Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

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

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

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

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-015-56149

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*	12. County or Parish	13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date

Title

Approved by *(Signature)*	Name *(Printed/Typed)*	Date

Title	Office

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

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

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 11/22/2024

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

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015-56149	97916 97494	Cottonwood Draw; Bone Spring Wildcat; Bone Spring

Property Code	Property Name	Well Number
336943	WIGEON 23-35 FEDERAL COM	7H

OGRID No.	Operator Name	Ground Level Elevation
215099	CIMAREX ENERGY CO.	3287.9'

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

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
B	23	25S	26E		371 NORTH	1679 EAST	32.121634°	-104.260365°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
O	35	25S	26E		100 SOUTH	2305 EAST	32.079290°	-104.262627°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
960				

Order Numbers. Well setbacks are under Common Ownership: ☐Yes ☐No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
B	23	25S	26E		100 NORTH	2305 EAST	32.122357°	-104.262396°	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
B	23	25S	26E		100 NORTH	2305 EAST	32.122357°	-104.262396°	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
O	35	25S	26E		100 SOUTH	2305 EAST	32.079290°	-104.262627°	EDDY

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

OPERATOR CERTIFICATIONS

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

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Shelly Bowen 2/5/2025

Signature Date

Shelly Bowen

Printed Name

Shelly.Bowen@coterra.com

Email Address

SURVEYOR CERTIFICATIONS

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

PAUL BUCHELE NEW MEXICO 23782 PROFESSIONAL SURVEYOR 12-30-24

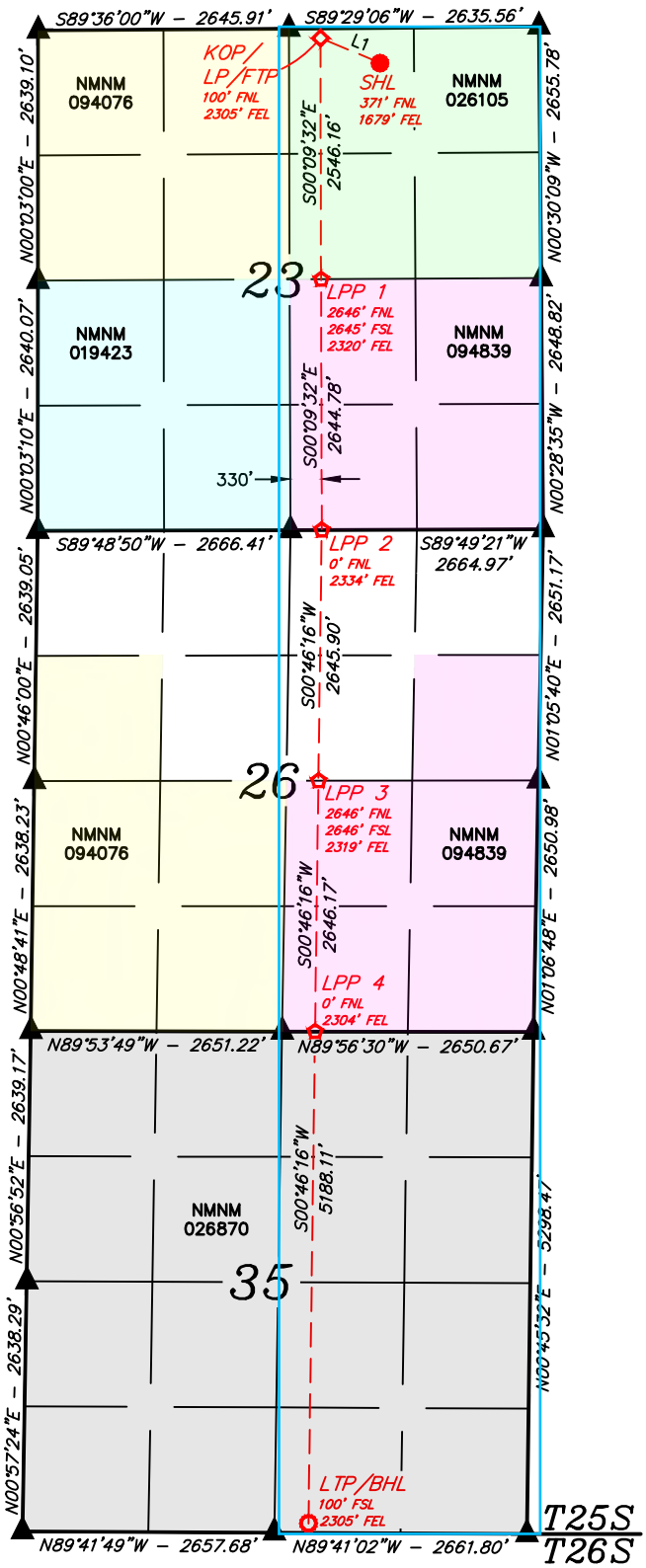
Signature and Seal of Professional Surveyor

23782 February 20, 2024

Certificate Number Date of Survey

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

Property Name	Well Number	Drawn By	Revised By
WIGEON 23-35 FEDERAL COM	7H	C.M.T. 02-11-19	REV: 5 L.T.T. 12-30-24 (UPDATE FORMAT)



NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°07'17.88" (32.121634°)
LONGITUDE = -104°15'37.31" (-104.260365°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°07'17.45" (32.121514°)
LONGITUDE = -104°15'35.52" (-104.259867°)
STATE PLANE NAD 83 (N.M. EAST)
N: 407994.34' E: 563927.02'
STATE PLANE NAD 27 (N.M. EAST)
N: 407937.17' E: 522744.08'

NAD 83 (KOP/LP/FTP)
LATITUDE = 32°07'20.49" (32.122357°)
LONGITUDE = -104°15'44.63" (-104.262396°)
NAD 27 (KOP/LP/FTP)
LATITUDE = 32°07'20.05" (32.122237°)
LONGITUDE = -104°15'42.83" (-104.261899°)
STATE PLANE NAD 83 (N.M. EAST)
N: 408256.92' E: 563297.92'
STATE PLANE NAD 27 (N.M. EAST)
N: 408199.76' E: 522114.98'

NAD 83 (LPP 1)
LATITUDE = 32°06'55.30" (32.115360°)
LONGITUDE = -104°15'44.44" (-104.262344°)
NAD 27 (LPP 1)
LATITUDE = 32°06'54.86" (32.115240°)
LONGITUDE = -104°15'42.65" (-104.261847°)
STATE PLANE NAD 83 (N.M. EAST)
N: 405711.43' E: 563315.61'
STATE PLANE NAD 27 (N.M. EAST)
N: 405654.31' E: 522132.63'

NAD 83 (LPP 2)
LATITUDE = 32°06'29.13" (32.108091°)
LONGITUDE = -104°15'44.25" (-104.262291°)
NAD 27 (LPP 2)
LATITUDE = 32°06'28.70" (32.107971°)
LONGITUDE = -104°15'42.46" (-104.261793°)
STATE PLANE NAD 83 (N.M. EAST)
N: 403067.34' E: 563333.98'
STATE PLANE NAD 27 (N.M. EAST)
N: 403010.27' E: 522150.96'

NAD 83 (LPP 3)
LATITUDE = 32°06'02.95" (32.100820°)
LONGITUDE = -104°15'44.55" (-104.262376°)
NAD 27 (LPP 3)
LATITUDE = 32°06'02.52" (32.100700°)
LONGITUDE = -104°15'42.76" (-104.261879°)
STATE PLANE NAD 83 (N.M. EAST)
N: 400422.18' E: 563309.41'
STATE PLANE NAD 27 (N.M. EAST)
N: 400365.17' E: 522126.35'

NAD 83 (LPP 4)
LATITUDE = 32°05'36.77" (32.093548°)
LONGITUDE = -104°15'44.86" (-104.262461°)
NAD 27 (LPP 4)
LATITUDE = 32°05'36.34" (32.093428°)
LONGITUDE = -104°15'43.07" (-104.261964°)
STATE PLANE NAD 83 (N.M. EAST)
N: 397776.76' E: 563284.84'
STATE PLANE NAD 27 (N.M. EAST)
N: 397719.79' E: 522101.74'

NAD 83 (LTP/BHL)
LATITUDE = 32°04'45.44" (32.079290°)
LONGITUDE = -104°15'45.46" (-104.262627°)
NAD 27 (LTP/BHL)
LATITUDE = 32°04'45.01" (32.079169°)
LONGITUDE = -104°15'43.67" (-104.262131°)
STATE PLANE NAD 83 (N.M. EAST)
N: 392590.11' E: 563236.66'
STATE PLANE NAD 27 (N.M. EAST)
N: 392533.23' E: 522053.49'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N67°06'20"W	681.87'

2000' 1000' 0' 2000'

SCALE

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)
- Colored areas within section lines represent Federal oil & gas leases.

● = SURFACE HOLE LOCATION.
◇ = KICK OFF POINT/LANDING POINT/FIRST TAKE POINT.
⬠ = LEASE PENETRATION POINT.
○ = LAST TAKE POINT/BOTTOM HOLE LOCATION.
▲ = SECTION CORNER LOCATED.

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Cimarex Energy Company **OGRID:** 215099 **Date:** 10/21/24

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
Wigeon 23-35 Federal 7H		NWNE Sec 23 T25S, R26E	371FNL/ 1679 FWL	1500	2500	3000

IV. Central Delivery Point Name: Wigeon 23-26 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
Wigeon 23-35 Federal 7H		5/1/25	8/4/25	10/30/25	1/1/26	1/1/26

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.

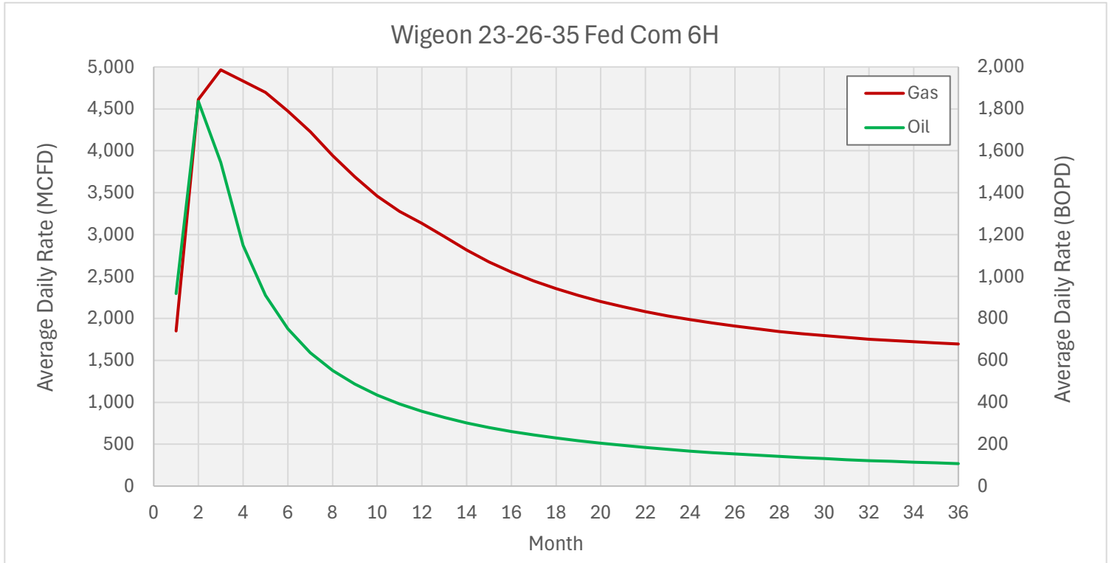
Signature:	Shelly Bowen
Printed Name:	Shelly Bowen
Title:	Sr. Regulatory Analyst
E-mail Address:	shelly.bowen@coterra.com
Date:	10/21/24
Phone:	432/620-1644

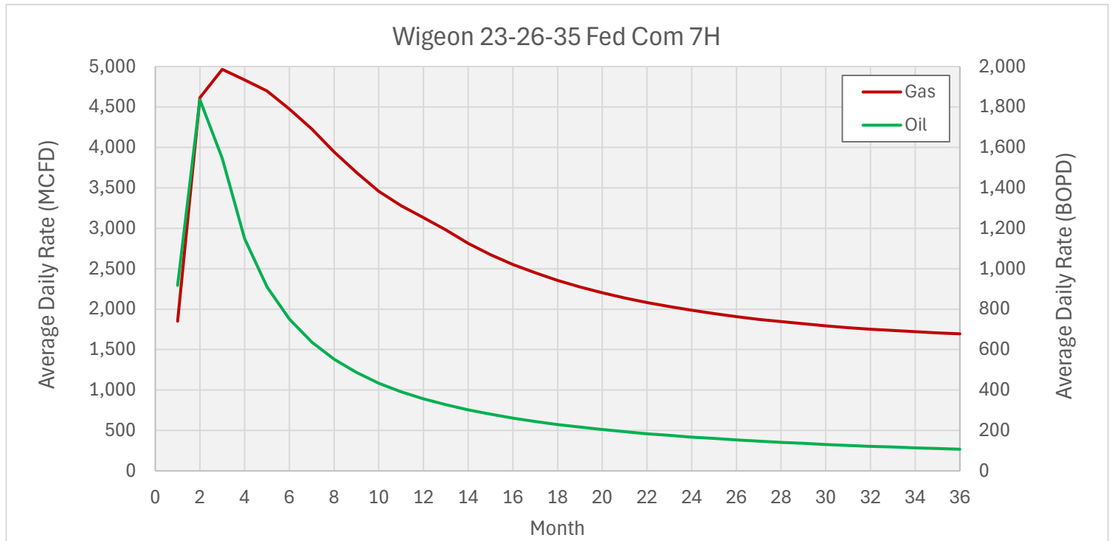
OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

Wigeon - Harkey				
Month	Wigeon 23-26-35 Federal Com 6H Gas MCFD	Wigeon 23-26-35 Federal Com 7H Gas MCFD	Wigeon 23-26-35 Federal Com 6H Oil BOPD	Wigeon 23-26-35 Federal Com 7H Oil BOPD
1	1849	1849	918	918
2	4613	4613	1836	1836
3	4965	4965	1545	1545
4	4833	4833	1149	1149
5	4696	4696	910	910
6	4473	4473	750	750
7	4228	4228	637	637
8	3942	3942	552	552
9	3691	3691	487	487
10	3460	3460	434	434
11	3278	3278	392	392
12	3133	3133	357	357
13	2979	2979	327	327
14	2815	2815	302	302
15	2675	2675	280	280
16	2554	2554	261	261
17	2448	2448	244	244
18	2356	2356	229	229
19	2275	2275	216	216
20	2203	2203	204	204
21	2139	2139	194	194
22	2082	2082	184	184
23	2031	2031	175	175
24	1985	1985	167	167
25	1944	1944	160	160
26	1908	1908	153	153
27	1875	1875	147	147
28	1845	1845	141	141
29	1818	1818	136	136
30	1794	1794	131	131
31	1773	1773	126	126
32	1753	1753	122	122
33	1736	1736	118	118
34	1721	1721	114	114
35	1707	1707	111	111
36	1695	1695	107	107





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.

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.

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM **Well Number:** 7H

Pressure Rating (PSI): 5M **Rating Depth:** 7719

Equipment: A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A rotating head may be installed as needed. A Kelly clock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.
Requesting Variance? YES

Variance request: See attached.

Testing Procedure: A multi-bowl wellhead will be utilized and will be tested per 43 CFR 3172 after the installation on the surface casing. The testing interval shall be for 30 days. Whenever any seal subject to pressure is broken, a full BOPE test shall be performed.
Choke Diagram Attachment:

COTERRA_5K_PROD_TREE_20240502091358.pdf

CIMAREX_10M_MBU_3T_CFL_13.38_X_9.58_X_5.5_HBE1215DQ_20240502075909.pdf

5M_BOPE_BLM_SUBMISSION_Choke_20240501082449.pdf

CHOKE_HOSE_M14856_404H_20240501082453.pdf

BOP Diagram Attachment:

5M_BOP_DIAGRAM_20240501082503.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	828	0	828	3288	2460	828	H-40	48	ST&C	2.06	4.82	BUOY	8.1	BUOY	8.1
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	1890	0	1890	3288	1398	1890	J-55	36	LT&C	1.87	3.25	BUOY	6.23	BUOY	6.23
3	PRODUCTION	8.75	5.5	NEW	API	N	0	23152	0	7719	3288	-4431	23152	L-80	17	BUTT	1.65	2.03	BUOY	41.48	BUOY	41.48

Casing Attachments

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM **Well Number:** 7H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing_Assumptions_7H_20240930133310.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Section 4 - Cement

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM **Well Number:** 7H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	0	0
PRODUCTION	Tail		1690	23152	4230	1.3	14.2	5499	25	50:50 Poz C	Salt + Bentonite + Fluid Loss + Dispersant + SMS
SURFACE	Lead		0	528	320	1.72	13.5	550	45	Class C	Bentonite
SURFACE	Tail		528	828	195	1.34	14.8	261	45	Class C	LCM
INTERMEDIATE	Lead		0	890	338	1.88	13.5	635	49	35:65 Poz C	Salt + Bentonite
INTERMEDIATE	Tail		890	1890	110	1.34	14.8	150	49	Class C	LCM

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	828	OTHER : Fresh water	7.83	8.33				25			
828	1890	OTHER : Brine water	9.8	10.3				25			

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM **Well Number:** 7H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1890	23152	OIL-BASED MUD	8.5	9				25			

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

No logs planned, this is an offset well. Logs will be run on the 3H

List of open and cased hole logs run in the well:

DIRECTIONAL SURVEY,

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3813 **Anticipated Surface Pressure:** 2114

Anticipated Bottom Hole Temperature(F): 149

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

H2S_PLAN_REV.0_20240501084152.pdf

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM **Well Number:** 7H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

WELL_CONTROL_PLAN_REV.0_20240502090918.pdf

_6_24_2024_2_51_53_PM__3D_ACSummary_10____Coterra_Wigeon_23_35_Federal_Com_7H_Rev2_kFc_21Jun24_20240628084753.pdf

_6_24_2024_2_51_53_PM__Proposal___Coterra_Wigeon_23_35_Federal_Com_7H_Rev2_kFc_21Jun24_20240628084753.pdf

_6_24_2024_2_51_53_PM__WP___Coterra_Wigeon_23_35_Federal_Com_7H_Rev2_kFc_21Jun24_20240628084753.pdf

_6_24_2024_2_51_53_PM__Proposal_100____Coterra_Wigeon_23_35_Federal_Com_7H_Rev2_kFc_21Jun24_20240628084753.pdf

Drilling_Plan_New_Mexico_Wigeon_7H_06282024_20240930133558.pdf

Wigeon_23_26_Fed_Com_W2E2_Karst_Survey_Report_20240930133614.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

WIGEON_23_26_FEDERAL_COM_W2E2_PAD_Rig_Layout_20240507075109.pdf

Wigeon_23_35_Federal_7H_Natural_Gas_Plan_Cimarex_20241021082439.pdf

Other Variance attachment:

Wigeon_23_35_Federal_7H_Natural_Gas_Plan_Cimarex_20240502091331.pdf

CHOKE_HOSE_M14856_404H_20240502081316.pdf

NEW_MEXICO_STANDARD_VARIANCES_Wigeon_20240502081312.pdf

Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24 Anti-Collision Summary Report

Analysis Date-24hr Time:	June 21, 2024 - 02:32 PM (UTC 0)	**Analysis Method:**	3D Least Distance
Client:	COTERRA	**Reference Trajectory:**	Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24
Field:	NM Eddy County (NAD 83)	**Depth Interval:**	Every 10.00 Measured Depth (ft)
Structure:	Coterra Wigeon 23-26-35 Federal Com Pad (Lot B)	**Rule Set:**	NAL Procedure: D&M AntiCollision Standard S002
Slot:	Wigeon 23-35 Federal Com 7H	**Min Pts:**	Absolute minima indicated.
Well:	Wigeon 23-35 Federal Com 7H	**Engine Version:**	2024.2.0.1
Borehole:	Wigeon 23-35 Federal Com 7H	**Database \ Project:**	Wigeon 23-35 Federal Com 7H–COTERRA
Scan MD Range:	0.00ft ~ 23152.14ft		

