AFMSS

U.S. Department of the Interior
Bureau of Land Management

Application for Permit to Drill

APD Package Report

Date Printed:

APD ID:	Well Status:
APD Received Date:	Well Name:
Operator:	Well Number:

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

- Application Report
- Application Attachments
  -- Well Plat: 2 file(s)

- Drilling Plan Report
- Drilling Plan Attachments
  -- Blowout Prevention Choke Diagram Attachment: 10 file(s)
  -- Blowout Prevention BOP Diagram Attachment: 2 file(s)
  -- Casing Design Assumptions and Worksheet(s): 1 file(s)
  -- Hydrogen sulfide drilling operations plan: 2 file(s)
  -- Proposed horizontal/directional/multi-lateral plan submission: 11 file(s)
  -- Other Facets: 4 file(s)
  -- Other Variances: 4 file(s)

- SUPO Report
- SUPO Attachments
  -- Existing Road Map: 1 file(s)
  -- New Road Map: 1 file(s)
  -- Attach Well map: 1 file(s)
  -- Production Facilities map: 2 file(s)
  -- Water source and transportation map: 1 file(s)
  -- Well Site Layout Diagram: 7 file(s)
  -- Recontouring attachment: 1 file(s)

- PWD Report
- PWD Attachments
  -- None

- Bond Report

- Bond Attachments
  -- None

Form 3160-3
(October 2024)

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2027

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.
30-015-57783

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: 01/28/2026

INSTRUCTIONS

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

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

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

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Approval Date: 01/28/2026

Additional Operator Remarks

Location of Well

0. SHL: SWSW / 1305 FSL / 395 FWL / TWSP: 23S / RANGE: 29E / SECTION: 29 / LAT: 32.272196 / LONG: -104.014245 (TVD: 0 feet, MD: 0 feet)

PPP: NWSW / 1870 FSL / 100 FWL / TWSP: 23S / RANGE: 29E / SECTION: 29 / LAT: 32.273754 / LONG: -104.0152 (TVD: 8025 feet, MD: 8073 feet)

PPP: NESE / 1870 FSL / 1332 FEL / TWSP: 23S / RANGE: 29E / SECTION: 28 / LAT: 32.273734 / LONG: -103.98551 (TVD: 8617 feet, MD: 9104 feet)

PPP: NWSW / 1881 FSL / 0 FWL / TWSP: 23S / RANGE: 29E / SECTION: 28 / LAT: 32.273743 / LONG: -103.998441 (TVD: 8687 feet, MD: 13431 feet)

BHL: NESE / 1870 FSL / 100 FEL / TWSP: 23S / RANGE: 29E / SECTION: 28 / LAT: 32.273731 / LONG: -103.981523 (TVD: 8752 feet, MD: 17428 feet)

BLM Point of Contact

Name: JANET D ESTES
Title: ADJUDICATOR
Phone: (575) 234-6233
Email: JESTES@BLM.GOV

Laguna Grande 29-28 FED COM 5H

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:

- No H2S has been reported within one mile of the proposed project.

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

PECOS DISTRICT

SURFACE USE

CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CIMAREX ENERGY COMPANY OF COLORADO
LEASE NO.:	NMNM19848
COUNTY:	Eddy County, New Mexico

Wells:

Laguna Grande 29-28 Fed Com 1H
Laguna Grande 29-28 Fed Com 2H
Laguna Grande 29-28 Fed Com 3H
Laguna Grande 29-28 Fed Com 4H
Laguna Grande 29-28 Fed Com 5H
Laguna Grande 29-28 Fed Com 6H
Laguna Grande 29-28 Fed Com 7H
Laguna Grande 29-28 Fed Com 8H

Approval Date: 01/28/2026

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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 treat the noxious weeds that are currently established and any noxious weeds that 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

General Construction
Any water erosion that may occur due to the construction of ROW/surface site and during the life of the ROW/surface site will be quickly corrected and proper measures will be taken to prevent future erosion.
Erosion control structures such as curled (plastic free and weed free) wood/straw fiber wattles/logs, silt fences, diversion berms, or other soil erosion controls to slow water migration across disturbed areas should be installed during construction and reclamation or as needed.

Regular monitoring of any erosion control structures placed in or along the ROW/surface site is recommended, both following precipitation events and regularly during monsoon season (June – September).
Any spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

Access Road(s)
The submitter is responsible for maintenance of the road during the proposed ROW term.
When crossing ephemeral drainages, low water crossings or culverts should be installed as appropriate.
Low water crossings should be adequately armored with gabions, rock aprons and/or riprap.
Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Due to flash floods, increased overland flow, and related debris, the BLM strongly recommends the operator increases the culvert diameter to 24 inches or larger. Flared culvert, rock armoring, and gravel are recommended for culvert stability. Culvert location and required diameter are shown on the attached map. If culverts or drainage crossings are needed, they should be designed for a 25-year or greater storm frequency, without development of a static head at the pipe inlet. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water.
As appropriate, rock check dams should be installed above and/or below the drainage crossing to further reduce erosion potential.
Turnout ditches/drainage leadoffs should be installed along the ROW at every 5-foot change in elevation. Turnout ditches and drainage leadoffs should not be constructed in such a manner as to alter the natural flow of water into or out of naturally occurring drainage features.
Water bars should be placed within the ROW to divert and dissipate surface runoff.

Surface Site and/or Pad
The entire surface site/pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. No waterflow from the uphill side(s) of the pad shall be allowed to enter the well pad.
Topsoil shall not be used to construct the berm. The compacted berm should be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche).
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 wattles (recommended minimum 9” height) surrounding the stockpiled soil to prevent soil loss due to water/wind erosion. The wattles 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.

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(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. In ephemeral flow paths, rivers, and streams excess soil is to be compacted, contoured, and level to ground surface, allowing water to flow in its natural state. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.
Prior to pipeline installation/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 should incorporate an automatic shut-off system or manual shut-off valves with active monitoring to minimize the effects of an undesirable event.
A pipeline access road should not cross ephemeral drainages. Traffic should be diverted to a preexisting route 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.

2.2. 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

2.3.1. **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.

2.3.2 **Raptor Nest Mitigation**

Raptor Nest Mitigation (includes Burrowing Owls)

- A BLM Wildlife Biologist must be contacted by the operator prior to construction activities to determine if any raptor nests observed or detected are active. Raptor nest surveys are required prior to initiating construction of the project.
- Raptor nests on special, natural habitat features, such as trees, large brush, cliff faces and escarpments, will be protected by not allowing surface disturbance within up to 200 meters of nests or by delaying activity for up to 90 days, or a combination of both. Exceptions to this requirement for raptor nests will be considered if the nests expected to be disturbed are inactive, the proposed activity is of short duration (e.g. habitat enhancement projects, fences, pipelines), and will not result in continuing activity in proximity to the nest.
- Exhaust noise from pump jack engines, or other equipment, must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

2.4 SPECIAL STATUS PLANT SPECIES

2.5 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**

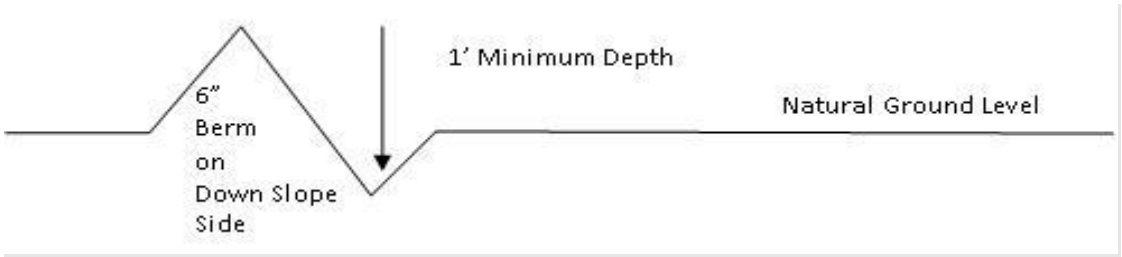
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

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

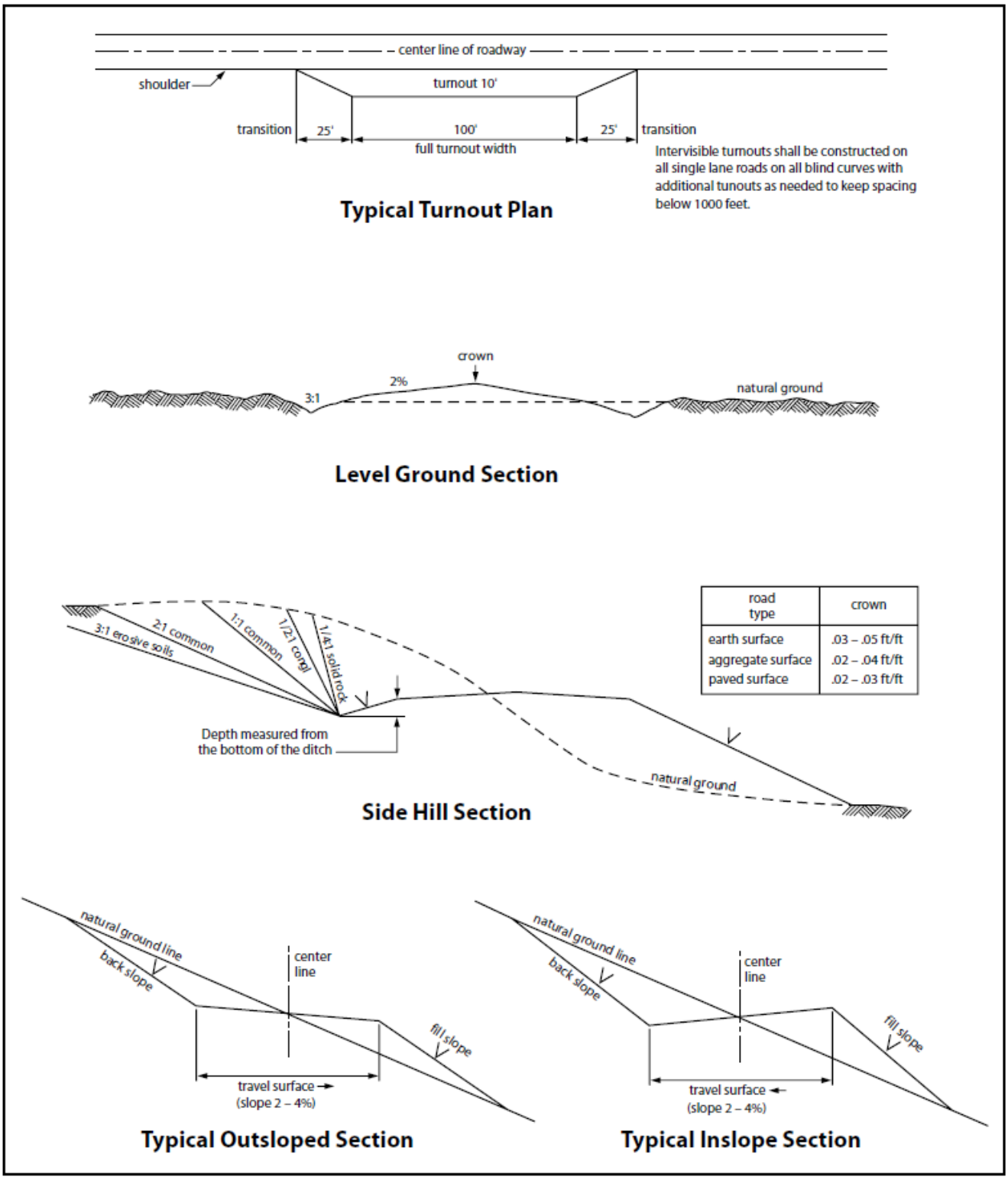


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

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:

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.

Approval Date: 01/28/2026

Seed Mixture 2, for Sandy Site

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

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

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

Approval Date: 01/28/2026

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Cimarex Energy Company of Colorado**
LOCATION:	Section 29, T.23 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	**Laguna Grande 29-28 Fed Com 5H**
ATS/API ID:	**ATS-25-1860**
APD ID:	**10400105081**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Laguna Grande 29-28 Fed Com 6H**
ATS/API ID:	**ATS-25-1874**
APD ID:	**10400105140**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Laguna Grande 29-28 Fed Com 7H**
ATS/API ID:	**ATS-25-1875**
APD ID:	**10400105143**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Laguna Grande 29-28 Fed Com 8H**
ATS/API ID:	**ATS-25-1876**
APD ID:	**10400105144**
Sundry ID:	**N/a**

COA

Approval Date: 01/28/2026

H2S	No		
Potash	None	None	
Cave/Karst Potential	Medium		
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	☐ BOPE Break Testing ☐ Offline BOPE Testing	☐ Offline Cementing	☐ Casing Clearance

Approval Date: 01/28/2026

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **450 feet** (a minimum of 70 feet 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.**

    ❖ In Medium 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.

3. The minimum required fill of cement behind the **7** 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.**

4. The minimum required fill of cement behind the **4-1/2** inch production liner is:

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

C. PRESSURE CONTROL

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

2.

Option 1:

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

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

Commercial Well Determination

- A commercial well determination shall be submitted after production has been established for at least six months if the well penetrate a federal exploratory unit acreage, in addition the unit number and participating area number shall be on the well sign when the well is determined to be a Unit well.
- If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

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) 7/23/2025

Approval Date: 01/28/2026

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

Operator Certification Data Report

01/28/2026

Operator

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: SHELLY BOWEN **Signed on:** 01/08/2026

Title: Regulatory Analyst

Street Address: 6001 DEAUVILLE BLVD STE 300N

City: MIDLAND **State:** TX **Zip:** 79706

Phone: (432)620-1644

Email address: DL_PBUREGULATORY@COTERRA.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

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

Application Data
01/28/2026

APD ID: 10400105081 **Submission Date:** 06/27/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - General

APD ID: 10400105081 **Tie to previous NOS?** N **Submission Date:** 06/27/2025

BLM Office: Carlsbad **User:** SHELLY BOWEN **Title:** Regulatory Analyst

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM19848 **Lease Acres:**

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? NO **Federal or Indian agreement:**

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO **APD Operator:** CIMAREX ENERGY COMPANY OF COLORADO

Operator letter of

Operator Info

Operator Organization Name: CIMAREX ENERGY COMPANY OF COLORADO

Operator Address: 6001 DEAUVILLE BLVD STE 300N **Zip:** 79706

Operator PO Box:

Operator City: MIDLAND **State:** TX

Operator Phone: (432)620-1936

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Master Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Field/Pool or Exploratory? Field and Pool **Field Name:** COTTONWOOD **Pool Name:** BONE SPRING

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** Y **New surface disturbance?** N

Type of Well Pad: MULTIPLE WELL **Multiple Well Pad Name:** S2S2 **Number:** 5H

Well Class: HORIZONTAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 10 Miles **Distance to nearest well:** 20 FT **Distance to lease line:** 100 FT

Reservoir well spacing assigned acres Measurement: 1280 Acres

Well plat: LAGUNA_GRANDE_29_28_FED_COM_S2S2_04302025_C102_WELL_5H_20250619145317.pdf

LAGUNA_GRANDE_29_28_FED_COM_S2S2_04302025_C102_WELL_5H_20250912152247.pdf

Well work start Date: 10/01/2025 **Duration:** 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 23782 **Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	1305	FSL	395	FWL	23S	29E	29	Aliquot SWSW	32.272196	-104.014245	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 19848	2966			Y
KOP Leg #1	1870	FSL	100	FWL	23S	29E	29	Aliquot NWSW	32.273754	-104.0152	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 19848	-5059	8073	8025	Y

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	1870	FSL	100	FWL	23S	29E	29	Aliquot NWSW	32.273754	-104.0152	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 19848	-5059	8073	8025	Y
PPP Leg #1-2	1881	FSL	0	FWL	23S	29E	28	Aliquot NWSW	32.273743	-103.998441	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 86024	-5721	13431	8687	Y
PPP Leg #1-3	1870	FSL	1332	FEL	23S	29E	28	Aliquot NESE	32.273734	-103.98551	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 136211	-5651	9104	8617	Y
EXIT Leg #1	1870	FSL	100	FEL	23S	29E	28	Aliquot NESE	32.273731	-103.981523	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 136211	-5786	17428	8752	Y
BHL Leg #1	1870	FSL	100	FEL	23S	29E	28	Aliquot NESE	32.273731	-103.981523	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 136211	-5786	17428	8752	Y

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
30-015-57783	~~96403~~ 96857	Laguna Salado; Bone Spring, South ~~Wildcat; Bone Spring~~

Property Code	Property Name	Well Number
338813	LAGUNA GRANDE 29-28 FED COM	5H

OGRID No.	Operator Name	Ground Level Elevation
215099 ~~162683~~	CIMAREX ENERGY CO. OF COLORADO.	2966.2'

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
M	29	23S	29E		1305 SOUTH	395 WEST	32.272196°	-104.014245°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
I	28	23S	29E		1870 SOUTH	100 EAST	32.273731°	-103.981523°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
1280	Defining	Pending	N	C and F

Order Numbers. R-23926 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
L	29	23S	29E		1870 SOUTH	100 WEST	32.273754°	-104.015200°	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
L	29	23S	29E		1870 SOUTH	100 WEST	32.273754°	-104.015200°	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
I	28	23S	29E		1870 SOUTH	100 EAST	32.273731°	-103.981523°	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation:
N/A	☒ Horizontal ☐ Vertical	2966.2'

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.

Crystal Denson — 1/29/2026

Signature — Date

Crystal Denson

Printed Name

Crystal.Denson@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 04-29-25

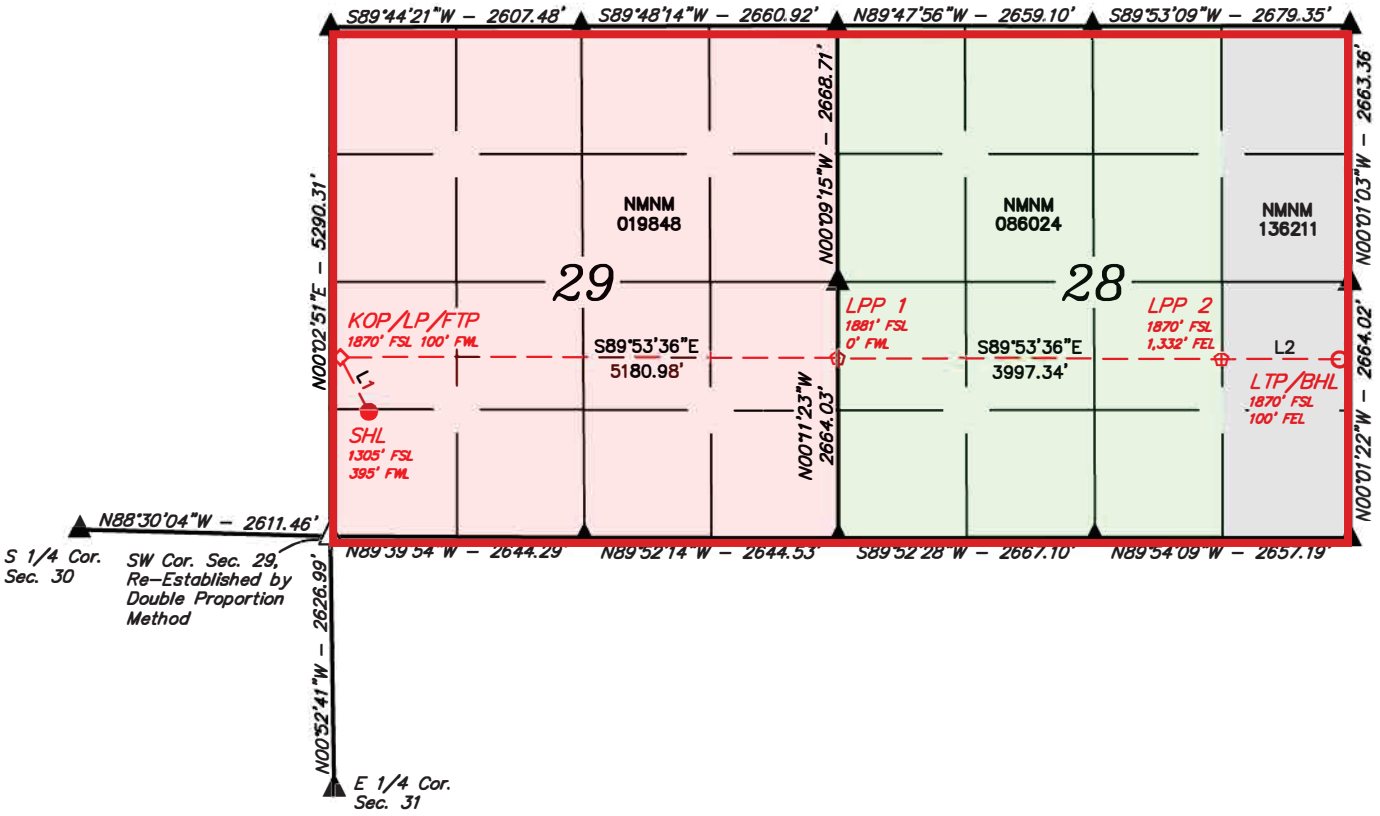
Signature and Seal of Professional Surveyor

23782 — Certificate Number

March 5, 2025 — 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
LAGUNA GRANDE 29-28 FED COM	5H	T.I.R. 03-10-25	REV. 1 N.R. 04-29-25 (REMOVE DEDICATED ACREAGE)



● = SURFACE HOLE LOCATION
◇ = KICK OFF POINT/LANDING POINT/ FIRST TAKE POINT
⬠ = LEASE PENETRATION POINT
○ = LAST TAKE POINT/ BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED
△ = SECTION CORNER RE-ESTABLISHED. (Not Set on Ground.)

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.

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°16'19.90" (32.272196°)
LONGITUDE = -104°00'51.28" (-104.014245°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°16'19.47" (32.272074°)
LONGITUDE = -104°00'49.51" (-104.013754°)
STATE PLANE NAD 83 (N.M. EAST)
N: 462904.42' E: 639957.88'
STATE PLANE NAD 27 (N.M. EAST)
N: 462845.15' E: 598774.56'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N27°26'31"W	639.10'
L2	S89°53'36"E	1232.45'

NAD 83 (KOP/LP/FTP)
LATITUDE = 32°16'25.51" (32.273754°)
LONGITUDE = -104°00'54.72" (-104.015200°)
NAD 27 (KOP/LP/FTP)
LATITUDE = 32°16'25.07" (32.273632°)
LONGITUDE = -104°00'52.95" (-104.014709°)
STATE PLANE NAD 83 (N.M. EAST)
N: 463470.25' E: 639661.04'
STATE PLANE NAD 27 (N.M. EAST)
N: 463410.96' E: 598477.74'

NAD 83 (LPP 1)
LATITUDE = 32°16'25.48" (32.273743°)
LONGITUDE = -103°59'54.39" (-103.998441°)
NAD 27 (LPP 1)
LATITUDE = 32°16'25.04" (32.273621°)
LONGITUDE = -103°59'52.62" (-103.997950°)
STATE PLANE NAD 83 (N.M. EAST)
N: 463482.33' E: 644840.91'
STATE PLANE NAD 27 (N.M. EAST)
N: 463422.99' E: 603657.53'

NAD 83 (LPP 2)
LATITUDE = 32°16'25.44" (32.273734°)
LONGITUDE = -103°59'07.84" (-103.985510°)
NAD 27 (LPP 2)
LATITUDE = 32°16'25.00" (32.273612°)
LONGITUDE = -103°59'06.07" (-103.985019°)
STATE PLANE NAD 83 (N.M. EAST)
N: 463491.66' E: 648837.39'
STATE PLANE NAD 27 (N.M. EAST)
N: 463432.31' E: 607654.01'

NAD 83 (LTP/BHL)
LATITUDE = 32°16'25.43" (32.273731°)
LONGITUDE = -103°58'53.48" (-103.981523°)
NAD 27 (LTP/BHL)
LATITUDE = 32°16'24.99" (32.273609°)
LONGITUDE = -103°58'51.72" (-103.981032°)
STATE PLANE NAD 83 (N.M. EAST)
N: 463494.53' E: 650069.58'
STATE PLANE NAD 27 (N.M. EAST)
N: 463435.19' E: 608886.19'

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

Drilling Plan Data Report
01/28/2026

APD ID: 10400105081 **Submission Date:** 06/27/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

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
17310789	RUSTLER	3750	115	115	ANHYDRITE, SANDSTONE	USEABLE WATER	N
17310790	TOP SALT	3189	561	561	ANHYDRITE	NONE	N
17310791	BOTTOM SALT	962	2788	2788	ANHYDRITE	NONE	N
17310785	BELL CANYON	809	2941	2941	SANDSTONE	NATURAL GAS, OIL	N
17310792	CHERRY CANYON	124	3626	3626	SANDSTONE	NONE	N
17310793	BRUSHY CANYON	-1170	4920	4920	SANDSTONE	NATURAL GAS, OIL	N
17310786	LOWER BRUSHY CANYON 8A	-2014	5764	5764	SANDSTONE	NATURAL GAS, OIL	N
17310794	BONE SPRING LIME	-2759	6509	6509	LIMESTONE	NATURAL GAS, OIL	N
17310797	BONE SPRING 1ST	-3771	7521	7521	SANDSTONE	NATURAL GAS, OIL	Y
17310798	BONE SPRING 2ND	-4867	8617	8617	SANDSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M **Rating Depth:** 18661

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:

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

NEW_MEXICO_STANDARD_VARIANCES_REV.1_LG_20250624145142.pdf

10M_BOPE_BLM_SUBMISSION_REV.0_20250624145143.pdf

CHOKE_HOSE_M15486_20250624145143.pdf

COTERRA_MBU_3T_CFL_20_X_13.38_X_9.58_X_7_X_4.5_20250624145143.pdf

COTERRA_10K_PROD_TREE_20250624145144.pdf

NEW_MEXICO_STANDARD_VARIANCES_REV.1_LG_20250912152402.pdf

10M_BOPE_BLM_SUBMISSION_REV.0_20250912152403.pdf

CHOKE_HOSE_M15486_20250912152403.pdf

COTERRA_MBU_3T_CFL_20_X_13.38_X_9.58_X_7_X_4.5_20250912152403.pdf

COTERRA_10K_PROD_TREE_20250912152404.pdf

BOP Diagram Attachment:

10M_BOP_DIAGRAM_20250624145205.pdf

10M_BOP_DIAGRAM_20250912152415.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	520	0	520	2966	2446	520	J-55	48	ST&C	3.29	7.68	BUOY	12.9	BUOY	12.9
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	2775	0	2775	3024	191	2775	J-55	36	LT&C	1.4	2.44	BUOY	4.53	BUOY	4.53
3	PRODUCTION	8.75	5.5	NEW	API	N	0	18661	0	8772	3024	-5806	18661	P-110	20	BUTT	2.56	2.85	BUOY	45.85	BUOY	45.85

Casing Attachments

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

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):

5H_Casing_Assumptions_20251022165110.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 OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	220	134	1.72	13.5	174	36	Class C	Bentonite
SURFACE	Tail		220	520	195	1.34	14.8	254	36	Class C	LCM
INTERMEDIATE	Lead		0	2775	526	1.88	12.9	684	48	35:35 Poz:C	Salt + Bentonite
INTERMEDIATE	Tail		2775	2780	162	1.34	14.8	211	48	Class C	LCM
PRODUCTION	Lead		2875	8073	338	3.64	10.3	439	25	Tuned Light	LCM
PRODUCTION	Tail		8073	9105	172	1.36	14.8	224	25	Class C	Retarder

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 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

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
8073	18661	OIL-BASED MUD	9	9.5							
0	520	OTHER : FRESH WATER	7.83	8.33							

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

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
520	2775	OTHER : Brine Water	9.5	10							
2775	9105	OTHER : Cut Brine or OBM	9	9.5							

Section 6 - Test, Logging, Coring

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

No DST Planned. Logs run on the 6H.

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: 4333 **Anticipated Surface Pressure:** 2407

Anticipated Bottom Hole Temperature(F): 159

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_20250626103340.pdf

H2S_PLAN_REV.0_20250912152525.pdf

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Proposal___Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250626141825.pdf
WELL_CONTROL_PLAN_REV.0_20250626141610.pdf
Proposal_100____Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250626141845.pdf
3D_ACSummary_10____Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250626141859.pdf

WP___Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250626141933.pdf
WELL_CONTROL_PLAN_REV.0_20250912152540.pdf
3D_ACSummary_10____Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250912152559.pdf

Proposal___Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250912152559.pdf
Proposal_100____Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250912152559.pdf
WP___Coterra_Laguna_Grande_29_28_Fed_Com_5H_Rev0_kFc_09May25_20250912152600.pdf
5H_Drilling_Plan_New_Mexico_20251022165249.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Laguna_Grande_5H_NGMP_WMP_20250626145130.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_rig_layout_plat_20250626145317.pdf
Laguna_Grande_5H_NGMP_WMP_20250912152617.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_rig_layout_plat_20250912152633.pdf

Other Variance request(s)?: Y

Other Variance attachment:

CHOKE_HOSE_M15486_20250626143744.pdf
NEW_MEXICO_STANDARD_VARIANCES_REV.1_LG_20250626143816.pdf
NEW_MEXICO_STANDARD_VARIANCES_REV.1_LG_20250912152652.pdf
CHOKE_HOSE_M15486_20250912152653.pdf

Standard New Mexico Variances

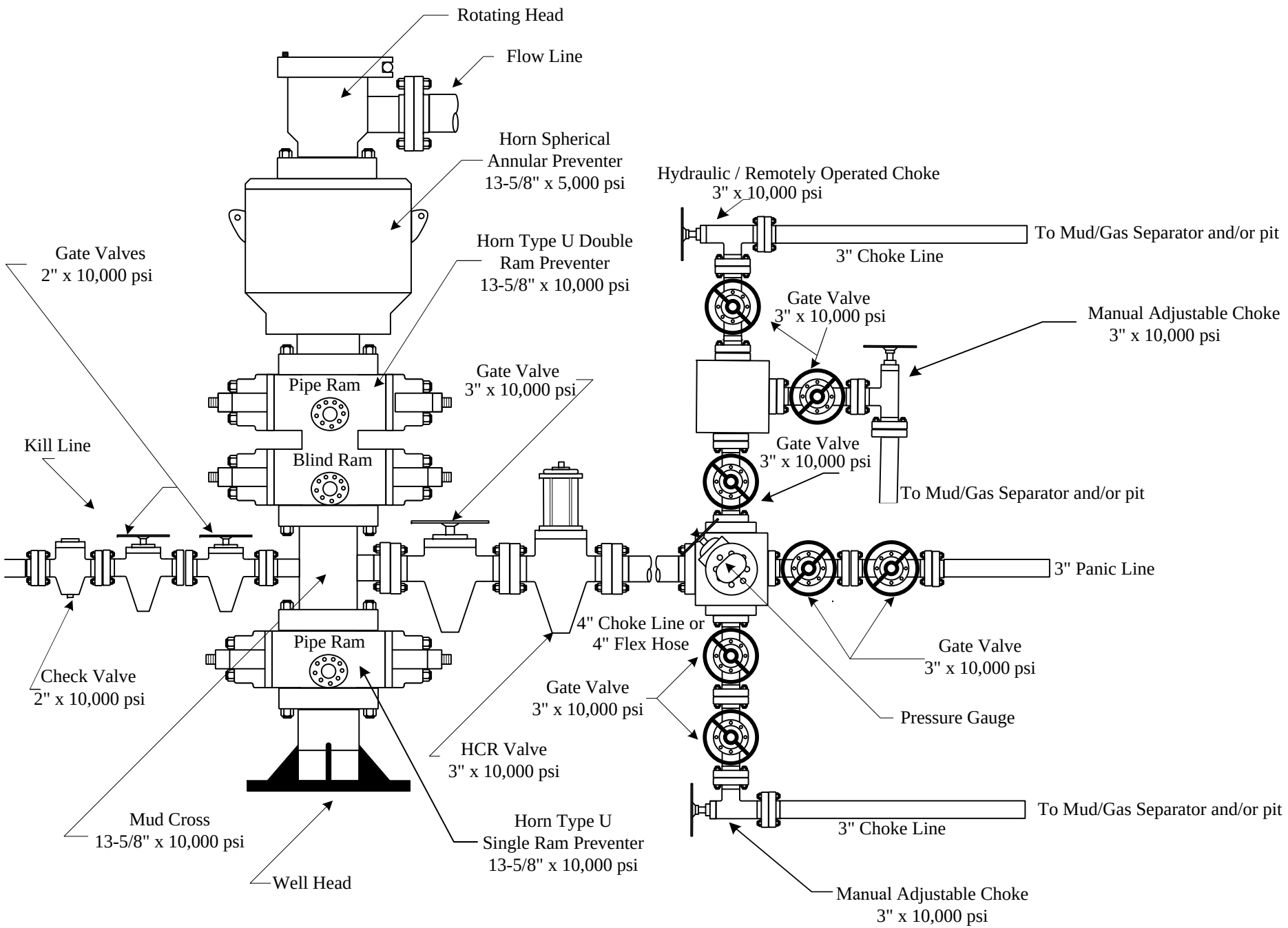
Variance Request #1: Skid Rig after Cementing Surface Casing

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

Variance Request #4: Utilize Co-Flex Choke Line

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

COTERRA



AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

Customer Name			
Product Name	Choke And Kill Hose		
Product Specification	3″×10000psi×35ft（10.67m）	Quantity	1PCS
Serial Number	VTC-7660257	FSL	FSL3
customer number	PO890145-001	Standard	API Spec 16C 3rd edition
Temperature Range	-29℃～+121℃	Inspection date	2024.09.03

Inspection Items	Inspection results
Appearance Checking	In accordance with API Spec 16C 3rd edition
Size and Lengths	In accordance with API Spec 16C 3rd edition
Dimensions and Tolerances	In accordance with API Spec 16C 3rd edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 6A 21st edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 17D 3rd edition
Hydrostatic Testing	In accordance with API Spec 16C 3rd edition
product Marking	In accordance with API Spec 16C 3rd edition
Inspection conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition
Remarks	16C-0403

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

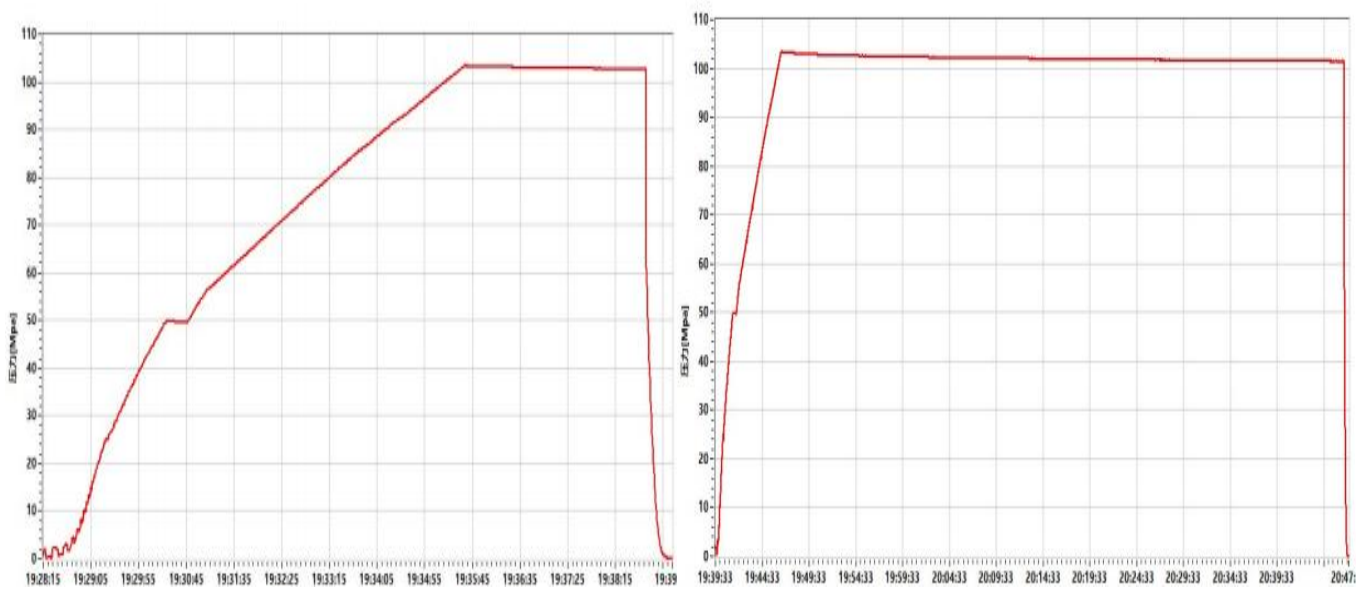
LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3rd edition
Product Specification	3″×10000psi×35ft（10.67m）	Serial Number	VTC-7660257
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
customer number	PO890145-001	Inspection Date	2024.08.30
Rate of length change			
Standard requirements	At working pressure ,the rate of length change should not more than ±2%		
Testing result	10000psi (69.0MPa) ,Rate of length change 0.6%		
Hydrostatic testing			
Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leakage.		
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage		

Graph of pressure testing：



Conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition 16C-0403				
Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

AustinHOSE

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

Product Specification：3″×10000psi×35ft（10.67m）

Serial Number：VTC-7660257

customer number：PO890145-001

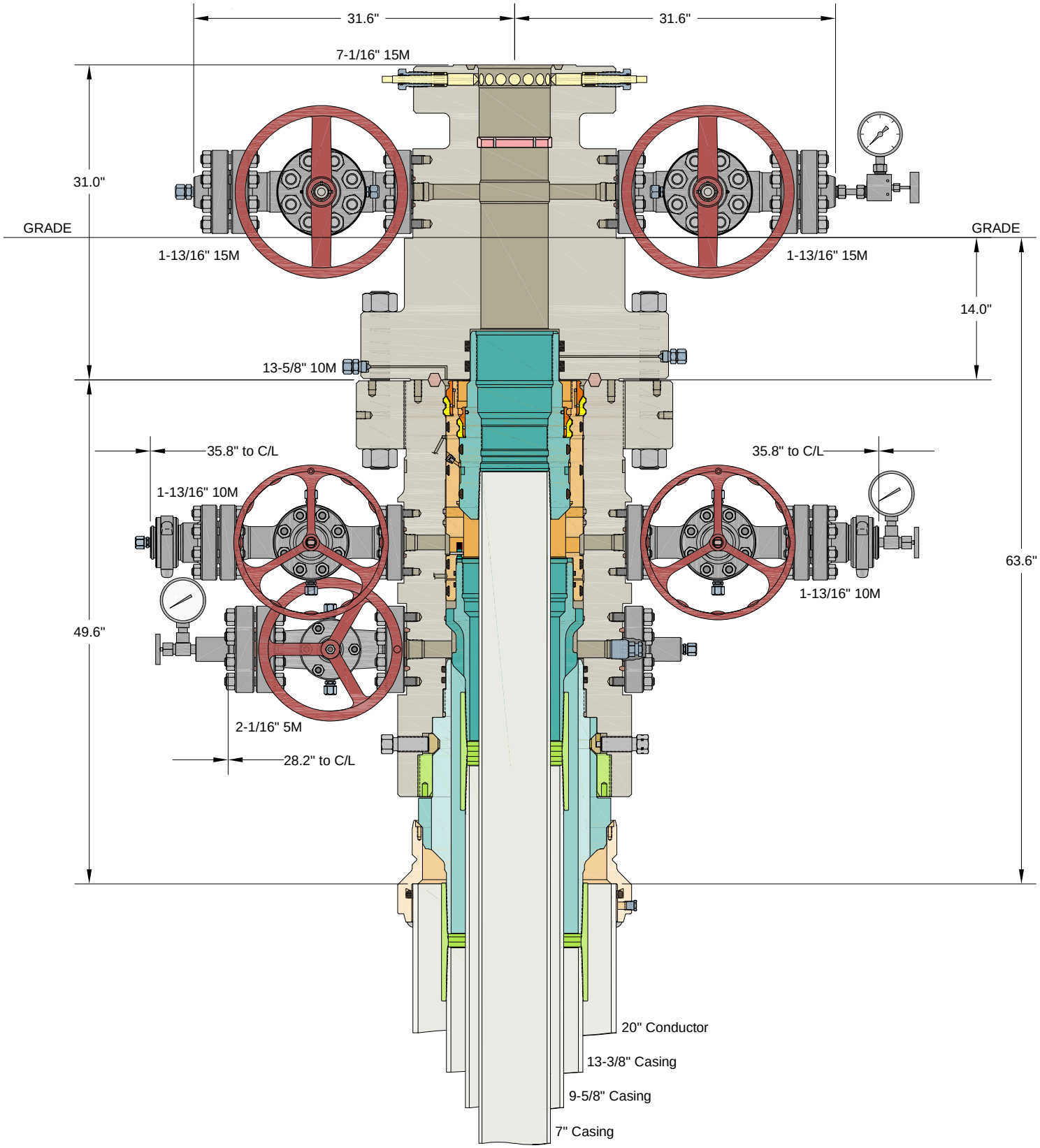
End Connections: 4-1/16″×10000psi Integral flange for sour gas service

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD.in Sep,2024, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Sep 3, 2024. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition .

QC Manager： Jane C Date:Sep 3, 2024

16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE



ALL DIMENSIONS APPROXIMAT

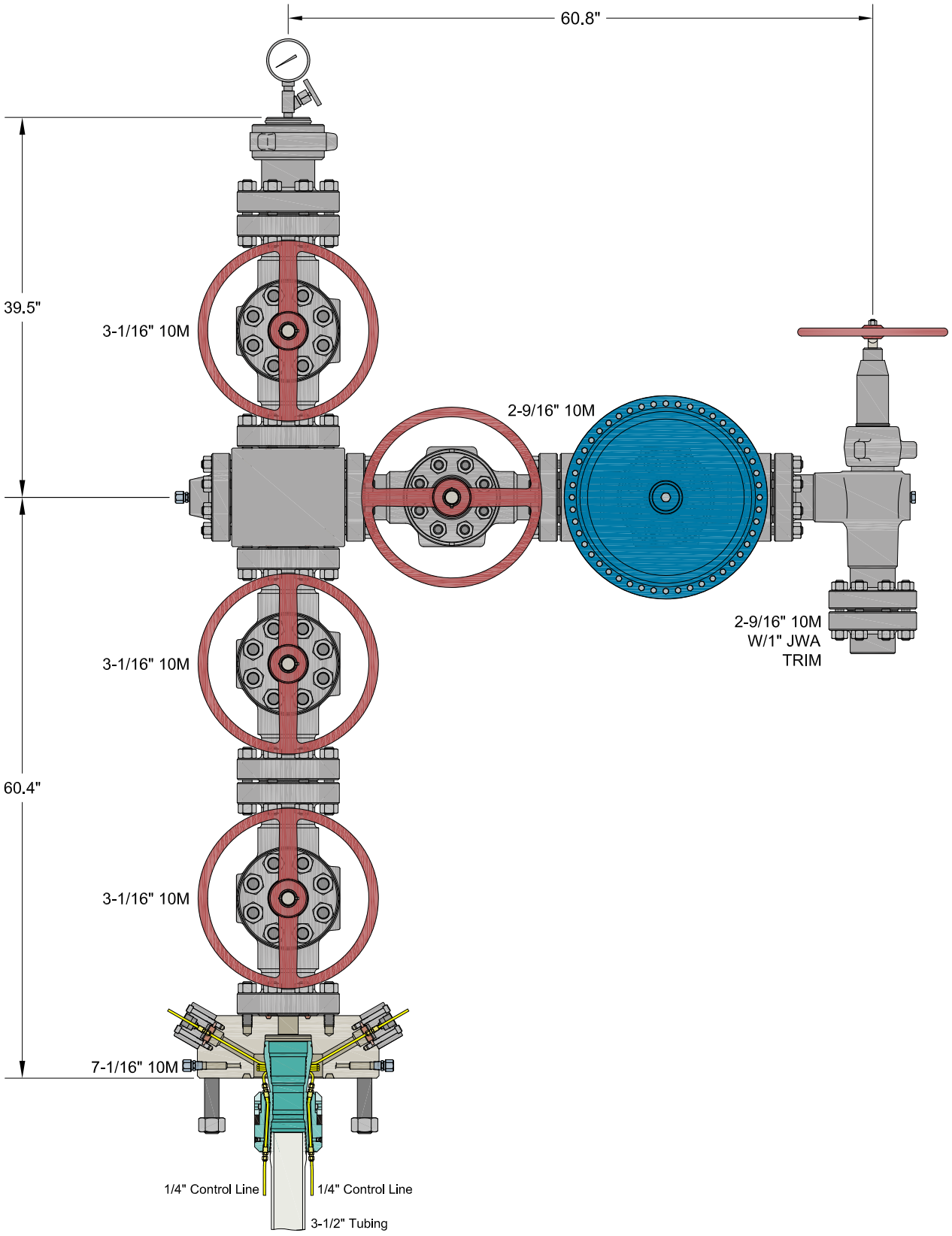
CACTUS WELLHEAD LLC

CIMAREX
HOBBS, NM

20" x 13-3/8" x 9-5/8" x 7" MBU-3T-CFL-R-DBLO-SF Wellhead Sys.
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head
And 9-5/8" Fluted & 7" One Piece Mandrel Casing Hangers

DRAWN	VJK	01FEB24
APPRV		

DRAWING NO. HBE0001053



ALL DIMENSIONS APPROXIMATE

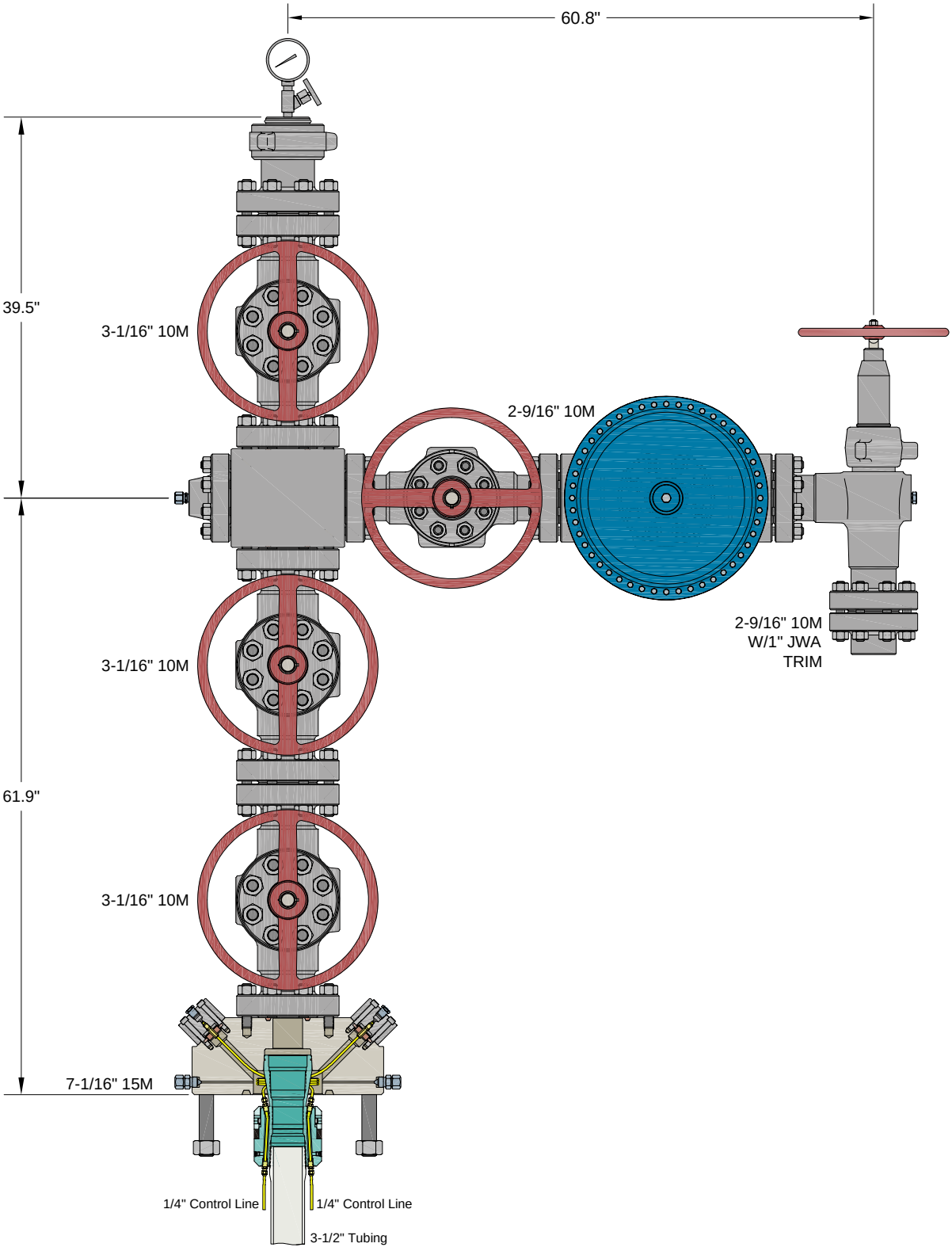
CACTUS WELLHEAD LLC

CIMAREX
HOBBS, NM

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

DRAWN	VJK	05SEP23
APPRV		

DRAWING NO. HBE0001018



ALL DIMENSIONS APPROXIMAT

CACTUS WELLHEAD LLC	CIMAREX HOBBS, NM
7-1/16" 15M x 3-1/16" x 2-9/16" 10M Production Tree Assembly With 7-1/16" 15M x 3-1/16" 10M T40-CCL Tubing Head Adapter And 7-1/16" 3-1/2" T40-CCL Tubing Hanger	DRAWN VJK 13DEC23 APPRV DRAWING NO. HBE0001018

Cactus

Quotation

Hobbs, NM
4120 W Carlsbad Hwy
Hobbs NM 88240
Phone: 817-682-8336

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

Bill To: 7050

CIMAREX
ATTN: DAVID SHAW
202 S CHEYENNE AVENUE SUITE 1000
TULSA OK 74103
US

Ship To: 1016

2023 PRICING REVIEW
202 S Cheyenne Ave Ste 1000
Tulsa OK 74103-3001
US

	Quantity	Price	Ext Price

CIMAREX

HOBBS, NM

PRODUCTION TREE ASSEMBLY
7-1/16" 10M X 3-1/16" 10M X 2-9/16" 10M
OPTIONAL 15M ADAPTER

QUOTATION SUMMARY:

- PRODUCTION TREE ASSEMBLY - $49,338.02

CACTUS CONTACT:
RILEY STAFFORD / MIKE SPINKS
OFFICE: 405.708.7217 (RILEY) / 713.396.5762 (MIKE)
MOBILE: 405.445.2222 (RILEY) / 832.691.7724 (MIKE)
EMAIL: riley.stafford@cactuswellhead.com / mike.spinks@cactuswellhead.com

DUE TO VOLATILITY IN THE STEEL MARKET, PRICING FOR ITEMS MADE FROM NICKEL ALLOYS (EX. 410SS, 17-4PHSS, INCONEL, ETC.) WILL BE VALID FOR TWO WEEKS. CW WILL REVIEW AND ADJUST, IF NECESSARY, AT ORDER PLACEMENT.

PREMIUM THREADED CASING HANGERS/RUNNING TOOLS & CUSTOMER SPECIFIC EQUIPMENT ARE NON-CANCELABLE AND MAY REQUIRE A PURCHASE ORDER (PO) PRIOR TO MANUFACTURING.

SUPPLY CHAIN PRICING IS BASED UPON A 135 DAY DELIVERY ARO. EXPEDITED PRICING CAN BE PROVIDED UPON REQUEST. PRICES ARE F.O.B. CACTUS BOSSIER CITY, LA. THE FOLLOWING QUOTATION DOES NOT INCLUDE APPLICABLE MILEAGE AND SERVICE CHARGES THAT MAY BE CHARGED AT TIME OF INVOICING.

