

District I

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

District II

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

District III

1000 Rio Brazos Rd., Aztec, NM 87410
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 367894

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 30-025-53186
4. Property Code 39181	5. Property Name TRES EQUIS 5 STATE	6. Well No. 403H

7. Surface Location

UL - Lot C	Section 5	Township 24S	Range 33E	Lot Idn 3	Feet From 422	N/S Line N	Feet From 1498	E/W Line W	County Lea
---------------	--------------	-----------------	--------------	--------------	------------------	---------------	-------------------	---------------	---------------

8. Proposed Bottom Hole Location

UL - Lot D	Section 5	Township 24S	Range 33E	Lot Idn 4	Feet From 100	N/S Line N	Feet From 330	E/W Line W	County Lea
---------------	--------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	---------------

9. Pool Information

WC-025 G-09 S243310P;UPPER WOLFCAMP	98135
-------------------------------------	-------

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 23156	18. Formation Wolfcamp	19. Contractor	20. Spud Date 9/1/2024
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	14.75	10.75	40.5	1370	674	0
Int1	9.875	7.625	29.7	12672	1198	0
Prod	6.75	5.5	23	11872	1455	12472
Prod	6.75	5	18	23156	1455	12472

Casing/Cement Program: Additional Comments

--

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: 7/11/2024 Expiration Date: 7/11/2026
Date: 6/26/2024 Phone: 412-759-4585	Conditions of Approval Attached

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 98135	³ Pool Name WC-025 G-09 S243310P; UPPER WOLFCAMP
⁴ Property Code	⁵ Property Name TRES EQUIS 5 STATE	⁶ Well Number 403H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 3657.4'

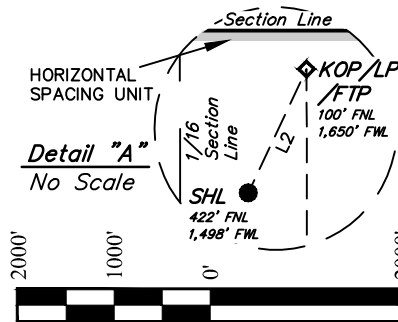
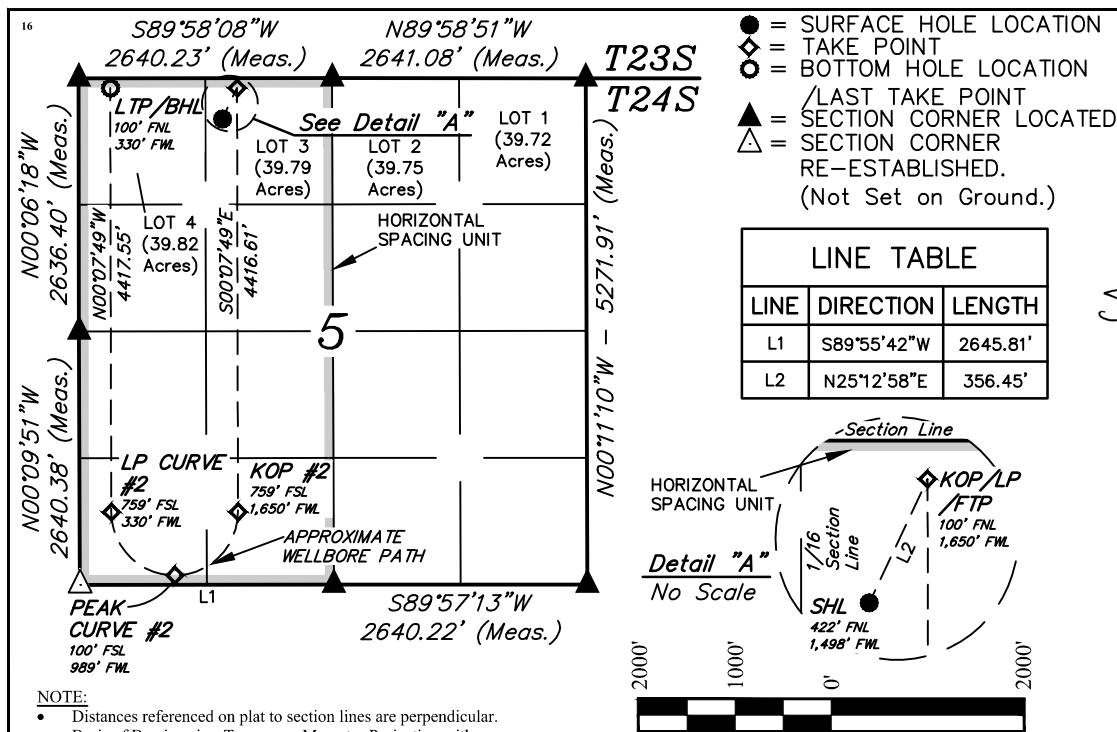
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	5	24S	33E		422	NORTH	1498	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	5	24S	33E		100	NORTH	330	WEST	LEA
¹² Dedicated Acres 319.61	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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



SCALE
DRAWN BY: C.S.C. 04-11-24
REV:3 Z.L. 06-17-24 (SHL & NAME CHANGE)

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)
- Section breakdown information for this plat may be obtained from Uintah Engineering & Land Surveying.

NAD 83 (SURFACE HOLE LOCATION) LATITUDE = 32°15'10.02" (32.252785°) LONGITUDE = -103°35'52.95" (-103.598042°)	NAD 83 (KOP/LP/FTP) LATITUDE = 32°15'13.21" (32.253670°) LONGITUDE = -103°35'51.17" (-103.597548°)	NAD 83 (KOP #2) LATITUDE = 32°14'29.51" (32.241532°) LONGITUDE = -103°35'51.19" (-103.597553°)
NAD 27 (SURFACE HOLE LOCATION) LATITUDE = 32°15'09.58" (32.252661°) LONGITUDE = -103°35'51.22" (-103.597561°)	NAD 27 (KOP/LP/FTP) LATITUDE = 32°15'12.77" (32.253546°) LONGITUDE = -103°35'49.44" (-103.597067°)	NAD 27 (KOP #2) LATITUDE = 32°14'29.07" (32.241408°) LONGITUDE = -103°35'49.46" (-103.597073°)
STATE PLANE NAD 83 (N.M. EAST) N: 456474.69' E: 768644.32'	STATE PLANE NAD 83 (N.M. EAST) N: 456797.75' E: 768794.80'	STATE PLANE NAD 83 (N.M. EAST) N: 452381.99' E: 768823.34'
STATE PLANE NAD 27 (N.M. EAST) N: 456415.61' E: 727460.55'	STATE PLANE NAD 27 (N.M. EAST) N: 456738.66' E: 727611.04'	STATE PLANE NAD 27 (N.M. EAST) N: 452323.01' E: 727639.40'
NAD 83 (PEAK CURVE #2) LATITUDE = 32°14'23.00" (32.239723°) LONGITUDE = -103°35'58.88" (-103.599690°)	NAD 83 (LP CURVE #2) LATITUDE = 32°14'29.53" (32.241537°) LONGITUDE = -103°36'06.56" (-103.601822°)	NAD 83 (LTP/BHL) LATITUDE = 32°15'13.24" (32.253677°) LONGITUDE = -103°36'06.54" (-103.601817°)
NAD 27 (PEAK CURVE #2) LATITUDE = 32°14'22.56" (32.239599°) LONGITUDE = -103°35'57.16" (-103.599210°)	NAD 27 (LP CURVE #2) LATITUDE = 32°14'29.09" (32.241413°) LONGITUDE = -103°36'04.83" (-103.601342°)	NAD 27 (LTP/BHL) LATITUDE = 32°15'12.79" (32.253554°) LONGITUDE = -103°36'04.81" (-103.601336°)
STATE PLANE NAD 83 (N.M. EAST) N: 451719.53' E: 768167.21'	STATE PLANE NAD 83 (N.M. EAST) N: 452374.81' E: 767503.59'	STATE PLANE NAD 83 (N.M. EAST) N: 456791.50' E: 767475.04'
STATE PLANE NAD 27 (N.M. EAST) N: 451660.56' E: 726983.24'	STATE PLANE NAD 27 (N.M. EAST) N: 452315.83' E: 726319.65'	STATE PLANE NAD 27 (N.M. EAST) N: 456732.41' E: 726291.28'

¹⁷ OPERATOR
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shelly Bowen 6/24/24
Signature Date

Shelly Bowen

Printed Name

shelly.bowen@coterra.com

E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

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

April 08, 2024

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number:

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
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 APD Conditions
Permit 367894

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: CIMAREX ENERGY CO. [215099] 6001 Deauville Blvd Midland, TX 79706	API Number: 30-025-53186
	Well: TRES EQUIS 5 STATE #403H

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

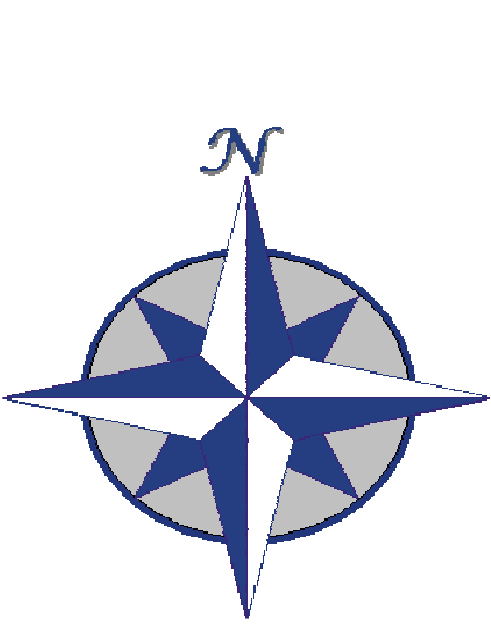
Rev2



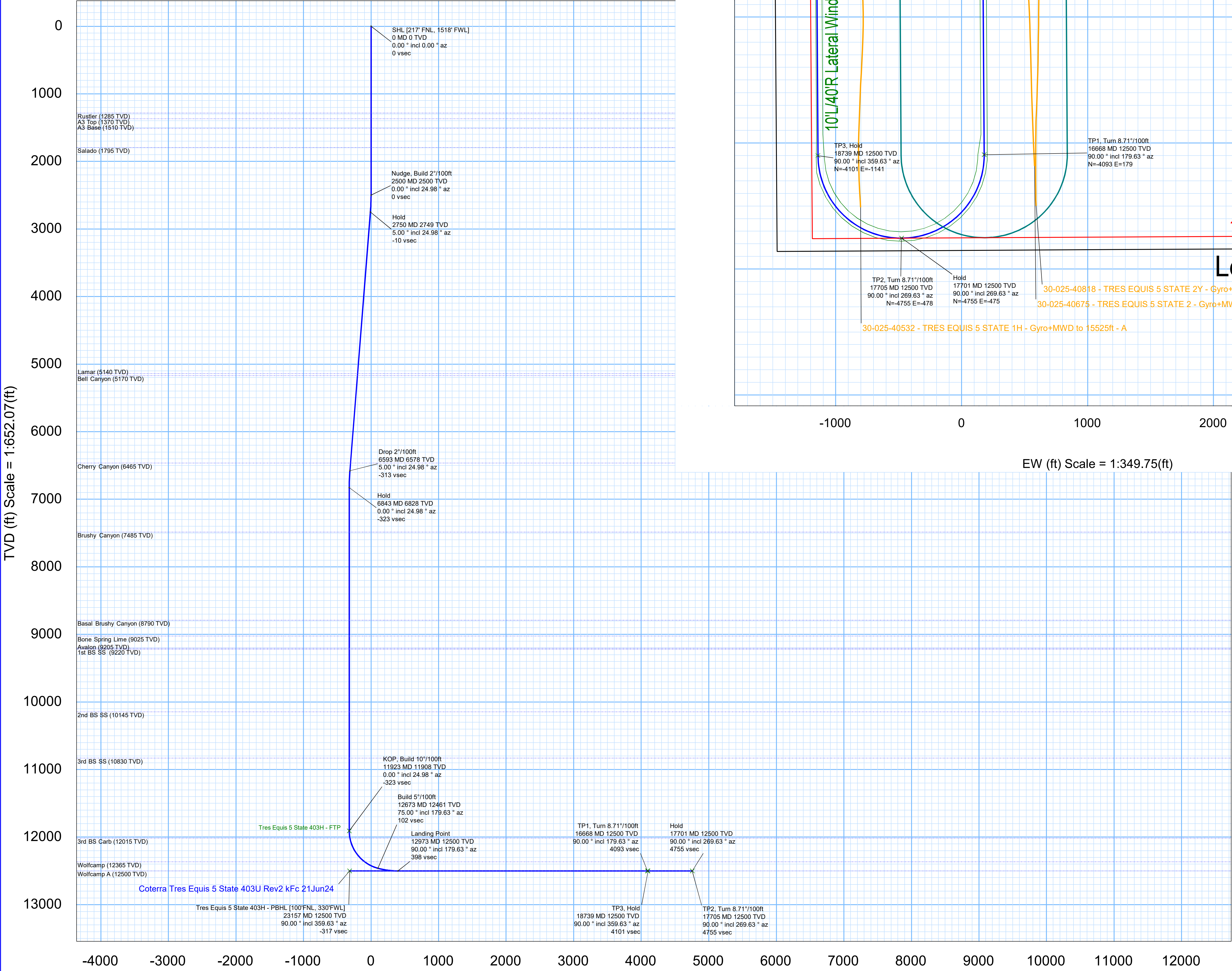
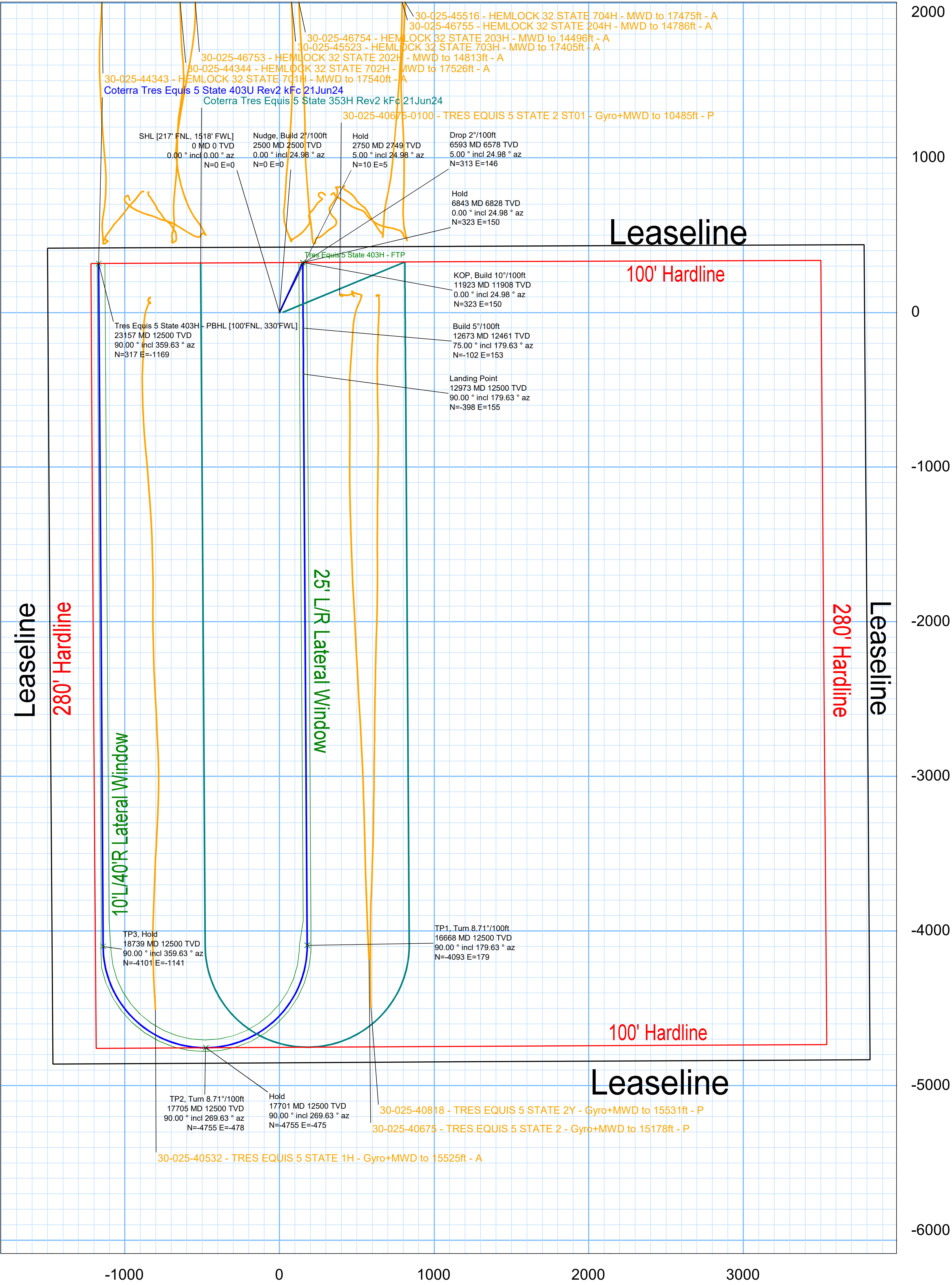
Borehole: Tres Equis 5 State 403H		Well: Tres Equis 5 State 403H		Field: NM Lea County (NAD 83)		Structure: Coterra Tres Equis 5 State Pad Lot 3	
-----------------------------------	--	-------------------------------	--	-------------------------------	--	---	--

