

Well Name: DOS EQUIS 12-13 FEDERAL COM	Well Location: T24S / R32E / SEC 12 / NWNW /	County or Parish/State:
Well Number: 77H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM02889	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002550136	Well Status: Approved Application for Permit to Drill	Operator: CIMAREX ENERGY COMPANY

Notice of Intent

Sundry ID: 2763424

Type of Submission: Notice of Intent

Date Sundry Submitted: 11/28/2023

Date proposed operation will begin: 02/01/2024

Type of Action: APD Change

Time Sundry Submitted: 06:55

Procedure Description: Casing change from previously approved APD. Bottom hole change from previously approved APD. Non- standard location pending.

NOI Attachments

Procedure Description

Dos_Equis_12_13_77H_Sundry_Submittal_03112024_updated_20240311122535.pdf

Conditions of Approval

Specialist Review

Dos_Equis_12_13_Fed_Com_77H_Sundry_ID_2763424_20240312091355.pdf

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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: MAR 11, 2024 12:25 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: LONG VO

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5759885402

BLM POC Email Address: LVO@BLM.GOV

Disposition: Approved

Disposition Date: 03/12/2024

Signature: Long Vo

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

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

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

11. Country or Parish, State

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well☐ Gas Well☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

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

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
☐ Subsequent Report	☐ Alter Casing ☐ Hydraulic Fracturing ☐ Reclamation ☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair ☐ New Construction ☐ Recomplete ☐ Other
	☐ Change Plans ☐ Temporarily Abandon
	☐ 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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

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

Title

Signature

Date

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: NWNE / 300 FNL / 2450 FEL / TWSP: 24S / RANGE: 32E / SECTION: 12 / LAT: 32.238633 / LONG: -103.62771 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 300 FNL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 12 / LAT: 32.238634 / LONG: -103.626675 (TVD: 12235 feet, MD: 12255 feet)

PPP: NWNE / 0 FNL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 13 / LAT: 32.224944 / LONG: -103.626686 (TVD: 12900 feet, MD: 17787 feet)

PPP: NESE / 2640 FNL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 12 / LAT: 32.2322 / LONG: -103.626681 (TVD: 12900 feet, MD: 15147 feet)

BHL: SWSE / 100 FSL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 13 / LAT: 32.210697 / LONG: -103.626696 (TVD: 12900 feet, MD: 22970 feet)

CONFIDENTIAL

Cimarex Energy Co. respectfully requests to change the approved APD as follows:

Well Name	API	S/T/R	SHL Old	SHL New	S/T/R	BHL Old	BHL New	TVD Old	TVD New	MD Old	MD New
Dos Equis 12-13 Fed Com 52H	30-025-50124	12/24S/32E	195 FNL/ 1480 FWL	NO CHANGE	13/24S/32E	100 FSL/1520 FWL	100 FSL/660 FWL	9,600'	9,980'	19,753	20,072
Dos Equis 12-13 Fed Com 51H	30-025-50123	12/24S/32E	195 FNL/ 1500 FWL	NO CHANGE	13/24S/32E	100 FSL/1540 FWL	100 FSL/990 FWL	9,600'	11,550'	19,665	21,677
Dos Equis 12-13 Fed Com 50H	30-025-50122	12/24S/32E	195 FNL/ 1520 FWL	NO CHANGE	13/24S/32E	100 FSL/1560 FWL	100 FSL/1388 FWL	12,900'	10,620'	23,019	20,654
Dos Equis 12-13 Fed Com 49H	30-025-50121	12/24S/32E	195 FNL/ 1540 FWL	195 FNL/1540 FWL	13/24S/32E	100 FSL/1430 FWL	100 FSL/1980 FWL	12,300'	9,980'	22,376	20,256
Dos Equis 12-13 Fed Com 48H	30-025-50120	12/24S/32E	255 FNL/1580 FWL	195 FNL/1560 FWL	13/24S/32E	100 FSL/1386 FWL	100 FSL/2310 FWL	12,390'	11,550'	22,379	21,551
Dos Equis 12-13 Fed Com 77H	30-025-50136	12/24S/32E	300 FNL/ 2450 FEL	NO CHANGE	13/24S/32E	100 FSL/2130 FEL	100 FSL/2588 FEL	12,900'	10,620'	22,970	20,825
Dos Equis 12-13 Fed Com 76H	30-025-50126	12/24S/32E	300 FNL/ 2430 FEL	NO CHANGE	13/24S/32E	100 FSL/2100 FEL	100 FSL/1980 FEL	9,600'	9,980'	19,654	20,141
Dos Equis 12-13 Fed Com 75H	30-025-50125	12/24S/32E	300 FNL/ 2410 FEL	NO CHANGE	13/24S/32E	100 FSL/2000 FEL	100 FSL/1650 FEL	9,600'	11,550'	19,510	21,718
Dos Equis 12-13 Fed Com 89H	30-025-50138	12/24S/32E	300 FNL/ 1510 FEL	NO CHANGE	13/24S/32E	100 FSL/990 FEL	100FSL/1275 FEL	9,600'	10,620'	19,595	20,753
Dos Equis 12-13 Fed Com 88H	30-025-50206	12/24S/32E	300 FNL/ 1490 FEL	NO CHANGE	13/24S/32E	100 FSL/330 FEL	100 FSL/660 FEL	9,600'	9,980'	19,706	20,186
Dos Equis 12-13 Fed Com 87H	30-025-50137	12/24S/32E	360 FNL/ 1450 FEL	300 FNL/ 1470 FEL	13/24S/32E	100FSL /1386 FEL	100 FSL/330 FEL	12,340'	11,550'	22,258	21,803

Sundry ID	Well Name	API	S/T/R	SHL Old	SHL New	S/T/R	BHL Old	BHL New	TVD Old	TVD New	MD Old	MD New
2763424	Dos Equis 12-13 Fed Com 77H	30-025-50136	12/24S/32E	300 FNL/ 2450 FEL	NO CHANGE	13/24S/32E	100 FSL/2130 FEL	100 FSL/2588 FEL	12,900'	10,620'	22,970	20,825

Drilling Plan Amendments

Sec 1 - Geologic Formations See attached drilling plan.

Sec 2 - Blowout Prevention

Old	New
5M	2M
10M	3M
	5M

Section 3 - Casing

Old

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	1235	1235	10-3/4"	40.50	J-55	BT&C	2.95	5.85	12.58
9 7/8	0	13035	12851	7-5/8"	29.70	L-80	BT&C	2.38	1.15	1.74
6 3/4	0	12410	12410	5-1/2"	23.00	L-80	LT&C	1.38	1.22	2.11
6 3/4	12410	22970	12900	5"	18.00	P-110	BT&C	1.60	1.62	65.76
BLM Minimum Safety Factor								1.125	1	1.6 Dry 1.8 Wet

New

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	1216	1216	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.40	3.28	5.52
12 1/4	0	4929	4927	9-5/8"	40.00	HCK-55	LT&C	1.49	1.54	2.85
8 3/4	0	10157	10157	7"	29.00	L-80	LT&C	1.48	1.72	1.89
8 3/4	10157	10907	10706	7"	29.00	L-80	LT&C	1.40	1.63	36.87
6	9657	20825	10750	4-1/2"	11.60	P-110	BT&C	1.43	2.02	28.95
BLM Minimum Safety Factor								1.125	1	1.6 Dry 1.8 Wet

Section 4 - Cement

Old

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	480	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	128	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate Stage 1	632	10.30	3.64	22.18		Lead: Tuned Light + LCM
	143	12.90	1.88	9.65	12	Tail: 35:65 (Poz:C) + Salt + Bentonite
Intermediate Stage 2	782	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
Production	1140	14.50	1.30	5.79	20	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + Expanding Agent + Retarder + Antifoam

New

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	589	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	158	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	925	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	289	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	333	10.30	3.64	22.18		Lead: Tuned Light + LCM
	125	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Completion System	736	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Section 5 - Circulating Medium

Old

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1235'	Fresh Water	7.83 - 8.33	28	N/C
1235' to 13035'	Brine Diesel Emulsion	8.50 - 9.00	30-35	N/C
13035' to 22970'	OBM	12.00 - 12.50	50-70	N/C

New

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1216'	Fresh Water	7.83 - 8.33	28	N/C
1216' to 4929'	Brine Water	9.50 - 10.00	30-32	N/C
4929' to 10907'	Cut Brine or OBM	8.50 - 9.00	27-70	N/C
11238' to 20825'	OBM	9.00 - 9.50	50-70	N/C

Section 7 - Pressure

Old	New
8385	5310

1. Geological Formations

TVD of target 10,750

Pilot Hole TD N/A

MD at TD 20,825

Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	1163	N/A	
Top of Salt	1545	N/A	
Base of Salt	4907	N/A	
Bell Canyon	4947	N/A	
Cherry Canyon	5874	N/A	
Brushy Canyon	7310	Hydrocarbons	
Basal Brushy Canyon	8631	Hydrocarbons	
Bone Spring Lime	8850	Hydrocarbons	
Leonard	9031	Hydrocarbons	
Avalon	9283	Hydrocarbons	
1st Bone Spring Sand	9982	Hydrocarbons	
1st Sand - Target	10100	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	1216	1216	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.40	3.28	5.52
12 1/4	0	4929	4927	9-5/8"	40.00	HCK-55	LT&C	1.49	1.54	2.85
8 3/4	0	10157	10157	7"	29.00	L-80	LT&C	1.48	1.72	1.89
8 3/4	10157	10907	10706	7"	29.00	L-80	LT&C	1.40	1.63	36.87
6	9657	20825	10750	4-1/2"	11.60	P-110	BT&C	1.43	2.02	28.95
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

Cimarex Energy Co., Dos Equis 12-13 Federal Com 77H

	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	# Sk	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	589	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	158	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	925	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	289	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	333	10.30	3.64	22.18		Lead: Tuned Light + LCM
	125	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Completion System	736	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	50
Production	4729	25
Completion System	10707	10

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.					
BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	2M	Annular	X	50% of working pressure
			Blind Ram		2M
			Pipe Ram		
			Double Ram	X	
			Other		
8 3/4	13 5/8	3M	Annular	X	50% of working pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	X	
			Other		
6	13 5/8	5M	Annular	X	50% of working pressure
			Blind Ram	X	5M
			Pipe Ram		
			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 1216'	Fresh Water	7.83 - 8.33	28	N/C
1216' to 4929'	Brine Water	9.50 - 10.00	30-32	N/C
4929' to 10907'	Cut Brine or OBM	8.50 - 9.00	27-70	N/C
11238' to 20825'	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 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	5310 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	H ₂ S is present
X	H ₂ S plan is attached

8. Other Facets of Operation**9. Wellhead**

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 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 5000 psi.

A solid steel body pack-off will be utilized after running and cementing the production casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

All casing strings will be tested as per Onshore Order No.2 to at least 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.

Variance Request #1: Skid Rig after Cementing Surface Casing

Coterra requests permission to skid the rig to the next well on the pad in order to begin operations immediately after the cement job for the surface casing has been completed. After the cement job is completed, no operations on the subject well will be conducted until at least 8 hours have elapsed, and both lead and tail slurries have achieved 500 psi compressive strength. While cement cures, the surface casing of the subject well will be suspended in the well by a mandrel and landing ring system, which is independent from the rig and ensures that casing remains centered while the rig is active on other wells.

Variance Request #4: Utilize Co-Flex Choke Line

Coterra requests approval to utilize a co-flex choke line between the BOP and choke manifold. Certification for the proposed co-flex choke line is attached. The choke line is not required by the manufacturer to be anchored. In the event the specific co-flex choke line is not available, one of equal or higher rating will be used. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

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

¹ APL Number 30-025-50136		² Pool Code 96674	³ Pool Name TRIPLE X;BONE SPRING, WEST
⁴ Property Code	⁵ Property Name DOS EQUIS 12-13 FEDERAL COM		⁶ Well Number 77H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.		⁹ Elevation 3604.4'

¹⁰ Surface Location

UL or lot no. B	Section 12	Township 24S	Range 32E	Lot Idn	Feet from the 300	North/South line NORTH	Feet from the 2450	East/West line EAST	County LEA
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no. O	Section 13	Township 24S	Range 32E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 2588	East/West line EAST	County LEA
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¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. NSL Pending
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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.

16

NAD 83 (SURFACE HOLE LOCATION)	
LATITUDE = 32°14'19.08" (32.238633°)	
LONGITUDE = -103°37'39.76" (-103.627710°)	
NAD 27 (SURFACE HOLE LOCATION)	
LATITUDE = 32°14'18.63" (32.238509°)	
LONGITUDE = -103°37'38.03" (-103.627229°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 451264.87' E: 759506.36'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 451205.91' E: 718322.38'	

NAD 83 (KOP/LP/FTP)	
LATITUDE = 32°14'21.06" (32.239182°)	
LONGITUDE = -103°37'41.36" (-103.628155°)	
NAD 27 (KOP/LP/FTP)	
LATITUDE = 32°14'20.61" (32.239059°)	
LONGITUDE = -103°37'39.63" (-103.627675°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 451463.82' E: 759367.28'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 451404.85' E: 718183.31'	

NAD 83 (LPP #1)	
LATITUDE = 32°13'55.91" (32.232198°)	
LONGITUDE = -103°37'41.38" (-103.628160°)	
NAD 27 (LPP #1)	
LATITUDE = 32°13'55.47" (32.232074°)	
LONGITUDE = -103°37'39.65" (-103.627680°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 448922.98' E: 759382.38'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 448864.07' E: 718198.30'	

NAD 83 (LPP #2)	
LATITUDE = 32°13'29.79" (32.224942°)	
LONGITUDE = -103°37'41.40" (-103.628166°)	
NAD 27 (LPP #2)	
LATITUDE = 32°13'29.35" (32.224819°)	
LONGITUDE = -103°37'39.67" (-103.627686°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 446283.46' E: 759398.07'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 446224.62' E: 718213.86'	

NAD 83 (LPP #3)	
LATITUDE = 32°13'03.65" (32.217680°)	
LONGITUDE = -103°37'41.42" (-103.628171°)	
NAD 27 (LPP #3)	
LATITUDE = 32°13'03.20" (32.217556°)	
LONGITUDE = -103°37'39.69" (-103.627692°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 443641.39' E: 759413.77'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 443582.61' E: 718229.45'	

NAD 83 (LTP/BHL)	
LATITUDE = 32°12'38.50" (32.210695°)	
LONGITUDE = -103°37'41.43" (-103.628176°)	
NAD 27 (LTP/BHL)	
LATITUDE = 32°12'38.06" (32.210571°)	
LONGITUDE = -103°37'39.71" (-103.627697°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 441100.38' E: 759428.86'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 441041.66' E: 718244.43'	

The main plat diagram shows a grid of sections. Section 12 is highlighted in blue. A red dashed line indicates the lease boundary. Various points are labeled: SHL (Surface Hole Location), LPP #1, LPP #2, LPP #3, NMNM (New Mexico Mineral Monument), BHL/LTP (Bottom Hole Location / Landing Point/First Take Point), and SW Cor. Sec. 14. Bearings and distances are provided for all boundaries.

LINE	DIRECTION	LENGTH
L1	N34°43'04"W	242.78'
L2	S00°06'02"E	2541.33'
L3	S00°06'02"E	2640.03'
L4	S00°06'02"E	2642.58'
L5	S00°06'02"E	2541.50'

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00"

Detail "A"
No Scale

SW Cor. Sec. 24

E 1/4 Cor. Sec. 24

R 32 E R 33 E

Scale bar: 0, 1000, 2000 feet

SCALE

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 3/11/24
Signature Date

Shelly Bowen
Printed Name

shelly.bowen@coterra.com
E-mail Address

18 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.

April 23, 2018
Date of Survey

Signature and Seal of Professional Surveyor:

Certificate Number:

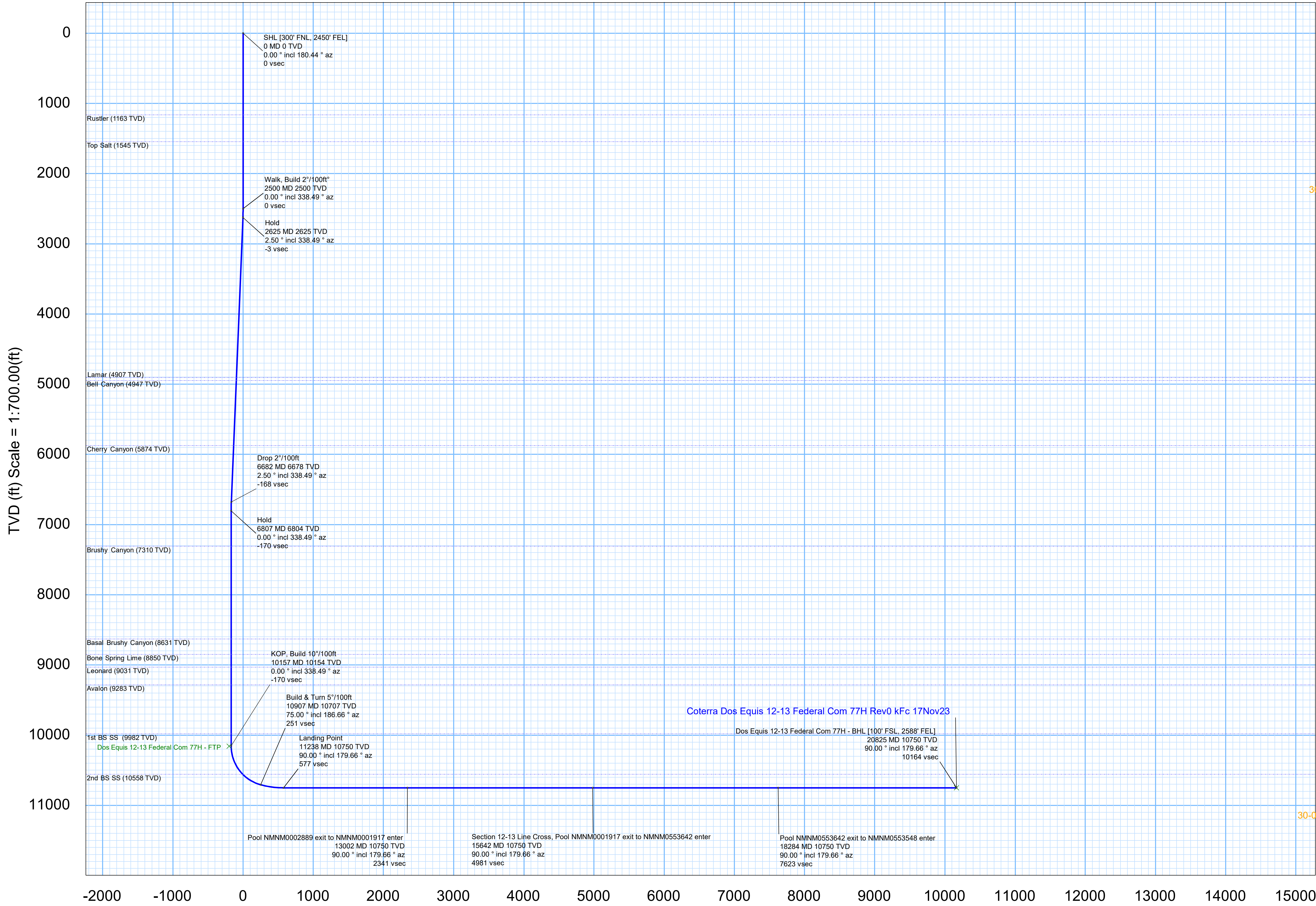
Legend:
● = SURFACE HOLE LOCATION
◆ = LANDING POINT/FIRST TAKE POINT/LPP
○ = BOTTOM HOLE LOCATION LAST TAKE POINT
▲ = SECTION CORNER LOCATED
△ = SECTION CORNER RE-ESTABLISHED.
(Not Set on Ground.)
— = LEASE LINE

DRAWN BY: J.N. 03-01-19
REV: 4 N.R. 10-09-23
(UPDATE WELLBORE)

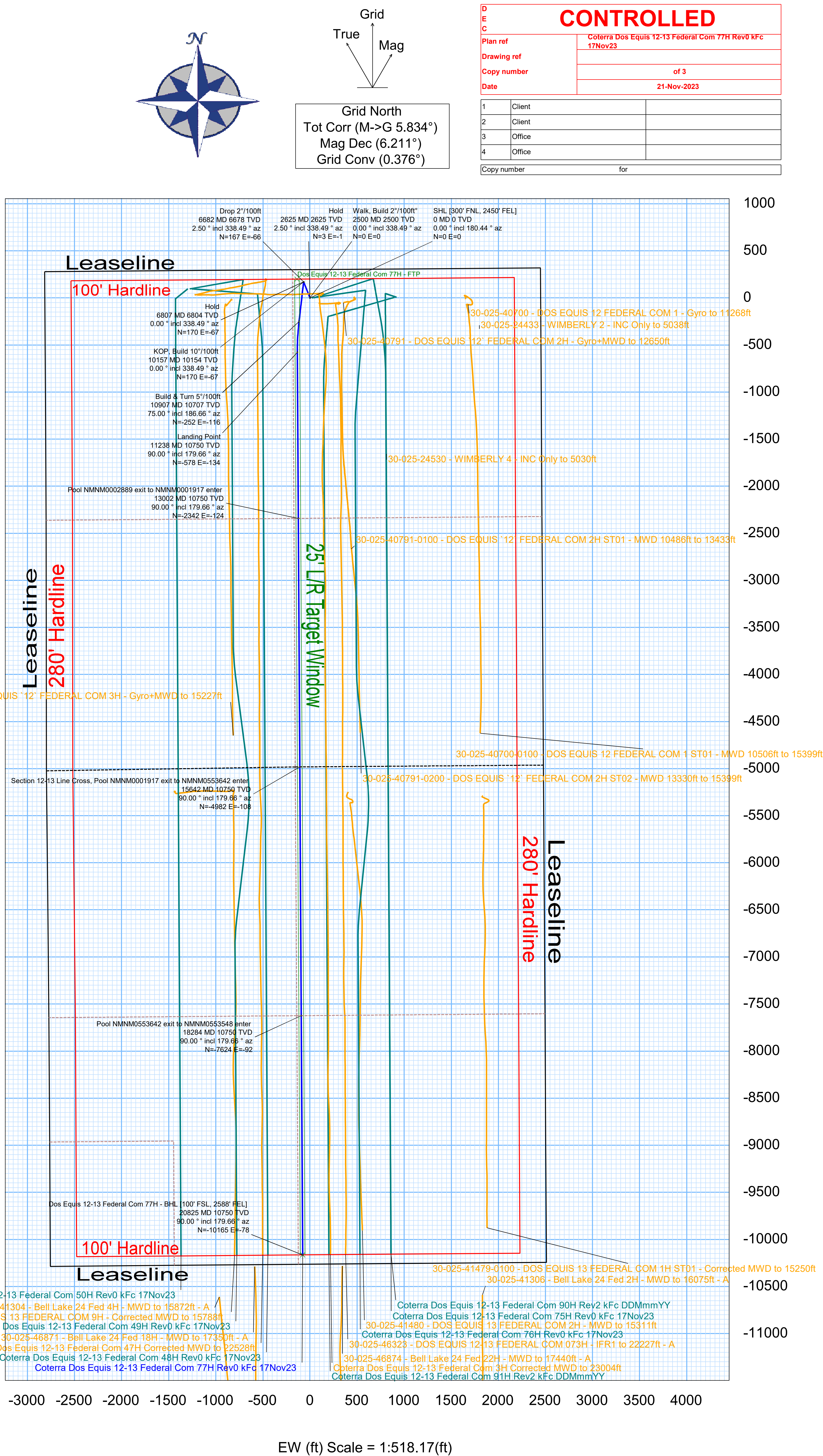
Borehole: Dos Equis 12-13 Federal Com 77H		Well: Dos Equis 12-13 Federal Com 77H		Field: NM Lea County (NAD 83)		Structure: Coterra Dos Equis 12-13 Federal Com Pad 5	
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Gravity & Magnetic Parameters				Surface Location				NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	HDGM 2022	Dip:	59.792°	Date:	17-Nov-2023	Lat:	N 32 14 19.08	Northing:	451264.87ftUS	Grid Conv:	0.3764°	Slot:	Dos Equis 12-13	TVD Ref:	RKB (3627.400 ft above MSL)
MagDec:	6.211°	FS:	47446.159nT	Gravity FS:	998.439mgn (9.80665 Based)	Lon:	W 103 37 39.76	Easting:	759506.36ftUS	Scale Fact:	0.9999636	Plan:	Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23		