Cactus

Quotation

Hobbs, NM
4120 W Carlsbad Hwy
Hobbs NM 88240
Phone: 817-682-8336

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

		Quantity	Price	Ext Price
	PRODUCTION TREE ASSEMBLY			
1	124314P2	1.00	4,830.00	4,830.00
	ADPT,TBGHD,CW,T40-CCL,7-1/16 10M STD X 3-1/16 10M STD,W/TWO #14 DHCV W/1/4 LP INLETS,10000 PSI MAX WP,TEMP PU,MATL EE,PSL2,PR2			
2	120242MV	1.00	4,343.00	4,343.00
	VLV,CW,SB100,3-1/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL3 PR1) QPQ TRIM, API 6A PR1 SECTION 10.5.2 (BORE VENT HOLE)			
3	120242MV	1.00	4,343.00	4,343.00
	VLV,CW,SB100,3-1/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL3 PR1) QPQ TRIM, API 6A PR1 SECTION 10.5.2 (BORE VENT HOLE)			
4	128365	1.00	2,650.00	2,650.00
	CRSS,STD,AOZE,3-1/16 10M X 2-9/16 10M,6A-LU-EE-3			
5	120242MV	1.00	4,343.00	4,343.00
	VLV,CW,SB100,3-1/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL3 PR1) QPQ TRIM, API 6A PR1 SECTION 10.5.2 (BORE VENT HOLE)			
6	142800	1.00	1,270.00	1,270.00
	TREECAP,NEWAY,BHTA,B15A,3-1/16 10M X 3-1/2 EU ILT,W/1/2 NPT & 3.06 MIN BORE,MONOGRAMMED,TEMP PU,MATL EE,PSL2			
7	BX154	5.00	10.44	52.20
	RING GASKET,BX154,3-1/16 10/15/20M			
8	780077-20E1	16.00	19.83	317.28
	STUD,ALL-THD W/2 HVY HEX NUTS,BLK,1-8UNC X 7,API 20E BSL-1 ASTM A193 GR B7 ALL THREAD STUD W/2 API 20E BSL-1 ASTM A194 GR 2H HEAVY HEX NUTS,NO PLATING			
9	132879	1.00	495.00	495.00
	FLG,BLIND,AOZE,3-1/16 10M X 1/2 NPT,W/HUB,TEMP LU,MATL EE,PSL3			
10	100048	1.00	59.74	59.74
	FTG,GRS,VENTED CAP,1/2 NPT,4140 -50F W/ELECTROLESS NICKEL COATING NACE,K-MONEL BALL,INCONEL X-750 SPRING			
11	115900MV	1.00	3,285.00	3,285.00
	VLV,CW,SB100,2-9/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL2 PR2) QPQ TRIM, API 6A PR2 ANNEX F (BORE VENT HOLE)			
12	128567	1.00	8,292.00	8,292.00
	VLV/ACT,OMNI,FS-R,2-9/16 10M FE EE HF C/W MODEL DX-18 DIAPHRAGM PNEUMATIC ACTUATOR, FORGED BODY, REVERSE ACTING SLAB GATE, FLOATING SEATS & DIRECTIONAL FLOW BODY BUSHING (FLOW FROM RIGHT TO LEFT): MAT'L CLASS EE, HARDFACE TRIM, TEMP PU (-20 TO 250 F), PSL-2, PR-2; ACTUATOR: MATERIAL CLASS BB, TEMP P (-20F TO 180F) PR-2 (FC TYPE) W/MANUAL OVERRIDE,ACTUATOR REQUIRES 112 PSI TO OPEN AT FULL 10,000 PSI			
13	130652	1.00	7,500.00	7,500.00
	CHOKE,ADJ,HOE,H2,2-9/16 10M FE X FE ALLOY BDY,3" NOMINAL,W/ 2" SSTC TRIM,H2S SERVICE,API MONOGRAMMED,PSL-2 PR-2 TEMP-PU MATL-EE-1.5			
14	120734	1.00	399.00	399.00
	FLG,COMP,AOZE,2-9/16 10M X 2-7/8 EU,5000 PSI MAX WP,TEMP LU,PSL3,PR1			

Cactus

Quotation

Hobbs, NM
4120 W Carlsbad Hwy
Hobbs NM 88240
Phone: 817-682-8336

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

			Quantity	Price	Ext Price
15	BX153		5.00	11.54	57.70
	RING GASKET,BX153,2-9/16 10/15/20M				
16	780067-20E1		24.00	14.70	352.80
	STUD,ALL-THD W/2 HVY HEX NUTS,BLK,7/8-9UNC X 6-1/2,API 20E BSL-1 ASTM A193 GR B7 ALL THREAD STUD W/2 API 20E BSL-1 ASTM A194 GR 2H HEAVY HEX NUTS,NO PLATING				
17	135166		1.00	4,490.00	4,490.00
	TBGHGR,CW,T40-CCL,7-1/16 X 3-1/2 EU API MOD BOX BTM X 3-1/2 EU BOX TOP,W/3 HBPV THD,W/ TWO 1/4 CCL & DOVETAIL SEAL,CF 124316P2,10000 PSI MAX WP,17-4PH SS,TEMP PU,MATL FF-0,5,PSL2,PR2				
18	BX156		1.00	62.48	62.48
	RING GASKET,BX156,7-1/16 10/15/20M				
19	NVS		1.00	61.16	61.16
	NEEDLE VALVE,MFS,1/2 NPT MXF,10M PSI WP,CARBON STEEL BODY, 304/316SS STEM, TFE PACKING (NON-NACE)				
20	PG10M		1.00	58.24	58.24
	PRESSURE GAUGE,10M,4-1/2 FACE, LIQUID FILLED,1/2 NPT				
21	PRO	Prorata Freight	0.75	2,768.56	2,076.42
					49,338.02

OPTIONAL 15M ADAPTER

22	124999P2		0.00	7,423.00	0.00
	ADPT,TBGHD,CW,T40-CCL,7-1/16 15M STD X 3-1/16 10M STD,W/TWO #14 DHCV W/1/4 NPT INLET,10000 PSI MAX WP,TEMP PU,MAT'L EE,PSL2,PR2				
					0.00

For Acceptance of this Quotation
Please Contact Ph: 713-626-8800
sales@cactuswellhead.com

Matl:	47,261.60
Labor:	0.00
Misc:	2,076.42
Sales Tax:	0.00
Total:	49,338.02

Cactus

Quotation

Hobbs, NM
4120 W Carlsbad Hwy
Hobbs NM 88240
Phone: 817-682-8336

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

CACTUS WELLHEAD, LLC PURCHASE TERMS AND CONDITIONS

1. **ACCEPTANCE**: Acceptance of Cactus Wellhead, LLC (herein: Company) Purchase Terms and Conditions (herein: CACTUS Purchase Terms) shall be deemed effective upon shipment of the Products and/or rendering of Services which are the subject of an order by Customer (defined as the party purchasing CACTUS Products and or Services referred on the invoice). Any proposal made by Customer for additional or different terms and conditions or any attempt by Customer to vary in any degree any of the terms and conditions of CACTUS Purchase Terms is hereby rejected.

2. **PRICING**. Each Product and Service shall be invoiced at (and Customer shall pay) the respective price shown on the reverse side hereof, or if no price is shown on the reverse side hereof, at the price shown in the current price list of Company. In addition, Customer shall pay any and all additional charges for mileage, transportation, freight, packing and other related charges, as well as any federal, state or local tax, excise, or charge applicable on the sale, transportation, or use of Products and Services, unless otherwise specified.

3. **TERMS OF PAYMENT**. Customer agrees to pay Company any and all payments due on or before thirty (30) days from invoice date at the designated address of Company. Amounts unpaid after such thirty (30) day period shall bear interest at the lesser of (i) one and one-half percent (1½%) per month or (ii) the maximum rate allowed by law. Customer shall also pay any and all of Company's attorney's fees and court costs if any amounts hereunder are collected by an attorney or through legal proceedings. Company reserves the right, among other remedies, either to terminate this agreement or to suspend further deliveries upon failure of Customer to make any payment as provided herein.

4. **LIMITED WARRANTY**. COMPANY MAKES NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE MERCHANTABILITY, FITNESS FOR PURPOSE, DESCRIPTION, QUALITY, PRODUCTIVENESS, ACCURACY OR ANY OTHER MATTER WITH RESPECT TO PRODUCTS OR SERVICES, ALL SUCH WARRANTIES BEING HEREBY SPECIFICALLY AND EXPRESSLY DISCLAIMED BY COMPANY. COMPANY MAY OFFER TECHNICAL ADVICE OR ASSISTANCE WITH REGARD TO THE PRODUCTS AND SERVICES BASED ON LABORATORY AND/OR FIELD EXPERIENCE AND CUSTOMER UNDERSTANDS AND AGREES THAT SUCH ADVICE REPRESENTS ONLY GOOD FAITH OPINIONS AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE. THE SOLE AND EXPRESS WARRANTY PROVIDED BY COMPANY IS TO WARRANT THAT THE PRODUCTS SOLD AS LISTED ON THE REVERSE SIDE HEREOF COMPLY WITH COMPANY'S SOLE SPECIFICATION AT THE DATE AND TIME OF MANUFACTURE. COMPANY MAKES NO WARRANTY THAT SUCH PRODUCTS SHALL MEET SUCH SPECIFICATION AT ANY TIME AFTER SHIPMENT OF PRODUCTS. USE OF SUCH PRODUCTS IS SPECIFICALLY NOT WARRANTED.

5. **REMEDY**. The exclusive remedy for this warranty for Products shall be limited to, in Company's sole discretion and judgment, the replacement of defective part(s), F.O.B. Company's plant (transportation, redesign, dismantling, disposal of material and installation are not included and shall be borne and paid for by Customer), or repair of defective part(s). . The exclusive remedy for this warranty for Services shall be limited to the repeat of Services performed F.O.B. Company's plant (transportation, redesign, dismantling, disposal of material and installation are not included and shall be borne and paid for by Customer). Any such repeat of Services or replacement or repair of Products shall not include any materials not sold by Company hereunder, and specifically excludes any obligation by Company related to other property of the Customer or any property of third parties. Provided, however, Company may in its sole discretion, decide to instead give Customer credit memorandum for the amounts already paid by Customer to Company for such Product or Service. IN ANY EVENT AND NOTWITHSTANDING THE LANGUAGE TO THE CONTRARY HEREIN, CUSTOMER ACKNOWLEDGES THAT ANY CLAIM IT MAY HAVE ARISING OUT OF OR IN CONNECTION WITH ANY ORIGINAL PRODUCTS AND SERVICES, ANY REPLACEMENT PRODUCTS OR REPEAT OF SERVICES AND THESE CACTUS PURCHASE TERMS SHALL BE LIMITED TO AND NOT EXCEED THE AMOUNT CUSTOMER HAS ACTUALLY PAID TO COMPANY FOR SUCH PRODUCTS AND/OR SERVICES PURSUANT HERETO. If Customer fails to make any such claim within thirty (30) days after completion of Service or delivery of Products, Customer hereby waives (to the extent permitted by applicable law) any and all claims it may or does have with respect to such Products and Services. Unless Customer is an authorized reseller of Company, Company's liability in connection with Products and Services shall extend only to Customer. CUSTOMER HEREBY INDEMNIFIES AND HOLDS COMPANY (AND ITS AGENTS, REPRESENTATIVES, OFFICERS DIRECTORS AND EMPLOYEES) HARMLESS FOR ANY LOSS, EXPENSE OR DAMAGE (WHETHER OF CUSTOMER OR OF ANY THIRD PARTY) ARISING FROM OR IN CONNECTION WITH PRODUCTS AND SERVICES, INCLUDING WITHOUT LIMITATION ANY FAILURE OF SUCH PRODUCTS AND SERVICES TO CONFORM TO CUSTOMER'S ORDER OR SPECIFICATION OR ANY OTHER STANDARD, OR ANY NEGLIGENCE OR BREACH OF WARRANTY BY COMPANY WITH RESPECT TO ANYTHING DONE OR FAILED TO HAVE BEEN DONE BY COMPANY, IF AND TO THE EXTENT THAT SUCH LOSS, EXPENSE OR DAMAGE EXCEEDS THE AMOUNT CUSTOMER HAS ACTUALLY PAID COMPANY PURSUANT HERETO FOR SUCH PRODUCTS OR SERVICES.

6. **INSPECTION**. The results of any inspection or testing reported by the Company to Customer represents only good faith opinions and are not to be construed as warranties or guarantees of the quality, classification, merchantability, fitness for purpose, condition, or liability of any equipment or material that has been inspected or tested by the Company.

7. **INSURANCE**. Each party agrees to maintain comprehensive general liability insurance in the amount of $1,000,000 each occurrence, $2,000,000 general aggregate, and Workers Compensation insurance per statutory requirements providing coverage for the indemnity obligations in this agreement. The Company (and such of its affiliates as it shall designate) including their officers, directors, members, shareholders, partners, joint ventures, employees, agents and representatives shall be named as additional insureds under the policies of Customer on a primary basis to the extent of its indemnification obligations set forth in these CACTUS Purchase Terms, and the policies shall also provide a waiver of subrogation rights in favor of the Company (and such of its affiliates as it shall designate) and their officers, directors, members, shareholders, employees, agents and representatives. The provisions of this Section 7 shall apply and the obligation to maintain insurance of each party in the coverages and amounts set forth herein shall remain in force regardless and independent of the validity or enforceability of the indemnity provisions of Section 8, below; the obligation to obtain insurance is a separate and independent obligation. If the insurance required herein is more or less than allowed by prevailing law, the indemnity obligations in Section 8 below shall be effective only to the maximum extent permitted under applicable law.

8. **INDEMNIFICATION**. The following indemnifications and releases of liability will apply to any Products or Services provided under this contract. COMPANY AND CUSTOMER EXPRESSLY AGREE THAT, TO THE EXTENT REQUIRED BY APPLICABLE LAW TO BE EFFECTIVE, THE INDEMNITIES AND DISCLAIMERS OF WARRANTIES CONTAINED HEREIN ARE "CONSPICUOUS."

A. **Customer Indemnity Obligations**. Customer hereby releases Company from any liability for, and shall protect, defend, indemnify, and hold harmless Company, its parents, affiliates, subsidiaries, partners, joint owners, joint ventures, and its contractors and subcontractors of any tier, and the officers, directors, agents, representatives, employees, insurers, and consultants (specifically excluding any member of Customer Group) of all of the foregoing, and its and their respective successors, heirs and assigns ("Company Group") from and against all costs (including the payment of reasonable attorneys' fees), losses, liabilities, demands, causes of action, damages, or claims of every type and character ("Claims"), arising out of or resulting from or related, directly or indirectly, to (i) injury to, illness or death of Customer its parents, affiliates, subsidiaries, partners, joint owners, joint ventures, and its contractors and subcontractors of any tier, and the officers, directors, agents, representatives, employees, customers, insurers, invitees and consultants of all of the foregoing, and its and their respective successors, heirs and assigns ("Customer Group"), or (ii) loss of or damage to any property of any member of Customer Group, REGARDLESS OF THE CAUSE OF SUCH CLAIMS, INCLUDING THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF COMPANY GROUP, BUT NOT IN THE CASE OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY MEMBER OF COMPANY GROUP.

B. **Company Indemnity Obligations**. Company hereby releases Customer from any liability for, and shall protect, defend, indemnify, and hold harmless Customer from and against all Claims arising out of or resulting from or related, directly or indirectly, to (i) injury to, illness or death of any member of Company Group, or (ii) loss of or damage to any property of any member of Company Group, REGARDLESS OF THE CAUSE OF SUCH CLAIMS, INCLUDING THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF CUSTOMER GROUP, BUT NOT IN THE CASE OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY MEMBER OF COMPANY GROUP.

C. **Third Party Claims**. Notwithstanding the foregoing, to the extent of its negligence, Company and Customer shall each indemnify, defend and hold harmless from and against all Claims, of every type and character, which are asserted by third parties for bodily injury, death or loss or destruction of property or interests in property in any manner caused by, directly or indirectly resulting from, incident to, connected with or arising out of the work to be performed, Services to be rendered or Products or materials furnished to Customer. When personal injury, death or loss of or damage to property is the result of joint or concurrent negligence of Customer and Company, the indemnitor's duty of indemnification shall be in proportion to its allocable share of such negligence.

D. **Pollution**. Company agrees that it shall be totally responsible for, and shall protect, defend and indemnify, Customer for all losses, damages, claims, demands, costs, charges, and other expenses, including attorneys' fees, for any and all waste and/or hazardous substances which are in Company Group's exclusive possession and control and directly associated with Company Group's equipment and facilities, EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF CUSTOMER GROUP. Customer shall assume all responsibility for, including control and removal of, and shall protect, defend and indemnify Company Group from and against all Claims arising directly or indirectly from all other pollution or contamination which may occur during the conduct of operations hereunder, including, but not limited to, that which may result from fire, blowout, cratering, seepage or any other uncontrolled flow of oil, gas, water or other substance, EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF COMPANY GROUP.

E. **Wild Well**. Customer shall release Company Group of any liability for, and shall protect, defend and indemnify Company Group for any damages, expenses, losses, fines, penalties, costs, expert fees and attorneys' fees arising out of a fire, blow out, cratering, seepage or wild well, including regaining control thereof, debris removal and property restoration and remediation. THIS INDEMNITY APPLIES EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE, ORDINARY OR GROSS) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF COMPANY GROUP.

F. **Underground Damage**. Customer shall release Company Group of any liability for, and shall protect, defend and indemnify Company Group from and against any and all claims, liability and expenses resulting from operations related to the work under this agreement on account of injury to, destruction of, or loss or impairment of any property right in or to oil, gas or other mineral substance or water, if at the time of the act or omission causing such injury, destruction, loss or impairment said substance and not been reduced to physical possession above the surface of the earth, and for any loss or damage to any formation, strata, or reservoir beneath the surface of the earth. THIS INDEMNITY APPLIES EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE, ORDINARY OR GROSS) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF COMPANY GROUP.

G. The foregoing indemnities set forth in these CACTUS Purchase Terms are intended to be enforceable against the parties hereto in accordance with the express terms and scope hereof notwithstanding Texas' Express Negligence Rule or any similar directive that would prohibit or otherwise limit indemnities because of the negligence (whether sole, concurrent, active or passive, ordinary or gross) or other fault or strict liability of Company or Customer.

H. If a claim is asserted against one of the parties to this agreement which may give rise to a claim for indemnity against the other party hereto, the party against whom the claim is first asserted must notify the potential indemnitor in writing and give the potential indemnitor the right to defend or assist in the defense of the claim.

9. **RISK OF LOSS**.

A. Title and risk of loss shall pass to Customer upon delivery as specified in Article 11. Customer's receipt of any material delivered hereunder shall be an unqualified acceptance of, and a waiver by Customer of any and all claims with respect to, such material unless Customer gives Company written notice of claim within thirty (30) days after such receipt. Notwithstanding the foregoing, installation or use of materials or equipment shall unequivocally constitute irrevocable acceptance of said materials. Customer assumes all risk and liability for the results obtained by the use of any material or Products delivered hereunder in work performed by on behalf of Customer or in combination with other or substances. No claim of any kind, whether as to material delivered or for non-delivery of material, and whether or not based on negligence, shall be greater in amount than the purchase price of the

Cactus

Quotation

Hobbs, NM
4120 W Carlsbad Hwy
Hobbs NM 88240
Phone: 817-682-8336

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

material in respect of which such claim is made.

B. For Services, Company shall not be liable for loss or deterioration of any equipment and material of Customer under Company's control or stored on Company's premises after Company has completed its work if such loss or deterioration results from atmospheric condition, Act of God or other occurrence not within the reasonable control of Company.

10. **TERMINATION**. Company reserves the right to terminate the order at issue, or any part hereof, solely for its convenience at any time without cause with notice to Customer. Company shall have the right to cancel any unfilled order without notice to Customer in the event that Customer becomes insolvent, adjudicated bankrupt, petitions for or consents to any relief under any bankruptcy reorganization statute, violates a term of these CACTUS Purchase Terms, or is unable to meet its financial obligations in the normal course of business. In the event of such termination, Company shall immediately stop all work hereunder. Prior to delivery, Customer may terminate this order without cause upon thirty (30) day notice in writing to Company. In the event of such termination, Company at its sole option shall cease work up to thirty (30) days after such notice. Upon the cessation of work, Customer agrees to pay Company a reasonable termination charge consisting of a percentage of the Invoice price, such percentage to reflect the value of the Products, Services or work in progress completed upon the cessation of work. Customer shall also pay promptly to Company any costs incurred due to paying and settling claims of Company's vendors or subcontractors arising out of the termination of the order by Customer.

11. **DELIVERY**. Unless different terms are provided on the face of this order, all items are sold FOB Company's manufacturing facility in Bossier City, LA., and Customer shall bear the cost of transportation to any other named destination. Upon notification of Company of delivery, Customer shall become liable and shall bear all risk of loss associated with the Products at issues regardless of whether the Products are at a location controlled by Company and whether or not caused by the negligence of Company. In the case of Customer pick-up, the truck furnished by Customer is the destination and Company's obligations regarding shipments are fulfilled when the Products are loaded on the truck. Items to be shipped to any other destination outside of the United States are sold FOB port of shipment (Customer will deliver and bear the cost of transportation to the named port and will bear the cost of transportation thereafter to the final destination). The means of shipment and carrier to the point at which Company's liability for transportation costs ceases shall be chosen by Company. Excess packing, marking, shipping, and transportation charges resulting from compliance with Customer's request shall be for Customer's account. Unless otherwise agreed in writing, delivery time is not of the essence.

12. **RETURNS/REFUND**. Within ninety (90) days of delivery, Customer has the option to return any non-defective Products (any Products found to be defective will be subject to the warranty and remedies expressed in paragraphs four (4) and five (5) above). Customer shall bear all costs of shipment and/or transportation for such return and risk of loss for the returned Products shall remain with Customer until re-delivered to Company's Yard. Customer shall receive a full refund for any returns, less a twenty percent (20%) restocking fee. Company at all times reserves the right to designate certain Products as non-refundable in Company's Sales Quote or Sales Order. In addition, any made-to-order , special order, and/or Product manufactured to Customer specifications are NOT returnable.

13. **DELAYS**. If a specific shipping date is either not given or is estimated only, and is not promised on the face of this order or in a separate writing signed by Company, Company will not be responsible for delays in filling this order nor liable for any loss or damages resulting from such delays. If a specific shipping date is promised, Company will not be liable for delays resulting from causes beyond Company's control, including without limitation accidents to machinery, fire, flood, act of God or other casualty, vendor delays, labor disputes, labor shortages, lack of transportation facilities, priorities required by, requested by, or granted for the benefit of any governmental agency, or restrictions imposed by law or governmental regulation.

14. **LIMITATION OF DAMAGES**. Notwithstanding any other provision contained herein, Company shall not be liable to Customer Group or any third party for consequential (whether direct or indirect damages), indirect, incidental, special or punitive damages, howsoever arising, including, but not limited to loss of profits (whether direct or indirect damages), revenues, production or business opportunities, WHETHER OR NOT SUCH LOSSES ARE THE RESULT IN WHOLE OR IN PART FROM THE NEGLIGENCE (WHETHER SOLE, JOINT, CONCURRENT OR COMPARATIVE, ACTIVE OR PASSIVE, ORDINARY OR GROSS) OF COMPANY GROUP, OR ANY DEFECT IN THE PREMISES, PRE-EXISTING CONDITIONS, PATENT OR LATENT, BREACH OF STATUTORY DUTY, STRICT LIABILITY OR ANY OTHER THEORY OF LEGAL LIABILITY OF COMPANY GROUP (EXCLUDING ONLY LOSSES CAUSED BY THE WILLFUL MISCONDUCT OF COMPANY GROUP).

15. **SECURITY INTEREST**. Customer grants Company, and Company reserves, a security interest, covering all Customer's obligations under these terms (including any liability for breach of Customer's obligations), and applying to all of Customer's right, title, and interest in the Leased Equipment, together with all accessions thereto and any proceeds that may arise in connection with the sale or disposition thereof. Customer shall cooperate with Company in the filing of Financing Statements to perfect such security interest. Furthermore, Customer authorizes Company to execute and file Financing Statements without Customer's signature in any jurisdiction in which such procedure is authorized. Customer warrants, covenants and agrees that it will not, without prior written consent of Company, sell, contract to sell, lease, encumber, or dispose of the Leased Equipment or any interest in it until all obligations secured by this security interest have been fully satisfied.

16. **PATENT AND INTELLECTUAL PROPERTY**. The sale of any Products hereunder does not convey any intellectual property license by implication, estoppel or otherwise regarding the Products. Company retains the copyright in all documents, catalogs and plans supplied to Customer pursuant to or ancillary to the contract. Unless otherwise agreed in writing, Customer shall obtain no intellectual property interest in any Company Product.

17. **TAXES**. Unless otherwise specifically provided for herein, Customer shall be liable for all federal, state, or local taxes or import duties assessed by any governmental entity of any jurisdiction in connection with the Products or Services furnished hereunder.

18. **DECEPTIVE TRADE PRACTICES**. Customer acknowledges the application of Section 17.45(4) of the Texas Deceptive Trade Practices Act (Texas Business Commission Code §17.41 et. seq.) (the "Act") to any transaction contemplated hereby and represents that it is not a "consumer" for the purposes of the Act.

19. **NO WAIVER**. Failure to enforce any or all of the provisions in these CACTUS Purchase Terms in any particular instance shall not constitute or be deemed to constitute a waiver of or preclude subsequent enforcement of the same provision or any other provision of these CACTUS Purchase Terms. Should any provision of these CACTUS Purchase Terms be declared invalid or unenforceable all other provisions of these CACTUS Purchase Terms shall remain in full force and effect.

20. **CHOICE OF LAW**. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND SHALL BE PERFORMABLE IN HARRIS COUNTY, TEXAS. WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPALS AND WAIVER OF SAME, EACH PARTY HERETO SUBMITS TO THE JURISDICTION OF THE COURTS OF THE STATE OF TEXAS IN HARRIS COUNTY, TEXAS AND THE FEDERAL COURTS IN AND FOR THE SOUTHERN DISTRICT OF TEXAS SITTING IN HOUSTON, TEXAS IN CONNECTION WITH ANY DISPUTE ARISING UNDER THIS AGREEMENT OR ANY DOCUMENT OR INSTRUMENT ENTERED INTO IN CONNECTION HEREWITH.

21. **AUTHORITY**. Customer warrants and represents that the individual receiving this order at issue on behalf of Customer has the authority to enter into these CACTUS Purchase Terms on behalf of Customer, and that upon receipt these CACTUS Purchase Terms shall be binding upon Customer.

22. **FORCE MAJEURE**. If Company is unable to carry out its obligations hereunder by reason of force majeure, then upon Company's giving of notice and reasonably full particulars of such force majeure in writing to Customer, Company's obligations that are affected by force majeure shall be suspended during the continuance of the force majeure and Company shall not be liable to Customer for any damages incurred by the Customer as a result thereof.

23. **CONFIDENTIALITY**. Customer acknowledges the highly secret and valuable nature of all proprietary inventions, methods, processes, designs, know-how, and trade secrets embodied in the Company's equipment, Products and Services and its components (hereinafter referred to as "Confidential Data"). Accordingly, Customer agrees not to disclose or use any Confidential Data. Customer further agrees to take any and all necessary precautions to prevent disclosure of the Confidential Data associated with the Company's equipment, Products and Services and components thereof to persons other than those employees of Customer for whom such disclosure is necessary for performance of the work hereunder.

24. **COMPLIANCE**. Customer expressly agrees to comply with and abide by, all of the laws of the United States and of the State of Texas, including, but not limited to, OSHA, EPA and all rules and regulations now existing or that may be hereafter promulgated under and in accordance with any such law or laws, and hereby agrees to indemnify and hold Company harmless from any and all claims, demands, or damages incurred by Company arising from Customer's failure to comply with all laws and governmental regulations. The indemnities in this paragraph shall be in addition to any other indemnity obligations between Customer and Company, including any other indemnity obligations contained herein.

Standard New Mexico Variances

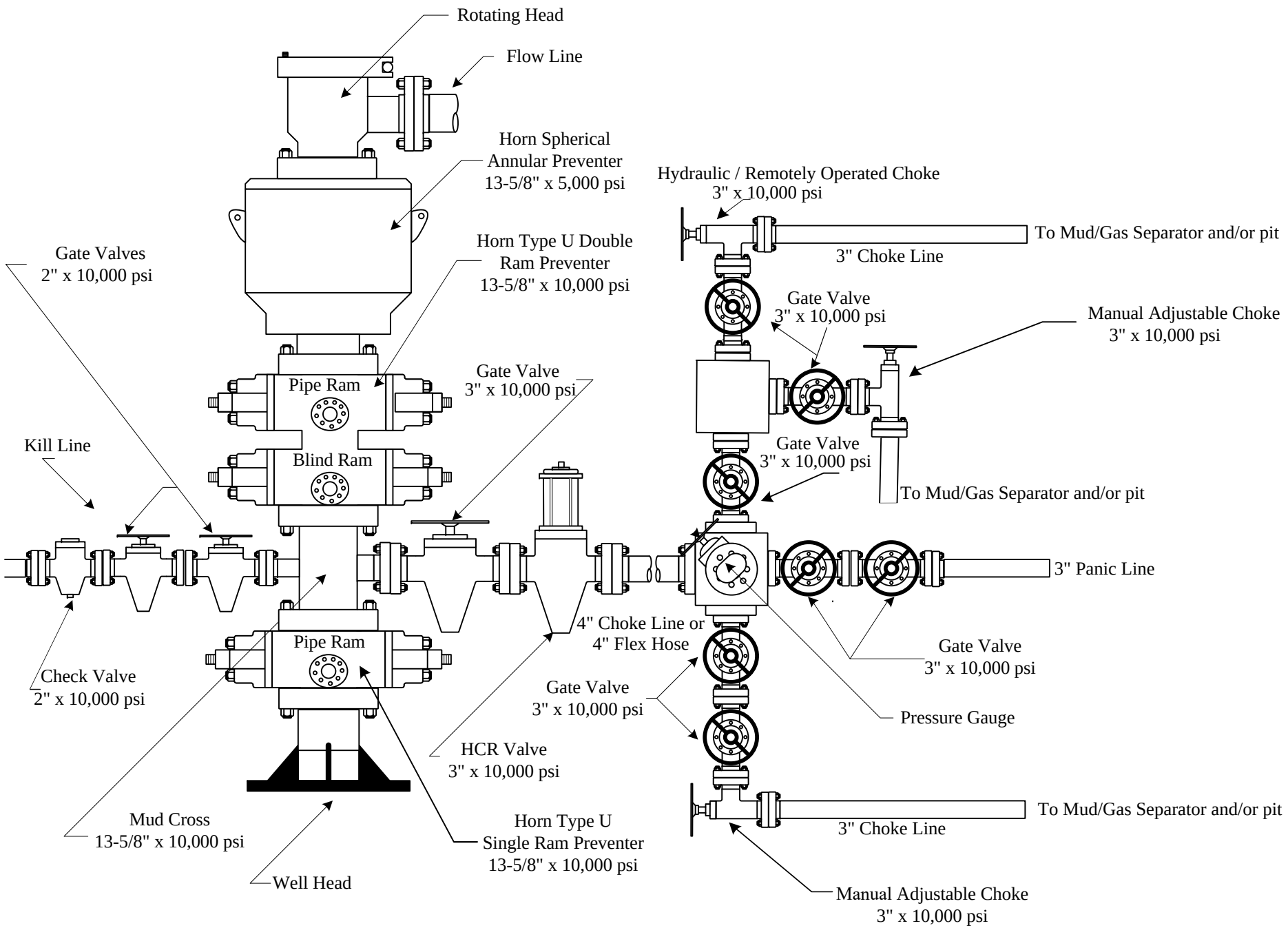
Variance Request #1: Skid Rig after Cementing Surface Casing

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

Variance Request #4: Utilize Co-Flex Choke Line

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

COTERRA



AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

Customer Name			
Product Name	Choke And Kill Hose		
Product Specification	3″×10000psi×35ft（10.67m）	Quantity	1PCS
Serial Number	VTC-7660257	FSL	FSL3
customer number	PO890145-001	Standard	API Spec 16C 3rd edition
Temperature Range	-29℃～+121℃	Inspection date	2024.09.03

Inspection Items	Inspection results
Appearance Checking	In accordance with API Spec 16C 3rd edition
Size and Lengths	In accordance with API Spec 16C 3rd edition
Dimensions and Tolerances	In accordance with API Spec 16C 3rd edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 6A 21st edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 17D 3rd edition
Hydrostatic Testing	In accordance with API Spec 16C 3rd edition
product Marking	In accordance with API Spec 16C 3rd edition
Inspection conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition
Remarks	16C-0403

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

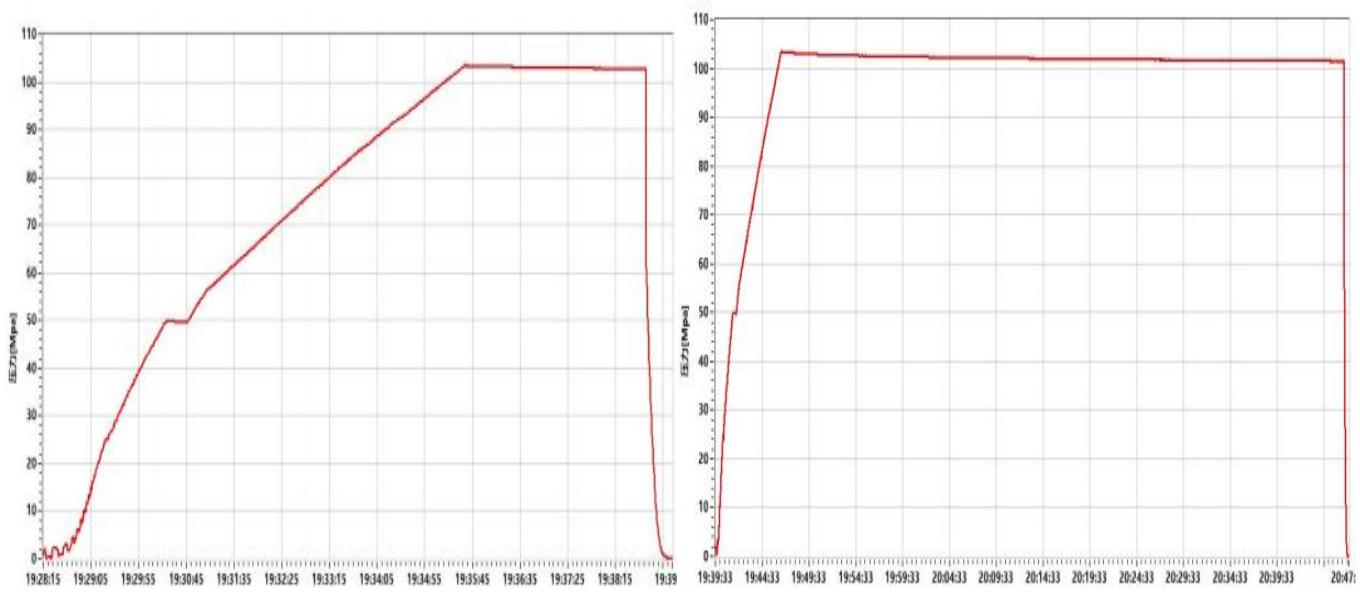
LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3rd edition
Product Specification	3″×10000psi×35ft（10.67m）	Serial Number	VTC-7660257
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
customer number	PO890145-001	Inspection Date	2024.08.30
Rate of length change			
Standard requirements	At working pressure ,the rate of length change should not more than ±2%		
Testing result	10000psi (69.0MPa) ,Rate of length change 0.6%		
Hydrostatic testing			
Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leakage.		
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage		

Graph of pressure testing：



Conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition 16C-0403				
Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

Product Specification：3″×10000psi×35ft（10.67m）

Serial Number：VTC-7660257

customer number：PO890145-001

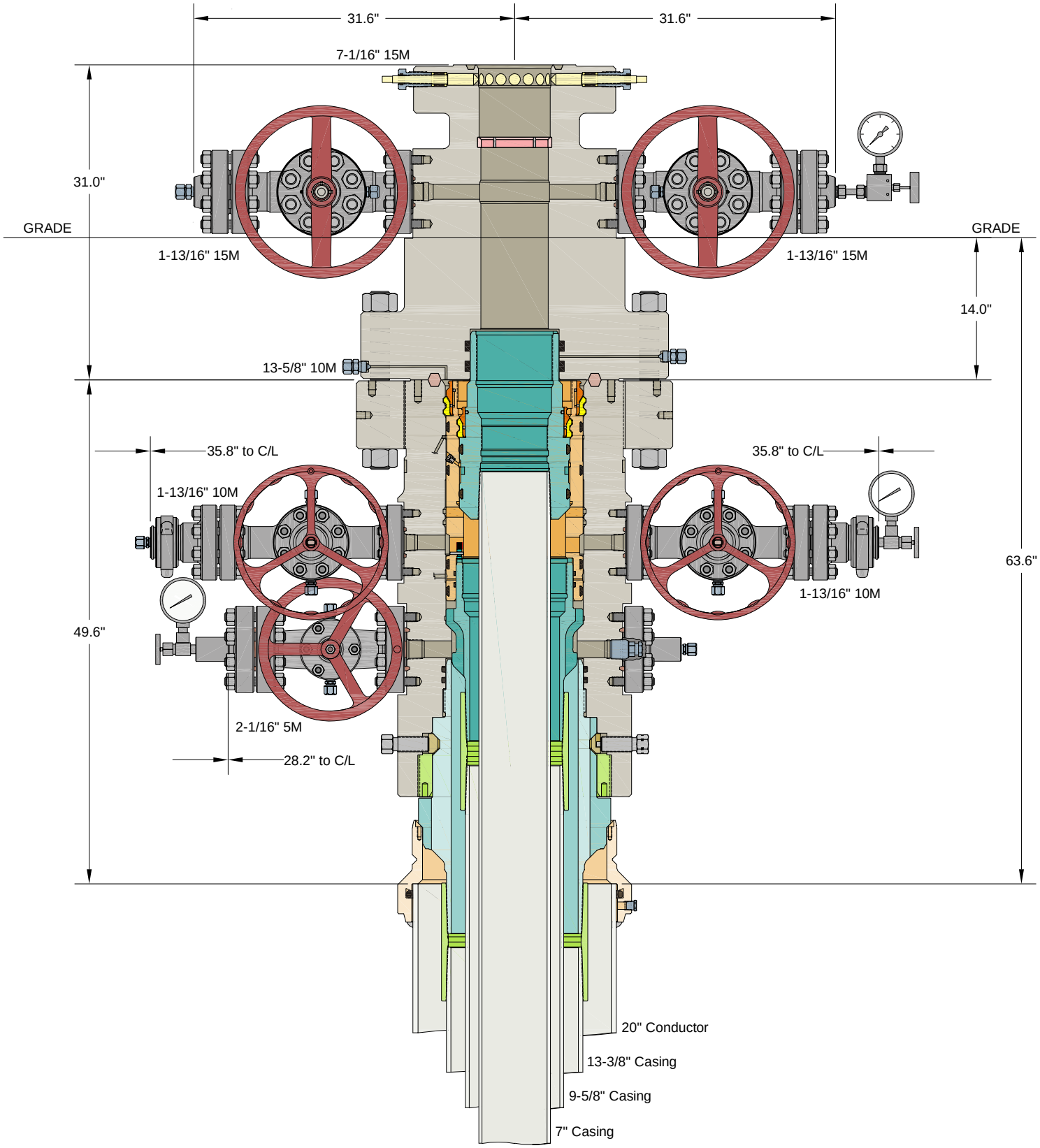
End Connections: 4-1/16″×10000psi Integral flange for sour gas service

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD.in Sep,2024, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Sep 3, 2024. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition .

QC Manager： Jane C Date:Sep 3, 2024

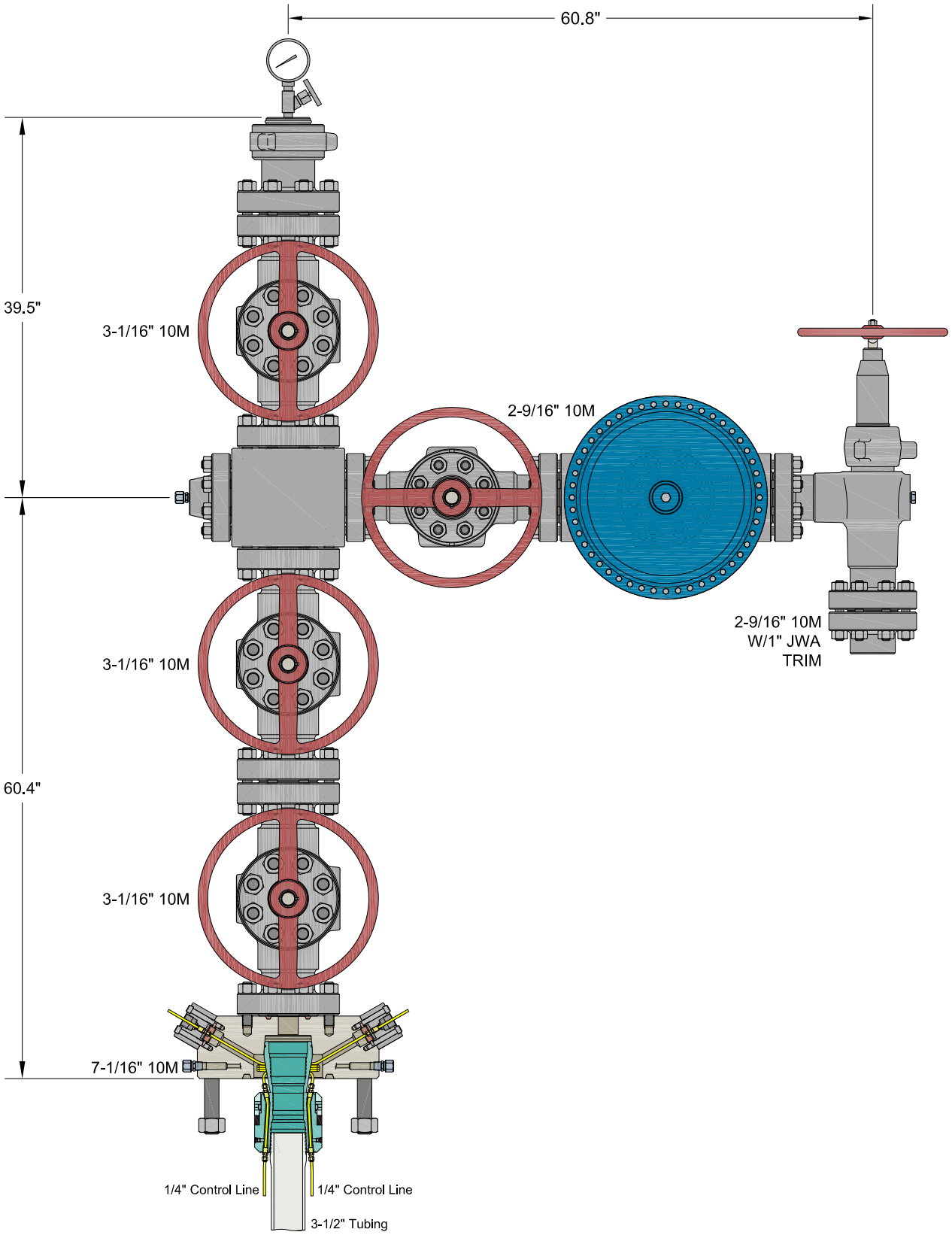
16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE



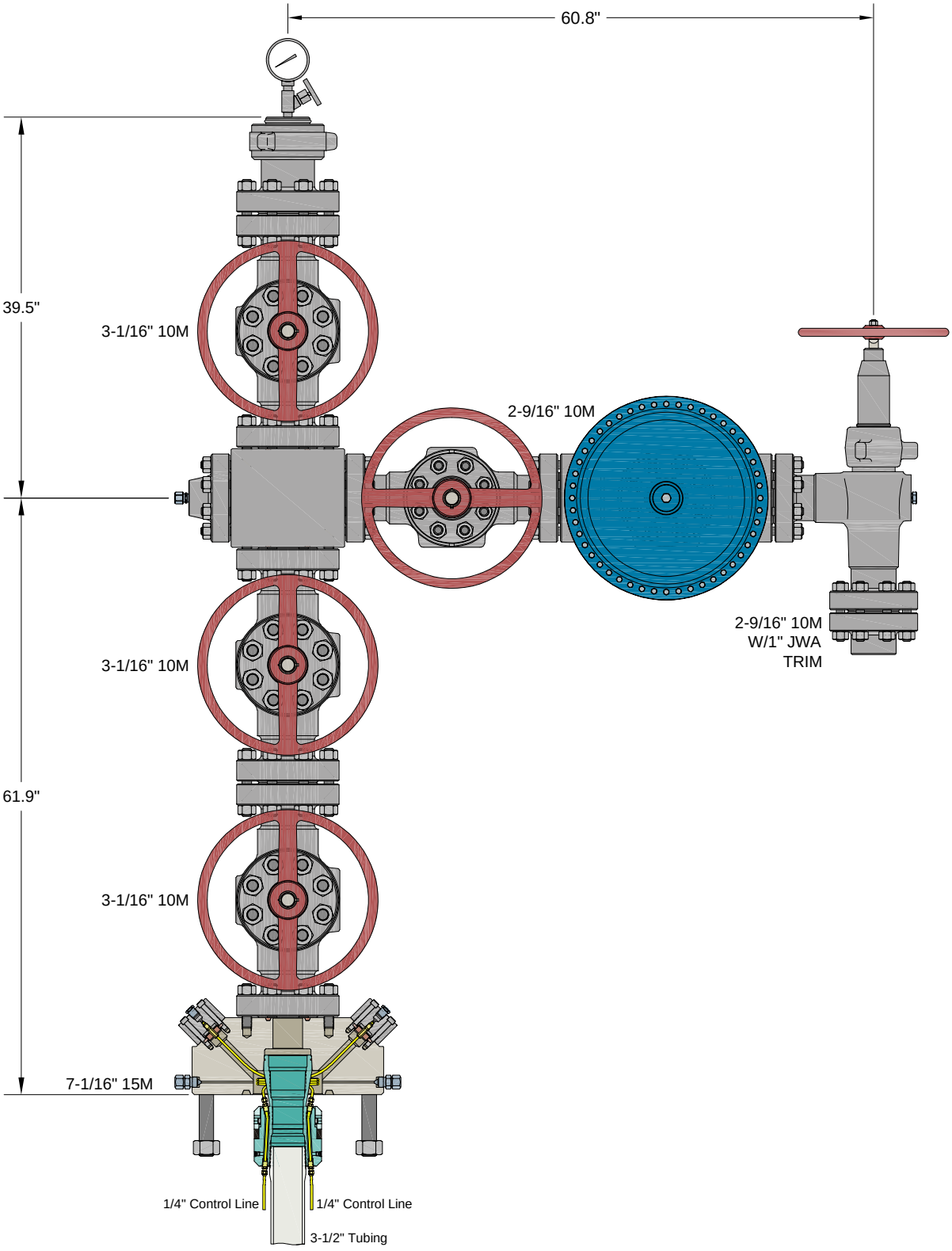
ALL DIMENSIONS APPROXIMAT

CACTUS WELLHEAD LLC	CIMAREX HOBBS, NM	
20" x 13-3/8" x 9-5/8" x 7" MBU-3T-CFL-R-DBLO-SF Wellhead Sys. With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8" Fluted & 7" One Piece Mandrel Casing Hangers	DRAWN	VJK 01FEB24
	APPRV	
	DRAWING NO.	HBE0001053



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC	CIMAREX HOBBS, NM
7-1/16" 10M x 3-1/16" x 2-9/16" 10M Production Tree Assembly With 7-1/16" 10M x 3-1/16" 10M T40-CCL Tubing Head Adapter And 7-1/16" 3-1/2" T40-CCL Tubing Hanger	DRAWN VJK 05SEP23 APPRV DRAWING NO. HBE0001018



ALL DIMENSIONS APPROXIMAT

CACTUS WELLHEAD LLC	CIMAREX HOBBS, NM	
7-1/16" 15M x 3-1/16" x 2-9/16" 10M Production Tree Assembly With 7-1/16" 15M x 3-1/16" 10M T40-CCL Tubing Head Adapter And 7-1/16" 3-1/2" T40-CCL Tubing Hanger	DRAWN	VJK 13DEC23
	APPRV	
	DRAWING NO.	HBE0001018

Cactus

Quotation

Hobbs, NM
4120 W Carlsbad Hwy
Hobbs NM 88240
Phone: 817-682-8336

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

Bill To: 7050

CIMAREX
ATTN: DAVID SHAW
202 S CHEYENNE AVENUE SUITE 1000
TULSA OK 74103
US

Ship To: 1016

2023 PRICING REVIEW
202 S Cheyenne Ave Ste 1000
Tulsa OK 74103-3001
US

	Quantity	Price	Ext Price

CIMAREX

HOBBS, NM

PRODUCTION TREE ASSEMBLY
7-1/16" 10M X 3-1/16" 10M X 2-9/16" 10M
OPTIONAL 15M ADAPTER

QUOTATION SUMMARY:

- PRODUCTION TREE ASSEMBLY - $49,338.02

CACTUS CONTACT:
RILEY STAFFORD / MIKE SPINKS
OFFICE: 405.708.7217 (RILEY) / 713.396.5762 (MIKE)
MOBILE: 405.445.2222 (RILEY) / 832.691.7724 (MIKE)
EMAIL: riley.stafford@cactuswellhead.com / mike.spinks@cactuswellhead.com

DUE TO VOLATILITY IN THE STEEL MARKET, PRICING FOR ITEMS MADE FROM NICKEL ALLOYS (EX. 410SS, 17-4PHSS, INCONEL, ETC.) WILL BE VALID FOR TWO WEEKS. CW WILL REVIEW AND ADJUST, IF NECESSARY, AT ORDER PLACEMENT.

PREMIUM THREADED CASING HANGERS/RUNNING TOOLS & CUSTOMER SPECIFIC EQUIPMENT ARE NON-CANCELABLE AND MAY REQUIRE A PURCHASE ORDER (PO) PRIOR TO MANUFACTURING.

SUPPLY CHAIN PRICING IS BASED UPON A 135 DAY DELIVERY ARO. EXPEDITED PRICING CAN BE PROVIDED UPON REQUEST. PRICES ARE F.O.B. CACTUS BOSSIER CITY, LA. THE FOLLOWING QUOTATION DOES NOT INCLUDE APPLICABLE MILEAGE AND SERVICE CHARGES THAT MAY BE CHARGED AT TIME OF INVOICING.

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		Quantity	Price	Ext Price
	PRODUCTION TREE ASSEMBLY			
1	124314P2	1.00	4,830.00	4,830.00
	ADPT,TBGHD,CW,T40-CCL,7-1/16 10M STD X 3-1/16 10M STD,W/TWO #14 DHCV W/1/4 LP INLETS,10000 PSI MAX WP,TEMP PU,MATL EE,PSL2,PR2			
2	120242MV	1.00	4,343.00	4,343.00
	VLV,CW,SB100,3-1/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL3 PR1) QPQ TRIM, API 6A PR1 SECTION 10.5.2 (BORE VENT HOLE)			
3	120242MV	1.00	4,343.00	4,343.00
	VLV,CW,SB100,3-1/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL3 PR1) QPQ TRIM, API 6A PR1 SECTION 10.5.2 (BORE VENT HOLE)			
4	128365	1.00	2,650.00	2,650.00
	CRSS,STD,AOZE,3-1/16 10M X 2-9/16 10M,6A-LU-EE-3			
5	120242MV	1.00	4,343.00	4,343.00
	VLV,CW,SB100,3-1/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL3 PR1) QPQ TRIM, API 6A PR1 SECTION 10.5.2 (BORE VENT HOLE)			
6	142800	1.00	1,270.00	1,270.00
	TREECAP,NEWAY,BHTA,B15A,3-1/16 10M X 3-1/2 EU ILT,W/1/2 NPT & 3.06 MIN BORE,MONOGRAMMED,TEMP PU,MATL EE,PSL2			
7	BX154	5.00	10.44	52.20
	RING GASKET,BX154,3-1/16 10/15/20M			
8	780077-20E1	16.00	19.83	317.28
	STUD,ALL-THD W/2 HVY HEX NUTS,BLK,1-8UNC X 7,API 20E BSL-1 ASTM A193 GR B7 ALL THREAD STUD W/2 API 20E BSL-1 ASTM A194 GR 2H HEAVY HEX NUTS,NO PLATING			
9	132879	1.00	495.00	495.00
	FLG,BLIND,AOZE,3-1/16 10M X 1/2 NPT,W/HUB,TEMP LU,MATL EE,PSL3			
10	100048	1.00	59.74	59.74
	FTG,GRS,VENTED CAP,1/2 NPT,4140 -50F W/ELECTROLESS NICKEL COATING NACE,K-MONEL BALL,INCONEL X-750 SPRING			
11	115900MV	1.00	3,285.00	3,285.00
	VLV,CW,SB100,2-9/16 10M FE BB/EE-0,5 (API 6A LU BB/EE-0,5 PSL2 PR2) QPQ TRIM, API 6A PR2 ANNEX F (BORE VENT HOLE)			
12	128567	1.00	8,292.00	8,292.00
	VLV/ACT,OMNI,FS-R,2-9/16 10M FE EE HF C/W MODEL DX-18 DIAPHRAGM PNEUMATIC ACTUATOR, FORGED BODY, REVERSE ACTING SLAB GATE, FLOATING SEATS & DIRECTIONAL FLOW BODY BUSHING (FLOW FROM RIGHT TO LEFT): MAT'L CLASS EE, HARDFACE TRIM, TEMP PU (-20 TO 250 F), PSL-2, PR-2; ACTUATOR: MATERIAL CLASS BB, TEMP P (-20F TO 180F) PR-2 (FC TYPE) W/MANUAL OVERRIDE,ACTUATOR REQUIRES 112 PSI TO OPEN AT FULL 10,000 PSI			
13	130652	1.00	7,500.00	7,500.00
	CHOKE,ADJ,HOE,H2,2-9/16 10M FE X FE ALLOY BDY,3" NOMINAL,W/ 2" SSTC TRIM,H2S SERVICE,API MONOGRAMMED,PSL-2 PR-2 TEMP-PU MATL-EE-1.5			
14	120734	1.00	399.00	399.00
	FLG,COMP,AOZE,2-9/16 10M X 2-7/8 EU,5000 PSI MAX WP,TEMP LU,PSL3,PR1			

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			Quantity	Price	Ext Price
15	BX153		5.00	11.54	57.70
	RING GASKET,BX153,2-9/16 10/15/20M				
16	780067-20E1		24.00	14.70	352.80
	STUD,ALL-THD W/2 HVY HEX NUTS,BLK,7/8-9UNC X 6-1/2,API 20E BSL-1 ASTM A193 GR B7 ALL THREAD STUD W/2 API 20E BSL-1 ASTM A194 GR 2H HEAVY HEX NUTS,NO PLATING				
17	135166		1.00	4,490.00	4,490.00
	TBGHGR,CW,T40-CCL,7-1/16 X 3-1/2 EU API MOD BOX BTM X 3-1/2 EU BOX TOP,W/3 HBPV THD,W/ TWO 1/4 CCL & DOVETAIL SEAL,CF 124316P2,10000 PSI MAX WP,17-4PH SS,TEMP PU,MATL FF-0,5,PSL2,PR2				
18	BX156		1.00	62.48	62.48
	RING GASKET,BX156,7-1/16 10/15/20M				
19	NVS		1.00	61.16	61.16
	NEEDLE VALVE,MFS,1/2 NPT MXF,10M PSI WP,CARBON STEEL BODY, 304/316SS STEM, TFE PACKING (NON-NACE)				
20	PG10M		1.00	58.24	58.24
	PRESSURE GAUGE,10M,4-1/2 FACE, LIQUID FILLED,1/2 NPT				
21	PRO	Prorata Freight	0.75	2,768.56	2,076.42
					49,338.02

OPTIONAL 15M ADAPTER

22	124999P2		0.00	7,423.00	0.00
	ADPT,TBGHD,CW,T40-CCL,7-1/16 15M STD X 3-1/16 10M STD,W/TWO #14 DHCV W/1/4 NPT INLET,10000 PSI MAX WP,TEMP PU,MAT'L EE,PSL2,PR2				
					0.00

For Acceptance of this Quotation
Please Contact Ph: 713-626-8800
sales@cactuswellhead.com

Matl:	47,261.60
Labor:	0.00
Misc:	2,076.42
Sales Tax:	0.00
Total:	49,338.02

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Valid For 30 Days

CACTUS WELLHEAD, LLC PURCHASE TERMS AND CONDITIONS

1. **ACCEPTANCE**: Acceptance of Cactus Wellhead, LLC (herein: Company) Purchase Terms and Conditions (herein: CACTUS Purchase Terms) shall be deemed effective upon shipment of the Products and/or rendering of Services which are the subject of an order by Customer (defined as the party purchasing CACTUS Products and or Services referred on the invoice). Any proposal made by Customer for additional or different terms and conditions or any attempt by Customer to vary in any degree any of the terms and conditions of CACTUS Purchase Terms is hereby rejected.

2. **PRICING**. Each Product and Service shall be invoiced at (and Customer shall pay) the respective price shown on the reverse side hereof, or if no price is shown on the reverse side hereof, at the price shown in the current price list of Company. In addition, Customer shall pay any and all additional charges for mileage, transportation, freight, packing and other related charges, as well as any federal, state or local tax, excise, or charge applicable on the sale, transportation, or use of Products and Services, unless otherwise specified.

