AFMSS

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

Application for Permit to Drill

APD Package Report

Date Printed:

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

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

- Application Report
- Application Attachments
  -- Well Plat: 1 file(s)

- Drilling Plan Report
- Drilling Plan Attachments
  -- Blowout Prevention Choke Diagram Attachment: 2 file(s)
  -- Blowout Prevention BOP Diagram Attachment: 1 file(s)
  -- Casing Design Assumptions and Worksheet(s): 3 file(s)
  -- Hydrogen sulfide drilling operations plan: 1 file(s)
  -- Proposed horizontal/directional/multi-lateral plan submission: 4 file(s)
  -- Other Facets: 4 file(s)

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

- PWD Report
- PWD Attachments
  -- None

- Bond Report

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- Bond Attachments
  -- None

Form 3160-3
(October 2024)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-015-59186

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory

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

At surface

At proposed prod. zone

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

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)

16. No of acres in lease

17. Spacing Unit dedicated to this well

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth

20. BLM/BIA Bond No. in file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

22. Approximate date work will start*

23. Estimated duration

24. Attachments

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

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

25. Signature

Name *(Printed/Typed)*

Date

Title

Approved by *(Signature)*

Name *(Printed/Typed)*

Date

Title

Office

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

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

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 10/22/2026

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INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

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

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

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

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

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

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

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

Released to Imaging: 11/18/2026 1:59:10 PM

Approval Date: 10/22/2026

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Additional Operator Remarks

Location of Well

0. SHL: SWNE / 1739 FNL / 1410 FEL / TWSP: 18S / RANGE: 27E / SECTION: 6 / LAT: 32.779338 / LONG: -104.313832 (TVD: 0 feet, MD: 0 feet)

PPP: SWNW / 1650 FNL / 100 FWL / TWSP: 18S / RANGE: 27E / SECTION: 5 / LAT: 32.779506 / LONG: -104.308921 (TVD: 3039 feet, MD: 3654 feet)

PPP: SENW / 1650 FNL / 1318 FWL / TWSP: 18S / RANGE: 27E / SECTION: 5 / LAT: 32.779418 / LONG: -104.304958 (TVD: 3047 feet, MD: 4872 feet)

PPP: SWNE / 1651 FNL / 2632 FEL / TWSP: 18S / RANGE: 27E / SECTION: 5 / LAT: 32.779322 / LONG: -104.300669 (TVD: 3056 feet, MD: 6191 feet)

BHL: SENE / 1650 FNL / 10 FEL / TWSP: 18S / RANGE: 27E / SECTION: 5 / LAT: 32.779132 / LONG: -104.292134 (TVD: 3075 feet, MD: 8815 feet)

BLM Point of Contact

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

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UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT – CARLSBAD FIELD OFFICE

Applicant: Riley Permian Operating Company

Project Title: Calmer Than You 5 Fed Com

NEPA #: DOI-BLM-NM-P020-2026-1449-EA

Location: Eddy County, New Mexico

Lease Number: NMLC0026874, NMLC0049648

Project Type: APD

SURFACE USE CONDITIONS OF APPROVAL

Failure of the operator to comply with these requirements may result in the assessment of 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.*

Calmer Than You 5 Fed Com #11

Calmer Than You 5 Fed Com #22

Calmer Than You 5 Fed Com #13

Calmer Than You 5 Fed Com #24

APPLICATION FACILITIES

1. CONSTRUCTION NOTIFICATION

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

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

2. ACCESS ROAD(S)

ROAD WIDTH & GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10% unless the box below is checked. The maximum width of surface disturbance from construction will be 25 feet.

☐ The segments of road where the grade is more than 10% for greater than 300 feet shall be designed by a professional engineer.

CROWNING & DITCHING

Crowning with materials onsite and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross-section diagrams in turnout diagram. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road.)

☐ Ditching will be required on both sides of the roadway as shown on the attached plat or as staked in the field.

☐ Flat blading is authorized on segment(s) delineated on the attached plat.

DRAINAGE

Drainage control shall be ensured over the entire road using borrow ditches, out-sloping, in-sloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

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.***

All lead-off and turnout ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope:

Percent Slope	Spacing Interval
0% – 4%	400’ – 150’
4% – 6%	250’ – 125’
6% – 8%	200’ – 100’
8% – 10%	150’ – 075’

Turnout ditches and drainage leadoffs will not be constructed in such a manner as to increase or decrease the natural flow of water into or out of cave or karst features.

LEAD-OFF

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 1 foot above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

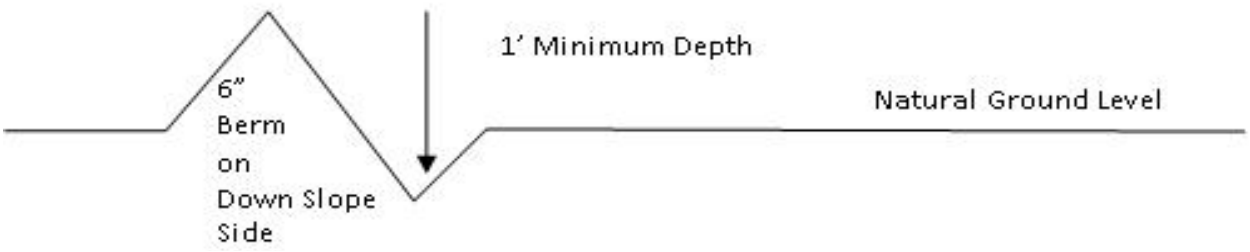
For this road the spacing interval for lead-off ditches shall be at:

☒ 400-foot intervals.

☐ 2500-foot intervals.

☐ Locations staked in the field as per spacing intervals above.

☐ Locations delineated on the attached plat.



On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead off ditch. Drainage dip location and spacing shall be determined by the formula:

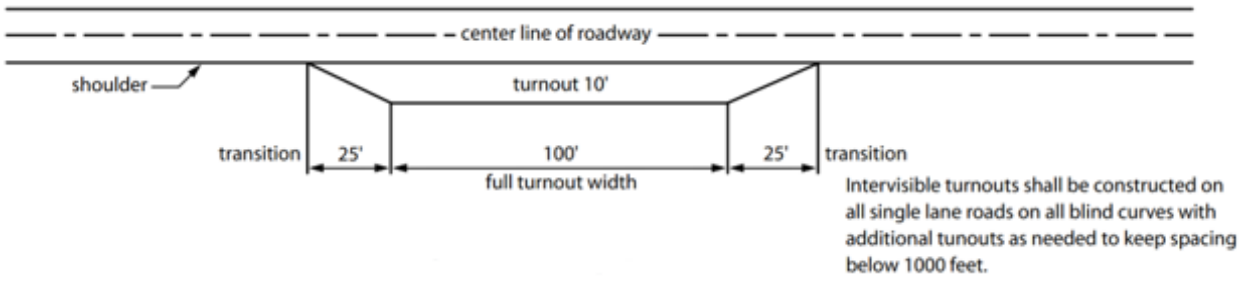
$$Spacing\ Interval = Road\ Slope\ in\ \% + 100'$$

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:

$$400\ ft\ road\ with\ 4\%\ slope = \frac{400'}{4\%} + 100' = 200'\ leadoff\ ditch\ interval$$

TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 1000-foot intervals, or the turnouts will be intervisible, whichever is less. **Turnouts will conform to the following diagram:**



Additional options can be found within the fourth edition of the **Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (The Gold Book)**.

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 should 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. When surfacing is required, surfacing materials will be compacted to a minimum thickness of **6 inches** with caliche material. The width of surfacing shall be no less than the driving surface.

Erosion Control & Road Maintenance

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault.

Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

Public Access

The holder will not restrict public access along this road without specific written approval being granted by the Authorized Officer. Gates or cattle guards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

Reclamation

When the road is abandoned, it will be ripped at least sixteen inches deep, including turnouts. The caliche may be reclaimed for re-use before ripping, if so desired. Alternately, the caliche can be plowed under with a grader, or other soil turning device, and the plowed surface disked before seeding. All culverts or other structures will be removed. All fill material will be replaced into the cut areas; barrow and lead-off ditches, drainage dips, or other erosion control earthwork will be filled or smoothed; and the abandoned road returned to the natural contours, as closely as possible. Water breaks at least eight inches high will be constructed. Traffic barriers will be installed at all vehicular access points to prevent further use of the road.

The Authorized Officer for the BLM, Carlsbad Field Office (505-234-5972) will be contacted for full reclamation of the access road upon abandonment of the wells being served by the access road.

3. ELECTRIC & FIBER CABLE(S)

All power poles used shall be a drab blond color and a non-reflective / non-specular wire shall be used.

Power lines shall be constructed and designed in accordance with standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder assumes the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms, and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this corridor, should they

be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms, and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

There will be no clearing or blading of the corridor unless otherwise agreed to in writing by the Authorized Officer.

The holder shall not use the corridor as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder shall take whatever steps are necessary to ensure that the route is not used as a roadway.

For reclamation remove poles, lines, transformer, etc. and dispose of properly. Fill in any holes from the poles removed. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

Buried Electric & Fiber Cables

The construction of this project will consist of digging a trench to a depth of at least 40 inches. Then install the power line and cover with backfill dirt. After completing construction of the buried power line, the line shall be marked with underground power line warning signs at least every 1,000 feet.

4. PIPELINE(S)

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

All construction and maintenance activity shall be confined to the authorized permit length of **[Project Info – Pipeline Disturbance – Length Ft] feet**. 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.

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

A sign stating “This Pipeline Corridor is Closed to Vehicular Traffic Due to Reclamation Efforts in Progress” will be placed where the pipeline crosses any road (both sides of the road), and at the beginning and end of the pipeline route on BLM administered lands. ***Upon successful completion of reclamation, no further motorized travel will occur on the pipeline route.***

TEMPORARY FRESHWATER PIPELINES / FLOWLINES

Surface pipelines, 6.5-inch to 16-inch OD, may be in place for no more than 180 days not including installation. **This 180-day period shall begin on the date of approval.** Surface pipeline will be in operation for no more than 180-days, with a maximum of seven (7) days authorized for installation of the lay flat poly line prior to operation.

Surface pipelines larger than 6.5-inch to-16-inch OD may be in place for no more than 180-days from date of authorization, unless a SF-299 is submitted within 30 days of this decision expiring requesting a long term buried fresh water pipeline, and processing of the SF-299 is not yet complete at the end of 30-days, in which case the line(s) may be left in place until a decision is made on the SF-299.

- All lines must be removed when no longer in use.
- Width of authorized use is 15-feet.

No blading and/or earthwork will be allowed to place the pipeline, except burying the line under crossings (with a minimum cover of 36 inches between the top of the pipe and ground level.) The pipeline will be buried under all intersecting routes, including BLM-designated trails and access roads into caliche pits, rancher watering stations, etc. All such buried crossings will be removed when the pipeline is removed, unless otherwise approved by the Authorized Officer. Pipelines larger than 6.5-inch OD may utilize other crossing methodologies (but any fill placed over pipeline must be brought in from off-site.) Placement of surface pipelines along or under public roadways may require permits from the road authority.

The pipeline shall stay within 10 feet maximum of existing disturbance (e.g. lease road, pipeline corridor etc.); placement must be within 5 feet whenever possible. Due to potential damage to natural resources, no work is allowed during inclement weather.

Placement of pumps or other high-maintenance equipment shall be installed along maintained lease roads. Gas or diesel pumps, generators, or compressors shall be placed on geosynthetic lining [or 20 mil plastic] and in a containment structure capable of containing all potentially released fuels. Containments must be protected against wildlife deaths in accordance with best management practices. **No water may be released into the environment without BLM consent.**

The pipeline will be marked with your company's name and contact number, at beginning and ending points, at all public road crossings, and at intervals not exceeding every 0.5 mile, unless otherwise approved by the Authorized Officer. Should unforeseen damage occur to resources, BLM will require reclamation of the impacted land.

SURFACE PIPELINE

If the pipeline route follows an existing road or buried pipeline route, the surface pipeline route shall be installed no farther than 10 feet from the edge of the road or buried pipeline route. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or pipeline routes.

The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline will be "snaked" around hummocks and dunes rather than suspended across these features.

The pipeline shall be buried at a minimum of 36 inches under all roads, including "two-tracks" and trails. Burial will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of the construction, shall be returned to at least its former state, with no bumps, dips, or soft spots remaining in the road surface.

Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

In areas where more than 4 pipelines are placed side by side, earthen "cross-over" mounds, at least six feet wide, will be placed a minimum of 0.25 miles apart. Fill will be placed over the pipes to completely cover them in such a manner that wildlife and livestock can walk across the pipes.

No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

BURIED PIPELINE

The pipeline will be buried with a minimum cover of **36 inches** between the top of the pipe and ground level (including under roads). ***The pipeline must be buried at least 48-inches deep in irrigated fields.*** Boring is required where the line crosses all cement irrigation ditches. No damage should occur to the ditches. Consequently, if damage should occur, the holder is liable for any necessary repairs. The BLM Carlsbad Field Office will determine design standards for any necessary repair.

Blading of all vegetation will not be allowed. The maximum width of blading operations will not exceed **30-feet**. The trench is included in this area. Blading is defined as the complete removal of brush and ground vegetation. The operator shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil will be stripped to approximately **6-inches** in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

Clearing of brush will not be allowed. Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. The maximum width of clearing operations will not exceed **30-feet.**. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface or by using brush-hog / hydro-ax equipment to "mulch" woody vegetation.

The remaining area of the pipeline route (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, placement of dirt/spoil, etc.)

Areas of cut and/or fill totaling more than 6-vertical-feet requires specific site-by-site approval by the BLM Authorized Officer.

5. WELL PAD(S)

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from encountering soil and water. 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. The netting must not be in contact with fluids and must not have holes or gaps

Mitigation of tank battery and mud pit spills can be accomplished using special construction features, the use of permanent non-permeable pit liners to prevent leaching, appropriate berms constructed around the facilities, and leak detection systems. Upon completion of drilling, if it is determined that the well is a producer, access roads and the drill pad for this well must be surfaced with 6-inches of compacted caliche.

Consistent with 43 CFR 9212.1-3 and lease rights granted, the operator shall comply with fire prevention orders issued during times of very high fire danger.

Operators shall contact a BLM Surface Protection Specialist prior to surface abandonment operations for site specific objectives. Once the site is no longer in service or use, the site must undergo final abandonment. At final abandonment, the site 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 the abandonment of the site. All pads and 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. Seeding should 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.

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.

Open-Topped Tanks: 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.

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. The 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.

Containment Structures: 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. 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.

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

Flares: The flare line(s) discharge shall be located not less than 150 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned in a manner to compensate for wind changes, and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare. Flares shall be fitted with a device to prevent oil from being emitted into the air or off location. A fuel break shall be maintained around the flare site to prevent ignition of wildfires. All flammable products and debris shall be cleared and vegetation will be mowed (or trimmed where mowing is not practical) to a height not to exceed 4 inches. The fuel-break area will extend from the flare stack a total distance equal to 3 times the height of the flare stack.

Tank Battery: Tank battery locations will be lined and bermed. A 20-mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater. 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.

PAD CONSTRUCTION

Material from the pits should be used for the construction of the pad. Roads and the drill pad for this well must be surfaced with 6-inches of compacted caliche upon completion of well if it is determined to be a producer.

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 permit. **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.

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

PRODUCTION (POST-DRILLING)

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.

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.

Chemical and Fuel Secondary Containment and Exclosure Screening: The operator will prevent all hazardous, poisonous, flammable, and toxic substances from encountering 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.

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.

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.

RESERVE PIT

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic. The reserve pit may be constructed in predominantly fill material if it is lined as specified above and a temporary or emergency pit may be constructed immediately adjacent to the reserve pit if the pit remains within the project boundary.

Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is not to be ruptured to facilitate drying; a ten-month period after completion of the well is allowed for drying of the pit content. The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit. Reserve Pit construction and reclamation will be subject to the New Mexico Oil Conservation Division's Pit Construction and Closure Guidelines.

SPECIAL STIPULATIONS

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 100 ft) 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, 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.**

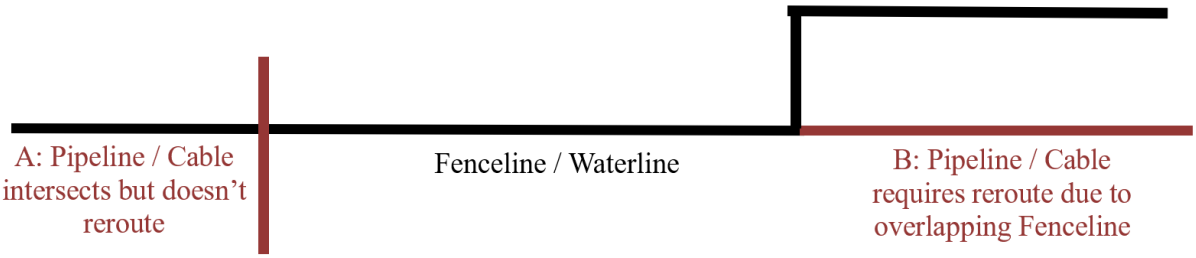
1. Temporary halting of all construction, drilling, and production activities to lower noise.
2. Temporary shut-off of all artificial lights at night.

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 confirmation that all activity within 100 ft 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.

2. RANGELAND RESOURCES

Scenario A below does not require routing to range. Scenario B (projects that overlap fences / waterlines (which require reroutes)) need to be routed to Range.



200 ft from any watering point (trough, tank, well, storage) require routing to range.

CATTLEGUARDS

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.

FENCE REQUIREMENT

Where entry is 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).

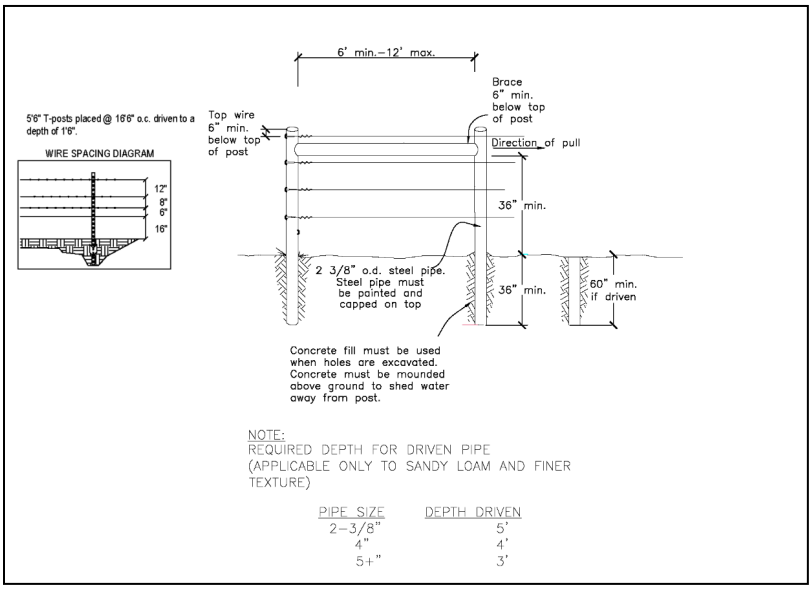


Figure 1: Pipe H-Brace Specifications

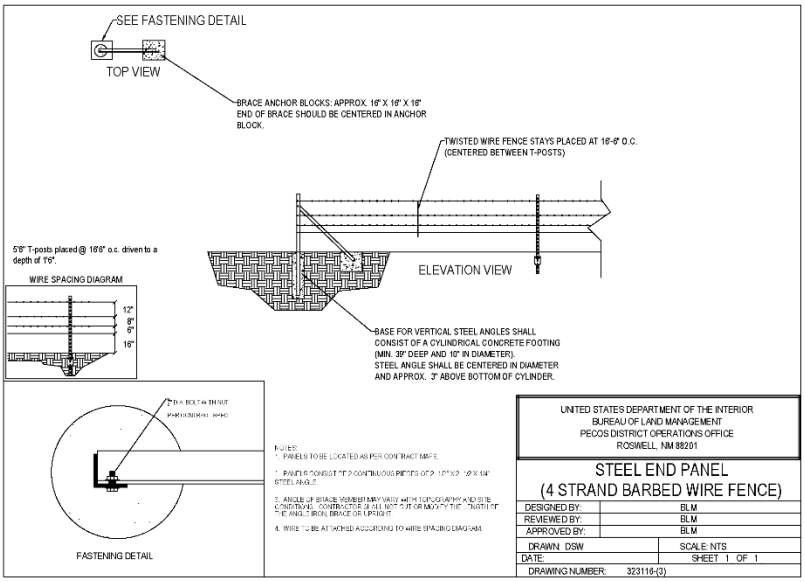


Figure 2: Angle Iron Brace Specifications

ESCAPE RAMPS

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

a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.
b. For trenches left open for eight (8) hours or more (or overnight), earthen escape ramps (built at no more than a 30-degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.
c. Holder shall ensure safe passage for livestock and wildlife during construction of the welded pipe on surface prior to laying in the trench every quarter of a mile or at grazing permittees reasonable discretion.

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 project, caused by operations from the project, 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.***

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 associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

African Rue (*Peganum Harmala*)

If African Rue is present within the proposed project, the following stipulations apply:

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 **4% Arsenal** (Imazapyr) and 2% Roundup (Glyphosate) along with a nonionic surfactant. Any other chemicals or combinations shall be approved by the BLM Noxious Weeds Coordinator prior to treatment. African Rue shall be sprayed in connection to any dirt working activities or disturbances to the site being sprayed. Spraying of African Rue shall be done on immature plants at initial growth through flowering and mature plants between budding and flowering stages. Spraying shall not be conducted after flowering when plant is fruiting. This will ensure optimal intake of chemical and decrease chances of developing herbicide resistance. After spraying, the operator or necessary parties must contact the Carlsbad Field Office to inspect the effectiveness of the application treatment to the plant species. No ground disturbing activities can take place until the inspection by the authorized officer is complete. ***The operator may contact the Environmental Protection Department or the BLM Noxious Weed Coordinator at (575) 234-5972 or BLM_NM_CFO_NoxiousWeeds@blm.gov.***

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

3. HYDROLOGY

GENERAL CONSTRUCTION

- Any water erosion that may occur due to the construction of surface site and during the life of the surface site will be quickly corrected and proper measures will be taken to prevent future erosion.
    - Erosion control structures such as curled wood/straw fiber wattles/logs (plastic-free and weed-free), sandbags (with arsenic-free burlap), 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 surface site is recommended, both following precipitation events and regularly during monsoon season (June – September.)

  - If during construction of this project any erosion control structures installed to protect adjacent permitted disturbance are damaged, the holder of the ROW/surface site under construction must repair or replace those structures with an equivalent structure.
  - If erosion control structures are incorrectly installed or poorly maintained such that they result in erosional impacts on adjacent permitted disturbance, the operator responsible for the disturbance must repair any damage in addition to any damage within their own permitted ROW/surface site.
- Any spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

ACCESS ROAD(S)

- The submitter is responsible for maintenance of the road.
- 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.
  - If culverts are employed, they should be of installed at adequate depth and be of adequate size for the potential streamflow volume expected in a 100-year flood event. To reduce the erosion around culvert entrances, gabions, rock aprons and/or riprap should be placed on both the inflow and outflow sides. A flared culvert is also recommended to further reduce erosion around culvert entrances.
  - 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 project boundary 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 project boundary to divert and dissipate surface runoff.

CABLE(S)

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

PIPELINE(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.

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.