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [300' FNL, 2450' FEL]	0.00	0.00	180.44	0.00	0.00	0.00	0.00	
Rustler	1163.00	0.00	338.49	1163.00	0.00	0.00	0.00	0.00
Top Salt	1545.00	0.00	338.49	1545.00	0.00	0.00	0.00	0.00
Walk, Build 2"/100ft°	2500.00	0.00	338.49	2500.00	0.00	0.00	0.00	0.00
Hold	2625.20	2.50	338.49	2625.16	-2.55	2.55	-1.00	2.00
Lamar	4909.22	2.50	338.49	4907.00	-95.61	95.38	-37.59	0.00
Bell Canyon	4949.26	2.50	338.49	4947.00	-97.24	97.01	-38.23	0.00
Cherry Canyon	5877.15	2.50	338.49	5874.00	-135.04	134.73	-53.10	0.00
Drop 2"/100ft	6682.27	2.50	338.49	6678.36	-167.84	167.45	-66.00	0.00
Hold	6807.47	0.00	338.49	6803.52	-170.39	170.00	-67.00	2.00
Brushy Canyon	7313.95	0.00	338.49	7310.00	-170.39	170.00	-67.00	0.00
Basal Brushy Canyon	8634.95	0.00	338.49	8631.00	-170.39	170.00	-67.00	0.00
Bone Spring Lime	8853.95	0.00	338.49	8850.00	-170.39	170.00	-67.00	0.00
Leonard	9034.95	0.00	338.49	9031.00	-170.39	170.00	-67.00	0.00
Avalon	9286.95	0.00	338.49	9283.00	-170.39	170.00	-67.00	0.00
1st BS SS	9985.95	0.00	338.49	9982.00	-170.39	170.00	-67.00	0.00
KOP, Build 10"/100ft	10157.47	0.00	338.49	10153.52	-170.39	170.00	-67.00	0.00
2nd BS SS	10606.54	44.91	186.66	10558.00	-4.49	3.97	-86.39	10.00
Build & Turn 5"/100ft	10907.47	75.00	186.66	10706.95	251.11	-251.80	-116.25	10.00
landing Point	11237.83	90.00	179.66	10750.00	576.90	-577.71	-133.91	5.00
Pool NMNM0002889 exit to NMNM0001917 enter	13002.00	90.00	179.66	10750.00	2341.07	-2341.85	-123.53	0.00
Section 12-13 Line Cross, Pool NMNM0001917 exit to NMNM0553642 enter	15642.00	90.00	179.66	10750.00	4981.07	-4981.80	-108.00	0.00
Pool NMNM0553642 exit to NMNM0553548 enter	18284.00	90.00	179.66	10750.00	7623.07	-7623.76	-92.45	0.00
Dos Equis 12-13 Federal Com 77H - BHL [100' FSL, 2588' FEL]	20825.17	90.00	179.66	10750.00	10164.24	-10164.88	-77.50	0.00



Vertical Section (ft) Azim = 179.66° Scale = 1:700.00(ft) Origin = 0N/-S, 0E/-W



Schlumberger

Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23 Proposal

Geodetic Report

Def Plan

Report Date: November 21, 2023 - 08:03 PM (UTC 0)
Client: COTERRA
Field: NM Lea County (NAD 83)
Structure / Slot: Coterra Dos Equis 12-13 Federal Com Pad 5 / Dos Equis 12-13 Federal
Well: Dos Equis 12-13 Federal Com 77H
Borehole: Dos Equis 12-13 Federal Com 77H
UBH / API#: Unknown / Unknown
Survey Name: Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23
Survey Date: November 21, 2023
Tort / AHD / DDI / ERD Ratio: 96.526° / 10521.318 ft / 6.294 / 0.979
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: 32°14'19.0784"N, 103°37'39.75520"W
Location Grid N/E Y/X: N 451264.870 RJUS, E 759506.360 RJUS
CRS Grid Convergence Angle: 0.376°
Grid Scale Factor: 0.9999636
Version / Patch: 2023.1.0.1

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.660° (GRID North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3627.400 ft above MSL
Sealed / Ground Elevation: 3804.400 ft above MSL
Magnetic Declination: 6.211°
Total Gravity Field Strength: 998.438mgm (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47446.159 nT
Magnetic Dip Angle: 59.792°
Declination Date: November 17, 2023
Magnetic Declination Model: HDGM 2022
North Reference: Grid North
Grid Convergence Used: 0.376°
Total Corr Mag North->Grid North: 5.834°
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azin (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
SHL [300° FNL, 2450° FEL]	0.00	0.00	180.44	0.00	-3.627.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978			
	100.00	0.00	338.49	100.00	-3.527.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	200.00	0.00	338.49	200.00	-3.427.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	300.00	0.00	338.49	300.00	-3.327.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	400.00	0.00	338.49	400.00	-3.227.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	500.00	0.00	338.49	500.00	-3.127.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	600.00	0.00	338.49	600.00	-3.027.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	700.00	0.00	338.49	700.00	-2.927.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	800.00	0.00	338.49	800.00	-2.827.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	900.00	0.00	338.49	900.00	-2.727.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
Rustler	1,000.00	0.00	338.49	1,000.00	-2.627.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,100.00	0.00	338.49	1,100.00	-2.527.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,163.00	0.00	338.49	1,163.00	-2.464.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,200.00	0.00	338.49	1,200.00	-2.427.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,300.00	0.00	338.49	1,300.00	-2.327.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,400.00	0.00	338.49	1,400.00	-2.227.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,500.00	0.00	338.49	1,500.00	-2.127.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,545.00	0.00	338.49	1,545.00	-2.082.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,600.00	0.00	338.49	1,600.00	-2.027.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,700.00	0.00	338.49	1,700.00	-1.927.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
Top Salt	1,800.00	0.00	338.49	1,800.00	-1.827.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,900.00	0.00	338.49	1,900.00	-1.727.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,000.00	0.00	338.49	2,000.00	-1.627.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,100.00	0.00	338.49	2,100.00	-1.527.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,200.00	0.00	338.49	2,200.00	-1.427.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,300.00	0.00	338.49	2,300.00	-1.327.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,400.00	0.00	338.49	2,400.00	-1.227.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,500.00	0.00	338.49	2,500.00	-1.127.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,600.00	2.00	338.49	2,599.98	-1.027.42	-1.63	1.62	-0.64	451,266.49	759,505.72	32.23863739	-103.62771181	2.00	2.00	0.00
	2,625.20	2.50	338.49	2,625.16	-1.002.24	-2.55	2.55	-1.00	451,267.41	759,505.36	32.23863993	-103.62771297	2.00	2.00	0.00
Walk, Build 2°/100ft*	2,700.00	2.50	338.49	2,699.89	-927.51	-5.60	5.59	-2.20	451,270.46	759,504.16	32.23864831	-103.62771678	0.00	0.00	0.00
	2,800.00	2.50	338.49	2,799.79	-867.71	-6.65	6.65	-3.80	451,274.52	759,502.56	32.23865951	-103.62772187	0.00	0.00	0.00
	2,900.00	2.50	338.49	2,899.70	-727.70	-13.75	13.71	-5.41	451,278.58	759,500.95	32.23867257	-103.62772697	0.00	0.00	0.00
	3,000.00	2.50	338.49	2,999.60	-627.80	-17.82	17.78	-7.01	451,282.65	759,499.35	32.23868191	-103.62773206	0.00	0.00	0.00
	3,100.00	2.50	338.49	3,099.51	-527.89	-21.90	21.84	-8.61	451,286.71	759,497.75	32.23869311	-103.62773715	0.00	0.00	0.00
	3,200.00	2.50	338.49	3,199.41	-427.99	-25.97	25.91	-10.21	451,290.78	759,496.15	32.23870431	-103.62774225	0.00	0.00	0.00
	3,300.00	2.50	338.49	3,299.32	-328.08	-30.04	29.97	-11.81	451,294.84	759,494.55	32.23871551	-103.62774734	0.00	0.00	0.00
	3,400.00	2.50	338.49	3,399.22	-228.18	-34.12	34.04	-13.42	451,298.91	759,492.95	32.23872671	-103.62775244	0.00	0.00	0.00
	3,500.00	2.50	338.49	3,499.12	-128.28	-38.19	38.10	-15.02	451,302.97	759,491.34	32.23873792	-103.62775753	0.00	0.00	0.00
	3,600.00	2.50	338.49	3,599.03	-28.37	-42.17	42.17	-16.62	451,307.04	759,489.74	32.23874912	-103.62776263	0.00	0.00	0.00
Hold	3,700.00	2.50	338.49	3,698.93	71.53	-46.34	46.23	-18.22	451,311.10	759,488.14	32.23876032	-103.62776772	0.00	0.00	0.00
	3,800.00	2.50	338.49	3,798.84	171.44	-50.41	50.30	-19.82	451,315.17	759,486.54	32.23877152	-103.62777282	0.00	0.00	0.00
	3,900.00	2.50	338.49	3,898.74	271.34	-54.49	54.36	-21.43	451,319.23	759,484.94	32.23878272	-103.62777791	0.00	0.00	0.00
	4,000.00	2.50	338.49	3,998.65	371.25	-58.56	58.43	-23.03	451,323.29	759,483.33	32.23879392	-103.62778300	0.00	0.00	0.00
	4,100.00	2.50	338.49	4,098.55	471.15	-62.64	62.49	-24.63	451,327.36	759,481.73	32.23880512	-103.62778810	0.00	0.00	0.00
	4,200.00	2.50	338.49	4,198.46	571.06	-66.71	66.56	-26.23	451,331.42	759,480.13	32.23881632	-103.62779319	0.00	0.00	0.00
	4,300.00	2.50	338.49	4,298.36	670.96	-70.79	70.62	-27.83	451,335.49	759,478.53	32.23882753	-103.62779829	0.00	0.00	0.00
	4,400.00	2.50	338.49	4,398.27	770.87	-74.86	74.69	-29.44	451,339.55	759,476.93	32.23883873	-103.62780338	0.00	0.00	0.00
	4,500.00	2.50	338.49	4,498.17	870.77	-78.93	78.75	-31.04	451,343.62	759,475.32	32.23884993	-103.62780848	0.00	0.00	0.00
	4,600.00	2.50	338.49	4,598.07	970.67	-83.01	82.82	-32.64	451,347.68	759,473.72	32.23886113	-103.62781357	0.00	0.00	0.00
Lamar	4,700.00	2.50	338.49	4,697.98	1,070.58	-87.08	86.88	-34.24	451,351.75	759,472.12	32.23887233	-103.62781867	0.00	0.00	0.00
	4,800.00	2.50	338.49	4,797.88	1,170.48	-91.16	90.95	-35.84	451,355.81	759,470.52	32.23888353	-103.62782376	0.00	0.00	0.00
	4,900.00	2.50	338.49	4,897.79	1,270.39	-95.23	95.01	-37.45	451,359.88	759,468.92	32.23889473	-103.62782885	0.00	0.00	0.00
	4,999.22	2.50	338.49	4,907.70	1,279.60	-95.61	95.38	-37.59	451,360.25	759,468.77	32.23889677	-103.62782932	0.00	0.00	0.00
	4,949.26	2.50	338.49	4,947.00	1,319.60	-97.24	97.01	-38.23	451,361.88	759,468.13	32.23890025	-103.62783136	0.00	0.00	0.00
	5,000.00	2.50	338.49	4,997.69	1,370.29	-99.30	99.07	-39.05	451,363.94	759,467.31	32.23890594	-103.62783395	0.00	0.00	0.00
	5,100.00	2.50	338.49	5,097.60	1,470.20	-103.38	103.14	-40.65	451,368.01	759,465.71	32.23891714	-103.62783904	0.00	0.00	0.00
	5,200.00	2.50	338.49	5,197.50	1,570.10	-107.45	107.20	-42.25	451,372.07	759,464.11	32.23892834	-103.62784414	0.00	0.00	0.00
	5,300.00	2.50	338.49	5,297.41	1,670.01	-111.53	111.27	-43.85	451,376.13	759,462.51	32.23893954	-103.62784923	0.00	0.00	0.00
	5,400.00	2.50	338.49	5,397.31	1,769.91	-115.60	115.33	-45.46	451,380.20	759,460.91	32.23895074	-103.62785433	0.00	0.00	0.00
Cherry Canyon	5,500.00	2.50	338.49	5,497.22	1,869.82	-119.68	119.40	-47.06	451,384.26	759,459.30	32.23896194	-103.62785942	0.00	0.00	0.00
	5,600.00	2.50	338.49	5,597.12	1,969.72	-123.75	123.46	-48.66	451,388.33	759,457.70	32.23897314	-103.62786451	0.00	0.00	0.00
	5,700.00	2.50	338.49	5,697.02	2,069.62	-127.82	127.50	-50.26	451,392.39	759,456.10	32.23898434	-103.62786960			

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)	DLS ("100ft)	BR ("100ft)	TR ("100ft)
Avalon	9,100.00	0.00	338.49	9,096.05	5,468.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,200.00	0.00	338.49	9,196.05	5,568.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,286.95	0.00	338.49	9,283.00	5,655.60	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,300.00	0.00	338.49	9,296.05	5,668.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,400.00	0.00	338.49	9,396.05	5,768.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,500.00	0.00	338.49	9,496.05	5,868.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,600.00	0.00	338.49	9,596.05	5,968.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,700.00	0.00	338.49	9,696.05	6,068.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,800.00	0.00	338.49	9,796.05	6,168.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,900.00	0.00	338.49	9,896.05	6,268.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
1st BS SS	9,985.95	0.00	338.49	9,982.00	6,354.60	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,000.00	0.00	338.49	9,996.05	6,368.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,100.00	0.00	338.49	10,096.05	6,468.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,157.47	0.00	338.49	10,153.52	6,528.12	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,200.00	4.25	186.66	10,196.01	6,568.61	-168.83	168.43	-67.18	451,433.30	759,439.18	32.23909708	-103.62792347	10.00	10.00	0.00
	10,300.00	14.25	186.66	10,294.58	6,667.18	-152.89	152.48	-69.05	451,417.35	759,437.32	32.23905327	-103.62792983	10.00	10.00	0.00
	10,400.00	24.25	186.66	10,388.87	6,761.47	-120.20	119.77	-72.86	451,384.64	759,433.50	32.23896344	-103.62794287	10.00	10.00	0.00
	10,500.00	34.25	186.66	10,476.01	6,848.61	-71.76	71.30	-78.52	451,336.17	759,427.84	32.23883030	-103.62796221	10.00	10.00	0.00
	10,600.00	44.25	186.66	10,553.34	6,925.94	-9.04	8.53	-85.85	451,273.40	759,420.51	32.23865791	-103.62798724	10.00	10.00	0.00
	10,606.54	44.91	186.66	10,558.00	6,930.60	-4.49	3.97	-86.39	451,268.84	759,419.98	32.23864540	-103.62798906	10.00	10.00	0.00
KOP, Build 10"/100ft	10,700.00	54.25	186.66	10,618.53	6,991.13	66.96	-94.63	-81.73	451,198.25	759,411.73	32.23845151	-103.62801752	10.00	10.00	0.00
	10,800.00	64.25	186.66	10,669.59	7,042.19	151.25	-151.88	-104.58	451,113.00	759,401.78	32.23821736	-103.62805122	10.00	10.00	0.00
	10,900.00	74.25	186.66	10,704.97	7,077.57	243.95	-244.64	-115.42	451,020.24	759,390.95	32.23796528	-103.62808822	10.00	10.00	0.00
	10,907.47	75.00	186.66	10,706.95	7,079.55	251.11	-251.80	-116.25	451,013.08	759,390.11	32.23794292	-103.62809108	10.00	10.00	0.00
	11,000.00	79.19	184.64	10,727.62	7,100.22	340.78	-341.53	-125.12	450,923.36	759,381.25	32.23769646	-103.62812166	5.00	4.53	-2.18
	11,100.00	83.73	182.53	10,742.47	7,115.07	439.41	-440.19	-131.29	450,824.69	759,375.08	32.23742538	-103.62814371	5.00	4.54	-2.12
	11,200.00	88.28	180.45	10,749.44	7,122.04	539.08	-539.88	-133.87	450,725.01	759,372.49	32.23715141	-103.62816417	5.00	4.55	-2.08
	11,237.83	88.28	180.45	10,750.00	7,122.00	579.80	-579.80	-133.54	450,625.02	759,372.49	32.23687651	-103.62815523	0.00	0.00	0.00
	11,300.00	90.00	179.66	10,750.00	7,122.00	639.07	-639.88	-133.54	450,625.02	759,372.85	32.23687657	-103.62815523	0.00	0.00	0.00
	11,400.00	90.00	179.66	10,750.00	7,122.00	739.07	-739.88	-132.95	450,525.02	759,373.41	32.23660170	-103.62815545	0.00	0.00	0.00
2nd BS SS	11,500.00	90.00	179.66	10,750.00	7,122.00	839.07	-839.87	-132.36	450,425.03	759,374.00	32.23632684	-103.62815567	0.00	0.00	0.00
	11,600.00	90.00	179.66	10,750.00	7,122.00	939.07	-939.87	-131.78	450,325.03	759,374.59	32.23605197	-103.62815589	0.00	0.00	0.00
	11,700.00	90.00	179.66	10,750.00	7,122.00	1,039.07	-1,039.87	-131.19	450,225.04	759,375.18	32.23577711	-103.62815611	0.00	0.00	0.00
	11,800.00	90.00	179.66	10,750.00	7,122.00	1,139.07	-1,139.87	-130.60	450,125.05	759,375.77	32.23550224	-103.62815633	0.00	0.00	0.00
	11,900.00	90.00	179.66	10,750.00	7,122.00	1,239.07	-1,239.87	-129.97	450,025.06	759,376.35	32.23522738	-103.62815655	0.00	0.00	0.00
	12,000.00	90.00	179.66	10,750.00	7,122.00	1,339.07	-1,339.87	-129.42	449,925.06	759,376.94	32.23495256	-103.62815677	0.00	0.00	0.00
	12,100.00	90.00	179.66	10,750.00	7,122.00	1,439.07	-1,439.86	-128.83	449,825.06	759,377.53	32.23467765	-103.62815699	0.00	0.00	0.00
	12,200.00	90.00	179.66	10,750.00	7,122.00	1,539.07	-1,539.86	-128.25	449,725.07	759,378.12	32.23440279	-103.62815721	0.00	0.00	0.00
	12,300.00	90.00	179.66	10,750.00	7,122.00	1,639.07	-1,639.86	-127.66	449,625.07	759,378.71	32.23412792	-103.62815743	0.00	0.00	0.00
	12,400.00	90.00	179.66	10,750.00	7,122.00	1,739.07	-1,739.86	-127.07	449,525.08	759,379.30	32.23385306	-103.62815766	0.00	0.00	0.00
	12,500.00	90.00	179.66	10,750.00	7,122.00	1,839.07	-1,839.86	-126.48	449,425.08	759,379.88	32.23357819	-103.62815788	0.00	0.00	0.00
	12,600.00	90.00	179.66	10,750.00	7,122.00	1,939.07	-1,939.85	-125.89	449,325.09	759,380.47	32.23330333	-103.62815810	0.00	0.00	0.00
	12,700.00	90.00	179.66	10,750.00	7,122.00	2,039.07	-2,039.85	-125.30	449,225.10	759,381.06	32.23302846	-103.62815832	0.00	0.00	0.00
	12,800.00	90.00	179.66	10,750.00	7,122.00	2,139.07	-2,139.85	-124.72	449,125.10	759,381.65	32.23275360	-103.62815854	0.00	0.00	0.00
	12,900.00	90.00	179.66	10,750.00	7,122.00	2,239.07	-2,239.85	-124.13	449,025.11	759,382.24	32.23247873	-103.62815876	0.00	0.00	0.00
	13,000.00	90.00	179.66	10,750.00	7,122.00	2,339.07	-2,339.85	-123.54	448,925.11	759,382.83	32.23220387	-103.62815898	0.00	0.00	0.00
	13,002.00	90.00	179.66	10,750.00	7,122.00	2,341.07	-2,341.85	-123.53	448,923.11	759,382.84	32.23219837	-103.62815898	0.00	0.00	0.00
	13,100.00	90.00	179.66	10,750.00	7,122.00	2,439.07	-2,439.85	-122.95	448,825.12	759,383.41	32.23192900	-103.62815920	0.00	0.00	0.00
	13,200.00	90.00	179.66	10,750.00	7,122.00	2,539.07	-2,539.84	-122.36	448,725.12	759,384.00	32.23176514	-103.62815942	0.00	0.00	0.00
	13,300.00	90.00	179.66	10,750.00	7,122.00	2,639.07	-2,639.84	-121.77	448,625.13	759,384.59	32.23160127	-103.62815964	0.00	0.00	0.00
	13,400.00	90.00	179.66	10,750.00	7,122.00	2,739.07	-2,739.84	-121.19	448,525.13	759,385.18	32.23143741	-103.62815986	0.00	0.00	0.00
	13,500.00	90.00	179.66	10,750.00	7,122.00	2,839.07	-2,839.84	-120.60	448,425.14	759,385.77	32.23127354	-103.62816008	0.00	0.00	0.00
	13,600.00	90.00	179.66	10,750.00	7,122.00	2,939.07	-2,9								

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)
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Survey Type: Def Plan

Survey Error Model: ISCWSA0 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	10,100.000	1/100.000	—	—		A001Mb_MWD		Dos Equis 12-13 Federal Com 77H / Coterra Dos E
	1	10,100.000	20,610.835	1/100.000	—	—		A008Mb_MWD+IFR1+MS		Dos Equis 12-13 Federal Com 77H / Coterra Dos E

A default hole/casing size was used for A/C calculation because the wellbore size is not defined correctly.

EOU Geometry:			
End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,211.200	14.500	10.750	
	9.875	7.625	
	8.750	7.625	
20,825.168	6.750	5.000	



Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23 Anti-Collision Summary Report

Analysis Date-24hr Time: November 21, 2023 - 08:03 PM (UTC 0)
Client: COTERRA
Field: NM Lea County (NAD 83)
Structure: Coterra Dos Equis 12-13 Federal Com Pad 5
Slot: Dos Equis 12-13 Federal Com 77H
Well: Dos Equis 12-13 Federal Com 77H
Borehole: Dos Equis 12-13 Federal Com 77H
Scan MD Range: 0.00ft ~ 20825.17ft

Analysis Method: 3D Least Distance
Reference Trajectory: Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23 (Def Plan)
Depth Interval: Every 10.00 Measured Depth (ft)
Rule Set: NAL Procedure: D&M AntiCollision Standard S002
Min Pts: Absolute minima indicated.
Engine Version: 2023.1.0.1
Database 1 Project: Dos Equis 12-13 Federal Com 77H-COTERRA

Trajectory Error Model: ISCSWA0 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

