

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

<b>Well Name:</b> CASCADE 28 FEDERAL	<b>Well Location:</b> T25S / R33E / SEC 28 / NENW /	<b>County or Parish/State:</b>
<b>Well Number:</b> 31H	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMNM043562	<b>Unit or CA Name:</b>	<b>Unit or CA Number:</b>
<b>US Well Number:</b> 3002550105	<b>Well Status:</b> Approved Application for Permit to Drill	<b>Operator:</b> CIMAREX ENERGY COMPANY

**Notice of Intent**

**Sundry ID:** 2756102

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 10/11/2023

**Time Sundry Submitted:** 03:50

**Date proposed operation will begin:** 01/01/2024

**Procedure Description:** Cimarex Energy Co. respectfully requests to change the approved APD as follows: SHL/KOP Current: Unit C, Sec 28, T25S, R33E, 390 FNL & 1455 FWL SHL/KOP New: Unit C, Sec 28, T25S, R33E, 210 FNL & 1355 FWL LP/FTP Current: Unit C, Sec 28, T25S, R33E, 390 FNL & 330 FWL LP/FTP New: Unit C, Sec 28, T25S, R33E, 100 FNL & 442 FWL BHL/LTP Current: Unit N, Sec 28, T25S, R33E 100 FSL, 330 FWL BHL/LTP New: Unit M, Sec 28, T25S, R33E, 100 FSL & 442 FWL TVD/TD Current: 12,555 TVD & 17,211 MD TVD/TD New: 12,340 TVD & 17,269 MD

**NOI Attachments**

**Procedure Description**

Cascade\_28\_Federal\_31H\_Sundry\_Attachments\_10112023\_20231011155002.pdf

**Well Name:** CASCADE 28 FEDERAL

**Well Location:** T25S / R33E / SEC 28 / NENW /

**County or Parish/State:**

**Well Number:** 31H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM043562

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:** 3002550105

**Well Status:** Approved Application for Permit to Drill

**Operator:** CIMAREX ENERGY COMPANY

**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:** OCT 11, 2023 03:50 PM

**Name:** CIMAREX ENERGY COMPANY

**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:** 02/07/2024

**Signature:** Chris Walls

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

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

1. Type of Well

Oil Well     Gas Well     Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. (include area code)

10. Field and Pool or Exploratory Area

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

11. Country or Parish, State

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

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

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

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

Title

Signature

Date

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

Approved by

Title

Date

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

Office

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

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

## Additional Information

### Location of Well

0. SHL: NENW / 390 FNL / 1455 FWL / TWSP: 25S / RANGE: 33E / SECTION: 28 / LAT: 32.107737 / LONG: -103.581072 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNW / 390 FNL / 330 FWL / TWSP: 25S / RANGE: 33E / SECTION: 28 / LAT: 32.107747 / LONG: -103.584705 ( TVD: 12555 feet, MD: 13146 feet )

BHL: SWSW / 100 FSL / 330 FWL / TWSP: 25S / RANGE: 33E / SECTION: 28 / LAT: 32.09458 / LONG: -103.584713 ( TVD: 12555 feet, MD: 17211 feet )

CONFIDENTIAL

**1. Geological Formations**

TVD of target 12,340  
MD at TD 17,269

Pilot Hole TD N/A  
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	994	N/A	
Top Salt	1328	N/A	
Lamar	4920	N/A	
Bell Canyon	4954	Hydrocarbons	
Cherry Canyon	6014	Hydrocarbons	
Brushy Canyon	7508	Hydrocarbons	
Bone Spring	9048	Hydrocarbons	
Upper Avalon Shale	9723	Hydrocarbons	
Wolfcamp	12169	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
14 3/4	0	1050	1050	10-3/4"	40.50	J-55	BT&C	3.47	6.88	14.79
9 7/8	0	12611	12336	7-5/8"	29.70	HCL-80	BT&C	2.51	1.19	1.86
6 3/4	0	11860	11860	5-1/2"	23.00	L-80	LT&C	1.45	1.28	2.20
6 3/4	12050	17269	12340	5"	18.00	P-110	BT&C	1.68	1.70	67.13
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

Request Variance for 5-1/2" x 7-5/8" annular clearance. The portion that does not meet clearance will not be cemented

	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	408	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	109	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	1003	10.30	3.64	22.18		Lead: Tuned Light + LCM
	198	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Production	701	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	49
Production	12411	25

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

**4. Pressure Control Equipment**

	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
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BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
<b>9 7/8</b>	<b>13 5/8</b>	<b>5M</b>	Annular	X	50% of working pressure
			Blind Ram		5M
			Pipe Ram	X	
			Double Ram	X	
			Other		
<b>6 3/4</b>	<b>13 5/8</b>	<b>10M</b>	Annular	X	50% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