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. The displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity. Liners should be permanently installed, at least 20 mm thick with a 4 oz. felt backing to prevent tears or punctures.

1.1.1 CAVE / KARST

GENERAL CONSTRUCTION

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

ACCESS ROAD CONSTRUCTION

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow of water into or out of cave or karst features.

- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

Overhead Cable Construction

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

Buried Pipeline / Cable Construction

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

Surface Pipelines Installation

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

Surface Site Construction

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

Production Mitigation

- Tank battery locations and facilities will be bermed and lined with a 20-mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater (displaced volume from all tanks

within the berms MUST be subtracted from total volume of containment in calculating holding capacity).

- Implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

Residual and Cumulative Mitigation

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

Plugging and Abandonment Mitigation

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

1.1.2 SPECIAL STATUS PLANT SPECIES

- Fence all SSPS within 30 meters of project disturbance.
- Remove all fencing materials from public land after construction is completed.

Special Status Plant Species (SSPS) Habitat Stipulations

Vehicles and equipment will be kept on existing roads and approved surfaces only and will avoid travel across undisturbed surfaces. Workers will be instructed not to park off the roads or in undisturbed areas. **Alterations to project design and additions of project components will require SSPS surveys and re-analysis of impacts if those project elements intersect SSPS suitable habitat.**

4. VISUAL RESOURCE MANAGEMENT

General Requirements

- **Painting:** All permanent surface structures (except those subject to safety-color requirements), including piping 4 inches or greater, shall be painted with a flat, non-reflective finish selected from the BLM Standard Environmental Color Chart (CC-001: June 2008). The color specified for this project is **Shale Green**.
- **Form / Line / Texture Minimization:** The Holder shall minimize structure heights and lengths, avoid sky lining, break up continuous lines and planar faces, and orient facilities to reduce strong horizontal/vertical lines visible from KOPs.

RECLAMATION

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

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 contamination

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 listed below.

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 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 to catch and contain rainfall on-site. Any trenches resulting from erosion caused by run-off shall be addressed immediately.

3. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations must undergo interim reclamation 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. 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 below.

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

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).

5. SEEDING REQUIREMENTS

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.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided within. 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.

SEED MIXTURE 4 FOR GYPSUM SITES

Species to be planted in **Pounds of Pure Live Seed** per acre:

Species	lb/acre
Alkali Sacaton (*Sporobolus airoides*)	1.5
De-Winged Seed: Four-wing saltbush (*Atriplex canescens*)	8.0

GENERAL PROVISIONS

1. The BLM shall administer compliance and monitor construction of the disturbance. Notify the Carlsbad Office at BLM_NM_CFO_Construction_Reclamation@blm.gov at least 3-working days prior to commencing construction of the access road and/or well pad.
2. The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties. A copy of these stipulations and survey plat and / or map will be on location during construction, drilling and reclamation activity. BLM personnel may request a copy of your permit during construction to ensure compliance with all stipulations.
3. The holder / operator shall conduct all activities associated with the construction, operation, and termination of the right-of-way within the authorized limits of the right-of-way.
4. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
5. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR § 2803 & 2883. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from fire or soil movement (including landslides and slumps as well as wind and water caused movement of particles) caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder, including but not limited to, construction, operation, maintenance, and termination of the facility.
b. Activities of other parties including but not limited to:
   i. Land clearing.
   ii. Earth-disturbing and earth-moving work.
   iii. Blasting.
   iv. Vandalism and sabotage.
c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction of in which the damage of injury occurred. This section shall not impose strict liability for damage or injury resulting primarily from the negligent acts of the United States.

If, during any phase of the construction, operation, maintenance, or termination of the site or related pipeline(s), any oil or other pollutant should be discharged from site facilities, the pipeline(s) or from containers or vehicles impacting Federal lands, the control and total removal, disposal, and cleanup of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting therefrom, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

6. The operator will notify the Bureau of Land Management (BLM) authorized officer and nearest Fish and Wildlife Service (FWS) Law Enforcement office within 24 hours, if the operator discovers a dead or injured federally protected species (i.e., migratory bird species, bald or golden eagle, or species listed by the FWS as threatened or endangered) in or adjacent to a pit, trench, tank, exhaust stack, or fence. (If the operator is unable to contact the FWS Law Enforcement office, the operator must contact the nearest FWS Ecological Services office.)
7. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. §§ 2601) regarding any toxic substances that are used, generated by or storedAdditionally, any release of toxic substances (leaks, spills, etc.) more than the reportable quantity established by 40 CFR § 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government because of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
8. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980,

42 U.S.C. §§ 9601 or the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

9. Sites shall always be maintained in an orderly, sanitary condition. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations. All trash, debris and other waste materials shall be contained in trash cages or bins to prevent scattering. Burial on site is not permitted. Waste materials, both liquid and solid, shall be disposed of promptly at an appropriate, authorized waste disposal facility in accordance with all applicable State and Federal laws. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, petroleum products, brines, chemicals, oil drums, ashes, and equipment.
10. The BLM serial number assigned to this right-of-way grant shall be posted at the points of origin and completion of the right-of-way (or entry to and exit from public lands), all major road crossings, and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served. These signs will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the term of the right-of-way.
11. A sales contract for removal of mineral material (caliche, sand, gravel, fill dirt) from an authorized pit, site, or on location must be obtained from the BLM prior to commencing construction. **Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.** Removal of any material from the project boundary for use on other leases or roads must first be purchased from BLM.
12. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be always maintained. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
13. In those areas where erosion control structures are required to stabilize soil conditions, the holder shall install such structures as are suitable for specific soil conditions being encountered and which are in accordance with sound management practices. Any earthwork will require prior approval by the Authorized Officer.
14. Any vegetation, soil, and rocks left because of construction, drilling, or maintenance activity will be randomly scattered over the project area and will not be left in rows, piles, or berms, unless otherwise approved by the authorized officer. The backfilled soil shall be compacted, and a 6-inch berm will be left over the ditch line to allow for settling back to grade. The holder shall stockpile an adequate amount of topsoil where blading occurs. The topsoil to be stripped is approximately 6-inches in depth. The topsoil will be segregated from other spoil piles. Following backfilling and recontouring, the topsoil will be evenly distributed over the bladed area for the preparation of seeding. The entire corridor shall be recontoured to match the surrounding landscape.

15. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer. All surface structures shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facilities or this grant, whichever comes first. This will not apply where the facilities extend to serving an active, adjoining facility. 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. 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.

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PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	RILEY PERMIAN OPERATING COMPANY LLC
WELL NAME & NO.:	CALMER THAN YOU 5 FED COM 13H
LOCATION:	Section 6, T.18 S., R.27 E., -NMP
COUNTY:	Eddy County, New Mexico

Create COAs

H_2S	Cave / Karst	Waste Prevention Rule
Present	High	Waste Minimization Plan

Potash	R-111-Q Design
None	

Wellhead	Casing	Cementing
Conventional	2-String Well	
	☐ Liner ☐ Fluid Filled ☑ Casing Clearance	
☑ Flex Hose		☐ DV Tool ☐ Bradenhead ☐ Echometer
☐ Break Testing		☐ Offline Cement ☐ Open Annulus ☐ Pilot Hole

Special Requirements

☐ Capitan Reef ☐ Water Disposal ☑ COM ☐ Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately **400** feet (a minimum of **70'** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. **Set depth adjusted per BLM geologist.**
    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

Approval Date: 10/22/2026

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 (including lead cement.)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

High cave/karst – contingency casing will be required If lost circulation occurs while drilling the surface hole. The surface hole will have to be reamed and a larger casing installed. If lost circulation occurs while drilling the 8-3/4" hole, the cement program for the 7x5-1/2" casing will need to be modified and the Blm is to be contacted PRIOR TO RUNNING THE CASING. A minimum of two casing strings cemented to surface IS required in high cave/karst areas. THE CEMENT MUST BE IN A SOLID SHEATH THEREFORE, ONE INCH OPERATIONS WILL NOT BE PERMITTED. A DV TOOL WILL BE required.

2. The minimum required fill of cement behind the **7** inch x 5.5 inch production casing is **cement to surface**. If cement does not circulate, see B.1.a, c-d above.
    - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst, Capitan Reef, or potash features.

C. PRESSURE CONTROL

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the production casing shoe shall be **5000 (5M)** psi.

3. 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).

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.

Casing Clearance
Surface String does not meet clearance requirement per 43 CFR 3172.

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)

For multi-well pads, notifications for the following operations may be made together going from one well to the next. This does **NOT** apply to notifications for wells in the R111Q potash area:

- Casing run
- Offline cementing
- Break testing

Contact Eddy County Petroleum Engineering Inspection Staff:
Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM_NM_CFO_DrillingNotifications@BLM.GOV**; (575) 361-2822

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
    a. In the event the operator 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 2nd 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 2nd Rig is rigged up on swell.

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 always be operational 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 & CEMENT

1. The current acceptable methods of cement verification are as follows:
   i. Observing cement circulated to surface,
   ii. Cement Bond Log (CBL),
   iii. Temperature log within 8-10 hours after completing the cement job,
   iv. Echometer (if a second-stage bradenhead is being utilized and operator was granted approval prior to operations.)
2. 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.
3. 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.
4. 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.

5. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Well specific cement details must be onsite prior to pumping the cement for each casing string.
6. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
7. 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.
8. 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.
9. 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. (This 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 -our 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 because 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.

JS 10/21/2026

 Approval Date: 10/22/2026

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

Operator Certification Data Report

10/26/2026

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: JORDAN LUKASIK **Signed on:** 06/18/2026

Title: Regulatory Analyst

Street Address: 8620 WOLFF COURT

City: WESTMINSTER **State:** CO **Zip:** 80031

Phone: (303)928-7128

Email address: JLUKASIK@ASCENTGEOMATICS.COM

Field

Representative Name:

Street Address:

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

Phone:

Email address:

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

Application Data
10/26/2026

APD ID: 10400112521 **Submission Date:** 06/18/2026

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - General

APD ID: 10400112521 **Tie to previous NOS?** N **Submission Date:** 06/18/2026

BLM Office: Carlsbad **User:** JORDAN LUKASIK **Title:** Regulatory Analyst

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

Lease number: NMLC049648A **Lease Acres:** 121.07

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:** RILEY PERMIAN OPERATING COMPANY LLC

Operator letter of

Operator Info

Operator Organization Name: RILEY PERMIAN OPERATING COMPANY LLC

Operator Address: 29 E RENO AVENUE SUITE 500 **Zip:** 73104

Operator PO Box:

Operator City: OKLAHOMA CITY **State:** OK

Operator Phone: (405)543-1411

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: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Field/Pool or Exploratory? Field and Pool **Field Name:** ARTESIA **Pool Name:** GLORIETA -YESO

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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:** Calmer Than You **Number:** South Pad

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

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: EXPLORATORY (WILDCAT)

Describe sub-type:

Distance to town: 6 Miles **Distance to nearest well:** 20 FT **Distance to lease line:** 80 FT

Reservoir well spacing assigned acres Measurement: 324 Acres

Well plat: Calmer_Than_You_5_Fed_Com_13H_C102_R3_Signed_20260617095506.pdf

Well work start Date: 03/05/2027 **Duration:** 10 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	1739	FNL	1410	FEL	18S	27E	6	Aliquot SWNE	32.779338	-104.313832	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC026874B	3468			N
KOP Leg #1	1679	FNL	610	FEL	18S	27E	6	Aliquot SENE	32.779465	-104.31123	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC026874F	854	2799	2614	N
PPP Leg #1-1	1650	FNL	100	FWL	18S	27E	5	Aliquot SWNW	32.779506	-104.308921	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC049648A	429	3654	3039	Y

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-2	1650	FNL	1318	FWL	18S	27E	5	Aliquot SENW	32.779418	-104.304958	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 97122	421	4872	3047	Y
PPP Leg #1-3	1651	FNL	2632	FEL	18S	27E	5	Aliquot SWNE	32.779322	-104.300669	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC064384	412	6191	3056	Y
EXIT Leg #1	1650	FNL	100	FEL	18S	27E	5	Aliquot SENE	32.779138	-104.292427	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC064384	394	8725	3074	Y
BHL Leg #1	1650	FNL	10	FEL	18S	27E	5	Aliquot SENE	32.779132	-104.292134	EDDY	NEW MEXICO	NEW MEXICO	F	NMLC064384	393	8815	3075	Y

CONFIDENTIAL

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

Property Name and Well Number

CALMER THAN YOU 5 FED COM 13H

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-	51120	Red Lake; Glorieta-Yeso

Property Code	Property Name	Well Number
	CALMER THAN YOU 5 FED COM	13H

OGRID No.	Operator Name	Ground Level Elevation
372290	RILEY PERMIAN OPERATING COMPANY LLC	3468'

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

Surface Location

UL or Lot No.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
G	6	18 S	27 E		1739 FNL	1410 FEL	N 32.779338°	W 104.313832°	EDDY

Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
H	5	18 S	27 E		1650 FNL	10 FEL	N 32.779132°	W 104.292134°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidated Code
323.88				

Order Numbers Well Setbacks are under Common Ownership: ☐ Yes ☐ No

Kick Off Point (KOP)

UL or lot no.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
H	6	18 S	27 E		1679 FNL	610 FEL	N 32.779465°	W 104.311230°	EDDY

First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
E	5	18 S	27 E		1650 FNL	100 FWL	N 32.779506°	W 104.308921°	EDDY

Last Take Point (LTP)

UL or lot no.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
H	5	18 S	27 E		1650 FNL	100 FEL	N 32.779138°	W 104.292427°	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unity Type	Ground Floor Elevation
	☒ Horizontal ☐ Vertical	3493'

OPERATOR CERTIFICATION

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.

Signature Date: 5-28-26

Print Name: Alex Rizzo

E-mail Address: Alex.rizzo@rileypermian.com

SURVEYORS CERTIFICATION

MITCHELL L. McDONALD NEW MEXICO 29821 PROFESSIONAL SURVEYOR 05/27/2026

Signature and Seal of Professional Surveyor Date

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.

MITCHELL L. MCDONALD, N.M. P.L.S.

Certificate Number	Date of Survey
29821	JANUARY 14, 2026

P:\WDPA_EDS\0059\PHOD\C102_Part\wpaC102\NS_CALMER_THAN_YOU_5_FED_COM_C102_13H_R2.dwg RHOMEBELLY 5/28/2026 11:43 AM

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.

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Page 42 of 180

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

Property Name and Well Number

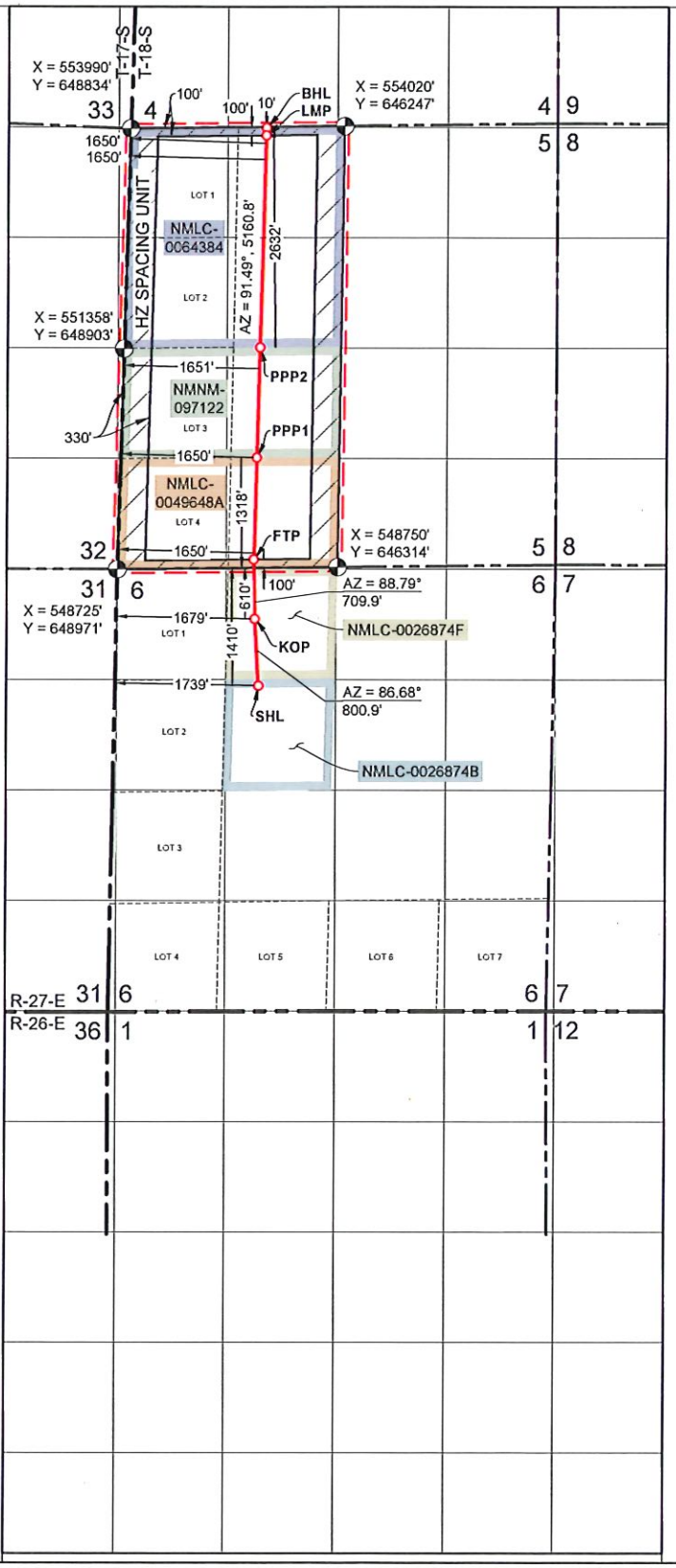
CALMER THAN YOU 5 FED COM 13H

SURFACE LOCATION
NEW MEXICO EAST
NAD 1983
X=547331' Y=647256'
LAT=N32.779338°
LONG=W104.313832°
NAD 1927
X=506152' Y=647193'
LAT=N32.779224°
LONG=W104.313316°
1739' FNL 1410' FEL

KOP LOCATION
NEW MEXICO EAST
NAD 1983
X=548131' Y=647302'
LAT=N32.779465°
LONG=W104.311230°
NAD 1927
X=506952' Y=647240'
LAT=N32.779351°
LONG=W104.310715°
1679' FNL 610' FEL

FIRST TAKE POINT
NEW MEXICO EAST
NAD 1983
X=548840' Y=647317'
LAT=N32.779506°
LONG=W104.308921°
NAD 1927
X=507661' Y=647254'
LAT=N32.779391°
LONG=W104.308405°
1650' FNL 100' FWL

PROPOSED PENETRATION POINT 1
NEW MEXICO EAST
NAD 1983
X=550058' Y=647285'
LAT=N32.779418°
LONG=W104.304958°
NAD 1927
X=508879' Y=647223'
LAT=N32.779303°
LONG=W104.304443°
1650' FNL 1318' FWL



PROPOSED PENETRATION POINT 2
NEW MEXICO EAST
NAD 1983
X=551376' Y=647251'
LAT=N32.779322°
LONG=W104.300669°
NAD 1927
X=510197' Y=647188'
LAT=N32.779208°
LONG=W104.300155°
1651' FNL 2632' FEL

LOWER MOST PERF.
NEW MEXICO EAST
NAD 1983
X=553909' Y=647185'
LAT=N32.779138°
LONG=W104.292427°
NAD 1927
X=512730' Y=647122'
LAT=N32.779024°
LONG=W104.291913°
1650' FNL 100' FEL

BOTTOM HOLE LOCATION
NEW MEXICO EAST
NAD 1983
X=553999' Y=647183'
LAT=N32.779132°
LONG=W104.292134°
NAD 1927
X=512820' Y=647120'
LAT=N32.779018°
LONG=W104.291620°
1650' FNL 10' FEL

Note: Bearings, coordinates, and distances (grid) shown hereon are based on the New Mexico State Plane Coordinate System, East Zone, NAD 83-2011 (EPOCH 2010) framework, as derived by OPUS Solution. The elevations shown hereon are based on NAVD 88.

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

Drilling Plan Data Report
10/26/2026

APD ID: 10400112521 **Submission Date:** 06/18/2026

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
19107200	SEVEN RIVERS	0	213	213	SALT	USEABLE WATER	N
19107201	QUEEN	-682	682	682	ANHYDRITE, DOLOMITE	NONE	N
19107202	GRAYBURG	-1081	1081	1085	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
19107203	SAN ANDRES	-1350	1350	1363	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
19107204	GLORIETA	-2679	2679	2878	ANHYDRITE, DOLOMITE	NATURAL GAS, OIL	N
19107205	PADDOCK	-2763	2763	2992	ANHYDRITE	NATURAL GAS, OIL	N
19107199	BLINEBRY	-3028	3028	3549	DOLOMITE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 11000

Equipment: The blowout preventer equipment (BOP) shown in Exhibit 10 will consist of a double ram-type (3000 psi WP) minimum preventer. This unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top of 5 drill pipe rams on bottom. The 13-5/8 BOP will be nippled up on the 13-3/8 surface casing and tested by a 3rd party to 2000 psi used continuously until TD is reached.
Requesting Variance? YES

Variance request: Riley Permian requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available from manufacturer on site. No external damage to the flex line. Flex line to be installed as straight as possible with no bends.
Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and 70% of working pressure high unless otherwise required, as per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed with be functional and tested. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics. Riley Exploration Permian LLC requests permission to adjust the BOP break testing requirements as follows: BOP break test under the following conditions: After a full BOP test is conducted When skidding to drill the production section, where the surface casing point is shallower than the 3 Bone Spring or 10,000 TVD When skidding to drill a production section that does not penetrate the 3rd Bone Spring or deeper If the kill line is broken prior to skid, four tests will be performed: The void between the wellhead and the spool (one on each

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

side for two tests) The spool between the kill lines and the choke manifold (consisting of two tests) If the kill line is not broken prior to skid, two tests will be performed: The void between the wellhead and the pipe rams

Choke Diagram Attachment:

Fed_Choke_BOP_Diagram_20260617111212.pdf

H3_051622_1_Choke_Hose_5Yr_Cert__May_16_22__202206281108_20260617111337.pdf

BOP Diagram Attachment:

Fed_Choke_BOP_Diagram_20260617111415.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	12.25	9.625	NEW	API	N	0	1250	0	1240	3468	2228	1250	J-55	36	BUTT	1.125	1.2	DRY	1.4	DRY	1.4
2	PRODUCTION	8.75	7.0	NEW	API	N	0	3300	0	2933	3468	535	3300	HCL-80	32	BUTT	1.125	1.2	DRY	1.4	DRY	1.4
3	PRODUCTION	8.75	5.5	NEW	API	N	3300	8815	2933	3075	535	393	5515	HCL-80	20	BUTT	1.125	1.2	DRY	1.4	DRY	1.4

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Calmer_Than_You_5_Fed_Com_13H_BLM_Casing_Assumptions_Rev1_20260617112319.pdf

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Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Casing Attachments

Casing ID: 2 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Calmer_Than_You_5_Fed_Com_13H_BLM_Casing_Assumptions_Rev1_20260617112723.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Calmer_Than_You_5_Fed_Com_13H_BLM_Casing_Assumptions_Rev1_20260617112905.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	950	450	1.43	12.8	520.9	100	50/50 Poz C Premium Plus	20 bbl gel spacer, 50sx of 11# scavenger cement
SURFACE	Tail		950	1250	195	1.33	14.8	364.05	100	Class C Premium Plus	50sx of 11# scavenger cement
PRODUCTION	Lead		0	2300	200	2.29	13.7	478.81	35	50/50 Poz C Premium Plus	20 bbl gel spacer, 50sx of 11# scavenger cement
PRODUCTION	Tail		2300	8814	1575	1.31	13.7	2233.59	35	35/65 Poz C Premium Plus	50sx of 11# scavenger cement

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	2300	200	2.29	11.5	478.84	35	50/50 Poz C Premium Plus	20 bbl gel spacer, 50sx of 11# scavenger cement
PRODUCTION	Tail		2300	8814	1575	1.31	13.7	2233.59	35	35/65 Poz C Premium Plus	50sx of 11# scavenger cement

Additional Cementing Information:

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The well will be drilled to TD with a combination of fresh and cut brine mud system. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Saltwater Clay, CACL2. Riley will utilize a closed mud system.

