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

Sundry Print Report

12/09/2025

Well Name: EMERALD FEDERAL COM

Well Location: T19S / R33E / SEC 6 / SWSW / 32.683047 / -103.707201

County or Parish/State: LEA / NM

Well Number: 513H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM077002

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002554190

Operator: AVANT OPERATING LLC

Notice of Intent

Sundry ID: 2861096

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 07/07/2025

Time Sundry Submitted: 06:37

Date proposed operation will begin: 08/01/2025

Procedure Description: Coterra Energy Operating Co requests the following changes to the Emerald Fed Com 513H (API 30-025-54190): SHL change from 350 FSL/1230 FWL to 300 FSL/1210 FEL BHL change from 100 FNL/2178 FWL to 100 FNL/2008FEL TVD change from 9800 to 9550 Please see attached for updated C102, drilling and directional plans.

NOI Attachments

Procedure Description

Emerald_513H_Sundry_Submittal_11032025_20251103123304.pdf

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Operator: AVANT OPERATING LLC

Conditions of Approval

Additional

Sundry_ID_2861096_20251203132014.pdf

Emerald_Federal_Com_513H_Dr_COA_20251203131953.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: SHELLY BOWEN

Signed on: NOV 03, 2025 12:32 PM

Name: AVANT OPERATING LLC

Title: Regulatory Analyst

Street Address: 6001 DEAUVILLE BLVD STE 300N

City: MIDLAND **State:** TX

Phone: (432) 620-1644

Email address: DL_PBUREGULATORY@COTERRA.COM

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: CWALLS@BLM.GOV

Disposition: Approved

Disposition Date: 12/08/2025

Signature: Chris Walls

Form 3160-5
(October 2024)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

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

11. Country or Parish, State

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

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

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be 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

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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: SWSW / 350 FSL / 1230 FWL / TWSP: 19S / RANGE: 33E / SECTION: 6 / LAT: 32.683047 / LONG: -103.707201 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 0 FNL / 2180 FWL / TWSP: 18S / RANGE: 33E / SECTION: 31 / LAT: 32.696622 / LONG: -103.704135 (TVD: 9800 feet, MD: 15507 feet)

PPP: SESW / 100 FSL / 2178 FWL / TWSP: 19S / RANGE: 33E / SECTION: 6 / LAT: 32.682364 / LONG: -103.704118 (TVD: 9800 feet, MD: 10205 feet)

BHL: NENW / 100 FNL / 2178 FWL / TWSP: 18S / RANGE: 33E / SECTION: 32 / LAT: 32.710872 / LONG: -103.704152 (TVD: 9800 feet, MD: 20156 feet)

Emerald Federal Com 513H

13 3/8	surface csg in a	17 1/2	inch hole.		Design Factors				Surface			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	j 55	ltc	5.86	1.62	0.88	1,610	4	1.49	3.30	87,745
"B"			ltc				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	1,215	Tail Cmt	does not	circ to sfc.	Totals:	1,610				87,745

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	980	1607	1118	44	8.33	1836	2M	2.06

Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.

9 5/8	casing inside the	13 3/8			Design Factors				Int 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	j 55	ltc	2.24	0.83	0.84	5,800	1	1.51	1.40	232,000
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	234				Totals:	5,800				232,000
	The cement volume(s) are intended to achieve a top of			0	ft from surface or a		1610				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	1402	2478	1896	31	10.33	2612	3M	0.81
D V Tool(s):							sum of sx	Σ CuFt	Σ%excess
by stage % :		#VALUE!	#VALUE!				1402	2478	31

Class 'H' tail cmt yld > 1.20

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.68, b, c, d <0.70 a Problem!!

Tail cmt

5 1/2	casing inside the	9 5/8			Design Factors				Prod 1			
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00	p 110	gbcd	3.36	2.36	2.68	19,969	3	4.84	4.25	399,380
"B"							0				0
"C"							0				0
"D"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	2,101				Totals:	19,969				399,380
	The cement volume(s) are intended to achieve a top of			5600	ft from surface or a		200				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	3481	5422	3631	49	9.50			1.23

Class 'C' tail cmt yld > 1.35

#N/A

0		5 1/2			Design Factors				<Choose Casing>			
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"			0.00				0				0
"B"			0.00				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:					Totals:	0				0
	Cmt vol calc below includes this csg, TOC intended			#N/A	ft from surface or a		#N/A				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
0		#N/A	#N/A	0	#N/A				

#N/A Capitan Reef est top XXXX.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Avant Operating LLC**
LOCATION:	Section 6, T.19 S., R.33 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	**Emerald Federal Com 513H**
ATS/API ID:	**3002554190**
APD ID:	**10400098219**
Sundry ID:	**2861096**

COA

H2S	Yes		
Potash	None	None	
Cave/Karst Potential	Low		
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☑ Flex Hose	☐ Other
Wellhead	Conventional and Multibowl		
Other	☐ 4 String ☐ 5 String	Capitan Reef None	☐ WIPP
Other	Pilot Hole None	☐ Open Annulus	
Cementing	Contingency Squeeze None	Echo-Meter None	Primary Cement Squeeze None
Special Requirements	☐ Water Disposal/Injection	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry	Waste Prevention None	
Special Requirements Variance	☐ Break Testing	☑ Offline Cementing	☐ Casing Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Morrow** formation. As a result, the Hydrogen Sulfide area must meet **43 CFR part 3170 Subpart 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

1. The **13-3/8** inch surface casing shall be set at approximately **1610 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

    Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

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

C. PRESSURE CONTROL

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

2.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

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 43 CFR 3172.6(b)(9) must be followed.

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.

- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in **43 CFR part 3170 Subpart 3171**
- 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.

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 cementing offline at **Lea County: 575-689-5981**.

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)

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

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

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

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

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-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke

manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

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

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

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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

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

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be

initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 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).

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

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

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

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

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 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.

Long Vo (LVO) 12/3/2025

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-025-54190	13160	Corbin South; Bone Spring

Property Code	Property Name	Well Number
338306	EMERALD FEDERAL COM	513H

OGRID No.	Operator Name	Ground Level Elevation
215099	COTERRA ENERGY OPERATING CO.	3674.4

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal | Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	6	19 S	33 E	7	300 FSL	1210 FWL	32.6829089° N	103.7072652° W	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	31	18 S	33 E		100 FNL	2008 FWL	32.7108704° N	103.7047047° W	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
1302.98 Ac.	defining		N	C, F

Order Numbers. R-23267-A | Well setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	6	19 S	33 E		100 FSL	2008 FWL	32.6823633° N	103.7046706° W	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	6	19 S	33 E		100 FSL	2008 FWL	32.6823633° N	103.7046706° W	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	31	18 S	33 E		100 FNL	2008 FWL	32.7108704° N	103.7047047° W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation:
NA	☒ Horizontal ☐ Vertical	3674.4

OPERATOR CERTIFICATIONS

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 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.

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.

Shelly Bowen — 11/3/2025

Signature

Shelly Bowen

Printed Name

shelly.bowen@coterra.com

E-mail Address

SURVEYOR CERTIFICATIONS

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 further certify that United Field Services, Inc., located at 21 Road 3520 in Flora Vista, New Mexico is the company providing this information.

JOHN A VUKONICH — NEW MEXICO — 14831 — PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number	Date of Field Survey	Date of Certification
14831	9/25/25	10/10/2025

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

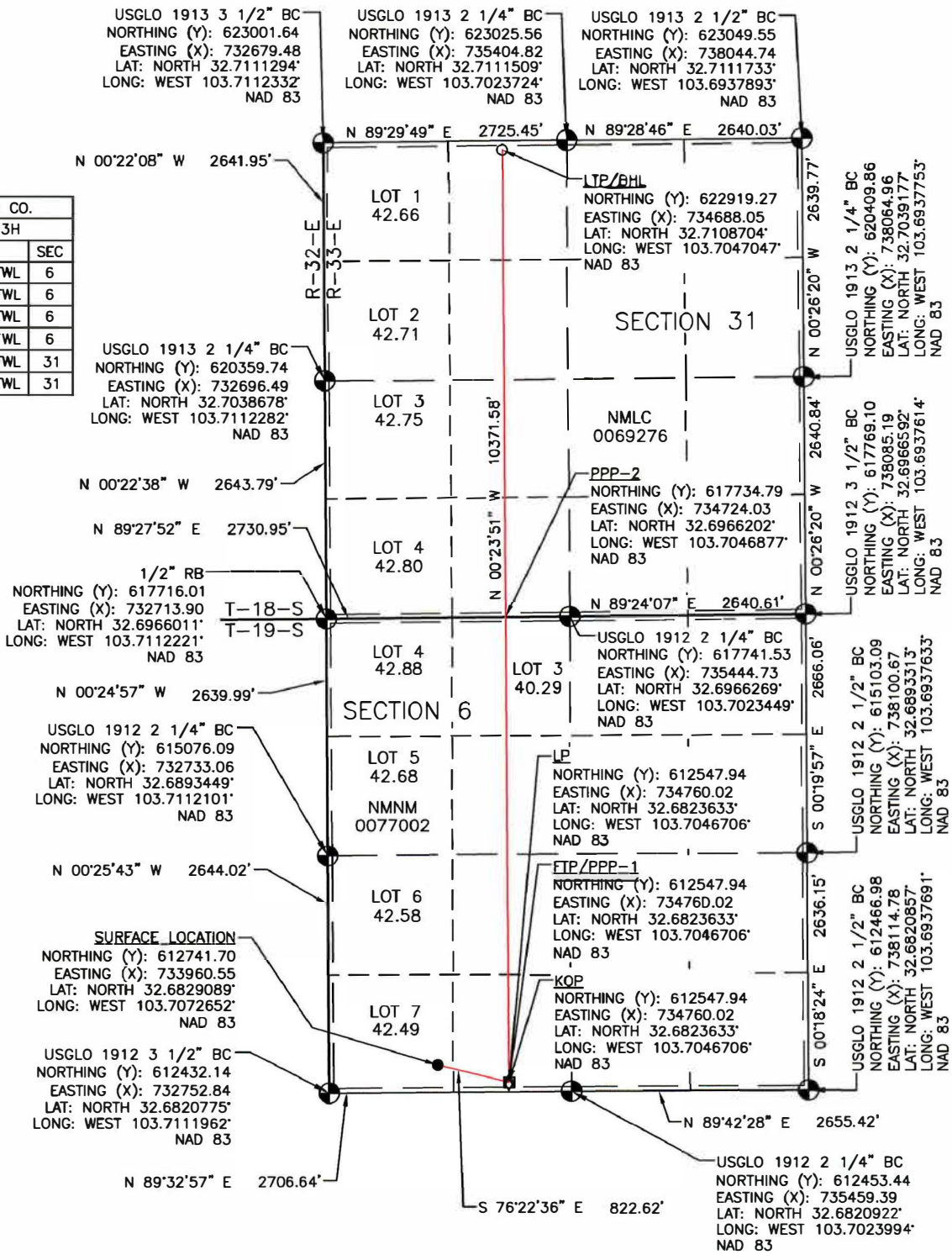
United Field Services, Inc., located at 21 Road 3520, Flora Vista, New Mexico, is the company providing this plat.