25 out of 26 are selected

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		

Results highlighted in red: Sep-Factor <= 1.5

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

Coterra Dos Equis 12-13 Federal Com 76H Rev0 kFc 17Nov23 (DefinitivePlan)													Fail Major
20.00	16.50	17.50	3.50	N/A	MAS = 5.03 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
20.00	16.50	17.50	3.50	N/A	MAS = 5.03 (m)	23.00	23.00					WRP	
20.00	20.06	5.79	-0.06	1.49	OSF1.50	1230.00	1230.00		OSF<1.50			Enter Minor	
20.00	28.63	0.08	-8.63	1.00	OSF1.50	1800.00	1800.00					MinPt-CtCt	
20.02	28.78	0.00	-8.76	1.00	OSF1.50	1810.00	1810.00					Enter Major	
20.15	29.08	-0.06	-8.92	1.00	OSF1.50	1830.00	1830.00					MinPts	
20.27	29.22	-0.04	-8.95	1.00	OSF1.50	1840.00	1840.00		OSF>1.00			Exit Major	
31.61	32.36	9.20	-0.75	1.46	OSF1.50	2060.00	2060.00					Exit Minor	
130.13	41.14	101.87	88.99	4.95	OSF1.50	2680.00	2679.91	OSF>5.00				Exit Alert	
663.14	144.50	565.97	518.63	6.98	OSF1.50	9570.00	9566.05					MinPt-EOU	
663.27	144.66	565.99	518.60	6.97	OSF1.50	9590.00	9586.05					MinPt-ADP	
666.08	145.81	568.04	520.27	6.95	OSF1.50	9730.00	9726.05					MinPt-SF	
889.52	131.82	800.81	757.71	10.29	OSF1.50	12090.00	10750.00					MinPt-CtCt	
890.17	180.74	768.85	709.43	7.47	OSF1.50	14660.00	10750.00					MinPt-EOU	
891.17	181.93	769.06	709.24	7.43	OSF1.50	14710.00	10750.00					MinPt-ADP	
889.71	256.37	717.96	633.34	5.24	OSF1.50	17480.00	10750.00					MinPt-CtCt	
889.73	268.79	709.70	620.94	5.00	OSF1.50	17910.00	10750.00	OSF<5.00				Enter Alert	
889.84	356.07	651.62	533.76	3.76	OSF1.50	20825.17	10750.00					MinPts	
Coterra Dos Equis 12-13 Federal Com 75H Rev0 kFc 17Nov23 (DefinitivePlan)													Warning Alert
39.99	32.49	37.49	7.50	N/A	MAS = 9.90 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
39.99	32.49	37.49	7.50	N/A	MAS = 9.90 (m)	23.00	23.00					WRP	
39.99	32.49	22.08	7.50	2.43	MAS = 9.90 (m)	1600.00	1600.00					MinPts	
40.14	32.49	21.92	7.64	2.40	MAS = 9.90 (m)	1630.00	1630.00					MinPt-EOU	
40.79	32.49	22.19	8.30	2.39	MAS = 9.90 (m)	1670.00	1670.00					MinPt-SF	
108.08	34.52	84.23	73.55	4.95	OSF1.50	2240.00	2240.00	OSF>5.00				Exit Alert	
739.81	154.00	636.31	585.81	7.30	OSF1.50	10170.00	10166.05					MinPt-EOU	
739.86	154.08	636.31	585.78	7.30	OSF1.50	10180.00	10176.04					MinPt-ADP	
741.65	154.73	637.66	586.92	7.28	OSF1.50	10270.00	10265.32					MinPt-SF	
1232.92	361.97	990.77	870.95	5.13	OSF1.50	20825.17	10750.00					MinPts	
Coterra Dos Equis 12-13 Federal Com 3H Corrected MWD to 23004ft (DefinitiveSurvey)													Warning Alert
1196.73	32.81	1194.29	1163.98	6207599.47	MAS = 10.00 (m)	0.00	0.00					MinPts	
1196.80	32.81	1194.29	1164.00	98129.30	MAS = 10.00 (m)	23.00	23.00					WRP	
1198.33	32.81	1193.52	1165.52	517.52	MAS = 10.00 (m)	300.00	300.00					MinPt-EOU	
1201.26	32.81	1193.85	1168.45	244.53	MAS = 10.00 (m)	560.00	560.00					MinPt-EOU	
263.68	81.64	208.42	182.04	4.95	OSF1.50	5210.00	5207.49	OSF<5.00				Enter Alert	
107.44	97.38	41.89	10.06	1.66	OSF1.50	6163.64	6160.22					MinPt-CtCt	
107.51	97.61	41.61	9.90	1.66	OSF1.50	6180.00	6176.57					MinPt-EOU	
107.63	97.75	41.63	9.88	1.66	OSF1.50	6190.00	6186.56					MinPts	
169.17	156.73	63.85	12.44	1.62	OSF1.50	10520.00	10492.34					MinPts	
525.26	160.01	417.75	365.24	4.98	OSF1.50	11090.00	10741.34	OSF>5.00				Exit Alert	
2189.73	140.46	2095.26	2049.27	23.78	OSF1.50	13230.00	10750.00					MinPt-CtCt	
2191.94	144.42	2094.83	2047.52	23.14	OSF1.50	13440.00	10750.00					MinPt-EOU	
2194.12	153.80	2090.76	2040.33	21.73	OSF1.50	13840.00	10750.00					MinPt-CtCt	
2194.34	158.72	2087.70	2035.62	21.05	OSF1.50	14050.00	10750.00					MinPt-CtCt	
2196.92	172.06	2081.38	2024.86	19.41	OSF1.50	14590.00	10750.00					MinPt-CtCt	
2178.35	220.03	2030.84	1958.33	15.00	OSF1.50	16360.00	10750.00					MinPt-CtCt	
2185.18	269.12	2004.93	1916.06	12.28	OSF1.50	18030.00	10750.00					MinPt-CtCt	
2185.63	276.09	2000.74	1909.54	11.97	OSF1.50	18260.00	10750.00					MinPt-CtCt	
2186.52	278.96	1999.72	1907.57	11.85	OSF1.50	18380.00	10750.00					MinPt-EOU	
2191.10	284.39	2000.67	1906.71	11.65	OSF1.50	18580.00	10750.00					MinPt-ADP	
2185.60	301.41	1983.82	1884.19	10.96	OSF1.50	19090.00	10750.00					MinPt-CtCt	
2182.61	336.59	1957.29	1845.92	9.79	OSF1.50	20230.00	10750.00					MinPt-CtCt	
2186.52	354.88	1949.10	1831.64	9.30	OSF1.50	20825.17	10750.00					MinPts	
30-025-46323 - DOS EQUIS 12-13 FEDERAL COM 073H - IFR1 to 22227ft - A (DefinitiveSurvey)													Warning Alert
116.60	32.81	114.10	83.79	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
116.60	32.81	114.10	83.79	N/A	MAS = 10.00 (m)	23.00	23.00					WRP	
109.18	32.81	94.42	76.37	8.70	MAS = 10.00 (m)	1321.61	1321.61					MinPts	
109.33	32.81	94.30	76.52	8.53	MAS = 10.00 (m)	1350.00	1350.00					MinPt-EOU	
122.14	32.81	104.74	89.33	8.03	MAS = 10.00 (m)	1600.00	1600.00					MinPt-SF	
138.27	32.81	118.92	105.46	8.06	MAS = 10.00 (m)	1800.00	1800.00					MinPt-SF	
398.29	85.22	340.64	313.07	7.18	OSF1.50	5650.00	5647.07					MinPt-EOU	
398.65	85.66	340.72	313.00	7.15	OSF1.50	5680.00	5677.04					MinPt-ADP	
425.23	109.07	351.68	316.16	5.95	OSF1.50	7270.00	7266.05					MinPt-CtCt	
425.43	109.78	351.42	315.66	5.91	OSF1.50	7320.00	7316.05					MinPt-EOU	
425.79	110.20	351.50	315.60	5.90	OSF1.50	7350.00	7346.05					MinPt-ADP	
443.76	128.78	357.06	314.97	5.24	OSF1.50	8600.00	8596.05					MinPt-CtCt	
444.02	135.01	353.18	309.01	5.00	OSF1.50	9020.00	9016.05	OSF<5.00				Enter Alert	
372.97	154.81	268.93	218.16	3.65	OSF1.50	10630.00	10574.27					MinPts	
373.08	154.87	269.00	218.21	3.65	OSF1.50	10640.00	10581.00					MinPt-SF	
512.46	156.48	407.31	355.99	4.97	OSF1.50	11020.00	10731.21	OSF>5.00				Exit Alert	
1725.44	124.01	1641.93	1601.43	21.27	OSF1.50	12460.00	10750.00					MinPt-CtCt	
1725.82	125.23	1641.50	1600.59	21.06	OSF1.50	12550.00	10750.00					MinPt-EOU	
1726.16	125.64	1641.57	1600.52	21.00	OSF1.50	12580.00	10750.00					MinPt-ADP	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	1724.61	134.00	1634.45	1590.61	19.64	OSF1.50	13050.00	10750.00				MinPt-CtCt	
	1724.75	134.36	1634.34	1590.39	19.59	OSF1.50	13080.00	10750.00				MinPt-EOU	
	1724.86	134.49	1634.36	1590.37	19.57	OSF1.50	13090.00	10750.00				MinPt-ADP	
	1726.67	136.62	1634.75	1590.04	19.28	OSF1.50	13200.00	10750.00				MinPt-EOU	
	1727.24	137.32	1634.86	1589.92	19.19	OSF1.50	13240.00	10750.00				MinPt-ADP	
	1737.79	144.64	1640.53	1593.15	18.31	OSF1.50	13590.00	10750.00				MinPt-EOU	
	1737.96	144.82	1640.59	1593.18	18.29	OSF1.50	13600.00	10750.00				MinPt-ADP	
	1735.55	161.24	1627.22	1574.31	16.38	OSF1.50	14290.00	10750.00				MinPt-CtCt	
	1733.96	171.13	1619.04	1562.83	15.40	OSF1.50	14690.00	10750.00				MinPt-CtCt	
	1734.39	172.50	1618.56	1561.89	15.28	OSF1.50	14760.00	10750.00				MinPt-EOU	
	1735.04	173.27	1618.69	1561.76	15.22	OSF1.50	14800.00	10750.00				MinPt-ADP	
	1732.11	191.49	1603.61	1540.61	13.73	OSF1.50	15470.00	10750.00				MinPt-CtCt	
	1721.86	216.15	1576.93	1505.71	12.07	OSF1.50	16360.00	10750.00				MinPt-CtCt	
	1704.56	245.72	1539.91	1458.84	10.50	OSF1.50	17380.00	10750.00				MinPt-CtCt	
	1700.09	253.66	1530.15	1446.43	10.14	OSF1.50	17650.00	10750.00				MinPt-CtCt	
	1700.35	254.42	1529.90	1445.93	10.11	OSF1.50	17690.00	10750.00				MinPt-EOU	
	1700.83	254.99	1530.00	1445.84	10.09	OSF1.50	17720.00	10750.00				MinPt-ADP	
	1710.20	270.63	1528.95	1439.58	9.55	OSF1.50	18240.00	10750.00				MinPt-EOU	
	1709.59	288.02	1516.74	1421.57	8.97	OSF1.50	18790.00	10750.00				MinPt-CtCt	
	1710.39	290.74	1515.73	1419.64	8.89	OSF1.50	18900.00	10750.00				MinPt-EOU	
	1711.35	291.93	1515.90	1419.42	8.86	OSF1.50	18950.00	10750.00				MinPt-ADP	
	1718.46	306.28	1513.45	1412.19	8.47	OSF1.50	19410.00	10750.00				MinPt-EOU	
	1719.97	308.60	1513.40	1411.37	8.42	OSF1.50	19490.00	10750.00				MinPt-EOU	
	1705.10	350.75	1470.44	1354.35	7.33	OSF1.50	20825.17	10750.00				MinPts	
Coterra Dos Equis 12-13 Federal Com 91H Rev2 kFc DDMmmYY (DefinitivePlan)													Warning Alert
	899.89	32.81	898.08	867.08	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	899.88	32.81	898.07	867.07	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	899.88	32.81	892.69	867.07	167.00	MAS = 10.00 (m)	600.00	600.00				MinPt-EOU	
	362.11	76.26	310.76	285.85	7.24	OSF1.50	4514.17	4512.33				MinPt-CtCt	
	362.46	77.31	310.41	285.15	7.15	OSF1.50	4580.00	4578.09				MinPt-EOU	
	362.84	77.78	310.48	285.06	7.11	OSF1.50	4610.00	4608.06				MinPt-ADP	
	450.22	136.20	358.90	314.02	5.00	OSF1.50	8770.00	8766.05	OSF<5.00			Enter Alert	
	450.24	139.76	356.55	310.47	4.87	OSF1.50	9020.00	9016.05				MinPts	
	450.33	139.81	356.61	310.52	4.87	OSF1.50	9030.00	9026.05				MinPt-SF	
	460.51	139.66	366.89	320.85	4.98	OSF1.50	9170.00	9166.05	OSF>5.00			Exit Alert	
	1179.35	90.69	1118.41	1088.66	19.80	OSF1.50	11600.00	10750.00				MinPt-CtCt	
	1179.42	342.00	950.95	837.43	5.19	OSF1.50	20825.17	10750.00				MinPts	
Coterra Dos Equis 12-13 Federal Com 47H Corrected MWD to 22528ft (DefinitiveSurvey)													Warning Alert
	1216.78	32.81	1214.28	1183.97	#####	MAS = 10.00 (m)	0.00	0.00				MinPts	
	1216.78	32.81	1214.27	1183.98	100562.91	MAS = 10.00 (m)	23.00	23.00				WRP	
	1216.78	32.81	1212.04	1183.97	541.56	MAS = 10.00 (m)	290.00	290.00				MinPts	
	1218.61	32.81	1207.08	1185.80	134.65	MAS = 10.00 (m)	980.00	980.00				MinPt-EOU	
	396.63	119.66	316.02	276.97	5.05	OSF1.50	7837.12	7833.16	OSF<5.00			MinPt-CtCt	
	396.70	120.85	315.30	275.85	5.00	OSF1.50	7920.00	7916.05				Enter Alert	
	398.83	127.33	313.11	271.50	4.76	OSF1.50	8370.00	8366.05				MinPt-EOU	
	401.18	130.66	313.24	270.53	4.67	OSF1.50	8600.00	8596.05				MinPt-EOU	
	403.89	133.64	313.96	270.24	4.59	OSF1.50	8810.00	8806.05				MinPt-ADP	
	401.01	154.23	297.36	246.78	3.94	OSF1.50	10300.00	10294.58				MinPt-CtCt	
	401.04	154.35	297.31	246.69	3.94	OSF1.50	10320.00	10313.88				MinPt-EOU	
	401.09	154.42	297.32	246.68	3.94	OSF1.50	10330.00	10323.45				MinPt-ADP	
	401.43	154.60	297.53	246.83	3.93	OSF1.50	10360.00	10351.86				MinPt-SF	
	517.32	157.34	411.59	359.97	4.99	OSF1.50	10830.00	10681.91	OSF>5.00			Exit Alert	
	1707.32	125.08	1623.10	1582.24	20.86	OSF1.50	12190.00	10750.00				MinPt-CtCt	
	1707.01	129.45	1619.88	1577.56	20.14	OSF1.50	12460.00	10750.00				MinPt-CtCt	
	1703.40	143.26	1607.06	1560.14	18.13	OSF1.50	13190.00	10750.00				MinPt-CtCt	
	1704.45	149.08	1604.23	1555.37	17.42	OSF1.50	13460.00	10750.00				MinPt-CtCt	
	1704.58	149.49	1604.09	1555.09	17.37	OSF1.50	13490.00	10750.00				MinPt-EOU	
	1704.79	149.76	1604.12	1555.03	17.34	OSF1.50	13510.00	10750.00				MinPt-ADP	
	1706.79	158.18	1600.50	1548.61	16.42	OSF1.50	13860.00	10750.00				MinPt-CtCt	
	1708.54	168.15	1595.61	1540.39	15.45	OSF1.50	14290.00	10750.00				MinPt-EOU	
	1717.69	188.12	1591.44	1529.57	13.86	OSF1.50	15070.00	10750.00				MinPt-EOU	
	1717.87	208.98	1577.71	1508.89	12.46	OSF1.50	15810.00	10750.00				MinPt-CtCt	
	1718.11	209.61	1577.53	1508.50	12.43	OSF1.50	15850.00	10750.00				MinPt-EOU	
	1718.24	209.77	1577.56	1508.47	12.42	OSF1.50	15860.00	10750.00				MinPt-ADP	
	1724.69	241.51	1562.85	1483.18	10.81	OSF1.50	16940.00	10750.00				MinPt-CtCt	
	1712.99	269.90	1532.22	1443.09	9.60	OSF1.50	17900.00	10750.00				MinPt-CtCt	
	1713.66	271.90	1531.56	1441.77	9.53	OSF1.50	17990.00	10750.00				MinPt-EOU	
	1716.29	275.42	1531.84	1440.87	9.42	OSF1.50	18120.00	10750.00				MinPt-ADP	
	1711.70	302.37	1509.28	1409.33	8.55	OSF1.50	18970.00	10750.00				MinPt-CtCt	
	1699.68	331.34	1477.95	1368.34	7.74	OSF1.50	19910.00	10750.00				MinPt-CtCt	
	1699.73	340.94	1471.61	1358.79	7.52	OSF1.50	20220.00	10750.00				MinPt-CtCt	
	1703.09	358.61	1463.18	1344.48	7.16	OSF1.50	20810.00	10750.00				MinPt-EOU	
	1703.35	358.97	1463.20	1344.38	7.16	OSF1.50	20825.17	10750.00				MinPts	
30-025-40791-0200 - DOS EQUIUS '12' FEDERAL COM 2H ST02 - MWD 13330ft to 15399ft (DefinitiveSurvey)													Warning Alert
	477.05	32.81	474.55	444.24	#####	MAS = 10.00 (m)	0.00	0.00				Surface	
	477.04	32.81	474.54	444.24	170030.41	MAS = 10.00 (m)	23.00	23.00				WRP	
	469.47	32.81	451.76	436.66	30.71	MAS = 10.00 (m)	1620.00	1620.00				MinPts	
	469.53	32.81	448.66	436.72	25.43	MAS = 10.00 (m)	1940.00	1940.00				MinPts	
	468.83	36.09	443.94	432.74	20.82	OSF1.50	2346.95	2346.95				MinPt-CtCt	
	469.65	38.63	443.06	431.02	19.40	OSF1.50	2520.00	2520.00				MinPt-EOU	
	470.14	39.22	443.16	430.92	19.10	OSF1.50	2560.00	2560.00				MinPt-ADP	
	476.58	47.86	443.84	428.72	15.68	OSF1.50	3140.00	3139.47				MinPt-EOU	
	477.55	49.04	444.03	428.52	15.								

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	696.67	210.78	555.31	485.88	5.00	OSF1.50	14450.00	10750.00	OSF<5.00			Enter Alert	
	694.17	224.81	543.46	469.36	4.67	OSF1.50	14840.00	10750.00				MinPt-CtCt	
	694.88	226.93	542.76	467.95	4.63	OSF1.50	14910.00	10750.00				MinPt-EOU	
	701.01	240.89	539.59	460.12	4.40	OSF1.50	15290.00	10750.00				MinPts	
	761.56	231.81	606.19	529.75	4.97	OSF1.50	15580.00	10750.00	OSF>5.00			Exit Alert	
	5587.00	165.85	5475.60	5421.15	51.28	OSF1.50	20825.17	10750.00				TD	
Coterra Dos Equis 12-13 Federal Com 48H Rev0 kFc 17Nov23 (DefinitivePlan)													Warning Alert
	1260.32	32.81	1257.82	1227.51	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1260.32	32.81	1257.80	1227.51	88747.53	MAS = 10.00 (m)	23.00	23.00				WRP	
	491.35	149.40	390.92	341.95	4.99	OSF1.50	10390.00	10379.72	OSF<5.00			Enter Alert	
	471.38	149.35	370.98	322.03	4.79	OSF1.50	10631.56	10575.33				MinPts	
	491.41	149.87	390.66	341.54	4.98	OSF1.50	10800.00	10669.59	OSF>5.00			Exit Alert	
	877.64	265.20	700.01	612.45	5.00	OSF1.50	17950.00	10750.00	OSF<5.00			Enter Alert	
	877.80	353.20	641.49	524.59	3.74	OSF1.50	20825.17	10750.00				MinPts	
30-025-41480 - DOS EQUIS 13 FEDERAL COM 2H - MWD to 15311ft (DefinitiveSurvey)													Warning Alert
	5263.08	32.81	5260.58	5230.27	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	5263.00	32.81	5260.49	5230.19	615177.30	MAS = 10.00 (m)	20.00	20.00				MinPt-SF	
	5262.99	32.81	5260.48	5230.18	725984.07	MAS = 10.00 (m)	23.00	23.00				WRP	
	5262.98	32.81	5260.46	5230.17	211841.74	MAS = 10.00 (m)	30.00	30.00				MinPts	
	5270.05	32.81	5253.26	5237.24	368.57	MAS = 10.00 (m)	1550.00	1550.00				MinPt-EOU	
	5273.04	32.81	5252.54	5240.23	292.88	MAS = 10.00 (m)	1920.00	1920.00				MinPt-EOU	
	5276.26	33.36	5253.18	5242.89	256.31	OSF1.50	2190.00	2190.00				MinPt-ADP	
	5279.21	36.36	5254.13	5242.84	233.75	OSF1.50	2390.00	2390.00				MinPt-ADP	
	5523.72	106.40	5451.95	5417.32	79.71	OSF1.50	7080.00	7076.05				MinPt-EOU	
	5532.28	118.08	5452.72	5414.20	71.77	OSF1.50	7860.00	7856.05				MinPt-EOU	
	5534.64	120.86	5453.23	5413.77	70.11	OSF1.50	8060.00	8056.05				MinPt-ADP	
	5545.42	129.24	5458.43	5416.18	65.60	OSF1.50	8610.00	8606.05				MinPt-EOU	
	5548.96	133.30	5459.26	5415.66	63.61	OSF1.50	8890.00	8886.05				MinPt-ADP	
	5554.08	150.70	5452.78	5403.38	56.19	OSF1.50	10030.00	10026.05				MinPt-CtCt	
	615.64	187.88	489.56	427.76	4.96	OSF1.50	15740.00	10750.00	OSF<5.00			Enter Alert	
	535.89	202.06	400.34	333.82	4.01	OSF1.50	16058.70	10750.00				MinPt-CtCt	
	535.99	202.26	400.32	333.73	4.01	OSF1.50	16070.00	10750.00				MinPts	
	536.25	202.41	400.48	333.84	4.00	OSF1.50	16080.00	10750.00				MinPt-SF	
	625.23	205.58	487.35	419.65	4.60	OSF1.50	16520.00	10750.00				MinPt-ADP	
	626.24	206.05	488.04	420.19	4.60	OSF1.50	16530.00	10750.00				MinPt-SF	
	647.52	285.41	456.41	362.10	3.42	OSF1.50	19210.00	10750.00				MinPt-CtCt	
	652.54	300.91	451.10	351.63	3.27	OSF1.50	19650.00	10750.00				MinPt-EOU	
	672.55	337.76	446.54	334.79	3.00	OSF1.50	20580.00	10750.00				MinPt-EOU	
	672.83	338.06	446.62	334.76	3.00	OSF1.50	20590.00	10750.00				MinPts	
	719.76	325.09	502.20	394.67	3.34	OSF1.50	20825.17	10750.00				TD	
Coterra Dos Equis 12-13 Federal Com 49H Rev0 kFc 17Nov23 (DefinitivePlan)													Warning Alert
	1280.25	32.81	1277.75	1247.44	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1280.25	32.81	1277.74	1247.44	94898.85	MAS = 10.00 (m)	23.00	23.00				WRP	
	643.12	144.04	546.26	499.08	6.79	OSF1.50	9500.00	9496.05				MinPt-CtCt	
	643.17	144.27	546.16	498.90	6.78	OSF1.50	9530.00	9526.05				MinPt-EOU	
	643.22	144.34	546.17	498.89	6.78	OSF1.50	9540.00	9536.05				MinPt-ADP	
	644.84	144.99	547.35	499.86	6.76	OSF1.50	9640.00	9636.05				MinPt-SF	
	848.46	211.89	706.37	636.58	6.06	OSF1.50	15950.00	10750.00				MinPt-CtCt	
	849.35	214.61	705.44	634.74	5.99	OSF1.50	16050.00	10750.00				MinPt-EOU	
	850.50	215.99	705.67	634.51	5.96	OSF1.50	16100.00	10750.00				MinPt-ADP	
	957.55	289.14	763.95	668.41	5.00	OSF1.50	18530.00	10750.00	OSF<5.00			Enter Alert	
	957.81	358.13	718.23	599.69	4.03	OSF1.50	20825.17	10750.00				MinPts	
30-025-45416 - DOS EQUIS 13 FEDERAL COM 9H - Corrected MWD to 15788ft (DefinitiveSurvey)													Warning Alert
	5438.04	32.81	5436.23	5405.23	#####	MAS = 10.00 (m)	0.00	0.00				MinPts	
	5438.04	32.81	5436.19	5405.23	144199.60	MAS = 10.00 (m)	23.00	23.00				WRP	
	5438.12	32.81	5432.04	5406.31	1032.36	MAS = 10.00 (m)	780.00	780.00				MinPts	
	5438.74	32.81	5428.99	5405.93	684.45	MAS = 10.00 (m)	1160.00	1160.00				MinPt-EOU	
	5430.30	32.81	5411.57	5397.49	317.95	MAS = 10.00 (m)	2460.00	2460.00				MinPts	
	5430.43	32.81	5411.28	5397.63	310.30	MAS = 10.00 (m)	2520.00	2520.00				MinPt-EOU	
	5451.47	106.06	5380.18	5345.41	78.37	OSF1.50	9760.00	9756.05				MinPt-CtCt	
	5451.85	107.19	5379.77	5344.65	77.59	OSF1.50	9860.00	9856.05				MinPt-EOU	
	5453.94	109.74	5380.16	5344.20	75.82	OSF1.50	10100.00	10096.05				MinPt-ADP	
	710.37	168.62	596.65	541.75	6.43	OSF1.50	15930.00	10750.00				MinPts	
	710.46	168.74	596.68	541.72	6.43	OSF1.50	15940.00	10750.00				MinPts	
	710.02	167.23	597.99	542.79	6.42	OSF1.50	15984.58	10750.00				MinPts	
	710.13	167.38	598.03	542.75	6.41	OSF1.50	16000.00	10750.00				MinPt-ADP	
	711.35	167.86	598.93	543.49	6.40	OSF1.50	16040.00	10750.00				MinPt-SF	
	734.06	169.37	620.63	564.69	6.55	OSF1.50	16230.00	10750.00				MinPt-SF	
	747.77	172.37	632.34	575.40	6.55	OSF1.50	16420.00	10750.00				MinPt-SF	
	754.30	175.83	636.56	578.47	6.48	OSF1.50	16600.00	10750.00				MinPt-ADP	
	752.81	185.62	628.55	567.19	6.12	OSF1.50	17080.00	10750.00				MinPt-CtCt	
	745.59	205.12	608.34	540.48	5.48	OSF1.50	17990.00	10750.00				MinPt-CtCt	
	746.27	207.00	607.75	539.26	5.44	OSF1.50	18080.00	10750.00				MinPt-EOU	
	746.99	207.84	607.92	539.15	5.42	OSF1.50	18120.00	10750.00				MinPt-ADP	
	771.34	232.70	615.69	538.64	5.00	OSF1.50	19140.00	10750.00	OSF<5.00			Enter Alert	
	769.05	243.59	596.18	515.50	4.69	OSF1.50	19590.00	10750.00				MinPt-CtCt	
	770.84	269.14	590.90	501.70	4.31	OSF1.50	20570.00	10750.00				MinPt-EOU	
	776.30	275.68	591.99	500.61	4.24	OSF1.50	20825.17	10750.00				MinPts	
30-025-40792 - DOS EQUIS '12' FEDERAL COM 3H - Gyro+MWD to 15227ft (DefinitiveSurvey)													Warning Alert
	829.31	32.81	826.81	796.50	1107044.94	MAS = 10.00 (m)	0.00	0.00				Surface	
	829.25	32.81	826.71	796.45	17287.50	MAS = 10.00 (m)	23.00	23.00				WRP	
	825.80	32.81	819.92	792.99	243.31	MAS = 10.00 (m)	400.00	400.00				MinPts	
	827.50	32.81	817.71	794.70	113.09	MAS = 10.00 (m)	800.00	800.00				MinPt-EOU	
	832.81	38.28	806.45	794.52	34.81	OSF1.50	2470.00	2470.00				MinPt-CtCt	
	810.67	65.81	765.97	744.86	19.15	OSF1.50	4330.00	4328.33				MinPt-CtCt	
	799.85	76.42	748.07	723.43	16.18	OSF1.50	5160.00	515					