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring will be used to monitor the loss or gain of fluid and digitally recorded.

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	1250	SPUD MUD	8.6	8.9							
1250	8815	OTHER : Water-Based Mud (Cut Brine)	8.3	9							

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Section 6 - Test, Logging, Coring

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

A. Logging will consist of a GR run from surface to TD
B. Drill stem test not anticipated
C. No conventional coring is anticipated
D. Mug log planned to be performed in the SCP-TD interval
E. Further testing procedures will be determined at TD

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

GAMMA RAY LOG,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No coring anticipated

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 2750 **Anticipated Surface Pressure:** 2073

Anticipated Bottom Hole Temperature(F): 110

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Fed_H2S_Drilling_Operations_Plan_20260617115647.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Riley___Calmer_Than_You_5_Fed_Com_13H_PlanRpt_20260617120013.pdf
Riley___Calmer_Than_You_5_Fed_Com_PlanView_20260617120013.pdf
Riley___Calmer_Than_You_5_Fed_Com_13H_OH_p1_1__20260617120013.pdf
Riley___Calmer_Than_You_5_Fed_Com_13H_AC_1__20260617120016.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Calmer_Than_You_5_Fed_Com_13H___BLM_Drilling_Program___Rev0_20260617120627.pdf
Calmer_Than_You_5_Fed_Com_13H_Gas_Plot_20260617120627.pdf
CTY_BLM_WasteMinimizationPlan_07022024_20260617120700.pdf

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Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Calmer_Than_You_NGMPForm_Final_20260617120700.pdf

Other Variance request(s)?: N

Other Variance attachment:

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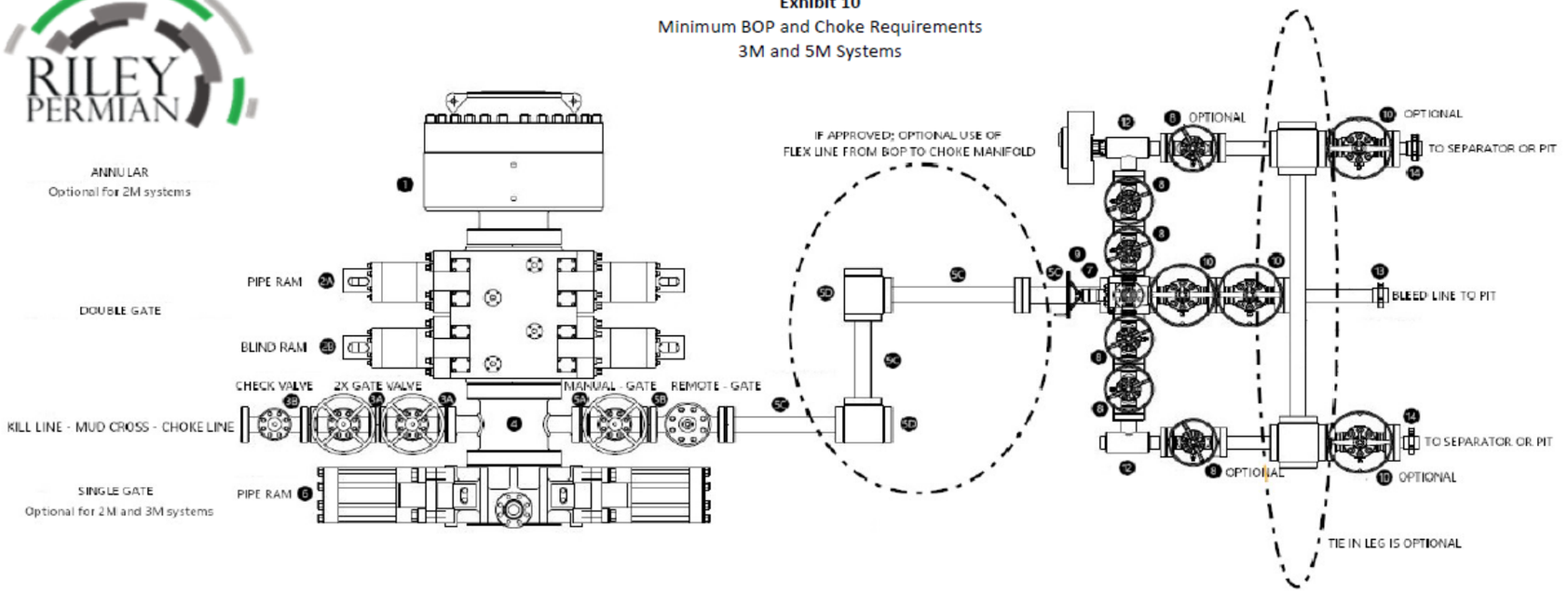
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Riley Permian

Exhibit 10

Minimum BOP and Choke Requirements

3M and 5M Systems



BOP - Minimum Requirements						
	Description		ID (in.)	Nom. OD (in.)	Optional	Note
1	Annular				Yes - 2M	
2A	Double Gate	Pipe Ram	3 1/8		No	
2B		Blind Ram				
3A	Kill Line	Gate	2		No	
3A		Gate				
3B		Check Valve				
		Line		2		
4	Mud Cross		2 1/16		No	Kill Line - 2" min. Choke Line - 3" min.
5A	Choke Line	Gate - Manual (2)	3 1/8		No	
5B		Gate - Remote (2)				
5C		Line		3	No	
5D		Targeted Tee			No	
6	Single Gate - Pipe Ram				Yes - 2M and 3M	

(1) Only one required in 2M system
(2) Choke line valve order is interchangable
(3) Remote operated hydraulic choke required on 5M and 10M systems

Choke Manifold - Minimum Requirements											
			3000 MWP			5000 MWP			10000 MWP		
	Description		ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)	ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)	ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)
7	Cross - 3" x 3" x 3" x 2"				3,000			5,000			10,000
8	Valve	Gate (2)	2 1/16		3,000	2 1/16		5,000	3 1/8		10,000
9		Plug									
9	Pressure Gauge				3,000			5,000			10,000
10	Valve	Gate (2)	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
		Plug									
11	Remote Operated Adjustable Choke (3)		2 1/16		3,000			5,000			10,000
12	Manual Adjustable Choke		2 1/16		3,000			5,000			10,000
13	Line			3	3,000		3	5,000		3	10,000
14	Line			2	3,000		2	5,000		2	10,000
15	Gas Separator (4)			2' x 5'			2' x 5'			2' x 5'	

(1) Only one required in 2M system
(2) Gate valves only to be used for 10M system
(3) Remote chokes are required for 5M and 10M systems
(4) Gas separator is optional for 2M and 3M systems

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H3-8915

5/16/2022 7:15:04 AM

TEST REPORT

CUSTOMER

Company: [redacted]

Production description:

Sales order #: 523868

Customer reference:

TEST INFORMATION

Test procedure:	GTS-04-052	
Test pressure:	7500.00	psi
Test pressure hold:	3600.00	sec
Work pressure:	5000.00	psi
Work pressure hold:	900.00	sec
Length difference:	0.00	%
Length difference:	0.00	inch

Visual check:

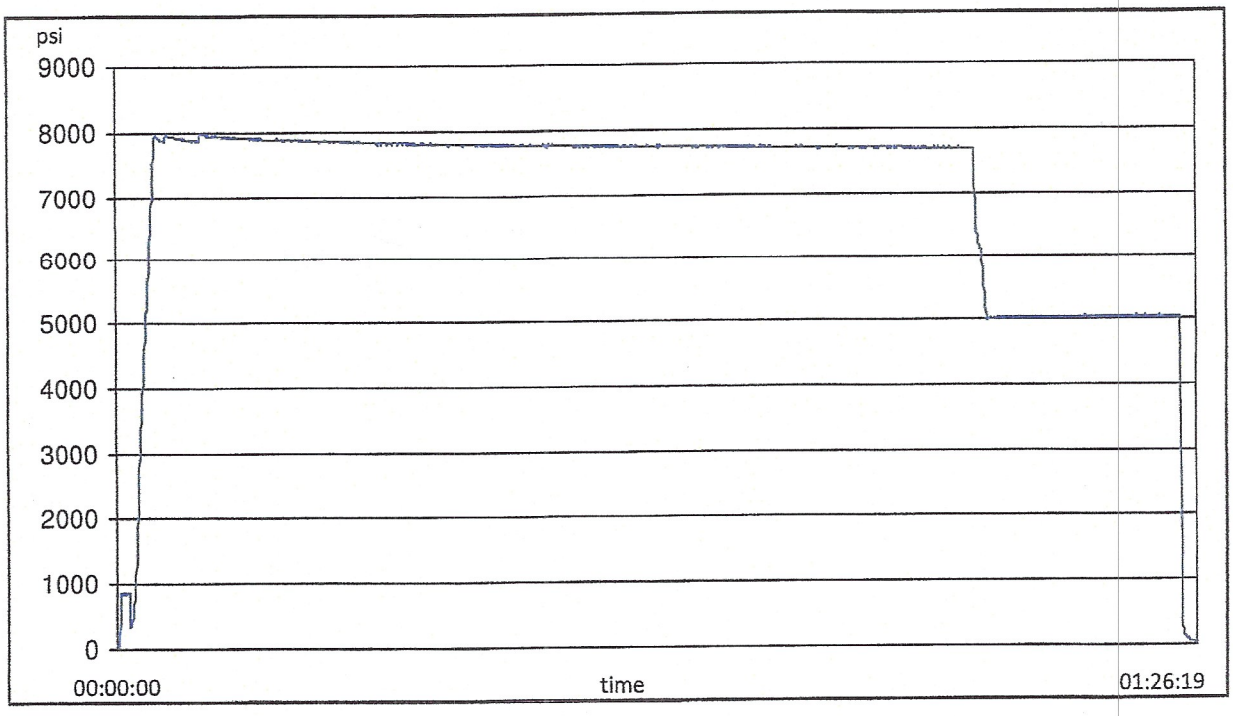
Pressure test result: PASS

Length measurement result:

Test operator: Martin

TEST OBJECT

Serial number:	H3-051622-1
Lot number:	L42089010720
Description:	
Hose ID:	3.5 5K MS C&K
Part number:	47741108
Fitting 1:	3.5 x 3 1/8 5k
Part number:	
Description:	3.5 x 3 1/8 5k
Fitting 2:	3.5 x 3 1/8 5k
Part number:	
Description:	3.5 x 3 1/8 5k
Length:	23 feet



Filename: D:\Certificates\Report_051622-H3-051622-1.pdf

BLACK GOLD®

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

PHONE: +1 (281) 602-4100
FAX: +1 (281) 602-4147
EMAIL: gesna.quality@gates.com
WEB: www.gates.com/oilandgas

PRESSURE TEST CERTIFICATE

Customer:	[redacted]	Test Date:	5/16/2022
Customer Ref.:	643541	Hose Serial No.:	H3-051622-1
Invoice No.:	523868	Created By:	Cristian Rivera

Product Description:	3.5" X 23 FT GATES FIRE RATED CHOKE & KILL HOSE ASSEMBLY C/W 3 1/8" 5K FIXED X FLOAT H2S SUITED FLANGES WITH RED FIRE SLEEVE OVER EACH END SUPPLIED WITH LIFT EYE CLAMPS ATTACHED

End Fitting 1:	3 1/8" 5K FIXED	End Fitting 2:	3 1/8" 5K FLOAT
Oracle Star No.:	68503550-10095959	Assembly Code:	L42089 010720
CUSTOMER P/N:	FR3.523.0CK3185KFIXXFLTFLG RFS LE	Test Pressure:	7,500 PSI.
		Working Pressure:	5,000 PSI.

Gates Engineering & Services North America certifies that:

The following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies) or GTS-04-048 (15K assemblies), which include reference to Specification API 16C (3rd Edition); sections 7.4.1, 7.4.5, and 10.7.7. A test graph will accompany this test certificate to illustrate conformity to test requirements. This hose assembly was pressure tested using equipment and instrumentation that has been calibrated in accordance with the requirements set-forth in the GESNA management system.

Quality:	QUALITY	Production:	PRODUCTION
Date :	5/16/2022	Date :	5/16/2022
Signature :		Signature :	

F-PRD-005B

Revision 7_03012022

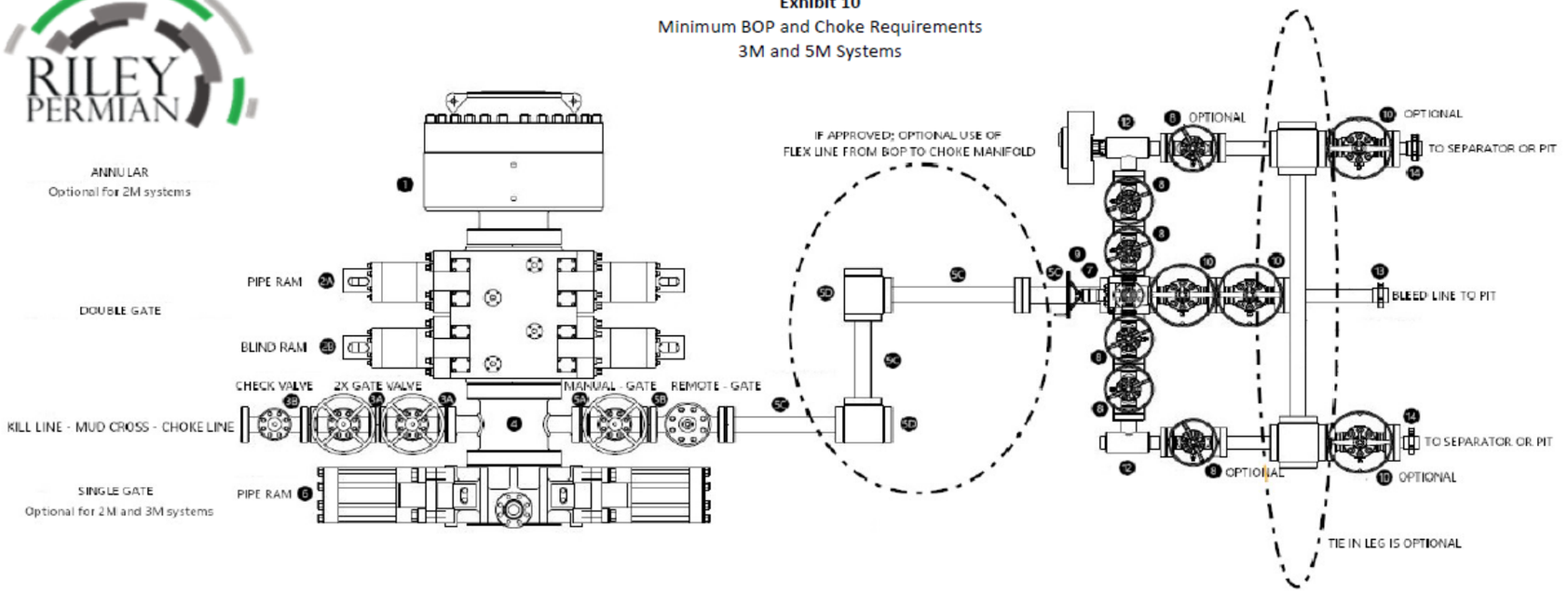
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Riley Permian

Exhibit 10

Minimum BOP and Choke Requirements

3M and 5M Systems



BOP - Minimum Requirements						
	Description		ID (in.)	Nom. OD (in.)	Optional	Note
1	Annular				Yes - 2M	
2A	Double Gate	Pipe Ram	3 1/8		No	
2B		Blind Ram				
3A	Kill Line	Gate	2		No	
3A		Gate				
3B		Check Valve				
		Line		2		
4	Mud Cross		2 1/16		No	Kill Line - 2" min. Choke Line - 3" min.
5A	Choke Line	Gate - Manual (2)	3 1/8		No	
5B		Gate - Remote (2)				
5C		Line		3	No	
5D		Targeted Tee			No	
6	Single Gate - Pipe Ram				Yes - 2M and 3M	

(1) Only one required in 2M system
(2) Choke line valve order is interchangable
(3) Remote operated hydraulic choke required on 5M and 10M systems

Choke Manifold - Minimum Requirements											
			3000 MWP			5000 MWP			10000 MWP		
	Description		ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)	ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)	ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)
7	Cross - 3" x 3" x 3" x 2"				3,000			5,000			10,000
8	Valve	Gate (2)	2 1/16		3,000	2 1/16		5,000	3 1/8		10,000
		Plug									
9	Pressure Gauge				3,000			5,000			10,000
10	Valve	Gate (2)	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
		Plug									
11	Remote Operated Adjustable Choke (3)		2 1/16		3,000			5,000			10,000
12	Manual Adjustable Choke		2 1/16		3,000			5,000			10,000
13	Line			3	3,000		3	5,000		3	10,000
14	Line			2	3,000		2	5,000		2	10,000
15	Gas Separator (4)			2' x 5'			2' x 5'			2' x 5'	

(1) Only one required in 2M system
(2) Gate valves only to be used for 10M system
(3) Remote chokes are required for 5M and 10M systems
(4) Gas separator is optional for 2M and 3M systems

Received by OCD: 11/11/2026 11:05:12 AM

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Surface Casing							
Size	Wt./Ft.	Grade	Conn	Top	Bottom	Length	$/Ft.
9.625	36	J55	BTC	0'	1,250'	1,250'	$53.00
asing Details							
ID:	12.715 in		Collapse Rating:	740 psi			
Drift:	12.559 in		Burst Rating:	2,370 psi			
Connection OD:	14.375 in		Body Yield:	744 kips			
Capacity:	0.15705384 bbl/ft		Joint Strength:	433 kips			
Notes: All connections in the shoe track should be Thread Locked							

Estimated Casing Loads			
Hookload in Air	18.0 K-lbs		
Hookload (Buoyed)	15.5 K-lbs	with MW	9.2 ppg
Hookload with Cement to Shoe	29.3 K-lbs	with CW	14.8 ppg
Hookload with Cement in Place	13.9 K-lbs		
Min Pressure to Bump Plug	109.2 PSI		

Casing, Float Equipment and Accessories			
Item	Mfg.	Centralizers	Remarks
Float Shoe	Innovex		5K, Thread Lock
2 Joints: 13-3/8" 48# BTC		Bow Spring each joint	
Float Collar	Innovex (IIIC, SV, NR)		5K, Thread Lock, Top Plug to be used
13-3/8" 48# BTC		Bow Spring first 2 joint and then 1x every 4th	

Surface Casing Design

	Size	Weight	Grade	Conn	Collapse	Burst	Tension	Notes
Surface	13.375	48	J55	BTC	740	2,370	433,000	
				Min. Safety Factors	**1.125**	**1.100**	**1.500**	
Collapse	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
	1,250'	0	9.2	0	179	**4.1249**		**Dry/Fully Evacuated**
Burst	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
	1,250'	9.2	0	179	0	**13.2107**		**Dry/Fully Evacuated**
Tension	**Casing Depth TVD**	**Mud Wt**	**Air Wt**	**Buoy Wt**	**BW + 100K**	**SF**		
	1,250'	9.2	18,000	15,472	115,472	**3.7498**		**100K Overpull**

Production Casing							
Size	Wt./Ft.	Grade	Conn	Top	Bottom	Length	$/Ft.
7	32	HCL-80	BTC	0'	2300	2300'	$57.00
Casing Details							
ID:	6.094 in		Collapse Rating:	10,400 psi			
Drift:	5.969 in		Burst Rating:	8,460 psi			
Connection OD:	7.875 in		Body Yield:	745 kips			
Capacity:	0.0361 bbl/ft		Joint Stregth:	832 kips			
Size	**Wt./Ft.**	**Grade**	**Conn**	**Top**	**Bottom**	**Length**	**$/Ft.**
5.5	20	HCL-80	BTC	2300'	8814	6514	$41.00
Casing Details							
ID:	4.778 in		Collapse Rating:	10,630 psi			
Drift:	4.653 in		Burst Rating:	8,990 psi			
Connection OD:	6.3 in		Body Yield:	466 kips			
Capacity:	0.0222 bbl/ft		Joint Stregth:	503 kips			
Notes: All connections in the shoe track should be Thread Locked							

Estimated Casing Loads			
Hookload in Air	228.0 K-lbs		
Hookload (Buoyed)	195.9 K-lbs	with MW	9.2 ppg
Hookload with Cement to Shoe	221.2 K-lbs	with CW	13.7 ppg
Hookload with Cement in Place	180.3 K-lbs		
Min Pressure to Bump Plug	819 PSI	Buoyancy	0.860

Production Casing Design

	Size	Weight	Grade	Conn	Collapse	Burst	Tension	Notes
Surface	7	32	HCL-80	BTC	10,400	8,460	745,000	
	5.5	20	HCL-80	BTC	10,630	8,990	466,000	
				Min. Safety Factors	**1.125**	**1.100**	**1.500**	
Collapse	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
7	3,051'	0	9.2	0	1,638	**6.3509**		**Dry/Fully Evacuated**
5.5	3,051'	0	9.2	0	1,674	**6.3485**		
Burst	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
7	3,051'	9.2	0	1,638	0	**5.1662**		**Dry/Fully Evacuated**
5.5	3,051'	9.2	0	1,674	0	**5.3691**		
Tension	**Casing Depth TVD**	**Mud Wt**	**Air Wt**	**Buoy Wt**	**BW + 100K**	**SF**		
7	3,051'	9.2	118,720	102,045	295,941	**2.5174**		**Total String + 100K Overpull**
5.5	3,051'	9.2	109,240	93,896		**1.5746**		

Surface Casing							
Size	Wt./Ft.	Grade	Conn	Top	Bottom	Length	$/Ft.
9.625	36	J55	BTC	0'	1,250'	1,250'	$53.00
asing Details							
ID:	12.715 in		Collapse Rating:	740 psi			
Drift:	12.559 in		Burst Rating:	2,370 psi			
Connection OD:	14.375 in		Body Yield:	744 kips			
Capacity:	0.15705384 bbl/ft		Joint Strength:	433 kips			
Notes: All connections in the shoe track should be Thread Locked							

Estimated Casing Loads			
Hookload in Air	18.0 K-lbs		
Hookload (Buoyed)	15.5 K-lbs	with MW	9.2 ppg
Hookload with Cement to Shoe	29.3 K-lbs	with CW	14.8 ppg
Hookload with Cement in Place	13.9 K-lbs		
Min Pressure to Bump Plug	109.2 PSI		