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 1050'	Fresh Water	7.83 - 8.33	28	N/C
1050' to 12611'	Brine Diesel Emulsion	8.50 - 9.00	30-35	N/C
12611' to 17269'	OBM	12.00 - 12.50	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. The Brine Emulsion is completely saturated brine fluid that ties diesel into itself to lower the weight of the fluid. The drilling fluid is completely salt saturated.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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**6. Logging and Testing Procedures**

Logging, Coring and Testing	
	Will run GR/CNL from TD 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	8021 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**

A multi-bowl wellhead system will be utilized.

After running the 10-3/4" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 10000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 10000 psi test. Annular will be tested to 50% of working pressure. The pressure test will be repeated at least every 30 days, as per Onshore Order No. 2.

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

The wellhead will be installed by a third-party welder while being monitored by the wellhead vendor representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 10000 psi.

All casing strings will be tested as per Onshore Order No.2 to atleast 0.22 psi/ft or 1,500 whichever is greater and not to exceed 70% of casing burst.

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

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name
	98094	Bobcat Draw; Upper Wolfcamp
<sup>4</sup> Property Code	<sup>5</sup> Property Name	<sup>6</sup> Well Number
	CASCADE 28 FEDERAL	31H
<sup>7</sup> OGRID No.	<sup>8</sup> Operator Name	<sup>9</sup> Elevation
215099	CIMAREX ENERGY CO.	3385.3'

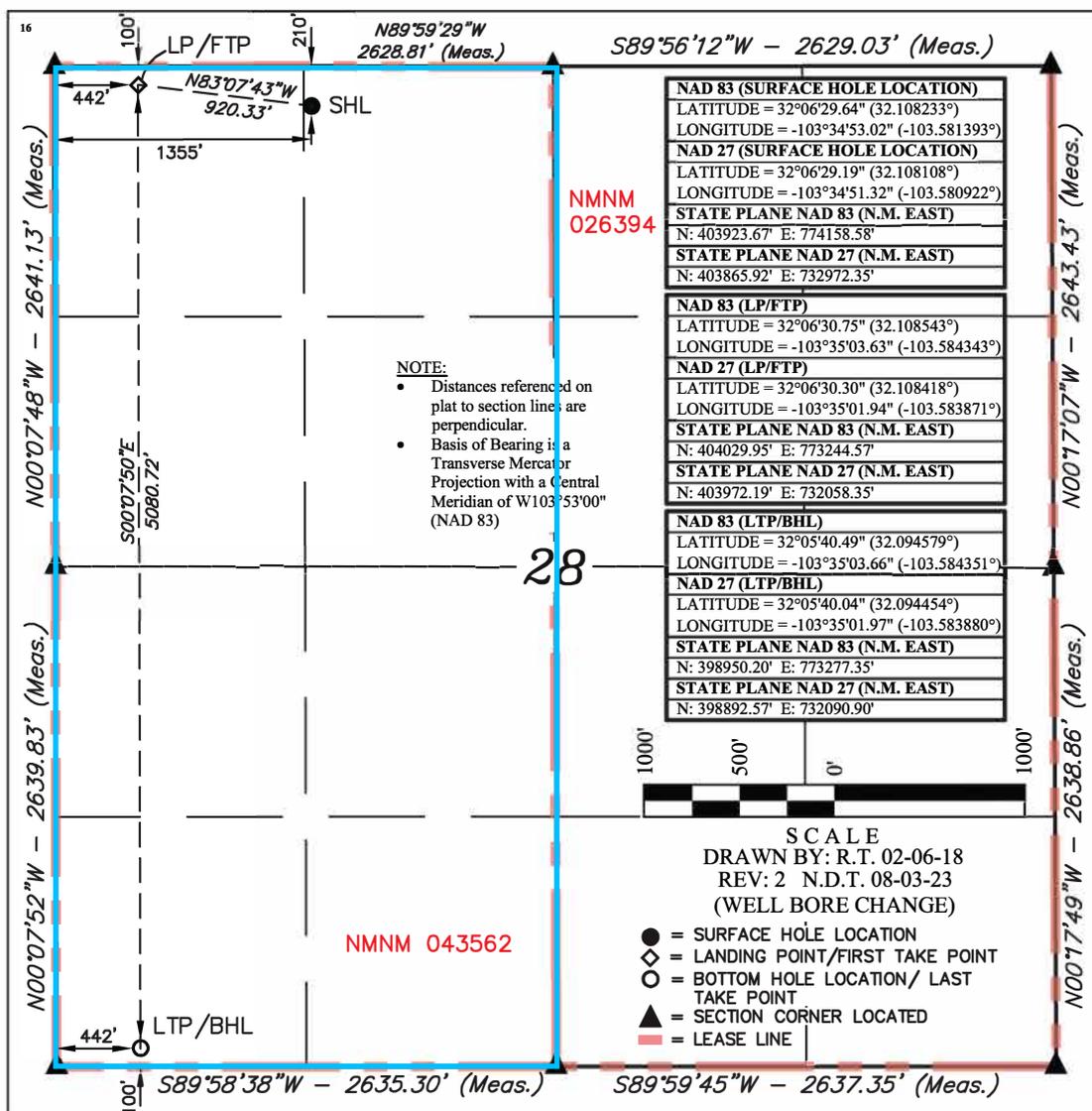
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	28	25S	33E		210	NORTH	1355	WEST	LEA