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	760.32	230.07	606.11	530.25	5.00	OSF1.50	14610.00	10750.00	OSF<5.00			Enter Alert	
	746.69	258.36	573.62	488.33	4.36	OSF1.50	15303.66	10750.00				MinPt-CtCt	
	746.72	258.40	573.62	488.31	4.36	OSF1.50	15310.00	10750.00				MinPts	
	810.94	246.78	645.59	564.16	4.96	OSF1.50	15620.00	10750.00	OSF>5.00			Exit Alert	
	5571.77	157.92	5465.66	5413.85	53.75	OSF1.50	20825.17	10750.00				TD	
30-025-41304 - Bell Lake 24 Fed 4H - MWD to 15872ft - A (DefinitiveSurvey)													Warning Alert
	15360.31	32.81	15357.81	15327.50	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	15360.26	32.81	15357.75	15327.45	2129531.21	MAS = 10.00 (m)	23.00	23.00				WRP	
	1120.72	339.73	893.40	780.99	4.97	OSF1.50	20680.00	10750.00	OSF<5.00			Enter Alert	
	1052.17	352.10	816.61	700.07	4.50	OSF1.50	20825.17	10750.00				MinPts	
30-025-40791-0100 - DOS EQUIS '12' FEDERAL COM 2H ST01 - MWD 10486ft to 13433ft (DefinitiveSurvey)													Pass
	477.05	32.81	474.55	444.24	#####	MAS = 10.00 (m)	0.00	0.00				Surface	
	477.04	32.81	474.54	444.24	170030.41	MAS = 10.00 (m)	23.00	23.00				WRP	
	469.47	32.81	451.76	436.66	30.71	MAS = 10.00 (m)	1620.00	1620.00				MinPts	
	469.53	32.81	448.66	436.72	25.43	MAS = 10.00 (m)	1940.00	1940.00				MinPts	
	468.83	36.09	443.94	432.74	20.82	OSF1.50	2346.95	2346.95				MinPt-CtCt	
	469.65	38.63	443.06	431.02	19.40	OSF1.50	2520.00	2520.00				MinPt-EOU	
	470.14	39.22	443.16	430.92	19.10	OSF1.50	2560.00	2560.00				MinPt-ADP	
	476.58	47.86	443.84	428.72	15.68	OSF1.50	3140.00	3139.47				MinPt-EOU	
	477.55	49.04	444.03	428.52	15.31	OSF1.50	3220.00	3219.39				MinPt-ADP	
	554.89	96.32	489.84	458.57	8.83	OSF1.50	7180.00	7176.05				MinPt-CtCt	
	554.99	96.64	489.73	458.35	8.80	OSF1.50	7210.00	7206.05				MinPt-EOU	
	555.15	96.85	489.75	458.30	8.79	OSF1.50	7230.00	7226.05				MinPt-ADP	
	559.14	101.11	490.90	458.03	8.47	OSF1.50	7610.00	7606.05				MinPt-ADP	
	503.75	134.03	413.56	369.72	5.72	OSF1.50	10620.00	10567.42				MinPt-SF	
	501.48	133.35	411.74	368.13	5.72	OSF1.50	10660.00	10594.05				MinPt-SF	
	498.01	132.56	408.81	365.46	5.72	OSF1.50	10720.00	10629.93				MinPt-SF	
	496.38	131.95	407.58	364.42	5.72	OSF1.50	10780.00	10660.59				MinPts	
	553.24	127.82	467.19	425.42	6.59	OSF1.50	11300.00	10750.00				MinPt-CtCt	
	548.91	134.06	458.71	414.86	6.23	OSF1.50	11740.00	10750.00				MinPt-CtCt	
	549.11	134.65	458.51	414.46	6.20	OSF1.50	11780.00	10750.00				MinPt-EOU	
	551.21	139.78	457.19	411.43	6.00	OSF1.50	12040.00	10750.00				MinPt-EOU	
	551.81	140.52	457.30	411.30	5.97	OSF1.50	12080.00	10750.00				MinPt-ADP	
	562.12	144.96	464.65	417.16	5.89	OSF1.50	12330.00	10750.00				MinPt-SF	
	624.29	171.40	509.19	452.89	5.52	OSF1.50	13180.00	10750.00				MinPt-ADP	
	628.71	177.65	509.44	451.06	5.36	OSF1.50	13340.00	10750.00				MinPts	
	628.96	177.72	509.64	451.23	5.36	OSF1.50	13350.00	10750.00				MinPt-SF	
	7521.75	149.91	7420.98	7371.84	76.51	OSF1.50	20825.17	10750.00				TD	
30-025-40791 - DOS EQUIS '12' FEDERAL COM 2H - Gyro+MWD to 12650ft (DefinitiveSurvey)													Pass
	477.05	32.81	474.55	444.24	#####	MAS = 10.00 (m)	0.00	0.00				Surface	
	477.04	32.81	474.54	444.24	170030.41	MAS = 10.00 (m)	23.00	23.00				WRP	
	469.47	32.81	451.76	436.66	30.71	MAS = 10.00 (m)	1620.00	1620.00				MinPts	
	469.53	32.81	448.66	436.72	25.43	MAS = 10.00 (m)	1940.00	1940.00				MinPts	
	468.83	36.09	443.94	432.74	20.82	OSF1.50	2346.95	2346.95				MinPt-CtCt	
	469.65	38.63	443.06	431.02	19.40	OSF1.50	2520.00	2520.00				MinPt-EOU	
	470.14	39.22	443.16	430.92	19.10	OSF1.50	2560.00	2560.00				MinPt-ADP	
	476.58	47.86	443.84	428.72	15.68	OSF1.50	3140.00	3139.47				MinPt-EOU	
	477.55	49.04	444.03	428.52	15.31	OSF1.50	3220.00	3219.39				MinPt-ADP	
	554.89	96.32	489.84	458.57	8.83	OSF1.50	7180.00	7176.05				MinPt-CtCt	
	554.99	96.64	489.73	458.35	8.80	OSF1.50	7210.00	7206.05				MinPt-EOU	
	555.15	96.85	489.75	458.30	8.79	OSF1.50	7230.00	7226.05				MinPt-ADP	
	559.14	101.11	490.90	458.03	8.47	OSF1.50	7610.00	7606.05				MinPt-ADP	
	505.00	134.57	414.46	370.43	5.71	OSF1.50	10610.00	10560.44				MinPt-CtCt	
	505.00	134.61	414.43	370.39	5.71	OSF1.50	10620.00	10567.42				MinPts	
	505.11	134.65	414.51	370.46	5.70	OSF1.50	10630.00	10574.27				MinPt-SF	
	10134.11	149.51	10033.60	9984.60	103.38	OSF1.50	20825.17	10750.00				TD	
Coterra Dos Equis 12-13 Federal Com 90H Rev2 kFc DDMmmYY (DefinitivePlan)													Pass
	919.89	32.81	918.08	887.08	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	919.88	32.81	918.07	887.07	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	919.88	32.81	912.70	887.07	170.75	MAS = 10.00 (m)	600.00	600.00				MinPt-EOU	
	874.06	100.24	806.72	773.82	13.26	OSF1.50	6634.26	6630.39				MinPt-CtCt	
	874.23	100.72	806.67	773.51	13.20	OSF1.50	6670.00	6666.10				MinPt-EOU	
	874.47	100.98	806.63	773.48	13.17	OSF1.50	6690.00	6686.08				MinPt-ADP	
	875.63	135.68	784.66	739.95	9.77	OSF1.50	9040.00	9036.05				MinPt-EOU	
	875.69	135.76	784.67	739.94	9.77	OSF1.50	9050.00	9046.05				MinPt-ADP	
	878.96	136.70	787.31	742.26	9.74	OSF1.50	9190.00	9186.05				MinPt-SF	
	1480.58	113.72	1404.29	1366.86	19.76	OSF1.50	11340.00	10750.00				MinPt-CtCt	
	1480.85	351.58	1245.99	1129.27	6.34	OSF1.50	20825.17	10750.00				MinPts	
Coterra Dos Equis 12-13 Federal Com 50H Rev0 kFc 17Nov23 (DefinitivePlan)													Pass
	1300.18	32.81	1297.68	1267.37	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1300.18	32.81	1297.66	1267.37	96378.73	MAS = 10.00 (m)	23.00	23.00				WRP	
	1286.65	51.57	1251.43	1235.08	39.26	OSF1.50	3339.09	3338.37				MinPt-CtCt	
	1286.81	52.08	1251.26	1234.73	38.85	OSF1.50	3380.00	3379.24				MinPt-EOU	
	1287.01	52.33	1251.20	1234.68	38.67	OSF1.50	3400.00	3399.22				MinPt-ADP	
	1291.49	155.02	1187.31	1136.47	12.68	OSF1.50	11370.00	10750.00				MinPt-CtCt	
	1291.89	364.65	1047.96	927.24	5.34	OSF1.50	20825.17	10750.00				MinPts	
30-025-40700-0100 - DOS EQUIS 12 FEDERAL COM 1 ST01 - MWD 10506ft to 15399ft (DefinitiveSurvey)													Pass
	1646.82	32.81	1644.32	1614.01	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	1646.82	32.81	1644.32	1614.01	N/A	MAS = 10.00 (m)	4.40	4.40				MinPts	
	1646.83	32.81	1644.32	1614.02	302502.70	MAS = 10.00 (m)	23.00	23.00				WRP	
	1647.03	32.81	1644.21	1614.22	5165.25	MAS = 10.00 (m)	90.00	90.00				MinPt-EOU	
	1648.39	32.81	1643.80	1615.58	789.24	MAS = 10.00 (m)	280.00	280.00				MinPt-EOU	
	1651.96	32.81	1632.16	1619.15	95.38	MAS = 10.00 (m)	1810.00	1810.00				MinPts	
	1653.76	39.70	1626.46	1614.06	66.58	OSF1.50	2570.00	2569.99				MinPt-EOU	
	1654.27	40.30	1626.57	1613.98	65.55	OSF1.50	2610.00	2609.97				MinPt-ADP	
	1660.87	54.73	1623.55	1606.14	47.63	OSF1.50	3570.00	3569.06				MinPt-CtCt	
	1660.87	57.11	1621.96	1603.76	45.55	OSF1.50	3730.00	3728.91				MinPt-CtCt	
	1662.33	62.79	1619.64	1599.54	41.29	OSF1.50	4120.00	4118.53				MinPt-EOU	
	1662.56	63.05	1619.69	1599.50	41.12	OSF1.50	4140.00	4138.51				MinPt-ADP	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
30-025-40700 - DOS EQUIS 12 FEDERAL COM 1 - Gyro to 11268ft (DefinitiveSurvey)	1929.41	170.82	1814.70	1758.59	17.17	OSF1.50	12220.00	10750.00				MinPt-ADP	Pass
	1949.16	219.37	1802.08	1729.79	13.46	OSF1.50	13890.00	10750.00				MinPt-CtCt	
	1950.26	222.59	1801.03	1727.67	13.27	OSF1.50	14010.00	10750.00				MinPt-EOU	
	1951.08	223.82	1801.03	1727.26	13.21	OSF1.50	14050.00	10750.00				MinPt-EOU	
	1957.61	244.49	1793.68	1713.02	12.12	OSF1.50	14590.00	10750.00				MinPt-CtCt	
	1947.93	271.56	1766.05	1676.37	10.85	OSF1.50	15300.00	10750.00				MinPt-CtCt	
	1947.98	271.65	1766.04	1676.32	10.84	OSF1.50	15310.00	10750.00				MinPts	
	1949.77	272.20	1767.47	1677.57	10.83	OSF1.50	15380.00	10750.00				MinPt-SF	
	5863.13	197.24	5730.81	5665.90	45.14	OSF1.50	20825.17	10750.00				TD	
30-025-40700 - DOS EQUIS 12 FEDERAL COM 1 - Gyro to 11268ft (DefinitiveSurvey)	1646.82	32.81	1644.32	1614.01	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1646.82	32.81	1644.32	1614.01	N/A	MAS = 10.00 (m)	4.40	4.40				MinPts	
	1646.83	32.81	1644.32	1614.02	302502.70	MAS = 10.00 (m)	23.00	23.00				WRP	
	1647.03	32.81	1644.21	1614.22	5165.25	MAS = 10.00 (m)	90.00	90.00				MinPt-EOU	
	1648.39	32.81	1643.80	1615.58	789.24	MAS = 10.00 (m)	280.00	280.00				MinPt-EOU	
	1651.96	32.81	1632.16	1619.15	95.38	MAS = 10.00 (m)	1810.00	1810.00				MinPts	
	1653.76	39.70	1626.46	1614.06	66.58	OSF1.50	2570.00	2569.99				MinPt-EOU	
	1654.27	40.30	1626.57	1613.98	65.55	OSF1.50	2610.00	2609.97				MinPt-ADP	
	1660.87	54.73	1623.55	1606.14	47.63	OSF1.50	3570.00	3569.06				MinPt-CtCt	
	1660.87	57.11	1621.96	1603.76	45.55	OSF1.50	3730.00	3728.91				MinPt-CtCt	
	1662.33	62.79	1619.64	1599.54	41.29	OSF1.50	4120.00	4118.53				MinPt-EOU	
	1662.56	63.05	1619.69	1599.50	41.12	OSF1.50	4140.00	4138.51				MinPt-ADP	
	1793.88	108.99	1720.39	1684.89	25.23	OSF1.50	7240.00	7236.05				MinPt-EOU	
	1800.94	119.20	1720.64	1681.74	23.12	OSF1.50	7930.00	7926.05				MinPt-EOU	
	1743.93	154.02	1640.42	1589.91	17.24	OSF1.50	10420.00	10406.96				MinPt-CtCt	
	1743.94	154.07	1640.39	1589.87	17.23	OSF1.50	10430.00	10415.89				MinPt-EOU	
	1743.98	154.13	1640.40	1589.86	17.23	OSF1.50	10440.00	10424.74				MinPt-ADP	
	1747.81	154.82	1643.77	1592.99	17.19	OSF1.50	10580.00	10538.78				MinPt-SF	
	10246.03	172.93	10129.91	10073.10	90.16	OSF1.50	20825.17	10750.00				TD	
30-025-46871 - Bell Lake 24 Fed 18H - MWD to 17350ft - A (DefinitiveSurvey)	15440.62	32.81	15438.12	15407.81	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	15440.61	32.81	15438.10	15407.80	6940401.69	MAS = 10.00 (m)	10.00	10.00				MinPt-SF	
	15440.60	32.81	15438.10	15407.79	#####	MAS = 10.00 (m)	23.00	23.00				WRP	
	15439.54	32.81	15431.23	15406.73	2657.51	MAS = 10.00 (m)	680.00	680.00				MinPts	
	1661.34	301.42	1459.55	1359.91	8.32	OSF1.50	20825.17	10750.00				MinPts	
30-025-46874 - Bell Lake 24 Fed 22H - MWD to 17440ft - A (DefinitiveSurvey)	15394.39	32.81	15391.89	15361.59	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	15394.33	32.81	15391.83	15361.53	1837725.29	MAS = 10.00 (m)	23.00	23.00				WRP	
	1823.92	295.63	1626.00	1528.29	9.32	OSF1.50	20825.17	10750.00				MinPts	
30-025-24433 - WIMBERLY 2 - INC Only to 5038ft (DefinitiveSurvey)	1827.90	32.81	1826.09	1795.09	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1827.67	32.81	1825.84	1794.86	81279.15	MAS = 10.00 (m)	20.00	20.00				MinPt-SF	
	1827.66	32.81	1825.83	1794.85	99328.98	MAS = 10.00 (m)	23.00	23.00				WRP	
	1827.64	139.57	1733.99	1688.07	19.88	OSF1.50	2500.00	2500.00				MinPt-CtCt	
	1887.77	324.62	1670.75	1563.14	8.76	OSF1.50	5070.00	5067.63				MinPts	
	7922.12	265.05	7744.82	7657.07	45.13	OSF1.50	16170.00	10750.00				MinPt-SF	
	11513.72	328.69	11293.99	11185.03	52.83	OSF1.50	20825.17	10750.00				TD	
30-025-24530 - WIMBERLY 4 - INC Only to 5030ft (DefinitiveSurvey)	1845.31	32.81	1843.50	1812.50	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1845.22	32.81	1843.40	1812.41	151161.31	MAS = 10.00 (m)	10.00	10.00				MinPt-SF	
	1845.18	32.81	1843.37	1812.38	615419.31	MAS = 10.00 (m)	20.00	20.00				MinPt-EOU	
	1845.18	32.81	1843.38	1812.37	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	1845.18	133.27	1755.74	1711.92	21.03	OSF1.50	2500.00	2500.00				MinPt-CtCt	
	1947.29	139.56	1753.55	1707.73	20.10	OSF1.50	2610.00	2609.97				MinPt-EOU	
	1948.29	290.53	1754.01	1657.77	10.11	OSF1.50	4930.00	4927.76				MinPt-EOU	
	1953.52	297.22	1754.77	1656.30	9.91	OSF1.50	5050.00	5047.64				MinPt-ADP	
	1953.97	297.40	1755.10	1656.57	9.91	OSF1.50	5060.00	5057.64				MinPt-SF	
	5776.45	102.22	5707.70	5674.23	86.26	OSF1.50	12320.00	10750.00				MinPt-CtCt	
	5776.65	102.77	5707.54	5673.88	85.79	OSF1.50	12370.00	10750.00				MinPt-EOU	
	5776.85	103.01	5707.58	5673.84	85.60	OSF1.50	12390.00	10750.00				MinPt-ADP	
	7691.21	252.96	7521.97	7438.25	45.92	OSF1.50	17400.00	10750.00				MinPt-SF	
	10279.76	303.40	10076.88	9976.35	51.12	OSF1.50	20825.17	10750.00				TD	
30-025-41479-0100 - DOS EQUIS 13 FEDERAL COM 1H ST01 - Corrected MWD to 15250ft (DefinitiveSurvey)	5594.01	32.81	5591.51	5561.20	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	5593.97	32.81	5591.47	5561.16	966224.25	MAS = 10.00 (m)	10.00	10.00				MinPt-SF	
	5593.95	32.81	5591.45	5561.14	2026335.98	MAS = 10.00 (m)	23.00	23.00				WRP	
	5593.77	32.81	5590.36	5560.95	6102.15	MAS = 10.00 (m)	170.00	170.00				MinPts	
	5593.16	32.81	5586.88	5562.35	968.18	MAS = 10.00 (m)	660.00	660.00				MinPts	
	5598.02	32.81	5582.92	5565.21	443.94	MAS = 10.00 (m)	1370.00	1370.00				MinPt-EOU	
	5601.63	32.81	5582.56	5568.83	337.74	MAS = 10.00 (m)	1770.00	1770.00				MinPt-EOU	
	5603.01	32.81	5582.33	5570.20	307.98	MAS = 10.00 (m)	1930.00	1930.00				MinPt-EOU	
	5606.44	38.84	5579.72	5567.60	231.33	OSF1.50	2520.00	2520.00				MinPt-EOU	
	5606.73	39.16	5579.79	5567.57	229.32	OSF1.50	2540.00	2540.00				MinPt-ADP	
	5833.73	108.80	5760.37	5724.93	82.29	OSF1.50	7240.00	7236.05				MinPt-EOU	
	5836.96	113.49	5760.47	5723.48	78.85	OSF1.50	7550.00	7546.05				MinPt-EOU	
	5838.03	114.81	5760.65	5723.24	77.94	OSF1.50	7650.00	7646.05				MinPt-ADP	
	5841.13	117.92	5761.68	5723.22	75.88	OSF1.50	7860.00	7856.05				MinPt-ADP	
	5853.35	127.68	5767.40	5725.68	70.11	OSF1.50	8500.00	8496.05				MinPt-EOU	
	5857.35	133.76	5767.34	5723.59	66.91	OSF1.50	8910.00	8906.05				MinPt-EOU	
	5859.59	138.92	5766.15	5720.67	64.40	OSF1.50	9260.00	9256.05				MinPt-EOU	
	5861.67	148.83	5761.61	5712.84	60.06	OSF1.50	9910.00	9906.05				MinPt-CtCt	
	5862.07	150.13	5761.16	5711.95	59.54	OSF1.50	10020.00	10016.05				MinPt-EOU	
	5862.66	150.83	5761.27	5711.83	59.26	OSF1.50	10080.00	10076.05				MinPt-ADP	
	1950.62	200.63	1816.03	1749.99	14.75	OSF1.50	16096.62	10750.00				MinPt-CtCt	
	1950.73	200.98	1815.91	1749.75	14.72	OSF1.50	16120.00	10750.00				MinPt-EOU	
	1951.13	201.61	1815.89	1749.52	14.68	OSF1.50	16160.00	10750.00				MinPt-EOU	
	1951.25	201.75	1815.92	1749.50	14.67	OSF1.50	16170.00	10750.00				MinPt-ADP	
	1956.33	212.15	1814.07	1744.18	13.98	OSF1.50	16840.00	10750.00				MinPt-CtCt	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	1975.35	289.78	1781.37	1685.61	10.30	OSF1.50	20340.00	10750.00				MinPt-CtCt	
	1976.30	295.42	1778.52	1680.88	10.11	OSF1.50	20570.00	10750.00				MinPt-EOU	
	1976.43	295.57	1778.56	1680.86	10.10	OSF1.50	20580.00	10750.00				MinPt-ADP	
	1980.52	296.81	1781.82	1683.72	10.08	OSF1.50	20680.00	10750.00				MinPt-SF	
	1995.39	297.70	1796.09	1697.69	10.13	OSF1.50	20825.17	10750.00				TD	
30-025-41306 - Bell Lake 24 Fed 2H - MWD to 16075ft - A (DefinitiveSurvey)													Pass
	15362.97	32.81	15360.47	15330.16	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	15362.92	32.81	15360.41	15330.11	2046400.58	MAS = 10.00 (m)	23.00	23.00				WRP	
	15362.90	32.81	15360.30	15330.09	160559.75	MAS = 10.00 (m)	50.00	50.00				MinPts	
	1992.46	366.82	1747.06	1625.65	8.19	OSF1.50	20825.17	10750.00				MinPts	

Well Name: DOS EQUIS 12-13 FEDERAL COM	Well Location: T24S / R32E / SEC 12 / NWNE /	County or Parish/State:
Well Number: 77H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM02889	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002550136	Well Status: Approved Application for Permit to Drill	Operator: CIMAREX ENERGY COMPANY

Notice of Intent

Sundry ID: 2763424

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 11/28/2023 Time Sundry Submitted: 06:55

Date proposed operation will begin: 02/01/2024

Procedure Description: Casing change from previously approved APD. Bottom hole change from previously approved APD. Non- standard location pending.

NOI Attachments

Procedure Description

Dos_Equis_12_13_77H_Sundry_Submittal_03112024_updated_20240311122535.pdf

Well Name: DOS EQUIS 12-13
FEDERAL COM

Well Location: T24S / R32E / SEC 12 /
NWNE /

County or Parish/State:

Well Number: 77H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM02889

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550136

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: MAR 11, 2024 12:25 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: LONG VO

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5759885402

BLM POC Email Address: LVO@BLM.GOV

Disposition: Sundry Returned

Disposition Date: 02/28/2024

Signature: Long Vo

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Cimarex Energy Company
LEASE NO.:	NMNM02889
LOCATION:	Section 12, T.24 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico ▼

WELL NAME & NO.:	Dos Equis 12-13 Federal Com 77H
SURFACE HOLE FOOTAGE:	300'/N & 2450'/E
BOTTOM HOLE FOOTAGE:	100'/S & 2588'/E
ATS/API ID:	30-025-50136
APD ID:	10400058461
Sundry ID:	2763424

COA

H2S	Yes ▼		
Potash	Ochoa ▼		
Cave/Karst Potential	Low ▼		
Cave/Karst Potential	☐ Critical		
Variance	☒ None	☒ Flex Hose	☒ Other
Wellhead	Conventional and Multibowl ▼		
Other	☐ 4 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		
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 **Delaware** 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 **1520 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 **24 hours in the Potash Area** 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.
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.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
3. The minimum required fill of cement behind the **7** inch production casing is:
 - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

4. The minimum required fill of cement behind the **4-1/2** inch production liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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 **3000 (3M)** psi.
- c. 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.