Gravity & Magnetic Parameters					Surface Location					NAD83 New Mexico State Plane, Eastern Zone, US Feet					Miscellaneous				
Model:	HDGM 2024	Dip:	59.777°	Date:	21-Jun-2024	Lat:	N 32 15 10.02	Northing:	456474.69ftUS	Grid Conv:	0.3924°	Tres Equis 5	TVD Ref:	RKB (3680.400 ft above MSL)					
MagDec:	6.166°	FS:	47333.41nT	Gravity FS:	998.438mgn (9.80665 Based)	Lon:	W 103 35 52.95	Easting:	768644.32ftUS	Scale Fact:	0.99996827	State 403U	Plan:	Coterra Tres Equis 5 State 403H Rev2 kFc 21Jun24					

Critical Points								
Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [422' FNL, 1498' FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler	1285.00	0.00	24.98	1285.00	0.00	0.00	0.00	0.00
A3 Top	1370.00	0.00	24.98	1370.00	0.00	0.00	0.00	0.00
A3 Base	1510.00	0.00	24.98	1510.00	0.00	0.00	0.00	0.00
Salado	1795.00	0.00	24.98	1795.00	0.00	0.00	0.00	0.00
Nudge, Build 2"/100ft	2500.00	0.00	24.98	2500.00	0.00	0.00	0.00	0.00
Hold	2749.76	5.00	24.98	2749.44	-9.86	9.86	4.59	2.00
Lamar	5149.43	5.00	24.98	5140.00	-199.27	199.27	92.82	0.00
Bell Canyon	5179.54	5.00	24.98	5170.00	-201.65	201.65	93.93	0.00
Cherry Canyon	6479.48	5.00	24.98	6465.00	-304.25	304.25	141.72	0.00
Drop 2"/100ft	6592.99	5.00	24.98	6578.08	-313.21	313.21	145.89	0.00
Hold	6842.75	0.00	24.98	6827.52	-323.07	323.07	150.49	2.00
Brushy Canyon	7500.23	0.00	24.98	7485.00	-323.07	323.07	150.49	0.00
Basal Brushy Canyon	8805.23	0.00	24.98	8790.00	-323.07	323.07	150.49	0.00
Bone Spring Lime	9040.23	0.00	24.98	9025.00	-323.07	323.07	150.49	0.00
Avalon	9220.23	0.00	24.98	9205.00	-323.07	323.07	150.49	0.00
1st BS SS	9235.23	0.00	24.98	9220.00	-323.07	323.07	150.49	0.00
2nd BS SS	10160.23	0.00	24.98	10145.00	-323.07	323.07	150.49	0.00
3rd BS SS	10845.23	0.00	24.98	10830.00	-323.07	323.07	150.49	0.00
KOP, Build 10"/100ft	11922.75	0.00	24.98	11907.52	-323.07	323.07	150.49	0.00
3rd BS Carb	12030.87	10.81	179.63	12015.00	-312.90	312.90	150.55	10.00
Wolfcamp	12452.58	52.98	179.63	12365.00	-95.07	95.07	151.96	10.00
Build 5"/100ft	12672.75	75.00	179.63	12460.95	101.59	-101.59	153.23	10.00
Wolfcamp A	12971.35	89.93	179.63	12500.00	396.76	-396.76	155.13	5.00
Landing Point	12972.75	90.00	179.63	12500.00	398.16	-398.16	155.14	5.00
Wolfcamp A	16667.50	90.00	179.63	12500.00	4092.84	-4092.84	179.03	0.00
TP1, Turn 8.71"/100ft	16667.50	90.00	179.63	12500.00	4092.84	-4092.84	179.03	0.00
Hold	17701.38	90.00	269.63	12500.00	4755.27	-4755.27	-474.90	8.71
TP2, Turn 8.71"/100ft	17704.82	90.00	269.63	12500.00	4755.29	-4755.29	-478.34	0.00
TP3, Hold	18738.70	90.00	359.63	12500.00	4101.37	-4101.37	-1140.76	8.71
Wolfcamp A	23156.98	90.00	359.63	12500.00	-316.82	316.82	-1169.32	0.00
Tres Equis 5 State 403H - PBHL [100'FNL, 330'FWL]	23156.98	90.00	359.63	12500.00	-316.82	316.82	-1169.32	0.00



Grid North
Tot Corr (M->G 5.774°)
Mag Dec (6.166°)
Grid Conv (0.392°)



Vertical Section (ft) Azim = 180.00° Scale = 1:652.07(ft) Origin = 0N/-S, 0E/-W



Coterra Tres Equis 5 State 403H Rev2 kFc 21Jun24 Proposal Geodetic Report

Def Plan

Report Date:	June 21, 2024 - 07:23 PM (UTC 0)	Survey / DLS Computation:	Minimum Curvature / Lubinski
Client:	COTERRA	Vertical Section Azimuth:	180.000 (GRID 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 State 403U	TVD Reference Datum:	RKB
Well:	Tres Equis 5 State 403H	TVD Reference Elevation:	3680.400 ft above MSL
Borehole:	Tres Equis 5 State 403H	Seabed / Ground Elevation:	3657.400 ft above MSL
UBHI / API#:	Unknown / Unknown	Magnetic Declination:	6.166°
Survey Name:	Coterra Tres Equis 5 State 403H Rev2 kFc 21Jun24	Total Gravity Field Strength:	998.4381mgm (9.80665 Based)
Survey Date:	June 21, 2024	Gravity Model:	GARM
Turn / AHD / DOI / ERD Ratio:	279.992 / 11261.876 ft / 6.767 / 0.901	Total Magnetic Field Strength:	47333.41 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	Magnetic Dip Angle:	59.777°
Location Lat / Long:	32°15'10.02426"N , 103°35'52.94956"W	Declination Date:	June 21, 2024
Location Grid N/E Y/X:	N 456474.690 RUS , E 768644.320 RUS	Magnetic Declination Model:	HDGM 2024
CRS Grid Convergence Angle:	0.392°	North Reference:	Grid North
Grid Scale Factor:	0.99996827(Applied)	Grid Convergence Used:	5.774°
Version / Patch:	2024.2.0.1	Total Corr Mag North->Grid North:	Well Head
		Local Coord Referenced To:	

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (ft/100ft)	BR (ft/100ft)	TR (ft/100ft)
SHL [422' FNL, 1498' FWL]	0.00	0.00	0.00	0.00	-3.680.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155			
Nudge, Build 2"/100ft	2,500.00	0.00	24.98	2,500.00	-1,180.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
Hold	2,749.76	5.00	24.98	2,749.44	-930.96	-9.86	9.86	4.59	456,484.55	768,648.91	32.25281154	-103.59802647	2.00	2.00	0.00
Drop 2"/100ft	6,592.99	5.00	24.98	6,578.08	2,897.68	-313.21	313.21	145.89	456,787.89	768,790.21	32.25364264	-103.59756272	0.00	0.00	0.00
Hold	6,842.75	0.00	24.98	6,827.52	3,147.12	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	2.00	-2.00	0.00
KOP, Build 10"/100ft	11,922.75	0.00	24.98	11,907.52	8,227.12	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
Build 5"/100ft	12,672.75	75.00	179.63	12,460.95	8,780.55	101.59	-101.59	153.23	456,373.11	768,797.54	32.25250242	-103.59754819	10.00	10.00	0.00
Landing Point	12,972.75	90.00	179.63	12,500.00	8,819.60	398.16	-398.16	155.14	456,076.54	768,799.46	32.25168721	-103.59754857	5.00	5.00	0.00
TP1, Turn 8.71"/100ft	16,667.50	90.00	179.63	12,500.00	8,819.60	4,092.84	-4,092.84	179.03	452,381.99	768,823.34	32.24153167	-103.59755321	0.00	0.00	0.00
Hold	17,701.38	90.00	269.63	12,500.00	8,819.60	4,755.27	-4,755.27	-474.90	451,719.59	768,169.44	32.23972323	-103.59968267	8.71	0.00	8.71
TP2, Turn 8.71"/100ft	17,704.82	90.00	269.63	12,500.00	8,819.60	4,755.29	-4,755.29	-478.34	451,719.56	768,166.00	32.23972323	-103.59968379	0.00	0.00	0.00
TP3, Hold	18,738.70	90.00	359.63	12,500.00	8,819.60	4,101.37	-4,101.37	-1,140.76	452,373.46	767,503.60	32.24153301	-103.60182166	8.71	0.00	8.71
Tres Equis 5 State 403H - PBHL [100'FNL, 330'FWL]	23,156.98	90.00	359.63	12,500.00	8,819.60	-316.82	316.82	-1,169.32	456,791.50	767,475.04	32.25367728	-103.60181668	0.00	0.00	0.00

Survey Type: Def Plan

Survey Error Model: ISOWSA0 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	11,900.100	1/100.000 - 12.25 - 8.75 - 6' 15 - 9.625 - 7 - 5				A001Mb_MWD		Tres Equis 5 State 403H / Coterra Tres Equis 5 Sta
	1	11,900.100	23,149.509	1/100.000	6	5		A008Mb_MWD+IFR1+MS		Tres Equis 5 State 403H / Coterra Tres Equis 5 Sta

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,366.300	17.500	13.375	
5,000.300	12.250	9.625	
11,817.300	8.750	7.000	
23,156.976	6.000	5.000	



Coterra Tres Equis 5 State 403H Rev2 kFc 21Jun24 Anti-Collision Summary Report

Analysis Date-24hr Time: June 21, 2024 - 07:24 PM (UTC 0)
Client: COTERRA
Field: NM Lea County (NAD 83)
Structure: Coterra Tres Equis 5 State Pad Lot 3
Slot: Tres Equis 5 State 403U
Well: Tres Equis 5 State 403H
Borehole: Tres Equis 5 State 403H
Scan MD Range: 0.00ft ~ 23156.98ft

Analysis Method: 3D Least Distance
Reference Trajectory: Coterra Tres Equis 5 State 403H Rev2 kFc 21Jun24 (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: 2024.2.0.1
Database \ Project: Tres Equis 5 State 403H-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 <= 2000ft
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

12 out of 22 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.

Coterra Tres Equis 5 State 353H Rev2 kFc 21Jun24 (DefinitivePlan) - Fail Minor

20.00	16.26	18.71	3.74	N/A	MAS = 4.96 (m)	0.00	0.00	CtCt<=15m<15.00				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	6.30	-0.05	1.50	OSF1.50	1330.00	1330.00	OSF<1.50				Enter Minor
20.00	22.61	4.60	-2.61	1.32	OSF1.50	1500.00	1500.00					MinPt-CiCt
20.15	23.05	4.45	-2.91	1.30	OSF1.50	1530.00	1530.00					MinPt-EOU
20.26	23.20	4.46	-2.94	1.30	OSF1.50	1540.00	1540.00					MinPt-SF
20.40	23.35	4.51	-2.95	1.30	OSF1.50	1550.00	1550.00					MinPt-ADP
24.71	25.10	7.65	-0.39	1.48	OSF1.50	1670.00	1670.00	OSF>1.50				Exit Minor
203.92	61.88	162.33	142.03	5.00	OSF1.50	4110.00	4104.52	OSF>5.00				Exit Alert
660.11	177.89	541.18	482.21	5.59	OSF1.50	11840.00	11824.77					MinPt-EOU
660.33	178.17	541.22	482.16	5.58	OSF1.50	11870.00	11854.77					MinPt-ADP
661.12	178.60	541.73	482.53	5.58	OSF1.50	11922.75	11907.52					MinPt-SF
670.70	213.87	527.79	456.83	4.72	OSF1.50	12190.00	12165.18	OSF<5.00				Enter Alert
666.48	212.60	524.42	453.89	4.72	OSF1.50	12220.00	12191.61					MinPt-SF
660.00	209.90	519.74	450.10	4.73	OSF1.50	12320.00	12273.70					MinPts
659.92	209.75	519.75	450.16	4.73	OSF1.50	12330.00	12281.34					MinPt-CiCt
694.04	211.27	552.86	482.77	4.94	OSF1.50	14810.00	12500.00					MinPt-CiCt
694.04	227.65	541.95	466.39	4.59	OSF1.50	16660.00	12500.00	OSF>5.00				Exit Alert
596.67	181.23	475.52	415.44	4.96	OSF1.50	16770.00	12500.00	OSF<5.00				Enter Alert
215.00	210.51	74.33	4.49	1.53	OSF1.50	17360.00	12500.00					MinPt-CiCt
215.80	212.55	73.77	3.24	1.52	OSF1.50	17380.00	12500.00					MinPt-EOU
216.70	213.48	74.05	3.22	1.52	OSF1.50	17390.00	12500.00					MinPts
694.05	238.00	535.06	456.05	4.39	OSF1.50	18738.70	12500.00					MinPts
694.08	257.31	522.21	436.76	4.06	OSF1.50	23150.00	12500.00					MinPt-CiCt
694.08	257.40	522.15	436.68	4.05	OSF1.50	23156.98	12500.00					MinPts

30-025-45523 - HEMLOCK 32 STATE 703H - MWD to 17405ft - A (DefinitiveSurvey) - Fail Minor

813.20	32.81	811.22	780.39	5139168.04	MAS = 10.00 (m)	0.00	0.00					MinPts
813.21	32.81	811.21	780.41	29235.26	MAS = 10.00 (m)	23.00	23.00					WRP
815.74	32.81	810.15	782.93	225.63	MAS = 10.00 (m)	430.00	430.00					MinPt-EOU
818.51	32.81	810.21	785.70	129.21	MAS = 10.00 (m)	700.00	700.00					MinPt-EOU
786.02	37.34	760.55	748.69	33.07	OSF1.50	2460.00	2460.00					MinPt-CiCt
286.26	87.17	227.61	199.09	4.99	OSF1.50	5790.00	5778.14	OSF<5.00				Enter Alert
163.91	116.58	85.65	47.33	2.12	OSF1.50	7670.00	7654.77					MinPt-CiCt
163.41	122.12	81.46	41.29	2.01	OSF1.50	8040.00	8024.77					MinPt-CiCt
158.94	132.02	70.38	26.92	1.81	OSF1.50	8700.00	8684.77					MinPt-CiCt
159.25	133.04	70.02	26.22	1.80	OSF1.50	8770.00	8754.77					MinPt-EOU
159.73	133.61	70.12	26.12	1.80	OSF1.50	8810.00	8794.77					MinPt-ADP
164.53	137.89	72.06	26.63	1.79	OSF1.50	9110.00	9094.77					MinPt-SF
170.07	146.96	71.56	23.12	1.74	OSF1.50	9740.00	9724.77					MinPt-CiCt
167.92	157.86	62.14	10.06	1.60	OSF1.50	10480.00	10464.77					MinPt-CiCt
166.34	166.51	54.79	-0.17	1.50	OSF1.50	11060.00	11044.77	OSF<1.50				Enter Minor
151.38	173.64	35.08	-22.26	1.31	OSF1.50	11546.76	11531.53					MinPt-CiCt
151.63	174.40	34.83	-22.77	1.30	OSF1.50	11600.00	11584.77					MinPt-EOU
151.74	174.54	34.84	-22.81	1.30	OSF1.50	11610.00	11594.77					MinPt-SF
151.86	174.69	34.87	-22.82	1.30	OSF1.50	11620.00	11604.77					MinPt-ADP
153.42	177.16	34.77	-23.74	1.30	OSF1.50	11790.00	11774.77					MinPts
152.72	178.95	32.92	-26.23	1.28	OSF1.50	11930.00	11914.77					MinPts
175.53	178.54	56.00	-3.01	1.47	OSF1.50	12060.00	12043.46	OSF>1.50				Exit Minor
548.95	168.21	436.31	380.73	4.93	OSF1.50	12530.00	12407.30	OSF>5.00				Exit Alert
1252.30	214.66	1108.70	1037.64	8.80	OSF1.50	23156.98	12500.00					MinPts

30-025-46754 - HEMLOCK 32 STATE 203H - MWD to 14496ft - A (DefinitiveSurvey) - Warning Alert

905.44	32.81	903.46	872.63	8662660.05	MAS = 10.00 (m)	0.00	0.00					Surface
905.42	32.81	903.41	872.61	25110.69	MAS = 10.00 (m)	23.00	23.00					WRP
307.36	93.93	244.20	213.43	4.97	OSF1.50	6270.00	6256.31	OSF<5.00				Enter Alert
141.43	134.86	50.99	6.57	1.57	OSF1.50	8992.26	8977.03					MinPt-CiCt
141.47	134.96	50.97	6.52	1.57	OSF1.50	9000.00	8984.77					MinPts
380.55	117.38	301.76	263.17	4.91	OSF1.50	9620.00	9604.77	OSF>5.00				Exit Alert
3361.48	117.95	3282.35	3243.53	43.28	OSF1.50	13290.00	12500.00					MinPt-SF
3384.35	118.75	3304.68	3265.60	43.28	OSF1.50	13340.00	12500.00					MinPt-SF
3475.35	121.96	3393.54	3353.39	43.26	OSF1.50	13530.00	12500.00					MinPt-SF
3277.46	255.64	3106.53	3021.82	19.34	OSF1.50	23156.98	12500.00					MinPts