Casing, Float Equipment and Accessories			
Item	Mfg.	Centralizers	Remarks
Float Shoe	Innovex		5K, Thread Lock
2 Joints: 13-3/8" 48# BTC		Bow Spring each joint	
Float Collar	Innovex (IIIC, SV, NR)		5K, Thread Lock, Top Plug to be used
13-3/8" 48# BTC		Bow Spring first 2 joint and then 1x every 4th	

Surface Casing Design

	Size	Weight	Grade	Conn	Collapse	Burst	Tension	Notes
Surface	13.375	48	J55	BTC	740	2,370	433,000	
				Min. Safety Factors	**1.125**	**1.100**	**1.500**	
Collapse	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
	1,250'	0	9.2	0	179	**4.1249**		**Dry/Fully Evacuated**
Burst	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
	1,250'	9.2	0	179	0	**13.2107**		**Dry/Fully Evacuated**
Tension	**Casing Depth TVD**	**Mud Wt**	**Air Wt**	**Buoy Wt**	**BW + 100K**	**SF**		
	1,250'	9.2	18,000	15,472	115,472	**3.7498**		**100K Overpull**

Production Casing							
Size	Wt./Ft.	Grade	Conn	Top	Bottom	Length	$/Ft.
7	32	HCL-80	BTC	0'	2300	2300'	$57.00
Casing Details							
ID:	6.094 in		Collapse Rating:	10,400 psi			
Drift:	5.969 in		Burst Rating:	8,460 psi			
Connection OD:	7.875 in		Body Yield:	745 kips			
Capacity:	0.0361 bbl/ft		Joint Stregth:	832 kips			
Size	**Wt./Ft.**	**Grade**	**Conn**	**Top**	**Bottom**	**Length**	**$/Ft.**
5.5	20	HCL-80	BTC	2300'	8814	6514	$41.00
Casing Details							
ID:	4.778 in		Collapse Rating:	10,630 psi			
Drift:	4.653 in		Burst Rating:	8,990 psi			
Connection OD:	6.3 in		Body Yield:	466 kips			
Capacity:	0.0222 bbl/ft		Joint Stregth:	503 kips			
Notes: All connections in the shoe track should be Thread Locked							

Estimated Casing Loads			
Hookload in Air	228.0 K-lbs		
Hookload (Buoyed)	195.9 K-lbs	with MW	9.2 ppg
Hookload with Cement to Shoe	221.2 K-lbs	with CW	13.7 ppg
Hookload with Cement in Place	180.3 K-lbs		
Min Pressure to Bump Plug	819 PSI	Buoyancy	0.860

Production Casing Design

	Size	Weight	Grade	Conn	Collapse	Burst	Tension	Notes
Surface	7	32	HCL-80	BTC	10,400	8,460	745,000	
	5.5	20	HCL-80	BTC	10,630	8,990	466,000	
				Min. Safety Factors	**1.125**	**1.100**	**1.500**	
Collapse	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
7	3,051'	0	9.2	0	1,638	**6.3509**		**Dry/Fully Evacuated**
5.5	3,051'	0	9.2	0	1,674	**6.3485**		
Burst	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
7	3,051'	9.2	0	1,638	0	**5.1662**		**Dry/Fully Evacuated**
5.5	3,051'	9.2	0	1,674	0	**5.3691**		
Tension	**Casing Depth TVD**	**Mud Wt**	**Air Wt**	**Buoy Wt**	**BW + 100K**	**SF**		
7	3,051'	9.2	118,720	102,045	295,941	**2.5174**		**Total String + 100K Overpull**
5.5	3,051'	9.2	109,240	93,896		**1.5746**		

Surface Casing							
Size	Wt./Ft.	Grade	Conn	Top	Bottom	Length	$/Ft.
9.625	36	J55	BTC	0'	1,250'	1,250'	$53.00
asing Details							
ID:	12.715 in		Collapse Rating:	740 psi			
Drift:	12.559 in		Burst Rating:	2,370 psi			
Connection OD:	14.375 in		Body Yield:	744 kips			
Capacity:	0.15705384 bbl/ft		Joint Strength:	433 kips			
Notes: All connections in the shoe track should be Thread Locked							

Estimated Casing Loads			
Hookload in Air	18.0 K-lbs		
Hookload (Buoyed)	15.5 K-lbs	with MW	9.2 ppg
Hookload with Cement to Shoe	29.3 K-lbs	with CW	14.8 ppg
Hookload with Cement in Place	13.9 K-lbs		
Min Pressure to Bump Plug	109.2 PSI		

Casing, Float Equipment and Accessories			
Item	Mfg.	Centralizers	Remarks
Float Shoe	Innovex		5K, Thread Lock
2 Joints: 13-3/8" 48# BTC		Bow Spring each joint	
Float Collar	Innovex (IIIC, SV, NR)		5K, Thread Lock, Top Plug to be used
13-3/8" 48# BTC		Bow Spring first 2 joint and then 1x every 4th	

Surface Casing Design

	Size	Weight	Grade	Conn	Collapse	Burst	Tension	Notes
Surface	13.375	48	J55	BTC	740	2,370	433,000	
				Min. Safety Factors	**1.125**	**1.100**	**1.500**	
Collapse	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
	1,250'	0	9.2	0	179	**4.1249**		**Dry/Fully Evacuated**
Burst	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
	1,250'	9.2	0	179	0	**13.2107**		**Dry/Fully Evacuated**
Tension	**Casing Depth TVD**	**Mud Wt**	**Air Wt**	**Buoy Wt**	**BW + 100K**	**SF**		
	1,250'	9.2	18,000	15,472	115,472	**3.7498**		**100K Overpull**

Production Casing							
Size	Wt./Ft.	Grade	Conn	Top	Bottom	Length	$/Ft.
7	32	HCL-80	BTC	0'	2300	2300'	$57.00
Casing Details							
ID:	6.094 in		Collapse Rating:	10,400 psi			
Drift:	5.969 in		Burst Rating:	8,460 psi			
Connection OD:	7.875 in		Body Yield:	745 kips			
Capacity:	0.0361 bbl/ft		Joint Stregth:	832 kips			
Size	**Wt./Ft.**	**Grade**	**Conn**	**Top**	**Bottom**	**Length**	**$/Ft.**
5.5	20	HCL-80	BTC	2300'	8814	6514	$41.00
Casing Details							
ID:	4.778 in		Collapse Rating:	10,630 psi			
Drift:	4.653 in		Burst Rating:	8,990 psi			
Connection OD:	6.3 in		Body Yield:	466 kips			
Capacity:	0.0222 bbl/ft		Joint Stregth:	503 kips			
Notes: All connections in the shoe track should be Thread Locked							

Estimated Casing Loads			
Hookload in Air	228.0 K-lbs		
Hookload (Buoyed)	195.9 K-lbs	with MW	9.2 ppg
Hookload with Cement to Shoe	221.2 K-lbs	with CW	13.7 ppg
Hookload with Cement in Place	180.3 K-lbs		
Min Pressure to Bump Plug	819 PSI	Buoyancy	0.860

Production Casing Design

	Size	Weight	Grade	Conn	Collapse	Burst	Tension	Notes
Surface	7	32	HCL-80	BTC	10,400	8,460	745,000	
	5.5	20	HCL-80	BTC	10,630	8,990	466,000	
				Min. Safety Factors	**1.125**	**1.100**	**1.500**	
Collapse	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
7	3,051'	0	9.2	0	1,638	**6.3509**		**Dry/Fully Evacuated**
5.5	3,051'	0	9.2	0	1,674	**6.3485**		
Burst	**Casing Depth TVD**	**MW in**	**MW Out**	**Pres In**	**Pres Out**	**SF**		
7	3,051'	9.2	0	1,638	0	**5.1662**		**Dry/Fully Evacuated**
5.5	3,051'	9.2	0	1,674	0	**5.3691**		
Tension	**Casing Depth TVD**	**Mud Wt**	**Air Wt**	**Buoy Wt**	**BW + 100K**	**SF**		
7	3,051'	9.2	118,720	102,045	295,941	**2.5174**		**Total String + 100K Overpull**
5.5	3,051'	9.2	109,240	93,896		**1.5746**		

Riley Permian Operating Company, LLC

Onshore Order #6
Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards an characteristics of hydrogen sulfide (H2S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H2S detectors alarms warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H2S of wells in this area from surface to TD are low enough that a contingency plan is not required.**

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. **Well Control Equipment:**

   A. Flare line.
   B. Choke manifold.
   C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
   D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. **Protective equipment for essential personnel:**

A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. H2S detection and monitoring equipment:

A. 3x portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. Visual warning systems:

A. Wind direction indicators as shown on well site diagram (Exhibit #8).
B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. Mud program:

A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
B. All elastomers used for packing and seals shall be H2S trim.

7. Communication:

A. Radio communications in company vehicles including cellular telephone and 2-way radio.
B. Land line (telephone) communication at Office.

8. Well testing:

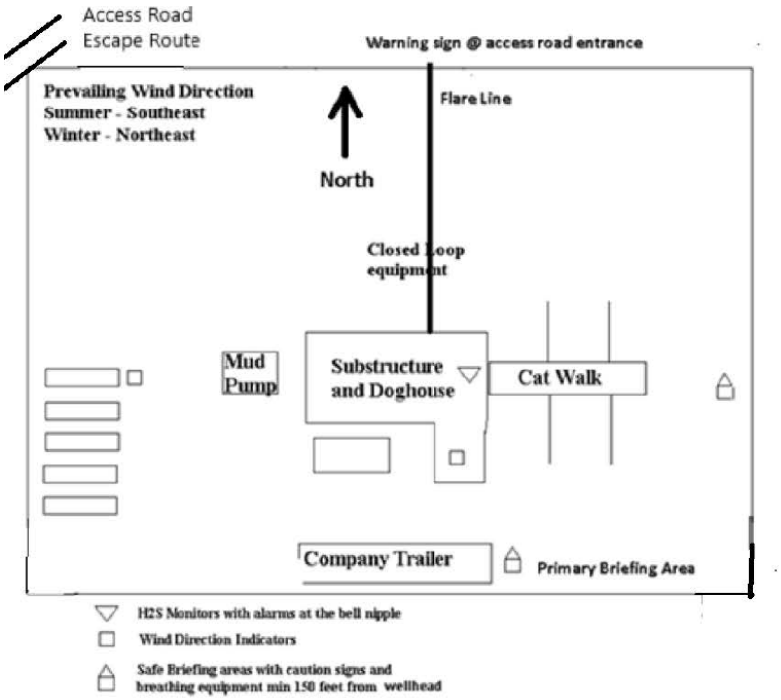
A. There will be no drill stem testing.

WARNING

YOU ARE ENTERING AN H2S AREA
AUTHORIZED PERSONNEL ONLY

1. BEARDS OR CONTACT LENSES NOT ALLOWED
2. HARD HATS REQUIRED
3. SMOKING IN DESIGNATED AREAS ONLY
4. BE WIND CONSCIOUS AT ALL TIMES
5. CHECK WITH RILEY PERMIAN OPERATING COMPANY MAN AT OFFICE

RILEY PERMIAN OPERATING COMPANY, LLC
1-405-415-8699



RILEY PERMIAN OPERATING CO,. LLC

Eddy County, NM (NAD83) NMEZ Grid
Calmer Than You 5 Fed Com Pad
Calmer Than Your 5 Fed Com 13H

13H

Plan: Plan #1

Standard Planning Report

01 April, 2026

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Company:	RILEY PERMIAN OPERATING CO,. LLC	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Project:	Eddy County, NM (NAD83) NMEZ Grid	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site:	Calmer Than You 5 Fed Com Pad	**North Reference:**	Grid
Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	13H		
Design:	Plan #1		

Project Eddy County, NM (NAD83) NMEZ Grid

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Calmer Than You 5 Fed Com Pad

Site Position:		**Northing:**	648,595.00 usft	**Latitude:**	32.7830187
From:	Map	**Easting:**	547,483.00 usft	**Longitude:**	-104.3133366
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.20 in	**Grid Convergence:**	0.01 °

Well Calmer Than Your 5 Fed Com 13H

Well Position	**+N/-S**	-1,339.00 usft	**Northing:**	647,256.00 usft	**Latitude:**	32.7793384
	+E/-W	-152.00 usft	**Easting:**	547,331.00 usft	**Longitude:**	-104.3138319
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,468.00 usft

Wellbore 13H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	03/29/26	6.57	60.09	47,162.50000000

Design Plan #1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	91.49

Plan Survey Tool Program **Date** 04/01/26

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	8,814.50	Plan #1 (13H)	MWD	
				OWSG MWD - Standard	

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Company:	RILEY PERMIAN OPERATING CO,. LLC	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Project:	Eddy County, NM (NAD83) NMEZ Grid	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site:	Calmer Than You 5 Fed Com Pad	**North Reference:**	Grid
Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	13H		
Design:	Plan #1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
2,076.26	31.53	86.68	1,997.92	24.48	422.11	2.00	2.00	0.00	86.68	
2,799.35	31.53	86.68	2,614.29	46.37	799.56	0.00	0.00	0.00	0.00	
3,157.67	60.00	91.49	2,861.77	47.80	1,053.50	8.00	7.95	1.34	8.70	
3,357.67	60.00	91.49	2,961.77	43.30	1,226.65	0.00	0.00	0.00	0.00	
3,653.66	89.60	91.50	3,038.52	35.93	1,509.03	10.00	10.00	0.00	0.03	
4,872.09	89.60	91.50	3,047.03	4.00	2,727.00	0.00	0.00	0.00	0.00	
6,190.56	89.60	91.45	3,056.23	-30.00	4,045.00	0.00	0.00	0.00	-88.83	
8,724.51	89.60	91.51	3,073.92	-95.62	6,578.04	0.00	0.00	0.00	91.32	
8,814.50	89.60	91.51	3,074.55	-98.00	6,668.00	0.00	0.00	0.00	0.00	CTY 5-13H PBHL 167

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Company:	RILEY PERMIAN OPERATING CO,. LLC	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Project:	Eddy County, NM (NAD83) NMEZ Grid	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site:	Calmer Than You 5 Fed Com Pad	**North Reference:**	Grid
Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	13H		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
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
Start Build 2.00									
600.00	2.00	86.68	599.98	0.10	1.74	1.74	2.00	2.00	0.00
700.00	4.00	86.68	699.84	0.40	6.97	6.95	2.00	2.00	0.00
800.00	6.00	86.68	799.45	0.91	15.67	15.64	2.00	2.00	0.00
900.00	8.00	86.68	898.70	1.61	27.83	27.78	2.00	2.00	0.00
1,000.00	10.00	86.68	997.47	2.52	43.45	43.37	2.00	2.00	0.00
1,100.00	12.00	86.68	1,095.62	3.62	62.50	62.38	2.00	2.00	0.00
1,200.00	14.00	86.68	1,193.06	4.93	84.95	84.80	2.00	2.00	0.00
1,300.00	16.00	86.68	1,289.64	6.43	110.79	110.59	2.00	2.00	0.00
1,400.00	18.00	86.68	1,385.27	8.12	139.98	139.72	2.00	2.00	0.00
1,500.00	20.00	86.68	1,479.82	10.00	172.48	172.16	2.00	2.00	0.00
1,600.00	22.00	86.68	1,573.17	12.08	208.25	207.87	2.00	2.00	0.00
1,700.00	24.00	86.68	1,665.21	14.34	247.26	246.80	2.00	2.00	0.00
1,800.00	26.00	86.68	1,755.84	16.79	289.45	288.91	2.00	2.00	0.00
1,900.00	28.00	86.68	1,844.94	19.42	334.77	334.15	2.00	2.00	0.00
2,000.00	30.00	86.68	1,932.39	22.22	383.17	382.46	2.00	2.00	0.00
2,076.26	31.53	86.68	1,997.92	24.48	422.11	421.33	2.00	2.00	0.00
Start 723.09 hold at 2076.26 MD									
2,100.00	31.53	86.68	2,018.16	25.20	434.50	433.69	0.00	0.00	0.00
2,200.00	31.53	86.68	2,103.40	28.23	486.70	485.80	0.00	0.00	0.00
2,300.00	31.53	86.68	2,188.64	31.26	538.90	537.90	0.00	0.00	0.00
2,400.00	31.53	86.68	2,273.88	34.28	591.10	590.01	0.00	0.00	0.00
2,500.00	31.53	86.68	2,359.12	37.31	643.30	642.11	0.00	0.00	0.00
2,600.00	31.53	86.68	2,444.36	40.34	695.50	694.21	0.00	0.00	0.00
2,700.00	31.53	86.68	2,529.60	43.37	747.70	746.32	0.00	0.00	0.00
2,799.35	31.53	86.68	2,614.29	46.37	799.56	798.08	0.00	0.00	0.00
KOP Start DLS 8.00 TFO 8.70									
2,850.00	35.54	87.73	2,656.50	47.72	827.50	825.97	8.00	7.92	2.08
2,900.00	39.50	88.59	2,696.15	48.69	857.92	856.37	8.00	7.93	1.71
2,950.00	43.47	89.31	2,733.60	49.29	891.03	889.45	8.00	7.94	1.44
3,000.00	47.45	89.94	2,768.66	49.51	926.66	925.06	8.00	7.95	1.25
3,050.00	51.43	90.49	2,801.17	49.37	964.64	963.03	8.00	7.96	1.10
3,100.00	55.41	90.98	2,830.97	48.85	1,004.78	1,003.17	8.00	7.96	0.98
3,150.00	59.39	91.42	2,857.90	47.97	1,046.88	1,045.28	8.00	7.96	0.89
3,157.67	60.00	91.49	2,861.77	47.80	1,053.50	1,051.90	8.00	7.97	0.85
60DEG Start 200.00 hold at 3157.67 MD									
3,200.00	60.00	91.49	2,882.94	46.85	1,090.15	1,088.56	0.00	0.00	0.00
3,300.00	60.00	91.49	2,932.94	44.60	1,176.72	1,175.16	0.00	0.00	0.00
3,357.67	60.00	91.49	2,961.77	43.30	1,226.65	1,225.11	0.00	0.00	0.00
Start DLS 10.00 TFO 0.03									
3,400.00	64.23	91.49	2,981.56	42.33	1,264.04	1,262.52	10.00	10.00	0.01
3,450.00	69.23	91.49	3,001.31	41.14	1,309.95	1,308.43	10.00	10.00	0.01
3,500.00	74.23	91.50	3,016.97	39.90	1,357.40	1,355.90	10.00	10.00	0.00
3,550.00	79.23	91.50	3,028.45	38.63	1,406.03	1,404.55	10.00	10.00	0.00
3,600.00	84.23	91.50	3,035.63	37.33	1,455.48	1,454.01	10.00	10.00	0.00
3,653.66	89.60	91.50	3,038.52	35.93	1,509.03	1,507.58	10.00	10.00	0.00
FTP 1675FNL Start 1218.42 hold at 3653.66 MD									

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Company:	RILEY PERMIAN OPERATING CO,. LLC	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Project:	Eddy County, NM (NAD83) NMEZ Grid	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site:	Calmer Than You 5 Fed Com Pad	**North Reference:**	Grid
Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	13H		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
3,700.00	89.60	91.50	3,038.84	34.72	1,555.35	1,553.92	0.00	0.00	0.00
3,800.00	89.60	91.50	3,039.54	32.10	1,655.31	1,653.91	0.00	0.00	0.00
3,900.00	89.60	91.50	3,040.24	29.48	1,755.27	1,753.91	0.00	0.00	0.00
4,000.00	89.60	91.50	3,040.94	26.85	1,855.23	1,853.91	0.00	0.00	0.00
4,100.00	89.60	91.50	3,041.64	24.23	1,955.20	1,953.91	0.00	0.00	0.00
4,200.00	89.60	91.50	3,042.33	21.61	2,055.16	2,053.90	0.00	0.00	0.00
4,300.00	89.60	91.50	3,043.03	18.99	2,155.12	2,153.90	0.00	0.00	0.00
4,400.00	89.60	91.50	3,043.73	16.37	2,255.09	2,253.90	0.00	0.00	0.00
4,500.00	89.60	91.50	3,044.43	13.75	2,355.05	2,353.90	0.00	0.00	0.00
4,600.00	89.60	91.50	3,045.13	11.13	2,455.01	2,453.89	0.00	0.00	0.00
4,700.00	89.60	91.50	3,045.83	8.51	2,554.98	2,553.89	0.00	0.00	0.00
4,800.00	89.60	91.50	3,046.53	5.89	2,654.94	2,653.89	0.00	0.00	0.00
4,872.09	89.60	91.50	3,047.03	4.00	2,727.00	2,725.97	0.00	0.00	0.00
PP1 Start DLS 0.00 TFO -88.83									
4,900.00	89.60	91.50	3,047.23	3.27	2,754.90	2,753.89	0.00	0.00	0.00
5,000.00	89.60	91.50	3,047.92	0.65	2,854.87	2,853.88	0.00	0.00	0.00
5,100.00	89.60	91.49	3,048.62	-1.96	2,954.83	2,953.88	0.00	0.00	0.00
5,200.00	89.60	91.49	3,049.32	-4.56	3,054.79	3,053.88	0.00	0.00	0.00
5,300.00	89.60	91.49	3,050.02	-7.16	3,154.76	3,153.88	0.00	0.00	0.00
5,400.00	89.60	91.48	3,050.72	-9.75	3,254.72	3,253.87	0.00	0.00	0.00
5,500.00	89.60	91.48	3,051.41	-12.33	3,354.69	3,353.87	0.00	0.00	0.00
5,600.00	89.60	91.48	3,052.11	-14.91	3,454.65	3,453.87	0.00	0.00	0.00
5,700.00	89.60	91.47	3,052.81	-17.48	3,554.62	3,553.87	0.00	0.00	0.00
5,800.00	89.60	91.47	3,053.51	-20.04	3,654.58	3,653.87	0.00	0.00	0.00
5,900.00	89.60	91.46	3,054.20	-22.60	3,754.54	3,753.86	0.00	0.00	0.00
6,000.00	89.60	91.46	3,054.90	-25.15	3,854.51	3,853.86	0.00	0.00	0.00
6,100.00	89.60	91.46	3,055.60	-27.70	3,954.47	3,953.86	0.00	0.00	0.00
6,190.56	89.60	91.45	3,056.23	-30.00	4,045.00	4,044.41	0.00	0.00	0.00
PP2 Start DLS 0.00 TFO 91.32									
6,200.00	89.60	91.45	3,056.30	-30.24	4,054.44	4,053.86	0.00	0.00	0.00
6,300.00	89.60	91.46	3,056.99	-32.78	4,154.41	4,153.85	0.00	0.00	0.00
6,400.00	89.60	91.46	3,057.69	-35.32	4,254.37	4,253.85	0.00	0.00	0.00
6,500.00	89.60	91.46	3,058.39	-37.87	4,354.34	4,353.85	0.00	0.00	0.00
6,600.00	89.60	91.46	3,059.08	-40.42	4,454.30	4,453.85	0.00	0.00	0.00
6,700.00	89.60	91.47	3,059.78	-42.98	4,554.27	4,553.84	0.00	0.00	0.00
6,800.00	89.60	91.47	3,060.48	-45.54	4,654.23	4,653.84	0.00	0.00	0.00
6,900.00	89.60	91.47	3,061.18	-48.10	4,754.20	4,753.84	0.00	0.00	0.00
7,000.00	89.60	91.47	3,061.87	-50.67	4,854.16	4,853.84	0.00	0.00	0.00
7,100.00	89.60	91.48	3,062.57	-53.24	4,954.12	4,953.83	0.00	0.00	0.00
7,200.00	89.60	91.48	3,063.27	-55.82	5,054.09	5,053.83	0.00	0.00	0.00
7,300.00	89.60	91.48	3,063.97	-58.40	5,154.05	5,153.83	0.00	0.00	0.00
7,400.00	89.60	91.48	3,064.67	-60.99	5,254.02	5,253.83	0.00	0.00	0.00
7,500.00	89.60	91.48	3,065.36	-63.58	5,353.98	5,353.82	0.00	0.00	0.00
7,600.00	89.60	91.49	3,066.06	-66.17	5,453.94	5,453.82	0.00	0.00	0.00
7,700.00	89.60	91.49	3,066.76	-68.77	5,553.91	5,553.82	0.00	0.00	0.00
7,800.00	89.60	91.49	3,067.46	-71.37	5,653.87	5,653.82	0.00	0.00	0.00
7,900.00	89.60	91.49	3,068.16	-73.97	5,753.84	5,753.81	0.00	0.00	0.00
8,000.00	89.60	91.50	3,068.86	-76.58	5,853.80	5,853.81	0.00	0.00	0.00
8,100.00	89.60	91.50	3,069.55	-79.20	5,953.76	5,953.81	0.00	0.00	0.00
8,200.00	89.60	91.50	3,070.25	-81.82	6,053.73	6,053.81	0.00	0.00	0.00
8,300.00	89.60	91.50	3,070.95	-84.44	6,153.69	6,153.80	0.00	0.00	0.00
8,400.00	89.60	91.51	3,071.65	-87.07	6,253.65	6,253.80	0.00	0.00	0.00
8,500.00	89.60	91.51	3,072.35	-89.70	6,353.62	6,353.80	0.00	0.00	0.00
8,600.00	89.60	91.51	3,073.05	-92.33	6,453.58	6,453.80	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Company:	RILEY PERMIAN OPERATING CO,. LLC	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Project:	Eddy County, NM (NAD83) NMEZ Grid	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site:	Calmer Than You 5 Fed Com Pad	**North Reference:**	Grid
Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	13H		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,700.00	89.60	91.51	3,073.75	-94.97	6,553.54	6,553.79	0.00	0.00	0.00
8,724.51	89.60	91.51	3,073.92	-95.62	6,578.04	6,578.30	0.00	0.00	0.00
LMP Start 90.00 hold at 8724.51 MD									
8,800.00	89.60	91.51	3,074.45	-97.62	6,653.50	6,653.79	0.00	0.00	0.00
8,814.50	89.60	91.51	3,074.55	-98.00	6,668.00	6,668.29	0.00	0.00	0.00
PBHL TD at 8814.50									

