

District I1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720**District II**811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720**District III**1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170**District IV**1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101
August 1, 2011

Permit 373756

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706		2. OGRID Number 215099
		3. API Number 30-025-53706
4. Property Code 336378	5. Property Name TRES EQUIS 5 8 STATE COM	6. Well No. 351H

7. Surface Location

UL - Lot C	Section 5	Township 24S	Range 33E	Lot Idn 3	Feet From 387	N/S Line N	Feet From 1518	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot M	Section 8	Township 24S	Range 33E	Lot Idn M	Feet From 100	N/S Line S	Feet From 990	E/W Line W	County Lea
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9. Pool Information

TRIPLE X;BONE SPRING, WEST	96674
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3657
16. Multiple N	17. Proposed Depth 22411	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 11/1/2024
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	1370	841	0
Int1	12.25	9.625	40	5160	1264	0
Prod	8.75	7	29	12475	541	4960
Liner1	6	4.5	11.6	22411	737	12275

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	
Double Ram	5000	5000	
Pipe	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.		OIL CONSERVATION DIVISION	
Signature:			
Printed Name:	Electronically filed by Phillip Levasseur	Approved By:	Paul F Kautz
Title:	Regulatory Compliance Manager	Title:	Geologist
Email Address:	phillip.levasseur@coterra.com	Approved Date:	10/12/2024
Date:	9/27/2024	Phone:	412-759-4585
		Expiration Date:	10/12/2026
Conditions of Approval Attached			

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

WELL LOCATION INFORMATION

API Number	Pool Code 96674	Pool Name Triple X; Bone Spring, West
Property Code	Property Name TRES EQUIS 5 8 STATE COM	Well Number 351H
OGRID No. 215099	Operator Name CIMAREX ENERGY CO.	Ground Level Elevation 3657.6'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL 3	Section 5	Township 24S	Range 33E	Lot	Ft. from N/S 387 NORTH	Ft. from E/W 1518 WEST	Latitude (NAD 83) 32.252881°	Longitude (NAD 83) -103.597977°	County LEA
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Bottom Hole Location

UL M	Section 8	Township 24S	Range 33E	Lot	Ft. from N/S 100 SOUTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.225209°	Longitude (NAD 83) -103.599685°	County LEA
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Dedicated Acres 319.82	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: ☐ Yes ☐ No		

Kick Off Point (KOP)

UL 4	Section 5	Township 24S	Range 33E	Lot	Ft. from N/S 100 NORTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.253673°	Longitude (NAD 83) -103.599682°	County LEA
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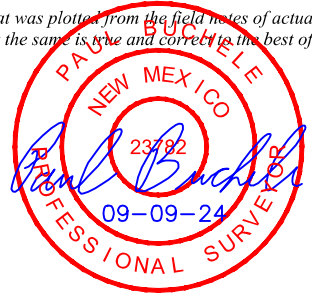
First Take Point (FTP)

UL 4	Section 5	Township 24S	Range 33E	Lot	Ft. from N/S 100 NORTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.253673°	Longitude (NAD 83) -103.599682°	County LEA
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Last Take Point (LTP)

UL M	Section 8	Township 24S	Range 33E	Lot	Ft. from N/S 100 SOUTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.225209°	Longitude (NAD 83) -103.599685°	County LEA
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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☐ Horizontal ☐ Vertical	Ground Floor Elevation:
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OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i> Shelly Bowen 9/23/2024	SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from the field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> 
Signature Shelly Bowen	Signature and Seal of Professional Surveyor 23782 April 08, 2024
Printed Name shelly.bowen@coterra.com	Certificate Number Date of Survey
Email Address	

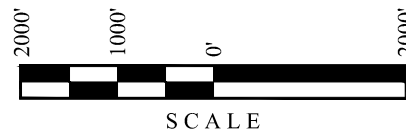
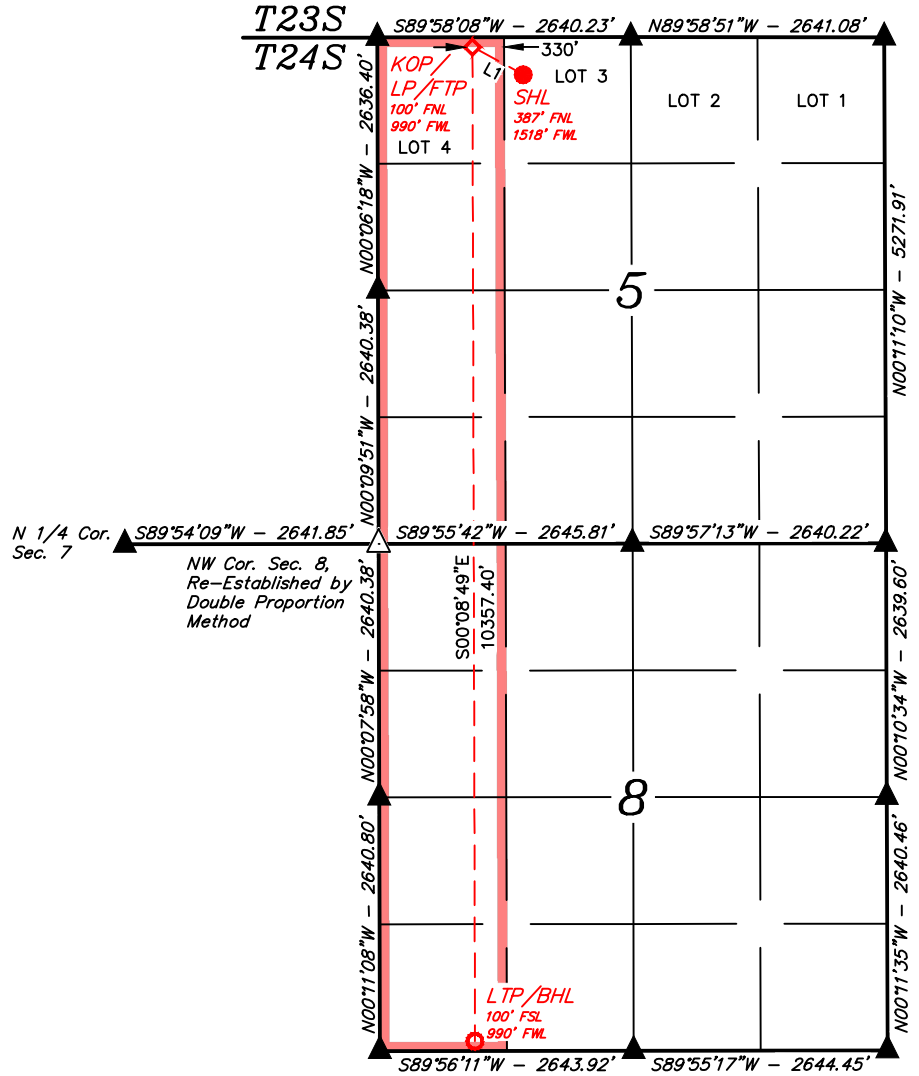
Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

Property Name TRES EQUIS 5 8 STATE COM	Well Number 351H	Drawn By D.M.C. 07-24-24	Revised By (WELL NAME CHANGE & ADD DEDICATED ACREAGE)	REV.: 1 L.T.T. 09-09-24
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- = SURFACE HOLE LOCATION
- ◆ = KICK OFF POINT/LANDING POINT/FIRST TAKE POINT
- = LAST TAKE POINT/BOTTOM HOLE LOCATION
- ▲ = SECTION CORNER LOCATED
- △ = SECTION CORNER RE-ESTABLISHED.
(Not Set on Ground.)
- = DEDICATED ACREAGE

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N61°28'10"W	601.12'

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°15'10.37" (32.252881°)
LONGITUDE = -103°35'52.72" (-103.597977°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°15'09.92" (32.252757°)
LONGITUDE = -103°35'50.99" (-103.597496°)
STATE PLANE NAD 83 (N.M. EAST)
N: 456509.78' E: 768664.15'
STATE PLANE NAD 27 (N.M. EAST)
N: 456450.70' E: 727480.38'

NAD 83 (KOP/LP/FTP)
LATITUDE = 32°15'13.22" (32.253673°)
LONGITUDE = -103°35'58.86" (-103.599682°)
NAD 27 (KOP/LP/FTP)
LATITUDE = 32°15'12.78" (32.253550°)
LONGITUDE = -103°35'57.13" (-103.599202°)
STATE PLANE NAD 83 (N.M. EAST)
N: 456794.63' E: 768134.92'
STATE PLANE NAD 27 (N.M. EAST)
N: 456735.53' E: 726951.16'

NAD 83 (LTP/BHL)
LATITUDE = 32°13'30.75" (32.225209°)
LONGITUDE = -103°35'58.86" (-103.599685°)
NAD 27 (LTP/BHL)
LATITUDE = 32°13'30.31" (32.225085°)
LONGITUDE = -103°35'57.14" (-103.599206°)
STATE PLANE NAD 83 (N.M. EAST)
N: 446439.26' E: 768204.87'
STATE PLANE NAD 27 (N.M. EAST)
N: 446380.42' E: 727020.66'

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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

Form APD Conditions
Permit 373756

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: CIMAREX ENERGY CO. [215099] 6001 Deauville Blvd Midland, TX 79706	API Number: 30-025-53706
	Well: TRES EQUIS 5 8 STATE COM #351H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	If cement does not circulate on any string, a CBL is required for that string of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

Coterra: H2S Plan



H2S Drilling Operations Plan

Training

All company and contract personnel admitted on location must be trained by a qualified H2S safety instructor to do the following:

1. Characteristics of H2S
2. Physical effects and hazards
3. Principle and operation of H2S detectors, warning system, and briefing areas
4. Evacuation procedure, routes and first aid
5. Proper use of safety equipment & life support systems
6. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

H2S Detection and Alarm Systems

1. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
2. An audio alarm system will be installed on the derrick floor and in the top doghouse

Windsock and/or wind streamers

1. Windsock at mudpit area should be high enough to be visible
2. Windsock on the rig floor and / or top of doghouse should be high enough to be visible

Condition Flags & Signs

1. Warning signs on access road to location
2. Flags are to be displayed on sign at the entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates

Coterra: H2S Plan

danger (H2S present in dangerous concentration). Only H2S trained and certified personnel admitted to location.

Well Control Equipment

1. See the pressure control section of this submission.

Communication

1. While working under masks, chalkboards will be used for communication
2. Hand signals will be used where chalk board is inappropriate.
3. Two way radio will be used to communicate off location in case emergency help is required. In most cases, cellular telephones will be available at most drilling foreman's trailer or living quarters.

Drillstem Testing

1. No DSTs or cores are planned at this time
2. Drilling contractor supervisor will be required to be familiar with the effects that H2S has on tubular goods and other mechanical equipment.
3. If H2S is encountered, mud system will be altered if necessary to maintain control of the well. A mud gas separator will be brought into service along with H2S scavenger if necessary.

Coterra: H2S Plan

H2S Contingency Plan

Emergency Procedures

In the event of an H2S release, the first responder(s) must:

1. Isolate the area and prevent entry by other persons into the 100 PPM ROE.
2. Evacuate any public places encompassed by the 100 PPM ROE.
3. Be equipped with H2S monitors and air packs in order to control the release.
4. Use the buddy system
5. Take precautions to avoid personal injury during this operation
6. Contact operator and/or local officials to aid in operation. See list of emergency contacts attached.
7. Have received training the detection of H2S, measures for protection against the gas, and equipment used for protection and emergency response

Ignition of the Gas Source

1. Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Contacting Authorities

1. Coterra personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours.
2. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Coterra's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

Coterra: H2S Plan

Emergency Contacts

Coterra Energy

Charlie Pritchard: Drilling Operations Manager: 432 – 238 – 7084

Darrell Kelly: Vice President EHS: 281 – 589 – 5795

Third Party

PERMIAN REGION CONTACT NUMBERS					
CALL 911					
Air Ambulance Services					
	Reeves County Medical - Pecos, TX		432-447-3551		
	Aero Care - Midland, TX		800-627-2376		
	Tri State Care Flight - Artesia, NM		800-800-0900		
	Air Methods - Hobbs, NM		800-242-6199		
Fire / Police / Medical Care					
Sheriff's Office		Fire Departments		Hospital / Medical Care Facilities	
Andrews County	432-523-5545	Andrews	432-523-3111	Permian Regional Med.	432-523-2200
Reagan County	325-884-2929	Big Lake	325-884-3650	Reagan Memorial Hosp.	325-884-2561
Howard County	432-264-2244	Big Springs	432-264-2303	Scenic Mountain Med Ctr	432-263-1211
Terry County	806-637-2212	Brownfield	806-637-6633		
Crane County	432-558-3571	Crane	432-558-2361	Crane Memorial Hosp.	432-558-3555
Val Verde County	830-774-7513	Del Rio	830-774-8648	Val Verde Regional Med.	830-775-8566
		Denver City	806-592-3516	Yoakum County Hospital	806-592-2121
Pecos County	432-336-3521	Ft Stockton	432-336-8525		
Glasscock County	432-354-2361	Garden City			
Winkler County	432-586-3461	Kernit	432-586-2577	Winkler County Memorial	432-586-5864
		McCamey	432-652-8232	McCamey Hospital	432-652-8626
Loving County	432-377-2411	Mentone			
Irion County	325-835-2551	Mertzon			
Ward County	432-943-6703	Monahans	432-943-2211	Ward Memorial Hospital	432-943-2511
Ector County	432-335-3050	Odessa	432-335-4650	Odessa Regional Hosp.	432-582-8340
Crocket County	325-392-2661	Ozona	325-392-2626		
Reeves County	432-445-4901	Pecos	505-757-6511	Reeves County Hospital	432-447-3551
Yoakum County	806-456-2377	Plains	806-456-2288		
Garza County	806-495-3595	Post			
Upton County	432-693-2422	Rankin			
Coke County	915-453-2717	Robert Lee			
		Roscoe	325-766-3931		
Hockley County	806-894-3126	Levelland	806-894-3155	Covenant Health	806-894-4963
Tom Green County	325-655-8111	San Angelo	325-657-4355	San Angelo Comm. Med.	325-949-9511
Gaines County	432-758-9871	Seminole	432-758-3621	Memorial Hospital	432-758-5811
Terrell County	432-345-2525	Sanderson			
Scurry County	325-573-3551	Snyder	325-573-3546	DM Cogdell Memorial	325-573-6374
Sterling County	325-378-4771	Sterling City			
Nolan County	325-235-5471	Sweetwater	325-235-8130	Rolling Plains Memorial	325-235-1701
Culberson County	432-283-2060	Van Horn		Culberson Hospital	432-283-2760
New Mexico					
Lea County	505-396-3611	Knowles	505-392-7469	Lea Reg Med Ctr	575-492-5000
Eddy County	575-887-7551	Carlsbad	575-885-3125	Carlsbad Medical	575-887-4100
		Artesia	575-746-5050	Artesia Hospital	575-748-3333
Roosevelt County	575-356-4408				
Chaves County	575-624-7590				
Ground Ambulance Services					
	Reeves County Medical		Pecos, TX		432-447-3551

State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505**NATURAL GAS MANAGEMENT PLAN**

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021**I. Operator:** Cimarex Energy Company **OGRID:** 215099 **Date:** 9/23/24**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Tres Equis 5 8 State Com 351H	NENW Sec 5 T24S, R33E	387FNL/ 1518 FWL	2211	4643	4176	

IV. Central Delivery Point Name: Tres Equis 5 CTB [See 19.15.27.9(D)(1) NMAC]**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Tres Equis 5 8 State Com 351H		12/7/24	1/1/25	3/19/25	4/30/25	4/30/25

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	<i>Shelly Bowen</i>
Printed Name:	Shelly Bowen
Title:	Sr. Regulatory Analyst
E-mail Address:	shelly.bowen@coterra.com
Date:	9/23/24
Phone:	432/620-1644
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

From State of New Mexico, Natural Gas Management Plan

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

XEC Standard Response

Standard facility gas process flow begins at the inlet separator. These vessels are designed based off of forecasted rates and residence times in accordance with, and often greater than, API 12J. The separated gas is then routed to an additional separation vessel (ie sales scrubber) in order to extract liquids that may have carried over or developed due to the decrease in pressure. The sales scrubber is sized based on API 521. From the sales scrubber, the gas leaves the facility and enters the gas midstream gathering network.

Cimarex

VII. Operational Practices

Cimarex values the sustainable development of New Mexico's natural resources. Venting and flaring of natural gas is a source of waste in the industry, and Cimarex will ensure that its values are aligned with those of NMOCD. As such, Cimarex plans to take pointed steps to ensure compliance with Subsection A through F of 19.15.27.8 NMAC.

Specifically, below are the steps Cimarex will plan to follow under routine well commissioning and operations.

