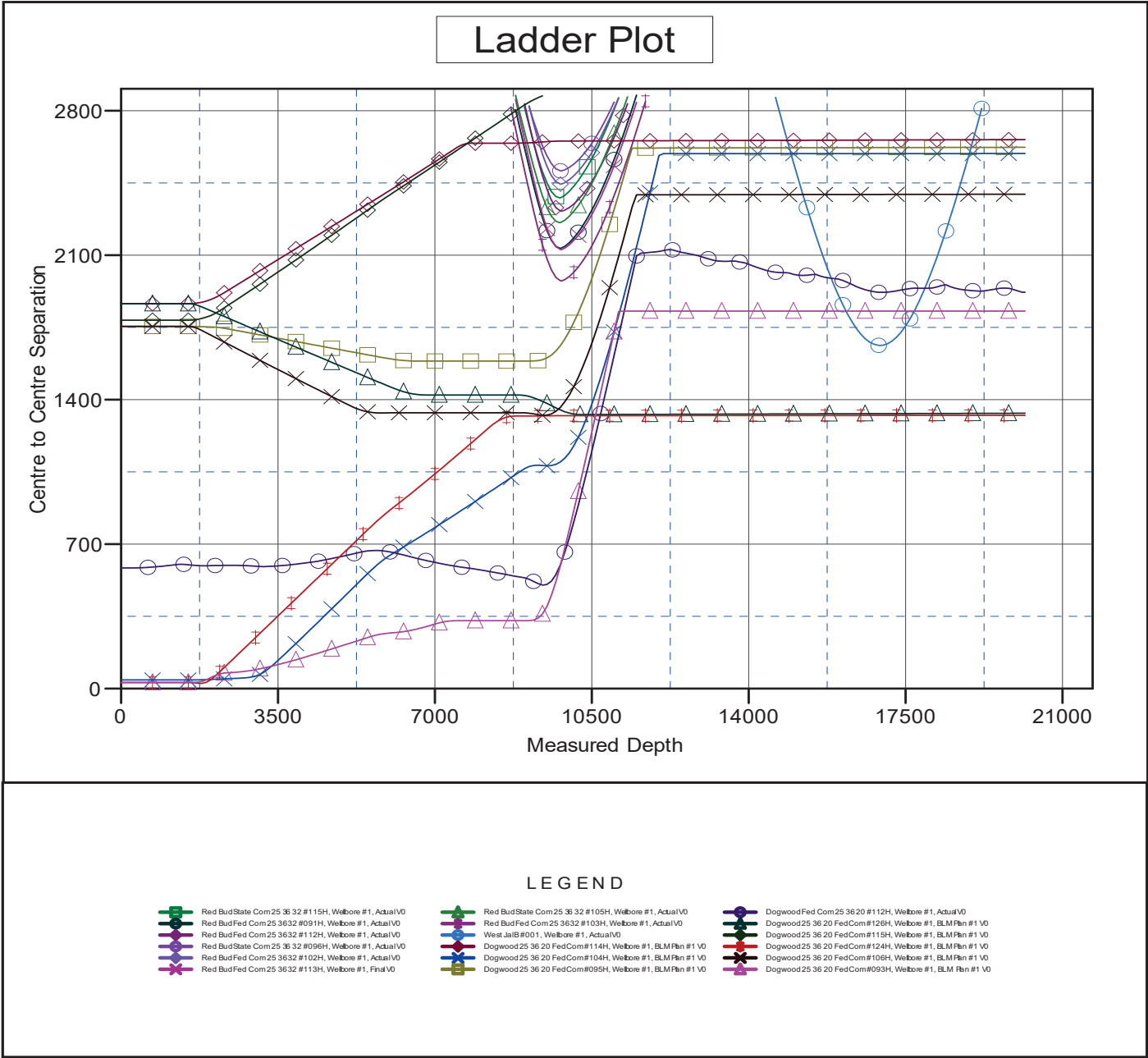
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Red Bud						
Red Bud Fed Com 25 36 32 #091H - Wellbore #1 - Actua	9,799.2	21,912.0	2,133.2	2,001.9	16.239	CC, ES, SF
Red Bud Fed Com 25 36 32 #102H - Wellbore #1 - Actua	9,815.5	22,091.4	2,444.7	2,306.1	17.641	CC, ES, SF
Red Bud Fed Com 25 36 32 #103H - Wellbore #1 - Actua	9,828.2	22,280.0	1,975.6	1,876.9	20.014	CC, ES, SF
Red Bud Fed Com 25 36 32 #112H - Wellbore #1 - Actua	9,835.9	22,254.0	2,313.5	2,200.3	20.436	CC, ES, SF
Red Bud Fed Com 25 36 32 #113H - Wellbore #1 - Final	9,819.0	22,207.0	2,127.3	2,016.6	19.231	CC, ES, SF
Red Bud State Com 25 36 32 #087H - Wellbore #1 - Actu						Out of range
Red Bud State Com 25 36 32 #096H - Wellbore #1 - Actu	9,800.0	21,797.0	2,509.0	2,335.0	14.420	SF
Red Bud State Com 25 36 32 #096H - Wellbore #1 - Actu	9,820.0	21,797.0	2,508.8	2,334.9	14.424	CC, ES
Red Bud State Com 25 36 32 #098H - Wellbore #1 - Actu						Out of range
Red Bud State Com 25 36 32 #105H - Wellbore #1 - Actu	9,785.9	21,597.0	2,258.2	2,115.0	15.776	CC, ES, SF
Red Bud State Com 25 36 32 #107H - Wellbore #1 - Actu						Out of range
Red Bud State Com 25 36 32 #115H - Wellbore #1 - Actu	9,783.8	21,668.0	2,377.9	2,240.7	17.330	CC, ES, SF
Red Bud State Com 25 36 32 #118H - Wellbore #1 - Actu						Out of range

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Summary Report

Company:	Matador Production Company	Local Co-ordinate Reference:	Well Dogwood 25 36 20 Fed Com #113H
Project:	Antelope Ridge	TVD Reference:	KB @ 3085.5usft
Reference Site:	Dogwood	MD Reference:	KB @ 3085.5usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	Dogwood 25 36 20 Fed Com #113H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	BLM Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3085.5usft	Coordinates are relative to: Dogwood 25 36 20 Fed Com #113H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Central Meridian is 104° 20' 0.000 W	Grid Convergence at Surface is: 0.55°



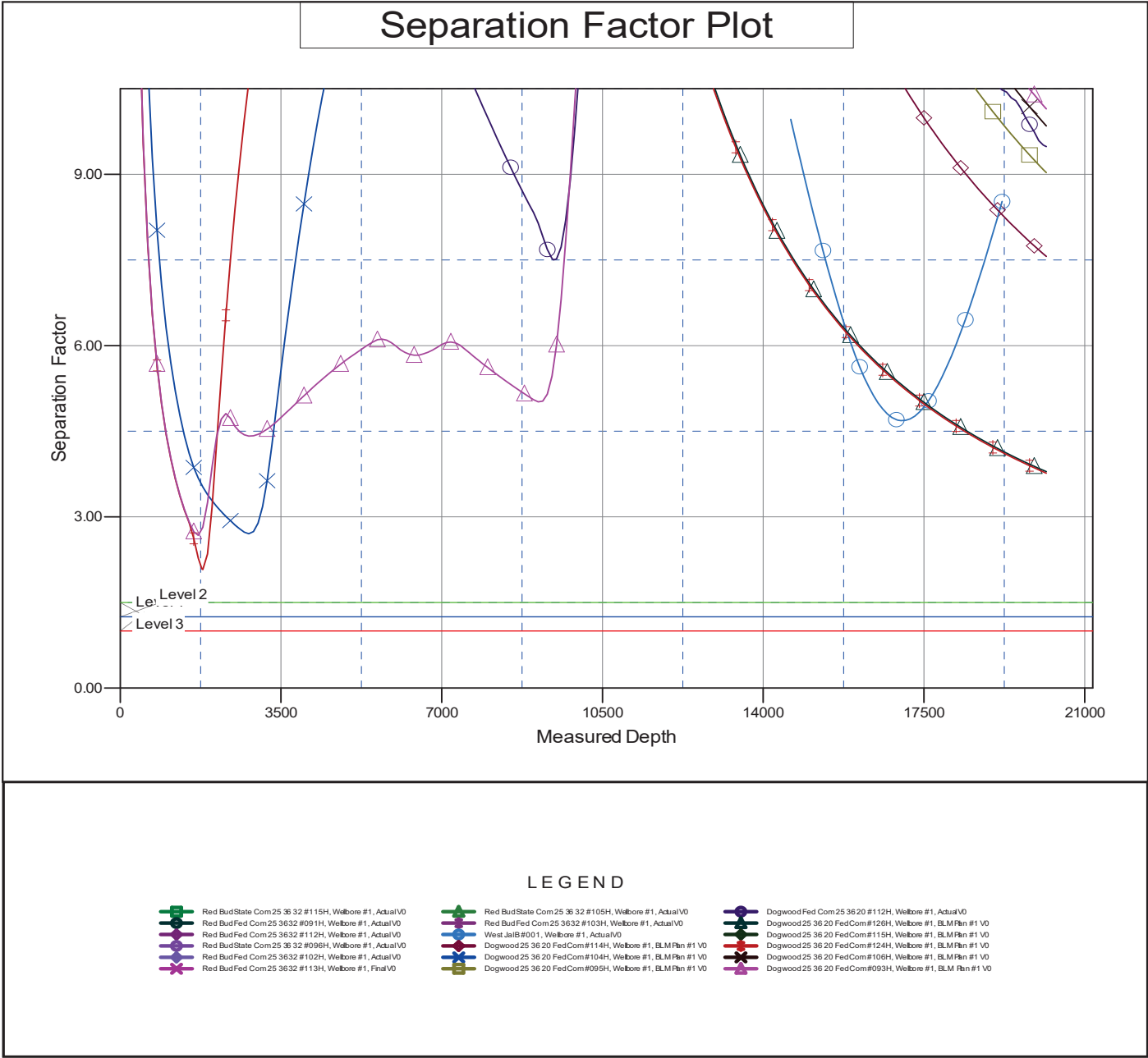
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Summary Report

<b>Company:</b>	Matador Production Company	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Project:</b>	Antelope Ridge	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Reference Site:</b>	Dogwood	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	Grid
<b>Reference Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.14 Single User Db
<b>Reference Design:</b>	BLM Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KB @ 3085.5usft  
Offset Depths are relative to Offset Datum  
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: Dogwood 25 36 20 Fed Com #113H  
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30  
Grid Convergence at Surface is: 0.55°



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

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**  
**BHL: 110' FNL & 1654' FWL Section 17**  
**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3057**

**Drilling Operation Plan**

Proposed Drilling Depth: 20165' MD / 9510' TVD

Type of well: Horizontal well, no pilot hole

Permitted Well Type: Oil

Geologic Name of Surface Formation: Quaternary Deposits

KOP Lat/Long (NAD83): 32.1075068 N / -103.2903498 W

TD Lat/Long (NAD83): 32.1373661 N / -103.2903511 W

**1. Estimated Tops**

Formation	MD (ft)	TVD (ft)	Thickness (ft)	Lithology	Resource
Rustler	1,172	1,172	543	Anhydrite	Barren
Salado (Top of Salt)	1,715	1,715	1,685	Salt	Barren
Lamar (Base of Salt)	3,400	3,400	1,800	Salt	Barren
Bell Canyon	5,200	5,200	700	Sandstone	Oil/Natural Gas
Cherry Canyon	5,900	5,900	1,075	Sandstone	Oil/Natural Gas
Brushy Canyon	6,975	6,975	1,293	Sandstone	Oil/Natural Gas
Bone Spring Lime	8,306	8,268	1,222	Limestone	Oil/Natural Gas
<b>KOP (ft)</b>	<b>8,975</b>	<b>8,937</b>	-	<b>Limestone</b>	<b>Oil/Natural Gas</b>
1st Bone Spring Sand	9,724	9,490	182	Sandstone	Oil/Natural Gas
<b>TD (ft)</b>	<b>20,165</b>	<b>9,510</b>	-	<b>Sandstone</b>	<b>Oil/Natural Gas</b>

**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 183

**3. Pressure Control****Equipment**

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

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

**Testing Procedure**

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

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

A third party company will test the BOPs.