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
CTY 5-13H SHL 1739FN - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	647,256.00	547,331.00	32.7793384	-104.3138319
CTY 5-13H KOP - plan misses target center by 0.23usft at 2798.98usft MD (2613.97 TVD, 46.36 N, 799.36 E) - Point	0.00	0.00	2,613.85	46.37	799.56	647,302.37	548,130.56	32.7794654	-104.3112303
CTY 5-13H 60DEG - plan hits target center - Point	0.00	0.00	2,861.77	47.80	1,053.50	647,303.80	548,384.50	32.7794692	-104.3104041
CTY 5-13H FTP 1675FN - plan misses target center by 0.07usft at 3653.64usft MD (3038.52 TVD, 35.93 N, 1509.00 E) - Point	0.00	0.00	3,038.52	36.00	1,509.00	647,292.00	548,840.00	32.7794365	-104.3089220
CTY 5-13H PP1 1675FN - plan hits target center - Point	0.00	0.00	3,047.03	4.00	2,727.00	647,260.00	550,058.00	32.7793477	-104.3049590
CTY 5-13H PP2 1676FN - plan hits target center - Point	0.00	0.00	3,056.23	-30.00	4,045.00	647,226.00	551,376.00	32.7792532	-104.3006705
CTY 5-13H LMP 1675FN - plan misses target center by 0.38usft at 8724.48usft MD (3073.92 TVD, -95.62 N, 6578.01 E) - Point	0.00	0.00	3,073.92	-96.00	6,578.00	647,160.00	553,909.00	32.7790693	-104.2924289
CTY 5-13H PBHL 1675F - plan hits target center - Point	0.00	0.00	3,074.55	-98.00	6,668.00	647,158.00	553,999.00	32.7790637	-104.2921361

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
213.00	213.00	Seven Rivers			
682.12	682.00	Queen			
1,085.06	1,081.00	Grayburg			
1,362.99	1,350.00	San Andres			
2,878.04	2,679.00	Glorieta			
2,991.68	2,763.00	Paddock			
3,549.06	3,028.27	Target		0.40	

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Company:	RILEY PERMIAN OPERATING CO,. LLC	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Project:	Eddy County, NM (NAD83) NMEZ Grid	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site:	Calmer Than You 5 Fed Com Pad	**North Reference:**	Grid
Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	13H		
Design:	Plan #1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
500.00	500.00	0.00	0.00	Start Build 2.00
2,076.26	1,997.92	24.48	422.11	Start 723.09 hold at 2076.26 MD
2,799.35	2,614.29	46.37	799.56	KOP Start DLS 8.00 TFO 8.70
3,157.67	2,861.77	47.80	1,053.50	60DEG Start 200.00 hold at 3157.67 MD
3,357.67	2,961.77	43.30	1,226.65	Start DLS 10.00 TFO 0.03
3,653.66	3,038.52	35.93	1,509.03	FTP 1675FNL Start 1218.42 hold at 3653.66 MD
4,872.09	3,047.03	4.00	2,727.00	PP1 Start DLS 0.00 TFO -88.83
6,190.56	3,056.23	-30.00	4,045.00	PP2 Start DLS 0.00 TFO 91.32
8,724.51	3,073.92	-95.62	6,578.04	LMP Start 90.00 hold at 8724.51 MD
8,814.50	3,074.55	-98.00	6,668.00	PBHL TD at 8814.50

Released to Imaging: 11/18/2026 1:59:10 PM
Received by OCD: 11/11/2026 11:05:12 AM

RILEY PERMIAN OPERATING CO,. LLC

Project: Eddy County, NM (NAD83) NMEZ Grid
Site: Calmer Than You 5 Fed Com Pad
Well: Calmer Than Your 5 Fed Com 11H
Wellbore: 11H
Design: Plan #1

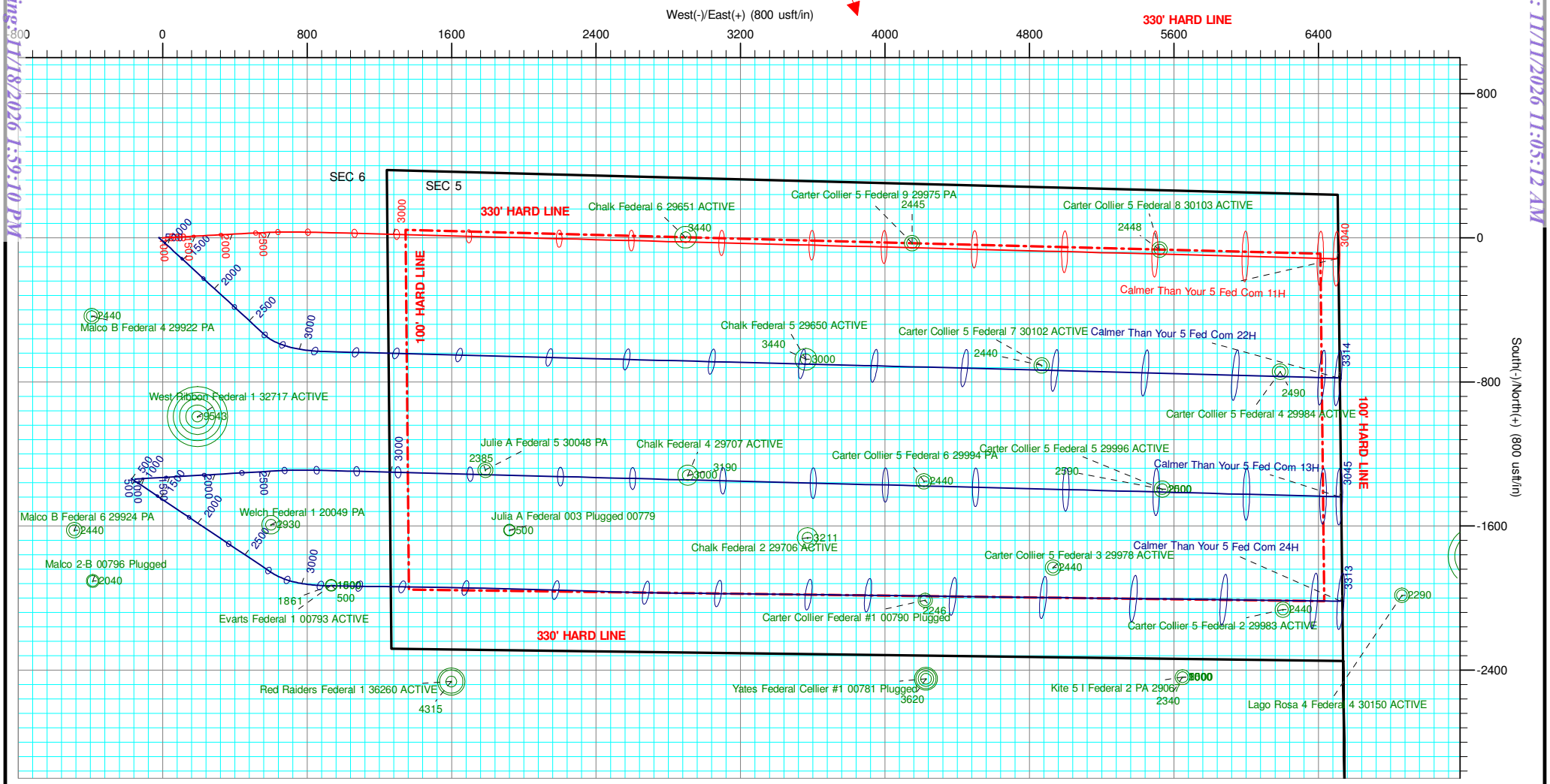
3438+20 @ 3458.00usft (Savanna)
GL+KB

Magnetic North is 6.56° East of Grid North (Magnetic Convergence)
Magnetic North is 6.57° East of True North (Magnetic Declination)
To convert a Magnetic Direction to a Grid Direction, Add 6.56°
To convert a Magnetic Direction to a True Direction, Add 6.57° East

T G M

Azimuths to Grid North
True North: -0.01°
Magnetic North: 6.56°

Magnetic Field
Strength: 47162.5nT
Dip Angle: 60.09°
Date: 03/29/2026
Model: NOAA IGRF 2025



Plan: Plan #1 (Calmer Than Your 5 Fed Com 11H/11H)
Created By: Mekka Williams

mekka@esominawelldesign.com
12:13, April 01 2026

QUANTUM ENERGY TECHNOLOGIES
1521 E Richey Rd
Houston, TX 77073

QUANTUM ENERGY TECHNOLOGIES

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RILEY PERMIAN OPERATING CO,. LLC

Project: Eddy County, NM (NAD83) NMEZ Grid
Site: Calmer Than You 5 Fed Com Pad
Well: Calmer Than Your 5 Fed Com 13H
Wellbore: 13H
Design: Plan #1

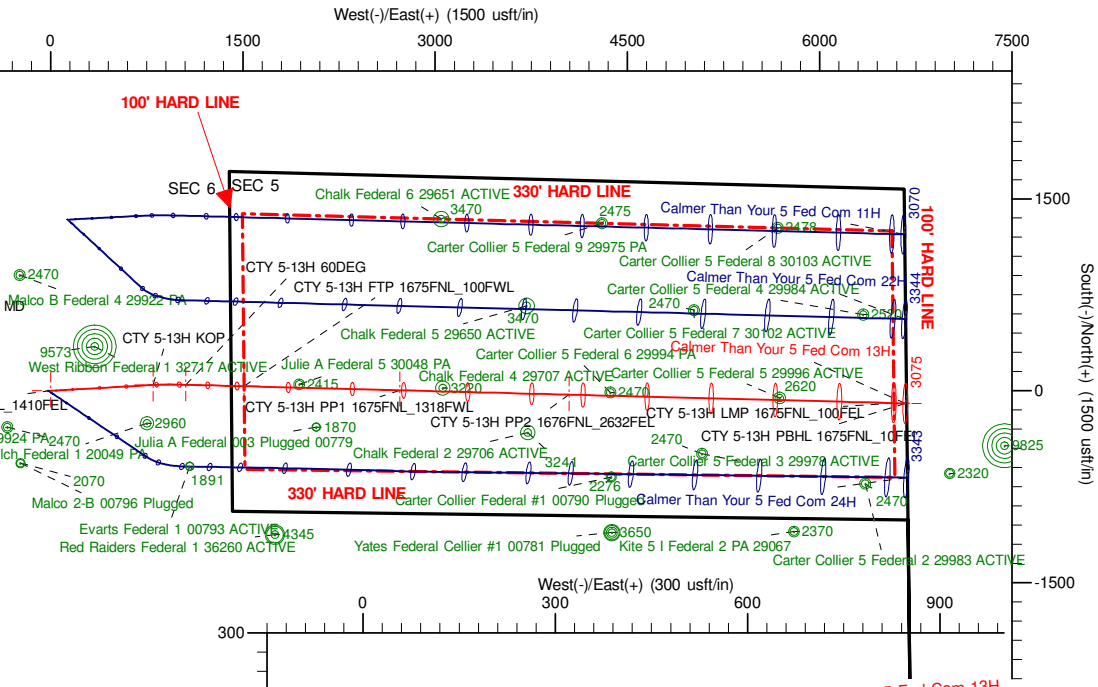
3468+20 @ 3488.00usft (Savanna)
GL+KB

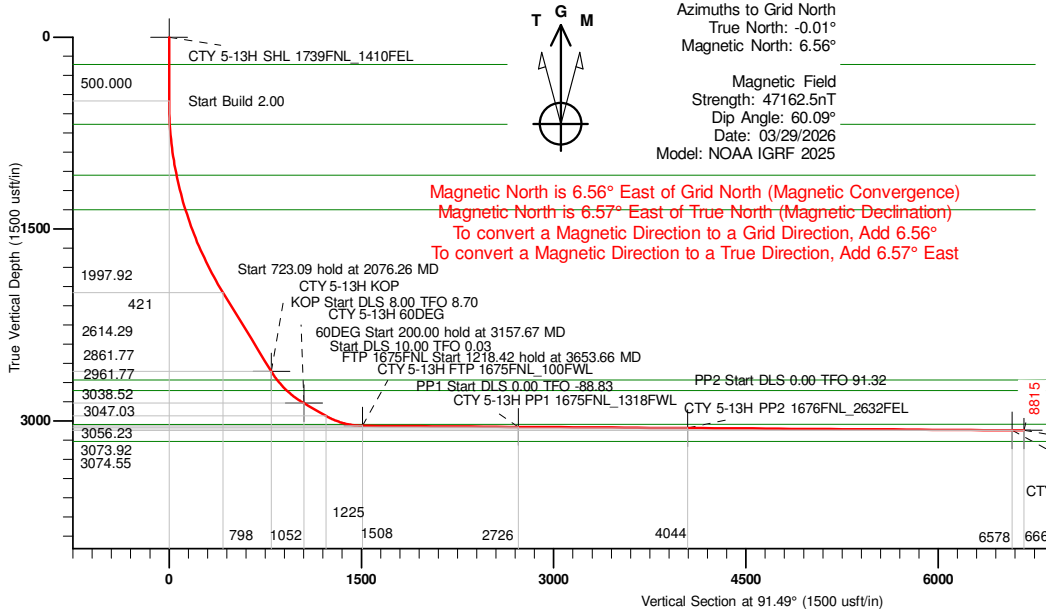
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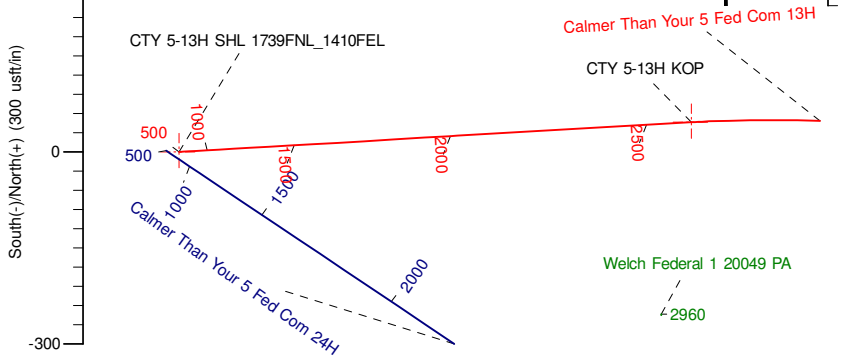
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
2076.26	31.53	86.68	1997.92	24.48	422.11	2.00	86.68	421.33	Start 723.09 hold at 2076.26 MD
2799.35	31.53	86.68	2614.29	46.37	799.56	0.00	0.00	798.08	KOP Start DLS 8.00 TFO 8.70
3157.67	60.00	91.49	2861.77	47.80	1053.50	8.00	8.70	1051.90	60DEG Start 200.00 hold at 3157.67 MD
3357.67	60.00	91.49	2961.77	43.30	1226.65	0.00	0.00	1225.11	Start DLS 10.00 TFO 0.03
3653.66	89.60	91.50	3038.52	35.93	1509.03	10.00	0.03	1507.58	FTP 1675FNL Start 1218.42 hold at 3653.66 MD
4872.09	89.60	91.50	3047.03	4.00	2727.00	0.00	0.00	2725.97	PP1 Start DLS 0.00 TFO -88.83
6190.56	89.60	91.45	3056.23	-30.00	4045.00	0.00	-88.83	4044.41	PP2 Start DLS 0.00 TFO 91.32
8724.51	89.60	91.51	3073.92	-95.62	6578.04	0.00	91.32	6578.30	LMP Start 90.00 hold at 8724.51 MD
8814.50	89.60	91.51	3074.55	-98.00	6668.00	0.00	0.00	6668.29	PBHL TD at 8814.50

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CTY 5-13H SHL 1739FNL_1410FEL	0.00	0.00	0.00	647256.00	547331.00	32.7793383	-104.3138320
CTY 5-13H KOP	2613.85	46.37	799.56	647302.37	548130.56	32.7794654	-104.3112304
CTY 5-13H 60DEG	2861.77	47.80	1053.50	647303.80	548384.50	32.7794692	-104.3104041
CTY 5-13H FTP 1675FNL_100FWL	3038.52	36.00	1509.00	647292.00	548840.00	32.7794364	-104.3089220
CTY 5-13H PP1 1675FNL_1318FWL	3047.03	4.00	2727.00	647260.00	550058.00	32.7793476	-104.3049590
CTY 5-13H PP2 1676FNL_2632FEL	3056.23	-30.00	4045.00	647226.00	551376.00	32.7792531	-104.3006706
CTY 5-13H LMP 1675FNL_100FEL	3073.92	-96.00	6578.00	647160.00	553909.00	32.7790693	-104.2924289
CTY 5-13H PBHL 1675FNL_10FEL	3074.55	-98.00	6668.00	647158.00	553999.00	32.7790637	-104.2921361







FORMATION TOPS

TVDPath	MDPath	Formation
213.00	213.00	Seven Rivers
682.00	682.12	Queen
1081.00	1085.06	Grayburg
1350.00	1362.99	San Andres
2679.00	2878.04	Glorieta
2763.00	2991.68	Paddock
3028.27	3549.06	Target

TARGET LINE - 3028KBTVD .4°DIP (89.6INC)

Plan: Plan #1 (Calmer Than Your 5 Fed Com 13H/13H)
Created By: Mekka Williams

mekka@esominawelldesign.com
12:09, April 01 2026

QUANTUM ENERGY TECHNOLOGIES
1521 E Richey Rd
Houston, TX 77073

RILEY PERMIAN OPERATING CO,. LLC

Eddy County, NM (NAD83) NMEZ Grid
Calmer Than You 5 Fed Com Pad
Calmer Than Your 5 Fed Com 13H

13H
Plan #1

Anticollision Report

01 April, 2026

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 0.00 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 04/01/26

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	8,814.50	Plan #1 (13H)	MWD	OWSG MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Calmer Than You 5 Fed Com Pad						
Calmer Than Your 5 Fed Com 11H - 11H - Plan #1	8,763.99	8,705.97	1,320.15	1,011.92	4.283	CC
Calmer Than Your 5 Fed Com 11H - 11H - Plan #1	8,800.00	8,706.51	1,320.62	1,011.55	4.273	ES
Calmer Than Your 5 Fed Com 11H - 11H - Plan #1	8,814.50	8,706.51	1,321.09	1,011.74	4.271	SF
Calmer Than Your 5 Fed Com 22H - 22H - Plan #1	3,357.95	3,499.15	703.62	655.52	14.631	CC
Calmer Than Your 5 Fed Com 22H - 22H - Plan #1	8,800.00	9,069.15	711.57	421.56	2.454	ES, SF
Calmer Than Your 5 Fed Com 24H - 24H - Plan #1	500.00	499.00	20.10	16.30	5.286	CC
Calmer Than Your 5 Fed Com 24H - 24H - Plan #1	700.00	700.14	21.32	14.40	3.079	ES
Calmer Than Your 5 Fed Com 24H - 24H - Plan #1	8,814.50	9,130.89	638.86	351.36	2.222	SF
Carter Collier 5 Federal 2 29983 ACTIVE - 2 - 2 AsDrilled	8,514.58	2,450.00	875.23	730.77	6.059	CC, ES
Carter Collier 5 Federal 2 29983 ACTIVE - 2 - 2 AsDrilled	8,600.00	2,450.00	879.38	734.15	6.055	SF
Carter Collier 5 Federal 3 29978 ACTIVE - 5 - 5 AsDrilled	7,235.89	2,450.00	735.69	633.85	7.224	CC, ES
Carter Collier 5 Federal 3 29978 ACTIVE - 5 - 5 AsDrilled	7,300.00	2,450.00	738.47	636.20	7.221	SF
Carter Collier 5 Federal 4 29984 ACTIVE - 4 - 4 AsDrilled	8,464.87	2,500.00	879.90	726.31	5.729	CC, ES
Carter Collier 5 Federal 4 29984 ACTIVE - 4 - 4 AsDrilled	8,500.00	2,500.00	880.60	726.44	5.712	SF
Carter Collier 5 Federal 5 29996 ACTIVE - 5 - 5 AsDrilled	7,600.00	2,600.00	503.79	440.98	8.020	SF
Carter Collier 5 Federal 5 29996 ACTIVE - 5 - 5 AsDrilled	7,830.46	2,600.00	447.99	397.64	8.897	CC, ES
Carter Collier 5 Federal 6 29994 PA - 6 - 6 AsDrilled	6,200.00	2,450.00	664.78	612.09	12.616	SF
Carter Collier 5 Federal 6 29994 PA - 6 - 6 AsDrilled	6,500.00	2,450.00	589.08	549.00	14.698	ES
Carter Collier 5 Federal 6 29994 PA - 6 - 6 AsDrilled	6,508.20	2,450.00	589.02	549.05	14.737	CC
Carter Collier 5 Federal 7 30102 ACTIVE - 7 - 7 AsDrilled	7,143.98	2,450.00	906.22	782.54	7.327	CC, ES
Carter Collier 5 Federal 7 30102 ACTIVE - 7 - 7 AsDrilled	7,200.00	2,450.00	907.95	783.41	7.291	SF
Carter Collier 5 Federal 8 30103 ACTIVE - 8 - 8 AsDrilled	7,779.45	2,458.00	1,468.59	1,307.54	9.119	CC
Carter Collier 5 Federal 8 30103 ACTIVE - 8 - 8 AsDrilled	7,800.00	2,458.00	1,468.73	1,307.23	9.094	ES
Carter Collier 5 Federal 8 30103 ACTIVE - 8 - 8 AsDrilled	8,000.00	2,458.00	1,485.07	1,320.32	9.014	SF
Carter Collier 5 Federal 9 29975 PA - 9 - 9 AsDrilled	6,409.26	2,455.00	1,466.56	1,336.38	11.266	CC, ES
Carter Collier 5 Federal 9 29975 PA - 9 - 9 AsDrilled	6,600.00	2,455.00	1,478.92	1,345.16	11.057	SF
Carter Collier Federal #1 00790 Plugged - 1 - 1 AsDrilled	6,531.34	2,256.00	1,007.39	913.93	10.779	CC, ES
Carter Collier Federal #1 00790 Plugged - 1 - 1 AsDrilled	6,600.00	2,256.00	1,009.72	915.55	10.722	SF
Chalk Federal 2 29706 ACTIVE - 2 - 2 AsDrilled	5,876.53	3,034.04	303.89	166.03	2.204	CC, ES, SF
Chalk Federal 4 29707 ACTIVE - 4 - 4 AsDrilled	5,204.49	3,029.35	26.13	-95.36	0.215	Level 1, CC, ES, SF
Chalk Federal 5 29650 ACTIVE - 5 - 5 AsDrilled	5,841.85	3,033.80	686.12	549.10	5.008	CC, ES
Chalk Federal 5 29650 ACTIVE - 5 - 5 AsDrilled	5,900.00	3,034.20	688.57	550.32	4.981	SF
Chalk Federal 6 29651 ACTIVE - 6 - 6 AsDrilled	5,157.72	3,029.03	1,346.51	1,226.16	11.188	CC
Chalk Federal 6 29651 ACTIVE - 6 - 6 AsDrilled	5,200.00	3,029.32	1,347.18	1,225.79	11.098	ES
Chalk Federal 6 29651 ACTIVE - 6 - 6 AsDrilled	5,400.00	3,030.72	1,368.12	1,242.74	10.912	SF
Evarts Federal 1 00793 ACTIVE - 1 - 1 AsDrilled	2,200.00	1,871.00	886.42	842.13	20.011	SF
Evarts Federal 1 00793 ACTIVE - 1 - 1 AsDrilled	2,312.91	1,871.00	879.20	835.45	20.096	CC, ES