1. Capture or combust natural gas during drilling operations where technically feasible, using the best industry practices and control technologies.
 - a. All flares during these operations will be a minimum of 100ft away from the nearest surface-hole location.
2. All gas present during post-completion drill-out and flow back will be routed through separation equipment, and, if technically feasible, flare unsellable vapors rather than vent. Lastly, formal sales separator commissioning to process well-stream fluids and send gas to a gas flow line/collection system or use the gas for on-site fuel or beneficial usage, gas as soon as is safe and technically feasible.
3. Cimarex will ensure the flare or combustion equipment is properly sized to handle expected flow rates, ensure this equipment is equipped with an automatic or continuous ignition source, and ensure this equipment is designed for proper combustion efficiency.
4. If Cimarex must flare because gas is not meeting pipeline specifications, Cimarex will limit flaring to <60 days, analyze gas composition at least twice per week, and route gas into a gathering pipeline as soon as pipeline specifications are met.
5. Under routine production operations, Cimarex will not flare/vent unless:
 - a. Venting or flaring occurs due to an emergency or equipment malfunction.
 - b. Venting or flaring occurs as a result of unloading practices, and an operator is onsite (or within 30 minutes of drive time and posts contact information at the wellsite) until the end of unloading practice.
 - c. The venting or flaring occurs during automated plungerlift operations, in which case the Cimarex operator will work to optimize the plungerlift system to minimize venting/flaring.
 - d. The venting or flaring occurs during downhole well maintenance, in which case Cimarex will work to minimize venting or flaring operations to the extent that it does not pose a risk to safe operations.
 - e. The well is an exploratory well, the division has approved the well as an exploratory well, venting or flaring is limited to 12 months, as approved by the division, and venting/flaring does not cause Cimarex to breach its State-wide 98% gas capture requirement.
 - f. Venting or flaring occurs because the stock tanks or other low-pressure vessels are being gauged, sampled, or liquids are being loaded out.
 - g. The venting or flaring occurs because pressurized vessels are being maintained and are being blown-down or depressurized.
 - h. Venting or flaring occurs as a result of normal dehydration unit operations.

- i. Venting or flaring occurs as a result of bradenhead testing.
 - j. Venting or flaring occurs as a result of normal compressor operations, including general compressor operations, compressor engines and turbines.
 - k. Venting or flaring occurs as a result of a packer leakage test.
 - l. Venting or flaring occurs as a result of a production test lasting less than 24 hours unless otherwise approved by the division.
 - m. Venting or flaring occurs as a result of new equipment commissioning and is necessary to purge impurities from the pipeline or production equipment.
6. Cimarex will maintain its equipment in accordance with its Operations and Maintenance Program, to ensure venting or flaring events are minimized and that equipment is properly functioning.
7. Cimarex will install automatic tank gauging equipment on all production facilities constructed after May 25, 2021, to ensure minimal emissions from tank gauging practices.
8. By November 25, 2022, all Cimarex facilities equipped with flares or combustors will be equipped with continuous pilots or automatic igniters, and technology to ensure proper function, i.e. thermocouple, fire-eye, etc...
9. Cimarex will perform AVO (audio, visual, olfactory) facility inspections in accordance with NMOCD requirements. Specifically, Cimarex will:
 - a. Perform weekly inspections during the first year of production, and so long as production is greater than 60 MCFD.
 - b. If production is less than 60 MCFD, Cimarex will perform weekly AVO inspections when an operator is present on location, and inspections at least once per calendar month with at least 20 calendar days between inspections.
10. Cimarex will measure or estimate the volume of vented, flared or beneficially used natural gas, regardless of the reason or authorization for such venting or flaring.
11. On all facilities constructed after May 25, 2021, Cimarex will install metering where feasible and in accordance with available technology and best engineering practices, in an effort to measure how much gas could have been vented or flared.
 - a. In areas where metering is not technically feasible, such as low-pressure/low volume venting or flaring applications, engineering estimates will be used such that the methodology could be independently verified.
12. Cimarex will fulfill the division's requirements for reporting and filing of venting or flaring that exceeds 50 MCF in volume or last eight hours or more cumulatively within any 24-hour period.

VIII. Best Management Practices to minimize venting during active and planned maintenance

Cimarex strives to ensure minimal venting occurs during active and planned maintenance activities. Below is a description of common maintenance practices, and the steps Cimarex takes to limit venting exposure.

- **Workovers:**
 - Always strive to kill well when performing downhole maintenance.
 - If vapors or trapped pressure is present and must be relieved then:
 - Initial blowdown to production facility:
 - Route vapors to LP flare if possible/applicable
 - Blowdown to portable gas buster tank:
 - Vent to existing or portable flare if applicable.
- **Stock tank servicing:**
 - Minimize time spent with thief hatches open.
 - When cleaning or servicing via manway, suck tank bottoms to ensure minimal volatiles exposed to atmosphere.
 - Connect vacuum truck to low pressure flare while cleaning bottoms to limit venting.
 - Isolate the vent lines and overflows on the tank being serviced from other tanks.
- **Pressure vessel/compressor servicing and associated blowdowns:**
 - Route to flare where possible.
 - Blow vessel down to minimum available pressure via pipeline, prior to venting vessel.
 - Preemptively changing anodes to reduce failures and extended corrosion related servicing.
 - When cleaning or servicing via manway, suck vessel bottoms to ensure minimal volatiles exposed to atmosphere.
- **Flare/combustor maintenance:**
 - Minimize downtime by coordinating with vendor and Cimarex staff travel logistics.
 - Utilizing preventative and predictive maintenance programs to replace high wear components before failure.
 - Because the flare/combustor is the primary equipment used to limit venting practices, ensure flare/combustor is properly maintained and fully operational at all times via routine maintenance, temperature telemetry, onsite visual inspections.

The Cimarex expectation is to limit all venting exposure. Equipment that may not be listed on this document is still expected to be maintained and associated venting during such maintenance minimized.

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

WELL LOCATION INFORMATION

API Number	Pool Code 96674	Pool Name Triple X; Bone Spring, West
Property Code	Property Name TRES EQUIS 5 8 STATE COM	Well Number 351H
OGRID No. 215099	Operator Name CIMAREX ENERGY CO.	Ground Level Elevation 3657.6'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL 3	Section 5	Township 24S	Range 33E	Lot	Ft. from N/S 387 NORTH	Ft. from E/W 1518 WEST	Latitude (NAD 83) 32.252881°	Longitude (NAD 83) -103.597977°	County LEA
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Bottom Hole Location

UL M	Section 8	Township 24S	Range 33E	Lot	Ft. from N/S 100 SOUTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.225209°	Longitude (NAD 83) -103.599685°	County LEA
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Dedicated Acres 319.82	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: ☐ Yes ☐ No		

Kick Off Point (KOP)

UL 4	Section 5	Township 24S	Range 33E	Lot	Ft. from N/S 100 NORTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.253673°	Longitude (NAD 83) -103.599682°	County LEA
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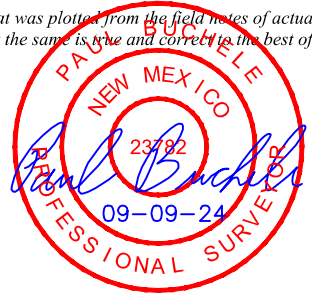
First Take Point (FTP)

UL 4	Section 5	Township 24S	Range 33E	Lot	Ft. from N/S 100 NORTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.253673°	Longitude (NAD 83) -103.599682°	County LEA
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Last Take Point (LTP)

UL M	Section 8	Township 24S	Range 33E	Lot	Ft. from N/S 100 SOUTH	Ft. from E/W 990 WEST	Latitude (NAD 83) 32.225209°	Longitude (NAD 83) -103.599685°	County LEA
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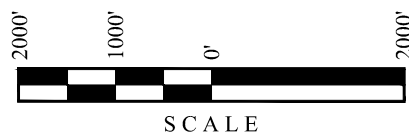
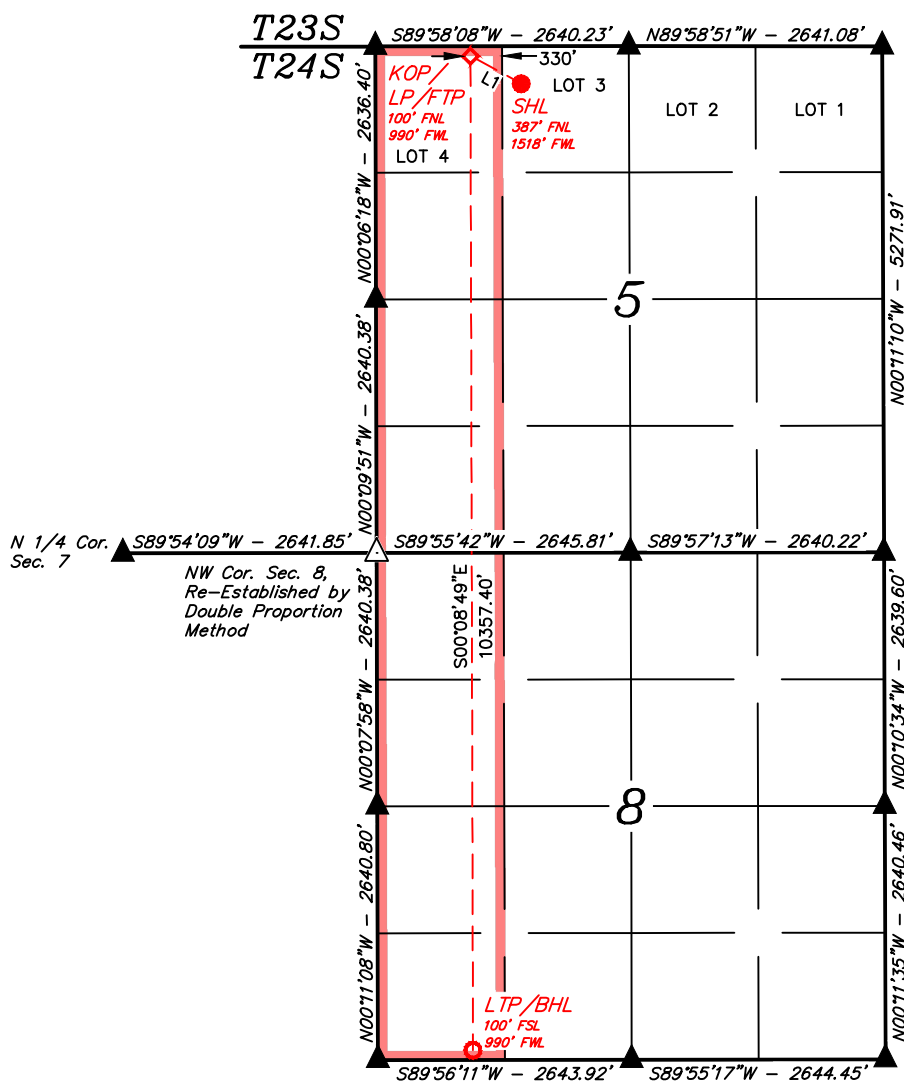
Unitized Area or Area of Uniform Interest	Spacing Unit Type ☐ Horizontal ☐ Vertical	Ground Floor Elevation:
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OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i> <i>Shelly Bowen</i> 9/23/2024 Signature _____ Date _____ Shelly Bowen Printed Name _____ shelly.bowen@coterra.com Email Address _____	SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from the field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  Signature and Seal of Professional Surveyor 23782 April 08, 2024 Certificate Number _____ Date of Survey _____
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Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

- = SURFACE HOLE LOCATION
- ◆ = KICK OFF POINT/LANDING POINT/FIRST TAKE POINT
- ◉ = LAST TAKE POINT/BOTTOM HOLE LOCATION
- ▲ = SECTION CORNER LOCATED
- △ = SECTION CORNER RE-ESTABLISHED.
(Not Set on Ground.)
- = DEDICATED ACREAGE

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N61°28'10"W	601.12'

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°15'10.37" (32.252881°)
LONGITUDE = -103°35'52.72" (-103.597977°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°15'09.92" (32.252757°)
LONGITUDE = -103°35'50.99" (-103.597496°)
STATE PLANE NAD 83 (N.M. EAST)
N: 456509.78' E: 768664.15'
STATE PLANE NAD 27 (N.M. EAST)
N: 456450.70' E: 727480.38'

NAD 83 (KOP/LP/FTP)
LATITUDE = 32°15'13.22" (32.253673°)
LONGITUDE = -103°35'58.86" (-103.599682°)
NAD 27 (KOP/LP/FTP)
LATITUDE = 32°15'12.78" (32.253550°)
LONGITUDE = -103°35'57.13" (-103.599202°)
STATE PLANE NAD 83 (N.M. EAST)
N: 456794.63' E: 768134.92'
STATE PLANE NAD 27 (N.M. EAST)
N: 456735.53' E: 726951.16'

NAD 83 (LTP/BHL)
LATITUDE = 32°13'30.75" (32.225209°)
LONGITUDE = -103°35'58.86" (-103.599685°)
NAD 27 (LTP/BHL)
LATITUDE = 32°13'30.31" (32.225085°)
LONGITUDE = -103°35'57.14" (-103.599206°)
STATE PLANE NAD 83 (N.M. EAST)
N: 446439.26' E: 768204.87'
STATE PLANE NAD 27 (N.M. EAST)
N: 446380.42' E: 727020.66'



Coterra Tres Equis 5-8 State 351H Rev0 kFc 09Sep24 Anti-Collision Summary Report

Analysis Date-24hr Time: September 09, 2024 - 10:09 PM (UTC 0)
Client: COTERRA
Field: NM Lea County (NAD 83)
Structure: Coterra Tres Equis 5 State Pad Lot 3
Slot: Tres Equis 5-8 State 351H
Well: Tres Equis 5-8 State 351H
Borehole: Tres Equis 5-8 State 351H
Scan MD Range: 0.00ft ~ 22410.64ft

Analysis Method: 3D Least Distance
Reference Trajectory: Coterra Tres Equis 5-8 State 351H Rev0 kFc 09Sep24 (Def
Depth Interval: Every 10.00 Measured Depth (ft)
Rule Set: NAL Procedure: D&M AntiCollision Standard S002
Min Pts: Absolute minima indicated.
Engine Version: 2024.4.0.4
Database \ Project: Tres Equis 5-8 State 351H-COTERRA

Trajectory Error Model: ISCWSA0 3 - D 95 % Confidence 2.7955 sigma

Offset Trajectories Summary

Offset Selection Criteria

Bounding box scan: minimum Ct-Ct separation <= 3000ft
 Definitive Surveys - Definitive Plans - Definitive surveys exclude definitive plans
 Selection filters: - 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 27 are selected

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert
	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.

