



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
  - Operator Letter of Designation: 1 file(s)
  - Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
  - Blowout Prevention Choke Diagram Attachment: 1 file(s)
  - Blowout Prevention BOP Diagram Attachment: 2 file(s)
  - Casing Design Assumptions and Worksheet(s): 6 file(s)
  - Hydrogen sulfide drilling operations plan: 1 file(s)
  - Proposed horizontal/directional/multi-lateral plan submission: 2 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: 2 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, 2027UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. <b>30-025-55809</b>
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.   | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan.  | 5. Operator certification.  |
| 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). | 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.

(Continued on page 2)

\*(Instructions on page 2)



Approval Date: 01/05/2026

## 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 well, 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 directionally 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 well 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 will 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 connects this information to an 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 Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.



## Additional Operator Remarks

### Location of Well

0. SHL: NWNE / 279 FNL / 1966 FEL / TWSP: 26S / RANGE: 35E / SECTION: 25 / LAT: 32.0206959 / LONG: -103.319028 ( TVD: 0 feet, MD: 0 feet )

PPP: NENE / 330 FNL / 660 FEL / TWSP: 26S / RANGE: 35E / SECTION: 25 / LAT: 32.0205523 / LONG: -103.3148158 ( TVD: 12980 feet, MD: 13408 feet )

BHL: LOT 1 / 330 FSL / 660 FEL / TWSP: 26S / RANGE: 35E / SECTION: 36 / LAT: 32.0012145 / LONG: -103.3148019 ( TVD: 12980 feet, MD: 19970 feet )

### BLM Point of Contact

Name: MARIAH HUGHES

Title: Land Law Examiner

Phone: (575) 234-5972

Email: MHUGHES@BLM.GOV

CONFIDENTIAL

**PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	3R OPERATING LLC
LEASE NO.:	NMNM125402
COUNTY:	Lea County, New Mexico

Wells:

**Comanche Pad**

**COMANCHE 25 36 FED COM 301H**

Surface Hole Location: 278 feet FNL and 2145 feet FEL, Section 25, T. 26 S., R. 35 E.  
Bottom Hole Location: 100 feet FSL and 1980 feet FEL, Section 36, T. 26 S, R 35 E.

**COMANCHE 25 36 FED COM 302H**

Surface Hole Location: 278 feet FNL and 2116 feet FEL, Section 25, T. 26 S., R. 35 E.  
Bottom Hole Location: 100 feet FSL and 660 feet FEL, Section 36, T. 26 S, R 35 E.

**COMANCHE 25 36 FED COM 401H**

Surface Hole Location: 278 feet FNL and 2091 feet FEL, Section 25, T. 26 S., R. 35 E.  
Bottom Hole Location: 100 feet FSL and 1980 feet FEL, Section 36, T. 26 S, R 35 E.

**COMANCHE 25 36 FED COM 402H**

Surface Hole Location: 278 feet FNL and 2066 feet FEL, Section 25, T. 26 S., R. 35 E.  
Bottom Hole Location: 100 feet FSL and 660 feet FEL, Section 36, T. 26 S, R 35 E.

**COMANCHE 25 36 FED COM 501H**

Surface Hole Location: 279 feet FNL and 2041 feet FEL, Section 25, T. 26 S., R. 35 E.  
Bottom Hole Location: 100 feet FSL and 1980 feet FEL, Section 36, T. 26 S, R 35 E.

**COMANCHE 25 36 FED COM 502H**

Surface Hole Location: 279 feet FNL and 2016 feet FEL, Section 25, T. 26 S., R. 35 E.  
Bottom Hole Location: 100 feet FSL and 660 feet FEL, Section 36, T. 26 S, R 35 E.

**COMANCHE 25 36 FED COM 801H**

Surface Hole Location: 279 feet FNL and 1991 feet FEL, Section 25, T. 26 S., R. 35 E.  
Bottom Hole Location: 330 feet FSL and 1980 feet FEL, Section 36, T. 26 S, R 35 E.

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## 1. GENERAL PROVISIONS

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

### 1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

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

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

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

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

### 1.2. RANGELAND RESOURCES

#### 1.2.1. Cattleguards

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

### 1.2.2. Fence Requirement

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

### 1.2.3. Livestock Watering Requirement

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

## 1.3. NOXIOUS WEEDS

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

### 1.3.1 African Rue (*Peganum harmala*)

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

### 2.1. WATERSHED

#### 2.1.1. 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.

#### 2.1.2. 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.

#### 2.1.3. Tank Battery

- Tank battery locations will be lined and bermed. Tank battery berms should be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater. Liners should be permanently installed, at least 20 mm thick with a 4 oz. felt backing to prevent tears or punctures.
- 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.

#### 2.1.4. 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.



- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

#### 2.1.5. 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

#### 2.1.6. Electric Line(s)

- A power pole must not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that does not promote further erosion.

#### 2.1.7. Temporary Use Fresh Water Frac Line(s)

- Once the temporary use exceeds the timeline of 180 days and/or with a 90-day extension status; further analysis will be required if the applicant pursues to turn the temporary pipeline into a permanent pipeline.
- The pipeline is to not obstruct ephemeral drainages or streams, allowing water to flow in its natural state unobstructed.
- 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.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

#### 2.1.8. Temporary Use Fresh Water Frac Line(s)

- Erosion control structures such as rock armor (constructed of NRCS standard rip rap mix 3 or 4), geotextile fabric, or coco fiber mats will be installed **on all four sides of the proposed pad** including the berm and the cut and/or fill slopes of the pad boundary to reduce erosion potential. Regular monitoring of any erosion control structures is recommended, both following precipitation events and regularly during monsoon season (June – September).
- Erosion control measures will be employed between the below listed points to reduce runoff and sediment transport into the identified ephemeral stream and downstream dirt tank. Along this stretch, excess soil and fill material will be compacted, contoured, and level to ground surface, allowing water to flow in its natural state. Erosion control structures such as (plastic-free and weed-free) wood/straw fiber wattles/logs and/or silt fences will be placed on the downstream side of disturbed areas for sediment control during construction and maintained until soils and vegetation have stabilized.

Water Feature Name	Approximate Start Location	Approximate End Location	Map Reference
NHD01	103.3185050°W 32.0210797°N	103.3136509°W 32.0211578°N	Comanche Sweet Gas Line: Proposed Gas Pipeline Easement Section 25, T-26-S, R-35-E, NMPM

## 2.3 WILDLIFE

### 2.3.1 Lesser Prairie Chicken

#### 2.3.1.1 Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

#### 2.3.1.2 Timing Limitation Exceptions:

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

#### 2.3.1.3 Ground-level Abandoned Well Marker to avoid raptor perching:

Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at [BLM\\_NM\\_CFO\\_Construction\\_Reclamation@blm.gov](mailto:BLM_NM_CFO_Construction_Reclamation@blm.gov).

## 2.4 VISUAL RESOURCE MANAGEMENT

### 2.5.1 VRM IV

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

## 3. CONSTRUCTION REQUIREMENTS

### 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](mailto: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 enclosure 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 enclosure 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 ACCESS 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

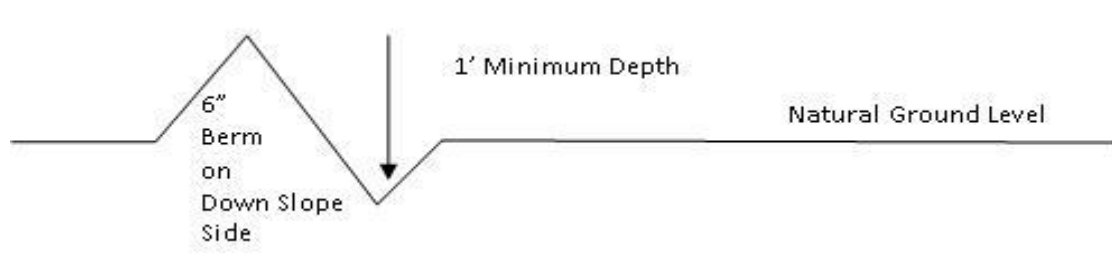
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### 3.7.6 Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing 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:

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

### 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

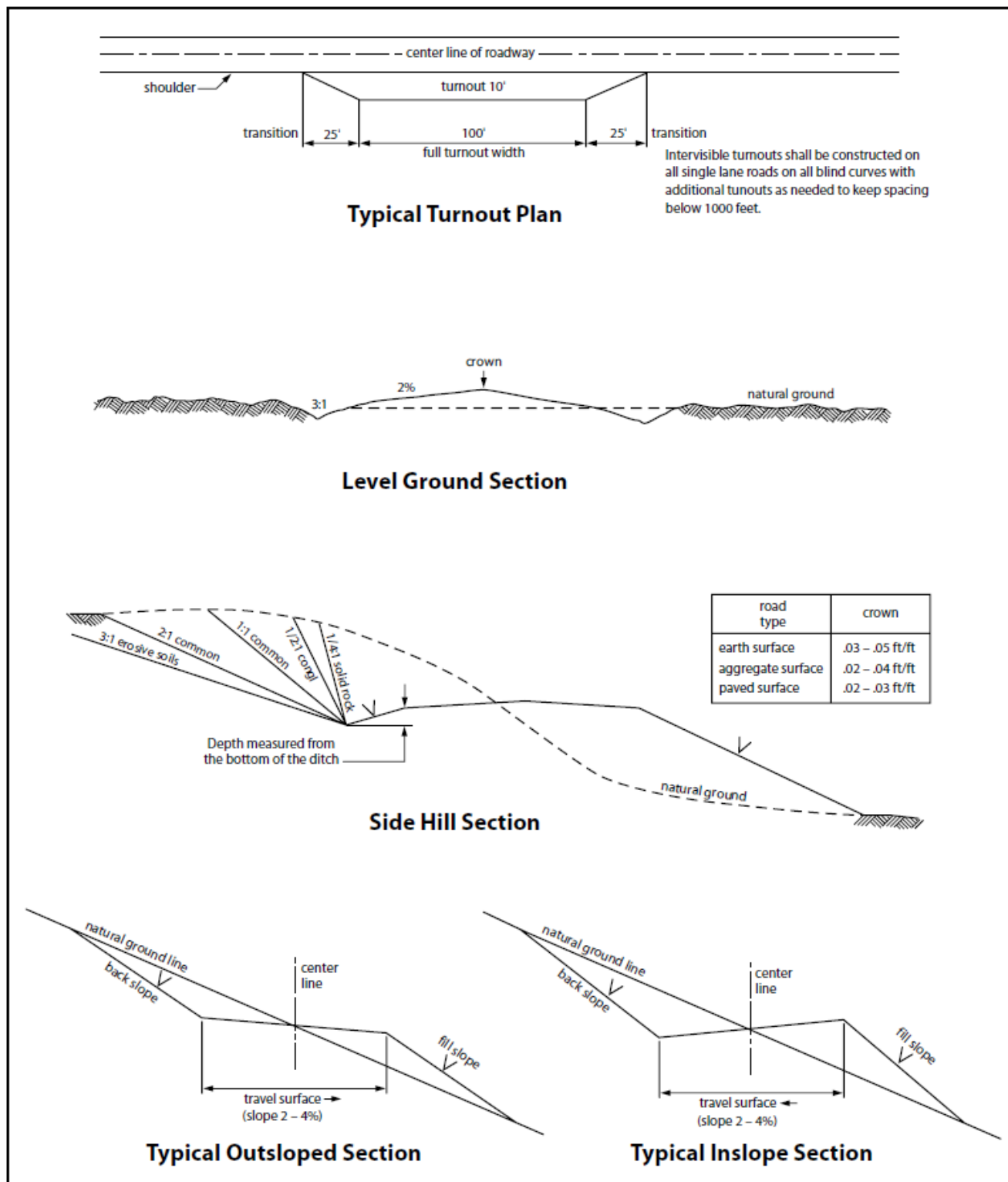


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## 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, siting 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 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 caused 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/permittee 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.

**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 bristlegass (*Setaria macrostachya*)

2.0

\*Pounds of pure live seed:

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

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b> 3R OOPERATING, LLC
<b>WELL NAME &amp; NO.:</b> COMANCHE 25 36 FEDERAL COM 802H
<b>LOCATION:</b> 25-26S-35E
<b>COUNTY:</b> <span style="border: 1px solid black; padding: 2px;">Lea County, New Mexico</span> ▼

COA

H <sub>2</sub> S	<input checked="" type="radio"/> No	<input type="radio"/> Yes
<b>Potash / WIPP</b>	<input checked="" type="radio"/> None <input type="radio"/> Secretary <input type="radio"/> R-111-Q	<input type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP
	Choose an option (including blank option.)	
<b>Cave / Karst</b>	<input checked="" type="radio"/> Low	<input type="radio"/> Medium <input type="radio"/> High <input type="radio"/> Critical
<b>Wellhead</b>	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl <input type="radio"/> Both <input type="radio"/> Diverter
<b>Cementing</b>	<input type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze <input type="checkbox"/> EchoMeter <input type="checkbox"/> DV Tool
<b>Special Req</b>	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal <input checked="" type="checkbox"/> COM <input type="checkbox"/> Unit
<b>Waste Prev.</b>	<input type="radio"/> Self-Certification	<input checked="" type="radio"/> Waste Min. Plan <input type="radio"/> APD Submitted prior to 06/10/2024
<b>Additional Language</b>	<input checked="" type="checkbox"/> Flex Hose <input type="checkbox"/> Casing Clearance <input type="checkbox"/> Four-String <input type="checkbox"/> Offline Cementing	<input type="checkbox"/> Pilot Hole <input type="checkbox"/> Break Testing <input checked="" type="checkbox"/> Fluid-Filled

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H<sub>2</sub>S) monitors shall be installed prior to drilling out the surface shoe. If H<sub>2</sub>S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, 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 **900 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - 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)

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- 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.

**Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.**

2. The minimum required fill of cement behind the **10-3/4 inch** intermediate 1 casing and shall be set at approximately **4,900 feet** 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, Capitan Reef, or potash.**
3. The minimum required fill of cement behind the **7-5/8 inch** intermediate 2 casing and shall be set at approximately **12,300 feet** 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, Capitan Reef, or potash.**
4. The minimum required fill of cement behind the **5-1/2 inch** production casing and shall be set at approximately **19,970 feet** 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, Capitan Reef, or potash.**

## **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. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface and intermediate 1 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 must be followed.
3. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the Intermediate 2 casing shoe shall be **10,000 (10M) psi**.
- f. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - g. 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.
  - h. Manufacturer representative shall install the test plug for the initial BOP test.
  - i. 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.
  - j. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 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 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.



## GENERAL REQUIREMENTS

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

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

**Contact Lea County Petroleum Engineering Inspection Staff:**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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 doghouse or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

## 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 hard band 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-Q 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 3172**.
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:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
  - i. 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).

- ii. 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.)
- iii. 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 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).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 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.

**YJ (01/05/2026)**

Comanche 25 36 Fed Com 802H 1-5-2026

COMANCHE FEDERAL COM 802H

13 3/8	surface csg in a	17 1/2	inch hole.	Design Factors					Surface		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	J 55	BTC	17.40	2.63	1.05	900	7	1.80	4.87	49,050
"B"			BTC				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500							Totals:	900			49,050
Comparison of Proposed to Minimum Required Cement Volumes											
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
17 1/2	0.6946	859	1250	625	100	9.20	1518	2M			1.56
Site plat (pipe racks S or E) as per O.O.I.H.D-4.1: not found.											

10 3/4	casing inside the	13 3/8		Design Factors					Int 1		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	45.50	HCL 80	BTC SC	4.66	1.13	0.8	4,900	2	1.37	1.94	222,950
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	4,900			222,950
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			900			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
12 1/4	0.1882	661	2217	967	129	10.20	3811	5M			0.50
Class 'H' tail cmt yld > 1.20											
Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.06, b, c, d All > 0.70, OK.											

7 5/8	casing inside the	10 3/4		Design Factors					Int 2		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	HCP 110	BTC	2.57	1.1	1.17	12,300	1	1.81	1.88	365,310
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,262							Totals:	12,300			365,310
The cement volume(s) are intended to achieve a top of				4700	ft from surface or a			200			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
9 7/8	0.2148	909	3466	1634	112	10.20	5236	10M			0.69
Class 'C' tail cmt yld > 1.35											
MASP is within 10% of 5000psig, need exrta equip?											

Tail cmt											
5 1/2	casing inside the	7 5/8		Design Factors					Prod 1		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	23.00	P 110	BTC SC	2.43	1.8	1.56	19,970	2	2.41	2.78	459,310
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,856							Totals:	19,970			459,310
The cement volume(s) are intended to achieve a top of				12100	ft from surface or a			200			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
6 3/4	0.0835	775	1000	659	52	12.00					0.35
Class 'H' tail cmt yld > 1.20											
Capitan Reef est top XXXX.											
MASP is within 10% of 5000psig, need exrta equip?											

#N/A											
0		5 1/2		Design Factors					<Choose Casing>		
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"			BTC SC				0				0
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,856							Totals:	0			0
The cement volume(s) are intended to achieve a top of				#N/A	ft from surface or a			#N/A			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt					Min Dist Hole-Cplg
0		#N/A	#N/A		#N/A						
#N/A											



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

# Operator Certification Data Report

01/05/2026

## 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:** KALEN MELTON

**Signed on:** 09/30/2025

**Title:** PERMITTING SPECIALIST

**Street Address:** 3909 N CLASSEN BLVD

**City:** OKLAHOMA CITY

**State:** OK

**Zip:** 73118

**Phone:** (405)286-9326

**Email address:** KMELTON@REAGANSMITH.COM

## Field

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**





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

## Application Data

01/05/2026

APD ID: 10400107558

Submission Date: 09/30/2025

Operator Name: 3R OPERATING LLC

Well Name: COMANCHE 25 36 FED COM

Well Number: 802H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

Highlighted data  
reflects the most  
recent changes  
[Show Final Text](#)

### Section 1 - General

APD ID: 10400107558

Tie to previous NOS? N

Submission Date: 09/30/2025

BLM Office: Carlsbad

User: KALEN MELTON

Title: PERMITTING SPECIALIST

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM125402

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? YES

APD Operator: 3R OPERATING LLC

Operator letter of

NM\_DOA\_Designation\_of\_Agent\_8.19.25\_20250922152159.pdf

### Operator Info

Operator Organization Name: 3R OPERATING LLC

Operator Address: 20405 STATE HIGHWAY 249 STE 820

Zip: 77070

Operator PO Box:

Operator City: HOUSTON

State: TX

Operator Phone: (432)413-4148

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: COMANCHE 25 36 FED COM

Well Number: 802H

Field/Pool or Exploratory? Field and Pool

Field Name: WC-025 G-09  
S263619C

Pool Name: WOLFCAMP

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**Is the proposed well in an area containing other mineral resources?** USEABLE WATER,NATURAL GAS,OIL**Is the proposed well in a Helium production area?** N**Use Existing Well Pad?** N**New surface disturbance?****Type of Well Pad:** MULTIPLE WELL**Multiple Well Pad Name:****Number:** 1

Comanche

**Well Class:** HORIZONTAL**Number of Legs:** 1**Well Work Type:** Drill**Well Type:** CONVENTIONAL GAS WELL**Describe Well Type:****Well sub-Type:** INFILL**Describe sub-type:****Distance to town:** 9 Miles**Distance to nearest well:** 25 FT**Distance to lease line:** 279 FT**Reservoir well spacing assigned acres Measurement:** 466.49 Acres**Well plat:** 20251211\_COMANCHE\_25\_36\_FED\_COM\_802H\_REV.\_1\_\_\_CERTIFIED\_20250910\_20250930161041.p  
df**Well work start Date:** 12/01/2025**Duration:** 30 DAYS**Section 3 - Well Location Table****Survey Type:** RECTANGULAR**Describe Survey Type:****Datum:** NAD83**Vertical Datum:** NAVD88**Survey number:****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	279	FNL	1966	FEL	26S	35E	25	Aliquot NWNE	32.0206959	- 103.319028	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 125402	2953			N
KOP Leg #1	230	FNL	660	FEL	26S	35E	25	Aliquot NENE	32.0208272	- 103.3148161	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 125402	- 9454	12508	12407	N
PPP Leg #1-1	330	FNL	660	FEL	26S	35E	25	Aliquot NENE	32.0205523	- 103.3148158	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 125402	- 10027	13408	12980	Y

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H

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
EXIT Leg #1	330	FSL	660	FEL	26S	35E	36	Lot 1	32.00121 45	- 103.3148 019	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 100 27	199 70	129 80	Y
BHL Leg #1	330	FSL	660	FEL	26S	35E	36	Lot 1	32.00121 45	- 103.3148 019	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 100 27	199 70	129 80	Y

August 19, 2025

Bureau of Land Management  
Carlsbad Field Office  
620 E Greene St, Carlsbad, NM 88220  
Attn: Land Law Examiner

Re: **3R Operating, LLC**  
**Designation of Agent**  
Big Mick Unit  
Sioux West Unit  
Sioux East Unit  
Comanche Unit  
Eddy & Lea County, New Mexico

Land Law Examiner:

3R Operating, LLC has contracted with Reagan Smith, Inc. to assist in regulatory compliance associated with the above-named oil & gas development projects. Reagan Smith has the authority to act as 3R Operating's agent to maintain regulatory compliance for the above-named projects. This includes the submittal of Applications for Permit to Drill, Communitization Agreements, Designations of Operator, Sundry Notices, Enforcement Actions including Notices of Incompliance, and any other regulatory documents on behalf of 3R Operating, in order to maintain regulatory compliance with the Bureau of Land Management in regard to the above-named projects.

Sincerely,

\_\_\_\_\_

Brad Grandstaff  
COO  
3R Operating, LLC

<b>C-102</b>  Submit Electronically Via OCD Permitting	<b>State of New Mexico</b> <b>Energy, Minerals, &amp; Natural Resources Department</b> <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024 PAGE 1 OF 2
		Submittal Type: <input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

## WELL LOCATION INFORMATION

API Number <b>30-025-55809</b>	Pool Code 98234	Pool Name WC-025 G-09 S263619C; WOLFCAMP
Property Code <b>337804</b>	Property Name COMANCHE 25 36 FED COM	Well Number 802H
OGRID No. 331569	Operator Name 3R OPERATING, LLC	Ground Level Elevation 2953'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

## Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
B	25	26S	35E		279' FNL	1966' FEL	32.02069591	-103.31902796	LEA

## Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
	36	26S	35E	1	330' FSL	660' FEL	32.00121446	-103.31480185	LEA

Dedicated Acres 466.49	Infill or Defining Well infill	Defining Well API pending	Overlapping Spacing Unit (Y/N) Y	Consolidation Code C
Order Numbers: pending			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Offset lease operator(s) notified

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
A	25	26S	35E		230' FNL	660' FEL	32.02082716	-103.31481606	LEA

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
A	25	26S	35E		330' FNL	660' FEL	32.02055229	-103.31481576	LEA

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
	36	26S	35E	1	330' FSL	660' FEL	32.00121446	-103.31480185	LEA

Unitized Area or Area of Uniform Interest comm	Spacing Unit Type: <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation 2953'
---	---	---------------------------------

## 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.

Brad Grandstaff 09/19/2025  
Signature Date

Brad Grandstaff  
Printed Name

bgrandstaff@3ROperating.com  
Email Address

## SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor

Certificate Number

29049

Date of Survey

SEPTEMBER 10, 2025

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

## ACREAGE DEDICATION PLATS

## COMANCHE 25 36 FED COM 802H

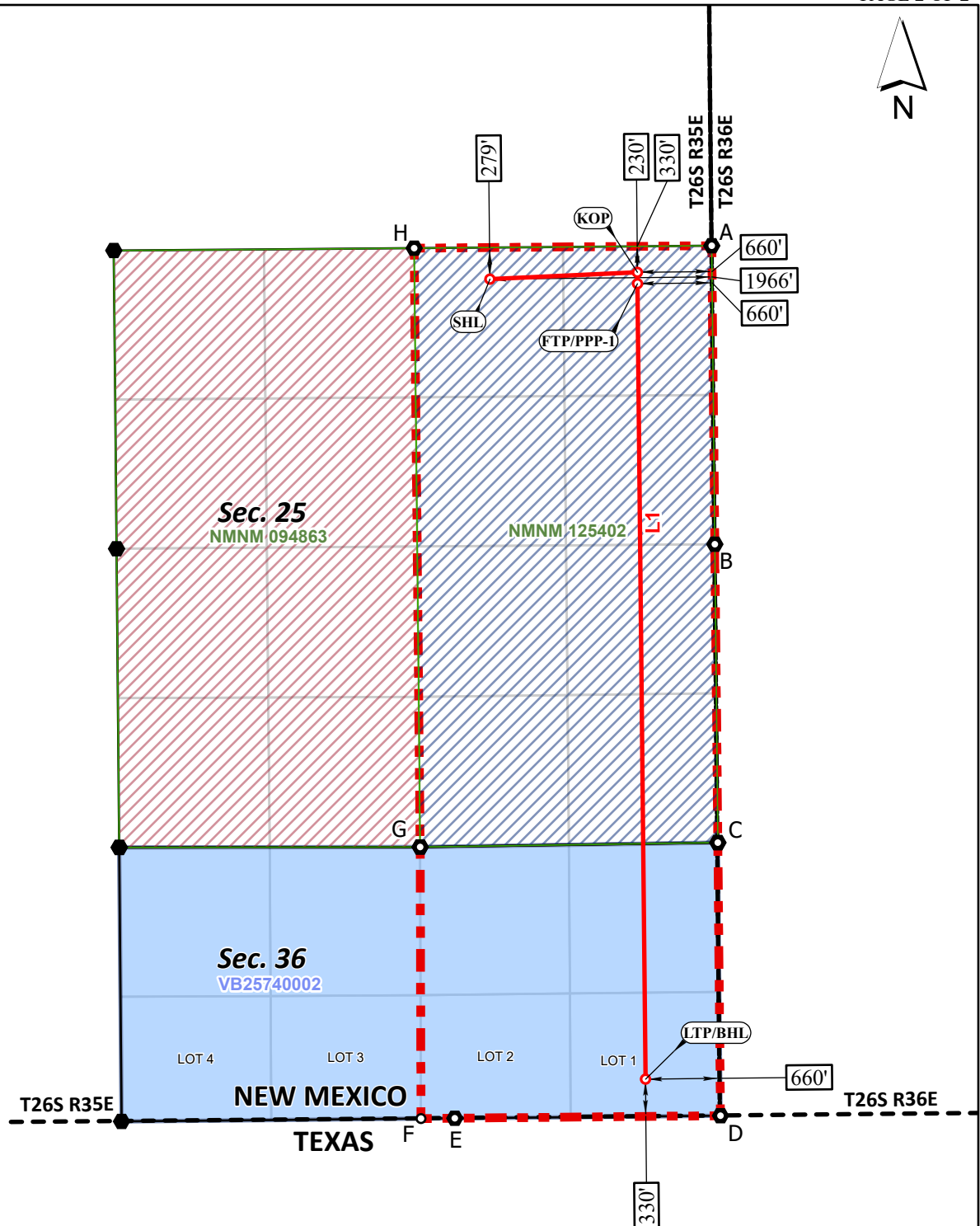
PAGE 2 OF 2

**SHL**  
FNL 279' FEL 1966', SECTION 25  
**NAD 83, SPCS NM EAST**  
X:855696.66' / Y:372743.53'  
LAT:32.02069591 / LON:-103.31902796  
**NAD 27, SPCS NM EAST**  
X:814508.12' / Y:372686.16'  
LAT:32.02056857 / LON:-103.31857039

**KOP**  
FNL 230' FEL 660', SECTION 25  
**NAD 83, SPCS NM EAST**  
X:857001.64' / Y:372803.56'  
LAT:32.02082716 / LON:-103.31481606  
**NAD 27, SPCS NM EAST**  
X:815813.10' / Y:372746.18'  
LAT:32.02069977 / LON:-103.31435862

**FTP/PPP-1**  
FNL 330' FEL 660', SECTION 25  
**NAD 83, SPCS NM EAST**  
X:857002.68' / Y:372703.56'  
LAT:32.02055229 / LON:-103.31481576  
**NAD 27, SPCS NM EAST**  
X:815814.14' / Y:372646.18'  
LAT:32.02042490 / LON:-103.31435832

**LTP/BHL**  
FSL 330' FEL 660', SECTION 36  
**NAD 83, SPCS NM EAST**  
X:857073.29' / Y:365668.61'  
LAT:32.00121446 / LON:-103.31480185  
**NAD 27, SPCS NM EAST**  
X:815884.47' / Y:365611.43'  
LAT:32.00108697 / LON:-103.31434539



## \*FTP TO LTP LINE BEARINGS

LINE	BEARING
L1	S 00°34'30" E ~ 7035.30'

## CORNER COORDINATES

## NAD 83, SPCS NM EAST

A - X: 857659.24' / Y: 373038.97'  
B - X: 857686.64' / Y: 370399.04'  
C - X: 857712.78' / Y: 367760.09'  
D - X: 857736.50' / Y: 365344.98'  
E - X: 855386.07' / Y: 365322.37'  
F - X: 855087.15' / Y: 365319.53'  
G - X: 855079.80' / Y: 367721.53'  
H - X: 855026.84' / Y: 373017.32'

## CORNER COORDINATES

## NAD 27, SPCS NM EAST

A - X: 816470.70' / Y: 372981.58'  
B - X: 816497.99' / Y: 370341.73'  
C - X: 816524.03' / Y: 367702.85'  
D - X: 816547.67' / Y: 365287.80'  
E - X: 814197.25' / Y: 365265.21'  
F - X: 813898.33' / Y: 365262.37'  
G - X: 813891.07' / Y: 367664.31'  
H - X: 813838.32' / Y: 372959.95'

## \*FTP TO LTP LEASE DISTANCES

TRACT	DISTANCE
NMNM 125402	4953.39'
TOTAL	4953.39'



○ Drill Line Events    ● Section Corners    — Drill Line    ↔ Dimension Lines    □ Federal Leases    □ NMSLO    □ HSU    ● HSU Corners  
All bearings and coordinates refer to New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet.