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

Variance Request

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

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

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

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

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

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

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

**4. Casing & Cement**

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

String	Hole Size (in)	Set MD (ft)	Set TVD (ft)	Casing Size (in)	Wt. (lb/ft)	Grade	Joint	Collapse	Burst	Tension
Surface	17.5	0 - 1197	0 - 1197	13.375	54.5	J-55	BUTT	1.125	1.125	1.8
Intermediate 1	12.25	0 - 5250	0 - 5250	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
	9.875	5250 - 8825	5250 - 8787	7.625	29.7	P-110	BUTT	1.125	1.125	1.8
Production	6.75	0 - 20165	0 - 9510	5.5	20	P-110	Hunting TLW-SC	1.125	1.125	1.8

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

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

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

accordingly if needed

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

Variance Request

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

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

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

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

**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	540	1.72	931	13.5	50%	0	C	5% NaCl + LCM
	Tail	250	1.38	347	14.8	50%	897	C	5% NaCl + LCM
Intermediate 1 w/ DV @ 3450'	Stg 2 Tail	1390	1.78	2470	13.5	10%	0	C	5% NaCl + LCM
	Stg 1 Lead	2260	1.84	4149	12.5	35%	0	C	5% NaCl + LCM
	Stg 1 Tail	230	1.33	311	13.2	35%	7825	C	5% NaCl + LCM
Production	Tail	890	1.35	1203	13.2	25%	8625	A/C	Fluid Loss + Dispersant + Retarder

**5. Mud Program**

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

Hole Section	Hole Size (in)	Mud Type	Interval MD (ft)	Density (lb/gal)	Viscosity	Fluid Loss
Surface	17.5	Spud Mud	0 - 1197	8.6 - 9	28-30	NC
Intermediate 1	12.25 & 9.875	Diesel Brine Emulsion	1197 - 8825	9.2 - 10	28-30	NC
Production	6.75	OBM/Cut Brine	8825 - 20165	9.6 - 10.5	50-65	<20



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

**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 5192 psi. Maximum anticipated surface pressure is 3100 psi. Expected bottom hole temperature is 160 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.

# **Matador Production Company**

**Antelope Ridge**

**Dogwood**

**Dogwood 25 36 20 Fed Com #113H**

**Wellbore #1**

**Plan: BLM Plan #1**

## **Standard Planning Report**

**13 May, 2025**

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dogwood 25 36 20 Fed Com #113H
Company:	Matador Production Company	TVD Reference:	KB @ 3085.5usft
Project:	Antelope Ridge	MD Reference:	KB @ 3085.5usft
Site:	Dogwood	North Reference:	Grid
Well:	Dogwood 25 36 20 Fed Com #113H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Project	Antelope Ridge		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Dogwood					
Site Position:		Northing:	404,908.33 usft	Latitude:	32° 6' 31.909 N	
From:	Lat/Long	Easting:	824,831.39 usft	Longitude:	103° 17' 3.323 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.56 °

Well	Dogwood 25 36 20 Fed Com #113H					
Well Position	+N/-S	12.6 usft	Northing:	404,920.93 usft	Latitude:	32° 6' 32.205 N
	+E/-W	-1,785.4 usft	Easting:	823,046.00 usft	Longitude:	103° 17' 24.077 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,057.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/15/2024	6.00	59.90	47,139.66684842

Design	BLM Plan #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.44

Plan Survey Tool Program		Date	2/19/2025		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	20,165.0	BLM Plan #1 (Wellbore #1)	MWD	
				OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.0	8.00	175.28	1,898.7	-27.8	2.3	2.00	2.00	0.00	175.28	
5,534.5	8.00	175.28	5,497.8	-531.9	43.9	0.00	0.00	0.00	0.00	
6,067.8	0.00	0.00	6,029.4	-568.9	47.0	1.50	-1.50	0.00	180.00	
8,975.4	0.00	0.00	8,937.0	-568.9	47.0	0.00	0.00	0.00	0.00	KOP - Dogwood 25 36
9,875.4	90.00	359.44	9,510.0	4.0	41.4	10.00	10.00	0.00	359.44	
20,165.0	90.00	359.44	9,510.0	10,293.1	-59.2	0.00	0.00	0.00	0.00	BHL - Dogwood 25 36

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Company:</b>	Matador Production Company	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Project:</b>	Antelope Ridge	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site:</b>	Dogwood	<b>North Reference:</b>	Grid
<b>Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,172.0	0.00	0.00	1,172.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Rustler</b>									
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Start Build 2.00</b>									
1,600.0	2.00	175.28	1,600.0	-1.7	0.1	-1.7	2.00	2.00	0.00
1,700.0	4.00	175.28	1,699.8	-7.0	0.6	-7.0	2.00	2.00	0.00
1,715.2	4.30	175.28	1,715.0	-8.1	0.7	-8.1	2.00	2.00	0.00
<b>Salado</b>									
1,800.0	6.00	175.28	1,799.5	-15.6	1.3	-15.7	2.00	2.00	0.00
1,900.0	8.00	175.28	1,898.7	-27.8	2.3	-27.8	2.00	2.00	0.00
<b>Start 3634.5 hold at 1900.0 MD</b>									
2,000.0	8.00	175.28	1,997.7	-41.7	3.4	-41.7	0.00	0.00	0.00
2,100.0	8.00	175.28	2,096.8	-55.5	4.6	-55.6	0.00	0.00	0.00
2,200.0	8.00	175.28	2,195.8	-69.4	5.7	-69.4	0.00	0.00	0.00
2,300.0	8.00	175.28	2,294.8	-83.3	6.9	-83.3	0.00	0.00	0.00
2,400.0	8.00	175.28	2,393.8	-97.1	8.0	-97.2	0.00	0.00	0.00
2,500.0	8.00	175.28	2,492.9	-111.0	9.2	-111.1	0.00	0.00	0.00
2,600.0	8.00	175.28	2,591.9	-124.9	10.3	-125.0	0.00	0.00	0.00
2,700.0	8.00	175.28	2,690.9	-138.7	11.5	-138.9	0.00	0.00	0.00
2,800.0	8.00	175.28	2,789.9	-152.6	12.6	-152.7	0.00	0.00	0.00
2,900.0	8.00	175.28	2,889.0	-166.5	13.8	-166.6	0.00	0.00	0.00
3,000.0	8.00	175.28	2,988.0	-180.4	14.9	-180.5	0.00	0.00	0.00
3,100.0	8.00	175.28	3,087.0	-194.2	16.0	-194.4	0.00	0.00	0.00
3,200.0	8.00	175.28	3,186.1	-208.1	17.2	-208.3	0.00	0.00	0.00
3,300.0	8.00	175.28	3,285.1	-222.0	18.3	-222.1	0.00	0.00	0.00
3,400.0	8.00	175.28	3,384.1	-235.8	19.5	-236.0	0.00	0.00	0.00
3,416.1	8.00	175.28	3,400.0	-238.1	19.7	-238.2	0.00	0.00	0.00
<b>Base Salt/ Tansill</b>									
3,500.0	8.00	175.28	3,483.1	-249.7	20.6	-249.9	0.00	0.00	0.00
3,600.0	8.00	175.28	3,582.2	-263.6	21.8	-263.8	0.00	0.00	0.00
3,700.0	8.00	175.28	3,681.2	-277.4	22.9	-277.7	0.00	0.00	0.00
3,800.0	8.00	175.28	3,780.2	-291.3	24.1	-291.5	0.00	0.00	0.00
3,847.2	8.00	175.28	3,827.0	-297.9	24.6	-298.1	0.00	0.00	0.00
<b>Capitan</b>									
3,900.0	8.00	175.28	3,879.2	-305.2	25.2	-305.4	0.00	0.00	0.00
4,000.0	8.00	175.28	3,978.3	-319.1	26.4	-319.3	0.00	0.00	0.00
4,100.0	8.00	175.28	4,077.3	-332.9	27.5	-333.2	0.00	0.00	0.00
4,200.0	8.00	175.28	4,176.3	-346.8	28.6	-347.1	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Company:</b>	Matador Production Company	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Project:</b>	Antelope Ridge	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site:</b>	Dogwood	<b>North Reference:</b>	Grid
<b>Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,300.0	8.00	175.28	4,275.3	-360.7	29.8	-360.9	0.00	0.00	0.00
4,400.0	8.00	175.28	4,374.4	-374.5	30.9	-374.8	0.00	0.00	0.00
4,500.0	8.00	175.28	4,473.4	-388.4	32.1	-388.7	0.00	0.00	0.00
4,600.0	8.00	175.28	4,572.4	-402.3	33.2	-402.6	0.00	0.00	0.00
4,700.0	8.00	175.28	4,671.5	-416.1	34.4	-416.5	0.00	0.00	0.00
4,800.0	8.00	175.28	4,770.5	-430.0	35.5	-430.3	0.00	0.00	0.00
4,900.0	8.00	175.28	4,869.5	-443.9	36.7	-444.2	0.00	0.00	0.00
5,000.0	8.00	175.28	4,968.5	-457.8	37.8	-458.1	0.00	0.00	0.00
5,100.0	8.00	175.28	5,067.6	-471.6	39.0	-472.0	0.00	0.00	0.00
5,200.0	8.00	175.28	5,166.6	-485.5	40.1	-485.9	0.00	0.00	0.00
5,233.7	8.00	175.28	5,200.0	-490.2	40.5	-490.5	0.00	0.00	0.00
G26: Bell Cyn.									
5,300.0	8.00	175.28	5,265.6	-499.4	41.3	-499.7	0.00	0.00	0.00
5,400.0	8.00	175.28	5,364.6	-513.2	42.4	-513.6	0.00	0.00	0.00
5,500.0	8.00	175.28	5,463.7	-527.1	43.5	-527.5	0.00	0.00	0.00
5,534.5	8.00	175.28	5,497.8	-531.9	43.9	-532.3	0.00	0.00	0.00
Start Drop -1.50									
5,600.0	7.02	175.28	5,562.8	-540.4	44.6	-540.8	1.50	-1.50	0.00
5,700.0	5.52	175.28	5,662.2	-551.3	45.5	-551.7	1.50	-1.50	0.00
5,800.0	4.02	175.28	5,761.8	-559.6	46.2	-560.0	1.50	-1.50	0.00
5,900.0	2.52	175.28	5,861.7	-565.3	46.7	-565.7	1.50	-1.50	0.00
5,938.4	1.94	175.28	5,900.0	-566.8	46.8	-567.2	1.50	-1.50	0.00
G13: Cherry Cyn.									
6,000.0	1.02	175.28	5,961.6	-568.3	46.9	-568.8	1.50	-1.50	0.00
6,067.8	0.00	0.00	6,029.4	-568.9	47.0	-569.4	1.50	-1.50	0.00
Start 2907.6 hold at 6067.8 MD									
6,100.0	0.00	0.00	6,061.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,200.0	0.00	0.00	6,161.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,300.0	0.00	0.00	6,261.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,400.0	0.00	0.00	6,361.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,500.0	0.00	0.00	6,461.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,600.0	0.00	0.00	6,561.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,700.0	0.00	0.00	6,661.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,800.0	0.00	0.00	6,761.6	-568.9	47.0	-569.4	0.00	0.00	0.00
6,900.0	0.00	0.00	6,861.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,961.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,013.4	0.00	0.00	6,975.0	-568.9	47.0	-569.4	0.00	0.00	0.00
G7: Brushy Cyn.									
7,100.0	0.00	0.00	7,061.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,200.0	0.00	0.00	7,161.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,300.0	0.00	0.00	7,261.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,361.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,500.0	0.00	0.00	7,461.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,600.0	0.00	0.00	7,561.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,700.0	0.00	0.00	7,661.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,761.6	-568.9	47.0	-569.4	0.00	0.00	0.00
7,900.0	0.00	0.00	7,861.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,000.0	0.00	0.00	7,961.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,100.0	0.00	0.00	8,061.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,200.0	0.00	0.00	8,161.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,300.0	0.00	0.00	8,261.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,306.4	0.00	0.00	8,268.0	-568.9	47.0	-569.4	0.00	0.00	0.00
G4: BSGL (CS9)									