3. **TERMS OF PAYMENT**. Customer agrees to pay Company any and all payments due on or before thirty (30) days from invoice date at the designated address of Company. Amounts unpaid after such thirty (30) day period shall bear interest at the lesser of (i) one and one-half percent (1½%) per month or (ii) the maximum rate allowed by law. Customer shall also pay any and all of Company's attorney's fees and court costs if any amounts hereunder are collected by an attorney or through legal proceedings. Company reserves the right, among other remedies, either to terminate this agreement or to suspend further deliveries upon failure of Customer to make any payment as provided herein.

4. **LIMITED WARRANTY**. COMPANY MAKES NO WARRANTY, EXPRESSED OR IMPLIED, AS TO THE MERCHANTABILITY, FITNESS FOR PURPOSE, DESCRIPTION, QUALITY, PRODUCTIVENESS, ACCURACY OR ANY OTHER MATTER WITH RESPECT TO PRODUCTS OR SERVICES, ALL SUCH WARRANTIES BEING HEREBY SPECIFICALLY AND EXPRESSLY DISCLAIMED BY COMPANY. COMPANY MAY OFFER TECHNICAL ADVICE OR ASSISTANCE WITH REGARD TO THE PRODUCTS AND SERVICES BASED ON LABORATORY AND/OR FIELD EXPERIENCE AND CUSTOMER UNDERSTANDS AND AGREES THAT SUCH ADVICE REPRESENTS ONLY GOOD FAITH OPINIONS AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE. THE SOLE AND EXPRESS WARRANTY PROVIDED BY COMPANY IS TO WARRANT THAT THE PRODUCTS SOLD AS LISTED ON THE REVERSE SIDE HEREOF COMPLY WITH COMPANY'S SOLE SPECIFICATION AT THE DATE AND TIME OF MANUFACTURE. COMPANY MAKES NO WARRANTY THAT SUCH PRODUCTS SHALL MEET SUCH SPECIFICATION AT ANY TIME AFTER SHIPMENT OF PRODUCTS. USE OF SUCH PRODUCTS IS SPECIFICALLY NOT WARRANTED.

5. **REMEDY**. The exclusive remedy for this warranty for Products shall be limited to, in Company's sole discretion and judgment, the replacement of defective part(s), F.O.B. Company's plant (transportation, redesign, dismantling, disposal of material and installation are not included and shall be borne and paid for by Customer), or repair of defective part(s). . The exclusive remedy for this warranty for Services shall be limited to the repeat of Services performed F.O.B. Company's plant (transportation, redesign, dismantling, disposal of material and installation are not included and shall be borne and paid for by Customer). Any such repeat of Services or replacement or repair of Products shall not include any materials not sold by Company hereunder, and specifically excludes any obligation by Company related to other property of the Customer or any property of third parties. Provided, however, Company may in its sole discretion, decide to instead give Customer credit memorandum for the amounts already paid by Customer to Company for such Product or Service. IN ANY EVENT AND NOTWITHSTANDING THE LANGUAGE TO THE CONTRARY HEREIN, CUSTOMER ACKNOWLEDGES THAT ANY CLAIM IT MAY HAVE ARISING OUT OF OR IN CONNECTION WITH ANY ORIGINAL PRODUCTS AND SERVICES, ANY REPLACEMENT PRODUCTS OR REPEAT OF SERVICES AND THESE CACTUS PURCHASE TERMS SHALL BE LIMITED TO AND NOT EXCEED THE AMOUNT CUSTOMER HAS ACTUALLY PAID TO COMPANY FOR SUCH PRODUCTS AND/OR SERVICES PURSUANT HERETO. If Customer fails to make any such claim within thirty (30) days after completion of Service or delivery of Products, Customer hereby waives (to the extent permitted by applicable law) any and all claims it may or does have with respect to such Products and Services. Unless Customer is an authorized reseller of Company, Company's liability in connection with Products and Services shall extend only to Customer. CUSTOMER HEREBY INDEMNIFIES AND HOLDS COMPANY (AND ITS AGENTS, REPRESENTATIVES, OFFICERS DIRECTORS AND EMPLOYEES) HARMLESS FOR ANY LOSS, EXPENSE OR DAMAGE (WHETHER OF CUSTOMER OR OF ANY THIRD PARTY) ARISING FROM OR IN CONNECTION WITH PRODUCTS AND SERVICES, INCLUDING WITHOUT LIMITATION ANY FAILURE OF SUCH PRODUCTS AND SERVICES TO CONFORM TO CUSTOMER'S ORDER OR SPECIFICATION OR ANY OTHER STANDARD, OR ANY NEGLIGENCE OR BREACH OF WARRANTY BY COMPANY WITH RESPECT TO ANYTHING DONE OR FAILED TO HAVE BEEN DONE BY COMPANY, IF AND TO THE EXTENT THAT SUCH LOSS, EXPENSE OR DAMAGE EXCEEDS THE AMOUNT CUSTOMER HAS ACTUALLY PAID COMPANY PURSUANT HERETO FOR SUCH PRODUCTS OR SERVICES.

6. **INSPECTION**. The results of any inspection or testing reported by the Company to Customer represents only good faith opinions and are not to be construed as warranties or guarantees of the quality, classification, merchantability, fitness for purpose, condition, or liability of any equipment or material that has been inspected or tested by the Company.

7. **INSURANCE**. Each party agrees to maintain comprehensive general liability insurance in the amount of $1,000,000 each occurrence, $2,000,000 general aggregate, and Workers Compensation insurance per statutory requirements providing coverage for the indemnity obligations in this agreement. The Company (and such of its affiliates as it shall designate) including their officers, directors, members, shareholders, partners, joint ventures, employees, agents and representatives shall be named as additional insureds under the policies of Customer on a primary basis to the extent of its indemnification obligations set forth in these CACTUS Purchase Terms, and the policies shall also provide a waiver of subrogation rights in favor of the Company (and such of its affiliates as it shall designate) and their officers, directors, members, shareholders, employees, agents and representatives. The provisions of this Section 7 shall apply and the obligation to maintain insurance of each party in the coverages and amounts set forth herein shall remain in force regardless and independent of the validity or enforceability of the indemnity provisions of Section 8, below; the obligation to obtain insurance is a separate and independent obligation. If the insurance required herein is more or less than allowed by prevailing law, the indemnity obligations in Section 8 below shall be effective only to the maximum extent permitted under applicable law.

8. **INDEMNIFICATION**. The following indemnifications and releases of liability will apply to any Products or Services provided under this contract. COMPANY AND CUSTOMER EXPRESSLY AGREE THAT, TO THE EXTENT REQUIRED BY APPLICABLE LAW TO BE EFFECTIVE, THE INDEMNITIES AND DISCLAIMERS OF WARRANTIES CONTAINED HEREIN ARE "CONSPICUOUS."

A. **Customer Indemnity Obligations**. Customer hereby releases Company from any liability for, and shall protect, defend, indemnify, and hold harmless Company, its parents, affiliates, subsidiaries, partners, joint owners, joint ventures, and its contractors and subcontractors of any tier, and the officers, directors, agents, representatives, employees, insurers, and consultants (specifically excluding any member of Customer Group) of all of the foregoing, and its and their respective successors, heirs and assigns ("Company Group") from and against all costs (including the payment of reasonable attorneys' fees), losses, liabilities, demands, causes of action, damages, or claims of every type and character ("Claims"), arising out of or resulting from or related, directly or indirectly, to (i) injury to, illness or death of Customer its parents, affiliates, subsidiaries, partners, joint owners, joint ventures, and its contractors and subcontractors of any tier, and the officers, directors, agents, representatives, employees, customers, insurers, invitees and consultants of all of the foregoing, and its and their respective successors, heirs and assigns ("Customer Group"), or (ii) loss of or damage to any property of any member of Customer Group, REGARDLESS OF THE CAUSE OF SUCH CLAIMS, INCLUDING THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF COMPANY GROUP, BUT NOT IN THE CASE OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY MEMBER OF COMPANY GROUP.

B. **Company Indemnity Obligations**. Company hereby releases Customer from any liability for, and shall protect, defend, indemnify, and hold harmless Customer from and against all Claims arising out of or resulting from or related, directly or indirectly, to (i) injury to, illness or death of any member of Company Group, or (ii) loss of or damage to any property of any member of Company Group, REGARDLESS OF THE CAUSE OF SUCH CLAIMS, INCLUDING THE NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF CUSTOMER GROUP, BUT NOT IN THE CASE OF GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF ANY MEMBER OF COMPANY GROUP.

C. **Third Party Claims**. Notwithstanding the foregoing, to the extent of its negligence, Company and Customer shall each indemnify, defend and hold harmless from and against all Claims, of every type and character, which are asserted by third parties for bodily injury, death or loss or destruction of property or interests in property in any manner caused by, directly or indirectly resulting from, incident to, connected with or arising out of the work to be performed, Services to be rendered or Products or materials furnished to Customer. When personal injury, death or loss of or damage to property is the result of joint or concurrent negligence of Customer and Company, the indemnitor's duty of indemnification shall be in proportion to its allocable share of such negligence.

D. **Pollution**. Company agrees that it shall be totally responsible for, and shall protect, defend and indemnify, Customer for all losses, damages, claims, demands, costs, charges, and other expenses, including attorneys' fees, for any and all waste and/or hazardous substances which are in Company Group's exclusive possession and control and directly associated with Company Group's equipment and facilities, EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF CUSTOMER GROUP. Customer shall assume all responsibility for, including control and removal of, and shall protect, defend and indemnify Company Group from and against all Claims arising directly or indirectly from all other pollution or contamination which may occur during the conduct of operations hereunder, including, but not limited to, that which may result from fire, blowout, cratering, seepage or any other uncontrolled flow of oil, gas, water or other substance, EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF COMPANY GROUP.

E. **Wild Well**. Customer shall release Company Group of any liability for, and shall protect, defend and indemnify Company Group for any damages, expenses, losses, fines, penalties, costs, expert fees and attorneys' fees arising out of a fire, blow out, cratering, seepage or wild well, including regaining control thereof, debris removal and property restoration and remediation. THIS INDEMNITY APPLIES EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE, ORDINARY OR GROSS) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF COMPANY GROUP.

F. **Underground Damage**. Customer shall release Company Group of any liability for, and shall protect, defend and indemnify Company Group from and against any and all claims, liability and expenses resulting from operations related to the work under this agreement on account of injury to, destruction of, or loss or impairment of any property right in or to oil, gas or other mineral substance or water, if at the time of the act or omission causing such injury, destruction, loss or impairment said substance and not been reduced to physical possession above the surface of the earth, and for any loss or damage to any formation, strata, or reservoir beneath the surface of the earth. THIS INDEMNITY APPLIES EVEN IF THE LOSSES, DAMAGES, CLAIMS, DEMANDS, COSTS, FEES, AND EXPENSES ARE CAUSED NEGLIGENCE (WHETHER SOLE, JOINT OR CONCURRENT, ACTIVE OR PASSIVE, ORDINARY OR GROSS) STRICT LIABILITY, OR ANY OTHER LEGAL FAULT OR RESPONSIBILITY OF ANY MEMBER OF COMPANY GROUP.

G. The foregoing indemnities set forth in these CACTUS Purchase Terms are intended to be enforceable against the parties hereto in accordance with the express terms and scope hereof notwithstanding Texas' Express Negligence Rule or any similar directive that would prohibit or otherwise limit indemnities because of the negligence (whether sole, concurrent, active or passive, ordinary or gross) or other fault or strict liability of Company or Customer.

H. If a claim is asserted against one of the parties to this agreement which may give rise to a claim for indemnity against the other party hereto, the party against whom the claim is first asserted must notify the potential indemnitor in writing and give the potential indemnitor the right to defend or assist in the defense of the claim.

9. **RISK OF LOSS**.

A. Title and risk of loss shall pass to Customer upon delivery as specified in Article 11. Customer's receipt of any material delivered hereunder shall be an unqualified acceptance of, and a waiver by Customer of any and all claims with respect to, such material unless Customer gives Company written notice of claim within thirty (30) days after such receipt. Notwithstanding the foregoing, installation or use of materials or equipment shall unequivocally constitute irrevocable acceptance of said materials. Customer assumes all risk and liability for the results obtained by the use of any material or Products delivered hereunder in work performed by on behalf of Customer or in combination with other or substances. No claim of any kind, whether as to material delivered or for non-delivery of material, and whether or not based on negligence, shall be greater in amount than the purchase price of the

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material in respect of which such claim is made.

B. For Services, Company shall not be liable for loss or deterioration of any equipment and material of Customer under Company's control or stored on Company's premises after Company has completed its work if such loss or deterioration results from atmospheric condition, Act of God or other occurrence not within the reasonable control of Company.

10. **TERMINATION**. Company reserves the right to terminate the order at issue, or any part hereof, solely for its convenience at any time without cause with notice to Customer. Company shall have the right to cancel any unfilled order without notice to Customer in the event that Customer becomes insolvent, adjudicated bankrupt, petitions for or consents to any relief under any bankruptcy reorganization statute, violates a term of these CACTUS Purchase Terms, or is unable to meet its financial obligations in the normal course of business. In the event of such termination, Company shall immediately stop all work hereunder. Prior to delivery, Customer may terminate this order without cause upon thirty (30) day notice in writing to Company. In the event of such termination, Company at its sole option shall cease work up to thirty (30) days after such notice. Upon the cessation of work, Customer agrees to pay Company a reasonable termination charge consisting of a percentage of the Invoice price, such percentage to reflect the value of the Products, Services or work in progress completed upon the cessation of work. Customer shall also pay promptly to Company any costs incurred due to paying and settling claims of Company's vendors or subcontractors arising out of the termination of the order by Customer.

11. **DELIVERY**. Unless different terms are provided on the face of this order, all items are sold FOB Company's manufacturing facility in Bossier City, LA., and Customer shall bear the cost of transportation to any other named destination. Upon notification of Company of delivery, Customer shall become liable and shall bear all risk of loss associated with the Products at issues regardless of whether the Products are at a location controlled by Company and whether or not caused by the negligence of Company. In the case of Customer pick-up, the truck furnished by Customer is the destination and Company's obligations regarding shipments are fulfilled when the Products are loaded on the truck. Items to be shipped to any other destination outside of the United States are sold FOB port of shipment (Customer will deliver and bear the cost of transportation to the named port and will bear the cost of transportation thereafter to the final destination). The means of shipment and carrier to the point at which Company's liability for transportation costs ceases shall be chosen by Company. Excess packing, marking, shipping, and transportation charges resulting from compliance with Customer's request shall be for Customer's account. Unless otherwise agreed in writing, delivery time is not of the essence.

12. **RETURNS/REFUND**. Within ninety (90) days of delivery, Customer has the option to return any non-defective Products (any Products found to be defective will be subject to the warranty and remedies expressed in paragraphs four (4) and five (5) above). Customer shall bear all costs of shipment and/or transportation for such return and risk of loss for the returned Products shall remain with Customer until re-delivered to Company's Yard. Customer shall receive a full refund for any returns, less a twenty percent (20%) restocking fee. Company at all times reserves the right to designate certain Products as non-refundable in Company's Sales Quote or Sales Order. In addition, any made-to-order , special order, and/or Product manufactured to Customer specifications are NOT returnable.

13. **DELAYS**. If a specific shipping date is either not given or is estimated only, and is not promised on the face of this order or in a separate writing signed by Company, Company will not be responsible for delays in filling this order nor liable for any loss or damages resulting from such delays. If a specific shipping date is promised, Company will not be liable for delays resulting from causes beyond Company's control, including without limitation accidents to machinery, fire, flood, act of God or other casualty, vendor delays, labor disputes, labor shortages, lack of transportation facilities, priorities required by, requested by, or granted for the benefit of any governmental agency, or restrictions imposed by law or governmental regulation.

14. **LIMITATION OF DAMAGES**. Notwithstanding any other provision contained herein, Company shall not be liable to Customer Group or any third party for consequential (whether direct or indirect damages), indirect, incidental, special or punitive damages, howsoever arising, including, but not limited to loss of profits (whether direct or indirect damages), revenues, production or business opportunities, WHETHER OR NOT SUCH LOSSES ARE THE RESULT IN WHOLE OR IN PART FROM THE NEGLIGENCE (WHETHER SOLE, JOINT, CONCURRENT OR COMPARATIVE, ACTIVE OR PASSIVE, ORDINARY OR GROSS) OF COMPANY GROUP, OR ANY DEFECT IN THE PREMISES, PRE-EXISTING CONDITIONS, PATENT OR LATENT, BREACH OF STATUTORY DUTY, STRICT LIABILITY OR ANY OTHER THEORY OF LEGAL LIABILITY OF COMPANY GROUP (EXCLUDING ONLY LOSSES CAUSED BY THE WILLFUL MISCONDUCT OF COMPANY GROUP).

15. **SECURITY INTEREST**. Customer grants Company, and Company reserves, a security interest, covering all Customer's obligations under these terms (including any liability for breach of Customer's obligations), and applying to all of Customer's right, title, and interest in the Leased Equipment, together with all accessions thereto and any proceeds that may arise in connection with the sale or disposition thereof. Customer shall cooperate with Company in the filing of Financing Statements to perfect such security interest. Furthermore, Customer authorizes Company to execute and file Financing Statements without Customer's signature in any jurisdiction in which such procedure is authorized. Customer warrants, covenants and agrees that it will not, without prior written consent of Company, sell, contract to sell, lease, encumber, or dispose of the Leased Equipment or any interest in it until all obligations secured by this security interest have been fully satisfied.

16. **PATENT AND INTELLECTUAL PROPERTY**. The sale of any Products hereunder does not convey any intellectual property license by implication, estoppel or otherwise regarding the Products. Company retains the copyright in all documents, catalogs and plans supplied to Customer pursuant to or ancillary to the contract. Unless otherwise agreed in writing, Customer shall obtain no intellectual property interest in any Company Product.

17. **TAXES**. Unless otherwise specifically provided for herein, Customer shall be liable for all federal, state, or local taxes or import duties assessed by any governmental entity of any jurisdiction in connection with the Products or Services furnished hereunder.

18. **DECEPTIVE TRADE PRACTICES**. Customer acknowledges the application of Section 17.45(4) of the Texas Deceptive Trade Practices Act (Texas Business Commission Code §17.41 et. seq.) (the "Act") to any transaction contemplated hereby and represents that it is not a "consumer" for the purposes of the Act.

19. **NO WAIVER**. Failure to enforce any or all of the provisions in these CACTUS Purchase Terms in any particular instance shall not constitute or be deemed to constitute a waiver of or preclude subsequent enforcement of the same provision or any other provision of these CACTUS Purchase Terms. Should any provision of these CACTUS Purchase Terms be declared invalid or unenforceable all other provisions of these CACTUS Purchase Terms shall remain in full force and effect.

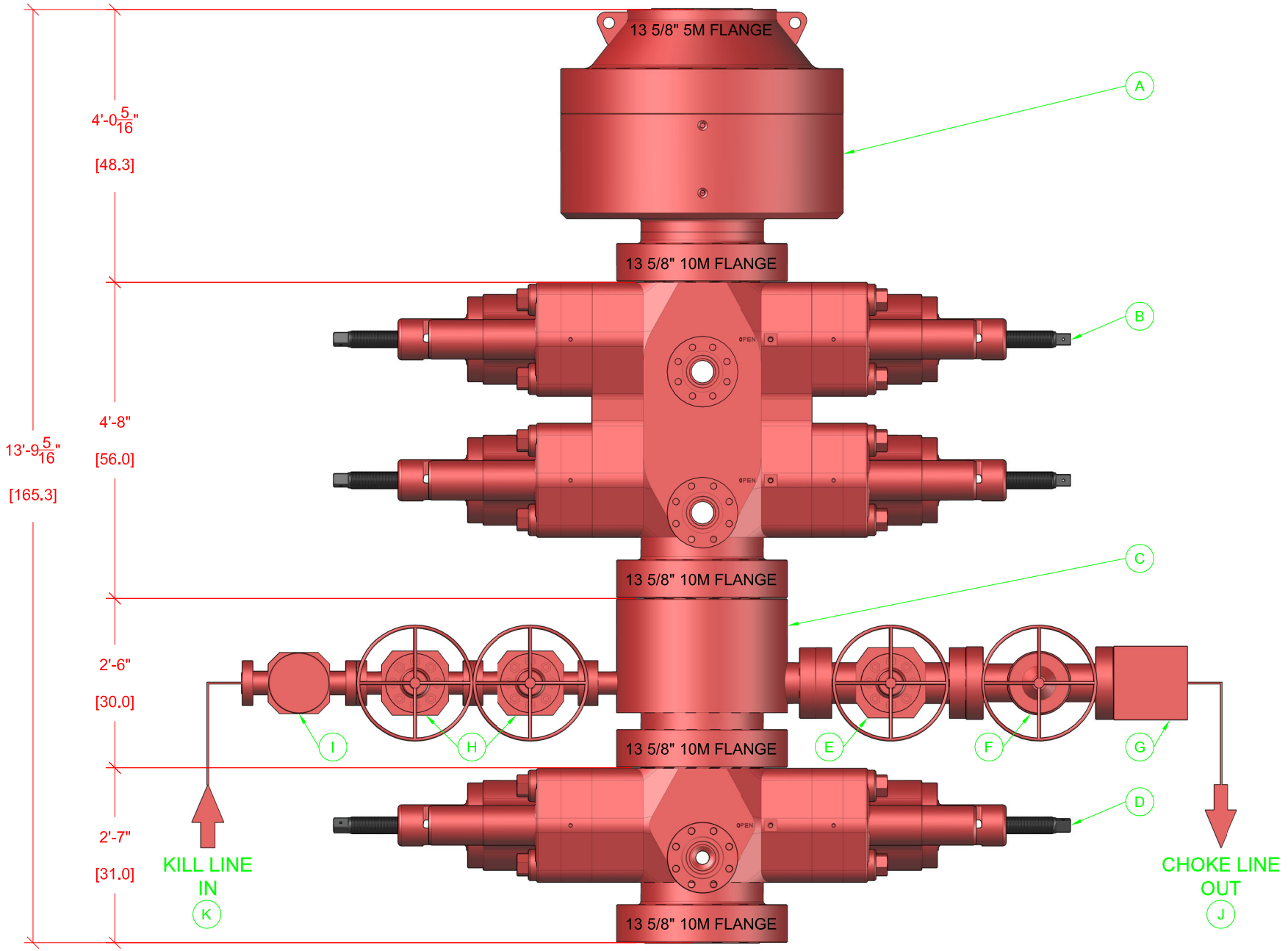
20. **CHOICE OF LAW**. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND SHALL BE PERFORMABLE IN HARRIS COUNTY, TEXAS. WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPALS AND WAIVER OF SAME, EACH PARTY HERETO SUBMITS TO THE JURISDICTION OF THE COURTS OF THE STATE OF TEXAS IN HARRIS COUNTY, TEXAS AND THE FEDERAL COURTS IN AND FOR THE SOUTHERN DISTRICT OF TEXAS SITTING IN HOUSTON, TEXAS IN CONNECTION WITH ANY DISPUTE ARISING UNDER THIS AGREEMENT OR ANY DOCUMENT OR INSTRUMENT ENTERED INTO IN CONNECTION HEREWITH.

21. **AUTHORITY**. Customer warrants and represents that the individual receiving this order at issue on behalf of Customer has the authority to enter into these CACTUS Purchase Terms on behalf of Customer, and that upon receipt these CACTUS Purchase Terms shall be binding upon Customer.

22. **FORCE MAJEURE**. If Company is unable to carry out its obligations hereunder by reason of force majeure, then upon Company's giving of notice and reasonably full particulars of such force majeure in writing to Customer, Company's obligations that are affected by force majeure shall be suspended during the continuance of the force majeure and Company shall not be liable to Customer for any damages incurred by the Customer as a result thereof.

23. **CONFIDENTIALITY**. Customer acknowledges the highly secret and valuable nature of all proprietary inventions, methods, processes, designs, know-how, and trade secrets embodied in the Company's equipment, Products and Services and its components (hereinafter referred to as "Confidential Data"). Accordingly, Customer agrees not to disclose or use any Confidential Data. Customer further agrees to take any and all necessary precautions to prevent disclosure of the Confidential Data associated with the Company's equipment, Products and Services and components thereof to persons other than those employees of Customer for whom such disclosure is necessary for performance of the work hereunder.

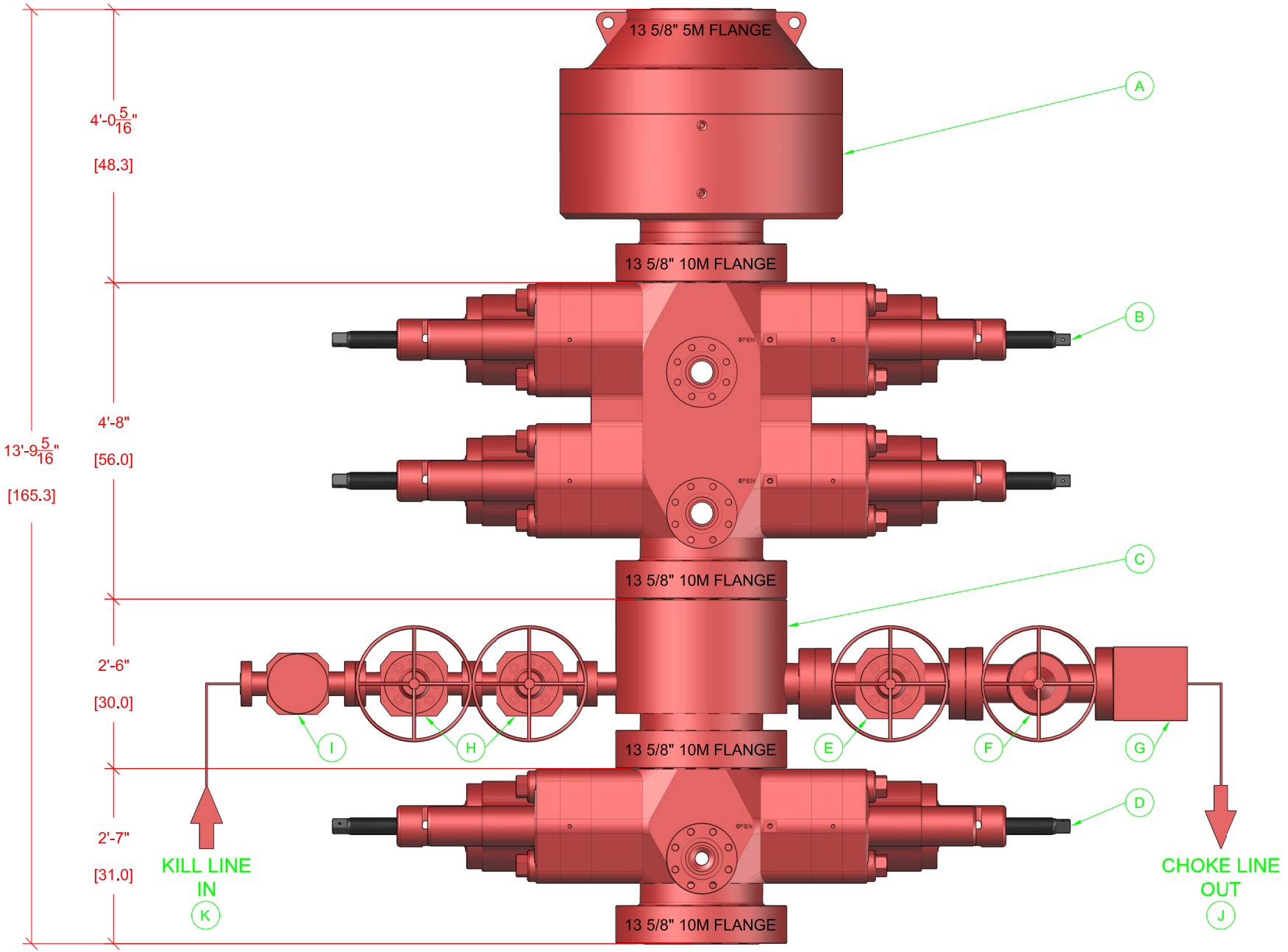
24. **COMPLIANCE**. Customer expressly agrees to comply with and abide by, all of the laws of the United States and of the State of Texas, including, but not limited to, OSHA, EPA and all rules and regulations now existing or that may be hereafter promulgated under and in accordance with any such law or laws, and hereby agrees to indemnify and hold Company harmless from any and all claims, demands, or damages incurred by Company arising from Customer's failure to comply with all laws and governmental regulations. The indemnities in this paragraph shall be in addition to any other indemnity obligations between Customer and Company, including any other indemnity obligations contained herein.



BOP EQUIPMENT INFORMATION

DESCRIPTION	MODEL	QTY
ANNULAR BOP	13 5/8" 5M	1
DOUBLE RAM BOP	13 5/8" 10M TYPE-U	1
MUD CROSS	13 5/8" 10M	1
SINGLE RAM BOP	13 5/8" 10M TYPE-U	1
GATE VALVE	4 1/16" 10M FC MANUAL	1
HCR VALVE	4 1/16" 10M HCR	1

ITEM	DESCRIPTION	MODEL	QTY
G	STUDDED BLOCK	4 1/16" 10M	1
H	GATE VALE	2 1/16" 10M FC MANUAL	2
I	CHECK VALVE	2 1/16" 10M	1
J	CHOKE HOSE	4 1/16" 10M	1
K	KILL HOSE	2 1/16" 10M	1
L			



BOP EQUIPMENT INFORMATION

ITEM	DESCRIPTION	MODEL	QTY
A	ANNULAR BOP	13 5/8" 5M	1
B	DOUBLE RAM BOP	13 5/8" 10M TYPE-U	1
C	MUD CROSS	13 5/8" 10M	1
D	SINGLE RAM BOP	13 5/8" 10M TYPE-U	1
E	GATE VALVE	4 1/16" 10M FC MANUAL	1
F	HCR VALVE	4 1/16" 10M HCR	1

ITEM	DESCRIPTION	MODEL	QTY
G	STUDDED BLOCK	4 1/16" 10M	1
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I	CHECK VALVE	2 1/16" 10M	1
J	CHOKE HOSE	4 1/16" 10M	1
K	KILL HOSE	2 1/16" 10M	1
L			

1. Geological Formations

TVD of target 8,772
MD at TD 18,661

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	115	N/A	
Top of Salt	561	N/A	
Base of Salt/Lamar	2788	N/A	
Top Delaware Sands/Bell Canyon	2941	N/A	
Cherry Canyon	3626	N/A	
Brushy Canyon	4920	N/A	
Lower Brushy Canyon	5764	N/A	
Bone Spring Lime	6509	N/A	
1st Bone Spring Sand	7521	N/A	
2nd Bone Spring Sand	8290	N/A	
2nd Bone Spring Sand - Target	8617	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	520	520	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.29	7.68	12.90
12 1/4	0	2775	2780	9-5/8"	36.00	J-55	LT&C	1.40	2.44	4.53
8 3/4	0	8073	8073	5-1/2"						
8 3/4	8073	18661	8772	5-1/2"	20.00	P-110	BT&C	2.56	2.85	45.85
						BLM Minimum Safety Factor		1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

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.
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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
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Hockley County	806-894-3126	Levelland	806-894-3155	Covenant Health	806-894-4963
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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				

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Coterra: H2S Plan

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Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25 Proposal
Geodetic Report
Def Plan

Report Date:	May 09, 2025 - 10:12 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	89.870 °(GRID North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra - Laguna Grande 29-28 Fed Com Pad (south) / Laguna Grande	**TVD Reference Datum:**	RKB
Well:	Laguna Grande 29-28 Fed Com 5H	**TVD Reference Elevation:**	2989.200 ft above MSL
Borehole:	Laguna Grande 29-28 Fed Com 5H	**Seabed / Ground Elevation:**	2966.200 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.516°
Survey Name:	Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25	**Total Gravity Field Strength:**	998.473mgn (9.80665 Based)
Survey Date:	May 08, 2025	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	109.076 ° / 10842.800 ft / 6.401 / 1.236	**Total Magnetic Field Strength:**	47243.672 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.827°
Location Lat / Long:	32°16'19.90477"N , 104°0'51.28298"W	**Declination Date:**	May 09, 2025
Location Grid N/E Y/X:	N 462904.420 ftUS , E 639957.880 ftUS	**Magnetic Declination Model:**	HDGM 2025
CRS Grid Convergence Angle:	0.17°	**North Reference:**	Grid North
Grid Scale Factor:	0.99992023(Applied)	**Grid Convergence Used:**	0.17°
Version / Patch:	2024.5.0.1	**Total Corr Mag North->Grid North:**	6.346°
		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 [1305'FSL, 395'FWL]	0.00	0.00	0.00	0.00	-2,989.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527			
Top Salt□	561.00	0.00	345.66	561.00	-2,428.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Nudge, Build 2°/100ft	1,500.00	0.00	345.66	1,500.00	-1,489.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Hold	2,000.12	10.00	345.66	1,997.59	-991.61	-10.69	42.19	-10.79	462,946.60	639,947.09	32.27231181	-104.01427977	2.00	2.00	0.00
Lamar□	2,802.74	10.00	345.66	2,788.00	-201.20	-44.93	177.25	-45.33	463,081.65	639,912.56	32.27268332	-104.01439021	0.00	0.00	0.00
Bell Canyon□	2,958.10	10.00	345.66	2,941.00	-48.20	-51.55	203.39	-52.01	463,107.79	639,905.87	32.27275523	-104.01441159	0.00	0.00	0.00
Cherry Canyon□	3,653.67	10.00	345.66	3,626.00	636.80	-81.22	320.44	-81.95	463,224.83	639,875.94	32.27307720	-104.01450730	0.00	0.00	0.00
Drop 2°/100ft	4,868.21	10.00	345.66	4,822.08	1,832.88	-133.02	524.81	-134.21	463,429.19	639,823.68	32.27363938	-104.01467443	0.00	0.00	0.00
Brushy Canyon□	4,967.36	8.02	345.66	4,920.00	1,930.80	-136.83	539.86	-138.06	463,444.23	639,819.83	32.27368076	-104.01468674	2.00	-2.00	0.00
Hold	5,368.34	0.00	345.66	5,319.67	2,330.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	2.00	-2.00	0.00
Lower Brushy Canyon□	5,812.67	0.00	345.66	5,764.00	2,774.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
Bone Spring Lime□	6,557.67	0.00	345.66	6,509.00	3,519.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
1st BS SS □	7,569.67	0.00	345.66	7,521.00	4,531.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
KOP, Build 10°/100ft	8,073.34	0.00	345.66	8,024.67	5,035.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
2nd BS SS□	8,349.20	27.59	89.87	8,290.00	5,300.80	-78.57	567.15	-79.86	463,471.52	639,878.02	32.27375529	-104.01449819	10.00	10.00	0.00
Build 5°/100ft	8,823.34	75.00	89.87	8,578.10	5,588.90	280.95	567.96	279.66	463,472.34	640,237.52	32.27375459	-104.01333502	10.00	10.00	0.00
Landing Point	9,104.74	89.07	89.87	8,617.00	5,627.80	558.94	568.59	557.65	463,472.97	640,515.48	32.27375405	-104.01243566	5.00	5.00	0.00
	9,204.74	89.07	89.87	8,618.62	5,629.42	658.92	568.82	657.64	463,473.19	640,615.46	32.27375385	-104.01211217	0.00	0.00	0.00
	9,204.78	89.07	89.87	8,618.62	5,629.42	658.97	568.82	657.68	463,473.19	640,615.51	32.27375385	-104.01211202	2.00	1.34	1.48
Section 29-28 Line Cross, Pool N	13,431.00	89.07	89.87	8,687.17	5,697.97	4,884.63	578.36	4,883.33	463,482.73	644,840.81	32.27374455	-103.99844084	0.00	0.00	0.00
Pool NMNM086024 exit to NMNI	17,428.00	89.07	89.87	8,752.00	5,762.80	8,881.11	587.38	8,879.80	463,491.75	648,836.95	32.27373439	-103.98551115	0.00	0.00	0.00
Laguna Grande 29-28 Fed Com 5	18,660.90	89.07	89.87	8,772.00	5,782.80	10,113.84	590.16	10,112.53	463,494.53	650,069.58	32.27373099	-103.98152293	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	8,000.000	1/100.000	'.5 – 12.25 – 8.75	3.375 – 9.625 – 7		A001Mb_MWD		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur
	1	8,000.000	18,660.896	1/100.000	8.75 – 6.125	7 – 4.5		A008Mb_MWD+IFR1+MS		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,201.800	17.500	13.375	
4,035.270	12.250	9.625	
8,050.467	8.750	7.000	
18,660.896	6.125	4.500	

Well Control Plan

Warning Signs of a Kick

If a kick is ever suspected, perform flow check.

While Drilling:

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

While Tripping:

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

While Out of the Hole:

1. Flow
2. Pit gain

Well Control Procedures with Diverter

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

If rotating head is installed:

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

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

If rotating head is not installed:

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

Well Control Procedures

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

General Well Control

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

Hard Shut-In

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

Flow Check when on Bottom

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

Shutting in while Drilling

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

Flow Check while Tripping

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

Shutting in while Tripping

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

Shutting in while Out of Hole

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

Information to Record while Shut-In

1. Shut in drill pipe pressure every 5 minutes

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

H2S with Annular Diverter:

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

H2S with BOP's:

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

Procedure for Closing Blind Rams

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

Procedure for Opening Blind Rams

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

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

BOP Drills

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

Choke Manifold Freeze Prevention

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

Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25 Proposal
Geodetic Report
Def Plan

Report Date:	May 09, 2025 - 10:12 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	89.870 °(GRID North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra - Laguna Grande 29-28 Fed Com Pad (south) / Laguna Grande	**TVD Reference Datum:**	RKB
Well:	Laguna Grande 29-28 Fed Com 5H	**TVD Reference Elevation:**	2989.200 ft above MSL
Borehole:	Laguna Grande 29-28 Fed Com 5H	**Seabed / Ground Elevation:**	2966.200 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.516°
Survey Name:	Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25	**Total Gravity Field Strength:**	998.473mgn (9.80665 Based)
Survey Date:	May 08, 2025	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	109.076 ° / 10842.800 ft / 6.401 / 1.236	**Total Magnetic Field Strength:**	47243.672 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.827°
Location Lat / Long:	32°16'19.90477"N , 104°0'51.28298"W	**Declination Date:**	May 09, 2025
Location Grid N/E Y/X:	N 462904.420 ftUS , E 639957.880 ftUS	**Magnetic Declination Model:**	HDGM 2025
CRS Grid Convergence Angle:	0.17°	**North Reference:**	Grid North
Grid Scale Factor:	0.99992023(Applied)	**Grid Convergence Used:**	0.17°
Version / Patch:	2024.5.0.1	**Total Corr Mag North->Grid North:**	6.346°
		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 [1305'FSL, 395'FWL]	0.00	0.00	0.00	0.00	-2,989.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527			
	100.00	0.00	345.66	100.00	-2,889.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	200.00	0.00	345.66	200.00	-2,789.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	300.00	0.00	345.66	300.00	-2,689.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	400.00	0.00	345.66	400.00	-2,589.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	500.00	0.00	345.66	500.00	-2,489.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Top Salt□	561.00	0.00	345.66	561.00	-2,428.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	600.00	0.00	345.66	600.00	-2,389.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	700.00	0.00	345.66	700.00	-2,289.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	800.00	0.00	345.66	800.00	-2,189.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	900.00	0.00	345.66	900.00	-2,089.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,000.00	0.00	345.66	1,000.00	-1,989.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,100.00	0.00	345.66	1,100.00	-1,889.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,200.00	0.00	345.66	1,200.00	-1,789.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,300.00	0.00	345.66	1,300.00	-1,689.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,400.00	0.00	345.66	1,400.00	-1,589.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Nudge, Build 2°/100ft	1,500.00	0.00	345.66	1,500.00	-1,489.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,600.00	2.00	345.66	1,599.98	-1,389.22	-0.43	1.69	-0.43	462,906.11	639,957.45	32.27220042	-104.01424666	2.00	2.00	0.00
	1,700.00	4.00	345.66	1,699.84	-1,289.36	-1.71	6.76	-1.73	462,911.18	639,956.15	32.27221437	-104.01425080	2.00	2.00	0.00
	1,800.00	6.00	345.66	1,799.45	-1,189.75	-3.85	15.20	-3.89	462,919.62	639,953.99	32.27223759	-104.01425771	2.00	2.00	0.00
	1,900.00	8.00	345.66	1,898.70	-1,090.50	-6.85	27.01	-6.91	462,931.43	639,950.97	32.27227007	-104.01426736	2.00	2.00	0.00
	2,000.00	10.00	345.66	1,997.47	-991.73	-10.69	42.17	-10.78	462,946.58	639,947.10	32.27231175	-104.01427975	2.00	2.00	0.00
Hold	2,000.12	10.00	345.66	1,997.59	-991.61	-10.69	42.19	-10.79	462,946.60	639,947.09	32.27231181	-104.01427977	2.00	2.00	0.00
	2,100.00	10.00	345.66	2,095.95	-893.25	-14.95	58.99	-15.09	462,963.41	639,942.79	32.27235804	-104.01429351	0.00	0.00	0.00
	2,200.00	10.00	345.66	2,194.43	-794.77	-19.22	75.82	-19.39	462,980.23	639,938.49	32.27240433	-104.01430727	0.00	0.00	0.00
	2,300.00	10.00	345.66	2,292.91	-696.29	-23.48	92.65	-23.69	462,997.06	639,934.19	32.27245062	-104.01432103	0.00	0.00	0.00
	2,400.00	10.00	345.66	2,391.39	-597.81	-27.75	109.48	-28.00	463,013.89	639,929.89	32.27249690	-104.01433479	0.00	0.00	0.00
	2,500.00	10.00	345.66	2,489.87	-499.33	-32.01	126.30	-32.30	463,030.71	639,925.58	32.27254319	-104.01434855	0.00	0.00	0.00
	2,600.00	10.00	345.66	2,588.35	-400.85	-36.28	143.13	-36.60	463,047.54	639,921.28	32.27258948	-104.01436231	0.00	0.00	0.00
	2,700.00	10.00	345.66	2,686.83	-302.37	-40.54	159.96	-40.91	463,064.36	639,916.98	32.27263577	-104.01437608	0.00	0.00	0.00
	2,800.00	10.00	345.66	2,785.31	-203.89	-44.81	176.79	-45.21	463,081.19	639,912.67	32.27268205	-104.01438984	0.00	0.00	0.00
Lamar□	2,802.74	10.00	345.66	2,788.00	-201.20	-44.93	177.25	-45.33	463,081.65	639,912.56	32.27268332	-104.01439021	0.00	0.00	0.00
	2,900.00	10.00	345.66	2,883.79	-105.41	-49.07	193.61	-49.51	463,098.02	639,908.37	32.27272834	-104.01440360	0.00	0.00	0.00
Bell Canyon□	2,958.10	10.00	345.66	2,941.00	-48.20	-51.55	203.39	-52.01	463,107.79	639,905.87	32.27275523	-104.01441159	0.00	0.00	0.00
	3,000.00	10.00	345.66	2,982.27	-6.93	-53.34	210.44	-53.82	463,114.84	639,904.07	32.27277463	-104.01441736	0.00	0.00	0.00
	3,100.00	10.00	345.66	3,080.75	91.55	-57.60	227.27	-58.12	463,131.67	639,899.77	32.27282092	-104.01443112	0.00	0.00	0.00
	3,200.00	10.00	345.66	3,179.23	190.03	-61.87	244.10	-62.42	463,148.50	639,895.46	32.27286720	-104.01444488	0.00	0.00	0.00
	3,300.00	10.00	345.66	3,277.71	288.51	-66.13	260.92	-66.73	463,165.32	639,891.16	32.27291349	-104.01445864	0.00	0.00	0.00
	3,400.00	10.00	345.66	3,376.19	386.99	-70.40	277.75	-71.03	463,182.15	639,886.86	32.27295978	-104.01447240	0.00	0.00	0.00
	3,500.00	10.00	345.66	3,474.67	485.47	-74.66	294.58	-75.33	463,198.97	639,882.55	32.27300607	-104.01448616	0.00	0.00	0.00
	3,600.00	10.00	345.66	3,573.15	583.95	-78.93	311.41	-79.64	463,215.80	639,878.25	32.27305235	-104.01449992	0.00	0.00	0.00
Cherry Canyon□	3,653.67	10.00	345.66	3,626.00	636.80	-81.22	320.44	-81.95	463,224.83	639,875.94	32.27307720	-104.01450730	0.00	0.00	0.00
	3,700.00	10.00	345.66	3,671.63	682.43	-83.19	328.23	-83.94	463,232.63	639,873.95	32.27309864	-104.01451368	0.00	0.00	0.00
	3,800.00	10.00	345.66	3,770.11	780.91	-87.46	345.06	-88.24	463,249.45	639,869.64	32.27314493	-104.01452744	0.00	0.00	0.00
	3,900.00	10.00	345.66	3,868.59	879.39	-91.72	361.89	-92.55	463,266.28	639,865.34	32.27319122	-104.01454120	0.00	0.00	0.00
	4,000.00	10.00	345.66	3,967.07	977.87	-95.99	378.72	-96.85	463,283.10	639,861.04	32.27323750	-104.01455496	0.00	0.00	0.00
	4,100.00	10.00	345.66	4,065.55	1,076.35	-100.26	395.54	-101.15	463,299.93	639,856.74	32.27328379	-104.01456872	0.00	0.00	0.00
	4,200.00	10.00	345.66	4,164.03	1,174.83	-104.52	412.37	-105.46	463,316.76	639,852.43	32.27333008	-104.01458248	0.00	0.00	0.00
	4,300.00	10.00	345.66	4,262.51	1,273.31	-108.79	429.20	-109.76	463,333.58	639,848.13	32.27337637	-104.01459624	0.00	0.00	0.00
	4,400.00	10.00	345.66	4,360.99	1,371.79	-113.05	446.03	-114.06	463,350.41	639,843.83	32.27342265	-104.01461000	0.00	0.00	0.00
	4,500.00	10.00	345.66	4,459.47	1,470.27	-117.32	462.85	-118.37	463,367.23	639,839.52	32.27346894	-104.01462376	0.00	0.00	0.00
	4,600.00	10.00	345.66	4,557.95	1,568.75	-121.58	479.68	-122.67	463,384.06	639,835.22	32.27351523	-104.01463753	0.00	0.00	0.00
	4,700.00	10.00	345.66	4,656.43	1,667.23	-125.85	496.51	-126.97	463,400.89	639,830.92	32.27356152	-104.01465129	0.00	0.00	0.00
	4,800.00	10.00	345.66	4,754.91	1,765.71	-130.11	513.33	-131.28	463,417.71	639,826.61	32.27360780	-104.01466505	0.00	0.00	0.00
Drop 2°/100ft	4,868.21	10.00	345.66	4,822.08	1,832.88	-133.02	524.81	-134.21	463,429.19	639,823.68	32.27363938	-104.01467443	0.00	0.00	0.00
	4,900.00	9.37	345.66	4,853.42	1,864.22	-134.33	529.99	-135.54	463,434.37	639,822.35	32.27365363	-104.01467867	2.00	-2.00	0.00
Brushy Canyon□	4,967.36	8.02	345.66	4,920.00	1,930.80	-136.83	539.86	-138.06	463,444.23	639,819.83	32.27368076	-104.01468674	2.00	-2.00	0.00
	5,000.00	7.37	345.66	4,952.35	1,963.15	-137.91	544.09	-139.14	463,448.47	639,818.75	32.27369240	-104.01469020	2.00	-2.00	0.00
	5,100.00	5.37	345.66	5,051.73	2,062.53	-140.63	554.83	-141.89	463,459.21	639,816.00	32.27372195	-104.01469898	2.00	-2.00	0.00
	5,200.00	3.37	345.66	5,151.43	2,162.23	-142.50	562.21	-143.77	463,466.58	639,814.12	32.27374224	-104.01470501	2.00	-2.00	0.00
	5,300.00	1.37	345.66	5,251.34	2,262.14	-143.51	566.21	-144.80	463,470.58	639,813.09	32.27375325	-104.01470829	2.00	-2.00	0.00
Hold	5,368.34	0.00	345.66	5,319.67	2,330.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	2.00	-2.00	0.00
	5,400.00	0.00	345.66	5,351.33	2,362.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,500.00	0.00	345.66	5,451.33	2,462.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,600.00	0.00	345.66	5,551.33	2,562.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,700.00	0.00	345.66	5,651.33	2,662.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,800.00	0.00	345.66	5,751.33	2,762.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
Lower Brushy Canyon□	5,812.67	0.00	345.66	5,764.00	2,774.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,900.00	0.00	345.66	5,851.33	2,862.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,000.00	0.00	345.66	5,951.33	2,962.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,100.00	0.00	345.66	6,051.33	3,062.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,200.00	0.00	345.66	6,151.33	3,162.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,300.00	0.00	345.66	6,251.33	3,262.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,400.00	0.00	345.66	6,351.33	3,362.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,500.00	0.00	345.66	6,451.33	3,462.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
Bone Spring Lime□	6,557.67	0.00	345.66	6,509.00	3,519.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,600.00	0.00	345.66	6,551.33	3,562.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,700.00	0.00	345.66	6,651.33	3,662.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,800.00	0.00	345.66	6,751.33	3,762.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,900.00	0.00	345.66	6,851.33	3,862.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,000.00	0.00	345.66	6,951.33	3,962.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,100.00	0.00	345.66	7,051.33	4,062.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,200.00	0.00	345.66	7,151.33	4,162.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,300.00	0.00	345.66	7,251.33	4,262.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,400.00	0.00	345.66	7,351.33	4,362.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,500.00	0.00	345.66	7,451.33	4,462.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
1st BS SS □	7,569.67	0.00	345.66	7,521.00	4,531.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,600.00	0.00	345.66	7,551.33	4,562.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,700.00	0.00	345.66	7,651.33	4,662.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,800.00	0.00	345.66	7,751.33	4,762.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,900.00	0.00	345.66	7,851.33	4,862.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	8,000.00	0.00	345.66	7,951.33	4,962.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
KOP, Build 10°/100ft	8,073.34	0.00	345.66	8,024.67	5,035.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	8,100.00	2.67	89.87	8,051.32	5,062.12	-143.09	567.00	-144.38	463,471.38	639,813.51	32.27375542	-104.01470692	10.00	10.00	0.00
	8,200.00	12.67	89.87	8,150.30	5,161.10	-129.77	567.03	-131.06	463,471.41	639,826.83	32.27375539	-104.01466382	10.00	10.00	0.00
	8,300.00	22.67	89.87	8,245.47	5,256.27	-99.46	567.10	-100.75	463,471.47	639,857.14	32.27375533	-104.01456576	10.00	10.00	0.00
2nd BS SS□	8,349.20	27.59	89.87	8,290.00	5,300.80	-78.57	567.15	-79.86	463,471.52	639,878.02	32.27375529	-104.01449819	10.00	10.00	0.00
	8,400.00	32.67	89.87	8,333.92	5,344.72	-53.09	567.21	-54.37	463,471.58	639,903.51	32.27375525	-104.01441573	10.00	10.00	0.00
	8,500.00	42.67	89.87	8,412.98	5,423.78	7.94	567.34	6.65	463,471.72	639,964.53	32.27375513	-104.01421829	10.00	10.00	0.00
	8,600.00	52.67	89.87	8,480.24	5,491.04	81.77	567.51	80.48	463,471.89	640,038.36	32.27375498	-104.01397943	10.00	10.00	0.00
	8,700.00	62.67	89.87	8,533.66	5,544.46	166.16	567.70	164.87	463,472.08	640,122.74	32.27375482	-104.01370641	10.00	10.00	0.00
	8,800.00	72.67	89.87	8,571.61	5,582.41	258.54	567.91	257.25	463,472.29	640,215.11	32.27375464	-104.01340753	10.00	10.00	0.00
Build 5°/100ft	8,823.34	75.00	89.87	8,578.10	5,588.90	280.95	567.96	279.66	463,472.34	640,237.52	32.27375459	-104.01333502	10.00	10.00	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)
	8,900.00	78.83	89.87	8,595.46	5,606.26	355.61	568.13	354.32	463,472.51	640,312.17	32.27375445	-104.01309348	5.00	5.00	0.00
	9,000.00	83.83	89.87	8,610.52	5,621.32	454.44	568.36	453.15	463,472.73	640,410.99	32.27375425	-104.01277374	5.00	5.00	0.00
	9,100.00	88.83	89.87	8,616.91	5,627.71	554.20	568.58	552.91	463,472.96	640,510.75	32.27375406	-104.01245098	5.00	5.00	0.00
Landing Point	9,104.74	89.07	89.87	8,617.00	5,627.80	558.94	568.59	557.65	463,472.97	640,515.48	32.27375405	-104.01243566	5.00	5.00	0.00
	9,200.00	89.07	89.87	8,618.55	5,629.35	654.19	568.81	652.90	463,473.18	640,610.73	32.27375386	-104.01212750	0.00	0.00	0.00
	9,204.74	89.07	89.87	8,618.62	5,629.42	658.92	568.82	657.64	463,473.19	640,615.46	32.27375385	-104.01211217	0.00	0.00	0.00
	9,204.78	89.07	89.87	8,618.62	5,629.42	658.97	568.82	657.68	463,473.19	640,615.51	32.27375385	-104.01211202	2.00	1.34	1.48
	9,300.00	89.07	89.87	8,620.17	5,630.97	754.18	569.04	752.89	463,473.41	640,710.70	32.27375365	-104.01180401	0.00	0.00	0.00
	9,400.00	89.07	89.87	8,621.79	5,632.59	854.16	569.26	852.87	463,473.64	640,810.68	32.27375345	-104.01148053	0.00	0.00	0.00
	9,500.00	89.07	89.87	8,623.41	5,634.21	954.15	569.49	952.86	463,473.86	640,910.66	32.27375325	-104.01115704	0.00	0.00	0.00
	9,600.00	89.07	89.87	8,625.03	5,635.83	1,054.14	569.71	1,052.85	463,474.09	641,010.64	32.27375304	-104.01083356	0.00	0.00	0.00
	9,700.00	89.07	89.87	8,626.66	5,637.46	1,154.12	569.94	1,152.83	463,474.31	641,110.62	32.27375283	-104.01051007	0.00	0.00	0.00
	9,800.00	89.07	89.87	8,628.28	5,639.08	1,254.11	570.16	1,252.82	463,474.54	641,210.60	32.27375263	-104.01018658	0.00	0.00	0.00
	9,900.00	89.07	89.87	8,629.90	5,640.70	1,354.10	570.39	1,352.81	463,474.76	641,310.57	32.27375242	-104.00986310	0.00	0.00	0.00
	10,000.00	89.07	89.87	8,631.52	5,642.32	1,454.08	570.62	1,452.79	463,474.99	641,410.55	32.27375221	-104.00953961	0.00	0.00	0.00
	10,100.00	89.07	89.87	8,633.14	5,643.94	1,554.07	570.84	1,552.78	463,475.21	641,510.53	32.27375200	-104.00921613	0.00	0.00	0.00
	10,200.00	89.07	89.87	8,634.77	5,645.57	1,654.06	571.07	1,652.77	463,475.44	641,610.51	32.27375179	-104.00889264	0.00	0.00	0.00
	10,300.00	89.07	89.87	8,636.39	5,647.19	1,754.04	571.29	1,752.75	463,475.67	641,710.49	32.27375158	-104.00856916	0.00	0.00	0.00
	10,400.00	89.07	89.87	8,638.01	5,648.81	1,854.03	571.52	1,852.74	463,475.89	641,810.47	32.27375137	-104.00824567	0.00	0.00	0.00
	10,500.00	89.07	89.87	8,639.63	5,650.43	1,954.02	571.74	1,952.73	463,476.12	641,910.45	32.27375116	-104.00792219	0.00	0.00	0.00
	10,600.00	89.07	89.87	8,641.25	5,652.05	2,054.00	571.97	2,052.71	463,476.34	642,010.42	32.27375094	-104.00759870	0.00	0.00	0.00
	10,700.00	89.07	89.87	8,642.88	5,653.68	2,153.99	572.20	2,152.70	463,476.57	642,110.40	32.27375073	-104.00727522	0.00	0.00	0.00
	10,800.00	89.07	89.87	8,644.50	5,655.30	2,253.98	572.42	2,252.68	463,476.79	642,210.38	32.27375051	-104.00695173	0.00	0.00	0.00
	10,900.00	89.07	89.87	8,646.12	5,656.92	2,353.96	572.65	2,352.67	463,477.02	642,310.36	32.27375030	-104.00662825	0.00	0.00	0.00
	11,000.00	89.07	89.87	8,647.74	5,658.54	2,453.95	572.87	2,452.66	463,477.25	642,410.34	32.27375008	-104.00630476	0.00	0.00	0.00
	11,100.00	89.07	89.87	8,649.36	5,660.16	2,553.94	573.10	2,552.64	463,477.47	642,510.32	32.27374986	-104.00598128	0.00	0.00	0.00
	11,200.00	89.07	89.87	8,650.99	5,661.79	2,653.93	573.32	2,652.63	463,477.70	642,610.29	32.27374964	-104.00565779	0.00	0.00	0.00
	11,300.00	89.07	89.87	8,652.61	5,663.41	2,753.91	573.55	2,752.62	463,477.92	642,710.27	32.27374942	-104.00533431	0.00	0.00	0.00
	11,400.00	89.07	89.87	8,654.23	5,665.03	2,853.90	573.77	2,852.60	463,478.15	642,810.25	32.27374920	-104.00501082	0.00	0.00	0.00
	11,500.00	89.07	89.87	8,655.85	5,666.65	2,953.89	574.00	2,952.59	463,478.37	642,910.23	32.27374898	-104.00468734	0.00	0.00	0.00
	11,600.00	89.07	89.87	8,657.47	5,668.27	3,053.87	574.23	3,052.58	463,478.60	643,010.21	32.27374876	-104.00436385	0.00	0.00	0.00
	11,700.00	89.07	89.87	8,659.10	5,669.90	3,153.86	574.45	3,152.56	463,478.82	643,110.19	32.27374854	-104.00404037	0.00	0.00	0.00
	11,800.00	89.07	89.87	8,660.72	5,671.52	3,253.85	574.68	3,252.55	463,479.05	643,210.16	32.27374831	-104.00371688	0.00	0.00	0.00
	11,900.00	89.07	89.87	8,662.34	5,673.14	3,353.83	574.90	3,352.54	463,479.28	643,310.14	32.27374809	-104.00339340	0.00	0.00	0.00
	12,000.00	89.07	89.87	8,663.96	5,674.76	3,453.82	575.13	3,452.52	463,479.50	643,410.12	32.27374786	-104.00306991	0.00	0.00	0.00
	12,100.00	89.07	89.87	8,665.58	5,676.38	3,553.81	575.35	3,552.51	463,479.73	643,510.10	32.27374764	-104.00274643	0.00	0.00	0.00
	12,200.00	89.07	89.87	8,667.21	5,678.01	3,653.79	575.58	3,652.50	463,479.95	643,610.08	32.27374741	-104.00242294	0.00	0.00	0.00
	12,300.00	89.07	89.87	8,668.83	5,679.63	3,753.78	575.81	3,752.48	463,480.18	643,710.06	32.27374718	-104.00209946	0.00	0.00	0.00
	12,400.00	89.07	89.87	8,670.45	5,681.25	3,853.77	576.03	3,852.47	463,480.40	643,810.04	32.27374695	-104.00177597	0.00	0.00	0.00
	12,500.00	89.07	89.87	8,672.07	5,682.87	3,953.75	576.26	3,952.46	463,480.63	643,910.01	32.27374672	-104.00145249	0.00	0.00	0.00
	12,600.00	89.07	89.87	8,673.69	5,684.49	4,053.74	576.48	4,052.44	463,480.86	644,009.99	32.27374649	-104.00112900	0.00	0.00	0.00
	12,700.00	89.07	89.87	8,675.32	5,686.12	4,153.73	576.71	4,152.43	463,481.08	644,109.97	32.27374626	-104.00080552	0.00	0.00	0.00
	12,800.00	89.07	89.87	8,676.94	5,687.74	4,253.71	576.93	4,252.42	463,481.31	644,209.95	32.27374603	-104.00048203	0.00	0.00	0.00
	12,900.00	89.07	89.87	8,678.56	5,689.36	4,353.70	577.16	4,352.40	463,481.53	644,309.93	32.27374580	-104.00015855	0.00	0.00	0.00
	13,000.00	89.07	89.87	8,680.18	5,690.98	4,453.69	577.38	4,452.39	463,481.76	644,409.91	32.27374556	-103.99983506	0.00	0.00	0.00
	13,100.00	89.07	89.87	8,681.80	5,692.60	4,553.68	577.61	4,552.38	463,481.98	644,509.88	32.27374533	-103.99951158	0.00	0.00	0.00
	13,200.00	89.07	89.87	8,683.43	5,694.23	4,653.66	577.84	4,652.36	463,482.21	644,609.86	32.27374510	-103.99918809	0.00	0.00	0.00
	13,300.00	89.07	89.87	8,685.05	5,695.85	4,753.65	578.06	4,752.35	463,482.43	644,709.84	32.27374486	-103.99886461	0.00	0.00	0.00
	13,400.00	89.07	89.87	8,686.67	5,697.47	4,853.64	578.29	4,852.34	463,482.66	644,809.82	32.27374462	-103.99854112	0.00	0.00	0.00
Section 29-28 Line Cross, Pool N	13,431.00	89.07	89.87	8,687.17	5,697.97	4,884.63	578.36	4,883.33	463,482.73	644,840.81	32.27374455	-103.99844084	0.00	0.00	0.00
	13,500.00	89.07	89.87	8,688.29	5,699.09	4,953.62	578.51	4,952.32	463,482.89	644,909.80	32.27374438	-103.99821764	0.00	0.00	0.00
	13,600.00	89.07	89.87	8,689.91	5,700.71	5,053.61	578.74	5,052.31	463,483.11	645,009.78	32.27374415	-103.99789415	0.00	0.00	0.00
	13,700.00	89.07	89.87	8,691.54	5,702.34	5,153.60	578.96	5,152.30	463,483.34	645,109.75	32.27374391	-103.99757067	0.00	0.00	0.00
	13,800.00	89.07	89.87	8,693.16	5,703.96	5,253.58	579.19	5,252.28	463,483.56	645,209.73	32.27374367	-103.99724718	0.00	0.00	0.00
	13,900.00	89.07	89.87	8,694.78	5,705.58	5,353.57	579.42	5,352.27	463,483.79	645,309.71	32.27374343	-103.99692370	0.00	0.00	0.00
	14,000.00	89.07	89.87	8,696.40	5,707.20	5,453.56	579.64	5,452.26	463,484.01	645,409.69	32.27374318	-103.99660021	0.00	0.00	0.00
	14,100.00	89.07	89.87	8,698.02	5,708.82	5,553.54	579.87	5,552.24	463,484.24	645,509.67	32.27374294	-103.99627673	0.00	0.00	0.00
	14,200.00	89.07	89.87	8,699.65	5,710.45	5,653.53	580.09	5,652.23	463,484.47	645,609.65	32.27374270	-103.99595324	0.00	0.00	0.00
	14,300.00	89.07	89.87	8,701.27	5,712.07	5,753.52	580.32	5,752.22	463,484.69	645,709.63	32.27374245	-103.99562976	0.00	0.00	0.00
	14,400.00	89.07	89.87	8,702.89	5,713.69	5,853.50	580.54	5,852.20	463,484.92	645,809.60	32.27374221	-103.99530627	0.00	0.00	0.00
	14,500.00	89.07	89.87	8,704.51	5,715.31	5,953.49	580.77	5,952.19	463,485.14	645,909.58	32.27374196	-103.99498279	0.00	0.00	0.00
	14,600.00	89.07	89.87	8,706.13	5,716.93	6,053.48	581.00	6,052.18	463,485.37	646,009.56	32.27374172	-103.99465930	0.00	0.00	0.00
	14,700.00	89.07	89.87	8,707.76	5,718.56	6,153.46	581.22	6,152.16	463,485.59	646,109.54	32.27374147	-103.99433582	0.00	0.00	0.00
	14,800.00	89.07	89.87	8,709.38	5,720.18	6,253.45	581.45	6,252.15	463,485.82	646,209.52	32.27374122	-103.99401233	0.00	0.00	0.00
	14,900.00	89.07	89.87	8,711.00	5,721.80	6,353.44	581.67	6,352.14	463,486.04	646,309.50	32.27374097	-103.99368885	0.00	0.00	0.00
	15,000.00	89.07	89.87	8,712.62	5,723.42	6,453.43	581.90	6,452.12	463,486.27	646,409.47	32.27374072	-103.99336536	0.00	0.00	0.00
	15,100.00	89.07	89.87	8,714.24	5,725.04	6,553.41	582.12	6,552.11	463,486.50	646,509.45	32.27374047	-103.99304188	0.00	0.00	0.00
	15,200.00	89.07	89.87	8,715.86	5,726.66	6,653.40	582.35	6,652.09	463,486.72	646,609.43	32.27374022	-103.99271839	0.00	0.00	0.00
	15,300.00	89.07	89.87	8,717.49	5,728.29	6,753.39	582.57	6,752.08	463,486.95	646,709.41	32.27373996	-103.99239491	0.00	0.00	0.00
	15,400.00	89.07	89.87	8,719.11	5,729.91	6,853.37	582.80	6,852.07	463,487.17	646,809.39	32.27373971	-103.99207142	0.00	0.00	0.00
	15,500.00	89.07	89.87	8,720.73	5,731.53	6,953.36	583.03	6,952.05	463,487.40	646,909.37	32.27373946	-103.99174794	0.00	0.00	0.00
	15,600.00	89.07	89.87	8,722.35	5,733.15	7,053.35	583.25	7,052.04	463,487.62	647,009.34	32.27373920	-103.99142445	0.00	0.00	0.00
	15,700.00	89.07	89.87	8,723.97	5,734.77	7,153.33	583.48	7,152.03	463,487.85	647,109.32	32.27373895	-103.99110097	0.00	0.00	0.00
	15,800.00	89.07	89.87	8,725.60	5,736.40	7,253.32	583.70	7,252.01	463,488.08	647,209.30	32.27373869	-103.99077748	0.00	0.00	0.00
	15,900.00	89.07	89.87	8,727.22	5,738.02	7,353.31	583.93	7,352.00	463,488.30	647,309.28	32.27373843	-103.99045400	0.00	0.00	0.00
	16,000.00	89.07	89.87	8,728.84	5,739.64	7,453.29	584.15	7,451.99	463,488.53	647,409.26	32.27373817	-103.99013051	0.00	0.00	0.00
	16,100.00	89.07	89.87	8,730.46	5,741.26	7,553.28	584.38	7,551.97	463,488.75	647,509.24	32.27373791	-103.98980703	0.00	0.00	0.00
	16,200.00	89.07	89.87	8,732.08	5,742.88	7,653.27	584.61	7,651.96	463,488.98	647,609.22	32.27373765	-103.98948355	0.00	0.00	0.00
	16,300.00	89.07	89.87	8,733.71	5,744.51	7,753.25	584.83	7,751.95	463,489.20	647,709.19	32.27373739	-103.98916006	0.00	0.00	0.00
	16,400.00	89.07	89.87	8,735.33	5,746.13	7,853.24	585.06	7,851.93	463,489.43	647,809.17	32.27373713	-103.98883658	0.00	0.00	0.00
	16,500.00	89.07	89.87	8,736.95	5,747.75	7,953.23	585.28	7,951.92	463,489.65	647,909.15	32.27373687	-103.98851309	0.00	0.00	0.00
	16,600.00	89.07	89.87	8,738.57	5,749.37	8,053.21	585.51	8,051.91	463,489.88	648,009.13	32.27373661	-103.98818961	0.00	0.00	0.00
	16,700.00	89.07	89.87	8,740.19	5,750.99	8,153.20	585.73	8,151.89	463,490.11	648,109.11	32.27373634	-103.98786612	0.00	0.00	0.00
	16,800.00	89.07	89.87	8,741.82	5,752.62	8,253.19	585.96	8,251.88	463,490.33	648,209.09	32.27373608	-103.98754264	0.00	0.00	0.00
	16,900.00	89.07	89.87	8,743.44	5,754.24	8,353.18	586.18	8,351.87	463,490.56	648,309.06	32.27373581	-103.98721915	0.00	0.00	0.00
	17,000.00	89.07	89.87	8,745.06	5,755.86	8,453.16	586.41	8,451.85	463,490.78	648,409.04	32.27373554	-103.98689567	0.00	0.00	0.00
	17,100.00	89.07	89.87	8,746.68	5,757.48	8,553.15	586.64	8,551.84	463,491.01	648,509.02	32.27373528	-103.98657218	0.00	0.00	0.00
	17,200.00	89.07	89.87	8,748.30	5,759.10	8,653.14	586.86	8,651.83	463,491.23	648,609.00	32.27373501	-103.98624870	0.00	0.00	0.00
	17,300.00	89.07	89.87	8,749.93	5,760.73	8,753.12	587.09	8,751.81	463,491.46	648,708.98	32.27373474	-103.98592521	0.00	0.00	0.00
	17,400.00	89.07	89.87	8,751.55	5,762.35	8,853.11	587.31	8,851.80	463,491.69	648,808.96	32.27373447	-103.98560173	0.00	0.00	0.00
Pool NMNM086024 exit to NMNI	17,428.00	89.07	89.87	8,752.00	5,762.80	8,881.11	587.38	8,879.80	463,491.75	648,836.95	32.27373439	-103.98551115	0.00	0.00	0.00
	17,500.00	89.07	89.87	8,753.17	5,763.97	8,953.10	587.54	8,951.79	463,491.91	648,908.93	32.27373420	-103.98527824	0.00	0.00	0.00
	17,600.00	89.07	89.87	8,754.79	5,765.59	9,053.08	587.76	9,051.77	463,492.14	649,008.91	32.27373393	-103.98495476	0.00	0.00	0.00
	17,700.00	89.07	89.87	8,756.41	5,767.21	9,153.07	587.99	9,151.76	463,492.36	649,108.89	32.27373365	-103.98463128	0.00	0.00	0.00
	17,800.00	89.07	89.87	8,758.04	5,768.84	9,253.06	588.22	9,251.75	463,492.59	649,208.87	32.27373338	-103.98430779	0.00	0.00	0.00
	17,900.00	89.07	89.87	8,759.66	5,770.46	9,353.04	588.44	9,351.73	463,492.81	649,308.85	32.27373311	-103.98398431	0.00	0.00	0.00
	18,000.00	89.07	89.87	8,761.28	5,772.08	9,453.03	588.67	9,451.72	463,493.04	649,408.83	32.27373283	-103.98366082	0.00	0.00	0.00
	18,100.00	89.07	89.87	8,762.90	5,773.70	9,553.02	588.89	9,551.71	463,493.26	649,508.80	32.27373256	-103.98333734	0.00	0.00	0.00
	18,200.00	89.07	89.87	8,764.52	5,775.32	9,653.00	589.12	9,651.69	463,493.49	649,608.78	32.27373228	-103.98301385	0.00	0.00	0.00
	18,300.00	89.07	89.87	8,766.15	5,776.95	9,752.99	589.34	9,751.68	463,493.72	649,708.76	32.27373200	-103.98269037	0.00	0.00	0.00
	18,400.00	89.07	89.87	8,767.77	5,778.57	9,852.98	589.57	9,851.67	463,493.94	649,808.74	32.27373172	-103.98236688	0.00	0.00	0.00
	18,500.00	89.07	89.87	8,769.39	5,780.19	9,952.96	589.80	9,951.65	463,494.17	649,908.72	32.27373144	-103.98204340	0.00	0.00	0.00
	18,600.00	89.07	89.87	8,771.01	5,781.81	10,052.95	590.02	10,051.64	463,494.39	650,008.70	32.27373116	-103.98171992	0.00	0.00	0.00
Laguna Grande 29-28 Fed Com 5	18,660.90	89.07	89.87	8,772.00	5,782.80	10,113.84	590.16	10,112.53	463,494.53	650,069.58	32.27373099	-103.98152293	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	8,000.000	1/100.000	'.5 – 12.25 – 8.75	3.375 – 9.625 – 7		A001Mb_MWD		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur
	1	8,000.000	18,660.896	1/100.000	8.75 – 6.125	7 – 4.5		A008Mb_MWD+IFR1+MS		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,201.800	17.500	13.375	