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

Offset Trajectories Summary

Offset Selection Criteria

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

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

8 out of 12 are selected

Offset Trajectory	Separation			Allow	Sep.	Controlling	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)	Dev. (ft)	Fact.	Rule	MD (ft)	TVD (ft)	Alert	Minor	Major	
Coterra Wigeon 23-26 Federal Com 3H Rev2 kFc 21Jun24 (DefinitivePlan) - **Warning Alert**												
	20.00	16.50	17.50	3.50	N/A	MAS = 5.03 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert
	20.00	16.50	17.50	3.50	49389.56	MAS = 5.03 (m)	27.00	27.00				WRP
	20.00	19.59	6.11	0.41	1.54	OSF1.50	1200.00	1200.00				MinPt-CtCt
	20.15	20.03	**5.96**	0.11	1.51	OSF1.50	1230.00	1230.00				MinPt-EOU
	20.41	20.33	6.02	**0.08**	**1.51**	OSF1.50	1250.00	1250.00				MinPts
	42.48	26.88	23.72	15.59	**2.46**	OSF1.50	1700.05	1697.51				MinPt-SF
	52.22	34.46	28.42	**17.77**	2.33	OSF1.50	2190.00	2180.02				MinPt-ADP
	94.47	67.66	48.53	26.81	**2.12**	OSF1.50	4040.00	4001.91				MinPt-SF
	129.08	92.95	**66.28**	36.13	2.10	OSF1.50	5400.00	5343.12				MinPt-EOU
	130.00	110.01	**55.83**	19.99	1.78	OSF1.50	6680.00	6622.89				MinPts
	130.04	110.05	55.84	**19.99**	**1.78**	OSF1.50	6690.00	6632.89				MinPts
	303.70	93.69	240.40	210.00	4.95	OSF1.50	7210.00	7152.81	OSF>5.00			Exit Alert
	472.25	58.07	432.71	414.19	12.68	OSF1.50	8330.00	7690.15				MinPt-CtCt
	483.66	147.03	384.81	336.63	4.99	OSF1.50	11780.00	7696.86	OSF<5.00			Enter Alert
	503.84	341.88	**275.09**	**161.97**	**2.22**	OSF1.50	17870.00	7708.72				MinPts
	803.69	246.07	638.82	557.63	4.93	OSF1.50	18490.00	7709.92	OSF>5.00			Exit Alert
	5312.27	151.45	5210.47	5160.82	53.47	OSF1.50	23152.14	7719.00				TD
Coterra Wigeon 23-26 Federal Com 5H Rev2 kFc 07Jun24 (DefinitivePlan) - **Warning Alert**												
	40.00	32.50	37.50	7.50	N/A	MAS = 9.91 (m)	0.00	0.00	CtCt<=15m<15.00			Enter Alert
	40.00	32.50	37.50	7.50	52917.40	MAS = 9.91 (m)	27.00	27.00				WRP
	40.00	32.50	26.11	**7.50**	3.29	MAS = 9.91 (m)	1200.00	1200.00				MinPts
	40.15	32.50	**25.96**	7.65	3.22	MAS = 9.91 (m)	1230.00	1230.00				MinPt-EOU
	41.64	32.50	26.75	9.14	**3.16**	MAS = 9.91 (m)	1300.00	1299.98				MinPt-SF
	79.75	32.50	61.56	47.25	4.92	MAS = 9.91 (m)	1640.00	1638.27	OSF>5.00			Exit Alert
	93.39	32.50	74.63	60.89	**5.59**	MAS = 9.91 (m)	1700.05	1697.51				MinPt-SF
	1174.22	104.11	1103.98	1070.11	17.30	OSF1.50	6820.00	6762.89				MinPt-CtCt
	1174.37	104.56	**1103.83**	1069.81	17.22	OSF1.50	6880.00	6822.89				MinPt-EOU
	1174.43	104.63	1103.84	**1069.80**	17.21	OSF1.50	6890.00	6832.89				MinPt-ADP
	1180.90	106.06	1109.36	1074.84	**17.07**	OSF1.50	7100.00	7042.89				MinPt-SF
	1079.24	196.35	947.51	882.89	8.33	OSF1.50	12700.00	7698.65				MinPt-CtCt
	1112.73	335.79	888.04	776.95	5.00	OSF1.50	17370.00	7707.74	OSF<5.00			Enter Alert
	1116.27	350.93	**881.48**	765.33	4.79	OSF1.50	17860.00	7708.70				MinPt-EOU
	1116.39	351.06	881.52	**765.33**	4.79	OSF1.50	17870.00	7708.72				MinPt-ADP
	1116.60	351.17	881.66	765.44	**4.79**	OSF1.50	17880.00	7708.74				MinPt-SF
	1148.13	346.75	916.13	801.38	4.99	OSF1.50	18120.00	7709.20	OSF>5.00			Exit Alert
	5417.16	169.29	5303.47	5247.87	48.70	OSF1.50	23152.14	7719.00				TD
Coterra Wigeon 23-35 Federal Com 6H Rev2 kFc 07Jun24 (DefinitivePlan) - **Warning Alert**												
	60.00	32.81	57.50	27.19	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	60.00	32.81	57.50	27.19	32456.00	MAS = 10.00 (m)	27.00	27.00				WRP
	60.00	32.81	46.21	**27.19**	5.09	MAS = 10.00 (m)	1190.00	1190.00				MinPts
	60.09	32.81	**46.00**	27.28	4.97	MAS = 10.00 (m)	1220.00	1220.00	OSF<5.00			Enter Alert
	62.29	32.81	47.42	29.49	**4.83**	MAS = 10.00 (m)	1300.00	1299.98				MinPt-SF
	68.59	32.81	52.85	35.79	4.99	MAS = 10.00 (m)	1390.00	1389.86	OSF>5.00			Exit Alert
	128.08	32.81	109.41	95.27	**7.77**	MAS = 10.00 (m)	1700.05	1697.51				MinPt-SF
	953.48	202.49	817.65	750.99	7.13	OSF1.50	12700.00	7698.65				MinPt-CtCt
	970.93	293.13	774.67	677.79	5.00	OSF1.50	15870.00	7704.82	OSF<5.00			Enter Alert
	1011.17	517.02	**665.65**	494.15	2.94	OSF1.50	23150.00	7719.00				MinPt-EOU
	1011.18	517.05	665.65	**494.14**	**2.94**	OSF1.50	23152.14	7719.00				MinPts
30-015-43619 - Bonnie 35 Federal Com 4H - MWD to 11991ft - A (DefinitiveSurvey) - **Warning Alert**												
	12923.48	96.66	12858.20	12826.81	205.82	OSF1.50	0.00	0.00				Surface
	12907.89	96.69	12842.60	12811.20	205.51	OSF1.50	27.00	27.00				WRP
	12037.28	94.76	11973.28	11942.52	**195.68**	OSF1.50	1700.00	1697.47				MinPt-SF
	878.04	267.15	699.10	610.88	4.96	OSF1.50	17690.00	7708.37	OSF<5.00			Enter Alert
	643.45	343.89	**413.36**	**299.56**	**2.82**	OSF1.50	18290.00	7709.53				MinPts
	644.07	337.20	418.44	306.87	2.88	OSF1.50	20760.00	7714.34				MinPt-CtCt
	641.15	343.43	411.36	297.72	2.81	OSF1.50	21420.00	7715.63				MinPt-CtCt
	639.28	354.34	402.22	**284.94**	**2.71**	OSF1.50	22190.00	7717.13				MinPts
	635.37	352.17	399.76	283.20	**2.71**	OSF1.50	22230.00	7717.20				MinPt-SF
	510.78	362.69	268.15	148.09	2.12	OSF1.50	22769.15	7718.25				MinPt-CtCt
	510.87	362.89	**268.11**	**147.98**	**2.12**	OSF1.50	22780.00	7718.28				MinPts
	615.94	325.95	397.81	289.99	2.84	OSF1.50	23152.14	7719.00				TD

Results highlighted in red: Sep-Factor <= 1.5

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

Offset Trajectory	Separation			Allow	Sep.	Controlling	Reference Trajectory		Risk Level			Alert
	Ct-Ct (ft)	MAS (ft)	EOU (ft)	Dev. (ft)	Fact.	Rule	MD (ft)	TVD (ft)	Alert	Minor	Major	
30-015-33563 - WIGEON 23 FEDERAL COM 1 - INC Only to 12300ft - P (DefinitiveSurvey) - **Warning Alert**												
	3273.73	32.81	3271.23	3240.92	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	3273.56	32.81	3271.04	3240.75	177879.56	MAS = 10.00 (m)	20.00	20.00				MinPt-SF
	3273.53	32.81	3271.01	3240.72	216376.77	MAS = 10.00 (m)	27.00	27.00				WRP
	3273.51	76.20	3221.87	3197.31	66.57	OSF1.50	1200.00	1200.00				MinPt-CtCt
	3282.73	105.32	3211.68	3177.40	47.85	OSF1.50	1560.00	1559.05				MinPt-EOU
	3314.15	140.34	3219.76	3173.81	36.04	OSF1.50	2010.00	2002.75				MinPt-ADP
	1841.87	556.59	1469.98	1285.28	4.98	OSF1.50	9310.00	7692.05	OSF<5.00			Enter Alert
	675.87	562.04	300.34	113.82	1.81	OSF1.50	11023.39	7695.39				MinPts
	675.90	562.07	300.35	113.83	1.81	OSF1.50	11030.00	7695.40				MinPt-SF
	1854.48	559.47	1480.67	1295.02	4.99	OSF1.50	12750.00	7698.75	OSF>5.00			Exit Alert
	12156.83	564.16	11779.89	11592.67	32.46	OSF1.50	23152.14	7719.00				TD
30-015-33684 - WIGEON 23 FEDERAL COM 2 - INC Only to 12345ft - P (DefinitiveSurvey) - **Warning Alert**												
	1049.76	32.81	1047.26	1016.95	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	1049.76	32.81	1047.12	1016.95	7380.76	MAS = 10.00 (m)	27.00	27.00				WRP
	1049.76	68.81	1003.06	980.95	23.69	OSF1.50	1200.00	1200.00				MinPt-CtCt
	1057.44	90.87	996.03	966.57	17.91	OSF1.50	1450.00	1449.68				MinPt-EOU
	1062.37	98.48	995.88	963.88	16.56	OSF1.50	1520.00	1519.33				MinPt-EOU
	1079.51	118.63	999.59	960.88	13.91	OSF1.50	1690.00	1687.61				MinPt-ADP
	1080.76	119.85	1000.02	960.90	13.78	OSF1.50	1700.05	1697.51				MinPt-ADP
	1526.53	460.63	1218.61	1065.90	4.99	OSF1.50	7500.00	7422.34	OSF<5.00			Enter Alert
	1012.41	479.51	691.90	532.90	3.18	OSF1.50	8726.81	7690.92				MinPts
	1012.41	479.52	691.90	532.90	3.18	OSF1.50	8730.00	7690.93				MinPts
	1595.53	481.11	1273.96	1114.42	4.99	OSF1.50	9960.00	7693.32	OSF>5.00			Exit Alert
	14472.33	488.17	14146.05	13984.16	44.69	OSF1.50	23152.14	7719.00				TD
30-015-43773 - PINTAIL 23-26 FEDERAL COM 10H - MWD to 18381ft - A (DefinitiveSurvey) - **Pass**												
	1625.66	32.81	1623.16	1592.86	7577807.70	MAS = 10.00 (m)	0.00	0.00				MinPts
	1625.68	32.81	1623.15	1592.88	47862.22	MAS = 10.00 (m)	27.00	27.00				WRP
	830.19	88.20	770.56	741.99	14.49	OSF1.50	5520.00	5462.92				MinPt-CtCt
	830.78	90.11	769.87	740.67	14.18	OSF1.50	5650.00	5592.89				MinPt-EOU
	832.60	97.98	766.45	734.62	13.04	OSF1.50	6210.00	6152.89				MinPt-CtCt
	833.18	99.37	766.10	733.81	12.86	OSF1.50	6310.00	6252.89				MinPt-EOU
	834.34	100.78	766.32	733.56	12.70	OSF1.50	6410.00	6352.89				MinPt-ADP
	694.73	113.02	618.55	581.71	9.40	OSF1.50	7910.00	7652.26				MinPt-SF
	694.71	113.01	618.53	581.69	9.40	OSF1.50	7915.63	7653.68				MinPts
	1326.01	92.85	1263.28	1233.16	21.97	OSF1.50	9070.00	7691.59				MinPt-ADP
	1340.52	117.43	1261.41	1223.10	17.46	OSF1.50	10020.00	7693.44				MinPt-CtCt
	1345.85	131.96	1257.05	1213.89	15.57	OSF1.50	10530.00	7694.43				MinPt-EOU
	1346.97	133.30	1257.28	1213.68	15.42	OSF1.50	10580.00	7694.53				MinPt-ADP
	1352.88	144.81	1255.50	1208.06	14.23	OSF1.50	10930.00	7695.21				MinPt-EOU
	1359.02	157.32	1253.30	1201.70	13.14	OSF1.50	11310.00	7695.95				MinPt-EOU
	1362.62	163.17	1253.00	1199.45	12.70	OSF1.50	11490.00	7696.30				MinPt-EOU
	1369.94	183.57	1246.73	1186.37	11.33	OSF1.50	12090.00	7697.46				MinPt-EOU
	1375.19	198.92	1241.75	1176.27	10.48	OSF1.50	12530.00	7698.32				MinPt-EOU
	1381.93	214.56	1238.06	1167.38	9.76	OSF1.50	12980.00	7699.20				MinPt-EOU
	1382.43	251.36	1214.02	1131.07	8.32	OSF1.50	14010.00	7701.20				MinPt-CtCt
	1395.49	298.24	1195.83	1097.25	7.07	OSF1.50	15370.00	7703.85				MinPt-EOU
	1398.61	304.17	1195.00	1094.44	6.94	OSF1.50	15540.00	7704.18				MinPt-EOU
	1405.21	318.00	1192.38	1087.21	6.67	OSF1.50	15940.00	7704.96				MinPt-EOU
	1414.75	381.97	1159.27	1032.78	5.58	OSF1.50	17650.00	7708.29				MinPts
	1414.82	382.04	1159.30	1032.78	5.58	OSF1.50	17660.00	7708.31				MinPt-ADP
	1414.96	382.10	1159.40	1032.87	5.58	OSF1.50	17670.00	7708.33				MinPt-SF
	5685.80	187.59	5559.91	5498.21	46.06	OSF1.50	23152.14	7719.00				TD
30-015-36335 - PINTAIL 23 FEDERAL 3 - Gyro+MWD to 4850ft - P (DefinitiveSurvey) - **Pass**												
	2541.03	32.81	2540.04	2508.22	N/A	MAS = 10.00 (m)	0.00	0.00				Surface
	2541.00	32.81	2539.99	2508.20	89606.80	MAS = 10.00 (m)	27.00	27.00				WRP
	1355.61	104.93	1285.33	1250.68	19.55	OSF1.50	3190.00	3164.82				MinPt-SF
	1354.40	104.73	1284.25	1249.67	19.57	OSF1.50	3240.00	3214.06				MinPts
	1354.37	104.69	1284.25	1249.69	19.58	OSF1.50	3247.90	3221.84				MinPt-CtCt
	4754.58	66.22	4710.11	4688.36	109.31	OSF1.50	7930.00	7657.17				MinPt-SF
	4780.92	56.60	4742.86	4724.32	128.93	OSF1.50	8520.00	7690.52				MinPts
	4768.57	57.02	4730.23	4711.56	127.63	OSF1.50	8910.00	7691.28				MinPt-SF
	4768.32	56.98	4730.00	4711.33	127.70	OSF1.50	8940.00	7691.33				MinPt-SF
	4764.86	58.17	4725.75	4706.69	124.96	OSF1.50	9110.00	7691.67				MinPt-SF
	4762.59	60.83	4721.70	4701.75	119.35	OSF1.50	9320.00	7692.07				MinPt-CtCt
	4762.99	62.04	4721.30	4700.95	116.99	OSF1.50	9400.00	7692.23				MinPt-EOU
	4763.41	62.54	4721.39	4700.87	116.05	OSF1.50	9430.00	7692.29				MinPt-ADP
	5880.98	121.19	5799.86	5759.79	73.38	OSF1.50	12930.00	7699.10				MinPt-SF
	14371.56	166.56	14260.19	14205.00	130.19	OSF1.50	23152.14	7719.00				TD

Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24 Proposal Geodetic Report

Def Plan

Report Date:	June 21, 2024 - 02:30 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	180.220 °(GRID North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra Wigeon 23-26-35 Federal Com Pad (Lot B) / Wigeon 23-35	**TVD Reference Datum:**	RKB
Well:	Wigeon 23-35 Federal Com 7H	**TVD Reference Elevation:**	3314.900 ft above MSL
Borehole:	Wigeon 23-35 Federal Com 7H	**Seabed / Ground Elevation:**	3287.900 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.831°
Survey Name:	Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24	**Total Gravity Field Strength:**	998.4354mgn (9.80665 Based)
Survey Date:	June 21, 2024	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	110.824 ° / 16350.601 ft / 6.735 / 2.118	**Total Magnetic Field Strength:**	47242.171 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.609°
Location Lat / Long:	32°7'17.88408"N , 104°15'37.31264"W	**Declination Date:**	June 21, 2024
Location Grid N/E Y/X:	N 407994.340 ftUS , E 563927.020 ftUS	**Magnetic Declination Model:**	HDGM 2024
CRS Grid Convergence Angle:	0.039°	**North Reference:**	Grid North
Grid Scale Factor:	0.99990968(Applied)	**Grid Convergence Used:**	0.039°
Version / Patch:	2024.2.0.1	**Total Corr Mag North->Grid North:**	6.792°
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
SHL [371'FNL, 1679'FEL]	0.00	0.00	0.00	0.00	-3,314.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462			
Nudge, Build 2°/100ft	1,200.00	0.00	292.66	1,200.00	-2,114.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
Hold	1,700.05	10.00	292.66	1,697.51	-1,617.39	-16.61	16.77	-40.17	408,011.11	563,886.85	32.12168063	-104.26049434	2.00	2.00	0.00
Drop 2°/100ft	5,124.48	10.00	292.66	5,069.91	1,755.01	-243.57	245.84	-588.99	408,240.15	563,338.09	32.12231128	-104.26226647	0.00	0.00	0.00
Hold	5,624.53	0.00	292.66	5,567.42	2,252.52	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	2.00	-2.00	0.00
KOP, Build 10°/100ft	7,154.53	0.00	292.66	7,097.42	3,782.52	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
Build 5°/100ft	7,904.53	75.00	179.60	7,650.85	4,335.95	164.45	-162.05	-626.19	407,832.30	563,300.88	32.12119019	-104.26238751	10.00	10.00	0.00
Landing Point	8,202.30	89.89	179.60	7,689.90	4,375.00	458.79	-456.40	-624.14	407,537.98	563,302.93	32.12038111	-104.26238152	5.00	5.00	0.00
IFP1, Turn 2°/100ft	12,673.47	89.89	179.60	7,698.60	4,383.70	4,929.70	-4,927.45	-593.11	403,067.34	563,333.96	32.10809147	-104.26229082	0.00	0.00	0.00
Hold	12,720.14	89.89	180.54	7,698.69	4,383.79	4,976.37	-4,974.13	-593.17	403,020.67	563,333.90	32.10796318	-104.26229110	2.00	0.00	2.00
Wigeon 23-35 Federal Com 7H - PBHL [100'FSL, 2305'FEL]	23,152.14	89.89	180.54	7,719.00	4,404.10	15,408.19	-15,405.65	-690.72	392,590.11	563,236.36	32.07929014	-104.26262822	0.00	0.00	0.00

Survey Type: Def Plan

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

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Code	Vendor / Tool	Borehole / Survey
	1	0.000	7,100.000	1/100.000	–	–		A001Mb_MWD		Wigeon 23-35 Federal Com 7H / Coterra Wigeon 2
	1	7,100.000	23,151.680	1/100.000	–	–		A008Mb_MWD+IFR1+MS		Wigeon 23-35 Federal Com 7H / Coterra Wigeon 2