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Company:</b>	Matador Production Company	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Project:</b>	Antelope Ridge	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site:</b>	Dogwood	<b>North Reference:</b>	Grid
<b>Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,400.0	0.00	0.00	8,361.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,500.0	0.00	0.00	8,461.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,600.0	0.00	0.00	8,561.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,700.0	0.00	0.00	8,661.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,800.0	0.00	0.00	8,761.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,846.4	0.00	0.00	8,808.0	-568.9	47.0	-569.4	0.00	0.00	0.00
<b>L6.3: Avalon Carb</b>									
8,900.0	0.00	0.00	8,861.6	-568.9	47.0	-569.4	0.00	0.00	0.00
8,975.4	0.00	0.00	8,937.0	-568.9	47.0	-569.4	0.00	0.00	0.00
<b>Start Build 10.00 - KOP - Dogwood 25 36 20 Fed Com #113H</b>									
9,000.0	2.46	359.44	8,961.6	-568.4	47.0	-568.8	10.00	10.00	0.00
9,100.0	12.46	359.44	9,060.6	-555.4	46.9	-555.9	10.00	10.00	0.00
9,200.0	22.46	359.44	9,155.9	-525.5	46.6	-525.9	10.00	10.00	0.00
9,300.0	32.46	359.44	9,244.5	-479.4	46.1	-479.9	10.00	10.00	0.00
9,400.0	42.46	359.44	9,323.8	-418.7	45.5	-419.1	10.00	10.00	0.00
9,500.0	52.46	359.44	9,391.3	-345.1	44.8	-345.5	10.00	10.00	0.00
9,600.0	62.46	359.44	9,445.0	-260.9	44.0	-261.3	10.00	10.00	0.00
9,700.0	72.46	359.44	9,483.3	-168.7	43.1	-169.1	10.00	10.00	0.00
9,723.7	74.83	359.44	9,490.0	-145.9	42.9	-146.3	10.00	10.00	0.00
<b>L5.1: FBSSG</b>									
9,800.0	82.46	359.44	9,505.0	-71.2	42.1	-71.6	10.00	10.00	0.00
9,801.2	82.58	359.44	9,505.2	-70.0	42.1	-70.4	10.00	10.00	0.00
<b>FPP - Dogwood 25 36 20 Fed Com #113H</b>									
9,875.4	90.00	359.44	9,510.0	4.0	41.4	3.6	10.00	10.00	0.00
<b>Start 10289.6 hold at 9875.4 MD</b>									
9,900.0	90.00	359.44	9,510.0	28.6	41.2	28.2	0.00	0.00	0.00
10,000.0	90.00	359.44	9,510.0	128.6	40.2	128.2	0.00	0.00	0.00
10,100.0	90.00	359.44	9,510.0	228.6	39.2	228.2	0.00	0.00	0.00
10,200.0	90.00	359.44	9,510.0	328.6	38.2	328.2	0.00	0.00	0.00
10,300.0	90.00	359.44	9,510.0	428.6	37.2	428.2	0.00	0.00	0.00
10,400.0	90.00	359.44	9,510.0	528.6	36.3	528.2	0.00	0.00	0.00
10,500.0	90.00	359.44	9,510.0	628.6	35.3	628.2	0.00	0.00	0.00
10,600.0	90.00	359.44	9,510.0	728.6	34.3	728.2	0.00	0.00	0.00
10,700.0	90.00	359.44	9,510.0	828.6	33.3	828.2	0.00	0.00	0.00
10,800.0	90.00	359.44	9,510.0	928.6	32.4	928.2	0.00	0.00	0.00
10,900.0	90.00	359.44	9,510.0	1,028.5	31.4	1,028.2	0.00	0.00	0.00
11,000.0	90.00	359.44	9,510.0	1,128.5	30.4	1,128.2	0.00	0.00	0.00
11,100.0	90.00	359.44	9,510.0	1,228.5	29.4	1,228.2	0.00	0.00	0.00
11,200.0	90.00	359.44	9,510.0	1,328.5	28.5	1,328.2	0.00	0.00	0.00
11,300.0	90.00	359.44	9,510.0	1,428.5	27.5	1,428.2	0.00	0.00	0.00
11,400.0	90.00	359.44	9,510.0	1,528.5	26.5	1,528.2	0.00	0.00	0.00
11,500.0	90.00	359.44	9,510.0	1,628.5	25.5	1,628.2	0.00	0.00	0.00
11,600.0	90.00	359.44	9,510.0	1,728.5	24.5	1,728.2	0.00	0.00	0.00
11,700.0	90.00	359.44	9,510.0	1,828.5	23.6	1,828.2	0.00	0.00	0.00
11,800.0	90.00	359.44	9,510.0	1,928.5	22.6	1,928.2	0.00	0.00	0.00
11,900.0	90.00	359.44	9,510.0	2,028.5	21.6	2,028.2	0.00	0.00	0.00
12,000.0	90.00	359.44	9,510.0	2,128.5	20.6	2,128.2	0.00	0.00	0.00
12,100.0	90.00	359.44	9,510.0	2,228.5	19.7	2,228.2	0.00	0.00	0.00
12,200.0	90.00	359.44	9,510.0	2,328.5	18.7	2,328.2	0.00	0.00	0.00
12,300.0	90.00	359.44	9,510.0	2,428.5	17.7	2,428.2	0.00	0.00	0.00
12,400.0	90.00	359.44	9,510.0	2,528.5	16.7	2,528.2	0.00	0.00	0.00
12,500.0	90.00	359.44	9,510.0	2,628.5	15.7	2,628.2	0.00	0.00	0.00
12,600.0	90.00	359.44	9,510.0	2,728.5	14.8	2,728.2	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Company:</b>	Matador Production Company	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Project:</b>	Antelope Ridge	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site:</b>	Dogwood	<b>North Reference:</b>	Grid
<b>Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	BLM Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,700.0	90.00	359.44	9,510.0	2,828.5	13.8	2,828.2	0.00	0.00	0.00	
12,800.0	90.00	359.44	9,510.0	2,928.5	12.8	2,928.2	0.00	0.00	0.00	
12,900.0	90.00	359.44	9,510.0	3,028.5	11.8	3,028.2	0.00	0.00	0.00	
13,000.0	90.00	359.44	9,510.0	3,128.4	10.9	3,128.2	0.00	0.00	0.00	
13,100.0	90.00	359.44	9,510.0	3,228.4	9.9	3,228.2	0.00	0.00	0.00	
13,200.0	90.00	359.44	9,510.0	3,328.4	8.9	3,328.2	0.00	0.00	0.00	
13,300.0	90.00	359.44	9,510.0	3,428.4	7.9	3,428.2	0.00	0.00	0.00	
13,400.0	90.00	359.44	9,510.0	3,528.4	6.9	3,528.2	0.00	0.00	0.00	
13,500.0	90.00	359.44	9,510.0	3,628.4	6.0	3,628.2	0.00	0.00	0.00	
13,600.0	90.00	359.44	9,510.0	3,728.4	5.0	3,728.2	0.00	0.00	0.00	
13,700.0	90.00	359.44	9,510.0	3,828.4	4.0	3,828.2	0.00	0.00	0.00	
13,800.0	90.00	359.44	9,510.0	3,928.4	3.0	3,928.2	0.00	0.00	0.00	
13,900.0	90.00	359.44	9,510.0	4,028.4	2.1	4,028.2	0.00	0.00	0.00	
14,000.0	90.00	359.44	9,510.0	4,128.4	1.1	4,128.2	0.00	0.00	0.00	
14,100.0	90.00	359.44	9,510.0	4,228.4	0.1	4,228.2	0.00	0.00	0.00	
14,200.0	90.00	359.44	9,510.0	4,328.4	-0.9	4,328.2	0.00	0.00	0.00	
14,300.0	90.00	359.44	9,510.0	4,428.4	-1.8	4,428.2	0.00	0.00	0.00	
14,400.0	90.00	359.44	9,510.0	4,528.4	-2.8	4,528.2	0.00	0.00	0.00	
14,500.0	90.00	359.44	9,510.0	4,628.4	-3.8	4,628.2	0.00	0.00	0.00	
14,600.0	90.00	359.44	9,510.0	4,728.4	-4.8	4,728.2	0.00	0.00	0.00	
14,700.0	90.00	359.44	9,510.0	4,828.4	-5.8	4,828.2	0.00	0.00	0.00	
14,800.0	90.00	359.44	9,510.0	4,928.4	-6.7	4,928.2	0.00	0.00	0.00	
14,900.0	90.00	359.44	9,510.0	5,028.4	-7.7	5,028.2	0.00	0.00	0.00	
14,978.9	90.00	359.44	9,510.0	5,107.3	-8.5	5,107.1	0.00	0.00	0.00	
BPP1 - Dogwood 25 36 20 Fed Com #113H										
15,000.0	90.00	359.44	9,510.0	5,128.4	-8.7	5,128.2	0.00	0.00	0.00	
15,100.0	90.00	359.44	9,510.0	5,228.3	-9.7	5,228.2	0.00	0.00	0.00	
15,200.0	90.00	359.44	9,510.0	5,328.3	-10.6	5,328.2	0.00	0.00	0.00	
15,300.0	90.00	359.44	9,510.0	5,428.3	-11.6	5,428.2	0.00	0.00	0.00	
15,400.0	90.00	359.44	9,510.0	5,528.3	-12.6	5,528.2	0.00	0.00	0.00	
15,500.0	90.00	359.44	9,510.0	5,628.3	-13.6	5,628.2	0.00	0.00	0.00	
15,600.0	90.00	359.44	9,510.0	5,728.3	-14.6	5,728.2	0.00	0.00	0.00	
15,700.0	90.00	359.44	9,510.0	5,828.3	-15.5	5,828.2	0.00	0.00	0.00	
15,800.0	90.00	359.44	9,510.0	5,928.3	-16.5	5,928.2	0.00	0.00	0.00	
15,900.0	90.00	359.44	9,510.0	6,028.3	-17.5	6,028.2	0.00	0.00	0.00	
16,000.0	90.00	359.44	9,510.0	6,128.3	-18.5	6,128.2	0.00	0.00	0.00	
16,100.0	90.00	359.44	9,510.0	6,228.3	-19.4	6,228.2	0.00	0.00	0.00	
16,200.0	90.00	359.44	9,510.0	6,328.3	-20.4	6,328.2	0.00	0.00	0.00	
16,300.0	90.00	359.44	9,510.0	6,428.3	-21.4	6,428.2	0.00	0.00	0.00	
16,400.0	90.00	359.44	9,510.0	6,528.3	-22.4	6,528.2	0.00	0.00	0.00	
16,500.0	90.00	359.44	9,510.0	6,628.3	-23.3	6,628.2	0.00	0.00	0.00	
16,600.0	90.00	359.44	9,510.0	6,728.3	-24.3	6,728.2	0.00	0.00	0.00	
16,700.0	90.00	359.44	9,510.0	6,828.3	-25.3	6,828.2	0.00	0.00	0.00	
16,800.0	90.00	359.44	9,510.0	6,928.3	-26.3	6,928.2	0.00	0.00	0.00	
16,900.0	90.00	359.44	9,510.0	7,028.3	-27.3	7,028.2	0.00	0.00	0.00	
17,000.0	90.00	359.44	9,510.0	7,128.3	-28.2	7,128.2	0.00	0.00	0.00	
17,100.0	90.00	359.44	9,510.0	7,228.2	-29.2	7,228.2	0.00	0.00	0.00	
17,200.0	90.00	359.44	9,510.0	7,328.2	-30.2	7,328.2	0.00	0.00	0.00	
17,300.0	90.00	359.44	9,510.0	7,428.2	-31.2	7,428.2	0.00	0.00	0.00	
17,400.0	90.00	359.44	9,510.0	7,528.2	-32.1	7,528.2	0.00	0.00	0.00	
17,500.0	90.00	359.44	9,510.0	7,628.2	-33.1	7,628.2	0.00	0.00	0.00	
17,600.0	90.00	359.44	9,510.0	7,728.2	-34.1	7,728.2	0.00	0.00	0.00	
17,700.0	90.00	359.44	9,510.0	7,828.2	-35.1	7,828.2	0.00	0.00	0.00	
17,800.0	90.00	359.44	9,510.0	7,928.2	-36.1	7,928.2	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well Dogwood 25 36 20 Fed Com #113H
Company:	Matador Production Company	TVD Reference:	KB @ 3085.5usft
Project:	Antelope Ridge	MD Reference:	KB @ 3085.5usft
Site:	Dogwood	North Reference:	Grid
Well:	Dogwood 25 36 20 Fed Com #113H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	BLM Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,900.0	90.00	359.44	9,510.0	8,028.2	-37.0	8,028.2	0.00	0.00	0.00
18,000.0	90.00	359.44	9,510.0	8,128.2	-38.0	8,128.2	0.00	0.00	0.00
18,100.0	90.00	359.44	9,510.0	8,228.2	-39.0	8,228.2	0.00	0.00	0.00
18,200.0	90.00	359.44	9,510.0	8,328.2	-40.0	8,328.2	0.00	0.00	0.00
18,300.0	90.00	359.44	9,510.0	8,428.2	-40.9	8,428.2	0.00	0.00	0.00
18,400.0	90.00	359.44	9,510.0	8,528.2	-41.9	8,528.2	0.00	0.00	0.00
18,500.0	90.00	359.44	9,510.0	8,628.2	-42.9	8,628.2	0.00	0.00	0.00
18,600.0	90.00	359.44	9,510.0	8,728.2	-43.9	8,728.2	0.00	0.00	0.00
18,700.0	90.00	359.44	9,510.0	8,828.2	-44.9	8,828.2	0.00	0.00	0.00
18,800.0	90.00	359.44	9,510.0	8,928.2	-45.8	8,928.2	0.00	0.00	0.00
18,900.0	90.00	359.44	9,510.0	9,028.2	-46.8	9,028.2	0.00	0.00	0.00
19,000.0	90.00	359.44	9,510.0	9,128.2	-47.8	9,128.2	0.00	0.00	0.00
19,100.0	90.00	359.44	9,510.0	9,228.2	-48.8	9,228.2	0.00	0.00	0.00
19,200.0	90.00	359.44	9,510.0	9,328.1	-49.7	9,328.2	0.00	0.00	0.00
19,300.0	90.00	359.44	9,510.0	9,428.1	-50.7	9,428.2	0.00	0.00	0.00
19,400.0	90.00	359.44	9,510.0	9,528.1	-51.7	9,528.2	0.00	0.00	0.00
19,500.0	90.00	359.44	9,510.0	9,628.1	-52.7	9,628.2	0.00	0.00	0.00
19,600.0	90.00	359.44	9,510.0	9,728.1	-53.6	9,728.2	0.00	0.00	0.00
19,700.0	90.00	359.44	9,510.0	9,828.1	-54.6	9,828.2	0.00	0.00	0.00
19,800.0	90.00	359.44	9,510.0	9,928.1	-55.6	9,928.2	0.00	0.00	0.00
19,900.0	90.00	359.44	9,510.0	10,028.1	-56.6	10,028.2	0.00	0.00	0.00
20,000.0	90.00	359.44	9,510.0	10,128.1	-57.6	10,128.2	0.00	0.00	0.00
20,100.0	90.00	359.44	9,510.0	10,228.1	-58.5	10,228.2	0.00	0.00	0.00
20,165.0	90.00	359.44	9,510.0	10,293.1	-59.2	10,293.1	0.00	0.00	0.00
TD at 20165.0 - BHL - Dogwood 25 36 20 Fed Com #113H									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP - Dogwood 25 36 2 - plan hits target center - Shape - Point	0.00	0.00	8,937.0	-568.9	47.0	404,352.00	823,093.00	32° 6' 26.571 N	103° 17' 23.595 W
FPP - Dogwood 25 36 2i - plan hits target center - Shape - Point	0.00	0.00	9,505.2	-70.0	42.1	404,850.93	823,088.12	32° 6' 31.509 N	103° 17' 23.595 W
BPP1 - Dogwood 25 36 - plan misses target center by 1.5usft at 14978.9usft MD (9510.0 TVD, 5107.3 N, -8.5 E) - Shape - Point	0.00	0.00	9,510.0	5,107.2	-10.0	410,028.18	823,036.00	32° 7' 22.742 N	103° 17' 23.618 W
BHL - Dogwood 25 36 2i - plan misses target center by 0.2usft at 20165.0usft MD (9510.0 TVD, 10293.1 N, -59.2 E) - Shape - Point	0.00	0.00	9,510.0	10,293.1	-59.0	415,214.00	822,987.00	32° 8' 14.060 N	103° 17' 23.604 W