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)
4,035.270		12.250		9.625											
8,050.467		8.750		7.000											
18,660.896		6.125		4.500											

Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25 Anti-Collision Summary Report

Analysis Date-24hr Time:	May 09, 2025 - 10:12 PM (UTC 0)	**Analysis Method:**	3D Least Distance
Client:	COTERRA	**Reference Trajectory:**	Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc
Field:	NM Eddy County (NAD 83)	**Depth Interval:**	Every 10.00 Measured Depth (ft)
Structure:	Coterra - Laguna Grande 29-28 Fed Com Pad (south)	**Rule Set:**	NAL Procedure: D&M AntiCollision Standard S002
Slot:	Laguna Grande 29-28 Fed Com 5H	**Min Pts:**	Absolute minima indicated.
Well:	Laguna Grande 29-28 Fed Com 5H	**Engine Version:**	2024.5.0.1
Borehole:	Laguna Grande 29-28 Fed Com 5H	**Database \ Project:**	Laguna Grande 29-28 Fed Com 5H–COTERRA
Scan MD Range:	0.00ft ~ 18660.90ft		

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

12 out of 21 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	
30-015-30113 - Cochiti 28 Federal 001 - Blind to 10180ft - P&A (DefinitiveSurvey) - **Fail Major**												
	5904.91	32.81	5898.67	5872.10	1387.39	MAS = 10.00 (m)	0.00	0.00				Surface
	5904.91	32.81	5882.95	5872.10	295.51	MAS = 10.00 (m)	23.00	23.00				WRP
	5904.91	1779.88	4717.66	4125.02	4.98	OSF1.50	900.00	900.00	OSF<=5.00			Enter Alert
	5887.30	5897.15	1955.28	-9.85	1.50	OSF1.50	2900.00	2883.79		OSF<=1.50		Enter Minor
	5874.83	8819.97	-5.69	-2945.15	1.00	OSF1.50	4330.00	4292.05			OSF<=1.00	Enter Major
	1475.16	17965.23	-10502.14	-16490.05	0.12	OSF1.50	14086.86	8697.81				MinPt-CtCt
	1475.19	17965.34	-10502.21	-16490.15	**0.12**	OSF1.50	14090.00	8697.86				MinPt-SF
	1475.56	17966.36	**-10502.52**	-16490.80	0.12	OSF1.50	14120.00	8698.35				MinPt-EOU
	1476.14	17967.04	-10502.38	**-16490.90**	0.12	OSF1.50	14140.00	8698.67				MinPt-ADP
	4805.46	18118.63	-7274.13	-13313.17	0.40	OSF1.50	18660.90	8772.00				TD
Coterra Laguna Grande 29-28 Fed Com 6H Rev0 kFc 09May25 (DefinitivePlan) - **Fail Minor**												
	20.00	16.40	16.72	3.60	9.36	MAS = 5.00 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	20.00	16.40	16.71	3.60	9.36	MAS = 5.00 (m)	23.00	23.00				WRP
	20.00	18.51	**7.23**	**1.49**	**1.63**	OSF1.50	1190.00	1190.00				MinPts
	20.00	20.14	6.25	-0.14	1.49	OSF1.50	1320.00	1320.00		OSF<=1.50		Enter Minor
	20.00	22.81	4.46	-2.81	1.31	OSF1.50	1500.00	1500.00				MinPt-CtCt
	20.15	23.26	**4.32**	-3.11	1.29	OSF1.50	1530.00	1530.00				MinPt-EOU
	20.27	23.41	4.34	**-3.14**	**1.29**	OSF1.50	1540.00	1540.00				MinPts
	24.92	25.35	7.70	-0.43	1.47	OSF1.50	1670.00	1669.90		OSF>1.50		Exit Minor
	58.15	34.46	34.85	**23.69**	2.56	OSF1.50	2290.00	2283.06				MinPt-ADP
	78.01	49.03	45.00	28.98	**2.40**	OSF1.50	3170.00	3149.68				MinPt-SF
	135.92	88.19	76.80	47.73	2.32	OSF1.50	5320.00	5271.34				MinPt-CtCt
	136.23	89.36	**76.33**	46.87	2.30	OSF1.50	5390.00	5341.33				MinPt-EOU
	136.49	89.68	76.38	**46.81**	2.29	OSF1.50	5410.00	5361.33				MinPt-ADP
	137.04	90.13	76.63	46.91	**2.29**	OSF1.50	5440.00	5391.33				MinPt-SF
	151.87	126.16	**67.43**	25.71	1.81	OSF1.50	8073.34	8024.67				MinPt-EOU
	151.91	126.21	67.44	**25.70**	**1.81**	OSF1.50	8080.00	8031.33				MinPts
	426.87	130.01	339.87	296.86	4.95	OSF1.50	8660.00	8514.06	OSF>5.00			Exit Alert
	829.93	249.94	662.98	580.00	4.99	OSF1.50	15730.00	8724.46	OSF<=5.00			Enter Alert
	829.19	343.73	**599.71**	**485.46**	**3.62**	OSF1.50	18660.90	8772.00				MinPts
30-015-21636 - Luguna Grande 001 - Inc Only to 13700ft - P&A (DefinitiveSurvey) - **Fail Minor**												
	9226.04	32.81	9222.62	9193.23	6420.07	MAS = 10.00 (m)	0.00	0.00				Surface
	9226.04	32.81	9222.49	9193.23	5889.75	MAS = 10.00 (m)	23.00	23.00				WRP
	9226.04	85.01	9168.78	9141.03	166.21	OSF1.50	1500.00	1500.00				MinPt-CtCt
	9279.03	196.02	**9147.77**	9083.01	71.64	OSF1.50	2980.00	2962.57				MinPt-EOU
	9315.01	253.11	**9145.68**	9061.89	55.58	OSF1.50	3760.00	3730.71				MinPt-EOU
	1866.91	564.06	1490.37	1302.85	4.97	OSF1.50	15970.00	8728.35	OSF<=5.00			Enter Alert
	606.80	609.30	200.09	-2.51	1.49	OSF1.50	17410.00	8751.71		OSF<=1.50		Enter Minor
	486.55	640.10	59.32	-153.55	1.14	OSF1.50	17772.63	8757.59				MinPt-CtCt
	486.61	640.22	**59.30**	**-153.61**	**1.14**	OSF1.50	17780.00	8757.71				MinPts
	615.72	617.05	203.85	-1.33	1.50	OSF1.50	18150.00	8763.71		OSF>1.50		Exit Minor
	1012.69	587.12	620.78	425.57	2.59	OSF1.50	18660.90	8772.00				TD
Coterra Laguna Grande 29-28 Fed Com 13H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	34.99	28.39	31.71	6.60	16.85	MAS = 8.65 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	34.99	28.39	31.71	6.60	16.85	MAS = 8.65 (m)	23.00	23.00				WRP
	34.99	28.39	**22.22**	6.60	2.94	MAS = 8.65 (m)	1190.00	1190.00				MinPt-EOU
	34.99	28.39	20.45	**6.60**	2.51	MAS = 8.65 (m)	1400.00	1400.00				MinPts
	35.46	28.39	**19.93**	7.07	2.37	MAS = 8.65 (m)	1500.00	1500.00				MinPt-EOU
	43.21	29.68	23.09	13.53	**2.21**	OSF1.50	1970.00	1967.89				MinPt-SF
	278.49	84.66	221.72	193.83	4.97	OSF1.50	5500.00	5451.33	OSF>5.00			Exit Alert
	464.86	122.60	**382.80**	342.26	5.72	OSF1.50	8080.00	8031.33				MinPt-EOU
	464.92	122.67	382.81	**342.25**	5.72	OSF1.50	8090.00	8041.33				MinPt-ADP
	465.47	122.90	383.21	342.57	**5.71**	OSF1.50	8120.00	8071.28				MinPt-SF
	1611.34	356.07	**1373.63**	**1255.27**	**6.80**	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 7H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	39.99	32.40	36.71	7.60	19.35	MAS = 9.87 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	39.99	32.40	36.71	7.60	19.35	MAS = 9.87 (m)	23.00	23.00				WRP
	39.99	32.40	**27.22**	7.60	3.37	MAS = 9.87 (m)	1190.00	1190.00				MinPt-EOU
	39.99	32.40	24.46	**7.60**	2.68	MAS = 9.87 (m)	1500.00	1500.00				MinPts
	40.15	32.40	**24.31**	7.75	2.64	MAS = 9.87 (m)	1530.00	1530.00				MinPt-EOU

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	
	41.08	32.40	24.75	8.68	2.61	MAS = 9.87 (m)	1580.00	1579.99				MinPt-SF
	94.59	32.40	74.85	62.19	4.99	MAS = 9.87 (m)	1950.00	1948.15	OSF>5.00			Exit Alert
	1369.14	120.17	1288.70	1248.97	17.22	OSF1.50	8073.34	8024.67				MinPts
	1369.18	120.17	1288.74	1249.01	17.22	OSF1.50	8090.00	8041.33				MinPt-SF
	1539.76	462.78	1230.91	1076.98	5.00	OSF1.50	17980.00	8760.96	OSF<=5.00			Enter Alert
	1539.80	493.71	1210.33	1046.09	4.68	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 14H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	40.30	32.64	37.01	7.66	19.50	MAS = 9.95 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	40.30	32.64	37.01	7.66	19.50	MAS = 9.95 (m)	23.00	23.00				WRP
	40.30	32.64	27.53	7.66	3.40	MAS = 9.95 (m)	1190.00	1190.00				MinPt-EOU
	40.30	32.64	24.76	7.66	2.70	MAS = 9.95 (m)	1500.00	1500.00				MinPts
	40.70	32.64	24.27	8.06	2.57	MAS = 9.95 (m)	1590.00	1589.99				MinPt-EOU
	42.17	32.64	24.85	9.53	2.52	MAS = 9.95 (m)	1680.00	1679.88				MinPt-SF
	267.84	124.01	184.83	143.82	3.25	OSF1.50	8080.00	8031.33				MinPts
	267.95	124.09	184.90	143.86	3.25	OSF1.50	8090.00	8041.33				MinPt-SF
	423.51	128.38	337.60	295.13	4.98	OSF1.50	8580.00	8467.83	OSF>5.00			Exit Alert
	1443.86	350.03	1210.18	1093.84	6.20	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 15H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	53.14	32.81	49.85	20.33	25.92	MAS = 10.00 (m)	0.00	0.00				Surface
	53.14	32.81	49.85	20.33	25.92	MAS = 10.00 (m)	23.00	23.00				WRP
	53.14	32.81	41.45	20.33	4.98	MAS = 10.00 (m)	1080.00	1080.00	OSF<=5.00			Enter Alert
	53.14	32.81	40.37	20.33	4.51	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	53.14	32.81	37.60	20.33	3.58	MAS = 10.00 (m)	1500.00	1500.00				MinPts
	53.39	32.81	37.35	20.58	3.48	MAS = 10.00 (m)	1550.00	1550.00				MinPt-EOU
	54.68	32.81	37.95	21.87	3.41	MAS = 10.00 (m)	1620.00	1619.96				MinPt-SF
	93.38	32.81	73.79	60.57	4.97	MAS = 10.00 (m)	1930.00	1928.39	OSF>5.00			Exit Alert
	893.55	120.79	812.70	772.76	11.17	OSF1.50	8090.00	8041.33				MinPt-EOU
	893.62	120.87	812.71	772.75	11.17	OSF1.50	8100.00	8051.32				MinPt-ADP
	897.89	121.91	816.29	775.98	11.13	OSF1.50	8240.00	8188.99				MinPt-SF
	1782.05	390.76	1521.21	1391.29	6.85	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 8H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	60.00	32.81	56.71	27.19	29.35	MAS = 10.00 (m)	0.00	0.00				Surface
	60.00	32.81	56.71	27.19	29.35	MAS = 10.00 (m)	23.00	23.00				WRP
	60.00	32.81	47.23	27.19	5.11	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	60.00	32.81	47.13	27.19	4.97	MAS = 10.00 (m)	1230.00	1230.00	OSF<=5.00			Enter Alert
	60.00	32.81	45.45	27.19	4.35	MAS = 10.00 (m)	1400.00	1400.00				MinPts
	60.14	32.81	45.31	27.34	4.27	MAS = 10.00 (m)	1430.00	1430.00				MinPt-EOU
	62.05	32.81	46.46	29.24	4.18	MAS = 10.00 (m)	1510.00	1510.00				MinPt-SF
	81.88	32.81	64.56	49.07	4.95	MAS = 10.00 (m)	1700.00	1699.84	OSF>5.00			Exit Alert
	161.23	32.81	141.33	128.42	8.47	MAS = 10.00 (m)	2000.12	1997.59				MinPt-SF
	1540.04	121.86	1458.47	1418.18	19.10	OSF1.50	8210.00	8160.04				MinPt-CtCt
	1540.17	122.34	1458.28	1417.83	19.02	OSF1.50	8280.00	8226.88				MinPt-EOU
	1540.28	122.47	1458.31	1417.81	19.01	OSF1.50	8300.00	8245.47				MinPt-ADP
	1550.27	124.22	1467.13	1426.05	18.86	OSF1.50	8560.00	8454.89				MinPt-SF
	1687.14	316.44	1475.86	1370.71	8.02	OSF1.50	15160.00	8715.22				MinPt-CtCt
	1688.44	320.08	1474.72	1368.35	7.93	OSF1.50	15270.00	8717.00				MinPt-EOU
	1689.83	321.72	1475.02	1368.11	7.90	OSF1.50	15320.00	8717.81				MinPt-ADP
	1748.84	466.35	1437.61	1282.49	5.63	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 16H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	69.46	32.81	66.17	36.65	34.08	MAS = 10.00 (m)	0.00	0.00				Surface
	69.46	32.81	66.17	36.65	34.08	MAS = 10.00 (m)	23.00	23.00				WRP
	69.46	32.81	56.69	36.65	5.94	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	69.46	32.81	54.91	36.65	5.05	MAS = 10.00 (m)	1400.00	1400.00				MinPts
	69.52	32.81	54.79	36.71	4.98	MAS = 10.00 (m)	1420.00	1420.00	OSF<=5.00			Enter Alert
	69.61	32.81	54.77	36.80	4.96	MAS = 10.00 (m)	1430.00	1430.00				MinPt-EOU
	71.88	32.81	56.20	39.08	4.82	MAS = 10.00 (m)	1520.00	1520.00				MinPt-SF
	78.30	32.81	61.79	45.49	4.98	MAS = 10.00 (m)	1610.00	1609.97	OSF>5.00			Exit Alert
	163.68	32.81	143.70	130.87	8.56	MAS = 10.00 (m)	2000.12	1997.59				MinPt-SF
	1547.96	121.99	1466.30	1425.96	19.18	OSF1.50	8100.00	8051.32				MinPt-EOU
	1548.01	122.06	1466.31	1425.95	19.17	OSF1.50	8110.00	8061.31				MinPt-ADP
	1558.49	123.94	1475.53	1434.54	19.00	OSF1.50	8390.00	8325.46				MinPt-SF
	2095.19	437.42	1803.25	1657.78	7.20	OSF1.50	18660.90	8772.00				MinPts
30-015-23414 - Cimarex Laguna Grande Unit 3 - Gyro+Inc Only to 13690ft - P&A (DefinitiveSurvey) - **Warning Alert**												
	3073.82	32.81	3070.43	3041.02	2169.46	MAS = 10.00 (m)	0.00	0.00				MinPts
	3073.88	32.81	3070.48	3041.07	2162.89	MAS = 10.00 (m)	23.00	23.00				WRP
	3078.41	32.81	3065.03	3045.60	269.91	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	3078.68	32.81	3063.41	3045.87	227.86	MAS = 10.00 (m)	1400.00	1400.00				MinPts
	3069.39	35.26	3045.30	3034.14	137.37	OSF1.50	2300.00	2292.91				MinPt-CtCt
	3069.78	36.47	3044.88	3033.31	132.60	OSF1.50	2390.00	2381.54				MinPt-EOU
	3070.23	37.01	3044.98	3033.23	130.59	OSF1.50	2430.00	2420.93				MinPt-ADP
	3084.23	47.45	3052.02	3036.79	101.21	OSF1.50	3080.00	3061.05				MinPt-ADP
	3110.47	71.27	3062.42	3039.21	66.95	OSF1.50	4530.00	4489.01				MinPt-ADP
	3115.66	76.09	3064.39	3039.57	62.72	OSF1.50	4820.00	4774.60				MinPt-ADP
	484.58	148.37	385.17	336.21	4.93	OSF1.50	11180.00	8650.66	OSF<=5.00			Enter Alert
	413.08	159.55	306.21	253.53	3.91	OSF1.50	11433.37	8654.77				MinPt-CtCt
	413.13	159.66	306.19	253.48	3.90	OSF1.50	11440.00	8654.88				MinPts
	413.41	159.80	306.38	253.62	3.90	OSF1.50	11450.00	8655.04				MinPt-SF
	508.54	153.69	405.58	354.85	5.00	OSF1.50	11730.00	8659.58	OSF>5.00			Exit Alert
	7238.76	139.55	7145.23	7099.21	78.64	OSF1.50	18660.90	8772.00				TD
30-015-37331 - Cypress 28 Federal 002H - Gyro+MWD to 10272ft - A (DefinitiveSurvey) - **Pass**												
	5440.32	32.81	5436.92	5407.51	3833.67	MAS = 10.00 (m)	0.00	0.00				MinPts
	5440.37	32.81	5436.96	5407.56	3815.27	MAS = 10.00 (m)	23.00	23.00				WRP
	5437.00	32.81	5423.42	5404.19	468.53	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	5434.67	32.81	5416.69	5401.86	335.01	MAS = 10.00 (m)	1640.00	1639.94				MinPts
	5435.64	32.81	5415.30	5402.84	292.40	MAS = 10.00 (m)	1870.00	1868.97				MinPt-EOU

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	
	5479.14	45.10	5448.48	5434.03	189.55	OSF1.50	2930.00	2913.33				MinPts
	5604.15	79.23	5550.80	5524.92	108.28	OSF1.50	5710.00	5661.33				MinPt-CtCt
	5604.26	79.58	5550.67	5524.68	107.79	OSF1.50	5750.00	5701.33				MinPt-EOU
	5604.39	79.75	5550.68	5524.64	107.56	OSF1.50	5770.00	5721.33				MinPt-ADP
	5847.43	100.66	5779.83	5746.77	88.44	OSF1.50	8000.00	7951.33				MinPt-SF
	5863.47	100.90	5795.70	5762.57	88.46	OSF1.50	8073.34	8024.67				MinPt-SF
	1029.30	183.48	906.48	845.82	8.47	OSF1.50	15760.00	8724.95				MinPt-CtCt
	1026.84	197.20	894.87	829.64	7.86	OSF1.50	16250.00	8732.90				MinPt-CtCt
	1025.63	208.35	886.23	817.28	7.43	OSF1.50	16631.47	8739.08				MinPt-CtCt
	1029.96	219.89	882.86	810.07	7.06	OSF1.50	17020.00	8745.38				MinPts
	1032.01	220.71	884.37	811.30	7.05	OSF1.50	17070.00	8746.20				MinPt-SF
	1951.99	171.99	1836.83	1780.00	17.16	OSF1.50	18660.90	8772.00				TD
30-015-42739 - Laguna Grande Unit 007H - MWD to 14595ft - A (DefinitiveSurvey) - **Pass**												
	5002.36	32.81	4998.96	4969.55	3530.50	MAS = 10.00 (m)	0.00	0.00				Surface
	5002.35	32.81	4998.94	4969.54	3513.08	MAS = 10.00 (m)	23.00	23.00				WRP
	4994.66	32.81	4981.22	4961.85	435.83	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	4994.07	32.81	4979.68	4961.26	395.45	MAS = 10.00 (m)	1330.00	1330.00				MinPts
	1298.14	126.44	1213.35	1171.71	15.57	OSF1.50	11577.20	8657.10				MinPt-CtCt
	1298.21	126.57	1213.33	1171.64	15.55	OSF1.50	11590.00	8657.31				MinPts
	1345.22	133.13	1255.96	1212.09	15.31	OSF1.50	11930.00	8662.83				MinPt-SF
	7200.60	181.38	7079.18	7019.22	60.03	OSF1.50	18660.90	8772.00				TD

COTERRA Rev 0

Borehole:	Well:	Field:	Structure:
Laguna Grande 29-28 Fed Com 5H	Laguna Grande 29-28 Fed Com 5H	NM Eddy County (NAD 83)	Coterra - Laguna Grande 29-28 Fed Com Pad (south)

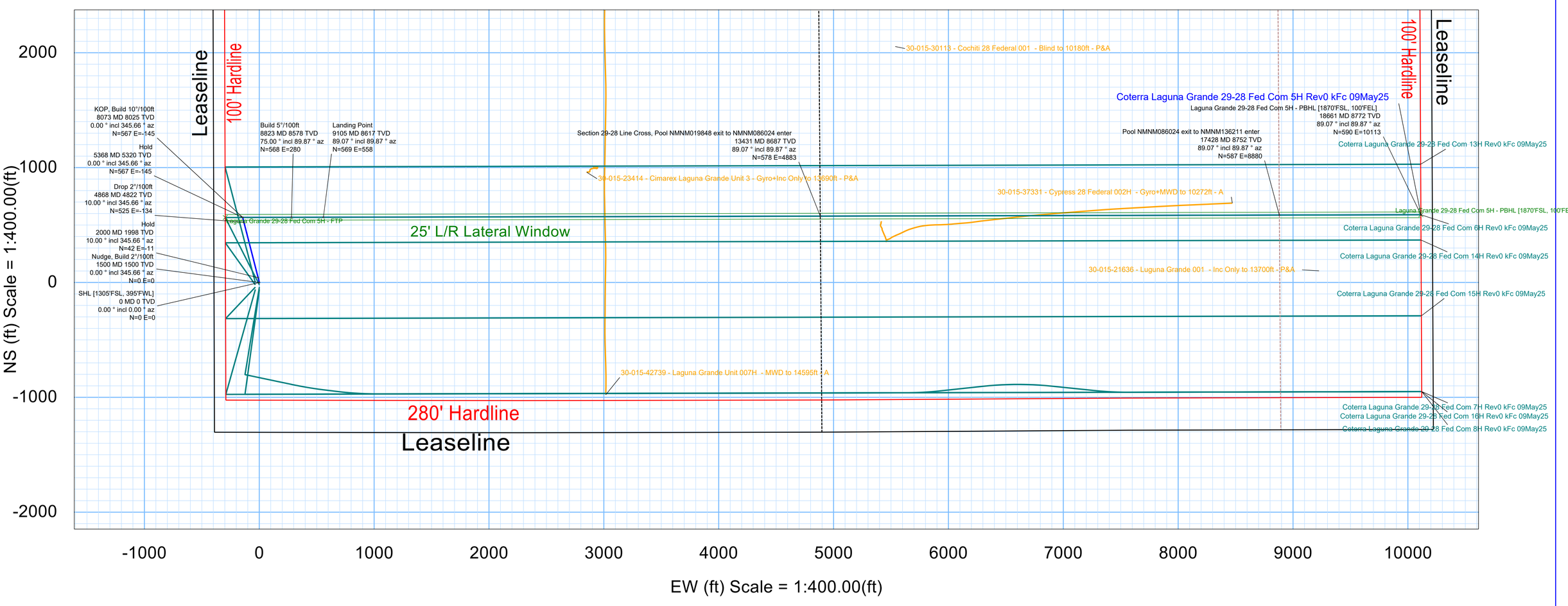
Gravity & Magnetic Parameters
Model: HDGM 2025 | Dip: 59.827° | Date: 09-May-2025
MagDec: 6.516° | FS: 47243.672nT | Gravity FS: 998.473mgn (9.80665 Based)

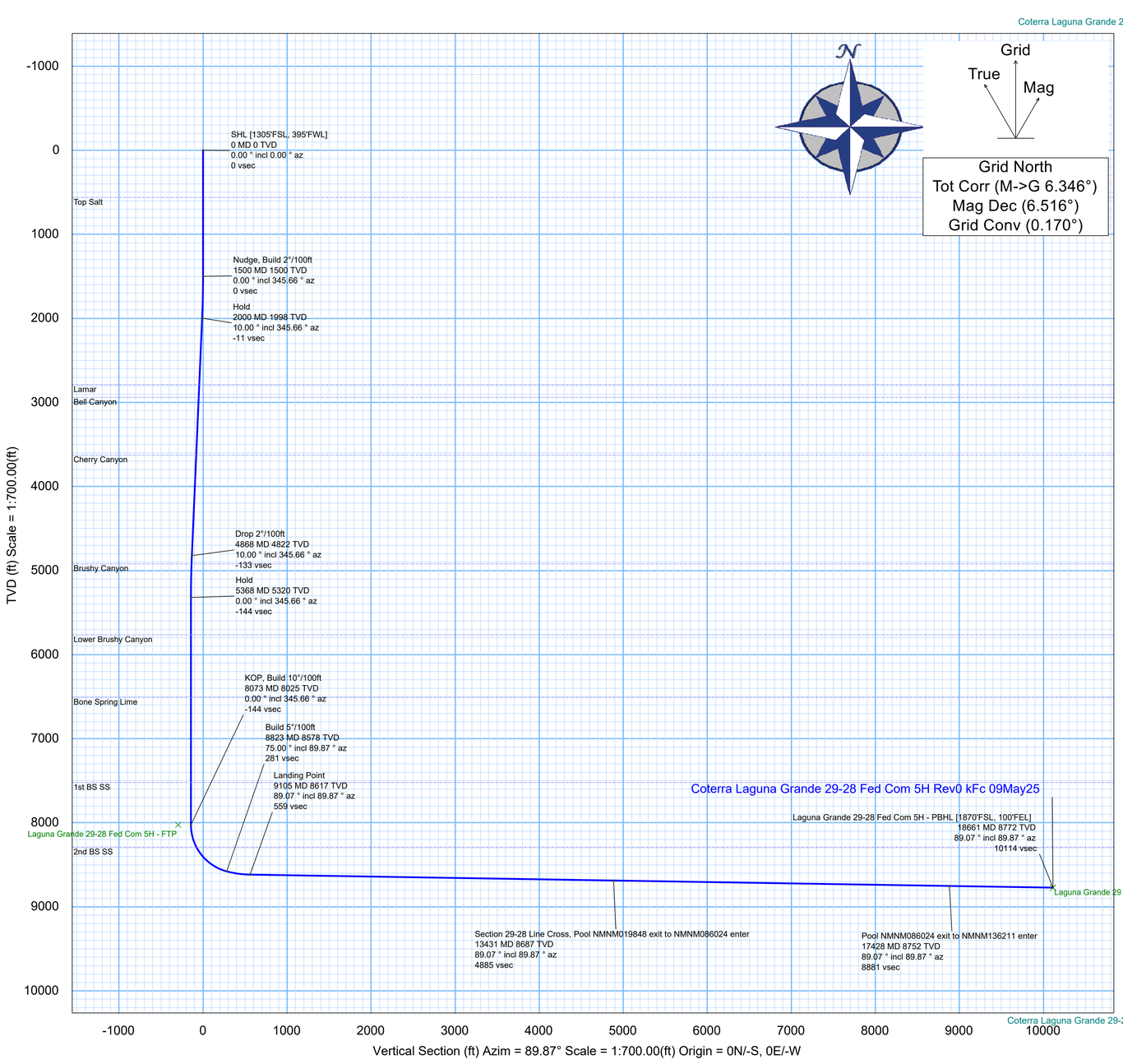
Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet
Lat: N 32 16 19.90 | Northing: 462904.42ftUS | Grid Conv: 0.1704°
Lon: W 104 0 51.28 | Easting: 639957.88ftUS | Scale Fact: 0.99992023

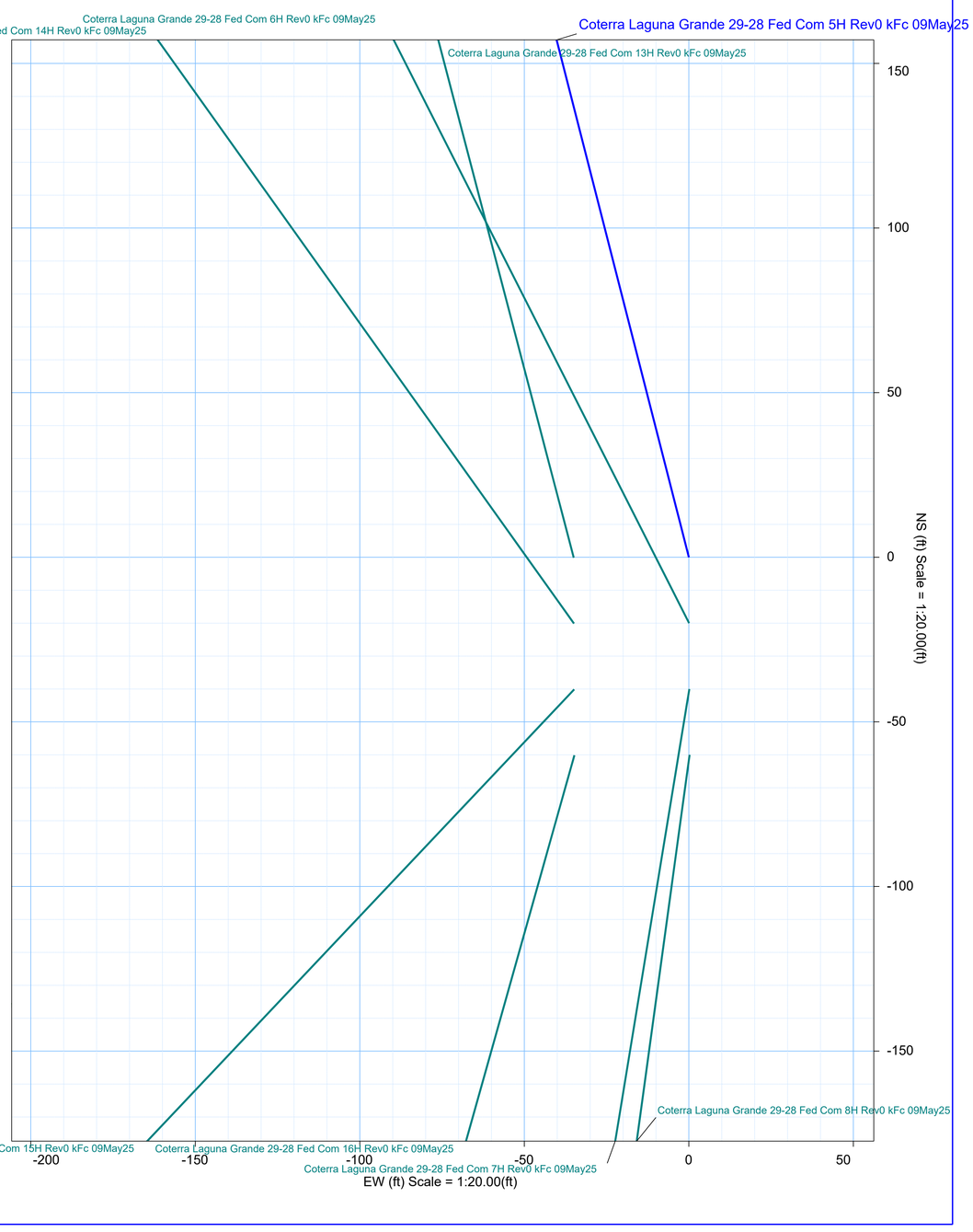
Miscellaneous
Slot: Laguna Grande 29-28 Fed Com 5H | TVD Ref: RKB (2989.200 ft above MSL)
Plan: Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [1305'FSL, 395'FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Top Salt	561.00	0.00	345.66	561.00	0.00	0.00	0.00	0.00
Nudge, Build 2°/100ft	1500.00	0.00	345.66	1500.00	0.00	0.00	0.00	0.00
Hold	2000.12	10.00	345.66	1997.59	-10.69	42.19	-10.79	2.00
Lamar	2802.74	10.00	345.66	2788.00	-44.93	177.25	-45.33	0.00
Bell Canyon	2958.10	10.00	345.66	2941.00	-51.55	203.39	-52.01	0.00
Cherry Canyon	3653.67	10.00	345.66	3626.00	-81.22	320.44	-81.95	0.00
Drop 2°/100ft	4868.21	10.00	345.66	4822.08	-133.02	524.81	-134.21	0.00
Brushy Canyon	4967.36	8.02	345.66	4920.00	-136.83	539.86	-138.06	2.00
Hold	5368.34	0.00	345.66	5319.67	-143.71	567.00	-145.00	2.00
Lower Brushy Canyon	5812.67	0.00	345.66	5764.00	-143.71	567.00	-145.00	0.00
Bone Spring Lime	6557.67	0.00	345.66	6509.00	-143.71	567.00	-145.00	0.00
1st BS SS	7569.67	0.00	345.66	7521.00	-143.71	567.00	-145.00	0.00
KOP, Build 10°/100ft	8073.34	0.00	345.66	8024.67	-143.71	567.00	-145.00	0.00
2nd BS SS	8349.20	27.59	89.87	8290.00	-78.57	567.15	-79.86	10.00
Build 5°/100ft	8823.34	75.00	89.87	8578.10	280.95	567.96	279.66	10.00
Landing Point	9104.74	89.07	89.87	8617.00	558.94	568.59	557.65	5.00
	9204.74	89.07	89.87	8618.62	658.92	568.82	657.64	0.00
	9204.78	89.07	89.87	8618.62	658.97	568.82	657.68	2.00
Section 29-28 Line Cross, Pool NMNM019848 exit to NMNM086024 enter	13431.00	89.07	89.87	8687.17	4884.63	578.36	4883.33	0.00
Pool NMNM086024 exit to NMNM136211 enter	17428.00	89.07	89.87	8752.00	8881.11	587.38	8879.80	0.00
Laguna Grande 29-28 Fed Com 5H - PBHL [1870'FSL, 100'FEL]	18660.90	89.07	89.87	8772.00	10113.84	590.16	10112.53	0.00







Well Control Plan

Warning Signs of a Kick

If a kick is ever suspected, perform flow check.