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	
30-025-44343 - HEMLOCK 32 STATE 701H - MWD to 17540ft - A (DefinitiveSurvey) - Warning Alert												
1173.66	32.81	1171.68	1140.85	6413965.53		MAS = 10.00 (m)	0.00	0.00				MinPts
1173.67	32.81	1171.68	1140.86	145677.39		MAS = 10.00 (m)	23.00	23.00				WRP
1176.07	32.81	1169.17	1143.26	238.73		MAS = 10.00 (m)	580.00	580.00				MinPt-EOU
1180.83	32.81	1166.81	1148.02	97.90		MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
1179.96	32.81	1161.14	1147.16	69.06		MAS = 10.00 (m)	1800.00	1800.00				MinPts
1180.59	32.81	1160.24	1147.78	63.43		MAS = 10.00 (m)	1960.00	1960.00				MinPt-EOU
1180.84	42.79	1151.73	1138.05	43.11		OSF1.50	2830.00	2829.38				MinPt-CtCt
1181.06	43.47	1151.49	1137.59	42.41		OSF1.50	2880.00	2879.19				MinPt-EOU
1181.29	43.74	1151.54	1137.55	42.14		OSF1.50	2900.00	2899.11				MinPt-ADP
1185.83	53.58	1149.52	1132.25	34.27		OSF1.50	3510.00	3506.80				MinPt-EOU
1186.72	54.65	1149.70	1132.07	33.60		OSF1.50	3580.00	3576.53				MinPt-ADP
1190.22	58.00	1150.97	1132.22	31.70		OSF1.50	3790.00	3785.73				MinPt-ADP
1263.83	131.66	1175.52	1132.17	14.56		OSF1.50	8720.00	8704.77				MinPt-CtCt
1264.16	132.60	1175.22	1131.56	14.46		OSF1.50	8790.00	8774.77				MinPt-EOU
1264.51	133.00	1175.30	1131.51	14.42		OSF1.50	8820.00	8804.77				MinPt-ADP
1275.71	149.73	1175.35	1125.97	12.90		OSF1.50	9960.00	9944.77				MinPt-EOU
1278.04	152.51	1175.83	1125.53	12.69		OSF1.50	10150.00	10134.77				MinPt-ADP
1283.99	160.12	1176.71	1123.88	12.14		OSF1.50	10660.00	10644.77				MinPt-EOU
1284.69	160.96	1176.85	1123.73	12.08		OSF1.50	10720.00	10704.77				MinPt-ADP
1295.89	171.04	1181.33	1124.86	11.46		OSF1.50	11400.00	11384.77				MinPt-EOU
1296.85	172.17	1181.54	1124.69	11.39		OSF1.50	11480.00	11464.77				MinPt-ADP
1301.10	176.85	1182.66	1124.25	11.12		OSF1.50	11790.00	11774.77				MinPt-EOU
1298.00	179.88	1177.57	1118.11	10.90		OSF1.50	12070.00	12053.16				MinPt-CtCt
1298.02	179.95	1177.55	1118.07	10.90		OSF1.50	12080.00	12062.80				MinPts
1298.48	180.08	1177.93	1118.40	10.89		OSF1.50	12110.00	12091.46				MinPt-SF
651.32	197.45	519.18	453.87	4.97		OSF1.50	22720.00	12500.00	OSF<5.00			Enter Alert
269.09	218.18	123.13	50.91	1.85		OSF1.50	23156.98	12500.00				MinPts
30-025-40675-0100 - TRES EQUIS 5 STATE 2 ST01 - Gyro+MWD to 10485ft - P (DefinitiveSurvey) - Warning Alert												
499.96	32.81	497.98	467.16	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
499.68	32.81	497.66	466.87	13402.96		MAS = 10.00 (m)	10.00	10.00				MinPt-SF
499.59	32.81	497.61	466.78	345689.17		MAS = 10.00 (m)	23.00	23.00				WRP
492.74	32.81	478.67	459.93	40.61		MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
402.67	66.94	357.46	335.74	9.23		OSF1.50	4460.00	4453.19				MinPt-CtCt
403.64	69.47	356.74	334.17	8.90		OSF1.50	4630.00	4622.54				MinPt-EOU
404.39	70.36	356.90	334.03	8.80		OSF1.50	4690.00	4682.31				MinPt-ADP
310.91	85.51	253.37	225.40	5.53		OSF1.50	6216.29	6202.81				MinPt-CtCt
311.04	85.87	253.25	225.17	5.51		OSF1.50	6250.00	6236.39				MinPt-EOU
311.67	86.63	253.38	225.04	5.47		OSF1.50	6320.00	6306.12				MinPt-ADP
318.96	93.80	255.89	225.16	5.16		OSF1.50	6970.00	6954.77				MinPt-CtCt
319.36	95.00	255.49	224.36	5.10		OSF1.50	7080.00	7064.77				MinPt-EOU
320.38	97.25	255.01	223.13	5.00		OSF1.50	7280.00	7264.77	OSF<5.00			Enter Alert
325.01	105.94	253.85	219.07	4.65		OSF1.50	8030.00	8014.77				MinPt-EOU
327.77	109.89	253.97	217.88	4.52		OSF1.50	8360.00	8344.77				MinPt-EOU
330.59	114.05	254.02	216.54	4.39		OSF1.50	8700.00	8684.77				MinPt-EOU
331.41	115.03	254.19	216.38	4.36		OSF1.50	8780.00	8764.77				MinPt-ADP
316.92	137.29	224.86	179.64	3.49		OSF1.50	10510.00	10494.77				MinPt-CtCt
316.94	137.33	224.85	179.61	3.49		OSF1.50	10520.00	10504.77				MinPts
400.96	122.65	318.66	278.31	4.95		OSF1.50	10760.00	10744.77	OSF>5.00			Exit Alert
2206.03	117.75	2127.03	2088.28	28.45		OSF1.50	13360.00	12500.00				MinPt-SF
2535.26	241.76	2373.59	2293.50	15.82		OSF1.50	22940.00	12500.00				MinPt-CtCt
2535.39	242.28	2373.37	2293.11	15.79		OSF1.50	22970.00	12500.00				MinPt-EOU
2535.67	242.62	2373.42	2293.05	15.77		OSF1.50	22990.00	12500.00				MinPt-ADP
2544.15	245.09	2380.26	2299.06	15.66		OSF1.50	23156.98	12500.00				MinPt-SF
30-025-40675 - TRES EQUIS 5 STATE 2 - Gyro+MWD to 15178ft - P (DefinitiveSurvey) - Warning Alert												
499.96	32.81	497.98	467.16	N/A		MAS = 10.00 (m)	0.00	0.00				Surface
499.68	32.81	497.66	466.87	13402.96		MAS = 10.00 (m)	10.00	10.00				MinPt-SF
499.59	32.81	497.61	466.78	345689.17		MAS = 10.00 (m)	23.00	23.00				WRP
492.74	32.81	478.67	459.93	40.61		MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
402.67	66.96	357.45	335.71	9.22		OSF1.50	4461.53	4454.71				MinPt-CtCt
403.64	69.47	356.74	334.17	8.90		OSF1.50	4630.00	4622.54				MinPt-EOU
404.39	70.36	356.90	334.03	8.80		OSF1.50	4690.00	4682.31				MinPt-ADP
423.75	97.26	358.37	326.49	6.62		OSF1.50	6460.00	6445.59				MinPt-EOU
427.33	107.24	355.30	320.09	6.05		OSF1.50	7130.00	7114.77				MinPt-CtCt
429.61	116.14	351.64	313.46	5.61		OSF1.50	7740.00	7724.77				MinPt-EOU
433.41	120.52	352.52	312.89	5.45		OSF1.50	8040.00	8024.77				MinPt-ADP
437.21	125.10	353.28	312.11	5.29		OSF1.50	8350.00	8334.77				MinPt-EOU
440.21	133.21	350.86	307.00	5.00		OSF1.50	8900.00	8884.77	OSF<5.00			Enter Alert
434.99	148.37	335.54	286.62	4.43		OSF1.50	9930.00	9914.77				MinPt-CtCt
437.53	154.53	333.97	283.00	4.28		OSF1.50	10350.00	10334.77				MinPt-EOU
439.22	158.22	333.21	281.01	4.19		OSF1.50	10610.00	10594.77				MinPt-EOU
439.28	158.30	333.21	280.98	4.19		OSF1.50	10620.00	10604.77				MinPt-ADP
439.53	158.44	333.37	281.09	4.19		OSF1.50	10640.00	10624.77				MinPt-SF
510.35	155.10	406.42	355.25	4.97		OSF1.50	11110.00	11094.77	OSF>5.00			Exit Alert
1378.99	113.87	1302.58	1265.13	18.39		OSF1.50	12730.00	12474.39				MinPt-SF
1351.64	113.86	1275.24	1237.79	18.02		OSF1.50	13190.00	12500.00				MinPt-CtCt
1351.68	113.95	1275.22	1237.73	18.01		OSF1.50	13200.00	12500.00				MinPt-EOU
1351.75	114.04	1275.23	1237.71	18.00		OSF1.50	13210.00	12500.00				MinPt-ADP
1352.65	114.74	1275.65	1237.90	17.90		OSF1.50	13300.00	12500.00				MinPt-ADP
1360.44	117.72	1281.46	1242.72	17.54		OSF1.50	13600.00	12500.00				MinPt-SF
1361.52	118.34	1282.13	1243.18	17.46		OSF1.50	13670.00	12500.00				MinPt-ADP
1363.10	120.07	1282.55	1243.03	17.22		OSF1.50	13810.00	12500.00				MinPt-EOU
1361.59	124.08	1278.37	1237.51	16.64		OSF1.50	14080.00	12500.00				MinPt-CtCt
1362.10	125.74	1277.78	1236.37	16.43		OSF1.50	14180.00	12500.00				MinPt-EOU
1362.60	128.75	1276.27	1233.86	16.05		OSF1.50	14350.00	12500.00				MinPt-CtCt
1349.31	161.47	1241.17	1187.84	12.64		OSF1.50	15750.00	12500.00				MinPt-CtCt
1347.47	184.54	1223.94	1162.92	11.03		OSF1.50	16580.00	12500.00				MinPt-CtCt
1348.22	187.45	1222.76	1160.78	10.86		OSF1.50	16680.00	12500.00				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	
1348.73	188.06	1222.85	1160.67	10.83		OSF1.50	16700.00	12500.00				MinPt-ADP
1394.62	199.64	1261.02	1194.98	10.55		OSF1.50	17000.00	12500.00				MinPt-SF
2142.94	259.68	1969.32	1883.26	12.44		OSF1.50	18810.00	12500.00				MinPt-ADP
2142.20	258.77	1969.19	1883.43	12.48		OSF1.50	18860.00	12500.00				MinPt-EOU
2137.71	250.01	1970.54	1887.71	12.89		OSF1.50	19220.00	12500.00				MinPt-EOU
2132.04	241.49	1970.55	1890.55	13.32		OSF1.50	19620.00	12500.00				MinPt-ADP
2131.12	240.72	1970.14	1890.40	13.35		OSF1.50	19680.00	12500.00				MinPt-ADP
2130.93	240.50	1970.10	1890.44	13.36		OSF1.50	19700.00	12500.00				MinPt-EOU
2130.73	239.95	1970.26	1890.78	13.39		OSF1.50	19750.00	12500.00				MinPt-CiCt
2101.71	223.95	1951.91	1877.76	14.16		OSF1.50	21050.00	12500.00				MinPt-SF
2094.31	223.49	1944.82	1870.82	14.14		OSF1.50	21470.00	12500.00				MinPt-SF
2090.94	223.82	1941.23	1867.12	14.10		OSF1.50	21790.00	12500.00				MinPt-SF
2087.31	225.62	1936.39	1861.69	13.96		OSF1.50	22220.00	12500.00				MinPt-CiCt
2087.37	225.81	1936.33	1861.56	13.95		OSF1.50	22240.00	12500.00				MinPt-EOU
2087.53	226.00	1936.36	1861.53	13.94		OSF1.50	22260.00	12500.00				MinPt-ADP
2087.81	228.16	1945.20	1869.65	13.87		OSF1.50	22480.00	12500.00				MinPt-SF
2223.71	233.10	2067.81	1990.62	14.39		OSF1.50	23156.98	12500.00				TD

30-025-44344 - HEMLOCK 32 STATE 702H - MWD to 17526ft - A (DefinitiveSurvey) - Warning Alert

1149.61	32.81	1147.63	1116.80	#####	MAS = 10.00 (m)	0.00	0.00					Surface
1149.61	32.81	1147.62	1116.80	115142.32	MAS = 10.00 (m)	23.00	23.00					WRP
1148.94	32.81	1141.28	1116.14	201.65	MAS = 10.00 (m)	650.00	650.00					MinPts
1150.85	32.81	1136.81	1118.04	95.24	MAS = 10.00 (m)	1290.00	1290.00					MinPt-EOU
831.24	113.14	755.27	718.10	11.16	OSF1.50	7420.00	7404.77					MinPt-CiCt
831.76	114.69	754.76	717.07	11.01	OSF1.50	7530.00	7514.77					MinPt-EOU
832.35	115.40	754.88	716.95	10.95	OSF1.50	7580.00	7564.77					MinPt-ADP
851.06	136.06	759.81	715.00	9.48	OSF1.50	8990.00	8974.77					MinPt-EOU
854.83	140.43	760.67	714.40	9.22	OSF1.50	9300.00	9284.77					MinPt-ADP
854.79	151.68	753.13	703.10	8.53	OSF1.50	10080.00	10064.77					MinPt-CiCt
855.46	153.19	752.79	702.27	8.45	OSF1.50	10190.00	10174.77					MinPt-EOU
857.68	156.01	753.13	701.67	8.32	OSF1.50	10390.00	10374.77					MinPt-ADP
864.56	164.72	754.21	699.84	7.94	OSF1.50	10990.00	10974.77					MinPt-CiCt
861.55	175.45	744.04	686.10	7.42	OSF1.50	11730.00	11714.77					MinPt-CiCt
861.81	176.26	743.77	685.55	7.39	OSF1.50	11790.00	11774.77					MinPts
862.94	178.06	743.73	684.88	7.32	OSF1.50	11922.75	11907.52					MinPt-CiCt
862.97	178.20	743.67	684.77	7.31	OSF1.50	11940.00	11924.77					MinPt-EOU
863.04	178.26	743.69	684.77	7.31	OSF1.50	11950.00	11934.76					MinPt-ADP
864.06	178.60	744.49	685.46	7.31	OSF1.50	12000.00	11984.54					MinPt-SF
677.19	205.90	539.42	471.29	4.96	OSF1.50	22960.00	12500.00	OSF<5.00				Enter Alert
566.06	212.09	424.17	353.98	4.02	OSF1.50	23156.98	12500.00					MinPts

30-025-40818 - TRES EQUIS 5 STATE 2Y - Gyro-MWD to 15531ft - P (DefinitiveSurvey) - Pass

647.17	32.81	645.19	614.36	801377.20	MAS = 10.00 (m)	0.00	0.00					Surface
647.10	32.81	645.08	614.29	15228.83	MAS = 10.00 (m)	23.00	23.00					WRP
638.20	32.81	624.01	605.39	52.11	MAS = 10.00 (m)	1290.00	1290.00					MinPt-EOU
635.14	35.96	610.58	599.18	27.78	OSF1.50	2360.00	2360.00					MinPt-CiCt
527.09	105.78	456.04	421.32	7.57	OSF1.50	7015.91	7000.68					MinPt-CiCt
527.94	108.28	455.21	419.65	7.40	OSF1.50	7190.00	7174.77					MinPt-EOU
532.13	113.09	456.20	419.04	7.14	OSF1.50	7520.00	7504.77					MinPt-ADP
538.67	135.47	447.82	403.20	6.02	OSF1.50	9040.00	9024.77					MinPt-CiCt
538.80	139.29	445.40	399.51	5.85	OSF1.50	9300.00	9284.77					MinPt-CiCt
538.25	144.89	441.12	393.36	5.62	OSF1.50	9680.00	9664.77					MinPt-CiCt
535.47	158.03	429.58	377.44	5.12	OSF1.50	10630.00	10614.77					MinPt-CiCt
535.09	158.57	428.84	376.52	5.10	OSF1.50	10700.00	10684.77					MinPts
535.35	158.70	429.01	376.65	5.10	OSF1.50	10720.00	10704.77					MinPt-SF
1467.89	118.47	1388.42	1349.43	18.81	OSF1.50	13210.00	12500.00					MinPt-CiCt
1467.85	121.42	1386.41	1346.43	18.34	OSF1.50	13510.00	12500.00					MinPt-CiCt
1461.31	132.41	1362.54	1318.90	16.61	OSF1.50	14270.00	12500.00					MinPt-CiCt
1422.93	162.24	1314.27	1260.69	13.26	OSF1.50	15680.00	12500.00					MinPt-CiCt
1404.98	182.59	1282.75	1222.39	11.63	OSF1.50	16490.00	12500.00					MinPt-CiCt
1406.32	187.36	1280.91	1218.96	11.34	OSF1.50	16670.00	12500.00					MinPt-EOU
1406.78	187.90	1281.02	1218.88	11.31	OSF1.50	16690.00	12500.00					MinPt-ADP
1534.77	220.43	1387.32	1314.34	10.51	OSF1.50	17320.00	12500.00					MinPt-SF
2190.76	260.13	2016.85	1930.64	12.70	OSF1.50	18790.00	12500.00					MinPt-CiCt
2256.00	223.83	2106.28	2032.17	15.21	OSF1.50	21100.00	12500.00					MinPt-ADP
2255.98	223.81	2106.28	2032.18	15.21	OSF1.50	21110.00	12500.00					MinPt-EOU
2255.97	223.78	2106.28	2032.19	15.21	OSF1.50	21120.00	12500.00					MinPt-CiCt
2273.03	223.20	2123.73	2049.83	15.37	OSF1.50	22050.00	12500.00					MinPt-SF
2271.21	224.39	2121.12	2046.82	15.27	OSF1.50	22280.00	12500.00					MinPt-CiCt
2271.42	224.98	2120.93	2046.44	15.24	OSF1.50	22360.00	12500.00					MinPt-EOU
2271.75	225.38	2121.00	2046.37	15.21	OSF1.50	22410.00	12500.00					MinPt-ADP
2285.90	228.46	2133.10	2057.45	15.10	OSF1.50	22730.00	12500.00					MinPt-SF
2354.65	231.72	2199.67	2122.93	15.33	OSF1.50	23156.98	12500.00					TD

30-025-46755 - HEMLOCK 32 STATE 204H - MWD to 14786ft - A (DefinitiveSurvey) - Pass