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Dogwood 25 36 20 Fed Com #113H
<b>Company:</b>	Matador Production Company	<b>TVD Reference:</b>	KB @ 3085.5usft
<b>Project:</b>	Antelope Ridge	<b>MD Reference:</b>	KB @ 3085.5usft
<b>Site:</b>	Dogwood	<b>North Reference:</b>	Grid
<b>Well:</b>	Dogwood 25 36 20 Fed Com #113H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	BLM Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,172.0	1,172.0	Rustler				
1,715.2	1,715.0	Salado				
3,416.1	3,400.0	Base Salt/ Tansill				
3,847.2	3,827.0	Capitan				
5,233.7	5,200.0	G26: Bell Cyn.				
5,938.4	5,900.0	G13: Cherry Cyn.				
7,013.4	6,975.0	G7: Brushy Cyn.				
8,306.4	8,268.0	G4: BSG (CS9)				
8,846.4	8,808.0	L6.3: Avalon Carb				
9,723.7	9,490.0	L5.1: FBSG		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1,500.0	1,500.0	0.0	0.0	Start Build 2.00	
1,900.0	1,898.7	-27.8	2.3	Start 3634.5 hold at 1900.0 MD	
5,534.5	5,497.8	-531.9	43.9	Start Drop -1.50	
6,067.8	6,029.4	-568.9	47.0	Start 2907.6 hold at 6067.8 MD	
8,975.4	8,937.0	-568.9	47.0	Start Build 10.00	
9,875.4	9,510.0	4.0	41.4	Start 10289.6 hold at 9875.4 MD	
20,165.0	9,510.0	10,293.1	-59.2	TD at 20165.0	

**Casing Specs - 5.5" 20lb Hunting TLW-SC**

Dogwood 25 36 20 Fed Com 113H

Township/Range: 25S 36E

SHL: 170' FSL &amp; 1610' FWL Section 20

Elevation Above Sea Level: 3057'

**TEC-LOCK WEDGE**5.500" 20 LB/FT (.361" Wall) with 5.875" SPECIAL CLEARANCE OD  
BEN P110 CY**Pipe Body Data**

Nominal OD:	5.500	in
Nominal Wall:	.361	in
Nominal Weight:	20.00	lb/ft
Plain End Weight:	19.83	lb/ft
Material Grade:	P110 CY	
Mill/Specification:	BEN	
Yield Strength:	125,000	psi
Tensile Strength:	135,000	psi
Nominal ID:	4.778	in
API Drift Diameter:	4.653	in
Special Drift Diameter:	None	in
RBW:	87.5 %	
Body Yield:	729,000	lbf
Burst:	14,360	psi
Collapse:	13,010	psi

**Connection Data**

Standard OD:	5.875	in
Pin Bored ID:	4.778	in
Critical Section Area:	5.656	in <sup>2</sup>
Tensile Efficiency:	97 %	
Compressive Efficiency:	100 %	
Longitudinal Yield Strength:	707,000	lbf
Compressive Limit:	729,000	lbf
Internal Pressure Rating:	14,360	psi
External Pressure Rating:	13,010	psi
Maximum Bend:	101.2	°/100ft

**Operational Data**

Minimum Makeup Torque:	15,000	ft*lbf
Optimum Makeup Torque:	18,700	ft*lbf
Maximum Makeup Torque:	41,200	ft*lbf
Minimum Yield:	45,800	ft*lbf
Makeup Loss:	5.97	in

**Notes** Operational Torque is equivalent to the Maximum Make-Up Torque

Generated on Sep 03, 2019

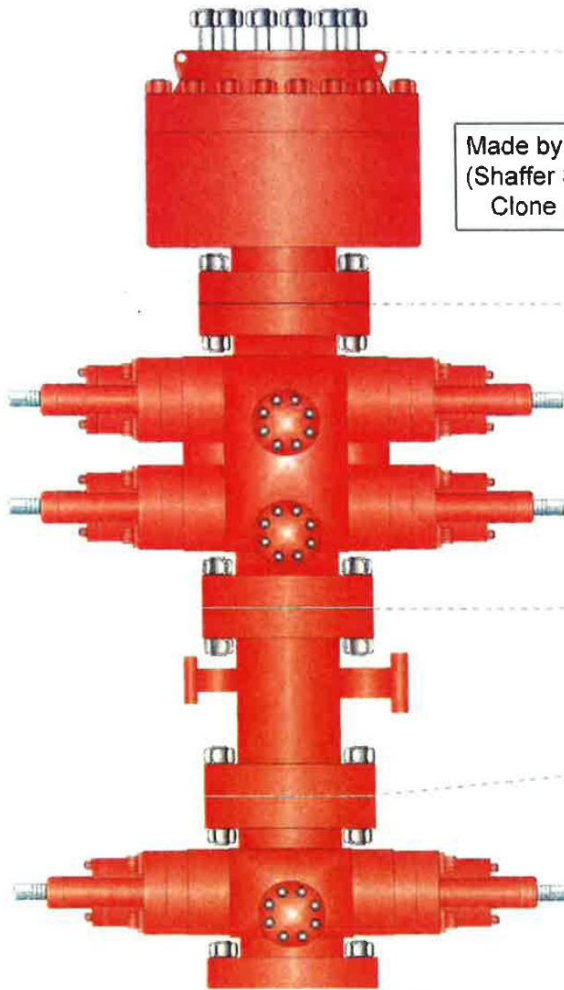
## 10M BOP

Dogwood 25 36 20 Fed Com 113H  
SHL: 170' FSL & 1610' FWL Section 20

Township/Range: 25S 36E  
Elevation Above Sea Level: 3057'



**RIG:** 297



Made by Cameron  
(Shaffer Spherical)  
Clone Annular

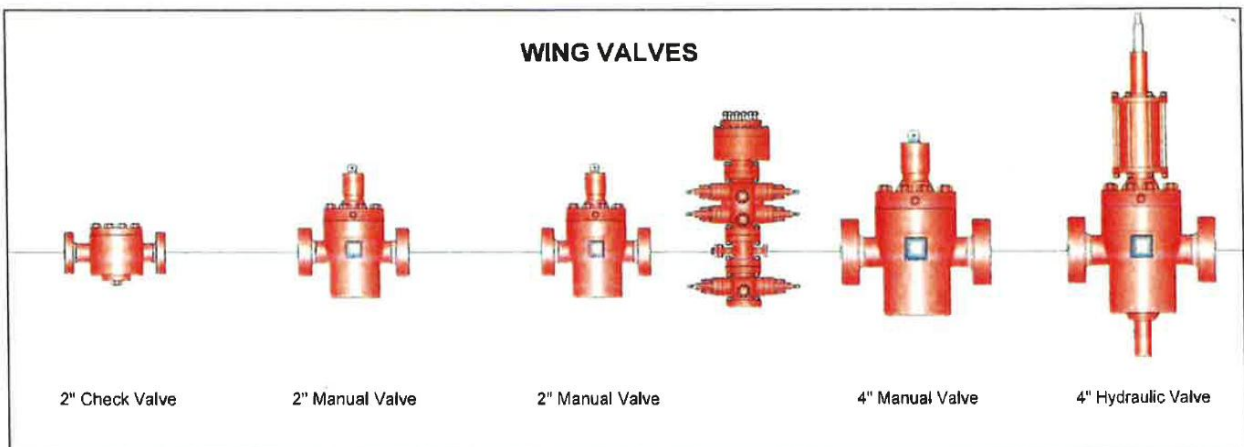
PATTERSON-UTI # PS2-628  
STYLE: New Shaffer Spherical  
BORE 13 5/8" PRESSURE 5,000  
HEIGHT: 48 1/2" WEIGHT: 13,800 lbs

PATTERSON-UTI # PC2-128  
STYLE: New Cameron Type U  
BORE 13 5/8" PRESSURE 10,000  
RAMS: TOP 5" Pipe BTM Blinds  
HEIGHT: 66 5/8" WEIGHT: 24,000 lbs

Length 40" Outlets 4" 10M  
DSA 4" 10M x 2" 10M

PATTERSON-UTI # PC2-228  
STYLE: New Cameron Type U  
BORE 13 5/8" PRESSURE 10,000  
RAMS: 5" Pipe  
HEIGHT: 41 5/8" WEIGHT: 13,000 lbs