30-025-39882 - MACHO NACHO STATE 1H - Gyro to 11373, Blind to 12500ft - A (DefinitiveSurvey) - **Fail Major**

5581.50	32.81	5579.52	5548.69	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
5581.42	32.81	5579.43	5548.61	626052.25	MAS = 10.00 (m)	20.00	20.00					MinPt-SF
5581.42	32.81	5579.43	5548.61	714514.63	MAS = 10.00 (m)	23.00	23.00					WRP
5580.26	32.81	5574.48	5547.45	1468.88	MAS = 10.00 (m)	460.00	460.00					MinPts
5583.60	32.81	5569.80	5550.79	472.07	MAS = 10.00 (m)	1290.00	1290.00					MinPt-EOU
5580.70	32.81	5559.17	5547.89	282.26	MAS = 10.00 (m)	2040.00	2039.72					MinPts
5582.86	44.75	5552.43	5538.10	194.71	OSF1.50	2910.00	2904.26					MinPt-CtCt
5579.03	54.46	5542.13	5524.57	158.74	OSF1.50	3540.00	3530.21					MinPt-CtCt
5579.61	56.13	5541.61	5523.49	153.90	OSF1.50	3670.00	3659.38					MinPt-EOU
5580.61	57.34	5541.80	5523.27	150.57	OSF1.50	3760.00	3748.80					MinPt-ADP
5706.21	133.01	5617.00	5573.20	65.12	OSF1.50	8780.00	8746.58					MinPt-CtCt
5708.24	144.20	5611.56	5564.03	60.03	OSF1.50	9580.00	9546.58					MinPt-EOU
5707.71	147.62	5608.75	5560.09	58.62	OSF1.50	9790.00	9756.58					MinPt-CtCt
5707.94	148.36	5608.49	5559.58	58.33	OSF1.50	9860.00	9826.58					MinPt-EOU
5708.28	148.79	5608.55	5559.49	58.16	OSF1.50	9900.00	9866.58					MinPt-ADP
5756.57	1735.84	4598.80	4020.72	4.98	OSF1.50	11540.00	11506.58	OSF<=5.00				Enter Alert
3575.97	3580.60	1188.41	-4.63	1.50	OSF1.50	14340.00	12285.00		OSF<=1.50			Enter Minor
2462.82	3701.32	-5.23	-1238.50	1.00	OSF1.50	15550.00	12285.00			OSF<=1.00		Enter Major
1152.89	3893.60	-1443.34	-2740.71	0.44	OSF1.50	17728.61	12285.00					MinPt-CtCt
1153.09	3894.86	-1443.98	-2741.77	0.44	OSF1.50	17750.00	12285.00					MinPt-SF
1153.63	3896.04	-1444.23	-2742.41	0.44	OSF1.50	17770.00	12285.00					MinPt-EOU
1155.10	3897.82	-1443.95	-2742.72	0.44	OSF1.50	17800.00	12285.00					MinPt-ADP
2742.83	4115.13	-1.09	-1372.30	1.00	OSF1.50	20220.00	12285.00			OSF>1.00		Exit Major
4265.80	4267.14	1420.54	-1.34	1.50	OSF1.50	21840.00	12285.00		OSF>1.50			Exit Minor
4817.19	4268.43	1971.06	548.75	1.69	OSF1.50	22410.64	12285.00					TD

Coterra Tres Equis 5-8 State 401H Rev0 kFc 09Sep24 (DefinitivePlan) - **Fail Minor**

20.00	16.26	18.71	3.74	N/A	MAS = 4.96 (m)	0.00	0.00	CtCt<=15.00m				Enter Alert
20.00	16.26	18.71	3.74	6602.14	MAS = 4.96 (m)	23.00	23.00					WRP
20.00	19.76	6.40	0.24	1.52	OSF1.50	1290.00	1290.00					MinPts
20.00	20.06	6.30	-0.06	1.50	OSF1.50	1330.00	1330.00	OSF<=1.50				Enter Minor
20.00	23.97	3.69	-3.97	1.24	OSF1.50	1590.00	1590.00					MinPt-CtCt
20.16	24.56	3.46	-4.40	1.22	OSF1.50	1630.00	1630.00					MinPt-EOU
20.28	24.71	3.48	-4.43	1.22	OSF1.50	1640.00	1640.00					MinPts
26.79	27.03	8.44	-0.24	1.49	OSF1.50	1800.00	1800.00		OSF>1.50			Exit Minor
164.51	50.06	130.80	114.45	5.00	OSF1.50	3360.00	3351.37	OSF>5.00				Exit Alert
504.76	152.23	402.95	352.53	5.00	OSF1.50	10060.00	10026.58	OSF<=5.00				Enter Alert
504.76	176.45	386.80	328.31	4.31	OSF1.50	11725.94	11692.52					MinPt-CtCt
504.86	177.12	386.45	327.73	4.29	OSF1.50	11830.00	11796.01					MinPt-EOU
504.95	177.23	386.46	327.71	4.29	OSF1.50	11850.00	11815.61					MinPt-ADP
505.32	177.44	386.69	327.88	4.29	OSF1.50	11890.00	11854.35					MinPt-SF
577.99	174.28	461.47	403.71	4.99	OSF1.50	12420.00	12228.86	OSF>5.00				Exit Alert
694.18	209.07	554.47	485.10	5.00	OSF1.50	15800.00	12285.00	OSF<=5.00				Enter Alert
693.80	374.88	443.56	318.93	2.78	OSF1.50	22410.00	12285.00					MinPt-CtCt
693.80	374.88	443.56	318.93	2.78	OSF1.50	22410.64	12285.00					MinPts

Coterra Tres Equis 5-8 State 402H Rev0 kFc 09Sep24 (DefinitivePlan) - **Fail Minor**

20.00	16.26	18.72	3.75	N/A	MAS = 4.96 (m)	0.00	0.00	CtCt<=15.00m				Enter Alert
20.00	16.26	18.71	3.74	N/A	MAS = 4.96 (m)	23.00	23.00					WRP
20.00	19.75	6.40	0.25	1.52	OSF1.50	1290.00	1290.00					MinPts
20.00	20.05	6.31	-0.05	1.50	OSF1.50	1330.00	1330.00	OSF<=1.50				Enter Minor
20.00	27.12	1.60	-7.11	1.09	OSF1.50	1800.00	1800.00					MinPt-CtCt
20.14	27.56	1.44	-7.42	1.08	OSF1.50	1830.00	1830.00					MinPt-EOU
20.25	27.71	1.44	-7.47	1.08	OSF1.50	1840.00	1840.00					MinPt-SF
20.39	27.86	1.48	-7.48	1.08	OSF1.50	1850.00	1850.00					MinPt-ADP
30.87	30.98	9.89	-0.11	1.49	OSF1.50	2060.00	2059.64					Exit Minor
150.21	45.80	119.34	104.40	4.99	OSF1.50	3060.00	3053.30	OSF>5.00		OSF>1.50		Exit Alert
577.00	92.74	514.85	484.26	9.42	OSF1.50	6090.00	6063.84					MinPt-SF
692.18	177.01	573.85	515.17	5.89	OSF1.50	11850.00	11815.61					MinPt-CtCt
692.32	177.40	573.72	514.92	5.88	OSF1.50	11900.00	11863.92					MinPt-EOU
692.38	177.48	573.74	514.91	5.88	OSF1.50	11910.00	11873.43					MinPt-ADP
692.71	177.65	573.95	515.06	5.87	OSF1.50	11940.00	11901.64					MinPt-SF
696.30	174.95	579.34	521.35	6.00	OSF1.50	12760.00	12284.89					MinPt-CtCt
696.31	175.01	579.31	521.30	5.99	OSF1.50	12775.94	12285.00					MinPt-EOU

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major	
	696.25	209.68	556.14	486.58	5.00	OSF1.50	15700.00	12285.00	OSF<=5.00			Enter Alert
	696.08	376.15	444.96	319.92	2.78	OSF1.50	22410.64	12285.00				MinPts
Coterra Tres Equis 5-8 State 352H Rev0 kFc 09Sep24 (DefinitivePlan) - Warning Alert												
	39.99	32.25	38.71	7.74	N/A	MAS = 9.83 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	39.99	32.25	38.71	7.74	N/A	MAS = 9.83 (m)	23.00	23.00				WRP
	39.99	32.25	26.40	7.74	3.14	MAS = 9.83 (m)	1290.00	1290.00				MinPt-EOU
	39.99	32.25	21.59	7.74	2.24	MAS = 9.83 (m)	1800.00	1800.00				MinPts
	40.11	32.25	21.51	7.86	2.22	MAS = 9.83 (m)	1820.00	1820.00				MinPt-EOU
	40.48	32.25	21.69	8.23	2.22	MAS = 9.83 (m)	1840.00	1840.00				MinPt-SF
	110.85	34.15	87.75	76.69	4.97	OSF1.50	2300.00	2298.18	OSF>5.00			Exit Alert
	1215.26	175.81	1097.73	1039.45	10.42	OSF1.50	11725.94	11692.52				MinPts
	1319.82	377.49	1067.84	942.33	5.25	OSF1.50	22410.64	12285.00				MinPts
30-025-46753 - HEMLOCK 32 STATE 202H - MWD to 14813ft - A (DefinitiveSurvey) - Warning Alert												
	1203.65	32.81	1201.67	1170.84	3366658.22	MAS = 10.00 (m)	0.00	0.00				MinPts
	1203.67	32.81	1201.68	1170.86	115879.08	MAS = 10.00 (m)	23.00	23.00				WRP
	1203.87	32.81	1201.56	1171.06	3619.84	MAS = 10.00 (m)	90.00	90.00				MinPt-EOU
	1204.24	32.81	1201.50	1171.43	1578.41	MAS = 10.00 (m)	150.00	150.00				MinPt-EOU
	1204.58	32.81	1201.51	1171.78	1099.18	MAS = 10.00 (m)	190.00	190.00				MinPt-EOU
	297.36	91.18	236.04	206.19	4.95	OSF1.50	6020.00	5994.28	OSF<=5.00			Enter Alert
	188.41	114.73	111.38	73.68	2.48	OSF1.50	7340.00	7306.60				MinPt-CtCt
	188.70	115.65	111.07	73.06	2.46	OSF1.50	7400.00	7366.58				MinPt-EOU
	189.06	116.08	111.14	72.98	2.46	OSF1.50	7430.00	7396.58				MinPt-ADP
	180.20	142.65	84.56	37.55	1.90	OSF1.50	9236.84	9203.42				MinPt-CtCt
	180.30	142.97	84.46	37.34	1.90	OSF1.50	9260.00	9226.58				MinPt-EOU
	180.41	143.10	84.48	37.31	1.90	OSF1.50	9270.00	9236.58				MinPt-ADP
	180.56	143.23	84.54	37.33	1.90	OSF1.50	9280.00	9246.58				MinPt-SF
	414.88	126.83	329.79	288.05	4.95	OSF1.50	9980.00	9946.58	OSF>5.00			Exit Alert
	2739.59	117.12	2661.01	2622.47	35.52	OSF1.50	12770.00	12284.99				MinPt-SF
	10933.05	188.24	10807.06	10744.81	87.81	OSF1.50	22410.64	12285.00				TD
30-025-44344 - HEMLOCK 32 STATE 702H - MWD to 17526ft - A (DefinitiveSurvey) - Warning Alert												
	1140.93	32.81	1138.95	1108.12	#####	MAS = 10.00 (m)	0.00	0.00				MinPts
	1140.93	32.81	1138.94	1108.12	124019.74	MAS = 10.00 (m)	23.00	23.00				WRP
	1140.37	32.81	1132.80	1107.56	203.75	MAS = 10.00 (m)	640.00	640.00				MinPts
	1142.45	32.81	1128.41	1109.64	94.56	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
	328.59	100.32	261.17	228.27	4.97	OSF1.50	6660.00	6630.17	OSF<=5.00			Enter Alert
	214.45	114.61	137.50	99.84	2.83	OSF1.50	7601.44	7568.03				MinPt-CtCt
	214.85	115.60	137.25	99.25	2.81	OSF1.50	7670.00	7636.58				MinPt-EOU
	215.69	116.60	137.42	99.09	2.79	OSF1.50	7740.00	7706.58				MinPt-ADP
	221.72	133.25	132.35	88.47	2.51	OSF1.50	8880.00	8846.58				MinPt-CtCt
	222.29	134.84	131.86	87.45	2.48	OSF1.50	8990.00	8956.58				MinPt-EOU
	222.90	135.57	131.99	87.34	2.48	OSF1.50	9040.00	9006.58				MinPt-ADP
	229.47	140.39	135.34	89.08	2.46	OSF1.50	9380.00	9346.58				MinPt-SF
	235.41	149.73	135.05	85.68	2.37	OSF1.50	10030.00	9996.58				MinPt-CtCt
	235.70	150.59	134.76	85.10	2.36	OSF1.50	10090.00	10056.58				MinPt-EOU
	236.04	151.02	134.82	85.02	2.35	OSF1.50	10120.00	10086.58				MinPt-ADP
	240.97	154.46	137.46	86.51	2.35	OSF1.50	10360.00	10326.58				MinPt-SF
	267.61	173.69	151.28	93.92	2.32	OSF1.50	11680.00	11646.58				MinPt-CtCt
	267.72	174.26	151.01	93.46	2.31	OSF1.50	11725.94	11692.52				MinPts
	267.75	174.29	151.02	93.46	2.31	OSF1.50	11730.00	11696.58				MinPt-SF
	583.26	178.44	463.80	404.82	4.93	OSF1.50	12390.00	12217.58	OSF>5.00			Exit Alert
	10565.79	191.55	10437.59	10374.24	83.38	OSF1.50	22410.64	12285.00				TD
30-025-40532 - TRES EQUIS 5 STATE 1H - Gyro+MWD to 15525ft - A (DefinitiveSurvey) - Warning Alert												
	853.39	32.81	851.41	820.58	1825317.15	MAS = 10.00 (m)	0.00	0.00				MinPts
	853.42	32.81	851.43	820.62	66791.48	MAS = 10.00 (m)	23.00	23.00				WRP
	861.40	32.81	847.10	828.59	69.76	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
	417.98	113.42	341.83	304.56	5.59	OSF1.50	7420.00	7386.58				MinPt-CtCt
	420.79	127.41	335.31	293.38	5.00	OSF1.50	8390.00	8356.58	OSF<=5.00			Enter Alert
	413.69	150.29	312.96	263.40	4.16	OSF1.50	9970.80	9937.38				MinPt-CtCt
	415.19	159.22	308.51	255.97	3.94	OSF1.50	10610.00	10576.58				MinPt-CtCt
	415.25	159.37	308.46	255.87	3.93	OSF1.50	10630.00	10596.58				MinPt-EOU
	415.31	159.45	308.47	255.86	3.93	OSF1.50	10640.00	10606.58				MinPt-ADP
	415.87	159.82	308.78	256.05	3.93	OSF1.50	10690.00	10656.58				MinPt-SF
	505.94	153.93	402.79	352.02	4.97	OSF1.50	11140.00	11106.58	OSF>5.00			Exit Alert
	1223.39	116.91	1144.95	1106.48	15.88	OSF1.50	13010.00	12285.00				MinPt-CtCt
	1223.49	117.26	1144.82	1106.23	15.83	OSF1.50	13060.00	12285.00				MinPt-EOU
	1223.81	117.96	1144.67	1105.85	15.74	OSF1.50	13170.00	12285.00				MinPt-CtCt
	1223.93	118.33	1144.54	1105.60	15.69	OSF1.50	13220.00	12285.00				MinPt-EOU
	1224.05	118.48	1144.56	1105.57	15.68	OSF1.50	13240.00	12285.00				MinPt-ADP
	1210.90	129.41	1124.13	1081.49	14.18	OSF1.50	14130.00	12285.00				MinPt-CtCt
	1211.39	130.86	1123.65	1080.53	14.03	OSF1.50	14210.00	12285.00				MinPt-EOU
	1213.40	133.35	1124.00	1080.06	13.79	OSF1.50	14340.00	12285.00				MinPt-ADP
	1198.85	157.06	1093.64	1041.79	11.55	OSF1.50	15470.00	12285.00				MinPt-CtCt
	1199.77	159.95	1092.64	1039.83	11.34	OSF1.50	15580.00	12285.00				MinPt-EOU
	1201.11	161.54	1092.92	1039.58	11.24	OSF1.50	15640.00	12285.00				MinPt-ADP
	1211.80	175.27	1094.45	1036.53	10.45	OSF1.50	16120.00	12285.00				MinPt-EOU
	1205.17	193.74	1075.51	1011.43	9.39	OSF1.50	16770.00	12285.00				MinPt-CtCt
	1206.64	197.02	1074.80	1009.63	9.25	OSF1.50	16900.00	12285.00				MinPt-EOU
	1206.83	197.28	1074.81	1009.55	9.24	OSF1.50	16910.00	12285.00				MinPt-ADP
	1216.60	200.35	1082.54	1016.25	9.17	OSF1.50	17040.00	12285.00				MinPt-SF
	5656.94	195.26	5526.26	5461.67	43.78	OSF1.50	22410.64	12285.00				TD
30-025-40675 - TRES EQUIS 5 STATE 2 - Gyro+MWD to 15178ft - P (DefinitiveSurvey) - Pass												
	474.15	32.81	472.17	441.34	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	473.84	32.81	471.82	441.03	11799.20	MAS = 10.00 (m)	10.00	10.00				MinPt-SF
	473.74	32.81	471.76	440.94	341777.78	MAS = 10.00 (m)	23.00	23.00				WRP
	466.91	32.81	452.85	434.10	38.48	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
	462.09	32.81	443.00	429.28	26.56	MAS = 10.00 (m)	1820.31	1820.31				MinPts