While Drilling:

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

While Tripping:

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

While Out of the Hole:

1. Flow
2. Pit gain

Well Control Procedures with Diverter

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

If rotating head is installed:

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

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

If rotating head is not installed:

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

Well Control Procedures

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

General Well Control

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

Hard Shut-In

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

Flow Check when on Bottom

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

Shutting in while Drilling

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

Flow Check while Tripping

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

Shutting in while Tripping

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

Shutting in while Out of Hole

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

Information to Record while Shut-In

1. Shut in drill pipe pressure every 5 minutes

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

H2S with Annular Diverter:

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

H2S with BOP's:

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

Procedure for Closing Blind Rams

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

Procedure for Opening Blind Rams

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

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

BOP Drills

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

Choke Manifold Freeze Prevention

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

Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25 Anti-Collision Summary Report

Analysis Date-24hr Time:	May 09, 2025 - 10:12 PM (UTC 0)	**Analysis Method:**	3D Least Distance
Client:	COTERRA	**Reference Trajectory:**	Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc
Field:	NM Eddy County (NAD 83)	**Depth Interval:**	Every 10.00 Measured Depth (ft)
Structure:	Coterra - Laguna Grande 29-28 Fed Com Pad (south)	**Rule Set:**	NAL Procedure: D&M AntiCollision Standard S002
Slot:	Laguna Grande 29-28 Fed Com 5H	**Min Pts:**	Absolute minima indicated.
Well:	Laguna Grande 29-28 Fed Com 5H	**Engine Version:**	2024.5.0.1
Borehole:	Laguna Grande 29-28 Fed Com 5H	**Database \ Project:**	Laguna Grande 29-28 Fed Com 5H–COTERRA
Scan MD Range:	0.00ft ~ 18660.90ft		

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

12 out of 21 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	
30-015-30113 - Cochiti 28 Federal 001 - Blind to 10180ft - P&A (DefinitiveSurvey) - **Fail Major**												
	5904.91	32.81	5898.67	5872.10	1387.39	MAS = 10.00 (m)	0.00	0.00				Surface
	5904.91	32.81	5882.95	5872.10	295.51	MAS = 10.00 (m)	23.00	23.00				WRP
	5904.91	1779.88	4717.66	4125.02	4.98	OSF1.50	900.00	900.00	OSF<=5.00			Enter Alert
	5887.30	5897.15	1955.28	-9.85	1.50	OSF1.50	2900.00	2883.79		OSF<=1.50		Enter Minor
	5874.83	8819.97	-5.69	-2945.15	1.00	OSF1.50	4330.00	4292.05			OSF<=1.00	Enter Major
	1475.16	17965.23	-10502.14	-16490.05	0.12	OSF1.50	14086.86	8697.81				MinPt-CtCt
	1475.19	17965.34	-10502.21	-16490.15	**0.12**	OSF1.50	14090.00	8697.86				MinPt-SF
	1475.56	17966.36	**-10502.52**	-16490.80	0.12	OSF1.50	14120.00	8698.35				MinPt-EOU
	1476.14	17967.04	-10502.38	**-16490.90**	0.12	OSF1.50	14140.00	8698.67				MinPt-ADP
	4805.46	18118.63	-7274.13	-13313.17	0.40	OSF1.50	18660.90	8772.00				TD
Coterra Laguna Grande 29-28 Fed Com 6H Rev0 kFc 09May25 (DefinitivePlan) - **Fail Minor**												
	20.00	16.40	16.72	3.60	9.36	MAS = 5.00 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	20.00	16.40	16.71	3.60	9.36	MAS = 5.00 (m)	23.00	23.00				WRP
	20.00	18.51	**7.23**	**1.49**	**1.63**	OSF1.50	1190.00	1190.00				MinPts
	20.00	20.14	6.25	-0.14	1.49	OSF1.50	1320.00	1320.00		OSF<=1.50		Enter Minor
	20.00	22.81	4.46	-2.81	1.31	OSF1.50	1500.00	1500.00				MinPt-CtCt
	20.15	23.26	**4.32**	-3.11	1.29	OSF1.50	1530.00	1530.00				MinPt-EOU
	20.27	23.41	4.34	**-3.14**	**1.29**	OSF1.50	1540.00	1540.00				MinPts
	24.92	25.35	7.70	-0.43	1.47	OSF1.50	1670.00	1669.90		OSF>1.50		Exit Minor
	58.15	34.46	34.85	**23.69**	2.56	OSF1.50	2290.00	2283.06				MinPt-ADP
	78.01	49.03	45.00	28.98	**2.40**	OSF1.50	3170.00	3149.68				MinPt-SF
	135.92	88.19	76.80	47.73	2.32	OSF1.50	5320.00	5271.34				MinPt-CtCt
	136.23	89.36	**76.33**	46.87	2.30	OSF1.50	5390.00	5341.33				MinPt-EOU
	136.49	89.68	76.38	**46.81**	2.29	OSF1.50	5410.00	5361.33				MinPt-ADP
	137.04	90.13	76.63	46.91	**2.29**	OSF1.50	5440.00	5391.33				MinPt-SF
	151.87	126.16	**67.43**	25.71	1.81	OSF1.50	8073.34	8024.67				MinPt-EOU
	151.91	126.21	67.44	**25.70**	**1.81**	OSF1.50	8080.00	8031.33				MinPts
	426.87	130.01	339.87	296.86	4.95	OSF1.50	8660.00	8514.06	OSF>5.00			Exit Alert
	829.93	249.94	662.98	580.00	4.99	OSF1.50	15730.00	8724.46	OSF<=5.00			Enter Alert
	829.19	343.73	**599.71**	**485.46**	**3.62**	OSF1.50	18660.90	8772.00				MinPts
30-015-21636 - Luguna Grande 001 - Inc Only to 13700ft - P&A (DefinitiveSurvey) - **Fail Minor**												
	9226.04	32.81	9222.62	9193.23	6420.07	MAS = 10.00 (m)	0.00	0.00				Surface
	9226.04	32.81	9222.49	9193.23	5889.75	MAS = 10.00 (m)	23.00	23.00				WRP
	9226.04	85.01	9168.78	9141.03	166.21	OSF1.50	1500.00	1500.00				MinPt-CtCt
	9279.03	196.02	**9147.77**	9083.01	71.64	OSF1.50	2980.00	2962.57				MinPt-EOU
	9315.01	253.11	**9145.68**	9061.89	55.58	OSF1.50	3760.00	3730.71				MinPt-EOU
	1866.91	564.06	1490.37	1302.85	4.97	OSF1.50	15970.00	8728.35	OSF<=5.00			Enter Alert
	606.80	609.30	200.09	-2.51	1.49	OSF1.50	17410.00	8751.71		OSF<=1.50		Enter Minor
	486.55	640.10	59.32	-153.55	1.14	OSF1.50	17772.63	8757.59				MinPt-CtCt
	486.61	640.22	**59.30**	**-153.61**	**1.14**	OSF1.50	17780.00	8757.71				MinPts
	615.72	617.05	203.85	-1.33	1.50	OSF1.50	18150.00	8763.71		OSF>1.50		Exit Minor
	1012.69	587.12	620.78	425.57	2.59	OSF1.50	18660.90	8772.00				TD
Coterra Laguna Grande 29-28 Fed Com 13H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	34.99	28.39	31.71	6.60	16.85	MAS = 8.65 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	34.99	28.39	31.71	6.60	16.85	MAS = 8.65 (m)	23.00	23.00				WRP
	34.99	28.39	**22.22**	6.60	2.94	MAS = 8.65 (m)	1190.00	1190.00				MinPt-EOU
	34.99	28.39	20.45	**6.60**	2.51	MAS = 8.65 (m)	1400.00	1400.00				MinPts
	35.46	28.39	**19.93**	7.07	2.37	MAS = 8.65 (m)	1500.00	1500.00				MinPt-EOU
	43.21	29.68	23.09	13.53	**2.21**	OSF1.50	1970.00	1967.89				MinPt-SF
	278.49	84.66	221.72	193.83	4.97	OSF1.50	5500.00	5451.33	OSF>5.00			Exit Alert
	464.86	122.60	**382.80**	342.26	5.72	OSF1.50	8080.00	8031.33				MinPt-EOU
	464.92	122.67	382.81	**342.25**	5.72	OSF1.50	8090.00	8041.33				MinPt-ADP
	465.47	122.90	383.21	342.57	**5.71**	OSF1.50	8120.00	8071.28				MinPt-SF
	1611.34	356.07	**1373.63**	**1255.27**	**6.80**	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 7H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	39.99	32.40	36.71	7.60	19.35	MAS = 9.87 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	39.99	32.40	36.71	7.60	19.35	MAS = 9.87 (m)	23.00	23.00				WRP
	39.99	32.40	**27.22**	7.60	3.37	MAS = 9.87 (m)	1190.00	1190.00				MinPt-EOU
	39.99	32.40	24.46	**7.60**	2.68	MAS = 9.87 (m)	1500.00	1500.00				MinPts
	40.15	32.40	**24.31**	7.75	2.64	MAS = 9.87 (m)	1530.00	1530.00				MinPt-EOU

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	
	41.08	32.40	24.75	8.68	2.61	MAS = 9.87 (m)	1580.00	1579.99				MinPt-SF
	94.59	32.40	74.85	62.19	4.99	MAS = 9.87 (m)	1950.00	1948.15	OSF>5.00			Exit Alert
	1369.14	120.17	1288.70	1248.97	17.22	OSF1.50	8073.34	8024.67				MinPts
	1369.18	120.17	1288.74	1249.01	17.22	OSF1.50	8090.00	8041.33				MinPt-SF
	1539.76	462.78	1230.91	1076.98	5.00	OSF1.50	17980.00	8760.96	OSF<=5.00			Enter Alert
	1539.80	493.71	1210.33	1046.09	4.68	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 14H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	40.30	32.64	37.01	7.66	19.50	MAS = 9.95 (m)	0.00	0.00	CtCt<=15.00m			Enter Alert
	40.30	32.64	37.01	7.66	19.50	MAS = 9.95 (m)	23.00	23.00				WRP
	40.30	32.64	27.53	7.66	3.40	MAS = 9.95 (m)	1190.00	1190.00				MinPt-EOU
	40.30	32.64	24.76	7.66	2.70	MAS = 9.95 (m)	1500.00	1500.00				MinPts
	40.70	32.64	24.27	8.06	2.57	MAS = 9.95 (m)	1590.00	1589.99				MinPt-EOU
	42.17	32.64	24.85	9.53	2.52	MAS = 9.95 (m)	1680.00	1679.88				MinPt-SF
	267.84	124.01	184.83	143.82	3.25	OSF1.50	8080.00	8031.33				MinPts
	267.95	124.09	184.90	143.86	3.25	OSF1.50	8090.00	8041.33				MinPt-SF
	423.51	128.38	337.60	295.13	4.98	OSF1.50	8580.00	8467.83	OSF>5.00			Exit Alert
	1443.86	350.03	1210.18	1093.84	6.20	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 15H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	53.14	32.81	49.85	20.33	25.92	MAS = 10.00 (m)	0.00	0.00				Surface
	53.14	32.81	49.85	20.33	25.92	MAS = 10.00 (m)	23.00	23.00				WRP
	53.14	32.81	41.45	20.33	4.98	MAS = 10.00 (m)	1080.00	1080.00	OSF<=5.00			Enter Alert
	53.14	32.81	40.37	20.33	4.51	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	53.14	32.81	37.60	20.33	3.58	MAS = 10.00 (m)	1500.00	1500.00				MinPts
	53.39	32.81	37.35	20.58	3.48	MAS = 10.00 (m)	1550.00	1550.00				MinPt-EOU
	54.68	32.81	37.95	21.87	3.41	MAS = 10.00 (m)	1620.00	1619.96				MinPt-SF
	93.38	32.81	73.79	60.57	4.97	MAS = 10.00 (m)	1930.00	1928.39	OSF>5.00			Exit Alert
	893.55	120.79	812.70	772.76	11.17	OSF1.50	8090.00	8041.33				MinPt-EOU
	893.62	120.87	812.71	772.75	11.17	OSF1.50	8100.00	8051.32				MinPt-ADP
	897.89	121.91	816.29	775.98	11.13	OSF1.50	8240.00	8188.99				MinPt-SF
	1782.05	390.76	1521.21	1391.29	6.85	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 8H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	60.00	32.81	56.71	27.19	29.35	MAS = 10.00 (m)	0.00	0.00				Surface
	60.00	32.81	56.71	27.19	29.35	MAS = 10.00 (m)	23.00	23.00				WRP
	60.00	32.81	47.23	27.19	5.11	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	60.00	32.81	47.13	27.19	4.97	MAS = 10.00 (m)	1230.00	1230.00	OSF<=5.00			Enter Alert
	60.00	32.81	45.45	27.19	4.35	MAS = 10.00 (m)	1400.00	1400.00				MinPts
	60.14	32.81	45.31	27.34	4.27	MAS = 10.00 (m)	1430.00	1430.00				MinPt-EOU
	62.05	32.81	46.46	29.24	4.18	MAS = 10.00 (m)	1510.00	1510.00				MinPt-SF
	81.88	32.81	64.56	49.07	4.95	MAS = 10.00 (m)	1700.00	1699.84	OSF>5.00			Exit Alert
	161.23	32.81	141.33	128.42	8.47	MAS = 10.00 (m)	2000.12	1997.59				MinPt-SF
	1540.04	121.86	1458.47	1418.18	19.10	OSF1.50	8210.00	8160.04				MinPt-CtCt
	1540.17	122.34	1458.28	1417.83	19.02	OSF1.50	8280.00	8226.88				MinPt-EOU
	1540.28	122.47	1458.31	1417.81	19.01	OSF1.50	8300.00	8245.47				MinPt-ADP
	1550.27	124.22	1467.13	1426.05	18.86	OSF1.50	8560.00	8454.89				MinPt-SF
	1687.14	316.44	1475.86	1370.71	8.02	OSF1.50	15160.00	8715.22				MinPt-CtCt
	1688.44	320.08	1474.72	1368.35	7.93	OSF1.50	15270.00	8717.00				MinPt-EOU
	1689.83	321.72	1475.02	1368.11	7.90	OSF1.50	15320.00	8717.81				MinPt-ADP
	1748.84	466.35	1437.61	1282.49	5.63	OSF1.50	18660.90	8772.00				MinPts
Coterra Laguna Grande 29-28 Fed Com 16H Rev0 kFc 09May25 (DefinitivePlan) - **Warning Alert**												
	69.46	32.81	66.17	36.65	34.08	MAS = 10.00 (m)	0.00	0.00				Surface
	69.46	32.81	66.17	36.65	34.08	MAS = 10.00 (m)	23.00	23.00				WRP
	69.46	32.81	56.69	36.65	5.94	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	69.46	32.81	54.91	36.65	5.05	MAS = 10.00 (m)	1400.00	1400.00				MinPts
	69.52	32.81	54.79	36.71	4.98	MAS = 10.00 (m)	1420.00	1420.00	OSF<=5.00			Enter Alert
	69.61	32.81	54.77	36.80	4.96	MAS = 10.00 (m)	1430.00	1430.00				MinPt-EOU
	71.88	32.81	56.20	39.08	4.82	MAS = 10.00 (m)	1520.00	1520.00				MinPt-SF
	78.30	32.81	61.79	45.49	4.98	MAS = 10.00 (m)	1610.00	1609.97	OSF>5.00			Exit Alert
	163.68	32.81	143.70	130.87	8.56	MAS = 10.00 (m)	2000.12	1997.59				MinPt-SF
	1547.96	121.99	1466.30	1425.96	19.18	OSF1.50	8100.00	8051.32				MinPt-EOU
	1548.01	122.06	1466.31	1425.95	19.17	OSF1.50	8110.00	8061.31				MinPt-ADP
	1558.49	123.94	1475.53	1434.54	19.00	OSF1.50	8390.00	8325.46				MinPt-SF
	2095.19	437.42	1803.25	1657.78	7.20	OSF1.50	18660.90	8772.00				MinPts
30-015-23414 - Cimarex Laguna Grande Unit 3 - Gyro+Inc Only to 13690ft - P&A (DefinitiveSurvey) - **Warning Alert**												
	3073.82	32.81	3070.43	3041.02	2169.46	MAS = 10.00 (m)	0.00	0.00				MinPts
	3073.88	32.81	3070.48	3041.07	2162.89	MAS = 10.00 (m)	23.00	23.00				WRP
	3078.41	32.81	3065.03	3045.60	269.91	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	3078.68	32.81	3063.41	3045.87	227.86	MAS = 10.00 (m)	1400.00	1400.00				MinPts
	3069.39	35.26	3045.30	3034.14	137.37	OSF1.50	2300.00	2292.91				MinPt-CtCt
	3069.78	36.47	3044.88	3033.31	132.60	OSF1.50	2390.00	2381.54				MinPt-EOU
	3070.23	37.01	3044.98	3033.23	130.59	OSF1.50	2430.00	2420.93				MinPt-ADP
	3084.23	47.45	3052.02	3036.79	101.21	OSF1.50	3080.00	3061.05				MinPt-ADP
	3110.47	71.27	3062.42	3039.21	66.95	OSF1.50	4530.00	4489.01				MinPt-ADP
	3115.66	76.09	3064.39	3039.57	62.72	OSF1.50	4820.00	4774.60				MinPt-ADP
	484.58	148.37	385.17	336.21	4.93	OSF1.50	11180.00	8650.66	OSF<=5.00			Enter Alert
	413.08	159.55	306.21	253.53	3.91	OSF1.50	11433.37	8654.77				MinPt-CtCt
	413.13	159.66	306.19	253.48	3.90	OSF1.50	11440.00	8654.88				MinPts
	413.41	159.80	306.38	253.62	3.90	OSF1.50	11450.00	8655.04				MinPt-SF
	508.54	153.69	405.58	354.85	5.00	OSF1.50	11730.00	8659.58	OSF>5.00			Exit Alert
	7238.76	139.55	7145.23	7099.21	78.64	OSF1.50	18660.90	8772.00				TD
30-015-37331 - Cypress 28 Federal 002H - Gyro+MWD to 10272ft - A (DefinitiveSurvey) - **Pass**												
	5440.32	32.81	5436.92	5407.51	3833.67	MAS = 10.00 (m)	0.00	0.00				MinPts
	5440.37	32.81	5436.96	5407.56	3815.27	MAS = 10.00 (m)	23.00	23.00				WRP
	5437.00	32.81	5423.42	5404.19	468.53	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	5434.67	32.81	5416.69	5401.86	335.01	MAS = 10.00 (m)	1640.00	1639.94				MinPts
	5435.64	32.81	5415.30	5402.84	292.40	MAS = 10.00 (m)	1870.00	1868.97				MinPt-EOU

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	
	5479.14	45.10	5448.48	5434.03	189.55	OSF1.50	2930.00	2913.33				MinPts
	5604.15	79.23	5550.80	5524.92	108.28	OSF1.50	5710.00	5661.33				MinPt-CtCt
	5604.26	79.58	5550.67	5524.68	107.79	OSF1.50	5750.00	5701.33				MinPt-EOU
	5604.39	79.75	5550.68	5524.64	107.56	OSF1.50	5770.00	5721.33				MinPt-ADP
	5847.43	100.66	5779.83	5746.77	88.44	OSF1.50	8000.00	7951.33				MinPt-SF
	5863.47	100.90	5795.70	5762.57	88.46	OSF1.50	8073.34	8024.67				MinPt-SF
	1029.30	183.48	906.48	845.82	8.47	OSF1.50	15760.00	8724.95				MinPt-CtCt
	1026.84	197.20	894.87	829.64	7.86	OSF1.50	16250.00	8732.90				MinPt-CtCt
	1025.63	208.35	886.23	817.28	7.43	OSF1.50	16631.47	8739.08				MinPt-CtCt
	1029.96	219.89	882.86	810.07	7.06	OSF1.50	17020.00	8745.38				MinPts
	1032.01	220.71	884.37	811.30	7.05	OSF1.50	17070.00	8746.20				MinPt-SF
	1951.99	171.99	1836.83	1780.00	17.16	OSF1.50	18660.90	8772.00				TD
30-015-42739 - Laguna Grande Unit 007H - MWD to 14595ft - A (DefinitiveSurvey) - **Pass**												
	5002.36	32.81	4998.96	4969.55	3530.50	MAS = 10.00 (m)	0.00	0.00				Surface
	5002.35	32.81	4998.94	4969.54	3513.08	MAS = 10.00 (m)	23.00	23.00				WRP
	4994.66	32.81	4981.22	4961.85	435.83	MAS = 10.00 (m)	1190.00	1190.00				MinPt-EOU
	4994.07	32.81	4979.68	4961.26	395.45	MAS = 10.00 (m)	1330.00	1330.00				MinPts
	1298.14	126.44	1213.35	1171.71	15.57	OSF1.50	11577.20	8657.10				MinPt-CtCt
	1298.21	126.57	1213.33	1171.64	15.55	OSF1.50	11590.00	8657.31				MinPts
	1345.22	133.13	1255.96	1212.09	15.31	OSF1.50	11930.00	8662.83				MinPt-SF
	7200.60	181.38	7079.18	7019.22	60.03	OSF1.50	18660.90	8772.00				TD

Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25 Proposal
Geodetic Report
Def Plan

Report Date:	May 09, 2025 - 10:12 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	89.870 °(GRID North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra - Laguna Grande 29-28 Fed Com Pad (south) / Laguna Grande	**TVD Reference Datum:**	RKB
Well:	Laguna Grande 29-28 Fed Com 5H	**TVD Reference Elevation:**	2989.200 ft above MSL
Borehole:	Laguna Grande 29-28 Fed Com 5H	**Seabed / Ground Elevation:**	2966.200 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.516°
Survey Name:	Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25	**Total Gravity Field Strength:**	998.473mgn (9.80665 Based)
Survey Date:	May 08, 2025	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	109.076 ° / 10842.800 ft / 6.401 / 1.236	**Total Magnetic Field Strength:**	47243.672 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.827°
Location Lat / Long:	32°16'19.90477"N , 104°0'51.28298"W	**Declination Date:**	May 09, 2025
Location Grid N/E Y/X:	N 462904.420 ftUS , E 639957.880 ftUS	**Magnetic Declination Model:**	HDGM 2025
CRS Grid Convergence Angle:	0.17°	**North Reference:**	Grid North
Grid Scale Factor:	0.99992023(Applied)	**Grid Convergence Used:**	0.17°
Version / Patch:	2024.5.0.1	**Total Corr Mag North->Grid North:**	6.346°
		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 [1305'FSL, 395'FWL]	0.00	0.00	0.00	0.00	-2,989.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527			
Top Salt□	561.00	0.00	345.66	561.00	-2,428.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Nudge, Build 2°/100ft	1,500.00	0.00	345.66	1,500.00	-1,489.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Hold	2,000.12	10.00	345.66	1,997.59	-991.61	-10.69	42.19	-10.79	462,946.60	639,947.09	32.27231181	-104.01427977	2.00	2.00	0.00
Lamar□	2,802.74	10.00	345.66	2,788.00	-201.20	-44.93	177.25	-45.33	463,081.65	639,912.56	32.27268332	-104.01439021	0.00	0.00	0.00
Bell Canyon□	2,958.10	10.00	345.66	2,941.00	-48.20	-51.55	203.39	-52.01	463,107.79	639,905.87	32.27275523	-104.01441159	0.00	0.00	0.00
Cherry Canyon□	3,653.67	10.00	345.66	3,626.00	636.80	-81.22	320.44	-81.95	463,224.83	639,875.94	32.27307720	-104.01450730	0.00	0.00	0.00
Drop 2°/100ft	4,868.21	10.00	345.66	4,822.08	1,832.88	-133.02	524.81	-134.21	463,429.19	639,823.68	32.27363938	-104.01467443	0.00	0.00	0.00
Brushy Canyon□	4,967.36	8.02	345.66	4,920.00	1,930.80	-136.83	539.86	-138.06	463,444.23	639,819.83	32.27368076	-104.01468674	2.00	-2.00	0.00
Hold	5,368.34	0.00	345.66	5,319.67	2,330.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	2.00	-2.00	0.00
Lower Brushy Canyon□	5,812.67	0.00	345.66	5,764.00	2,774.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
Bone Spring Lime□	6,557.67	0.00	345.66	6,509.00	3,519.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
1st BS SS □	7,569.67	0.00	345.66	7,521.00	4,531.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
KOP, Build 10°/100ft	8,073.34	0.00	345.66	8,024.67	5,035.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
2nd BS SS□	8,349.20	27.59	89.87	8,290.00	5,300.80	-78.57	567.15	-79.86	463,471.52	639,878.02	32.27375529	-104.01449819	10.00	10.00	0.00
Build 5°/100ft	8,823.34	75.00	89.87	8,578.10	5,588.90	280.95	567.96	279.66	463,472.34	640,237.52	32.27375459	-104.01333502	10.00	10.00	0.00
Landing Point	9,104.74	89.07	89.87	8,617.00	5,627.80	558.94	568.59	557.65	463,472.97	640,515.48	32.27375405	-104.01243566	5.00	5.00	0.00
	9,204.74	89.07	89.87	8,618.62	5,629.42	658.92	568.82	657.64	463,473.19	640,615.46	32.27375385	-104.01211217	0.00	0.00	0.00
	9,204.78	89.07	89.87	8,618.62	5,629.42	658.97	568.82	657.68	463,473.19	640,615.51	32.27375385	-104.01211202	2.00	1.34	1.48
Section 29-28 Line Cross, Pool N	13,431.00	89.07	89.87	8,687.17	5,697.97	4,884.63	578.36	4,883.33	463,482.73	644,840.81	32.27374455	-103.99844084	0.00	0.00	0.00
Pool NMNM086024 exit to NMNI	17,428.00	89.07	89.87	8,752.00	5,762.80	8,881.11	587.38	8,879.80	463,491.75	648,836.95	32.27373439	-103.98551115	0.00	0.00	0.00
Laguna Grande 29-28 Fed Com 5	18,660.90	89.07	89.87	8,772.00	5,782.80	10,113.84	590.16	10,112.53	463,494.53	650,069.58	32.27373099	-103.98152293	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	8,000.000	1/100.000	'.5 – 12.25 – 8.75	3.375 – 9.625 – 7		A001Mb_MWD		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur
	1	8,000.000	18,660.896	1/100.000	8.75 – 6.125	7 – 4.5		A008Mb_MWD+IFR1+MS		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,201.800	17.500	13.375	
4,035.270	12.250	9.625	
8,050.467	8.750	7.000	
18,660.896	6.125	4.500	

Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25 Proposal
Geodetic Report
Def Plan

Report Date:	May 09, 2025 - 10:12 PM (UTC 0)	**Survey / DLS Computation:**	Minimum Curvature / Lubinski
Client:	COTERRA	**Vertical Section Azimuth:**	89.870 °(GRID North)
Field:	NM Eddy County (NAD 83)	**Vertical Section Origin:**	0.000 ft, 0.000 ft
Structure / Slot:	Coterra - Laguna Grande 29-28 Fed Com Pad (south) / Laguna Grande	**TVD Reference Datum:**	RKB
Well:	Laguna Grande 29-28 Fed Com 5H	**TVD Reference Elevation:**	2989.200 ft above MSL
Borehole:	Laguna Grande 29-28 Fed Com 5H	**Seabed / Ground Elevation:**	2966.200 ft above MSL
UBHI / API#:	Unknown / Unknown	**Magnetic Declination:**	6.516°
Survey Name:	Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25	**Total Gravity Field Strength:**	998.473mgn (9.80665 Based)
Survey Date:	May 08, 2025	**Gravity Model:**	GARM
Tort / AHD / DDI / ERD Ratio:	109.076 ° / 10842.800 ft / 6.401 / 1.236	**Total Magnetic Field Strength:**	47243.672 nT
Coordinate Reference System:	NAD83 New Mexico State Plane, Eastern Zone, US Feet	**Magnetic Dip Angle:**	59.827°
Location Lat / Long:	32°16'19.90477"N , 104°0'51.28298"W	**Declination Date:**	May 09, 2025
Location Grid N/E Y/X:	N 462904.420 ftUS , E 639957.880 ftUS	**Magnetic Declination Model:**	HDGM 2025
CRS Grid Convergence Angle:	0.17°	**North Reference:**	Grid North
Grid Scale Factor:	0.99992023(Applied)	**Grid Convergence Used:**	0.17°
Version / Patch:	2024.5.0.1	**Total Corr Mag North->Grid North:**	6.346°
		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 [1305'FSL, 395'FWL]	0.00	0.00	0.00	0.00	-2,989.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527			
	100.00	0.00	345.66	100.00	-2,889.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	200.00	0.00	345.66	200.00	-2,789.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	300.00	0.00	345.66	300.00	-2,689.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	400.00	0.00	345.66	400.00	-2,589.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	500.00	0.00	345.66	500.00	-2,489.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Top Salt□	561.00	0.00	345.66	561.00	-2,428.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	600.00	0.00	345.66	600.00	-2,389.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	700.00	0.00	345.66	700.00	-2,289.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	800.00	0.00	345.66	800.00	-2,189.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	900.00	0.00	345.66	900.00	-2,089.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,000.00	0.00	345.66	1,000.00	-1,989.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,100.00	0.00	345.66	1,100.00	-1,889.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,200.00	0.00	345.66	1,200.00	-1,789.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,300.00	0.00	345.66	1,300.00	-1,689.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,400.00	0.00	345.66	1,400.00	-1,589.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
Nudge, Build 2°/100ft	1,500.00	0.00	345.66	1,500.00	-1,489.20	0.00	0.00	0.00	462,904.42	639,957.88	32.27219577	-104.01424527	0.00	0.00	0.00
	1,600.00	2.00	345.66	1,599.98	-1,389.22	-0.43	1.69	-0.43	462,906.11	639,957.45	32.27220042	-104.01424666	2.00	2.00	0.00
	1,700.00	4.00	345.66	1,699.84	-1,289.36	-1.71	6.76	-1.73	462,911.18	639,956.15	32.27221437	-104.01425080	2.00	2.00	0.00
	1,800.00	6.00	345.66	1,799.45	-1,189.75	-3.85	15.20	-3.89	462,919.62	639,953.99	32.27223759	-104.01425771	2.00	2.00	0.00
	1,900.00	8.00	345.66	1,898.70	-1,090.50	-6.85	27.01	-6.91	462,931.43	639,950.97	32.27227007	-104.01426736	2.00	2.00	0.00
	2,000.00	10.00	345.66	1,997.47	-991.73	-10.69	42.17	-10.78	462,946.58	639,947.10	32.27231175	-104.01427975	2.00	2.00	0.00
Hold	2,000.12	10.00	345.66	1,997.59	-991.61	-10.69	42.19	-10.79	462,946.60	639,947.09	32.27231181	-104.01427977	2.00	2.00	0.00
	2,100.00	10.00	345.66	2,095.95	-893.25	-14.95	58.99	-15.09	462,963.41	639,942.79	32.27235804	-104.01429351	0.00	0.00	0.00
	2,200.00	10.00	345.66	2,194.43	-794.77	-19.22	75.82	-19.39	462,980.23	639,938.49	32.27240433	-104.01430727	0.00	0.00	0.00
	2,300.00	10.00	345.66	2,292.91	-696.29	-23.48	92.65	-23.69	462,997.06	639,934.19	32.27245062	-104.01432103	0.00	0.00	0.00
	2,400.00	10.00	345.66	2,391.39	-597.81	-27.75	109.48	-28.00	463,013.89	639,929.89	32.27249690	-104.01433479	0.00	0.00	0.00
	2,500.00	10.00	345.66	2,489.87	-499.33	-32.01	126.30	-32.30	463,030.71	639,925.58	32.27254319	-104.01434855	0.00	0.00	0.00
	2,600.00	10.00	345.66	2,588.35	-400.85	-36.28	143.13	-36.60	463,047.54	639,921.28	32.27258948	-104.01436231	0.00	0.00	0.00
	2,700.00	10.00	345.66	2,686.83	-302.37	-40.54	159.96	-40.91	463,064.36	639,916.98	32.27263577	-104.01437608	0.00	0.00	0.00
	2,800.00	10.00	345.66	2,785.31	-203.89	-44.81	176.79	-45.21	463,081.19	639,912.67	32.27268205	-104.01438984	0.00	0.00	0.00
Lamar□	2,802.74	10.00	345.66	2,788.00	-201.20	-44.93	177.25	-45.33	463,081.65	639,912.56	32.27268332	-104.01439021	0.00	0.00	0.00
	2,900.00	10.00	345.66	2,883.79	-105.41	-49.07	193.61	-49.51	463,098.02	639,908.37	32.27272834	-104.01440360	0.00	0.00	0.00
Bell Canyon□	2,958.10	10.00	345.66	2,941.00	-48.20	-51.55	203.39	-52.01	463,107.79	639,905.87	32.27275523	-104.01441159	0.00	0.00	0.00
	3,000.00	10.00	345.66	2,982.27	-6.93	-53.34	210.44	-53.82	463,114.84	639,904.07	32.27277463	-104.01441736	0.00	0.00	0.00
	3,100.00	10.00	345.66	3,080.75	91.55	-57.60	227.27	-58.12	463,131.67	639,899.77	32.27282092	-104.01443112	0.00	0.00	0.00
	3,200.00	10.00	345.66	3,179.23	190.03	-61.87	244.10	-62.42	463,148.50	639,895.46	32.27286720	-104.01444488	0.00	0.00	0.00
	3,300.00	10.00	345.66	3,277.71	288.51	-66.13	260.92	-66.73	463,165.32	639,891.16	32.27291349	-104.01445864	0.00	0.00	0.00
	3,400.00	10.00	345.66	3,376.19	386.99	-70.40	277.75	-71.03	463,182.15	639,886.86	32.27295978	-104.01447240	0.00	0.00	0.00
	3,500.00	10.00	345.66	3,474.67	485.47	-74.66	294.58	-75.33	463,198.97	639,882.55	32.27300607	-104.01448616	0.00	0.00	0.00
	3,600.00	10.00	345.66	3,573.15	583.95	-78.93	311.41	-79.64	463,215.80	639,878.25	32.27305235	-104.01449992	0.00	0.00	0.00
Cherry Canyon□	3,653.67	10.00	345.66	3,626.00	636.80	-81.22	320.44	-81.95	463,224.83	639,875.94	32.27307720	-104.01450730	0.00	0.00	0.00
	3,700.00	10.00	345.66	3,671.63	682.43	-83.19	328.23	-83.94	463,232.63	639,873.95	32.27309864	-104.01451368	0.00	0.00	0.00
	3,800.00	10.00	345.66	3,770.11	780.91	-87.46	345.06	-88.24	463,249.45	639,869.64	32.27314493	-104.01452744	0.00	0.00	0.00
	3,900.00	10.00	345.66	3,868.59	879.39	-91.72	361.89	-92.55	463,266.28	639,865.34	32.27319122	-104.01454120	0.00	0.00	0.00
	4,000.00	10.00	345.66	3,967.07	977.87	-95.99	378.72	-96.85	463,283.10	639,861.04	32.27323750	-104.01455496	0.00	0.00	0.00
	4,100.00	10.00	345.66	4,065.55	1,076.35	-100.26	395.54	-101.15	463,299.93	639,856.74	32.27328379	-104.01456872	0.00	0.00	0.00
	4,200.00	10.00	345.66	4,164.03	1,174.83	-104.52	412.37	-105.46	463,316.76	639,852.43	32.27333008	-104.01458248	0.00	0.00	0.00
	4,300.00	10.00	345.66	4,262.51	1,273.31	-108.79	429.20	-109.76	463,333.58	639,848.13	32.27337637	-104.01459624	0.00	0.00	0.00
	4,400.00	10.00	345.66	4,360.99	1,371.79	-113.05	446.03	-114.06	463,350.41	639,843.83	32.27342265	-104.01461000	0.00	0.00	0.00
	4,500.00	10.00	345.66	4,459.47	1,470.27	-117.32	462.85	-118.37	463,367.23	639,839.52	32.27346894	-104.01462376	0.00	0.00	0.00
	4,600.00	10.00	345.66	4,557.95	1,568.75	-121.58	479.68	-122.67	463,384.06	639,835.22	32.27351523	-104.01463753	0.00	0.00	0.00
	4,700.00	10.00	345.66	4,656.43	1,667.23	-125.85	496.51	-126.97	463,400.89	639,830.92	32.27356152	-104.01465129	0.00	0.00	0.00
	4,800.00	10.00	345.66	4,754.91	1,765.71	-130.11	513.33	-131.28	463,417.71	639,826.61	32.27360780	-104.01466505	0.00	0.00	0.00
Drop 2°/100ft	4,868.21	10.00	345.66	4,822.08	1,832.88	-133.02	524.81	-134.21	463,429.19	639,823.68	32.27363938	-104.01467443	0.00	0.00	0.00
	4,900.00	9.37	345.66	4,853.42	1,864.22	-134.33	529.99	-135.54	463,434.37	639,822.35	32.27365363	-104.01467867	2.00	-2.00	0.00
Brushy Canyon□	4,967.36	8.02	345.66	4,920.00	1,930.80	-136.83	539.86	-138.06	463,444.23	639,819.83	32.27368076	-104.01468674	2.00	-2.00	0.00
	5,000.00	7.37	345.66	4,952.35	1,963.15	-137.91	544.09	-139.14	463,448.47	639,818.75	32.27369240	-104.01469020	2.00	-2.00	0.00
	5,100.00	5.37	345.66	5,051.73	2,062.53	-140.63	554.83	-141.89	463,459.21	639,816.00	32.27372195	-104.01469898	2.00	-2.00	0.00
	5,200.00	3.37	345.66	5,151.43	2,162.23	-142.50	562.21	-143.77	463,466.58	639,814.12	32.27374224	-104.01470501	2.00	-2.00	0.00
	5,300.00	1.37	345.66	5,251.34	2,262.14	-143.51	566.21	-144.80	463,470.58	639,813.09	32.27375325	-104.01470829	2.00	-2.00	0.00
Hold	5,368.34	0.00	345.66	5,319.67	2,330.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	2.00	-2.00	0.00
	5,400.00	0.00	345.66	5,351.33	2,362.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,500.00	0.00	345.66	5,451.33	2,462.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,600.00	0.00	345.66	5,551.33	2,562.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,700.00	0.00	345.66	5,651.33	2,662.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,800.00	0.00	345.66	5,751.33	2,762.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
Lower Brushy Canyon□	5,812.67	0.00	345.66	5,764.00	2,774.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	5,900.00	0.00	345.66	5,851.33	2,862.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,000.00	0.00	345.66	5,951.33	2,962.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,100.00	0.00	345.66	6,051.33	3,062.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,200.00	0.00	345.66	6,151.33	3,162.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,300.00	0.00	345.66	6,251.33	3,262.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,400.00	0.00	345.66	6,351.33	3,362.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,500.00	0.00	345.66	6,451.33	3,462.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
Bone Spring Lime□	6,557.67	0.00	345.66	6,509.00	3,519.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,600.00	0.00	345.66	6,551.33	3,562.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,700.00	0.00	345.66	6,651.33	3,662.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,800.00	0.00	345.66	6,751.33	3,762.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	6,900.00	0.00	345.66	6,851.33	3,862.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,000.00	0.00	345.66	6,951.33	3,962.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,100.00	0.00	345.66	7,051.33	4,062.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,200.00	0.00	345.66	7,151.33	4,162.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,300.00	0.00	345.66	7,251.33	4,262.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,400.00	0.00	345.66	7,351.33	4,362.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,500.00	0.00	345.66	7,451.33	4,462.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
1st BS SS □	7,569.67	0.00	345.66	7,521.00	4,531.80	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,600.00	0.00	345.66	7,551.33	4,562.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,700.00	0.00	345.66	7,651.33	4,662.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,800.00	0.00	345.66	7,751.33	4,762.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	7,900.00	0.00	345.66	7,851.33	4,862.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	8,000.00	0.00	345.66	7,951.33	4,962.13	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
KOP, Build 10°/100ft	8,073.34	0.00	345.66	8,024.67	5,035.47	-143.71	567.00	-145.00	463,471.37	639,812.89	32.27375542	-104.01470893	0.00	0.00	0.00
	8,100.00	2.67	89.87	8,051.32	5,062.12	-143.09	567.00	-144.38	463,471.38	639,813.51	32.27375542	-104.01470692	10.00	10.00	0.00
	8,200.00	12.67	89.87	8,150.30	5,161.10	-129.77	567.03	-131.06	463,471.41	639,826.83	32.27375539	-104.01466382	10.00	10.00	0.00
	8,300.00	22.67	89.87	8,245.47	5,256.27	-99.46	567.10	-100.75	463,471.47	639,857.14	32.27375533	-104.01456576	10.00	10.00	0.00
2nd BS SS□	8,349.20	27.59	89.87	8,290.00	5,300.80	-78.57	567.15	-79.86	463,471.52	639,878.02	32.27375529	-104.01449819	10.00	10.00	0.00
	8,400.00	32.67	89.87	8,333.92	5,344.72	-53.09	567.21	-54.37	463,471.58	639,903.51	32.27375525	-104.01441573	10.00	10.00	0.00
	8,500.00	42.67	89.87	8,412.98	5,423.78	7.94	567.34	6.65	463,471.72	639,964.53	32.27375513	-104.01421829	10.00	10.00	0.00
	8,600.00	52.67	89.87	8,480.24	5,491.04	81.77	567.51	80.48	463,471.89	640,038.36	32.27375498	-104.01397943	10.00	10.00	0.00
	8,700.00	62.67	89.87	8,533.66	5,544.46	166.16	567.70	164.87	463,472.08	640,122.74	32.27375482	-104.01370641	10.00	10.00	0.00
	8,800.00	72.67	89.87	8,571.61	5,582.41	258.54	567.91	257.25	463,472.29	640,215.11	32.27375464	-104.01340753	10.00	10.00	0.00
Build 5°/100ft	8,823.34	75.00	89.87	8,578.10	5,588.90	280.95	567.96	279.66	463,472.34	640,237.52	32.27375459	-104.01333502	10.00	10.00	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)
	8,900.00	78.83	89.87	8,595.46	5,606.26	355.61	568.13	354.32	463,472.51	640,312.17	32.27375445	-104.01309348	5.00	5.00	0.00
	9,000.00	83.83	89.87	8,610.52	5,621.32	454.44	568.36	453.15	463,472.73	640,410.99	32.27375425	-104.01277374	5.00	5.00	0.00
	9,100.00	88.83	89.87	8,616.91	5,627.71	554.20	568.58	552.91	463,472.96	640,510.75	32.27375406	-104.01245098	5.00	5.00	0.00
Landing Point	9,104.74	89.07	89.87	8,617.00	5,627.80	558.94	568.59	557.65	463,472.97	640,515.48	32.27375405	-104.01243566	5.00	5.00	0.00
	9,200.00	89.07	89.87	8,618.55	5,629.35	654.19	568.81	652.90	463,473.18	640,610.73	32.27375386	-104.01212750	0.00	0.00	0.00
	9,204.74	89.07	89.87	8,618.62	5,629.42	658.92	568.82	657.64	463,473.19	640,615.46	32.27375385	-104.01211217	0.00	0.00	0.00
	9,204.78	89.07	89.87	8,618.62	5,629.42	658.97	568.82	657.68	463,473.19	640,615.51	32.27375385	-104.01211202	2.00	1.34	1.48
	9,300.00	89.07	89.87	8,620.17	5,630.97	754.18	569.04	752.89	463,473.41	640,710.70	32.27375365	-104.01180401	0.00	0.00	0.00
	9,400.00	89.07	89.87	8,621.79	5,632.59	854.16	569.26	852.87	463,473.64	640,810.68	32.27375345	-104.01148053	0.00	0.00	0.00
	9,500.00	89.07	89.87	8,623.41	5,634.21	954.15	569.49	952.86	463,473.86	640,910.66	32.27375325	-104.01115704	0.00	0.00	0.00
	9,600.00	89.07	89.87	8,625.03	5,635.83	1,054.14	569.71	1,052.85	463,474.09	641,010.64	32.27375304	-104.01083356	0.00	0.00	0.00
	9,700.00	89.07	89.87	8,626.66	5,637.46	1,154.12	569.94	1,152.83	463,474.31	641,110.62	32.27375283	-104.01051007	0.00	0.00	0.00
	9,800.00	89.07	89.87	8,628.28	5,639.08	1,254.11	570.16	1,252.82	463,474.54	641,210.60	32.27375263	-104.01018658	0.00	0.00	0.00
	9,900.00	89.07	89.87	8,629.90	5,640.70	1,354.10	570.39	1,352.81	463,474.76	641,310.57	32.27375242	-104.00986310	0.00	0.00	0.00
	10,000.00	89.07	89.87	8,631.52	5,642.32	1,454.08	570.62	1,452.79	463,474.99	641,410.55	32.27375221	-104.00953961	0.00	0.00	0.00
	10,100.00	89.07	89.87	8,633.14	5,643.94	1,554.07	570.84	1,552.78	463,475.21	641,510.53	32.27375200	-104.00921613	0.00	0.00	0.00
	10,200.00	89.07	89.87	8,634.77	5,645.57	1,654.06	571.07	1,652.77	463,475.44	641,610.51	32.27375179	-104.00889264	0.00	0.00	0.00
	10,300.00	89.07	89.87	8,636.39	5,647.19	1,754.04	571.29	1,752.75	463,475.67	641,710.49	32.27375158	-104.00856916	0.00	0.00	0.00
	10,400.00	89.07	89.87	8,638.01	5,648.81	1,854.03	571.52	1,852.74	463,475.89	641,810.47	32.27375137	-104.00824567	0.00	0.00	0.00
	10,500.00	89.07	89.87	8,639.63	5,650.43	1,954.02	571.74	1,952.73	463,476.12	641,910.45	32.27375116	-104.00792219	0.00	0.00	0.00
	10,600.00	89.07	89.87	8,641.25	5,652.05	2,054.00	571.97	2,052.71	463,476.34	642,010.42	32.27375094	-104.00759870	0.00	0.00	0.00
	10,700.00	89.07	89.87	8,642.88	5,653.68	2,153.99	572.20	2,152.70	463,476.57	642,110.40	32.27375073	-104.00727522	0.00	0.00	0.00
	10,800.00	89.07	89.87	8,644.50	5,655.30	2,253.98	572.42	2,252.68	463,476.79	642,210.38	32.27375051	-104.00695173	0.00	0.00	0.00
	10,900.00	89.07	89.87	8,646.12	5,656.92	2,353.96	572.65	2,352.67	463,477.02	642,310.36	32.27375030	-104.00662825	0.00	0.00	0.00
	11,000.00	89.07	89.87	8,647.74	5,658.54	2,453.95	572.87	2,452.66	463,477.25	642,410.34	32.27375008	-104.00630476	0.00	0.00	0.00
	11,100.00	89.07	89.87	8,649.36	5,660.16	2,553.94	573.10	2,552.64	463,477.47	642,510.32	32.27374986	-104.00598128	0.00	0.00	0.00
	11,200.00	89.07	89.87	8,650.99	5,661.79	2,653.93	573.32	2,652.63	463,477.70	642,610.29	32.27374964	-104.00565779	0.00	0.00	0.00
	11,300.00	89.07	89.87	8,652.61	5,663.41	2,753.91	573.55	2,752.62	463,477.92	642,710.27	32.27374942	-104.00533431	0.00	0.00	0.00
	11,400.00	89.07	89.87	8,654.23	5,665.03	2,853.90	573.77	2,852.60	463,478.15	642,810.25	32.27374920	-104.00501082	0.00	0.00	0.00
	11,500.00	89.07	89.87	8,655.85	5,666.65	2,953.89	574.00	2,952.59	463,478.37	642,910.23	32.27374898	-104.00468734	0.00	0.00	0.00
	11,600.00	89.07	89.87	8,657.47	5,668.27	3,053.87	574.23	3,052.58	463,478.60	643,010.21	32.27374876	-104.00436385	0.00	0.00	0.00
	11,700.00	89.07	89.87	8,659.10	5,669.90	3,153.86	574.45	3,152.56	463,478.82	643,110.19	32.27374854	-104.00404037	0.00	0.00	0.00
	11,800.00	89.07	89.87	8,660.72	5,671.52	3,253.85	574.68	3,252.55	463,479.05	643,210.16	32.27374831	-104.00371688	0.00	0.00	0.00
	11,900.00	89.07	89.87	8,662.34	5,673.14	3,353.83	574.90	3,352.54	463,479.28	643,310.14	32.27374809	-104.00339340	0.00	0.00	0.00
	12,000.00	89.07	89.87	8,663.96	5,674.76	3,453.82	575.13	3,452.52	463,479.50	643,410.12	32.27374786	-104.00306991	0.00	0.00	0.00
	12,100.00	89.07	89.87	8,665.58	5,676.38	3,553.81	575.35	3,552.51	463,479.73	643,510.10	32.27374764	-104.00274643	0.00	0.00	0.00
	12,200.00	89.07	89.87	8,667.21	5,678.01	3,653.79	575.58	3,652.50	463,479.95	643,610.08	32.27374741	-104.00242294	0.00	0.00	0.00
	12,300.00	89.07	89.87	8,668.83	5,679.63	3,753.78	575.81	3,752.48	463,480.18	643,710.06	32.27374718	-104.00209946	0.00	0.00	0.00
	12,400.00	89.07	89.87	8,670.45	5,681.25	3,853.77	576.03	3,852.47	463,480.40	643,810.04	32.27374695	-104.00177597	0.00	0.00	0.00
	12,500.00	89.07	89.87	8,672.07	5,682.87	3,953.75	576.26	3,952.46	463,480.63	643,910.01	32.27374672	-104.00145249	0.00	0.00	0.00
	12,600.00	89.07	89.87	8,673.69	5,684.49	4,053.74	576.48	4,052.44	463,480.86	644,009.99	32.27374649	-104.00112900	0.00	0.00	0.00
	12,700.00	89.07	89.87	8,675.32	5,686.12	4,153.73	576.71	4,152.43	463,481.08	644,109.97	32.27374626	-104.00080552	0.00	0.00	0.00
	12,800.00	89.07	89.87	8,676.94	5,687.74	4,253.71	576.93	4,252.42	463,481.31	644,209.95	32.27374603	-104.00048203	0.00	0.00	0.00
	12,900.00	89.07	89.87	8,678.56	5,689.36	4,353.70	577.16	4,352.40	463,481.53	644,309.93	32.27374580	-104.00015855	0.00	0.00	0.00
	13,000.00	89.07	89.87	8,680.18	5,690.98	4,453.69	577.38	4,452.39	463,481.76	644,409.91	32.27374556	-103.99983506	0.00	0.00	0.00
	13,100.00	89.07	89.87	8,681.80	5,692.60	4,553.68	577.61	4,552.38	463,481.98	644,509.88	32.27374533	-103.99951158	0.00	0.00	0.00
	13,200.00	89.07	89.87	8,683.43	5,694.23	4,653.66	577.84	4,652.36	463,482.21	644,609.86	32.27374510	-103.99918809	0.00	0.00	0.00
	13,300.00	89.07	89.87	8,685.05	5,695.85	4,753.65	578.06	4,752.35	463,482.43	644,709.84	32.27374486	-103.99886461	0.00	0.00	0.00
	13,400.00	89.07	89.87	8,686.67	5,697.47	4,853.64	578.29	4,852.34	463,482.66	644,809.82	32.27374462	-103.99854112	0.00	0.00	0.00
Section 29-28 Line Cross, Pool N	13,431.00	89.07	89.87	8,687.17	5,697.97	4,884.63	578.36	4,883.33	463,482.73	644,840.81	32.27374455	-103.99844084	0.00	0.00	0.00
	13,500.00	89.07	89.87	8,688.29	5,699.09	4,953.62	578.51	4,952.32	463,482.89	644,909.80	32.27374438	-103.99821764	0.00	0.00	0.00
	13,600.00	89.07	89.87	8,689.91	5,700.71	5,053.61	578.74	5,052.31	463,483.11	645,009.78	32.27374415	-103.99789415	0.00	0.00	0.00
	13,700.00	89.07	89.87	8,691.54	5,702.34	5,153.60	578.96	5,152.30	463,483.34	645,109.75	32.27374391	-103.99757067	0.00	0.00	0.00
	13,800.00	89.07	89.87	8,693.16	5,703.96	5,253.58	579.19	5,252.28	463,483.56	645,209.73	32.27374367	-103.99724718	0.00	0.00	0.00
	13,900.00	89.07	89.87	8,694.78	5,705.58	5,353.57	579.42	5,352.27	463,483.79	645,309.71	32.27374343	-103.99692370	0.00	0.00	0.00
	14,000.00	89.07	89.87	8,696.40	5,707.20	5,453.56	579.64	5,452.26	463,484.01	645,409.69	32.27374318	-103.99660021	0.00	0.00	0.00
	14,100.00	89.07	89.87	8,698.02	5,708.82	5,553.54	579.87	5,552.24	463,484.24	645,509.67	32.27374294	-103.99627673	0.00	0.00	0.00
	14,200.00	89.07	89.87	8,699.65	5,710.45	5,653.53	580.09	5,652.23	463,484.47	645,609.65	32.27374270	-103.99595324	0.00	0.00	0.00
	14,300.00	89.07	89.87	8,701.27	5,712.07	5,753.52	580.32	5,752.22	463,484.69	645,709.63	32.27374245	-103.99562976	0.00	0.00	0.00
	14,400.00	89.07	89.87	8,702.89	5,713.69	5,853.50	580.54	5,852.20	463,484.92	645,809.60	32.27374221	-103.99530627	0.00	0.00	0.00
	14,500.00	89.07	89.87	8,704.51	5,715.31	5,953.49	580.77	5,952.19	463,485.14	645,909.58	32.27374196	-103.99498279	0.00	0.00	0.00
	14,600.00	89.07	89.87	8,706.13	5,716.93	6,053.48	581.00	6,052.18	463,485.37	646,009.56	32.27374172	-103.99465930	0.00	0.00	0.00
	14,700.00	89.07	89.87	8,707.76	5,718.56	6,153.46	581.22	6,152.16	463,485.59	646,109.54	32.27374147	-103.99433582	0.00	0.00	0.00
	14,800.00	89.07	89.87	8,709.38	5,720.18	6,253.45	581.45	6,252.15	463,485.82	646,209.52	32.27374122	-103.99401233	0.00	0.00	0.00
	14,900.00	89.07	89.87	8,711.00	5,721.80	6,353.44	581.67	6,352.14	463,486.04	646,309.50	32.27374097	-103.99368885	0.00	0.00	0.00
	15,000.00	89.07	89.87	8,712.62	5,723.42	6,453.43	581.90	6,452.12	463,486.27	646,409.47	32.27374072	-103.99336536	0.00	0.00	0.00
	15,100.00	89.07	89.87	8,714.24	5,725.04	6,553.41	582.12	6,552.11	463,486.50	646,509.45	32.27374047	-103.99304188	0.00	0.00	0.00
	15,200.00	89.07	89.87	8,715.86	5,726.66	6,653.40	582.35	6,652.09	463,486.72	646,609.43	32.27374022	-103.99271839	0.00	0.00	0.00
	15,300.00	89.07	89.87	8,717.49	5,728.29	6,753.39	582.57	6,752.08	463,486.95	646,709.41	32.27373996	-103.99239491	0.00	0.00	0.00
	15,400.00	89.07	89.87	8,719.11	5,729.91	6,853.37	582.80	6,852.07	463,487.17	646,809.39	32.27373971	-103.99207142	0.00	0.00	0.00
	15,500.00	89.07	89.87	8,720.73	5,731.53	6,953.36	583.03	6,952.05	463,487.40	646,909.37	32.27373946	-103.99174794	0.00	0.00	0.00
	15,600.00	89.07	89.87	8,722.35	5,733.15	7,053.35	583.25	7,052.04	463,487.62	647,009.34	32.27373920	-103.99142445	0.00	0.00	0.00
	15,700.00	89.07	89.87	8,723.97	5,734.77	7,153.33	583.48	7,152.03	463,487.85	647,109.32	32.27373895	-103.99110097	0.00	0.00	0.00
	15,800.00	89.07	89.87	8,725.60	5,736.40	7,253.32	583.70	7,252.01	463,488.08	647,209.30	32.27373869	-103.99077748	0.00	0.00	0.00
	15,900.00	89.07	89.87	8,727.22	5,738.02	7,353.31	583.93	7,352.00	463,488.30	647,309.28	32.27373843	-103.99045400	0.00	0.00	0.00
	16,000.00	89.07	89.87	8,728.84	5,739.64	7,453.29	584.15	7,451.99	463,488.53	647,409.26	32.27373817	-103.99013051	0.00	0.00	0.00
	16,100.00	89.07	89.87	8,730.46	5,741.26	7,553.28	584.38	7,551.97	463,488.75	647,509.24	32.27373791	-103.98980703	0.00	0.00	0.00
	16,200.00	89.07	89.87	8,732.08	5,742.88	7,653.27	584.61	7,651.96	463,488.98	647,609.22	32.27373765	-103.98948355	0.00	0.00	0.00
	16,300.00	89.07	89.87	8,733.71	5,744.51	7,753.25	584.83	7,751.95	463,489.20	647,709.19	32.27373739	-103.98916006	0.00	0.00	0.00
	16,400.00	89.07	89.87	8,735.33	5,746.13	7,853.24	585.06	7,851.93	463,489.43	647,809.17	32.27373713	-103.98883658	0.00	0.00	0.00
	16,500.00	89.07	89.87	8,736.95	5,747.75	7,953.23	585.28	7,951.92	463,489.65	647,909.15	32.27373687	-103.98851309	0.00	0.00	0.00
	16,600.00	89.07	89.87	8,738.57	5,749.37	8,053.21	585.51	8,051.91	463,489.88	648,009.13	32.27373661	-103.98818961	0.00	0.00	0.00
	16,700.00	89.07	89.87	8,740.19	5,750.99	8,153.20	585.73	8,151.89	463,490.11	648,109.11	32.27373634	-103.98786612	0.00	0.00	0.00
	16,800.00	89.07	89.87	8,741.82	5,752.62	8,253.19	585.96	8,251.88	463,490.33	648,209.09	32.27373608	-103.98754264	0.00	0.00	0.00
	16,900.00	89.07	89.87	8,743.44	5,754.24	8,353.18	586.18	8,351.87	463,490.56	648,309.06	32.27373581	-103.98721915	0.00	0.00	0.00
	17,000.00	89.07	89.87	8,745.06	5,755.86	8,453.16	586.41	8,451.85	463,490.78	648,409.04	32.27373554	-103.98689567	0.00	0.00	0.00
	17,100.00	89.07	89.87	8,746.68	5,757.48	8,553.15	586.64	8,551.84	463,491.01	648,509.02	32.27373528	-103.98657218	0.00	0.00	0.00
	17,200.00	89.07	89.87	8,748.30	5,759.10	8,653.14	586.86	8,651.83	463,491.23	648,609.00	32.27373501	-103.98624870	0.00	0.00	0.00
	17,300.00	89.07	89.87	8,749.93	5,760.73	8,753.12	587.09	8,751.81	463,491.46	648,708.98	32.27373474	-103.98592521	0.00	0.00	0.00
	17,400.00	89.07	89.87	8,751.55	5,762.35	8,853.11	587.31	8,851.80	463,491.69	648,808.96	32.27373447	-103.98560173	0.00	0.00	0.00
Pool NMNM086024 exit to NMNI	17,428.00	89.07	89.87	8,752.00	5,762.80	8,881.11	587.38	8,879.80	463,491.75	648,836.95	32.27373439	-103.98551115	0.00	0.00	0.00
	17,500.00	89.07	89.87	8,753.17	5,763.97	8,953.10	587.54	8,951.79	463,491.91	648,908.93	32.27373420	-103.98527824	0.00	0.00	0.00
	17,600.00	89.07	89.87	8,754.79	5,765.59	9,053.08	587.76	9,051.77	463,492.14	649,008.91	32.27373393	-103.98495476	0.00	0.00	0.00
	17,700.00	89.07	89.87	8,756.41	5,767.21	9,153.07	587.99	9,151.76	463,492.36	649,108.89	32.27373365	-103.98463128	0.00	0.00	0.00
	17,800.00	89.07	89.87	8,758.04	5,768.84	9,253.06	588.22	9,251.75	463,492.59	649,208.87	32.27373338	-103.98430779	0.00	0.00	0.00
	17,900.00	89.07	89.87	8,759.66	5,770.46	9,353.04	588.44	9,351.73	463,492.81	649,308.85	32.27373311	-103.98398431	0.00	0.00	0.00
	18,000.00	89.07	89.87	8,761.28	5,772.08	9,453.03	588.67	9,451.72	463,493.04	649,408.83	32.27373283	-103.98366082	0.00	0.00	0.00
	18,100.00	89.07	89.87	8,762.90	5,773.70	9,553.02	588.89	9,551.71	463,493.26	649,508.80	32.27373256	-103.98333734	0.00	0.00	0.00
	18,200.00	89.07	89.87	8,764.52	5,775.32	9,653.00	589.12	9,651.69	463,493.49	649,608.78	32.27373228	-103.98301385	0.00	0.00	0.00
	18,300.00	89.07	89.87	8,766.15	5,776.95	9,752.99	589.34	9,751.68	463,493.72	649,708.76	32.27373200	-103.98269037	0.00	0.00	0.00
	18,400.00	89.07	89.87	8,767.77	5,778.57	9,852.98	589.57	9,851.67	463,493.94	649,808.74	32.27373172	-103.98236688	0.00	0.00	0.00
	18,500.00	89.07	89.87	8,769.39	5,780.19	9,952.96	589.80	9,951.65	463,494.17	649,908.72	32.27373144	-103.98204340	0.00	0.00	0.00
	18,600.00	89.07	89.87	8,771.01	5,781.81	10,052.95	590.02	10,051.64	463,494.39	650,008.70	32.27373116	-103.98171992	0.00	0.00	0.00
Laguna Grande 29-28 Fed Com 5	18,660.90	89.07	89.87	8,772.00	5,782.80	10,113.84	590.16	10,112.53	463,494.53	650,069.58	32.27373099	-103.98152293	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	8,000.000	1/100.000	'.5 – 12.25 – 8.75	3.375 – 9.625 – 7		A001Mb_MWD		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur
	1	8,000.000	18,660.896	1/100.000	8.75 – 6.125	7 – 4.5		A008Mb_MWD+IFR1+MS		Laguna Grande 29-28 Fed Com 5H / Coterra Lagur