PLAT REVISED: 9/29/25

UFSI PROJECT NO. 11648

LEGEND:
- ● = SURFACE LOCATION (SHL)
- □ = KICK OFF POINT (KOP)
- △ = FTP/PPP-1
- ◊ = LANDING POINT (LP)
- ○ = LTP/BHL
- ◓ = FOUND MONUMENT

COTERRA ENERGY OPERATING CO.			
EMERALD FEDERAL COM 513H			
FOOTAGES			SEC
SHL	300' FSL	1210' FWL	6
KOP	100' FSL	2008' FWL	6
FTP/PPP-1	100' FSL	2008' FWL	6
LP	100' FSL	2008' FWL	6
PPP-2	0' FSL	2010' FWL	31
LTP/BHL	100' FNL	2008' FWL	31



NOTE: BEARINGS AND DISTANCES SHOWN ARE REFERENCED TO THE NEW MEXICO COORDINATE SYSTEM, EAST ZONE, NAD 83, UNLESS OTHERWISE NOTED

1. Geological Formations

TVD of target 9,550
MD at TD 20,049

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	1485	N/A	
Top of Salt	1765	N/A	
Base of Salt/Lamar	5865	N/A	
Top of Delaware Sands/Bell Canyon	5949	N/A	
Cherry Canyon	6150	N/A	
Brushy Canyon	6620	N/A	
Basal Brushy Canyon	7209	N/A	
Bone Spring Lime	7530	N/A	
Leonard/Avalon Sand	7700	N/A	
Avalon Shale	7850	N/A	
1st Bone Spring Sand	8750	N/A	
2nd Bone Spring Sand	9290	Hydrocarbons	
2nd Bone Spring Sand - Target	9790	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	1595	1595	13-3/8"	54.50	J-55	ST&C	1.64	3.97	5.91
12 1/4	0	5800	5800	9-5/8"	40.00	J-55	BT&C	1.50	1.27	2.72
8 3/4	0	9265								
8 3/4	9341	19969	9550	5-1/2"	17.00	P-110	BT&C	1.59	2.26	112.69
					BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	N
Is AC Report included?	Y

3. Cementing Program

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	773	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	207	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	1110	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	292	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	383	10.30	3.64	22.18		Lead: Tuned Light + LCM
	3098	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	51
Production	5600	25

Cimarex request the ability to perform casing integrity tests after plug bump of cement job.

4. Pressure Control Equipment

X	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	**13 5/8**	**10M**	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram		
			Other		
8 3/4	**13 5/8**	**10M**	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or 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. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.	
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1595'	Fresh Water	7.83 - 8.33	28	N/C
1595' to 5800'	Brine Water	9.83 - 10.33	30-32	N/C
5800' to 19969'	OBM	9.00 - 9.50	50-70	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing	
	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
X	No logs are planned based on well control or offset log information.
	Drill stem test?
	Coring?

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	4717 psi
Abnormal Temperature	No

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
X	H2S is present
X	H2S plan is attached

8. Other Facets of Operation

9. Wellhead

1. The multi-bowl wellhead will be installed by a vendor representative. A copy of the installation instructions has been sent to the BLM field office.

2. A packoff will be installed after running and cementing the production casing. This packoff will be tested to 10K psi.

BOPE Additional Information & Testing

1. After running the first string of casing, a 10M BOP/BOPE system with 10M annular will be installed. BOPs will be tested according to Onshore Order #2. BOPE will be tested to full rated pressure (10K for all BOPE). For the low test, the system will be tested to 250 psi.

2. All BOP equipment will be tested utilizing a conventional test plug.

3. A remote kill line is included in the BOPE system

4. All casing strings will be tested per Onshore Order #2, to 0.22 psi/ft or 1,500 psi, whichever is greater, not to exceed 70% of casing burst.

5. If well conditions dictate, conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

Additional Well Control Notes

1. In the event wellbore pressure encroaches to the maximum rated pressure of the annular, primary pressure control will be switched to the higher rated components (i.e., switch from annular to pipe rams) – upper pipe rams will be closed, and the annular opened in order to not exceed maximum rated pressures.

slb

COTERRA

Rev1

COTERRA

Borehole:	Well:	Field:	Structure:
Emerald Federal Com 513H	Emerald Federal Com 513H	NM Lea County (NAD 83)	Coterra - Emerald Federal Com Pad (west)

Gravity & Magnetic Parameters

Model:	HDGM 2025	Dip:	60.413°	Date:	29-Oct-2025
MagDec:	6.25°	FS:	47456.908nT	Gravity FS:	998.51mgn (9.80665 Based)

Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet

Lat:	N 32 40 58.47	Northing:	612741.7ftUS	Grid Conv:	0.3381°
Lon:	W 103 42 26.15	Easting:	733960.55ftUS	Scale Fact:	0.99995158

Miscellaneous

Slot:	Emerald Federal Com 513H	TVD Ref:	RKB (3697.400 ft above MSL)
Plan:	Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25		