Offset Trajectory	Separation			Allow	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major	
462.29	32.81		442.80	429.48	25.99	MAS = 10.00 (m)	1860.00	1860.00				MinPt-EOU
704.97	67.14		659.62	637.83	16.13	OSF1.50	4500.00	4484.05				MinPt-SF
748.44	71.46		700.21	676.97	16.07	OSF1.50	4800.00	4782.12				MinPt-SF
778.27	74.23		728.19	704.04	16.07	OSF1.50	4990.00	4970.90				MinPt-SF
1055.62	115.73		977.93	939.89	13.85	OSF1.50	7770.00	7736.58				MinPt-EOU
1062.55	132.35		973.78	930.20	12.17	OSF1.50	8900.00	8866.58				MinPt-CiCt
1056.48	147.58		957.55	908.90	10.84	OSF1.50	9940.00	9906.58				MinPt-CiCt
1057.59	149.83		957.17	907.76	10.69	OSF1.50	10100.00	10068.58				MinPt-EOU
1059.80	153.51		956.92	906.29	10.45	OSF1.50	10350.00	10316.58				MinPt-EOU
1050.72	159.69		943.72	891.03	9.95	OSF1.50	10910.00	10876.58				MinPts
1050.78	159.75		943.74	891.03	9.95	OSF1.50	10920.00	10886.58				MinPt-ADP
1051.32	159.89		944.19	891.44	9.95	OSF1.50	10950.00	10916.58				MinPt-SF
1461.07	137.03		1369.22	1324.04	16.15	OSF1.50	12990.00	12285.00				MinPt-CiCt
1461.13	137.21		1369.15	1323.91	16.13	OSF1.50	13010.00	12285.00				MinPt-EOU
1461.87	138.59		1368.98	1323.28	15.98	OSF1.50	13140.00	12285.00				MinPt-EOU
1462.34	139.13		1369.08	1323.20	15.92	OSF1.50	13190.00	12285.00				MinPt-ADP
1466.59	142.44		1371.13	1324.15	15.59	OSF1.50	13450.00	12285.00				MinPt-EOU
1467.09	143.02		1371.24	1324.07	15.53	OSF1.50	13490.00	12285.00				MinPt-ADP
1468.34	144.85		1371.27	1323.49	15.35	OSF1.50	13600.00	12285.00				MinPt-EOU
1469.39	147.61		1370.48	1321.78	15.07	OSF1.50	13740.00	12285.00				MinPt-CiCt
1470.58	150.99		1369.42	1319.59	14.74	OSF1.50	13910.00	12285.00				MinPt-EOU
1471.96	152.65		1369.70	1319.32	14.59	OSF1.50	13990.00	12285.00				MinPt-ADP
1473.79	154.76		1370.12	1319.03	14.41	OSF1.50	14080.00	12285.00				MinPt-EOU
1476.67	158.29		1370.65	1318.39	14.11	OSF1.50	14230.00	12285.00				MinPt-ADP
1493.71	197.46		1361.57	1296.25	11.42	OSF1.50	15480.00	12285.00				MinPt-CiCt
1503.47	231.61		1348.57	1271.86	9.79	OSF1.50	16450.00	12285.00				MinPt-EOU
1508.31	237.34		1349.58	1270.97	9.58	OSF1.50	16610.00	12285.00				MinPt-ADP
1512.00	238.43		1352.55	1273.57	9.66	OSF1.50	16680.00	12285.00				MinPt-SF
6036.37	199.86		5902.63	5836.51	45.64	OSF1.50	22410.64	12285.00				TD
30-025-45523 - HEMLOCK 32 STATE 703H - MWD to 17405ft - A (DefinitiveSurvey) - Pass												
773.30	32.81		771.32	740.49	4594595.40	MAS = 10.00 (m)	0.00	0.00				MinPts
773.31	32.81		771.31	740.50	28409.99	MAS = 10.00 (m)	23.00	23.00				WRP
775.68	32.81		770.30	742.87	227.09	MAS = 10.00 (m)	410.00	410.00				MinPt-EOU
778.61	32.81		770.41	745.80	124.86	MAS = 10.00 (m)	690.00	690.00				MinPt-EOU
599.08	89.86		538.63	509.22	10.16	OSF1.50	5860.00	5835.31				MinPt-CiCt
599.98	93.07		537.39	506.91	9.81	OSF1.50	6070.00	6043.96				MinPt-EOU
600.98	94.28		537.59	506.70	9.70	OSF1.50	6150.00	6123.45				MinPt-ADP
624.76	106.97		552.91	517.79	8.87	OSF1.50	6980.00	6948.12				MinPt-ADP
602.94	133.79		513.21	469.15	6.82	OSF1.50	8830.00	8796.58				MinPt-CiCt
603.59	142.48		508.06	461.10	6.41	OSF1.50	9440.00	9406.58				MinPt-CiCt
603.95	143.56		507.71	460.40	6.37	OSF1.50	9520.00	9486.58				MinPt-EOU
604.39	144.09		507.79	460.30	6.35	OSF1.50	9560.00	9526.58				MinPt-ADP
597.94	165.42		487.12	432.52	5.46	OSF1.50	11014.92	10981.50				MinPt-CiCt
598.52	167.17		486.53	431.34	5.41	OSF1.50	11140.00	11106.58				MinPt-EOU
599.21	168.01		486.66	431.20	5.39	OSF1.50	11200.00	11166.58				MinPt-ADP
604.25	175.69		486.59	428.57	5.19	OSF1.50	11730.00	11696.58				MinPt-EOU
604.32	175.76		486.61	428.57	5.19	OSF1.50	11740.00	11706.58				MinPt-ADP
605.00	176.04		487.10	428.96	5.19	OSF1.50	11780.00	11746.50				MinPt-SF
10511.94	192.25		10383.27	10319.69	82.65	OSF1.50	22410.64	12285.00				TD
30-025-40818 - TRES EQUIS 5 STATE 2Y - Gyro+MWD to 15531ft - P (DefinitiveSurvey) - Pass												
622.64	32.81		620.66	589.83	714923.99	MAS = 10.00 (m)	0.00	0.00				Surface
622.57	32.81		620.54	589.76	14751.51	MAS = 10.00 (m)	23.00	23.00				WRP
613.45	32.81		599.26	580.64	50.09	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
611.68	32.81		592.52	578.87	35.05	MAS = 10.00 (m)	1813.44	1813.44				MinPts
611.87	32.81		592.35	579.07	34.35	MAS = 10.00 (m)	1850.00	1850.00				MinPt-EOU
1165.71	112.24		1090.34	1053.47	15.78	OSF1.50	7520.00	7486.58				MinPt-ADP
1168.95	116.09		1091.02	1052.86	15.30	OSF1.50	7780.00	7746.58				MinPt-EOU
1173.49	135.50		1082.62	1037.99	13.13	OSF1.50	9100.00	9066.58				MinPt-CiCt
1174.16	143.87		1077.71	1030.29	12.36	OSF1.50	9670.00	9636.58				MinPt-CiCt
1169.78	157.93		1063.95	1011.85	11.21	OSF1.50	10720.00	10686.58				MinPt-CiCt
1169.78	157.99		1063.92	1011.80	11.21	OSF1.50	10730.00	10696.58				MinPts
1170.66	158.23		1064.63	1012.42	11.20	OSF1.50	10780.00	10746.58				MinPt-SF
1633.88	139.79		1540.18	1494.09	17.71	OSF1.50	12950.00	12285.00				MinPt-CiCt
1634.13	140.64		1539.87	1493.49	17.60	OSF1.50	13030.00	12285.00				MinPt-EOU
1634.51	141.09		1539.95	1493.42	17.55	OSF1.50	13070.00	12285.00				MinPt-ADP
1617.51	159.47		1510.69	1458.04	15.34	OSF1.50	14090.00	12285.00				MinPt-CiCt
1554.63	228.04		1402.10	1326.59	10.28	OSF1.50	16380.00	12285.00				MinPt-CiCt
1556.08	233.61		1399.84	1322.47	10.05	OSF1.50	16560.00	12285.00				MinPt-EOU
1561.87	245.91		1397.43	1315.96	9.58	OSF1.50	16900.00	12285.00				MinPts
1565.56	247.05		1400.36	1318.51	9.55	OSF1.50	16990.00	12285.00				MinPt-SF
5746.05	201.90		5610.94	5544.14	43.00	OSF1.50	22410.64	12285.00				TD
30-025-44343 - HEMLOCK 32 STATE 701H - MWD to 17540ft - A (DefinitiveSurvey) - Pass												
1165.74	32.81		1163.76	1132.93	6692487.27	MAS = 10.00 (m)	0.00	0.00				MinPts
1165.75	32.81		1163.76	1132.94	156783.99	MAS = 10.00 (m)	23.00	23.00				WRP
1168.15	32.81		1161.26	1135.35	237.25	MAS = 10.00 (m)	580.00	580.00				MinPt-EOU
1173.14	32.81		1159.13	1140.34	97.29	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
612.13	131.36		524.02	480.77	7.06	OSF1.50	8742.13	8708.71				MinPt-CiCt
612.41	132.20		523.74	480.21	7.02	OSF1.50	8800.00	8766.58				MinPt-EOU
612.76	132.63		523.81	480.14	7.00	OSF1.50	8830.00	8796.58				MinPt-ADP
624.63	150.75		523.59	473.88	6.27	OSF1.50	10070.00	10036.58				MinPt-EOU
631.05	159.92		523.90	471.13	5.96	OSF1.50	10690.00	10656.58				MinPt-EOU
631.78	160.79		524.05	470.99	5.94	OSF1.50	10750.00	10716.58				MinPt-ADP
642.60	170.51		528.39	472.09	5.69	OSF1.50	11410.00	11376.58				MinPt-EOU
643.57	171.68		528.58	471.89	5.66	OSF1.50	11490.00	11456.58				MinPt-ADP
647.15	175.08		529.89	472.07	5.58	OSF1.50	11725.94	11692.52				MinPt-ADP
648.38	175.55		530.81	472.83	5.58	OSF1.50	11790.00	11756.45				MinPt-SF
10506.19	192.40		10377.43	10313.79	82.54	OSF1.50	22410.64	12285.00				TD

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major	
30-025-46752 - HEMLOCK 32 STATE 201H - MWD to 14523ft - A (DefinitiveSurvey) - Pass												
	1230.90	32.81	1228.92	1198.09	#####	MAS = 10.00 (m)	0.00	0.00				MinPts
	1230.90	32.81	1228.91	1198.09	88250.19	MAS = 10.00 (m)	23.00	23.00				WRP
	1208.77	32.81	1192.21	1175.96	81.54	MAS = 10.00 (m)	1540.00	1540.00				MinPts
	1208.98	32.81	1192.06	1176.17	79.66	MAS = 10.00 (m)	1580.00	1580.00				MinPt-EOU
	700.17	136.09	608.90	564.08	7.79	OSF1.50	9086.20	9052.78				MinPt-CiCt
	700.35	136.69	608.68	563.65	7.76	OSF1.50	9130.00	9096.58				MinPt-EOU
	700.57	136.96	608.72	563.61	7.75	OSF1.50	9150.00	9116.58				MinPt-ADP
	703.93	138.32	611.18	565.61	7.71	OSF1.50	9260.00	9226.58				MinPt-SF
	3034.60	116.00	2956.77	2918.60	39.74	OSF1.50	12775.94	12285.00				MinPt-SF
	3195.84	122.64	3113.58	3073.20	39.55	OSF1.50	13150.00	12285.00				MinPt-SF
	11003.15	187.37	10877.73	10815.78	88.78	OSF1.50	22410.64	12285.00				TD
30-025-46754 - HEMLOCK 32 STATE 203H - MWD to 14496ft - A (DefinitiveSurvey) - Pass												
	865.23	32.81	863.25	832.42	7412928.55	MAS = 10.00 (m)	0.00	0.00				Surface
	865.21	32.81	863.20	832.40	24609.36	MAS = 10.00 (m)	23.00	23.00				WRP
	847.19	38.58	820.88	808.60	34.44	OSF1.50	2540.00	2536.64				MinPt-CiCt
	742.69	69.34	695.87	673.35	16.45	OSF1.50	4520.00	4503.92				MinPt-CiCt
	743.15	70.86	695.32	672.29	16.09	OSF1.50	4620.00	4603.28				MinPt-EOU
	743.77	71.62	695.44	672.16	15.93	OSF1.50	4670.00	4652.96				MinPt-ADP
	743.83	103.99	673.97	639.84	10.88	OSF1.50	6760.00	6729.53				MinPt-CiCt
	743.96	104.27	673.91	639.69	10.85	OSF1.50	6780.00	6749.40				MinPt-EOU
	744.08	104.41	673.94	639.68	10.83	OSF1.50	6790.00	6759.34				MinPt-ADP
	737.41	138.09	644.81	599.32	8.09	OSF1.50	9117.43	9084.01				MinPt-CiCt
	737.45	138.21	644.77	599.23	8.08	OSF1.50	9130.00	9096.58				MinPt-EOU
	737.52	138.31	644.78	599.21	8.08	OSF1.50	9140.00	9106.58				MinPt-ADP
	738.96	138.81	645.88	600.15	8.06	OSF1.50	9200.00	9166.58				MinPt-SF
	3120.98	115.22	3043.67	3005.76	41.15	OSF1.50	12810.00	12285.00				MinPt-SF
	10991.14	188.03	10865.28	10803.11	88.37	OSF1.50	22410.64	12285.00				TD
30-025-40582 - EATA FAJITA STATE 1H - Gyro+MWD to 15607ft - A (DefinitiveSurvey) - Pass												
	10020.97	32.81	10018.99	9988.16	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	10020.75	32.81	10018.74	9987.95	274364.33	MAS = 10.00 (m)	23.00	23.00				WRP
	10020.43	32.81	10018.18	9987.62	36719.80	MAS = 10.00 (m)	100.00	100.00				MinPts
	10024.44	32.81	10012.48	9991.63	1004.30	MAS = 10.00 (m)	1150.00	1150.00				MinPt-EOU
	10025.70	32.81	10012.36	9992.89	881.81	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
	10026.52	32.81	10012.43	9993.71	812.73	MAS = 10.00 (m)	1390.00	1390.00				MinPt-EOU
	5551.62	163.87	5441.84	5387.76	51.31	OSF1.50	11140.00	11106.58				MinPt-CiCt
	5551.71	164.13	5441.75	5387.58	51.23	OSF1.50	11170.00	11136.58				MinPt-EOU
	5551.85	164.30	5441.78	5387.55	51.17	OSF1.50	11190.00	11156.58				MinPt-ADP
	5582.52	168.69	5469.52	5413.83	50.11	OSF1.50	11725.94	11692.52				MinPt-SF
	1231.42	209.79	1091.06	1021.63	8.86	OSF1.50	17560.00	12285.00				MinPt-SF
	1226.77	209.31	1086.73	1017.46	8.84	OSF1.50	17750.00	12285.00				MinPt-SF
	1219.95	209.56	1079.74	1010.38	8.78	OSF1.50	18340.00	12285.00				MinPt-SF
	1216.78	210.88	1075.69	1005.89	8.71	OSF1.50	18680.00	12285.00				MinPt-CiCt
	1216.86	211.25	1075.53	1005.61	8.69	OSF1.50	18740.00	12285.00				MinPt-EOU
	1216.98	211.41	1075.55	1005.58	8.69	OSF1.50	18760.00	12285.00				MinPt-ADP
	1219.37	212.31	1077.33	1007.06	8.67	OSF1.50	18920.00	12285.00				MinPt-SF
	1187.06	232.84	1031.33	954.22	7.69	OSF1.50	20827.73	12285.00				MinPt-CiCt
	1187.44	234.03	1030.92	953.40	7.65	OSF1.50	20890.00	12285.00				MinPt-EOU
	1187.89	234.60	1030.99	953.29	7.63	OSF1.50	20920.00	12285.00				MinPt-ADP
	1192.05	243.82	1029.00	948.23	7.37	OSF1.50	21470.00	12285.00				MinPt-CiCt
	1192.52	245.32	1028.47	947.20	7.33	OSF1.50	21540.00	12285.00				MinPt-EOU
	1193.23	246.17	1028.61	947.05	7.31	OSF1.50	21580.00	12285.00				MinPt-ADP
	1209.06	254.47	1038.91	954.58	7.16	OSF1.50	21980.00	12285.00				MinPt-SF
	1298.35	260.01	1124.52	1038.35	7.53	OSF1.50	22410.64	12285.00				TD
30-025-41056 - HEARTTHROB BSX STATE 1H - Gyro+MWD to 15815ft - A (DefinitiveSurvey) - Pass												
	10409.37	32.81	10407.39	10376.56	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	10409.22	32.81	10407.21	10376.41	414265.62	MAS = 10.00 (m)	23.00	23.00				WRP
	10409.06	32.81	10406.88	10376.25	51529.02	MAS = 10.00 (m)	80.00	80.00				MinPts
	10409.86	32.81	10405.57	10377.05	4508.91	MAS = 10.00 (m)	360.00	360.00				MinPt-EOU
	10410.21	32.81	10405.57	10377.40	3916.80	MAS = 10.00 (m)	400.00	400.00				MinPt-EOU
	10412.54	32.81	10404.39	10379.73	1687.26	MAS = 10.00 (m)	760.00	760.00				MinPt-EOU
	10412.75	32.81	10398.99	10379.95	883.23	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
	10412.70	32.81	10398.66	10379.90	847.41	MAS = 10.00 (m)	1360.00	1360.00				MinPts
	10413.00	32.81	10396.04	10380.19	685.08	MAS = 10.00 (m)	1800.00	1800.00				MinPts
	10413.16	32.81	10395.84	10380.35	669.16	MAS = 10.00 (m)	1850.00	1850.00				MinPt-EOU
	10572.62	69.73	10525.59	10502.89	232.77	OSF1.50	5070.00	5050.39				MinPts
	10624.43	84.80	10567.36	10539.63	191.56	OSF1.50	6020.00	5994.28				MinPts
	10643.06	145.93	10545.24	10497.13	110.61	OSF1.50	10240.00	10206.58				MinPt-CiCt
	10645.07	150.70	10544.07	10494.37	107.09	OSF1.50	10610.00	10576.58				MinPt-EOU
	10645.92	151.71	10544.24	10494.21	106.37	OSF1.50	10700.00	10666.58				MinPt-ADP
	10691.22	160.72	10583.54	10530.50	100.78	OSF1.50	11725.94	11692.52				MinPt-SF
	1285.32	244.19	1122.02	1041.12	7.93	OSF1.50	22410.64	12285.00				MinPts
30-025-41057 - HEARTTHROB BSX STATE 2H - Gyro+MWD to 15824ft - A (DefinitiveSurvey) - Pass												
	10380.02	32.81	10378.04	10347.21	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	10379.88	32.81	10377.88	10347.07	468920.54	MAS = 10.00 (m)	23.00	23.00				WRP
	10379.76	32.81	10377.61	10346.95	62313.97	MAS = 10.00 (m)	70.00	70.00				MinPts
	10384.29	32.81	10375.84	10351.48	1605.75	MAS = 10.00 (m)	790.00	790.00				MinPt-EOU
	10387.72	32.81	10373.92	10354.92	878.56	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
	10384.80	32.81	10367.72	10352.00	677.49	MAS = 10.00 (m)	1820.00	1820.00				MinPts
	10384.96	32.81	10367.58	10352.15	664.57	MAS = 10.00 (m)	1860.00	1860.00				MinPt-EOU
	10541.98	63.93	10498.77	10478.05	254.29	OSF1.50	4670.00	4652.96				MinPt-ADP
	10708.72	108.03	10636.16	10600.69	150.93	OSF1.50	7590.00	7556.58				MinPt-CiCt
	10704.42	121.84	10622.66	10582.58	133.54	OSF1.50	8560.00	8526.58				MinPt-CiCt
	10681.42	149.96	10580.91	10531.47	107.99	OSF1.50	10510.00	10476.58				MinPt-CiCt
	10682.09	151.99	10580.23	10530.10	106.54	OSF1.50	10690.00	10656.58				MinPt-EOU
	10682.53	152.52	10580.32	10530.02	106.17	OSF1.50	10740.00	10706.58				MinPt-ADP