920.45	32.81	918.48	887.65	#####	MAS = 10.00 (m)	0.00	0.00					MinPts
920.46	32.81	918.45	887.65	29925.95	MAS = 10.00 (m)	23.00	23.00					WRP
548.31	110.53	474.08	437.77	7.53	OSF1.50	7240.00	7224.77					MinPt-CiCt
548.82	115.04	471.59	433.78	7.24	OSF1.50	7560.00	7544.77					MinPt-CiCt
540.25	139.62	446.64	400.63	5.85	OSF1.50	9231.57	9216.34					MinPt-CiCt
540.43	140.15	446.46	400.28	5.83	OSF1.50	9270.00	9254.77					MinPt-EOU
540.67	140.43	446.52	400.25	5.83	OSF1.50	9290.00	9274.77					MinPt-ADP
543.00	141.60	448.07	401.40	5.80	OSF1.50	9380.00	9364.77					MinPt-SF
6178.44	170.45	6064.30	6007.98	54.84	OSF1.50	17700.00	12500.00					MinPt-SF
3298.93	247.88	3133.17	3051.05	20.08	OSF1.50	23156.98	12500.00					MinPts

30-025-45516 - HEMLOCK 32 STATE 704H - MWD to 17475ft - A (DefinitiveSurvey) - Pass

825.91	32.81	823.93	793.10	1972696.57	MAS = 10.00 (m)	0.00	0.00					MinPts
825.94	32.81	823.94	793.14	31711.92	MAS = 10.00 (m)	23.00	23.00					WRP
826.08	32.81	823.90	793.27	4160.89	MAS = 10.00 (m)	60.00	60.00					MinPt-EOU
833.61	32.81	813.41	800.80	45.11	MAS = 10.00 (m)	1910.00	1910.00					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	
	626.88	101.40	558.74	525.48	9.40	OSF1.50	6600.11	6585.17				MinPt-CiCt
	627.09	102.00	558.55	525.09	9.35	OSF1.50	6640.00	6624.94				MinPt-EOU
	627.36	102.31	558.62	525.05	9.32	OSF1.50	6660.00	6644.89				MinPt-ADP
	668.05	117.82	588.96	550.23	8.60	OSF1.50	7680.00	7664.77				MinPt-CiCt
	668.35	118.68	588.69	549.67	8.54	OSF1.50	7740.00	7724.77				MinPt-EOU
	668.71	119.10	588.77	549.61	8.52	OSF1.50	7770.00	7754.77				MinPt-ADP
	673.66	131.08	585.73	542.57	7.79	OSF1.50	8580.00	8564.77				MinPt-CiCt
	676.66	144.96	579.48	531.70	7.06	OSF1.50	9520.00	9504.77				MinPt-EOU
	677.52	145.98	579.66	531.53	7.02	OSF1.50	9590.00	9574.77				MinPt-ADP
	684.43	158.56	578.19	525.87	6.53	OSF1.50	10440.00	10424.77				MinPt-CiCt
	685.10	160.61	577.49	524.49	6.45	OSF1.50	10580.00	10564.77				MinPt-EOU
	686.97	177.51	568.10	509.46	5.84	OSF1.50	11720.00	11704.77				MinPt-CiCt
	687.03	178.55	567.46	508.48	5.81	OSF1.50	11790.00	11774.77				MinPt-EOU
	687.48	180.31	566.78	507.17	5.75	OSF1.50	11922.75	11907.52				MinPt-EOU
	687.54	180.36	566.79	507.17	5.75	OSF1.50	11930.00	11914.77				MinPt-ADP
	688.46	180.71	567.49	507.75	5.75	OSF1.50	11980.00	11964.68				MinPt-SF
	1997.13	215.35	1853.07	1781.79	14.00	OSF1.50	23156.98	12500.00				MinPts
30-025-46753 - HEMLOCK 32 STATE 202H - MWD to 14813ft - A (DefinitiveSurvey) - Pass												
	1208.07	32.81	1206.09	1175.26	3195053.58	MAS = 10.00 (m)	0.00	0.00				MinPts
	1208.09	32.81	1206.10	1175.28	109677.74	MAS = 10.00 (m)	23.00	23.00				WRP
	1208.30	32.81	1205.99	1175.49	3633.67	MAS = 10.00 (m)	90.00	90.00				MinPt-EOU
	1208.61	32.81	1205.95	1175.80	1763.55	MAS = 10.00 (m)	140.00	140.00				MinPt-EOU
	681.11	99.00	614.56	582.10	10.47	OSF1.50	6500.00	6485.44				MinPt-CiCt
	681.42	99.84	614.32	581.57	10.38	OSF1.50	6560.00	6545.21				MinPt-EOU
	649.24	139.01	556.03	510.23	7.07	OSF1.50	9225.62	9210.39				MinPt-CiCt
	649.39	139.43	555.89	509.95	7.05	OSF1.50	9260.00	9244.77				MinPt-EOU
	649.49	139.55	555.91	509.93	7.05	OSF1.50	9270.00	9254.77				MinPt-ADP
	651.57	140.60	557.29	510.96	7.01	OSF1.50	9360.00	9344.77				MinPt-SF
	2744.30	264.63	2567.38	2479.67	15.64	OSF1.50	23156.98	12500.00				MinPts
30-025-40532 - TRES EQUIS 5 STATE 1H - Gyro+MWD to 15525ft - A (DefinitiveSurvey) - Pass												
	837.05	32.81	835.07	804.24	1699436.01	MAS = 10.00 (m)	0.00	0.00				MinPts
	837.08	32.81	835.09	804.27	65457.73	MAS = 10.00 (m)	23.00	23.00				WRP
	844.86	32.81	830.56	812.05	68.41	MAS = 10.00 (m)	1290.00	1290.00				MinPt-EOU
	849.85	38.25	823.76	811.60	34.87	OSF1.50	2500.00	2500.00				MinPt-CiCt
	850.27	39.58	823.30	810.69	33.66	OSF1.50	2590.00	2589.99				MinPt-EOU
	850.89	40.32	823.43	810.58	33.04	OSF1.50	2640.00	2639.94				MinPt-ADP
	1019.09	148.15	919.78	870.94	10.42	OSF1.50	9910.00	9894.77				MinPt-CiCt
	1022.11	157.92	916.25	864.19	9.79	OSF1.50	10600.00	10584.77				MinPt-EOU
	1022.17	157.99	916.30	864.17	9.79	OSF1.50	10610.00	10594.77				MinPt-ADP
	1024.05	158.75	917.67	865.30	9.76	OSF1.50	10720.00	10704.77				MinPt-SF
	1695.40	151.64	1593.81	1543.76	16.92	OSF1.50	14330.00	12500.00				MinPt-CiCt
	1695.85	152.96	1593.37	1542.89	16.78	OSF1.50	14400.00	12500.00				MinPt-EOU
	1698.55	156.22	1593.91	1542.34	16.45	OSF1.50	14550.00	12500.00				MinPt-ADP
	1675.23	183.71	1552.26	1491.52	13.78	OSF1.50	15620.00	12500.00				MinPt-CiCt
	1676.05	186.36	1551.32	1489.70	13.59	OSF1.50	15720.00	12500.00				MinPt-EOU
	1677.41	187.98	1551.59	1489.43	13.48	OSF1.50	15780.00	12500.00				MinPt-ADP
	1696.34	204.23	1559.69	1492.12	12.54	OSF1.50	16270.00	12500.00				MinPt-EOU
	1700.37	208.91	1560.60	1491.46	12.29	OSF1.50	16420.00	12500.00				MinPt-ADP
	1383.64	203.39	1247.55	1180.25	10.27	OSF1.50	18140.00	12500.00				MinPt-CiCt
	1383.87	203.99	1247.38	1179.88	10.24	OSF1.50	18170.00	12500.00				MinPt-EOU
	1384.06	204.21	1247.43	1179.86	10.23	OSF1.50	18180.00	12500.00				MinPt-ADP
	1412.93	212.38	1270.84	1200.55	10.04	OSF1.50	18720.00	12500.00				MinPt-SF
	1421.62	214.12	1278.37	1207.50	10.02	OSF1.50	19130.00	12500.00				MinPt-CiCt
	1421.67	214.25	1278.33	1207.41	10.01	OSF1.50	19150.00	12500.00				MinPt-EOU
	1421.72	214.32	1278.34	1207.40	10.01	OSF1.50	19160.00	12500.00				MinPt-ADP
	1423.55	217.57	1278.01	1205.98	9.87	OSF1.50	19620.00	12500.00				MinPt-CiCt
	1423.66	217.91	1277.88	1205.75	9.86	OSF1.50	19660.00	12500.00				MinPt-EOU
	1423.81	218.08	1277.92	1205.73	9.85	OSF1.50	19680.00	12500.00				MinPt-ADP
	1426.74	220.00	1279.58	1206.74	9.78	OSF1.50	19920.00	12500.00				MinPt-ADP
	1429.23	225.51	1278.39	1203.72	9.56	OSF1.50	20490.00	12500.00				MinPt-CiCt
	1429.73	226.97	1277.91	1202.76	9.50	OSF1.50	20610.00	12500.00				MinPt-EOU
	1422.54	235.73	1264.89	1186.81	9.10	OSF1.50	21250.00	12500.00				MinPt-CiCt
	1423.14	237.46	1264.33	1185.67	9.04	OSF1.50	21360.00	12500.00				MinPt-EOU
	1405.31	254.38	1235.22	1150.92	8.33	OSF1.50	22300.00	12500.00				MinPt-CiCt
	1405.96	256.38	1234.55	1149.59	8.27	OSF1.50	22400.00	12500.00				MinPt-EOU
	1406.64	257.16	1234.70	1149.47	8.24	OSF1.50	22440.00	12500.00				MinPt-ADP
	1415.18	260.25	1241.18	1154.93	8.20	OSF1.50	22610.00	12500.00				MinPt-SF
	1535.60	262.96	1359.80	1272.64	8.80	OSF1.50	23156.98	12500.00				TD



Coterra Tres Equis 5 State 403H Rev2 kFc 21Jun24 Proposal Geodetic Report

Def Plan

Report Date: June 21, 2024 - 07:24 PM (UTC 0)
Client: COTERRA
Field: NM Lea County (NAD 83)
Structure / Slot: Coterra Tres Equis 5 State Pad Lot 3 / Tres Equis 5 State 403U
Well: Tres Equis 5 State 403H
Borehole: Tres Equis 5 State 403H
UBH / API#: Unknown / Unknown
Survey Name: Coterra Tres Equis 5 State 403H Rev2 kFc 21Jun24
Survey Date: June 21, 2024
Tort / AHD / DDI / ERD Ratio: 279.992' / 11261.876 ft / 6.767' / 0.901
Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: 32°15'10.02426"N, 103°35'52.94956"W
Location Grid N/E Y/X: N 456474.690 RUS, E 768644.320 RUS
CRS Grid Convergence Angle: 0.392"
Grid Scale Factor: 0.99996827(Applied)
Version / Patch: 2024.2.0.1

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 180.000 °(GRID North)
Vertical Section Origin: 0.000 ft, 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3680.400 ft above MSL
Sealed / Ground Elevation: 3687.400 ft above MSL
Magnetic Declination: 6.166"
Total Gravity Field Strength: 996.4381mgn (9.80665 Based)
Gravity Model: GARM
Total Magnetic Field Strength: 47333.41 nT
Magnetic Dip Angle: 59.777"
Declination Date: June 21, 2024
Magnetic Declination Model: HDGM 2024
North Reference: Grid North
Grid Convergence Used: 0.392"
Total Corr Mag North->Grid North: 5.774"
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 [422' FNL, 1498' FWL]	0.00	0.00	0.00	0.00	-3.680.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155			
	100.00	0.00	24.98	100.00	-3.580.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	200.00	0.00	24.98	200.00	-3.480.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	300.00	0.00	24.98	300.00	-3.380.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	400.00	0.00	24.98	400.00	-3.280.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	500.00	0.00	24.98	500.00	-3.180.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	600.00	0.00	24.98	600.00	-3.080.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	700.00	0.00	24.98	700.00	-2.980.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	800.00	0.00	24.98	800.00	-2.880.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	900.00	0.00	24.98	900.00	-2.780.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
Rustier	1,000.00	0.00	24.98	1,000.00	-2.680.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,100.00	0.00	24.98	1,100.00	-2.580.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,200.00	0.00	24.98	1,200.00	-2.480.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,285.00	0.00	24.98	1,285.00	-2.385.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,300.00	0.00	24.98	1,300.00	-2.380.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,370.00	0.00	24.98	1,370.00	-2.310.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,400.00	0.00	24.98	1,400.00	-2.280.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,500.00	0.00	24.98	1,500.00	-2.180.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,510.00	0.00	24.98	1,510.00	-2.170.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,600.00	0.00	24.98	1,600.00	-2.080.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
Salado	1,700.00	0.00	24.98	1,700.00	-1.980.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,795.00	0.00	24.98	1,795.00	-1.885.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,800.00	0.00	24.98	1,800.00	-1.880.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	1,900.00	0.00	24.98	1,900.00	-1.780.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	2,000.00	0.00	24.98	2,000.00	-1.680.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	2,100.00	0.00	24.98	2,100.00	-1.580.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	2,200.00	0.00	24.98	2,200.00	-1.480.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	2,300.00	0.00	24.98	2,300.00	-1.380.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	2,400.00	0.00	24.98	2,400.00	-1.280.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
	2,500.00	0.00	24.98	2,500.00	-1.180.40	0.00	0.00	0.00	456,474.69	768,644.32	32.25278452	-103.59804155	0.00	0.00	0.00
Nudge, Build 2°/100ft	2,600.00	2.00	24.98	2,599.98	-1,080.42	-1.58	1.58	0.74	456,476.27	768,645.06	32.25278885	-103.59803913	2.00	2.00	0.00
	2,700.00	4.00	24.98	2,699.84	-980.56	-6.33	6.33	2.95	456,481.02	768,647.27	32.25280185	-103.59801988	2.00	2.00	0.00
	2,749.76	5.00	24.98	2,749.44	-930.96	-9.86	9.86	4.59	456,484.55	768,648.91	32.25281154	-103.59802647	2.00	2.00	0.00
	2,800.00	5.00	24.98	2,799.49	-880.91	-13.83	13.83	6.44	456,488.52	768,650.76	32.25282240	-103.59802041	0.00	0.00	0.00
	2,900.00	5.00	24.98	2,899.11	-781.29	-21.72	21.72	10.12	456,496.41	768,654.44	32.25284403	-103.59800834	0.00	0.00	0.00
	3,000.00	5.00	24.98	2,998.73	-681.67	-29.61	29.61	13.79	456,504.30	768,658.11	32.25286565	-103.59799627	0.00	0.00	0.00
	3,100.00	5.00	24.98	3,098.35	-582.05	-37.51	37.51	17.47	456,512.20	768,661.79	32.25288728	-103.59798421	0.00	0.00	0.00
	3,200.00	5.00	24.98	3,197.91	-482.43	-45.40	45.40	21.15	456,520.09	768,665.47	32.25290890	-103.59797214	0.00	0.00	0.00
	3,300.00	5.00	24.98	3,297.59	-382.81	-53.29	53.29	24.82	456,527.98	768,669.14	32.25293053	-103.59796007	0.00	0.00	0.00
	3,400.00	5.00	24.98	3,397.21	-283.19	-61.19	61.19	28.50	456,535.87	768,672.82	32.25295216	-103.59794801	0.00	0.00	0.00
Lamar	3,500.00	5.00	24.98	3,496.83	-183.57	-69.08	69.08	32.18	456,543.77	768,676.50	32.25297378	-103.59793594	0.00	0.00	0.00
	3,600.00	5.00	24.98	3,596.45	-83.95	-76.97	76.97	35.85	456,551.66	768,680.17	32.25299541	-103.59792387	0.00	0.00	0.00
	3,700.00	5.00	24.98	3,696.07	15.67	-84.87	84.87	39.53	456,559.55	768,683.85	32.25301703	-103.59791181	0.00	0.00	0.00
	3,800.00	5.00	24.98	3,795.69	115.29	-92.76	92.76	43.21	456,567.44	768,687.52	32.25303866	-103.59789974	0.00	0.00	0.00
	3,900.00	5.00	24.98	3,895.32	214.92	-100.65	100.65	46.88	456,575.34	768,691.20	32.25306028	-103.59788767	0.00	0.00	0.00
	4,000.00	5.00	24.98	3,994.94	314.54	-108.54	108.54	50.56	456,583.24	768,694.88	32.25308191	-103.59787561	0.00	0.00	0.00
	4,100.00	5.00	24.98	4,094.56	414.16	-116.44	116.44	54.24	456,591.12	768,698.55	32.25310353	-103.59786354	0.00	0.00	0.00
	4,200.00	5.00	24.98	4,194.18	513.78	-124.33	124.33	57.91	456,599.02	768,702.23	32.25312516	-103.59785148	0.00	0.00	0.00
	4,300.00	5.00	24.98	4,293.80	613.40	-132.22	132.22	61.59	456,606.91	768,705.91	32.25314678	-103.59783941	0.00	0.00	0.00
	4,400.00	5.00	24.98	4,393.42	713.02	-140.12	140.12	65.27	456,614.80	768,709.58	32.25316841	-103.59782734	0.00	0.00	0.00
Bell Canyon	4,500.00	5.00	24.98	4,493.04	812.64	-148.01	148.01	68.94	456,622.69	768,713.26	32.25319003	-103.59781528	0.00	0.00	0.00
	4,600.00	5.00	24.98	4,592.66	912.26	-155.90	155.90	72.62	456,630.59	768,716.94	32.25321166	-103.59780321	0.00	0.00	0.00
	4,700.00	5.00	24.98	4,692.28	1,011.88	-163.79	163.79	76.29	456,638.48	768,720.61	32.25323328	-103.59779114	0.00	0.00	0.00
	4,800.00	5.00	24.98	4,791.90	1,111.50	-171.69	171.69	79.97	456,646.37	768,724.29	32.25325491	-103.59777908	0.00	0.00	0.00
	4,900.00	5.00	24.98	4,891.52	1,211.12	-179.58	179.58	83.65	456,654.26	768,727.97	32.25327653	-103.59776701	0.00	0.00	0.00
	5,000.00	5.00	24.98	4,991.14	1,310.74	-187.47	187.47	87.32	456,662.16	768,731.64	32.25329816	-103.59775494	0.00	0.00	0.00
	5,100.00	5.00	24.98	5,090.76	1,410.36	-195.37	195.37	91.00	456,670.05	768,735.32	32.25331978	-103.59774288	0.00	0.00	0.00
	5,149.43	5.00	24.98	5,140.00	1,459.60	-199.27	199.27	92.82	456,673.95	768,737.14	32.25333047	-103.59773081	0.00	0.00	0.00
	5,179.54	5.00	24.98	5,170.00	1,489.60	-201.65	201.65	93.93	456,676.33	768,738.24	32.25333698	-103.59773328	0.00	0.00	0.00
	5,200.00	5.00	24.98	5,190.38	1,509.98	-203.26	203.26	94.68	456,677.94	768,738.99	325				