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Calmer Than You 5 Fed Com Pad						
Federal BA Com 1 23542 ACTIVE - 1 - 1 AsDrilled	8,814.50	3,054.55	842.00	727.27	7.339	CC, ES, SF
Julia A Federal 003 Plugged 00779 - 003 - 003 AsDrilled	2,600.00	1,850.00	1,526.96	1,483.09	34.804	SF
Julia A Federal 003 Plugged 00779 - 003 - 003 AsDrilled	4,217.46	1,850.00	1,211.31	1,182.44	41.958	CC, ES
Julie A Federal 5 30048 PA - 5 - 5 AsDrilled	3,357.67	2,395.00	898.57	848.15	17.822	SF
Julie A Federal 5 30048 PA - 5 - 5 AsDrilled	4,079.43	2,395.00	627.03	604.36	27.656	CC, ES
Kite 5 I Federal 2 PA 29067 - 1 - 1 AsDrilled	7,968.01	2,350.00	1,239.84	1,090.86	8.322	CC
Kite 5 I Federal 2 PA 29067 - 1 - 1 AsDrilled	8,000.00	2,350.00	1,240.25	1,090.73	8.295	ES
Kite 5 I Federal 2 PA 29067 - 1 - 1 AsDrilled	8,100.00	2,350.00	1,246.84	1,096.05	8.269	SF
Lago Rosa 4 Federal 4 30150 ACTIVE - 4 - 4 AsDrilled	8,814.50	2,300.00	994.43	873.21	8.203	CC, ES, SF
Malco 2-B 00796 Plugged - 2-B - 2-B AsDrilled	500.00	480.00	612.21	601.61	57.800	CC
Malco 2-B 00796 Plugged - 2-B - 2-B AsDrilled	600.00	579.98	612.97	600.29	48.341	ES
Malco 2-B 00796 Plugged - 2-B - 2-B AsDrilled	2,076.26	1,977.92	882.79	837.98	19.702	SF
Malco B Federal 4 29922 PA - 4 - 4 AsDrilled	500.00	480.00	936.27	926.10	92.094	CC
Malco B Federal 4 29922 PA - 4 - 4 AsDrilled	800.00	779.45	939.54	922.75	55.976	ES
Malco B Federal 4 29922 PA - 4 - 4 AsDrilled	2,600.00	2,424.36	1,274.08	1,216.83	22.255	SF
Malco B Federal 6 29924 PA - 6 - 6 AsDrilled	500.00	480.00	440.62	429.94	41.262	CC
Malco B Federal 6 29924 PA - 6 - 6 AsDrilled	600.00	579.98	442.02	429.09	34.169	ES
Malco B Federal 6 29924 PA - 6 - 6 AsDrilled	1,700.00	1,645.21	656.06	618.43	17.436	SF
Red Raiders Federal 1 36260 ACTIVE - 1 - 1 AsDrilled	3,925.58	3,020.42	1,153.30	1,062.21	12.661	CC, ES
Red Raiders Federal 1 36260 ACTIVE - 1 - 1 AsDrilled	4,200.00	3,022.33	1,185.50	1,089.43	12.340	SF
Welch Federal 1 20049 PA - 1 - 1 AsDrilled	2,676.23	2,489.34	296.69	236.91	4.963	CC
Welch Federal 1 20049 PA - 1 - 1 AsDrilled	2,700.00	2,509.60	296.95	236.63	4.923	ES
Welch Federal 1 20049 PA - 1 - 1 AsDrilled	2,799.35	2,594.29	303.59	241.11	4.859	SF
West Ribbon Federal 1 32717 ACTIVE - 1 - AsDrilled	1,960.59	1,878.13	326.50	284.22	7.723	CC
West Ribbon Federal 1 32717 ACTIVE - 1 - AsDrilled	2,000.00	1,912.39	327.08	283.76	7.552	ES
West Ribbon Federal 1 32717 ACTIVE - 1 - AsDrilled	2,200.00	2,083.40	348.96	300.46	7.195	SF
Yates Federal Cellier #1 00781 Plugged - 1 - 1 AsDrilled	6,552.23	3,038.75	1,069.46	915.04	6.926	CC, ES
Yates Federal Cellier #1 00781 Plugged - 1 - 1 AsDrilled	6,700.00	3,039.78	1,079.61	922.69	6.880	SF

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 11H - 11H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	30.00	0.00	0.00	6.48	1,339.00	152.00	1,347.93				
100.00	100.00	70.00	100.00	0.31	0.22	6.48	1,339.00	152.00	1,347.60	1,347.16	0.44	3,088.684	
200.00	200.00	170.00	200.00	0.95	0.76	6.48	1,339.00	152.00	1,347.60	1,346.15	1.45	927.193	
300.00	300.00	270.00	300.00	1.46	1.31	6.48	1,339.00	152.00	1,347.60	1,345.22	2.38	565.272	
400.00	400.00	370.00	400.00	1.89	1.76	6.48	1,339.00	152.00	1,347.60	1,344.39	3.21	419.913	
500.00	500.00	470.00	500.00	2.31	2.18	6.48	1,339.00	152.00	1,347.60	1,343.61	3.99	337.627	
600.00	599.98	564.99	594.98	2.85	2.64	-80.24	1,339.04	152.74	1,347.43	1,342.85	4.59	293.663	
700.00	699.84	657.85	687.77	3.79	3.35	-80.30	1,339.23	156.34	1,347.18	1,342.02	5.16	261.015	
800.00	799.45	750.76	780.44	4.66	4.22	-80.37	1,339.57	162.95	1,346.87	1,341.09	5.79	232.811	
900.00	898.70	843.72	872.89	5.42	4.98	-80.45	1,340.07	172.57	1,346.51	1,340.07	6.43	209.359	
1,000.00	997.47	936.73	965.04	6.10	5.67	-80.54	1,340.73	185.18	1,346.08	1,338.96	7.12	188.951	
1,100.00	1,095.62	1,029.80	1,056.79	6.74	6.29	-80.64	1,341.54	200.78	1,345.60	1,337.73	7.87	171.048	
1,200.00	1,193.06	1,122.94	1,148.04	7.33	6.87	-80.75	1,342.50	219.37	1,345.07	1,336.40	8.67	155.184	
1,300.00	1,289.64	1,216.16	1,238.72	7.90	7.42	-80.87	1,343.63	240.93	1,344.48	1,334.95	9.53	141.008	
1,400.00	1,385.27	1,309.46	1,328.73	8.44	7.95	-81.00	1,344.90	265.45	1,343.85	1,333.37	10.48	128.263	
1,500.00	1,479.82	1,400.00	1,415.27	8.97	8.44	-81.14	1,346.28	292.02	1,343.17	1,331.68	11.49	116.925	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 11H - 11H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,600.00	1,573.17	1,496.33	1,506.37	9.47	8.94	-81.29	1,347.91	323.28	1,342.44	1,329.81	12.62	106.343	
1,700.00	1,665.21	1,589.92	1,593.81	9.97	9.42	-81.45	1,349.64	356.57	1,341.67	1,327.82	13.85	96.904	
1,800.00	1,755.84	1,687.14	1,683.68	10.47	9.70	-81.66	1,351.57	393.62	1,340.78	1,325.60	15.19	88.288	
1,900.00	1,844.94	1,786.84	1,775.73	10.96	9.98	-82.00	1,353.56	431.88	1,339.46	1,322.82	16.65	80.471	
2,000.00	1,932.39	1,886.21	1,867.47	11.47	10.28	-82.51	1,355.54	470.01	1,337.72	1,319.53	18.19	73.532	
2,076.26	1,997.92	1,961.70	1,937.16	11.82	10.54	-82.99	1,357.05	498.97	1,336.17	1,316.74	19.43	68.782	
2,100.00	2,018.16	1,985.15	1,958.81	11.92	10.62	-83.15	1,357.52	507.97	1,335.66	1,315.84	19.82	67.401	
2,200.00	2,103.40	2,083.94	2,050.01	12.40	10.99	-83.80	1,359.49	545.88	1,333.65	1,312.15	21.49	62.057	
2,300.00	2,188.64	2,182.73	2,141.22	13.05	11.43	-84.46	1,361.46	583.79	1,331.81	1,308.61	23.20	57.415	
2,400.00	2,273.88	2,281.52	2,232.42	13.85	11.95	-85.11	1,363.43	621.70	1,330.15	1,305.23	24.92	53.375	
2,500.00	2,359.12	2,380.30	2,323.63	14.75	12.54	-85.77	1,365.41	659.61	1,328.67	1,302.01	26.66	49.837	
2,600.00	2,444.36	2,479.09	2,414.83	15.69	13.19	-86.43	1,367.38	697.51	1,327.37	1,298.96	28.41	46.720	
2,700.00	2,529.60	2,577.88	2,506.03	16.66	13.86	-87.09	1,369.35	735.42	1,326.25	1,296.08	30.17	43.963	
2,799.35	2,614.29	2,690.38	2,606.52	17.63	14.76	-87.50	1,371.09	785.72	1,324.81	1,292.70	32.11	41.256	
2,799.99	2,614.84	2,691.12	2,607.16	17.64	14.76	-87.52	1,371.10	786.10	1,324.80	1,292.67	32.13	41.238	
2,850.00	2,656.50	2,748.70	2,655.20	18.16	15.32	-88.46	1,371.54	817.81	1,323.85	1,290.63	33.22	39.848	
2,900.00	2,696.15	2,806.26	2,700.53	18.75	15.95	-89.19	1,371.68	853.25	1,323.01	1,288.56	34.45	38.404	
2,950.00	2,733.60	2,863.73	2,742.82	19.38	16.64	-89.74	1,371.52	892.16	1,322.26	1,286.46	35.80	36.936	
3,000.00	2,768.66	2,921.08	2,781.77	20.07	17.41	-90.15	1,371.05	934.21	1,321.62	1,284.35	37.27	35.460	
3,050.00	2,801.17	2,978.24	2,817.13	20.82	18.24	-90.45	1,370.28	979.09	1,321.09	1,282.23	38.86	33.995	
3,100.00	2,830.97	3,035.16	2,848.69	21.62	19.14	-90.65	1,369.23	1,026.44	1,320.67	1,280.11	40.57	32.554	
3,150.00	2,857.90	3,087.22	2,874.90	22.46	20.01	-90.82	1,368.07	1,071.40	1,320.44	1,278.14	42.30	31.214	
3,157.67	2,861.77	3,094.88	2,878.73	22.60	20.14	-90.85	1,367.90	1,078.04	1,320.44	1,277.87	42.57	31.018	
3,200.00	2,882.94	3,137.22	2,899.90	23.35	20.87	-90.85	1,366.95	1,114.69	1,320.44	1,276.37	44.07	29.963	
3,300.00	2,932.94	3,237.22	2,949.90	25.15	22.62	-90.85	1,364.69	1,201.26	1,320.43	1,272.78	47.66	27.707	
3,357.67	2,961.77	3,296.35	2,978.00	26.20	23.70	-90.78	1,363.34	1,253.25	1,320.41	1,270.61	49.79	26.517	
3,400.00	2,981.56	3,339.85	2,995.32	27.00	24.54	-90.64	1,362.30	1,293.13	1,320.36	1,268.93	51.43	25.672	
3,450.00	3,001.31	3,390.88	3,011.70	27.99	25.56	-90.47	1,361.04	1,341.43	1,320.32	1,266.88	53.44	24.705	
3,500.00	3,016.97	3,441.55	3,023.65	29.02	26.61	-90.29	1,359.75	1,390.64	1,320.29	1,264.76	55.53	23.777	
3,550.00	3,028.45	3,491.86	3,031.17	30.08	27.67	-90.12	1,358.45	1,440.35	1,320.27	1,262.61	57.66	22.898	
3,599.72	3,035.60	3,541.53	3,034.28	31.15	28.73	-89.94	1,357.15	1,489.88	1,320.27	1,260.46	59.80	22.077	
3,600.00	3,035.63	3,541.80	3,034.29	31.16	28.74	-89.94	1,357.14	1,490.16	1,320.27	1,260.45	59.82	22.072	
3,653.66	3,038.52	3,595.38	3,034.70	32.33	29.90	-89.83	1,355.74	1,543.72	1,320.27	1,258.12	62.15	21.244	
3,700.00	3,038.84	3,641.72	3,035.03	33.34	30.92	-89.83	1,354.52	1,590.04	1,320.26	1,256.08	64.19	20.569	
3,800.00	3,039.54	3,741.72	3,035.73	35.57	33.13	-89.83	1,351.89	1,690.00	1,320.26	1,251.62	68.64	19.235	
3,900.00	3,040.24	3,841.72	3,036.42	37.83	35.39	-89.83	1,349.27	1,789.96	1,320.25	1,247.10	73.16	18.047	
4,000.00	3,040.94	3,941.72	3,037.12	40.11	37.67	-89.83	1,346.64	1,889.92	1,320.25	1,242.53	77.72	16.986	
4,100.00	3,041.64	4,041.72	3,037.82	42.41	39.97	-89.83	1,344.02	1,989.89	1,320.25	1,237.91	82.34	16.035	
4,200.00	3,042.33	4,141.72	3,038.52	44.73	42.29	-89.83	1,341.39	2,089.85	1,320.24	1,233.26	86.98	15.178	
4,300.00	3,043.03	4,241.72	3,039.22	47.07	44.63	-89.83	1,338.77	2,189.81	1,320.24	1,228.57	91.66	14.403	
4,400.00	3,043.73	4,341.72	3,039.92	49.42	46.98	-89.83	1,336.14	2,289.78	1,320.23	1,223.87	96.37	13.700	
4,500.00	3,044.43	4,441.72	3,040.61	51.78	49.34	-89.83	1,333.52	2,389.74	1,320.23	1,219.13	101.09	13.060	
4,600.00	3,045.13	4,541.72	3,041.31	54.15	51.72	-89.83	1,330.89	2,489.70	1,320.22	1,214.38	105.84	12.474	
4,700.00	3,045.83	4,641.72	3,042.01	56.53	54.10	-89.83	1,328.27	2,589.67	1,320.22	1,209.61	110.60	11.936	
4,800.00	3,046.53	4,741.72	3,042.71	58.92	56.49	-89.83	1,325.64	2,689.63	1,320.21	1,204.83	115.38	11.442	
4,872.09	3,047.03	4,813.76	3,043.21	60.64	58.21	-89.83	1,323.75	2,761.65	1,320.21	1,201.38	118.83	11.110	
4,900.00	3,047.23	4,841.65	3,043.41	61.31	58.88	-89.83	1,323.02	2,789.52	1,320.21	1,200.04	120.17	10.987	
5,000.00	3,047.92	4,941.56	3,044.11	63.71	61.28	-89.83	1,320.40	2,889.40	1,320.21	1,195.24	124.96	10.565	
5,100.00	3,048.62	5,041.47	3,044.80	66.11	63.68	-89.83	1,317.80	2,989.27	1,320.21	1,190.43	129.78	10.173	
5,200.00	3,049.32	5,141.38	3,045.50	68.52	66.09	-89.83	1,315.19	3,089.15	1,320.21	1,185.61	134.60	9.809	
5,228.43	3,049.52	5,169.79	3,045.70	69.21	66.78	-89.83	1,314.46	3,117.54	1,320.21	1,184.24	135.97	9.710	
5,300.00	3,050.02	5,241.29	3,046.20	70.94	68.51	-89.83	1,312.60	3,189.02	1,320.21	1,180.78	139.43	9.469	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 11H - 11H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,400.00	3,050.72	5,341.20	3,046.90	73.35	70.93	-89.83	1,310.01	3,288.89	1,320.21	1,175.95	144.26	9.151	
5,500.00	3,051.41	5,441.11	3,047.59	75.78	73.35	-89.83	1,307.43	3,388.77	1,320.21	1,171.10	149.11	8.854	
5,600.00	3,052.11	5,541.02	3,048.29	78.20	75.77	-89.83	1,304.86	3,488.64	1,320.21	1,166.26	153.95	8.575	
5,700.00	3,052.81	5,640.93	3,048.99	80.63	78.20	-89.83	1,302.29	3,588.52	1,320.21	1,161.40	158.81	8.313	
5,800.00	3,053.51	5,740.84	3,049.69	83.06	80.63	-89.83	1,299.73	3,688.39	1,320.21	1,156.54	163.67	8.066	
5,900.00	3,054.20	5,840.75	3,050.38	85.49	83.06	-89.83	1,297.18	3,788.27	1,320.22	1,151.68	168.53	7.834	
6,000.00	3,054.90	5,940.66	3,051.08	87.92	85.49	-89.83	1,294.63	3,888.15	1,320.22	1,146.82	173.40	7.614	
6,100.00	3,055.60	6,040.57	3,051.78	90.36	87.93	-89.83	1,292.09	3,988.02	1,320.22	1,141.95	178.27	7.406	
6,190.56	3,056.23	6,131.13	3,052.41	92.56	90.14	-89.83	1,289.79	4,078.55	1,320.22	1,137.54	182.69	7.227	
6,200.00	3,056.30	6,140.57	3,052.48	92.79	90.37	-89.83	1,289.55	4,087.99	1,320.22	1,137.08	183.15	7.208	
6,300.00	3,056.99	6,240.63	3,053.18	95.23	92.81	-89.83	1,287.01	4,188.01	1,320.22	1,132.19	188.03	7.021	
6,400.00	3,057.69	6,340.69	3,053.88	97.67	95.25	-89.83	1,284.46	4,288.03	1,320.22	1,127.31	192.91	6.844	
6,500.00	3,058.39	6,440.74	3,054.57	100.12	97.70	-89.83	1,281.91	4,388.05	1,320.22	1,122.42	197.80	6.674	
6,600.00	3,059.08	6,540.80	3,055.27	102.56	100.15	-89.83	1,279.36	4,488.07	1,320.22	1,117.53	202.69	6.513	
6,700.00	3,059.78	6,640.86	3,055.97	105.00	102.59	-89.83	1,276.80	4,588.10	1,320.22	1,112.63	207.59	6.360	
6,800.00	3,060.48	6,740.91	3,056.67	107.45	105.04	-89.83	1,274.24	4,688.12	1,320.21	1,107.73	212.48	6.213	
6,900.00	3,061.18	6,840.97	3,057.37	109.90	107.49	-89.83	1,271.67	4,788.14	1,320.21	1,102.83	217.38	6.073	
7,000.00	3,061.87	6,941.03	3,058.07	112.35	109.94	-89.83	1,269.10	4,888.16	1,320.21	1,097.93	222.28	5.939	
7,100.00	3,062.57	7,041.09	3,058.77	114.79	112.40	-89.83	1,266.52	4,988.18	1,320.21	1,093.03	227.18	5.811	
7,200.00	3,063.27	7,141.14	3,059.46	117.24	114.85	-89.83	1,263.94	5,088.20	1,320.20	1,088.12	232.08	5.688	
7,300.00	3,063.97	7,241.20	3,060.16	119.70	117.30	-89.83	1,261.35	5,188.22	1,320.20	1,083.21	236.99	5.571	
7,400.00	3,064.67	7,341.26	3,060.86	122.15	119.76	-89.83	1,258.76	5,288.24	1,320.20	1,078.31	241.89	5.458	
7,500.00	3,065.36	7,441.31	3,061.56	124.60	122.21	-89.83	1,256.17	5,388.27	1,320.20	1,073.39	246.80	5.349	
7,600.00	3,066.06	7,541.37	3,062.26	127.05	124.67	-89.83	1,253.57	5,488.29	1,320.19	1,068.48	251.71	5.245	
7,700.00	3,066.76	7,641.43	3,062.96	129.51	127.12	-89.83	1,250.97	5,588.31	1,320.19	1,063.57	256.62	5.145	
7,800.00	3,067.46	7,741.48	3,063.65	131.96	129.58	-89.83	1,248.36	5,688.33	1,320.19	1,058.65	261.53	5.048	
7,900.00	3,068.16	7,841.54	3,064.35	134.42	132.04	-89.83	1,245.75	5,788.35	1,320.18	1,053.74	266.44	4.955	
8,000.00	3,068.86	7,941.60	3,065.05	136.87	134.50	-89.83	1,243.14	5,888.37	1,320.18	1,048.82	271.36	4.865	
8,100.00	3,069.55	8,041.66	3,065.75	139.33	136.96	-89.83	1,240.52	5,988.39	1,320.18	1,043.90	276.27	4.779	
8,200.00	3,070.25	8,141.71	3,066.45	141.78	139.41	-89.83	1,237.89	6,088.41	1,320.17	1,038.98	281.19	4.695	
8,300.00	3,070.95	8,241.77	3,067.15	144.24	141.87	-89.83	1,235.26	6,188.43	1,320.17	1,034.06	286.10	4.614	
8,400.00	3,071.65	8,341.83	3,067.84	146.70	144.33	-89.83	1,232.63	6,288.45	1,320.16	1,029.14	291.02	4.536	
8,500.00	3,072.35	8,441.88	3,068.54	149.15	146.79	-89.83	1,229.99	6,388.47	1,320.16	1,024.22	295.94	4.461	
8,600.00	3,073.05	8,541.94	3,069.24	151.61	149.25	-89.83	1,227.35	6,488.49	1,320.15	1,019.29	300.86	4.388	
8,700.00	3,073.75	8,641.98	3,069.94	154.07	151.52	-89.83	1,224.71	6,588.49	1,320.15	1,014.57	305.58	4.320	
8,724.51	3,073.92	8,666.48	3,070.11	154.67	151.93	-89.83	1,224.06	6,612.99	1,320.15	1,013.55	306.60	4.306	
8,763.99	3,074.20	8,705.97	3,070.39	155.64	152.60	-89.83	1,223.02	6,652.45	1,320.15	1,011.92	308.23	4.283	CC
8,800.00	3,074.45	8,706.51	3,070.39	156.53	152.60	-89.83	1,223.00	6,653.00	1,320.62	1,011.55	309.08	4.273	ES
8,814.50	3,074.55	8,706.51	3,070.39	156.89	152.60	-89.83	1,223.00	6,653.00	1,321.09	1,011.74	309.35	4.271	SF