Offset Trajectory	Separation			Allow	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major	
10728.24	160.85	10620.47	10567.39	101.04		OSF1.50	11725.94	11692.52				MinPt-SF
1507.26	255.03	1336.74	1252.23	8.91		OSF1.50	22410.64	12285.00				MinPts
30-025-40570 - EATA FAJITA STATE 2H - Gyro+MWD to 15410ft - A (DefinitiveSurvey) - Pass												
9771.92	32.81	9769.94	9739.11	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
9771.79	32.81	9769.79	9738.98	494788.03		MAS = 10.00 (m)	23.00	23.00				WRP
9771.22	32.81	9766.01	9738.42	3022.28		MAS = 10.00 (m)	420.00	420.00				MinPts
9772.27	32.81	9758.45	9739.47	824.79		MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
9770.20	32.81	9751.03	9737.39	561.19		MAS = 10.00 (m)	1830.00	1830.00				MinPts
9770.32	32.81	9750.92	9737.51	553.93		MAS = 10.00 (m)	1860.00	1860.00				MinPt-EOU
5654.24	170.43	5540.08	5483.81	50.23		OSF1.50	11220.00	11186.58				MinPt-CiCt
5654.31	170.68	5539.98	5483.63	50.15		OSF1.50	11250.00	11216.58				MinPt-EOU
5654.44	170.84	5540.00	5483.59	50.11		OSF1.50	11270.00	11236.58				MinPt-ADP
5676.53	174.29	5559.80	5502.25	49.30		OSF1.50	11725.94	11692.52				MinPt-SF
1541.94	253.81	1372.24	1288.13	9.16		OSF1.50	17590.00	12285.00				MinPt-SF
1541.81	253.73	1372.16	1288.08	9.16		OSF1.50	17610.00	12285.00				MinPt-ADP
1541.76	253.68	1372.14	1288.08	9.16		OSF1.50	17620.00	12285.00				MinPt-EOU
1541.71	253.57	1372.17	1288.14	9.17		OSF1.50	17640.00	12285.00				MinPt-CiCt
1545.90	248.57	1379.69	1297.33	9.38		OSF1.50	18060.00	12285.00				MinPt-ADP
1545.82	248.46	1379.68	1297.36	9.38		OSF1.50	18080.00	12285.00				MinPt-EOU
1545.78	248.29	1379.75	1297.49	9.39		OSF1.50	18110.00	12285.00				MinPt-CiCt
1541.54	242.05	1379.67	1299.49	9.60		OSF1.50	18690.00	12285.00				MinPt-SF
1541.02	241.93	1379.23	1299.09	9.60		OSF1.50	18777.35	12285.00				MinPts
1548.67	240.20	1388.03	1308.47	9.72		OSF1.50	19160.00	12285.00				MinPt-CiCt
1549.67	240.32	1388.96	1309.35	9.72		OSF1.50	19350.00	12285.00				MinPt-SF
1551.68	240.57	1390.80	1311.11	9.73		OSF1.50	19550.00	12285.00				MinPt-SF
1553.99	241.00	1392.82	1312.99	9.72		OSF1.50	19730.00	12285.00				MinPt-SF
1546.85	244.38	1383.44	1302.48	9.54		OSF1.50	20410.00	12285.00				MinPt-CiCt
1547.09	245.04	1383.23	1302.05	9.52		OSF1.50	20470.00	12285.00				MinPt-EOU
1547.18	245.15	1383.24	1302.02	9.52		OSF1.50	20480.00	12285.00				MinPt-ADP
1547.97	246.29	1383.28	1301.68	9.48		OSF1.50	20610.00	12285.00				MinPt-EOU
1548.43	246.85	1383.36	1301.58	9.46		OSF1.50	20660.00	12285.00				MinPt-ADP
1557.21	257.34	1385.15	1299.87	9.12		OSF1.50	21470.00	12285.00				MinPt-CiCt
1557.64	258.68	1384.69	1298.96	9.08		OSF1.50	21540.00	12285.00				MinPt-EOU
1557.82	258.90	1384.73	1298.93	9.07		OSF1.50	21550.00	12285.00				MinPt-ADP
1572.57	263.48	1396.42	1309.09	9.00		OSF1.50	21800.00	12285.00				MinPt-SF
1704.23	268.79	1524.54	1435.45	9.56		OSF1.50	22410.64	12285.00				TD
30-025-47138 - HEARTTHROB 17 STATE 202H - IFR1 to 14918ft - A (DefinitiveSurvey) - Pass												
10895.04	32.81	10893.06	10862.23	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
10894.90	32.81	10892.90	10862.10	516612.70		MAS = 10.00 (m)	23.00	23.00				WRP
10894.79	32.81	10892.61	10861.98	53933.68		MAS = 10.00 (m)	80.00	80.00				MinPts
10896.14	32.81	10891.51	10863.33	4113.55		MAS = 10.00 (m)	410.00	410.00				MinPt-EOU
10599.90	69.94	10552.68	10529.96	233.15		OSF1.50	4270.00	4255.53				MinPt-CiCt
10600.65	71.93	10552.11	10528.72	226.56		OSF1.50	4440.00	4424.43				MinPt-EOU
10511.19	113.67	10434.88	10397.53	140.69		OSF1.50	7050.00	7017.67				MinPt-CiCt
10503.73	123.64	10420.76	10380.09	129.10		OSF1.50	8020.00	7996.58				MinPt-CiCt
10504.81	126.79	10419.75	10378.02	125.86		OSF1.50	8290.00	8256.58				MinPt-EOU
10506.29	128.59	10420.02	10377.70	124.10		OSF1.50	8440.00	8406.58				MinPt-ADP
10527.61	142.53	10432.06	10385.09	112.05		OSF1.50	9480.00	9446.58				MinPt-ADP
10777.29	158.09	10671.36	10619.21	103.30		OSF1.50	11700.00	11666.58				MinPt-SF
2436.62	254.22	2266.65	2182.41	14.45		OSF1.50	22410.64	12285.00				MinPts
30-025-42506 - EATA FAJITA STATE 12H - MWD to 14092ft - A (DefinitiveSurvey) - Pass												
10069.98	32.81	10068.00	10037.17	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
10069.83	32.81	10067.82	10037.02	416621.33		MAS = 10.00 (m)	23.00	23.00				WRP
5409.32	156.32	5304.57	5253.01	52.43		OSF1.50	9630.00	9596.58				MinPt-CiCt
5409.36	156.44	5304.53	5252.92	52.39		OSF1.50	9650.00	9616.58				MinPt-EOU
5409.41	156.51	5304.53	5252.90	52.37		OSF1.50	9660.00	9626.58				MinPt-ADP
5499.22	162.04	5390.65	5337.18	51.40		OSF1.50	10620.00	10586.58				MinPt-SF
2688.58	193.97	2558.77	2494.61	20.94		OSF1.50	17710.00	12285.00				MinPt-CiCt
2688.69	194.29	2558.66	2494.39	20.91		OSF1.50	17750.00	12285.00				MinPt-EOU
2688.81	194.46	2558.68	2494.36	20.89		OSF1.50	17770.00	12285.00				MinPt-ADP
2692.15	196.06	2560.94	2496.08	20.74		OSF1.50	17940.00	12285.00				MinPt-SF
2691.47	194.74	2561.14	2496.73	20.88		OSF1.50	18040.00	12285.00				MinPts
2691.06	194.26	2561.05	2496.80	20.93		OSF1.50	18070.00	12285.00				MinPts
2659.89	199.56	2526.35	2460.33	20.13		OSF1.50	18730.00	12285.00				MinPt-CiCt
2660.17	200.31	2526.13	2459.87	20.06		OSF1.50	18790.00	12285.00				MinPt-EOU
2660.66	200.90	2526.22	2459.76	20.00		OSF1.50	18840.00	12285.00				MinPt-ADP
2666.57	203.96	2530.10	2462.61	19.75		OSF1.50	19100.00	12285.00				MinPt-SF
2667.26	203.70	2530.96	2463.56	19.78		OSF1.50	19150.00	12285.00				MinPt-EOU
2667.74	204.26	2531.06	2463.48	19.72		OSF1.50	19190.00	12285.00				MinPt-ADP
2672.68	207.11	2534.11	2465.57	19.49		OSF1.50	19390.00	12285.00				MinPt-SF
2666.49	210.43	2525.70	2456.05	19.13		OSF1.50	19810.00	12285.00				MinPt-SF
2660.76	213.19	2518.14	2447.57	18.84		OSF1.50	20010.00	12285.00				MinPt-SF
2654.28	218.23	2508.29	2436.05	18.36		OSF1.50	20310.50	12285.00				MinPt-CiCt
2654.86	219.90	2507.76	2434.96	18.22		OSF1.50	20390.00	12285.00				MinPt-EOU
2655.42	220.55	2507.89	2434.87	18.17		OSF1.50	20420.00	12285.00				MinPt-ADP
2673.30	228.18	2520.68	2445.12	17.68		OSF1.50	20840.00	12285.00				MinPt-SF
2671.77	229.96	2517.96	2441.81	17.53		OSF1.50	21010.00	12285.00				MinPt-CiCt
2672.45	232.76	2516.78	2439.69	17.32		OSF1.50	21170.00	12285.00				MinPt-SF
2666.50	237.85	2507.43	2428.65	16.91		OSF1.50	21440.00	12285.00				MinPt-CiCt
2667.07	239.51	2506.89	2427.56	16.80		OSF1.50	21510.00	12285.00				MinPt-EOU
2667.86	240.44	2507.07	2427.42	16.74		OSF1.50	21550.00	12285.00				MinPt-ADP
2736.96	255.18	2566.34	2481.78	16.17		OSF1.50	22240.00	12285.00				MinPt-SF
2774.83	257.99	2602.34	2516.84	16.22		OSF1.50	22410.64	12285.00				TD
30-025-42505 - EATA FAJITA STATE 11H - Gyro+MWD to 14201ft - A (DefinitiveSurvey) - Pass												
10076.24	32.81	10074.26	10043.43	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
10076.09	32.81	10074.09	10043.28	417139.82		MAS = 10.00 (m)	23.00	23.00				WRP