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (RUS)	Easting (RUS)	Latitude (°)	Longitude (°)	DLS ("100)	BR ("100)	TR ("100)
Bone Spring Lime	9,040.23	0.00	24.98	9,025.00	5,344.60	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,100.00	0.00	24.98	9,084.77	5,404.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,200.00	0.00	24.98	9,184.77	5,504.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,220.23	0.00	24.98	9,205.00	5,524.60	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,235.23	0.00	24.98	9,220.00	5,539.60	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,300.00	0.00	24.98	9,284.77	5,604.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,400.00	0.00	24.98	9,384.77	5,704.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,500.00	0.00	24.98	9,484.77	5,804.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,600.00	0.00	24.98	9,584.77	5,904.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,700.00	0.00	24.98	9,684.77	6,004.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
1st BS SS	9,800.00	0.00	24.98	9,784.77	6,104.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	9,900.00	0.00	24.98	9,884.77	6,204.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,000.00	0.00	24.98	9,984.77	6,304.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,100.00	0.00	24.98	10,084.77	6,404.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,160.23	0.00	24.98	10,145.00	6,464.60	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,200.00	0.00	24.98	10,184.77	6,504.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,300.00	0.00	24.98	10,284.77	6,604.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,400.00	0.00	24.98	10,384.77	6,704.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,500.00	0.00	24.98	10,484.77	6,804.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,600.00	0.00	24.98	10,584.77	6,904.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
2nd BS SS	10,700.00	0.00	24.98	10,684.77	7,004.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,800.00	0.00	24.98	10,784.77	7,104.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,845.23	0.00	24.98	10,830.00	7,149.60	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	10,900.00	0.00	24.98	10,884.77	7,204.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,000.00	0.00	24.98	10,984.77	7,304.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,100.00	0.00	24.98	11,084.77	7,404.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,200.00	0.00	24.98	11,184.77	7,504.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,300.00	0.00	24.98	11,284.77	7,604.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,400.00	0.00	24.98	11,384.77	7,704.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,500.00	0.00	24.98	11,484.77	7,804.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
KOP, Build 107/100ft	11,600.00	0.00	24.98	11,584.77	7,904.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,700.00	0.00	24.98	11,684.77	8,004.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,800.00	0.00	24.98	11,784.77	8,104.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	11,900.00	0.00	24.98	11,884.77	8,204.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	12,000.00	0.00	24.98	11,984.77	8,304.37	-323.07	323.07	150.49	456,797.75	768,794.80	32.25366967	-103.59754765	0.00	0.00	0.00
	12,000.00	7.73	179.63	11,984.54	8,304.14	-317.87	317.87	150.52	456,792.55	768,794.83	32.25365537	-103.59754765	10.00	10.00	0.00
	12,030.87	10.81	179.63	12,015.00	8,334.60	-312.90	312.90	150.55	456,787.58	768,794.87	32.25364171	-103.59754766	10.00	10.00	0.00
	12,100.00	17.73	179.63	12,081.96	8,401.56	-295.87	295.87	150.66	456,770.55	768,794.98	32.25359491	-103.59754768	10.00	10.00	0.00
	12,200.00	27.73	179.63	12,174.08	8,493.68	-257.29	257.29	150.91	456,731.97	768,795.22	32.25348886	-103.59754773	10.00	10.00	0.00
	12,300.00	37.73	179.63	12,258.10	8,577.70	-203.30	203.30	151.26	456,677.98	768,795.57	32.25334045	-103.59754780	10.00	10.00	0.00
Wolfcamp	12,400.00	47.73	179.63	12,331.47	8,651.07	-135.54	135.54	151.70	456,610.22	768,796.01	32.25315420	-103.59754789	10.00	10.00	0.00
	12,452.58	52.98	179.63	12,365.00	8,684.60	-95.07	95.07	151.96	456,569.76	768,796.27	32.25304297	-103.59754794	10.00	10.00	0.00
	12,500.00	57.73	179.63	12,391.96	8,711.55	-56.07	56.07	152.21	456,530.76	768,796.52	32.25293576	-103.59754799	10.00	10.00	0.00
	12,600.00	67.73	179.63	12,437.72	8,757.32	-32.70	32.70	152.78	456,441.99	768,797.10	32.25269176	-103.59754810	10.00	10.00	0.00
	12,672.75	75.00	179.63	12,460.95	8,780.55	-101.59	-101.59	153.23	456,373.11	768,797.54	32.25250242	-103.59754819	10.00	10.00	0.00
	12,700.00	76.36	179.63	12,467.69	8,787.29	-127.99	-127.99	153.40	456,346.71	768,797.71	32.25242984	-103.59754822	5.00	5.00	0.00
	12,800.00	81.36	179.63	12,487.00	8,806.60	-226.07	226.07	154.03	456,248.63	768,798.35	32.25216024	-103.59754835	5.00	5.00	0.00
	12,900.00	86.36	179.63	12,497.69	8,817.29	-325.47	325.47	154.67	456,149.24	768,798.99	32.25188704	-103.59754847	5.00	5.00	0.00
	12,971.35	89.93	179.63	12,500.00	8,819.60	-396.76	396.76	155.13	456,077.94	768,799.45	32.25169107	-103.59754856	5.00	5.00	0.00
	12,972.75	90.00	179.63	12,500.00	8,819.60	-396.76	396.76	155.14	456,076.54	768,799.46	32.25168721	-103.59754857	5.00	5.00	0.00
Landing Point	13,000.00	90.00	179.63	12,500.00	8,819.60	-425.41	-425.41	155.32	456,049.29	768,799.63	32.25161231	-103.59754860	0.00	0.00	0.00
	13,100.00	90.00	179.63	12,500.00	8,819.60	-525.41	-525.41	155.97	455,949.30	768,800.28	32.25133744	-103.59754873	0.00	0.00	0.00
	13,200.00	90.00	179.63	12,500.00	8,819.60	-625.41	-625.41	156.61	455,849.30	768,800.93	32.25106258	-103.59754885	0.00	0.0	

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
	20,400.00	90.00	359.63	12,500.00	8,819.60	2,440.10	-2,440.10	-1,151.50	454,034.67	767,492.86	32.24609934	-103.60181979	0.00	0.00	0.00
	20,500.00	90.00	359.63	12,500.00	8,819.60	2,340.10	-2,340.10	-1,152.14	454,134.67	767,492.21	32.24637420	-103.60181968	0.00	0.00	0.00
	20,600.00	90.00	359.63	12,500.00	8,819.60	2,240.10	-2,240.10	-1,152.79	454,234.66	767,491.57	32.24664907	-103.60181957	0.00	0.00	0.00
	20,700.00	90.00	359.63	12,500.00	8,819.60	2,140.10	-2,140.10	-1,153.44	454,334.66	767,490.92	32.24692393	-103.60181946	0.00	0.00	0.00
	20,800.00	90.00	359.63	12,500.00	8,819.60	2,040.11	-2,040.11	-1,154.08	454,434.65	767,490.28	32.24719880	-103.60181934	0.00	0.00	0.00
	20,900.00	90.00	359.63	12,500.00	8,819.60	1,940.11	-1,940.11	-1,154.73	454,534.65	767,489.63	32.24747366	-103.60181923	0.00	0.00	0.00
	21,000.00	90.00	359.63	12,500.00	8,819.60	1,840.11	-1,840.11	-1,155.38	454,634.64	767,488.98	32.24774853	-103.60181912	0.00	0.00	0.00
	21,100.00	90.00	359.63	12,500.00	8,819.60	1,740.11	-1,740.11	-1,156.02	454,734.64	767,488.34	32.24802339	-103.60181901	0.00	0.00	0.00
	21,200.00	90.00	359.63	12,500.00	8,819.60	1,640.11	-1,640.11	-1,156.67	454,834.63	767,487.69	32.24829825	-103.60181889	0.00	0.00	0.00
	21,300.00	90.00	359.63	12,500.00	8,819.60	1,540.12	-1,540.12	-1,157.32	454,934.63	767,487.04	32.24857312	-103.60181878	0.00	0.00	0.00
	21,400.00	90.00	359.63	12,500.00	8,819.60	1,440.12	-1,440.12	-1,157.96	455,034.62	767,486.40	32.24884798	-103.60181867	0.00	0.00	0.00
	21,500.00	90.00	359.63	12,500.00	8,819.60	1,340.12	-1,340.12	-1,158.61	455,134.61	767,485.75	32.24912285	-103.60181855	0.00	0.00	0.00
	21,600.00	90.00	359.63	12,500.00	8,819.60	1,240.12	-1,240.12	-1,159.25	455,234.61	767,485.10	32.24939771	-103.60181844	0.00	0.00	0.00
	21,700.00	90.00	359.63	12,500.00	8,819.60	1,140.12	-1,140.12	-1,159.90	455,334.60	767,484.46	32.24967258	-103.60181833	0.00	0.00	0.00
	21,800.00	90.00	359.63	12,500.00	8,819.60	1,040.13	-1,040.13	-1,160.55	455,434.60	767,483.81	32.24994744	-103.60181822	0.00	0.00	0.00
	21,900.00	90.00	359.63	12,500.00	8,819.60	940.13	-940.13	-1,161.19	455,534.59	767,483.16	32.25022230	-103.60181810	0.00	0.00	0.00
	22,000.00	90.00	359.63	12,500.00	8,819.60	840.13	-840.13	-1,161.84	455,634.59	767,482.52	32.25049717	-103.60181799	0.00	0.00	0.00
	22,100.00	90.00	359.63	12,500.00	8,819.60	740.13	-740.13	-1,162.49	455,734.58	767,481.87	32.25077203	-103.60181788	0.00	0.00	0.00
	22,200.00	90.00	359.63	12,500.00	8,819.60	640.13	-640.13	-1,163.13	455,834.58	767,481.23	32.25104690	-103.60181776	0.00	0.00	0.00
	22,300.00	90.00	359.63	12,500.00	8,819.60	540.14	-540.14	-1,163.78	455,934.57	767,480.58	32.25132176	-103.60181765	0.00	0.00	0.00
	22,400.00	90.00	359.63	12,500.00	8,819.60	440.14	-440.14	-1,164.43	456,034.57	767,479.93	32.25159662	-103.60181754	0.00	0.00	0.00
	22,500.00	90.00	359.63	12,500.00	8,819.60	340.14	-340.14	-1,165.07	456,134.56	767,479.29	32.25187149	-103.60181743	0.00	0.00	0.00
	22,600.00	90.00	359.63	12,500.00	8,819.60	240.14	-240.14	-1,165.72	456,234.55	767,478.64	32.25214635	-103.60181731	0.00	0.00	0.00
	22,700.00	90.00	359.63	12,500.00	8,819.60	140.15	-140.15	-1,166.37	456,334.55	767,477.99	32.25242122	-103.60181720	0.00	0.00	0.00
	22,800.00	90.00	359.63	12,500.00	8,819.60	40.15	-40.15	-1,167.01	456,434.54	767,477.35	32.25269608	-103.60181709	0.00	0.00	0.00
	22,900.00	90.00	359.63	12,500.00	8,819.60	-59.85	59.85	-1,167.66	456,534.54	767,476.70	32.25297094	-103.60181697	0.00	0.00	0.00
	23,000.00	90.00	359.63	12,500.00	8,819.60	-159.85	159.85	-1,168.30	456,634.53	767,476.05	32.25324581	-103.60181686	0.00	0.00	0.00
	23,100.00	90.00	359.63	12,500.00	8,819.60	-259.85	259.85	-1,168.95	456,734.53	767,475.41	32.25352067	-103.60181675	0.00	0.00	0.00
Tres Equis 5 State 403H - PBHL	23,156.98	90.00	359.63	12,500.00	8,819.60	-316.82	316.82	-1,169.32	456,791.50	767,475.04	32.25367728	-103.60181668	0.00	0.00	0.00
Wolfcamp A □	23,156.98	90.00	359.63	12,500.00	8,819.60	-316.82	316.82	-1,169.32	456,791.50	767,475.04	32.25367728	-103.60181668	0.00	0.00	0.00

Survey Type: Def Plan

Survey Error Model: ISCSWA0 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	11,900.100	1/100.000 - 12.25 – 8.75 – 6'5 – 9.625 – 7 – 5				A001Mb_MWD		Tres Equis 5 State 403H / Coterra Tres Equis 5 Sta
	1	11,900.100	23,149.509	1/100.000	6	5		A008Mb_MWD+IFR1+MS		Tres Equis 5 State 403H / Coterra Tres Equis 5 Sta
EOU Geometry:										
End MD (ft)	Hole Size (in)		Casing Size (in)		Name					
1,366.300	17.500		13.375							
5,000.300	12.250		9.625							
11,817.300	8.750		7.000							
23,156.976	6.000		5.000							

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

1. Geological Formations

TVD of target 12,500

Pilot Hole TD N/A

MD at TD 23,156

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	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	
Wolfcamp	12365	Hydrocarbons	
Wolfcamp - Target	12500	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
14 3/4	0	1370	1370	10-3/4"	40.50	J-55	BT&C	2.66	5.27	11.34
9 7/8	0	12672	12460	7-5/8"	29.70	L-80	LT&C	2.46	1.18	1.53
6 3/4	0	11872	11872	5-1/2"	23.00	L-80	LT&C	1.45	1.28	2.17
6 3/4	11864	23156	12500	5"	18.00	P-110	BT&C	1.66	1.68	50.66
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 State 403U

	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

Cimarex Energy Co., Tres Equis 5 State 403U

3. Cementing Program

Casing	# Sk	Wt. lb/gal	Yld ft ³ /sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	532	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	142	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	1000	10.30	3.64	22.18		Lead: Tuned Light + LCM
	198	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Production	1455	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	49
Production	12472	25

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
9 7/8	13 5/8	10M	Annular	5M	50% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		
6 3/4	13 5/8	10M	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		

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

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1370'	Fresh Water	7.83 - 8.33	28	N/C
1370' to 12672'	Brine Diesel Emulsion	8.50 - 9.00	30-35	N/C
12672' to 23156'	OBM	12.00 - 12.50	50-70	N/C

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

The Brine Emulsion is completely saturated brine fluid that ties diesel into itself to lower the weight of the fluid. The drilling fluid is completely salt saturated.

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

6. Logging and Testing Procedures

Logging, Coring and Testing	
X	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.
	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	8125 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**

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

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

BOPE Additional Information & Testing

1. After running the first string of casing, a 10M BOP/BOPE system with 5M annular will be installed. BOPs will be tested according to Onshore Order #2. BOPE will be tested to full rated pressure (10K for all BOPE except the annular, which is tested to 5K). For the low test, the system will be tested to 250 psi.