## WING VALVES



## Offline Cementing - Surface Casing

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**

**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3057'**

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

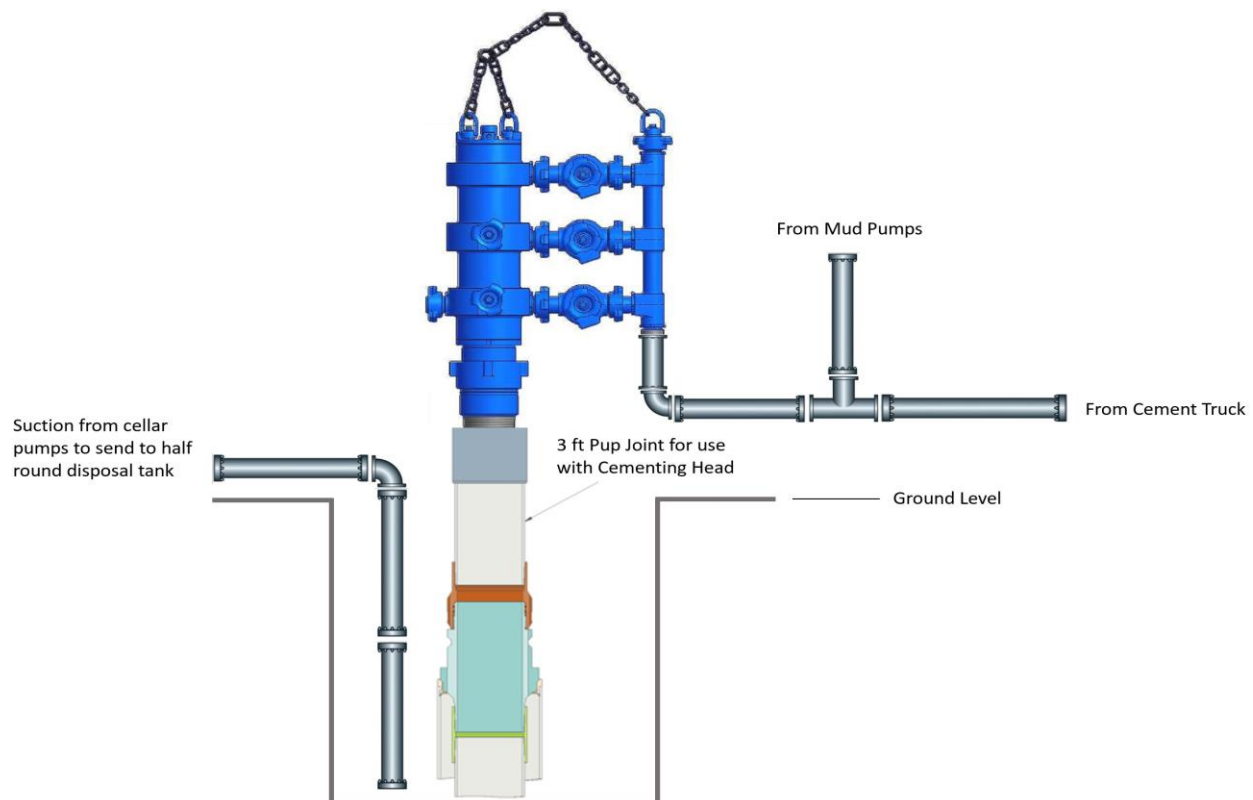
### Cement Program

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

### Offline Cementing Procedure

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

- No noticeable wellbore instability.
  - Casing installed successfully with no issues.
  - No observed shallow gas or other anomalies
1. Run casing as per normal operations. While running casing, confirm integrity of the float equipment (float collar and shoe).
  2. Land casing with mandrel.
  3. Install cap flange.
  4. Skid rig to the next well on the pad.
  5. Rig up on the well in accordance with the diagram shown below.



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

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**

Township/Range: 25S 36E  
Elevation Above Sea Level: 3057'





C-102  Submit Electronically Via OCD Permitting	State of New Mexico  Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024	
		Submittal Type:	<input type="checkbox"/> Initial Submittal
			<input checked="" type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-52151</b>	Pool Code <b>97088</b>	Pool Name <b>WC-025 G-08 S2535340; BONE SPRING</b>
Property Code	Property Name <b>DOGWOOD 25 36 20 FED COM</b>	Well Number <b>113H</b>
OGRID No. <b>2289337</b>	Operator Name <b>MATADOR PRODUCTION COMPANY</b>	Ground Level Elevation <b>3057'</b>
Surface Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input checked="" type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL or lot no. <b>N</b>	Section <b>20</b>	Township <b>25-S</b>	Range <b>36-E</b>	Lot Idn <b>-</b>	Feet from the N/S <b>170' S</b>	Feet from the E/W <b>1610' W</b>	Latitude <b>N 32.1090735</b>	Longitude <b>W 103.2904821</b>	County <b>LEA</b>
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Bottom Hole Location

UL or lot no. <b>C</b>	Section <b>17</b>	Township <b>25-S</b>	Range <b>36-E</b>	Lot Idn <b>-</b>	Feet from the N/S <b>110' N</b>	Feet from the E/W <b>1654' W</b>	Latitude <b>N 32.1373661</b>	Longitude <b>W 103.2903511</b>	County <b>LEA</b>
---------------------------	----------------------	-------------------------	----------------------	---------------------	------------------------------------	-------------------------------------	---------------------------------	-----------------------------------	----------------------

Dedicated Acres <b>320</b>	Infill or Defining Well <b>Defining</b>	Defining Well API <b>30-025-52151</b>	Overlapping Spacing Unit (Y/N) <b>N</b>	Consolidated Code <b>F</b>
Order Numbers <b>24050</b>			Well Setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL or lot no. <b>C</b>	Section <b>29</b>	Township <b>25-S</b>	Range <b>36-E</b>	Lot Idn <b>-</b>	Feet from the N/S <b>400' N</b>	Feet from the E/W <b>1651' W</b>	Latitude <b>N 32.1075068</b>	Longitude <b>W 103.2903498</b>	County <b>LEA</b>
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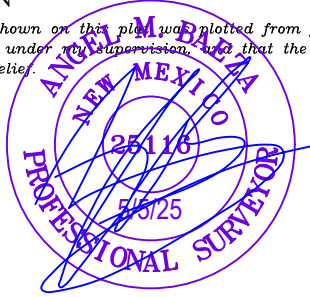
First Take Point (FTP)

UL or lot no. <b>N</b>	Section <b>20</b>	Township <b>25-S</b>	Range <b>36-E</b>	Lot Idn <b>-</b>	Feet from the N/S <b>100' S</b>	Feet from the E/W <b>1651' W</b>	Latitude <b>N 32.1088808</b>	Longitude <b>W 103.2903497</b>	County <b>LEA</b>
---------------------------	----------------------	-------------------------	----------------------	---------------------	------------------------------------	-------------------------------------	---------------------------------	-----------------------------------	----------------------

Last Take Point (LTP)

UL or lot no. <b>C</b>	Section <b>17</b>	Township <b>25-S</b>	Range <b>36-E</b>	Lot Idn <b>-</b>	Feet from the N/S <b>110' N</b>	Feet from the E/W <b>1654' W</b>	Latitude <b>N 32.1373661</b>	Longitude <b>W 103.2903511</b>	County <b>LEA</b>
---------------------------	----------------------	-------------------------	----------------------	---------------------	------------------------------------	-------------------------------------	---------------------------------	-----------------------------------	----------------------

Unitized Area or Area of Uniform Intrest <b>E2 W2 of Sec. 17 and 20, 25S, 36E</b>	Spacing Unity Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation <b>3085'</b>
--	--	--

<b>OPERATOR CERTIFICATION</b>  <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief; and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  <i>If this well is a horizontal well, I further certify that this organization has received The consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i>  <b>Nicky Fitzgerald      5/13/2025</b>		<b>SURVEYORS CERTIFICATION</b>  <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>   <b>5/5/25</b>	
Signature <b>Nicky Fitzgerald</b>	Date	Signature and Seal of Professional Surveyor <b>Angelo M. Salas</b>	Date
Print Name <b>nicky.fitzgerald@matadorresources.com</b>	Certificate Number <b>25116</b>	Date of Survey <b>07/27/2024</b>	
E-mail Address			



<b>C-102</b> Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>		Revised July 9, 2024	
			Submittal Type: <input type="checkbox"/> Initial Submittal <input checked="" type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled	
	Property Name and Well Number <b>DOGWOOD 25 36 20 FED COM 113H</b>			

**SURFACE LOCATION (SHL)**

NEW MEXICO EAST  
 NAD 1983  
 X=864233 Y=404979  
 LAT.: N 32.1090735  
 LONG.: W 103.2904821  
**NAD 1927**  
**X=823046 Y=404921**  
**LAT.: N 32.1089461**  
**LONG.: W 103.2900213**  
 170' FSL 1610' FWL

**KICK OFF POINT (KOP)**

NEW MEXICO EAST  
 NAD 1983  
 X=864280 Y=404410  
 LAT.: N 32.1075068  
 LONG.: W 103.2903498  
**NAD 1927**  
**X=823093 Y=404352**  
**LAT.: N 32.1073795**  
**LONG.: W 103.2898889**  
 400' FNL 1651' FWL

**FIRST PERF. POINT (FPP)**

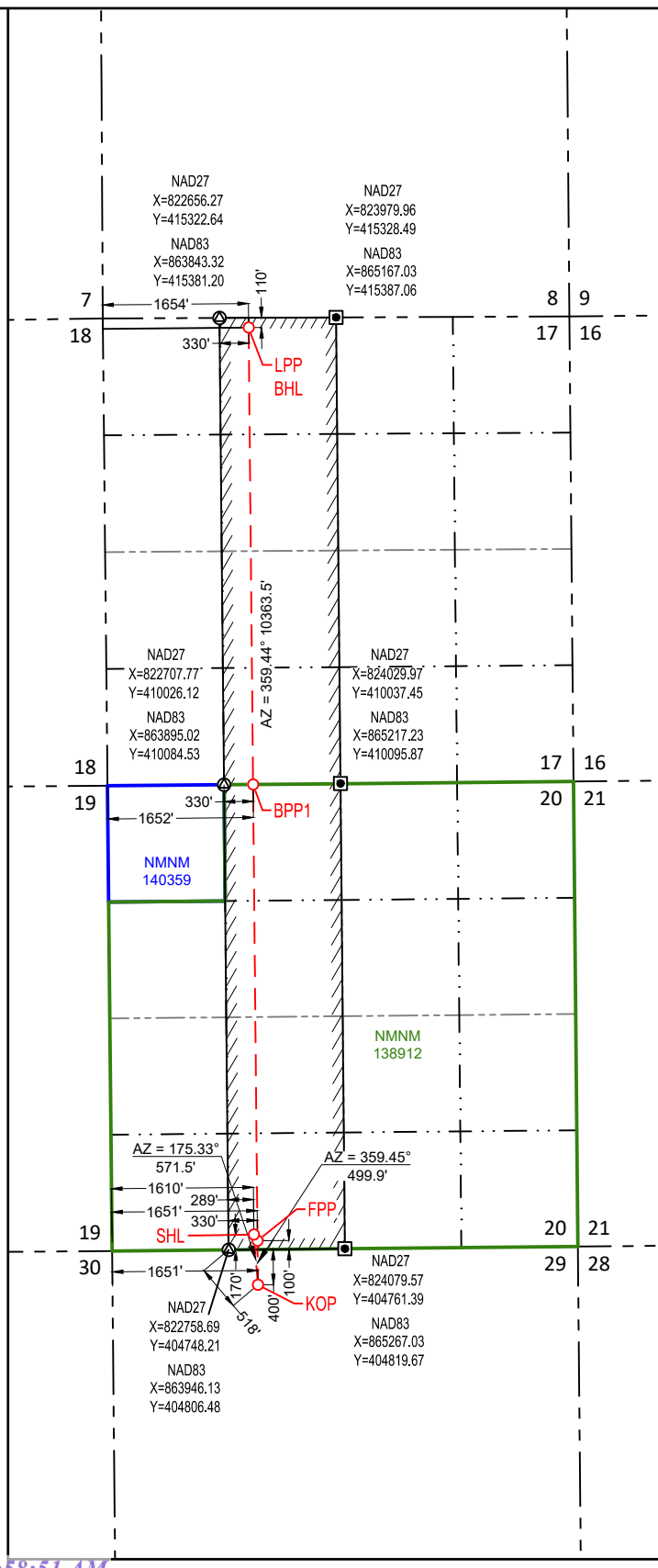
NEW MEXICO EAST  
 NAD 1983  
 X=864275 Y=404910  
 LAT.: N 32.1088808  
 LONG.: W 103.2903497  
**NAD 1927**  
**X=823088 Y=404851**  
**LAT.: N 32.1087535**  
**LONG.: W 103.2898888**  
 100' FSL 1651' FWL

**BLM PERF. POINT (BPP1)**

NEW MEXICO EAST  
 NAD 1983  
 X=864225 Y=410087  
 LAT.: N 32.1231130  
 LONG.: W 103.2903498  
**NAD 1927**  
**X=823038 Y=410029**  
**LAT.: N 32.1229858**  
**LONG.: W 103.2903498**  
 0' FNL 1652' FWL