JOB No. 20251211  
REV 1 ANC 9/10/2025

Distances/areas relative to NAD 83 grid measurements. Combined Scale Factor: 0.99975847 and a Convergence Angle: 0.05091389°



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

# Drilling Plan Data Report

01/05/2026

APD ID: 10400107558

Submission Date: 09/30/2025

Highlighted data  
reflects the most  
recent changes

Operator Name: 3R OPERATING LLC

Well Name: COMANCHE 25 36 FED COM

Well Number: 802H

Well Type: CONVENTIONAL GAS WELL

Well Work Type: Drill

[Show Final Text](#)

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
17090202	PERMIAN	2953	0	0	SANDSTONE, SHALE	USEABLE WATER	N
17090203	RUSTLER	2260	693	693	ANHYDRITE	USEABLE WATER	N
17090204	SALADO	1890	1063	1063	SALT	NONE	N
17090205	DELAWARE	-2035	4988	5036	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
17090206	BONE SPRING	-5860	8813	8909	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
17090197	BONE SPRING 1ST	-7160	10113	10221	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
17090198	BONE SPRING 2ND	-7555	10508	10616	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
17090199	BONE SPRING 3RD	-8835	11788	11896	LIMESTONE, SANDSTONE	NATURAL GAS, OIL	N
17090200	WOLFCAMP	-9220	12173	12281	SANDSTONE, SHALE	NATURAL GAS, OIL	N
17090201	WOLFCAMP	-9865	12818	12976	SHALE	NATURAL GAS, OIL	Y

## Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 13000

**Equipment:** Ten thousand (10M) psi Blind Rams and Pipe Rams and a five thousand (5M) psi Annular Preventer will be installed on all casing. Per 5M system requirements, two (2) chokes, with at least one (1) being a remotely controlled hydraulic choke, will be used. If a full 10M system is required by the BLM, three (3) chokes will be used.

Requesting Variance? YES

**Variance request:** (1) Variance requested to use a flex hose in place of a rigid line connection from BOP to choke manifold. Please see attachment for typical flex hose. (2) A variance is requested to use a multi-bowl wellhead system. Schematic attached in the exhibit section. Multibowl wellhead testing will adhere to required regulations, CFRs, and COAs.

**Testing Procedure:** Operator testing procedures will meet minimum standards for well control equipment testing per CFR 3172.6(b)(9). Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing if BOP



**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H

stack is not isolated from casing. Annular type preventers shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer. Multibowl wellhead testing will adhere to required regulations, CFRs, and COAs.

**Choke Diagram Attachment:**

CHOKE\_HOSE\_M14945\_20250924081039.pdf

**BOP Diagram Attachment:**

BOP\_and\_Choke\_Manifold\_20250924081051.pdf

Ridgerunner\_Multibowl\_20250924081105.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	900	0	900	2953	2053	900	J-55	54.5	BUTT	8.42	6.78	BUOY	21.34	BUOY	20.02
2	INTERMEDIATE	12.25	10.75	NEW	API	N	0	4900	0	4900	2953	-1947	4900	HCL-80	45.5	OTHER - BTC SC	3.46	2.04	BUOY	5.63	BUOY	5.51
3	INTERMEDIATE	9.875	7.625	NEW	API	N	0	12300	0	12300	2953	-9347	12300	HCP-110	29.7	BUTT	3.14	1.48	BUOY	3.1	BUOY	3.04
4	PRODUCTION	6.75	5.5	NEW	API	N	0	19970	0	12980	2953	-10027	19970	P-110	23	OTHER - BTC SC	1.79	1.79	BUOY	2.97	BUOY	2.99

**Casing Attachments****Casing ID:** 1 **String** SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Drilling\_Plan\_Comanche\_802H\_12.22.25\_20251223082052.pdf



**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**Casing Attachments**

Casing\_Program\_Comanche\_802H\_12.01.25\_20251223082059.pdf

**Casing ID:** 2      **String**      INTERMEDIATE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Casing\_Assumptions\_20251121133351.pdf

Casing\_Program\_Comanche\_802H\_12.01.25\_20251201093720.pdf

**Casing ID:** 3      **String**      INTERMEDIATE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Casing\_Program\_Comanche\_802H\_12.01.25\_20251201093800.pdf

**Casing ID:** 4      **String**      PRODUCTION**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Casing\_Program\_Comanche\_802H\_12.01.25\_20251201093808.pdf

Operator Name: 3R OPERATING LLC

Well Name: COMANCHE 25 36 FED COM

Well Number: 802H

## Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	0	0
PRODUCTION	Tail		1180 0	1997 0	775	1.29	14.5	1000	15	60% Class H + 20% POZ + 20% CPO	.1% C51 + 6% STE + .08% Citric + .45% CFL1
SURFACE	Lead		0	400	341	1.63	12.8	556	50	25% class C + 75% TXI Light weight	.1% C51 + .03% Citric acid + 3% salt + 5lb kolseal
SURFACE	Tail		400	900	518	1.34	14.8	695	50	Class C	1% calcium chloride + .1% C-45
INTERMEDIATE	Lead		0	4400	486	4.08	10.5	1984	25	HSLD	1 lb/sk salt + .5% C45 + .15% citric + .29% CSA100 + .1% CFL1 + 5#/sk defoamer + 12#/sk LCM
INTERMEDIATE	Tail		4400	4900	175	1.34	14.8	235	25	Class C	.05% C51 + .025% citric acid
INTERMEDIATE	Lead		0	1180 0	814	4.08	10.5	3321	25	HSLD	1 lb/sk salt + .5% C45 + .15% citric + .29% CSA100 + .1% CFL1 + 5#/sk defoamer + 12#/sk LCM
INTERMEDIATE	Tail		1180 0	1230 0	95	1.53	13.8	145	25	HSLD	.1% CFL 2 +.06% CSA1000 + 4% STE + .45% C23

## 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:** Mud weight increases at shoe depths are for pressure control. Mud weight increases in the curve and lateral section of the hole are for hole stability, not pressure control. Mud weight assumptions for casing load designs exceed anticipated maximum mud weight for balanced drilling in all hole sections. Expected mud weights in producing formation will be 0.5 to 1.0 lbs/gal greater than formation pressure (i.e. overbalanced drilling). Sufficient materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H

**Describe the mud monitoring system utilized:** The mud system will run as a closed loop system. PVT system will be in place throughout the well, as well as visual checks.

### Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	900	WATER-BASED MUD	8.6	9.2							
900	4900	SALT SATURATED	10	10.2							
4900	12300	SALT SATURATED	10	10.2							
12300	19970	OIL-BASED MUD	10.5	12							

### Section 6 - Test, Logging, Coring

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

The operator will comply with the BLM's logging requirements as stated in the COAs.

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

GAMMA RAY LOG, SPONTANEOUS POTENTIAL LOG, MEASUREMENT WHILE DRILLING, CEMENT BOND LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

**Coring operation description for the well:**

None planned

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 7087

**Anticipated Surface Pressure:** 4231

**Anticipated Bottom Hole Temperature(F):** 180

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards**

**Hydrogen Sulfide drilling operations plan required?** YES

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**Hydrogen sulfide drilling operations**

3R\_H2S\_Plan\_Lea\_County\_20250924090506.pdf

**Section 8 - Other Information****Proposed horizontal/directional/multi-lateral plan submission:**

3R\_Operating\_Comanche\_25\_36\_Fed\_Com\_802H\_P1\_WP\_Rpt\_20250930163538.pdf

3R\_Operating\_Comanche\_25\_36\_Fed\_Com\_802H\_P1\_20250930163541.pdf

**Other proposed operations facets description:**

GAS WELL: Per 43 CFR 3162.3-1(d)(4), only oil wells require a gas waste minimization plan as part of a submitted APD; accordingly, this gas well APD will not require a separate gas management plan attachment.

**Other proposed operations facets attachment:****Other Variance request(s)?:** N**Other Variance attachment:**



**GATES ENGINEERING & SERVICES NORTH AMERICA**  
**7603 Pralrle Oak Dr. Suite 190**  
**Houston, TX. 77086**

**PHONE: +1 (281) 602-4100**

**FAX: +1 (281) 602-4147**

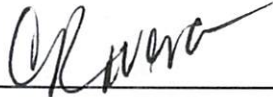
**EMAIL: gesna.quality@gates.com**

**WEB: gates.com/oilandgas**

## CERTIFICATE OF CONFORMANCE

This is to verify that all Parts and/or Materials included in this shipment have been manufactured and/or processed in Conformance with applicable drawings and specifications, and that Records of Required Tests are on file and subject to examination. The following items were assembled at **Gates Engineering & Services North America** facilities in Houston, TX, USA. This hose assembly was designed and manufactured to meet requirements of API Spec 16C, 3<sup>rd</sup> Edition.

**CUSTOMER:** A-7 AUSTIN INC DBA AUSTIN HOSE  
**CUSTOMER P.O.#:** 00620920 (MENA REF# 01LB10050, 01-012870, HOSE BATCH NO. 120463-07/20)  
**CUSTOMER P/N:** 16C3.035.0CK4116FX-FLTSC/S  
**PART DESCRIPTION:** 3" X 35' GATES API 16C FSL3 TEMP B CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FIXED X SWIVEL H2S SUITED FLANGE ENDS WITH BX 155 RING GROOVE SUPPLIED WITH SAFETY CLAMPS & SLINGS ATTACHED  
**SALES ORDER #:** 522832  
**QUANTITY:** 1  
**SERIAL #:** F-041522-1

**SIGNATURE:**   
**TITLE:** QUALITY ASSURANCE  
**DATE:** 8/15/2022





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**GATES ENGINEERING & SERVICES FZCO**  
 MENA HEADQUARTERS  
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 دبي، الامارات العربية المتحدة  
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 فاكس: +٩٧١ ٤ ٨٨٦ ١٤١٣  
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## PRESSURE TEST CERTIFICATE

<b>Certificate #</b>	<b>01-012870</b>	<b>Test Date</b>	15-Apr-2022
<b>Customer Name</b>	GATES E & S NORTH AMERICA INC		
<b>Customer Ref. #</b>	1786392/ 2	<b>Gates Ref. #</b>	01CCLBSOA-10007
<b>Gates Job #</b>	01LB10050		
<b>Product Description</b>	3" X 35' GATES API 16C FSL3 TEMP B CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FIXED X SWIVEL H2S SUITED FLANGE ENDS WITH BX 155 RING GROOVE		
<b>Part #</b>	RAB000884-23	<b>Quantity</b>	1
<b>Assembly Code / Serial No.</b>	F-041522-1	<b>Hose Batch No.</b>	120463-07/20
<b>Working Pressure</b>	10000 PSI	<b>Test Pressure</b>	15000.0 PSI
<b>Medium</b>	Water	<b>Duration</b>	1 HOUR
<b>Ref. Specifications</b>			
<b>Observation</b>	No Leakage or Pressure Drop observed under testing condition.		

Gates Engineering & Services certifies that the hose has been assembled, inspected and tested as per Gates Technical Specification. The hose assembly has successfully passed the 60 minutes hydrostatic test as per as per API Spec 16C standard, 3rd edition, March 2021.

<b>Pr. Gauge Sr.#</b>	288223022	<b>Calibrn. Exp.Date</b>	13-Jul-2022
<b>Chart Recorder Sr.#</b>	11.02117.1-01	<b>Calibrn. Exp.Date</b>	13-Jul-2022
<b>Reviewed By</b>	<b>Witnessed By</b>		
			
<b>Clifford G</b>	<b>Siva Mahalingam</b>		
<b>Supervisor / 15-Apr-2022</b>	<b>Operations / Quality Lead / 15-Apr-2022</b>		





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## CERTIFICATE OF CONFORMANCE

<b>Certificate #</b>	<b>01-012870</b>	<b>Date</b>	15-Apr-2022
<b>Customer Name</b>	GATES E & S NORTH AMERICA INC		
<b>Customer Ref. #</b>	1786392/ 2	<b>Gates Ref. #</b>	01CCLBSOA-10007

Gates Engineering & Services certifies that the hose has been assembled, inspected and tested as per Gates Technical Specification. The hose assembly has successfully passed the 60 minutes hydrostatic test as per as per API Spec 16C standard, 3rd edition, March 2021.

Item Code	Product Description	Quantity
RNB-30E-16C-4F3T2-FG	3" X 35' GATES API 16C FSL3 TEMP B CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FIXED X SWIVEL H2S SUITED FLANGE ENDS WITH BX 155 RING GROOVE  <b>Hose Batch No.</b> 120463-07/20 <b>Assembly Code / Serial No.</b> F-041522-1 <b>Gates Job #</b> 01LB10050	1

15-Apr-2022

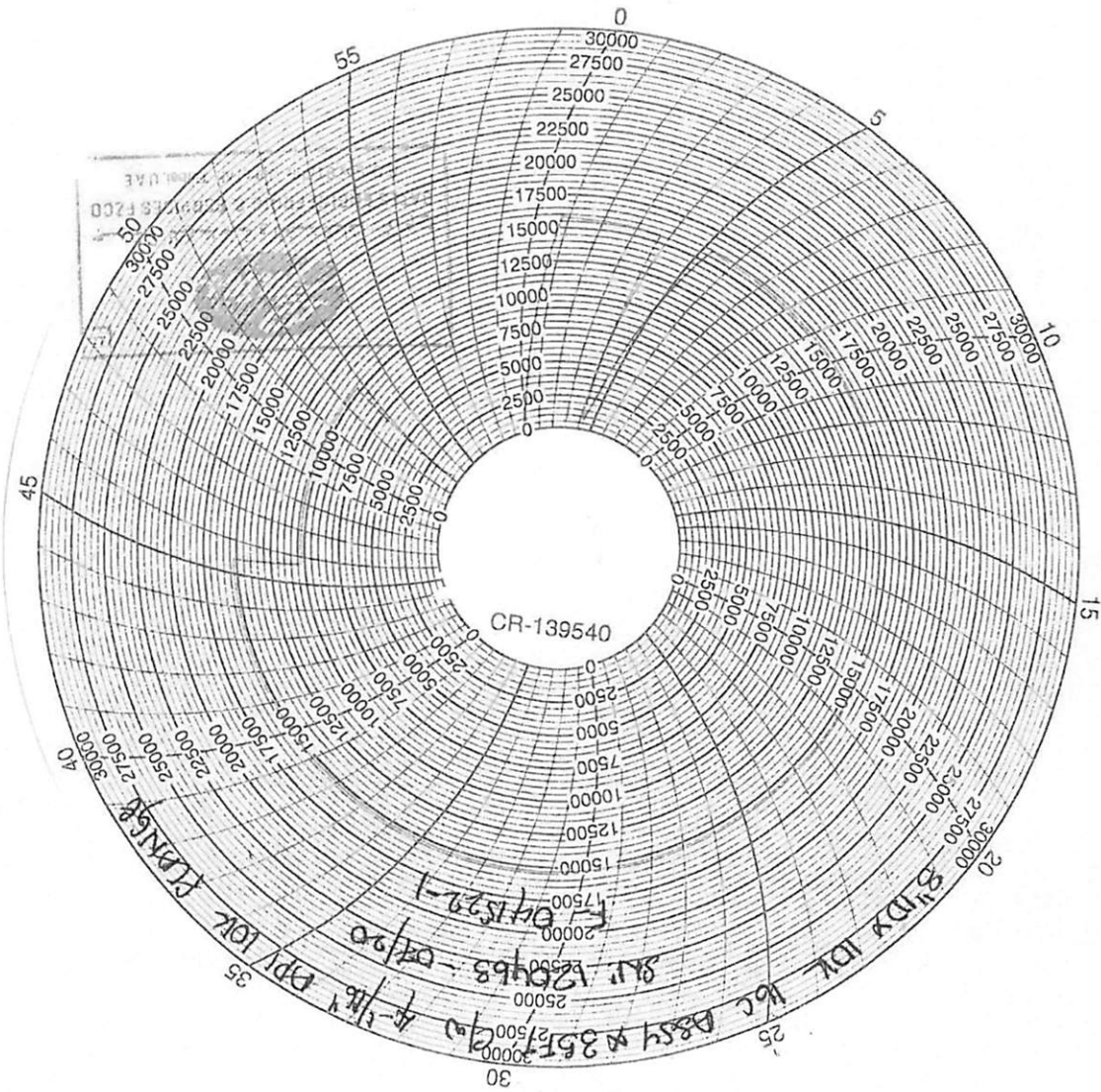
Date



Sajid Rasheed

QHSE Manager

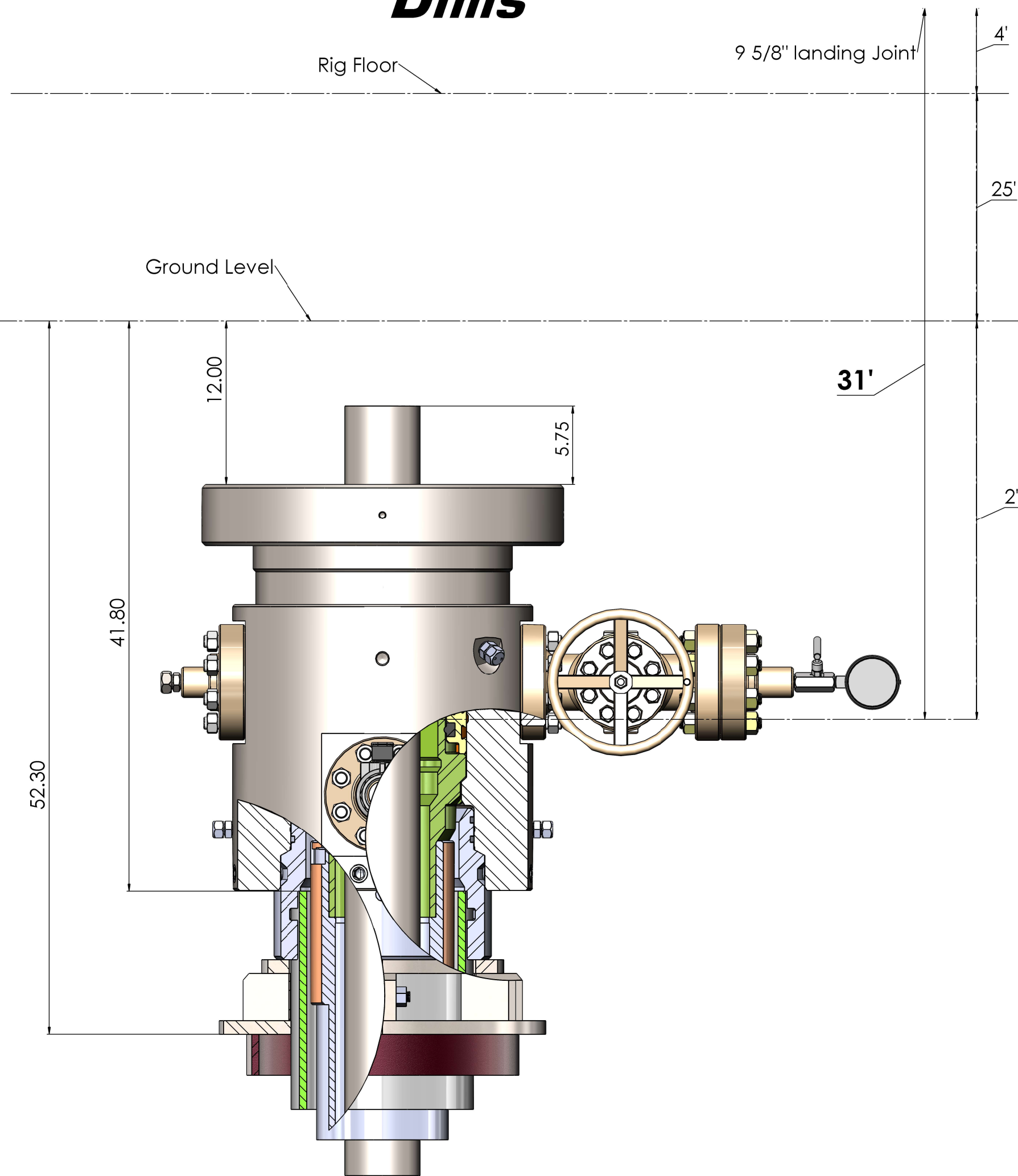




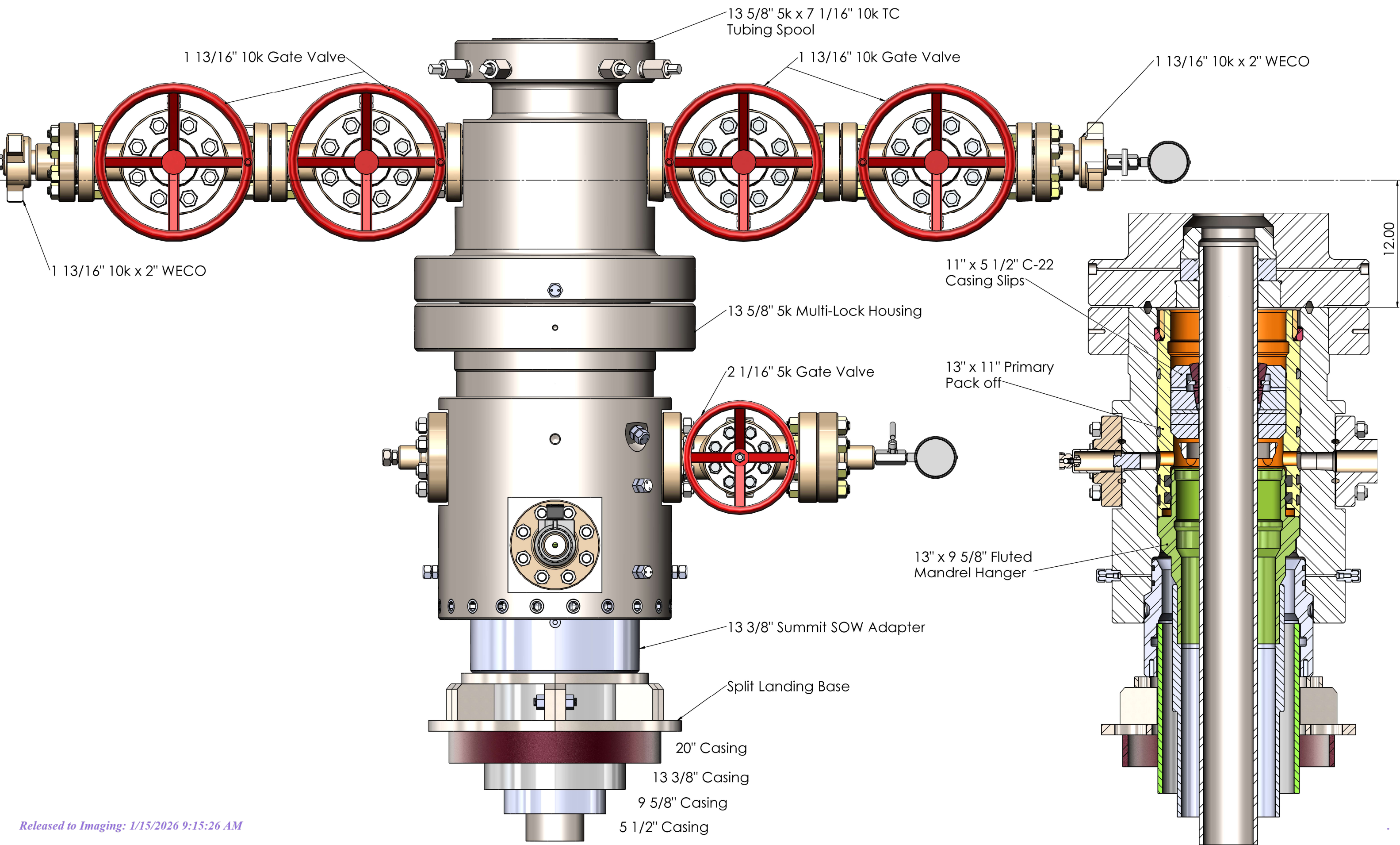




# ***13 5/8" 5k Multi-Lock Dims***



# 13 5/8" 5k Multi-Lock



**Casing Program: Comanche 25 36 Fed Com 802H**

Open Hole Size (Inches)	Casing Depth; From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft) TVD	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Condition	Anticipated Mud Weight (ppg)	Burst (psi)	Burst SF (1.125)	Collapse (psi)	Collapse SF (1.125)	Pipe Body Tension (lbs)	Joint Tension (lbs)	Air Weight (lbs)	Bouyant Weight (lbs)	Pipe Body Tension SF (1.8)	Joint Tension SF (1.8)
Surface																			
17.5"	0'	900'	900'	13-3/8"	54.5	J-55	BTC	New	8.6	2,730	6.78	1,130	8.42	853,000	909,000	49,050	42,604	20.02	21.34
Intermediate 1																			
12.25"	0'	4,900'	4,900'	10-3/4"	45.5	HCL80	BTC SC	New	10	5,210	2.04	2,940	3.46	1,040,000	1,063,000	222,950	188,881	5.51	5.63
Intermediate 2																			
9.875"	0'	12,300'	12,300'	7-5/8"	29.7	P110 HC	BTC	New	10	9,460	1.48	6,700	3.14	940,000	960,000	365,310	309,486	3.04	3.10
Production																			
6.75"	0'	19,970'	12,980'	5-1/2"	23	P110	BTC SC	New	12	14,520	1.79	14,520	1.79	729,000	724,000	298,540	243,796	2.99	2.97