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

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

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

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

Additional Well Control Notes

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

Standard New Mexico Variances

Variance Request #1: Skid Rig after Cementing Surface Casing

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

Variance Request #3: Omit the DV Tool from the Intermediate Casing

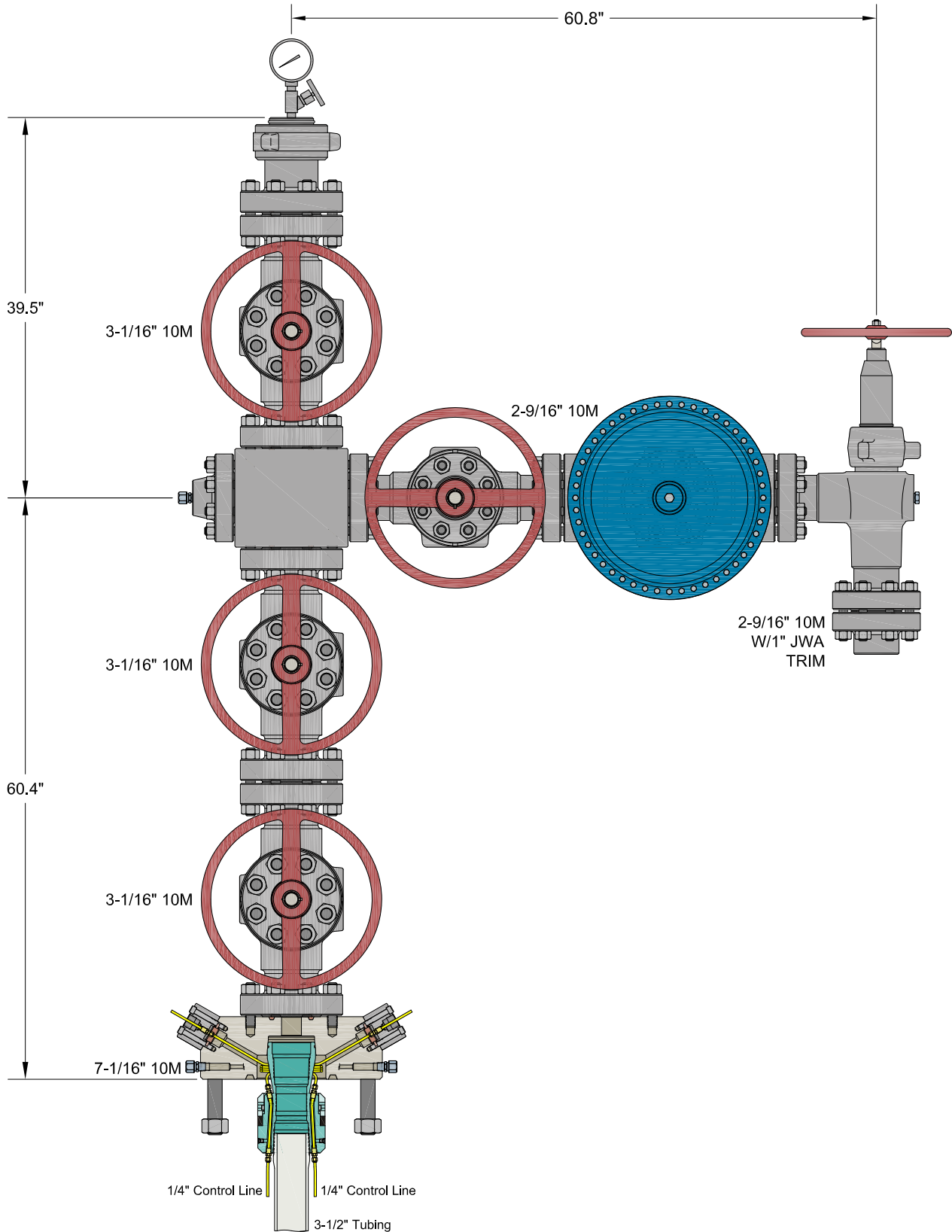
Coterra requests approval to omit the DV tool from the intermediate casing string. In lieu of a DV tool, Coterra will retain the option to pump down the intermediate annulus through casing valves with the appropriate cement slurry in the event returns to surface are not achieved on the primary job.

Variance Request #4: Utilize Co-Flex Choke Line

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

Variance Request #5: 10M BOPE & 5M Annular

Coterra requests permission to utilize a 5M annular BOP with a 10M BOP primary system. The 10M BOP system will include upper pipe rams, blind rams, and lower pipe rams, all tested to 10K, 100% of the rated working pressure. The annular element will be tested to 5K, 100% of the rated working pressure. As noted in the well control plan, if pressure approaches the rated working pressure of the 5K annular element while in use, the upper pipe rams will be closed, and the annular opened so as to not exceed the rated working pressures.



INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

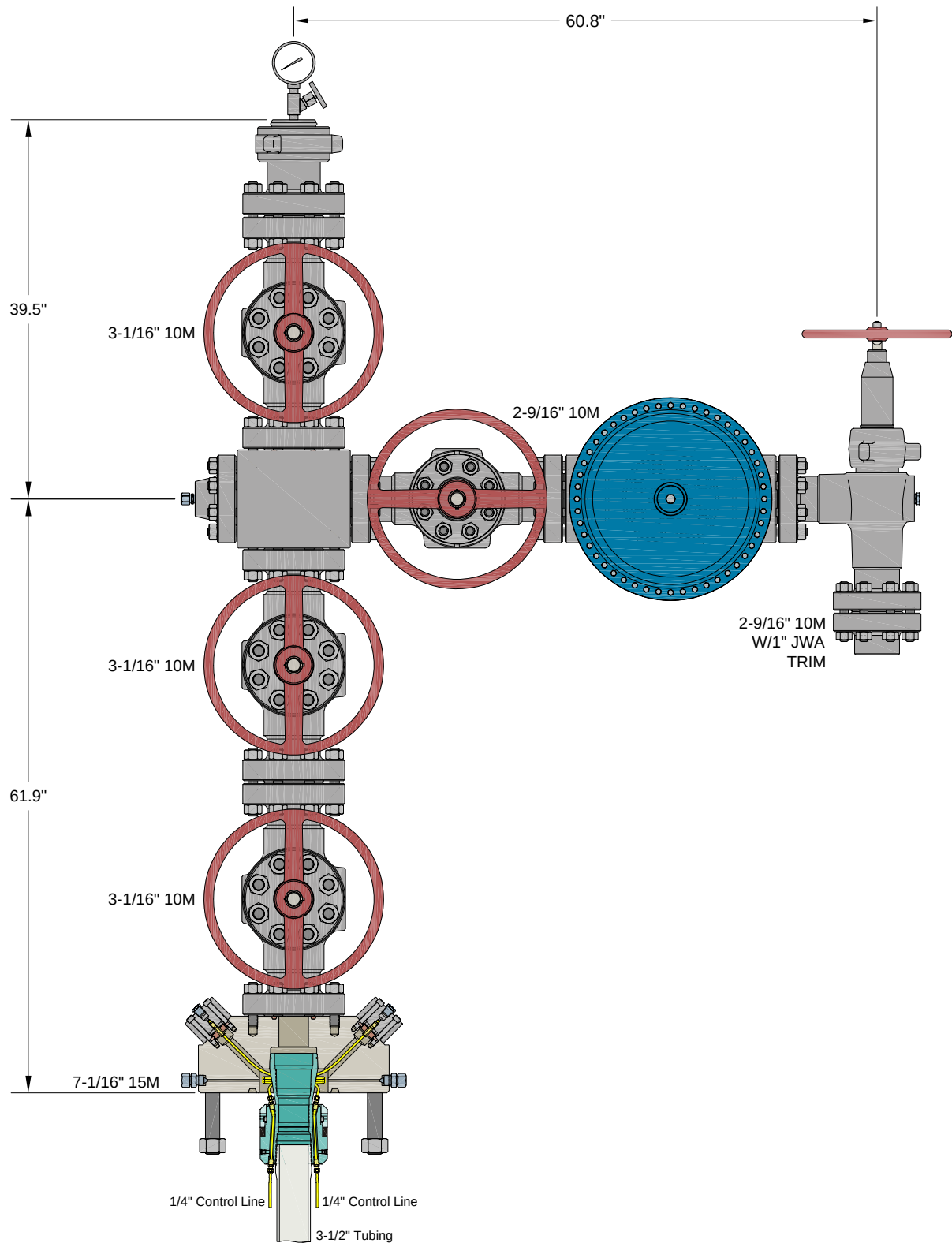
ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

CIMAREX
HOBBS, NM

7-1/16" 10M x 3-1/16" x 2-9/16" 10M Production Tree Assembly
With 7-1/16" 10M x 3-1/16" 10M T40-CCL Tubing Head Adapter
And 7-1/16" 3-1/2" T40-CCL Tubing Hanger

DRAWN	VJK	05SEP23
APPRV		
DRAWING NO.	HBE0001018	



INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

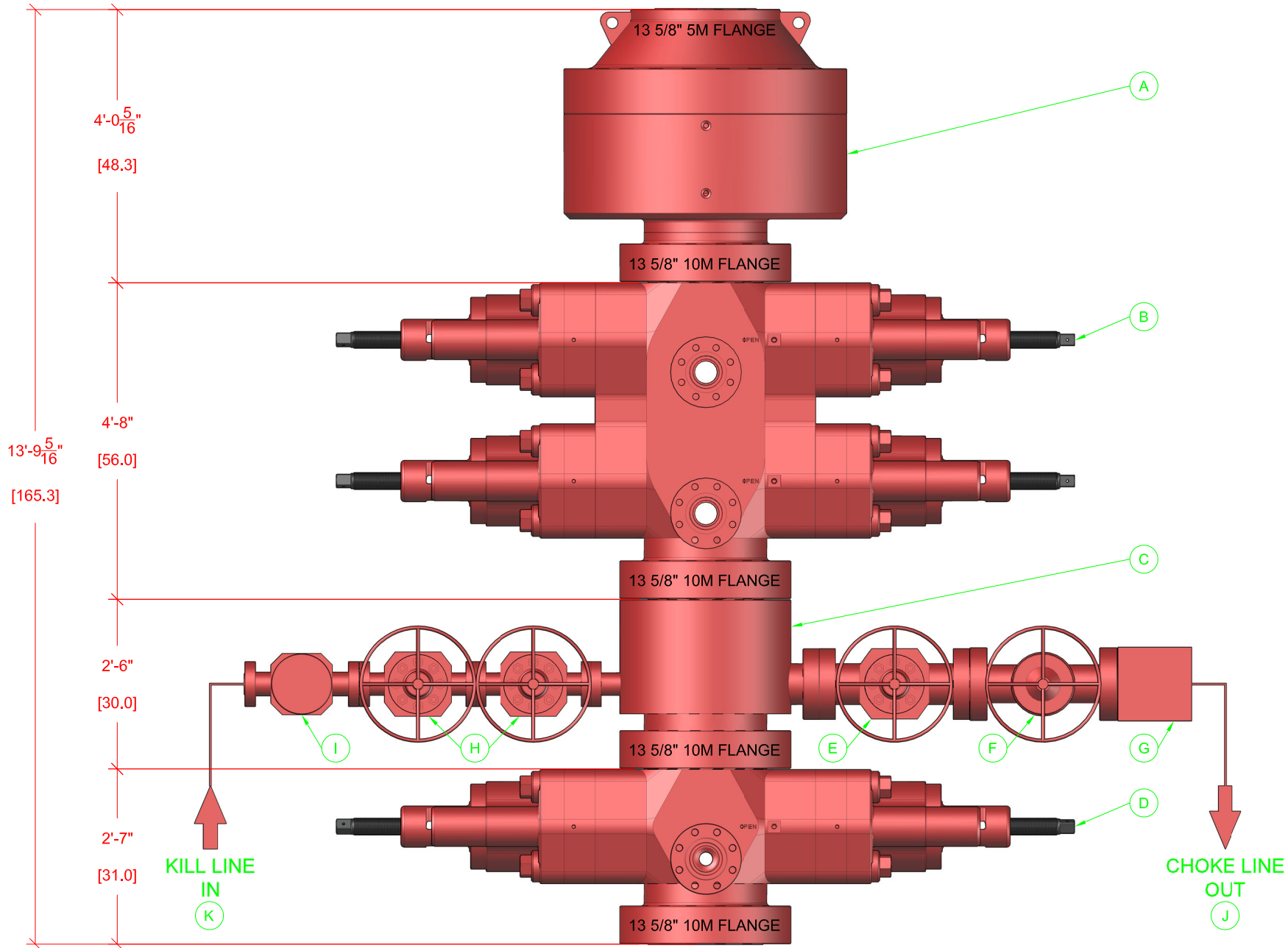
ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

CIMAREX
HOBBS, NM

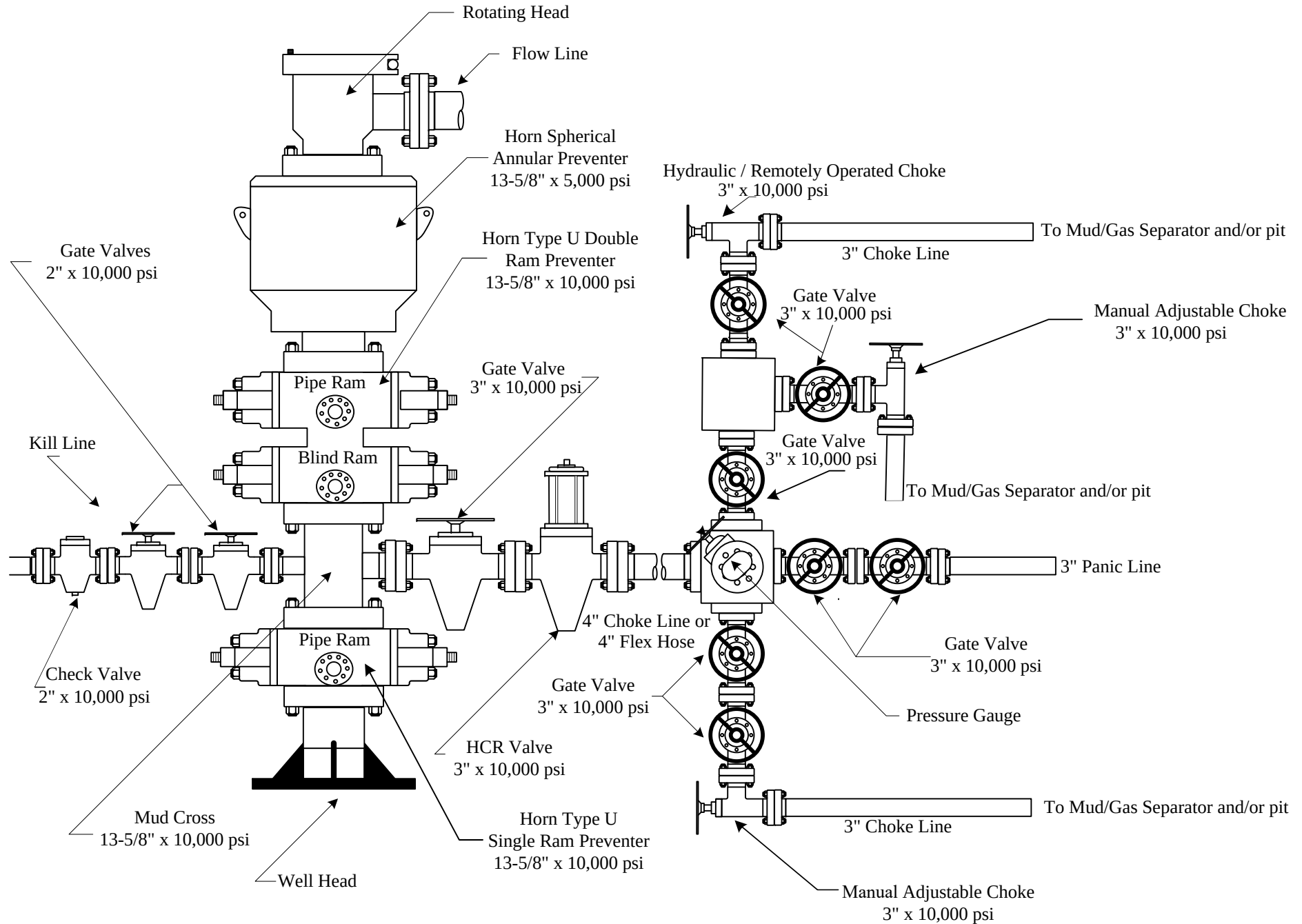
7-1/16" 15M x 3-1/16" x 2-9/16" 10M Production Tree Assembly
With 7-1/16" 15M x 3-1/16" 10M T40-CCL Tubing Head Adapter
And 7-1/16" 3-1/2" T40-CCL Tubing Hanger

DRAWN	VJK	13DEC23
APPRV		
DRAWING NO.	HBE0001018	



BOP EQUIPMENT INFORMATION

DESCRIPTION	MODEL	QTY	ITEM	DESCRIPTION	MODEL	QTY
ANNULAR BOP	13 3/8" 5M	1	G	STUDDED BLOCK	4 1/2" 10M	1
DOUBLE RAM BOP	13 3/8" 10M TYPE-U	1	H	GATE VALE	2 1/2" 10M FC MANUAL	2
MUD CROSS	13 3/8" 10M	1	I	CHECK VALVE	2 1/2" 10M	1
SINGLE RAM BOP	13 3/8" 10M TYPE-U	1	J	CHOKE HOSE	4 1/2" 10M	1
GATE VALVE	4 1/2" 10M FC MANUAL	1	K	KILL HOSE	2 1/2" 10M	1
HCR VALVE	4 1/2" 10M HCR	1	L			



Gates Engineering & Services UK Ltd		CERTIFICATE OF CONFORMITY	
Doc. Ref.	Form-056		
Revision	4		

[illegible]

Gates Engineering & Services UK Ltd		PRESSURE TEST CERTIFICATE	
Doc. Ref.	Form-051		
Revision	9		

			Certificate No:
☐ BURST	☒ HYDROSTATIC	☐ CYCLIC	31675-002

Product:	3" Choke & Kill Hose	Hose WO/Batch:	120839
Assembly WO:	120840	Length:	35Ft
SO No:	31675	Date:	11/02/20
Client:	Gates Engineering & Services North America	Client Reference:	1714987/ 0

Inner Diameter:	3	Inch		
Working Pressure:	10000	Psi	690	bar
Test Pressure:	15000	Psi	1034	bar
Burst Pressure:	22500	Psi	1551	bar

Hose Description:		3" Choke & Kill Hose x 35ft complete with 4.1/16" API 6A 10K Fixed Flange with BX155 Inlaid Ring Groove on one end & 4.1/16" API 6A 10K Swivel Flange with BX155 Inlaid Ring Groove On the other end		
Item No	Qty	Part Code	Customer Tag No (if applicable)	
2	1	HA31623-001	N/A	

Details of Test:	Pressure tested with water at ambient temperature for 60 minutes at test pressure 1034 BAR, Chart recording done with Yokagawa Data Logger S/N: S5NC08915 Transducer ESI GS4200EX3000DE ID:TD/DC-002, S/N: 2018-741502 Calibration Certificate No: IKMCERTL9111
Results:	Pressure Loss: 11.4 Bar Acceptance Criteria: Pressure loss not to exceed - 34.47 Bar or 500 PSI