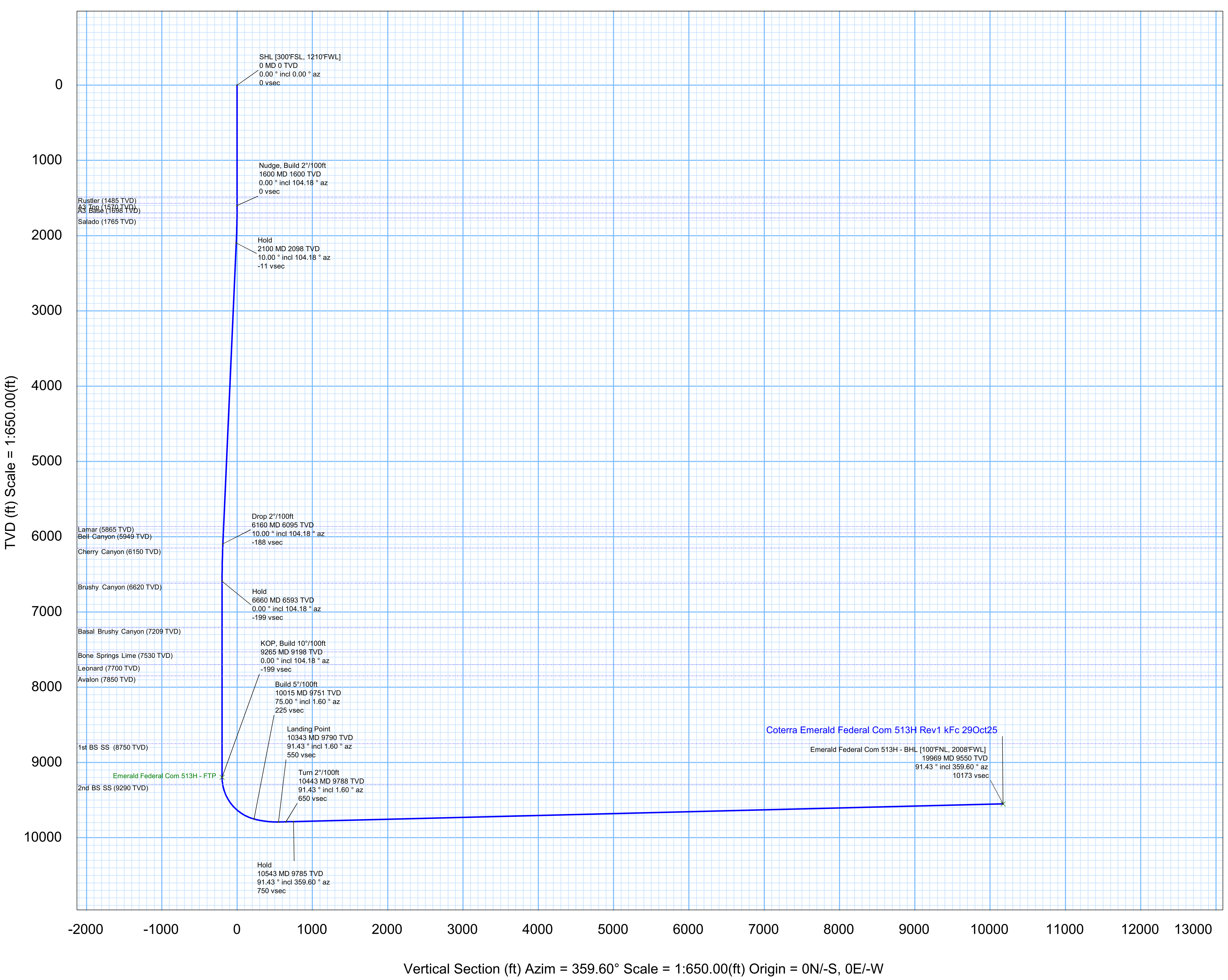
Critical Points

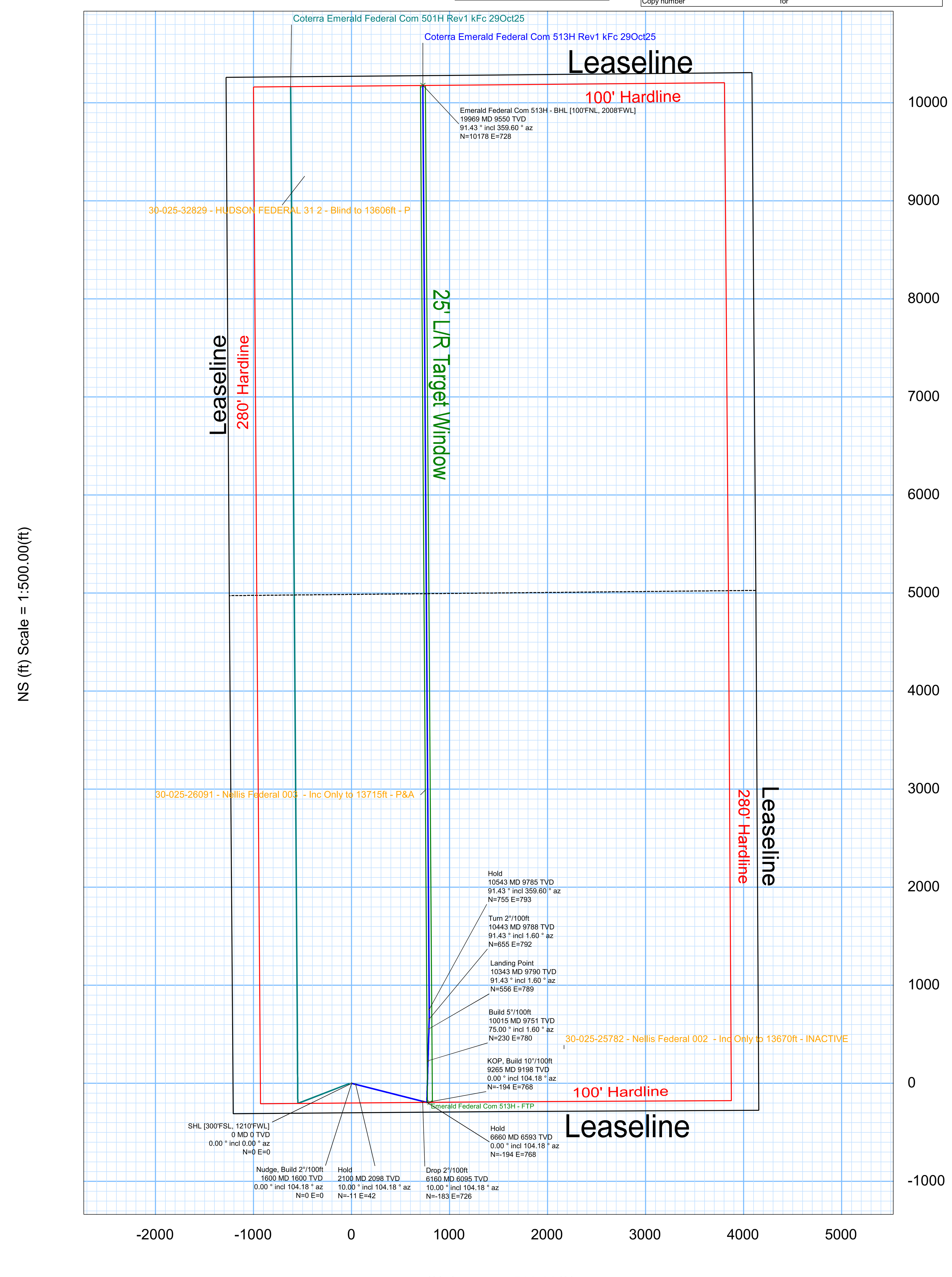
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [300'FSL, 1210'FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler	1485.00	0.00	104.18	1485.00	0.00	0.00	0.00	0.00
A3 Top	1570.00	0.00	104.18	1570.00	0.00	0.00	0.00	0.00
Nudge, Build 2°/100ft	1600.00	0.00	104.18	1600.00	0.00	0.00	0.00	0.00
A3 Base	1698.02	1.96	104.18	1698.00	-0.42	-0.41	1.63	2.00
Salado	1765.09	3.30	104.18	1765.00	-1.20	-1.16	4.61	2.00
Hold	2100.09	10.00	104.18	2097.56	-10.96	-10.66	42.21	2.00
Lamar	5925.68	10.00	104.18	5865.00	-178.18	-173.39	686.40	0.00
Bell Canyon	6010.97	10.00	104.18	5949.00	-181.90	-177.02	700.77	0.00
Drop 2°/100ft	6159.56	10.00	104.18	6095.32	-188.40	-183.34	725.79	0.00
Cherry Canyon	6214.98	8.89	104.18	6150.00	-190.69	-185.57	734.61	2.00
Hold	6659.65	0.00	104.18	6592.88	-199.36	-194.00	768.00	2.00
Brushy Canyon	6686.77	0.00	104.18	6620.00	-199.36	-194.00	768.00	0.00
Basal Brushy Canyon	7275.77	0.00	104.18	7209.00	-199.36	-194.00	768.00	0.00
Bone Springs Lime	7596.77	0.00	104.18	7530.00	-199.36	-194.00	768.00	0.00
Leonard	7766.77	0.00	104.18	7700.00	-199.36	-194.00	768.00	0.00
Avalon	7916.77	0.00	104.18	7850.00	-199.36	-194.00	768.00	0.00
1st BS SS	8816.77	0.00	104.18	8750.00	-199.36	-194.00	768.00	0.00
KOP, Build 10°/100ft	9264.65	0.00	104.18	9197.88	-199.36	-194.00	768.00	0.00
2nd BS SS	9357.17	9.25	1.60	9290.00	-191.91	-186.55	768.21	10.00
Build 5°/100ft	10014.65	75.00	1.60	9751.31	225.05	230.50	779.86	10.00
Landing Point	10343.25	91.43	1.60	9790.00	550.03	555.55	788.94	5.00
Turn 2°/100ft	10443.25	91.43	1.60	9787.51	649.94	655.48	791.73	0.00
Hold	10543.05	91.43	359.60	9785.02	749.69	755.25	792.78	2.00
Emerald Federal Com 513H - BHL [100'FNL, 2008'FWL]	19969.04	91.43	359.60	9550.00	10172.76	10178.08	727.54	0.00

D E C	CONTROLLED
Plan ref	Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25
Drawing ref	
Copy number	of 3
Date	29-Oct-2025

1	Client	
2	Client	
3	Office	
4	Office	
Copy number	for	

Grid North
Tot Corr (M->G 5.912°)
Mag Dec (6.250°)
Grid Conv (0.338°)





Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25 Proposal Geodetic Report

Def Plan

Report Date:	October 29, 2025 - 05:26 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	359.600 °(GRID North)
Field:	NM Lea County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra - Emerald Federal Com Pad (west) / Emerald Federal Com 513H	**TVD Reference Datum:**	RKB
Well:	Emerald Federal Com 513H	**TVD Reference Elevation:**	3697.400 ft above MSL
Borehole:	Emerald Federal Com 513H	**Seabed / Ground Elevation:**	3674.400 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.250°
Survey Name:	Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25	**Total Gravity Field Strength:**	998.51mgn (9.80665 Based)
Survey Date:	October 29, 2025	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	113.430 ° / 11164.775 ft / 6.412 / 1.140	**Total Magnetic Field Strength:**	47456.908 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	60.413°
Location Lat / Long:	32°40'58.47189"N , 103°42'26.15464"W	**Declination Date:**	October 29, 2025
Location Grid N/E Y/X:	N 612741.700 ftUS , E 733960.550 ftUS	**Magnetic Declination Model:**	HDGM 2025
CRS Grid Convergence Angle:	0.338°	**North Reference:**	Grid North
Grid Scale Factor:	0.99995158(Applied)	**Grid Convergence Used:**	0.338°
Version / Patch:	2025.1.0.1	**Total Corr Mag North->Grid North:**	5.912°
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
SHL [300'FSL, 1210'FWL]	0.00	0.00	0.00	0.00	-3,697.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518			
	100.00	0.00	104.18	100.00	-3,597.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	200.00	0.00	104.18	200.00	-3,497.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	300.00	0.00	104.18	300.00	-3,397.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	400.00	0.00	104.18	400.00	-3,297.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	500.00	0.00	104.18	500.00	-3,197.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	600.00	0.00	104.18	600.00	-3,097.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	700.00	0.00	104.18	700.00	-2,997.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	800.00	0.00	104.18	800.00	-2,897.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	900.00	0.00	104.18	900.00	-2,797.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	1,000.00	0.00	104.18	1,000.00	-2,697.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	1,100.00	0.00	104.18	1,100.00	-2,597.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	1,200.00	0.00	104.18	1,200.00	-2,497.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	1,300.00	0.00	104.18	1,300.00	-2,397.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	1,400.00	0.00	104.18	1,400.00	-2,297.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
Rustler□	1,485.00	0.00	104.18	1,485.00	-2,212.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
	1,500.00	0.00	104.18	1,500.00	-2,197.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
A3 Top□	1,570.00	0.00	104.18	1,570.00	-2,127.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
Nudge, Build 2°/100ft	1,600.00	0.00	104.18	1,600.00	-2,097.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
A3 Base□	1,698.02	1.96	104.18	1,698.00	-1,999.40	-0.42	-0.41	1.63	612,741.29	733,962.18	32.68290770	-103.70725990	2.00	2.00	0.00
	1,700.00	2.00	104.18	1,699.98	-1,997.42	-0.44	-0.43	1.69	612,741.27	733,962.24	32.68290766	-103.70725969	2.00	2.00	0.00
Salado□	1,765.09	3.30	104.18	1,765.00	-1,932.40	-1.20	-1.16	4.61	612,740.54	733,965.16	32.68290558	-103.70725022	2.00	2.00	0.00
	1,800.00	4.00	104.18	1,799.84	-1,897.56	-1.76	-1.71	6.77	612,739.99	733,967.32	32.68290405	-103.70724322	2.00	2.00	0.00
	1,900.00	6.00	104.18	1,899.45	-1,797.95	-3.95	-3.84	15.22	612,737.86	733,975.76	32.68289805	-103.70721580	2.00	2.00	0.00
	2,000.00	8.00	104.18	1,998.70	-1,698.70	-7.02	-6.83	27.03	612,734.87	733,987.58	32.68288965	-103.70717746	2.00	2.00	0.00
	2,100.00	10.00	104.18	2,097.47	-1,599.93	-10.95	-10.66	42.20	612,731.04	734,002.74	32.68287888	-103.70712825	2.00	2.00	0.00
Hold	2,100.09	10.00	104.18	2,097.56	-1,599.84	-10.96	-10.66	42.21	612,731.04	734,002.76	32.68287887	-103.70712820	2.00	2.00	0.00
	2,200.00	10.00	104.18	2,195.95	-1,501.45	-15.32	-14.91	59.04	612,726.79	734,019.58	32.68286691	-103.70707360	0.00	0.00	0.00
	2,300.00	10.00	104.18	2,294.43	-1,402.97	-19.70	-19.17	75.88	612,722.53	734,036.42	32.68285495	-103.70701896	0.00	0.00	0.00
	2,400.00	10.00	104.18	2,392.91	-1,304.49	-24.07	-23.42	92.71	612,718.28	734,053.26	32.68284299	-103.70696432	0.00	0.00	0.00
	2,500.00	10.00	104.18	2,491.39	-1,206.01	-28.44	-27.67	109.55	612,714.03	734,070.10	32.68283102	-103.70690967	0.00	0.00	0.00
	2,600.00	10.00	104.18	2,589.87	-1,107.53	-32.81	-31.93	126.39	612,709.77	734,086.94	32.68281906	-103.70685503	0.00	0.00	0.00
	2,700.00	10.00	104.18	2,688.35	-1,009.05	-37.18	-36.18	143.23	612,705.52	734,103.77	32.68280710	-103.70680039	0.00	0.00	0.00
	2,800.00	10.00	104.18	2,786.83	-910.57	-41.55	-40.43	160.07	612,701.27	734,120.61	32.68279513	-103.70674574	0.00	0.00	0.00
	2,900.00	10.00	104.18	2,885.31	-812.09	-45.92	-44.69	176.91	612,697.01	734,137.45	32.68278317	-103.70669110	0.00	0.00	0.00
	3,000.00	10.00	104.18	2,983.79	-713.61	-50.29	-48.94	193.75	612,692.76	734,154.29	32.68277120	-103.70663646	0.00	0.00	0.00
	3,100.00	10.00	104.18	3,082.27	-615.13	-54.66	-53.20	210.59	612,688.51	734,171.13	32.68275924	-103.70658181	0.00	0.00	0.00
	3,200.00	10.00	104.18	3,180.75	-516.65	-59.04	-57.45	227.43	612,684.25	734,187.97	32.68274728	-103.70652717	0.00	0.00	0.00
	3,300.00	10.00	104.18	3,279.23	-418.17	-63.41	-61.70	244.27	612,680.00	734,204.80	32.68273531	-103.70647253	0.00	0.00	0.00
	3,400.00	10.00	104.18	3,377.71	-319.69	-67.78	-65.96	261.10	612,675.75	734,221.64	32.68272335	-103.70641788	0.00	0.00	0.00
	3,500.00	10.00	104.18	3,476.19	-221.21	-72.15	-70.21	277.94	612,671.49	734,238.48	32.68271138	-103.70636324	0.00	0.00	0.00
	3,600.00	10.00	104.18	3,574.67	-122.73	-76.52	-74.46	294.78	612,667.24	734,255.32	32.68269942	-103.70630860	0.00	0.00	0.00
	3,700.00	10.00	104.18	3,673.15	-24.25	-80.89	-78.72	311.62	612,662.99	734,272.16	32.68268745	-103.70625395	0.00	0.00	0.00
	3,800.00	10.00	104.18	3,771.63	74.23	-85.26	-82.97	328.46	612,658.73	734,288.99	32.68267549	-103.70619931	0.00	0.00	0.00
	3,900.00	10.00	104.18	3,870.11	172.71	-89.63	-87.22	345.30	612,654.48	734,305.83	32.68266353	-103.70614467	0.00	0.00	0.00
	4,000.00	10.00	104.18	3,968.59	271.19	-94.00	-91.48	362.14	612,650.23	734,322.67	32.68265156	-103.70609002	0.00	0.00	0.00
	4,100.00	10.00	104.18	4,067.07	369.67	-98.37	-95.73	378.98	612,645.97	734,339.51	32.68263960	-103.70603538	0.00	0.00	0.00
	4,200.00	10.00	104.18	4,165.55	468.15	-102.75	-99.99	395.82	612,641.72	734,356.35	32.68262763	-103.70598074	0.00	0.00	0.00
	4,300.00	10.00	104.18	4,264.03	566.63	-107.12	-104.24	412.66	612,637.47	734,373.19	32.68261567	-103.70592609	0.00	0.00	0.00
	4,400.00	10.00	104.18	4,362.51	665.11	-111.49	-108.49	429.50	612,633.21	734,390.02	32.68260371	-103.70587145	0.00	0.00	0.00
	4,500.00	10.00	104.18	4,460.99	763.59	-115.86	-112.75	446.33	612,628.96	734,406.86	32.68259174	-103.70581681	0.00	0.00	0.00
	4,600.00	10.00	104.18	4,559.47	862.07	-120.23	-117.00	463.17	612,624.71	734,423.70	32.68257978	-103.70576216	0.00	0.00	0.00
	4,700.00	10.00	104.18	4,657.95	960.55	-124.60	-121.25	480.01	612,620.45	734,440.54	32.68256781	-103.70570752	0.00	0.00	0.00
	4,800.00	10.00	104.18	4,756.43	1,059.03	-128.97	-125.51	496.85	612,616.20	734,457.38	32.68255585	-103.70565288	0.00	0.00	0.00
	4,900.00	10.00	104.18	4,854.91	1,157.51	-133.34	-129.76	513.69	612,611.95	734,474.21	32.68254388	-103.70559823	0.00	0.00	0.00
	5,000.00	10.00	104.18	4,953.39	1,255.99	-137.71	-134.01	530.53	612,607.69	734,491.05	32.68253192	-103.70554359	0.00	0.00	0.00
	5,100.00	10.00	104.18	5,051.87	1,354.47	-142.09	-138.27	547.37	612,603.44	734,507.89	32.68251995	-103.70548895	0.00	0.00	0.00
	5,200.00	10.00	104.18	5,150.35	1,452.95	-146.46	-142.52	564.21	612,599.19	734,524.73	32.68250799	-103.70543431	0.00	0.00	0.00
	5,300.00	10.00	104.18	5,248.83	1,551.43	-150.83	-146.77	581.05	612,594.93	734,541.57	32.68249603	-103.70537966	0.00	0.00	0.00
	5,400.00	10.00	104.18	5,347.31	1,649.91	-155.20	-151.03	597.89	612,590.68	734,558.41	32.68248406	-103.70532502	0.00	0.00	0.00
	5,500.00	10.00	104.18	5,445.79	1,748.39	-159.57	-155.28	614.72	612,586.43	734,575.24	32.68247210	-103.70527038	0.00	0.00	0.00
	5,600.00	10.00	104.18	5,544.27	1,846.87	-163.94	-159.54	631.56	612,582.17	734,592.08	32.68246013	-103.70521573	0.00	0.00	0.00
	5,700.00	10.00	104.18	5,642.75	1,945.35	-168.31	-163.79	648.40	612,577.92	734,608.92	32.68244817	-103.70516109	0.00	0.00	0.00
	5,800.00	10.00	104.18	5,741.23	2,043.83	-172.68	-168.04	665.24	612,573.67	734,625.76	32.68243620	-103.70510645	0.00	0.00	0.00
	5,900.00	10.00	104.18	5,839.71	2,142.31	-177.05	-172.30	682.08	612,569.41	734,642.60	32.68242424	-103.70505180	0.00	0.00	0.00
Lamar□	5,925.68	10.00	104.18	5,865.00	2,167.60	-178.18	-173.39	686.40	612,568.32	734,646.92	32.68242117	-103.70503777	0.00	0.00	0.00
	6,000.00	10.00	104.18	5,938.19	2,240.79	-181.43	-176.55	698.92	612,565.16	734,659.43	32.68241227	-103.70499716	0.00	0.00	0.00
Bell Canyon□	6,010.97	10.00	104.18	5,949.00	2,251.60	-181.90	-177.02	700.77	612,564.69	734,661.28	32.68241096	-103.70499117	0.00	0.00	0.00
	6,100.00	10.00	104.18	6,036.67	2,339.27	-185.80	-180.80	715.76	612,560.91	734,676.27	32.68240031	-103.70494252	0.00	0.00	0.00