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major	
10075.95	32.81	10073.77	10043.14	49879.69	MAS = 10.00 (m)	80.00	80.00					MinPts
5445.53	143.93	5349.03	5301.60	57.38	OSF1.50	9720.00	9686.58					MinPt-CiCt
5445.58	144.09	5348.98	5301.49	57.32	OSF1.50	9740.00	9706.58					MinPt-EOU
5445.71	144.24	5349.01	5301.47	57.26	OSF1.50	9760.00	9726.58					MinPt-ADP
5633.82	154.60	5530.21	5479.22	55.22	OSF1.50	11160.00	11126.58					MinPt-SF
2686.48	202.88	2550.72	2483.60	20.00	OSF1.50	17459.42	12285.00					MinPt-CiCt
2686.65	203.43	2550.53	2483.23	19.95	OSF1.50	17490.00	12285.00					MinPt-EOU
2686.95	203.78	2550.60	2483.17	19.91	OSF1.50	17510.00	12285.00					MinPt-ADP
2688.75	204.74	2551.76	2484.01	19.83	OSF1.50	17570.00	12285.00					MinPt-SF
2693.29	204.85	2556.22	2488.44	19.86	OSF1.50	17680.00	12285.00					MinPt-SF
2717.35	204.59	2580.46	2512.76	20.06	OSF1.50	18260.00	12285.00					MinPt-SF
2726.12	205.41	2588.67	2520.70	20.04	OSF1.50	18540.00	12285.00					MinPt-SF
2731.03	205.70	2593.40	2525.33	20.05	OSF1.50	18690.00	12285.00					MinPt-SF
2730.10	205.00	2592.93	2525.09	20.11	OSF1.50	18810.00	12285.00					MinPt-CiCt
2730.31	205.73	2592.66	2524.58	20.04	OSF1.50	18870.00	12285.00					MinPt-EOU
2730.71	206.21	2592.74	2524.50	20.00	OSF1.50	18910.00	12285.00					MinPt-ADP
2738.38	209.07	2598.50	2529.32	19.78	OSF1.50	19180.00	12285.00					MinPt-SF
2737.77	208.69	2598.14	2529.08	19.81	OSF1.50	19300.00	12285.00					MinPt-CiCt
2738.12	209.77	2597.77	2528.34	19.71	OSF1.50	19370.00	12285.00					MinPt-EOU
2738.50	210.24	2597.84	2528.26	19.67	OSF1.50	19400.00	12285.00					MinPt-ADP
2760.07	217.19	2614.78	2542.88	19.18	OSF1.50	19870.00	12285.00					MinPt-SF
2763.57	217.41	2618.13	2546.16	19.19	OSF1.50	20030.00	12285.00					MinPt-ADP
2765.08	218.59	2618.85	2546.49	19.10	OSF1.50	20110.00	12285.00					MinPt-SF
2766.09	219.94	2618.96	2546.14	18.98	OSF1.50	20230.00	12285.00					MinPt-EOU
2766.62	220.60	2619.05	2546.02	18.93	OSF1.50	20270.00	12285.00					MinPt-ADP
2767.23	222.36	2618.49	2544.87	18.78	OSF1.50	20420.00	12285.00					MinPts
2764.67	224.68	2614.38	2539.99	18.57	OSF1.50	20580.00	12285.00					MinPt-CiCt
2765.20	226.16	2613.92	2539.03	18.45	OSF1.50	20650.00	12285.00					MinPt-EOU
2765.72	226.76	2614.05	2538.96	18.41	OSF1.50	20680.00	12285.00					MinPt-ADP
2777.10	232.01	2621.93	2545.09	18.06	OSF1.50	20950.00	12285.00					MinPt-SF
2777.70	231.40	2622.93	2546.30	18.11	OSF1.50	21000.00	12285.00					MinPt-CiCt
2778.26	233.06	2622.39	2545.20	17.99	OSF1.50	21080.00	12285.00					MinPt-EOU
2779.11	234.08	2622.56	2545.03	17.91	OSF1.50	21130.00	12285.00					MinPt-ADP
2783.41	236.89	2624.98	2546.51	17.73	OSF1.50	21270.00	12285.00					MinPt-SF
2784.36	237.98	2625.21	2546.38	17.65	OSF1.50	21360.00	12285.00					MinPt-EOU
2785.26	239.04	2625.40	2546.22	17.58	OSF1.50	21410.00	12285.00					MinPt-ADP
2850.72	259.65	2677.12	2591.07	16.56	OSF1.50	22410.64	12285.00					MinPt-SF
30-025-47140 - HEARTTHROB 17 STATE 204H - IFR1 to 14522ft - A (DefinitiveSurvey) - Pass												
10894.19	32.81	10892.21	10861.38	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
10894.06	32.81	10892.06	10861.25	526946.26	MAS = 10.00 (m)	23.00	23.00					WRP
10890.55	32.81	10885.06	10857.74	3098.77	MAS = 10.00 (m)	470.00	470.00					MinPts
10892.44	32.81	10883.53	10859.64	1569.66	MAS = 10.00 (m)	860.00	860.00					MinPt-EOU
10531.79	108.94	10458.62	10422.85	147.17	OSF1.50	6690.00	6659.98					MinPt-CiCt
10532.12	109.98	10458.26	10422.14	145.77	OSF1.50	6790.00	6759.34					MinPt-EOU
10532.44	110.36	10458.32	10422.07	145.25	OSF1.50	6830.00	6799.08					MinPt-ADP
10534.31	124.37	10450.87	10409.95	128.71	OSF1.50	8070.00	8036.58					MinPt-CiCt
10534.88	125.92	10450.40	10408.97	127.11	OSF1.50	8220.00	8186.58					MinPt-EOU
10535.71	126.91	10450.56	10408.80	126.11	OSF1.50	8310.00	8276.58					MinPt-ADP
10563.67	137.30	10471.60	10426.38	116.77	OSF1.50	9210.00	9176.58					MinPt-ADP
10572.82	142.63	10477.19	10430.19	112.45	OSF1.50	9500.00	9466.58					MinPts
10832.15	157.08	10726.89	10675.07	104.50	OSF1.50	11700.00	11666.58					MinPt-SF
2702.89	253.31	2533.52	2449.58	16.09	OSF1.50	22410.64	12285.00					MinPts
30-025-47139 - HEARTTHROB 17 STATE 203H - IFR1 to 14489ft - A (DefinitiveSurvey) - Pass												
10894.47	32.81	10892.50	10861.67	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
10894.35	32.81	10892.35	10861.54	526974.21	MAS = 10.00 (m)	23.00	23.00					WRP
10894.23	32.81	10892.09	10861.42	65404.69	MAS = 10.00 (m)	70.00	70.00					MinPts
10897.57	32.81	10890.79	10864.76	2269.96	MAS = 10.00 (m)	640.00	640.00					MinPt-EOU
10898.86	32.81	10890.58	10866.05	1730.98	MAS = 10.00 (m)	790.00	790.00					MinPt-EOU
10634.30	67.73	10588.56	10566.57	241.76	OSF1.50	4160.00	4146.23					MinPt-CiCt
10634.73	68.99	10588.15	10565.75	237.25	OSF1.50	4280.00	4265.46					MinPt-EOU
10635.17	69.51	10588.24	10565.66	235.42	OSF1.50	4330.00	4315.14					MinPt-ADP
10527.83	110.61	10453.55	10417.21	144.86	OSF1.50	6870.00	6838.83					MinPt-CiCt
10528.43	113.28	10452.37	10415.14	141.40	OSF1.50	7080.00	7047.48					MinPt-EOU
10513.84	123.60	10430.90	10390.24	129.26	OSF1.50	8080.00	8046.58					MinPt-CiCt
10514.34	125.18	10430.36	10389.17	127.62	OSF1.50	8230.00	8196.58					MinPt-EOU
10514.85	125.77	10430.47	10389.08	127.02	OSF1.50	8290.00	8256.58					MinPt-ADP
10869.14	154.27	10765.75	10714.87	106.78	OSF1.50	11700.00	11666.58					MinPt-SF
2820.06	252.23	2651.40	2567.83	16.86	OSF1.50	22410.64	12285.00					MinPts
30-025-42487 - EATA FAJITA STATE 13H - Gyro-MWD to 14250ft - A (DefinitiveSurvey) - Pass												
9989.60	32.81	9987.62	9956.80	N/A	MAS = 10.00 (m)	0.00	0.00					Surface
9989.47	32.81	9987.47	9956.66	461678.18	MAS = 10.00 (m)	23.00	23.00					WRP
9989.35	32.81	9987.21	9956.55	59972.36	MAS = 10.00 (m)	70.00	70.00					MinPts
9991.83	32.81	9984.54	9959.02	1879.94	MAS = 10.00 (m)	670.00	670.00					MinPt-EOU
5510.44	156.29	5405.70	5354.14	53.42	OSF1.50	9670.00	9636.58					MinPt-CiCt
5510.50	156.51	5405.61	5353.98	53.35	OSF1.50	9700.00	9666.58					MinPt-EOU
5510.55	156.59	5405.62	5353.96	53.32	OSF1.50	9710.00	9676.58					MinPt-ADP
5632.44	164.12	5522.49	5468.33	51.98	OSF1.50	10840.00	10806.58					MinPt-SF
2849.06	212.73	2706.74	2636.33	20.22	OSF1.50	17450.00	12285.00					MinPt-SF
2849.03	212.73	2706.71	2636.30	20.22	OSF1.50	17460.00	12285.00					MinPt-ADP
2848.77	212.46	2706.62	2636.30	20.24	OSF1.50	17550.00	12285.00					MinPt-ADP
2848.76	212.45	2706.62	2636.31	20.25	OSF1.50	17560.00	12285.00					MinPt-EOU
2848.76	212.45	2706.63	2636.31	20.25	OSF1.50	17570.00	12285.00					MinPt-CiCt
2849.22	211.82	2707.50	2637.39	20.31	OSF1.50	17800.00	12285.00					MinPt-ADP
2872.93	215.61	2728.69	2657.32	20.12	OSF1.50	18350.00	12285.00					MinPt-SF
2871.77	211.20	2730.47	2660.57	20.53	OSF1.50	18520.00	12285.00					MinPts
2863.75	212.95	2721.28	2650.80	20.30	OSF1.50	19030.00	12285.00					MinPt-CiCt
2863.95	213.58	2721.06	2650.37	20.25	OSF1.50	19080.00	12285.00					MinPt-EOU

Offset Trajectory	Separation			Allow Dev. (ft)	Sep. Fact.	Controlling Rule	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)				MD (ft)	TVD (ft)	Alert	Minor	Major	
2864.16	213.83	2721.10	2650.33	20.22		OSF1.50	19100.00	12285.00				MinPt-ADP
2878.23	218.15	2732.30	2660.08	19.92		OSF1.50	19640.00	12285.00				MinPt-SF
2878.30	217.71	2732.66	2660.59	19.96		OSF1.50	19720.00	12285.00				MinPt-CtCt
2879.33	220.24	2732.01	2659.09	19.73		OSF1.50	19950.00	12285.00				MinPt-EOU
2880.16	221.22	2732.18	2658.94	19.65		OSF1.50	20030.00	12285.00				MinPt-ADP
2881.86	222.95	2732.73	2658.92	19.51		OSF1.50	20190.00	12285.00				MinPt-EOU
2882.58	223.82	2732.87	2658.76	19.44		OSF1.50	20250.00	12285.00				MinPt-ADP
2883.35	224.31	2733.31	2659.04	19.40		OSF1.50	20310.00	12285.00				MinPt-SF
2880.50	226.54	2728.98	2653.96	19.19		OSF1.50	20490.00	12285.00				MinPt-CtCt
2880.92	227.70	2728.62	2653.22	19.09		OSF1.50	20550.00	12285.00				MinPt-EOU
2881.56	228.43	2728.77	2653.13	19.04		OSF1.50	20590.00	12285.00				MinPt-ADP
2882.98	229.52	2729.47	2653.46	18.96		OSF1.50	20650.00	12285.00				MinPt-SF
2861.57	238.66	2701.97	2622.91	18.09		OSF1.50	21320.00	12285.00				MinPts
2857.72	237.18	2699.10	2620.54	18.18		OSF1.50	21370.00	12285.00				MinPt-SF
2830.11	247.81	2664.40	2582.30	17.23		OSF1.50	21821.67	12285.00				MinPt-CtCt
2830.61	249.25	2663.95	2581.37	17.13		OSF1.50	21880.00	12285.00				MinPt-EOU
2831.02	249.73	2664.03	2581.29	17.10		OSF1.50	21900.00	12285.00				MinPt-ADP
2872.82	260.37	2698.74	2612.45	16.64		OSF1.50	22410.64	12285.00				MinPt-SF
30-025-47137 - HEARTTHROB 17 STATE 201H - IFR1 to 14426ft - A (DefinitiveSurvey) - Pass												
10895.37	32.81	10893.39	10862.56	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
10895.24	32.81	10893.24	10862.44	527061.19		MAS = 10.00 (m)	23.00	23.00				WRP
10895.13	32.81	10892.95	10862.32	53935.76		MAS = 10.00 (m)	80.00	80.00				MinPts
10894.86	32.81	10889.63	10862.06	3345.64		MAS = 10.00 (m)	440.00	440.00				MinPts
10897.49	32.81	10886.77	10864.68	1246.70		MAS = 10.00 (m)	1030.00	1030.00				MinPt-EOU
10514.33	117.07	10435.74	10397.26	136.58		OSF1.50	7090.00	7057.41				MinPt-CtCt
10501.30	125.57	10417.05	10375.74	127.06		OSF1.50	7940.00	7906.58				MinPt-CtCt
10501.49	126.14	10416.86	10375.35	126.48		OSF1.50	8010.00	7976.58				MinPt-EOU
10501.77	126.46	10416.92	10375.30	126.15		OSF1.50	8050.00	8016.58				MinPt-ADP
10504.19	128.50	10417.98	10375.69	124.16		OSF1.50	8230.00	8196.58				MinPt-ADP
10517.92	135.55	10427.01	10382.37	117.77		OSF1.50	8820.00	8786.58				MinPt-ADP
10845.11	157.65	10739.47	10687.46	104.24		OSF1.50	11700.00	11666.58				MinPt-SF
2850.27	254.87	2679.86	2595.40	16.87		OSF1.50	22410.64	12285.00				MinPts
30-025-48386 - HEARTTHROB 17 STATE 101H - IFR1 to 14270ft - A (DefinitiveSurvey) - Pass												
10894.76	32.81	10892.78	10861.95	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
10894.63	32.81	10892.63	10861.82	516586.31		MAS = 10.00 (m)	23.00	23.00				WRP
10893.86	32.81	10888.07	10861.05	2862.02		MAS = 10.00 (m)	500.00	500.00				MinPts
10894.06	32.81	10886.59	10861.25	1984.89		MAS = 10.00 (m)	670.00	670.00				MinPts
10612.99	68.57	10566.69	10544.42	238.26		OSF1.50	4220.00	4205.85				MinPt-CtCt
10613.46	69.97	10566.23	10543.49	233.36		OSF1.50	4350.00	4335.01				MinPt-EOU
10458.67	106.65	10387.04	10352.03	149.34		OSF1.50	6630.00	6600.37				MinPt-CtCt
10458.93	107.39	10386.80	10351.54	148.30		OSF1.50	6710.00	6679.85				MinPt-EOU
10459.25	107.75	10386.87	10351.49	147.79		OSF1.50	6750.00	6719.60				MinPt-ADP
10475.62	114.36	10398.84	10361.26	139.35		OSF1.50	7470.00	7436.58				MinPt-ADP
10479.05	117.95	10399.87	10361.09	135.09		OSF1.50	7750.00	7716.58				MinPt-ADP
10871.01	152.91	10768.53	10718.10	107.76		OSF1.50	11700.00	11666.58				MinPt-SF
2929.02	249.25	2762.35	2679.76	17.72		OSF1.50	22410.64	12285.00				MinPts



Coterra Tres Equis 5-8 State 351H Rev0 kFc 09Sep24 Proposal Geodetic Report

Def Plan

Report Date:	September 09, 2024 - 10:10 PM (UTC 0)	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	COTERRA	Vertical Section Azimuth:	179.610 (10090 North)
Field:	NM Lea County (NAD 83)	Vertical Section Origin:	0.000 ft, 0.000 ft
Structure / Slot:	Coterra Tres Equis 5 State Pad Lot 3 / Tres Equis 5-8 State 351H	TVD Reference Datum:	RKB
Well:	Tres Equis 5-8 State 351H	TVD Reference Elevation:	3680.600 ft above MSL
Borehole:	Tres Equis 5-8 State 351H	Seabed / Ground Elevation:	3657.600 ft above MSL
UBHI / API#:	Unknown / Unknown	Magnetic Declination:	6.150°
Survey Name:	Coterra Tres Equis 5-8 State 351H Rev0 kFc 09Sep24	Total Gravity Field Strength:	998.4381mgN (9.80665 Based)
Survey Date:	September 09, 2024	Gravity Model:	GARM
Tort / AHD / DOI / ERD Ratio:	102.995' / 10956.995 ft / 6.314 / 0.892	Total Magnetic Field Strength:	47304.821 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.771°
Location Lat / Long:	32°15'10.37014"N, 103°35'52.71586"W	Declination Date:	September 09, 2024
Location Grid N/E Y/X:	N 456509.780 RUS, E 768664.150 RUS	Magnetic Declination Model:	HDGM 2024
CRS Grid Convergence Angle:	0.392'	North Reference:	Grid North
Grid Scale Factor:	0.99996828(Applied)	Grid Convergence Used:	0.392°
Version / Patch:	2024.4.0.4	Total Corr Mag North->Grid North:	5.758°
		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 [387' FNL, 1518' FWL]	0.00	0.00		0.00	-3.680.60	0.00	0.00	0.00	456,508.78	768,664.15	32.25288059	-103.59797663			
Nudge, Build 2"/100ft	1,800.00	0.00	298.29	1,800.00	-1,880.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
Hold	2,124.88	6.50	298.29	2,124.18	-1,556.42	-8.83	8.72	-16.20	456,518.50	768,647.95	32.25290487	-103.59802884	2.00	2.00	0.00
Drop 2"/100ft	7,111.06	6.50	298.29	7,078.34	3,397.74	-279.62	276.14	-513.04	456,785.91	768,151.12	32.25364923	-103.59962995	0.00	0.00	0.00
Hold	7,435.94	0.00	298.29	7,402.52	3,721.92	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	2.00	-2.00	0.00
KOP, Build 10"/100ft	11,725.94	0.00	298.29	11,692.52	8,011.92	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
Build 5"/100ft	12,475.94	75.00	179.61	12,245.95	8,565.35	136.21	-139.80	-526.36	456,369.99	768,137.81	32.25250625	-103.59968220	10.00	10.00	0.00
Landing Point	12,775.94	90.00	179.61	12,285.00	8,604.40	432.79	-436.37	-524.35	456,073.42	768,139.82	32.25169105	-103.59968225	5.00	5.00	0.00
Tres Equis 5-8 State 351H - PBHL [100'FSL, 990'FWL]	22,410.64	90.00	179.61	12,285.00	8,604.40	10,067.50	-10,070.86	-459.30	446,439.26	768,204.87	32.22520865	-103.59968471	0.00	0.00	0.00

Survey Type: Def Plan

Survey Error Model: ISCWSAO 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	11,700.400	1/100.000	5 - 12.25	8.75	3.375 - 9.625	A001Mb_MWD		Tres Equis 5-8 State 351H / Coterra Tres Equis 5-8
	1	11,700.400	22,982.823	1/100.000	8.75 - 6	7 - 5		A008Mb_MWD+IFR1+MS		Tres Equis 5-8 State 351H / Coterra Tres Equis 5-8

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,366.500	17.500	13.375	
5,000.500	12.250	9.625	
11,817.500	8.750	7.000	
22,410.644	6.000	5.000	



Coterra Tres Equis 5-8 State 351H Rev0 kFc 09Sep24 Proposal Geodetic Report

Def Plan

Report Date: September 09, 2024 - 10:06 PM (UTC 0)
Client: COTERRA
Field: NM Lea County (NAD 83)
Structure / Slot: Coterra Tres Equis 5 State Pad Lot 3 / Tres Equis 5-8 State 351H
Well: Tres Equis 5-8 State 351H
Borehole: Tres Equis 5-8 State 351H
UBH1 / API#: Unknown / Unknown
Survey Name: Coterra Tres Equis 5-8 State 351H Rev0 kFc 09Sep24
Survey Date: September 09, 2024
Tort / AHD / DDI / ERD Ratio: 102.995' / 10955.995 ft / 6.314' / 0.892
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: 32°15'10.3704"N, -103°35'52.71586"W
Location Grid N/E Y/X: N 456509.780 RUS, E 768664.150 RUS
CRS Grid Convergence Angle: 0.392"
Grid Scale Factor: 0.99996828(Applied)
Version / Patch: 2024.0.4.0