**LAST PERF. POINT (LPP)  
BOTTOM HOLE LOCATION (BHL)**

NEW MEXICO EAST  
 NAD 1983  
 X=864174 Y=415273  
 LAT.: N 32.1373661  
 LONG.: W 103.2903511  
**NAD 1927**  
**X=822987 Y=415214**  
**LAT.: N 32.1372390**  
**LONG.: W 103.2898888**  
 110' FNL 1654' FWL

**SURVEYORS CERTIFICATION**

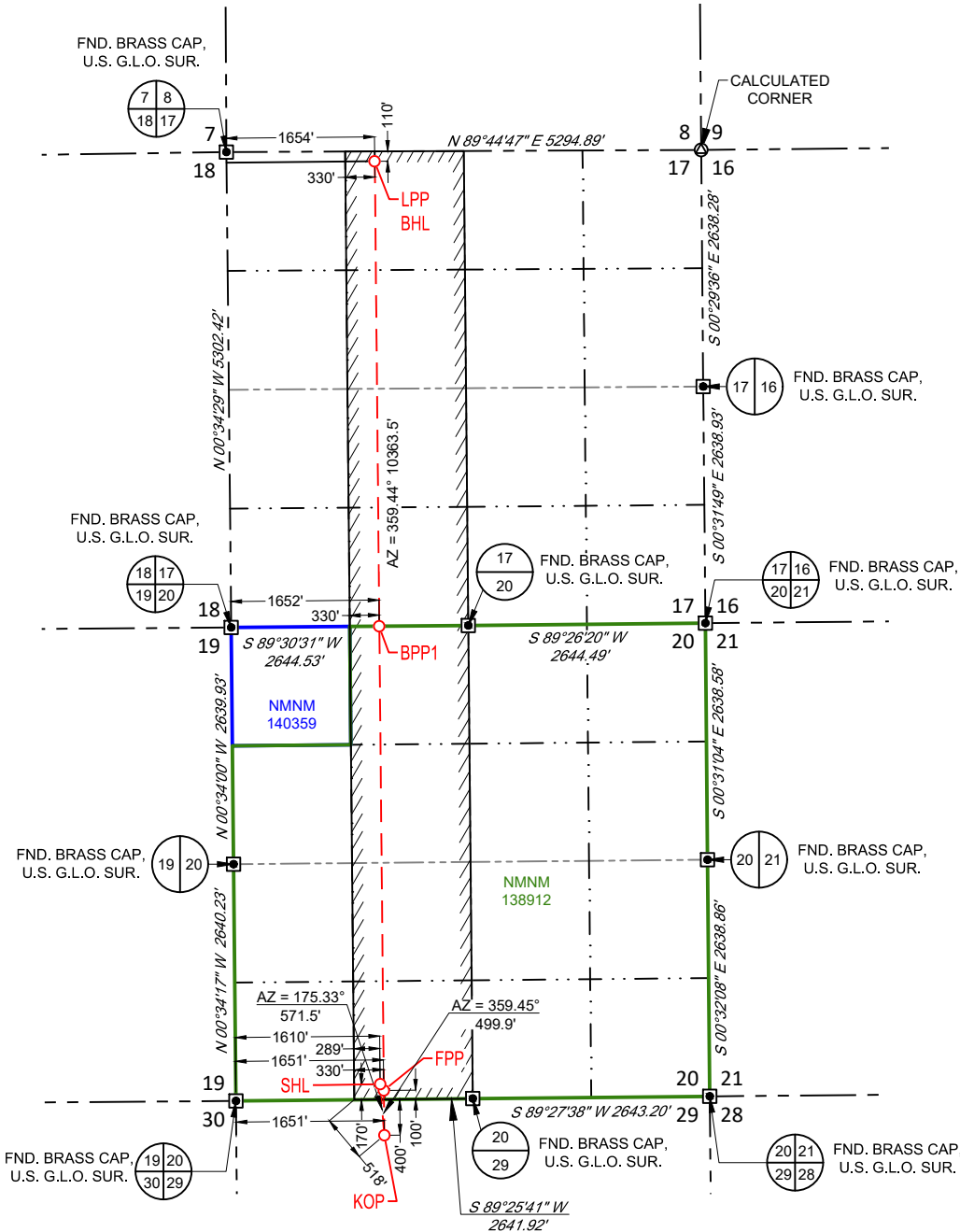
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  
 07/27/2024

Date of Survey  
 Signature and Seal of Professional Surveyor:





SECTION 20, TOWNSHIP 25-S, RANGE 36-E, N.M.P.M.  
LEA COUNTY, NEW MEXICO



**SURFACE LOCATION (SHL)**

NEW MEXICO EAST  
NAD 1983

X=864233 Y=404979  
LAT.: N 32.1090735  
LONG.: W 103.2904821  
170' FSL 1610' FWL

**KICK OFF POINT (KOP)**

NEW MEXICO EAST  
NAD 1983

X=864280 Y=404410  
LAT.: N 32.1075068  
LONG.: W 103.2903498  
400' FNL 1651' FWL

**FIRST PERF. POINT (FPP)**

NEW MEXICO EAST  
NAD 1983

X=864275 Y=404910  
LAT.: N 32.1088808  
LONG.: W 103.2903497  
100' FSL 1651' FWL

**BLM PERF. POINT (BPP1)**

NEW MEXICO EAST  
NAD 1983

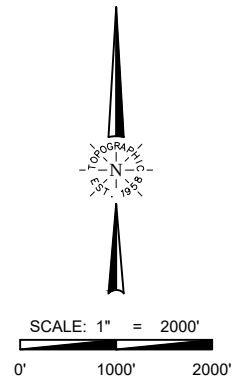
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LAT.: N 32.1231130  
LONG.: W 103.2903498  
0' FNL 1652' FWL

**LAST PERF. POINT (LPP)**

**BOTTOM HOLE LOCATION (BHL)**

NEW MEXICO EAST  
NAD 1983

X=864174 Y=415273  
LAT.: N 32.1373661  
LONG.: W 103.2903511  
110' FNL 1654' FWL



LEASE NAME & WELL NO.: DOGWOOD 25 36 20 FED COM 113H

SECTION 20 TWP 25-S RGE 36-E SURVEY N.M.P.M.  
COUNTY LEA STATE NM  
DESCRIPTION 170' FSL & 1610' FWL

DISTANCE & DIRECTION  
FROM INT. OF NM-18, & NM-128, GO WEST ON NM-128 ±5.6 MILES.  
THENCE SOUTH (LEFT) ON A LEASE RD. ±2.0 MILES. THENCE WEST  
(RIGHT) ON A PROPOSED RD. ±0.6 MILES TO A POINT ±247 FEET NORTH  
OF THE LOCATION.



Angel M. Baeza, P.S. No. 25116

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET  
THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.  
AS OF THE DATE OF SURVEY, ALL ABOVE GROUND APPURTENANCES WITHIN 300' OF THE STAKED LOCATION ARE SHOWN HEREON.



481 WINSOTT ROAD, Ste. 200 • BENBROOK, TEXAS 76126  
TELEPHONE: (817) 744-7512 • FAX (817) 744-7554  
2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705  
TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743  
WWW.TOPOGRAPHIC.COM

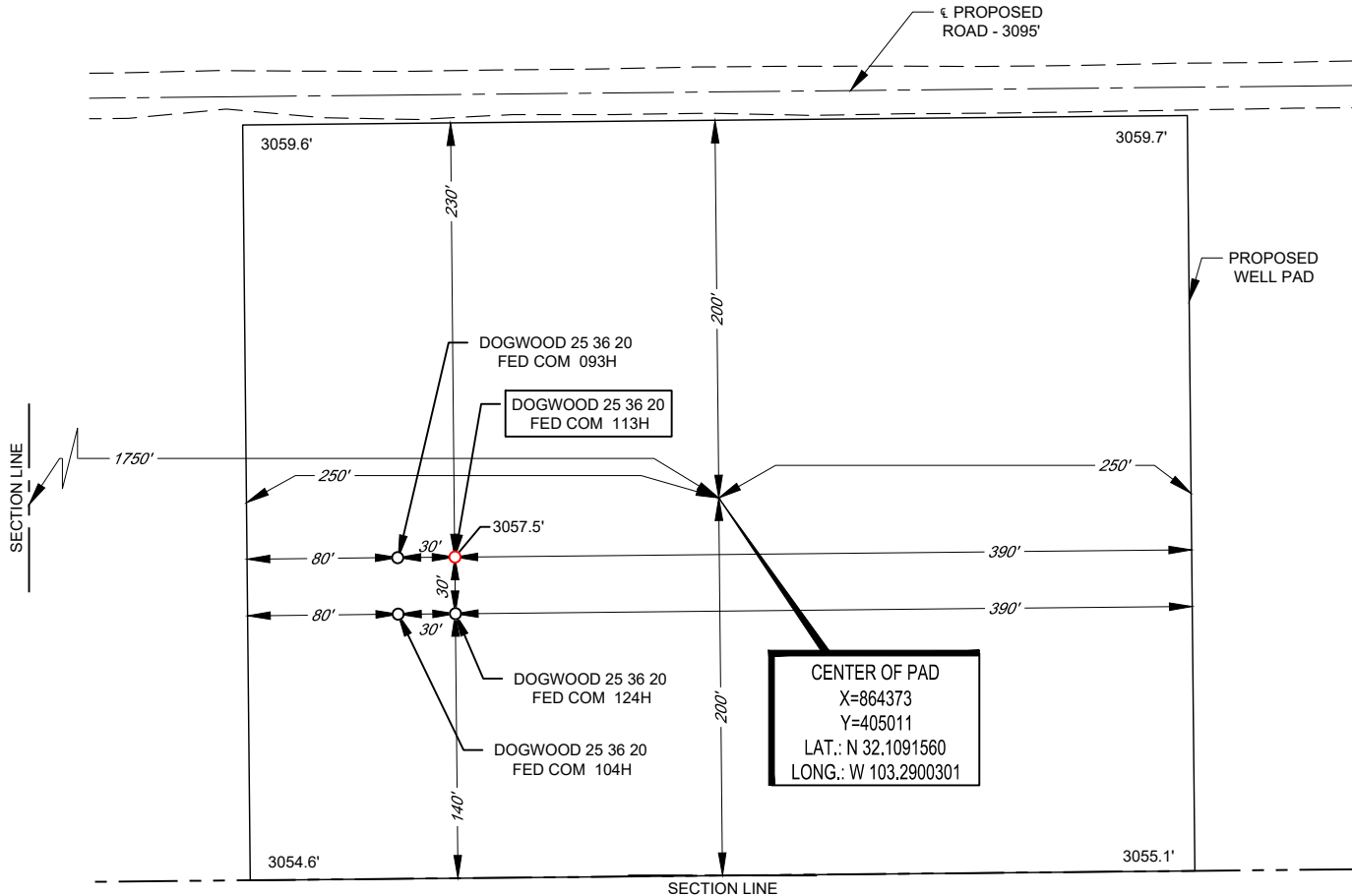
## LEGEND

--- SECTION LINE  
 --- PROPOSED ROAD  
 === ROAD WAY



DETAIL VIEW  
 SCALE: 1" = 100'

SECTION 20, TOWNSHIP 25-S, RANGE 36-E, N.M.P.M.  
 LEA COUNTY, NEW MEXICO



Angel M. Baeza, P.S. No. 25116

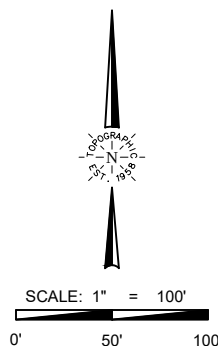
LEASE NAME & WELL NO.: DOGWOOD 25 36 20 FED COM 113H  
 113H LATITUDE N 32.1090735 113H LONGITUDE W 103.2904821

CENTER OF PAD IS 200' FSL & 1750' FWL

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET. ELEVATIONS USED ARE NAVD88, OBTAINED THROUGH AN OPUS SOLUTION.