GESUK Ltd	Third Party
 17/02/20	

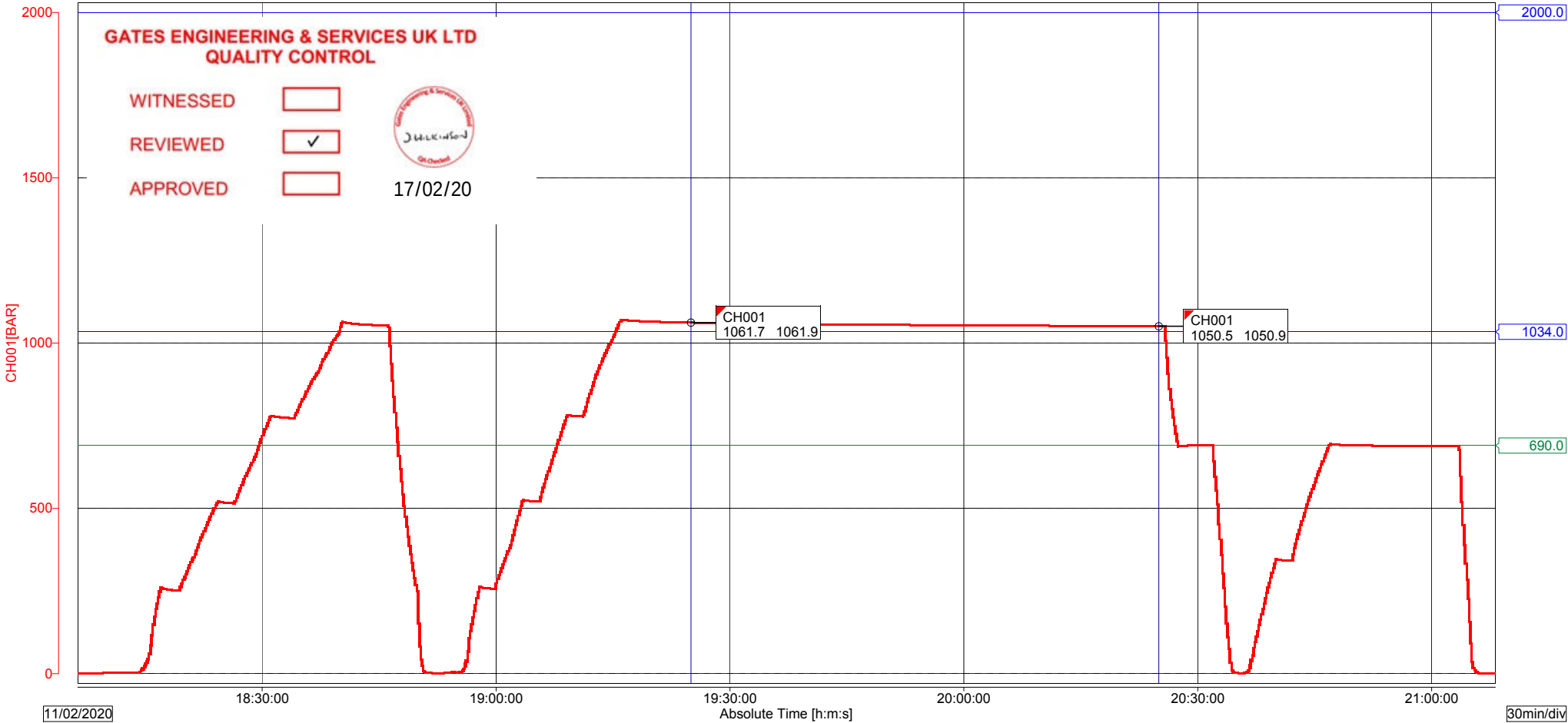
File Message : 120840 FAT
Device Type : DX2000
Serial No. : S5NC08915

Print Groups : GROUP 1
Print Range : 11/02/2020 18:06:20.000 - 11/02/2020 21:08:10.000
Comment : Factory Acceptance Test

Start Time : 11/02/2020 18:06:20.000
Stop Time : 11/02/2020 21:08:10.000

		Cursor A	Cursor B	Difference
Data No.		472	832	360
Absolute Time		11/02/2020 19:25:00.000	11/02/2020 20:25:00.000	01:00:00.000
Channel		Value A	Value B	Value B-A
CH001 [BAR]	Max	1061.9	1050.9	-11.0
	Min	1061.7	1050.5	-11.2

Section	472	-	832	11/02/2020 19:25:00.000	-	11/02/2020 20:25:00.000
Channel	MIN	MAX	P-P	Mean	RMS	
CH001[BAR]	1050.5	1061.9	11.4	1055.0	1055.1	





REPORT OF THOROUGH EXAMINATION OF LIFTING EQUIPMENT
IN ACCORDANCE WITH LIFTING OPERATIONS AND LIFTING EQUIPMENT REGULATIONS 1998
ALL ITEMS ON THIS REPORT ARE SAFE TO USE

NAME & ADDRESS OF COMPANY FOR WHOM THE EXAMINATION WAS MADE		ADDRESS OF THE PREMISES WHERE THE EXAMINATION WAS MADE		DATE OF REPORT	08/01/2020
Gates Engineering & Services UK Ltd Bassington Drive Bassington Industrial Estate Cramlington		Tusk Lifting Ltd 49D Sadler Forster Way Teesside Industrial Estate Stockton-On-Tees TS17 9JY		REPORT NO	13322
NE23 8AS				CUSTOMER REFERENCE	052628
				CONTRACT NO.	0000059501

QTY	ID NO.	DESCRIPTION OF EQUIPMENT INCLUDING MANUFACTURER AND DATE OF MANUFACTURE	SWL / WLL	EWL	EXAM REASON (SEE BELOW)	TEST APPLIED	LATEST DATE OF NEXT THOROUGH EXAMINATION
50.00	643615/1 - 643615/50	10mm x 6ft HCP Coated Chain Sling c/w 4.75t Safety Pin Bow Shackle each end	4 TONNE	6 FT	B	VISUAL	08/07/2020

REASON FOR EXAMINATION: **A** - NEW INSTALLATION OR NEW LOCATION; **B** - WITHIN 6 MONTHS; **C** - WITHIN 12 MONTHS; **D** - WRITTEN SCHEME; **E** - EXCEPTIONAL CIRCUMSTANCES.

NAME AND QUALIFICATION OF PERSON MAKING THE REPORT Jimmy Joyce, Company Approved Examiner		NAME OF THE PERSON AUTHENTICATING THE REPORT Julie Montgomery, Planner	
SIGNATURE 	SIGNATURE 	DATE OF THOROUGH EXAMINATION	08/01/2020

OPERATING INSTRUCTIONS CAN BE FOUND ON OUR WEBSITE. HTTP://WWW.TUSKLIFTING.CO.UK
THE ORIGINAL MANUFACTURERS EC DECLARATION OF CONFORMITY IS HELD ON FILE AT OUR PREMISES AND IS AVAILABLE UPON REQUEST

Tusk Lifting Ltd.
49D Sadler Forster Way. Teesside Industrial Estate.
Stockton On Tees. TS17 9JY

T. 01642 915330
E. teesside@tusklifting.co.uk
W. tusklifting.co.uk

VAT. GB258876247
REG. 10497383

MAMMOET





William Hackett

Lifting Products Limited



Delivery Address

TUSK LIFTING LTD (STOCK)
49D SADLER FORSTER WAY
TEESIDE INDUSTRIAL ESTATE
STOCKTON ON TEES
TS17 9JY

Supplied To: TUS002

Certificate Number: L072222

Customer Order No: 7557

Date Received: 17/12/2019

PRODUCTS REQUIRING A DECLARATION OF CONFORMITY
ARE INDICATED BY (A)
THOSE REQUIRING JUST A MANUFACTURER'S
CERTIFICATE BY (B)

DUAL PURPOSE DOCUMENT

EC DECLARATION OF CONFORMITY

DECLARATION

I DECLARE THAT THE ITEMS DESCRIBED ON THIS DOCUMENT COMPLY WITH THE REQUIREMENTS OF THE MACHINERY DIRECTIVE 2006/42/EC

MANUFACTURER'S CERTIFICATE

CERTIFIED ON BEHALF OF THE COMPANY



T.J. BURGESS 17/12/2019

A

B

Authorised person for the configuration of the declaration documents: Tim Burgess, William Hackett Lifting Products, Alnwick, UK

A/B	Batch	Lot No / Serial No	Product	Description	Qty	Working Load Limit	Proof Load	Min Breaking Load
A	P02637	643615/1-50	HNZZZ.100.TUSK	10mm grade 10 chain sling assembly. Comprising of: 1 x 4.75t Safety Bow Shackle, 1 x 10mm connector, 10mm grade 10 chain, 1 x 10mm connector and 1 x 4.75t Safety Bow Shackle.	50	4t		

OAK DRIVE, LIONHEART ENTERPRISE PARK, ALNWKICK, NORTHUMBERLAND NE66 2EU
Tel. + 44 (0) 1665 604200 Fax. + 44 (0) 1665 604204 Email: info@williamhackett.co.uk
Website: www.williamhackett.co.uk Co. Registration No. 09679580 VAT Reg. No. 217 3508 23

Page 1 of 1

Released to Imaging: 7/11/2024 9:07:07 AM

IMB52628

Gates Engineering & Services UK Limited Cerified True Copy



William Hackett
Lifting Products Limited



IMB52628

3.1 Material Certificate

DATE: 18.12.2019	PURCHASE ORDER NO. 7557
-------------------------	--------------------------------

CUSTOMER	TUSK LIFTING LIMITED
ADDRESS	49D SADLER FORSTER WAY TEESIDE IND EST STOCKTON ON TEES TS17 9JY

PRODUCT CODE: ASV.100.5	Marking: 1235
DESCRIPTION: 10MM GRADE 10 LIFTING CHAIN – Q61076	

Chemical Composition –

	%
C	0,215
Si	0,216
Mn	1,222
P	0,0076
S	0,0071
Ni	0,947
Cr	0,554
Cu	-
Mo	0,595
AL	0,0337



Safety is our first priority

061259

YOKE INDUSTRIAL CORP.

#39,33rd Road, Taichung Industrial Park,

TAICHUNG 407, TAIWAN

TEL: +886-4-2350 8088

FAX: +886-4-2350 1001

80059145-000730

IMB52628

Test Certificate

TO: WILLIAM HACKETT LIFTING PRODUCTS LTD
Oak Drive
Lionheart Enterprise Park
Alnwick, Northumberland, NE66 2EU
United Kingdom
Tel: 44-1665604200

Invoice NO: 90059797

Description: ITEM: X-015-10
G100, Connecting Link, 10mm, 3/8"
Batch No: YUA
Quantity: 1,800 PC

C	Si	Mn	P	S	Cr	Mo	Ni	Fe
0.18~0.30	0.15~0.40	0.70~1.30	<0.035	<0.04	0.40~1.10	0.15~0.40	0.40~1.00	other

Material: Alloy Steel
Mini Breaking Load: 157kN
Magnetic Flux: 100% of above quantity
Crack Tested

Proof Load Test: 98.1kN
100%
Fatigue Rate: 58.8kN
20000 cycle
Working Load Limit: 4.0 tonnes

TESTING ACCORDING TO ASTM A952/A 952M, DIN PAS 1061, EN1677-1
ISO 9001:2015 Certification by DNV and API
Inspection Test Certificate meet the EN10204 3.1

TEST RESULT
Pass

Jason Lu

Dated: May 14, 2019

Qualification: QA Manager

Page 34 of 50
Received by QC on 02/06/2021 12:50:17 PM
Released to Imaging: 7/11/2024 9:07:07 AM



Safety is our first priority

06 1396

YOKE INDUSTRIAL CORP.

#39,33rd Road, Taichung Industrial Park

TAICHUNG 407, TAIWAN

TEL:+886-4-2350 8088

FAX:+886-4-2350 1001

Test Certificate

80062821-000450

TO: WILLIAM HACKETT LIFTING PRODUCTS LTD
Oak Drive,
Lionheart Enterprise Park,
Alnwick, Northumberland, NE66 2EU,
United Kingdom
Tel: 44-1665604200

Invoice NO: 90064302

Description: ITEM: DA-808-19
DA Bolt Pin Anchor Shackle, 3/4"
(Your PO no. 601644)
Batch No.: AAA/AA
Quantity: 1,142 PC

C	Si	Mn	P	S	Cr	Mo	Ni	Fe
0.38~0.43	0.15~0.35	0.60~1.00	<0.035	<0.040	0.90~1.00	0.15~0.30	<0.1%	other

Material: Alloy Steel	Proof Load Test: 93kN
Mini Breaking Load: 373kN	Fatigue Rate: 70kN
Magnetic Flux: 100% of above quantity	20000 cycle
Crack Tested:	Impact Test: 42J
Working Load Limit: 4-75tonnes	(-40°C)

TESTING ACCORDING TO EN 13889, RR-C-271F, DNVL-ST-E273, EN 12079-2, IMO/MS-Circular 860, ISO 9001:2015 Certification by DNVL and API
Inspection Test Certificate meet the EN 10204 3.1
These shackle have been designed, approved and tested in accordance with DNVL-ST-E271 Offshore Containers.
This certificate is based on DNVL type approval NO. S-8059

TEST RESULT

YOKE INDUSTRIAL CORP

Pass

Jason Yu

Dated: September 30, 2019

Qualification: QA Manager

IML52690



REPORT OF THOROUGH EXAMINATION OF LIFTING EQUIPMENT
IN ACCORDANCE WITH LIFTING OPERATIONS AND LIFTING EQUIPMENT REGULATIONS 1998

ALL ITEMS ON THIS REPORT ARE SAFE TO USE

NAME & ADDRESS OF COMPANY FOR WHOM THE EXAMINATION WAS MADE	ADDRESS OF THE PREMISES WHERE THE EXAMINATION WAS MADE	DATE OF REPORT
Gates Engineering & Services UK Ltd Bassington Drive Bassington Industrial Estate Cramlington NE23 8AS	Tusk Lifting Ltd 49D Sadler Forster Way Teesside Industrial Estate Stockton-On-Tees TS17 9JY	21/01/2020
	REPORT NO	13586
	CUSTOMER REFERENCE	052690
	CONTRACT NO.	0000059627

QTY	ID NO.	DESCRIPTION OF EQUIPMENT INCLUDING MANUFACTURER AND DATE OF MANUFACTURE	SWL / WLL	EWL	EXAM REASON (SEE BELOW)	TEST APPLIED	LATEST DATE OF NEXT THOROUGH EXAMINATION
30.00	IMK52690/01 -	3.6T Safety Clamp CS Galv - 195MM	3.6 TONNE	-	B	PROOF LOAD	21/07/2020
	IMK52690/30	Material CERT : GI9268					
20.00	IML52690/01 -	3.6T Safety Clamp CS Galv - 195MM	3.6 TONNE	-	B	PROOF LOAD	21/07/2020
	IML52690/20	Material CERT : GI9268					

REASON FOR EXAMINATION: **A** - NEW INSTALLATION OR NEW LOCATION; **B** - WITHIN 6 MONTHS; **C** - WITHIN 12 MONTHS; **D** - WRITTEN SCHEME; **E** - EXCEPTIONAL CIRCUMSTANCES.