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 179.610' (GRID North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3680.600 ft above MSL
Sealed / Ground Elevation: 3657.600 ft above MSL
Magnetic Declination: 6.150"
Total Gravity Field Strength: 996.4381mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47304.821 nT
Magnetic Dip Angle: 59.771"
Declination Date: September 09, 2024
Magnetic Declination Model: HDGM 2024
North Reference: Grid North
Grid Convergence Used: 0.392"
Total Corr Mag North->Grid North: 5.758"
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 [387' FNL, 1518' FWL]	0.00	0.00	0.00	0.00	-3.680.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663			
	100.00	0.00	298.29	100.00	-3.580.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	200.00	0.00	298.29	200.00	-3.480.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	300.00	0.00	298.29	300.00	-3.380.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	400.00	0.00	298.29	400.00	-3.280.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	500.00	0.00	298.29	500.00	-3.180.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	600.00	0.00	298.29	600.00	-3.080.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	700.00	0.00	298.29	700.00	-2.980.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	800.00	0.00	298.29	800.00	-2.880.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	900.00	0.00	298.29	900.00	-2.780.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
Rustier	1,000.00	0.00	298.29	1,000.00	-2.680.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,100.00	0.00	298.29	1,100.00	-2.580.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,200.00	0.00	298.29	1,200.00	-2.480.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,285.00	0.00	298.29	1,285.00	-2.395.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,300.00	0.00	298.29	1,300.00	-2.380.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,370.00	0.00	298.29	1,370.00	-2.310.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,400.00	0.00	298.29	1,400.00	-2.280.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,500.00	0.00	298.29	1,500.00	-2.180.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,510.00	0.00	298.29	1,510.00	-2.170.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,600.00	0.00	298.29	1,600.00	-2.080.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
A3 Top	1,700.00	0.00	298.29	1,700.00	-1.980.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,795.00	0.00	298.29	1,795.00	-1.885.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,800.00	0.00	298.29	1,800.00	-1.880.60	0.00	0.00	0.00	456,509.78	768,664.15	32.25288059	-103.59797663	0.00	0.00	0.00
	1,899.00	2.00	298.29	1,899.98	-1.780.62	-0.84	0.83	-1.54	456,510.61	768,662.61	32.25288290	-103.59798158	2.00	2.00	0.00
	2,000.00	4.00	298.29	1,999.84	-1.680.76	-3.35	3.31	-6.14	456,513.09	768,658.01	32.25288990	-103.59799643	2.00	2.00	0.00
	2,100.00	6.00	298.29	2,099.45	-1.581.15	-7.53	7.44	-13.82	456,517.22	768,650.33	32.25290130	-103.59802116	2.00	2.00	0.00
	2,124.88	6.50	298.29	2,124.18	-1.556.42	-8.83	8.72	-16.20	456,518.50	768,647.95	32.25290487	-103.59802884	2.00	2.00	0.00
	2,200.00	6.50	298.29	2,198.82	-1.481.78	-12.91	12.75	-23.69	456,522.53	768,640.46	32.25291609	-103.59805297	0.00	0.00	0.00
	2,300.00	6.50	298.29	2,298.18	-1.382.42	-18.34	18.11	-33.65	456,527.89	768,630.50	32.25293101	-103.59808508	0.00	0.00	0.00
	2,400.00	6.50	298.29	2,297.54	-1.283.06	-23.77	23.48	-43.62	456,533.26	768,620.53	32.25294594	-103.59811719	0.00	0.00	0.00
A3 Base	2,500.00	6.50	298.29	2,496.89	-1.183.71	-29.20	28.84	-53.58	456,538.62	768,610.57	32.25296087	-103.59814930	0.00	0.00	0.00
	2,600.00	6.50	298.29	2,596.25	-1.084.35	-34.63	34.20	-63.55	456,543.98	768,600.61	32.25297580	-103.59818141	0.00	0.00	0.00
	2,700.00	6.50	298.29	2,695.61	-984.99	-40.07	39.57	-73.51	456,549.34	768,590.64	32.25299073	-103.59821352	0.00	0.00	0.00
	2,800.00	6.50	298.29	2,794.97	-885.63	-45.50	44.93	-83.48	456,554.71	768,580.68	32.25300566	-103.59824563	0.00	0.00	0.00
	2,900.00	6.50	298.29	2,894.33	-786.27	-50.93	50.29	-93.44	456,560.07	768,570.71	32.25302059	-103.59827774	0.00	0.00	0.00
	3,000.00	6.50	298.29	2,993.68	-686.92	-56.36	55.66	-103.40	456,565.43	768,560.75	32.25303551	-103.59830985	0.00	0.00	0.00
	3,100.00	6.50	298.29	3,093.04	-587.56	-61.79	61.02	-113.37	456,570.80	768,550.79	32.25305044	-103.59834196	0.00	0.00	0.00
	3,200.00	6.50	298.29	3,192.40	-488.20	-67.22	66.38	-123.33	456,576.16	768,540.82	32.25306537	-103.59837407	0.00	0.00	0.00
	3,300.00	6.50	298.29	3,291.76	-388.84	-72.65	71.74	-133.30	456,581.52	768,530.86	32.25308030	-103.59840618	0.00	0.00	0.00
	3,400.00	6.50	298.29	3,391.11	-289.49	-78.08	77.11	-143.26	456,586.89	768,520.89	32.25309523	-103.59843829	0.00	0.00	0.00
Top Salt/Salado	3,500.00	6.50	298.29	3,490.47	-190.13	-83.51	82.47	-153.23	456,592.25	768,510.93	32.25311016	-103.59847040	0.00	0.00	0.00
	3,600.00	6.50	298.29	3,589.83	-90.77	-88.94	87.83	-163.19	456,597.61	768,500.97	32.25312508	-103.59850251	0.00	0.00	0.00
	3,700.00	6.50	298.29	3,689.19	8.59	-94.37	93.20	-173.15	456,602.97	768,491.00	32.25314001	-103.59853462	0.00	0.00	0.00
	3,800.00	6.50	298.29	3,788.54	107.94	-99.80	98.56	-183.12	456,608.34	768,481.04	32.25315494	-103.59856674	0.00	0.00	0.00
	3,900.00	6.50	298.29	3,887.90	207.30	-105.24	103.92	-193.08	456,613.70	768,471.07	32.25316987	-103.59859885	0.00	0.00	0.00
	4,000.00	6.50	298.29	3,987.26	306.67	-110.25	109.20	-203.05	456,619.06	768,461.11	32.25318480	-103.59863096	0.00	0.00	0.00
	4,100.00	6.50	298.29	4,086.62	406.02	-116.10	114.65	-213.01	456,624.43	768,451.15	32.25319973	-103.59866307	0.00	0.00	0.00
	4,200.00	6.50	298.29	4,185.98	505.38	-121.53	120.01	-222.98	456,629.79	768,441.18	32.25321466	-103.59869518	0.00	0.00	0.00
	4,300.00	6.50	298.29	4,285.33	604.73	-126.96	125.38	-232.94	456,635.15	768,431.22	32.25322958	-103.59872729	0.00	0.00	0.00
	4,400.00	6.50	298.29	4,384.69	704.09	-132.39	130.74	-242.90	456,640.52	768,421.25	32.25324451	-103.59875940	0.00	0.00	0.00
Nudge, Build 2°/100ft	4,500.00	6.50	298.29	4,484.05	803.45	-137.82	136.10	-252.87	456,645.88	768,411.29	32.25325944	-103.59879151	0.00	0.00	0.00
	4,600.00	6.50	298.29	4,583.41	902.81	-143.25	141.47	-262.83	456,651.24	768,401.33	32.25327437	-103.59882362	0.00	0.00	0.00
	4,700.00	6.50	298.29	4,682.76	1,002.16	-148.68	146.83	-272.80	456,656.60	768,391.36	32.25328930	-103.59885573	0.00	0.00	0.00
	4,800.00	6.50	298.29	4,782.12	1,101.52	-154.11	152.19	-282.76	456,661.97	768,381.40	32.25330423	-103.59888784	0.00	0.00	0.00
	4,900.00	6.50	298.29	4,881.48	1,200.88	-159.54	157.56	-292.73	456,667.33	768,371.43	32.25331915	-103.59891995	0.00	0.00	0.00
	5,000.00	6.50	298.29	4,980.84	1,300.24	-164.98	162.92	-302.69	456,672.69	768,361.47	32.25333408	-103.59895206	0.00	0.00	0.00
	5,100.00	6.50	298.29	5,080.19	1,399.59	-170.41	168.28	-312.66	456,678.06	768,351.51	32.25334901	-103.59898418	0.00	0.00	0.00
	5,160.19	6.50	298.29	5,140.00	1,459.40	-173.68	171.51	-318.65	456,681.28	768,345.51	32.25335800	-103.59900350	0.00	0.00	0.00
	5,199.39	6.50	298.29	5,170.00	1,489.40	-175.31	173.13	-321.66	456,682.90	768,342.50	32.25336250	-103.59901320	0.00	0.00	0.00
	5,200.00	6.50	298.29	5,179.55	1,489.95	-175.84	173.65	-322.62	456,683.42	768,341.54	32.25336394	-103.59901			

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
Bone Spring Lime	9,058.42	0.00	298.29	9,025.00	5,344.40	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,100.00	0.00	298.29	9,066.58	5,385.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,200.00	0.00	298.29	9,166.58	5,485.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,238.42	0.00	298.29	9,205.00	5,524.40	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,253.42	0.00	298.29	9,220.00	5,539.40	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
Leonard/Avalon Sand	9,300.00	0.00	298.29	9,266.58	5,585.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,400.00	0.00	298.29	9,366.58	5,685.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,500.00	0.00	298.29	9,466.58	5,785.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,600.00	0.00	298.29	9,566.58	5,885.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,700.00	0.00	298.29	9,666.58	5,985.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,800.00	0.00	298.29	9,766.58	6,085.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	9,900.00	0.00	298.29	9,866.58	6,185.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,000.00	0.00	298.29	9,966.58	6,285.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,100.00	0.00	298.29	10,066.58	6,385.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,178.42	0.00	298.29	10,145.00	6,464.40	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
1st Bone Spring Sand	10,200.00	0.00	298.29	10,166.58	6,485.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,300.00	0.00	298.29	10,266.58	6,585.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,400.00	0.00	298.29	10,366.58	6,685.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,500.00	0.00	298.29	10,466.58	6,785.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,600.00	0.00	298.29	10,566.58	6,885.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,700.00	0.00	298.29	10,666.58	6,985.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,800.00	0.00	298.29	10,766.58	7,085.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,863.42	0.00	298.29	10,830.00	7,149.40	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	10,900.00	0.00	298.29	10,866.58	7,185.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,000.00	0.00	298.29	10,966.58	7,285.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,100.00	0.00	298.29	11,066.58	7,385.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,200.00	0.00	298.29	11,166.58	7,485.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,300.00	0.00	298.29	11,266.58	7,585.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,400.00	0.00	298.29	11,366.58	7,685.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,500.00	0.00	298.29	11,466.58	7,785.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
KOP, Build 10"/100ft	11,600.00	0.00	298.29	11,566.58	7,885.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,700.00	0.00	298.29	11,666.58	7,985.98	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,725.94	0.00	298.29	11,692.52	8,011.92	-288.46	284.86	-529.25	456,794.63	768,134.92	32.25367350	-103.59968216	0.00	0.00	0.00
	11,800.00	7.41	179.61	11,766.37	8,085.77	-283.68	280.08	-529.22	456,789.85	768,134.95	32.25360337	-103.59968216	10.00	10.00	0.00
	11,900.00	17.41	179.61	11,863.92	8,183.32	-262.22	258.62	-529.07	456,768.39	768,135.10	32.25360139	-103.59968217	10.00	10.00	0.00
3rd Bone Spring Sand	12,000.00	27.41	179.61	11,966.25	8,275.65	-224.15	220.56	-528.81	456,730.33	768,135.36	32.25349675	-103.59968217	10.00	10.00	0.00
	12,068.46	34.25	179.61	12,015.00	8,334.40	-189.09	185.49	-528.57	456,695.27	768,135.60	32.25340038	-103.59968217	10.00	10.00	0.00
	12,100.00	37.41	179.61	12,040.57	8,359.97	-170.63	167.03	-528.45	456,676.81	768,135.72	32.25334964	-103.59968217	10.00	10.00	0.00
	12,200.00	47.41	179.61	12,114.31	8,433.71	-103.27	99.68	-527.99	456,609.46	768,136.18	32.25316451	-103.59968218	10.00	10.00	0.00
	12,300.00	57.41	179.61	12,175.24	8,494.64	-24.14	20.55	-527.45	456,530.33	768,136.72	32.25294699	-103.59968219	10.00	10.00	0.00
Build 5"/100ft	12,400.00	67.41	179.61	12,221.50	8,540.90	64.37	-67.96	-526.85	456,441.82	768,137.32	32.25270370	-103.59968219	10.00	10.00	0.00
	12,475.94	75.00	179.61	12,245.95	8,565.35	136.21	-139.80	-526.36	456,389.99	768,137.81	32.25250625	-103.59968220	10.00	10.00	0.00
	12,500.00	76.20	179.61	12,251.94	8,571.34	-159.51	-163.10	-526.20	456,346.69	768,137.97	32.25244220	-103.59968220	5.00	5.00	0.00
	12,600.00	81.20	179.61	12,271.52	8,590.92	-257.55	-261.13	-525.53	456,248.66	768,138.63	32.25217274	-103.59968222	5.00	5.00	0.00
	12,700.00	86.20	179.61	12,282.49	8,601.89	-356.91	-360.49	-524.86	456,149.30	768,139.31	32.25189962	-103.59968223	5.00	5.00	0.00
Landing Point	12,775.94	90.00	179.61	12,285.00	8,604.40	-432.79	-436.37	-524.35	456,073.42	768,139.82	32.25169105	-103.59968225	5.00	5.00	0.00
	12,800.00	90.00	179.61	12,285.00	8,604.40	-456.86	-460.43	-524.18	456,049.36	768,139.98	32.25162491	-103.59968226	0.00	0.00	0.00
	12,900.00	90.00	179.61	12,285.00	8,604.40	-556.86	-560.43	-523.51	455,949.37	768,140.66	32.25135005	-103.59968229	0.00	0.00	0.00
	13,000.00	90.00	179.61	12,285.00	8,604.40	-656.86	-660.43	-522.83	455,849.37	768,141.33	32.25107518	-103.59968231	0.00	0.00	0.00
	13,100.00	90.00	179.61	12,285.00	8,604.40	-756.86	-760.43	-522.16	455,749.38	768,142.01	32.25080032	-103.59968234	0.00	0.00	0.00
	13,200.00	90.00	179.61	12,285.00	8,604.40	-856.86	-860.43	-521.48	455,649.38	768,142.68	32.25052546	-103.59968236	0.00	0.00	0.00
	13,300.00	90.00	179.61	12,285.00	8,604.40	-956.86	-960.42	-520.81	455,549.39	768,143.36	32.25025059	-103.59968239	0.00	0.00	0.00
	13,400.00	90.00	179.61	12,285.00	8,604.40	-1,056.86									

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)
	21,100.00	90.00	179.61	12,285.00	8,604.40	8,756.86	-8,760.25	-468.14	447,749.83	768,196.02	32.22881116	-103.59968439	0.00	0.00	0.00
	21,200.00	90.00	179.61	12,285.00	8,604.40	8,856.86	-8,860.24	-467.47	447,649.84	768,196.70	32.22853629	-103.59968441	0.00	0.00	0.00
	21,300.00	90.00	179.61	12,285.00	8,604.40	8,956.86	-8,960.24	-466.79	447,549.84	768,197.37	32.22826143	-103.59968444	0.00	0.00	0.00
	21,400.00	90.00	179.61	12,285.00	8,604.40	9,056.86	-9,060.24	-466.12	447,449.85	768,198.05	32.22798656	-103.59968446	0.00	0.00	0.00
	21,500.00	90.00	179.61	12,285.00	8,604.40	9,156.86	-9,160.24	-465.44	447,349.85	768,198.72	32.22771170	-103.59968449	0.00	0.00	0.00
	21,600.00	90.00	179.61	12,285.00	8,604.40	9,256.86	-9,260.23	-464.77	447,249.86	768,199.40	32.22743683	-103.59968451	0.00	0.00	0.00
	21,700.00	90.00	179.61	12,285.00	8,604.40	9,356.86	-9,360.23	-464.09	447,149.86	768,200.07	32.22716197	-103.59968454	0.00	0.00	0.00
	21,800.00	90.00	179.61	12,285.00	8,604.40	9,456.86	-9,460.23	-463.42	447,049.87	768,200.75	32.22688710	-103.59968456	0.00	0.00	0.00
	21,900.00	90.00	179.61	12,285.00	8,604.40	9,556.86	-9,560.23	-462.74	446,949.88	768,201.42	32.22661224	-103.59968459	0.00	0.00	0.00
	22,000.00	90.00	179.61	12,285.00	8,604.40	9,656.86	-9,660.22	-462.07	446,849.88	768,202.10	32.22633737	-103.59968461	0.00	0.00	0.00
	22,100.00	90.00	179.61	12,285.00	8,604.40	9,756.86	-9,760.22	-461.39	446,749.89	768,202.77	32.22606251	-103.59968464	0.00	0.00	0.00
	22,200.00	90.00	179.61	12,285.00	8,604.40	9,856.86	-9,860.22	-460.72	446,649.89	768,203.45	32.22578764	-103.59968466	0.00	0.00	0.00
	22,300.00	90.00	179.61	12,285.00	8,604.40	9,956.86	-9,960.22	-460.04	446,549.90	768,204.12	32.22551278	-103.59968469	0.00	0.00	0.00
	22,400.00	90.00	179.61	12,285.00	8,604.40	10,056.86	-10,060.22	-459.37	446,449.90	768,204.80	32.22523791	-103.59968471	0.00	0.00	0.00
Tres Equis 5-8 State 351H - PBH	22,410.64	90.00	179.61	12,285.00	8,604.40	10,067.50	-10,070.86	-459.30	446,439.26	768,204.87	32.22520865	-103.59968471	0.00	0.00	0.00