**Casing Design Criteria and Casing Loading Assumptions:**

<u>Surface</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	8.6 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	8.6 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	8.6 ppg
<u>Intermediate 1</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.1 psi/ft.	
<u>Intermediate 2</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	
<u>Production</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	12 ppg
Collapse A 1.125 design factor with full internal evacuation and collapse force equal to a mud gradient of:	12 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	12 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	





**U. S. Steel Tubular Products, Inc.**  
**2011 CASING PRODUCT TABLE rev 0**

Dimensional & Grade Designators								Collapse Resistance psi	TENSION				Internal Yield				Lame' - Von Mises		Ductile	Outside Diameter	
O D Size in.	Weight		NOM Wall in.	NOM I D in.	API Drift in.	Alternate Drift in.	Product Grade		Joint Strength, 1,000 lbs				Pipe Body psi	Threaded & Coupled			Open End psi	Capped End psi	Capped End psi	Regular Coupling in.	Special Clr Coupling in.
	T&C lb/ft	P E lb/ft							Yield Pipe Body	STC	LTC	BTC <sup>a</sup>		STC psi	LTC psi	BTC psi					
5 1/2	23.00	22.56	0.415	4.670	4.545	--	N80n	11,160	530	--	502	579	10,560	--	9,880	8,990	10,440	11,370	10,000	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	N80	11,160	530	--	502	579	10,560	--	9,880	8,990	10,440	11,370	12,120	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	N80 HC	12,110	530	--	502	579	10,560	--	9,880	8,990	10,440	11,370	12,120	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	N80 HP	13,160	630	--	540	579	12,540	--	9,880	8,990	12,400	13,500	12,820	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	C90	12,380	597	--	514	579	11,880	--	11,110	10,120	11,750	12,790	13,480	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	USS C90	12,380	597	--	514	579	11,880	--	11,110	10,120	11,750	12,790	13,480	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	C95	12,930	630	--	540	608	12,540	--	11,730	10,680	12,400	13,500	12,820	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	T95	12,930	630	--	540	608	12,540	--	11,730	10,680	12,400	13,500	14,180	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	USS C95	12,930	630	--	540	608	12,540	--	11,730	10,680	12,400	13,500	14,180	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	USS C100	13,480	663	--	566	637	13,200	--	12,350	11,240	13,050	14,210	14,900	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	C110	14,540	729	--	--	--	14,520	--	--	--	14,360	15,630	16,330	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	P110 SR16	14,540	729	--	643	724	14,520	--	13,580	12,360	14,360	15,630	15,370	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	P110	14,540	729	--	643	724	14,520	--	13,580	12,360	14,360	15,630	17,010	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	P110 HC	15,310	729	--	643	724	14,520	--	13,580	12,360	14,360	15,630	17,010	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	P110 HP	16,470	829	--	669	724	16,500	--	13,580	12,360	16,320	17,760	17,830	6.050	5.875
5 1/2	23.00	22.56	0.415	4.670	4.545	--	Q125	16,060	829	--	694	782	16,500	--	15,430	14,050	16,320	17,760	18,510	6.050	--
5 1/2	23.00	22.56	0.415	4.670	4.545	--	Q125 HC	16,270	829	--	694	782	16,500	--	15,430	14,050	16,320	17,760	18,510	6.050	--
5 1/2	23.00	22.56	0.415	4.670	4.545	--	Q125 HP	17,470	895	--	720	782	17,820	--	15,430	14,050	17,620	19,180	19,290	6.050	--
5 1/2	23.00	22.56	0.415	4.670	4.545	--	USS140	17,500	928	--	771	869	18,480	--	17,290	15,740	18,280	19,890	20,720	6.050	--
5 1/2	23.00	22.56	0.415	4.670	4.545	--	USS V150	18,390	995	--	823	927	19,800	--	18,520	16,860	19,580	21,310	22,220	6.050	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	C90	14,880	707	--	--	--	14,330	--	--	--	14,100	15,190	16,490	--	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	USS C90	14,880	707	--	--	--	14,330	--	--	--	14,100	15,190	16,490	--	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	T95	15,700	746	--	--	--	15,130	--	--	--	14,890	16,030	17,350	--	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	USS C95	15,700	746	--	--	--	15,130	--	--	--	14,890	16,030	17,350	--	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	USS C100	16,530	785	--	--	--	15,930	--	--	--	15,670	16,870	18,230	--	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	C110	18,180	864	--	--	--	17,520	--	--	--	17,240	18,560	19,980	--	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	P110 SR16	18,180	864	--	788	724	17,520	--	13,580	12,360	17,240	18,560	18,790	6.050	5.875
5 1/2	26.80	26.73	0.500	4.500	4.375	--	P110	18,180	864	--	788	724	17,520	--	13,580	12,360	17,240	18,560	20,820	6.050	5.875
5 1/2	26.80	26.73	0.500	4.500	4.375	--	P110 HC	19,890	864	--	788	724	17,520	--	13,580	12,360	17,240	18,560	20,820	6.050	5.875
5 1/2	26.80	26.73	0.500	4.500	4.375	--	P110 HP	21,370	982	--	791	724	19,910	--	13,580	12,360	19,590	21,090	21,810	6.050	5.875
5 1/2	26.80	26.73	0.500	4.500	4.375	--	Q125	20,660	982	--	851	782	19,910	--	15,430	14,050	19,590	21,090	22,650	6.050	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	Q125 HC	21,320	982	--	851	782	19,910	--	15,430	14,050	19,590	21,090	22,650	6.050	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	Q125 HP	22,850	1,060	--	854	782	21,500	--	15,430	14,050	21,160	22,780	23,610	6.050	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	USS140	23,140	1,100	--	946	869	22,300	--	17,290	15,740	21,940	23,620	25,360	6.050	--
5 1/2	26.80	26.73	0.500	4.500	4.375	--	USS V150	24,790	1,178	--	1,009	927	23,890	--	18,520	16,860	23,510	25,310	27,180	6.050	--
5 1/2	29.70	29.67	0.562	4.376	4.251	--	C90	16,510	785	--	--	--	16,100	--	--	--	15,780	16,890	18,710	--	--
5 1/2	29.70	29.67	0.562	4.376	4.251	--	USS C90	16,510	785	--	--	--	16,100	--	--	--	15,780	16,890	18,710	--	--
5 1/2	29.70	29.67	0.562	4.376	4.251	--	T95	17,430	828	--	--	--	17,000	--	--	--	16,650	17,820	19,690	--	--
5 1/2	29.70	29.67	0.562	4.376	4.251	--	USS C95	17,430	828	--	--	--	17,000	--	--	--	16,650	17,820	19,690	--	--



**U. S. Steel Tubular Products, Inc.**  
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Dimensional & Grade Designators								Collapse Resistance psi	TENSION				API Historical				Lame' - Von Mises		Ductile	Outside Diameter	
O D	Weight		NOM	NOM	API	Alternate	Product Grade		Joint Strength, 1,000 lbs				Pipe	Threaded & Coupled			Open	Capped	Rupture	Regular Coupling in.	Special Clr Coupling in.
Size	T&C	P E	Wall	I D	Drift	Drift			Yield	Threaded and Coupled			Body	STC	LTC	BTC	End	End	Capped		
in.	lb/ft	lb/ft	in.	in.	in.	in.			Pipe Body	STC	LTC	BTC <sup>a</sup>	psi	psi	psi	psi	psi	psi	psi		
7 5/8	29.70	29.06	0.375	6.875	6.750	--	C90	5,030	769	--	625	773	7,740	--	7,740	7,740	7,710	8,540	8,580	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	USS C90	5,030	769	--	625	773	7,740	--	7,740	7,740	7,710	8,540	8,580	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	C95	5,130	811	--	659	813	8,170	--	8,170	8,170	8,130	9,010	8,180	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	T95	5,130	811	--	659	813	8,170	--	8,170	8,170	8,130	9,010	9,040	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	USS C95	5,130	811	--	659	813	8,170	--	8,170	8,170	8,130	9,010	9,040	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	USS C100	5,220	854	--	692	853	8,600	--	8,600	8,600	8,560	9,490	9,490	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	C110	5,350	940	--	--	--	9,460	--	--	--	9,420	10,440	10,400	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	P110 SR16	5,350	940	--	769	960	9,460	--	9,460	9,460	9,420	10,440	9,810	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	P110	5,350	940	--	769	960	9,460	--	9,460	9,460	9,420	10,440	10,840	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	P110 HC	6,700	940	--	769	960	9,460	--	9,460	9,460	9,420	10,440	10,840	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	P110 HP	7,260	1,068	--	846	1,025	10,750	--	10,750	10,750	10,700	11,860	11,360	8.500	8.125
7 5/8	29.70	29.06	0.375	6.875	6.750	--	Q125	5,670	1,068	--	861	1,052	10,750	--	10,750	10,750	10,700	11,860	11,790	8.500	--
7 5/8	29.70	29.06	0.375	6.875	6.750	--	Q125 HC	6,880	1,068	--	861	1,052	10,750	--	10,750	10,750	10,700	11,860	11,790	8.500	--
7 5/8	29.70	29.06	0.375	6.875	6.750	--	Q125 HP	7,450	1,153	--	911	1,104	11,610	--	11,610	11,610	11,560	12,810	12,290	8.500	--
7 5/8	29.70	29.06	0.375	6.875	6.750	--	USS140	5,930	1,196	--	962	1,172	12,040	--	12,040	12,040	11,990	13,280	13,200	8.500	--
7 5/8	29.70	29.06	0.375	6.875	6.750	--	USS V150	6,060	1,281	--	1,030	1,252	12,900	--	12,900	12,900	12,840	14,230	14,150	8.500	--
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS GT80S	6,560	778	--	664	820	7,890	--	7,890	7,890	7,840	8,650	8,470	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	L80	6,560	778	--	664	820	7,890	--	7,890	7,890	7,840	8,650	8,470	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	L80 HC	7,460	778	--	664	820	7,890	--	7,890	7,890	7,840	8,650	8,470	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	L80 HP	7,940	826	--	693	834	8,380	--	8,380	8,380	8,330	9,190	8,470	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	N80n	6,560	778	--	674	852	7,890	--	7,890	7,890	7,840	8,650	7,370	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	N80	6,560	778	--	674	852	7,890	--	7,890	7,890	7,840	8,650	8,920	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	N80 HC	7,740	778	--	674	852	7,890	--	7,890	7,890	7,840	8,650	8,920	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	N80 HP	8,420	923	--	772	925	9,370	--	9,370	9,370	9,310	10,270	9,430	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	C90	7,050	875	--	733	880	8,880	--	8,880	8,880	8,820	9,730	9,900	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS C90	7,050	875	--	733	880	8,880	--	8,880	8,880	8,820	9,730	9,900	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	C95	7,280	923	--	772	925	9,370	--	9,370	9,370	9,310	10,270	9,430	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	T95	7,280	923	--	772	925	9,370	--	9,370	9,370	9,310	10,270	10,420	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS C95	7,280	923	--	772	925	9,370	--	9,370	9,370	9,310	10,270	10,420	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS C100	7,490	972	--	812	971	9,860	--	9,860	9,860	9,800	10,810	10,950	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	C110	7,870	1,069	--	--	--	10,850	--	--	--	10,780	11,890	12,000	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	P110 SR16	7,870	1,069	--	901	1,093	10,850	--	10,850	10,850	10,780	11,890	11,310	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	P110	7,870	1,069	--	901	1,093	10,850	--	10,850	10,850	10,780	11,890	12,500	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	P110 HC	9,110	1,069	--	901	1,093	10,850	--	10,850	10,850	10,780	11,890	12,500	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	P110 HP	9,850	1,215	--	992	1,166	12,330	--	12,330	12,330	12,250	13,510	13,100	8.500	8.125
7 5/8	33.70	33.07	0.430	6.765	6.640	--	Q125	8,350	1,215	--	1,009	1,197	12,330	--	12,330	12,330	12,250	13,510	13,600	8.500	--
7 5/8	33.70	33.07	0.430	6.765	6.640	--	Q125 HC	9,460	1,215	--	1,009	1,197	12,330	--	12,330	12,330	12,250	13,510	13,600	8.500	--
7 5/8	33.70	33.07	0.430	6.765	6.640	--	Q125 HP	10,220	1,312	--	1,068	1,257	13,310	--	13,310	13,310	13,230	14,590	14,180	8.500	--
7 5/8	33.70	33.07	0.430	6.765	6.640	--	USS140	8,690	1,361	--	1,128	1,334	13,810	--	13,810	13,810	13,720	15,130	15,230	8.500	--



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Dimensional & Grade Designators								Collapse Resistance psi	TENSION				Internal Yield				Lame' - Von Mises		Ductile Rupture Capped End psi	Outside Diameter	
O D	Weight		NOM	NOM	API	Alternate	Product		Joint Strength, 1,000 lbs				Pipe	Threaded & Coupled			Open	Capped		Regular Coupling in.	Special Clr Coupling in.
Size in.	T&C lb/ft	P E lb/ft	Wall in.	I D in.	Drift in.	Drift in.	Grade		Yield Pipe Body	Threaded and Coupled			Body psi	STC	LTC	BTC	End psi	End psi			
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	L80 HC	9,530	1,507	--	1,005	1,241	9,220	--	9,220	8,830	9,140	10,010	11,030	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	L80 HP	10,060	1,601	--	1,050	1,268	9,800	--	9,630	8,830	9,710	10,630	11,030	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	N80n	8,880	1,507	--	1,019	1,283	9,220	--	9,220	8,830	9,140	10,010	11,610	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	N80	8,880	1,507	--	1,019	1,283	9,220	--	9,220	8,830	9,140	10,010	11,610	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	N80 HC	9,970	1,507	--	1,019	1,283	9,220	--	9,220	8,830	9,140	10,010	11,610	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	N80 HP	10,830	1,790	--	1,171	1,407	10,950	--	9,630	8,830	10,860	11,880	12,280	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	C90	9,690	1,695	--	1,111	1,338	10,370	--	10,370	9,940	10,280	11,260	11,670	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	USS C90	9,690	1,695	--	1,111	1,338	10,370	--	10,370	9,940	10,280	11,260	11,670	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	C95	10,080	1,790	--	1,171	1,407	10,950	--	10,950	10,490	10,860	11,880	12,280	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	T95	10,080	1,790	--	1,171	1,407	10,950	--	10,950	10,490	10,860	11,880	12,280	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	USS C95	10,080	1,790	--	1,171	1,407	10,950	--	10,950	10,490	10,860	11,880	12,280	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	USS C100	10,450	1,884	--	1,202	1,392	11,520	--	11,520	11,040	11,430	12,510	11,730	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	C110	11,170	2,072	--	--	--	12,680	--	--	--	12,570	13,760	14,730	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	P110 SR16	11,170	2,072	--	1,365	1,659	12,680	--	12,680	12,140	12,570	13,760	13,320	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	P110	11,170	2,072	--	1,365	1,659	12,680	--	12,680	12,140	12,570	13,760	14,730	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	P110 HC	12,260	2,072	--	1,365	1,659	12,680	--	12,680	12,140	12,570	13,760	14,730	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	P110 HP	13,210	2,355	--	1,517	1,783	14,410	--	13,280	12,140	14,280	15,630	15,430	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	Q125	12,160	2,355	--	1,531	1,825	14,410	--	14,410	13,800	14,280	15,630	16,030	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	Q125 HC	12,900	2,355	--	1,531	1,825	14,410	--	14,410	13,800	14,280	15,630	16,030	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	Q125 HP	13,890	2,543	--	1,637	1,922	15,560	--	15,090	13,800	15,430	16,880	16,700	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	USS140	13,050	2,637	--	1,711	2,034	16,130	--	16,130	15,460	16,000	17,510	17,940	10.625	--
9 7/8	65.10	64.10	0.650	8.575	8.419	8.500	USS V150	13,570	2,826	--	1,831	2,173	17,290	--	17,290	16,560	17,140	18,760	19,240	10.625	--
10 3/4	32.75	31.23	0.279	10.192	10.036	--	H40	840	367	205	--	--	1,820	1,820	--	--	1,810	2,050	1,960	11.750	11.25
10 3/4	40.50	38.91	0.350	10.050	9.894	--	H40	1,390	457	314	--	--	2,280	2,280	--	--	2,270	2,550	2,470	11.750	11.25
10 3/4	40.50	38.91	0.350	10.050	9.894	--	J55	1,580	629	420	--	700	3,130	3,130	--	3,130	3,120	3,510	3,110	11.750	11.25
10 3/4	40.50	38.91	0.350	10.050	9.894	--	K55	1,580	629	450	--	819	3,130	3,130	--	3,130	3,120	3,510	3,930	11.750	11.25
10 3/4	40.50	38.91	0.350	10.050	9.894	--	USS HCK55	1,900	629	450	--	819	3,130	3,130	--	3,130	3,120	3,510	3,930	11.750	11.25
10 3/4	40.50	38.91	0.350	10.050	9.894	--	USS FS80	2,100	858	562	--	911	4,270	4,270	--	4,270	4,260	4,780	4,790	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	J55	2,090	715	493	--	796	3,580	3,580	--	3,580	3,570	3,990	3,560	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	K55	2,090	715	528	--	931	3,580	3,580	--	3,580	3,570	3,990	4,510	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	USS HCK55	2,840	715	528	--	931	3,580	3,580	--	3,580	3,570	3,990	4,510	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	USS FS80	2,960	975	659	--	1,037	4,880	4,880	--	4,880	4,870	5,440	5,500	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	L80	2,470	1,040	692	--	1,063	5,210	5,210	--	5,210	5,200	5,810	5,510	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	L80 HC	2,940	1,040	692	--	1,063	5,210	5,210	--	5,210	5,200	5,810	5,510	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	L80 HP	3,120	1,106	725	--	1,089	5,690	5,690	--	5,690	5,680	6,340	5,700	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	N80n	2,470	1,040	701	--	1,097	5,210	5,210	--	5,210	5,200	5,810	4,810	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	N80	2,470	1,040	701	--	1,097	5,210	5,210	--	5,210	5,200	5,810	5,800	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	N80 HC	3,020	1,040	701	--	1,097	5,210	5,210	--	5,210	5,200	5,810	5,800	11.750	11.25
10 3/4	45.50	44.26	0.400	9.950	9.794	9.875	N80 HP	3,220	1,236	808	--	1,209	6,360	6,360	--	6,360	6,340	7,090	6,350	11.750	11.25



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Dimensional & Grade Designators								Collapse Resistance psi	TENSION				API Historical				Lame' - Von Mises		Ductile	Outside Diameter	
O D	Weight		NOM	NOM	API	Alternate	Product Grade		Joint Strength, 1,000 lbs				Pipe	Threaded & Coupled			Open	Capped	Capped End psi	Regular Coupling in.	Special Clr Coupling in.
Size in.	T&C lb/ft	P E lb/ft	Wall in.	I D in.	Drift in.	Drift in.			Yield Pipe Body	Threaded and Coupled			Body psi	STC psi	LTC psi	BTC psi	End psi	End psi			
11 7/8	71.80	70.26	0.582	10.711	10.555	--	P110 HP	6,880	2,581	1,481	--	2,154	11,030	10,400	--	10,120	10,970	12,150	11,680	12.750	--
11 7/8	71.80	70.26	0.582	10.711	10.555	--	Q125	5,630	2,581	1,493	--	2,198	10,720	10,720	--	10,720	10,670	11,820	11,750	12.750	--
11 7/8	71.80	70.26	0.582	10.711	10.555	--	Q125 HC	6,650	2,581	1,493	--	2,198	10,720	10,720	--	10,720	10,670	11,820	11,750	12.750	--
11 7/8	71.80	70.26	0.582	10.711	10.555	--	Q125 HP	7,070	2,787	1,599	--	2,323	11,910	11,810	--	11,500	11,850	13,130	12,640	12.750	--
11 7/8	71.80	70.26	0.582	10.711	10.555	--	USS140	5,880	2,891	1,670	--	2,451	12,000	12,000	--	12,000	11,950	13,240	13,150	12.750	--
11 7/8	71.80	70.26	0.582	10.711	10.555	--	USS V150	6,000	3,097	1,787	--	2,620	12,860	12,860	--	12,860	12,800	14,180	14,100	12.750	--
13 3/8	48.00	46.02	0.330	12.715	12.559	--	H40	740	541	322	--	--	1,730	1,730	--	--	1,730	1,950	1,860	14.375	--
13 3/8	54.50	52.79	0.380	12.615	12.459	--	J55	1,130	853	514	--	909	2,740	2,740	--	2,740	2,730	3,070	2,710	14.375	--
13 3/8	54.50	52.79	0.380	12.615	12.459	--	K55	1,130	853	547	--	1,038	2,740	2,740	--	2,740	2,730	3,070	3,430	14.375	--
13 3/8	54.50	52.79	0.380	12.615	12.459	--	USS HCK55	1,260	853	547	--	1,038	2,740	2,740	--	2,740	2,730	3,070	3,430	14.375	--
13 3/8	61.00	59.50	0.430	12.515	12.359	--	J55	1,540	962	595	--	1,025	3,090	3,090	--	3,090	3,090	3,460	3,070	14.375	--
13 3/8	61.00	59.50	0.430	12.515	12.359	--	K55	1,540	962	633	--	1,169	3,090	3,090	--	3,090	3,090	3,460	3,880	14.375	--
13 3/8	61.00	59.50	0.430	12.515	12.359	--	USS HCK55	1,830	962	633	--	1,169	3,090	3,090	--	3,090	3,090	3,460	3,880	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	J55	1,950	1,069	675	--	1,140	3,450	3,450	--	3,450	3,450	3,850	3,430	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	K55	1,950	1,069	718	--	1,300	3,450	3,450	--	3,450	3,450	3,850	4,350	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	USS HCK55	2,550	1,069	718	--	1,300	3,450	3,450	--	3,450	3,450	3,850	4,350	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	USS GT80S	2,260	1,556	952	--	1,545	5,020	5,020	--	5,020	5,010	5,610	5,310	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	L80	2,260	1,556	952	--	1,545	5,020	5,020	--	5,020	5,010	5,610	5,310	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	L80 HC	2,690	1,556	952	--	1,545	5,020	5,020	--	5,020	5,010	5,610	5,310	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	L80 HP	2,850	1,653	999	--	1,594	5,490	5,490	--	5,490	5,480	6,130	5,490	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	N80n	2,260	1,556	963	--	1,585	5,020	5,020	--	5,020	5,010	5,610	4,640	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	N80	2,260	1,556	963	--	1,585	5,020	5,020	--	5,020	5,010	5,610	5,590	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	N80 HC	2,750	1,556	963	--	1,585	5,020	5,020	--	5,020	5,010	5,610	5,590	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	N80 HP	2,930	1,847	1,114	--	1,772	6,140	6,140	--	6,140	6,120	6,850	6,120	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	C90	2,320	1,750	1,057	--	1,683	5,650	5,650	--	5,650	5,640	6,310	6,200	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	USS C90	2,320	1,750	1,057	--	1,683	5,650	5,650	--	5,650	5,640	6,310	6,200	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	C95	2,330	1,847	1,114	--	1,772	5,970	5,970	--	5,970	5,950	6,660	5,910	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	T95	2,330	1,847	1,114	--	1,772	5,970	5,970	--	5,970	5,950	6,660	6,520	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	USS C95	2,330	1,847	1,114	--	1,772	5,970	5,970	--	5,970	5,950	6,660	6,520	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	USS C100	2,340	1,945	1,150	--	1,781	6,280	6,280	--	6,280	6,260	7,010	6,230	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	C110	2,330	2,139	--	--	--	6,910	--	--	--	6,890	7,710	7,510	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	P110 SR16	2,330	2,139	1,297	--	2,079	6,910	6,910	--	6,910	6,890	7,710	7,090	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	P110	2,330	2,139	1,297	--	2,079	6,910	6,910	--	6,910	6,890	7,710	7,820	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	P110 HC	2,910	2,139	1,297	--	2,079	6,910	6,910	--	6,910	6,890	7,710	7,820	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	P110 HP	3,100	2,431	1,448	--	2,266	8,070	8,070	--	8,070	8,050	9,010	8,450	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	Q125	2,340	2,431	1,458	--	2,306	7,850	7,850	--	7,850	7,830	8,760	8,510	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	Q125 HC	2,950	2,431	1,458	--	2,306	7,850	7,850	--	7,850	7,830	8,760	8,510	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	Q125 HP	3,140	2,625	1,563	--	2,444	8,720	8,720	--	8,720	8,700	9,730	9,150	14.375	--
13 3/8	68.00	66.17	0.480	12.415	12.259	--	USS140	2,340	2,722	1,631	--	2,573	8,790	8,790	--	8,790	8,770	9,810	9,530	14.375	--