NAME AND QUALIFICATION OF PERSON MAKING THE REPORT	NAME OF THE PERSON AUTHENTICATING THE REPORT
Jimmy Joyce, Company Approved Examiner	Julie Montgomery, Planner
SIGNATURE	SIGNATURE
	DATE OF THOROUGH EXAMINATION 21/01/2020

OPERATING INSTRUCTIONS CAN BE FOUND ON OUR WEBSITE, HTTP://WWW.TUSKLIFTING.CO.UK
THE ORIGINAL MANUFACTURERS EC DECLARATION OF CONFORMITY IS HELD ON FILE AT OUR PREMISES AND IS AVAILABLE UPON REQUEST

Tusk Lifting Ltd.
49D Sadler Forster Way, Teesside Industrial Estate,
Stockton On Tees. TS17 9JY
T. 01642 915330
E. teesside@tusklifting.co.uk
W. tusklifting.co.uk
VAT. GB258876247
REG. 10497383



IML52690

CELISA STEEL UK
OFFICES: Build. 58, Castle Works, East Moors Road
CF24 5NN Cardiff (United Kingdom)



CELISA
MANUFACTURING UK



UK MADE

Cert No: 0038/CPRL/RQ4002811/1
DOP: CELSAUK001 EN10025
Hot rolled structural steel products
LRV ID N: 0038

INSPECTION CERTIFICATE
BS-EN 10204-2004, TYPE 3.1

Standard
BS-EN 10025-2004

Customer:
CARTER STEEL LTD
YARM ROAD, STOCKTON
TS18 3SA STOCKTON
United Kingdom

Destination:
CARTER STEEL LTD
YARM ROAD, STOCKTON
TS18 3SA STOCKTON
United Kingdom

Delivery number: 2550169238
Order number : 15705941
Your order : 11049

United Kingdom																					
TS18 35A STOCKS																					
MATERIAL	CAST	C	MN	SI	S	P	Cr	N	Ni	Cu	Mo	V	CE	Reh	Rm	A	T	Impact	Impact	Impact	Impact
Hot rolled structural steel products		%	%	%	%	%	%	%	%	%	%	%	%	MPa	MPa	%	°C	J	J	J	J
S275 JR+AR FL130X10 L.6m	CM124288	0.10	0.53	0.14	0.026	0.020	0.117	0.010	0.14	0.55	0.021	0.001	0.260	328	464	34.8					
S275 JR+AR FL130X10 L.6m	CM124288	0.10	0.53	0.14	0.026	0.020	0.117	0.010	0.14	0.55	0.021	0.001	0.260	325	467	35.3					
S275 JR+AR FL130X10 L.6m	CM124288	0.10	0.53	0.14	0.026	0.020	0.117	0.010	0.14	0.55	0.021	0.001	0.260	329	465	35.2					
S275 JR+AR FL130X10 L.6m	CM124288	0.10	0.53	0.14	0.026	0.020	0.117	0.010	0.14	0.55	0.021	0.001	0.260	323	465	35.2					
S275 JR+AR FL130X10 L.6m	CM124288	0.10	0.53	0.14	0.026	0.020	0.117	0.010	0.14	0.47	0.021	0.001	0.259	317	452	33.8					
S275 JR+AR FL130X12 L.6m	CM124207	0.10	0.56	0.16	0.035	0.022	0.124	0.009	0.14	0.47	0.021	0.001	0.259	323	451	33.8					
S275 JR+AR FL130X12 L.6m	CM124207	0.10	0.56	0.16	0.035	0.022	0.124	0.009	0.14	0.44	0.014	0.002	0.250	313	448	32.5					
S275 JR+AR FL150X12 L.6m	CM127200	0.10	0.54	0.15	0.023	0.018	0.086	0.010	0.11	0.44	0.014	0.002	0.250	308	450	32.0					
S275 JR+AR FL150X12 L.6m	CM127200	0.10	0.54	0.15	0.023	0.018	0.086	0.010	0.11	0.40	0.015	0.001	0.260	298	462	37.6					
S275 JR+AR FL150X6 L.6m	CM127310	0.11	0.57	0.15	0.023	0.019	0.105	0.008	0.10	0.40	0.015	0.001	0.260	319	459	32.5					
S275 JR+AR FL150X6 L.6m	CM127310	0.11	0.57	0.15	0.023	0.019	0.105	0.008	0.10	0.40	0.015	0.001	0.260	318	457	37.5					
S275 JR+AR FL150X6 L.6m	CM127310	0.11	0.57	0.15	0.023	0.019	0.105	0.008	0.10	0.52	0.021	0.001	0.244	320	448	33.2					
S275 JR+AR FL150X6 L.6m	CM124647	0.08	0.53	0.14	0.023	0.020	0.097	0.012	0.20	0.52	0.021	0.001	0.244	329	447	33.8					
S275 JR+AR FL50X15 L.6m	CM124647	0.08	0.53	0.14	0.023	0.020	0.097	0.012	0.20	0.52	0.021	0.001	0.244	326	448	33.9					
S275 JR+AR FL50X15 L.6m	CM124647	0.08	0.53	0.14	0.023	0.020	0.097	0.012	0.20	0.52	0.021	0.001	0.244	322	447	33.9					
S275 JR+AR FL50X15 L.6m	CM124647	0.08	0.53	0.14	0.023	0.020	0.097	0.012	0.20	0.52	0.021	0.001	0.244	322	447	33.9					

DATE

ORDER NO

CARTER STEEL LTD

Red.

X

The materials has been evaluated and radiation is within national limits
Product suitable for galvanizing 0.14<SI<0.25 & P<0.035

Steel making process
Electric arc

Cardiff, 20.08.2019

Stuart Thomas
Quality Manager

CARTER STEEL LTD
DATE: 21.8.2019
ORDER NO: 11049

CHECKED BY: [Signature]

Coterra: Well Control Plan



Well Control Plan

Warning Signs of a Kick

If a kick is ever suspected, perform flow check.

While Drilling:

1. Drilling break or increase in penetration rate
2. Increase of flow
3. Pit gain
4. Flow without pumping
5. Circulating pressure decrease and/or spm increase
6. Increase in gas cutting at the shakers
7. Decrease in cuttings at shakers

While Tripping:

1. Hole not taking the proper fill on trip out of hole
2. Hole returns too much mud on trip in hole
3. Flow without pumping

While Out of the Hole:

1. Flow
2. Pit gain

Well Control Procedures with Diverter

A TIW valve in the open position must be on the rig floor at all times.

If rotating head is installed:

1. Perform flow check.
2. If well is flowing, divert flow down flow line and through separator, before returning across shakers.
3. Swap to 10 ppg brine and circulate around. Notify superintendent.

Coterra: Well Control Plan

4. If well becomes uncontrollable, close annular, which will open HCR to divert flow away from rig.

If rotating head is not installed:

1. Perform flow check.
2. If well is flowing uncontrollably, close annular, which will open HCR to divert flow away from rig.
3. Swap to 10 ppg brine and circulate around. Notify superintendent.
4. After 10 ppg is circulated around shut pumps off and perform flow check.

Well Control Procedures

Coterra follows a hard shut-in procedure. Choke will be in the closed position.

General Well Control

1. If in doubt, secure the well first, then inform your supervisor.
2. Never wait for approval to shut in the well.
3. Verify that the mud pump is off before you close the BOP.
4. Always check and verify the well is properly secured after shut in.
5. Always install TIW valve in the open position.
6. If TIW valve is installed and then closed, apply estimated DP shut-in pressure above valve before opening.
7. The weak link in the mud system and mud lines is the pressure relief valve or pop off valve on the mud pump.
8. Keep the TIW valve wrench in a designated location on the rig floor and in the open position.
9. Use a drill string float above the bit. Don't perforate or disable the float.
10. In the event wellbore pressure encroaches to the maximum rated pressure of the annular, primary pressure control will be switched to the higher rated components (i.e., switch from annular to pipe rams) – upper pipe rams will be closed, and the annular opened in order to not exceed maximum rated pressures.

Hard Shut-In

1. Remote choke is closed.
2. Stop pumping and space out.
3. Check for flow.
4. To shut in, close annular or pipe ram if no annular is present.
5. Open the HCR valve.
6. Check systems, bump float. Record Initial Shut in Drill pipe pressure and Initial shut in casing pressure.

Coterra: Well Control Plan

Flow Check when on Bottom

1. Alert crew & stop rotating
2. Pick up and space out
3. Shut down pumps
4. Observe well for flow
5. Shut-in if flowing

Shutting in while Drilling

1. After flow has been detected via flow check, kill pumps, shut in well and open HCR
2. Verify well is shut-in and flow has stopped
3. Notify supervisory personnel
4. Record data
5. Begin go forward planning

Flow Check while Tripping

1. Alert crew & pick up / space out
2. Stop pipe movement. Set slips with tool joint accessible at rotary table
3. Install open TIW safety valve and close valve
4. Observe well for flow
5. Shut-in if flowing

Shutting in while Tripping

1. Install open TIW safety valve and close valve
2. Shut-in the well
3. Verify well is shut-in and flow has stopped
4. Install IBOP
5. Notify supervisory personnel
6. Record data; SICP, shut-in time, kick depth, and pit gain
7. Begin go forward planning

Shutting in while Out of Hole

1. Sound alarm
2. Shut-in well: close blind rams.
3. Verify well is shut-in and monitor pressures.
4. Notify supervisory personnel
5. Record data; SICP, shut-in time, kick depth, and pit gain
6. Begin go forward planning

Information to Record while Shut-In

1. Shut in drill pipe pressure every 5 minutes

Coterra: Well Control Plan

2. Shut in casing pressure every 5 minutes
3. Pit gain
4. Total volume in pit system
5. Mud weight in suction pit
6. Current depth
7. Total depth
8. Time the well is shut in

H2S with Annular Diverter:

1. Kill Pumps, close annular, which will open HCR, to divert flow away from rig.
2. Muster and take head count.
3. Call ASSI to check location for H2S. Call Coterra superintendent.
4. After ASSI has checked for H2S the path forward will be decided from Coterra superintendent.

H2S with BOP's:

1. Kill pumps
2. Shut in annular with HCR open and chokes closed.
3. Muster and take head count.
4. Call ASSI to check location for H2S. Call Coterra superintendent.
5. After ASSI has checked for H2S. discuss path forward with Coterra superintendent

Procedure for Closing Blind Rams

- Open HCR valve (visually check that the HCR valve is open – stem in the valve is open, stem out the valve is closed).
- Verify all circulating pumps are off (mud pumps, trip tank pump, etc.)
- Ensure that the hydraulic choke is in the closed position.
- Close the blind rams and place the “blind rams closed, bleed pressure and remove hole cover before opening” sign on the console.
- Monitor the shut in casing pressure gauge periodically while the blinds are closed to ensure that wellbore pressure isn't building. If pressure build up is observed, monitor the shut in casing pressure more frequently & document. Notify rig management and Coterra representative of the pressure build up.
- Ensure that the inner bushings are locked into the master bushings if applicable.
- Install hole cover.

Procedure for Opening Blind Rams

- Make sure choke manifold is aligned correctly.
- Open the hydraulic choke to bleed any trapped pressure that may be under the blind rams. (Even if the casing pressure gauge is reading zero).

Coterra: Well Control Plan

- Confirm that no flow is discharging into the trip tank or possum bellies of the shale shaker (wherever the separator is discharging into).
- Remove hole cover.
- Confirm that the inner bushing are locked into the master bushings if applicable.
- Clear all personnel from the rig floor.
- Remove sign and open blind rams.
- Return the BOPE to its original operating alignment.

BOP Drills

- Drilling crews should conduct BOP drills weekly from BOP nipple up to TD for reaction time to properly simulate securing the well. Record BOP drills on that day's report.
- Standard precautions such as checking the accumulator for proper working pressure, function testing rams, and recording slow pump rates are performed on a daily basis or on trips..
- All supervisory personnel onsite need to be properly trained and currently hold certification from an approved blowout prevention school. Any deviation from this needs to be discussed prior to spud.
- Drillers should always notify the tool pusher and the drilling foreman before performing a blowout drill.

Choke Manifold Freeze Prevention

- When possible, blow out the choke & kill lines as well as the choke manifold with rig air to remove water based fluids.
- When clear water is being placed into the choke & kill line as well as the choke manifold, make sure that the water has a mixture of 30% methanol added.
- When applicable, choke & kill lines as well as choke manifold needs to be pumped through with the rig pump by the driller to ensure that the lines aren't plugged with settling barite or solids.

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

Submit Electronically
Via E-permitting

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:** 5/22/24

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 State 403U	NENW Sec 5 T24S, R33E	422FNL/ 1498 FWL	2211	4643	4176	

IV. Central Delivery Point Name: Tres Equis 5/6 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 State 403U		9/6/24	10/26/24	12/29/24	1/19/25	1/19/25

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:	5/22/24
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.

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code 98135	³ Pool Name WC-025 G-09 S243310P; UPPER WOLFCAMP
⁴ Property Code	⁵ Property Name TRES EQUIS 5 STATE	⁶ Well Number 403H
⁷ OGRID No. 215099	⁸ Operator Name CIMAREX ENERGY CO.	⁹ Elevation 3657.4'

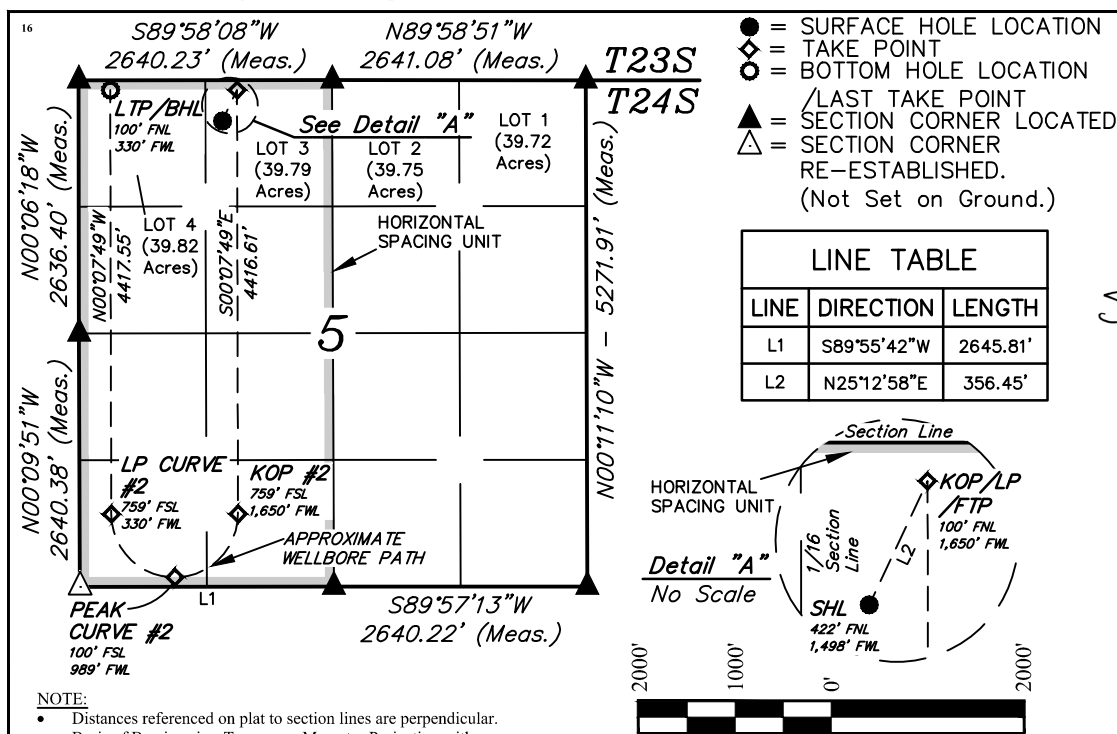
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
3	5	24S	33E		422	NORTH	1498	WEST	LEA

¹¹ Bottom Hole Location If Different From Surface

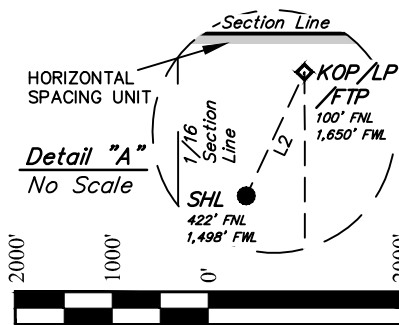
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	5	24S	33E		100	NORTH	330	WEST	LEA
¹² Dedicated Acres 319.61	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						

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



- = SURFACE HOLE LOCATION
- ◆ = TAKE POINT
- = BOTTOM HOLE LOCATION
- ▲ = SECTION CORNER LOCATED
- △ = SECTION CORNER RE-ESTABLISHED.
- (Not Set on Ground.)

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°55'42\"W	2645.81'
L2	N25°12'58\"E	356.45'



SCALE
DRAWN BY: C.S.C. 04-11-24
REV:3 Z.L. 06-17-24 (SHL & NAME CHANGE)

¹⁷ OPERATOR
CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Shelly Bowen 6/24/24
Signature Date

Shelly Bowen

Printed Name

shelly.bowen@coterra.com

E-mail Address

¹⁸ SURVEYOR
CERTIFICATION

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

April 08, 2024

Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:

NAD 83 (SURFACE HOLE LOCATION)

LATITUDE = 32°15'10.02" (32.252785°)
LONGITUDE = -103°35'52.95" (-103.598042°)

NAD 27 (SURFACE HOLE LOCATION)

LATITUDE = 32°15'09.58" (32.252661°)
LONGITUDE = -103°35'51.22" (-103.597561°)

STATE PLANE NAD 83 (N.M. EAST)

N: 456474.69' E: 768644.32'

STATE PLANE NAD 27 (N.M. EAST)

N: 456415.61' E: 727460.55'

NAD 83 (PEAK CURVE #2)

LATITUDE = 32°14'23.00" (32.239723°)
LONGITUDE = -103°35'58.88" (-103.599690°)

NAD 27 (PEAK CURVE #2)

LATITUDE = 32°14'22.56" (32.239599°)
LONGITUDE = -103°35'57.16" (-103.599210°)

STATE PLANE NAD 83 (N.M. EAST)

N: 451719.53' E: 768167.21'

STATE PLANE NAD 27 (N.M. EAST)

N: 451660.56' E: 726983.24'

NAD 83 (KOP/LP/FTP)

LATITUDE = 32°15'13.21" (32.253670°)
LONGITUDE = -103°35'51.17" (-103.597548°)

NAD 27 (KOP/LP/FTP)

LATITUDE = 32°15'12.77" (32.253546°)
LONGITUDE = -103°35'49.44" (-103.597067°)

STATE PLANE NAD 83 (N.M. EAST)

N: 456797.75' E: 768794.80'

STATE PLANE NAD 27 (N.M. EAST)

N: 456738.66' E: 727611.04'

NAD 83 (LP CURVE #2)

LATITUDE = 32°14'29.53" (32.241537°)
LONGITUDE = -103°36'06.56" (-103.601822°)

NAD 27 (LP CURVE #2)

LATITUDE = 32°14'29.09" (32.241413°)
LONGITUDE = -103°36'04.83" (-103.601342°)

STATE PLANE NAD 83 (N.M. EAST)

N: 452374.81' E: 767503.59'

STATE PLANE NAD 27 (N.M. EAST)

N: 452315.83' E: 726319.65'

NAD 83 (KOP #2)

LATITUDE = 32°14'29.51" (32.241532°)
LONGITUDE = -103°35'51.19" (-103.597553°)

NAD 27 (KOP #2)

LATITUDE = 32°14'29.07" (32.241408°)
LONGITUDE = -103°35'49.46" (-103.597073°)

STATE PLANE NAD 83 (N.M. EAST)

N: 452381.99' E: 768823.34'

STATE PLANE NAD 27 (N.M. EAST)

N: 452323.01' E: 727639.40'

NAD 83 (LTP/BHL)

LATITUDE = 32°15'13.24" (32.253677°)
LONGITUDE = -103°36'06.54" (-103.601817°)

NAD 27 (LTP/BHL)

LATITUDE = 32°15'12.79" (32.253554°)
LONGITUDE = -103°36'04.81" (-103.601336°)

STATE PLANE NAD 83 (N.M. EAST)

N: 456791.50' E: 767475.04'

STATE PLANE NAD 27 (N.M. EAST)

N: 456732.41' E: 726291.28'