Drop 2°/100ft	6,159.56	10.00	104.18	6,095.32	2,397.92	-188.40	-183.34	725.79	612,558.37	734,686.30	32.68239318	-103.70490998	0.00	0.00	0.00
	6,200.00	9.19	104.18	6,135.20	2,437.80	-190.10	-184.99	732.33	612,556.72	734,692.84	32.68238854	-103.70488876	2.00	-2.00	0.00
Cherry Canyon□	6,214.98	8.89	104.18	6,150.00	2,452.60	-190.69	-185.57	734.61	612,556.14	734,695.12	32.68238691	-103.70488135	2.00	-2.00	0.00
	6,300.00	7.19	104.18	6,234.18	2,536.78	-193.68	-188.48	746.14	612,553.23	734,706.65	32.68237872	-103.70484393	2.00	-2.00	0.00
	6,400.00	5.19	104.18	6,333.59	2,636.19	-196.40	-191.12	756.60	612,550.59	734,717.11	32.68237129	-103.70480999	2.00	-2.00	0.00
	6,500.00	3.19	104.18	6,433.32	2,735.92	-198.24	-192.91	763.69	612,548.80	734,724.20	32.68236625	-103.70478699	2.00	-2.00	0.00
	6,600.00	1.19	104.18	6,533.24	2,835.84	-199.20	-193.85	767.40	612,547.86	734,727.91	32.68236362	-103.70477495	2.00	-2.00	0.00
Hold	6,659.65	0.00	104.18	6,592.88	2,895.48	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	2.00	-2.00	0.00
Brushy Canyon□	6,686.77	0.00	104.18	6,620.00	2,922.60	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	6,700.00	0.00	104.18	6,633.23	2,935.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	6,800.00	0.00	104.18	6,733.23	3,035.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	6,900.00	0.00	104.18	6,833.23	3,135.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,000.00	0.00	104.18	6,933.23	3,235.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,100.00	0.00	104.18	7,033.23	3,335.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,200.00	0.00	104.18	7,133.23	3,435.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
Basal Brushy Canyon□	7,275.77	0.00	104.18	7,209.00	3,511.60	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,300.00	0.00	104.18	7,233.23	3,535.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,400.00	0.00	104.18	7,333.23	3,635.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,500.00	0.00	104.18	7,433.23	3,735.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
Bone Springs Lime□	7,596.77	0.00	104.18	7,530.00	3,832.60	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,600.00	0.00	104.18	7,533.23	3,835.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,700.00	0.00	104.18	7,633.23	3,935.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
Leonard□	7,766.77	0.00	104.18	7,700.00	4,002.60	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,800.00	0.00	104.18	7,733.23	4,035.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	7,900.00	0.00	104.18	7,833.23	4,135.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
Avalon□	7,916.77	0.00	104.18	7,850.00	4,152.60	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,000.00	0.00	104.18	7,933.23	4,235.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,100.00	0.00	104.18	8,033.23	4,335.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,200.00	0.00	104.18	8,133.23	4,435.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,300.00	0.00	104.18	8,233.23	4,535.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,400.00	0.00	104.18	8,333.23	4,635.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,500.00	0.00	104.18	8,433.23	4,735.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,600.00	0.00	104.18	8,533.23	4,835.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,700.00	0.00	104.18	8,633.23	4,935.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
	8,800.00	0.00	104.18	8,733.23	5,035.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
1st BS SS □	8,816.77	0.00	104.18	8,750.00	5,052.60	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	8,900.00	0.00	104.18	8,833.23	5,135.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	9,000.00	0.00	104.18	8,933.23	5,235.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	9,100.00	0.00	104.18	9,033.23	5,335.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	9,200.00	0.00	104.18	9,133.23	5,435.83	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
KOP, Build 10°/100ft	9,264.65	0.00	104.18	9,197.88	5,500.48	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
	9,300.00	3.54	1.60	9,233.21	5,535.81	-198.27	-192.91	768.03	612,548.80	734,728.54	32.68236618	-103.70477288	10.00	10.00	0.00
2nd BS SS□	9,357.17	9.25	1.60	9,290.00	5,592.60	-191.91	-186.55	768.21	612,555.16	734,728.72	32.68238366	-103.70477218	10.00	10.00	0.00
	9,400.00	13.54	1.60	9,331.98	5,634.58	-183.45	-178.09	768.44	612,563.62	734,728.96	32.68240690	-103.70477125	10.00	10.00	0.00
	9,500.00	23.54	1.60	9,426.67	5,729.27	-151.72	-146.36	769.33	612,595.35	734,729.84	32.68249411	-103.70476775	10.00	10.00	0.00
	9,600.00	33.54	1.60	9,514.41	5,817.01	-104.04	-98.67	770.66	612,643.04	734,731.17	32.68262516	-103.70476251	10.00	10.00	0.00
	9,700.00	43.54	1.60	9,592.53	5,895.13	-41.86	-36.47	772.40	612,705.23	734,732.91	32.68279607	-103.70475566	10.00	10.00	0.00
	9,800.00	53.54	1.60	9,658.67	5,961.27	32.93	38.34	774.49	612,780.04	734,735.00	32.68300165	-103.70474743	10.00	10.00	0.00
	9,900.00	63.54	1.60	9,710.80	6,013.40	118.07	123.50	776.87	612,865.19	734,737.38	32.68323565	-103.70473806	10.00	10.00	0.00
	10,000.00	73.54	1.60	9,747.34	6,049.94	210.96	216.41	779.46	612,958.10	734,739.97	32.68349097	-103.70472784	10.00	10.00	0.00
Build 5°/100ft	10,014.65	75.00	1.60	9,751.31	6,053.91	225.05	230.50	779.86	612,972.19	734,740.37	32.68352969	-103.70472629	10.00	10.00	0.00
	10,100.00	79.27	1.60	9,770.32	6,072.92	308.19	313.66	782.18	613,055.34	734,742.69	32.68375821	-103.70471714	5.00	5.00	0.00
	10,200.00	84.27	1.60	9,784.63	6,087.23	407.07	412.56	784.94	613,154.24	734,745.45	32.68402998	-103.70470625	5.00	5.00	0.00
	10,300.00	89.27	1.60	9,790.27	6,092.87	506.82	512.33	787.73	613,254.00	734,748.24	32.68430414	-103.70469528	5.00	5.00	0.00
Landing Point	10,343.25	91.43	1.60	9,790.00	6,092.60	550.03	555.55	788.94	613,297.23	734,749.45	32.68442293	-103.70469052	5.00	5.00	0.00
	10,400.00	91.43	1.60	9,788.59	6,091.19	606.73	612.27	790.52	613,353.94	734,751.03	32.68457877	-103.70468428	0.00	0.00	0.00
Turn 2°/100ft	10,443.25	91.43	1.60	9,787.51	6,090.11	649.94	655.48	791.73	613,397.15	734,752.24	32.68469753	-103.70467952	0.00	0.00	0.00
	10,500.00	91.43	0.46	9,786.09	6,088.69	706.66	712.21	792.75	613,453.87	734,753.26	32.68485341	-103.70467511	2.00	0.00	-2.00
Hold	10,543.05	91.43	359.60	9,785.02	6,087.62	749.69	755.25	792.78	613,496.91	734,753.29	32.68497169	-103.70467420	2.00	0.00	-2.00
	10,600.00	91.43	359.60	9,783.60	6,086.20	806.63	812.18	792.38	613,553.84	734,752.89	32.68512817	-103.70467438	0.00	0.00	0.00
	10,700.00	91.43	359.60	9,781.11	6,083.71	906.59	912.14	791.69	613,653.80	734,752.20	32.68540293	-103.70467471	0.00	0.00	0.00
	10,800.00	91.43	359.60	9,778.61	6,081.21	1,006.56	1,012.11	791.00	613,753.76	734,751.51	32.68567769	-103.70467503	0.00	0.00	0.00
	10,900.00	91.43	359.60	9,776.12	6,078.72	1,106.53	1,112.08	790.31	613,853.72	734,750.82	32.68595245	-103.70467536	0.00	0.00	0.00
	11,000.00	91.43	359.60	9,773.63	6,076.23	1,206.50	1,212.04	789.61	613,953.68	734,750.12	32.68622721	-103.70467568	0.00	0.00	0.00
	11,100.00	91.43	359.60	9,771.13	6,073.73	1,306.47	1,312.01	788.92	614,053.64	734,749.43	32.68650197	-103.70467600	0.00	0.00	0.00
	11,200.00	91.43	359.60	9,768.64	6,071.24	1,406.44	1,411.98	788.23	614,153.60	734,748.74	32.68677673	-103.70467633	0.00	0.00	0.00
	11,300.00	91.43	359.60	9,766.15	6,068.75	1,506.41	1,511.94	787.54	614,253.57	734,748.05	32.68705149	-103.70467665	0.00	0.00	0.00
	11,400.00	91.43	359.60	9,763.65	6,066.25	1,606.38	1,611.91	786.84	614,353.53	734,747.36	32.68732624	-103.70467698	0.00	0.00	0.00
	11,500.00	91.43	359.60	9,761.16	6,063.76	1,706.35	1,711.88	786.15	614,453.49	734,746.66	32.68760100	-103.70467730	0.00	0.00	0.00
	11,600.00	91.43	359.60	9,758.67	6,061.27	1,806.31	1,811.84	785.46	614,553.45	734,745.97	32.68787576	-103.70467762	0.00	0.00	0.00
	11,700.00	91.43	359.60	9,756.17	6,058.77	1,906.28	1,911.81	784.77	614,653.41	734,745.28	32.68815052	-103.70467795	0.00	0.00	0.00
	11,800.00	91.43	359.60	9,753.68	6,056.28	2,006.25	2,011.78	784.08	614,753.37	734,744.59	32.68842528	-103.70467827	0.00	0.00	0.00
	11,900.00	91.43	359.60	9,751.19	6,053.79	2,106.22	2,111.74	783.38	614,853.34	734,743.89	32.68870004	-103.70467860	0.00	0.00	0.00
	12,000.00	91.43	359.60	9,748.69	6,051.29	2,206.19	2,211.71	782.69	614,953.30	734,743.20	32.68897480	-103.70467892	0.00	0.00	0.00
	12,100.00	91.43	359.60	9,746.20	6,048.80	2,306.16	2,311.67	782.00	615,053.26	734,742.51	32.68924956	-103.70467925	0.00	0.00	0.00
	12,200.00	91.43	359.60	9,743.71	6,046.31	2,406.13	2,411.64	781.31	615,153.22	734,741.82	32.68952432	-103.70467957	0.00	0.00	0.00
	12,300.00	91.43	359.60	9,741.21	6,043.81	2,506.10	2,511.61	780.62	615,253.18	734,741.13	32.68979908	-103.70467989	0.00	0.00	0.00
	12,400.00	91.43	359.60	9,738.72	6,041.32	2,606.07	2,611.57	779.92	615,353.14	734,740.43	32.69007384	-103.70468022	0.00	0.00	0.00
	12,500.00	91.43	359.60	9,736.23	6,038.83	2,706.03	2,711.54	779.23	615,453.10	734,739.74	32.69034860	-103.70468054	0.00	0.00	0.00
	12,600.00	91.43	359.60	9,733.73	6,036.33	2,806.00	2,811.51	778.54	615,553.07	734,739.05	32.69062335	-103.70468087	0.00	0.00	0.00
	12,700.00	91.43	359.60	9,731.24	6,033.84	2,905.97	2,911.47	777.85	615,653.03	734,738.36	32.69089811	-103.70468119	0.00	0.00	0.00
	12,800.00	91.43	359.60	9,728.75	6,031.35	3,005.94	3,011.44	777.16	615,752.99	734,737.67	32.69117287	-103.70468151	0.00	0.00	0.00