EOU Geometry:

End MD (ft)	Hole Size (in)	Casing Size (in)	Name
1,201.800	17.500	13.375	

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)
4,035.270		12.250		9.625											
8,050.467		8.750		7.000											
18,660.896		6.125		4.500											

COTERRA Rev 0

Borehole:	Well:	Field:	Structure:
Laguna Grande 29-28 Fed Com 5H	Laguna Grande 29-28 Fed Com 5H	NM Eddy County (NAD 83)	Coterra - Laguna Grande 29-28 Fed Com Pad (south)

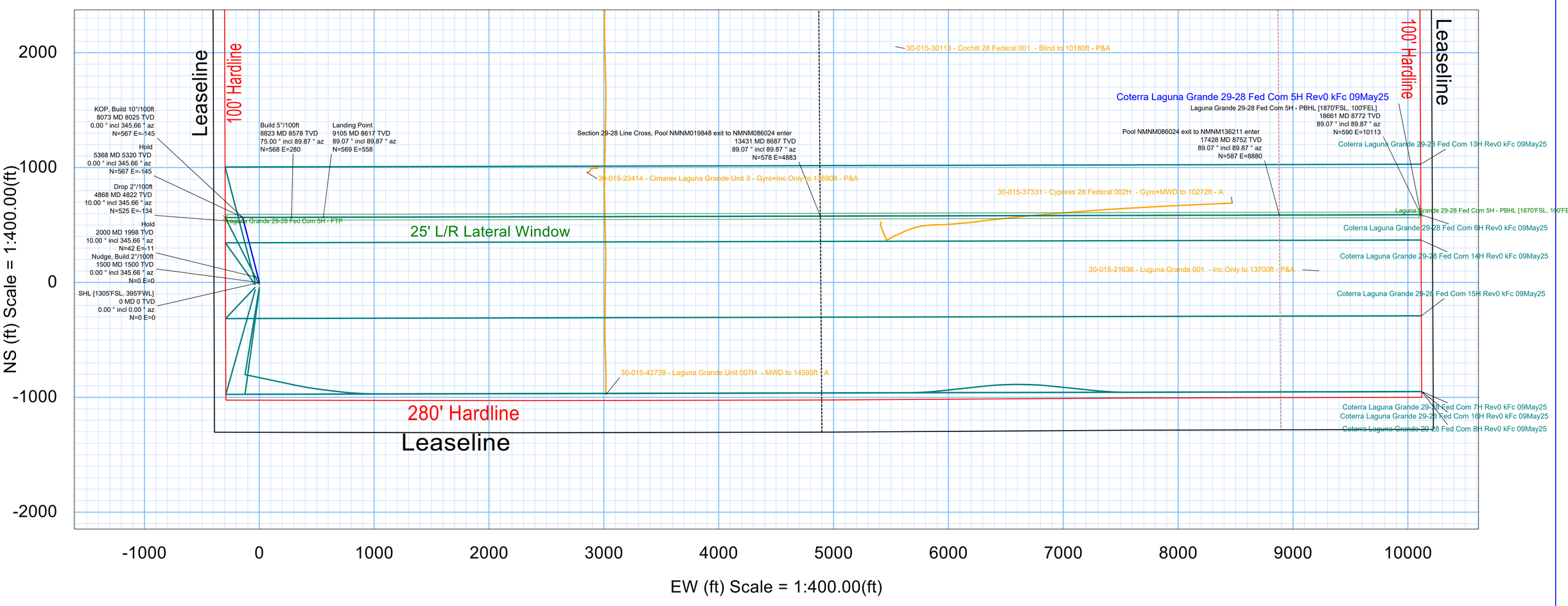
Gravity & Magnetic Parameters
Model: HDGM 2025 | Dip: 59.827° | Date: 09-May-2025
MagDec: 6.516° | FS: 47243.672nT | Gravity FS: 998.473mgn (9.80665 Based)

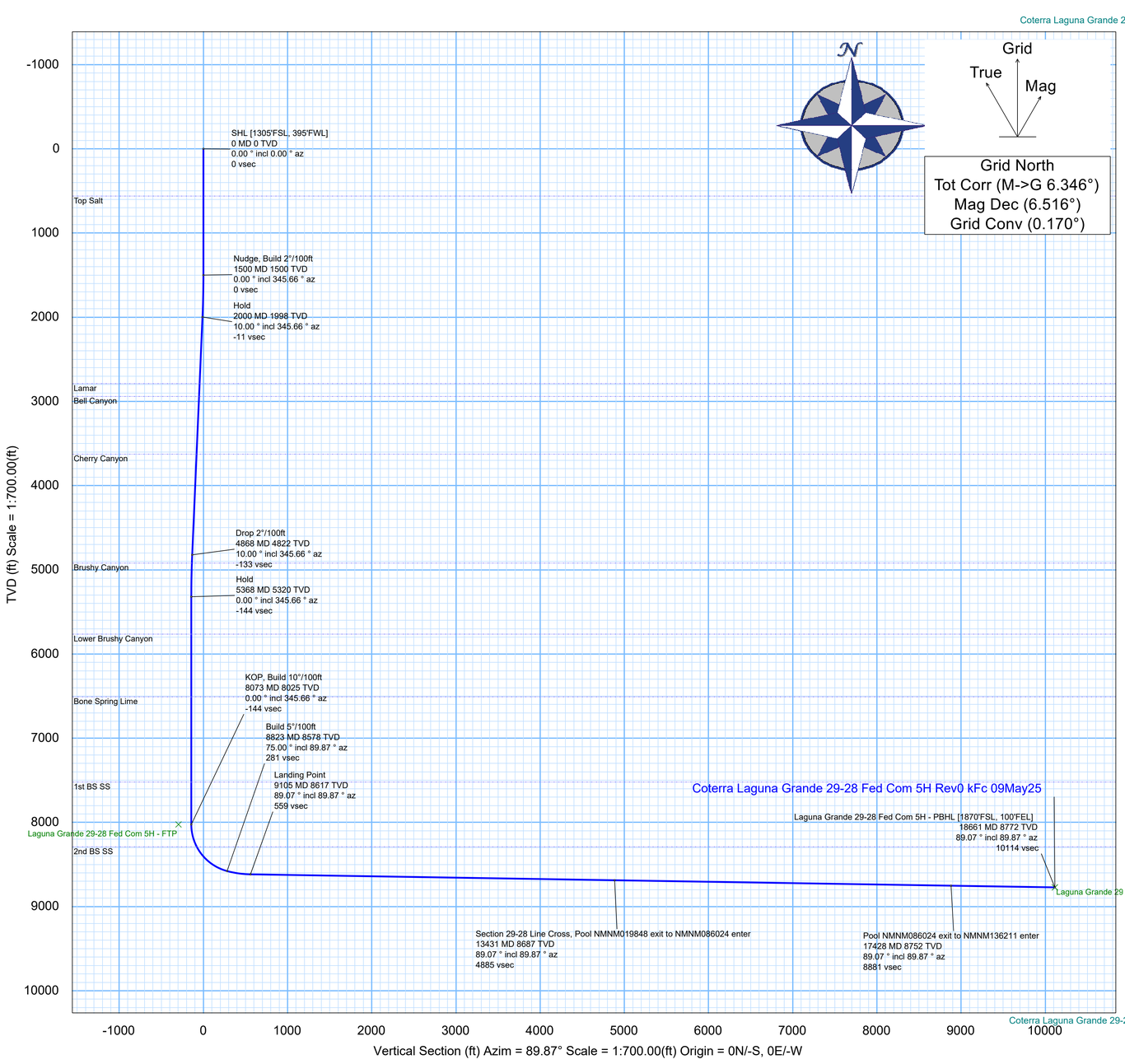
Surface Location NAD83 New Mexico State Plane, Eastern Zone, US Feet
Lat: N 32 16 19.90 | Northing: 462904.42ftUS | Grid Conv: 0.1704°
Lon: W 104 0 51.28 | Easting: 639957.88ftUS | Scale Fact: 0.99992023

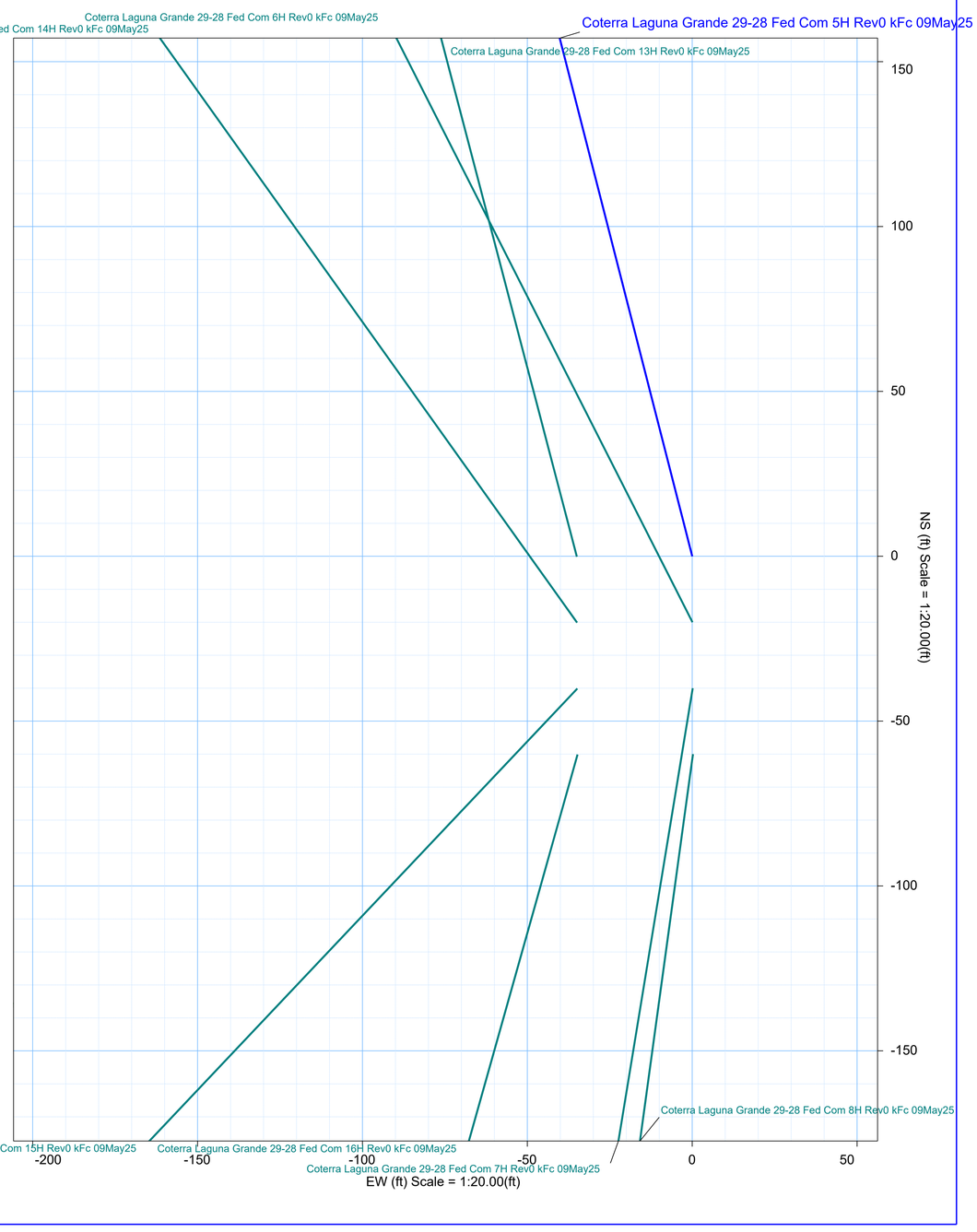
Miscellaneous
Slot: Laguna Grande 29-28 Fed Com 5H | TVD Ref: RKB (2989.200 ft above MSL)
Plan: Coterra Laguna Grande 29-28 Fed Com 5H Rev0 kFc 09May25

Critical Points

Critical Point	MD	INCL	AZIM	TVD	VSEC	N(+)/S(-)	E(+)/W(-)	DLS
SHL [1305'FSL, 395'FWL]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Top Salt	561.00	0.00	345.66	561.00	0.00	0.00	0.00	0.00
Nudge, Build 2°/100ft	1500.00	0.00	345.66	1500.00	0.00	0.00	0.00	0.00
Hold	2000.12	10.00	345.66	1997.59	-10.69	42.19	-10.79	2.00
Lamar	2802.74	10.00	345.66	2788.00	-44.93	177.25	-45.33	0.00
Bell Canyon	2958.10	10.00	345.66	2941.00	-51.55	203.39	-52.01	0.00
Cherry Canyon	3653.67	10.00	345.66	3626.00	-81.22	320.44	-81.95	0.00
Drop 2°/100ft	4868.21	10.00	345.66	4822.08	-133.02	524.81	-134.21	0.00
Brushy Canyon	4967.36	8.02	345.66	4920.00	-136.83	539.86	-138.06	2.00
Hold	5368.34	0.00	345.66	5319.67	-143.71	567.00	-145.00	2.00
Lower Brushy Canyon	5812.67	0.00	345.66	5764.00	-143.71	567.00	-145.00	0.00
Bone Spring Lime	6557.67	0.00	345.66	6509.00	-143.71	567.00	-145.00	0.00
1st BS SS	7569.67	0.00	345.66	7521.00	-143.71	567.00	-145.00	0.00
KOP, Build 10°/100ft	8073.34	0.00	345.66	8024.67	-143.71	567.00	-145.00	0.00
2nd BS SS	8349.20	27.59	89.87	8290.00	-78.57	567.15	-79.86	10.00
Build 5°/100ft	8823.34	75.00	89.87	8578.10	280.95	567.96	279.66	10.00
Landing Point	9104.74	89.07	89.87	8617.00	558.94	568.59	557.65	5.00
	9204.74	89.07	89.87	8618.62	658.92	568.82	657.64	0.00
	9204.78	89.07	89.87	8618.62	658.97	568.82	657.68	2.00
Section 29-28 Line Cross, Pool NMNM019848 exit to NMNM086024 enter	13431.00	89.07	89.87	8687.17	4884.63	578.36	4883.33	0.00
Pool NMNM086024 exit to NMNM136211 enter	17428.00	89.07	89.87	8752.00	8881.11	587.38	8879.80	0.00
Laguna Grande 29-28 Fed Com 5H - PBHL [1870'FSL, 100'FEL]	18660.90	89.07	89.87	8772.00	10113.84	590.16	10112.53	0.00







1. Geological Formations

TVD of target 8,772
MD at TD 18,661

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	115	N/A	
Top of Salt	561	N/A	
Base of Salt/Lamar	2788	N/A	
Top Delaware Sands/Bell Canyon	2941	N/A	
Cherry Canyon	3626	N/A	
Brushy Canyon	4920	N/A	
Lower Brushy Canyon	5764	N/A	
Bone Spring Lime	6509	N/A	
1st Bone Spring Sand	7521	N/A	
2nd Bone Spring Sand	8290	N/A	
2nd Bone Spring Sand - Target	8617	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	520	520	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	3.29	7.68	12.90
12 1/4	0	2775	2780	9-5/8"	36.00	J-55	LT&C	1.40	2.44	4.53
8 3/4	0	8073	8073	5-1/2"						
8 3/4	8073	18661	8772	5-1/2"	20.00	P-110	BT&C	2.56	2.85	45.85
					BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

TVD was used on all calculations.
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	N
Is AC Report included?	Y

3. Cementing Program

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	134	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	195	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	530	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	162	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	567	10.30	3.64	22.18	12	Lead: Tuned Light + LCM
	3087	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	36
Intermediate	0	49
Production	2575	25

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

4. Pressure Control Equipment

	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	**13 5/8**	**10M**	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		
8 3/4	**13 5/8**	**10M**	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		

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

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 520'	FW Spud Mud	7.83 - 8.33	30-32	N/C
520' to 2775'	Brine Water	9.50 - 10.00	30-32	N/C
2775' to 18661'	Cut Brine or OBM	9.00 - 9.50	27-70	N/C

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

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

6. Logging and Testing Procedures

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

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	4333 psi
Abnormal Temperature	No

	Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.
X	H2S is present
X	H2S plan is attached

8. Other Facets of Operation

9. Wellhead

10M

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

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

BOPE Additional Information & Testing

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

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

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

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

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

Additional Well Control Notes

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

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 Co. of Colorado **OGRID:** 162683 **Date:** 5/14/2025

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
Laguna Grande 29-28 Fed Com 5H		Sec 29 T23S, R29E	1305 FSL/395 FWL	1550	3100	4106

IV. Central Delivery Point Name: Laguna Grande 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
Laguna Grande 29-28 Fed Com 5H		4/1/2026	6/15/2026	8/15/2026	4/1/2027	4/1/2027

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:	5/14/2025
Phone:	432/6201644

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

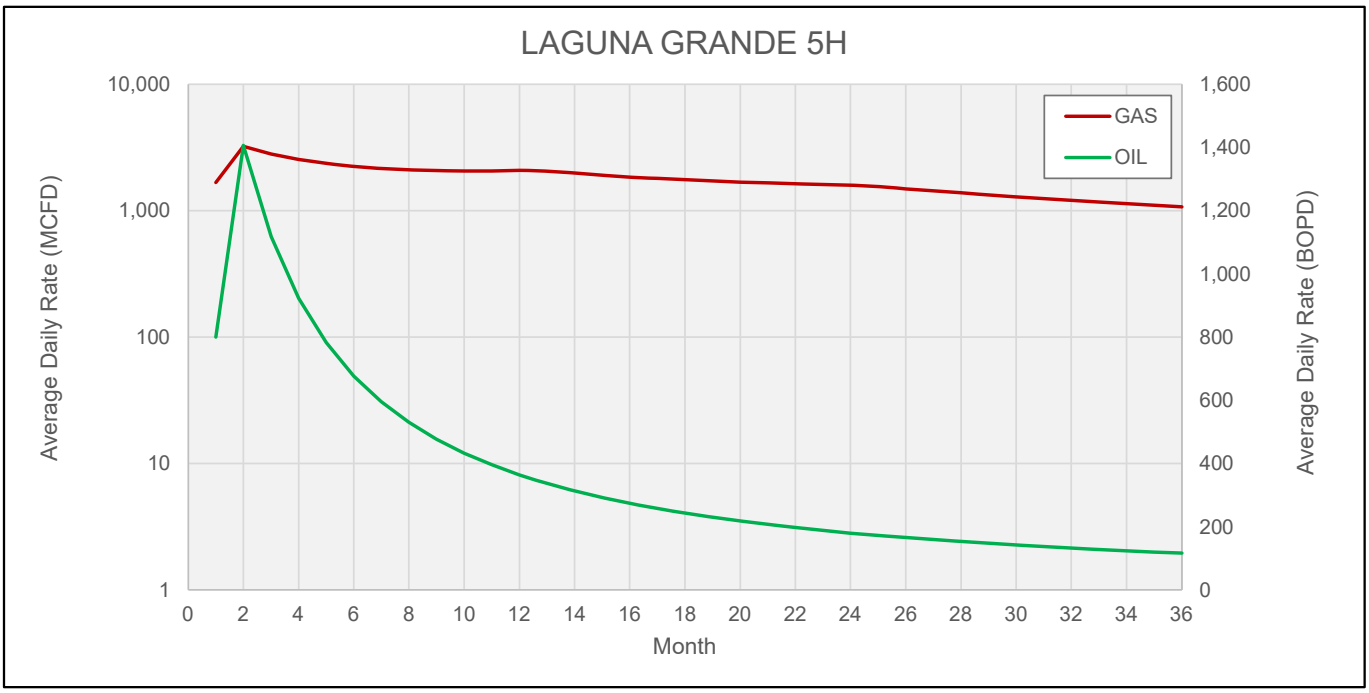
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

From State of New Mexico, Natural Gas Management Plan

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

XEC Standard Response

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


LAGUNA GRANDE 5H
Average Daily Rate (MCFD)
10,000
1,000
100
10
1
Average Daily Rate (BOPD)
1,600
1,400
1,200
1,000
800
600
400
200
0
GAS
OIL
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36
Month

	LAGUNA GRANDE 5H	LAGUNA GRANDE 5H
Row Labels	GAS MCFD	OIL BOPD
1	1,676	800
2	3,230	1,407
3	2,813	1,118
4	2,544	923
5	2,364	783
6	2,242	677
7	2,160	595
8	2,108	530
9	2,078	477
10	2,067	433
11	2,072	396
12	2,089	364
13	2,058	337
14	1,979	313
15	1,911	293
16	1,853	274
17	1,802	258
18	1,759	243
19	1,721	230
20	1,688	218
21	1,659	207
22	1,635	198
23	1,614	189
24	1,596	180
25	1,555	173
26	1,495	166
27	1,439	159
28	1,386	153
29	1,337	147
30	1,292	142
31	1,249	137
32	1,209	132
33	1,172	128
34	1,137	124
35	1,103	120
36	1,072	116

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.

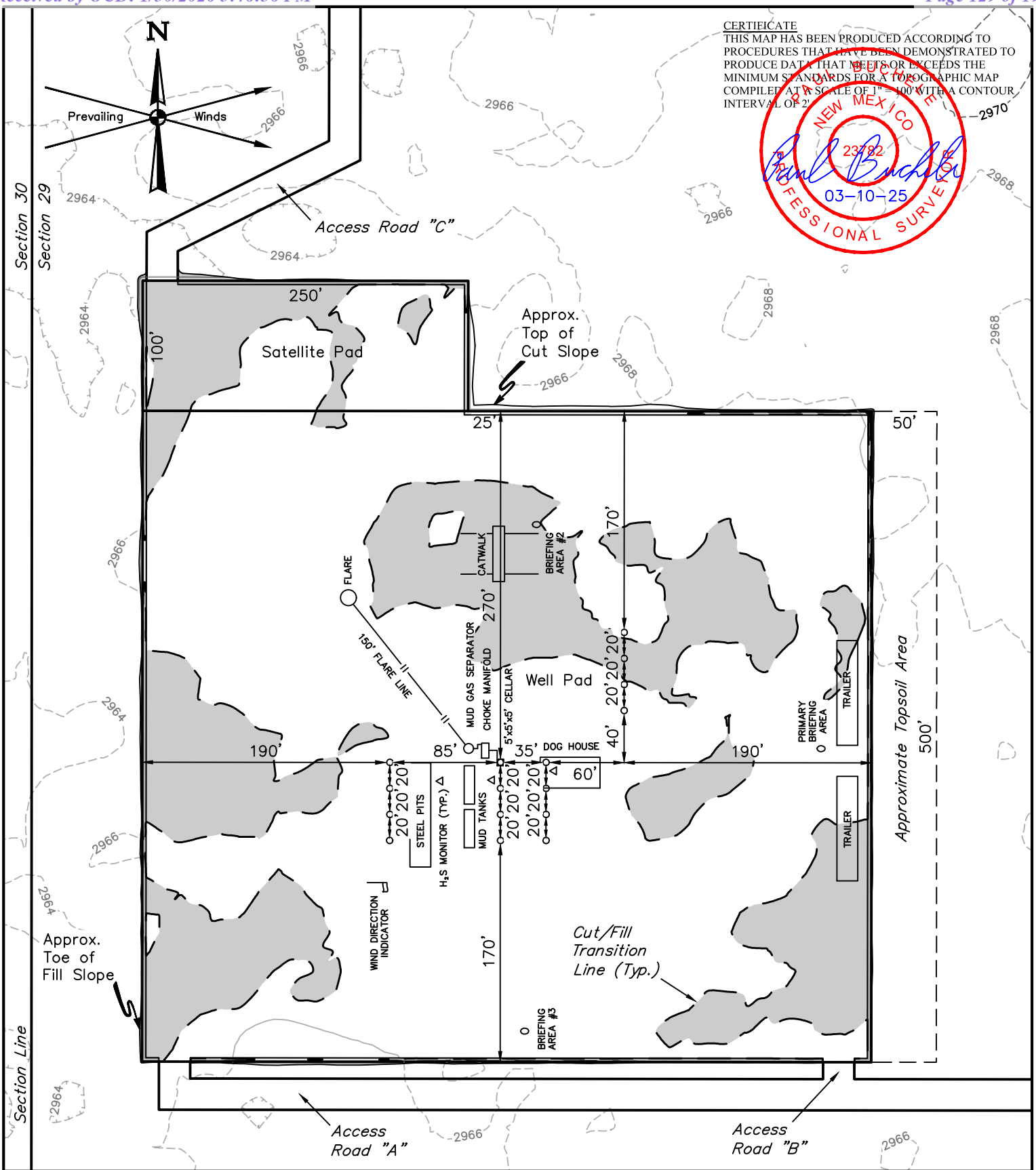
- **Workovers:**
  - Always strive to kill well when performing downhole maintenance.
  - If vapors or trapped pressure is present and must be relieved then:
    - Initial blowdown to production facility:
      - Route vapors to LP flare if possible/applicable
    - Blowdown to portable gas buster tank:
      - 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.



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" = 100' WITH A CONTOUR INTERVAL OF 2'.

PAUL BUCHELE — NEW MEXICO — 23782 — PROFESSIONAL SURVEYOR — 03-10-25

NOTES:

- Contours shown at 2' intervals.

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'
TYPICAL RIG LAYOUT			EXHIBIT K

UINTAH ENGINEERING & LAND SURVEYING

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

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 Co. of Colorado **OGRID:** 162683 **Date:** 5/14/2025

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
Laguna Grande 29-28 Fed Com 5H		Sec 29 T23S, R29E	1305 FSL/395 FWL	1550	3100	4106

IV. Central Delivery Point Name: Laguna Grande 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
Laguna Grande 29-28 Fed Com 5H		4/1/2026	6/15/2026	8/15/2026	4/1/2027	4/1/2027

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:	5/14/2025
Phone:	432/6201644

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

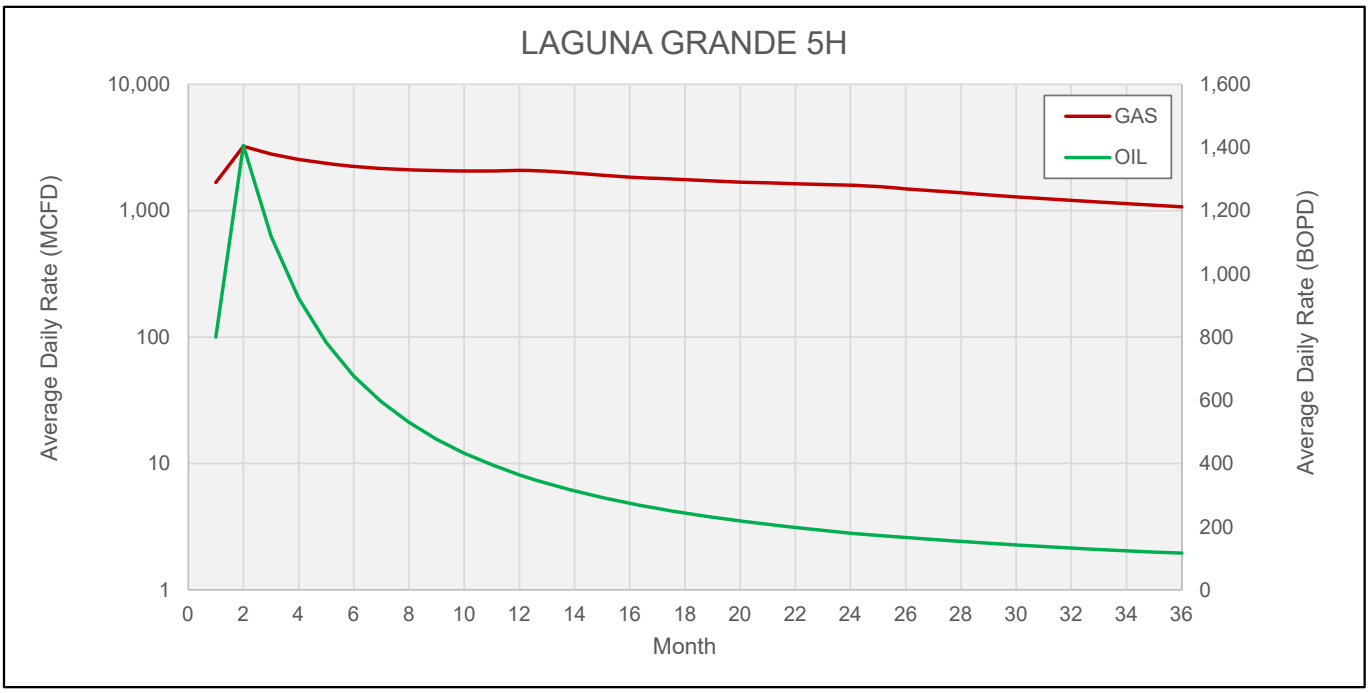
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

From State of New Mexico, Natural Gas Management Plan

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

XEC Standard Response

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


LAGUNA GRANDE 5H
Average Daily Rate (MCFD)
10,000
1,000
100
10
1
Average Daily Rate (BOPD)
1,600
1,400
1,200
1,000
800
600
400
200
0
GAS
OIL
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36
Month

	LAGUNA GRANDE 5H	LAGUNA GRANDE 5H
Row Labels	GAS MCFD	OIL BOPD
1	1,676	800
2	3,230	1,407
3	2,813	1,118
4	2,544	923
5	2,364	783
6	2,242	677
7	2,160	595
8	2,108	530
9	2,078	477
10	2,067	433
11	2,072	396
12	2,089	364
13	2,058	337
14	1,979	313
15	1,911	293
16	1,853	274
17	1,802	258
18	1,759	243
19	1,721	230
20	1,688	218
21	1,659	207
22	1,635	198
23	1,614	189
24	1,596	180
25	1,555	173
26	1,495	166
27	1,439	159
28	1,386	153
29	1,337	147
30	1,292	142
31	1,249	137
32	1,209	132
33	1,172	128
34	1,137	124
35	1,103	120
36	1,072	116

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.

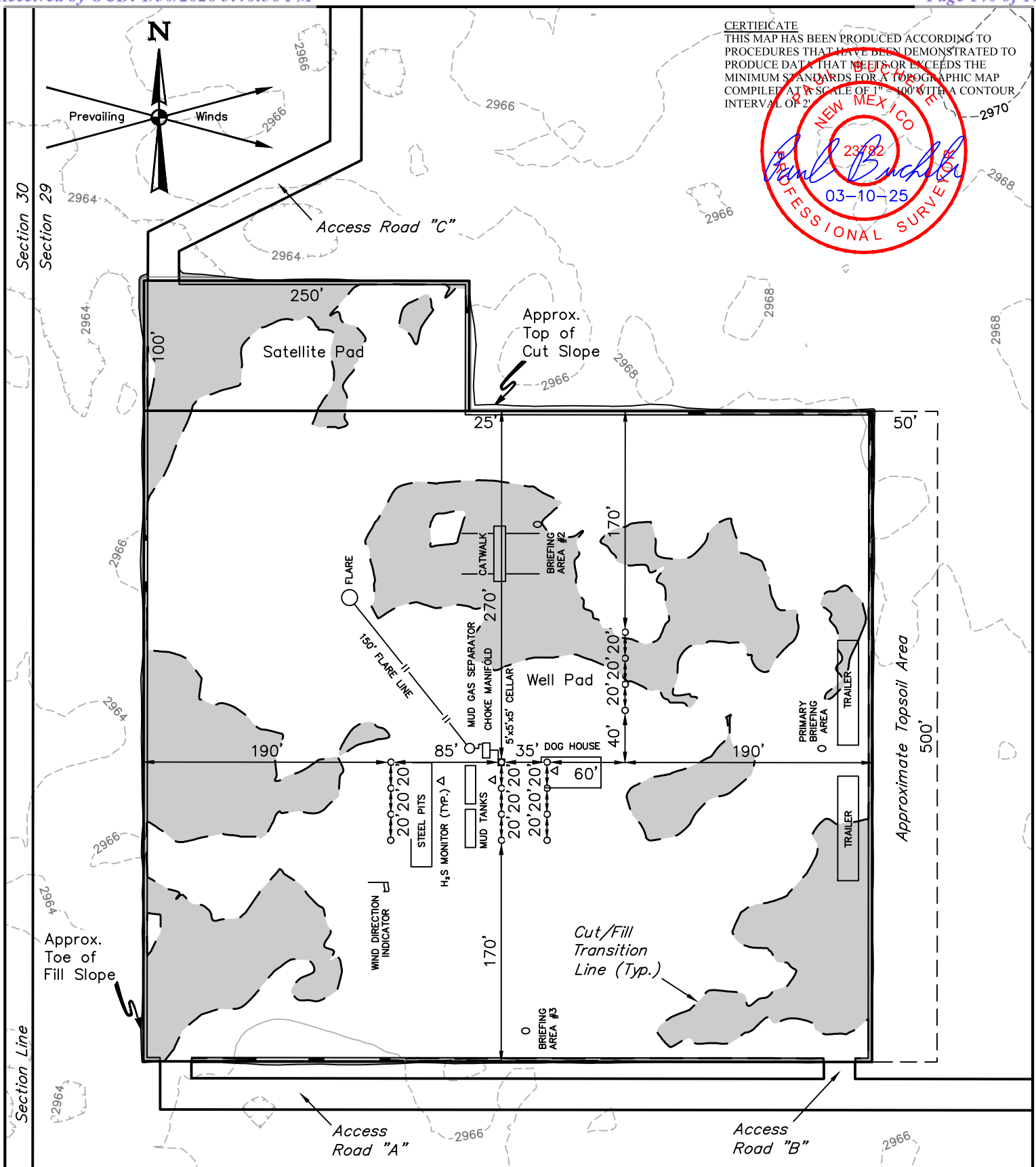
- **Workovers:**
  - Always strive to kill well when performing downhole maintenance.
  - If vapors or trapped pressure is present and must be relieved then:
    - Initial blowdown to production facility:
      - Route vapors to LP flare if possible/applicable
    - Blowdown to portable gas buster tank:
      - 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.



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" = 100' WITH A CONTOUR INTERVAL OF 2'.

PAUL BUCHELE — NEW MEXICO — 23782 — PROFESSIONAL SURVEYOR — 03-10-25

NOTES:

- Contours shown at 2' intervals.

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'

TYPICAL RIG LAYOUT | **EXHIBIT K**

UINTAH ENGINEERING & LAND SURVEYING

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

AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

Customer Name			
Product Name	Choke And Kill Hose		
Product Specification	3″×10000psi×35ft（10.67m）	Quantity	1PCS
Serial Number	VTC-7660257	FSL	FSL3
customer number	PO890145-001	Standard	API Spec 16C 3rd edition
Temperature Range	-29℃～+121℃	Inspection date	2024.09.03

Inspection Items	Inspection results
Appearance Checking	In accordance with API Spec 16C 3rd edition
Size and Lengths	In accordance with API Spec 16C 3rd edition
Dimensions and Tolerances	In accordance with API Spec 16C 3rd edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 6A 21st edition
End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 17D 3rd edition
Hydrostatic Testing	In accordance with API Spec 16C 3rd edition
product Marking	In accordance with API Spec 16C 3rd edition
Inspection conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition
Remarks	16C-0403

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

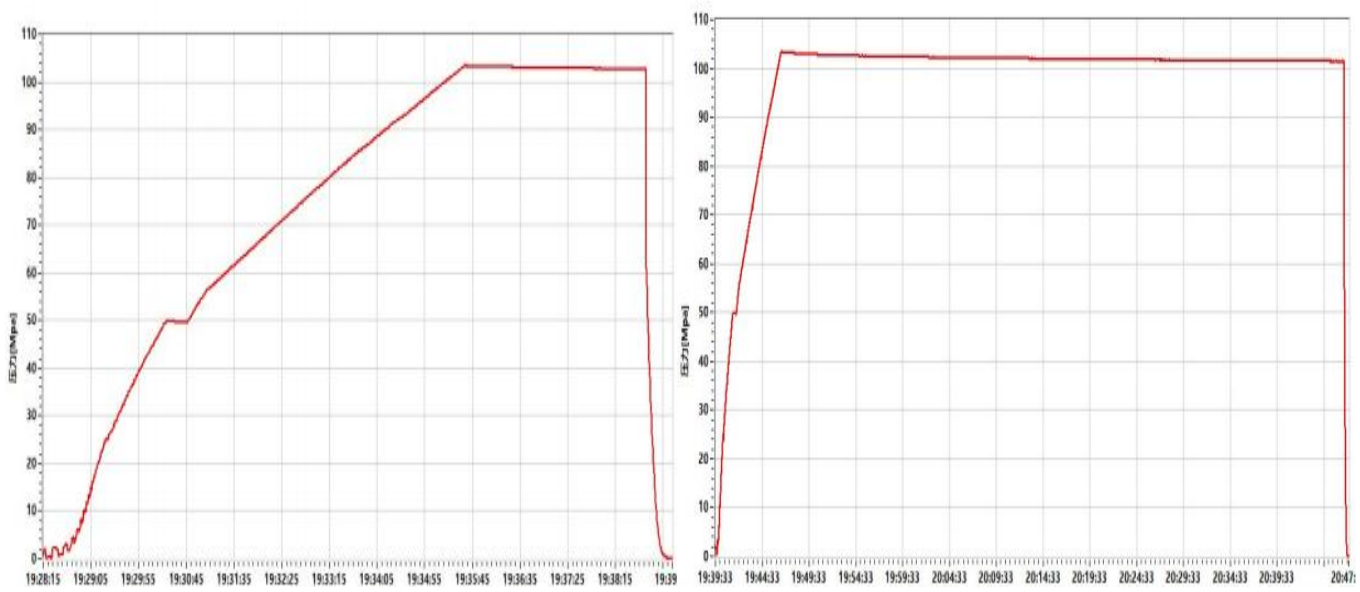
AustinHOSE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3rd edition
Product Specification	3″×10000psi×35ft（10.67m）	Serial Number	VTC-7660257
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
customer number	PO890145-001	Inspection Date	2024.08.30
Rate of length change			
Standard requirements	At working pressure ,the rate of length change should not more than ±2%		
Testing result	10000psi (69.0MPa) ,Rate of length change 0.6%		
Hydrostatic testing			
Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leakage.		
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage		

Graph of pressure testing：



Conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition 16C-0403				
Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

Product Specification：3″×10000psi×35ft（10.67m）

Serial Number：VTC-7660257

customer number：PO890145-001

End Connections: 4-1/16″×10000psi Integral flange for sour gas service

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD.in Sep,2024, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Sep 3, 2024. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition .

QC Manager： Jane C Date:Sep 3, 2024

16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE

Standard New Mexico Variances

Variance Request #1: Skid Rig after Cementing Surface Casing

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

Variance Request #4: Utilize Co-Flex Choke Line

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

Standard New Mexico Variances

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AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

Customer Name			
Product Name	Choke And Kill Hose		
Product Specification	3″×10000psi×35ft（10.67m）	Quantity	1PCS
Serial Number	VTC-7660257	FSL	FSL3
customer number	PO890145-001	Standard	API Spec 16C 3rd edition
Temperature Range	-29℃～+121℃	Inspection date	2024.09.03

Inspection Items	Inspection results
Appearance Checking	In accordance with API Spec 16C 3rd edition
Size and Lengths	In accordance with API Spec 16C 3rd edition
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End Connections: 4-1/16″×10000psi Integral flange for sour gas service	In accordance with API Spec 6A 21st edition
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Hydrostatic Testing	In accordance with API Spec 16C 3rd edition
product Marking	In accordance with API Spec 16C 3rd edition
Inspection conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition
Remarks	16C-0403

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

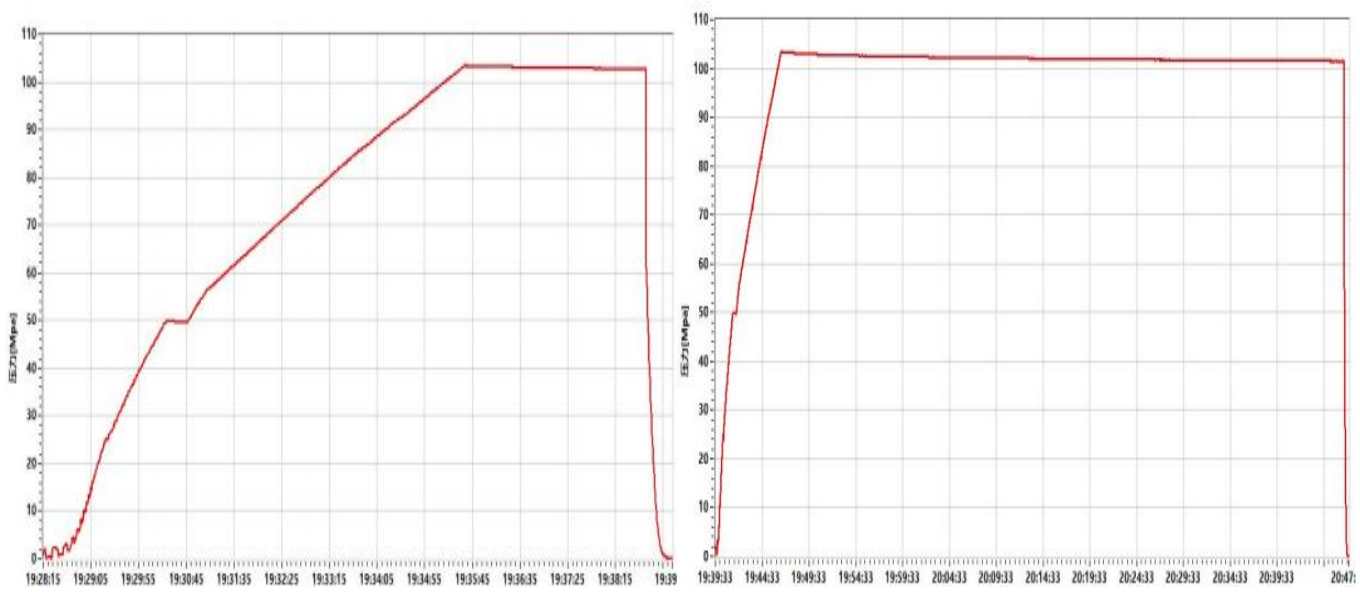
LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3rd edition
Product Specification	3″×10000psi×35ft（10.67m）	Serial Number	VTC-7660257
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
customer number	PO890145-001	Inspection Date	2024.08.30
Rate of length change			
Standard requirements	At working pressure ,the rate of length change should not more than ±2%		
Testing result	10000psi (69.0MPa) ,Rate of length change 0.6%		
Hydrostatic testing			
Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leakage.		
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage		

Graph of pressure testing：



Conclusion	The inspected items meet standard requirements of API Spec 16C 3rd edition 16C-0403				
Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

Product Specification：3″×10000psi×35ft（10.67m）

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The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD.in Sep,2024, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3rd edition on Sep 3, 2024. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3rd edition .

QC Manager： Jane C Date:Sep 3, 2024

16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE

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

SUPO Data Report
01/28/2026

APD ID: 10400105081 **Submission Date:** 06/27/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

LAGUNA_GRANDE_29_28_FED_COM_S2S2_access_road_plat_20260108143233.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT **Row(s) Exist?** NO

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

Existing Road Improvement Description: Cimarex will improve and/or maintain existing road(s) condition the same as or better than before the operations began. Provide plans for improvement and /or maintenance of existing roads if requested. Repair or replace damaged or deteriorated structures as needed. Including cattle guards and culverts. Prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or other events. Obtain written BLM approval prior to the application of surfactants, binding agents, or other dust suppression chemicals on the roadways. The maximum width of the driving surface will be 18'. The road will be crowned and ditched with a 2% slope from the tip of the crown to the edge of the driving surface. The ditches will be 1' deep with 3:1 slopes. The driving surface will be made of 6" rolled and compacted caliche.

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

LAGUNA_GRANDE_29_28_FED_COM_S2S2_12_10_25_Updated_Road_20251216120406.pdf

New road type: RESOURCE

Length: 5759.91 Feet **Width (ft.):** 30

Max slope (%): 0 **Max grade (%):** 0

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

New road access erosion control: Best management practices will be used for E&S controls.

New road access plan or profile prepared? N

New road access plan

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: GRAVEL

Access topsoil source: BOTH

Access surfacing type description:

Access onsite topsoil source depth: 4

Offsite topsoil source description: Onsite and offsite.

Onsite topsoil removal process: The topsoil shall be stripped and savlaged to provide for sufficient quantities to be respread to a depth of 4" as determined in the onsite, as needed to disturbed areas needed reclamation. Topsoil shall be stockpiled separately from subsoil materials.

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: Best management practices will be used for E&S controls.

Road Drainage Control Structures (DCS) description: Drainage structures or drainage dips will be placed in natural drainage ways.

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Existing Well map Attachment:

LAGUNA_GRANDE_29_28_FED_COM_S2S2_1_mile_well_radius_plat_20250604075031.pdf

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Production from this well pad will be constructed on attached tank battery located on the north side of the pad.

Production Facilities map:

D_24550_20_100__GENERAL_ARRANGEMENT_PLOT_PLAN_Rev.0_20250520160524.pdf

LAGUNA_GRANDE_29_28_FED_COM_S2S2_location_layout_20260108143027.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: OTHER

Describe type: COMMERCIAL

Water source use type: SURFACE CASING

INTERMEDIATE/PRODUCTION CASING

Source latitude: 32.307081 **Source longitude:** -103.660203

Source datum: NAD83

City: Malaga

Water source permit type: PRIVATE CONTRACT

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

Water source volume (barrels): 5000 **Source volume (acre-feet):** 0.64446548

Source volume (gal): 210000

Water source and transportation

Laguna_Grande_29_Fed_E2W2_Drilling_Water_Routes_20250520155715.pdf

Water source comments:

New water well? N

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: Caliche and gravel will be obtained from the actual well site if available. If caliche is not available onsite, it will be sourced from a private caliche pit located in the NESE 1/4 section 34, T23S, 29E.

Construction Materials source location

Section 7 - Methods for Handling

Waste type: PRODUCED WATER

Waste content description: After first production, produced water will be confined to storage tanks on location and then disposed of in an approved location or recycled on location for future use.
Amount of waste: 400 barrels

Waste disposal frequency : Daily

Safe containment description: After first production, produced water will be confined to storage tanks on location and then disposed of in an approved location or recycled on location for future use.
Safe containmant attachment:

Waste disposal type: OFF-LEASE INJECTION **Disposal location ownership:** FEDERAL

Disposal type description:

Disposal location description: Federal

Waste type: SEWAGE

Waste content description: Human Waste

Amount of waste: 300 gallons

Waste disposal frequency : Weekly

Safe containment description: Waste will be properly contained and disposed of properly at a state

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

approved disposal facility.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** PRIVATE
Disposal type description:

Disposal location description: A licensed 3rd party contractor will be used to haul and dispose human waste to City of Toyah TX waste water facility.

Waste type: GARBAGE

Waste content description: Garbage and trash produced during drilling and completion operations

Amount of waste: 32500 pounds

Waste disposal frequency : Weekly

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL
Disposal type description:

Disposal location description: A licensed 3rd party hauls trash to Lea County Landfill

Waste type: DRILLING

Waste content description: Drilling Fluids, drill cuttings, water and other waste produced from the well during drilling operations.
Amount of waste: 15000 barrels

Waste disposal frequency : Weekly

Safe containment description: N/A

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL
Disposal type description:

Disposal location description: Haul to R360 Environmental Solutions, 4507 Carlsbad Hwy, Hobbs, NM 88240

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? N

Description of cuttings location

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

Cuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

LAGUNA_GRANDE_29_28_FED_COM_S2S2_archaeology_survey_plat_20260108143109.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_aerial_site_plat_20260108143109.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_surface_use_plat_20260108143109.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_rig_layout_plat_20260108143110.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_access_road_plat_20260108143110.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_reclamation_plat_20260108143110.pdf
LAGUNA_GRANDE_29_28_FED_COM_S2S2_location_layout_20260108143110.pdf

Comments:

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance **Multiple Well Pad Name:** S2S2

Multiple Well Pad Number: 5H

Recontouring

LAGUNA_GRANDE_29_28_FED_COM_S2S2_reclamation_plat_20260108143126.pdf

Drainage/Erosion control construction: Pad construction will include drainage control by rerouting drainages around the pad an installing low water crossings where needed. Erosion control techniques will be used where needed to minimize wind and water erosion and sedimentation prior to vegetation establishment.

Drainage/Erosion control reclamation: Area-wide drainage will be stabilized and restored so that surface runoff flows and gradients are returned to the condition present prior to development. Drainage basins will have similar features found in nearby, properly functioning basins.

Well pad proposed disturbance (acres): 5.233	**Well pad interim reclamation (acres):** 2.49	**Well pad long term disturbance (acres):** 2.743
Road proposed disturbance (acres): 3.966	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 3.966
Powerline proposed disturbance (acres): 0	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 0
Pipeline proposed disturbance (acres): 2.933	**Pipeline interim reclamation (acres):** 2.933	**Pipeline long term disturbance (acres):** 0
Other proposed disturbance (acres): 0	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 0
Total proposed disturbance: 12.132	**Total interim reclamation:** 5.423	**Total long term disturbance:** 6.709

Disturbance Comments:

Reconstruction method: Areas to be reclaimed will be graded to approximate original contours and to blend in with adjacent topography. Graded surfaces will be suitable for the replacement of a uniform depth of topsoil, will promote cohesion between subsoil and topsoil layers, will reduce wind erosion, and will facilitate moisture capture. Specialized grading techniques may be applied, if warranted, and could include slope rounding, stair-step grading/terracing, and/or contour furrowing.

Topsoil redistribution: After compaction relief (ripping and discing) all topsoil will be redistributed on the reclaimed area to a pre-disturbance depth. Topsoil is typically redistributed with a scraper or front-end loader which leaves a friable surface to work with. Waterbars and erosion control devices will be installed on reclaimed areas, as necessary, to control topsoil erosion.

Soil treatment: As needed.

Existing Vegetation at the well pad: N/A

Existing Vegetation at the well pad

Existing Vegetation Community at the road: N/A

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: N/A

Existing Vegetation Community at the pipeline

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Existing Vegetation Community at other disturbances: N/A

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation

Operator Contact/Responsible Official

First Name: **Last Name:**

Phone: **Email:**

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment

Weed treatment plan description: Operator will be responsible for noxious and invasive weed control from all project activities for the life of the project. If use of herbicides is deemed necessary, a Pesticide Use Proposal will be submitted for approval to the BLM. Herbicides will be used only in the season or growth

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

stage during which they are most effective. Herbicides will be applied only by certified personnel using approved precautionary and application procedures in compliance with all applicable federal, state, and local regulations. Herbicides will not be used within 100 feet of open water or during extremely windy conditions. Mowing may be considered as an alternative to herbicide applications. Mowing would be implemented prior to seed head establishment or bloom. A weed control program will be applied to all existing and proposed access roads, pipeline ROWs, and well pads. Weed control involves annual treatments that are monitored and continued until desirable vegetation outcompetes invasive or noxious weeds.