**Casing Program: Comanche 25 36 Fed Com 802H**

Open Hole Size (Inches)	Casing Depth; From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft) TVD	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Condition	Anticipated Mud Weight (ppg)	Burst (psi)	Burst SF (1.125)	Collapse (psi)	Collapse SF (1.125)	Pipe Body Tension (lbs)	Joint Tension (lbs)	Air Weight (lbs)	Bouyant Weight (lbs)	Pipe Body Tension SF (1.8)	Joint Tension SF (1.8)
<b>Surface</b>																			
17.5"	0'	900'	900'	13-3/8"	54.5	J-55	BTC	New	8.6	2,730	6.78	1,130	8.42	853,000	909,000	49,050	42,604	20.02	21.34
<b>Intermediate 1</b>																			
12.25"	0'	4,900'	4,900'	10-3/4"	45.5	HCL80	BTC SC	New	10	5,210	2.04	2,940	3.46	1,040,000	1,063,000	222,950	188,881	5.51	5.63
<b>Intermediate 2</b>																			
9.875"	0'	12,300'	12,300'	7-5/8"	29.7	P110 HC	BTC	New	10	9,460	1.48	6,700	3.14	940,000	960,000	365,310	309,486	3.04	3.10
<b>Production</b>																			
6.75"	0'	19,970'	12,980'	5-1/2"	23	P110	BTC SC	New	12	14,520	1.79	14,520	1.79	729,000	724,000	298,540	243,796	2.99	2.97

**Casing Design Criteria and Casing Loading Assumptions:**

<b>Surface</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	8.6 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	8.6 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	8.6 ppg
<b>Intermediate 1</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.1 psi/ft.	
<b>Intermediate 2</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	
<b>Production</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	12 ppg
Collapse A 1.125 design factor with full internal evacuation and collapse force equal to a mud gradient of:	12 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	12 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	

**Casing Program: Comanche 25 36 Fed Com 802H**

Open Hole Size (Inches)	Casing Depth; From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft) TVD	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Condition	Anticipated Mud Weight (ppg)	Burst (psi)	Burst SF (1.125)	Collapse (psi)	Collapse SF (1.125)	Pipe Body Tension (lbs)	Joint Tension (lbs)	Air Weight (lbs)	Bouyant Weight (lbs)	Pipe Body Tension SF (1.8)	Joint Tension SF (1.8)
<b>Surface</b>																			
17.5"	0'	900'	900'	13-3/8"	54.5	J-55	BTC	New	8.6	2,730	6.78	1,130	8.42	853,000	909,000	49,050	42,604	20.02	21.34
<b>Intermediate 1</b>																			
12.25"	0'	4,900'	4,900'	10-3/4"	45.5	HCL80	BTC SC	New	10	5,210	2.04	2,940	3.46	1,040,000	1,063,000	222,950	188,881	5.51	5.63
<b>Intermediate 2</b>																			
9.875"	0'	12,300'	12,300'	7-5/8"	29.7	P110 HC	BTC	New	10	9,460	1.48	6,700	3.14	940,000	960,000	365,310	309,486	3.04	3.10
<b>Production</b>																			
6.75"	0'	19,970'	12,980'	5-1/2"	23	P110	BTC SC	New	12	14,520	1.79	14,520	1.79	729,000	724,000	298,540	243,796	2.99	2.97

**Casing Design Criteria and Casing Loading Assumptions:**

<b>Surface</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	8.6 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	8.6 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	8.6 ppg
<b>Intermediate 1</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.1 psi/ft.	
<b>Intermediate 2</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	
<b>Production</b>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	12 ppg
Collapse A 1.125 design factor with full internal evacuation and collapse force equal to a mud gradient of:	12 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	12 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	



## **Drilling Plan**

### **Operator**

3R Operating, LLC

## **Project Name**

**Comanche 25 36 Fed Com 802H**

SHL: 279' FNL & 1966' FEL of Section 25-26S-35E, Lea County, NM

BHL: 330' FSL & 660' FEL of Section 36-26S-35E, Lea County, NM

## **Prepared By**

Austin Tramell

Please address any questions, inquiries, or deficiency statements to  
Austin Tramell, address below:

3R Operating, LLC  
20405 State Hwy 249 STE 820  
Houston, TX 77070  
832-810-1037

**1.0 Estimated Formation Tops**

Formation	Depth	Primary Lithology	Primary Mineral Resource
Permian	Surface	SHALE, SANDSTONE	USEABLE WATER
Rustler	693	ANHYDRITE	USEABLE WATER
Salado	1,063	SALT	NONE
Delaware	4,988	LIMESTONE, SANDSTONE	NATURAL GAS, OIL
Bone Spring	8,813	LIMESTONE, SANDSTONE	NATURAL GAS, OIL
1st Bone Spring	10,113	LIMESTONE, SANDSTONE	NATURAL GAS, OIL
2nd Bone Spring	10,508	LIMESTONE, SANDSTONE	NATURAL GAS, OIL
3rd Bone Spring	11,788	LIMESTONE, SANDSTONE	NATURAL GAS, OIL
Wolfcamp (XY)	12,173	SHALE, SANDSTONE	NATURAL GAS, OIL
Wolfcamp (B)	12,818	SHALE	NATURAL GAS, OIL

**Total Depth and Target Formation**

Total Vertical Depth (ft): 12,980  
Measured Depth (ft): 19,970  
Formation: Wolfcamp

**2.0 Estimated Depths of Oil & Gas**

Substance	Depth (ft)
Top of Hydrocarbons	4,988
Bottom of Hydrocarbons	TD

**3.0 Pressure Control Equipment**

Ten thousand (10M) psi working pressure Blind Rams & Pipe Rams and a five thousand (5M) psi Annular Preventer will be installed on all casing. Two (2) chokes, with at least one (1) being a remotely controlled hydraulic choke, will be used. If a full 10M system is required by the BLM, three (3) chokes will be used.

A variance to the requirement of a rigid steel line connecting the BOP to the choke manifold is requested. Specifications for the flex hose are provided with the BOP schematic in the exhibit section.

A variance is requested to use a multi-bowl wellhead system. Schematic attached in the exhibit section. Multi-bowl wellhead testing will adhere to required regulations, CFRs, and COAs.

Operator testing procedures will meet minimum standards for well control equipment testing per CFR § 3172.6(b)(9). Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing if BOP stack is not isolated from casing. Annular type preventers shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer. Multi-bowl wellhead testing will adhere to required regulations, CFRs, and COAs.

Floor safety valves that are fully open and sized to fit drill pipe and collars will be available on the rig floor in the open position when the Kelly is not in use.

**4.0 Proposed Casing and Design Analysis****4.1 Proposed Casing Program**

Interval	Length (ft)	Size (in)	Weight/ft (lbs.)	Grade	Thread	Condition	Hole size (in)
<b>Surface</b>	900	13-3/8"	54.5	J-55	BTC	New	17.5"
<b>Inter. I</b>	4,900	10-3/4"	45.5	HCL80	BTC SC	New	12.25"
<b>Inter. II</b>	12,300	7-5/8"	29.7	P110 HC	BTC	New	9.875"
<b>Prod.</b>	19,970	5-1/2"	23	P110	BTC SC	New	6.75"

**4.2 Casing Specifications**

Interval	Total Vertical Depth (TVD)	Total Measured Depth (MD)	Weight/ft (lbs.)	Grade	Collapse (psi)	Internal Yield (psi)	Body Yield Strength (psi)	Joint Strength (psi)
<b>Surface</b>	900	900	54.5	J-55	1,130	2,730	853,000	909,000
<b>Inter. I</b>	4,900	4,900	45.5	HCL80	2,940	5,210	1,040,000	1,063,000
<b>Inter. II</b>	12,300	12,300	29.7	P110 HC	6,700	9,460	940,000	960,000
<b>Prod.</b>	12,980	19,970	23	P110	14,520	14,520	729,000	724,000

**5.0 Proposed Cement Program****Surface Casing Cement**

Lead / Tail	TOC (MD)	Bottom of CMT (MD)	Density (lbs/gal)	Yield (ft3/sk)	Excess (%)	Volume (ft3)	# of sks CMT
<b>Sur. Lead</b>	0	400	12.80	1.63	50	556	341
<b>Sur. Tail</b>	400	900	14.80	1.34	50	695	518

**Lead Cmt Type:** 25% class C + 75% TXI Light weight  
**Lead Additives:** .1% C51 + .03% Citric acid + 3% salt + 5lb kolseal  
**Tail Cmt Type:** Class C  
**Tail Additives:** 1% calcium chloride + .1% C-45

**Intermediate I Casing Cement**

Lead / Tail	TOC (MD)	Bottom of CMT (MD)	Density (lbs/gal)	Yield (ft3/sk)	Excess (%)	Volume (ft3)	# of sks CMT
<b>Int. Lead</b>	0	4,400	10.50	4.08	25	1,984	486
<b>Int. Tail</b>	4,400	4,900	14.80	1.34	25	235	175

**Lead Cmt Type:** HSLD  
**Lead Additives:** 1 lb/sk salt + .5% C45 + .15% citric + .29% CSA100 + .1% CFL1 + 5#/sk defoamer + 12#/sk LCM  
**Tail Cmt Type:** Class C  
**Tail Additives:** .05% C51 + .025% citric acid

**Intermediate II Casing Cement**

Lead / Tail	TOC (MD)	Bottom of CMT (MD)	Density (lbs/gal)	Yield (ft3/sk)	Excess (%)	Volume (ft3)	# of sks CMT
<b>Prod. Lead</b>	0'	11,800	10.50	4.08	25	3,321	814
<b>Prod. Tail</b>	11,800	12,300	13.80	1.53	25	145	95

**Lead Cmt Type:** HSLD

**Lead Additives:** 1 lb/sk salt + .5% C45 + .15% citric + .29% CSA100 + .1% CFL1 + 5#/sk defoamer + 12#/sk LCM

**Tail Cmt Type:** HSLD

**Tail Additives:** .1% CFL 2 + .06% CSA1000 + 4% STE + .45% C23

### Production Casing Cement

Lead / Tail	TOC (MD)	Bottom of CMT (MD)	Density (lbs/gal)	Yield (ft3/sk)	Excess (%)	Volume (ft3)	# of sks CMT
<b>Prod. Tail</b>	11,800	19,970	14.50	1.29	15	1,000	775

**Tail Cmt Type:** 60% Class H + 20% POZ + 20% CPO

**Tail Additives:** .1% C51 + 6% STE + .08% Citric + .45% CFL1

**\*Operator reserves the right to change cement designs as hole conditions may warrant**

## 6.0 Proposed Mud Program

Interval	Top (MD)	Bottom (MD)	Type	Min. Mud Weight for AFMSS	Max. Mud Weight for AFMSS	Viscosity (cP)	Formation Fracture Gradient	Fluid Loss
<b>Surface</b>	0'	900	FW	8.60	9.20	30-32	0.75	NC
<b>Inter. I</b>	900	4,900	Brine water	10.00	10.20	29-32	0.75	NC
<b>Inter. II</b>	4,900	12,300	Brine water	10.00	10.20	30-32	0.75	NC
<b>Prod.</b>	12,300	19,970	OBM	10.50	12.00	45-55	0.75	8-10 cc

Mud weight increases at shoe depths are for pressure control. Mud weight increases in the curve and lateral section of the hole are for hole stability, not pressure control. Mud weight assumptions for casing load designs exceed anticipated maximum mud weight for balanced drilling in all hole sections. Expected mud weights in producing formation will be 0.5 to 1.0 lbs/gal greater than formation pressure (i.e. overbalanced drilling).

The mud system will run as a closed loop system with PVT monitoring. All drill cuttings and liquid mud will be hauled to an approved site for disposal or soil farmed upon receiving appropriate approval.

An industry accepted medium will be stored on location in the event that there is a loss of circulation in the well bore.

## 7.0 Drilling Design Analysis

### 7.1 Casing Design Analysis

\*see separate Safety Factor attachment

Interval	Burst Safety Factor	Collapse Safety Factor	Pipe Body Tensile Safety Factor	Joint Tension Safety Factor
Surface	6.78	8.42	20.02	21.34

Inter. I	2.04	3.46	5.51	5.63
Inter. II	1.48	3.14	3.04	3.10
Prod.	1.79	1.79	2.99	2.97

## 7.2 Casing Design Assumptions

### 7.2.1 Surface Casing Design Assumptions

<b>Tension</b>	A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	8.6 ppg
<b>Collapse</b>	A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	8.6 ppg
<b>Burst</b>	A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	8.6 ppg

### 7.2.2 Intermediate I Casing Design Assumptions

<b>Tension</b>	A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
<b>Collapse</b>	A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
<b>Burst</b>	A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
<i>Safety factor calculated using offset pressure gradient variance factor up to 0.1 psi/ft.</i>		

### 7.2.3 Intermediate II Casing Design Assumptions

<b>Tension</b>	A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
<b>Collapse</b>	A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
<b>Burst</b>	A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
<i>Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.</i>		

### 7.2.4 Production Casing Design Assumptions

<b>Tension</b>	A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	12 ppg
<b>Collapse</b>	A 1.125 design factor with full internal evacuation and collapse force equal to a mud gradient of:	12 ppg
<b>Burst</b>	A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	12 ppg
<i>Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.</i>		

## 8.0 Completion Program and Casing Design

Hydraulic fracturing will occur through the production casing. The burst design calculation assumes TOC at 8,500 ft., therefore, the backside of the production casing is not evacuated. The maximum pumping pressure is 9500 psi with a maximum proppant fluid weight of 9.5 lbs/gal.

Upon request, operator will provide proof of cement bonding by bond log. Operator is responsible for log interpretation and certification prior to frac treatment.

Upon request, operator will provide estimated fracture lengths, flowback storage, volumes of fluids and amount of sand to be used, and number of stages of frac procedure. Furthermore, a report of the annulus pressures before and after each stage of treatment may be requested by the BLM. The report may include chemical additives (other than proprietary), dissolved solids in frac fluid, and depth of perforations.

## **9.0 Drilling Evaluation Program**

### **Required Testing, Logging, and Coring procedures noted below:**

\*Mud Logging/Gamma Ray/MWD – (MWD on horizontal wells only).

\*Open hole logs (GR/SP/DIL/LDT/CNL/ML) from TD (horizontal well - vertical portion of hole) to the top of the uppermost potential hydrocarbon intervals

\*Open hole logs (GR/SP/DIL) from the top of the uppermost hydrocarbon interval to the base of the surface casing and (GR) log from base of surface casing to surface.

\*Cased hole CBL on production casing.

### **Note: The above referenced logging requirements are mandatory unless:**

- 1)The well is located off unit, or
- 2)The operator can provide the BLM adequate geologic information in which they based the location and drilling of the well, or
- 3)The operator can provide the BLM logging data from a well that is within a 1-mile radius from the proposed surface hole location. The logging data can be no more than 30 years old and must be at least to TD of the proposed well.

## **10.0 Downhole Conditions**

<b>Zones of Possible Lost Circulation:</b>	N/A	
<b>Zones of Possible Abnormal Pressure:</b>	N/A	
<b>Maximum Bottom Hole Temperature:</b>	180	degrees F
<b>Maximum Bottom Hole Pressure:</b>	7,087	psi
<b>Anticipated Surface Downhole Pressure:</b>	4,231	psi



**Casing Program: Comanche 25 36 Fed Com 802H**

Open Hole Size (Inches)	Casing Depth; From (ft)	Casing Setting Depth (ft) MD	Casing Setting Depth (ft) TVD	Casing Size (inches)	Casing Weight (lb/ft)	Casing Grade	Thread	Condition	Anticipated Mud Weight (ppg)	Burst (psi)	Burst SF (1.125)	Collapse (psi)	Collapse SF (1.125)	Pipe Body Tension (lbs)	Joint Tension (lbs)	Air Weight (lbs)	Bouyant Weight (lbs)	Pipe Body Tension SF (1.8)	Joint Tension SF (1.8)
Surface																			
17.5"	0'	900'	900'	13-3/8"	54.5	J-55	BTC	New	8.6	2,730	6.78	1,130	8.42	853,000	909,000	49,050	42,604	20.02	21.34
Intermediate 1																			
12.25"	0'	4,900'	4,900'	10-3/4"	45.5	HCL80	BTC SC	New	10	5,210	2.04	2,940	3.46	1,040,000	1,063,000	222,950	188,881	5.51	5.63
Intermediate 2																			
9.875"	0'	12,300'	12,300'	7-5/8"	29.7	P110 HC	BTC	New	10	9,460	1.48	6,700	3.14	940,000	960,000	365,310	309,486	3.04	3.10
Production																			
6.75"	0'	19,970'	12,980'	5-1/2"	23	P110	BTC SC	New	12	14,520	1.79	14,520	1.79	729,000	724,000	298,540	243,796	2.99	2.97

**Casing Design Criteria and Casing Loading Assumptions:**

<u>Surface</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	8.6 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	8.6 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	8.6 ppg
<u>Intermediate 1</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.1 psi/ft.	
<u>Intermediate 2</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	10 ppg
Collapse A 1.125 design factor with 1/3 TVD internal evacuation and collapse force equal to a mud gradient of:	10 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	10 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	
<u>Production</u>	
Tension A 1.8 design factor with effects of buoyancy with a fluid equal to a mud weight of:	12 ppg
Collapse A 1.125 design factor with full internal evacuation and collapse force equal to a mud gradient of:	12 ppg
Burst A 1.125 design factor with full external evacuation and burst force equal to a mud gradient of:	12 ppg
Safety factor calculated using offset pressure gradient variance factor up to 0.22 psi/ft.	

**3R Operating, LLC**  
**Ridge Runner Resources, LLC**  
1004 N . Big Spring St., Suite 325  
  
Midland, TX 79701

**H2S Contingency Plan**  
**Lea County, NM**

## Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crew should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are NO homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'  
100 ppm H2S concentration shall trigger activation of this plan

## Emergency Procedures

In the event of a release of gas containing H2S, the first responder(s) must:

- « Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- « Evacuate any public places encompassed by the 100 ppm ROE.
- « Be equipped with H2S monitors and air packs in order to control the release.
- « Use the "buddy system" to ensure no injuries occur during the response.
- « Take precautions to avoid personal injury during this operation.
- « Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- « Have received training
  - in the: Detection of
  - H2S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

## Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). 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.

## Characteristics of H2S and SO

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air=1	2 ppm	N/A	1000 ppm

## Contacting Authorities

3 Bear Field Services 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. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. 3 Bear Field Services, LLC response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMERP).

## Hydrogen Sulfide Drilling Operations Plan

1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
  - A. Characteristics of H2S
  - B. Physical effects and hazards
  - C. Principal and operation of H2S detectors, warning system and briefing areas.
  - D. Evacuation procedure, routes and first aid.
  - E. Proper use of safety equipment & life support systems
  - F. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30-minute pressure demand air packs.
2. H2S Detection and Alarm Systems:
  - a. 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.
  - b. An audio alarm system will be installed on the derrick floor and in the top doghouse.
3. Windsock and/or wind streamers:
  - a. Windsock at mudpit area should be high enough to be visible.
  - b. Windsock on the rig floor and/ or top doghouse should be high enough to be visible.
4. Condition Flags and Signs
  - a. Warning sign on access road to location.
  - b. Flags to be displayed on sign at 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.

5. Well control equipment:

- a. See exhibit BOP and Choke Diagrams

6. Communication:

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

7. Drill stem Testing:

No DSTs are planned at this time.

- 8. Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
- 9. If H<sub>2</sub>S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H<sub>2</sub>S scavengers if necessary.

**Emergency Assistance Telephone List**

**Ridge Runner Resources, LLC**

Ridge Runner Resources, LLC  
CEO-Brian Cassens

Office: (432)686-2973  
Office: (817)953-0480

Drilling Superintendent-Russell Simons  
Production Superintendent-Paul Martinez

Cell: (830)285-7501  
Cell: (325)206-1722

<b>Public Safety:</b>		<b>911 or</b>
Lea County Sheriff's Department	Number:	(575)396-3611
Lea County Emergency Management-Lorenzo Velasquez	Number:	(575)391-2983
Lea County Fire Marshal		
Lorenzo Velasquez, Director	Number:	(575)391-2983
Jeff Broom, Deputy Fire Marshal	Number:	(575)391-2988
Fire Department:		
Knowles Fire Department	Number:	(505)392-2810
City of Hobbs Fire Department	Number:	(505)397-9308
Jal Volunteer Fire Department	Number:	(505)395-2221
Lovington Fire Department	Number:	(575)396-2359
Maljamar Fire Department	Number:	(505)676-4100
Tatum Volunteer Fire Department	Number:	(505)398-3473
Eunice Fire Department	Number:	(575)394-3258
Hospital: Lea Regional Medical Center	Number:	(575)492-5000
AirMed: Medevac	Number:	(888)303-9112
Dept. of Public Safety	Number:	(505)827-9000
<b>New Mexico OCD-Dist. 1-Hobbs-</b>	Office	Number: (575)393-6161
	Emergency	Number: (575)370-3186
Lea County Road Department	Number:	(575)391-2940
NMDOT	Number:	(505)827-5100
Bureau Of Land Management Pecos		
District Office	Number:	(575)627-0272
Carlsbad Field Office	Number:	(575)234 5972
Hobbs Field Station	Number:	(575)393-3612
<b>BLM HOBBS PET ON CALL NUMBER</b>		<b>575-689-5981</b>



## **3R Operating, LLC**

**Lea County, NM (NAD 83)**

**Comanche 25-36 Fed Com**

**Comanche 25-36 Fed Com 802H**

**OH**

**Plan: Plan 1**

## **Standard Survey Report**

**08 September, 2025**





## Legacy Directional Drilling

## Survey Report

<b>Company:</b>	3R Operating, LLC	<b>Local Co-ordinate Reference:</b>	Well Comanche 25-36 Fed Com 802H
<b>Project:</b>	Lea County, NM (NAD 83)	<b>TVD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

<b>Project</b>	Lea County, NM (NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site		Comanche 25-36 Fed Com			
Site Position:		Northing:	372,727.38 usft	Latitude:	32.020638
From:	Map	Easting:	856,221.41 usft	Longitude:	-103.317336
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	Comanche 25-36 Fed Com 802H					
Well Position	+N/-S	0.00 usft	Northing:	372,743.53 usft	Latitude:	32.020696
	+E/-W	0.00 usft	Easting:	855,696.66 usft	Longitude:	-103.319028
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	2,953.00 usft
Grid Convergence:		0.54 °				

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2025	9/1/2025	6.10	59.60	46,907.38153315

<b>Design</b>	Plan 1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	1.50	0.00	0.00	168.99	

<b>Survey Tool Program</b>	<b>Date</b>	9/8/2025			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
0.00	19,970.34	Plan 1 (OH)	MWD	OWSG MWD - Standard	

<b>Planned Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Rustler</b>										
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	



## Legacy Directional Drilling

## Survey Report

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<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,070.00	0.00	0.00	1,070.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Salado</b>									
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Nudge Build 2.00</b>									
1,500.00	2.00	87.37	1,499.98	0.08	1.74	0.25	2.00	2.00	0.00
1,600.00	4.00	87.37	1,599.84	0.32	6.97	1.02	2.00	2.00	0.00
1,700.00	6.00	87.37	1,699.45	0.72	15.68	2.29	2.00	2.00	0.00
1,800.00	8.00	87.37	1,798.70	1.28	27.85	4.06	2.00	2.00	0.00
1,849.94	9.00	87.37	1,848.09	1.62	35.22	5.14	2.00	2.00	0.00
<b>9° at 1849.94 MD</b>									
1,900.00	9.00	87.37	1,897.54	1.98	43.05	6.28	0.00	0.00	0.00
2,000.00	9.00	87.37	1,996.31	2.70	58.67	8.56	0.00	0.00	0.00
2,100.00	9.00	87.37	2,095.07	3.42	74.30	10.84	0.00	0.00	0.00
2,200.00	9.00	87.37	2,193.84	4.14	89.92	13.11	0.00	0.00	0.00
2,300.00	9.00	87.37	2,292.61	4.86	105.55	15.39	0.00	0.00	0.00
2,400.00	9.00	87.37	2,391.38	5.57	121.17	17.67	0.00	0.00	0.00
2,500.00	9.00	87.37	2,490.15	6.29	136.79	19.95	0.00	0.00	0.00
2,600.00	9.00	87.37	2,588.92	7.01	152.42	22.23	0.00	0.00	0.00
2,700.00	9.00	87.37	2,687.69	7.73	168.04	24.51	0.00	0.00	0.00
2,800.00	9.00	87.37	2,786.46	8.45	183.67	26.79	0.00	0.00	0.00
2,900.00	9.00	87.37	2,885.23	9.17	199.29	29.07	0.00	0.00	0.00
3,000.00	9.00	87.37	2,984.00	9.89	214.92	31.34	0.00	0.00	0.00
3,100.00	9.00	87.37	3,082.77	10.61	230.54	33.62	0.00	0.00	0.00
3,200.00	9.00	87.37	3,181.54	11.32	246.17	35.90	0.00	0.00	0.00
3,300.00	9.00	87.37	3,280.30	12.04	261.79	38.18	0.00	0.00	0.00
3,400.00	9.00	87.37	3,379.07	12.76	277.42	40.46	0.00	0.00	0.00
3,500.00	9.00	87.37	3,477.84	13.48	293.04	42.74	0.00	0.00	0.00
3,600.00	9.00	87.37	3,576.61	14.20	308.67	45.02	0.00	0.00	0.00
3,700.00	9.00	87.37	3,675.38	14.92	324.29	47.30	0.00	0.00	0.00
3,800.00	9.00	87.37	3,774.15	15.64	339.92	49.57	0.00	0.00	0.00
3,900.00	9.00	87.37	3,872.92	16.36	355.54	51.85	0.00	0.00	0.00
4,000.00	9.00	87.37	3,971.69	17.07	371.17	54.13	0.00	0.00	0.00
4,100.00	9.00	87.37	4,070.46	17.79	386.79	56.41	0.00	0.00	0.00
4,200.00	9.00	87.37	4,169.23	18.51	402.42	58.69	0.00	0.00	0.00
4,300.00	9.00	87.37	4,268.00	19.23	418.04	60.97	0.00	0.00	0.00
4,400.00	9.00	87.37	4,366.77	19.95	433.67	63.25	0.00	0.00	0.00
4,500.00	9.00	87.37	4,465.53	20.67	449.29	65.53	0.00	0.00	0.00
4,600.00	9.00	87.37	4,564.30	21.39	464.92	67.80	0.00	0.00	0.00
4,700.00	9.00	87.37	4,663.07	22.11	480.54	70.08	0.00	0.00	0.00