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	28	25S	33E		100	SOUTH	442	WEST	LEA
<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						
320									

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.



<sup>17</sup> OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shelly Bowen 10/11/23  
Signature Date

Shelly Bowen  
Printed Name

Shelly.Bowen@coterra.com  
E-mail Address

<sup>18</sup> SURVEYOR 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.

January 24, 2018

Date of Survey  
Signature and Seal of Professional Surveyor:



Certificate Number:

<b>Borehole:</b> Cascade 28 Federal 31H	<b>Well:</b> Cascade 28 Federal 31H	<b>Field:</b> NM Lea County (NAD 83)	<b>Structure:</b> Coterra Cascade 28 Federal Pad (Lot C)
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<b>Gravity &amp; Magnetic Parameters</b>		<b>Surface Location</b>			<b>NAD83 New Mexico State Plane, Eastern Zone, US Feet</b>		<b>Miscellaneous</b>	
Model: HDGM 2023	Dip: 59.621°	Date: 19-Sep-2023	Lat: N 32 6 29.64	Northing: 403923.67ftUS	Grid Conv: 0.3997°	Slot: Cascade 28 Federal 31H	TVD Ref: RKB (3408.300 ft above MSL)	
MagDec: 6.213°	FS: 47318.882nT	Gravity FS: 998.435mgn (9.80665 Based)	Lon: W 103 34 53.02	Easting: 774158.58ftUS	Scale Fact: 0.99997117	Plan: Coterra Cascade 28 Federal 31H Rev1 kFc 19Sept23		

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [210' FNL, 1395' FWL]	0.00	0.00	276.63	0.00	0.00	0.00	0.00	0.00
Rustle	995.00	0.00	276.63	0.00	0.00	0.00	0.00	0.00
Salado	1340.00	0.00	276.63	1340.00	0.00	0.00	0.00	0.00
Nudge, Build 2"/100ft	1800.00	0.00	276.63	1800.00	0.00	0.00	0.00	0.00
Hold	2300.04	10.00	276.63	2297.51	2.59	5.03	-43.24	2.00
Lamar	4973.15	10.00	276.63	4930.00	30.25	58.65	-504.35	0.00
Bell Canyon	5013.77	10.00	276.63	4970.00	30.67	59.46	-511.36	0.00
Cherry Canyon	6044.43	10.00	276.63	5985.00	41.33	80.13	-689.15	0.00
Drop 2"/100ft	7097.48	10.00	276.63	7022.05	52.22	101.26	-870.80	0.00
Hold	7597.53	0.00	276.63	7519.56	54.82	106.28	-914.04	2.00
Brushy Canyon	7652.97	0.00	276.63	7575.00	54.82	106.28	-914.04	0.00
Basal Brushy Canyon	8997.97	0.00	276.63	8920.00	54.82	106.28	-914.04	0.00
Bone Spring Lime	9167.97	0.00	276.63	9090.00	54.82	106.28	-914.04	0.00
Leonard	9207.97	0.00	276.63	9130.00	54.82	106.28	-914.04	0.00
Avalon	9407.97	0.00	276.63	9330.00	54.82	106.28	-914.04	0.00
1st BS SS	10182.97	0.00	276.63	10105.00	54.82	106.28	-914.04	0.00
2nd BS SS	10762.97	0.00	276.63	10685.00	54.82	106.28	-914.04	0.00
3rd BS Carb	11197.97	0.00	276.63	11120.00	54.82	106.28	-914.04	0.00
KOP, Build 10"/100ft	11860.53	0.00	276.63	11782.56	54.82	106.28	-914.04	0.00
3rd BS SS	11862.97	0.24	179.63	11785.56	54.82	106.28	-914.04	10.00
Wolfcamp	12328.19	46.77	179.63	12200.00	232.34	-74.21	-912.87	10.00
Build 5"/100ft	12610.53	75.00	179.63	12335.99	472.48	-318.37	-911.30	10.00
Landing Point	12919.75	90.46	179.63	12375.00	773.25	-624.17	-909.32	5.00
Cascade 28 Federal 31H - BHL [100' FSL, 442' FWL]	17269.43	90.46	179.63	12340.00	5051.09	-4973.62	-881.26	0.00