Weed treatment plan

Monitoring plan description: Monitoring will be done in accordance with the BLM Reclamation Guidelines.

Monitoring plan

Success standards: Success Standards will be in accordance with the BLM Reclamation Guidelines.

Pit closure description: No pit closure will be necessary. The referenced wells will be drilled utilizing a closed loop system. The closed loop system will be installed in a manner that will prevent leaks, breaks, or discharge. Drill cuttings will be contained in designated cuttings area. Upon completion of drilling operations, the cuttings will be mixed on location and dried; then spread on location.
Pit closure attachment:

Section 11 - Surface

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Disturbance type: TRANSMISSION LINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Section 12 - Other

Right of Way needed? N **Use APD as ROW?**

ROW Type(s):

ROW

SUPO Additional Information: None.

Use a previously conducted onsite? Y

Previous Onsite information: Onsite Date: 1/30/2025 BLM Personnel on site: Brendan Harris Cimarex Energy personnel on site: Shelly Bowen, Casey Jones, Cahill Kelleghan

Other SUPO

BEGINNING AT THE INTERSECTION OF POTASH MINES ROAD AND FISHERMANS LANE TO THE SOUTH (LOCATED AT NAD 83 LATITUDE 32.3185° AND LONGITUDE -104.0393°) PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY, THEN NORTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 3.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY, THEN SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE BEGINNING OF THE PROPOSED LAGUNA GRANDE 29-28 FED COM ACCESS ROAD "A" TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY, THEN WESTERLY, THEN NORTHWESTERLY, THEN WESTERLY, THEN SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 3764' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF POTASH MINES ROAD AND FISHERMANS LANE TO THE SOUTH (LOCATED AT NAD 83 LATITUDE 32.3185° AND LONGITUDE -104.0393°) TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 6.2 MILES.

REV: 2	12-08-25	T.I.R.	(UPDATE ACCESS ROADS)

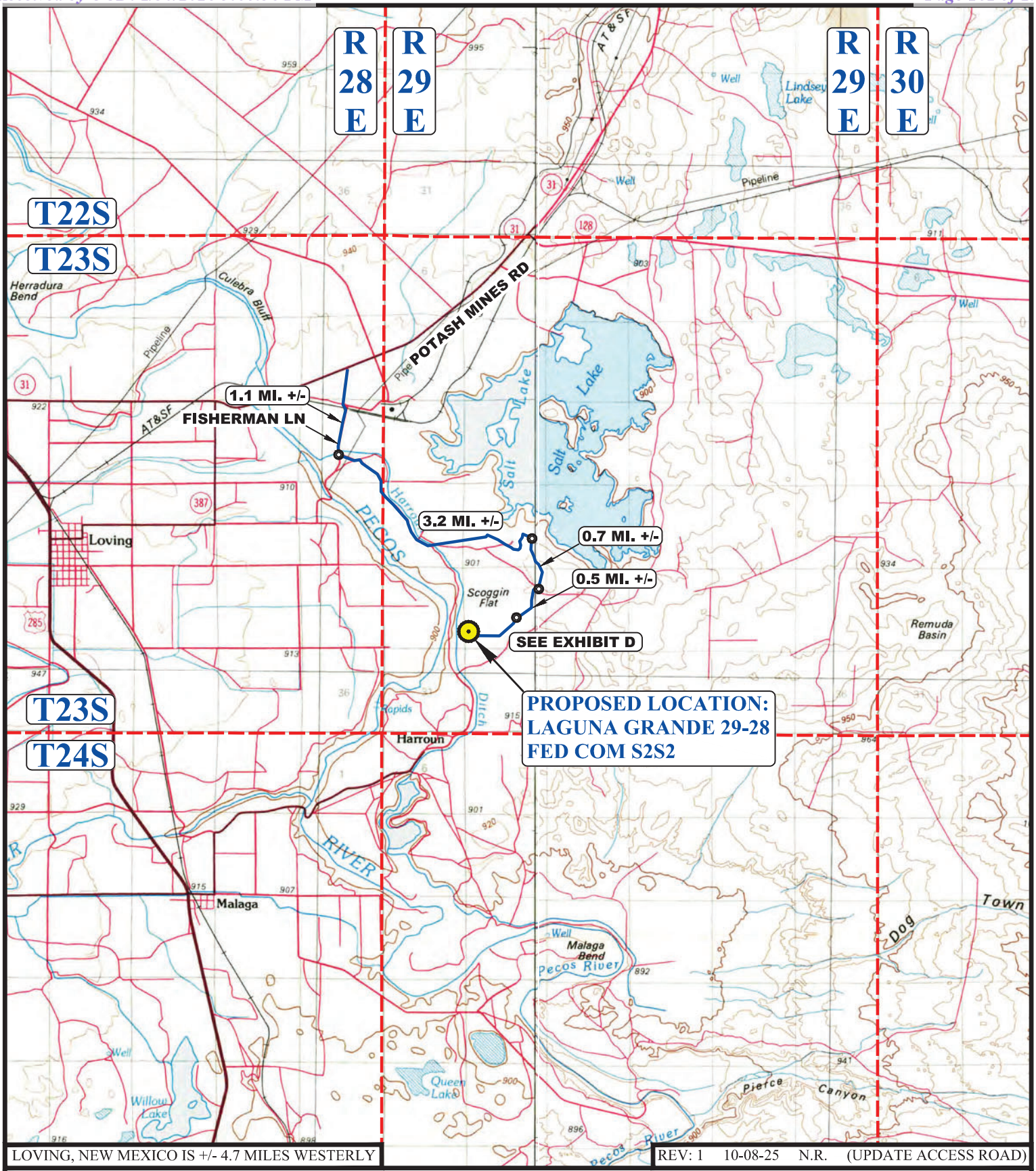
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	
DRAWN BY	T.I.R.	03-10-25	

ROAD DESCRIPTION **EXHIBIT A**

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



LOVING, NEW MEXICO IS +/- 4.7 MILES WESTERLY

REV: 1 10-08-25 N.R. (UPDATE ACCESS ROAD)

LEGEND:

PROPOSED LOCATION

N

CIMAREX ENERGY CO.

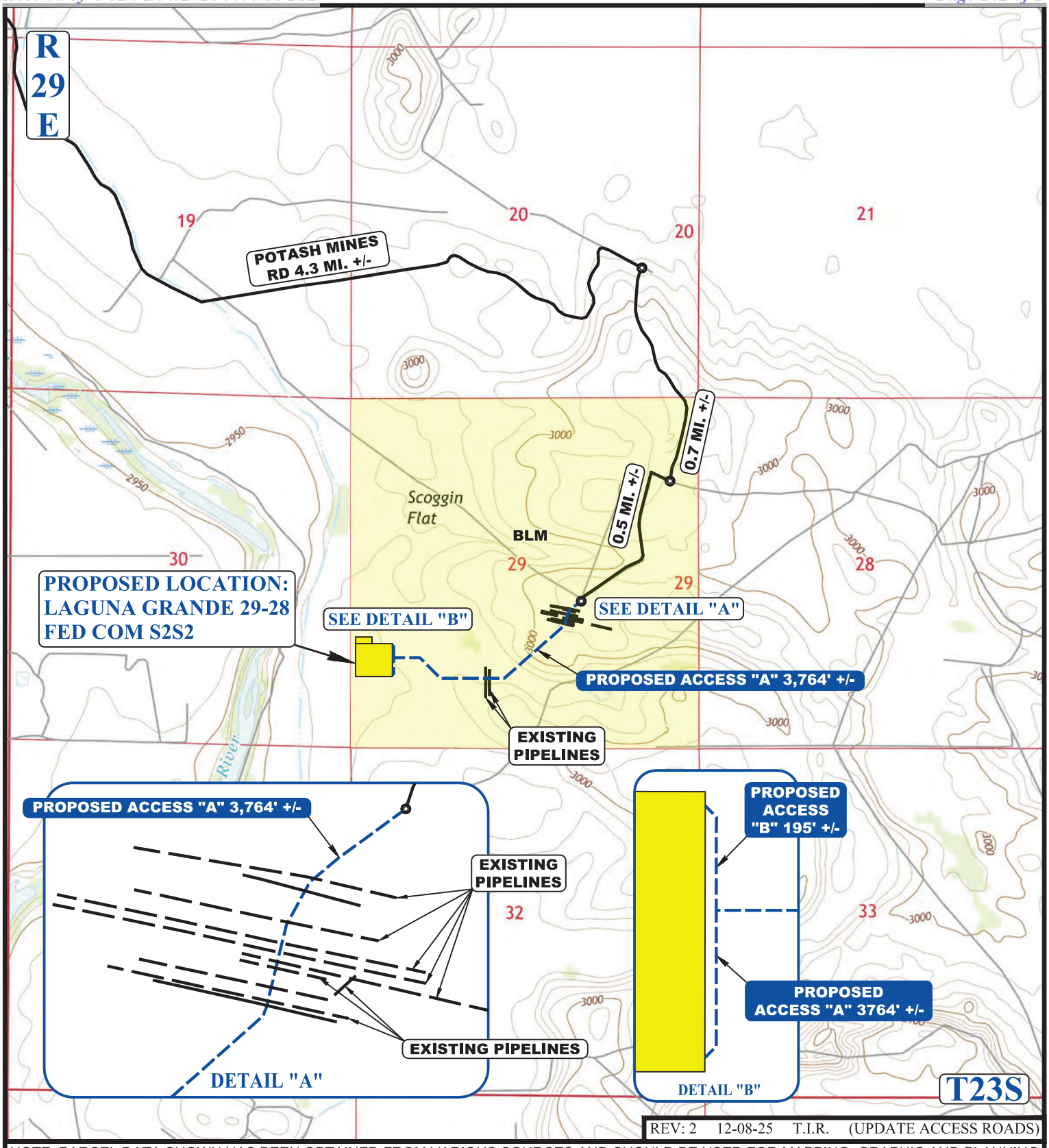
LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1 : 100,000

PUBLIC ACCESS ROAD MAP **EXHIBIT B**

UINTAH ENGINEERING & LAND SURVEYING

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



REV: 2	12-08-25	T.I.R.	(UPDATE ACCESS ROADS)

NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- EXISTING ROAD
- PROPOSED ROAD
- EXISTING PIPELINE

N

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1 : 24,000
NEW ROAD MAP			EXHIBIT D

UINTAH ENGINEERING & LAND SURVEYING

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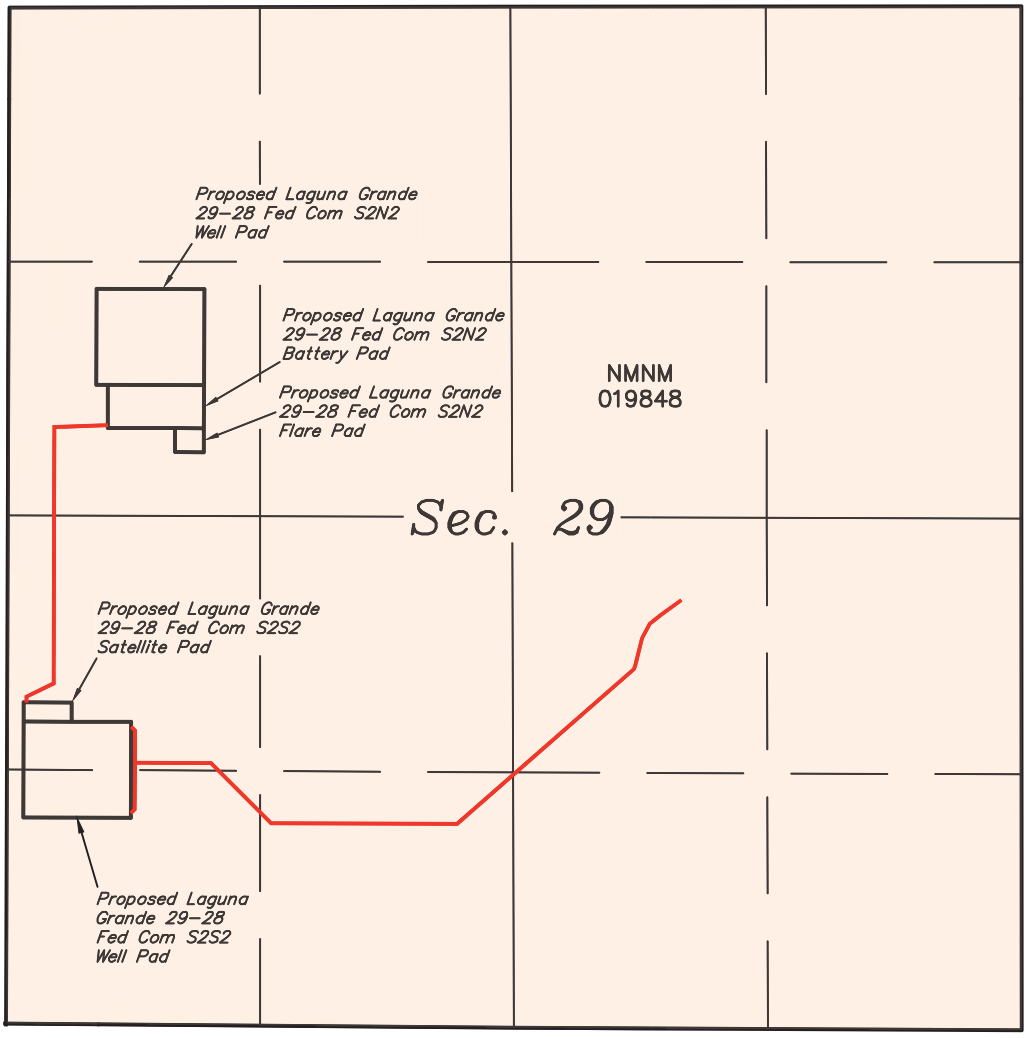


NOTE:

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

LEGEND:

PROPOSED ROAD CENTERLINE

SECTION LINE

1/4 SECTION LINE

1/16 SECTION LINE

N

REV: 4 12-08-25 T.I.R. (ROAD "A" & "B" RE-ROUTE)

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
ON BLM LANDS IN
SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

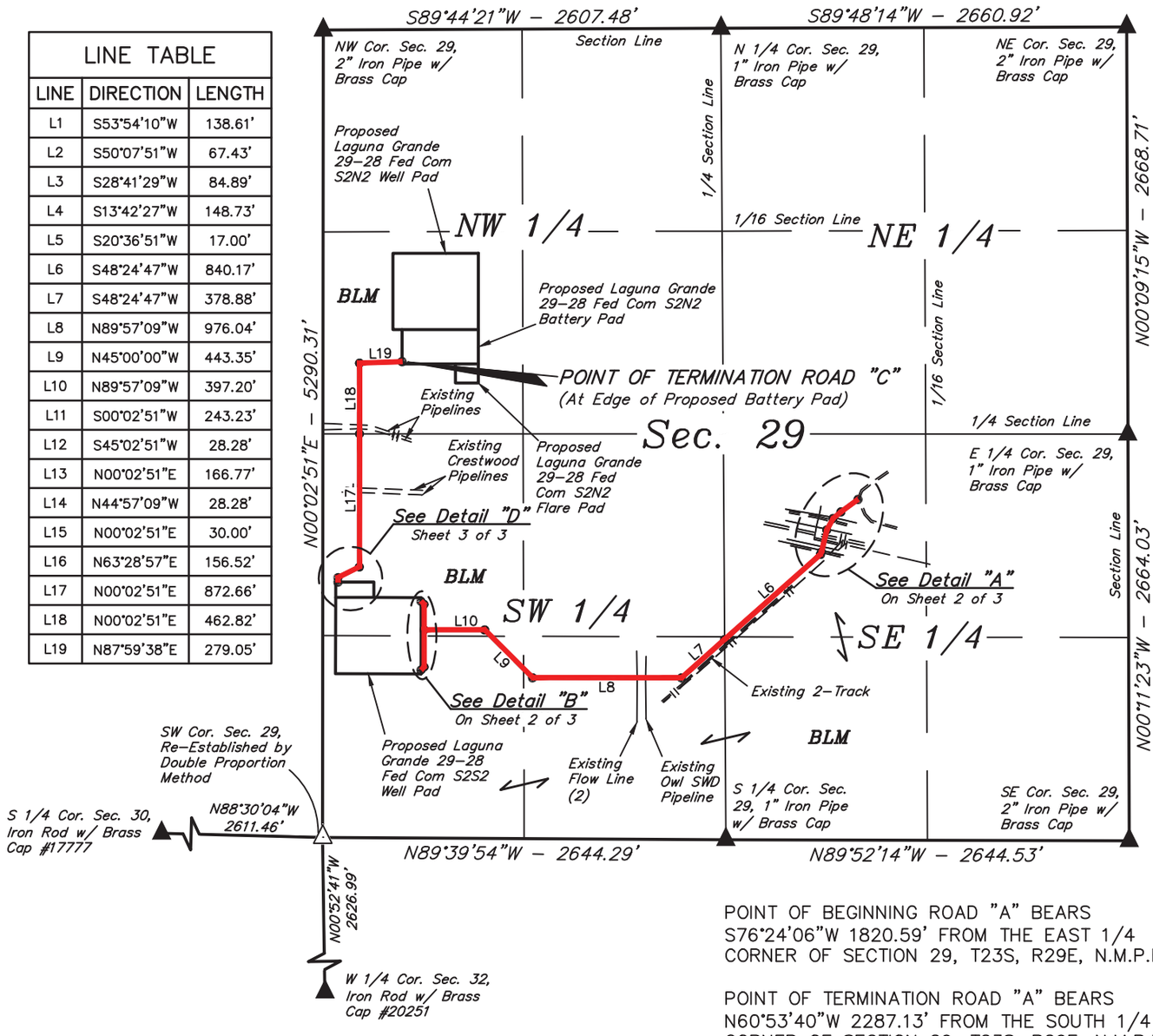
SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	N/A

OVERALL ACCESS ROAD

UINTAH ENGINEERING & LAND SURVEYING

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

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S53°54'10"W	138.61'
L2	S50°07'51"W	67.43'
L3	S28°41'29"W	84.89'
L4	S13°42'27"W	148.73'
L5	S20°36'51"W	17.00'
L6	S48°24'47"W	840.17'
L7	S48°24'47"W	378.88'
L8	N89°57'09"W	976.04'
L9	N45°00'00"W	443.35'
L10	N89°57'09"W	397.20'
L11	S00°02'51"W	243.23'
L12	S45°02'51"W	28.28'
L13	N00°02'51"E	166.77'
L14	N44°57'09"W	28.28'
L15	N00°02'51"E	30.00'
L16	N63°28'57"E	156.52'
L17	N00°02'51"E	872.66'
L18	N00°02'51"E	462.82'
L19	N87°59'38"E	279.05'



1000' 500' 0' 1000'

▲ = SECTION CORNERS LOCATED.
△ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

POINT OF BEGINNING ROAD "A" BEARS S76°24'06"W 1820.59' FROM THE EAST 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M.

POINT OF TERMINATION ROAD "A" BEARS N60°53'40"W 2287.13' FROM THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M.

POINT OF BEGINNING ROAD "B" BEARS N55°10'57"W 2409.47' FROM THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M.

POINT OF TERMINATION ROAD "B" BEARS N51°58'22"W 2536.38' FROM THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M.

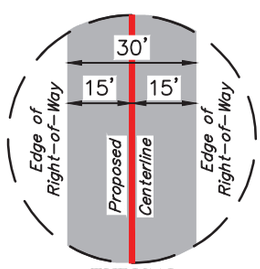
POINT OF BEGINNING ROAD "C" BEARS N56°25'25"W 3052.10' FROM THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M.

POINT OF TERMINATION ROAD "C" BEARS S13°23'11"E 2233.36' FROM THE NORTHWEST CORNER OF SECTION 29, T23S, R29E, N.M.P.M.

ACREAGE / LENGTH TABLE ROAD "A"			
LOCATION	FEET	RODS	ACRES
SEC. 29 (SE 1/4)	1,296.83	78.60	0.893
SEC. 29 (SW 1/4)	2,466.98	149.51	1.699
TOTAL	3,763.81	228.11	2.592

ACREAGE / LENGTH TABLE ROAD "B"			
LOCATION	FEET	RODS	ACRES
SEC. 29 (SW 1/4)	195.05	11.82	0.134

ACREAGE / LENGTH TABLE ROAD "C"			
LOCATION	FEET	RODS	ACRES
SEC. 29 (SW 1/4)	1,059.18	64.19	0.729
SEC. 29 (NW 1/4)	741.87	44.96	0.511
TOTAL	1,801.05	109.15	1.240



TYPICAL RIGHT-OF-WAY DETAIL
NO SCALE

CERTIFICATE
THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Sheet 1 of 3

REV: 4	12-08-25	T.I.R.	(ROAD "A" & "B" RE-ROUTE)

NOTES:
- The maximum grade of existing ground for the proposed access road "A" is ±4.99%.
- The maximum grade of existing ground for the proposed access road "B" is ±0.33%.
- The maximum grade of existing ground for the proposed access road "C" is ±1.73%.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of 103°53'00" (NAD 83)

N

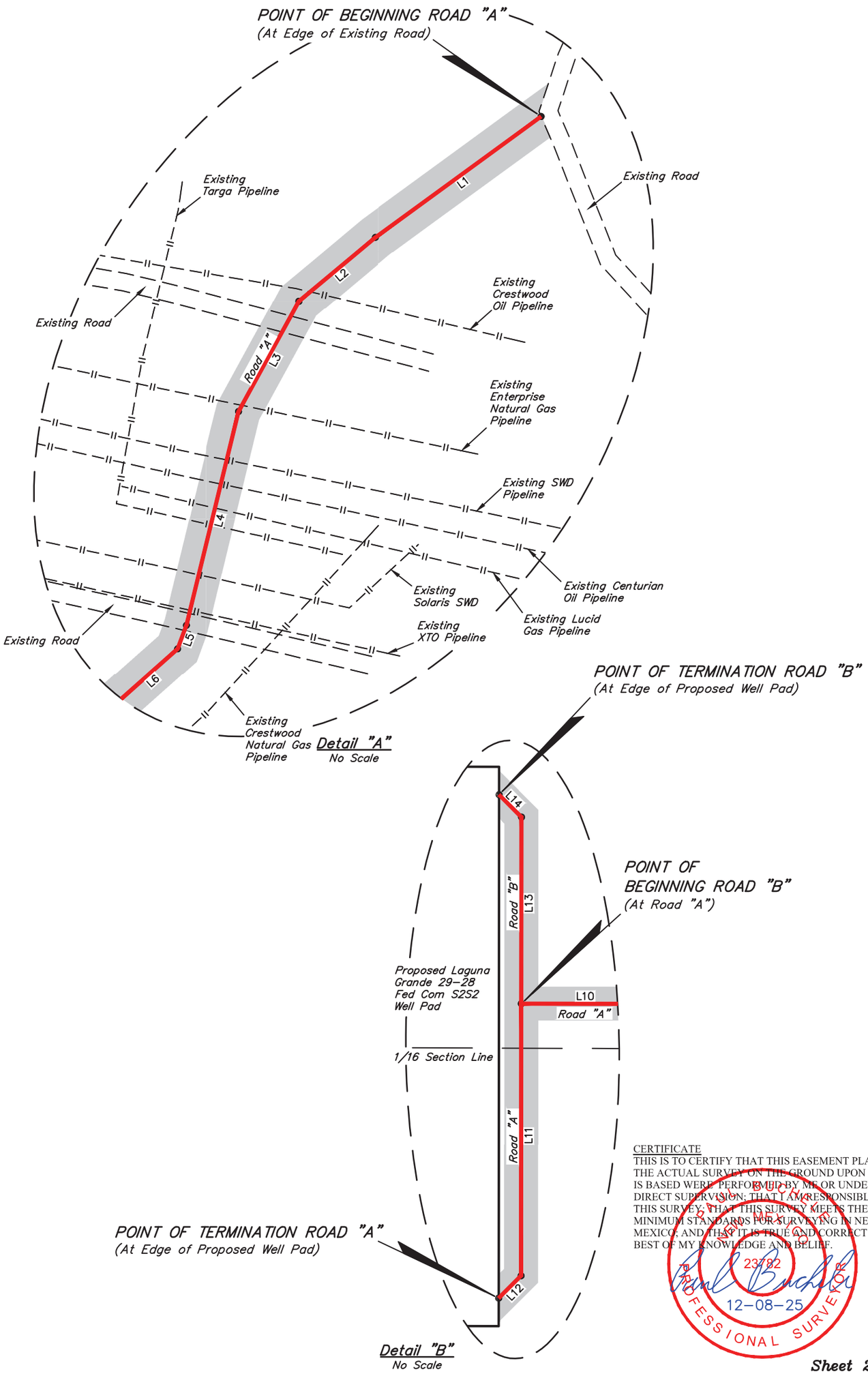
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2 ON BLM LANDS IN SECTION 29, T23S, R29E, N.M.P.M. EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 1000'
FILE	C-7880-A1		
ACCESS ROAD R-O-W			EXHIBIT D

UINTAH ENGINEERING & LAND SURVEYING

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



CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO
23782
Paul Buchheit
12-08-25
PROFESSIONAL SURVEYOR

Sheet 2 of 3

REV: 3	12-08-25	T.I.R.	(ROAD "A" & "B" RE-ROUTE)

NOTES:

- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of 103°53'00" (NAD 83)

N

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
ON BLM LANDS IN
SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	N/A
FILE	C-7880-A2		
ACCESS ROAD R-O-W			EXHIBIT D

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

ROAD "A" RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

COMMENCING AT THE EAST 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M., FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 29 BEARS S00°11'23"E 2664.03', THENCE S76°24'06"W 1820.59' TO A POINT IN THE NW 1/4 SE 1/4 OF SAID SECTION 29 AND THE POINT OF BEGINNING; THENCE S53°54'10"W 138.61'; THENCE S50°07'51"W 67.43'; THENCE S28°41'29"W 84.89'; THENCE S13°42'27"W 148.73; THENCE S20°36'51"W 17.00'; THENCE S48°24'47"W 840.17'; TO A POINT ON THE WEST LINE OF THE SW 1/4 SE 1/4 OF SAID SECTION 29; THENCE CONTINUING S48°24'47"W 378.88'; THENCE N89°57'09"W 976.04'; THENCE N45°00'00"W 443.35'; THENCE N89°57'09"W 397.20'; THENCE S00°02'51"W 243.23'; THENCE S45°02'51"W 28.28' TO A POINT IN THE SW 1/4 SW 1/4 OF SAID SECTION 29 AND THE POINT OF TERMINATION, WHICH BEARS N60°53'40"W 2287.13' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 29. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. CONTAINS 2.592 ACRES MORE OR LESS.

ROAD "B" RIGHT-OF-WAY DESCRIPTION

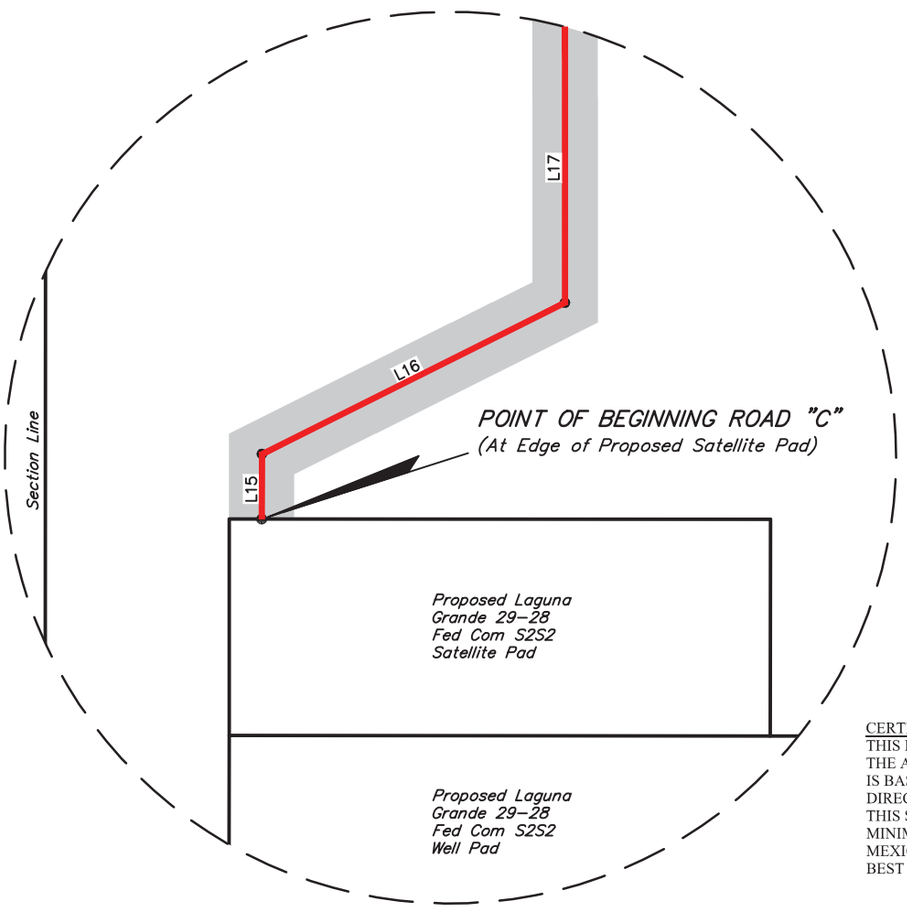
A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

COMMENCING AT THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M., FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 29 BEARS S89°52'14"E 2644.53', THENCE N55°10'57"W 2409.47' TO A POINT IN THE NW 1/4 SW 1/4 OF SAID SECTION 29 AND THE POINT OF BEGINNING; THENCE N00°02'51"E 166.77'; THENCE N44°57'09"W 28.28' TO A POINT IN THE NW 1/4 SW 1/4 OF SAID SECTION 29 AND THE POINT OF TERMINATION, WHICH BEARS N51°58'22"W 2536.38' FROM THE SOUTH 1/4 CORNER OF SAID SECTION 29. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. CONTAINS 0.134 ACRES MORE OR LESS.

ROAD "C" RIGHT-OF-WAY DESCRIPTION

A 30' WIDE RIGHT-OF-WAY 15' ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE.

COMMENCING AT THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M., FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 29 BEARS S89°52'14"E 2644.53', THENCE N56°25'25"W 3052.10' TO A POINT IN THE NW 1/4 SW 1/4 OF SAID SECTION 29 AND THE POINT OF BEGINNING; THENCE N00°02'51"E 30.00'; THENCE N63°28'57"E 156.52'; THENCE N00°02'51"E 872.66' TO A POINT ON THE NORTH LINE OF THE NW 1/4 SW 1/4 OF SAID SECTION 29; THENCE CONTINUING N00°02'51"E 462.82'; THENCE N87°59'38"E 279.05' TO A POINT IN THE SW 1/4 NW 1/4 OF SAID SECTION 29 AND THE POINT OF TERMINATION, WHICH BEARS S13°23'11"E 2233.36' FROM THE NORTHWEST CORNER OF SAID SECTION 29. THE SIDE LINES OF SAID DESCRIBED RIGHT-OF-WAY BEING SHORTENED OR ELONGATED TO MEET THE GRANTOR'S PROPERTY LINES. CONTAINS 1.240 ACRES MORE OR LESS.



Detail "D"
No Scale

CERTIFICATE

THIS IS TO CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO 23782 PROFESSIONAL SURVEYOR
12-08-25

Sheet 3 of 3

REV: 4	12-08-25	T.I.R.	(ROAD "A" & "B" RE-ROUTE)

NOTES:

- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of 103°53'00" (NAD 83)

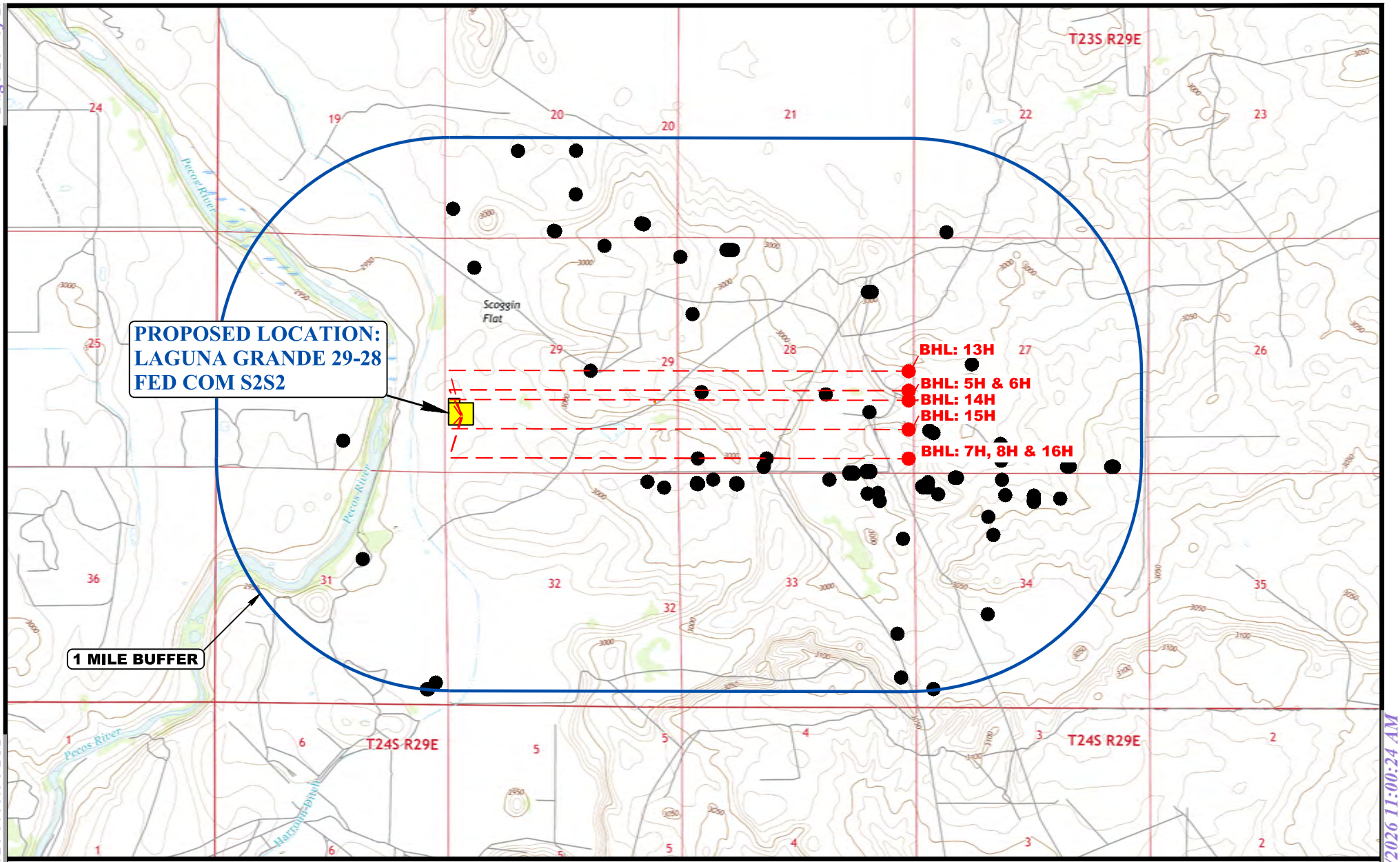
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
ON BLM LANDS IN
SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	N/A
FILE	C-7880-A3		
ACCESS ROAD R-O-W			EXHIBIT D

UINTAH ENGINEERING & LAND SURVEYING

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



LEGEND:

● EXISTING WELLS

N

CIMAREX ENERGY CO.

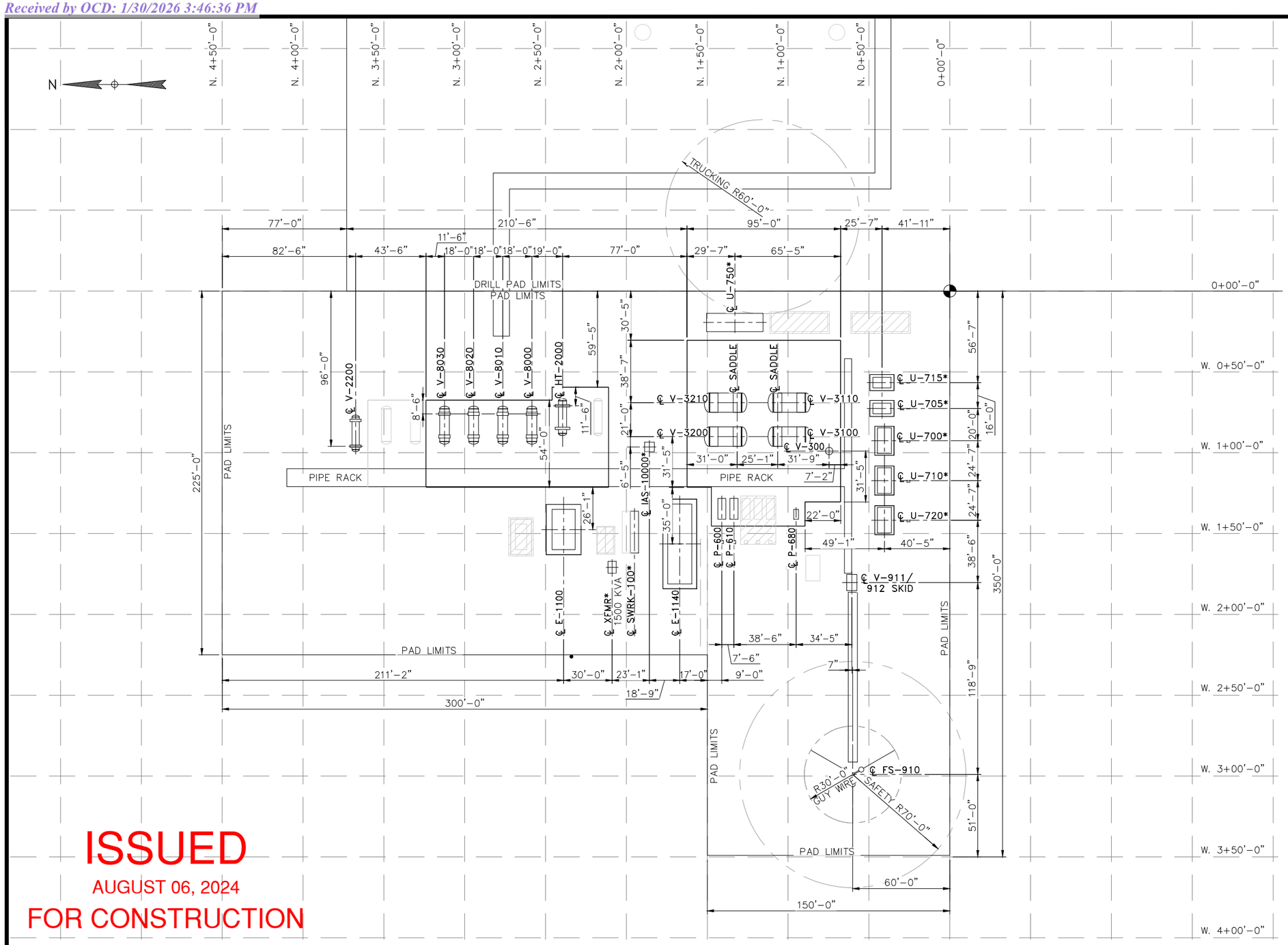
LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1 : 36,000

1 MILE RADIUS MAP | **EXHIBIT E**

UINTAH ENGINEERING & LAND SURVEYING

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



EQUIPMENT		
TAG	DESCRIPTION	HP
V-300	VAPOR RECOVERY TOWER 36" OD x 40' S/S	
P-600	SKIDDED TRANSFER PUMP	100
P-610	SKIDDED TRANSFER PUMP	100
P-680	PCP RECIRCULATION PUMP	5
U-700	FX12V125	125
U-705	G10	100
U-710	FX17V150	150
U-715	G10	100
U-720	FX17V150	150
U-750	PIPELINE W/ BOOSTER	210
FS-910	TRIPOD 3.0/1.5 MMSCFD DUAL FLARE STACK	20
V-911/912	FS-910 DUAL SCRUBBER SKID	3
E-1100	OIL COOLER H-13-24 HZ 16K	40
E-1140	H-10-2-28 WATER COOLER	40
HT-2000	HZ HEATER TREATER 60" OD x 20' S/S	
V-2200	2PH HZ LP GAS SCRUBBER 54" OD x 20' S/S	
V-3100	500 BBL OIL VESSEL 12' OD x 20' S/S	
V-3110	500 BBL OIL VESSEL 12' OD x 20' S/S	
V-3200	500 BBL WATER VESSEL 12' OD x 20' S/S	
V-3210	500 BBL WATER VESSEL 12' OD x 20' S/S	
V-8000	3PH HZ TEST SEPARATOR 72" OD x 20' S/S	
V-8010	3PH HZ TEST SEPARATOR 72" OD x 20' S/S	
V-8020	3PH HZ TEST SEPARATOR 72" OD x 20' S/S	
V-8030	3PH HZ TEST SEPARATOR 72" OD x 20' S/S	
IAS-10000	AIR COMPRESSOR	(2) 7.5

LEGEND

FUTURE

ISSUED

AUGUST 06, 2024

FOR CONSTRUCTION

NOTE:

LP B4P6; SWEET;

* FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION

REFERENCE DRAWINGS	
NO.	TITLE

REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHK.	APP.
0	08/06/24	ISSUED FOR CONSTRUCTION	NR	JNM	

3S ENGINEERING & DESIGN
Midland, Texas 79705
Arlington, Texas 76011
Katy, Texas 77449
Ph: 432-687-5611
WWW.3SENGINEERINGDESIGN.COM
TBPE FIRM REG. #13809
NM FIRM REG. #4545320

ENGINEERING RECORD		
	BY	DATE
DRN:	NR	07/10/24
DES:	JAV	
CHK:		
APP:		
AFE No.		
FACILITY ENGR.	C. BOYLE	
PROJ. ENGR:	J. MEDINA	
SCALE:	NONE	

COTERRA

[redacted]

GENERAL ARRANGEMENT PLOT PLAN

LEA COUNTY NM

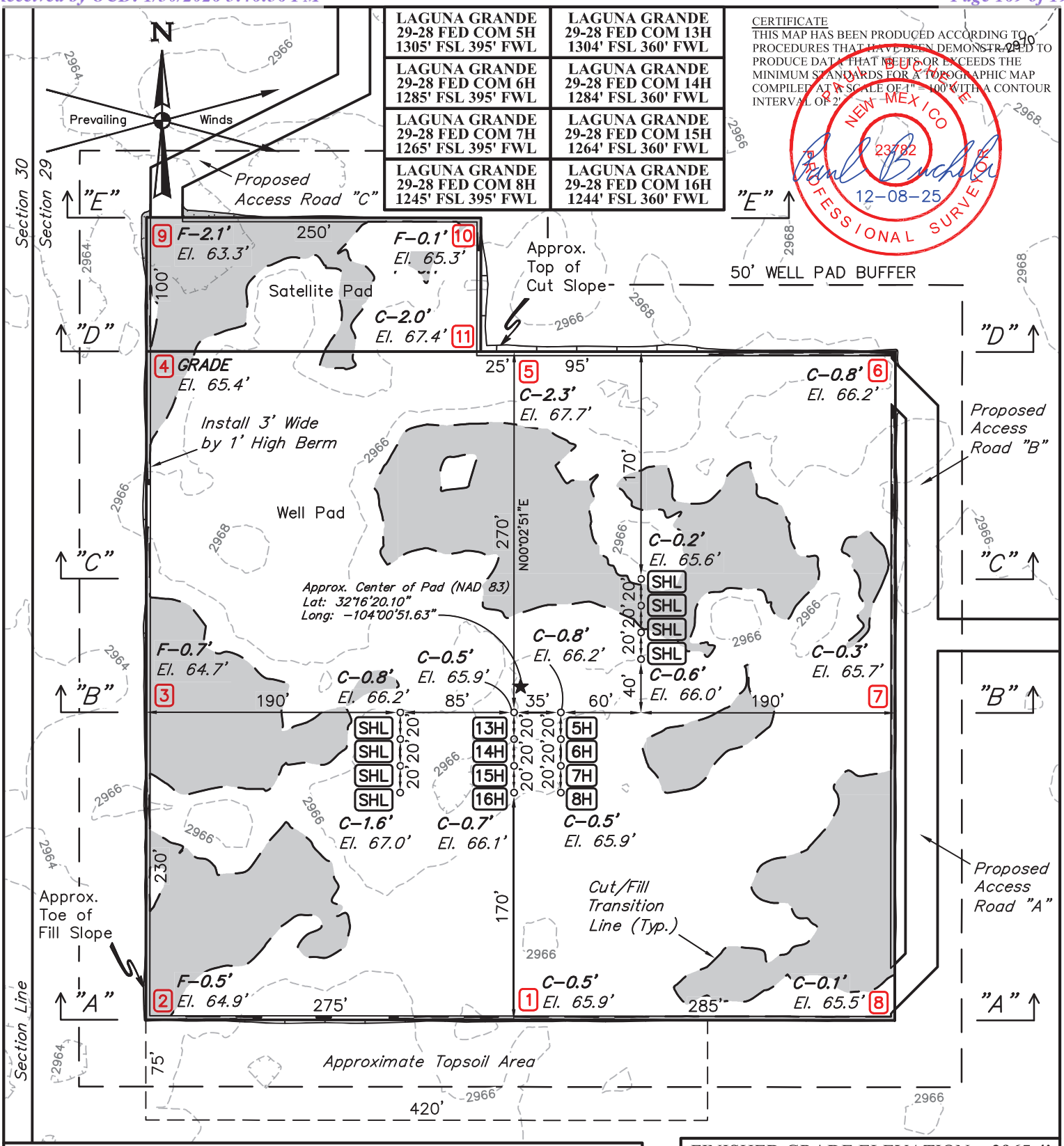
PLOT SCALE NONE

CAD NO.

DWG. NO. D-24550-20-100

REV 0

O:\01_Coterra\24550 - Triste Draw CTB\2. Eng. Design\2.3 Piping, Mech\2.3.2 Plot Plans\D-24550-20-100.dwg 20240805.101118



NOTE: Earthwork Calculations Require a Fill of 0.3' @ the Location Stake For Balance. All Fill is to be Compacted to a Minimum of 95% of the Maximum Dry Density Obtained by AASHTO Method t-99.

FINISHED GRADE ELEVATION = **2965.4'**

REV: 2 12-08-25 T.I.R.
(UPDATE ACCESS ROADS & TOPSOIL AREA)

NOTES:

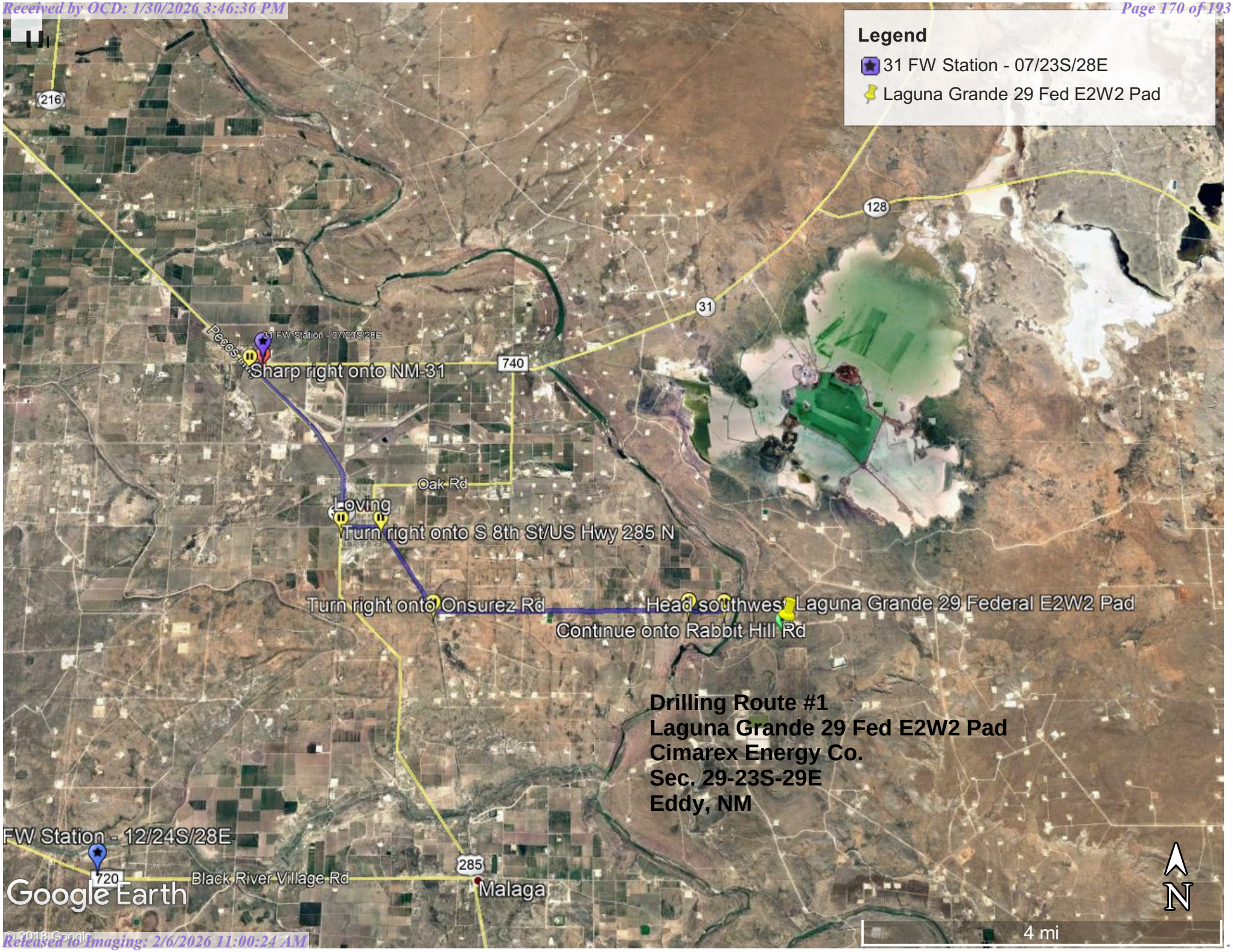
- Flare pit is to be located a min. of 100' from the wellhead.
- Contours shown at 2' intervals.
- Cut/Fill slopes 2:1 (Typ.)
- Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

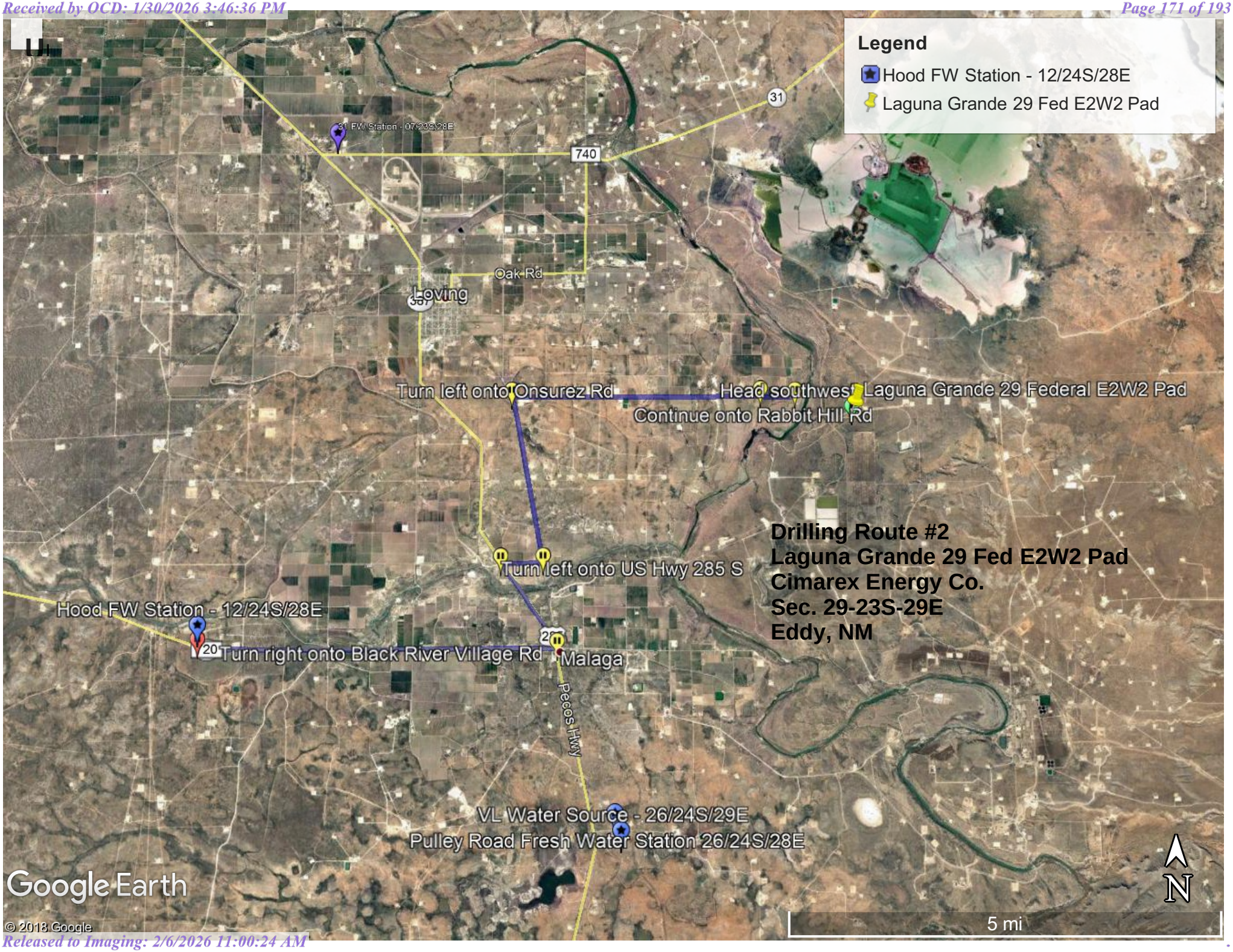
CIMAREX ENERGY CO.