## Legacy Directional Drilling

## Survey Report

<b>Company:</b>	3R Operating, LLC	<b>Local Co-ordinate Reference:</b>	Well Comanche 25-36 Fed Com 802H
<b>Project:</b>	Lea County, NM (NAD 83)	<b>TVD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.00	9.00	87.37	4,761.84	22.82	496.17	72.36	0.00	0.00	0.00
4,900.00	9.00	87.37	4,860.61	23.54	511.79	74.64	0.00	0.00	0.00
5,000.00	9.00	87.37	4,959.38	24.26	527.42	76.92	0.00	0.00	0.00
5,036.06	9.00	87.37	4,995.00	24.52	533.05	77.74	0.00	0.00	0.00
Delaware									
5,100.00	9.00	87.37	5,058.15	24.98	543.04	79.20	0.00	0.00	0.00
5,200.00	9.00	87.37	5,156.92	25.70	558.67	81.48	0.00	0.00	0.00
5,300.00	9.00	87.37	5,255.69	26.42	574.29	83.76	0.00	0.00	0.00
5,400.00	9.00	87.37	5,354.46	27.14	589.92	86.04	0.00	0.00	0.00
5,500.00	9.00	87.37	5,453.23	27.86	605.54	88.31	0.00	0.00	0.00
5,600.00	9.00	87.37	5,552.00	28.57	621.17	90.59	0.00	0.00	0.00
5,700.00	9.00	87.37	5,650.76	29.29	636.79	92.87	0.00	0.00	0.00
5,800.00	9.00	87.37	5,749.53	30.01	652.42	95.15	0.00	0.00	0.00
5,900.00	9.00	87.37	5,848.30	30.73	668.04	97.43	0.00	0.00	0.00
6,000.00	9.00	87.37	5,947.07	31.45	683.67	99.71	0.00	0.00	0.00
6,100.00	9.00	87.37	6,045.84	32.17	699.29	101.99	0.00	0.00	0.00
6,200.00	9.00	87.37	6,144.61	32.89	714.92	104.27	0.00	0.00	0.00
6,300.00	9.00	87.37	6,243.38	33.61	730.54	106.54	0.00	0.00	0.00
6,400.00	9.00	87.37	6,342.15	34.32	746.17	108.82	0.00	0.00	0.00
6,500.00	9.00	87.37	6,440.92	35.04	761.79	111.10	0.00	0.00	0.00
6,600.00	9.00	87.37	6,539.69	35.76	777.42	113.38	0.00	0.00	0.00
6,700.00	9.00	87.37	6,638.46	36.48	793.04	115.66	0.00	0.00	0.00
6,800.00	9.00	87.37	6,737.23	37.20	808.67	117.94	0.00	0.00	0.00
6,900.00	9.00	87.37	6,835.99	37.92	824.29	120.22	0.00	0.00	0.00
7,000.00	9.00	87.37	6,934.76	38.64	839.91	122.50	0.00	0.00	0.00
7,100.00	9.00	87.37	7,033.53	39.36	855.54	124.77	0.00	0.00	0.00
7,200.00	9.00	87.37	7,132.30	40.07	871.16	127.05	0.00	0.00	0.00
7,300.00	9.00	87.37	7,231.07	40.79	886.79	129.33	0.00	0.00	0.00
7,400.00	9.00	87.37	7,329.84	41.51	902.41	131.61	0.00	0.00	0.00
7,500.00	9.00	87.37	7,428.61	42.23	918.04	133.89	0.00	0.00	0.00
7,600.00	9.00	87.37	7,527.38	42.95	933.66	136.17	0.00	0.00	0.00
7,700.00	9.00	87.37	7,626.15	43.67	949.29	138.45	0.00	0.00	0.00
7,800.00	9.00	87.37	7,724.92	44.39	964.91	140.73	0.00	0.00	0.00
7,900.00	9.00	87.37	7,823.69	45.11	980.54	143.00	0.00	0.00	0.00
8,000.00	9.00	87.37	7,922.46	45.82	996.16	145.28	0.00	0.00	0.00
8,100.00	9.00	87.37	8,021.22	46.54	1,011.79	147.56	0.00	0.00	0.00
8,200.00	9.00	87.37	8,119.99	47.26	1,027.41	149.84	0.00	0.00	0.00
8,300.00	9.00	87.37	8,218.76	47.98	1,043.04	152.12	0.00	0.00	0.00
8,400.00	9.00	87.37	8,317.53	48.70	1,058.66	154.40	0.00	0.00	0.00
8,500.00	9.00	87.37	8,416.30	49.42	1,074.29	156.68	0.00	0.00	0.00
8,600.00	9.00	87.37	8,515.07	50.14	1,089.91	158.96	0.00	0.00	0.00
8,700.00	9.00	87.37	8,613.84	50.86	1,105.54	161.23	0.00	0.00	0.00
8,800.00	9.00	87.37	8,712.61	51.57	1,121.16	163.51	0.00	0.00	0.00



## Legacy Directional Drilling

## Survey Report

<b>Company:</b>	3R Operating, LLC	<b>Local Co-ordinate Reference:</b>	Well Comanche 25-36 Fed Com 802H
<b>Project:</b>	Lea County, NM (NAD 83)	<b>TVD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,900.00	9.00	87.37	8,811.38	52.29	1,136.79	165.79	0.00	0.00	0.00
8,908.73	9.00	87.37	8,820.00	52.36	1,138.15	165.99	0.00	0.00	0.00
<b>Bone Spring</b>									
9,000.00	9.00	87.37	8,910.15	53.01	1,152.41	168.07	0.00	0.00	0.00
9,100.00	9.00	87.37	9,008.92	53.73	1,168.04	170.35	0.00	0.00	0.00
9,200.00	9.00	87.37	9,107.68	54.45	1,183.66	172.63	0.00	0.00	0.00
9,300.00	9.00	87.37	9,206.45	55.17	1,199.29	174.91	0.00	0.00	0.00
9,400.00	9.00	87.37	9,305.22	55.89	1,214.91	177.19	0.00	0.00	0.00
9,500.00	9.00	87.37	9,403.99	56.61	1,230.54	179.47	0.00	0.00	0.00
9,600.00	9.00	87.37	9,502.76	57.32	1,246.16	181.74	0.00	0.00	0.00
9,700.00	9.00	87.37	9,601.53	58.04	1,261.79	184.02	0.00	0.00	0.00
9,751.00	9.00	87.37	9,651.91	58.41	1,269.76	185.18	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
9,800.00	8.02	87.37	9,700.36	58.74	1,277.00	186.24	2.00	-2.00	0.00
9,900.00	6.02	87.37	9,799.61	59.30	1,289.20	188.02	2.00	-2.00	0.00
10,000.00	4.02	87.37	9,899.22	59.71	1,297.94	189.30	2.00	-2.00	0.00
10,100.00	2.02	87.37	9,999.08	59.95	1,303.20	190.06	2.00	-2.00	0.00
10,200.95	0.00	0.00	10,100.00	60.03	1,304.98	190.32	2.00	-2.00	0.00
<b>Vertical at 10200.94 MD</b>									
10,220.95	0.00	0.00	10,120.00	60.03	1,304.98	190.32	0.00	0.00	0.00
<b>1st Bone Spring Sand</b>									
10,300.00	0.00	0.00	10,199.06	60.03	1,304.98	190.32	0.00	0.00	0.00
10,385.95	0.00	0.00	10,285.00	60.03	1,304.98	190.32	0.00	0.00	0.00
<b>2nd Bone Spring Carb</b>									
10,400.00	0.00	0.00	10,299.06	60.03	1,304.98	190.32	0.00	0.00	0.00
10,500.00	0.00	0.00	10,399.06	60.03	1,304.98	190.32	0.00	0.00	0.00
10,600.00	0.00	0.00	10,499.06	60.03	1,304.98	190.32	0.00	0.00	0.00
10,615.95	0.00	0.00	10,515.00	60.03	1,304.98	190.32	0.00	0.00	0.00
<b>2nd Bone Spring Sand</b>									
10,700.00	0.00	0.00	10,599.06	60.03	1,304.98	190.32	0.00	0.00	0.00
10,800.00	0.00	0.00	10,699.06	60.03	1,304.98	190.32	0.00	0.00	0.00
10,815.95	0.00	0.00	10,715.00	60.03	1,304.98	190.32	0.00	0.00	0.00
<b>3rd Bone Spring Carb</b>									
10,900.00	0.00	0.00	10,799.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,000.00	0.00	0.00	10,899.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,100.00	0.00	0.00	10,999.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,200.00	0.00	0.00	11,099.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,300.00	0.00	0.00	11,199.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,400.00	0.00	0.00	11,299.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,500.00	0.00	0.00	11,399.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,600.00	0.00	0.00	11,499.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,700.00	0.00	0.00	11,599.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,800.00	0.00	0.00	11,699.06	60.03	1,304.98	190.32	0.00	0.00	0.00
11,895.95	0.00	0.00	11,795.00	60.03	1,304.98	190.32	0.00	0.00	0.00
<b>3rd Bone Spring Sand</b>									



## Legacy Directional Drilling

## Survey Report

<b>Company:</b>	3R Operating, LLC	<b>Local Co-ordinate Reference:</b>	Well Comanche 25-36 Fed Com 802H
<b>Project:</b>	Lea County, NM (NAD 83)	<b>TVD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,900.00	0.00	0.00	11,799.06	60.03	1,304.98	190.32	0.00	0.00	0.00
12,000.00	0.00	0.00	11,899.06	60.03	1,304.98	190.32	0.00	0.00	0.00
12,100.00	0.00	0.00	11,999.06	60.03	1,304.98	190.32	0.00	0.00	0.00
12,200.00	0.00	0.00	12,099.06	60.03	1,304.98	190.32	0.00	0.00	0.00
12,280.95	0.00	0.00	12,180.00	60.03	1,304.98	190.32	0.00	0.00	0.00
<b>Wolfcamp XY</b>									
12,300.00	0.00	0.00	12,199.06	60.03	1,304.98	190.32	0.00	0.00	0.00
12,400.00	0.00	0.00	12,299.06	60.03	1,304.98	190.32	0.00	0.00	0.00
12,507.99	0.00	0.00	12,407.04	60.03	1,304.98	190.32	0.00	0.00	0.00
<b>KOP Start Build 10.00</b>									
12,550.00	4.20	179.42	12,449.02	58.49	1,305.00	191.84	10.00	10.00	0.00
12,600.00	9.20	179.42	12,498.66	52.66	1,305.05	197.57	10.00	10.00	0.00
12,650.00	14.20	179.42	12,547.61	42.52	1,305.16	207.54	10.00	10.00	0.00
12,700.00	19.20	179.42	12,595.48	28.16	1,305.30	221.67	10.00	10.00	0.00
12,750.00	24.20	179.42	12,641.92	9.68	1,305.49	239.85	10.00	10.00	0.00
12,800.00	29.20	179.42	12,686.58	-12.78	1,305.71	261.93	10.00	10.00	0.00
12,850.00	34.20	179.42	12,729.10	-39.05	1,305.97	287.77	10.00	10.00	0.00
12,900.00	39.20	179.42	12,769.18	-68.92	1,306.27	317.14	10.00	10.00	0.00
12,950.00	44.20	179.42	12,806.50	-102.17	1,306.61	349.85	10.00	10.00	0.00
12,976.41	46.84	179.42	12,825.00	-121.01	1,306.80	368.38	10.00	10.00	0.00
<b>Wolfcamp B</b>									
13,000.00	49.20	179.42	12,840.78	-138.55	1,306.97	385.62	10.00	10.00	0.00
13,050.00	54.20	179.42	12,871.76	-177.77	1,307.37	424.20	10.00	10.00	0.00
13,100.00	59.20	179.42	12,899.20	-219.55	1,307.79	465.29	10.00	10.00	0.00
13,150.00	64.20	179.42	12,922.89	-263.55	1,308.23	508.57	10.00	10.00	0.00
13,200.00	69.20	179.42	12,942.66	-309.46	1,308.69	553.72	10.00	10.00	0.00
13,250.00	74.20	179.42	12,958.36	-356.91	1,309.17	600.39	10.00	10.00	0.00
13,300.00	79.20	179.42	12,969.85	-405.56	1,309.66	648.23	10.00	10.00	0.00
13,350.00	84.20	179.42	12,977.07	-455.01	1,310.15	696.87	10.00	10.00	0.00
13,400.00	89.20	179.42	12,979.94	-504.91	1,310.65	745.95	10.00	10.00	0.00
13,407.99	90.00	179.42	12,980.00	-512.90	1,310.73	753.80	10.00	10.00	0.00
<b>LP 90° at 13407.99 MD - Target CL</b>									
13,500.00	90.00	179.42	12,980.00	-604.91	1,311.66	844.29	0.00	0.00	0.00
13,600.00	90.00	179.42	12,980.00	-704.90	1,312.66	942.64	0.00	0.00	0.00
13,700.00	90.00	179.42	12,980.00	-804.90	1,313.67	1,040.99	0.00	0.00	0.00
13,800.00	90.00	179.42	12,980.00	-904.89	1,314.67	1,139.33	0.00	0.00	0.00
13,900.00	90.00	179.42	12,980.00	-1,004.89	1,315.67	1,237.68	0.00	0.00	0.00
14,000.00	90.00	179.42	12,980.00	-1,104.88	1,316.68	1,336.02	0.00	0.00	0.00
14,100.00	90.00	179.42	12,980.00	-1,204.88	1,317.68	1,434.37	0.00	0.00	0.00
14,200.00	90.00	179.42	12,980.00	-1,304.87	1,318.69	1,532.72	0.00	0.00	0.00
14,300.00	90.00	179.42	12,980.00	-1,404.87	1,319.69	1,631.06	0.00	0.00	0.00
14,400.00	90.00	179.42	12,980.00	-1,504.86	1,320.69	1,729.41	0.00	0.00	0.00
14,500.00	90.00	179.42	12,980.00	-1,604.86	1,321.70	1,827.75	0.00	0.00	0.00
14,600.00	90.00	179.42	12,980.00	-1,704.85	1,322.70	1,926.10	0.00	0.00	0.00



## Legacy Directional Drilling

## Survey Report

<b>Company:</b>	3R Operating, LLC	<b>Local Co-ordinate Reference:</b>	Well Comanche 25-36 Fed Com 802H
<b>Project:</b>	Lea County, NM (NAD 83)	<b>TVD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,700.00	90.00	179.42	12,980.00	-1,804.85	1,323.71	2,024.44	0.00	0.00	0.00
14,800.00	90.00	179.42	12,980.00	-1,904.84	1,324.71	2,122.79	0.00	0.00	0.00
14,900.00	90.00	179.42	12,980.00	-2,004.84	1,325.72	2,221.14	0.00	0.00	0.00
15,000.00	90.00	179.42	12,980.00	-2,104.83	1,326.72	2,319.48	0.00	0.00	0.00
15,100.00	90.00	179.42	12,980.00	-2,204.83	1,327.72	2,417.83	0.00	0.00	0.00
15,200.00	90.00	179.42	12,980.00	-2,304.82	1,328.73	2,516.17	0.00	0.00	0.00
15,300.00	90.00	179.42	12,980.00	-2,404.82	1,329.73	2,614.52	0.00	0.00	0.00
15,400.00	90.00	179.42	12,980.00	-2,504.81	1,330.74	2,712.87	0.00	0.00	0.00
15,500.00	90.00	179.42	12,980.00	-2,604.81	1,331.74	2,811.21	0.00	0.00	0.00
15,600.00	90.00	179.42	12,980.00	-2,704.80	1,332.74	2,909.56	0.00	0.00	0.00
15,700.00	90.00	179.42	12,980.00	-2,804.80	1,333.75	3,007.90	0.00	0.00	0.00
15,800.00	90.00	179.42	12,980.00	-2,904.79	1,334.75	3,106.25	0.00	0.00	0.00
15,900.00	90.00	179.42	12,980.00	-3,004.79	1,335.76	3,204.60	0.00	0.00	0.00
16,000.00	90.00	179.42	12,980.00	-3,104.78	1,336.76	3,302.94	0.00	0.00	0.00
16,100.00	90.00	179.42	12,980.00	-3,204.78	1,337.77	3,401.29	0.00	0.00	0.00
16,200.00	90.00	179.42	12,980.00	-3,304.77	1,338.77	3,499.63	0.00	0.00	0.00
16,300.00	90.00	179.42	12,980.00	-3,404.77	1,339.77	3,597.98	0.00	0.00	0.00
16,400.00	90.00	179.42	12,980.00	-3,504.76	1,340.78	3,696.33	0.00	0.00	0.00
16,500.00	90.00	179.42	12,980.00	-3,604.76	1,341.78	3,794.67	0.00	0.00	0.00
16,600.00	90.00	179.42	12,980.00	-3,704.75	1,342.79	3,893.02	0.00	0.00	0.00
16,700.00	90.00	179.42	12,980.00	-3,804.75	1,343.79	3,991.36	0.00	0.00	0.00
16,800.00	90.00	179.42	12,980.00	-3,904.74	1,344.79	4,089.71	0.00	0.00	0.00
16,900.00	90.00	179.42	12,980.00	-4,004.74	1,345.80	4,188.05	0.00	0.00	0.00
17,000.00	90.00	179.42	12,980.00	-4,104.73	1,346.80	4,286.40	0.00	0.00	0.00
17,100.00	90.00	179.42	12,980.00	-4,204.73	1,347.81	4,384.75	0.00	0.00	0.00
17,200.00	90.00	179.42	12,980.00	-4,304.72	1,348.81	4,483.09	0.00	0.00	0.00
17,300.00	90.00	179.42	12,980.00	-4,404.72	1,349.82	4,581.44	0.00	0.00	0.00
17,400.00	90.00	179.42	12,980.00	-4,504.71	1,350.82	4,679.78	0.00	0.00	0.00
17,500.00	90.00	179.42	12,980.00	-4,604.71	1,351.82	4,778.13	0.00	0.00	0.00
17,600.00	90.00	179.42	12,980.00	-4,704.70	1,352.83	4,876.48	0.00	0.00	0.00
17,700.00	90.00	179.42	12,980.00	-4,804.70	1,353.83	4,974.82	0.00	0.00	0.00
17,800.00	90.00	179.42	12,980.00	-4,904.69	1,354.84	5,073.17	0.00	0.00	0.00
17,900.00	90.00	179.42	12,980.00	-5,004.69	1,355.84	5,171.51	0.00	0.00	0.00
18,000.00	90.00	179.42	12,980.00	-5,104.68	1,356.84	5,269.86	0.00	0.00	0.00
18,100.00	90.00	179.42	12,980.00	-5,204.68	1,357.85	5,368.21	0.00	0.00	0.00
18,200.00	90.00	179.42	12,980.00	-5,304.67	1,358.85	5,466.55	0.00	0.00	0.00
18,300.00	90.00	179.42	12,980.00	-5,404.67	1,359.86	5,564.90	0.00	0.00	0.00
18,400.00	90.00	179.42	12,980.00	-5,504.66	1,360.86	5,663.24	0.00	0.00	0.00
18,500.00	90.00	179.42	12,980.00	-5,604.66	1,361.87	5,761.59	0.00	0.00	0.00
18,600.00	90.00	179.42	12,980.00	-5,704.65	1,362.87	5,859.94	0.00	0.00	0.00
18,700.00	90.00	179.42	12,980.00	-5,804.65	1,363.87	5,958.28	0.00	0.00	0.00
18,800.00	90.00	179.42	12,980.00	-5,904.64	1,364.88	6,056.63	0.00	0.00	0.00
18,900.00	90.00	179.42	12,980.00	-6,004.64	1,365.88	6,154.97	0.00	0.00	0.00



## Legacy Directional Drilling

## Survey Report

<b>Company:</b>	3R Operating, LLC	<b>Local Co-ordinate Reference:</b>	Well Comanche 25-36 Fed Com 802H
<b>Project:</b>	Lea County, NM (NAD 83)	<b>TVD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

## Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,000.00	90.00	179.42	12,980.00	-6,104.63	1,366.89	6,253.32	0.00	0.00	0.00
19,100.00	90.00	179.42	12,980.00	-6,204.63	1,367.89	6,351.66	0.00	0.00	0.00
19,200.00	90.00	179.42	12,980.00	-6,304.62	1,368.89	6,450.01	0.00	0.00	0.00
19,300.00	90.00	179.42	12,980.00	-6,404.61	1,369.90	6,548.36	0.00	0.00	0.00
19,400.00	90.00	179.42	12,980.00	-6,504.61	1,370.90	6,646.70	0.00	0.00	0.00
19,500.00	90.00	179.42	12,980.00	-6,604.60	1,371.91	6,745.05	0.00	0.00	0.00
19,600.00	90.00	179.42	12,980.00	-6,704.60	1,372.91	6,843.39	0.00	0.00	0.00
19,700.00	90.00	179.42	12,980.00	-6,804.59	1,373.92	6,941.74	0.00	0.00	0.00
19,800.00	90.00	179.42	12,980.00	-6,904.59	1,374.92	7,040.09	0.00	0.00	0.00
19,900.00	90.00	179.42	12,980.00	-7,004.58	1,375.92	7,138.43	0.00	0.00	0.00
19,970.34	90.00	179.42	12,980.00	-7,074.92	1,376.63	7,207.61	0.00	0.00	0.00

LTP/BHL at 19970.34

## Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP - Comanche 25-36 - plan hits target center - Point	0.00	0.00	12,407.04	60.03	1,304.98	372,803.56	857,001.64	32.020827	-103.314816
FTP / PPP1 - Comanche - plan misses target center by 170.04usft at 13008.92usft MD (12846.55 TVD, -145.35 N, 1307.04 E) - Point	0.00	0.00	12,980.00	-39.97	1,306.02	372,703.56	857,002.68	32.020552	-103.314816
LTP / BHL - Comanche 2 - plan hits target center - Point	0.00	0.00	12,980.00	-7,074.92	1,376.63	365,668.61	857,073.29	32.001215	-103.314802





## Legacy Directional Drilling

## Survey Report

<b>Company:</b>	3R Operating, LLC	<b>Local Co-ordinate Reference:</b>	Well Comanche 25-36 Fed Com 802H
<b>Project:</b>	Lea County, NM (NAD 83)	<b>TVD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Site:</b>	Comanche 25-36 Fed Com	<b>MD Reference:</b>	GL 2953 + 26.5' KB @ 2979.50usft
<b>Well:</b>	Comanche 25-36 Fed Com 802H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	OH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Plan 1	<b>Database:</b>	EDM_WA

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
700.00	700.00	Rustler				
1,070.00	1,070.00	Salado				
5,036.06	4,995.00	Delaware				
8,908.73	8,820.00	Bone Spring				
10,220.95	10,120.00	1st Bone Spring Sand				
10,385.95	10,285.00	2nd Bone Spring Carb				
10,615.95	10,515.00	2nd Bone Spring Sand				
10,815.95	10,715.00	3rd Bone Spring Carb				
11,895.95	11,795.00	3rd Bone Spring Sand				
12,280.95	12,180.00	Wolfcamp XY				
12,976.41	12,825.00	Wolfcamp B				
13,407.99	12,980.00	Target CL				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
1400	1400	0	0	Start Nudge Build 2.00	
1850	1848	2	35	9° at 1849.94 MD	
9751	9652	58	1270	Start Drop -2.00	
10,201	10,100	60	1305	Vertical at 10200.94 MD	
12,508	12,407	60	1305	KOP Start Build 10.00	
13,408	12,980	-513	1311	LP 90° at 13407.99 MD	
19,970	12,980	-7075	1377	LTP/BHL at 19970.34	