THIS PROPOSED PAD SITE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY MATADOR PRODUCTION COMPANY. ONLY THE DATA SHOWN ABOVE IS BEING CERTIFIED TO, ALL OTHER INFORMATION WAS INTENTIONALLY OMITTED. THIS PLAT IS ONLY INTENDED TO BE USED FOR A PERMIT AND IS NOT A BOUNDARY SURVEY. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ORIGINAL DOCUMENT SIZE: 8.5" X 11"



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 TELEPHONE: (817) 744-7512 • FAX (817) 744-7554  
 2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705  
 TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743  
 WWW.TOPOGRAPHIC.COM

## Casing Design Criteria and Load Case Assumptions

**Dogwood 25 36 20 Fed Com 113H**  
**SHL: 170' FSL & 1610' FWL Section 20**

**Township/Range: 25S 36E**  
**Elevation Above Sea Level: 3057'**

### Surface Casing

Collapse:  $DF_c = 1.125$

- a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.43 psi/ft). The effects of axial load on collapse will be considered.
- b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.52 psi/ft).

Burst:  $DF_b = 1.125$

- a. Pressure Test: Casing test per Title 43 CFR 3172 with an external force equal to the mud gradient in which the casing will be run (0.43 psi/ft), which is a more conservative backup force than pore pressure.

Tensile:  $DF_t = 1.8$

- a. Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy.

### Intermediate #1 Casing

Collapse:  $DF_c = 1.125$

- a. Partial Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.47 psi/ft). The effects of axial load on collapse will be considered. Internal force equal to gas gradient over half of setting depth and mud gradient with which the next hole section will be run below that (0.65 psi/ft).
- b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst:  $DF_b = 1.125$

- a. Pressure Test: Casing test per Title 43 CFR 3172 with an external force equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- b. Gas Kick Profile: Internal burst force at the shoe will be Fracture Pressure at that depth. Surface burst pressure will be fracture gradient at setting depth less a gas gradient to equivalent height of 50 bbl kick with Drill Pipe inside casing and mud gradient with which the next hole section will be run above that (0.47 psi/ft). External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft), which is a more conservative backup force than pore pressure.
- c. Fracture at Shoe with 1/3 BHP at Surface: Internal burst force at the shoe will be Fracture Pressure at setting depth. Internal burst force at surface will be 1/3 of pore pressure at setting depth. External force will be equal to the mud gradient in which the casing will be run (0.52 psi/ft) which is a more conservative backup force than pore pressure.

Tensile:  $DF_t = 1.8$

- a. Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy.

### Production Casing

Collapse:  $DF_c = 1.125$

- a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
- b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft).

Burst:  $DF_b = 1.125$

- a. Pressure Test: 8000 psi casing test with an external force equal to the mud gradient in which the casing will

## Casing Design Criteria and Load Case Assumptions

be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.

- b. Injection Down Casing: 9500 psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.

Tensile:  $DF_t = 1.8$

- a. Overpull: A downward force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy.





SURVEY PROGRAM

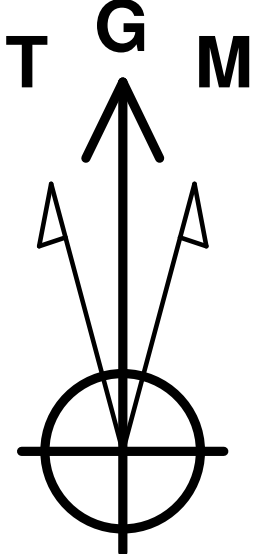
WELL DETAILS: Dogwood 25 36 20 Fed Com #113H

Depth From	Depth To	Survey/Plan	Tool	+N/-S	+E/-W	Northing	GL @ 3057.0	KB @ 3085.5usft	Latitude	Longitude	Slot
0.0	20165.0	BLM Plan #1 (Wellbore #1)	MWD	0.0	0.0	404920.94	Easting 823046.00	32° 6' 32.205 N	103° 17' 24.077 W		

Company: Matador Production Company  
Well: Dogwood 25 36 20 Fed Com #113H  
County: Lea County, NM  
Wellbore: Wellbore #1  
Plan: BLM Plan #1  
Date: 2/6/2025

Geodetic System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone: New Mexico East 3001  
System Datum: Mean Sea Level

To convert a Magnetic Direction to a Grid Direction, Add 5.44°  
To convert a Magnetic Direction to a True Direction, Add 6.00° East  
To convert a True Direction to a Grid Direction, Subtract 0.55°