	12,900.00	91.43	359.60	9,726.25	6,028.85	3,105.91	3,111.41	776.46	615,852.95	734,736.97	32.69144763	-103.70468184	0.00	0.00	0.00
	13,000.00	91.43	359.60	9,723.76	6,026.36	3,205.88	3,211.37	775.77	615,952.91	734,736.28	32.69172239	-103.70468216	0.00	0.00	0.00
	13,100.00	91.43	359.60	9,721.27	6,023.87	3,305.85	3,311.34	775.08	616,052.87	734,735.59	32.69199715	-103.70468249	0.00	0.00	0.00
	13,200.00	91.43	359.60	9,718.77	6,021.37	3,405.82	3,411.31	774.39	616,152.83	734,734.90	32.69227191	-103.70468281	0.00	0.00	0.00
	13,300.00	91.43	359.60	9,716.28	6,018.88	3,505.79	3,511.27	773.69	616,252.80	734,734.21	32.69254667	-103.70468313	0.00	0.00	0.00
	13,400.00	91.43	359.60	9,713.79	6,016.39	3,605.75	3,611.24	773.00	616,352.76	734,733.51	32.69282143	-103.70468346	0.00	0.00	0.00
	13,500.00	91.43	359.60	9,711.29	6,013.89	3,705.72	3,711.21	772.31	616,452.72	734,732.82	32.69309619	-103.70468378	0.00	0.00	0.00
	13,600.00	91.43	359.60	9,708.80	6,011.40	3,805.69	3,811.17	771.62	616,552.68	734,732.13	32.69337094	-103.70468411	0.00	0.00	0.00
	13,700.00	91.43	359.60	9,706.31	6,008.91	3,905.66	3,911.14	770.93	616,652.64	734,731.44	32.69364570	-103.70468443	0.00	0.00	0.00
	13,800.00	91.43	359.60	9,703.81	6,006.41	4,005.63	4,011.11	770.23	616,752.60	734,730.75	32.69392046	-103.70468475	0.00	0.00	0.00
	13,900.00	91.43	359.60	9,701.32	6,003.92	4,105.60	4,111.07	769.54	616,852.56	734,730.05	32.69419522	-103.70468508	0.00	0.00	0.00
	14,000.00	91.43	359.60	9,698.83	6,001.43	4,205.57	4,211.04	768.85	616,952.53	734,729.36	32.69446998	-103.70468540	0.00	0.00	0.00
	14,100.00	91.43	359.60	9,696.33	5,998.93	4,305.54	4,311.01	768.16	617,052.49	734,728.67	32.69474474	-103.70468572	0.00	0.00	0.00
	14,200.00	91.43	359.60	9,693.84	5,996.44	4,405.51	4,410.97	767.47	617,152.45	734,727.98	32.69501950	-103.70468605	0.00	0.00	0.00
	14,300.00	91.43	359.60	9,691.35	5,993.95	4,505.48	4,510.94	766.77	617,252.41	734,727.28	32.69529426	-103.70468637	0.00	0.00	0.00
	14,400.00	91.43	359.60	9,688.85	5,991.45	4,605.44	4,610.90	766.08	617,352.37	734,726.59	32.69556902	-103.70468670	0.00	0.00	0.00
	14,500.00	91.43	359.60	9,686.36	5,988.96	4,705.41	4,710.87	765.39	617,452.33	734,725.90	32.69584377	-103.70468702	0.00	0.00	0.00
	14,600.00	91.43	359.60	9,683.87	5,986.47	4,805.38	4,810.84	764.70	617,552.30	734,725.21	32.69611853	-103.70468734	0.00	0.00	0.00
	14,700.00	91.43	359.60	9,681.37	5,983.97	4,905.35	4,910.80	764.00	617,652.26	734,724.52	32.69639329	-103.70468767	0.00	0.00	0.00
	14,800.00	91.43	359.60	9,678.88	5,981.48	5,005.32	5,010.77	763.31	617,752.22	734,723.82	32.69666805	-103.70468799	0.00	0.00	0.00
	14,900.00	91.43	359.60	9,676.39	5,978.99	5,105.29	5,110.74	762.62	617,852.18	734,723.13	32.69694281	-103.70468831	0.00	0.00	0.00
	15,000.00	91.43	359.60	9,673.89	5,976.49	5,205.26	5,210.70	761.93	617,952.14	734,722.44	32.69721757	-103.70468864	0.00	0.00	0.00
	15,100.00	91.43	359.60	9,671.40	5,974.00	5,305.23	5,310.67	761.24	618,052.10	734,721.75	32.69749233	-103.70468896	0.00	0.00	0.00
	15,200.00	91.43	359.60	9,668.91	5,971.51	5,405.20	5,410.64	760.54	618,152.06	734,721.06	32.69776709	-103.70468929	0.00	0.00	0.00
	15,300.00	91.43	359.60	9,666.41	5,969.01	5,505.16	5,510.60	759.85	618,252.03	734,720.36	32.69804185	-103.70468961	0.00	0.00	0.00
	15,400.00	91.43	359.60	9,663.92	5,966.52	5,605.13	5,610.57	759.16	618,351.99	734,719.67	32.69831660	-103.70468993	0.00	0.00	0.00
	15,500.00	91.43	359.60	9,661.43	5,964.03	5,705.10	5,710.54	758.47	618,451.95	734,718.98	32.69859136	-103.70469026	0.00	0.00	0.00
	15,600.00	91.43	359.60	9,658.93	5,961.53	5,805.07	5,810.50	757.78	618,551.91	734,718.29	32.69886612	-103.70469058	0.00	0.00	0.00
	15,700.00	91.43	359.60	9,656.44	5,959.04	5,905.04	5,910.47	757.08	618,651.87	734,717.60	32.69914088	-103.70469090	0.00	0.00	0.00
	15,800.00	91.43	359.60	9,653.95	5,956.55	6,005.01	6,010.44	756.39	618,751.83	734,716.90	32.69941564	-103.70469123	0.00	0.00	0.00
	15,900.00	91.43	359.60	9,651.45	5,954.05	6,104.98	6,110.40	755.70	618,851.79	734,716.21	32.69969040	-103.70469155	0.00	0.00	0.00
	16,000.00	91.43	359.60	9,648.96	5,951.56	6,204.95	6,210.37	755.01	618,951.76	734,715.52	32.69996516	-103.70469188	0.00	0.00	0.00
	16,100.00	91.43	359.60	9,646.47	5,949.07	6,304.92	6,310.34	754.32	619,051.72	734,714.83	32.70023992	-103.70469220	0.00	0.00	0.00
	16,200.00	91.43	359.60	9,643.97	5,946.57	6,404.88	6,410.30	753.62	619,151.68	734,714.13	32.70051467	-103.70469252	0.00	0.00	0.00
	16,300.00	91.43	359.60	9,641.48	5,944.08	6,504.85	6,510.27	752.93	619,251.64	734,713.44	32.70078943	-103.70469285	0.00	0.00	0.00
	16,400.00	91.43	359.60	9,638.99	5,941.59	6,604.82	6,610.24	752.24	619,351.60	734,712.75	32.70106419	-103.70469317	0.00	0.00	0.00
	16,500.00	91.43	359.60	9,636.49	5,939.09	6,704.79	6,710.20	751.55	619,451.56	734,712.06	32.70133895	-103.70469349	0.00	0.00	0.00
	16,600.00	91.43	359.60	9,634.00	5,936.60	6,804.76	6,810.17	750.85	619,551.52	734,711.37	32.70161371	-103.70469382	0.00	0.00	0.00
	16,700.00	91.43	359.60	9,631.51	5,934.11	6,904.73	6,910.13	750.16	619,651.49	734,710.67	32.70188847	-103.70469414	0.00	0.00	0.00
	16,800.00	91.43	359.60	9,629.01	5,931.61	7,004.70	7,010.10	749.47	619,751.45	734,709.98	32.70216323	-103.70469446	0.00	0.00	0.00
	16,900.00	91.43	359.60	9,626.52	5,929.12	7,104.67	7,110.07	748.78	619,851.41	734,709.29	32.70243798	-103.70469479	0.00	0.00	0.00
	17,000.00	91.43	359.60	9,624.03	5,926.63	7,204.64	7,210.03	748.09	619,951.37	734,708.60	32.70271274	-103.70469511	0.00	0.00	0.00
	17,100.00	91.43	359.60	9,621.53	5,924.13	7,304.60	7,310.00	747.39	620,051.33	734,707.91	32.70298750	-103.70469543	0.00	0.00	0.00
	17,200.00	91.43	359.60	9,619.04	5,921.64	7,404.57	7,409.97	746.70	620,151.29	734,707.21	32.70326226	-103.70469576	0.00	0.00	0.00
	17,300.00	91.43	359.60	9,616.55	5,919.15	7,504.54	7,509.93	746.01	620,251.26	734,706.52	32.70353702	-103.70469608	0.00	0.00	0.00
	17,400.00	91.43	359.60	9,614.05	5,916.65	7,604.51	7,609.90	745.32	620,351.22	734,705.83	32.70381178	-103.70469640	0.00	0.00	0.00
	17,500.00	91.43	359.60	9,611.56	5,914.16	7,704.48	7,709.87	744.63	620,451.18	734,705.14	32.70408654	-103.70469673	0.00	0.00	0.00
	17,600.00	91.43	359.60	9,609.07	5,911.67	7,804.45	7,809.83	743.93	620,551.14	734,704.45	32.70436129	-103.70469705	0.00	0.00	0.00
	17,700.00	91.43	359.60	9,606.57	5,909.17	7,904.42	7,909.80	743.24	620,651.10	734,703.75	32.70463605	-103.70469737	0.00	0.00	0.00
	17,800.00	91.43	359.60	9,604.08	5,906.68	8,004.39	8,009.77	742.55	620,751.06	734,703.06	32.70491081	-103.70469770	0.00	0.00	0.00
	17,900.00	91.43	359.60	9,601.59	5,904.19	8,104.36	8,109.73	741.86	620,851.02	734,702.37	32.70518557	-103.70469802	0.00	0.00	0.00
	18,000.00	91.43	359.60	9,599.09	5,901.69	8,204.32	8,209.70	741.16	620,950.99	734,701.68	32.70546033	-103.70469834	0.00	0.00	0.00
	18,100.00	91.43	359.60	9,596.60	5,899.20	8,304.29	8,309.67	740.47	621,050.95	734,700.99	32.70573509	-103.70469867	0.00	0.00	0.00
	18,200.00	91.43	359.60	9,594.11	5,896.71	8,404.26	8,409.63	739.78	621,150.91	734,700.29	32.70600984	-103.70469899	0.00	0.00	0.00
	18,300.00	91.43	359.60	9,591.61	5,894.21	8,504.23	8,509.60	739.09	621,250.87	734,699.60	32.70628460	-103.70469931	0.00	0.00	0.00
	18,400.00	91.43	359.60	9,589.12	5,891.72	8,604.20	8,609.57	738.40	621,350.83	734,698.91	32.70655936	-103.70469964	0.00	0.00	0.00
	18,500.00	91.43	359.60	9,586.63	5,889.23	8,704.17	8,709.53	737.70	621,450.79	734,698.22	32.70683412	-103.70469996	0.00	0.00	0.00
	18,600.00	91.43	359.60	9,584.13	5,886.73	8,804.14	8,809.50	737.01	621,550.75	734,697.52	32.70710888	-103.70470028	0.00	0.00	0.00
	18,700.00	91.43	359.60	9,581.64	5,884.24	8,904.11	8,909.46	736.32	621,650.72	734,696.83	32.70738364	-103.70470061	0.00	0.00	0.00
	18,800.00	91.43	359.60	9,579.15	5,881.75	9,004.08	9,009.43	735.63	621,750.68	734,696.14	32.70765839	-103.70470093	0.00	0.00	0.00
	18,900.00	91.43	359.60	9,576.65	5,879.25	9,104.05	9,109.40	734.94	621,850.64	734,695.45	32.70793315	-103.70470125	0.00	0.00	0.00
	19,000.00	91.43	359.60	9,574.16	5,876.76	9,204.01	9,209.36	734.24	621,950.60	734,694.76	32.70820791	-103.70470158	0.00	0.00	0.00
	19,100.00	91.43	359.60	9,571.67	5,874.27	9,303.98	9,309.33	733.55	622,050.56	734,694.06	32.70848267	-103.70470190	0.00	0.00	0.00
	19,200.00	91.43	359.60	9,569.17	5,871.77	9,403.95	9,409.30	732.86	622,150.52	734,693.37	32.70875743	-103.70470222	0.00	0.00	0.00
	19,300.00	91.43	359.60	9,566.68	5,869.28	9,503.92	9,509.26	732.17	622,250.48	734,692.68	32.70903219	-103.70470255	0.00	0.00	0.00
	19,400.00	91.43	359.60	9,564.19	5,866.79	9,603.89	9,609.23	731.48	622,350.45	734,691.99	32.70930694	-103.70470287	0.00	0.00	0.00
	19,500.00	91.43	359.60	9,561.69	5,864.29	9,703.86	9,709.20	730.78	622,450.41	734,691.30	32.70958170	-103.70470319	0.00	0.00	0.00
	19,600.00	91.43	359.60	9,559.20	5,861.80	9,803.83	9,809.16	730.09	622,550.37	734,690.60	32.70985646	-103.70470352	0.00	0.00	0.00
	19,700.00	91.43	359.60	9,556.71	5,859.31	9,903.80	9,909.13	729.40	622,650.33	734,689.91	32.71013122	-103.70470384	0.00	0.00	0.00
	19,800.00	91.43	359.60	9,554.21	5,856.81	10,003.77	10,009.10	728.71	622,750.29	734,689.22	32.71040598	-103.70470416	0.00	0.00	0.00
	19,900.00	91.43	359.60	9,551.72	5,854.32	10,103.73	10,109.06	728.01	622,850.25	734,688.53	32.71068074	-103.70470449	0.00	0.00	0.00
Emerald Federal Com 513H - BH	19,969.04	91.43	359.60	9,550.00	5,852.60	10,172.76	10,178.08	727.54	622,919.27	734,688.05	32.71087044	-103.70470471	0.00	0.00	0.00