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 22H - 22H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	30.00	0.00	0.00	5.63	1,340.00	132.00	1,346.82				
100.00	100.00	70.00	100.00	0.31	0.22	5.63	1,340.00	132.00	1,346.49	1,346.05	0.43	3,111.609	
200.00	200.00	170.00	200.00	0.95	0.76	5.63	1,340.00	132.00	1,346.49	1,345.04	1.44	933.307	
300.00	300.00	270.00	300.00	1.46	1.31	5.63	1,340.00	132.00	1,346.49	1,344.12	2.37	568.466	
400.00	400.00	370.00	400.00	1.89	1.76	5.63	1,340.00	132.00	1,346.49	1,343.29	3.19	421.935	
500.00	500.00	470.00	500.00	2.31	2.18	5.63	1,340.00	132.00	1,346.49	1,342.51	3.97	339.028	
600.00	599.98	597.64	627.63	2.85	2.56	-81.12	1,338.87	133.22	1,345.50	1,340.77	4.73	284.668	
700.00	699.84	736.95	766.68	3.79	3.85	-81.23	1,333.36	139.20	1,341.17	1,334.98	6.19	216.827	
800.00	799.45	875.73	904.66	4.66	5.04	-81.39	1,323.32	150.09	1,333.39	1,325.94	7.45	178.989	
900.00	898.70	1,013.67	1,040.92	5.42	6.03	-81.60	1,308.87	165.77	1,322.18	1,313.56	8.62	153.424	
1,000.00	997.47	1,150.46	1,174.89	6.10	6.90	-81.85	1,290.16	186.06	1,307.61	1,297.86	9.74	134.210	
1,100.00	1,095.62	1,285.82	1,306.00	6.74	7.70	-82.16	1,267.40	210.74	1,289.72	1,278.86	10.86	118.747	
1,200.00	1,193.06	1,419.47	1,433.77	7.33	8.43	-82.51	1,240.84	239.56	1,268.59	1,256.60	11.99	105.778	
1,300.00	1,289.64	1,551.20	1,557.77	7.90	9.13	-82.93	1,210.73	272.21	1,244.31	1,231.15	13.16	94.574	
1,400.00	1,385.27	1,680.80	1,677.65	8.44	9.79	-83.40	1,177.38	308.40	1,216.97	1,202.60	14.36	84.722	
1,500.00	1,479.82	1,808.09	1,793.11	8.97	10.43	-83.94	1,141.07	347.78	1,186.67	1,171.05	15.62	75.952	
1,600.00	1,573.17	1,921.62	1,894.09	9.47	10.89	-84.56	1,105.91	385.91	1,153.70	1,136.88	16.82	68.598	
1,700.00	1,665.21	2,015.72	1,977.40	9.97	11.21	-85.37	1,076.24	418.10	1,119.95	1,101.99	17.96	62.356	
1,800.00	1,755.84	2,109.61	2,060.51	10.47	11.60	-86.39	1,046.65	450.20	1,085.94	1,066.74	19.20	56.556	
1,900.00	1,844.94	2,203.15	2,143.31	10.96	12.08	-87.63	1,017.16	482.19	1,051.78	1,031.28	20.51	51.290	
2,000.00	1,932.39	2,296.24	2,225.72	11.47	12.64	-89.11	987.81	514.02	1,017.60	995.72	21.89	46.492	
2,076.26	1,997.92	2,366.85	2,288.23	11.82	13.12	-90.40	965.55	538.17	991.64	968.66	22.98	43.147	
2,100.00	2,018.16	2,388.77	2,307.64	11.92	13.28	-90.66	958.63	545.67	983.59	960.27	23.33	42.166	
2,200.00	2,103.40	2,481.13	2,389.40	12.40	13.98	-91.79	929.52	577.25	949.90	925.11	24.79	38.314	
2,300.00	2,188.64	2,573.48	2,471.15	13.05	14.71	-93.00	900.40	608.83	916.58	890.30	26.28	34.883	
2,400.00	2,273.88	2,665.84	2,552.91	13.85	15.46	-94.30	871.28	640.41	883.66	855.90	27.76	31.833	
2,500.00	2,359.12	2,758.20	2,634.67	14.75	16.23	-95.69	842.17	672.00	851.20	821.97	29.23	29.116	
2,600.00	2,444.36	2,850.55	2,716.43	15.69	17.00	-97.19	813.05	703.58	819.25	788.56	30.69	26.692	
2,700.00	2,529.60	2,933.40	2,789.45	16.66	17.74	-98.54	787.34	733.05	788.18	755.98	32.20	24.477	
2,799.35	2,614.29	3,011.20	2,855.73	17.63	18.60	-99.31	765.78	767.52	759.52	725.54	33.97	22.356	
2,799.99	2,614.84	3,011.71	2,856.16	17.64	18.60	-99.34	765.65	767.78	759.34	725.35	33.99	22.343	
2,850.00	2,656.50	3,050.00	2,887.62	18.16	19.04	-101.48	756.18	787.42	746.27	711.33	34.95	21.354	
2,900.00	2,696.15	3,092.70	2,921.67	18.75	19.54	-103.38	746.53	811.31	734.85	698.86	36.00	20.415	
2,950.00	2,733.60	3,134.10	2,953.52	19.38	20.04	-105.02	738.13	836.37	725.16	688.07	37.09	19.550	
3,000.00	2,768.66	3,176.08	2,984.54	20.07	20.55	-106.45	730.61	863.62	717.27	679.02	38.24	18.755	
3,050.00	2,801.17	3,218.59	3,014.55	20.82	21.09	-107.69	724.04	893.01	711.22	671.77	39.45	18.027	
3,100.00	2,830.97	3,261.62	3,043.36	21.62	21.66	-108.76	718.48	924.47	707.08	666.36	40.72	17.365	
3,150.00	2,857.90	3,305.10	3,070.77	22.46	22.25	-109.65	714.00	957.91	704.86	662.82	42.04	16.767	
3,157.67	2,861.77	3,311.80	3,074.84	22.60	22.34	-109.77	713.41	963.21	704.69	662.44	42.24	16.682	
3,200.00	2,882.94	3,350.00	3,097.18	23.35	22.88	-110.12	710.58	994.06	704.05	660.64	43.41	16.220	
3,300.00	2,932.94	3,441.20	3,144.89	25.15	24.23	-110.35	707.27	1,071.66	703.63	657.32	46.31	15.194	
3,357.67	2,961.77	3,498.86	3,173.72	26.20	25.11	-110.35	705.96	1,121.59	703.62	655.53	48.08	14.634	
3,357.95	2,961.91	3,499.15	3,173.86	26.21	25.11	-110.35	705.95	1,121.83	703.62	655.52	48.09	14.631	CC
3,400.00	2,981.56	3,541.16	3,194.87	27.00	25.77	-110.42	705.00	1,158.20	704.15	654.74	49.41	14.251	
3,450.00	3,001.31	3,590.80	3,219.69	27.99	26.55	-110.67	703.88	1,201.18	706.22	655.26	50.96	13.857	
3,500.00	3,016.97	3,661.97	3,253.45	29.02	27.72	-111.34	702.24	1,263.78	709.49	656.59	52.90	13.412	
3,550.00	3,028.45	3,754.16	3,285.74	30.08	29.37	-112.00	699.98	1,349.99	711.84	656.41	55.43	12.842	
3,600.00	3,035.63	3,848.33	3,304.01	31.16	31.17	-112.27	697.56	1,442.23	712.81	654.58	58.23	12.241	
3,653.66	3,038.52	3,930.72	3,307.83	32.33	32.81	-112.21	695.40	1,524.45	712.51	651.50	61.00	11.680	
3,700.00	3,038.84	3,977.05	3,308.15	33.34	33.74	-112.21	694.19	1,570.77	712.51	649.68	62.83	11.340	
3,800.00	3,039.54	4,077.05	3,308.85	35.57	35.80	-112.21	691.56	1,670.73	712.50	645.67	66.83	10.662	
3,900.00	3,040.24	4,177.05	3,309.55	37.83	37.91	-112.21	688.94	1,770.70	712.50	641.59	70.91	10.048	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 22H - 22H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,000.00	3,040.94	4,277.05	3,310.25	40.11	40.06	-112.21	686.32	1,870.66	712.50	637.45	75.05	9.494	
4,100.00	3,041.64	4,377.05	3,310.95	42.41	42.24	-112.21	683.69	1,970.62	712.50	633.26	79.24	8.992	
4,200.00	3,042.33	4,477.05	3,311.64	44.73	44.45	-112.21	681.07	2,070.58	712.49	629.02	83.47	8.536	
4,300.00	3,043.03	4,577.05	3,312.34	47.07	46.69	-112.21	678.45	2,170.55	712.49	624.75	87.75	8.120	
4,400.00	3,043.73	4,677.05	3,313.04	49.42	48.94	-112.21	675.82	2,270.51	712.49	620.44	92.05	7.740	
4,500.00	3,044.43	4,777.05	3,313.74	51.78	51.22	-112.21	673.20	2,370.47	712.49	616.10	96.38	7.392	
4,600.00	3,045.13	4,877.05	3,314.44	54.15	53.51	-112.21	670.58	2,470.44	712.48	611.74	100.74	7.072	
4,700.00	3,045.83	4,977.05	3,315.14	56.53	55.82	-112.21	667.95	2,570.40	712.48	607.36	105.12	6.778	
4,800.00	3,046.53	5,077.05	3,315.84	58.92	58.14	-112.21	665.33	2,670.36	712.48	602.96	109.52	6.506	
4,872.09	3,047.03	5,149.13	3,316.34	60.64	59.82	-112.21	663.44	2,742.41	712.48	599.78	112.69	6.322	
4,900.00	3,047.23	5,177.03	3,316.53	61.31	60.47	-112.21	662.71	2,770.31	712.48	598.55	113.92	6.254	
5,000.00	3,047.92	5,276.99	3,317.23	63.71	62.81	-112.21	660.09	2,870.23	712.48	594.13	118.35	6.020	
5,100.00	3,048.62	5,376.95	3,317.93	66.11	65.17	-112.21	657.48	2,970.15	712.48	589.69	122.79	5.802	
5,200.00	3,049.32	5,476.90	3,318.63	68.52	67.53	-112.21	654.88	3,070.07	712.47	585.23	127.24	5.599	
5,300.00	3,050.02	5,576.86	3,319.33	70.94	69.89	-112.21	652.28	3,169.99	712.47	580.77	131.71	5.410	
5,400.00	3,050.72	5,676.82	3,320.03	73.35	72.27	-112.21	649.69	3,269.91	712.47	576.29	136.18	5.232	
5,500.00	3,051.41	5,776.78	3,320.72	75.78	74.65	-112.21	647.11	3,369.83	712.47	571.81	140.66	5.065	
5,600.00	3,052.11	5,876.73	3,321.42	78.20	77.03	-112.21	644.53	3,469.76	712.47	567.32	145.15	4.908	
5,700.00	3,052.81	5,976.69	3,322.12	80.63	79.42	-112.21	641.96	3,569.68	712.47	562.82	149.65	4.761	
5,793.97	3,053.47	6,070.62	3,322.78	82.91	81.67	-112.21	639.55	3,663.57	712.47	558.59	153.88	4.630	
5,800.00	3,053.51	6,076.65	3,322.82	83.06	81.82	-112.21	639.40	3,669.60	712.47	558.32	154.15	4.622	
5,900.00	3,054.20	6,176.61	3,323.52	85.49	84.22	-112.21	636.84	3,769.52	712.47	553.81	158.66	4.490	
6,000.00	3,054.90	6,276.56	3,324.21	87.92	86.62	-112.21	634.29	3,869.44	712.47	549.29	163.18	4.366	
6,100.00	3,055.60	6,376.52	3,324.91	90.36	89.03	-112.21	631.74	3,969.37	712.47	544.77	167.70	4.249	
6,190.56	3,056.23	6,467.06	3,325.54	92.56	91.21	-112.21	629.44	4,059.88	712.47	540.68	171.79	4.147	
6,200.00	3,056.30	6,476.50	3,325.61	92.79	91.43	-112.21	629.20	4,069.32	712.47	540.25	172.22	4.137	
6,300.00	3,056.99	6,576.55	3,326.31	95.23	93.85	-112.21	626.66	4,169.33	712.47	535.72	176.75	4.031	
6,400.00	3,057.69	6,676.60	3,327.01	97.67	96.27	-112.21	624.11	4,269.34	712.46	531.18	181.28	3.930	
6,500.00	3,058.39	6,776.64	3,327.70	100.12	98.69	-112.21	621.55	4,369.35	712.45	526.63	185.82	3.834	
6,600.00	3,059.08	6,876.69	3,328.40	102.56	101.11	-112.21	618.98	4,469.36	712.44	522.08	190.36	3.743	
6,700.00	3,059.78	6,976.74	3,329.10	105.00	103.54	-112.21	616.41	4,569.37	712.43	517.52	194.91	3.655	
6,800.00	3,060.48	7,076.78	3,329.80	107.45	105.96	-112.21	613.83	4,669.38	712.41	512.95	199.46	3.572	
6,900.00	3,061.18	7,176.83	3,330.50	109.90	108.39	-112.21	611.24	4,769.39	712.39	508.38	204.01	3.492	
7,000.00	3,061.87	7,276.87	3,331.19	112.35	110.82	-112.21	608.65	4,869.40	712.37	503.81	208.56	3.416	
7,100.00	3,062.57	7,376.92	3,331.89	114.79	113.26	-112.22	606.05	4,969.41	712.34	499.23	213.12	3.343	
7,200.00	3,063.27	7,476.97	3,332.59	117.24	115.69	-112.22	603.44	5,069.42	712.32	494.64	217.67	3.272	
7,300.00	3,063.97	7,577.01	3,333.29	119.70	118.13	-112.22	600.83	5,169.43	712.29	490.05	222.23	3.205	
7,400.00	3,064.67	7,677.06	3,333.99	122.15	120.57	-112.22	598.20	5,269.44	712.25	485.46	226.79	3.141	
7,500.00	3,065.36	7,777.10	3,334.69	124.60	123.01	-112.22	595.58	5,369.45	712.22	480.86	231.36	3.078	
7,600.00	3,066.06	7,877.15	3,335.38	127.05	125.45	-112.22	592.94	5,469.46	712.18	476.26	235.92	3.019	
7,700.00	3,066.76	7,977.20	3,336.08	129.51	127.89	-112.22	590.30	5,569.47	712.14	471.65	240.49	2.961	
7,800.00	3,067.46	8,077.24	3,336.78	131.96	130.33	-112.22	587.65	5,669.48	712.09	467.04	245.05	2.906	
7,900.00	3,068.16	8,177.29	3,337.48	134.42	132.77	-112.22	584.99	5,769.48	712.05	462.43	249.62	2.852	
8,000.00	3,068.86	8,277.34	3,338.18	136.87	135.22	-112.23	582.33	5,869.49	712.00	457.81	254.19	2.801	
8,100.00	3,069.55	8,377.38	3,338.87	139.33	137.66	-112.23	579.66	5,969.50	711.95	453.18	258.76	2.751	
8,200.00	3,070.25	8,477.43	3,339.57	141.78	140.11	-112.23	576.98	6,069.51	711.90	448.56	263.34	2.703	
8,300.00	3,070.95	8,577.47	3,340.27	144.24	142.56	-112.23	574.29	6,169.52	711.84	443.93	267.91	2.657	
8,400.00	3,071.65	8,677.52	3,340.97	146.70	145.01	-112.23	571.60	6,269.52	711.78	439.30	272.48	2.612	
8,500.00	3,072.35	8,777.57	3,341.67	149.15	147.46	-112.24	568.90	6,369.53	711.72	434.66	277.06	2.569	
8,600.00	3,073.05	8,877.61	3,342.36	151.61	149.91	-112.24	566.20	6,469.54	711.65	430.02	281.63	2.527	
8,700.00	3,073.75	8,977.66	3,343.06	154.07	152.36	-112.24	563.49	6,569.54	711.59	425.38	286.21	2.486	
8,724.51	3,073.92	9,002.16	3,343.23	154.67	152.94	-112.24	562.82	6,594.04	711.57	424.26	287.31	2.477	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 22H - 22H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,791.97	3,074.39	9,069.15	3,343.70	156.33	154.07	-112.24	561.00	6,661.00	711.52	421.63	289.90	2.454	
8,800.00	3,074.45	9,069.15	3,343.70	156.53	154.07	-112.24	561.00	6,661.00	711.57	421.56	290.01	2.454	ES, SF
8,814.50	3,074.55	9,069.15	3,343.70	156.89	154.07	-112.24	561.00	6,661.00	711.88	421.77	290.11	2.454	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 24H - 24H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	1.00	0.00	0.00	-84.29	2.00	-20.00	20.12				
100.00	100.00	99.00	100.00	0.31	0.30	-84.29	2.00	-20.00	20.10	19.65	0.45	45.061	
200.00	200.00	199.00	200.00	0.95	0.95	-84.29	2.00	-20.00	20.10	18.67	1.43	14.034	
300.00	300.00	299.00	300.00	1.46	1.45	-84.29	2.00	-20.00	20.10	17.83	2.27	8.849	
400.00	400.00	399.00	400.00	1.89	1.89	-84.29	2.00	-20.00	20.10	17.05	3.05	6.593	
500.00	500.00	499.00	500.00	2.31	2.30	-84.29	2.00	-20.00	20.10	16.30	3.80	5.286	CC
600.00	599.98	599.60	600.58	2.85	2.60	-174.05	1.03	-18.56	20.34	15.16	5.18	3.928	
700.00	699.84	700.14	700.98	3.79	3.51	177.11	-1.90	-14.20	21.32	14.40	6.93	3.079	ES
800.00	799.45	800.53	800.97	4.66	4.45	164.54	-6.79	-6.93	23.92	16.06	7.86	3.042	
900.00	898.70	900.69	900.38	5.42	5.25	151.58	-13.61	3.22	28.99	20.70	8.29	3.497	
1,000.00	997.47	1,000.55	999.01	6.10	5.95	140.79	-22.33	16.20	36.91	28.26	8.66	4.264	
1,100.00	1,095.62	1,100.05	1,096.67	6.74	6.60	132.75	-32.93	31.96	47.64	38.45	9.19	5.182	
1,200.00	1,193.06	1,199.12	1,193.20	7.33	7.20	126.97	-45.35	50.45	60.98	51.07	9.91	6.152	
1,300.00	1,289.64	1,297.69	1,288.42	7.90	7.77	122.79	-59.56	71.58	76.77	66.00	10.77	7.129	
1,400.00	1,385.27	1,395.71	1,382.19	8.44	8.31	119.69	-75.48	95.27	94.86	83.13	11.73	8.087	
1,500.00	1,479.82	1,493.12	1,474.34	8.97	8.83	117.31	-93.07	121.44	115.15	102.37	12.78	9.010	
1,600.00	1,573.17	1,589.87	1,564.77	9.47	9.33	115.45	-112.26	149.99	137.57	123.66	13.92	9.886	
1,700.00	1,665.21	1,685.91	1,653.33	9.97	9.82	113.93	-132.99	180.82	162.06	146.92	15.13	10.707	
1,800.00	1,755.84	1,781.21	1,739.92	10.47	10.30	112.65	-155.18	213.83	188.53	172.09	16.44	11.468	
1,900.00	1,844.94	1,875.73	1,824.46	10.96	10.77	111.56	-178.77	248.92	216.95	199.11	17.83	12.165	
2,000.00	1,932.39	1,969.44	1,906.85	11.47	11.25	110.59	-203.67	285.97	247.24	227.92	19.32	12.798	
2,076.26	1,997.92	2,040.35	1,968.20	11.82	11.64	109.91	-223.51	315.48	271.57	251.06	20.52	13.237	
2,100.00	2,018.16	2,062.33	1,987.03	11.92	11.76	109.84	-229.83	324.88	279.33	258.43	20.90	13.365	
2,200.00	2,103.40	2,155.77	2,066.36	12.40	12.27	109.33	-257.38	365.87	312.32	289.75	22.56	13.841	
2,300.00	2,188.64	2,250.11	2,146.27	13.05	12.82	108.85	-285.34	407.47	345.40	321.11	24.30	14.217	
2,400.00	2,273.88	2,344.44	2,226.18	13.85	13.48	108.46	-313.31	449.07	378.50	352.56	25.95	14.589	
2,500.00	2,359.12	2,438.77	2,306.09	14.75	14.24	108.13	-341.27	490.68	411.62	383.87	27.75	14.833	
2,600.00	2,444.36	2,533.11	2,386.01	15.69	15.08	107.85	-369.24	532.28	444.74	415.21	29.53	15.060	
2,700.00	2,529.60	2,627.44	2,465.92	16.66	15.96	107.60	-397.20	573.88	477.88	446.55	31.33	15.254	
2,799.35	2,614.29	2,721.16	2,545.31	17.63	16.85	107.39	-424.98	615.21	510.80	477.68	33.12	15.421	
2,799.99	2,614.84	2,721.77	2,545.83	17.64	16.86	107.36	-425.16	615.48	511.02	477.88	33.14	15.422	
2,850.00	2,656.50	2,768.84	2,585.70	18.16	17.31	105.19	-439.12	636.24	527.83	493.77	34.06	15.496	
2,900.00	2,696.15	2,815.56	2,625.28	18.75	17.77	103.54	-452.97	656.85	545.08	510.05	35.03	15.560	
2,950.00	2,733.60	2,861.71	2,664.38	19.38	18.22	102.31	-466.65	677.20	562.77	526.73	36.04	15.616	
3,000.00	2,768.66	2,907.06	2,702.79	20.07	18.67	101.43	-480.09	697.20	580.93	543.85	37.08	15.668	
3,050.00	2,801.17	2,951.39	2,740.35	20.82	19.11	100.82	-493.24	716.75	599.64	561.51	38.14	15.724	
3,100.00	2,830.97	2,994.48	2,776.85	21.62	19.54	100.41	-506.01	735.75	619.01	579.81	39.21	15.788	
3,150.00	2,857.90	3,036.13	2,812.13	22.46	19.95	100.13	-518.36	754.12	639.16	598.89	40.27	15.871	
3,157.67	2,861.77	3,043.60	2,818.46	22.60	20.02	100.15	-520.57	757.42	642.33	601.87	40.46	15.875	
3,200.00	2,882.94	3,150.37	2,905.95	23.35	21.27	104.11	-548.92	811.44	658.14	615.33	42.81	15.375	
3,300.00	2,932.94	3,437.85	3,101.60	25.15	25.34	108.89	-590.18	1,015.23	676.36	628.50	47.86	14.131	
3,357.67	2,961.77	3,542.66	3,155.70	26.20	27.02	109.04	-592.69	1,104.90	675.96	625.94	50.02	13.514	
3,372.91	2,969.22	3,557.90	3,163.33	26.49	27.27	109.07	-592.90	1,118.10	675.90	625.36	50.54	13.374	
3,400.00	2,981.56	3,584.95	3,176.85	27.00	27.72	109.16	-593.26	1,141.52	676.11	624.66	51.45	13.142	
3,450.00	3,001.31	3,634.59	3,201.67	27.99	28.54	109.50	-593.92	1,184.50	677.62	624.50	53.12	12.756	
3,500.00	3,016.97	3,683.52	3,226.14	29.02	29.36	110.01	-594.57	1,226.88	680.68	625.95	54.74	12.436	
3,550.00	3,028.45	3,763.42	3,262.06	30.08	30.76	111.16	-595.66	1,298.16	684.50	628.03	56.47	12.122	
3,600.00	3,035.63	3,852.99	3,290.16	31.16	32.47	112.15	-596.96	1,383.11	687.28	628.90	58.38	11.772	
3,653.66	3,038.52	3,952.37	3,305.44	32.33	34.47	112.81	-598.47	1,481.17	688.83	628.21	60.62	11.363	
3,700.00	3,038.84	4,014.75	3,306.94	33.34	35.75	112.91	-599.43	1,543.51	688.59	626.04	62.55	11.008	
3,800.00	3,039.54	4,113.82	3,307.63	35.57	37.82	112.94	-601.06	1,642.57	687.69	621.10	66.59	10.327	
3,900.00	3,040.24	4,212.90	3,308.33	37.83	39.93	112.97	-602.83	1,741.63	686.92	616.23	70.70	9.716	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 24H - 24H - Plan #1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,000.00	3,040.94	4,311.98	3,309.02	40.11	42.08	112.99	-604.74	1,840.69	686.29	611.43	74.86	9.168	
4,100.00	3,041.64	4,411.07	3,309.71	42.41	44.26	113.01	-606.80	1,939.75	685.79	606.72	79.07	8.674	
4,200.00	3,042.33	4,510.15	3,310.41	44.73	46.47	113.02	-609.00	2,038.80	685.43	602.11	83.32	8.227	
4,300.00	3,043.03	4,609.24	3,311.10	47.07	48.70	113.03	-611.35	2,137.86	685.19	597.59	87.60	7.822	
4,400.00	3,043.73	4,708.32	3,311.80	49.42	50.95	113.03	-613.84	2,236.91	685.09	593.18	91.92	7.454	
4,424.02	3,043.90	4,732.12	3,311.96	49.99	51.50	113.03	-614.46	2,260.70	685.09	592.13	92.96	7.370	
4,500.00	3,044.43	4,807.41	3,312.49	51.78	53.22	113.03	-616.47	2,335.96	685.13	588.87	96.26	7.118	
4,600.00	3,045.13	4,906.49	3,313.19	54.15	55.50	113.03	-619.25	2,435.00	685.30	584.67	100.62	6.810	
4,700.00	3,045.83	5,005.58	3,313.88	56.53	57.80	113.02	-622.17	2,534.04	685.60	580.59	105.01	6.529	
4,800.00	3,046.53	5,104.66	3,314.58	58.92	60.11	113.00	-625.23	2,633.08	686.03	576.61	109.42	6.270	
4,872.09	3,047.03	5,176.09	3,315.08	60.64	61.78	112.99	-627.53	2,704.46	686.43	573.82	112.61	6.095	
4,900.00	3,047.23	5,203.74	3,315.28	61.31	62.43	112.98	-628.44	2,732.10	686.60	572.75	113.85	6.031	
5,000.00	3,047.92	5,315.90	3,316.06	63.71	65.06	112.99	-631.09	2,844.23	686.38	568.01	118.37	5.799	
5,100.00	3,048.62	5,417.39	3,316.77	66.11	67.45	113.04	-632.27	2,945.71	685.05	562.26	122.78	5.579	
5,200.00	3,049.32	5,517.38	3,317.47	68.52	69.81	113.09	-633.42	3,045.69	683.71	556.51	127.20	5.375	
5,300.00	3,050.02	5,617.37	3,318.17	70.94	72.17	113.14	-634.57	3,145.67	682.38	550.76	131.61	5.185	
5,400.00	3,050.72	5,717.36	3,318.86	73.35	74.54	113.18	-635.72	3,245.65	681.05	545.01	136.04	5.006	
5,500.00	3,051.41	5,817.35	3,319.56	75.78	76.92	113.23	-636.87	3,345.63	679.74	539.27	140.47	4.839	
5,600.00	3,052.11	5,917.34	3,320.26	78.20	79.31	113.28	-638.02	3,445.61	678.42	533.52	144.90	4.682	
5,700.00	3,052.81	6,017.33	3,320.96	80.63	81.70	113.33	-639.17	3,545.59	677.12	527.78	149.34	4.534	
5,800.00	3,053.51	6,117.32	3,321.65	83.06	84.09	113.37	-640.32	3,645.57	675.82	522.04	153.78	4.395	
5,900.00	3,054.20	6,217.31	3,322.35	85.49	86.49	113.42	-641.47	3,745.55	674.53	516.31	158.22	4.263	
6,000.00	3,054.90	6,317.30	3,323.05	87.92	88.89	113.47	-642.63	3,845.54	673.24	510.58	162.66	4.139	
6,100.00	3,055.60	6,417.29	3,323.75	90.36	91.30	113.52	-643.78	3,945.52	671.96	504.85	167.11	4.021	
6,190.56	3,056.23	6,507.84	3,324.38	92.56	93.48	113.56	-644.82	4,036.06	670.81	499.67	171.13	3.920	
6,200.00	3,056.30	6,517.28	3,324.44	92.79	93.70	113.56	-644.93	4,045.50	670.69	499.14	171.55	3.910	
6,300.00	3,056.99	6,616.61	3,325.14	95.23	96.10	113.61	-646.16	4,144.82	669.50	493.50	176.00	3.804	
6,400.00	3,057.69	6,716.60	3,325.84	97.67	98.51	113.65	-647.42	4,244.80	668.33	487.88	180.45	3.704	
6,500.00	3,058.39	6,816.60	3,326.54	100.12	100.93	113.70	-648.68	4,344.78	667.15	482.24	184.90	3.608	
6,600.00	3,059.08	6,916.59	3,327.23	102.56	103.35	113.74	-649.94	4,444.76	665.96	476.61	189.35	3.517	
6,700.00	3,059.78	7,016.58	3,327.93	105.00	105.77	113.79	-651.19	4,544.74	664.77	470.97	193.81	3.430	
6,800.00	3,060.48	7,116.57	3,328.63	107.45	108.19	113.83	-652.45	4,644.72	663.58	465.33	198.26	3.347	
6,900.00	3,061.18	7,216.56	3,329.33	109.90	110.62	113.88	-653.71	4,744.70	662.39	459.68	202.71	3.268	
7,000.00	3,061.87	7,316.55	3,330.03	112.35	113.05	113.92	-654.97	4,844.69	661.19	454.03	207.15	3.192	
7,100.00	3,062.57	7,416.54	3,330.73	114.79	115.48	113.97	-656.22	4,944.67	659.99	448.39	211.60	3.119	
7,200.00	3,063.27	7,516.54	3,331.42	117.24	117.91	114.02	-657.48	5,044.65	658.78	442.73	216.05	3.049	
7,300.00	3,063.97	7,616.53	3,332.12	119.70	120.34	114.06	-658.74	5,144.63	657.57	437.08	220.49	2.982	
7,400.00	3,064.67	7,716.52	3,332.82	122.15	122.77	114.11	-660.00	5,244.61	656.36	431.43	224.93	2.918	
7,500.00	3,065.36	7,816.51	3,333.52	124.60	125.21	114.16	-661.25	5,344.59	655.15	425.77	229.37	2.856	
7,600.00	3,066.06	7,916.50	3,334.22	127.05	127.64	114.21	-662.51	5,444.57	653.93	420.12	233.81	2.797	
7,700.00	3,066.76	8,016.49	3,334.92	129.51	130.08	114.25	-663.77	5,544.55	652.70	414.46	238.25	2.740	
7,800.00	3,067.46	8,116.48	3,335.61	131.96	132.52	114.30	-665.03	5,644.53	651.48	408.80	242.68	2.685	
7,900.00	3,068.16	8,216.47	3,336.31	134.42	134.96	114.35	-666.28	5,744.51	650.25	403.14	247.11	2.631	
8,000.00	3,068.86	8,316.46	3,337.01	136.87	137.40	114.40	-667.54	5,844.49	649.02	397.48	251.54	2.580	
8,100.00	3,069.55	8,416.45	3,337.71	139.33	139.84	114.45	-668.80	5,944.47	647.78	391.82	255.97	2.531	
8,200.00	3,070.25	8,516.45	3,338.41	141.78	142.29	114.50	-670.06	6,044.45	646.54	386.15	260.39	2.483	
8,300.00	3,070.95	8,616.44	3,339.11	144.24	144.73	114.55	-671.31	6,144.43	645.30	380.49	264.81	2.437	
8,400.00	3,071.65	8,716.43	3,339.81	146.70	147.17	114.60	-672.57	6,244.41	644.06	374.83	269.23	2.392	
8,500.00	3,072.35	8,816.42	3,340.50	149.15	149.62	114.65	-673.83	6,344.40	642.81	369.16	273.64	2.349	
8,600.00	3,073.05	8,916.41	3,341.20	151.61	152.06	114.70	-675.09	6,444.38	641.55	363.50	278.05	2.307	
8,700.00	3,073.75	9,016.40	3,341.90	154.07	154.51	114.76	-676.34	6,544.36	640.30	357.84	282.46	2.267	
8,724.51	3,073.92	9,040.90	3,342.07	154.67	155.11	114.77	-676.65	6,568.86	639.99	356.45	283.54	2.257	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Calmer Than Your 5 Fed Com 24H - 24H - Plan #1