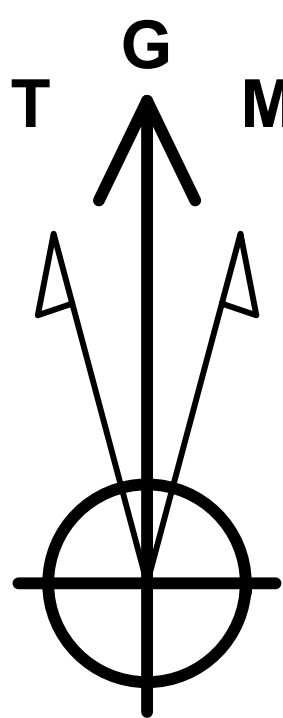
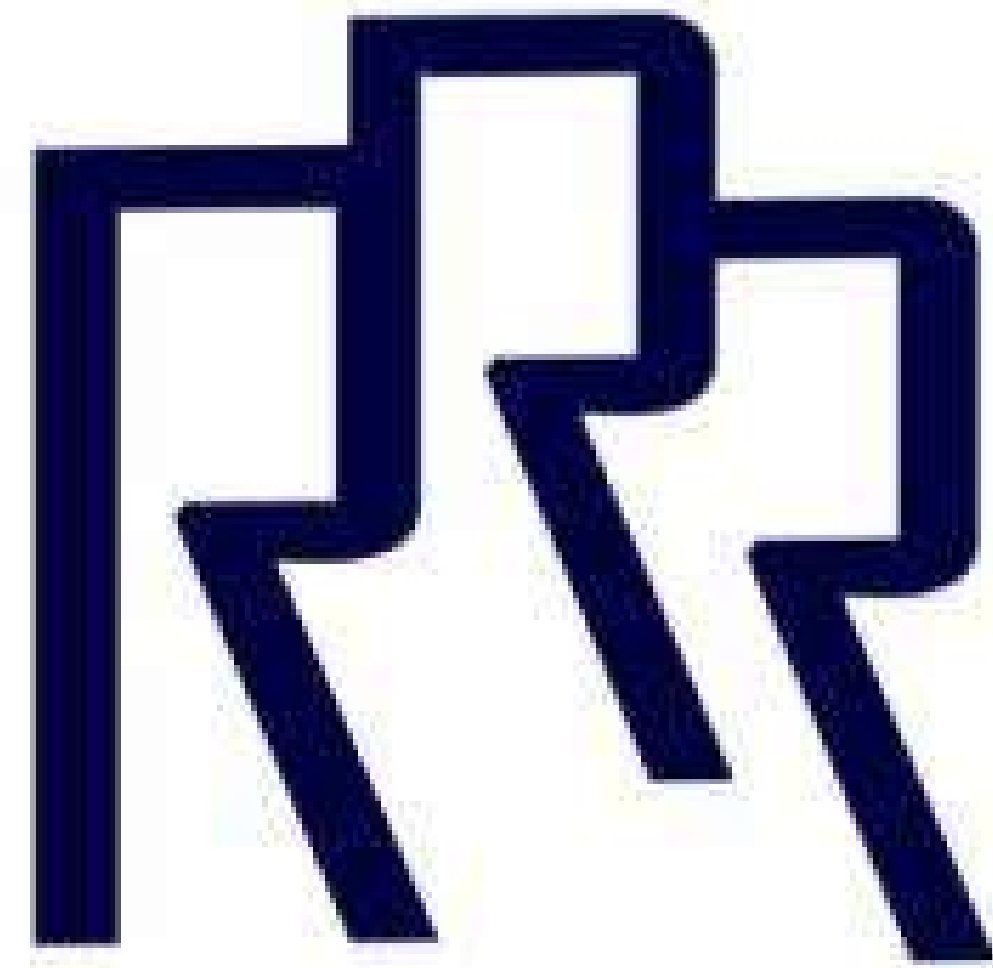
Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_



3R Operating, LLC

Company: 3R Operating, LLC  
Field: Lea County, NM (NAD 83)  
Location: Comanche 25-36 Fed Com  
Well: Comanche 25-36 Fed Com 802H  
OH  
Plan: Plan 1  
GL 2953 + 26.5' KB @ 2979.50usft

RIG: TBD



Azimuths to Grid North  
True North: -0.54°  
Magnetic North: 5.56°

Magnetic Field  
Strength: 46907.4nT  
Dip Angle: 59.60°  
Date: 9/1/2025  
Model: IGRF2025



LEGACY  
DIRECTIONAL

PROJECT DETAILS: Lea County, NM (NAD 83)

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone  
System Datum: Mean Sea Level

WELL DETAILS: Comanche 25-36 Fed Com 802H

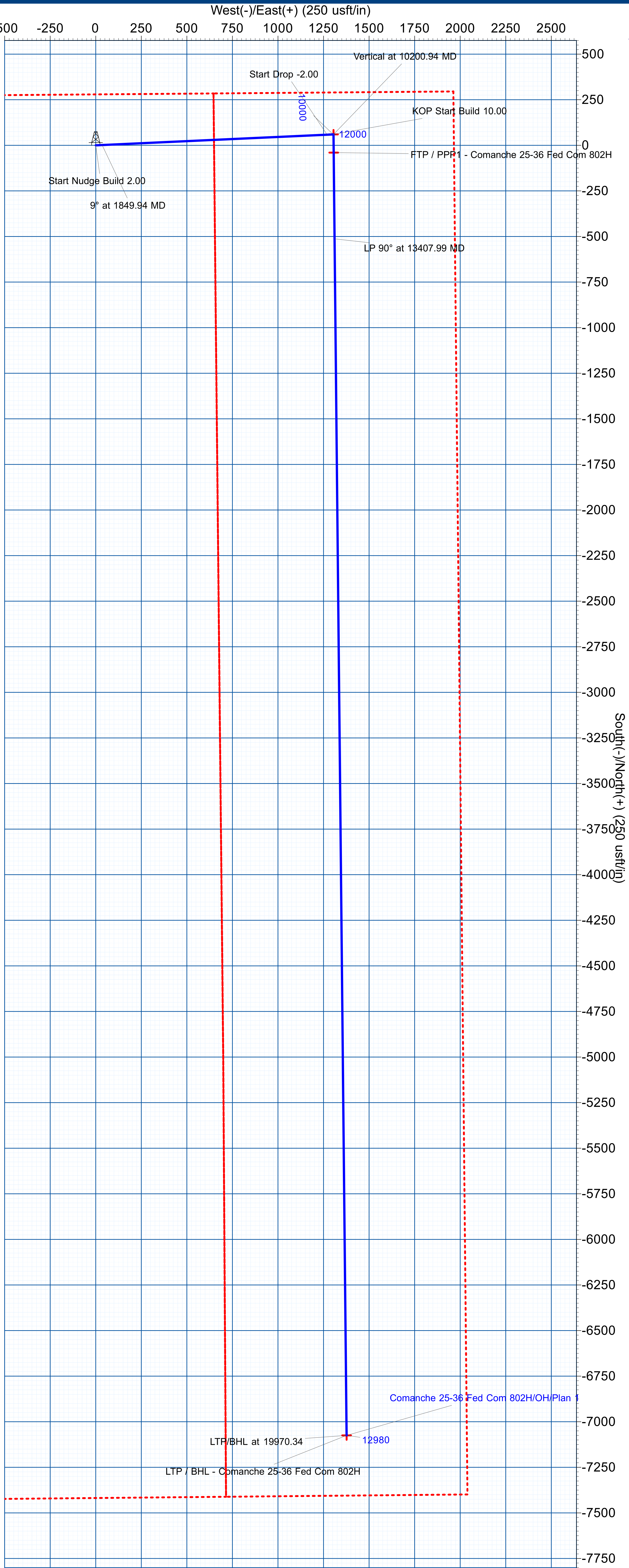
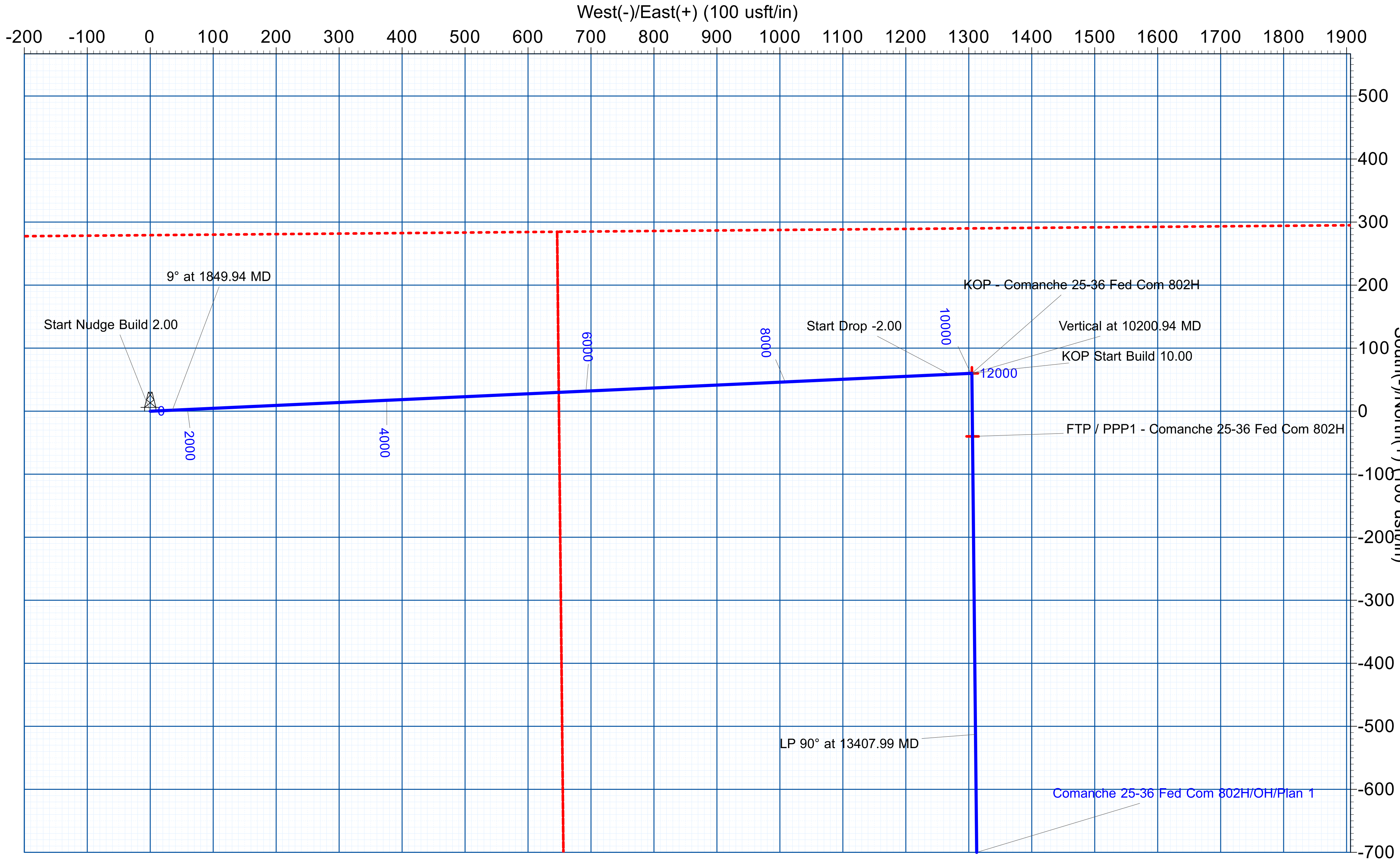
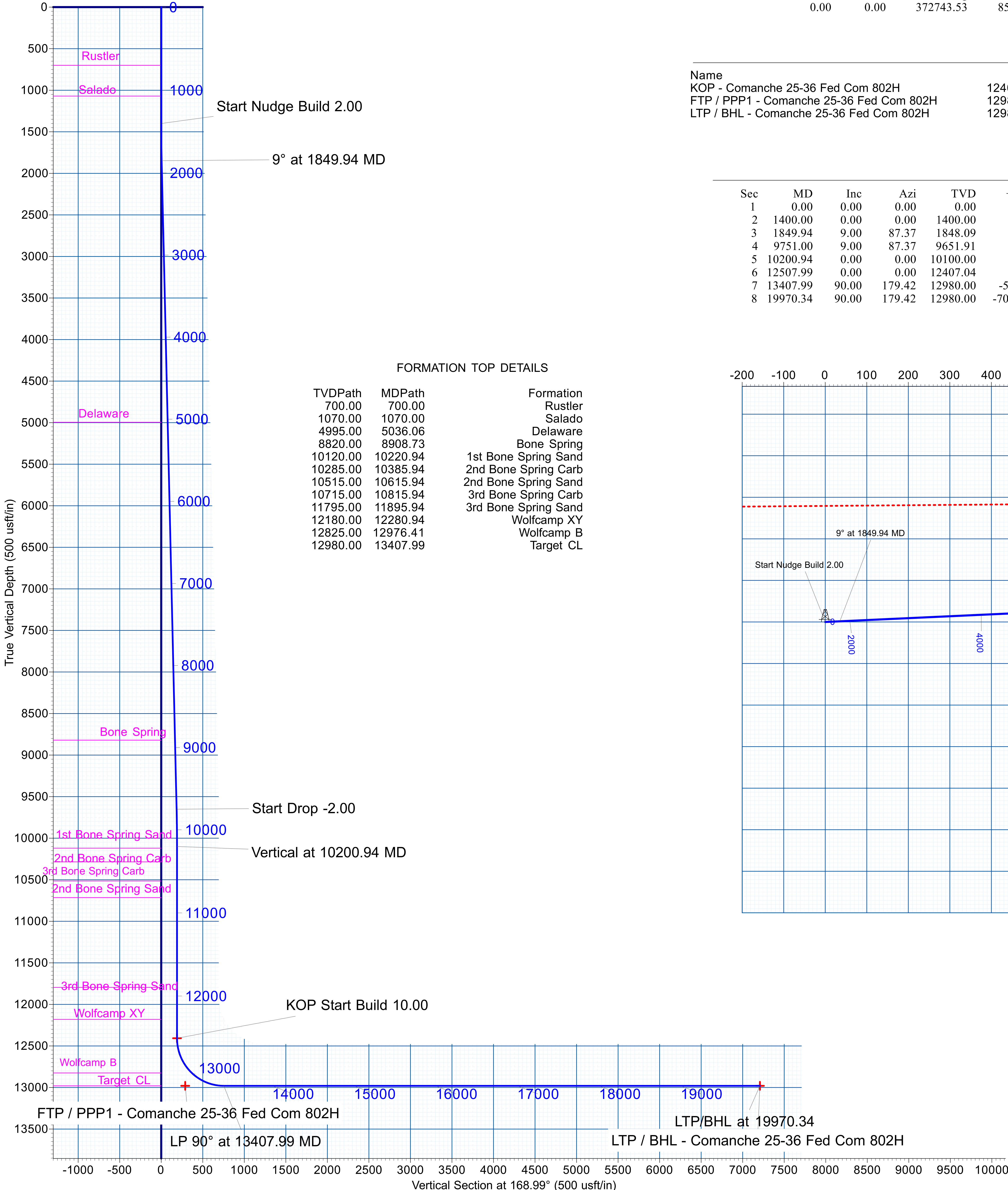
+N/-S	+E/-W	GL 2953 + 26.5' KB @ 2979.50usft	2953.00		
0.00	0.00	Northing	Easting	Latitude	Longitude
		372743.53	855696.66	32.020696	-103.319028

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Comanche 25-36 Fed Com 802H	12407.04	60.03	1304.98	372803.56	857001.64	32.020827	-103.314816
FTP / PPP1 - Comanche 25-36 Fed Com 802H	12980.00	-39.97	1306.02	372703.56	857002.68	32.020552	-103.314816
LTP / BHL - Comanche 25-36 Fed Com 802H	12980.00	-7074.92	1376.63	365668.61	857073.29	32.001214	-103.314802

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	1400.00	0.00	0.00	1400.00	0.00	0.00	0.00	0.00	0.00	
3	1849.94	9.00	87.37	1848.09	1.62	35.22	2.00	87.37	5.14	
4	9751.00	9.00	87.37	9651.91	58.41	1269.76	0.00	0.00	185.18	
5	10200.94	0.00	0.00	10100.00	60.03	1304.98	2.00	180.00	190.32	
6	12507.99	0.00	0.00	12407.04	60.03	1304.98	0.00	0.00	190.32	
7	13407.99	90.00	179.42	12980.00	-512.90	1310.73	10.00	179.42	753.80	
8	19970.34	90.00	179.42	12980.00	-7074.92	1376.63	0.00	0.00	7207.61	LTP / BHL - Comanche 25-36 Fed Com 802H







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

# SUPO Data Report

01/05/2026

APD ID: 10400107558

Submission Date: 09/30/2025

Operator Name: 3R OPERATING LLC

Well Name: COMANCHE 25 36 FED COM

Well Number: 802H

Well Type: CONVENTIONAL GAS 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:

20251211\_COMANCHE\_25\_36\_FED\_COM\_REV.\_1\_VICINITY\_MAP\_20250910\_20250930090520.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

### ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

## Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

20251211\_COMANCHE\_WEST\_WELL\_PAD\_ROAD\_NM\_LE\_0001.00060\_REV.\_0\_\_\_CERTIFIED\_20250912\_20250930090547.pdf

New road type: COLLECTOR

Length: 197

Feet

Width (ft.): 30

Max slope (%): 1

Max grade (%): 1

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 25

**New road access erosion control:** The proposed lease road traverses mostly level terrain. The largest grade along the lease road may be approximately 1%. Existing bar ditches or any man-made ditch is not considered in determining max slope of preconstruction contours. Fencing, gates, and/or cattle guards may be installed as necessary per agreement with landowner or surface managing agency. To accommodate the natural drainage of the landscape, culverts or water diversions will be installed as necessary to allow proper drainage of the landscape and mitigate erosion.

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**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:** OTHER**Access topsoil source:** ONSITE**Access surfacing type description:** Caliche**Access onsite topsoil source depth:** 6**Offsite topsoil source description:****Onsite topsoil removal process:** Bulldozer/Road Grader**Access other construction information:****Access miscellaneous information:****Number of access turnouts:****Access turnout map:**

### Drainage Control

**New road drainage crossing:** CULVERT

**Drainage Control comments:** The lease road will be new construction and provide all-weather access to this property. The lease road will be maintained with a motor grader in a prudent manner as an all-weather road. Maintenance activity shall include, but not be limited to, resurfacing, reshaping, compacting, and crowning said road as necessary. Any ruts, rills, and eroded areas will be filled/repared as necessary. Crown/ditch will be surfaced with caliche.

**Road Drainage Control Structures (DCS) description:** To accommodate the natural drainage of the landscape, culverts or water diversions will be installed as necessary to allow proper drainage of the landscape and mitigate erosion.

**Road Drainage Control Structures (DCS) attachment:**

### Access Additional Attachments

## Section 3 - Location of Existing Wells

**Existing Wells Map?** YES**Existing Well map Attachment:**

COMANCHE\_ONE\_MILE\_RADIUS\_20250930090941.pdf

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H

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

**Submit or defer a Proposed Production Facilities plan?** SUBMIT

**Production Facilities description:** Proposed production facilities are located on the east side of the proposed well pad. A site facility diagram will be submitted to the BLM after the well is placed into production. Additionally, the operator proposes a sweet gas return line to be constructed to the pad with for a length of approx. 1877' and a permanent easement width of 25' for a total proposed acreage of 1.07 acres on BLM surface. Please see attached plats.

**Production Facilities map:**

COMANCHE\_FAC\_20250930091017.pdf

20251211\_COMANCHE\_SWEET\_GAS\_LINE\_NM\_LE\_0001.00000\_REV.\_1\_\_\_CERTIFIED\_20251008\_20251023164514.pdf

## Section 5 - Location and Types of Water Supply

### Water Source Table

**Water source type:** PERENNIAL SURFACE

<b>Water source use type:</b>	DUST CONTROL
	SURFACE CASING
	INTERMEDIATE/PRODUCTION CASING
	STIMULATION

**Source latitude:** 32.024169**Source longitude:** -103.405569**Source datum:** NAD83**City:****Water source permit type:** PRIVATE CONTRACT**Water source transport method:** PIPELINE**Source land ownership:** PRIVATE**Source transportation land ownership:** FEDERAL**Water source volume (barrels):** 180000**Source volume (acre-feet):** 23.20075734**Source volume (gal):** 7560000

### Water source and transportation

WTP\_Comanche\_20250924094227.pdf

**Water source comments:** Existing frac ponds. Temporary aboveground water line will follow edge of existing roads/ROW routes.

**New water well?** N

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H

### New Water Well Info

**Well latitude:****Well Longitude:****Well datum:****Well target aquifer:****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:** Location will be graded and leveled with existing soil at proposed site. Construction material will be obtained via private contract for the construction of the well pad and lease road. Source of materials is existing pit located on private surface (approx. 32.023297, -103.401509) in the SE/4 of Sec. 19-26S-35E.

**Construction Materials source location**

### Section 7 - Methods for Handling

**Waste type:** SEWAGE**Waste content description:** Sewage associated with active drilling and completions operations.**Amount of waste:** 1000 gallons**Waste disposal frequency :** Weekly**Safe containment description:** All sewage will be held in onsite portable restrooms.**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY**Disposal location ownership:** COMMERCIAL**Disposal type description:**

**Disposal location description:** Third party vendor will be charged with disposal of waste (R360 Environmental Solutions). Waste will be hauled to an approved commercial disposal facility.

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**Waste type:** COMPLETIONS/STIMULATION**Waste content description:** Water associated with completion of the well.**Amount of waste:** 1000 barrels**Waste disposal frequency :** Weekly**Safe containment description:** Completion water will be held in permanent above ground storage tanks on the well pad. The tank(s) will be contained by appropriate secondary containment.**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL**Disposal type description:****Disposal location description:** Third party vendor will be charged with disposal of waste (R360 Environmental Solutions). Waste will be hauled to an approved commercial disposal facility.**Waste type:** DRILLING**Waste content description:** Drilling mud and cuttings**Amount of waste:** 3800 barrels**Waste disposal frequency :** One Time Only**Safe containment description:** Drilling mud and cuttings will be contained in a closed system. During drilling activities trenches will surround all pumps, motors, and rig such that runoff will be directed to a sump area on the well site and pumped into a haul off tank.**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL**Disposal type description:****Disposal location description:** Third party vendor will be charged with disposal of waste (R360 Environmental Solutions).Waste will be hauled to an approved commercial disposal facility.**Waste type:** GARBAGE**Waste content description:** Garbage produced during drilling and completions.**Amount of waste:** 1000 pounds**Waste disposal frequency :** Weekly**Safe containment description:** All garbage will be contained either in trash cans or dumpsters onsite.**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL**Disposal type description:****Disposal location description:** Third party vendor will be charged with disposal of waste (R360 Environmental Solutions). Waste will be hauled to an approved commercial disposal facility.



**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**Waste type:** PRODUCED WATER**Waste content description:** Water produced from the target formation.**Amount of waste:** 1000 barrels**Waste disposal frequency :** Daily**Safe containment description:** Water produced from target formation will be held in permanent above ground storage tanks on the well pad. The tank(s) will be contained by appropriate secondary containment.**Safe contaminant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL**Disposal type description:****Disposal location description:** TBD - Disposal will occur at a regional wastewater disposal facility designed and approved to dispose of oilfield wastewater.

### Reserve Pit

**Reserve Pit being used?** NO**Temporary disposal of produced water into reserve pit?****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****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**

Operator Name: 3R OPERATING LLC

Well Name: COMANCHE 25 36 FED COM

Well Number: 802H

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Rig\_Layout\_20250924095701.pdf  
COMANCHE\_PAD\_20250930091853.pdf

Comments:

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: Comanche

Multiple Well Pad Number: 1

Recontouring

20251211\_COMANCHE\_WEST\_WELL\_PAD\_REV.0\_\_CERTIFIED\_CUT\_AND\_FILL\_20250910\_20250930091911.pdf

**Drainage/Erosion control construction:** To mitigate erosion and protect the natural drainage areas, erosion control methods (e.g. cut and fill ratios of 2:1 or 3:1) will be implemented during the construction and production phases of this project. The slopes of the well pad may be reseeded or replanted per agreement with the landowner. Erosion mitigation such as water diversions, silt fences, and hay bales will be located as necessary around the well pad.

**Drainage/Erosion control reclamation:** To mitigate erosion and protect the natural drainage areas, erosion control methods (e.g. cut and fill ratios of 2:1 or 3:1) will be implemented during the construction and production phases of this project. The slopes of the well pad may be reseeded or replanted per agreement with the landowner. Erosion mitigation such as water diversions, silt fences, and hay bales will be located as necessary around the well pad.

Well pad proposed disturbance (acres): 6.77	Well pad interim reclamation (acres): 0	Well pad long term disturbance (acres): 6.77
Road proposed disturbance (acres): 0.14	Road interim reclamation (acres): 0	Road long term disturbance (acres): 0.14
Powerline proposed disturbance (acres): 0	Powerline interim reclamation (acres): 0	Powerline long term disturbance (acres): 0
Pipeline proposed disturbance (acres): 1.07	Pipeline interim reclamation (acres): 0	Pipeline long term disturbance (acres): 1.07
Other proposed disturbance (acres): 0.28	Other interim reclamation (acres): 0	Other long term disturbance (acres): 0.28
Total proposed disturbance: 8.26	Total interim reclamation: 0	Total long term disturbance: 8.26

Disturbance Comments:

**Reconstruction method:** The operator does not intend to downsize this well location at this time due to plans of future oil and gas development. In the event that it later becomes necessary to downsize or reclaim

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H

the well pad, the following methods will be implemented. The operator will restore topsoil to its original condition. The operator will backfill, level, and restore site to original contours with segregation of spoiled materials as needed. The operator will rehabilitate all disturbed areas. All areas of reclamation will be rehabilitated as per agreement with private surface owner or surface managing agency. Upon abandonment of the well, all waste will be hauled away and disposed of in an approved manner. All equipment and salvageable material will be removed from the drill site. All debris generated from the drilling and operating of the well, which is unsuited for burial at an approved landfill, will be disposed of according to applicable regulations. Cleaning operations will commence with completion of drilling activity and should be completed in approximately 10 days. The drill site will be restored as near as practicable to its reconstruction condition and topography. All surface drainage patterns, which may be affected by the proposed action, will be shaped and restored to preconstruction conditions. The soil will be graded and tilled to prepare its surface for seedbed in accordance with the applicable regulatory and conservation agencies. Erosion control techniques will be implemented when necessary. If applicable, construction of all pipelines will be in accordance with standard pipeline industry practices to assure prudent and safe operations and use of the land and in accordance with the conditions and stipulations of the BLM. The right-of-ways will be graded as necessary to provide a suitable work surface.

**Topsoil redistribution:** The operator does not intend to downsize this well location at this time due to plans of future oil and gas development. In the event that it later becomes necessary to downsize or reclaim the well pad, topsoil will be redistributed after the well pad has been returned to original contours, or as close as practical.

**Soil treatment:** No soil treatment will be needed.

**Existing Vegetation at the well pad:** The project area is located within the Chihuahuan Basins & Playas Level IV Ecoregion and situated in semi-arid scrubland with sparse grass presence and large portions of bare ground. Topography is level to gently sloping. Land use within and surrounding the project area is primarily limited to oil & gas development. Dominant species include honey mesquite and catclaw acacia.