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 4 *** 3-D 95 % Confidence 2.7955 sigma

Survey Program:

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
Description		**Part**	**MD From (ft)**	**MD To (ft)**	**EOU Freq (ft)**	**Hole Size (in)**	**Casing Diameter (in)**	**Expected Max Inclination (deg)**	**Survey Tool Code**		**Vendor / Tool**		**Borehole / Survey**		
		1	0.000	9,300.000	1/100.000 ′.5 – 12.25 – 8.75		3.375 – 9.625 – 7		A001Mb_MWD				Emerald Federal Com 513H / Coterra Emerald Fed		
		1	9,300.000	19,969.043	1/100.000	8.75 – 6	7 – 4.5		A008Mb_MWD+IFR1+MS				Emerald Federal Com 513H / Coterra Emerald Fed		

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,300.000	17.500	13.375	
4,945.784	12.250	9.625	
9,582.878	8.750	7.000	
19,969.043	6.000	4.500	

Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25 Proposal Geodetic Report

Def Plan

Report Date:	October 29, 2025 - 05:25 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	359.600 °(GRID North)
Field:	NM Lea County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra - Emerald Federal Com Pad (west) / Emerald Federal Com 513H	**TVD Reference Datum:**	RKB
Well:	Emerald Federal Com 513H	**TVD Reference Elevation:**	3697.400 ft above MSL
Borehole:	Emerald Federal Com 513H	**Seabed / Ground Elevation:**	3674.400 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.250°
Survey Name:	Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25	**Total Gravity Field Strength:**	998.51mgn (9.80665 Based)
Survey Date:	October 29, 2025	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	113.430 ° / 11164.775 ft / 6.412 / 1.140	**Total Magnetic Field Strength:**	47456.908 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	60.413°
Location Lat / Long:	32°40'58.47189"N , 103°42'26.15464"W	**Declination Date:**	October 29, 2025
Location Grid N/E Y/X:	N 612741.700 ftUS , E 733960.550 ftUS	**Magnetic Declination Model:**	HDGM 2025
CRS Grid Convergence Angle:	0.338°	**North Reference:**	Grid North
Grid Scale Factor:	0.99995158(Applied)	**Grid Convergence Used:**	0.338°
Version / Patch:	2025.1.0.1	**Total Corr Mag North->Grid North:**	5.912°
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
SHL [300'FSL, 1210'FWL]	0.00	0.00	0.00	0.00	-3,697.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518			
Nudge, Build 2°/100ft	1,600.00	0.00	104.18	1,600.00	-2,097.40	0.00	0.00	0.00	612,741.70	733,960.55	32.68290886	-103.70726518	0.00	0.00	0.00
Hold	2,100.09	10.00	104.18	2,097.56	-1,599.84	-10.96	-10.66	42.21	612,731.04	734,002.76	32.68287887	-103.70712820	2.00	2.00	0.00
Drop 2°/100ft	6,159.56	10.00	104.18	6,095.32	2,397.92	-188.40	-183.34	725.79	612,558.37	734,686.30	32.68239318	-103.70490998	0.00	0.00	0.00
Hold	6,659.65	0.00	104.18	6,592.88	2,895.48	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	2.00	-2.00	0.00
KOP, Build 10°/100ft	9,264.65	0.00	104.18	9,197.88	5,500.48	-199.36	-194.00	768.00	612,547.71	734,728.51	32.68236319	-103.70477300	0.00	0.00	0.00
Build 5°/100ft	10,014.65	75.00	1.60	9,751.31	6,053.91	225.05	230.50	779.86	612,972.19	734,740.37	32.68352969	-103.70472629	10.00	10.00	0.00
Landing Point	10,343.25	91.43	1.60	9,790.00	6,092.60	550.03	555.55	788.94	613,297.23	734,749.45	32.68442293	-103.70469052	5.00	5.00	0.00
Turn 2°/100ft	10,443.25	91.43	1.60	9,787.51	6,090.11	649.94	655.48	791.73	613,397.15	734,752.24	32.68469753	-103.70467952	0.00	0.00	0.00
Hold	10,543.05	91.43	359.60	9,785.02	6,087.62	749.69	755.25	792.78	613,496.91	734,753.29	32.68497169	-103.70467420	2.00	0.00	-2.00
Emerald Federal Com 513H - BHL [100'FNL, 2008'FWL]	19,969.04	91.43	359.60	9,550.00	5,852.60	10,172.76	10,178.08	727.54	622,919.27	734,688.05	32.71087044	-103.70470471	0.00	0.00	0.00