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.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report when present.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 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) 3/12/2024

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.	NMNM02889
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. DOS EQUIS 12-13 FEDERAL COM/
2. Name of Operator CIMAREX ENERGY COMPANY		9. API Well No. 3002550136
3a. Address 6001 DEAUVILLE BLVD STE 300N, MIDLAND, TX	3b. Phone No. (include area code) (432) 571-7800	10. Field and Pool or Exploratory Area WC-025 G-08 S243213C; WOLFCAMP/WC-025 G-08 S
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 12/T24S/R32E/NMP		11. Country or Parish, State LEA/NM

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
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

Casing change from previously approved APD.
Bottom hole change from previously approved APD.
Non- standard location pending.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) SHELLY BOWEN / Ph: (432) 620-1644	Title Regulatory Analyst
Signature (Electronic Submission)	Date 03/11/2024

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: NWNE / 300 FNL / 2450 FEL / TWSP: 24S / RANGE: 32E / SECTION: 12 / LAT: 32.238633 / LONG: -103.62771 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 300 FNL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 12 / LAT: 32.238634 / LONG: -103.626675 (TVD: 12235 feet, MD: 12255 feet)

PPP: NWNE / 0 FNL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 13 / LAT: 32.224944 / LONG: -103.626686 (TVD: 12900 feet, MD: 17787 feet)

PPP: NESE / 2640 FNL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 12 / LAT: 32.2322 / LONG: -103.626681 (TVD: 12900 feet, MD: 15147 feet)

BHL: SWSE / 100 FSL / 2130 FEL / TWSP: 24S / RANGE: 32E / SECTION: 13 / LAT: 32.210697 / LONG: -103.626696 (TVD: 12900 feet, MD: 22970 feet)

CONFIDENTIAL

Cimarex Energy Co. respectfully requests to change the approved APD as follows:

Well Name	API	S/T/R	SHL Old	SHL New	S/T/R	BHL Old	BHL New	TVD Old	TVD New	MD Old	MD New
Dos Equis 12-13 Fed Com 52H	30-025-50124	12/24S/32E	195 FNL/ 1480 FWL	NO CHANGE	13/24S/32E	100 FSL/1520 FWL	100 FSL/660 FWL	9,600'	9,980'	19,753	20,072
Dos Equis 12-13 Fed Com 51H	30-025-50123	12/24S/32E	195 FNL/ 1500 FWL	NO CHANGE	13/24S/32E	100 FSL/1540 FWL	100 FSL/990 FWL	9,600'	11,550'	19,665	21,677
Dos Equis 12-13 Fed Com 50H	30-025-50122	12/24S/32E	195 FNL/ 1520 FWL	NO CHANGE	13/24S/32E	100 FSL/1560 FWL	100 FSL/1388 FWL	12,900'	10,620'	23,019	20,654
Dos Equis 12-13 Fed Com 49H	30-025-50121	12/24S/32E	195 FNL/ 1540 FWL	195 FNL/1540 FWL	13/24S/32E	100 FSL/1430 FWL	100 FSL/1980 FWL	12,300'	9,980'	22,376	20,256
Dos Equis 12-13 Fed Com 48H	30-025-50120	12/24S/32E	255 FNL/1580 FWL	195 FNL/1560 FWL	13/24S/32E	100 FSL/1386 FWL	100 FSL/2310 FWL	12,390'	11,550'	22,379	21,551
Dos Equis 12-13 Fed Com 77H	30-025-50136	12/24S/32E	300 FNL/ 2450 FEL	NO CHANGE	13/24S/32E	100 FSL/2130 FEL	100 FSL/2588 FEL	12,900'	10,620'	22,970	20,825
Dos Equis 12-13 Fed Com 76H	30-025-50126	12/24S/32E	300 FNL/ 2430 FEL	NO CHANGE	13/24S/32E	100 FSL/2100 FEL	100 FSL/1980 FEL	9,600'	9,980'	19,654	20,141
Dos Equis 12-13 Fed Com 75H	30-025-50125	12/24S/32E	300 FNL/ 2410 FEL	NO CHANGE	13/24S/32E	100 FSL/2000 FEL	100 FSL/1650 FEL	9,600'	11,550'	19,510	21,718
Dos Equis 12-13 Fed Com 89H	30-025-50138	12/24S/32E	300 FNL/ 1510 FEL	NO CHANGE	13/24S/32E	100 FSL/990 FEL	100FSL/1275 FEL	9,600'	10,620'	19,595	20,753
Dos Equis 12-13 Fed Com 88H	30-025-50206	12/24S/32E	300 FNL/ 1490 FEL	NO CHANGE	13/24S/32E	100 FSL/330 FEL	100 FSL/660 FEL	9,600'	9,980'	19,706	20,186
Dos Equis 12-13 Fed Com 87H	30-025-50137	12/24S/32E	360 FNL/ 1450 FEL	300 FNL/ 1470 FEL	13/24S/32E	100FSL /1386 FEL	100 FSL/330 FEL	12,340'	11,550'	22,258	21,803

Sundry ID	Well Name	API	S/T/R	SHL Old	SHL New	S/T/R	BHL Old	BHL New	TVD Old	TVD New	MD Old	MD New
2763424	Dos Equis 12-13 Fed Com 77H	30-025-50136	12/24S/32E	300 FNL/ 2450 FEL	NO CHANGE	13/24S/32E	100 FSL/2130 FEL	100 FSL/2588 FEL	12,900'	10,620'	22,970	20,825

Drilling Plan Amendments

Sec 1 - Geologic Formations See attached drilling plan.

Sec 2 - Blowout Prevention

Old	New
5M	2M
10M	3M
	5M

Section 3 - Casing											Old	
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	1235	1235	10-3/4"	40.50	J-55	BT&C	2.95	5.85	12.58		
9 7/8	0	13035	12851	7-5/8"	29.70	L-80	BT&C	2.38	1.15	1.74		
6 3/4	0	12410	12410	5-1/2"	23.00	L-80	LT&C	1.38	1.22	2.11		
6 3/4	12410	22970	12900	5"	18.00	P-110	BT&C	1.60	1.62	65.76		
BLM Minimum Safety Factor								1.125	1	1.6 Dry 1.8 Wet		

Section 4 - Cement						Old	
Casing	# Sks	Wt. lb/gal	Yd ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description	
Surface	480	13.50	1.72	9.15	15.5	Lead: Class C = Bentonite	
	128	14.80	1.34	6.32	9.5	Tail: Class C = LCM	
Intermediate Stage 1	632	10.30	3.64	22.18		Lead: Tuned Light = LCM	
	143	12.90	1.88	9.65	12	Tail: 35/65 (PozC) + Salt + Bentonite	
Intermediate Stage 2	782	12.90	1.88	9.65	12	Lead: 35/65 (PozC) + Salt + Bentonite	
Production	1140	14.50	1.30	5.79	20	Tail: 50/50 (PozH) + Salt + Bentonite + Fluid Loss + Dispersant + Expanding Agent + Retarder + Antifoam	

Section 5 - Circulating Medium					Old	
Depth	Type	Weight (ppg)	Viscosity	Water Loss		
0' to 1235'	Fresh Water	7.83 - 8.33	28	N/C		
1235' to 13035'	Brine Diesel Emulsion	8.50 - 9.00	30-35	N/C		
13035' to 22970'	OBM	12.00 - 12.50	50-70	N/C		

Section 7 - Pressure

Old	New
8385	5310

New										
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	1216	1216	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.40	3.28	5.52
12 1/4	0	4929	4927	9-5/8"	40.00	HCK-55	LT&C	1.49	1.54	2.85
8 3/4	0	10157	10157	7"	29.00	L-80	LT&C	1.48	1.72	1.89
8 3/4	10157	10907	10706	7"	29.00	L-80	LT&C	1.40	1.63	36.87
6	9657	20825	10750	4-1/2"	11.60	P-110	BT&C	1.43	2.02	28.95
BLM Minimum Safety Factor								1.125	1	1.6 Dry 1.8 Wet

New										
Casing	# Sks	Wt. lb/gal	Yd ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description				
Surface	589	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite				
	158	14.80	1.34	6.32	9.5	Tail: Class C + LCM				
Intermediate	925	12.90	1.80	9.65	12	Lead: 35/65 (PozC) + Salt + Bentonite				
	289	14.80	1.34	6.32	9.5	Tail: Class C + LCM				
Production	333	10.30	3.64	22.18		Lead: Tuned Light + LCM				
	125	14.80	1.36	6.57	9.5	Tail: Class C + Retarder				
Completion System	736	14.20	1.30	5.86	14.30	Tail: 50/50 (PozH) + Salt + Bentonite + Fluid Loss + Dispersant + SMS				

New						
Depth	Type	Weight (ppg)	Viscosity	Water Loss		
0' to 1216'	Fresh Water	7.83 - 8.33	28	N/C		
1216' to 4929'	Brine Water	9.50 - 10.00	30-32	N/C		
4929' to 10907'	Cut Brine or OBM	8.50 - 9.00	27-70	N/C		
11238' to 20825'	OBM	9.00 - 9.50	50-70	N/C		

1. Geological Formations

TVD of target 10,750

Pilot Hole TD N/A

MD at TD 20,825

Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	1163	N/A	
Top of Salt	1545	N/A	
Base of Salt	4907	N/A	
Bell Canyon	4947	N/A	
Cherry Canyon	5874	N/A	
Brushy Canyon	7310	Hydrocarbons	
Basal Brushy Canyon	8631	Hydrocarbons	
Bone Spring Lime	8850	Hydrocarbons	
Leonard	9031	Hydrocarbons	
Avalon	9283	Hydrocarbons	
1st Bone Spring Sand	9982	Hydrocarbons	
1st Sand - Target	10100	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	1216	1216	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.40	3.28	5.52
12 1/4	0	4929	4927	9-5/8"	40.00	HCK-55	LT&C	1.49	1.54	2.85
8 3/4	0	10157	10157	7"	29.00	L-80	LT&C	1.48	1.72	1.89
8 3/4	10157	10907	10706	7"	29.00	L-80	LT&C	1.40	1.63	36.87
6	9657	20825	10750	4-1/2"	11.60	P-110	BT&C	1.43	2.02	28.95
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

Cimarex Energy Co., Dos Equis 12-13 Federal Com 77H

	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	# Sk	Wt. lb/gal	Yld ft ³ /sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	589	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	158	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	925	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	289	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	333	10.30	3.64	22.18		Lead: Tuned Light + LCM
	125	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Completion System	736	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	50
Production	4729	25
Completion System	10707	10

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.					
BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	2M	Annular	X	50% of working pressure
			Blind Ram		2M
			Pipe Ram		
			Double Ram	X	
			Other		
8 3/4	13 5/8	3M	Annular	X	50% of working pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	X	
			Other		
6	13 5/8	5M	Annular	X	50% of working pressure
			Blind Ram	X	5M
			Pipe Ram		
			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 1216'	Fresh Water	7.83 - 8.33	28	N/C
1216' to 4929'	Brine Water	9.50 - 10.00	30-32	N/C
4929' to 10907'	Cut Brine or OBM	8.50 - 9.00	27-70	N/C
11238' to 20825'	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 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	5310 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	H ₂ S is present
X	H ₂ S plan is attached

8. Other Facets of Operation**9. Wellhead**

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13 5/8" BOP/BOPE system with a minimum working pressure of 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 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 5000 psi.

A solid steel body pack-off will be utilized after running and cementing the production casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

All casing strings will be tested as per Onshore Order No.2 to at least 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.

Variance Request #1: Skid Rig after Cementing Surface Casing

Coterra requests permission to skid the rig to the next well on the pad in order to begin operations immediately after the cement job for the surface casing has been completed. After the cement job is completed, no operations on the subject well will be conducted until at least 8 hours have elapsed, and both lead and tail slurries have achieved 500 psi compressive strength. While cement cures, the surface casing of the subject well will be suspended in the well by a mandrel and landing ring system, which is independent from the rig and ensures that casing remains centered while the rig is active on other wells.

Variance Request #4: Utilize Co-Flex Choke Line

Coterra requests approval to utilize a co-flex choke line between the BOP and choke manifold. Certification for the proposed co-flex choke line is attached. The choke line is not required by the manufacturer to be anchored. In the event the specific co-flex choke line is not available, one of equal or higher rating will be used. Variance to include Hammer Union connections on lines downstream of the buffer tank only.

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

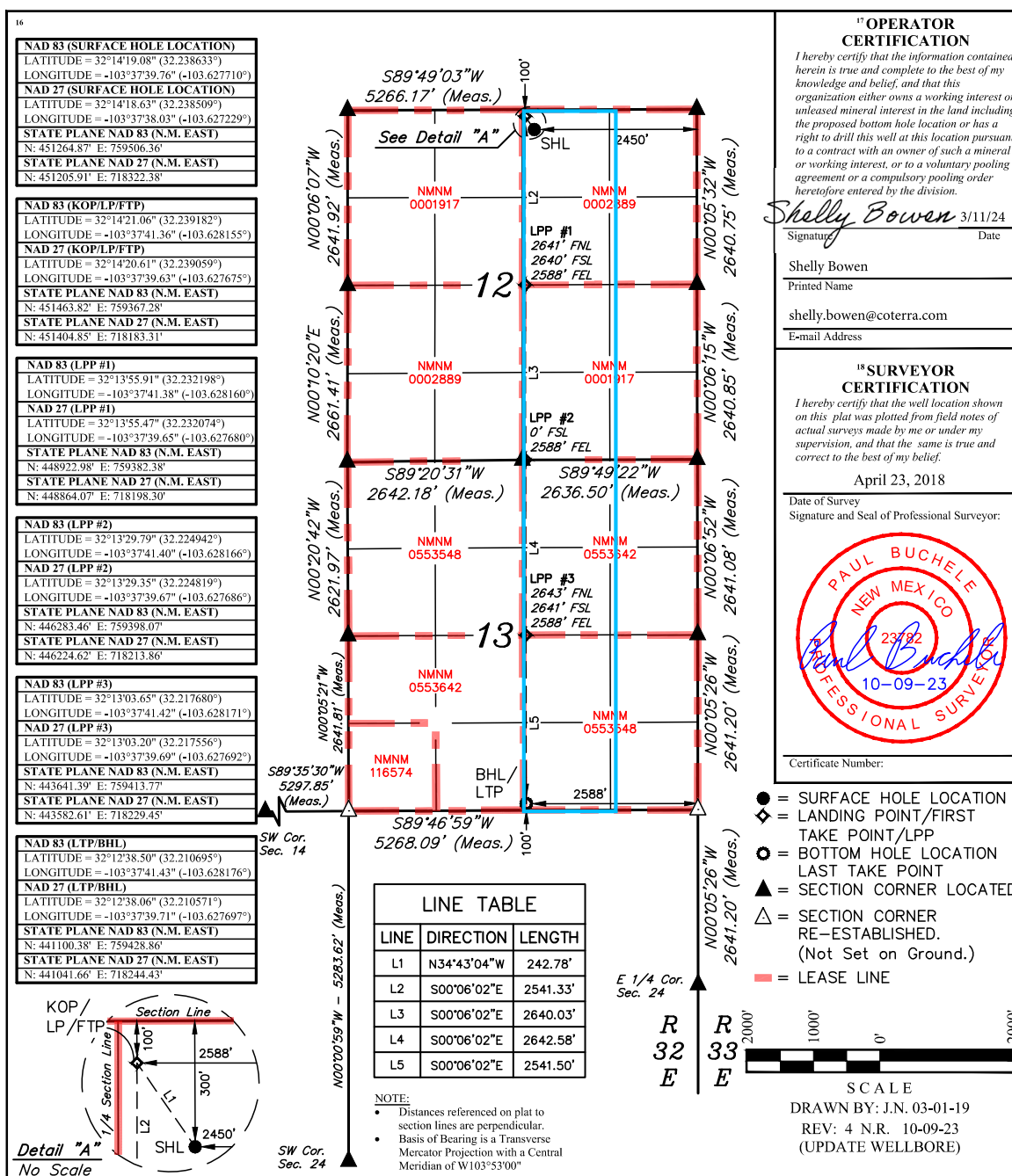
WELL LOCATION AND ACREAGE DEDICATION PLAT

1. Well Number 30-025-50136		2. Pool Code 96674		3. Pool Name TRIPLE X;BONE SPRING, WEST	
4. Property Code		5. Property Name DOS EQUIS 12-13 FEDERAL COM		6. Well Number 77H	
7. OCRIID No. 215099		8. Operator Name CIMAREX ENERGY CO.		9. Elevation 3604.4'	

10 Surface Location									
UL or lot no. B	Section 12	Township 24S	Range 32E	Lot Idn	Feet from the 300	North/South line NORTH	Feet from the 2450	East/West line EAST	County LEA

11 Bottom Hole Location If Different From Surface									
UL or lot no. O	Section 13	Township 24S	Range 32E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 2588	East/West line EAST	County LEA
12 Dedicated Acres 320	13 Joint or Infill	14 Consolidation Code	15 Order No.	NSL Pending					

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.





COTERRA

Rev0



Borehole: Dos Equis 12-13 Federal Com 77H		Well: Dos Equis 12-13 Federal Com 77H		Field: NM Lea County (NAD 83)		Structure: Coterra Dos Equis 12-13 Federal Com Pad 5	
Gravity & Magnetic Parameters		Surface Location		NAD83 New Mexico State Plane, Eastern Zone, US Feet		Miscellaneous	
Model: HDGM 2022	Dip: 59.792°	Date: 17-Nov-2023	Lat: N 32 14 18.08	Northings: 451264.87RUS	Grid Conv: 0.3764°	Dos Equis 12-13	TVD Ref: RKB (3627.40 ft above MSL)
MagDec: 6.211°	FS: 47446.159nT	Gravity FS: 998.439mgm (9.80665 Based)	Lon: W 103 37 39.76	Easting: 759506.36RUS	Scale Fact: 0.9999636	Plan: Federal Com 77H Coterra Dos Equis 12-13 Federal Com 77H Rev0 kfc 17Nov23	

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)S(-)	E(+)W(-)	DLS
SHL (300' FNL, 2450' FEL)	0.00	0.00	180.44	0.00	0.00	0.00	0.00	
Rustler	1163.00	0.00	338.49	1163.00	0.00	0.00	0.00	0.00
Top Salt	1545.00	0.00	338.49	1545.00	0.00	0.00	0.00	0.00
Walk, Build 2°/100ft	2500.00	0.00	338.49	2500.00	0.00	0.00	0.00	0.00
Hold	2625.20	2.50	338.49	2625.16	-2.55	2.55	-1.00	2.00
Lamar	4909.22	2.50	338.49	4907.00	-95.61	95.38	-37.59	0.00
Bell Canyon	4949.28	2.50	338.49	4947.00	-97.24	97.01	-38.23	0.00
Cherry Canyon	5877.15	2.50	338.49	5874.00	-135.04	134.73	-53.10	0.00
Drop 2°/100ft	6682.27	2.50	338.49	6678.36	-167.84	167.45	-66.00	0.00
Hold	6807.47	0.00	338.49	6803.52	-170.39	170.00	-67.00	2.00
Brushy Canyon	7313.95	0.00	338.49	7310.00	-170.39	170.00	-67.00	0.00
Basal Brushy Canyon	8634.95	0.00	338.49	8631.00	-170.39	170.00	-67.00	0.00
Bone Spring Lime	8853.95	0.00	338.49	8850.00	-170.39	170.00	-67.00	0.00
Leonard	9034.95	0.00	338.49	9031.00	-170.39	170.00	-67.00	0.00
Avalon	9286.95	0.00	338.49	9283.00	-170.39	170.00	-67.00	0.00
1st BS SS	9985.95	0.00	338.49	9982.00	-170.39	170.00	-67.00	0.00
KOP, Build 10°/100ft	10157.47	0.00	338.49	10153.52	-170.39	170.00	-67.00	0.00
2nd BS SS	10606.54	44.91	186.66	10558.00	-4.49	3.97	-86.39	10.00
Build & Turn 5°/100ft	10907.47	75.00	186.66	10706.95	251.11	-251.80	-116.25	10.00
Landing Point	11237.83	90.00	179.66	10750.00	576.90	-577.71	-133.91	5.00
Pool NMMN0002889 exit to NMMN0001917 enter	13002.00	90.00	179.66	10750.00	2341.07	-2341.85	-123.53	0.00
Section 12-13 Line Cross, Pool NMMN0001917 exit to NMMN0553642 enter	15642.00	90.00	179.66	10750.00	4981.07	-4981.80	-108.00	0.00
Pool NMMN0553642 enter	18284.00	90.00	179.66	10750.00	7623.07	-7623.76	-92.45	0.00
Dos Equis 12-13 Federal Com 77H - BHL (100' FSL, 2588' FEL)	20825.17	90.00	179.66	10750.00	10164.24	-10164.88	-77.50	0.00



CONTROLLED

Plan ref: 17Nov23

Drawing ref: 17Nov23

Copy number: 3

Date: 21-Nov-2023

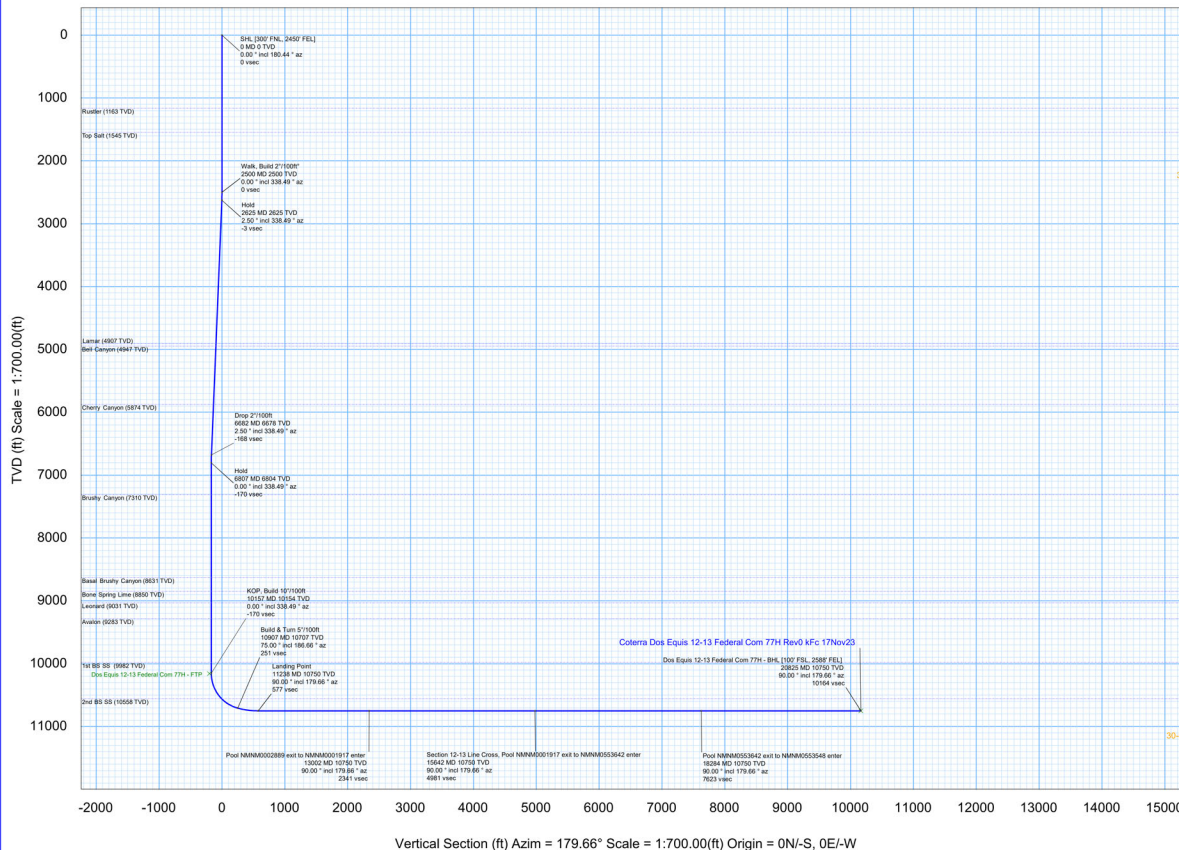
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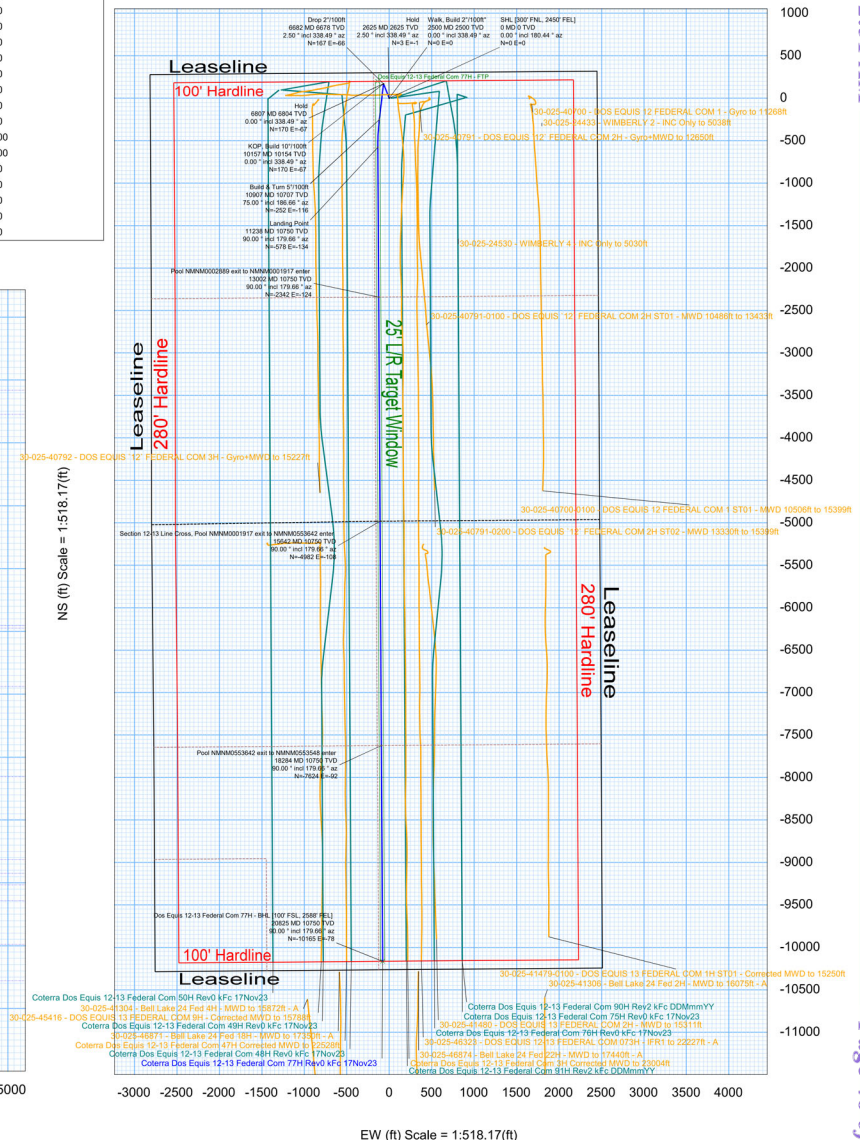
Office: 3