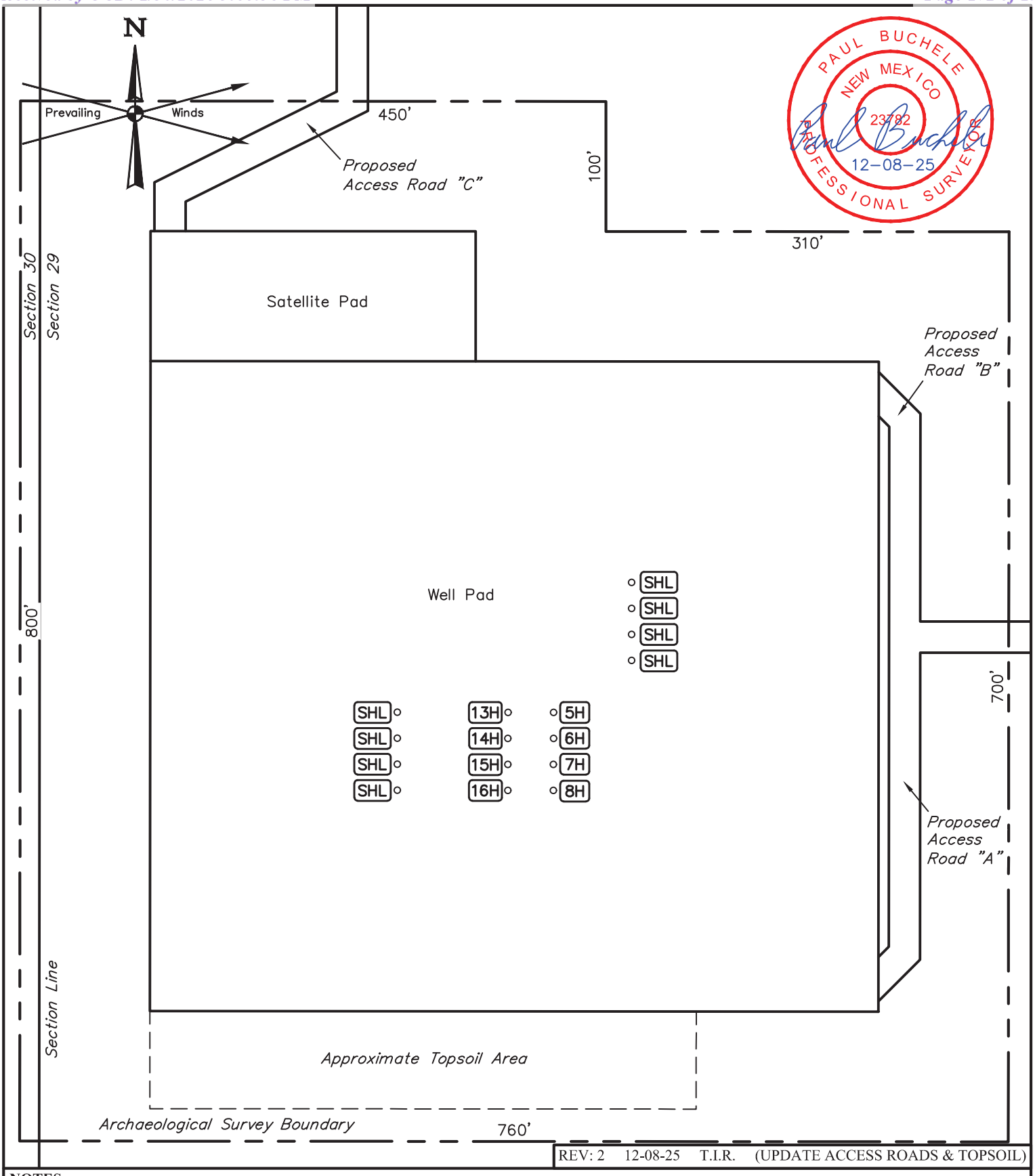
LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'
LOCATION LAYOUT			**EXHIBIT J**

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017


Legend
31 FW Station - 07/23S/28E
Laguna Grande 29 Fed E2W2 Pad
216
128
31
740
Sharp right onto NM-31
Oak Rd
Loving
Turn right onto S 8th St/US Hwy 285 N
Turn right onto Onsurez Rd
Continue onto Rabbit Hill Rd
Laguna Grande 29 Federal E2W2 Pad
Drilling Route #1
Laguna Grande 29 Fed E2W2 Pad
Cimarex Energy Co.
Sec. 29-23S-29E
Eddy, NM
FW Station - 12/24S/28E
720
Black River Village Rd
285
Malaga
Google Earth
© 2018 Google
N
4 mi


Legend
Hood FW Station - 12/24S/28E
Laguna Grande 29 Fed E2W2 Pad
31
740
Oak Rd
Loving
Turn left onto Onsurez Rd
Head southwest
Laguna Grande 29 Federal E2W2 Pad
Continue onto Rabbit Hill Rd
Turn left onto US Hwy 285 S
Hood FW Station - 12/24S/28E
Turn right onto Black River Village Rd
Malaga
Pecos Hwy
VL Water Source - 26/24S/29E
Pulley Road Fresh Water Station 26/24S/28E
Drilling Route #2
Laguna Grande 29 Fed E2W2 Pad
Cimarex Energy Co.
Sec. 29-23S-29E
Eddy, NM
Google Earth
© 2018 Google
N
5 mi



REV: 2 12-08-25 T.I.R. (UPDATE ACCESS ROADS & TOPSOIL)

NOTES:

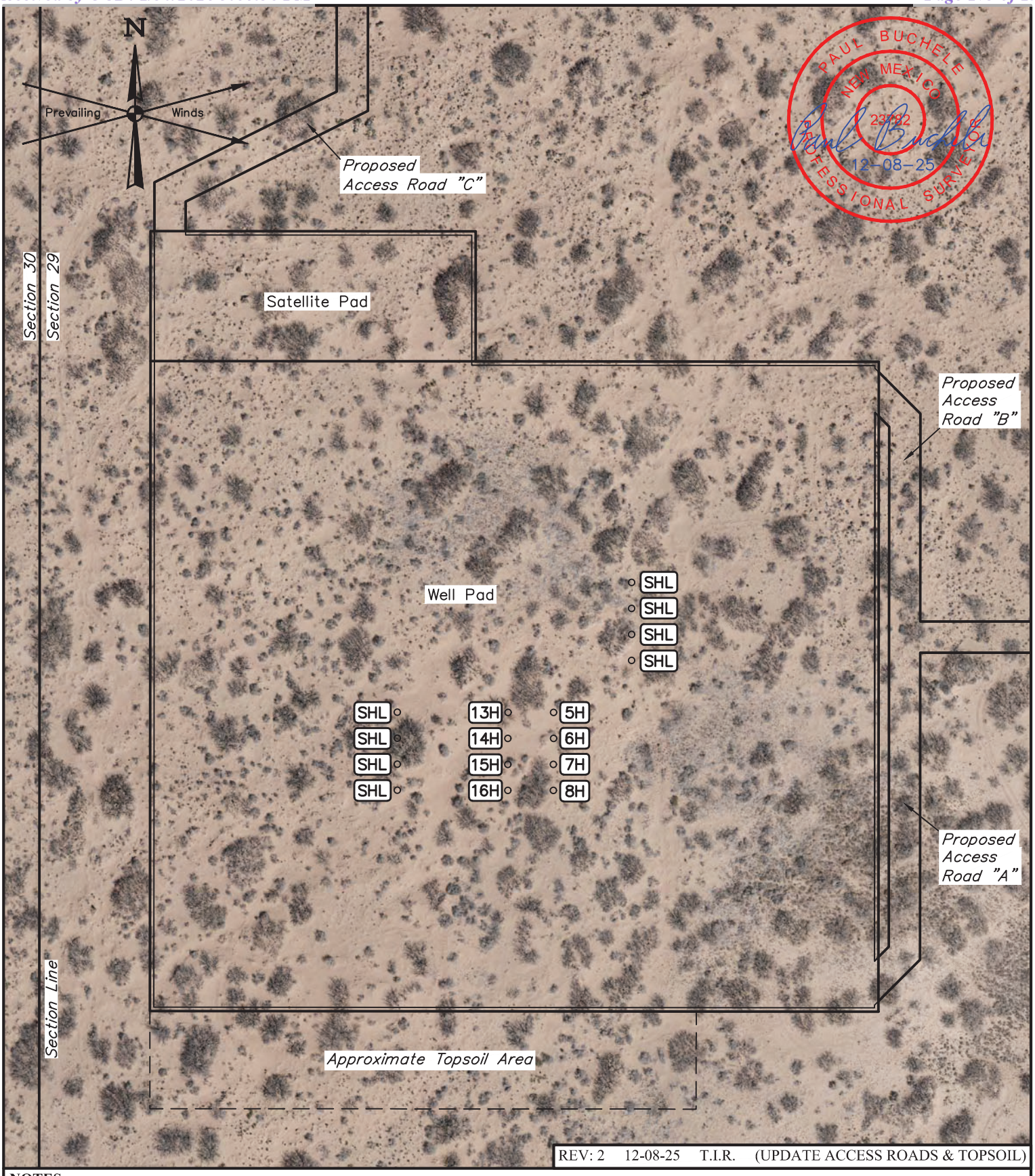
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'
ARCHAEOLOGICAL SURVEY BOUNDARY			EXHIBIT L

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



REV: 2 12-08-25 T.I.R. (UPDATE ACCESS ROADS & TOPSOIL)

NOTES:

- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

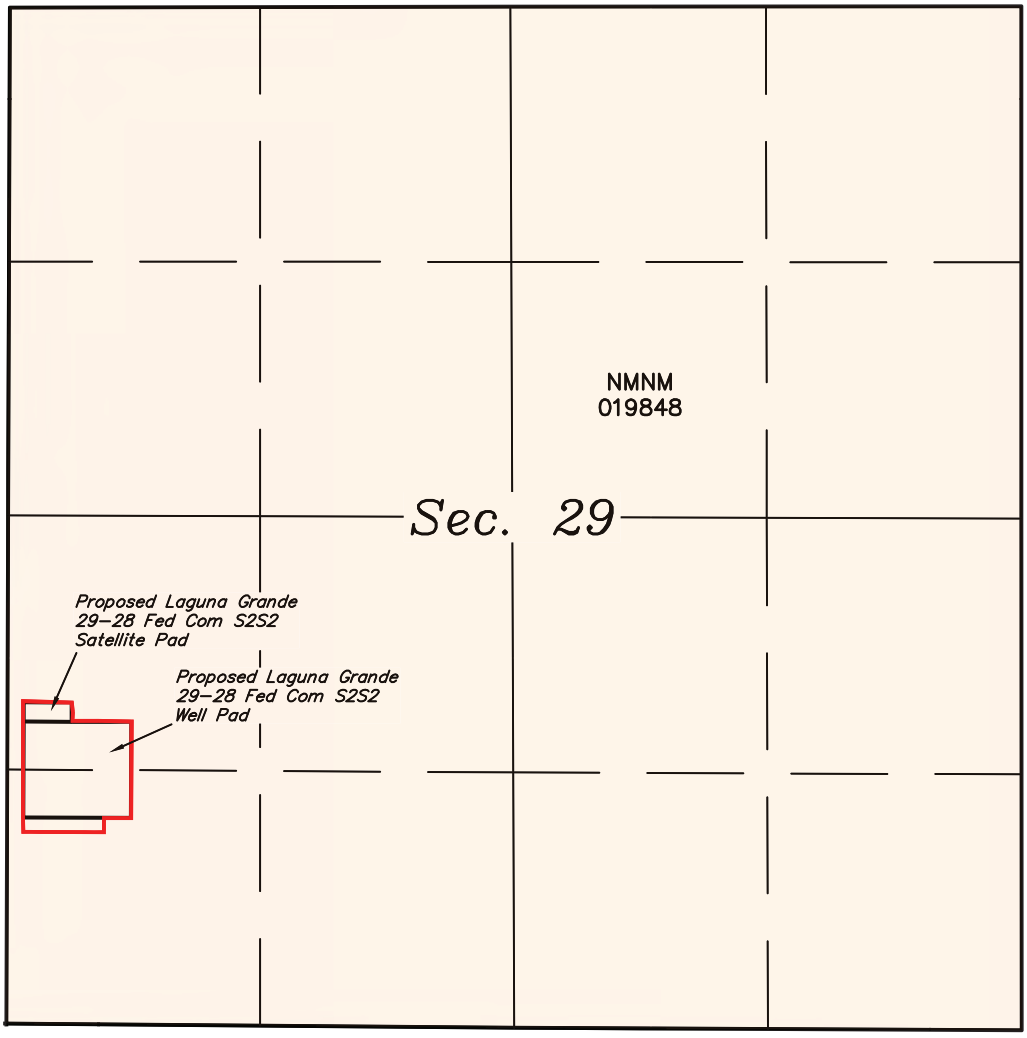
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'

AERIAL SITE PLAN

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



NOTE:

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

LEGEND:

PROPOSED SUA

SECTION LINE

1/4 SECTION LINE

1/16 SECTION LINE

N

REV: 1 12-08-25 T.I.R. (UPDATE SUA)

CIMAREX ENERGY CO.

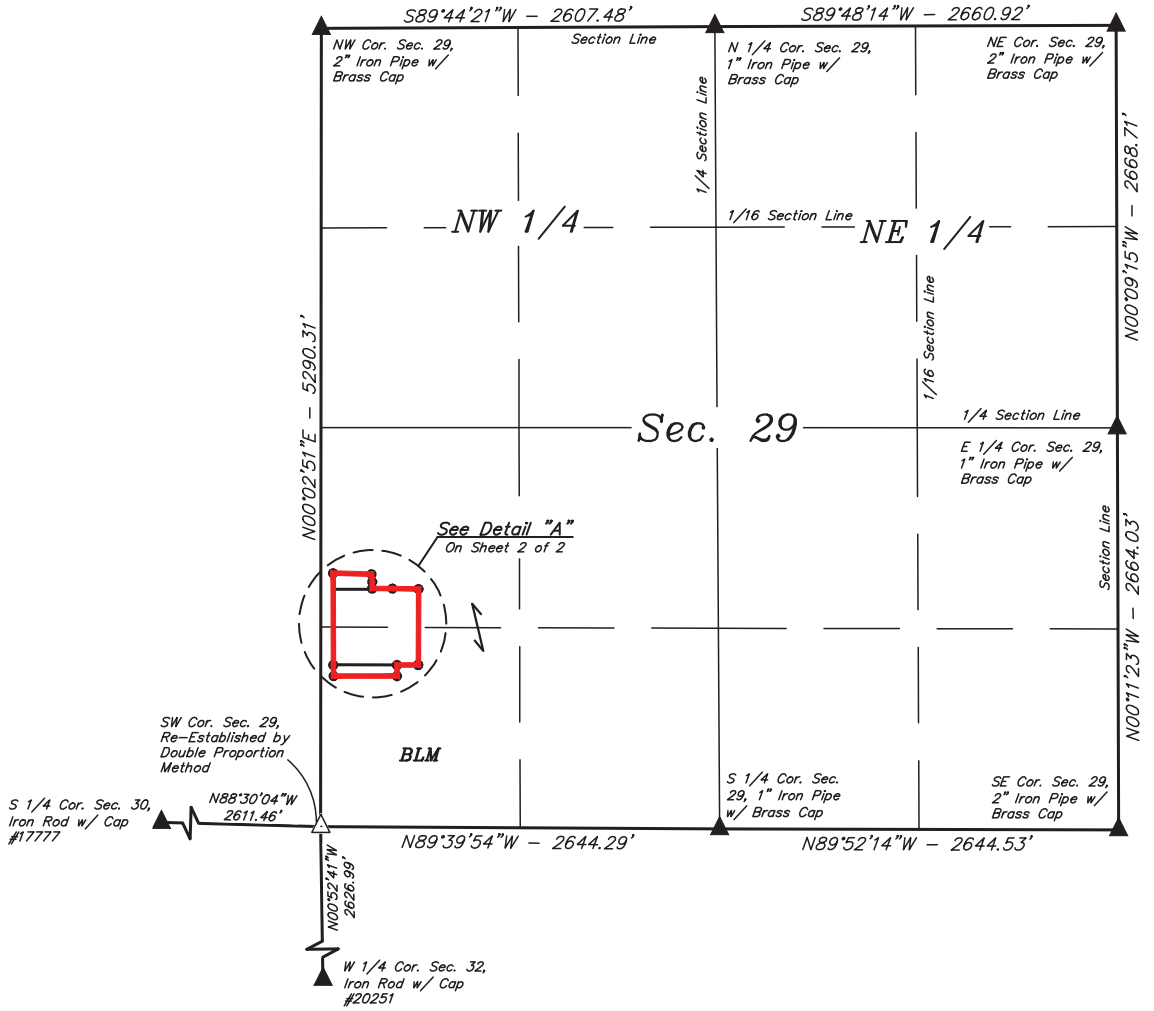
LAGUNA GRANDE 29-28 FED COM S2S2
ON BLM LANDS IN
SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	N/A

OVERALL SURFACE USE AREA

UINTAH ENGINEERING & LAND SURVEYING

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



SURFACE USE AREA DESCRIPTION

COMMENCING AT THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M., FROM WHICH THE SOUTHEAST CORNER OF SAID SECTION 29 BEARS S89°52'14"E 2644.53', THENCE N61°27'04"W 2273.94' TO A POINT IN THE SW 1/4 SW 1/4 OF SAID SECTION 29 AND THE POINT OF BEGINNING; THENCE S89°50'25"W 140.90'; THENCE S00°02'51"W 73.72'; THENCE N89°57'09"W 420.00'; THENCE N01°50'30"W 73.89'; THENCE N00°07'17"W 608.08'; THENCE S88°28'37"E 254.76'; THENCE S06°16'23"E 50.72'; THENCE S01°31'54"W 44.74'; THENCE N89°56'06"E 134.51'; THENCE S88°53'29"E 173.07'; THENCE S00°13'19"W 503.05' TO THE POINT OF BEGINNING. CONTAINS 7.858 ACRES MORE OR LESS.

POINT OF BEGINNING BEARS N61°27'04"W 2273.94' FROM THE SOUTH 1/4 CORNER OF SECTION 29, T23S, R29E, N.M.P.M.

1000' 500' 0' 1000'

ACREAGE TABLE	
LOCATION	ACRES
SEC. 29 (SW 1/4)	7.858

▲ = SECTION CORNERS LOCATED.
△ = SECTION CORNERS RE-ESTABLISHED. (Not Set on Ground.)

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°50'25"W	140.90'
L2	S00°02'51"W	73.72'
L3	N89°57'09"W	420.00'
L4	N01°50'30"W	73.89'
L5	N00°07'17"W	608.08'
L6	S88°28'37"E	254.76'
L7	S06°16'23"E	50.72'
L8	S01°31'54"W	44.74'
L9	N89°56'06"E	134.51'
L10	S88°53'29"E	173.07'
L11	S00°13'19"W	503.05'

CERTIFICATE
THIS IS TO CERTIFY THAT THIS SURFACE USE AREA PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

STATE OF NEW MEXICO 23782 Paul Buchheit 12-08-25 PROFESSIONAL SURVEYOR

Sheet 1 of 2

REV: 1	12-08-25	T.I.R.	(UPDATE SUA)

NOTES:
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of 103°53'00" (NAD 83)

N

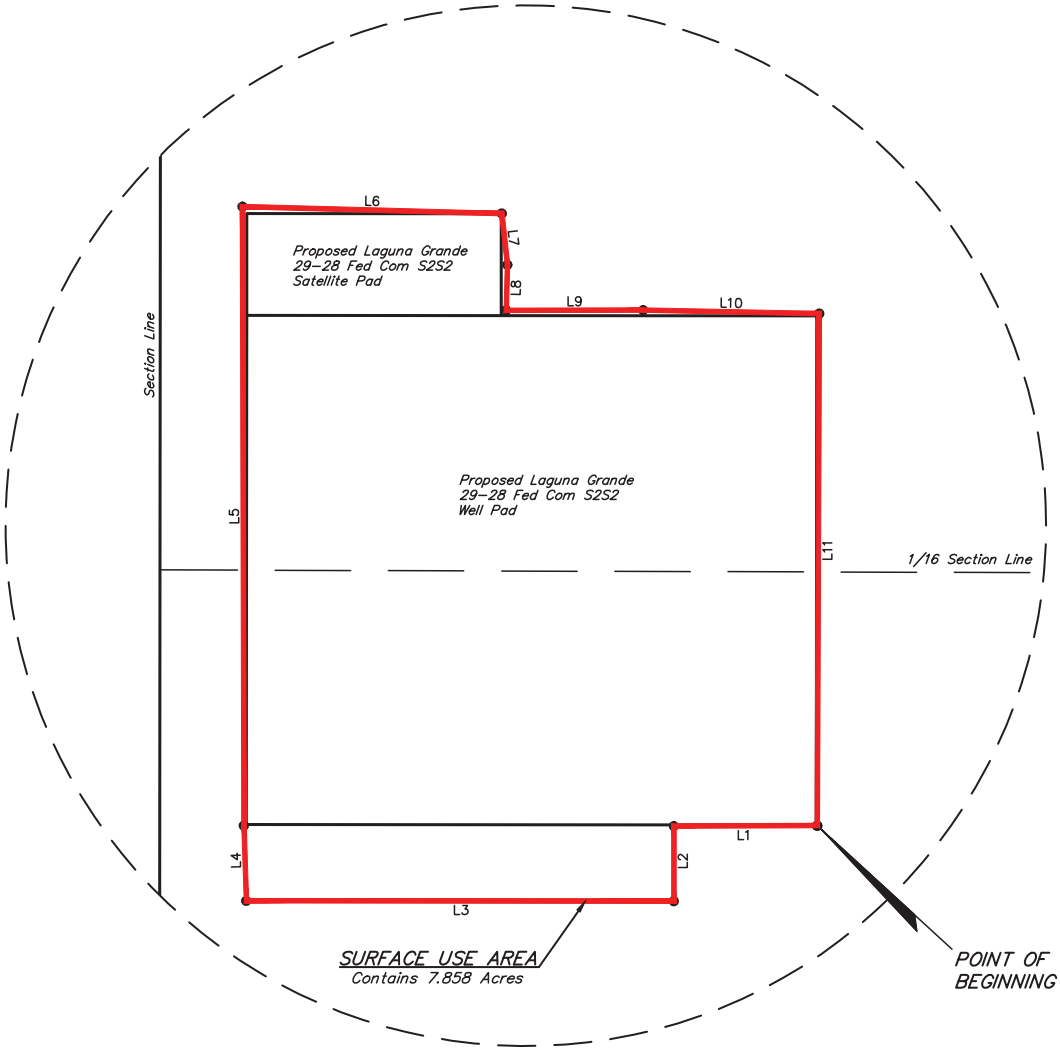
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
ON BLM LANDS IN
SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 1000'
FILE	C-7880-A1		

SURFACE USE AREA

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



Detail "A"
No Scale

CERTIFICATE
THIS IS TO CERTIFY THAT THIS SURFACE USE AREA PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

NEW MEXICO 23782 PROFESSIONAL SURVEYOR
12-08-25

Sheet 2 of 2

REV: 1 12-08-25 T.I.R. (UPDATE SUA)

NOTES:
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of 103°53'00" (NAD 83)

N

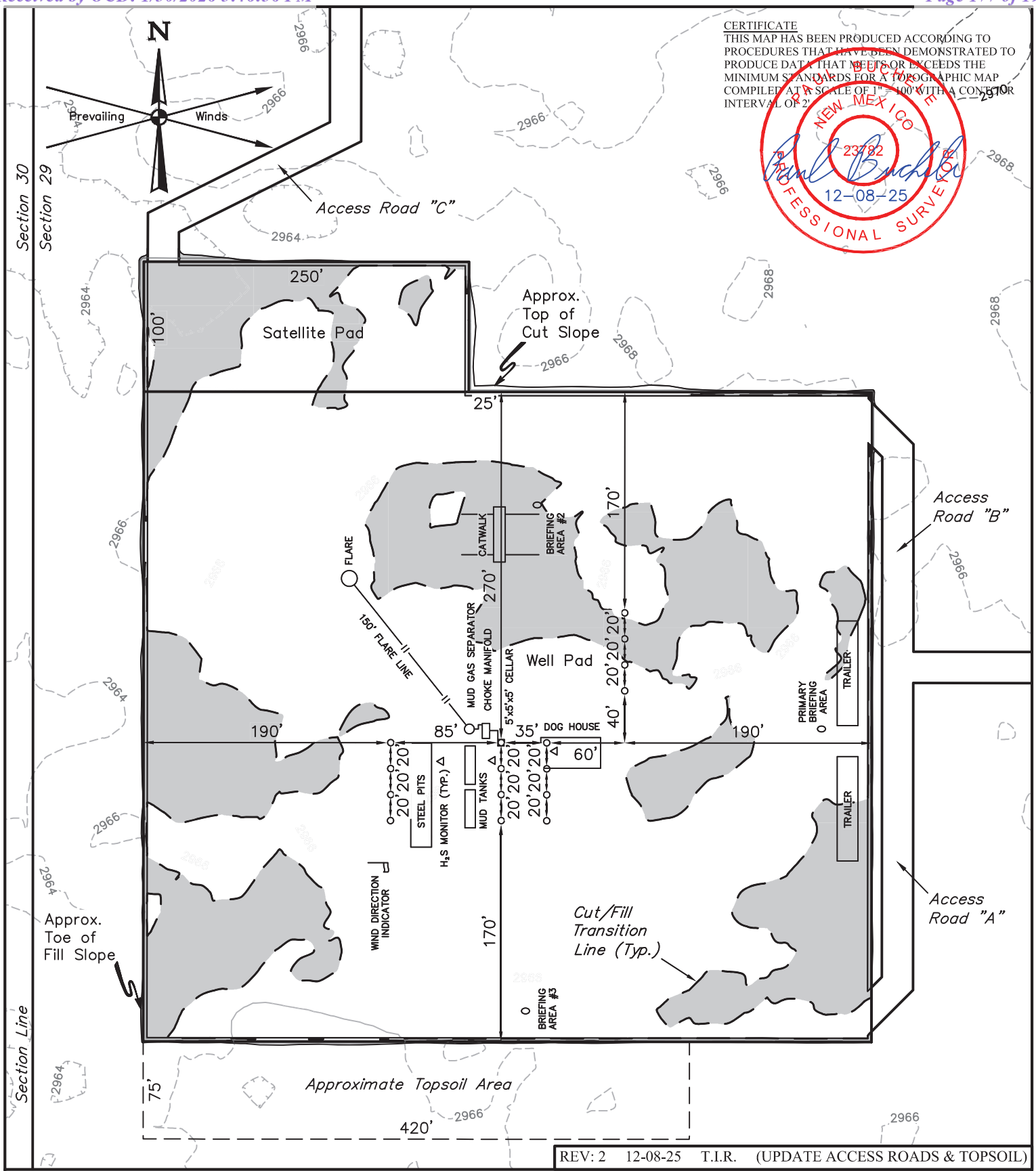
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
ON BLM LANDS IN
SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	N/A
FILE	C-7880-A2		

SURFACE USE AREA

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



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" = 100' WITH A CONTOUR INTERVAL OF 2'.

PAUL R. CHILDERS NEW MEXICO 23782 PROFESSIONAL SURVEYOR
Paul Childers
12-08-25

REV: 2 12-08-25 T.I.R. (UPDATE ACCESS ROADS & TOPSOIL)

NOTES:

- Contours shown at 2' intervals.

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'
TYPICAL RIG LAYOUT			EXHIBIT K

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

BEGINNING AT THE INTERSECTION OF POTASH MINES ROAD AND FISHERMANS LANE TO THE SOUTH (LOCATED AT NAD 83 LATITUDE 32.3185° AND LONGITUDE -104.0393°) PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 1.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY, THEN NORTHEASTERLY, THEN EASTERLY DIRECTION APPROXIMATELY 3.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.7 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE WEST; TURN RIGHT AND PROCEED IN A WESTERLY, THEN SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE BEGINNING OF THE PROPOSED LAGUNA GRANDE 29-28 FED COM ACCESS ROAD "A" TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY, THEN WESTERLY, THEN NORTHWESTERLY, THEN WESTERLY, THEN SOUTHERLY, THEN SOUTHWESTERLY DIRECTION APPROXIMATELY 3764' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF POTASH MINES ROAD AND FISHERMANS LANE TO THE SOUTH (LOCATED AT NAD 83 LATITUDE 32.3185° AND LONGITUDE -104.0393°) TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 6.2 MILES.

REV: 2	12-08-25	T.I.R.	(UPDATE ACCESS ROADS)

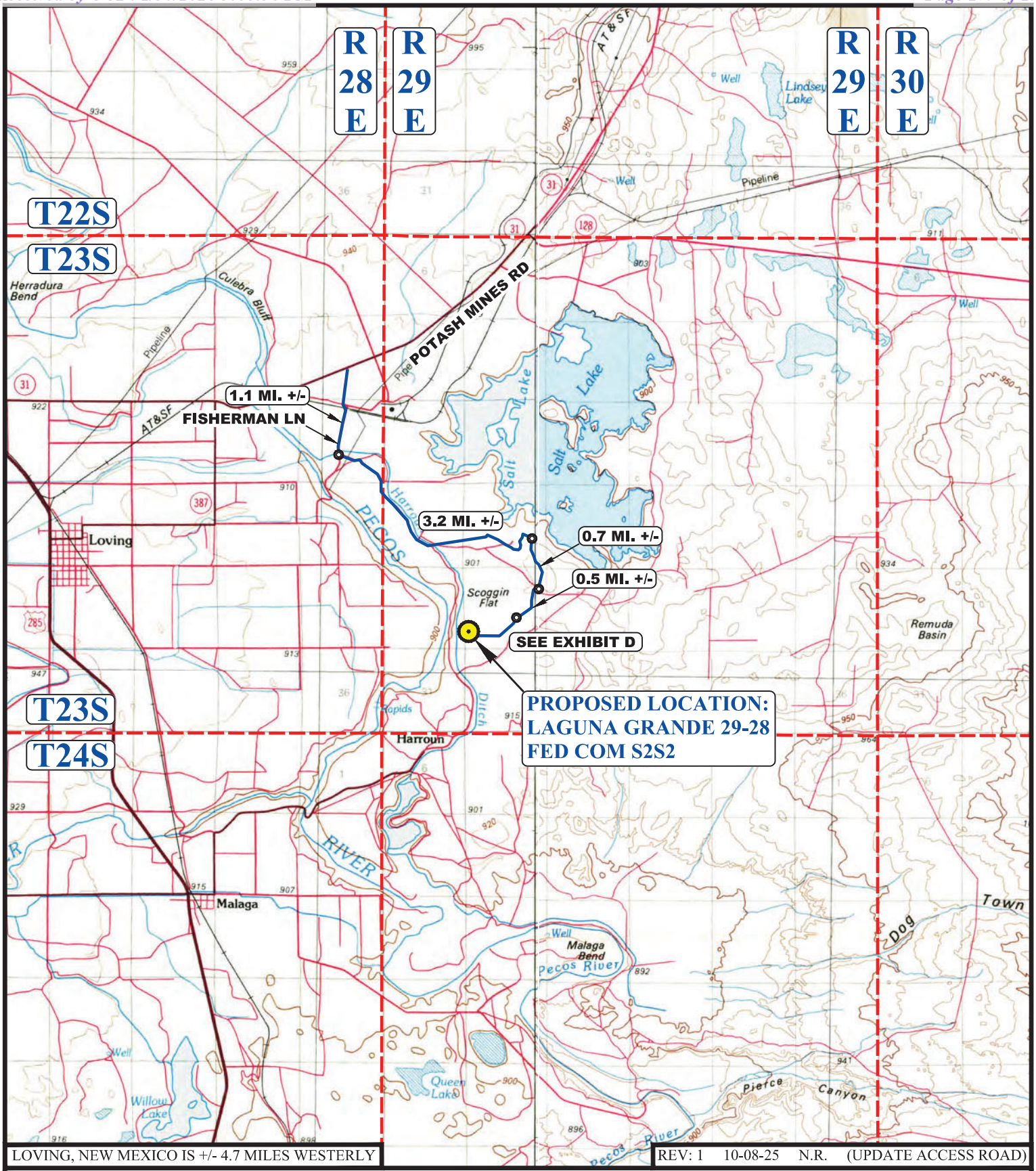
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	
DRAWN BY	T.I.R.	03-10-25	

ROAD DESCRIPTION **EXHIBIT A**

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



LOVING, NEW MEXICO IS +/- 4.7 MILES WESTERLY

REV: 1 10-08-25 N.R. (UPDATE ACCESS ROAD)

LEGEND:

PROPOSED LOCATION

N

CIMAREX ENERGY CO.

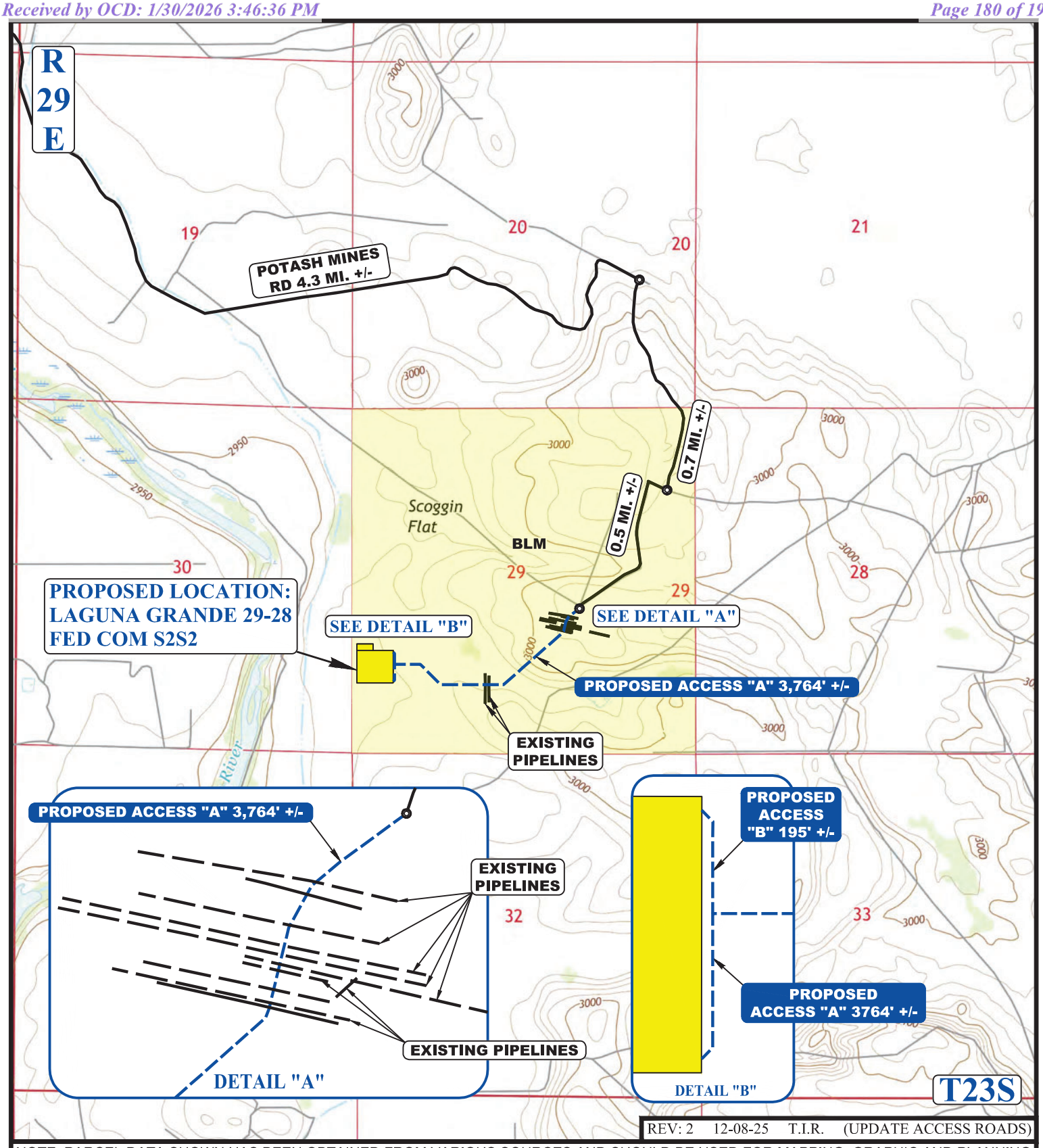
LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1 : 100,000

PUBLIC ACCESS ROAD MAP **EXHIBIT B**

UINTAH ENGINEERING & LAND SURVEYING

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



REV: 2 12-08-25 T.I.R. (UPDATE ACCESS ROADS)

NOTE: PARCEL DATA SHOWN HAS BEEN OBTAINED FROM VARIOUS SOURCES AND SHOULD BE USED FOR MAPPING, GRAPHIC AND PLANNING PURPOSES ONLY. NO WARRANTY IS MADE BY UINTAH ENGINEERING AND LAND SURVEYING (UELS) FOR ACCURACY OF THE PARCEL DATA.

LEGEND:

- EXISTING ROAD
- PROPOSED ROAD
- EXISTING PIPELINE

N

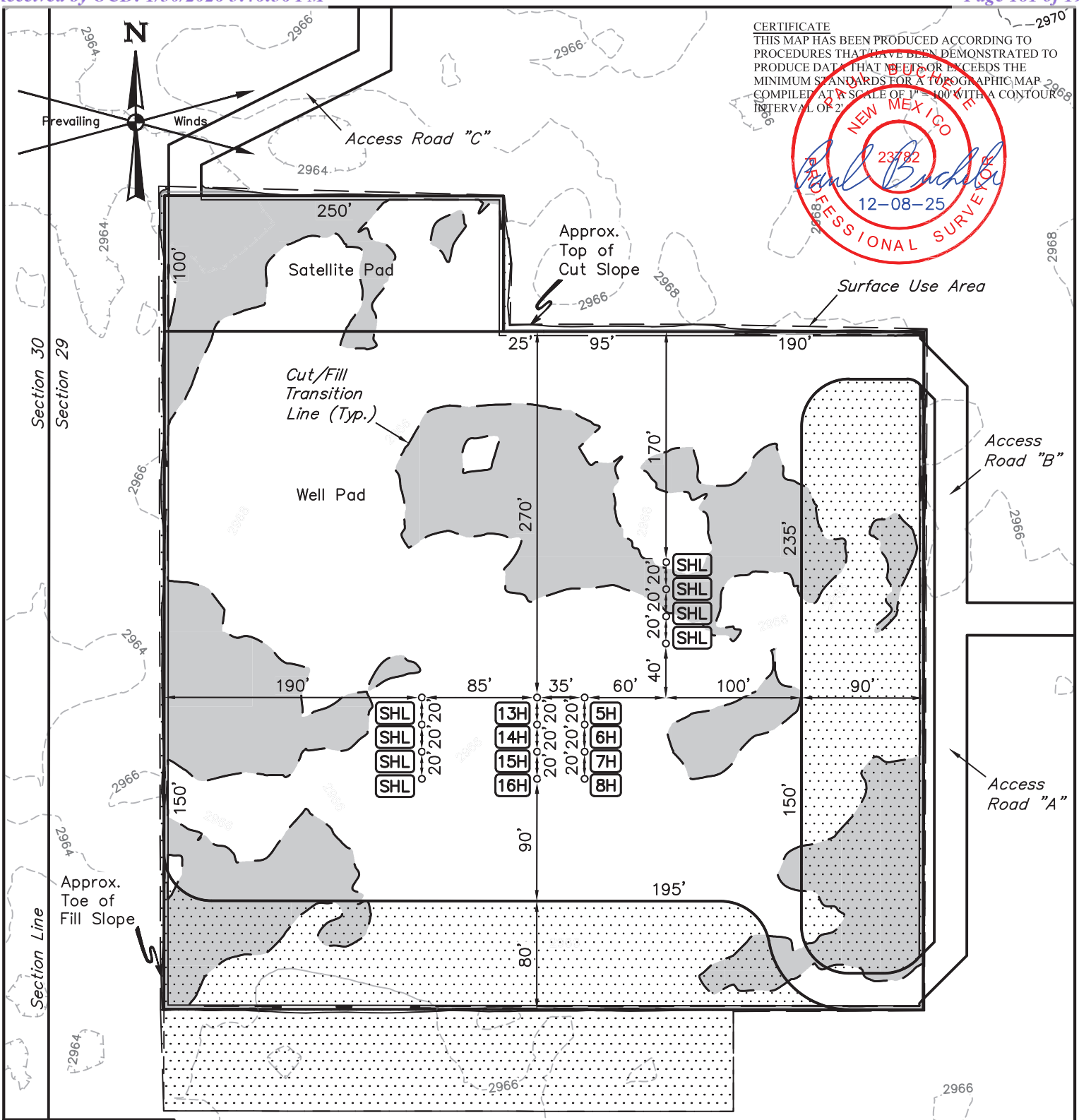
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1 : 24,000
NEW ROAD MAP			EXHIBIT D

UINTAH ENGINEERING & LAND SURVEYING

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



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" = 100' WITH A CONTOUR INTERVAL OF 2'.

BUCHELE PAUL NEW MEXICO 23782 PROFESSIONAL SURVEYOR 12-08-25

LEGEND:
Reclaimed Area

APPROXIMATE PRODUCTION PAD ACREAGE = ±5.277 ACRES
APPROXIMATE RECLAIMED AREA ACREAGE = ±2.581 ACRES
TOTAL ACREAGE = ±7.858 ACRES

REV: 2 12-08-25 T.I.R. (UPDATE ACCESS ROADS & TOPSOIL)

NOTES:
- Contours shown at 2' intervals.

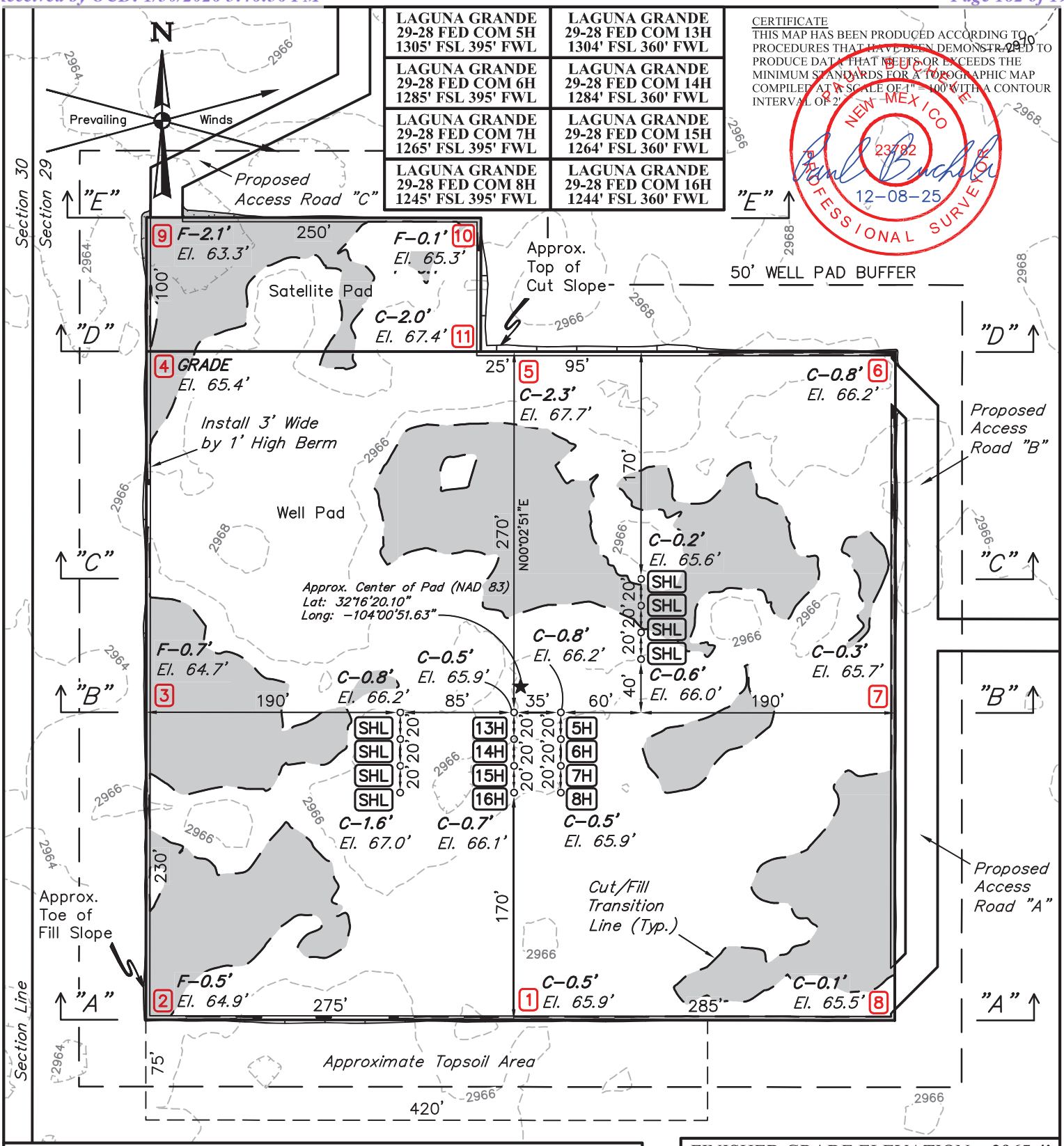
CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'

RECLAMATION DIAGRAM **EXHIBIT P**

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



NOTE: Earthwork Calculations Require a Fill of 0.3' @ the Location Stake For Balance. All Fill is to be Compacted to a Minimum of 95% of the Maximum Dry Density Obtained by AASHTO Method t-99.

FINISHED GRADE ELEVATION = **2965.4'**

REV: 2 12-08-25 T.I.R.
(UPDATE ACCESS ROADS & TOPSOIL AREA)

NOTES:

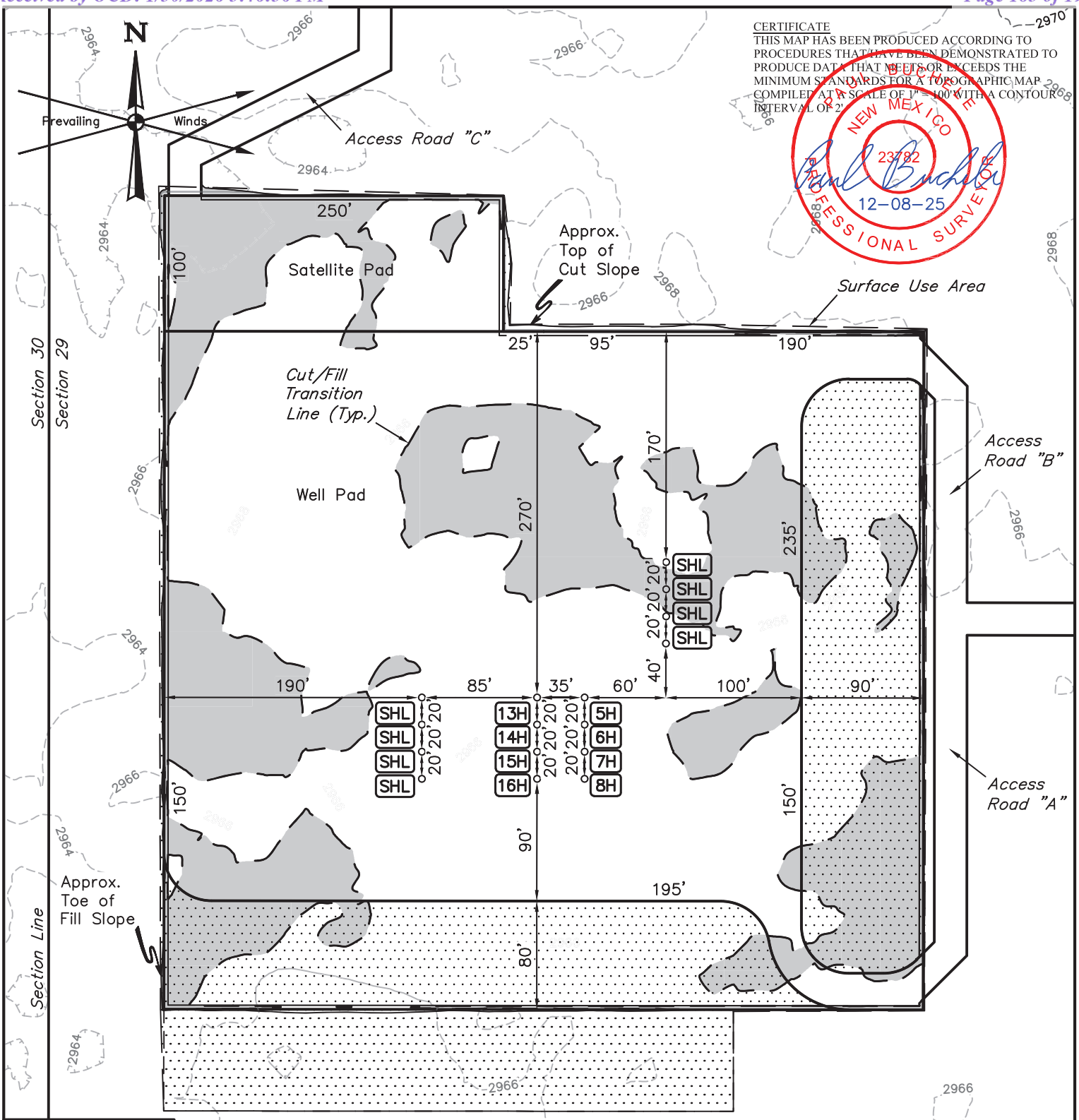
- Flare pit is to be located a min. of 100' from the wellhead.
- Contours shown at 2' intervals.
- Cut/Fill slopes 2:1 (Typ.)
- Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'
LOCATION LAYOUT			EXHIBIT J

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017



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" = 100' WITH A CONTOUR INTERVAL OF 2'.

PAUL BUCHELE NEW MEXICO 23782 PROFESSIONAL SURVEYOR
Paul Buchele
12-08-25

LEGEND:
Reclaimed Area

APPROXIMATE PRODUCTION PAD ACREAGE = ±5.277 ACRES
APPROXIMATE RECLAIMED AREA ACREAGE = ±2.581 ACRES
TOTAL ACREAGE = ±7.858 ACRES

REV: 2 12-08-25 T.I.R. (UPDATE ACCESS ROADS & TOPSOIL)

NOTES:
- Contours shown at 2' intervals.

CIMAREX ENERGY CO.

LAGUNA GRANDE 29-28 FED COM S2S2
1324' FSL 365' FWL (APPROX. CENTER OF PAD)
SW 1/4 SW 1/4, SECTION 29, T23S, R29E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	R.C., S.S.	03-05-25	SCALE
DRAWN BY	T.I.R.	03-10-25	1" = 100'

RECLAMATION DIAGRAM **EXHIBIT P**

UINTAH ENGINEERING & LAND SURVEYING
UELS, LLC
Corporate Office * 85 South 200 East
Vernal, UT 84078 * (435) 789-1017

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

PWD Data Report
01/28/2026

APD ID: 10400105081 **Submission Date:** 06/27/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD Surface Owner Description:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Lined pit Monitor description:

Lined pit Monitor

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): **PWD surface owner:**

Other PWD Surface Owner Description:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

Do you propose to put the produced water to beneficial use?

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Precipitated Solids Permit

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

State

Unlined Produced Water Pit Estimated

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information

Section 4 -

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD Surface Owner Description:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection

Underground Injection Control (UIC) Permit?

UIC Permit

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD Surface Owner Description :

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

PWD Surface Owner Description:

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements

AFMSS

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

Bond Info Data

01/28/2026

APD ID: 10400105081 **Submission Date:** 06/27/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: LAGUNA GRANDE 29-28 FED COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond

Federal/Indian APD: FED

BLM Bond number: NMB001188

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

5. Lease Serial No.
Multiple

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
MULTIPLE

2. Name of Operator
COTERRA ENERGY OPERATING CO.

9. API Well No.
MULTIPLE

3a. Address
6001 DEAUVILLE BLVD, STE 300N
MIDLAND,TX 79706

3b. Phone No. *(include area code)*
(432) 620-1695

10. Field and Pool or Exploratory Area
MULTIPLE

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

11. Country or Parish, State

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other Change of Operator
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

This serves as notification that Cimarex Energy Co. of Colorado (OGRID 162683) is transferring operatorship of the attached list of wells to Coterra Energy Operating Co. (OGRID 215099).

Coterra Energy Operating Co., as new owner, accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the lease as described.

Change of Operatorship effective January 1, 2025.
Bond Coverage: BLM Bond File No:
LPM9443161 Fidelity and Deposit Company of Maryland
CMS0355622 RLI Insurance Company
CMS0355616RLI Insurance Company

See Conditions of Approval

Like Approval by NMOCD

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

Title Regulatory Compliance Manager / Attorney-in-Fact

Signature Phillip G. Levasseur

Date 01/29/2026

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title Petroleum Engineer

Date 01/30/2026

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

Office RFO

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

(Instructions on page 2)

BLM OFFICE	US WELL NUMBER	APD/NOS ID	WELL NAME	WELL NUMBER	LEASE NUMBER
CARLSBAD		10400105056	LAGUNA GRANDE 29-28 FEDERAL COM	1H	NMNM19848
CARLSBAD		10400105086	LAGUNA GRANDE 29-28 FEDERAL COM	2H	NMNM19848
CARLSBAD		10400105114	LAGUNA GRANDE 29-28 FEDERAL COM	3H	NMNM19848
CARLSBAD		10400105117	LAGUNA GRANDE 29-28 FEDERAL COM	4H	NMNM19848
CARLSBAD		10400105081	LAGUNA GRANDE 29-28 FEDERAL COM	5H	NMNM19848
CARLSBAD		10400105140	LAGUNA GRANDE 29-28 FEDERAL COM	6H	NMNM19848
CARLSBAD		10400105143	LAGUNA GRANDE 29-28 FEDERAL COM	7H	NMNM19848
CARLSBAD		10400105144	LAGUNA GRANDE 29-28 FEDERAL COM	8H	NMNM19848

Change of Operator
Conditions of Approval

1. Tank battery must be bermed/diked (must be able to contain 1 1/2 times the volume of the largest tank) within 90 days.
2. Submit for approval of water disposal method within 60 days, if changes have been made from previously approved disposal method.
3. Review facility diagram on file, and submit updated facility diagrams, as per Onshore Order #3 within 60 day.
4. This agency shall be notified of any spill or discharge as required by NTL-3A.
5. All outstanding environmental issue must be addressed within 90 days. Contact Jim Amos for inspection and to resolve environmental issues. 575-234-5909
6. Install legible well sign on location with operator name, well name and number, lease number, unit number, 1/4 1/4, section, township, and range. NMOCD requires the API number on well signs.
7. Subject to like approval by NMOCD.
8. All Reporting to ONRR (OGOR Reports) must be brought current within 30 days of this approval including any past history.
9. If this well is incapable of producing in paying quantities submit NOI to plug and abandon this well or obtain approval to do otherwise within 90 days.
10. Submit plan for approval of well operations for all TA/SI wells within 30 days of this approval to change operator.
11. If not in place acquire operating rights on this lease within 30 days with BLM office in Santa Fe, NM.

JAM

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

ACKNOWLEDGMENTS

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 548690
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

☑	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.

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 548690

CONDITIONS

Operator: Coterra Energy Operating Co. 6001 Deauville Blvd Midland, TX 79706	OGRID: 215099
	Action Number: 548690
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
cdenson	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/30/2026
cdenson	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	1/30/2026
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	2/6/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	2/6/2026
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.	2/6/2026
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.	2/6/2026