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

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name

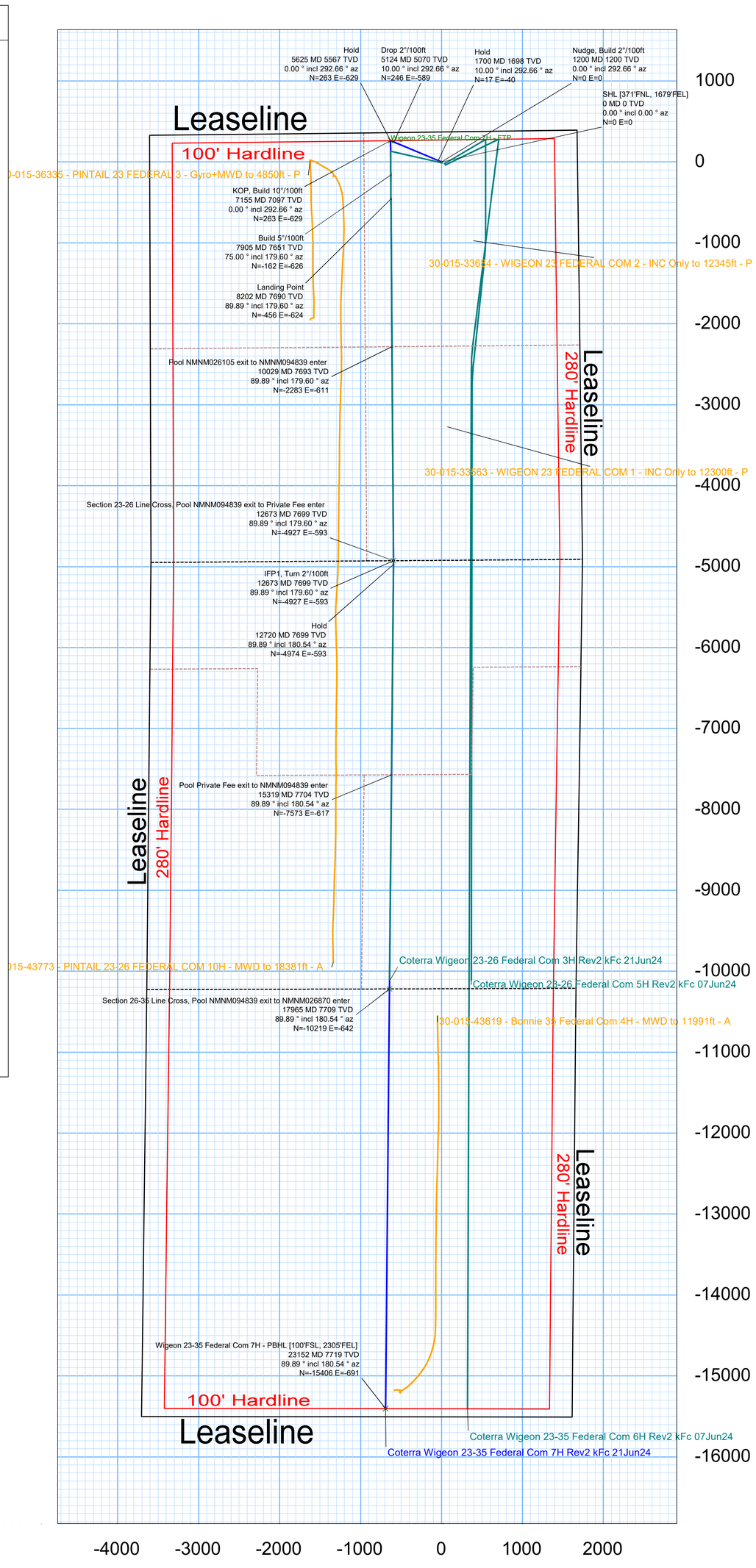
COTERRA Rev2

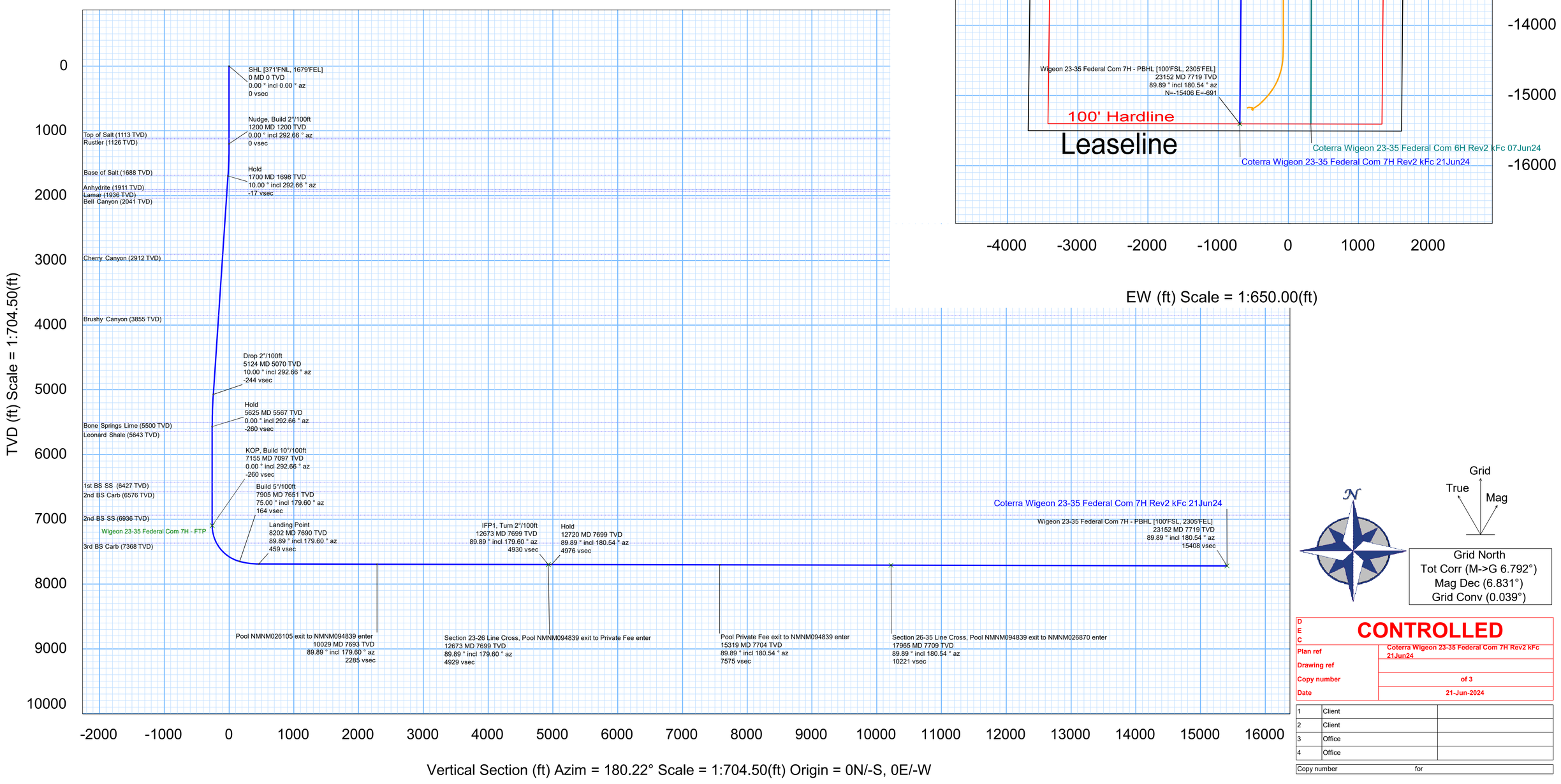
Borehole:	Well:	Field:	Structure:
Wigeon 23-35 Federal Com 7H	Wigeon 23-35 Federal Com 7H	NM Eddy County (NAD 83)	Coterra Wigeon 23-26-35 Federal Com Pad (Lot B)

Gravity & Magnetic Parameters					Surface Location	NAD83 New Mexico State Plane, Eastern Zone, US Feet				Miscellaneous			
Model:	HDGM 2024	Dip:	59.609°	Date:	21-Jun-2024	Lat:	N 32 7 17.88	Northing:	407994.34ftUS	Grid Conv:	0.0388°	Slot:	Wigeon 23-35 Federal Com 7H
MagDec:	6.831°	FS:	47242.171nT	Gravity FS:	998.435mgn (9.80665 Based)	Lon:	W 104 15 37.31	Easting:	563927.02ftUS	Scale Fact:	0.99990968	TVD Ref:	RKB (3314.900 ft above MSL)
												Plan:	Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [371'FNL, 1679'FEL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Top of Salt	1113.13	0.00	292.66	1113.13	0.00	0.00	0.00	0.00
Rustler	1125.90	0.00	292.66	1125.90	0.00	0.00	0.00	0.00
Nudge, Build 2°/100ft	1200.00	0.00	292.66	1200.00	0.00	0.00	0.00	0.00
Base of Salt	1690.29	9.81	292.66	1687.90	-15.97	16.12	-38.62	2.00
Hold	1700.05	10.00	292.66	1697.51	-16.61	16.77	-40.17	2.00
Anhydrite	1916.73	10.00	292.66	1910.90	-30.97	31.26	-74.90	0.00
Lamar	1942.11	10.00	292.66	1935.90	-32.66	32.96	-78.97	0.00
Bell Canyon	2048.73	10.00	292.66	2040.90	-39.72	40.09	-96.05	0.00
Cherry Canyon	2933.17	10.00	292.66	2911.90	-98.34	99.25	-237.80	0.00
Brushy Canyon	3890.72	10.00	292.66	3854.90	-161.80	163.31	-391.26	0.00
Drop 2°/100ft	5124.48	10.00	292.66	5069.91	-243.57	245.84	-588.99	0.00
Bone Springs Lime	5557.00	1.35	292.66	5499.90	-259.88	262.30	-628.42	2.00
Hold	5624.53	0.00	292.66	5567.42	-260.19	262.60	-629.16	2.00
Leonard Shale	5700.01	0.00	292.66	5642.90	-260.19	262.60	-629.16	0.00
1st BS SS	6484.01	0.00	292.66	6426.90	-260.19	262.60	-629.16	0.00
2nd BS Carb	6633.01	0.00	292.66	6575.90	-260.19	262.60	-629.16	0.00
2nd BS SS	6993.01	0.00	292.66	6935.90	-260.19	262.60	-629.16	0.00
KOP, Build 10°/100ft	7154.53	0.00	292.66	7097.42	-260.19	262.60	-629.16	0.00
3rd BS Carb	7436.22	28.17	179.60	7367.90	-192.33	194.74	-628.68	10.00
Build 5°/100ft	7904.53	75.00	179.60	7650.85	164.45	-162.05	-626.19	10.00
Landing Point	8202.30	89.89	179.60	7689.90	458.79	-456.40	-624.14	5.00
Pool NMNM026105 exit to NMNM094839 enter	10029.00	89.89	179.60	7693.45	2285.39	-2283.06	-611.47	0.00
Section 23-26 Line Cross, Pool NMNM094839 exit to Private Fee enter	12673.00	89.89	179.60	7698.60	4929.23	-4926.99	-593.12	0.00
IFP1, Turn 2°/100ft	12673.47	89.89	179.60	7698.60	4929.70	-4927.45	-593.11	0.00
Hold	12720.14	89.89	180.54	7698.69	4976.37	-4974.13	-593.17	2.00
Pool Private Fee exit to NMNM094839 enter	15319.00	89.89	180.54	7703.75	7575.18	-7572.87	-617.47	0.00
Section 26-35 Line Cross, Pool NMNM094839 exit to NMNM026870 enter	17965.00	89.89	180.54	7708.90	10221.14	-10218.75	-642.22	0.00
Wigeon 23-35 Federal Com 7H - PBHL [100'FSL, 2305'FEL]	23152.14	89.89	180.54	7719.00	15408.19	-15405.65	-690.72	0.00





D E C **CONTROLLED**

Plan ref	Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24
Drawing ref	
Copy number	of 3
Date	21-Jun-2024

1	Client	
2	Client	
3	Office	
4	Office	

Copy number for

Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24 Proposal Geodetic Report

Def Plan

Report Date:	June 21, 2024 - 02:31 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	180.220 °(GRID North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra Wigeon 23-26-35 Federal Com Pad (Lot B) / Wigeon 23-35	**TVD Reference Datum:**	RKB
Well:	Wigeon 23-35 Federal Com 7H	**TVD Reference Elevation:**	3314.900 ft above MSL
Borehole:	Wigeon 23-35 Federal Com 7H	**Seabed / Ground Elevation:**	3287.900 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.831°
Survey Name:	Coterra Wigeon 23-35 Federal Com 7H Rev2 kFc 21Jun24	**Total Gravity Field Strength:**	998.4354mgn (9.80665 Based)
Survey Date:	June 21, 2024	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	110.824 ° / 16350.601 ft / 6.735 / 2.118	**Total Magnetic Field Strength:**	47242.171 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.609°
Location Lat / Long:	32°7'17.88408"N , 104°15'37.31264"W	**Declination Date:**	June 21, 2024
Location Grid N/E Y/X:	N 407994.340 ftUS , E 563927.020 ftUS	**Magnetic Declination Model:**	HDGM 2024
CRS Grid Convergence Angle:	0.039°	**North Reference:**	Grid North
Grid Scale Factor:	0.99990968(Applied)	**Grid Convergence Used:**	0.039°
Version / Patch:	2024.2.0.1	**Total Corr Mag North->Grid North:**	6.792°
		Local Coord Referenced To:	Well Head

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
SHL [371'FNL, 1679'FEL]	0.00	0.00	0.00	0.00	-3,314.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462			
	100.00	0.00	292.66	100.00	-3,214.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	200.00	0.00	292.66	200.00	-3,114.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	300.00	0.00	292.66	300.00	-3,014.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	400.00	0.00	292.66	400.00	-2,914.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	500.00	0.00	292.66	500.00	-2,814.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	600.00	0.00	292.66	600.00	-2,714.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	700.00	0.00	292.66	700.00	-2,614.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	800.00	0.00	292.66	800.00	-2,514.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	900.00	0.00	292.66	900.00	-2,414.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	1,000.00	0.00	292.66	1,000.00	-2,314.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	1,100.00	0.00	292.66	1,100.00	-2,214.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
Top of Salt□	1,113.13	0.00	292.66	1,113.13	-2,201.77	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
Rustler□	1,125.90	0.00	292.66	1,125.90	-2,189.00	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
Nudge, Build 2°/100ft	1,200.00	0.00	292.66	1,200.00	-2,114.90	0.00	0.00	0.00	407,994.34	563,927.02	32.12163447	-104.26036462	0.00	0.00	0.00
	1,300.00	2.00	292.66	1,299.98	-2,014.92	-0.67	0.67	-1.61	407,995.01	563,925.41	32.12163632	-104.26036982	2.00	2.00	0.00
	1,400.00	4.00	292.66	1,399.84	-1,915.06	-2.66	2.69	-6.44	407,997.03	563,920.58	32.12164187	-104.26038542	2.00	2.00	0.00
	1,500.00	6.00	292.66	1,499.45	-1,815.45	-5.99	6.04	-14.48	408,000.38	563,912.54	32.12165111	-104.26041139	2.00	2.00	0.00
	1,600.00	8.00	292.66	1,598.70	-1,716.20	-10.64	10.74	-25.73	408,005.08	563,901.29	32.12166403	-104.26044770	2.00	2.00	0.00
Base of Salt□	1,690.29	9.81	292.66	1,687.90	-1,627.00	-15.97	16.12	-38.62	408,010.46	563,888.40	32.12167885	-104.26048934	2.00	2.00	0.00
	1,700.00	10.00	292.66	1,697.47	-1,617.43	-16.61	16.76	-40.16	408,011.10	563,886.86	32.12168062	-104.26049431	2.00	2.00	0.00
Hold	1,700.05	10.00	292.66	1,697.51	-1,617.39	-16.61	16.77	-40.17	408,011.11	563,886.85	32.12168063	-104.26049434	2.00	2.00	0.00
	1,800.00	10.00	292.66	1,795.95	-1,518.95	-23.24	23.45	-56.19	408,017.79	563,870.83	32.12169904	-104.26054606	0.00	0.00	0.00
	1,900.00	10.00	292.66	1,894.43	-1,420.47	-29.87	30.14	-72.22	408,024.48	563,854.81	32.12171745	-104.26059781	0.00	0.00	0.00
Anhydrite□	1,916.73	10.00	292.66	1,910.90	-1,404.00	-30.97	31.26	-74.90	408,025.60	563,852.13	32.12172054	-104.26060647	0.00	0.00	0.00
Lamar□	1,942.11	10.00	292.66	1,935.90	-1,379.00	-32.66	32.96	-78.97	408,027.30	563,848.06	32.12172521	-104.26061961	0.00	0.00	0.00
	2,000.00	10.00	292.66	1,992.91	-1,321.99	-36.49	36.83	-88.24	408,031.17	563,838.78	32.12173587	-104.26064956	0.00	0.00	0.00
Bell Canyon□	2,048.73	10.00	292.66	2,040.90	-1,274.00	-39.72	40.09	-96.05	408,034.43	563,830.97	32.12174485	-104.26067478	0.00	0.00	0.00
	2,100.00	10.00	292.66	2,091.39	-1,223.51	-43.12	43.52	-104.27	408,037.86	563,822.76	32.12175429	-104.26070131	0.00	0.00	0.00
	2,200.00	10.00	292.66	2,189.87	-1,125.03	-49.75	50.21	-120.30	408,044.55	563,806.73	32.12177270	-104.26075306	0.00	0.00	0.00
	2,300.00	10.00	292.66	2,288.35	-1,026.55	-56.38	56.90	-136.32	408,051.23	563,790.71	32.12179112	-104.26080481	0.00	0.00	0.00
	2,400.00	10.00	292.66	2,386.83	-928.07	-63.00	63.59	-152.35	408,057.92	563,774.68	32.12180954	-104.26085656	0.00	0.00	0.00
	2,500.00	10.00	292.66	2,485.31	-829.59	-69.63	70.28	-168.38	408,064.61	563,758.66	32.12182795	-104.26090831	0.00	0.00	0.00
	2,600.00	10.00	292.66	2,583.79	-731.11	-76.26	76.97	-184.40	408,071.30	563,742.63	32.12184637	-104.26096006	0.00	0.00	0.00
	2,700.00	10.00	292.66	2,682.27	-632.63	-82.89	83.66	-200.43	408,077.99	563,726.61	32.12186479	-104.26101181	0.00	0.00	0.00
	2,800.00	10.00	292.66	2,780.75	-534.15	-89.51	90.35	-216.46	408,084.68	563,710.58	32.12188320	-104.26106356	0.00	0.00	0.00
	2,900.00	10.00	292.66	2,879.23	-435.67	-96.14	97.04	-232.48	408,091.37	563,694.56	32.12190162	-104.26111531	0.00	0.00	0.00
Cherry Canyon□	2,933.17	10.00	292.66	2,911.90	-403.00	-98.34	99.25	-237.80	408,093.59	563,689.24	32.12190773	-104.26113247	0.00	0.00	0.00
	3,000.00	10.00	292.66	2,977.71	-337.19	-102.77	103.72	-248.51	408,098.06	563,678.53	32.12192004	-104.26116706	0.00	0.00	0.00
	3,100.00	10.00	292.66	3,076.19	-238.71	-109.40	110.41	-264.53	408,104.74	563,662.51	32.12193845	-104.26121880	0.00	0.00	0.00
	3,200.00	10.00	292.66	3,174.67	-140.23	-116.03	117.10	-280.56	408,111.43	563,646.48	32.12195687	-104.26127055	0.00	0.00	0.00
	3,300.00	10.00	292.66	3,273.15	-41.75	-122.65	123.79	-296.59	408,118.12	563,630.46	32.12197528	-104.26132230	0.00	0.00	0.00
	3,400.00	10.00	292.66	3,371.63	56.73	-129.28	130.48	-312.61	408,124.81	563,614.44	32.12199370	-104.26137405	0.00	0.00	0.00
	3,500.00	10.00	292.66	3,470.11	155.21	-135.91	137.17	-328.64	408,131.50	563,598.41	32.12201212	-104.26142580	0.00	0.00	0.00
	3,600.00	10.00	292.66	3,568.59	253.69	-142.54	143.86	-344.67	408,138.19	563,582.39	32.12203053	-104.26147755	0.00	0.00	0.00
	3,700.00	10.00	292.66	3,667.08	352.18	-149.16	150.55	-360.69	408,144.88	563,566.36	32.12204895	-104.26152930	0.00	0.00	0.00
	3,800.00	10.00	292.66	3,765.56	450.66	-155.79	157.24	-376.72	408,151.56	563,550.34	32.12206736	-104.26158105	0.00	0.00	0.00
Brushy Canyon□	3,890.72	10.00	292.66	3,854.90	540.00	-161.80	163.31	-391.26	408,157.63	563,535.80	32.12208407	-104.26162800	0.00	0.00	0.00
	3,900.00	10.00	292.66	3,864.04	549.14	-162.42	163.93	-392.75	408,158.25	563,534.31	32.12208578	-104.26163280	0.00	0.00	0.00
	4,000.00	10.00	292.66	3,962.52	647.62	-169.05	170.62	-408.77	408,164.94	563,518.29	32.12210420	-104.26168455	0.00	0.00	0.00
	4,100.00	10.00	292.66	4,061.00	746.10	-175.67	177.31	-424.80	408,171.63	563,502.26	32.12212261	-104.26173630	0.00	0.00	0.00
	4,200.00	10.00	292.66	4,159.48	844.58	-182.30	184.00	-440.83	408,178.32	563,486.24	32.12214103	-104.26178805	0.00	0.00	0.00
	4,300.00	10.00	292.66	4,257.96	943.06	-188.93	190.69	-456.85	408,185.01	563,470.21	32.12215944	-104.26183980	0.00	0.00	0.00
	4,400.00	10.00	292.66	4,356.44	1,041.54	-195.56	197.37	-472.88	408,191.70	563,454.19	32.12217786	-104.26189155	0.00	0.00	0.00
	4,500.00	10.00	292.66	4,454.92	1,140.02	-202.19	204.06	-488.90	408,198.39	563,438.16	32.12219628	-104.26194330	0.00	0.00	0.00
	4,600.00	10.00	292.66	4,553.40	1,238.50	-208.81	210.75	-504.93	408,205.07	563,422.14	32.12221469	-104.26199505	0.00	0.00	0.00
	4,700.00	10.00	292.66	4,651.88	1,336.98	-215.44	217.44	-520.96	408,211.76	563,406.11	32.12223311	-104.26204680	0.00	0.00	0.00
	4,800.00	10.00	292.66	4,750.36	1,435.46	-222.07	224.13	-536.98	408,218.45	563,390.09	32.12225152	-104.26209855	0.00	0.00	0.00
	4,900.00	10.00	292.66	4,848.84	1,533.94	-228.70	230.82	-553.01	408,225.14	563,374.06	32.12226994	-104.26215030	0.00	0.00	0.00
	5,000.00	10.00	292.66	4,947.32	1,632.42	-235.32	237.51	-569.04	408,231.83	563,358.04	32.12228836	-104.26220205	0.00	0.00	0.00
	5,100.00	10.00	292.66	5,045.80	1,730.90	-241.95	244.20	-585.06	408,238.52	563,342.01	32.12230677	-104.26225380	0.00	0.00	0.00
Drop 2°/100ft	5,124.48	10.00	292.66	5,069.91	1,755.01	-243.57	245.84	-588.99	408,240.15	563,338.09	32.12231128	-104.26226647	0.00	0.00	0.00
	5,200.00	8.49	292.66	5,144.45	1,829.55	-248.20	250.51	-600.18	408,244.83	563,326.89	32.12232415	-104.26230262	2.00	-2.00	0.00
	5,300.00	6.49	292.66	5,243.59	1,928.69	-253.18	255.53	-612.21	408,249.85	563,314.86	32.12233797	-104.26234147	2.00	-2.00	0.00
	5,400.00	4.49	292.66	5,343.12	2,028.22	-256.83	259.22	-621.04	408,253.53	563,306.03	32.12234812	-104.26236998	2.00	-2.00	0.00
	5,500.00	2.49	292.66	5,442.93	2,128.03	-259.15	261.56	-626.66	408,255.88	563,300.42	32.12235457	-104.26238812	2.00	-2.00	0.00
Bone Springs Lime□	5,557.00	1.35	292.66	5,499.90	2,185.00	-259.88	262.30	-628.42	408,256.61	563,298.65	32.12235660	-104.26239381	2.00	-2.00	0.00
	5,600.00	0.49	292.66	5,542.90	2,228.00	-260.15	262.56	-629.06	408,256.88	563,298.02	32.12235733	-104.26239587	2.00	-2.00	0.00
Hold	5,624.53	0.00	292.66	5,567.42	2,252.52	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	2.00	-2.00	0.00
	5,700.00	0.00	292.66	5,642.89	2,327.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
Leonard Shale□	5,700.01	0.00	292.66	5,642.90	2,328.00	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	5,800.00	0.00	292.66	5,742.89	2,427.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	5,900.00	0.00	292.66	5,842.89	2,527.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,000.00	0.00	292.66	5,942.89	2,627.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,100.00	0.00	292.66	6,042.89	2,727.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,200.00	0.00	292.66	6,142.89	2,827.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,300.00	0.00	292.66	6,242.89	2,927.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,400.00	0.00	292.66	6,342.89	3,027.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
1st BS SS □	6,484.01	0.00	292.66	6,426.90	3,112.00	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,500.00	0.00	292.66	6,442.89	3,127.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,600.00	0.00	292.66	6,542.89	3,227.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
2nd BS Carb□	6,633.01	0.00	292.66	6,575.90	3,261.00	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,700.00	0.00	292.66	6,642.89	3,327.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,800.00	0.00	292.66	6,742.89	3,427.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	6,900.00	0.00	292.66	6,842.89	3,527.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
2nd BS SS□	6,993.01	0.00	292.66	6,935.90	3,621.00	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	7,000.00	0.00	292.66	6,942.89	3,627.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	7,100.00	0.00	292.66	7,042.89	3,727.99	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
KOP, Build 10°/100ft	7,154.53	0.00	292.66	7,097.42	3,782.52	-260.19	262.60	-629.16	408,256.92	563,297.92	32.12235744	-104.26239618	0.00	0.00	0.00
	7,200.00	4.55	179.60	7,142.85	3,827.95	-258.38	260.80	-629.15	408,255.12	563,297.93	32.12235248	-104.26239615	10.00	10.00	0.00
	7,300.00	14.55	179.60	7,241.34	3,926.44	-241.82	244.24	-629.03	408,238.55	563,298.05	32.12230695	-104.26239581	10.00	10.00	0.00
	7,400.00	24.55	179.60	7,335.45	4,020.55	-208.40	210.82	-628.80	408,205.14	563,298.28	32.12221510	-104.26239513	10.00	10.00	0.00
3rd BS Carb□	7,436.22	28.17	179.60	7,367.90	4,053.00	-192.33	194.74	-628.68	408,189.07	563,298.39	32.12217091	-104.26239480	10.00	10.00	0.00
	7,500.00	34.55	179.60	7,422.34	4,107.44	-159.16	161.57	-628.45	408,155.89	563,298.63	32.12207973	-104.26239412	10.00	10.00	0.00
	7,600.00	44.55	179.60	7,499.35	4,184.45	-95.57	97.98	-628.01	408,092.31	563,299.07	32.12190494	-104.26239282	10.00	10.00	0.00
	7,700.00	54.55	179.60	7,564.15	4,249.25	-19.57	21.98	-627.48	408,016.32	563,299.60	32.12169605	-104.26239127	10.00	10.00	0.00
	7,800.00	64.55	179.60	7,614.77	4,299.87	66.52	-64.11	-626.88	407,930.24	563,300.20	32.12145940	-104.26238951	10.00	10.00	0.00
	7,900.00	74.55	179.60	7,649.67	4,334.77	160.09	-157.68	-626.22	407,836.67	563,300.85	32.12120219	-104.26238760	10.00	10.00	0.00
Build 5°/100ft	7,904.53	75.00	179.60	7,650.85	4,335.95	164.45	-162.05	-626.19	407,832.30	563,300.88	32.12119019	-104.26238751	10.00	10.00	0.00
	8,000.00	79.77	179.60	7,671.70	4,356.80	257.59	-255.19	-625.54	407,739.17	563,301.53	32.12093417	-104.26238561	5.00	5.00	0.00
	8,100.00	84.77	179.60	7,685.14	4,370.24	356.65	-354.25	-624.85	407,640.12	563,302.22	32.12066189	-104.26238359	5.00	5.00	0.00
	8,200.00	89.77	179.60	7,689.89	4,374.99	456.50	-454.10	-624.16	407,540.28	563,302.92	32.12038742	-104.26238157	5.00	5.00	0.00
Landing Point	8,202.30	89.89	179.60	7,689.90	4,375.00	458.79	-456.40	-624.14	407,537.98	563,302.93	32.12038111	-104.26238152	5.00	5.00	0.00