Office: 4

Copy number: for



NS (ft) Scale = 1:518.17(ft)





Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23 Proposal
Geodetic Report
Def Plan

Report Date: November 21, 2023 - 08:03 PM (UTC 0)
Client: COTERRA
Field: NM Lea County (NAD 83)
Structure / Slot: Coterra Dos Equis 12-13 Federal Com Pad 5 / Dos Equis 12-13 Federal
Well: Dos Equis 12-13 Federal Com 77H
Borehole: Dos Equis 12-13 Federal Com 77H
UBH / API#: Unknown / Unknown
Survey Name: Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23
Survey Date: November 21, 2023
Tort / AHD / DDI / ERD Ratio: 96.526 ° / 10521.318 ft / 6.294 / 0.979
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: 32°14'19.07849"N , 103°37'39.75520"W
Location Grid N/E Y/X: N 451264.870 RUS , E 759506.360 RUS
CRS Grid Convergence Angle: 0.376°
Grid Scale Factor: 0.9999636
Version / Patch: 2023.1.0.1

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.660 °(GRID North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3627.400 ft above MSL
Sealed / Ground Elevation: 3604.400 ft above MSL
Magnetic Declination: 6.211°
Total Gravity Field Strength: 996.4388mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47446.159 nT
Magnetic Dip Angle: 59.792°
Declination Date: November 17, 2023
Magnetic Declination Model: HDGM 2022
North Reference: Grid North
Grid Convergence Used: 0.376°
Total Corr Mag North->Grid North: 5.834°
Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
SHL [300° FNL, 2450° FEL]	0.00	0.00	180.44	0.00	-3.627.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978			
	100.00	0.00	338.49	100.00	-3.527.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	200.00	0.00	338.49	200.00	-3.427.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	300.00	0.00	338.49	300.00	-3.327.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	400.00	0.00	338.49	400.00	-3.227.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	500.00	0.00	338.49	500.00	-3.127.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	600.00	0.00	338.49	600.00	-3.027.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	700.00	0.00	338.49	700.00	-2.927.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	800.00	0.00	338.49	800.00	-2.827.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	900.00	0.00	338.49	900.00	-2.727.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,000.00	0.00	338.49	1,000.00	-2.627.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,100.00	0.00	338.49	1,100.00	-2.527.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,163.00	0.00	338.49	1,163.00	-2.464.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,200.00	0.00	338.49	1,200.00	-2.427.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,300.00	0.00	338.49	1,300.00	-2.327.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
Rustler	1,400.00	0.00	338.49	1,400.00	-2.227.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,500.00	0.00	338.49	1,500.00	-2.127.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,545.00	0.00	338.49	1,545.00	-2.082.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,600.00	0.00	338.49	1,600.00	-2.027.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,700.00	0.00	338.49	1,700.00	-1.927.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,800.00	0.00	338.49	1,800.00	-1.827.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	1,900.00	0.00	338.49	1,900.00	-1.727.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,000.00	0.00	338.49	2,000.00	-1.627.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,100.00	0.00	338.49	2,100.00	-1.527.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,200.00	0.00	338.49	2,200.00	-1.427.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,300.00	0.00	338.49	2,300.00	-1.327.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,400.00	0.00	338.49	2,400.00	-1.227.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,500.00	0.00	338.49	2,500.00	-1.127.40	0.00	0.00	0.00	451,264.87	759,506.36	32.23863291	-103.62770978	0.00	0.00	0.00
	2,600.00	338.49	2,599.98	-1.027.42	-1.63	1.62	-0.64	451,266.49	759,505.72	32.23863739	-103.62771181	2.00	2.00	0.00	
	2,625.20	2.50	338.49	2,625.16	-1.002.24	-2.55	2.55	-1.00	451,267.41	759,505.36	32.23863993	-103.62771297	2.00	2.00	0.00
Top Salt	2,700.00	2.50	338.49	2,699.89	-927.51	-5.60	5.59	-2.20	451,270.46	759,504.16	32.23864831	-103.62771678	0.00	0.00	0.00
	2,800.00	2.50	338.49	2,799.79	-827.61	-6.67	6.65	-3.80	451,274.52	759,502.56	32.23865951	-103.62772187	0.00	0.00	0.00
	2,900.00	2.50	338.49	2,899.70	-727.70	-13.75	13.71	-5.41	451,278.58	759,500.95	32.23867071	-103.62772697	0.00	0.00	0.00
	3,000.00	2.50	338.49	2,999.60	-627.80	-17.82	17.78	-7.01	451,282.65	759,499.35	32.23868191	-103.62773206	0.00	0.00	0.00
	3,100.00	2.50	338.49	3,099.51	-527.89	-21.90	21.84	-8.61	451,286.71	759,497.75	32.23869311	-103.62773715	0.00	0.00	0.00
	3,200.00	2.50	338.49	3,199.41	-427.99	-25.97	25.91	-10.21	451,290.78	759,496.15	32.23870431	-103.62774225	0.00	0.00	0.00
	3,300.00	2.50	338.49	3,299.32	-328.08	-30.04	29.97	-11.81	451,294.84	759,494.55	32.23871551	-103.62774734	0.00	0.00	0.00
	3,400.00	2.50	338.49	3,399.22	-228.18	-34.12	34.04	-13.42	451,298.91	759,492.95	32.23872671	-103.62775244	0.00	0.00	0.00
	3,500.00	2.50	338.49	3,499.12	-128.28	-38.19	38.10	-15.02	451,302.97	759,491.34	32.23873792	-103.62775753	0.00	0.00	0.00
	3,600.00	2.50	338.49	3,599.03	-28.37	-42.27	42.17	-16.62	451,307.04	759,489.74	32.23874912	-103.62776263	0.00	0.00	0.00
	3,700.00	2.50	338.49	3,698.93	71.53	-46.34	46.23	-18.22	451,311.10	759,488.14	32.23876032	-103.62776772	0.00	0.00	0.00
	3,800.00	2.50	338.49	3,798.84	171.44	-50.41	50.30	-19.82	451,315.17	759,486.54	32.23877152	-103.62777282	0.00	0.00	0.00
	3,900.00	2.50	338.49	3,898.74	271.34	-54.49	54.36	-21.43	451,319.23	759,484.94	32.23878272	-103.62777791	0.00	0.00	0.00
	4,000.00	2.50	338.49	3,998.65	371.25	-58.56	58.43	-23.03	451,323.29	759,483.33	32.23879392	-103.62778300	0.00	0.00	0.00
	Hold	4,100.00	2.50	338.49	4,098.55	471.15	-62.64	62.49	-24.63	451,327.36	759,481.73	32.23880512	-103.62778810	0.00	0.00
4,200.00		2.50	338.49	4,198.46	571.06	-66.71	66.56	-26.23	451,331.42	759,480.13	32.23881632	-103.62779319	0.00	0.00	0.00
4,300.00		2.50	338.49	4,298.36	670.96	-70.79	70.62	-27.83	451,335.49	759,478.53	32.23882753	-103.62779829	0.00	0.00	0.00
4,400.00		2.50	338.49	4,398.27	770.87	-74.86	74.69	-29.44	451,339.55	759,476.93	32.23883873	-103.62780338	0.00	0.00	0.00
4,500.00		2.50	338.49	4,498.17	870.77	-78.93	78.75	-31.04	451,343.62	759,475.32	32.23884993	-103.62780848	0.00	0.00	0.00
4,600.00		2.50	338.49	4,598.07	970.67	-83.01	82.82	-32.64	451,347.68	759,473.72	32.23886113	-103.62781357	0.00	0.00	0.00
4,700.00		2.50	338.49	4,697.98	1,070.58	-87.08	86.88	-34.24	451,351.75	759,472.12	32.23887233	-103.62781867	0.00	0.00	0.00
4,800.00		2.50	338.49	4,797.88	1,170.48	-91.16	90.95	-35.84	451,355.81	759,470.52	32.23888353	-103.62782376	0.00	0.00	0.00
4,900.00		2.50	338.49	4,897.79	1,270.39	-95.23	95.01	-37.45	451,359.88	759,468.92	32.23889473	-103.62782885	0.00	0.00	0.00
4,909.22		2.50	338.49	4,907.00	1,279.60	-95.61	95.38	-37.59	451,360.25	759,468.77	32.23889577	-103.62782932	0.00	0.00	0.00
4,949.26		2.50	338.49	4,947.00	1,319.60	-97.24	97.01	-38.23	451,361.88	759,468.13	32.23890025	-103.62783136	0.00	0.00	0.00
5,000.00		2.50	338.49	4,997.69	1,370.29	-99.30	99.07	-39.05	451,363.94	759,467.31	32.23890594	-103.62783395	0.00	0.00	0.00
5,100.00		2.50	338.49	5,097.60	1,470.20	-103.38	103.14	-40.65	451,368.01	759,465.71	32.23891714	-103.62783904	0.00	0.00	0.00
5,200.00		2.50	338.49	5,197.50	1,570.10	-107.45	107.20	-42.25	451,372.07	759,464.11	32.23892834	-103.62784414	0.00	0.00	0.00
5,300.00		2.50	338.49	5,297.41	1,670.01	-111.53	111.27	-43.85	451,376.13	759,462.51	32.23893954	-103.62784923	0.00	0.00	0.00
Lamar Bell Canyon	5,400.00	338.49	5,397.31	1,769.91	-115.60	115.33	-45.46	451,380.20	759,460.91	32.23895074	-103.62785433	0.00	0.00	0.00	
	5,500.00	2.50	338.49	5,497.22	1,869.82	-119.68	119.40	-47.00	451,384.26	759,459.30	32.23896194	-103.62785942	0.00	0.00	0.00
	5,600.00	2.50	338.49	5,597.12	1,969.72	-123.75	123.46	-48.66	451,388.33	759,457.70	32.23897314	-103.62786452	0.00	0.00	0.00
	5,700.00	2.50	338.49	5,697.02	2,										

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS ("100ft)	BR ("100ft)	TR ("100ft)
Avalon	9,100.00	0.00	338.49	9,096.05	5,468.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,200.00	0.00	338.49	9,196.05	5,568.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,286.95	0.00	338.49	9,283.00	5,655.60	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,300.00	0.00	338.49	9,296.05	5,668.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,400.00	0.00	338.49	9,396.05	5,768.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,500.00	0.00	338.49	9,496.05	5,868.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,600.00	0.00	338.49	9,596.05	5,968.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,700.00	0.00	338.49	9,696.05	6,068.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,800.00	0.00	338.49	9,796.05	6,168.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	9,900.00	0.00	338.49	9,896.05	6,268.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
1st BS SS	9,985.95	0.00	338.49	9,982.00	6,354.60	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,000.00	0.00	338.49	9,996.05	6,368.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,100.00	0.00	338.49	10,096.05	6,468.65	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,157.47	0.00	338.49	10,153.52	6,526.12	-170.39	170.00	-67.00	451,434.86	759,439.36	32.23910138	-103.62792284	0.00	0.00	0.00
	10,200.00	4.25	186.66	10,196.01	6,568.61	-168.83	168.43	-67.18	451,433.30	759,439.18	32.23909708	-103.62792347	10.00	10.00	0.00
	10,300.00	14.25	186.66	10,294.58	6,667.18	-152.89	152.48	-69.05	451,417.35	759,437.32	32.23905327	-103.62792983	10.00	10.00	0.00
	10,400.00	24.25	186.66	10,388.87	6,761.47	-120.20	119.77	-72.86	451,384.64	759,433.50	32.23896344	-103.62794287	10.00	10.00	0.00
	10,500.00	34.25	186.66	10,476.01	6,848.61	-71.76	71.30	-78.52	451,336.17	759,427.84	32.23883030	-103.62796221	10.00	10.00	0.00
	10,600.00	44.25	186.66	10,553.34	6,925.94	-9.04	8.53	-85.85	451,273.40	759,420.51	32.23865791	-103.62798724	10.00	10.00	0.00
	10,606.54	44.91	186.66	10,558.00	6,930.60	-4.49	3.97	-86.39	451,268.84	759,419.98	32.23864450	-103.62798906	10.00	10.00	0.00
2nd BS SS	10,700.00	54.25	186.66	10,618.53	6,991.53	-17.00	16.56	-94.63	451,198.25	759,411.73	32.23845151	-103.62801722	10.00	10.00	0.00
	10,800.00	64.25	186.66	10,689.59	7,042.19	151.25	-151.88	-104.58	451,113.00	759,401.78	32.23821736	-103.62805122	10.00	10.00	0.00
	10,900.00	74.25	186.66	10,704.97	7,077.57	243.95	-244.64	-115.42	451,020.24	759,390.95	32.23796258	-103.62808822	10.00	10.00	0.00
	10,907.47	75.00	186.66	10,706.95	7,079.55	251.11	-251.80	-116.25	451,013.08	759,390.11	32.23794292	-103.62809108	10.00	10.00	0.00
	11,000.00	79.19	184.64	10,727.62	7,100.22	340.78	-341.53	-125.12	450,923.36	759,381.25	32.23769646	-103.62812166	5.00	4.53	-2.18
	11,100.00	83.73	182.53	10,742.47	7,115.07	439.41	-440.19	-131.29	450,824.69	759,375.08	32.23742538	-103.62814371	5.00	4.54	-2.12
	11,200.00	88.28	180.45	10,749.44	7,122.04	539.08	-539.88	-133.87	450,725.01	759,372.49	32.23715141	-103.62815417	5.00	4.55	-2.08
	11,237.83	90.00	179.66	10,750.00	7,122.00	579.80	-577.71	-133.91	450,687.71	759,372.46	32.23704746	-103.62815555	5.00	4.55	-2.07
	11,300.00	90.00	179.66	10,750.00	7,122.00	639.07	-639.88	-133.54	450,625.02	759,372.82	32.23687657	-103.62815523	0.00	0.00	0.00
	11,400.00	90.00	179.66	10,750.00	7,122.00	739.07	-739.88	-132.95	450,525.02	759,373.41	32.23660170	-103.62815545	0.00	0.00	0.00
Build & Turn 5"/100ft	11,500.00	90.00	179.66	10,750.00	7,122.00	839.07	-839.87	-132.36	450,425.03	759,374.00	32.23632684	-103.62815567	0.00	0.00	0.00
	11,600.00	90.00	179.66	10,750.00	7,122.00	939.07	-939.87	-131.78	450,325.03	759,374.59	32.23605197	-103.62815589	0.00	0.00	0.00
	11,700.00	90.00	179.66	10,750.00	7,122.00	1,039.07	-1,039.87	-131.19	450,225.04	759,375.18	32.23577711	-103.62815611	0.00	0.00	0.00
	11,800.00	90.00	179.66	10,750.00	7,122.00	1,139.07	-1,139.87	-130.60	450,125.05	759,375.77	32.23550224	-103.62815633	0.00	0.00	0.00
	11,900.00	90.00	179.66	10,750.00	7,122.00	1,239.07	-1,239.87	-130.01	450,025.05	759,376.35	32.23522738	-103.62815655	0.00	0.00	0.00
	12,000.00	90.00	179.66	10,750.00	7,122.00	1,339.07	-1,339.87	-129.42	449,925.06	759,376.94	32.23495251	-103.62815677	0.00	0.00	0.00
	12,100.00	90.00	179.66	10,750.00	7,122.00	1,439.07	-1,439.86	-128.83	449,825.06	759,377.53	32.23467765	-103.62815699	0.00	0.00	0.00
	12,200.00	90.00	179.66	10,750.00	7,122.00	1,539.07	-1,539.86	-128.25	449,725.07	759,378.12	32.23440279	-103.62815721	0.00	0.00	0.00
	12,300.00	90.00	179.66	10,750.00	7,122.00	1,639.07	-1,639.86	-127.66	449,625.07	759,378.71	32.23412792	-103.62815743	0.00	0.00	0.00
	12,400.00	90.00	179.66	10,750.00	7,122.00	1,739.07	-1,739.86	-127.07	449,525.08	759,379.30	32.23385306	-103.62815766	0.00	0.00	0.00
Landing Point	12,500.00	90.00	179.66	10,750.00	7,122.00	1,839.07	-1,839.86	-126.48	449,425.08	759,379.88	32.23357819	-103.62815788	0.00	0.00	0.00
	12,600.00	90.00	179.66	10,750.00	7,122.00	1,939.07	-1,939.85	-125.89	449,325.09	759,380.47	32.23330333	-103.62815810	0.00	0.00	0.00
	12,700.00	90.00	179.66	10,750.00	7,122.00	2,039.07	-2,039.85	-125.30	449,225.10	759,381.06	32.23302846	-103.62815832	0.00	0.00	0.00
	12,800.00	90.00	179.66	10,750.00	7,122.00	2,139.07	-2,139.85	-124.72	449,125.10	759,381.65	32.23275360	-103.62815854	0.00	0.00	0.00
	12,900.00	90.00	179.66	10,750.00	7,122.00	2,239.07	-2,239.85	-124.13	449,025.11	759,382.24	32.23247873	-103.62815876	0.00	0.00	0.00
	13,000.00	90.00	179.66	10,750.00	7,122.00	2,339.07	-2,339.85	-123.54	448,925.11	759,382.83	32.23220387	-103.62815898	0.00	0.00	0.00
	13,002.00	90.00	179.66	10,750.00	7,122.00	2,341.07	-2,341.85	-123.53	448,923.11	759,382.84	32.23219837	-103.62815898	0.00	0.00	0.00
	13,100.00	90.00	179.66	10,750.00	7,122.00	2,439.07	-2,439.85	-122.95	448,825.12	759,383.41	32.23192900	-103.62815920	0.00	0.00	0.00
	13,200.00	90.00	179.66	10,750.00	7,122.00	2,539.07	-2,539.84	-122.36	448,725.12	759,384.00	32.23165414	-103.62815942	0.00	0.00	0.00
	13,300.00	90.00	179.66	10,750.00	7,122.00	2,639.07	-2,639.84	-121.77	448,625.13	759,384.59	32.23137927	-103.62815964	0.00	0.00	0.00
Pool MNMNM002889 exit to NM	13,400.00	90.00	179.66	10,750.00	7,122.00	2,739.07	-2,739.84	-121.19	448,525.13	759,385.18	32.23110441	-103.62815986	0.00	0.00	0.00
	13,500.00	90.00	179.66	10,750.00	7,122.00	2,839.07	-2,839.84	-120.60	448,425.14	759,385.77	32.23082954	-103.62816008	0.00	0.00	0.00
	13,600.00	90.00	179.66	10,750.00											

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)
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Survey Type: Def Plan

Survey Error Model: ISCWSA0 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	10,100.000	1/100.000	—	—		A001Mb_MWD		Dos Equis 12-13 Federal Com 77H / Coterra Dos E
	1	10,100.000	20,610.835	1/100.000	—	—		A008Mb_MWD+IFR1+MS		Dos Equis 12-13 Federal Com 77H / Coterra Dos E

A default hole/casing size was used for A/C calculation because the wellbore size is not defined correctly.

EOU Geometry:			
End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,211.200	14.500	10.750	
	9.875	7.625	
	8.750	7.625	
20,825.168	6.750	5.000	



Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23 Anti-Collision Summary Report

Analysis Date-24hr Time:	November 21, 2023 - 08:03 PM (UTC 0)	Analysis Method:	3D Least Distance
Client:	COTERRA	Reference Trajectory:	Coterra Dos Equis 12-13 Federal Com 77H Rev0 kFc 17Nov23 (Def Plan)
Field:	NM Lea County (NAD 83)	Depth Interval:	Every 10.00 Measured Depth (ft)
Structure:	Coterra Dos Equis 12-13 Federal Com Pad 5	Rule Set:	NAL Procedure: D&M AntiCollision Standard S002
Slot:	Dos Equis 12-13 Federal Com 77H	Min Pts:	Absolute minima indicated.
Well:	Dos Equis 12-13 Federal Com 77H	Engine Version:	2023.1.0.1
Borehole:	Dos Equis 12-13 Federal Com 77H	Database 1 Project:	Dos Equis 12-13 Federal Com 77H-COTERRA
Scan MD Range:	0.00ft ~ 20825.17ft		

Trajectory Error Model: ISCWSA0 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

25 out of 26 are selected

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		

Results highlighted in red: Sep-Factor <= 1.5
Result highlighted in boxed, red and bold: all local minima indicated.