**Existing Vegetation at the well pad**

**Existing Vegetation Community at the road:** The project area is located within the Chihuahuan Basins & Playas Level IV Ecoregion and situated in semi-arid scrubland with sparse grass presence and large portions of bare ground. Topography is level to gently sloping. Land use within and surrounding the project area is primarily limited to oil & gas development. Dominant species include honey mesquite and catclaw acacia.

**Existing Vegetation Community at the road**

**Existing Vegetation Community at the pipeline:** The project area is located within the Chihuahuan Basins & Playas Level IV Ecoregion and situated in semi-arid scrubland with sparse grass presence and large portions of bare ground. Topography is level to gently sloping. Land use within and surrounding the project area is primarily limited to oil & gas development. Dominant species include honey mesquite and catclaw acacia.

**Existing Vegetation Community at the pipeline**

**Existing Vegetation Community at other disturbances: TOPSOIL STOCKPILE -** The project area is located within the Chihuahuan Basins & Playas Level IV Ecoregion and situated in semi-arid scrubland with sparse grass presence and large portions of bare ground. Topography is level to gently sloping. Land use within and surrounding the project area is primarily limited to oil & gas development. Dominant species include honey mesquite and catclaw acacia.

**Existing Vegetation Community at other disturbances**

**Non native seed used?**

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?**

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**Seedling transplant description attachment:****Will seed be harvested for use in site reclamation?****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:** Weeds will be mowed regularly to prevent them from becoming the dominant species within the project area.**Weed treatment plan****Monitoring plan description:** The project location will be periodically monitored by the operator's staff that are responsible for infrastructure maintenance.**Monitoring plan****Success standards:** Develop sufficient plant and root coverage to minimize erosion and maximize sediment control.**Pit closure description:** N/A**Pit closure attachment:****Section 11 - Surface**

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**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:****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:**

**Operator Name:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**Disturbance type:** PIPELINE**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:**

## Section 12 - Other

**Right of Way needed?** N**Use APD as ROW?****ROW Type(s):****ROW****SUPO Additional Information:****Use a previously conducted onsite?** Y

**Previous Onsite information:** An onsite meeting for the proposed pad/road was completed with the BLM NRS and BLM Hydrologist on 8/14/25. An onsite for the proposed pipeline was completed with the BLM NRS on 9/17/25.

**Other SUPO**

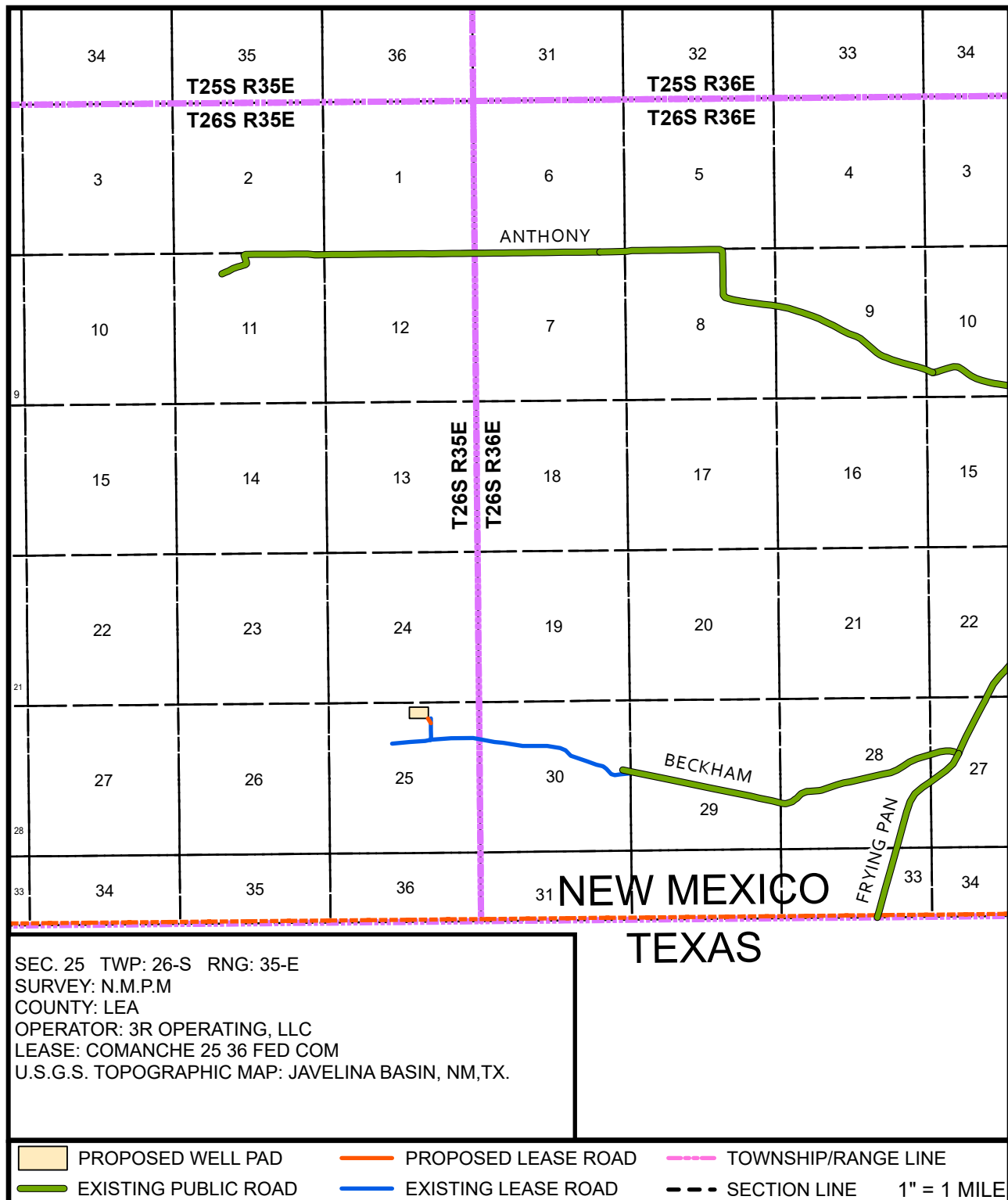
**Operator Name:** 3R OPERATING LLC

**Well Name:** COMANCHE 25 36 FED COM

**Well Number:** 802H



## VICINITY MAP



APPROXIMATELY 10.1 MILES SOUTHWEST OF JAL, NM.

BEGINNING AT THE INTERSECTION OF NM HWY 18 AND US HWY 128, HEAD SOUTH ON NM HWY 18 FOR 1.3 MILES TO WHITWORTH DRIVE. TURN RIGHT ONTO WHITWORTH DRIVE, HEADING WEST FOR 0.4 OF A MILE TO NM HWY 205 (FRYING PAN ROAD). TURN LEFT ONTO NM HWY 205, HEADING SOUTH FOR 7.3 MILES TO BECKHAM RANCH ROAD. TURN RIGHT ONTO BECKHAM RANCH ROAD, HEADING WEST FOR 3.7 MILES STAYING ON THE MAIN LEASE ROAD, TO THE EXISTING LEASE ROAD FOR THE COMANCHE 25-36 FEDERAL COM WELL LOCATION PAD. TURN RIGHT ON TO SAID EXISTING LEASE ROAD, HEADING NORTH FOR 348 FEET TO PROPOSED LEASE ROAD. TURN LEFT ONTO PROPOSED LEASE ROAD HEADING NORTHWEST FOR 197 FEET, ENTERING THE SOUTHEAST CORNER OF SAID WELL LOCATION PAD.



PREPARED BY:  
 DELTA FIELD SERVICES, LLC  
 510 TRENTON STREET,  
 WEST MONROE, LA 71291  
 318-323-6900 OFFICE  
 JOB No. 20251211



## ONE-MILE RADIUS MAP

COMANCHE WEST WELL PAD

SEC. 25 TWP: 26-S RNG: 35-E

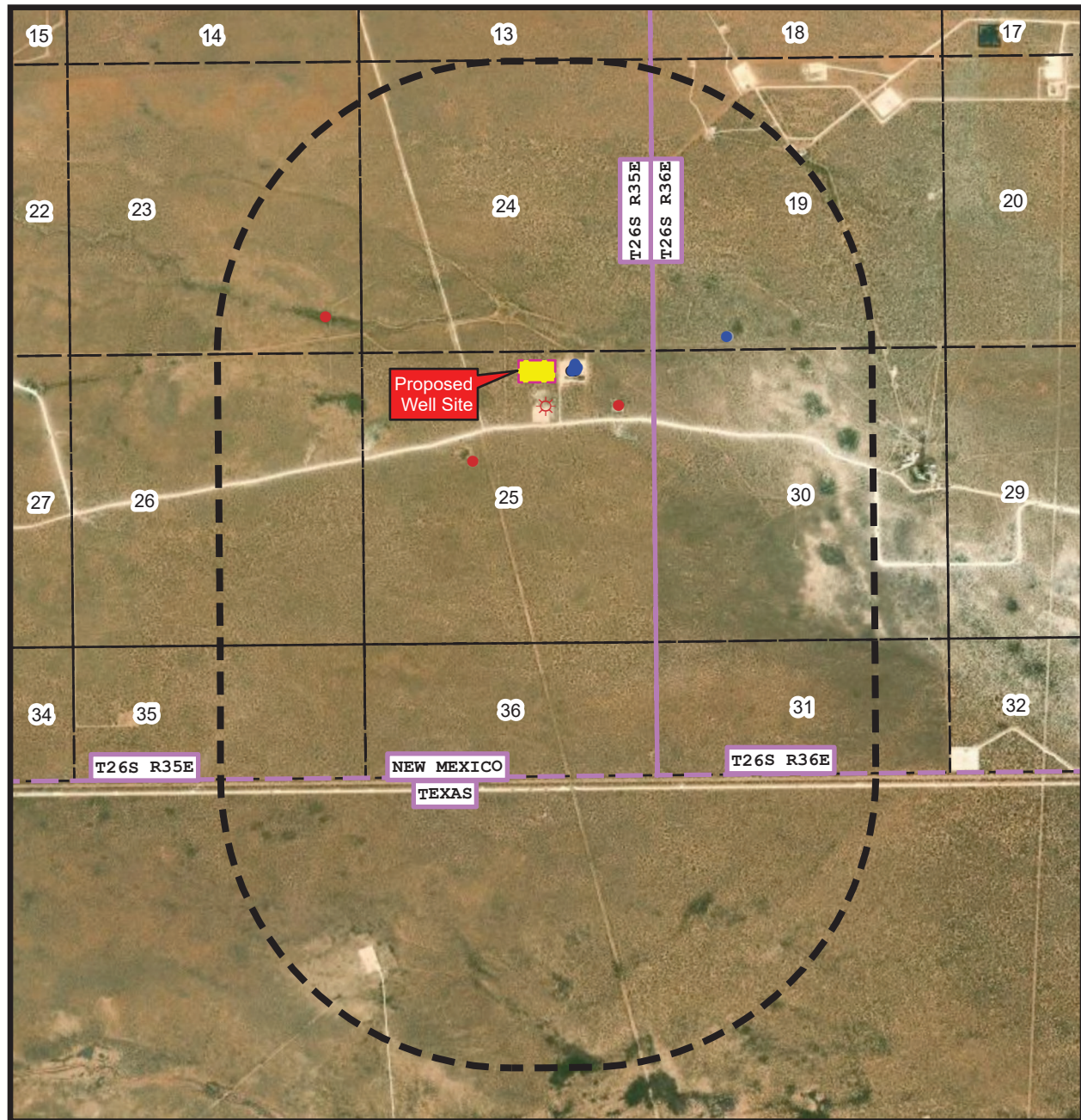
SURVEY: N.M.P.M

OPERATOR: 3R OPERATING, LLC

ELEVATION: 2958'

COUNTY: LEA

U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, NM, TX.



REV 1 ANC 9/10/2025

1" = 2,993 FEET

- |  |               |  |                    |
|--|---------------|--|--------------------|
|  | 1 MILE RADIUS |  | Gas, Plugged (1)   |
|  | PAD           |  | Oil, Active (4)    |
|  | TWNRNG        |  | Oil, Cancelled (1) |
|  | SECTIONS      |  | Oil, New (6)       |
|  |               |  | Oil, Plugged (3)   |



SHEET 1 OF 5

PREPARED BY:  
 DELTA FIELD SERVICES, LLC.  
 510 TRENTON ST, WEST MONROE, LA 71291  
 318-323-6900 OFFICE  
 JOB No. 20251211





## CUT & FILL CROSS SECTIONS

COMANCHE WEST WELL PAD

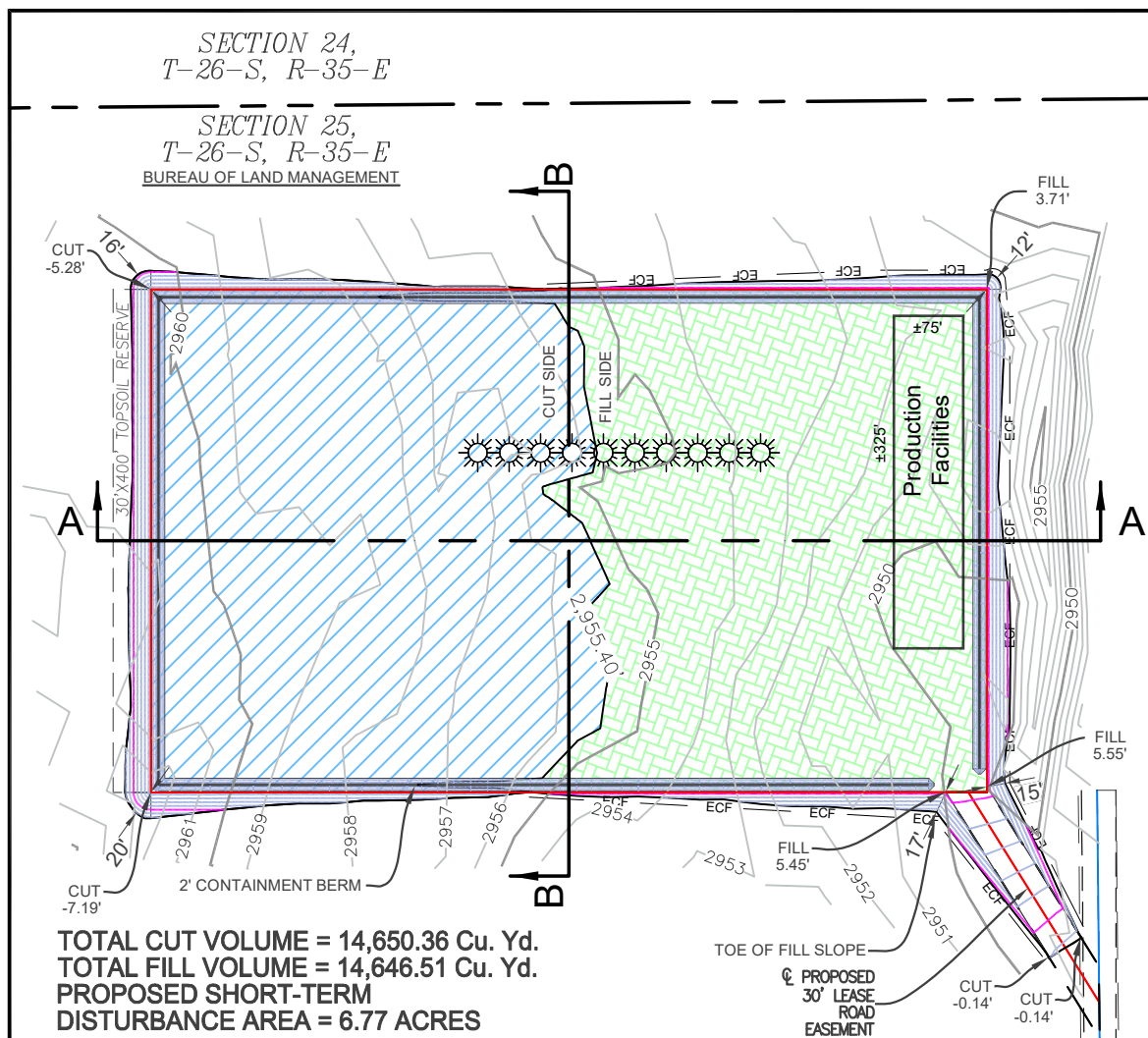
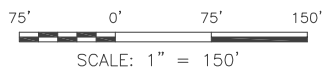
SEC. 26 TWP. 26-S RGE. 35-E

SURVEY: N.M.P.M.

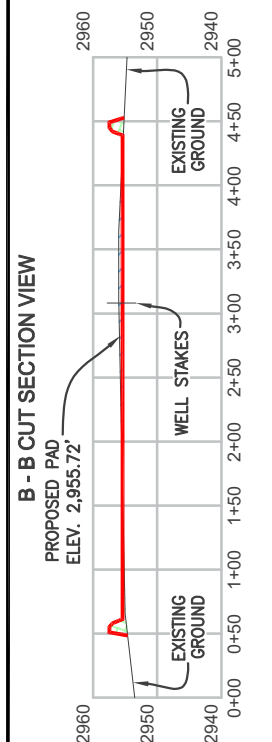
COUNTY: LEA

OPERATOR: 3R OPERATING, LLC

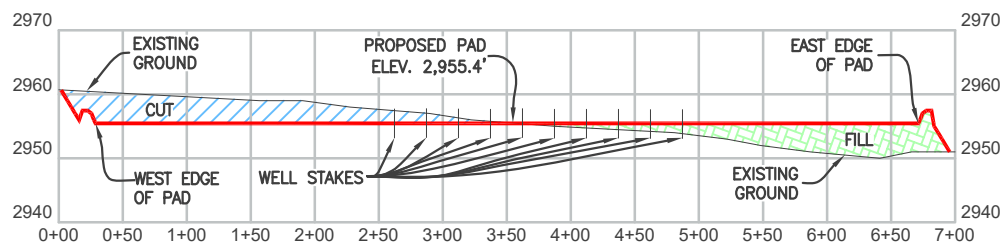
U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, N.M., T.X.



### A - A CUT SECTION VIEW

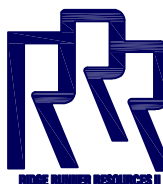


HORIZONTAL: 1" = 150'  
VERTICAL: 1" = 30'



HORIZONTAL: 1" = 150'  
VERTICAL: 1" = 30'

**SEPTEMBER 10, 2025**



## LEGEND

PROPOSED PAD SURFACE

PROPOSED LEASE ROAD

EXIST. 1' CONTOUR LINES

EXIST. 5' CONTOUR LINES

PROP. 1' CONTOUR LINES

PROP. 5' CONTOUR LINES

EROSION CONTROL FENCE

— ECF — ECF —

JOB NUMBER

20251211

SHEET 1 OF 1

DRAWN BY: ERR

DATE DRAWN: 8/26/2025

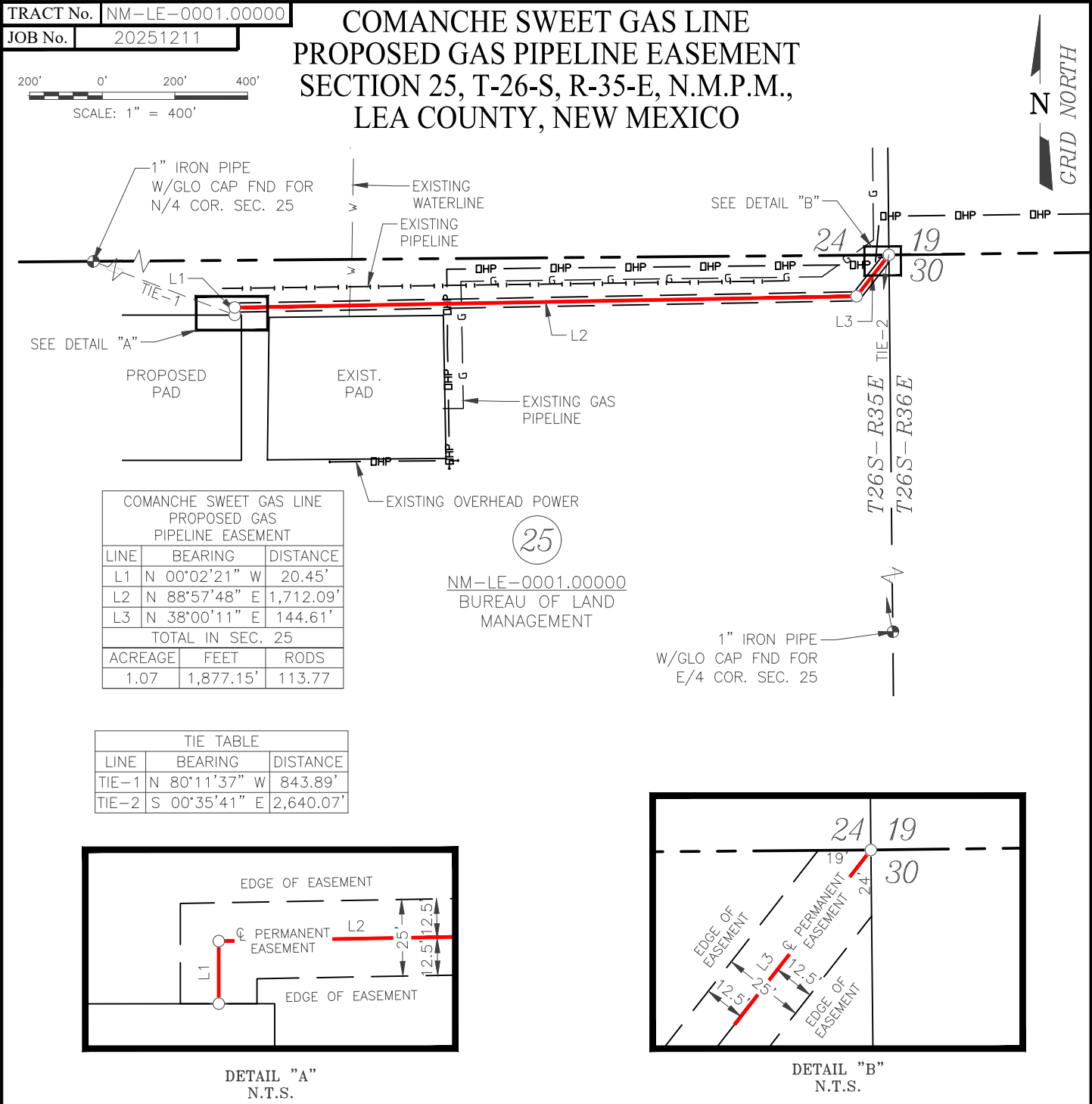
REV.	DATE	BY
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(318) 323-6900