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
	8,300.00	89.89	179.60	7,690.09	4,375.19	556.49	-554.10	-623.47	407,440.29	563,303.61	32.12011256	-104.26237954	0.00	0.00	0.00
	8,400.00	89.89	179.60	7,690.28	4,375.38	656.48	-654.10	-622.77	407,340.30	563,304.30	32.11983769	-104.26237751	0.00	0.00	0.00
	8,500.00	89.89	179.60	7,690.48	4,375.58	756.48	-754.10	-622.08	407,240.31	563,305.00	32.11956283	-104.26237548	0.00	0.00	0.00
	8,600.00	89.89	179.60	7,690.67	4,375.77	856.47	-854.09	-621.38	407,140.33	563,305.69	32.11928797	-104.26237345	0.00	0.00	0.00
	8,700.00	89.89	179.60	7,690.87	4,375.97	956.47	-954.09	-620.69	407,040.34	563,306.39	32.11901310	-104.26237142	0.00	0.00	0.00
	8,800.00	89.89	179.60	7,691.06	4,376.16	1,056.46	-1,054.09	-620.00	406,940.35	563,307.08	32.11873824	-104.26236939	0.00	0.00	0.00
	8,900.00	89.89	179.60	7,691.26	4,376.36	1,156.45	-1,154.09	-619.30	406,840.36	563,307.77	32.11846337	-104.26236736	0.00	0.00	0.00
	9,000.00	89.89	179.60	7,691.45	4,376.55	1,256.45	-1,254.08	-618.61	406,740.37	563,308.47	32.11818851	-104.26236534	0.00	0.00	0.00
	9,100.00	89.89	179.60	7,691.65	4,376.75	1,356.44	-1,354.08	-617.91	406,640.39	563,309.16	32.11791365	-104.26236331	0.00	0.00	0.00
	9,200.00	89.89	179.60	7,691.84	4,376.94	1,456.44	-1,454.08	-617.22	406,540.40	563,309.86	32.11763878	-104.26236128	0.00	0.00	0.00
	9,300.00	89.89	179.60	7,692.03	4,377.13	1,556.43	-1,554.07	-616.53	406,440.41	563,310.55	32.11736392	-104.26235925	0.00	0.00	0.00
	9,400.00	89.89	179.60	7,692.23	4,377.33	1,656.42	-1,654.07	-615.83	406,340.42	563,311.24	32.11708906	-104.26235722	0.00	0.00	0.00
	9,500.00	89.89	179.60	7,692.42	4,377.52	1,756.42	-1,754.07	-615.14	406,240.43	563,311.94	32.11681419	-104.26235519	0.00	0.00	0.00
	9,600.00	89.89	179.60	7,692.62	4,377.72	1,856.41	-1,854.07	-614.44	406,140.44	563,312.63	32.11653933	-104.26235316	0.00	0.00	0.00
	9,700.00	89.89	179.60	7,692.81	4,377.91	1,956.41	-1,954.06	-613.75	406,040.46	563,313.33	32.11626446	-104.26235113	0.00	0.00	0.00
	9,800.00	89.89	179.60	7,693.01	4,378.11	2,056.40	-2,054.06	-613.06	405,940.47	563,314.02	32.11598960	-104.26234911	0.00	0.00	0.00
	9,900.00	89.89	179.60	7,693.20	4,378.30	2,156.39	-2,154.06	-612.36	405,840.48	563,314.71	32.11571474	-104.26234708	0.00	0.00	0.00
	10,000.00	89.89	179.60	7,693.40	4,378.50	2,256.39	-2,254.06	-611.67	405,740.49	563,315.41	32.11543987	-104.26234505	0.00	0.00	0.00
Pool NMNM026105 exit to NMNI	10,029.00	89.89	179.60	7,693.45	4,378.55	2,285.39	-2,283.06	-611.47	405,711.49	563,315.61	32.11536016	-104.26234446	0.00	0.00	0.00
	10,100.00	89.89	179.60	7,693.59	4,378.69	2,356.38	-2,354.05	-610.97	405,640.50	563,316.10	32.11516501	-104.26234302	0.00	0.00	0.00
	10,200.00	89.89	179.60	7,693.79	4,378.89	2,456.38	-2,454.05	-610.28	405,540.52	563,316.80	32.11489014	-104.26234099	0.00	0.00	0.00
	10,300.00	89.89	179.60	7,693.98	4,379.08	2,556.37	-2,554.05	-609.59	405,440.53	563,317.49	32.11461528	-104.26233896	0.00	0.00	0.00
	10,400.00	89.89	179.60	7,694.18	4,379.28	2,656.36	-2,654.05	-608.89	405,340.54	563,318.18	32.11434042	-104.26233693	0.00	0.00	0.00
	10,500.00	89.89	179.60	7,694.37	4,379.47	2,756.36	-2,754.04	-608.20	405,240.55	563,318.88	32.11406555	-104.26233490	0.00	0.00	0.00
	10,600.00	89.89	179.60	7,694.56	4,379.66	2,856.35	-2,854.04	-607.50	405,140.56	563,319.57	32.11379069	-104.26233288	0.00	0.00	0.00
	10,700.00	89.89	179.60	7,694.76	4,379.86	2,956.35	-2,954.04	-606.81	405,040.57	563,320.27	32.11351582	-104.26233085	0.00	0.00	0.00
	10,800.00	89.89	179.60	7,694.95	4,380.05	3,056.34	-3,054.04	-606.12	404,940.59	563,320.96	32.11324096	-104.26232882	0.00	0.00	0.00
	10,900.00	89.89	179.60	7,695.15	4,380.25	3,156.33	-3,154.03	-605.42	404,840.60	563,321.65	32.11296610	-104.26232679	0.00	0.00	0.00
	11,000.00	89.89	179.60	7,695.34	4,380.44	3,256.33	-3,254.03	-604.73	404,740.61	563,322.35	32.11269123	-104.26232476	0.00	0.00	0.00
	11,100.00	89.89	179.60	7,695.54	4,380.64	3,356.32	-3,354.03	-604.03	404,640.62	563,323.04	32.11241637	-104.26232273	0.00	0.00	0.00
	11,200.00	89.89	179.60	7,695.73	4,380.83	3,456.32	-3,454.03	-603.34	404,540.63	563,323.74	32.11214150	-104.26232070	0.00	0.00	0.00
	11,300.00	89.89	179.60	7,695.93	4,381.03	3,556.31	-3,554.02	-602.65	404,440.65	563,324.43	32.11186664	-104.26231868	0.00	0.00	0.00
	11,400.00	89.89	179.60	7,696.12	4,381.22	3,656.30	-3,654.02	-601.95	404,340.66	563,325.12	32.11159178	-104.26231665	0.00	0.00	0.00
	11,500.00	89.89	179.60	7,696.32	4,381.42	3,756.30	-3,754.02	-601.26	404,240.67	563,325.82	32.11131691	-104.26231462	0.00	0.00	0.00
	11,600.00	89.89	179.60	7,696.51	4,381.61	3,856.29	-3,854.01	-600.56	404,140.68	563,326.51	32.11104205	-104.26231259	0.00	0.00	0.00
	11,700.00	89.89	179.60	7,696.71	4,381.81	3,956.29	-3,954.01	-599.87	404,040.69	563,327.20	32.11076718	-104.26231056	0.00	0.00	0.00
	11,800.00	89.89	179.60	7,696.90	4,382.00	4,056.28	-4,054.01	-599.18	403,940.70	563,327.90	32.11049232	-104.26230853	0.00	0.00	0.00
	11,900.00	89.89	179.60	7,697.09	4,382.19	4,156.27	-4,154.01	-598.48	403,840.72	563,328.59	32.11021745	-104.26230651	0.00	0.00	0.00
	12,000.00	89.89	179.60	7,697.29	4,382.39	4,256.27	-4,254.00	-597.79	403,740.73	563,329.29	32.10994259	-104.26230448	0.00	0.00	0.00
	12,100.00	89.89	179.60	7,697.48	4,382.58	4,356.26	-4,354.00	-597.09	403,640.74	563,329.98	32.10966773	-104.26230245	0.00	0.00	0.00
	12,200.00	89.89	179.60	7,697.68	4,382.78	4,456.26	-4,454.00	-596.40	403,540.75	563,330.67	32.10939286	-104.26230042	0.00	0.00	0.00
	12,300.00	89.89	179.60	7,697.87	4,382.97	4,556.25	-4,554.00	-595.71	403,440.76	563,331.37	32.10911800	-104.26229839	0.00	0.00	0.00
	12,400.00	89.89	179.60	7,698.07	4,383.17	4,656.24	-4,653.99	-595.01	403,340.78	563,332.06	32.10884313	-104.26229636	0.00	0.00	0.00
	12,500.00	89.89	179.60	7,698.26	4,383.36	4,756.24	-4,753.99	-594.32	403,240.79	563,332.76	32.10856827	-104.26229433	0.00	0.00	0.00
	12,600.00	89.89	179.60	7,698.46	4,383.56	4,856.23	-4,853.99	-593.62	403,140.80	563,333.45	32.10829341	-104.26229231	0.00	0.00	0.00
Section 23-26 Line Cross, Pool N	12,673.00	89.89	179.60	7,698.60	4,383.70	4,929.23	-4,926.99	-593.12	403,067.81	563,333.96	32.10809275	-104.26229083	0.00	0.00	0.00
IFP1, Turn 2°/100ft	12,673.47	89.89	179.60	7,698.60	4,383.70	4,929.70	-4,927.45	-593.11	403,067.34	563,333.96	32.10809147	-104.26229082	0.00	0.00	0.00
	12,700.00	89.89	180.13	7,698.65	4,383.75	4,956.23	-4,953.99	-593.05	403,040.81	563,334.02	32.10801854	-104.26229067	2.00	0.00	2.00
Hold	12,720.14	89.89	180.54	7,698.69	4,383.79	4,976.37	-4,974.13	-593.17	403,020.67	563,333.90	32.10796318	-104.26229110	2.00	0.00	2.00
	12,800.00	89.89	180.54	7,698.85	4,383.95	5,056.23	-5,053.98	-593.92	402,940.82	563,333.16	32.10774368	-104.26229368	0.00	0.00	0.00
	12,900.00	89.89	180.54	7,699.04	4,384.14	5,156.22	-5,153.98	-594.85	402,840.84	563,332.22	32.10746883	-104.26229691	0.00	0.00	0.00
	13,000.00	89.89	180.54	7,699.24	4,384.34	5,256.22	-5,253.97	-595.79	402,740.85	563,331.29	32.10719397	-104.26230014	0.00	0.00	0.00
	13,100.00	89.89	180.54	7,699.43	4,384.53	5,356.22	-5,353.97	-596.72	402,640.87	563,330.35	32.10691911	-104.26230338	0.00	0.00	0.00
	13,200.00	89.89	180.54	7,699.63	4,384.73	5,456.22	-5,453.96	-597.66	402,540.88	563,329.42	32.10664426	-104.26230661	0.00	0.00	0.00
	13,300.00	89.89	180.54	7,699.82	4,384.92	5,556.22	-5,553.96	-598.59	402,440.89	563,328.48	32.10636940	-104.26230984	0.00	0.00	0.00
	13,400.00	89.89	180.54	7,700.01	4,385.11	5,656.22	-5,653.96	-599.53	402,340.91	563,327.55	32.10609455	-104.26231307	0.00	0.00	0.00
	13,500.00	89.89	180.54	7,700.21	4,385.31	5,756.21	-5,753.95	-600.46	402,240.92	563,326.61	32.10581969	-104.26231631	0.00	0.00	0.00
	13,600.00	89.89	180.54	7,700.40	4,385.50	5,856.21	-5,853.95	-601.40	402,140.93	563,325.68	32.10554483	-104.26231954	0.00	0.00	0.00
	13,700.00	89.89	180.54	7,700.60	4,385.70	5,956.21	-5,953.94	-602.33	402,040.95	563,324.74	32.10526998	-104.26232277	0.00	0.00	0.00
	13,800.00	89.89	180.54	7,700.79	4,385.89	6,056.21	-6,053.94	-603.27	401,940.96	563,323.81	32.10499512	-104.26232601	0.00	0.00	0.00
	13,900.00	89.89	180.54	7,700.99	4,386.09	6,156.21	-6,153.93	-604.20	401,840.98	563,322.87	32.10472027	-104.26232924	0.00	0.00	0.00
	14,000.00	89.89	180.54	7,701.18	4,386.28	6,256.21	-6,253.93	-605.14	401,740.99	563,321.94	32.10444541	-104.26233247	0.00	0.00	0.00
	14,100.00	89.89	180.54	7,701.38	4,386.48	6,356.20	-6,353.92	-606.07	401,641.00	563,321.00	32.10417055	-104.26233570	0.00	0.00	0.00
	14,200.00	89.89	180.54	7,701.57	4,386.67	6,456.20	-6,453.92	-607.01	401,541.02	563,320.07	32.10389570	-104.26233894	0.00	0.00	0.00
	14,300.00	89.89	180.54	7,701.77	4,386.87	6,556.20	-6,553.91	-607.94	401,441.03	563,319.13	32.10362084	-104.26234217	0.00	0.00	0.00
	14,400.00	89.89	180.54	7,701.96	4,387.06	6,656.20	-6,653.91	-608.88	401,341.04	563,318.20	32.10334599	-104.26234540	0.00	0.00	0.00
	14,500.00	89.89	180.54	7,702.16	4,387.26	6,756.20	-6,753.91	-609.82	401,241.06	563,317.26	32.10307113	-104.26234863	0.00	0.00	0.00
	14,600.00	89.89	180.54	7,702.35	4,387.45	6,856.20	-6,853.90	-610.75	401,141.07	563,316.33	32.10279627	-104.26235186	0.00	0.00	0.00
	14,700.00	89.89	180.54	7,702.55	4,387.65	6,956.19	-6,953.90	-611.69	401,041.09	563,315.39	32.10252142	-104.26235510	0.00	0.00	0.00
	14,800.00	89.89	180.54	7,702.74	4,387.84	7,056.19	-7,053.89	-612.62	400,941.10	563,314.46	32.10224656	-104.26235833	0.00	0.00	0.00
	14,900.00	89.89	180.54	7,702.93	4,388.03	7,156.19	-7,153.89	-613.56	400,841.11	563,313.52	32.10197171	-104.26236156	0.00	0.00	0.00
	15,000.00	89.89	180.54	7,703.13	4,388.23	7,256.19	-7,253.88	-614.49	400,741.13	563,312.59	32.10169685	-104.26236479	0.00	0.00	0.00
	15,100.00	89.89	180.54	7,703.32	4,388.42	7,356.19	-7,353.88	-615.43	400,641.14	563,311.65	32.10142199	-104.26236803	0.00	0.00	0.00
	15,200.00	89.89	180.54	7,703.52	4,388.62	7,456.19	-7,453.87	-616.36	400,541.15	563,310.72	32.10114714	-104.26237126	0.00	0.00	0.00
	15,300.00	89.89	180.54	7,703.71	4,388.81	7,556.18	-7,553.87	-617.30	400,441.17	563,309.78	32.10087228	-104.26237449	0.00	0.00	0.00
Pool Private Fee exit to NMNM05	15,319.00	89.89	180.54	7,703.75	4,388.85	7,575.18	-7,572.87	-617.47	400,422.17	563,309.60	32.10082006	-104.26237510	0.00	0.00	0.00
	15,400.00	89.89	180.54	7,703.91	4,389.01	7,656.18	-7,653.86	-618.23	400,341.18	563,308.85	32.10059742	-104.26237772	0.00	0.00	0.00
	15,500.00	89.89	180.54	7,704.10	4,389.20	7,756.18	-7,753.86	-619.17	400,241.20	563,307.91	32.10032257	-104.26238095	0.00	0.00	0.00
	15,600.00	89.89	180.54	7,704.30	4,389.40	7,856.18	-7,853.86	-620.10	400,141.21	563,306.98	32.10004771	-104.26238419	0.00	0.00	0.00
	15,700.00	89.89	180.54	7,704.49	4,389.59	7,956.18	-7,953.85	-621.04	400,041.22	563,306.04	32.09977286	-104.26238742	0.00	0.00	0.00
	15,800.00	89.89	180.54	7,704.69	4,389.79	8,056.17	-8,053.85	-621.97	399,941.24	563,305.11	32.09949800	-104.26239065	0.00	0.00	0.00
	15,900.00	89.89	180.54	7,704.88	4,389.98	8,156.17	-8,153.84	-622.91	399,841.25	563,304.17	32.09922314	-104.26239388	0.00	0.00	0.00
	16,000.00	89.89	180.54	7,705.08	4,390.18	8,256.17	-8,253.84	-623.84	399,741.27	563,303.24	32.09894829	-104.26239712	0.00	0.00	0.00
	16,100.00	89.89	180.54	7,705.27	4,390.37	8,356.17	-8,353.83	-624.78	399,641.28	563,302.30	32.09867343	-104.26240035	0.00	0.00	0.00
	16,200.00	89.89	180.54	7,705.47	4,390.57	8,456.17	-8,453.83	-625.71	399,541.29	563,301.37	32.09839857	-104.26240358	0.00	0.00	0.00
	16,300.00	89.89	180.54	7,705.66	4,390.76	8,556.17	-8,553.82	-626.65	399,441.31	563,300.43	32.09812372	-104.26240681	0.00	0.00	0.00
	16,400.00	89.89	180.54	7,705.85	4,390.95	8,656.16	-8,653.82	-627.58	399,341.32	563,299.50	32.09784886	-104.26241004	0.00	0.00	0.00
	16,500.00	89.89	180.54	7,706.05	4,391.15	8,756.16	-8,753.81	-628.52	399,241.33	563,298.56	32.09757400	-104.26241328	0.00	0.00	0.00
	16,600.00	89.89	180.54	7,706.24	4,391.34	8,856.16	-8,853.81	-629.45	399,141.35	563,297.63	32.09729915	-104.26241651	0.00	0.00	0.00
	16,700.00	89.89	180.54	7,706.44	4,391.54	8,956.16	-8,953.80	-630.39	399,041.36	563,296.69	32.09702429	-104.26241974	0.00	0.00	0.00
	16,800.00	89.89	180.54	7,706.63	4,391.73	9,056.16	-9,053.80	-631.32	398,941.38	563,295.76	32.09674944	-104.26242297	0.00	0.00	0.00
	16,900.00	89.89	180.54	7,706.83	4,391.93	9,156.16	-9,153.80	-632.26	398,841.39	563,294.82	32.09647458	-104.26242620	0.00	0.00	0.00
	17,000.00	89.89	180.54	7,707.02	4,392.12	9,256.15	-9,253.79	-633.19	398,741.40	563,293.89	32.09619972	-104.26242944	0.00	0.00	0.00
	17,100.00	89.89	180.54	7,707.22	4,392.32	9,356.15	-9,353.79	-634.13	398,641.42	563,292.95	32.09592487	-104.26243267	0.00	0.00	0.00
	17,200.00	89.89	180.54	7,707.41	4,392.51	9,456.15	-9,453.78	-635.06	398,541.43	563,292.02	32.09565001	-104.26243590	0.00	0.00	0.00
	17,300.00	89.89	180.54	7,707.61	4,392.71	9,556.15	-9,553.78	-636.00	398,441.44	563,291.08	32.09537515	-104.26243913	0.00	0.00	0.00
	17,400.00	89.89	180.54	7,707.80	4,392.90	9,656.15	-9,653.77	-636.93	398,341.46	563,290.15	32.09510030	-104.26244236	0.00	0.00	0.00
	17,500.00	89.89	180.54	7,708.00	4,393.10	9,756.15	-9,753.77	-637.87	398,241.47	563,289.21	32.09482544	-104.26244559	0.00	0.00	0.00
	17,600.00	89.89	180.54	7,708.19	4,393.29	9,856.14	-9,853.76	-638.80	398,141.49	563,288.27	32.09455058	-104.26244883	0.00	0.00	0.00
	17,700.00	89.89	180.54	7,708.39	4,393.49	9,956.14	-9,953.76	-639.74	398,041.50	563,287.34	32.09427573	-104.26245206	0.00	0.00	0.00
	17,800.00	89.89	180.54	7,708.58	4,393.68	10,056.14	-10,053.75	-640.67	397,941.51	563,286.40	32.09400087	-104.26245529	0.00	0.00	0.00
	17,900.00	89.89	180.54	7,708.78	4,393.88	10,156.14	-10,153.75	-641.61	397,841.53	563,285.47	32.09372601	-104.26245852	0.00	0.00	0.00
Section 26-35 Line Cross, Pool N	17,965.00	89.89	180.54	7,708.90	4,394.00	10,221.14	-10,218.75	-642.22	397,776.54	563,284.86	32.09354736	-104.26246062	0.00	0.00	0.00
	18,000.00	89.89	180.54	7,708.97	4,394.07	10,256.14	-10,253.75	-642.54	397,741.54	563,284.53	32.09345116	-104.26246175	0.00	0.00	0.00
	18,100.00	89.89	180.54	7,709.16	4,394.26	10,356.14	-10,353.74	-643.48	397,641.55	563,283.60	32.09317630	-104.26246498	0.00	0.00	0.00
	18,200.00	89.89	180.54	7,709.36	4,394.46	10,456.13	-10,453.74	-644.41	397,541.57	563,282.66	32.09290144	-104.26246822	0.00	0.00	0.00
	18,300.00	89.89	180.54	7,709.55	4,394.65	10,556.13	-10,553.73	-645.35	397,441.58	563,281.73	32.09262659	-104.26247145	0.00	0.00	0.00
	18,400.00	89.89	180.54	7,709.75	4,394.85	10,656.13	-10,653.73	-646.29	397,341.60	563,280.79	32.09235173	-104.26247468	0.00	0.00	0.00
	18,500.00	89.89	180.54	7,709.94	4,395.04	10,756.13	-10,753.72	-647.22	397,241.61	563,279.86	32.09207687	-104.26247791	0.00	0.00	0.00
	18,600.00	89.89	180.54	7,710.14	4,395.24	10,856.13	-10,853.72	-648.16	397,141.62	563,278.92	32.09180202	-104.26248114	0.00	0.00	0.00
	18,700.00	89.89	180.54	7,710.33	4,395.43	10,956.13	-10,953.71	-649.09	397,041.64	563,277.99	32.09152716	-104.26248437	0.00	0.00	0.00
	18,800.00	89.89	180.54	7,710.53	4,395.63	11,056.12	-11,053.71	-650.03	396,941.65	563,277.05	32.09125231	-104.26248760	0.00	0.00	0.00
	18,900.00	89.89	180.54	7,710.72	4,395.82	11,156.12	-11,153.70	-650.96	396,841.67	563,276.12	32.09097745	-104.26249084	0.00	0.00	0.00
	19,000.00	89.89	180.54	7,710.92	4,396.02	11,256.12	-11,253.70	-651.90	396,741.68	563,275.18	32.09070259	-104.26249407	0.00	0.00	0.00
	19,100.00	89.89	180.54	7,711.11	4,396.21	11,356.12	-11,353.70	-652.83	396,641.69	563,274.25	32.09042774	-104.26249730	0.00	0.00	0.00
	19,200.00	89.89	180.54	7,711.31	4,396.41	11,456.12	-11,453.69	-653.77	396,541.71	563,273.31	32.09015288	-104.26250053	0.00	0.00	0.00
	19,300.00	89.89	180.54	7,711.50	4,396.60	11,556.11	-11,553.69	-654.70	396,441.72	563,272.38	32.08987802	-104.26250376	0.00	0.00	0.00
	19,400.00	89.89	180.54	7,711.70	4,396.80	11,656.11	-11,653.68	-655.64	396,341.73	563,271.44	32.08960316	-104.26250699	0.00	0.00	0.00
	19,500.00	89.89	180.54	7,711.89	4,396.99	11,756.11	-11,753.68	-656.57	396,241.75	563,270.51	32.08932831	-104.26251022	0.00	0.00	0.00
	19,600.00	89.89	180.54	7,712.08	4,397.18	11,856.11	-11,853.67	-657.51	396,141.76	563,269.57	32.08905345	-104.26251346	0.00	0.00	0.00
	19,700.00	89.89	180.54	7,712.28	4,397.38	11,956.11	-11,953.67	-658.44	396,041.78	563,268.64	32.08877859	-104.26251669	0.00	0.00	0.00
	19,800.00	89.89	180.54	7,712.47	4,397.57	12,056.11	-12,053.66	-659.38	395,941.79	563,267.70	32.08850374	-104.26251992	0.00	0.00	0.00
	19,900.00	89.89	180.54	7,712.67	4,397.77	12,156.10	-12,153.66	-660.31	395,841.80	563,266.77	32.08822888	-104.26252315	0.00	0.00	0.00
	20,000.00	89.89	180.54	7,712.86	4,397.96	12,256.10	-12,253.65	-661.25	395,741.82	563,265.83	32.08795402	-104.26252638	0.00	0.00	0.00
	20,100.00	89.89	180.54	7,713.06	4,398.16	12,356.10	-12,353.65	-662.18	395,641.83	563,264.90	32.08767917	-104.26252961	0.00	0.00	0.00
	20,200.00	89.89	180.54	7,713.25	4,398.35	12,456.10	-12,453.65	-663.12	395,541.84	563,263.96	32.08740431	-104.26253284	0.00	0.00	0.00
	20,300.00	89.89	180.54	7,713.45	4,398.55	12,556.10	-12,553.64	-664.05	395,441.86	563,263.03	32.08712945	-104.26253607	0.00	0.00	0.00
	20,400.00	89.89	180.54	7,713.64	4,398.74	12,656.10	-12,653.64	-664.99	395,341.87	563,262.09	32.08685460	-104.26253931	0.00	0.00	0.00
	20,500.00	89.89	180.54	7,713.84	4,398.94	12,756.09	-12,753.63	-665.92	395,241.89	563,261.16	32.08657974	-104.26254254	0.00	0.00	0.00