Coterra Dos Equis 12-13 Federal Com 76H Rev0 kFc 17Nov23 (DefinitivePlan)													Fail Major
20.00	16.50	17.50	3.50	N/A	MAS = 5.03 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
20.00	16.50	17.50	3.50	N/A	MAS = 5.03 (m)	23.00	23.00					WRP	
20.00	20.06	5.79	-0.06	1.49	OSF1.50	1230.00	1230.00		OSF<1.50			Enter Minor	
20.00	28.63	0.08	-8.63	1.00	OSF1.50	1800.00	1800.00					MinPt-CtCt	
20.02	28.78	0.00	-8.76	1.00	OSF1.50	1810.00	1810.00					Enter Major	
20.15	29.08	-0.06	-8.92	1.00	OSF1.50	1830.00	1830.00					MinPts	
20.27	29.22	-0.04	-8.95	1.00	OSF1.50	1840.00	1840.00		OSF>1.00			Exit Major	
31.61	32.36	9.20	-0.75	1.46	OSF1.50	2060.00	2060.00			OSF>1.50		Exit Minor	
130.13	41.14	101.87	88.99	4.95	OSF1.50	2680.00	2679.91	OSF>5.00				Exit Alert	
663.14	144.50	565.97	518.63	6.98	OSF1.50	9570.00	9566.05					MinPt-EOU	
663.27	144.66	565.99	518.60	6.97	OSF1.50	9590.00	9586.05					MinPt-ADP	
666.08	145.81	568.04	520.27	6.95	OSF1.50	9730.00	9726.05					MinPt-SF	
889.52	131.82	800.81	757.71	10.29	OSF1.50	12090.00	10750.00					MinPt-CtCt	
890.17	180.74	768.85	709.43	7.47	OSF1.50	14660.00	10750.00					MinPt-EOU	
891.17	181.93	769.05	709.24	7.43	OSF1.50	14710.00	10750.00					MinPt-ADP	
889.71	256.37	717.96	633.34	5.24	OSF1.50	17480.00	10750.00					MinPt-CtCt	
889.73	268.79	709.70	620.94	5.00	OSF1.50	17910.00	10750.00	OSF<5.00				Enter Alert	
889.84	356.07	651.62	533.76	3.76	OSF1.50	20825.17	10750.00					MinPts	

Coterra Dos Equis 12-13 Federal Com 75H Rev0 kFc 17Nov23 (DefinitivePlan)													Warning Alert
39.99	32.49	37.49	7.50	N/A	MAS = 9.90 (m)	0.00	0.00	CtCt<=15m<15.00				Enter Alert	
39.99	32.49	37.49	7.50	N/A	MAS = 9.90 (m)	23.00	23.00					WRP	
39.99	32.49	22.08	7.50	2.43	MAS = 9.90 (m)	1600.00	1600.00					MinPts	
40.14	32.49	21.92	7.64	2.40	MAS = 9.90 (m)	1630.00	1630.00					MinPt-EOU	
40.79	32.49	22.19	8.30	2.38	MAS = 9.90 (m)	1670.00	1670.00					MinPt-SF	
108.08	34.52	84.23	73.55	4.95	OSF1.50	2240.00	2240.00	OSF>5.00				Exit Alert	
739.81	154.00	636.31	585.81	7.30	OSF1.50	10170.00	10166.05					MinPt-EOU	
739.86	154.08	636.31	585.78	7.30	OSF1.50	10180.00	10176.04					MinPt-ADP	
741.65	154.73	637.66	586.92	7.28	OSF1.50	10270.00	10265.32					MinPt-SF	
1232.92	361.97	990.77	870.95	5.13	OSF1.50	20825.17	10750.00					MinPts	

Coterra Dos Equis 12-13 Federal Com 3H Corrected MWD to 23004ft (DefinitiveSurvey)													Warning Alert
1196.73	32.81	1194.29	1163.98	6207599.47	MAS = 10.00 (m)	0.00	0.00					MinPts	
1196.80	32.81	1194.29	1164.00	98129.30	MAS = 10.00 (m)	23.00	23.00					WRP	
1198.33	32.81	1193.52	1165.52	517.52	MAS = 10.00 (m)	300.00	300.00					MinPt-EOU	
1201.26	32.81	1193.85	1168.45	244.53	MAS = 10.00 (m)	560.00	560.00					MinPt-EOU	
263.68	81.64	208.42	182.04	4.95	OSF1.50	5210.00	5207.49	OSF<5.00				Enter Alert	
107.44	97.38	41.69	10.06	1.66	OSF1.50	6163.64	6160.22					MinPt-CtCt	
107.51	97.61	41.61	9.90	1.66	OSF1.50	6180.00	6176.57					MinPt-EOU	
107.63	97.75	41.63	9.88	1.66	OSF1.50	6190.00	6186.56					MinPts	
169.17	156.73	63.85	12.44	1.62	OSF1.50	10520.00	10492.34					MinPts	
525.26	160.01	417.75	365.24	4.98	OSF1.50	11090.00	10741.34	OSF>5.00				Exit Alert	
2189.73	140.46	2095.26	2049.27	23.78	OSF1.50	13230.00	10750.00					MinPt-CtCt	
2191.94	144.42	2094.83	2047.52	23.14	OSF1.50	13440.00	10750.00					MinPt-EOU	
2194.12	153.80	2090.76	2040.33	21.73	OSF1.50	13840.00	10750.00					MinPt-CtCt	
2194.34	158.72	2087.70	2035.62	21.05	OSF1.50	14050.00	10750.00					MinPt-CtCt	
2196.92	172.06	2081.38	2024.86	19.41	OSF1.50	14590.00	10750.00					MinPt-CtCt	
2178.35	220.03	2030.84	1958.33	15.00	OSF1.50	16360.00	10750.00					MinPt-CtCt	
2185.16	269.12	2004.93	1916.06	12.28	OSF1.50	18030.00	10750.00					MinPt-CtCt	
2185.63	276.09	2000.74	1909.54	11.97	OSF1.50	18260.00	10750.00					MinPt-CtCt	
2186.52	278.96	1999.72	1907.57	11.85	OSF1.50	18380.00	10750.00					MinPt-EOU	
2191.10	284.39	2000.67	1906.71	11.65	OSF1.50	18580.00	10750.00					MinPt-ADP	
2185.60	301.41	1983.82	1884.19	10.96	OSF1.50	19090.00	10750.00					MinPt-CtCt	
2182.51	336.59	1957.29	1845.92	9.79	OSF1.50	20230.00	10750.00					MinPt-CtCt	
2186.52	354.88	1949.10	1831.64	9.30	OSF1.50	20825.17	10750.00					MinPts	

30-025-46323 - DOS EQUIS 12-13 FEDERAL COM 073H - IFR1 to 22227ft - A (DefinitiveSurvey)													Warning Alert
116.60	32.81	114.10	83.79	N/A	MAS = 10.00 (m)	0.00	0.00					Surface	
116.60	32.81	114.10	83.79	N/A	MAS = 10.00 (m)	23.00	23.00					WRP	
109.18	32.81	94.42	76.37	8.70	MAS = 10.00 (m)	1321.61	1321.61					MinPts	
109.33	32.81	94.30	76.52	8.53	MAS = 10.00 (m)	1350.00	1350.00					MinPt-EOU	
122.14	32.81	104.74	89.33	8.03	MAS = 10.00 (m)	1600.00	1600.00					MinPt-SF	
138.27	32.81	118.92	105.46	8.06	MAS = 10.00 (m)	1800.00	1800.00					MinPt-SF	
398.29	85.22	340.64	313.07	7.18	OSF1.50	5650.00	5647.07					MinPt-EOU	
398.65	85.66	340.72	313.00	7.15	OSF1.50	5680.00	5677.04					MinPt-ADP	
425.23	109.07	351.68	316.16	5.95	OSF1.50	7270.00	7266.05					MinPt-CtCt	
425.43	109.78	351.42	315.66	5.91	OSF1.50	7320.00	7316.05					MinPt-EOU	
425.79	110.20	351.50	315.60	5.90	OSF1.50	7350.00	7346.05					MinPt-ADP	
443.75	128.78	357.06	314.97	5.24	OSF1.50	8600.00	8596.05					MinPt-CtCt	
444.02	135.01	353.18	309.01	5.00	OSF1.50	9020.00	9016.05	OSF<5.00				Enter Alert	
372.97	154.81	268.93	218.16	3.65	OSF1.50	10630.00	10574.27					MinPts	
373.08	154.87	269.00	218.21	3.65	OSF1.50	10640.00	10581.00					MinPt-SF	
512.46	156.48	407.31	355.99	4.97	OSF1.50	11020.00	10731.21	OSF>5.00				Exit Alert	
1725.44	124.01	1641.93	1601.43	21.27	OSF1.50	12460.00	10750.00					MinPt-CtCt	
1725.82	125.23	1641.50	1600.59	21.06	OSF1.50	12550.00	10750.00					MinPt-EOU	
1726.16	125.64	1641.57	1600.52	21.00	OSF1.50	12580.00	10750.00					MinPt-ADP	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	1724.61	134.00	1634.45	1590.61	19.64	OSF1.50	13050.00	10750.00				MinPt-CtCi	
	1724.75	134.36	1634.34	1590.39	19.59	OSF1.50	13080.00	10750.00				MinPt-EOU	
	1724.86	134.49	1634.36	1590.37	19.57	OSF1.50	13090.00	10750.00				MinPt-ADP	
	1726.67	136.62	1634.75	1590.04	19.28	OSF1.50	13200.00	10750.00				MinPt-EOU	
	1727.24	137.32	1634.86	1589.92	19.19	OSF1.50	13240.00	10750.00				MinPt-ADP	
	1737.79	144.64	1640.53	1593.15	18.31	OSF1.50	13590.00	10750.00				MinPt-EOU	
	1737.96	144.82	1640.59	1593.19	18.29	OSF1.50	13600.00	10750.00				MinPt-ADP	
	1735.55	161.24	1627.22	1574.31	16.38	OSF1.50	14290.00	10750.00				MinPt-CtCi	
	1733.96	171.13	1619.04	1562.83	15.40	OSF1.50	14690.00	10750.00				MinPt-CtCi	
	1734.39	172.50	1618.56	1561.89	15.28	OSF1.50	14760.00	10750.00				MinPt-EOU	
	1735.04	173.27	1618.69	1561.76	15.22	OSF1.50	14800.00	10750.00				MinPt-ADP	
	1732.11	191.49	1603.61	1540.61	13.73	OSF1.50	15470.00	10750.00				MinPt-CtCi	
	1721.86	216.15	1576.93	1505.71	12.07	OSF1.50	16360.00	10750.00				MinPt-CtCi	
	1704.56	245.72	1539.91	1458.84	10.50	OSF1.50	17380.00	10750.00				MinPt-CtCi	
	1700.09	253.66	1530.15	1446.43	10.14	OSF1.50	17650.00	10750.00				MinPt-CtCi	
	1700.35	254.42	1529.90	1445.93	10.11	OSF1.50	17690.00	10750.00				MinPt-EOU	
	1700.83	254.99	1530.00	1445.84	10.09	OSF1.50	17720.00	10750.00				MinPt-ADP	
	1710.20	270.63	1528.95	1439.58	9.55	OSF1.50	18240.00	10750.00				MinPt-EOU	
	1709.59	288.02	1516.74	1421.57	8.97	OSF1.50	18790.00	10750.00				MinPt-CtCi	
	1710.39	290.74	1515.73	1419.64	8.89	OSF1.50	18900.00	10750.00				MinPt-EOU	
	1711.35	291.93	1515.90	1419.42	8.86	OSF1.50	18950.00	10750.00				MinPt-ADP	
	1718.46	306.28	1513.45	1412.19	8.47	OSF1.50	19410.00	10750.00				MinPt-EOU	
	1719.97	308.60	1513.40	1411.37	8.42	OSF1.50	19490.00	10750.00				MinPt-EOU	
	1705.10	350.75	1470.44	1354.35	7.33	OSF1.50	20825.17	10750.00				MinPts	
Coterra Dos Equis 12-13 Federal Com 91H Rev2 KFc DDMmmYY (DefinitivePlan)													Warning Alert
	899.89	32.81	898.08	867.08	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	899.88	32.81	898.07	867.07	N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
	899.88	32.81	892.69	867.07	167.00	MAS = 10.00 (m)	600.00	600.00				MinPt-EOU	
	362.11	76.26	310.76	285.85	7.24	OSF1.50	4514.17	4512.33				MinPt-CtCi	
	362.46	77.31	310.41	285.15	7.15	OSF1.50	4580.00	4578.09				MinPt-EOU	
	362.84	77.78	310.48	285.06	7.11	OSF1.50	4610.00	4608.06				MinPt-ADP	
	450.22	136.20	358.90	314.02	5.00	OSF1.50	8770.00	8766.05	OSF<5.00			Enter Alert	
	450.24	139.76	356.55	310.47	4.87	OSF1.50	9020.00	9016.05				MinPts	
	450.33	139.81	356.61	310.52	4.87	OSF1.50	9030.00	9026.05				MinPt-SF	
	460.51	139.66	366.89	320.85	4.98	OSF1.50	9170.00	9166.05	OSF>5.00			Exit Alert	
	1179.35	90.69	1118.41	1088.66	19.80	OSF1.50	11600.00	10750.00				MinPt-CtCi	
	1179.42	342.00	950.95	837.43	5.19	OSF1.50	20825.17	10750.00				MinPts	
Coterra Dos Equis 12-13 Federal Com 47H Corrected MWD to 22528ft (DefinitiveSurvey)													Warning Alert
	1216.78	32.81	1214.28	1183.97	#####	MAS = 10.00 (m)	0.00	0.00				MinPts	
	1216.78	32.81	1214.27	1183.98	100562.91	MAS = 10.00 (m)	23.00	23.00				WRP	
	1216.78	32.81	1212.04	1183.97	541.56	MAS = 10.00 (m)	290.00	290.00				MinPts	
	1218.61	32.81	1207.08	1185.80	134.65	MAS = 10.00 (m)	980.00	980.00				MinPt-EOU	
	396.63	119.66	316.02	276.97	5.05	OSF1.50	7837.12	7833.16	OSF<5.00			MinPt-CtCi	
	396.70	120.85	315.30	275.85	5.00	OSF1.50	7920.00	7916.05				Enter Alert	
	398.83	127.33	313.11	271.50	4.76	OSF1.50	8370.00	8366.05				MinPt-EOU	
	401.18	130.66	313.24	270.53	4.67	OSF1.50	8600.00	8596.05				MinPt-EOU	
	403.89	133.64	313.96	270.24	4.59	OSF1.50	8810.00	8806.05				MinPt-ADP	
	401.01	154.23	297.36	246.78	3.94	OSF1.50	10300.00	10294.58				MinPt-CtCi	
	401.04	154.35	297.31	246.69	3.94	OSF1.50	10320.00	10313.88				MinPt-EOU	
	401.09	154.42	297.32	246.68	3.94	OSF1.50	10330.00	10323.45				MinPt-ADP	
	401.43	154.60	297.53	246.83	3.93	OSF1.50	10360.00	10351.86				MinPt-SF	
	517.32	157.34	411.59	359.97	4.99	OSF1.50	10830.00	10681.91	OSF>5.00			Exit Alert	
	1707.32	125.08	1623.10	1582.24	20.86	OSF1.50	12190.00	10750.00				MinPt-CtCi	
	1707.01	129.45	1619.88	1577.56	20.14	OSF1.50	12460.00	10750.00				MinPt-CtCi	
	1703.40	143.26	1607.06	1560.14	18.13	OSF1.50	13190.00	10750.00				MinPt-CtCi	
	1704.45	149.08	1604.23	1555.37	17.42	OSF1.50	13460.00	10750.00				MinPt-CtCi	
	1704.58	149.49	1604.09	1555.09	17.37	OSF1.50	13490.00	10750.00				MinPt-EOU	
	1704.79	149.76	1604.12	1555.03	17.34	OSF1.50	13510.00	10750.00				MinPt-ADP	
	1706.79	158.18	1600.50	1548.61	16.42	OSF1.50	13860.00	10750.00				MinPt-CtCi	
	1708.54	168.15	1595.61	1540.39	15.45	OSF1.50	14290.00	10750.00				MinPt-EOU	
	1717.69	188.12	1591.44	1529.57	13.86	OSF1.50	15070.00	10750.00				MinPt-EOU	
	1717.87	208.98	1577.71	1508.89	12.46	OSF1.50	15810.00	10750.00				MinPt-CtCi	
	1718.11	209.61	1577.53	1508.50	12.43	OSF1.50	15850.00	10750.00				MinPt-EOU	
	1718.24	209.77	1577.56	1508.47	12.42	OSF1.50	15860.00	10750.00				MinPt-ADP	
	1724.69	241.51	1562.85	1483.18	10.81	OSF1.50	16940.00	10750.00				MinPt-CtCi	
	1712.99	269.90	1532.22	1443.09	9.60	OSF1.50	17900.00	10750.00				MinPt-CtCi	
	1713.66	271.90	1531.56	1441.77	9.53	OSF1.50	17990.00	10750.00				MinPt-EOU	
	1716.29	275.42	1531.84	1440.87	9.42	OSF1.50	18120.00	10750.00				MinPt-ADP	
	1711.70	302.37	1509.28	1409.33	8.55	OSF1.50	18970.00	10750.00				MinPt-CtCi	
	1699.68	331.34	1477.95	1368.34	7.74	OSF1.50	19910.00	10750.00				MinPt-CtCi	
	1699.73	340.94	1471.61	1358.79	7.52	OSF1.50	20220.00	10750.00				MinPt-CtCi	
	1703.09	358.61	1463.18	1344.48	7.16	OSF1.50	20810.00	10750.00				MinPt-EOU	
	1703.35	358.97	1463.20	1344.38	7.16	OSF1.50	20825.17	10750.00				MinPts	
30-025-40791-0200 - DOS EQUIS '12' FEDERAL COM 2H ST02 - MWD 13303ft to 15399ft (DefinitiveSurvey)													Warning Alert
	477.05	32.81	474.55	444.24	#####	MAS = 10.00 (m)	0.00	0.00				Surface	
	477.04	32.81	474.54	444.24	170030.41	MAS = 10.00 (m)	23.00	23.00				WRP	
	469.47	32.81	451.76	436.66	30.71	MAS = 10.00 (m)	1620.00	1620.00				MinPts	
	469.53	32.81	448.66	436.72	25.43	MAS = 10.00 (m)	1940.00	1940.00				MinPts	
	468.83	36.09	443.94	432.74	20.82	OSF1.50	2346.95	2346.95				MinPt-CtCi	
	469.65	38.63	443.06	431.02	19.40	OSF1.50	2520.00	2520.00				MinPt-EOU	
	470.14	39.22	443.16	430.92	19.10	OSF1.50	2560.00	2560.00				MinPt-ADP	
	476.58	47.86	443.84	428.72	15.68	OSF1.50	3140.00	3139.47				MinPt-EOU	
	477.55	49.04	444.03	428.52	1								

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	696.67	210.78	555.31	485.88	5.00	OSF1.50	14450.00	10750.00	OSF<5.00			Enter Alert	
	694.17	224.81	543.46	469.36	4.67	OSF1.50	14840.00	10750.00				MinPt-CtCt	
	694.88	226.93	542.76	467.95	4.63	OSF1.50	14910.00	10750.00				MinPt-EOU	
	701.01	240.89	539.59	460.12	4.40	OSF1.50	15290.00	10750.00				MinPts	
	761.56	231.81	606.19	529.75	4.97	OSF1.50	15580.00	10750.00	OSF>5.00			Exit Alert	
	5587.00	165.85	5475.60	5421.15	51.28	OSF1.50	20825.17	10750.00				TD	
	Coterra Dos Equis 12-13 Federal Com 48H Rev0 kFc 17Nov23 (DefinitivePlan)												
1260.32	32.81	1257.82	1227.51	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Warning Alert	
1260.32	32.81	1257.80	1227.51	88747.53	MAS = 10.00 (m)	23.00	23.00				WRP		
491.35	149.40	390.92	341.95	4.99	OSF1.50	10390.00	10379.72	OSF<5.00			Enter Alert		
471.38	149.35	370.98	322.03	4.79	OSF1.50	10631.56	10575.33				MinPts		
491.41	149.87	390.66	341.54	4.98	OSF1.50	10800.00	10669.59	OSF>5.00			Exit Alert		
877.64	265.20	700.01	612.45	5.00	OSF1.50	17950.00	10750.00		OSF<5.00			Enter Alert	
877.80	353.20	641.49	524.59	3.74	OSF1.50	20825.17	10750.00				MinPts		
30-025-41480 - DOS EQUIS 13 FEDERAL COM 2H - MWD to 15311ft (DefinitiveSurvey)													
5263.08	32.81	5260.58	5230.27	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Warning Alert	
5263.00	32.81	5260.49	5230.19	615177.30	MAS = 10.00 (m)	20.00	20.00				MinPt-SF		
5262.99	32.81	5260.48	5230.18	725984.07	MAS = 10.00 (m)	23.00	23.00				WRP		
5262.98	32.81	5260.46	5230.17	211841.74	MAS = 10.00 (m)	30.00	30.00				MinPts		
5270.05	32.81	5253.26	5237.24	368.57	MAS = 10.00 (m)	1550.00	1550.00				MinPt-EOU		
5273.04	32.81	5252.54	5240.23	292.88	MAS = 10.00 (m)	1920.00	1920.00				MinPt-EOU		
5276.26	33.36	5253.18	5242.89	256.31	OSF1.50	2190.00	2190.00				MinPt-ADP		
5279.21	36.36	5254.13	5242.84	233.75	OSF1.50	2390.00	2390.00				MinPt-ADP		
5523.72	106.40	5451.95	5417.32	79.71	OSF1.50	7080.00	7076.05				MinPt-EOU		
5532.28	118.08	5452.72	5414.20	71.77	OSF1.50	7860.00	7856.05				MinPt-EOU		
5534.64	120.86	5453.23	5413.77	70.11	OSF1.50	8060.00	8056.05				MinPt-ADP		
5545.42	129.24	5458.43	5416.18	65.60	OSF1.50	8610.00	8606.05				MinPt-EOU		
5548.96	133.30	5459.26	5415.66	63.61	OSF1.50	8890.00	8886.05				MinPt-ADP		
5554.08	150.70	5452.78	5403.38	56.19	OSF1.50	10030.00	10026.05				MinPt-CtCt		
615.64	187.88	489.56	427.76	4.96	OSF1.50	15740.00	10750.00	OSF<5.00			Enter Alert		
535.89	202.06	400.34	333.82	4.01	OSF1.50	16058.70	10750.00				MinPt-CtCt		
535.99	202.26	400.32	333.73	4.01	OSF1.50	16070.00	10750.00				MinPts		
536.25	202.41	400.48	333.84	4.00	OSF1.50	16080.00	10750.00				MinPt-SF		
625.23	205.58	487.35	419.65	4.60	OSF1.50	16520.00	10750.00				MinPt-ADP		
626.24	206.05	488.04	420.19	4.60	OSF1.50	16530.00	10750.00				MinPt-SF		
647.52	285.41	456.41	362.10	3.42	OSF1.50	19210.00	10750.00				MinPt-CtCt		
652.54	300.91	451.10	351.63	3.27	OSF1.50	19650.00	10750.00				MinPt-EOU		
672.55	337.76	446.54	334.79	3.00	OSF1.50	20580.00	10750.00				MinPt-EOU		
672.83	338.06	446.62	334.76	3.00	OSF1.50	20590.00	10750.00				MinPts		
719.76	325.09	502.20	394.67	3.34	OSF1.50	20825.17	10750.00				TD		
Coterra Dos Equis 12-13 Federal Com 49H Rev0 kFc 17Nov23 (DefinitivePlan)													
1280.25	32.81	1277.75	1247.44	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Warning Alert	
1280.25	32.81	1277.74	1247.44	94898.85	MAS = 10.00 (m)	23.00	23.00				WRP		
643.12	144.04	546.26	499.08	6.79	OSF1.50	9500.00	9496.05				MinPt-CtCt		
643.17	144.27	546.16	498.90	6.78	OSF1.50	9530.00	9526.05				MinPt-EOU		
643.22	144.34	546.17	498.89	6.78	OSF1.50	9540.00	9536.05				MinPt-ADP		
644.84	144.99	547.35	499.86	6.76	OSF1.50	9640.00	9636.05				MinPt-SF		
848.46	211.89	706.37	636.58	6.06	OSF1.50	15950.00	10750.00				MinPt-CtCt		
849.35	214.61	705.44	634.74	5.99	OSF1.50	16050.00	10750.00				MinPt-EOU		
850.50	215.99	705.67	634.51	5.96	OSF1.50	16100.00	10750.00				MinPt-ADP		
957.55	289.14	763.95	668.41	5.00	OSF1.50	18530.00	10750.00	OSF<5.00			Enter Alert		
957.81	358.13	718.23	599.69	4.03	OSF1.50	20825.17	10750.00				MinPts		
30-025-45416 - DOS EQUIS 13 FEDERAL COM 9H - Corrected MWD to 15788ft (DefinitiveSurvey)													
5438.04	32.81	5436.23	5405.23	#####	MAS = 10.00 (m)	0.00	0.00				MinPts	Warning Alert	
5438.04	32.81	5436.19	5405.23	144199.60	MAS = 10.00 (m)	23.00	23.00				WRP		
5439.12	32.81	5432.04	5406.31	1032.36	MAS = 10.00 (m)	780.00	780.00				MinPts		
5438.74	32.81	5428.99	5405.93	684.45	MAS = 10.00 (m)	1160.00	1160.00				MinPt-EOU		
5430.30	32.81	5411.57	5397.49	317.95	MAS = 10.00 (m)	2460.00	2460.00				MinPts		
5430.43	32.81	5411.26	5397.63	310.30	MAS = 10.00 (m)	2520.00	2520.00				MinPt-EOU		
5451.47	106.06	5380.18	5345.41	78.37	OSF1.50	9760.00	9756.05				MinPt-CtCt		
5451.85	107.19	5379.77	5344.65	77.59	OSF1.50	9860.00	9856.05				MinPt-EOU		
5453.94	109.74	5380.16	5344.20	75.82	OSF1.50	10100.00	10096.05				MinPt-ADP		
710.37	168.62	596.65	541.75	6.43	OSF1.50	15930.00	10750.00				MinPts		
710.46	168.74	596.68	541.72	6.43	OSF1.50	15940.00	10750.00				MinPts		
710.02	167.23	597.99	542.79	6.42	OSF1.50	15984.58	10750.00				MinPts		
710.13	167.38	598.03	542.75	6.41	OSF1.50	16000.00	10750.00				MinPt-ADP		
711.35	167.86	598.93	543.49	6.40	OSF1.50	16040.00	10750.00				MinPt-SF		
734.06	169.37	620.63	564.69	6.55	OSF1.50	16230.00	10750.00				MinPt-SF		
747.77	172.37	632.34	575.40	6.55	OSF1.50	16420.00	10750.00				MinPt-SF		
754.30	175.83	636.56	578.47	6.48	OSF1.50	16600.00	10750.00				MinPt-ADP		
752.81	185.62	628.55	567.19	6.12	OSF1.50	17080.00	10750.00				MinPt-CtCt		
745.59	205.12	608.34	540.48	5.48	OSF1.50	17990.00	10750.00				MinPt-CtCt		
746.27	207.00	607.75	539.26	5.44	OSF1.50	18080.00	10750.00				MinPt-EOU		
746.99	207.84	607.92	539.15	5.42	OSF1.50	18120.00	10750.00				MinPt-ADP		
771.34	232.70	615.69	538.64	5.00	OSF1.50	19140.00	10750.00	OSF<5.00			Enter Alert		
759.09	243.59	596.18	515.50	4.69	OSF1.50	19590.00	10750.00				MinPt-CtCt		
770.84	269.14	590.90	501.70	4.31	OSF1.50	20570.00	10750.00				MinPt-EOU		
776.30	275.68	591.99	500.61	4.24	OSF1.50	20825.17	10750.00				MinPts		
30-025-40792 - DOS EQUIS '12' FEDERAL COM 3H - Gyro+MWD to 15227ft (DefinitiveSurvey)													
829.31	32.81	826.81	796.50	1107044.94	MAS = 10.00 (m)	0.00	0.00				Surface	Warning Alert	
829.25	32.81	826.71	796.45	17287.50	MAS = 10.00 (m)	23.00	23.00				WRP		
825.80	32.81	819.92	792.99	243.31	MAS = 10.00 (m)	400.00	400.00				MinPts		
827.50	32.81	817.71	794.70	113.09	MAS = 10.00 (m)	800.00	800.00				MinPt-EOU		
832.81	38.28	806.45	794.52	34.81	OSF1.50	2470.00	2470.00				MinPt-CtCt		
810.67	65.81	765.97	744.86	19.15	OSF1.50	4330.00	4328.33				MinPt-CtCt		
799.85	76.42	748.07	723.43	16.18	OSF1.50	5160.00	5157.54				MinPt-CtCt		
799.89	77.77	747.21	722.12	15.89	OSF1.50	5320.00	5317.39				MinPt-CtCt		
803.91	88.56	744.04	715.35	13.97	OSF1.50	6440.00	6436.32				MinPt-EOU		
806.52	91.99	744.36	714.53	13.48	OSF1.50	6760.00	6756.05				MinPt-ADP		
859.55	130.49	771.72	729.06	10.04	OSF1.50	9940.00	9936.05				MinPt-CtCt		
860.28	132.53	771.09	727.75	9.90	OSF1.50	10100.00	10096.05				MinPt-EOU		
860.52	132.78	771.16	727.74	9.88	OSF1.50	10130.00	10126.05				MinPt-ADP		
780.45	137.21	688.14	643.24	8.66	OSF1.50	11060.00	10737.47				MinPts		
780.64	137.27	688.29	643.36	8.66	OSF1.50	11080.00	10740.13				MinPt-SF		
778.36	154.55	674.49	623.81	7.65	OSF1.50	12270.00	10750.00				MinPt-CtCt		
775.87	174.49	658.71	601.38	6.74	OSF1.50	13010.00	10750.00				MinPt-CtCt		
765.67	194.45	635.21	571.22	5.96	OSF1.50	13630.00	10750.00				MinPt-CtCt		
763.53	207.95	624.06	555.58	5.56	OSF1.50	14010.00	10750.00				MinPt-CtCt		