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	11,700.400	1/100,000 '5 – 12.25 – 8.75 3.375 – 9.625 – 7				A001Mb_MWD		Tres Equis 5-8 State 351H / Coterra Tres Equis 5-8
	1	11,700.400	22,982.823	1/100,000	8.75 – 6	7 – 5		A008Mb_MWD+IFR1+MS		Tres Equis 5-8 State 351H / Coterra Tres Equis 5-8

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,366.500	17.500	13.375	
5,000.500	12.250	9.625	
11,817.500	8.750	7.000	
22,410.644	6.000	5.000	



COTERRA

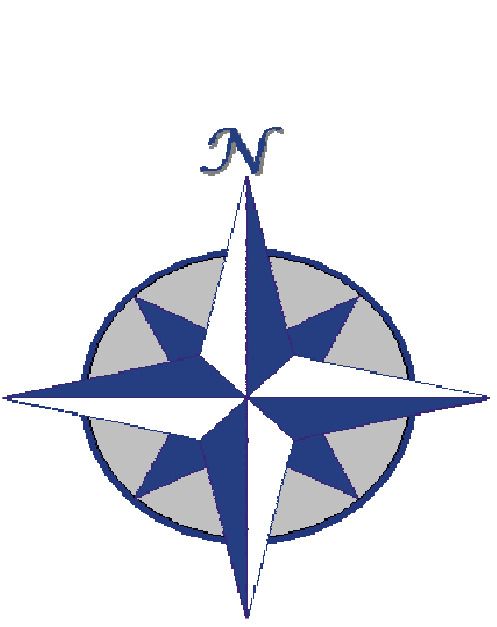
Rev0



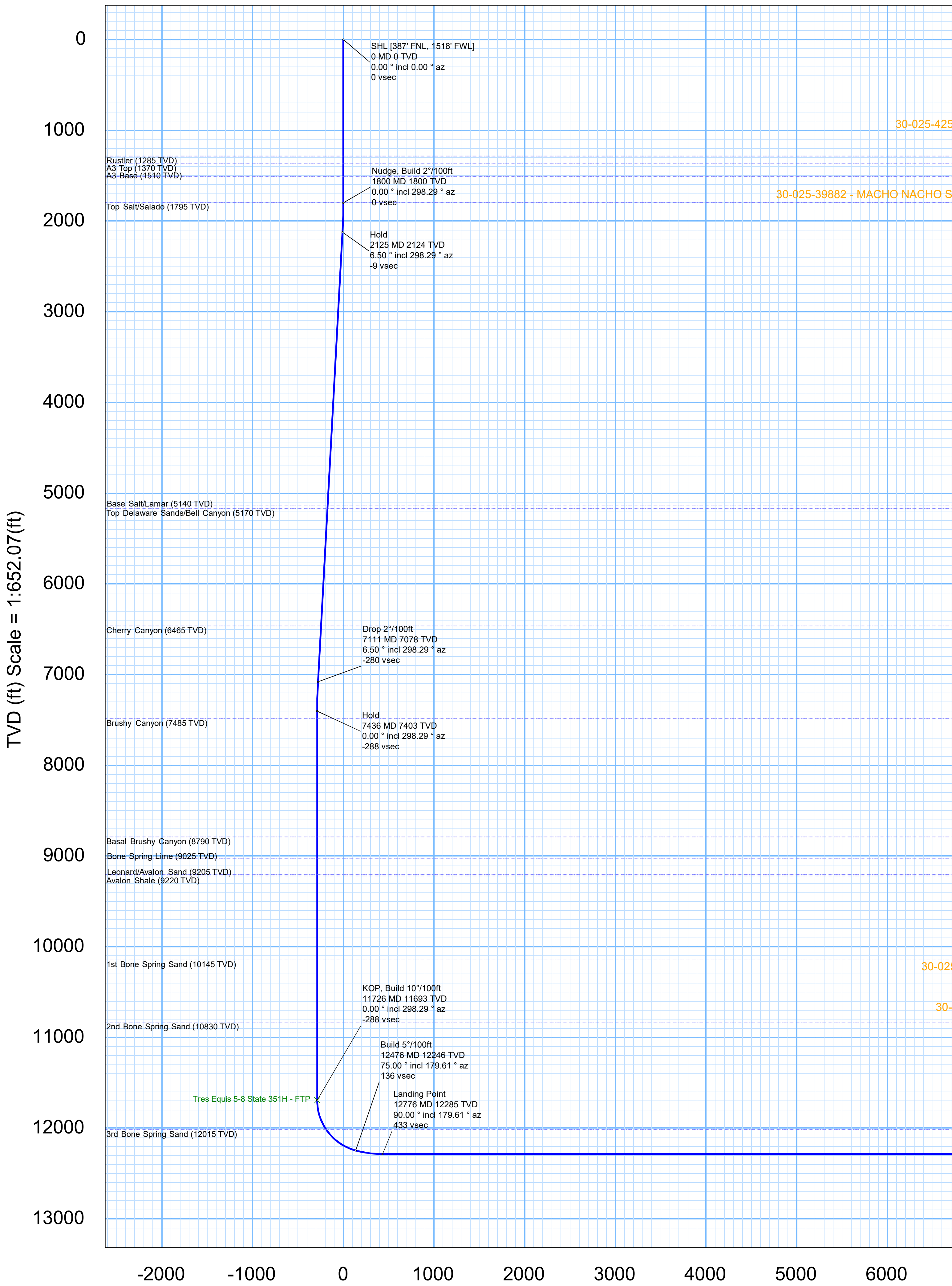
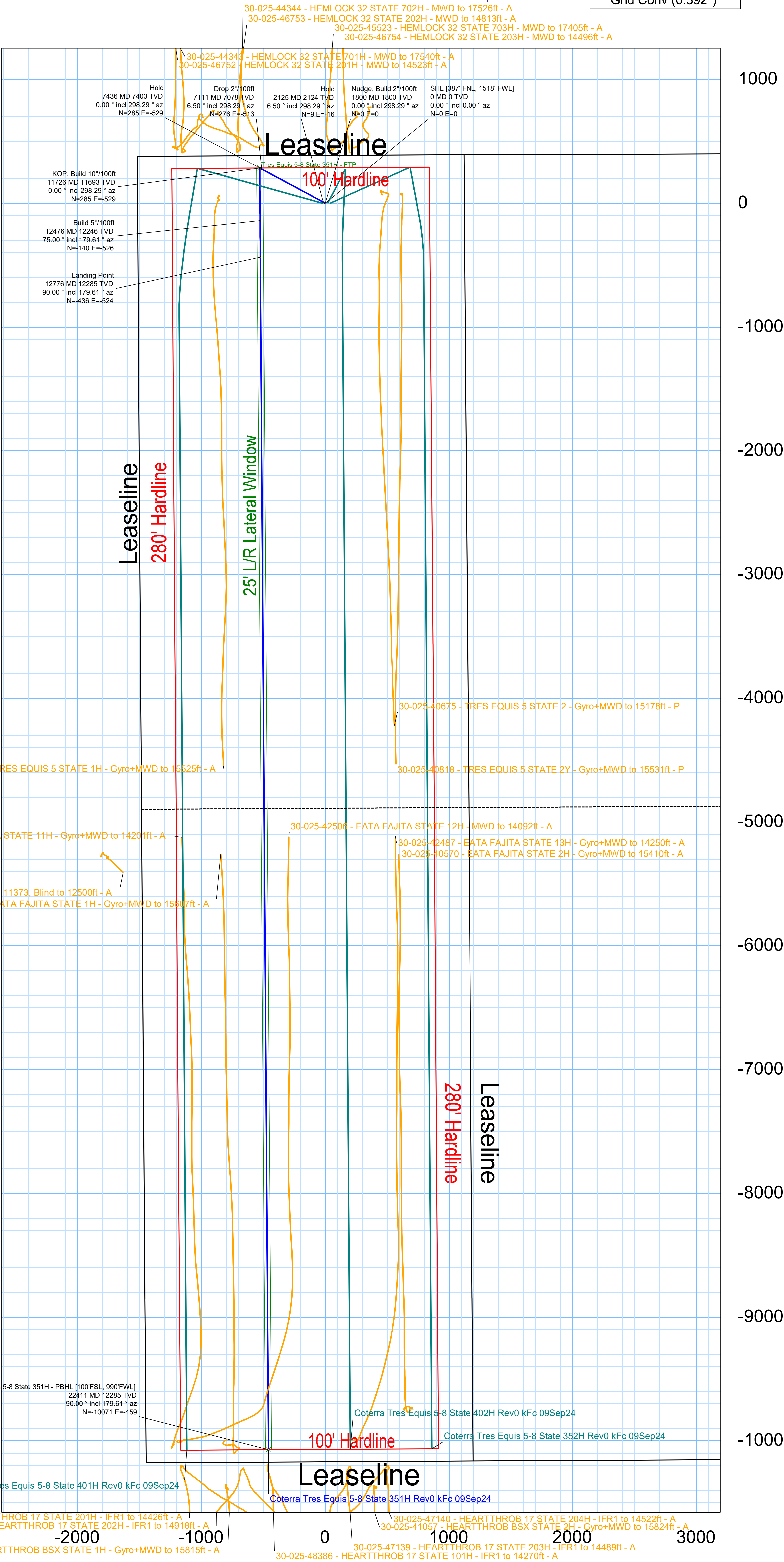
Borehole:	Well:	Field:	Structure:
Tres Equis 5-8 State 351H	Tres Equis 5-8 State 351H	NM Lea County (NAD 83)	Coterra Tres Equis 5 State Pad Lot 3

Gravity & Magnetic Parameters	Surface Location	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Miscellaneous
Model: HDGM 2024	Lat: N 32 15 10.37	456509.78ftUS	Tres Equis 5-8
Dip: 59.771°	North: 456509.78ftUS	Grid Conv: 0.3924°	State 351H
Date: 09-Sep-2024	Lon: W 103 35 52.72	Scale Fact: 0.99996828	Coterra Tres Equis 5-8 State 351H Rev0 kFc 09Sep24
MagDec: 6.15°	Gravity FS: 998.438mgn (9.80665 Based)		TVD Ref: RKB (3680.600 ft above MSL)

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [387° FNL, 1518' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler	1285.00	0.00	298.29	1285.00	0.00	0.00	0.00	0.00
A3 Top	1370.00	0.00	298.29	1370.00	0.00	0.00	0.00	0.00
A3 Base	1510.00	0.00	298.29	1510.00	0.00	0.00	0.00	0.00
Top Salt/Salado	1795.00	0.00	298.29	1795.00	0.00	0.00	0.00	0.00
Nudge, Build 2°/100ft	1800.00	0.00	298.29	1800.00	0.00	0.00	0.00	0.00
Hold	2124.88	6.50	298.29	2124.18	-8.83	8.72	-16.20	2.00
Base Salt/Lamar	5160.19	6.50	298.29	5140.00	-173.68	171.51	-318.65	0.00
Top Delaware Sands/Bell Canyon	5190.39	6.50	298.29	5170.00	-175.31	173.13	-321.66	0.00
Cherry Canyon	6493.76	6.50	298.29	6465.00	-246.10	243.03	-451.53	0.00
Drop 2°/100ft	7111.06	6.50	298.29	7078.34	-279.62	276.14	-513.04	0.00
Hold	7435.94	0.00	298.29	7402.52	-288.46	284.86	-529.25	2.00
Brushy Canyon	7518.42	0.00	298.29	7485.00	-288.46	284.86	-529.25	0.00
Basal Brushy Canyon	8823.42	0.00	298.29	8790.00	-288.46	284.86	-529.25	0.00
Bone Spring Lime	9058.42	0.00	298.29	9025.00	-288.46	284.86	-529.25	0.00
Leonard/Avalon Sand	9238.42	0.00	298.29	9205.00	-288.46	284.86	-529.25	0.00
Avalon Shale	9253.42	0.00	298.29	9220.00	-288.46	284.86	-529.25	0.00
1st Bone Spring Sand	10178.42	0.00	298.29	10145.00	-288.46	284.86	-529.25	0.00
2nd Bone Spring Sand	10863.42	0.00	298.29	10830.00	-288.46	284.86	-529.25	0.00
KOP, Build 10°/100ft	11725.94	0.00	298.29	11692.52	-288.46	284.86	-529.25	0.00
3rd Bone Spring Sand	12068.46	34.25	179.61	12015.00	-189.09	185.49	-528.57	10.00
Build 5°/100ft	12475.94	75.00	179.61	12245.95	136.21	-139.80	-526.36	10.00
Landing Point	12775.94	90.00	179.61	12285.00	432.79	-436.37	-524.35	5.00
Tres Equis 5-8 State 351H - PBHL [100°FSL, 990°FWL]	22410.64	90.00	179.61	12285.00	10067.50	-10070.86	-459.30	0.00



Grid North
Tot Corr (M->G 5.758°)
Mag Dec (6.150°)
Grid Conv (0.392°)



Vertical Section (ft) Azim = 179.61° Scale = 1:652.07(ft) Origin = 0N/-S, 0E/-W

1. Geological Formations

TVD of target 12,285

Pilot Hole TD N/A

MD at TD 22,411

Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	1285	N/A	
Top of Salt	1795	N/A	
Base of Salt/Lamar	5140	N/A	
Top Delaware Sands/Bell Canyon	5170	Hydrocarbons	
Cherry Canyon	6465	Hydrocarbons	
Brushy Canyon	7485	Hydrocarbons	
Basal Brushy Canyon	8790	N/A	
Bone Spring Lime	9025	N/A	
Leonard/Avalon Sand	9205	Hydrocarbons	
Avalon Shale	9220	Hydrocarbons	
1st Bone Spring Sand	10145	Hydrocarbons	
2nd Bone Spring Sand	10830	Hydrocarbons	
3rd Bone Spring Sand	12015	Hydrocarbons	
3rd Bone Spring Sand - Target	12285	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	1370	1370	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.25	2.92	4.90
12 1/4	0	5160	5140	9-5/8"	40.00	HCK-55	LT&C	1.43	1.48	2.73
8 3/4	0	11725	11725	7"						
8 3/4	11725	12475	12245	7"	29.00	L-80	BT&C	1.16	1.35	44.83
6	11525	22410	12285	4-1/2"	11.60	P-110	BT&C	1.21	1.71	41.63
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., Tres Equis 5 8 State Com 351H

	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	664	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	177	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	972	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	292	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	416	10.30	3.64	22.18	12	Lead: Tuned Light + LCM
	125	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Completion System	737	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	51
Production	4960	25
Completion System	12275	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	5M	Annular	5M	100% of working pressure
			Blind Ram		5M
			Pipe Ram	X	
			Double Ram	X	
			Other		
8 3/4	13 5/8	5M	Annular	5M	100% of working pressure
			Blind Ram		5M
			Pipe Ram	X	
			Double Ram	X	
			Other		
6	13 5/8	5M	Annular	5M	100% of working pressure
			Blind Ram		5M
			Pipe Ram	X	
			Double Ram	X	
			Other		

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.				
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.				
	N	Are anchors required by manufacturer?			

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1370'	Fresh Water	7.83 - 8.33	28	N/C
1370' to 5160'	Brine Water	9.50 - 10.00	30-32	N/C
5160' to 12475'	Cut Brine or OBM	9.00 - 9.50	27-70	N/C
12776' to 22410'	OBM	9.30 - 9.80	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
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6. Logging and Testing Procedures

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

Additional Logs Planned	Interval
-------------------------	----------

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	6260 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****BOPE Additional Information & Testing**

1. After running the first string of casing, a 5M BOP/BOPE system with 5M annular will be installed. BOPs will be tested according to Onshore Order #2. BOPE will be tested to full rated pressure (5K for all BOPE, including the annular). For the low test, the system will be tested to 250 psi.
2. All BOP equipment will be tested utilizing a conventional test plug.
3. A remote kill line is included in the BOPE system
4. All casing strings will be tested per Onshore Order #2, to 0.22 psi/ft or 1,500 psi, whichever is greater, not to exceed 70% of casing burst.
5. If well conditions dictate, conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

Wellhead

1. The multi-bowl wellhead will be installed by a vendor representative. A copy of the installation instructions has been sent to the BLM field office.
2. A packoff will be installed after running and cementing the production casing. This packoff will be tested to 5K psi.