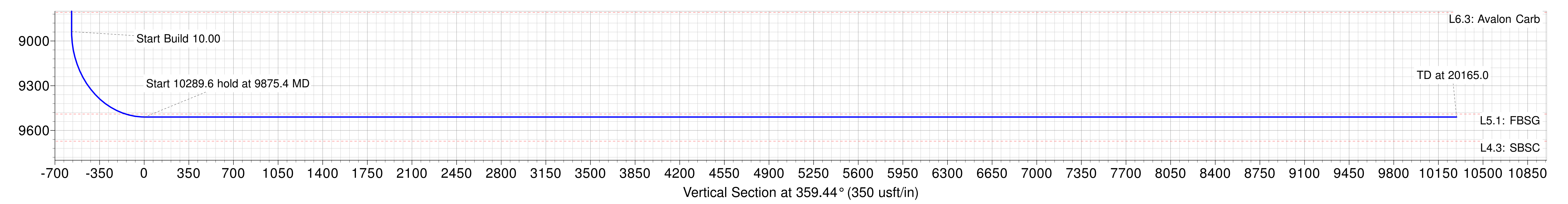
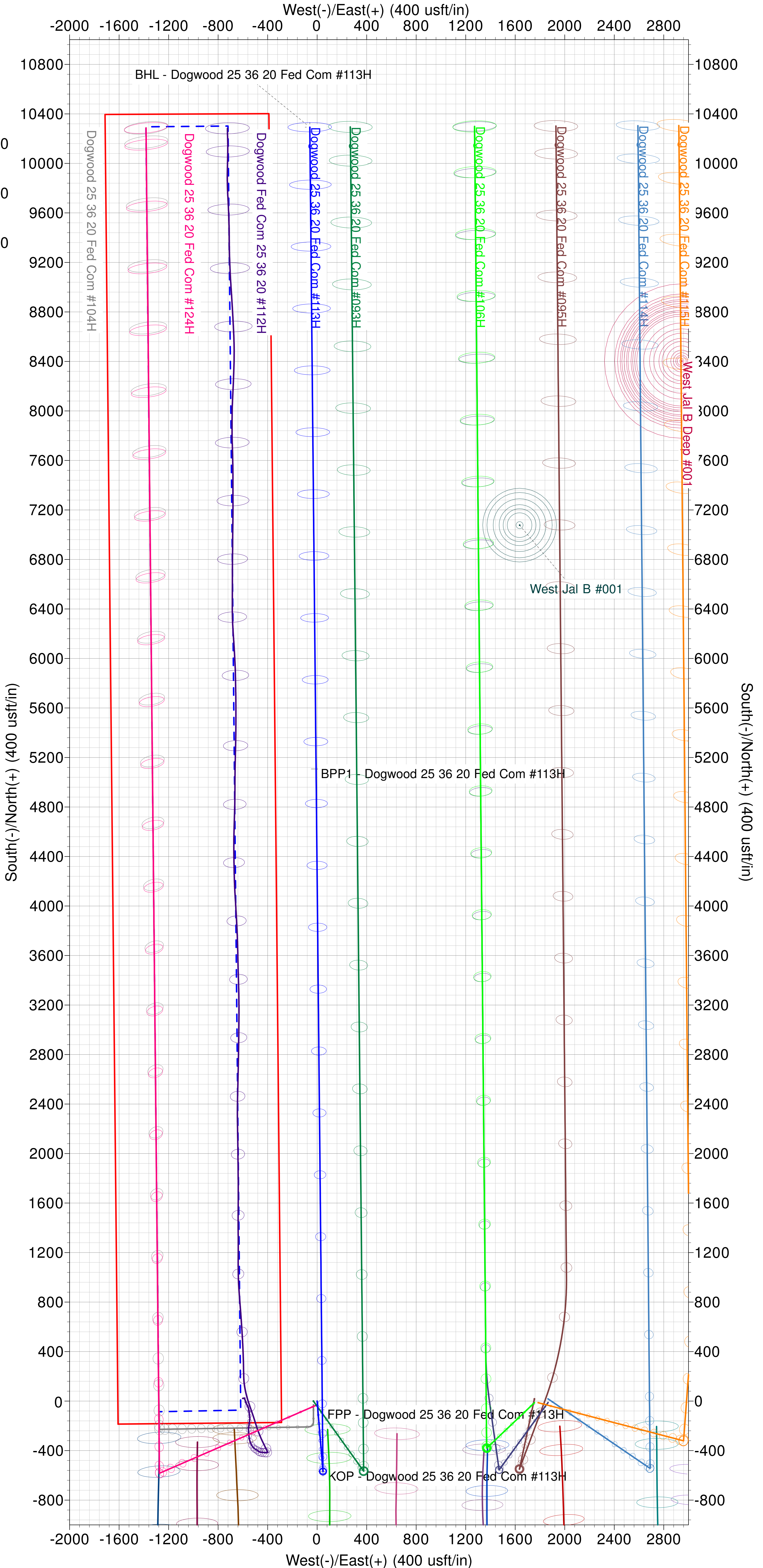
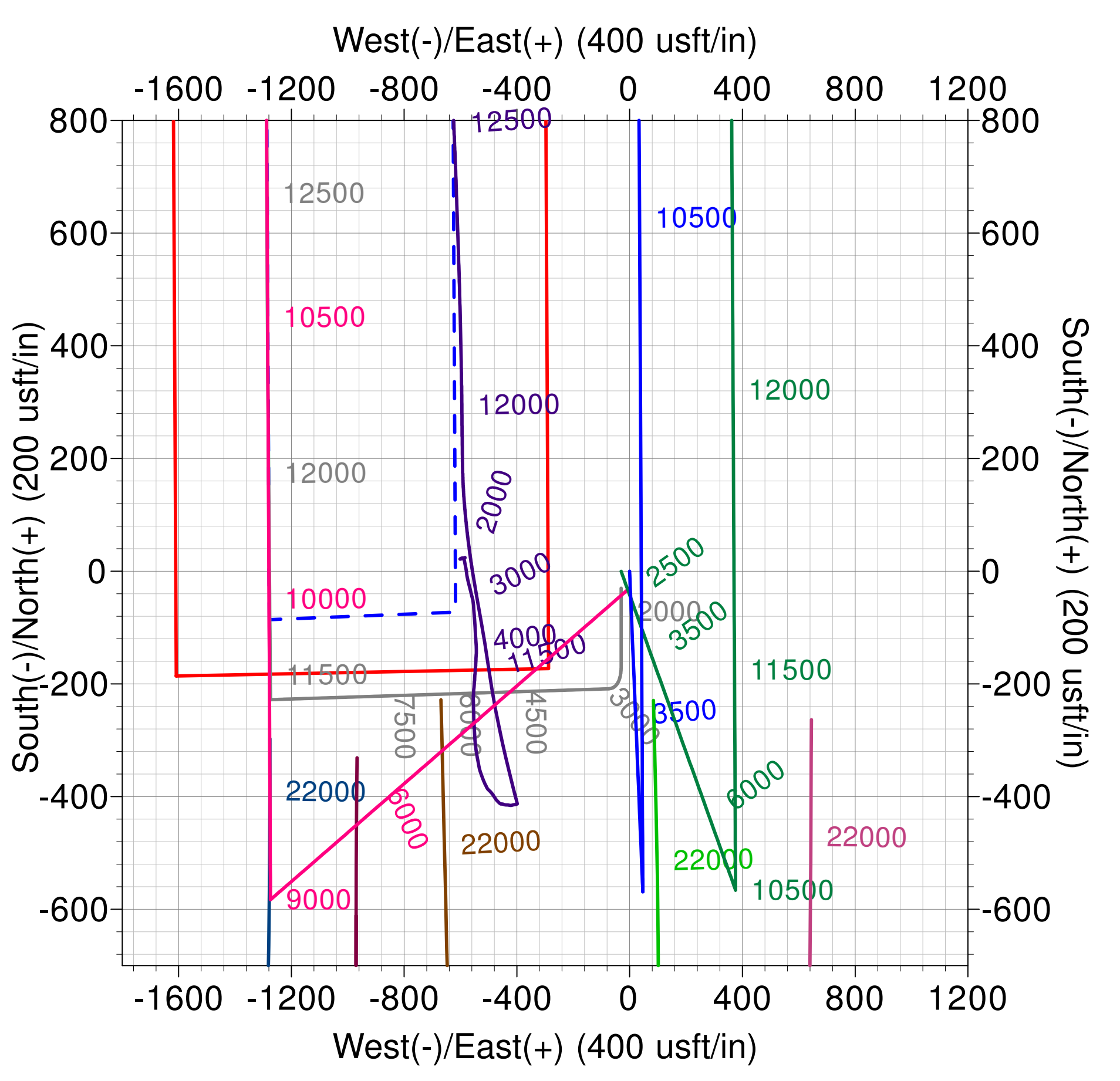
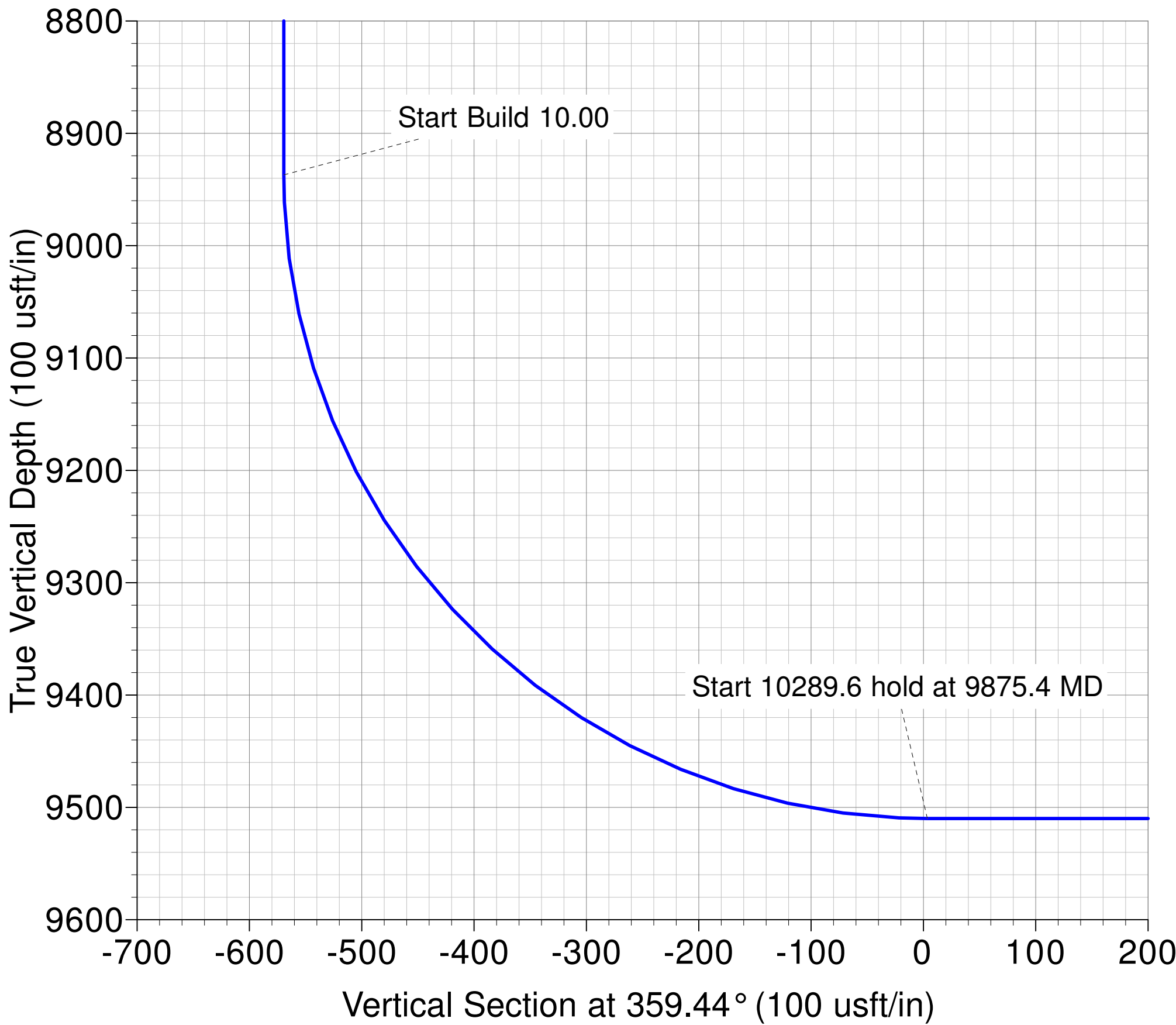
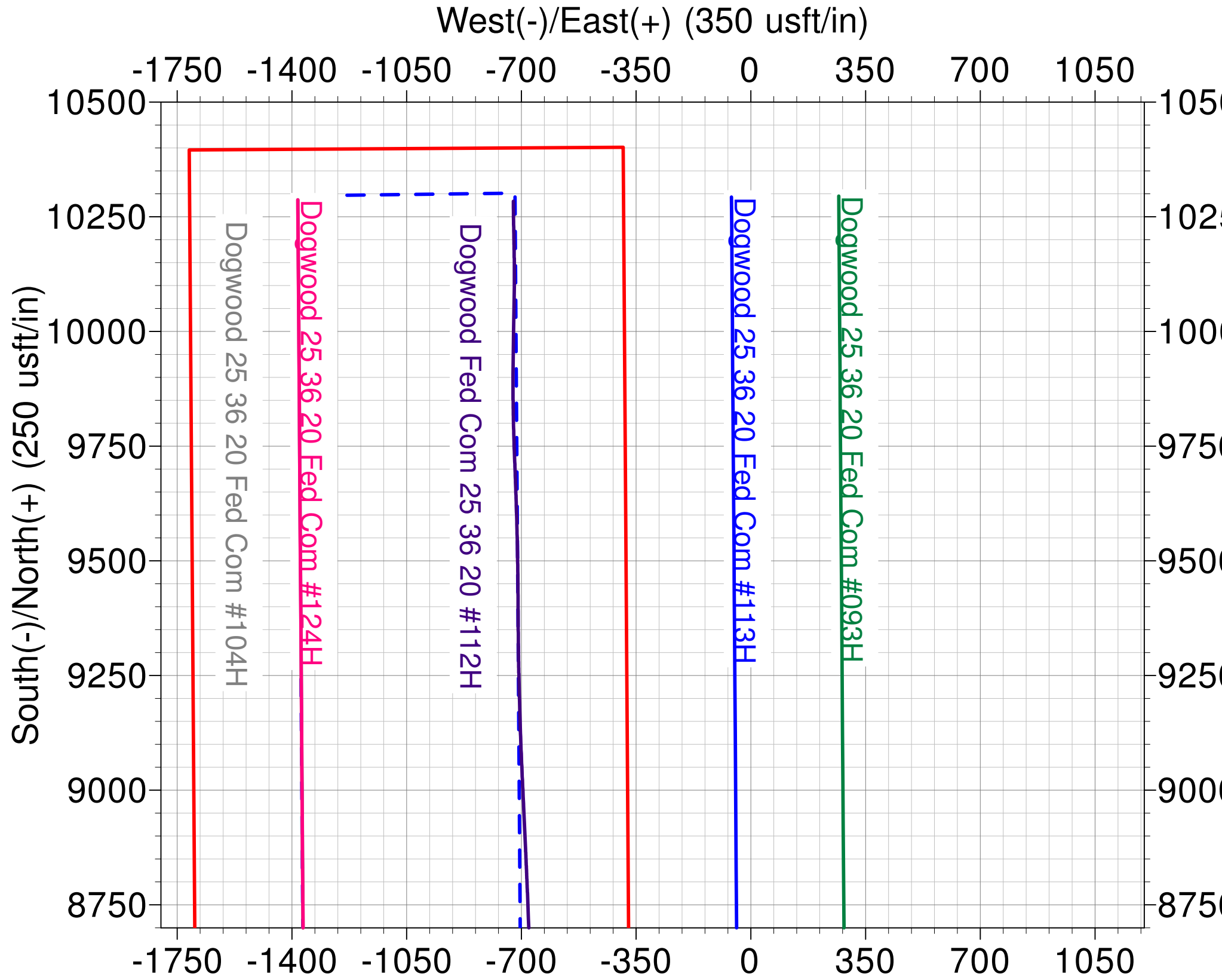
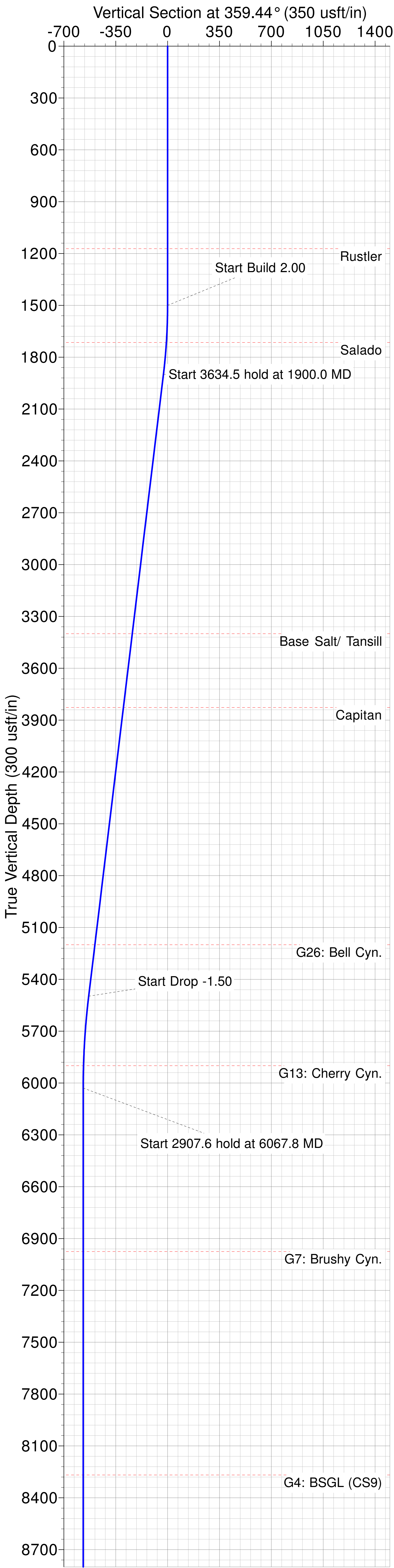
Azimuths to Grid North  
True North: -0.56°  
Magnetic North: 5.44°

Magnetic Field  
Strength: 47139.7snT  
Dip Angle: 59.90°  
Date: 11/15/2024  
Model: IGRF2015

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Dogwood 25 36 20 Fed Com #113H	8937.0	-568.9	47.0	404352.00	823093.00	32° 6' 26.571 N	103° 17' 23.595 W
BHL - Dogwood 25 36 20 Fed Com #113H	9510.0	10293.1	-59.0	415214.00	822987.00	32° 8' 14.060 N	103° 17' 23.604 W
BPP1 - Dogwood 25 36 20 Fed Com #113H	9510.0	5107.2	-10.0	410028.18	823036.01	32° 7' 22.742 N	103° 17' 23.618 W
FPP - Dogwood 25 36 20 Fed Com #113H	9505.2	-70.0	42.1	404850.94	823088.12	32° 6' 31.509 N	103° 17' 23.595 W

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1900.0	8.00	175.28	1898.7	-27.8	2.3	2.00	175.28	-27.8	Start 3634.5 hold at 1900.0 MD
5534.5	8.00	175.28	5497.8	-531.9	43.9	0.00	0.00	-532.3	Start Drop -1.50
6067.8	0.00	0.00	6029.4	-568.9	47.0	1.50	180.00	-569.4	Start 2907.6 hold at 6067.8 MD
8975.4	0.00	0.00	8937.0	-568.9	47.0	0.00	0.00	-569.4	Start Build 10.00
9875.4	90.00	359.44	9510.0	4.0	41.4	10.00	359.44	3.6	Start 10289.6 hold at 9875.4 MD
20165.0	90.00	359.44	9510.0	10293.1	-59.2	0.00	0.00	10293.1	TD at 20165.0





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 536790

CONDITIONS

Operator: MATADOR PRODUCTION COMPANY One Lincoln Centre Dallas, TX 75240	OGRID: 228937
	Action Number: 536790
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.	1/13/2026
matthew.gomez	If cement does not circulate to surface on any string, a Cement Bond Log (CBL) is required for that string of casing. If a CBL is unable to indicate sufficient cement coverage due to a lighter cement, a USI log may also be required. If strata isolation is not achieved, remediation will be required before further operations may commence.	1/13/2026
matthew.gomez	All conducted logs must be submitted to the OCD.	1/13/2026
matthew.gomez	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.	1/13/2026
matthew.gomez	In Capitan Reef areas if lost circulation (50% or greater) occurs below the base of the salt, the operator shall switch to freshwater mud until the intermediate casing is set.	1/13/2026
matthew.gomez	All previous COA's still apply.	1/13/2026