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 4 *** 3-D 95 % Confidence 2.7955 sigma

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Code	Vendor / Tool	Borehole / Survey
	1	0.000	9,300.000	1/100.000	'.5 – 12.25 – 8.75	3.375 – 9.625 – 7		A001Mb_MWD		Emerald Federal Com 513H / Coterra Emerald Fede
	1	9,300.000	19,969.043	1/100.000	8.75 – 6	7 – 4.5		A008Mb_MWD+IFR1+MS		Emerald Federal Com 513H / Coterra Emerald Fede

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,300.000	17.500	13.375	
4,945.784	12.250	9.625	
9,582.878	8.750	7.000	
19,969.043	6.000	4.500	

Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25 Anti-Collision Summary Report

Analysis Date-24hr Time:	October 29, 2025 - 05:26 PM (UTC 0)	**Analysis Method:**	3D Least Distance
Client:	COTERRA	**Reference Trajectory:**	Coterra Emerald Federal Com 513H Rev1 kFc 29Oct25 (Def
Field:	NM Lea County (NAD 83)	**Depth Interval:**	Every 10.00 Measured Depth (ft)
Structure:	Coterra - Emerald Federal Com Pad (west)	**Rule Set:**	NAL Procedure: D&M AntiCollision Standard S002
Slot:	Emerald Federal Com 513H	**Min Pts:**	Absolute minima indicated.
Well:	Emerald Federal Com 513H	**Engine Version:**	2025.1.0.1
Borehole:	Emerald Federal Com 513H	**Database \ Project:**	Emerald Federal Com 513H–COTERRA
Scan MD Range:	0.00ft ~ 19969.04ft		

Trajectory Error Model: ISCWSA Rev 4 *** 3-D 95 % Confidence 2.7955 sigma

Offset Trajectories Summary

Offset Selection Criteria

Bounding box scan: minimum Ct-Ct separation <= 2000ft

Selection filters: Definitive Surveys - Definitive Plans - Definitive surveys exclude definitive plans
- All Non-Def Surveys when no Def-Survey is set in a borehole - All Non-Def Plans when no Def-Plan is set in a borehole

4 out of 10 are selected

Offset Trajectory	Separation			Allow	Sep.	Breaking	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)	Dev. (ft)	Fact.	Rule	MD (ft)	TVD (ft)	Alert	Minor	Major	
30-025-26091 - Nellis Federal 003 - Inc Only to 13715ft - P&A (DefinitiveSurvey) - **Fail Major**												
	3086.97	32.81	3083.58	3054.17	2180.17		0.00	0.00				Surface
	3086.97	32.81	3083.51	3054.17	2082.17		23.00	23.00				WRP
	3086.97	94.99	3023.06	2991.99	49.64		1600.00	1600.00				MinPt-CtCt
	3172.94	411.88	**2897.82**	2761.06	11.60		6060.00	5997.28				MinPt-EOU
	2261.65	681.44	1806.86	1580.21	4.99	OSF 5.00	10520.00	9785.59	OSF<=5.00			Enter Alert
	672.44	678.22	219.79	-5.78	1.49	OSF 1.50	12110.00	9745.95		OSF<=1.50		Enter Minor
	442.72	677.76	-9.62	-235.04	0.98	OSF 1.00	12340.00	9740.22			OSF<=1.00	Enter Major
	23.46	679.56	**-430.08**	**-656.10**	**0.05**	OSF 1.00	12782.24	9729.19				MinPts
	448.24	676.11	-3.00	-227.87	0.99	OSF 1.00	13230.00	9718.02			OSF>1.00	Exit Major
	667.97	675.68	217.01	-7.71	1.48	OSF 1.50	13450.00	9712.54		OSF>1.50		Exit Minor
	2237.19	672.76	1788.19	1564.43	5.00	OSF 5.00	15020.00	9673.39	OSF>5.00			Exit Alert
	7184.61	664.41	6741.17	6520.20	16.25		19969.04	9550.00				TD
30-025-32829 - HUDSON FEDERAL 31 2 - Blind to 13606ft - P (DefinitiveSurvey) - **Fail Major**												
	9265.25	32.81	9242.74	9232.44	451.26		0.00	0.00				Surface
	9265.25	56.61	9226.85	9208.64	254.36		23.00	23.00				WRP
	9265.25	2783.82	7408.78	6481.42	4.99	OSF 5.00	1360.00	1360.00	OSF<=5.00			Enter Alert
	9265.25	3281.96	7076.69	5983.29	4.24	OSF 5.00	1600.00	1600.00				MinPt-CtCt
	9417.05	9424.57	3133.42	-7.51	1.50	OSF 1.50	4600.00	4559.47		OSF<=1.50		Enter Minor
	9528.72	14309.83	-11.71	-4781.12	1.00	OSF 1.00	6980.00	6913.23			OSF<=1.00	Enter Major
	1213.37	19834.27	-12009.98	**-18620.90**	0.09	OSF 1.00	18990.00	9574.41				MinPt-ADP
	1212.51	19833.24	**-12010.15**	-18620.73	0.09	OSF 1.00	19010.00	9573.91				MinPt-EOU
	1211.79	19831.18	-12009.50	-18619.40	**0.09**	OSF 1.00	19050.00	9572.91				MinPt-SF
	1211.78	19831.08	-12009.44	-18619.30	0.09	OSF 1.00	19051.96	9572.87				MinPt-CtCt
	1519.52	19783.40	-11669.92	-18263.88	0.12	OSF 1.00	19969.04	9550.00				TD
Coterra Emerald Federal Com 501H Rev1 kFc 29Oct25 (DefinitivePlan) - **Fail Minor**												
	19.89	16.31	16.60	3.58	9.30	CtCt 15.00m	0.00	0.00	CtCt<=15.00m			Enter Alert
	19.89	16.31	16.60	3.58	9.30	CtCt 15.00m	23.00	23.00				WRP
	19.89	20.00	**6.13**	**-0.10**	**1.49**	OSF 1.50	1290.00	1290.00		OSF>1.50		Exit Minor
	19.89	19.99	6.24	-0.10	1.49	OSF 1.50	1310.00	1310.00		OSF<=1.50		Enter Minor
	19.89	24.31	3.36	-4.41	1.22	OSF 1.50	1600.00	1600.00				MinPt-CtCt
	19.92	24.45	**3.30**	-4.52	1.21	OSF 1.50	1610.00	1610.00				MinPt-EOU
	20.02	24.59	3.30	**-4.57**	**1.21**	OSF 1.50	1620.00	1620.00				MinPts
	25.48	26.15	7.72	-0.66	1.46	OSF 1.50	1730.00	1729.96		OSF>1.50		Exit Minor
	98.43	31.19	77.30	67.23	**4.84**	OSF 5.00	2100.09	2097.56				MinPt-SF
	101.19	31.33	79.98	69.86	4.95	OSF 5.00	2110.00	2107.31	OSF>5.00			Exit Alert
	1316.55	137.78	1224.37	1178.77	14.43		9264.65	9197.88				MinPt-CtCt
	1316.59	138.03	**1224.24**	1178.56	14.40		9300.00	9233.21				MinPt-EOU
	1316.64	138.10	1224.25	**1178.54**	14.39		9320.00	9253.15				MinPt-ADP
	1317.12	138.39	1224.53	1178.73	**14.37**		9400.00	9331.98				MinPt-SF
	1348.40	363.16	**1105.97**	**985.25**	**5.58**		19969.04	9550.00				MinPts
30-025-25782 - Nellis Federal 002 - Inc Only to 13670ft - INACTIVE (DefinitiveSurvey) - **Warning Alert**												
	2194.58	32.81	2191.18	2161.77	1550.18		0.00	0.00				Surface
	2194.51	32.81	2191.12	2161.71	1545.51		23.00	23.00				WRP
	1500.70	451.38	1199.24	1049.31	5.00	OSF 5.00	7330.00	7263.23	OSF<=5.00			Enter Alert
	1382.52	643.64	952.93	738.88	3.23	OSF 5.00	10176.78	9782.08				MinPt-CtCt
	1382.58	643.76	**952.91**	**738.82**	3.23	OSF 5.00	10190.00	9783.59				MinPts
	1382.71	643.85	952.98	738.87	**3.23**	OSF 5.00	10200.00	9784.63				MinPt-SF
	2137.70	642.57	1708.81	1495.12	5.00	OSF 5.00	11770.00	9754.43	OSF>5.00			Exit Alert
	9931.96	629.61	9511.72	9302.34	23.71		19969.04	9550.00				TD

Results highlighted in red: Sep-Factor <= 1.5

Result highlighted in boxed, red and bold: all local minima indicated.

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

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: Avant Operating, LLC 6001 Deauville Blvd Midland, TX 79706	OGRID: 330396
	Action Number: 533019
	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.	12/24/2025
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.	12/24/2025
matthew.gomez	All conducted logs must be submitted to the OCD.	12/24/2025
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.	12/24/2025
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.	12/24/2025
matthew.gomez	All previous COA's still apply.	12/24/2025