Comments	MD (ft)	Incl (°)	Azim (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	Northing (ftUS)	Easting (ftUS)	Latitude (°)	Longitude (°)	DLS (°/100ft)	BR (°/100ft)	TR (°/100ft)
	20,600.00	89.89	180.54	7,714.03	4,399.13	12,856.09	-12,853.63	-666.86	395,141.90	563,260.22	32.08630488	-104.26254577	0.00	0.00	0.00
	20,700.00	89.89	180.54	7,714.23	4,399.33	12,956.09	-12,953.62	-667.79	395,041.91	563,259.29	32.08603003	-104.26254900	0.00	0.00	0.00
	20,800.00	89.89	180.54	7,714.42	4,399.52	13,056.09	-13,053.62	-668.73	394,941.93	563,258.35	32.08575517	-104.26255223	0.00	0.00	0.00
	20,900.00	89.89	180.54	7,714.62	4,399.72	13,156.09	-13,153.61	-669.66	394,841.94	563,257.42	32.08548031	-104.26255546	0.00	0.00	0.00
	21,000.00	89.89	180.54	7,714.81	4,399.91	13,256.09	-13,253.61	-670.60	394,741.95	563,256.48	32.08520546	-104.26255869	0.00	0.00	0.00
	21,100.00	89.89	180.54	7,715.00	4,400.10	13,356.08	-13,353.60	-671.53	394,641.97	563,255.55	32.08493060	-104.26256192	0.00	0.00	0.00
	21,200.00	89.89	180.54	7,715.20	4,400.30	13,456.08	-13,453.60	-672.47	394,541.98	563,254.61	32.08465574	-104.26256515	0.00	0.00	0.00
	21,300.00	89.89	180.54	7,715.39	4,400.49	13,556.08	-13,553.60	-673.40	394,442.00	563,253.68	32.08438088	-104.26256839	0.00	0.00	0.00
	21,400.00	89.89	180.54	7,715.59	4,400.69	13,656.08	-13,653.59	-674.34	394,342.01	563,252.74	32.08410603	-104.26257162	0.00	0.00	0.00
	21,500.00	89.89	180.54	7,715.78	4,400.88	13,756.08	-13,753.59	-675.27	394,242.02	563,251.81	32.08383117	-104.26257485	0.00	0.00	0.00
	21,600.00	89.89	180.54	7,715.98	4,401.08	13,856.08	-13,853.58	-676.21	394,142.04	563,250.87	32.08355631	-104.26257808	0.00	0.00	0.00
	21,700.00	89.89	180.54	7,716.17	4,401.27	13,956.07	-13,953.58	-677.14	394,042.05	563,249.94	32.08328146	-104.26258131	0.00	0.00	0.00
	21,800.00	89.89	180.54	7,716.37	4,401.47	14,056.07	-14,053.57	-678.08	393,942.07	563,249.00	32.08300660	-104.26258454	0.00	0.00	0.00
	21,900.00	89.89	180.54	7,716.56	4,401.66	14,156.07	-14,153.57	-679.01	393,842.08	563,248.07	32.08273174	-104.26258777	0.00	0.00	0.00
	22,000.00	89.89	180.54	7,716.76	4,401.86	14,256.07	-14,253.56	-679.95	393,742.09	563,247.13	32.08245689	-104.26259100	0.00	0.00	0.00
	22,100.00	89.89	180.54	7,716.95	4,402.05	14,356.07	-14,353.56	-680.88	393,642.11	563,246.20	32.08218203	-104.26259423	0.00	0.00	0.00
	22,200.00	89.89	180.54	7,717.15	4,402.25	14,456.07	-14,453.55	-681.82	393,542.12	563,245.26	32.08190717	-104.26259746	0.00	0.00	0.00
	22,300.00	89.89	180.54	7,717.34	4,402.44	14,556.06	-14,553.55	-682.76	393,442.13	563,244.33	32.08163231	-104.26260069	0.00	0.00	0.00
	22,400.00	89.89	180.54	7,717.54	4,402.64	14,656.06	-14,653.54	-683.69	393,342.15	563,243.39	32.08135746	-104.26260392	0.00	0.00	0.00
	22,500.00	89.89	180.54	7,717.73	4,402.83	14,756.06	-14,753.54	-684.63	393,242.16	563,242.46	32.08108260	-104.26260716	0.00	0.00	0.00
	22,600.00	89.89	180.54	7,717.93	4,403.03	14,856.06	-14,853.54	-685.56	393,142.18	563,241.52	32.08080774	-104.26261039	0.00	0.00	0.00
	22,700.00	89.89	180.54	7,718.12	4,403.22	14,956.06	-14,953.53	-686.50	393,042.19	563,240.59	32.08053289	-104.26261362	0.00	0.00	0.00
	22,800.00	89.89	180.54	7,718.31	4,403.41	15,056.06	-15,053.53	-687.43	392,942.20	563,239.65	32.08025803	-104.26261685	0.00	0.00	0.00
	22,900.00	89.89	180.54	7,718.51	4,403.61	15,156.05	-15,153.52	-688.37	392,842.22	563,238.72	32.07998317	-104.26262008	0.00	0.00	0.00
	23,000.00	89.89	180.54	7,718.70	4,403.80	15,256.05	-15,253.52	-689.30	392,742.23	563,237.78	32.07970831	-104.26262331	0.00	0.00	0.00
	23,100.00	89.89	180.54	7,718.90	4,404.00	15,356.05	-15,353.51	-690.24	392,642.24	563,236.85	32.07943346	-104.26262654	0.00	0.00	0.00
Wigeon 23-35 Federal Com 7H -	23,152.14	89.89	180.54	7,719.00	4,404.10	15,408.19	-15,405.65	-690.72	392,590.11	563,236.36	32.07929014	-104.26262822	0.00	0.00	0.00

Survey Type: Def Plan

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

Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Expected Max Inclination (deg)	Survey Tool Code	Vendor / Tool	Borehole / Survey
	1	0.000	7,100.000	1/100.000	–	–		A001Mb_MWD		Wigeon 23-35 Federal Com 7H / Coterra Wigeon 2:
	1	7,100.000	23,151.680	1/100.000	–	–		A008Mb_MWD+IFR1+MS		Wigeon 23-35 Federal Com 7H / Coterra Wigeon 2:

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

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name

WIGEON 23 26 FEDERAL COM 7H

APD - Geology COAs (Not in Potash or WIPP)

- For at least one well per pad (deepest well within initial development preferred) the record of the drilling rate (ROP) along with the Gamma Ray (GR) and Neutron (CNL) well logs run from TVD to surface in the vertical section of the hole shall be submitted to the BLM office as well as all other logs run on the full borehole 30 days from completion. Any other logs run on the wellbore, excluding cement remediation, should also be sent. Only digital copies of the logs in .TIF or .LAS formats are necessary; paper logs are no longer required. Logs shall be emailed to blm-cfo-geology@doimspp.onmicrosoft.com. Well completion report should have .pdf copies of any CBLs or Temp Logs run on the wellbore.

- Exceptions: In areas where there is extensive log coverage (in particular the salt zone adjacent to a pad), Operators are encouraged to contact BLM Geologists to discuss if additional GR and N logs are necessary on a pad. Operator may request a waiver of the GR and N log requirement due to good well control or other reasons to be approved by BLM Geologist prior to well completion. A waiver approved by BLM must be attached to completion well report to satisfy COAs.

- The top of the Rustler, top and bottom of the Salt, and the top of the Capitan Reef (if present) are to be recorded on the Completion Report.

Be aware that:

- H2S has been reported within one mile of the proposed project. Unknown measurements were recorded from the Delaware Group on the Sulphate Sister and H M Fed. White City 14-2 leases.

Questions? Contact Thomas Evans, BLM Geologist at 575-234-5965 or tvevans@blm.gov

PECOS DISTRICT

SURFACE USE

CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Wigeon 23-26 FEDERAL COM Multi-Well
LEASE NO.:	NMNM26105
COUNTY:	Eddy County, New Mexico

Wells:

Wigeon 23-26 FEDERAL COM 3H

Wigeon 23-26 FEDERAL COM 5H

Wigeon 23-26 FEDERAL COM 6H

Wigeon 23-26 FEDERAL COM 7H

Approval Date: 11/22/2024

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1. GENERAL PROVISIONS

The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on the location during construction, drilling and reclamation activity. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the operator, or any person working on the operator's behalf, on the public or federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area (within 100ft) of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer, in conjunction with a BLM Cultural Resource Specialist, to determine appropriate actions to prevent the loss of significant scientific values. The operator shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

Traditional Cultural Properties (TCPs) are protected by NHPA as codified in 36 CFR 800 for possessing traditional, religious, and cultural significance tied to a certain group of individuals. Though there are currently no designated TCPs within the project area or within a mile of the project area, but it is possible for a TCP to be designated after the approval of this project. **If a TCP is designated in the project area after the project's approval, the BLM Authorized Officer will notify the operator of the following conditions and the duration for which these conditions are required.**

1. Temporary halting of all construction, drilling, and production activities to lower noise.
2. Temporary shut-off of all artificial lights at night.

The operator is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA), specifically NAGPRA Subpart B regarding discoveries, to protect human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered during project work. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and a BLM-CFO Authorized Officer will be notified immediately. The BLM will then be required to be notified, in writing, within 24 hours of the discovery. The written notification should include the geographic location by county and state, the contents of the discovery, and the steps taken to protect said discovery. You must also include any potential threats to the discovery and a conformation that all activity within 100ft of the discovery has ceased and work will not resume until written certification is issued. All work on the entire project must halt for a minimum of 3 days and work cannot resume until an Authorized Officer grants permission to do so.

Any paleontological resource discovered by the operator, or any person working on the operator's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The operator will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

1.2. RANGELAND RESOURCES

1.2.1. **Cattleguards**

Where a permanent cattleguard is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

1.2.2. **Fence Requirement**

Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

1.2.3. **Livestock Watering Requirement**

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

1.3. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA, New Mexico Department of Agriculture, and BLM requirements and policies.