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	760.32	230.07	606.11	530.25	5.00	OSF1.50	14610.00	10750.00	OSF<5.00			Enter Alert	
	746.69	258.36	573.62	488.33	4.36	OSF1.50	15303.66	10750.00				MinPt-CtCt	
	746.72	258.40	573.62	488.31	4.36	OSF1.50	15310.00	10750.00	OSF>5.00			MinPts	
	810.94	246.78	645.59	564.16	4.96	OSF1.50	15620.00	10750.00				Exit Alert	
	5571.77	157.92	5465.66	5413.85	53.75	OSF1.50	20825.17	10750.00				TD	
30-025-41304 - Bell Lake 24 Fed 4H - MWD to 15872ft - A (DefinitiveSurvey)													Warning Alert
15360.31	32.81	15357.81	15327.50		N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
15360.26	32.81	15357.75	15327.45	2129531.21		MAS = 10.00 (m)	23.00	23.00				WRP	
1120.72	339.73	893.40	780.99	4.97		OSF1.50	20680.00	10750.00	OSF<5.00			Enter Alert	
1052.17	352.10	816.61	700.07	4.50		OSF1.50	20825.17	10750.00				MinPts	
30-025-40791-0100 - DOS EQUIS '12' FEDERAL COM 2H ST01 - MWD 10486ft to 13433ft (DefinitiveSurvey)													Pass
477.05	32.81	474.55	444.24	170030.41		MAS = 10.00 (m)	0.00	0.00				Surface	
477.04	32.81	474.54	444.24	170030.41		MAS = 10.00 (m)	23.00	23.00				WRP	
469.47	32.81	451.76	436.66	30.71		MAS = 10.00 (m)	1620.00	1620.00				MinPts	
469.53	32.81	448.66	436.72	25.43		MAS = 10.00 (m)	1940.00	1940.00				MinPts	
468.83	36.09	443.94	432.74	20.82		OSF1.50	2346.95	2346.95				MinPt-CtCt	
469.65	38.63	443.06	431.02	19.40		OSF1.50	2520.00	2520.00				MinPt-EOU	
470.14	39.22	443.16	430.92	19.10		OSF1.50	2560.00	2560.00				MinPt-ADP	
476.58	47.86	443.84	428.72	15.68		OSF1.50	3140.00	3139.47				MinPt-EOU	
477.55	49.04	444.03	428.52	15.31		OSF1.50	3220.00	3219.39				MinPt-ADP	
554.89	96.32	489.84	458.57	8.83		OSF1.50	7180.00	7176.05				MinPt-CtCt	
554.99	96.64	489.73	458.35	8.80		OSF1.50	7210.00	7206.05				MinPt-EOU	
555.15	96.85	489.75	458.30	8.79		OSF1.50	7230.00	7226.05				MinPt-ADP	
559.14	101.11	490.90	458.03	8.47		OSF1.50	7610.00	7606.05				MinPt-ADP	
503.75	134.03	413.56	369.72	5.72		OSF1.50	10620.00	10567.42				MinPt-SF	
501.48	133.35	411.74	368.13	5.72		OSF1.50	10660.00	10594.05				MinPt-SF	
498.01	132.56	408.81	365.46	5.72		OSF1.50	10720.00	10629.93				MinPt-SF	
496.38	131.95	407.58	364.42	5.72		OSF1.50	10780.00	10660.59				MinPts	
553.24	127.82	467.19	425.42	6.59		OSF1.50	11300.00	10750.00				MinPt-CtCt	
548.91	134.06	458.71	414.86	6.23		OSF1.50	11740.00	10750.00				MinPt-CtCt	
549.11	134.65	458.51	414.46	6.20		OSF1.50	11780.00	10750.00				MinPt-EOU	
551.21	139.78	457.19	411.43	6.00		OSF1.50	12040.00	10750.00				MinPt-EOU	
551.81	140.52	457.30	411.30	5.97		OSF1.50	12080.00	10750.00				MinPt-ADP	
562.12	144.96	464.65	417.16	5.89		OSF1.50	12330.00	10750.00				MinPt-SF	
624.29	171.40	509.19	452.89	5.52		OSF1.50	13180.00	10750.00				MinPt-ADP	
628.71	177.65	509.44	451.06	5.36		OSF1.50	13340.00	10750.00				MinPts	
628.96	177.72	509.64	451.23	5.36		OSF1.50	13350.00	10750.00				MinPt-SF	
7521.75	149.91	7420.98	7371.84	76.51		OSF1.50	20825.17	10750.00				TD	
30-025-40791 - DOS EQUIS '12' FEDERAL COM 2H - Gyro+MWD to 12650ft (DefinitiveSurvey)													Pass
477.05	32.81	474.55	444.24	170030.41		MAS = 10.00 (m)	0.00	0.00				Surface	
477.04	32.81	474.54	444.24	170030.41		MAS = 10.00 (m)	23.00	23.00				WRP	
469.47	32.81	451.76	436.66	30.71		MAS = 10.00 (m)	1620.00	1620.00				MinPts	
469.53	32.81	448.66	436.72	25.43		MAS = 10.00 (m)	1940.00	1940.00				MinPts	
468.83	36.09	443.94	432.74	20.82		OSF1.50	2346.95	2346.95				MinPt-CtCt	
469.65	38.63	443.06	431.02	19.40		OSF1.50	2520.00	2520.00				MinPt-EOU	
470.14	39.22	443.16	430.92	19.10		OSF1.50	2560.00	2560.00				MinPt-ADP	
476.58	47.86	443.84	428.72	15.68		OSF1.50	3140.00	3139.47				MinPt-EOU	
477.55	49.04	444.03	428.52	15.31		OSF1.50	3220.00	3219.39				MinPt-ADP	
554.89	96.32	489.84	458.57	8.83		OSF1.50	7180.00	7176.05				MinPt-CtCt	
554.99	96.64	489.73	458.35	8.80		OSF1.50	7210.00	7206.05				MinPt-EOU	
555.15	96.85	489.75	458.30	8.79		OSF1.50	7230.00	7226.05				MinPt-ADP	
559.14	101.11	490.90	458.03	8.47		OSF1.50	7610.00	7606.05				MinPt-ADP	
505.00	134.57	414.46	370.43	5.71		OSF1.50	10610.00	10560.44				MinPt-CtCt	
505.00	134.61	414.43	370.39	5.71		OSF1.50	10620.00	10567.42				MinPts	
505.11	134.65	414.51	370.46	5.70		OSF1.50	10630.00	10574.27				MinPt-SF	
10134.11	149.51	10033.60	9984.60	103.38		OSF1.50	20825.17	10750.00				TD	
Coterra Dos Equis 12-13 Federal Com 90H Rev2 kFc DDMmmYY (DefinitivePlan)													Pass
919.89	32.81	918.08	887.08		N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
919.88	32.81	918.07	887.07		N/A	MAS = 10.00 (m)	23.00	23.00				WRP	
919.88	32.81	912.70	887.07	170.75		MAS = 10.00 (m)	600.00	600.00				MinPt-EOU	
874.06	100.24	806.72	773.82	13.26		OSF1.50	6634.26	6630.39				MinPt-CtCt	
874.23	100.72	806.57	773.51	13.20		OSF1.50	6670.00	6666.10				MinPt-EOU	
874.47	100.98	806.63	773.48	13.17		OSF1.50	6690.00	6686.08				MinPt-ADP	
875.63	135.68	784.66	739.95	9.77		OSF1.50	9040.00	9036.05				MinPt-EOU	
875.69	135.76	784.67	739.94	9.77		OSF1.50	9050.00	9046.05				MinPt-ADP	
878.96	136.70	787.31	742.26	9.74		OSF1.50	9190.00	9186.05				MinPt-SF	
1480.58	113.72	1404.29	1366.86	19.76		OSF1.50	11340.00	10750.00				MinPt-CtCt	
1480.85	351.58	1245.99	1129.27	6.34		OSF1.50	20825.17	10750.00				MinPts	
Coterra Dos Equis 12-13 Federal Com 50H Rev0 kFc 17Nov23 (DefinitivePlan)													Pass
1300.18	32.81	1297.68	1267.37		N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
1300.18	32.81	1297.66	1267.37	96378.73		MAS = 10.00 (m)	23.00	23.00				WRP	
1286.65	51.57	1251.43	1235.08	39.26		OSF1.50	3339.09	3338.37				MinPt-CtCt	
1286.81	52.08	1251.26	1234.73	38.85		OSF1.50	3380.00	3379.24				MinPt-EOU	
1287.01	52.33	1251.20	1234.68	38.67		OSF1.50	3400.00	3399.22				MinPt-ADP	
1291.49	155.02	1187.31	1136.47	12.68		OSF1.50	11370.00	10750.00				MinPt-CtCt	
1291.89	364.65	1047.96	927.24	5.34		OSF1.50	20825.17	10750.00				MinPts	
30-025-40700-0100 - DOS EQUIS 12 FEDERAL COM 1 ST01 - MWD 10506ft to 15399ft (DefinitiveSurvey)													Pass
1646.82	32.81	1644.32	1614.01		N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
1646.82	32.81	1644.32	1614.01		N/A	MAS = 10.00 (m)	4.40	4.40				MinPts	
1646.83	32.81	1644.32	1614.02	302502.70		MAS = 10.00 (m)	23.00	23.00				WRP	
1647.03	32.81	1644.21	1614.22	5165.25		MAS = 10.00 (m)	90.00	90.00				MinPt-EOU	
1648.39	32.81	1643.80	1615.58	789.24		MAS = 10.00 (m)	280.00	280.00				MinPt-EOU	
1651.96	32.81	1632.16	1619.15	95.38		MAS = 10.00 (m)	1810.00	1810.00				MinPts	
1653.76	39.70	1626.46	1614.06	66.58		OSF1.50	2570.00	2569.99				MinPt-EOU	
1654.27	40.30	1626.57	1613.98	65.55		OSF1.50	2610.00	2609.97				MinPt-ADP	
1660.87	54.73	1623.55	1606.14	47.63		OSF1.50	3570.00	3569.06				MinPt-CtCt	
1660.87	57.11	1621.96	1603.76	45.55		OSF1.50	3730.00	3728.91				MinPt-CtCt	
1662.33	62.79	1619.64	1599.54	41.29		OSF1.50	4120.00	4118.53				MinPt-EOU	
1662.56	63.05	1619.69	1599.50	41.12		OSF1.50	4140.00	4138.51				MinPt-ADP	
1793.88	108.99												

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
30-025-40700 - DOS EQUIS 12 FEDERAL COM 1 - Gyro to 11268ft (DefinitiveSurvey)	1929.41	170.82	1614.70	1758.59	17.17	OSF1.50	12220.00	10750.00				MinPt-ADP	Pass
	1949.16	219.37	1802.08	1729.79	13.46	OSF1.50	13890.00	10750.00				MinPt-CtCt	
	1950.26	222.59	1801.03	1727.67	13.27	OSF1.50	14010.00	10750.00				MinPt-EOU	
	1951.08	223.82	1801.03	1727.26	13.21	OSF1.50	14050.00	10750.00				MinPt-EOU	
	1957.51	244.49	1793.68	1713.02	12.12	OSF1.50	14590.00	10750.00				MinPt-CtCt	
	1947.93	271.56	1766.05	1676.37	10.85	OSF1.50	15300.00	10750.00				MinPt-CtCt	
	1947.98	271.65	1766.04	1676.32	10.84	OSF1.50	15310.00	10750.00				MinPts	
	1949.77	272.20	1767.47	1677.57	10.83	OSF1.50	15380.00	10750.00				MinPt-SF	
	5863.13	197.24	5730.81	5665.90	45.14	OSF1.50	20825.17	10750.00				TD	
30-025-46871 - Bell Lake 24 Fed 18H - MWD to 17350ft - A (DefinitiveSurvey)	1646.82	32.81	1644.32	1614.01	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1646.82	32.81	1644.32	1614.01	N/A	MAS = 10.00 (m)	4.40	4.40				MinPts	
	1646.83	32.81	1644.32	1614.02	302502.70	MAS = 10.00 (m)	23.00	23.00				WRP	
	1647.03	32.81	1644.21	1614.22	5165.25	MAS = 10.00 (m)	90.00	90.00				MinPt-EOU	
	1648.39	32.81	1643.80	1615.58	789.24	MAS = 10.00 (m)	280.00	280.00				MinPt-EOU	
	1651.96	32.81	1632.16	1619.15	95.38	MAS = 10.00 (m)	1810.00	1810.00				MinPts	
	1653.76	39.70	1626.46	1614.06	66.58	OSF1.50	2570.00	2569.99				MinPt-EOU	
	1654.27	40.30	1626.57	1613.98	65.55	OSF1.50	2610.00	2609.97				MinPt-ADP	
	1660.87	54.73	1623.55	1606.14	47.63	OSF1.50	3570.00	3569.06				MinPt-CtCt	
	1660.87	57.11	1621.96	1603.76	45.55	OSF1.50	3730.00	3728.91				MinPt-CtCt	
	1662.33	62.79	1619.64	1599.54	41.29	OSF1.50	4120.00	4118.53				MinPt-EOU	
	1662.56	63.05	1619.69	1599.50	41.12	OSF1.50	4140.00	4138.51				MinPt-ADP	
	1793.88	108.99	1720.39	1684.89	25.23	OSF1.50	7240.00	7236.05				MinPt-EOU	
	1800.94	119.20	1720.64	1681.74	23.12	OSF1.50	7930.00	7926.05				MinPt-EOU	
	1743.93	154.02	1640.42	1589.91	17.24	OSF1.50	10420.00	10406.96				MinPt-CtCt	
	1743.94	154.07	1640.39	1589.87	17.23	OSF1.50	10430.00	10415.89				MinPt-EOU	
	1743.98	154.13	1640.40	1589.86	17.23	OSF1.50	10440.00	10424.74				MinPt-ADP	
	1747.81	154.82	1643.77	1592.99	17.19	OSF1.50	10580.00	10538.78				MinPt-SF	
	10246.03	172.93	10129.91	10073.10	90.16	OSF1.50	20825.17	10750.00				TD	
30-025-46874 - Bell Lake 24 Fed 22H - MWD to 17440ft - A (DefinitiveSurvey)	15440.62	32.81	15438.12	15407.81	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	15440.61	32.81	15438.10	15407.80	6940401.69	MAS = 10.00 (m)	10.00	10.00				MinPt-SF	
	15440.60	32.81	15438.10	15407.79	#####	MAS = 10.00 (m)	23.00	23.00				WRP	
	15439.54	32.81	15431.23	15406.73	2657.51	MAS = 10.00 (m)	680.00	680.00				MinPts	
	1861.34	301.42	1459.55	1359.91	8.32	OSF1.50	20825.17	10750.00				MinPts	
30-025-24433 - WIMBERLY 2 - INC Only to 5038ft (DefinitiveSurvey)	1827.90	32.81	1826.09	1795.09	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	1827.67	32.81	1825.84	1794.86	81279.15	MAS = 10.00 (m)	20.00	20.00				MinPt-SF	
	1827.66	32.81	1825.83	1794.85	99328.98	MAS = 10.00 (m)	23.00	23.00				WRP	
	1827.64	139.57	1733.99	1688.07	19.88	OSF1.50	2500.00	2500.00				MinPt-CtCt	
30-025-24530 - WIMBERLY 4 - INC Only to 5030ft (DefinitiveSurvey)	1887.77	324.62	1670.75	1563.14	8.76	OSF1.50	5070.00	5067.63				MinPts	Pass
	7922.12	265.05	7744.82	7657.07	45.13	OSF1.50	16170.00	10750.00				MinPt-SF	
	11513.72	328.69	11293.99	11185.03	52.83	OSF1.50	20825.17	10750.00				TD	
30-025-41479-0100 - DOS EQUIS 13 FEDERAL COM 1H ST01 - Corrected MWD to 15250ft (DefinitiveSurvey)	5594.01	32.81	5591.51	5561.20	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	Pass
	5593.97	32.81	5591.47	5561.16	966224.25	MAS = 10.00 (m)	10.00	10.00				MinPt-SF	
	5593.95	32.81	5591.45	5561.14	2026335.98	MAS = 10.00 (m)	23.00	23.00				WRP	
	5593.77	32.81	5590.36	5560.96	6102.15	MAS = 10.00 (m)	170.00	170.00				MinPts	
	5595.16	32.81	5586.88	5562.35	968.18	MAS = 10.00 (m)	660.00	660.00				MinPts	
	5598.02	32.81	5582.92	5565.21	443.94	MAS = 10.00 (m)	1370.00	1370.00				MinPt-EOU	
	5601.63	32.81	5582.56	5568.83	337.74	MAS = 10.00 (m)	1770.00	1770.00				MinPt-EOU	
	5603.01	32.81	5582.33	5570.20	307.98	MAS = 10.00 (m)	1930.00	1930.00				MinPt-EOU	
	5606.44	38.84	5579.72	5567.60	231.33	OSF1.50	2520.00	2520.00				MinPt-EOU	
	5606.73	39.16	5579.79	5567.57	229.32	OSF1.50	2540.00	2540.00				MinPt-ADP	
	5833.73	108.80	5750.37	5724.93	82.29	OSF1.50	7240.00	7236.05				MinPt-EOU	
	5836.96	113.49	5750.47	5723.48	78.85	OSF1.50	7550.00	7546.05				MinPt-EOU	
	5838.03	114.81	5760.65	5723.21	77.94	OSF1.50	7650.00	7646.05				MinPt-ADP	
	5841.13	117.92	5761.65	5723.22	75.88	OSF1.50	7860.00	7856.05				MinPt-ADP	
	5853.35	127.68	5767.40	5725.68	70.11	OSF1.50	8500.00	8496.05				MinPt-EOU	
	5857.35	133.76	5767.34	5723.59	66.91	OSF1.50	8910.00	8906.05				MinPt-EOU	
	5859.59	138.92	5766.15	5720.67	64.40	OSF1.50	9260.00	9256.05				MinPt-EOU	
	5861.67	148.83	5761.61	5712.84	60.06	OSF1.50	9910.00	9906.05				MinPt-CtCt	
	5862.07	150.13	5761.16	5711.95	59.54	OSF1.50	10020.00	10016.05				MinPt-EOU	
	5862.66	150.83	5761.27	5711.83	59.26	OSF1.50	10080.00	10076.05				MinPt-ADP	
	1950.62	200.63	1816.03	1749.99	14.75	OSF1.50	16096.62	10750.00				MinPt-CtCt	
	1950.73	200.98	1815.91	1749.75	14.72	OSF1.50	16120.00	10750.00				MinPt-EOU	
	1951.13	201.61	1815.89	1749.52	14.68	OSF1.50	16160.00	10750.00				MinPt-EOU	
	1951.25	201.75	1815.92	1749.50	14.67	OSF1.50	16170.00	10750.00				MinPt-ADP	
	1956.33	212.15	1814.07	1744.18	13.98	OSF1.50	16840.00	10750.00				MinPt-CtCt	
	1956.64	213.19	1813.72	1743.51	13.92	OSF1.50	16900.00	10750.00				MinPt-EOU	
	1957.05	213.63	1813.80	1743.42	13.89	OSF1.50	16930.00	10750.00				MinPt-ADP	
	1959.42	234.51	1802.25	1724.91	12.65	OSF1.50	17990.00	10750.00				MinPt-CtCt	
	1960.43	238.18	1800.80	1722.24	12.46	OSF1.50	18170.00	10750.00				MinPt-EOU	
	1961.26	239.17	1800.98	1722.09	12.41	OSF1.50	18220.00	10750.00				MinPt-ADP	
	1969.91	273.87	1786.49	1696.04	10.87	OSF1.50	19700.00	10750.00				MinPt-CtCt	
	1970.98	277.04	1785.45	1693.94	10.76	OSF1.50	19840.00	10750.00				MinPt-EOU	
	1972.08	278.38	1785.65	1693.69	10.71	OSF1.50	19900.00	10750.00				MinPt-ADP	

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert	Status
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major		
	1975.39	289.78	1781.37	1685.61	10.30	OSF1.50	20340.00	10750.00				MinPt-CtCt	
	1976.30	295.42	1778.52	1680.88	10.11	OSF1.50	20570.00	10750.00				MinPt-EOU	
	1976.43	295.57	1778.56	1680.86	10.10	OSF1.50	20580.00	10750.00				MinPt-ADP	
	1980.52	296.81	1781.82	1683.72	10.08	OSF1.50	20680.00	10750.00				MinPt-SF	
	1995.39	297.70	1796.09	1697.69	10.13	OSF1.50	20825.17	10750.00				TD	
30-025-41306 - Bell Lake 24 Fed 2H - MWD to 16075ft - A (DefinitiveSurvey)												Pass	
	15362.97	32.81	15360.47	15330.16	N/A	MAS = 10.00 (m)	0.00	0.00				Surface	
	15362.92	32.81	15360.41	15330.11	2046400.58	MAS = 10.00 (m)	23.00	23.00				WRP	
	15362.90	32.81	15360.30	15330.09	160559.75	MAS = 10.00 (m)	50.00	50.00				MinPts	
	1992.46	366.82	1747.09	1625.65	8.19	OSF1.50	20825.17	10750.00				MinPts	

12-24-32-B Sundry ID 2763424 Dos Equis 12-13 Federal Com 77H Lea NM02889 CIMAREX ENERGY COMPANY 13-22g 2-27-2024 LV

Dos Equis 12-13 Federal Com 77H

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"	48.00	j 55	stc	5.93	1.13	0.93	1,520	4	1.61	2.29	72,960
"B"			stc				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 996							Totals:	1,520			72,960
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	747	1225	1056	16	8.33	1476	2M			1.56
Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.											
She plot (pipe racks 3 or 4) as per D.3.3.30.D.4.1 not found											

9 5/8		casing inside the		13 3/8		Design Factors				Int 1			
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	40.00		hck 55		ltc	3.20	1.65	0.79	4,929	2	1.49	2.87	197,160
"B"									0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 615								Totals:	4,929				197,160
The cement volume(s) are intended to achieve a top of 0 ft from surface or a								1520					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	1214	2126	1640	30	10.00	2650	3M					0.81
r D V Tool(s):							sum of sx	Σ CuFt					Σ%excess
t by stage % :							1214	2126					30
Class 'H' tail cmt yld > 1.20													
Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.8, b, c, d All > 0.70, OK.													

7	casing inside the		9 5/8		Design Factors				Prod 1		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.00		l 80	ltc	1.89	1.4	1.54	10,907	2	2.78	2.65 316,303
"B"								0			0
"C"								0			0
"D"								0			0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,040							Totals:	10,907			316,303
The cement volume(s) are intended to achieve a top of							4429	ft from surface or a		500	overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd			Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE			Hole-Cplg
8 3/4	0.1503	458	1382	978	41	9.00	2940	3M			0.55
Class 'C' tail cmt yld > 1.35											

4 1/2		Liner w/top @		9657		Design Factors					Liner 1		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	11.60			p 110	btc	2.94	1.43	2.02	11,168	2	3.64	2.57	129,549
"B"									0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,365								Totals:	11,168				129,549
The cement volume(s) are intended to achieve a top of 9657 ft from surface or a								1250					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
6	0.0859	736	957	862	11	9.50							0.50
Class 'H' tail cmt yld > 1.20													
Capitan Reef est top XXXX.													

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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 322534

CONDITIONS

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 322534
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	ALL PREVIOUS COA'S APPLY	5/27/2024