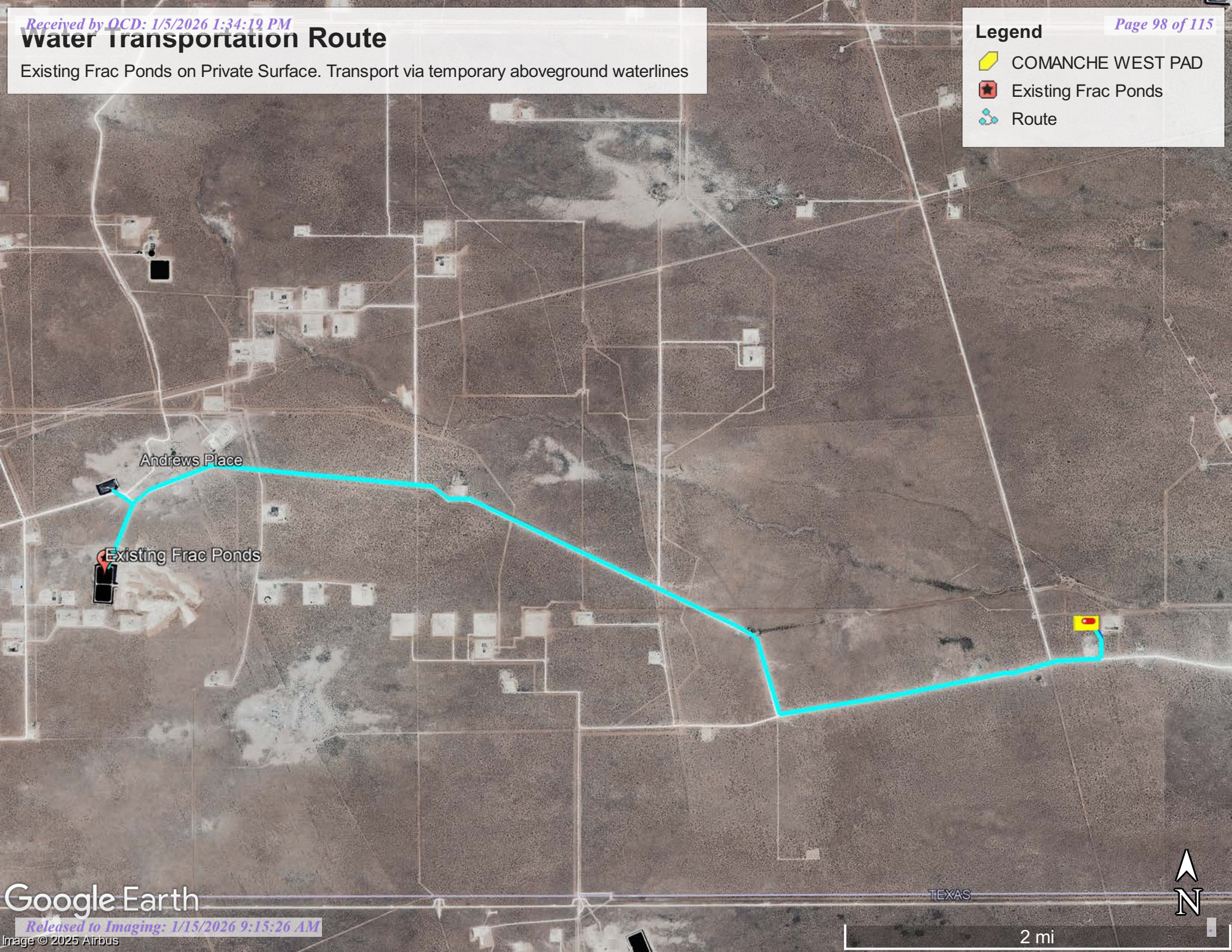


# water transportation Route

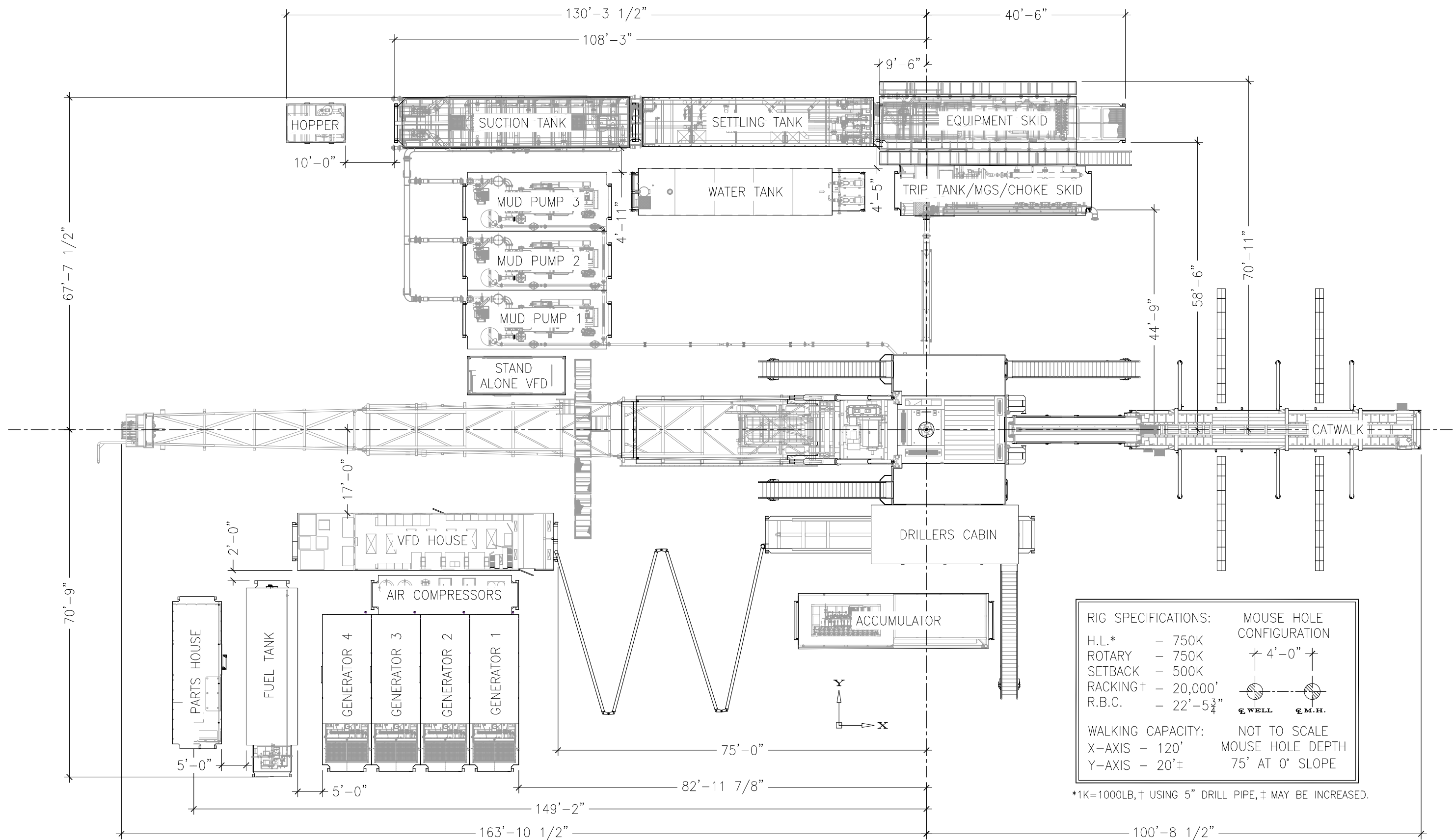
Existing Frac Ponds on Private Surface. Transport via temporary aboveground waterlines


## Legend

-  COMANCHE WEST PAD
-  Existing Frac Ponds
-  Route







REVISION HISTORY						UNSPECIFIED TOLERANCES			PROPRIETARY INFORMATION	CONTACT INFORMATION		DRAWN BY:	DATE:	RIG 212 EQUIPMENT LAYOUT GENERAL ARRANGEMENT		
REV	DESCRIPTION	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DIMENSIONS OVER	MACHINED	WELDMENT				MC	03/17/2020			
A	ISSUED FOR REVIEW	02/12/2020	MC	JM	—	0 1.5 ±0.008 ±1/32										
0	GENERATORS CORRECTED	03/23/2020	MC	JM	—	1.5 7.0 ±0.010 ±1/32										
1	ADDED MP3, ADDED RIG SPECS, UPDATED FORMATTING	06/1/2020	JM	JM	—	7.0 20.0 ±0.020 ±1/16										
2	UPDATED RIG SPECS	07/23/2020	JM	JM	—	20.0 50.0 ±0.030 ±1/8										
3	ADDED GEN 4	05/24/2022	JM	JM	—	50.0 120.0 ±0.060 ±3/16										
—	—	—	—	—	—	120.0 240.0 ±0.080 ±1/4										
—	—	—	—	—	—	ANGLES ±0.1° ±0.5°										
—	—	—	—	—	—	BREAK ALL CORNERS 06 X 45° MACHINE FINISH 250 MAX.										
—	—	—	—	—	—	MACHINED DIAMETERS ON SAME CENTERLINE SHALL BE COAXIAL WITHIN (±0.001) DRILLED HOLE LOCATION (±0.001) CHAMFER ALL TAPPED HOLES 45° TO FIRST THREAD ROOT. DIMENSIONS MARKED ( ) ARE FOR GENERAL REFERENCE ONLY, NOT TO BE USED FOR CONSTRUCTION.										
											THIRD ANGLE PROJECTION		SIZE: B	SCALE (UNO): 1:225	ESTIMATED WEIGHT (LBS): —	
													DWG NO. RIG212-GA-001	REV: 3	SHEET: 1 OF 1	



## WELL PAD LOCATION PLAT

COMANCHE WEST WELL PAD

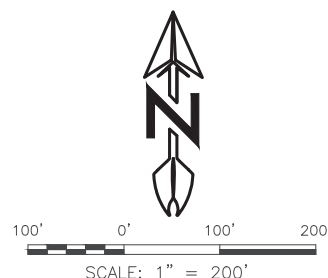
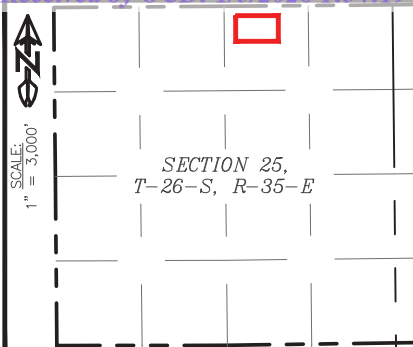
SEC. 25 TWP. 26-S RGE. 35-E

SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: 3R OPERATING, LLC

U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, N.M., T.X.



PROPOSED PAD		
LINE	BEARING	DISTANCE
SECTION 25		
L1	N 89°59'34" E	665.00'
L2	S 00°00'00" E	399.98'
L3	S 89°59'34" W	665.00'
L4	N 00°00'00" W	399.98'

TIE TABLE		
TIE	BEARING	DISTANCE
TIE-1	N 52°06'46" W	234.18'
TIE-2	N 72°24'12" E	1,870.08'

NAD 83		
A	X:855211.66 Y:372873.51	LAT:32.02106568 LON:-103.32058871
B	X:855876.66 Y:372873.59	LAT:32.02104876 LON:-103.31844331
C	X:855876.66 Y:372473.62	LAT:32.01994940 LON:-103.31845543
D	X:855211.66 Y:372473.53	LAT:32.01996632 LON:-103.32060081

NAD 27		
A	X:814023.13 Y:372816.14	LAT:32.02093835 LON:-103.32013108
B	X:814688.13 Y:372816.22	LAT:32.02092141 LON:-103.31798575
C	X:814688.11 Y:372416.26	LAT:32.01982205 LON:-103.3179792
D	X:814023.12 Y:372416.18	LAT:32.01983899 LON:-103.32014323

## NOTES

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY.



RIDGE RUNNER RESOURCES, INC.

SEPTEMBER 10, 2025

BUREAU OF  
LAND MANAGEMENTSECTION 25,  
T-26-S, R-35-E

PROPOSED  
LEASE ROAD

EXISTING  
LEASE ROAD

TOTAL SHORT-TERM DISTURBANCE AREA = 6.39 ACRES  
INCLUDES THE FOLLOWING:  
WELL PAD = 6.11 ACRES  
TOPSOIL RESERVE = 0.28 ACRES

## CERTIFICATION

I, LLOYD P. SHORT, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21653, DO HEREBY CERTIFY THAT THIS EASEMENT SURVEY 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. I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS INSTRUMENT IS AN EASEMENT SURVEY PLAT CROSSING AN EXISTING TRACT OR TRACTS.

## BASIS OF BEARING

ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. ALL BEARINGS, DISTANCES, COORDINATES AND AREAS ARE BASED GRID MEASUREMENTS UTILIZING A COMBINED SCALE FACTOR OF 0.99975847 AND A CONVERGENCE ANGLE OF 0.05091389°.

## JOB NUMBER

20251211

1

9/10/2025

ERR

REV.

DATE

BY

SHEET 2 OF 5

DRAWN BY: ANC

DATE DRAWN: 08/21/2025

CHECKED BY: MWS



510 TRENTON STREET  
WEST MONROE, LA 71291  
(318) 323-6900

# WELL PAD LOCATION PLAT

COMANCHE WEST WELL PAD

SEC. 25 TWP. 26-S RGE. 35-E

SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: 3R OPERATING, LLC

U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, N.M., T.X.

**COMANCHE 25 36 FED COM 201H  
3R OPERATING, LLC**

277' FNL 2191' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855471.66' / Y:372743.54'

LAT:32.02070175 / LON:-103.31975384

**NAD 27, SPCS NM EAST**

X:814283.13' / Y:372686.18'

LAT:32.02057441 / LON:-103.31929626

ELEVATION = 2,958'

**COMANCHE 25 36 FED COM 202H  
3R OPERATING, LLC**

278' FNL 2166' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855496.66' / Y:372743.54'

LAT:32.02070110 / LON:-103.31967319

**NAD 27, SPCS NM EAST**

X:814308.13' / Y:372686.17'

LAT:32.02057376 / LON:-103.31921560

ELEVATION = 2,957'

**COMANCHE 25 36 FED COM 301H  
3R OPERATING, LLC**

278' FNL 2141' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855521.66' / Y:372743.54'

LAT:32.02070045 / LON:-103.31959254

**NAD 27, SPCS NM EAST**

X:814333.13' / Y:372686.17'

LAT:32.02057312 / LON:-103.31913495

ELEVATION = 2,957'

**COMANCHE 25 36 FED COM 302H  
3R OPERATING, LLC**

278' FNL 2116' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855546.66' / Y:372743.54'

LAT:32.02069981 / LON:-103.31951188

**NAD 27, SPCS NM EAST**

X:814358.13' / Y:372686.17'

LAT:32.02057247 / LON:-103.31905430

ELEVATION = 2,956'

**COMANCHE 25 36 FED COM 401H  
3R OPERATING, LLC**

277' FNL 2091' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855571.66' / Y:372743.53'

LAT:32.02069916 / LON:-103.31943123

**NAD 27, SPCS NM EAST**

X:814383.13' / Y:372686.17'

LAT:32.02057182 / LON:-103.31897365

ELEVATION = 2,955'

**COMANCHE 25 36 FED COM 402H  
3R OPERATING, LLC**

278' FNL 2066' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855596.66' / Y:372743.53'

LAT:32.02069851 / LON:-103.31935058

**NAD 27, SPCS NM EAST**

X:814408.12' / Y:372686.17'

LAT:32.02057117 / LON:-103.31889300

ELEVATION = 2,955'

**COMANCHE 25 36 FED COM 501H  
3R OPERATING, LLC**

279' FNL 2041' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855621.66' / Y:372743.53'

LAT:32.02069786 / LON:-103.31926992

**NAD 27, SPCS NM EAST**

X:814433.12' / Y:372686.17'

LAT:32.02057052 / LON:-103.31881235

ELEVATION = 2,955'

**COMANCHE 25 36 FED COM 502H  
3R OPERATING, LLC**

279' FNL 2016' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855646.66' / Y:372743.53'

LAT:32.02069721 / LON:-103.31918927

**NAD 27, SPCS NM EAST**

X:814458.12' / Y:372686.16'

LAT:32.02056987 / LON:-103.31873170

ELEVATION = 2,954'

**COMANCHE 25 36 FED COM 801H  
3R OPERATING, LLC**

279' FNL 1991' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855671.66' / Y:372743.53'

LAT:32.02069656 / LON:-103.31910862

**NAD 27, SPCS NM EAST**

X:814483.12' / Y:372686.16'

LAT:32.02056922 / LON:-103.31865105

ELEVATION = 2,954'

**COMANCHE 25 36 FED COM 802H  
3R OPERATING, LLC**

279' FNL 1966' FEL, SECTION 25

**NAD 83, SPCS NM EAST**

X:855696.66' / Y:372743.53'

LAT:32.02069591 / LON:-103.31902796

**NAD 27, SPCS NM EAST**

X:814508.12' / Y:372686.16'

LAT:32.02056857 / LON:-103.31857039

ELEVATION = 2,953'


**NOTES**

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY.

**BASIS OF BEARING**

ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. ALL BEARINGS, DISTANCES, COORDINATES AND AREAS ARE BASED GRID MEASUREMENTS UTILIZING A COMBINED SCALE FACTOR OF 0.99975847 AND A CONVERGENCE ANGLE OF 0.05091389°.

**JOB NUMBER**

20251211

1

9/10/2025

ERR

REV.

DATE

BY

SHEET 3 OF 5

DRAWN BY: ANC

DATE DRAWN: 08/21/2025

CHECKED BY: MWS



510 TRENTON STREET  
WEST MONROE, LA 71291  
(318) 323-6900

# CUT & FILL CROSS SECTIONS

COMANCHE WEST WELL PAD

SEC. 26 TWP. 26-S RGE. 35-E

SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: 3R OPERATING, LLC

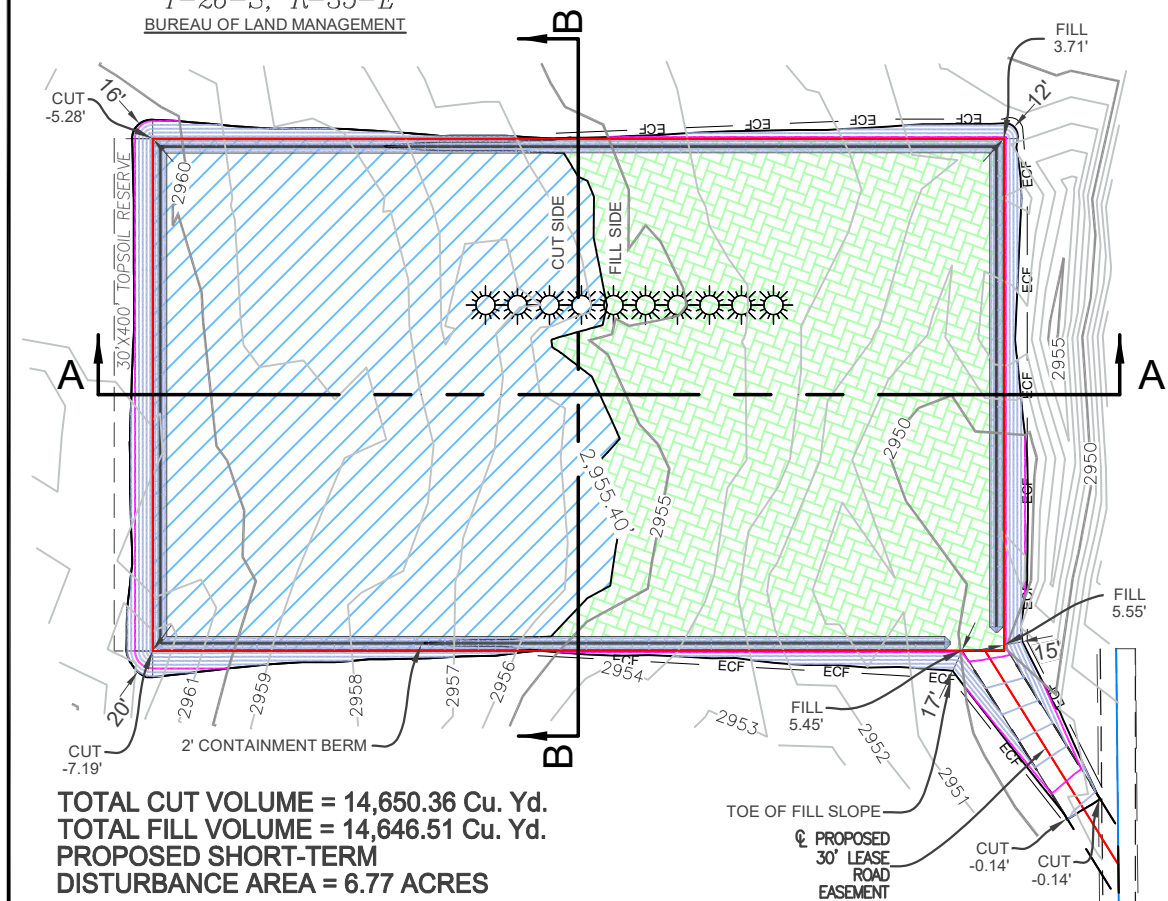
U.S.G.S. TOPOGRAPHIC MAP: JAVELINA BASIN, N.M., T.X.

75' 0' 75' 150'

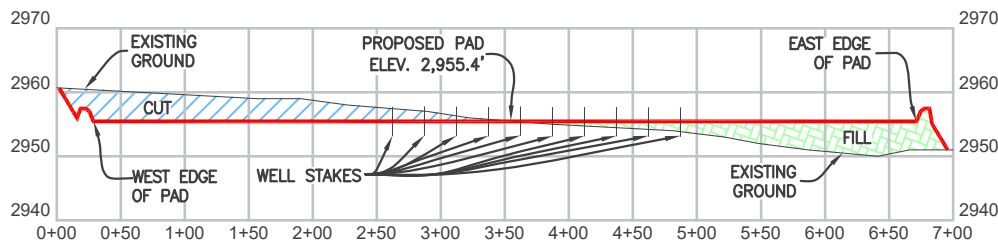
SCALE: 1" = 150'

SECTION 24,  
T-26-S, R-35-E

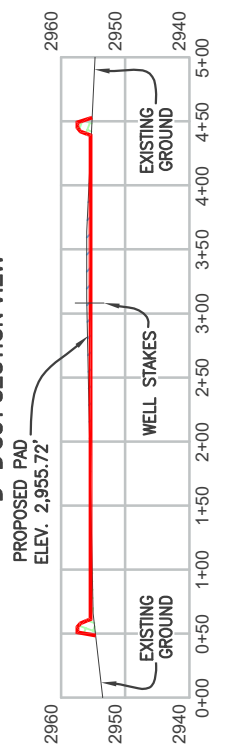
SECTION 25,  
T-26-S, R-35-E  
BUREAU OF LAND MANAGEMENT



A - A CUT SECTION VIEW



B - B CUT SECTION VIEW



HORIZONTAL: 1" = 150'  
VERTICAL: 1" = 30'

CUT AREA

FILL AREA

HORIZONTAL: 1" = 150'  
VERTICAL: 1" = 30'

SEPTEMBER 10, 2025



## LEGEND

PROPOSED PAD SURFACE  
PROPOSED LEASE ROAD  
EXIST. 1' CONTOUR LINES  
EXIST. 5' CONTOUR LINES

PROP. 1' CONTOUR LINES  
PROP. 5' CONTOUR LINES  
EROSION CONTROL FENCE  
ECF ECF

JOB NUMBER

20251211

REV.

DATE

BY

SHEET 1 OF 1

DRAWN BY: ERR

DATE DRAWN: 8/26/2025

CHECKED BY: MWS



510 TRENTON STREET  
WEST MONROE, LA 71291  
(318) 323-6900



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

## PWD Data Report

01/05/2026

**APD ID:** 10400107558

**Submission Date:** 09/30/2025

**Operator Name:** 3R OPERATING LLC

**Well Name:** COMANCHE 25 36 FED COM

**Well Number:** 802H

**Well Type:** CONVENTIONAL GAS 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:** 3R OPERATING LLC

**Well Name:** COMANCHE 25 36 FED COM

**Well Number:** 802H

**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:**

**Describe 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:** 3R OPERATING LLC**Well Name:** COMANCHE 25 36 FED COM**Well Number:** 802H**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:** 3R OPERATING LLC

**Well Name:** COMANCHE 25 36 FED COM

**Well Number:** 802H

## 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**





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

## Bond Info Data

01/05/2026

**APD ID:** 10400107558

**Submission Date:** 09/30/2025

Highlighted data  
reflects the most  
recent changes  
[Show Final Text](#)

**Operator Name:** 3R OPERATING LLC

**Well Name:** COMANCHE 25 36 FED COM

**Well Number:** 802H

**Well Type:** CONVENTIONAL GAS WELL

**Well Work Type:** Drill

### Bond

**Federal/Indian APD:** FED

**BLM Bond number:** NMB105811880

**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:**

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:** 3R Operating LLC **OGRID:** 331569 **Date:** 1 / 5 / 26

**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
See attached						

**IV. Central Delivery Point Name:** Comanche Production Facility [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
See attached						

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

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

**Section 2 – Enhanced Plan****EFFECTIVE APRIL 1, 2022**

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

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

**IX. Anticipated Natural Gas Production:**

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

**X. Natural Gas Gathering System (NGGS):**

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

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

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

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

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

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

### **Section 3 - Certifications**

**Effective May 25, 2021**

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

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

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

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

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

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

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

### **Section 4 - Notices**

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

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

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

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

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

Signature: <i>Austin Tramell</i>
Printed Name: Austin Tramell
Title: Director Environmental & Regulatory
E-mail Address: atramell@3roperating.com
Date: 1/5/2026
Phone: 832-810-1037
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:

## VI. Separation Equipment

Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing modeling software to ensure adequate capacity for anticipated production volumes and conditions. Production composition and the volumes will be utilized as inputs to a process model which predicts relative amounts of gas, oil and water throughout the process. The high-volume case will be used to size equipment, piping and instrumentation.

Each well has a dedicated 3-phase separator and gas from that separator is taken directly to gas sales. Facility piping and pipeline will be sized to allow peak volumes to flow with minimal pressure loss and deliver to the midstream gatherer at an acceptable pressure. Water will be conveyed directly to tankage. Oil from 3-phase separators will be conveyed to a heated separator for enhanced liquid-liquid separation and degassing. Vapors from the heater treater are routed to flare. Oil and water storage tanks vapor outlets utilize a closed vent vapor system to ensure all working & breathing and flashing losses are routed to the flare which is sized to accommodate peak expected production volume. Flash volumes are estimated using the high-volume case.

## VII. Operational Practices

The operator will ensure pipeline connectivity before producing hydrocarbons and will operate a closed vent vapor capture system that is designed to capture all associated and evolved gas during normal operation. Venting will only occur during maintenance activities or equipment failure. The operator may utilize the following from Section 3 for its operations to minimize flaring:

- A. The operator will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. The operator will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas. If there is no adequate takeaway for the gas, compression will be added to deliver volumes that are produced. Well production may also be curtailed to manage the flow of gas and not overrun compression.
- B. All drilling operations will be equipped with a rig flare located at least 100' from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations.
- C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. It is not anticipated that gas will not meet pipeline standards; however, if natural gas does not meet gathering pipeline quality specifications, the operator will flare the natural gas for up to 60 days or until the natural gas meets the pipeline quality specifications, whichever is sooner. The operator will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will be analyzed twice per week and the gas will be routed into a gathering system as soon as pipeline specifications are met.
- D. Natural gas will not be flared with the exceptions and provisions listed in the 19.15.27.8 D.(l) through (4). If there is no adequate takeaway for the separator gas, well(s) will be curtailed until the natural gas gathering system is available with exception of emergency or malfunction situations. Venting and/or flaring volumes will be measured using a total flow meter and reported appropriately.
- E. The operator will comply with the performance standards requirements and provisions listed in 19.15.27.8 E.(l) through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. The operator will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.
- F. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. The operator will install equipment to measure the volume of natural gas flared from existing process piping, or a flowline piped from equipment such as high-

pressure separators, heater treaters, or vapor recovery units associated with a well or facility associated with a well authorized by an APD issued after May 25, 2021, that has an average daily production greater than 60 Mcf/day. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, the operator will estimate the volume of vented or flared natural gas. Measuring equipment will conform to industry standards and will not be designed or equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.

#### **VIII. Best Management Practices**

The operator utilizes automated engineering controls included in facility design to minimize venting and flaring. Additionally, operator's SOP support the minimization of flare and venting.

If the main gas outlet becomes unavailable and pressure increases on the outlet sales line, produced gas will be routed directly to the facility flare. The facility control system will alert personnel to the need for maintenance and appropriate response to the temporary flaring event. The facility design includes a closed vent vapor capture system to route flash from the heater treater and tanks to the flare. For maintenance activities, the operator will utilize the facility flare to blowdown equipment and piping whenever practical to minimize venting.



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

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oed/contact-us>

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

ACKNOWLEDGMENTS

Action 540142

ACKNOWLEDGMENTS

Operator:  3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:  331569
	Action Number:  540142
	Action Type:  [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
-------------------------------------	--

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

CONDITIONS

Action 540142

**CONDITIONS**

Operator: 3R Operating, LLC 20405 State Highway 249 Houston, TX 77070	OGRID:
	331569
	Action Number: 540142
Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)	

**CONDITIONS**

Created By	Condition	Condition Date
atramell01	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/5/2026
atramell01	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	1/5/2026
jeffrey.harrison	Administrative order required for non-standard spacing unit prior to production.	1/15/2026
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	1/15/2026
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	1/15/2026
jeffrey.harrison	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.	1/15/2026
jeffrey.harrison	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.	1/15/2026