1.3.1 African Rue (Peganum harmala)

Spraying: The spraying of African Rue must be completed by a licensed or certified applicator. In order to attempt to kill or remove African Rue the proper mix of chemical is needed. The mix consists of 2% Arsenal (Imazapyr) and 2% Roundup (Glyphosate) along with a nonionic surfactant. Any other chemicals or combinations shall be approved by the BLM Noxious Weeds Coordinator prior to treatment. African Rue shall be sprayed in connection to any dirt working activities or disturbances to the site being sprayed. Spraying of African Rue shall be done on immature plants at initial growth through flowering and mature plants between budding and flowering stages. Spraying shall not be conducted after flowering when plant is fruiting. This will ensure optimal intake of chemical and decrease chances of developing herbicide resistance. After spraying, the operator or necessary parties must contact the Carlsbad Field Office to inspect the effectiveness of the application treatment to the plant species. No ground disturbing activities can take place until the inspection by the authorized officer is complete. The operator may contact the Environmental Protection Department or the BLM Noxious Weed Coordinator at (575) 234-5972 or BLM_NM_CFO_NoxiousWeeds@blm.gov.

Management Practices: In addition to spraying for African Rue, good management practices should be followed. All equipment should be washed off using a power washer in a designated containment area. The containment area shall be bermed to allow for containment of the seed to prevent it from entering any open areas of the nearby landscape. The containment area shall be excavated near or adjacent to the well pad at a depth of three feet and just large enough to get equipment inside it to be washed off. This will allow all seeds to be in a centrally located area that can be treated at a later date if the need arises.

1.4. LIGHT POLLUTION

1.4.1. **Downfacing**

All permanent lighting will be pointed straight down at the ground in order to prevent light spill beyond the edge of approved surface disturbance.

1.4.2. **Shielding**

All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source).

1.4.3. **Lighting Color**

Lighting shall be 3,500 Kelvin or less (Warm White) except during drilling, completion, and workover operations. No bluish-white lighting shall be used in permanent outdoor lighting.

2. SPECIAL REQUIREMENTS

WATERSHED

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No waterflow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be immediately corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location with waddles (minimum 9" height) surrounding the stockpiled soil to prevent soil loss due to water/wind erosion. The waddles are to be maintained throughout the life of the project. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

2.1.1. **Tank Battery**

Tank battery locations will be lined and bermed. A 20-mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hourproduction, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity). Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

2.1.2. **Buried/Surface Line(s)**

When crossing ephemeral drainages (marked and unmarked), the pipeline will be buried to a minimum depth of 48 inches from the top of pipe to ground level. In ephemeral drainages, rivers, and streams excess soil is to be compacted and level to ground surface, allowing water to flow in its natural state. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (plastic and weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation. Any water erosion that may occur due to construction or during the life of the pipeline system will be immediately corrected and proper measures will be taken to prevent erosion. Any spills or leaks from the proposed pipeline must be reported to BLM immediately.

Prior to pipeline installation and construction, a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event. Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

2.1.3. **Electric Line(s)**

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole must not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that does not promote further erosion.

2.1.4. **Temporary Use Fresh Water Frac Line(s)**

Once the temporary use exceeds the timeline of 180 days and/or with a 90 day extension status; further analysis will be required if the applicant pursues to turn the temporary ROW into a permanent ROW.

The pipeline is to not obstruct ephemeral drainages or streams allowing water to flow in its natural state unobstructed. Any water erosion that may occur due to the construction within the ROW would be corrected by the operator within two weeks and proper measures would be taken to prevent future erosion events. Any spills or leaks from the proposed produced water pipeline must be reported to BLM immediately.

2.2. CAVE/KARST

2.2.1. **General Construction**

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- This is a sensitive area and all spills or leaks will be reported to the BLM immediately for their immediate and proper treatment, as defined in NTL 3A for Major Undesirable Events.

2.2.2. **Pad Construction**

- The pad will be constructed and leveled by adding the necessary fill and caliche. No blasting will be used for any construction or leveling activities.
- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).

- Following a rain event, all fluids will be vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

2.2.3. **Road Construction**

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

2.2.4. **Buried Pipeline/Cable Construction**

- Rerouting of the buried line(s) may be required if a subsurface void is encountered during construction to minimize the potential subsidence/collapse of the feature(s) as well as the possibility of leaks/spills entering the karst drainage system.

2.2.5. **Powerline Construction**

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

2.2.6. **Surface Flowlines Installation**

- Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

2.2.7. **Production Mitigation**

- Tank battery locations and facilities will be bermed and lined with a 20-mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity).
- Implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

2.2.8. **Residual and Cumulative Mitigation**

The operator will perform annual pressure monitoring on all casing annuli. If the test results indicate a casing failure has occurred, contact a BLM Engineer immediately, and take remedial action to correct the problem.

2.2.9. **Plugging and Abandonment Mitigation**

Upon well abandonment in high cave karst areas, additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

2.3 WILDLIFE

2.3.2. **Texas Hornshell Mussel**

Oil and Gas and Associated Infrastructure Mitigation Measures for Zone D – CCA Boundary Requirements:

- Provide CEHMM with the permit, lease, or other authorization form BLM, if applicable.
- Provide CEHMM with plats or other electronic media describing the new surface disturbance for the project.

Oil and Gas Zone D - CCA Boundary requirements.

- Implement erosion control measures in accordance with the Reasonable and Prudent Practices for Stabilization ("RAPPS")
- Comply with SPCC requirements in accordance with 40 CFR Part 112;
- Comply with the United States Army Corp of Engineers (USACE) Nationwide 12 General Permit, where applicable;
- Utilize technologies (like underground borings for pipelines), where feasible;
- Educate personnel, agents, contractors, and subcontractors about the requirements of conservation measures, COAs, Stips and provide direction in accordance with the Permit.

2.4 VISUAL RESOURCE MANAGEMENT

2.5.1 **VRM IV**

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, Shale Green from the BLM Standard Environmental Color Chart (CC-001: June 2008).

3. CONSTRUCTION REQUIRENMENTS

3.1 CONSTRUCTION NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at BLM_NM_CFO_Construction_Reclamation@blm.gov at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and COAs on the well site and they shall be made available upon request by the Authorized Officer.

3.2 TOPSOIL

The operator shall strip the topsoil (the A horizon) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. No more than the top 6 inches of topsoil shall be removed. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (the B horizon and below) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

3.3 CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No reserve pits will be used for drill cuttings. The operator shall properly dispose of drilling contents at an authorized disposal site.

3.4 FEDERAL MINERAL PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

3.5 WELL PAD & SURFACING

Any surfacing material used to surface the well pad will be removed at the time of interim and final reclamation.

3.6 EXCLOSURE FENCING (CELLARS & PITS)

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the well cellar is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

The operator will also install and maintain mesh netting for all open well cellars to prevent access to smaller wildlife before and after drilling operations until the well cellar is free of fluids and the operator. Use a maximum netting mesh size of 1 ½ inches. The netting must not have holes or gaps.

3.7 ON LEASE ACESS ROAD

3.7.1 **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

3.7.2 **Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements will be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

3.7.3 **Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

3.7.4 **Ditching**

Ditching shall be required on both sides of the road.

3.7.5 **Turnouts**

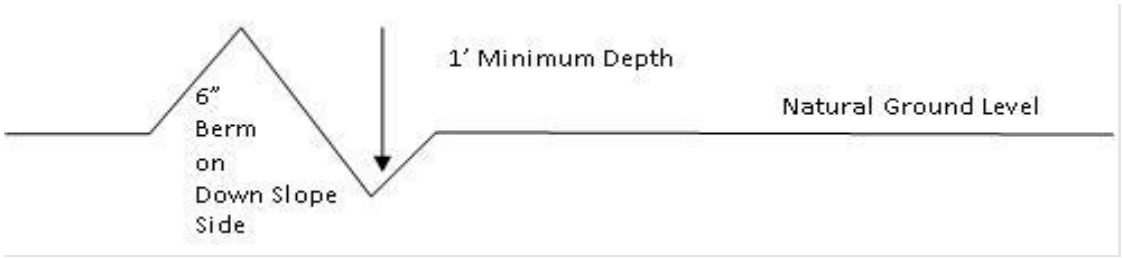
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

3.7.6 **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, leadoff ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$\text{400 foot road with 4\% road slope: } \frac{400'}{4} + 100' = 200' \text{ lead-off ditch interval}$$

3.7.7 **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

1. Salvage topsoil
2. Construct road
3. Redistribute topsoil
4. Revegetate slopes

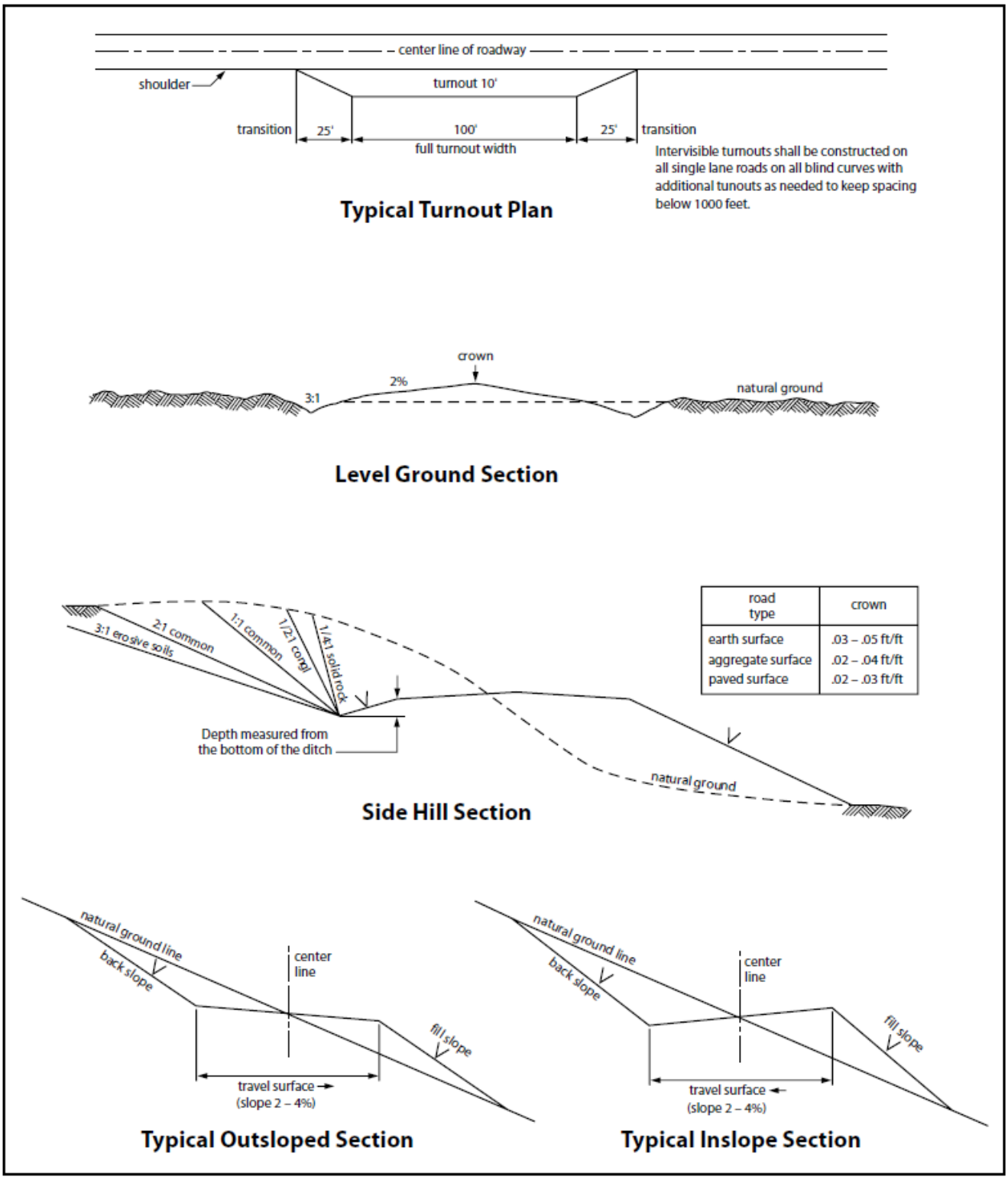


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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4. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.1 BURIED PIPELINES

A copy of the application (APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.

2. The Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the pipeline corridor or on facilities authorized under this APD. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Pipeline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant is discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of operator, regardless of fault. Upon failure of operator to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and

fish and wildlife habitats, at the full expense of the operator. Such action by the Authorized Officer shall not relieve operator of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized pipeline corridor.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this pipeline corridor will be 30 feet:

   - Blading of vegetation within the pipeline corridor will be allowed: maximum width of blading operations will not exceed **20** feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation*.)

   - Clearing of brush species within the pipeline corridor will be allowed: maximum width of clearing operations will not exceed **30** feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)

   - The remaining area of the pipeline corridor (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The operator shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6___ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this pipeline corridor and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire pipeline corridor shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted, and a 6-inch berm will be left over the ditch line to allow for settling back to grade.

10. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

11. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator before maintenance begins. The operator will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the operator to construct temporary deterrence structures.

12. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

13. Escape Ramps - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:

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a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.
b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30-degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.

14. Special Stipulations:
Karst:

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered, alignments may be rerouted to avoid the karst feature and lessen the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.2 OVERHEAD ELECTRIC LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.

2. The operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the powerline corridor or on facilities authorized under this powerline corridor. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Powerline corridor(unless the release or threatened release is wholly unrelated to the operator's activity on the powerline corridor), or resulting from the activity of the Operator on the powerline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.

4. There will be no clearing or blading of the powerline corridor unless otherwise agreed to in writing by the Authorized Officer.
5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The operator shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this powerline corridor, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the operator without liability or expense to the United States.
6. Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.
7. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
8. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
9. Upon cancellation, relinquishment, or expiration of this APD, the operator shall comply with those abandonment procedures as prescribed by the Authorized Officer.
10. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this APD, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
11. Special Stipulations:
    - For reclamation remove poles, lines, transformer, etc. and dispose of properly. Fill in any holes from the poles removed.
12. Karst stipulations for overhead electric lines
    - Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
    - The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
    - No further construction will be done until clearance has been issued by the Authorized Officer.
    - Special restoration stipulations or realignment may be required.

4.3 RANGLAND MITIGATION FOR PIPELINES

4.5.1 **Fence Requirement**

Where entry is granted across a fence line, the fence must be braced and tied off on both sides of the passageway with H-braces prior to cutting. Once the work is completed, the fence will be restored to its

prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment operator prior to crossing any fence(s).

4.5.2 **Cattleguards**

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at road-fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

4.5.3 **Livestock Watering Requirement**

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment operator if any damage occurs to structures that provide water to livestock.

- Livestock operators will be contacted, and adequate crossing facilities will be provided as needed to ensure livestock are not prevented from reaching water sources because of the open trench.
- Wildlife and livestock trails will remain open and passable by adding soft plugs (areas where the trench is excavated and replaced with minimal compaction) during the construction phase. Soft plugs with ramps on either side will be left at all well-defined livestock and wildlife trails along the open trench to allow passage across the trench and provide a means of escape for livestock and wildlife that may enter the trench.
- Trenches will be backfilled as soon as feasible to minimize the amount of open trench. The Operator will avoid leaving trenches open overnight to the extent possible and open trenches that cannot be backfilled immediately will have escape ramps (wooden) placed at no more than 2,500 feet intervals and sloped no more than 45 degrees.

5. PRODUCTION (POST DRILLING)

5.1 WELL STRUCTURES & FACILITIES

5.1.1 **Placement of Production Facilities**

Production facilities must be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

5.1.2 **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

5.1.4. Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone*.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

5.1.5. Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

6. RECLAMATION

Stipulations required by the Authorized Officer on specific actions may differ from the following general guidelines

6.1 ROAD AND SITE RECLAMATION

Any roads constructed during the life of the well will have the caliche removed or linear burial. If contaminants are indicated then testing will be required for chlorides and applicable contaminate anomalies for final disposal determination (disposed of in a manner approved by the Authorized Officer within Federal, State and Local statutes, regulations, and ordinances) and seeded to the specifications in sections 6.5 and 6.6.

6.2 EROSION CONTROL

Install erosion control berms, windrows, and hummocks. Windrows must be level and constructed perpendicular to down-slope drainage; steeper slopes will require greater windrow density. Topsoil between windrows must be ripped to a depth of at least 12”, unless bedrock is encountered. Any large boulders pulled up during ripping must be deep-buried on location. Ripping must be perpendicular to down-slope. The surface must be left rough in order to catch and contain rainfall on-site. Any trenches resulting from erosion cause by run-off shall be addressed immediately.

6.3 INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations must undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators must work with BLM surface protection specialists (BLM_NM_CFO_Construction_Reclamation@blm.gov) to devise the best strategies to reduce the size of the location. Interim reclamation must allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche and any other surface material is required. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided in section 6.6.

Upon completion of interim reclamation, the operator shall submit a Sundry Notice, Subsequent Report of Reclamation (Form 3160-5).

6.4 FINAL ABANDONMENT & RECLAMATION

Prior to surface abandonment, the operator shall submit a Notice of Intent Sundry Notice and reclamation plan.

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding will be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM. After earthwork and seeding is completed, the operator is required to submit a Sundry Notice, Subsequent Report of Reclamation.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (BLM_NM_CFO_Construction_Reclamation@blm.gov).

6.5 SEEDING TECHNIQUES

Seeds shall be hydro-seeded, mechanically drilled, or broadcast, with the broadcast-seeded area raked, ripped or dragged to aid in covering the seed. The seed mixture shall be evenly and uniformly planted over the disturbed area.

6.6 SOIL SPECIFIC SEED MIXTURE

The lessee/permitee shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed land application will be accomplished by mechanical planting using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds tend to drop the bottom of the drill and are planted first; the operator shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory BLM or Soil Conservation

District stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding or until several months of precipitation have occurred, enabling a full four months of growth, with one or more seed generations being established.

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Seed Mixture 1 for Loamy Sites

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains lovegrass (Eragrostis intermedia)	0.5
Sand dropseed (Sporobolus cryptandrus)	1.0
Sideoats grama (Bouteloua curtipendula)	5.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Cimarex Energy Company**
LOCATION:	Section 23, T.25 S., R.26 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	**Wigeon 23-26 Federal Com 5H**
ATS/API ID:	**ATS-24-2088**
APD ID:	**10400098324**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Wigeon 23-26 Federal Com 6H**
ATS/API ID:	**ATS-24-2089**
APD ID:	**10400098333**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Wigeon 23-26 Federal Com 7H**
ATS/API ID:	**ATS-24-2090**
APD ID:	**10400098336**
Sundry ID:	**N/a**

COA

Approval Date: 11/22/2024

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

Approval Date: 11/22/2024

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. As a result, the Hydrogen Sulfide area must meet **43 CFR part 3170 Subpart 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **828 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.

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

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

    - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**
      Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

    ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

 Approval Date: 11/22/2024

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

   - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
     Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

C. PRESSURE CONTROL

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

2.

Option 1:

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

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

Option 2:

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

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in **43 CFR part 3170 Subpart 3171**
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☑ Eddy County
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

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

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

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

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or

if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

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

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

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

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

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

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

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

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been

done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

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

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

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

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Long Vo (LVO) 11/18/2024

 Approval Date: 11/22/2024

COTERRA

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

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 tmie
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.