**CONTROLLED**

Plan ref: Coterra Cascade 28 Federal 31H Rev1 kFc 19Sept23

Drawing ref: \_\_\_\_\_

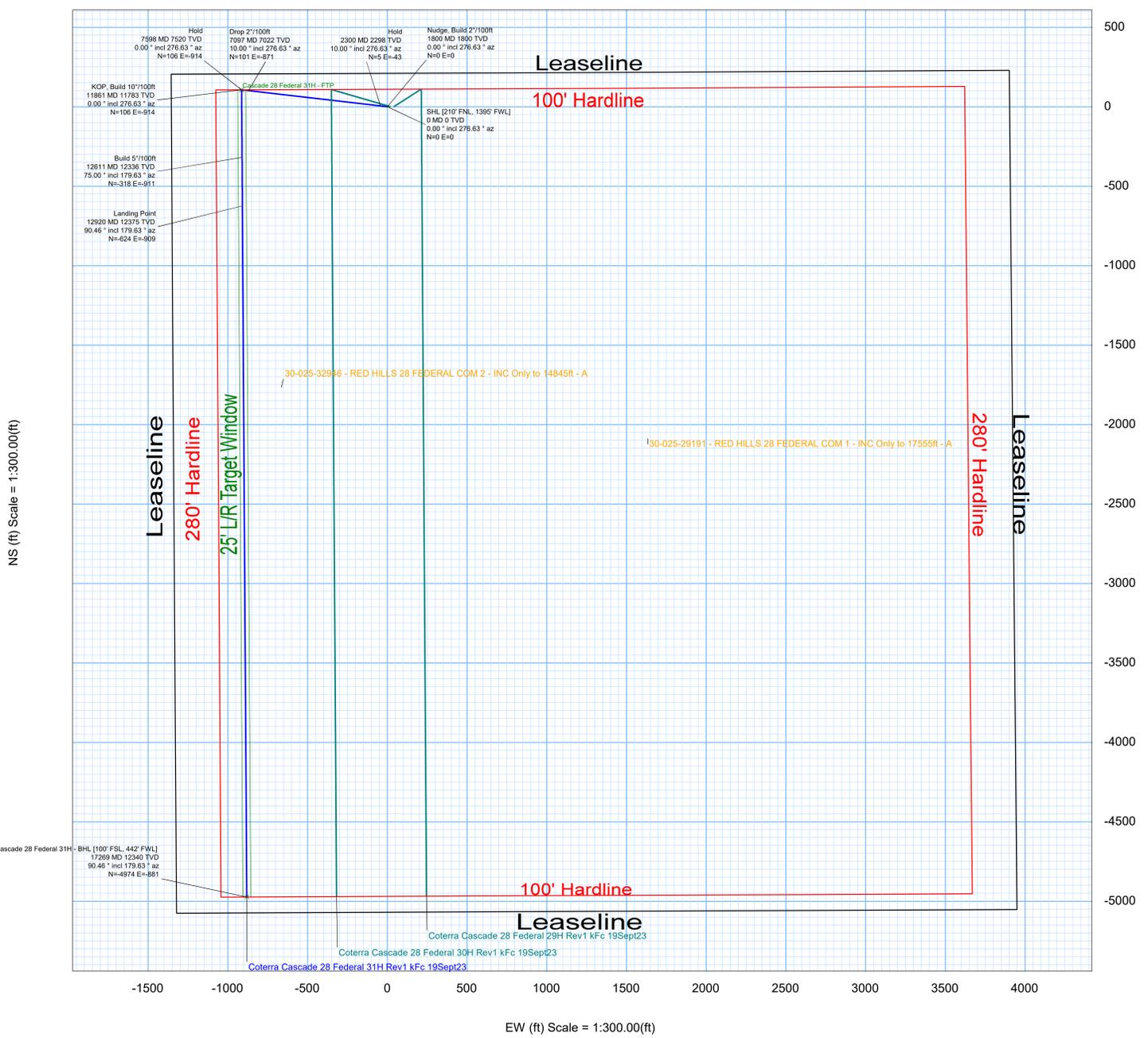
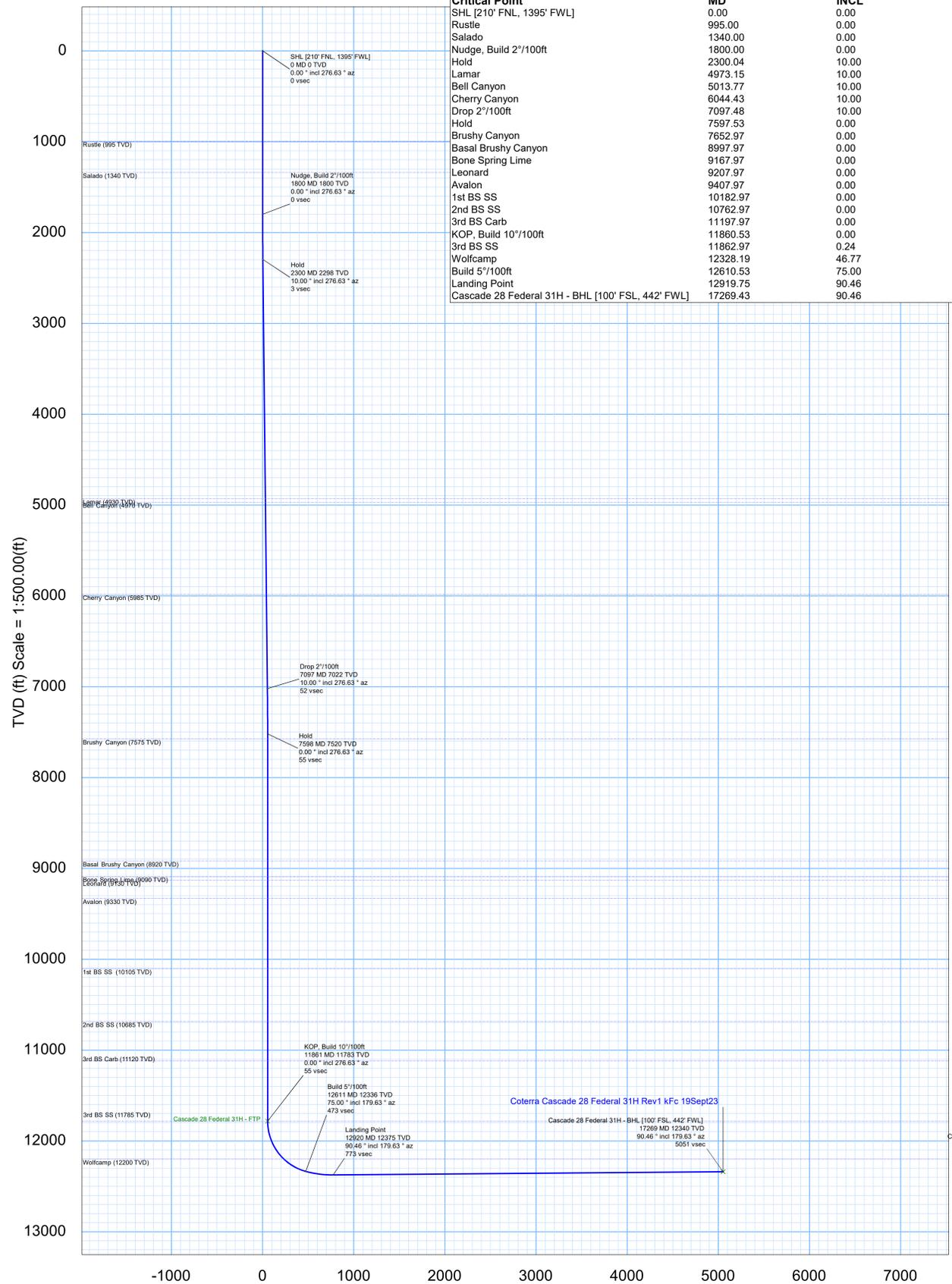
Copy number: \_\_\_\_\_ of 3

Date: 20-Sep-2023

1	Client	
2	Client	
3	Office	
4	Office	

Copy number \_\_\_\_\_ for \_\_\_\_\_

Grid North  
Tot Corr (M->G 5.813°)  
Mag Dec (6.213°)  
Grid Conv (0.400°)



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

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

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
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**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
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**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
 Action 312555

**CONDITIONS**

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 312555
	Action Type: [C-103] NOI Change of Plans (C-103A)

**CONDITIONS**

Created By	Condition	Condition Date
pkautz	None	3/15/2024