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 (SO_2). 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

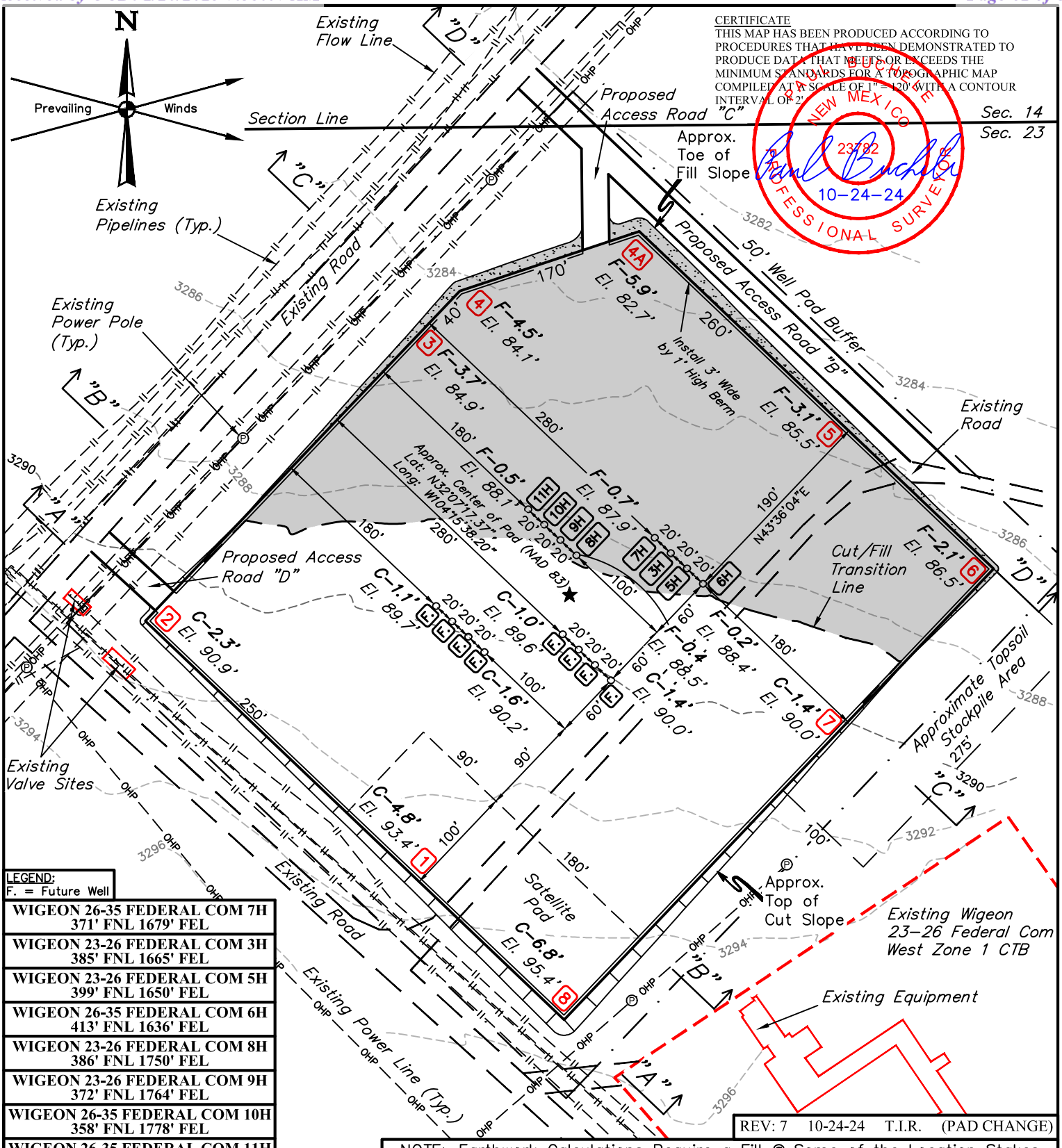
Reeves County Medical - Pecos, TX	432-447-3551
Aero Care - Midland, TX	800-627-2376
Tri State Care Flight - Artesia, NM	800-800-0900
Air Methods - Hobbs, NM	800-242-6199

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	Kermit	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



CERTIFICATE
THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1" = 120' WITH A CONTOUR INTERVAL OF 2'.

STATE OF NEW MEXICO 23782 Paul Buchele 10-24-24 PROFESSIONAL SURVEYOR

LEGEND:
F. = Future Well

WIGEON 26-35 FEDERAL COM 7H 371' FNL 1679' FEL
WIGEON 23-26 FEDERAL COM 3H 385' FNL 1665' FEL
WIGEON 23-26 FEDERAL COM 5H 399' FNL 1650' FEL
WIGEON 26-35 FEDERAL COM 6H 413' FNL 1636' FEL
WIGEON 23-26 FEDERAL COM 8H 386' FNL 1750' FEL
WIGEON 23-26 FEDERAL COM 9H 372' FNL 1764' FEL
WIGEON 26-35 FEDERAL COM 10H 358' FNL 1778' FEL
WIGEON 26-35 FEDERAL COM 11H 344' FNL 1793' FEL

FINISHED GRADE ELEVATION = **3288.6'**

REV: 7 10-24-24 T.I.R. (PAD CHANGE)

NOTE: Earthwork Calculations Require a Fill @ Some of the Location Stakes For Balance. All Fill is to be Compacted to a Minimum of 95% of the Maximum Dry Density Obtained by AASHTO Method t-99.

NOTES:

- Flare pit is to be located a min. of 100' from the wellhead.
- Contours shown at 2' intervals.
- Cut/Fill slopes 2:1 (Typ. except where noted)
- Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD83)

UINTAH ENGINEERING & LAND SURVEYING

UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

CIMAREX ENERGY CO.

WIGEON 23-26 FEDERAL COM W2E2 PAD
422' FNL 1756' FEL (APPROX. CENTER OF PAD)
NW 1/4 NE 1/4, SECTION 23, T25S, R26E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	02-20-24	SCALE
DRAWN BY	C.M.T.	02-08-19	1" = 120'
LOCATION LAYOUT			EXHIBIT J

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	[3] Pool Name
	97916	Wildcat; Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
	WIGEON 23-35 FEDERAL COM	7H

[7] OGRID No.	[8] Operator Name	[9] Elevation
215099	CIMAREX ENERGY CO.	3287.9'

[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
B	23	25S	26E		371	NORTH	1679	EAST	EDDY

[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
O	35	25S	26E		100	SOUTH	2305	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
960	Infill		

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

16

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°07'17.88" (32.121634°)
LONGITUDE = -104°15'37.31" (-104.260365°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°07'17.45" (32.121514°)
LONGITUDE = -104°15'35.52" (-104.259867°)
STATE PLANE NAD 83 (N.M. EAST)
N: 407994.34' E: 563927.02'
STATE PLANE NAD 27 (N.M. EAST)
N: 407937.17' E: 522744.08'

NAD 83 (KOP/LP/FTP)
LATITUDE = 32°07'20.49" (32.122357°)
LONGITUDE = -104°15'44.63" (-104.262396°)
NAD 27 (KOP/LP/FTP)
LATITUDE = 32°07'20.05" (32.122237°)
LONGITUDE = -104°15'42.83" (-104.261899°)
STATE PLANE NAD 83 (N.M. EAST)
N: 408256.92' E: 563297.92'
STATE PLANE NAD 27 (N.M. EAST)
N: 408199.76' E: 522114.98'

NAD 83 (LPP #1)
LATITUDE = 32°06'55.30" (32.115360°)
LONGITUDE = -104°15'44.44" (-104.262344°)
NAD 27 (LPP #1)
LATITUDE = 32°06'54.86" (32.115240°)
LONGITUDE = -104°15'42.65" (-104.261847°)
STATE PLANE NAD 83 (N.M. EAST)
N: 405711.43' E: 563315.61'
STATE PLANE NAD 27 (N.M. EAST)
N: 405654.31' E: 522132.63'

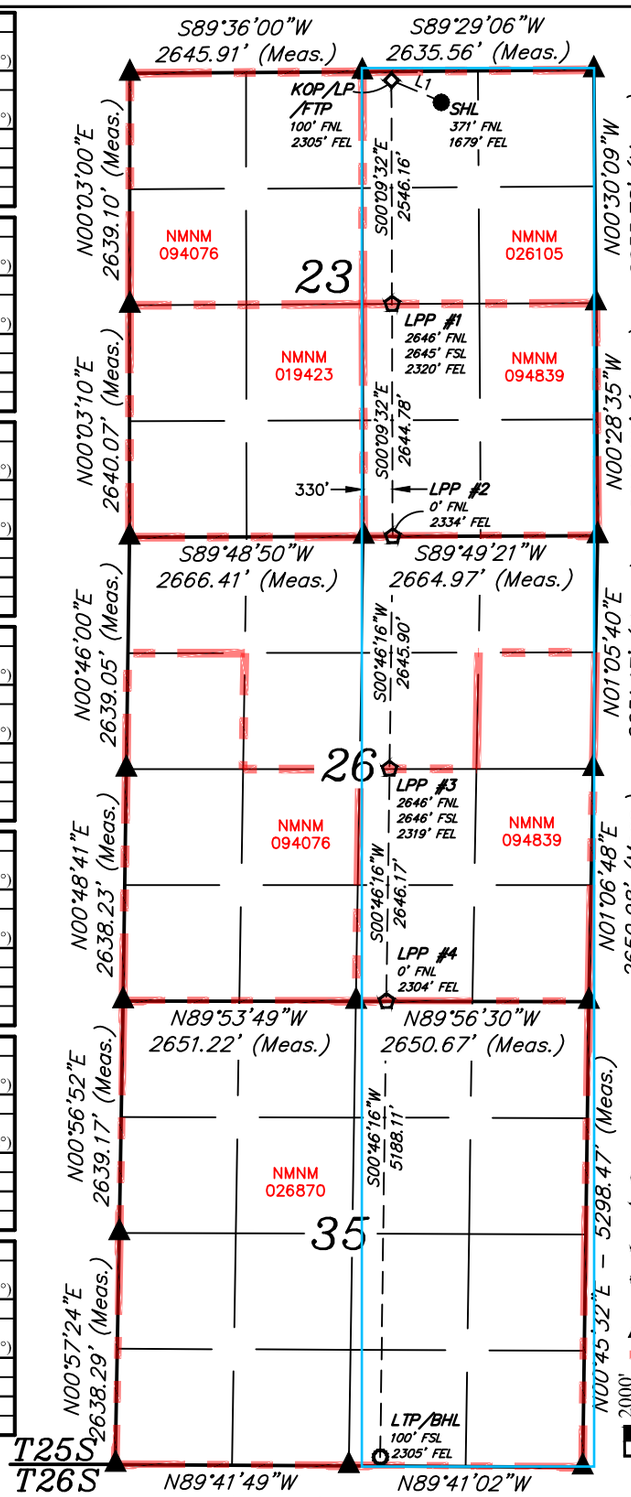
NAD 83 (LPP #2)
LATITUDE = 32°06'29.13" (32.108091°)
LONGITUDE = -104°15'44.25" (-104.262291°)
NAD 27 (LPP #2)
LATITUDE = 32°06'28.70" (32.107971°)
LONGITUDE = -104°15'42.46" (-104.261793°)
STATE PLANE NAD 83 (N.M. EAST)
N: 403067.34' E: 563333.98'
STATE PLANE NAD 27 (N.M. EAST)
N: 403010.27' E: 522150.96'

NAD 83 (LPP #3)
LATITUDE = 32°06'02.95" (32.100820°)
LONGITUDE = -104°15'44.55" (-104.262376°)
NAD 27 (LPP #3)
LATITUDE = 32°06'02.52" (32.100700°)
LONGITUDE = -104°15'42.76" (-104.261879°)
STATE PLANE NAD 83 (N.M. EAST)
N: 400422.18' E: 563309.41'
STATE PLANE NAD 27 (N.M. EAST)
N: 400365.17' E: 522126.35'

NAD 83 (LPP #4)
LATITUDE = 32°05'36.77" (32.093548°)
LONGITUDE = -104°15'44.86" (-104.262461°)
NAD 27 (LPP #4)
LATITUDE = 32°05'36.34" (32.093428°)
LONGITUDE = -104°15'43.07" (-104.261964°)
STATE PLANE NAD 83 (N.M. EAST)
N: 397776.76' E: 563284.84'
STATE PLANE NAD 27 (N.M. EAST)
N: 397719.79' E: 522101.74'

NAD 83 (LTP/BHL)
LATITUDE = 32°04'45.44" (32.079290°)
LONGITUDE = -104°15'45.46" (-104.262627°)
NAD 27 (LTP/BHL)
LATITUDE = 32°04'45.01" (32.079169°)
LONGITUDE = -104°15'43.67" (-104.262131°)
STATE PLANE NAD 83 (N.M. EAST)
N: 392590.11' E: 563236.66'
STATE PLANE NAD 27 (N.M. EAST)
N: 392533.23' E: 522053.49'

NOTE:
- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD83)



[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 11/5/24
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.

February 20, 2024
Date of Survey

Signature and Seal of Professional Surveyor:

PAUL BUCHELE NEW MEXICO 23782 PROFESSIONAL SURVEYOR 06-11-24

Certificate Number:

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N67°06'20"W	681.87'

● = SURFACE HOLE LOCATION
◇ = KICK OFF POINT/LANDING POINT/FIRST TAKE POINT
⬠ = LEASE PENETRATION POINT
○ = BOTTOM HOLE LOCATION/ LAST TAKE POINT
▲ = SECTION CORNER LOCATED
▬ = LEASE LINE

2000' 1000' 0' 2000'
SCALE

DRAWN BY: C.M.T. 02-11-19
REV: 4 L.K. 06-11-24
(WELLBORE CHANGE)

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

Drilling Plan Data Report
12/05/2024

APD ID: 10400098336
Submission Date: 06/28/2024

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM
Well Number: 7H

Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14549245	RUSTLER	-1575	462	462	ANHYDRITE, SANDSTONE	USEABLE WATER	N
14549246	TOP SALT	-2658	1083	1083	ANHYDRITE	NONE	N
14549247	BASE OF SALT	-3367	1792	1792	ANHYDRITE	NONE	N
14549248	CASTILE	-3485	1910	1910	ANHYDRITE	NONE	N
14549249	LAMAR	-3510	1935	1935	SANDSTONE	NONE	N
14549250	BELL CANYON	-3616	2041	2041	SANDSTONE	NONE	N
14549251	CHERRY CANYON	-4487	2912	2927	SANDSTONE	NONE	N
14549252	BRUSHY CANYON	-5430	3855	3882	SANDSTONE	NATURAL GAS, OIL	Y
14549253	BONE SPRING LIME	-7086	5511	5547	LIMESTONE	NATURAL GAS, OIL	Y
14549254	BONE SPRING 1ST	-8008	6433	6433	SANDSTONE	NATURAL GAS, OIL	Y
14549255	BONE SPRING 2ND	-8108	6533	6533	SHALE	NATURAL GAS, OIL	Y
14549256	BONE SPRING 2ND	-8521	6946	6946	SANDSTONE	NATURAL GAS, OIL	Y
14549257	BONE SPRING 3RD	-8963	7388	7388	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM **Well Number:** 7H

Pressure Rating (PSI): 5M **Rating Depth:** 7719

Equipment: A BOP consisting of three rams, including one blind ram and two pipe rams and one annular preventer. An accumulator that meets the requirements in Onshore Order #2 for the pressure rating of the BOP stack. A rotating head may be installed as needed. A Kelly clock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.
Requesting Variance? YES

Variance request: See attached.

Testing Procedure: A multi-bowl wellhead will be utilized and will be tested per 43 CFR 3172 after the installation on the surface casing. The testing interval shall be for 30 days. Whenever any seal subject to pressure is broken, a full BOPE test shall be performed.
Choke Diagram Attachment:

COTERRA_5K_PROD_TREE_20240502091358.pdf

CIMAREX_10M_MBU_3T_CFL_13.38_X_9.58_X_5.5_HBE1215DQ_20240502075909.pdf

5M_BOPE_BLM_SUBMISSION_Choke_20240501082449.pdf

CHOKE_HOSE_M14856_404H_20240501082453.pdf

BOP Diagram Attachment:

5M_BOP_DIAGRAM_20240501082503.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	828	0	828	3288	2460	828	H-40	48	ST&C	2.06	4.82	BUOY	8.1	BUOY	8.1
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	1890	0	1890	3288	1398	1890	J-55	36	LT&C	1.87	3.25	BUOY	6.23	BUOY	6.23
3	PRODUCTION	8.75	5.5	NEW	API	N	0	23152	0	7719	3288	-4431	23152	L-80	17	BUTT	1.65	2.03	BUOY	41.48	BUOY	41.48

Casing Attachments

Operator Name: CIMAREX ENERGY COMPANY

Well Name: WIGEON 23-35 FEDERAL COM **Well Number:** 7H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

WELL_CONTROL_PLAN_REV.0_20240502090918.pdf

_6_24_2024_2_51_53_PM__3D_ACSummary_10____Coterra_Wigeon_23_35_Federal_Com_7H_Rev2_kFc_21Jun24_20240628084753.pdf

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_6_24_2024_2_51_53_PM__Proposal_100____Coterra_Wigeon_23_35_Federal_Com_7H_Rev2_kFc_21Jun24_20240628084753.pdf

Drilling_Plan_New_Mexico_Wigeon_7H_06282024_20240930133558.pdf

Wigeon_23_26_Fed_Com_W2E2_Karst_Survey_Report_20240930133614.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

WIGEON_23_26_FEDERAL_COM_W2E2_PAD_Rig_Layout_20240507075109.pdf

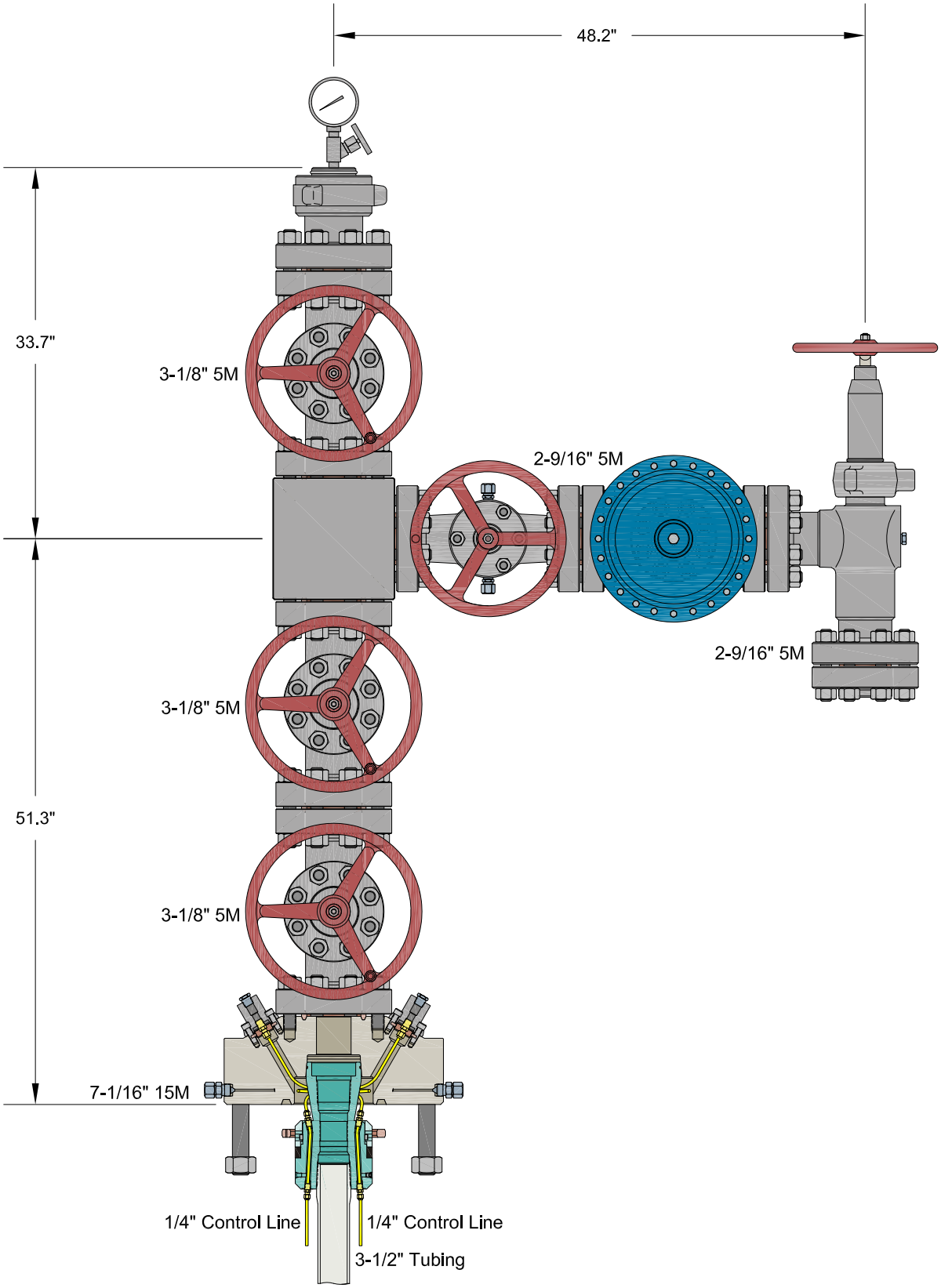
Wigeon_23_35_Federal_7H_Natural_Gas_Plan_Cimarex_20241021082439.pdf

Other Variance attachment:

Wigeon_23_35_Federal_7H_Natural_Gas_Plan_Cimarex_20240502091331.pdf

CHOKE_HOSE_M14856_404H_20240502081316.pdf

NEW_MEXICO_STANDARD_VARIANCES_Wigeon_20240502081312.pdf



ALL DIMENSIONS APPROXIMATE

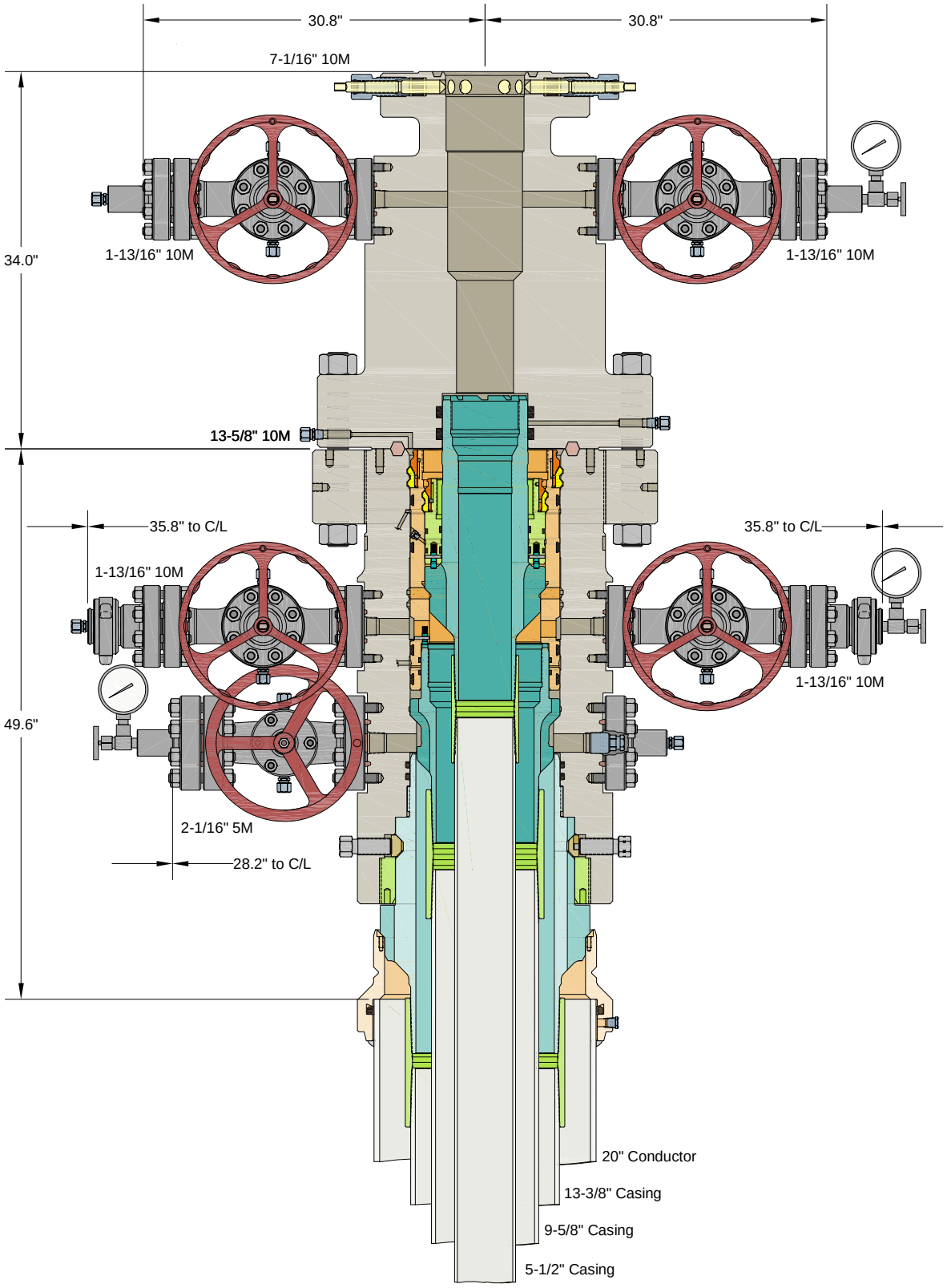
CACTUS WELLHEAD LLC

CIMAREX
HOBBS, NM

7-1/16" 15M x 3-1/8" x 2-9/16" 5M Production Tree Assembly
With 7-1/16" 15M x 3-1/8" 5M T40-CCL Tubing Head Adapter
And 7-1/16" x 3-1/2" T40-CCL Tubing Hanger

DRAWN	VJK	01SEP23
APPRV		

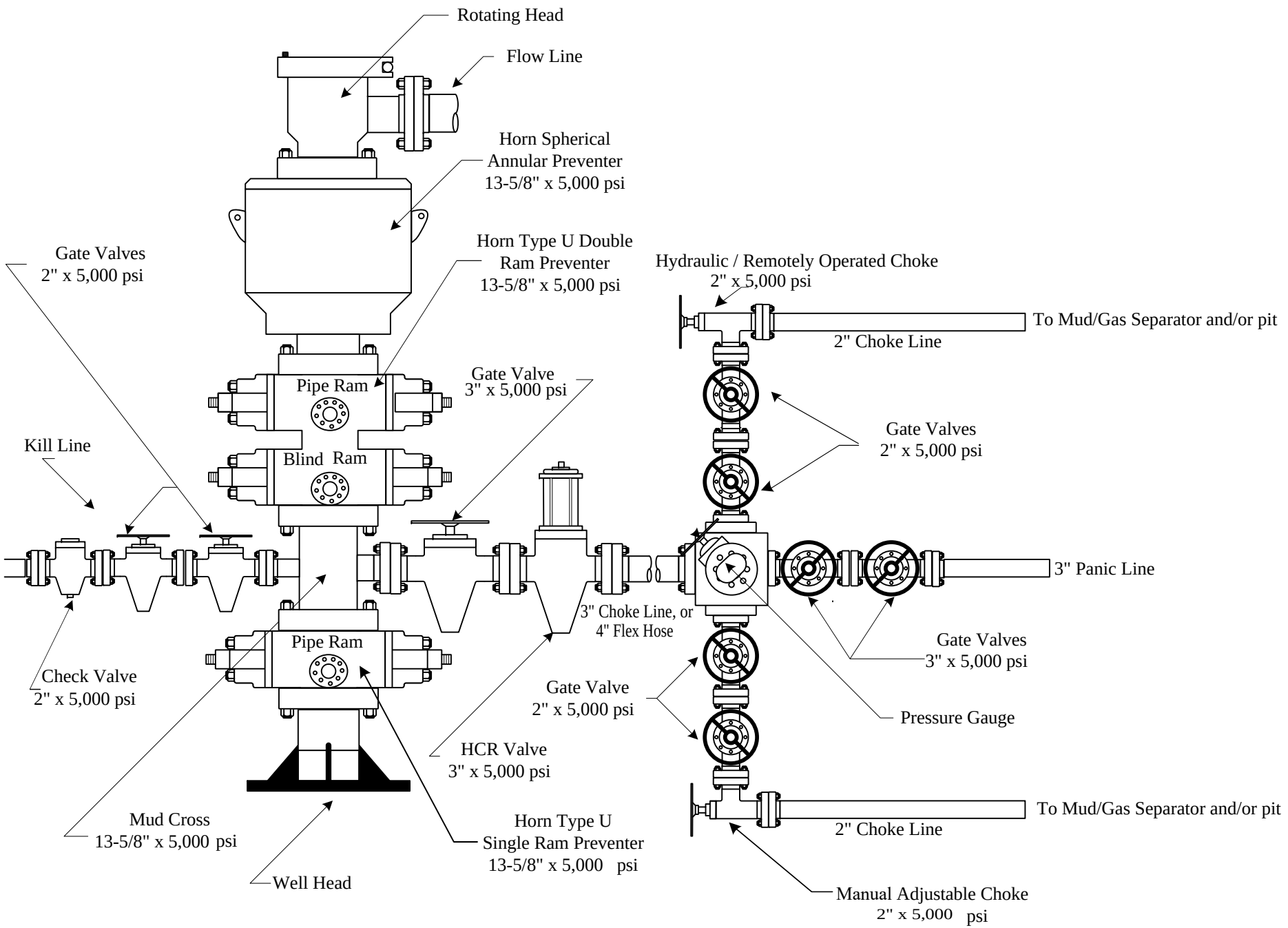
DRAWING NO. HBE0001017



ALL DIMENSIONS APPROXIMAT

CACTUS WELLHEAD LLC	CIMAREX HOBBS, NM
20" x 13-3/8" x 9-5/8" x 5-1/2" MBU-3T-CFL Wellhead Sys. With 13-5/8" 10M x 7-1/16" 10M CTH-DBLHPS Tubing Head And 9-5/8" & 5-1/2" Fluted Mandrel Casing Hangers	DRAWN VJK 01MAY24 APPRV DRAWING NO. HBE0001215

COTERRA



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

Gates SO No. 31675	**Customer Name & Address:** **Gates Engineering & Services North America** **7603, Prairie Oak Drive** **Suite 190** **Houston, TX 77086** **United States**
Clients PO No: 1714987/ 0	
Description: 3" Choke & Kill Hose x 35ft	

This is to certify that the components listed below have been supplied in accordance API 16C & with the referenced order number above. The assemblies listed below have been manufactured and tested in the UK

SPECIFICATION

ITEM	DESCRIPTION	Drawing Num	QTY
2	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	31675-DW-001, Rev 0	1
	Hose Batch: 120839		
	Hose Assembly: 120840		
	Customer Tag: N/A		
	Working Pressure: 10000 PSI		
	Test Pressure: 15000 PSI		
	Standard: API 16C		
	PSL: FSL 3		
	Material Grade: F		
	Temperature Rating: -25 to +100 Deg C		

Accepted by..S A Tait..... 17/02/20 ..... **for and on behalf of Gates Engineering & Services UK Ltd**

Gates Engineering & Services UK Limited QA Approved

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	

CR 374

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

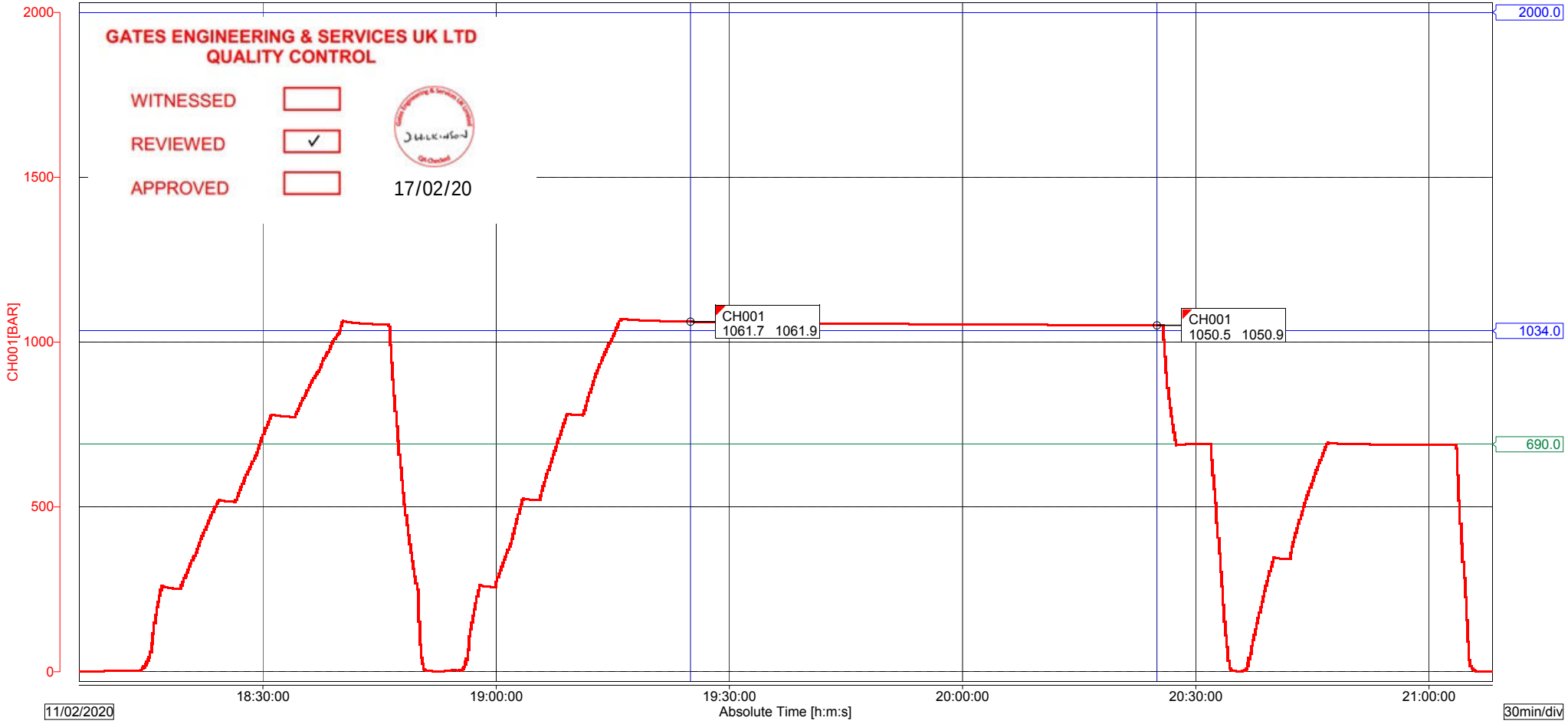
Start Time : 11/02/2020 18:06:20.000
Stop Time : 11/02/2020 21:08:10.000

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

		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



TUSK LIFTING

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		
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	DATE OF REPORT	08/01/2020
		REPORT NO	13322
		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

SIGNATURE

NAME OF THE PERSON AUTHENTICATING THE REPORT

Julie Montgomery, Planner

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

LEEA Full Member

IMB52628

William Hackett
Lifting Products Limited

ISO 9001 · ISO 14001 · ISO 45001 · LEEA Full Member

DUAL PURPOSE DOCUMENT

EC DECLARATION OF CONFORMITY — A

DECLARATION

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

MANUFACTURER'S CERTIFICATE — B

CERTIFIED ON BEHALF OF THE COMPANY

T.J. BURGESS 17/12/2019

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)

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, ALNWICK, 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

Report Version 2-5

IMB52628

William Hackett
Lifting Products Limited

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

Trading & Registered Office: Oak Drive, Lionheart Enterprise Park, Alnwick, Northumberland NE66 2EU
Tel: +44 (0) 1665 604200 Fax: +44 (0) 1665 604204 Email: info@williamhackett.co.uk
Website: www.williamhackett.co.uk CRN: 09679580 VAT Registration No. 217 3508 23

YOKE®

Safety is our first priority™

Q6|259

YOKE INDUSTRIAL CORP.
#39,33rd Road, Taichung Industrial Park,
TAICHUNG 407, TAIWAN
TEL:+886-4-2350 8088
FAX:+886-4-2350 1001

Test Certificate

80059145-000730

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 Crack Tested :	100% of above quantity

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

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 EN 10204 3.1

TEST RESULT
Pass

YOKE INDUSTRIAL CORP.

Jason Yu

Dated: May 14, 2019

Qualification: QA Manager

YOKE

Safety is our first priority™

Q61396

YOKE INDUSTRIAL CORP.
#39,33rd Road, Taichung Industrial Park,
TAICHUNG 407, TAIWAN
TEL:+886-4-2350 8088
FAX:+886-4-2350 1001

IMB52628

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 100% :	93kN
Mini. Breaking Load :	373kN	Fatigue Rate 20000 cycle :	70kN
Magnetic Flux Crack Tested :	100% of above quantity	Impact Test (-40℃) :	42J
Working Load Limit :	4.75tonnes		

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

TEST RESULT
Pass

YOKE INDUSTRIAL CORP.
Jason Yu
Dated: September 30, 2019
Qualification: QA Manager

IML52690

TUSK LIFTING

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		
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	DATE OF REPORT	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 - IMK52690/30	3.6T Safety Clamp CS Galv - 195MM Material CERT : GI9268	3.6 TONNE	-	B	PROOF LOAD	21/07/2020
20.00	IML52690/01 - IML52690/20	3.6T Safety Clamp CS Galv - 195MM Material CERT : GI9268	3.6 TONNE	-	B	PROOF LOAD	21/07/2020

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

SIGNATURE

NAME OF THE PERSON AUTHENTICATING THE REPORT

Julie Montgomery, Planner

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

MAMMOET

LEEA Full Member

IML52690

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

CELSA GROUP

CELSA MANUFACTURING UK

CE UK MADE

LRV ID N: 0038
06
Cert No: 0038/CPR/LRQ4002811/1
DOP: CELSAUK001 EN10025
Hot rolled structural steel products

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

MATERIAL Hot rolled structural steel products	CAST	C %	MN %	SI %	S %	P %	Cr %	N %	Ni %	Cu %	Mo %	V %	CE %	Reh MPA	Rm MPA	A 5.65 %	T °C	Impact 1 J	Impact 2 J	Impact 3 J	Impact Avg. 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 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	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		Red.		X	
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	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 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	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 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	320	448	33.2					
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	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	33.5					

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

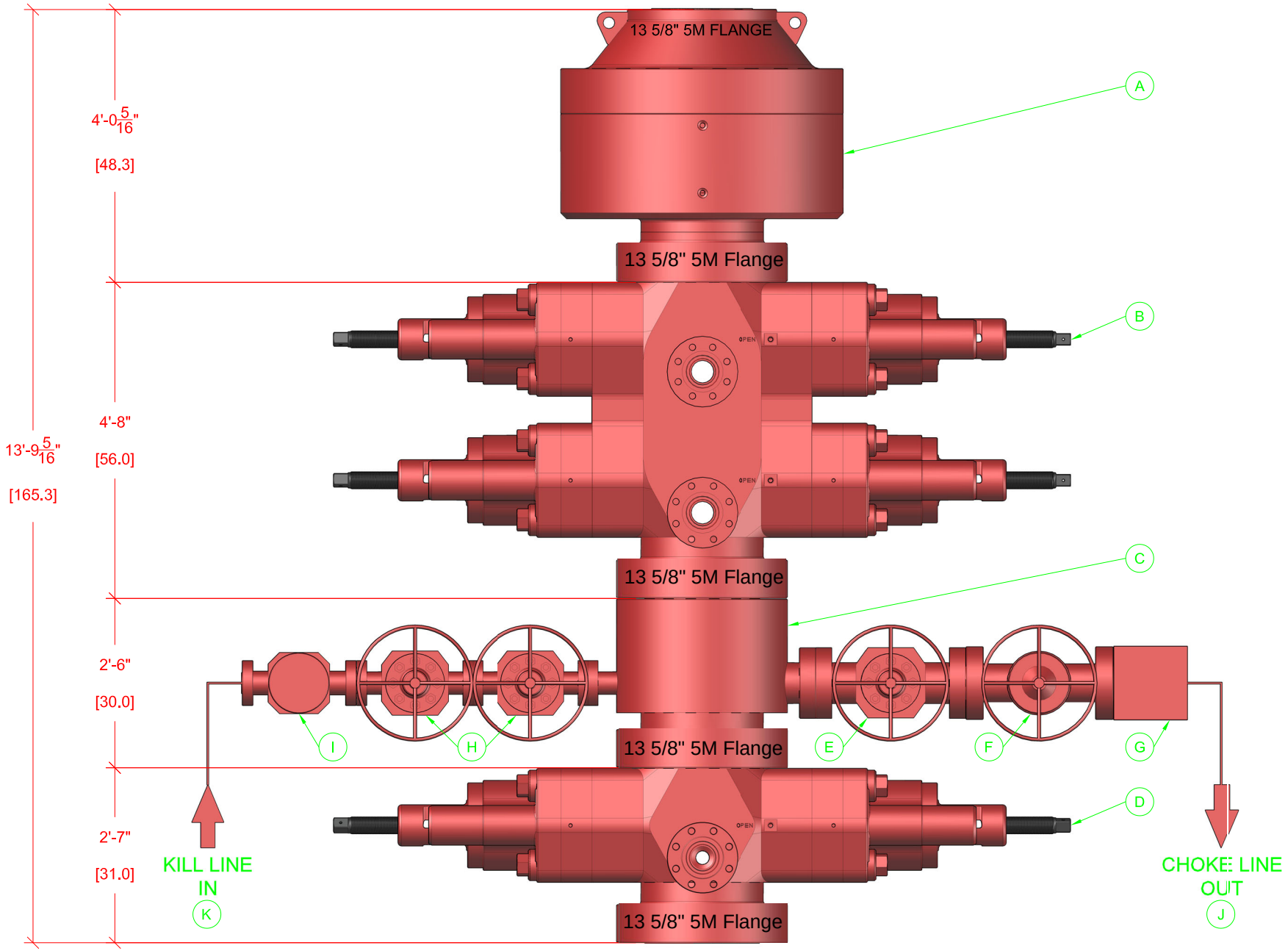
Certified that the material detailed hereon meets the requirements of the specified standard.

Cardiff, 20.08.2019

Stuart Thomas
Quality Manager

THIS IS A VERIFIED TRUE COPY OF AN ORIGINAL HELD BY CARTER STEEL LTD

CARTER STEEL LTD
DATE 21.8.2019
ORDER No 11049
CHECKED BY:



BOP EQUIPMENT INFORMATION

DESCRIPTION	MODEL	QTY
ANNULAR BOP	13 5/8" 5M	1
DOUBLE RAM BOP	13 5/8" 5M TYPE-U	1
MUD CROSS	13 5/8" 5M	1
SINGLE RAM BOP	13 5/8" 5M TYPE-U	1
GATE VALVE	4 1/16" 5M FC MANUAL	1

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 422207

CONDITIONS

Operator: CIMAREX ENERGY CO. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 422207
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
sbowen00	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/20/2025
sbowen00	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	1/20/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	2/10/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	2/10/2025
ward.rikala	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.	2/10/2025
ward.rikala	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.	2/10/2025