Survey Program: 0-MWD

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,800.00	3,074.45	9,116.39	3,342.60	156.53	156.96	114.81	-677.60	6,644.34	639.04	352.18	286.86	2.228	
8,814.50	3,074.55	9,130.89	3,342.70	156.89	157.31	114.81	-677.78	6,658.83	638.86	351.36	287.50	2.222	SF

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 2 29983 ACTIVE - 2 - 2 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,190.56	3,056.23	2,450.00	2,470.00	92.56	42.76	46.55	-724.84	6,355.68	2,483.09	2,409.13	73.96	33.573	
6,200.00	3,056.30	2,450.00	2,470.00	92.79	42.76	46.55	-724.84	6,355.68	2,474.25	2,400.18	74.08	33.401	
6,300.00	3,056.99	2,450.00	2,470.00	95.23	42.76	46.55	-724.84	6,355.68	2,380.99	2,305.61	75.39	31.584	
6,400.00	3,057.69	2,450.00	2,470.00	97.67	42.76	46.54	-724.84	6,355.68	2,288.30	2,211.49	76.81	29.792	
6,500.00	3,058.39	2,450.00	2,470.00	100.12	42.76	46.54	-724.84	6,355.68	2,196.25	2,117.89	78.36	28.028	
6,600.00	3,059.08	2,450.00	2,470.00	102.56	42.76	46.54	-724.84	6,355.68	2,104.92	2,024.87	80.05	26.296	
6,700.00	3,059.78	2,450.00	2,470.00	105.00	42.76	46.53	-724.84	6,355.68	2,014.42	1,932.53	81.89	24.599	
6,800.00	3,060.48	2,450.00	2,470.00	107.45	42.76	46.53	-724.84	6,355.68	1,924.85	1,840.95	83.90	22.942	
6,900.00	3,061.18	2,450.00	2,470.00	109.90	42.76	46.53	-724.84	6,355.68	1,836.36	1,750.26	86.10	21.328	
7,000.00	3,061.87	2,450.00	2,470.00	112.35	42.76	46.52	-724.84	6,355.68	1,749.11	1,660.61	88.50	19.764	
7,100.00	3,062.57	2,450.00	2,470.00	114.79	42.76	46.52	-724.84	6,355.68	1,663.29	1,572.17	91.13	18.253	
7,200.00	3,063.27	2,450.00	2,470.00	117.24	42.76	46.52	-724.84	6,355.68	1,579.15	1,485.15	93.99	16.801	
7,300.00	3,063.97	2,450.00	2,470.00	119.70	42.76	46.51	-724.84	6,355.68	1,496.95	1,399.82	97.12	15.413	
7,400.00	3,064.67	2,450.00	2,470.00	122.15	42.76	46.51	-724.84	6,355.68	1,417.04	1,316.51	100.53	14.095	
7,500.00	3,065.36	2,450.00	2,470.00	124.60	42.76	46.51	-724.84	6,355.68	1,339.83	1,235.60	104.23	12.855	
7,600.00	3,066.06	2,450.00	2,470.00	127.05	42.76	46.51	-724.84	6,355.68	1,265.81	1,157.59	108.22	11.697	
7,700.00	3,066.76	2,450.00	2,470.00	129.51	42.76	46.51	-724.84	6,355.68	1,195.57	1,083.09	112.48	10.629	
7,800.00	3,067.46	2,450.00	2,470.00	131.96	42.76	46.50	-724.84	6,355.68	1,129.83	1,012.84	116.99	9.658	
7,900.00	3,068.16	2,450.00	2,470.00	134.42	42.76	46.50	-724.84	6,355.68	1,069.41	947.75	121.66	8.790	
8,000.00	3,068.86	2,450.00	2,470.00	136.87	42.76	46.50	-724.84	6,355.68	1,015.26	888.86	126.40	8.032	
8,100.00	3,069.55	2,450.00	2,470.00	139.33	42.76	46.50	-724.84	6,355.68	968.43	837.40	131.03	7.391	
8,200.00	3,070.25	2,450.00	2,470.00	141.78	42.76	46.50	-724.84	6,355.68	930.03	794.67	135.36	6.871	
8,300.00	3,070.95	2,450.00	2,470.00	144.24	42.76	46.50	-724.84	6,355.68	901.14	761.99	139.15	6.476	
8,400.00	3,071.65	2,450.00	2,470.00	146.70	42.76	46.50	-724.84	6,355.68	882.69	740.52	142.18	6.208	
8,500.00	3,072.35	2,450.00	2,470.00	149.15	42.76	46.50	-724.84	6,355.68	875.35	731.11	144.24	6.069	
8,514.58	3,072.45	2,450.00	2,470.00	149.51	42.76	46.50	-724.84	6,355.68	875.23	730.77	144.46	6.059	CC, ES
8,600.00	3,073.05	2,450.00	2,470.00	151.61	42.76	46.50	-724.84	6,355.68	879.38	734.15	145.24	6.055	SF
8,700.00	3,073.75	2,450.00	2,470.00	154.07	42.76	46.50	-724.84	6,355.68	894.65	749.51	145.14	6.164	
8,724.51	3,073.92	2,450.00	2,470.00	154.67	42.76	46.50	-724.84	6,355.68	900.04	755.09	144.96	6.209	
8,800.00	3,074.45	2,450.00	2,470.00	156.53	42.76	46.50	-724.84	6,355.68	920.58	776.54	144.04	6.391	
8,814.50	3,074.55	2,450.00	2,470.00	156.89	42.76	46.50	-724.84	6,355.68	925.18	781.37	143.81	6.434	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 3 29978 ACTIVE - 5 - 5 AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,872.09	3,047.03	2,450.00	2,470.00	60.64	42.76	36.14	-491.39	5,082.89	2,475.60	2,411.45	64.15	38.593	
4,900.00	3,047.23	2,450.00	2,470.00	61.31	42.76	36.14	-491.39	5,082.89	2,448.96	2,384.66	64.29	38.090	
5,000.00	3,047.92	2,450.00	2,470.00	63.71	42.76	36.15	-491.39	5,082.89	2,353.76	2,288.90	64.86	36.290	
5,100.00	3,048.62	2,450.00	2,470.00	66.11	42.76	36.16	-491.39	5,082.89	2,258.98	2,193.49	65.49	34.495	
5,200.00	3,049.32	2,450.00	2,470.00	68.52	42.76	36.17	-491.39	5,082.89	2,164.67	2,098.49	66.18	32.709	
5,300.00	3,050.02	2,450.00	2,470.00	70.94	42.76	36.18	-491.39	5,082.89	2,070.89	2,003.95	66.95	30.934	
5,400.00	3,050.72	2,450.00	2,470.00	73.35	42.76	36.19	-491.39	5,082.89	1,977.73	1,909.93	67.80	29.172	
5,500.00	3,051.41	2,450.00	2,470.00	75.78	42.76	36.19	-491.39	5,082.89	1,885.27	1,816.53	68.74	27.427	
5,600.00	3,052.11	2,450.00	2,470.00	78.20	42.76	36.20	-491.39	5,082.89	1,793.61	1,723.83	69.78	25.703	
5,700.00	3,052.81	2,450.00	2,470.00	80.63	42.76	36.21	-491.39	5,082.89	1,702.90	1,631.96	70.94	24.004	
5,800.00	3,053.51	2,450.00	2,470.00	83.06	42.76	36.21	-491.39	5,082.89	1,613.29	1,541.06	72.23	22.335	
5,900.00	3,054.20	2,450.00	2,470.00	85.49	42.76	36.22	-491.39	5,082.89	1,524.98	1,451.31	73.66	20.702	
6,000.00	3,054.90	2,450.00	2,470.00	87.92	42.76	36.22	-491.39	5,082.89	1,438.20	1,362.94	75.25	19.111	
6,100.00	3,055.60	2,450.00	2,470.00	90.36	42.76	36.23	-491.39	5,082.89	1,353.24	1,276.23	77.01	17.572	
6,190.56	3,056.23	2,450.00	2,470.00	92.56	42.76	36.23	-491.39	5,082.89	1,278.19	1,199.42	78.76	16.228	
6,200.00	3,056.30	2,450.00	2,470.00	92.79	42.76	36.23	-491.39	5,082.89	1,270.48	1,191.52	78.95	16.091	
6,300.00	3,056.99	2,450.00	2,470.00	95.23	42.76	36.23	-491.39	5,082.89	1,190.37	1,109.28	81.08	14.681	
6,400.00	3,057.69	2,450.00	2,470.00	97.67	42.76	36.23	-491.39	5,082.89	1,113.47	1,030.07	83.40	13.351	
6,500.00	3,058.39	2,450.00	2,470.00	100.12	42.76	36.23	-491.39	5,082.89	1,040.52	954.63	85.89	12.115	
6,600.00	3,059.08	2,450.00	2,470.00	102.56	42.76	36.22	-491.39	5,082.89	972.38	883.87	88.51	10.986	
6,700.00	3,059.78	2,450.00	2,470.00	105.00	42.76	36.22	-491.39	5,082.89	910.14	818.95	91.19	9.980	
6,800.00	3,060.48	2,450.00	2,470.00	107.45	42.76	36.22	-491.39	5,082.89	855.10	761.26	93.84	9.112	
6,900.00	3,061.18	2,450.00	2,470.00	109.90	42.76	36.22	-491.39	5,082.89	808.72	712.41	96.31	8.397	
7,000.00	3,061.87	2,450.00	2,470.00	112.35	42.76	36.22	-491.39	5,082.89	772.57	674.09	98.48	7.845	
7,100.00	3,062.57	2,450.00	2,470.00	114.79	42.76	36.22	-491.39	5,082.89	748.13	647.90	100.23	7.464	
7,200.00	3,063.27	2,450.00	2,470.00	117.24	42.76	36.22	-491.39	5,082.89	736.56	635.06	101.50	7.257	
7,235.89	3,063.52	2,450.00	2,470.00	118.12	42.76	36.22	-491.39	5,082.89	735.69	633.85	101.84	7.224	CC, ES
7,300.00	3,063.97	2,450.00	2,470.00	119.70	42.76	36.22	-491.39	5,082.89	738.47	636.20	102.27	7.221	SF
7,400.00	3,064.67	2,450.00	2,470.00	122.15	42.76	36.22	-491.39	5,082.89	753.76	651.26	102.50	7.354	
7,500.00	3,065.36	2,450.00	2,470.00	124.60	42.76	36.22	-491.39	5,082.89	781.65	679.50	102.15	7.652	
7,600.00	3,066.06	2,450.00	2,470.00	127.05	42.76	36.22	-491.39	5,082.89	820.84	719.62	101.23	8.109	
7,700.00	3,066.76	2,450.00	2,470.00	129.51	42.76	36.22	-491.39	5,082.89	869.82	769.98	99.84	8.712	
7,800.00	3,067.46	2,450.00	2,470.00	131.96	42.76	36.22	-491.39	5,082.89	927.04	828.91	98.13	9.447	
7,900.00	3,068.16	2,450.00	2,470.00	134.42	42.76	36.22	-491.39	5,082.89	991.06	894.82	96.24	10.298	
8,000.00	3,068.86	2,450.00	2,470.00	136.87	42.76	36.23	-491.39	5,082.89	1,060.66	966.38	94.28	11.250	
8,100.00	3,069.55	2,450.00	2,470.00	139.33	42.76	36.23	-491.39	5,082.89	1,134.81	1,042.47	92.34	12.289	
8,200.00	3,070.25	2,450.00	2,470.00	141.78	42.76	36.23	-491.39	5,082.89	1,212.67	1,122.20	90.48	13.403	
8,300.00	3,070.95	2,450.00	2,470.00	144.24	42.76	36.23	-491.39	5,082.89	1,293.59	1,204.87	88.72	14.581	
8,400.00	3,071.65	2,450.00	2,470.00	146.70	42.76	36.24	-491.39	5,082.89	1,377.01	1,289.93	87.07	15.814	
8,500.00	3,072.35	2,450.00	2,470.00	149.15	42.76	36.24	-491.39	5,082.89	1,462.51	1,376.95	85.55	17.095	
8,600.00	3,073.05	2,450.00	2,470.00	151.61	42.76	36.24	-491.39	5,082.89	1,549.74	1,465.59	84.15	18.415	
8,700.00	3,073.75	2,450.00	2,470.00	154.07	42.76	36.25	-491.39	5,082.89	1,638.44	1,555.56	82.87	19.771	
8,724.51	3,073.92	2,450.00	2,470.00	154.67	42.76	36.25	-491.39	5,082.89	1,660.37	1,577.79	82.57	20.108	
8,800.00	3,074.45	2,450.00	2,470.00	156.53	42.76	36.25	-491.39	5,082.89	1,728.36	1,646.67	81.70	21.156	
8,814.50	3,074.55	2,450.00	2,470.00	156.89	42.76	36.25	-491.39	5,082.89	1,741.50	1,659.96	81.53	21.359	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 4 29984 ACTIVE - 4 - 4 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,190.56	3,056.23	2,500.00	2,520.00	92.56	43.63	-51.09	596.01	6,340.37	2,438.88	2,364.21	74.67	32.664	
6,200.00	3,056.30	2,500.00	2,520.00	92.79	43.63	-51.09	596.01	6,340.37	2,430.07	2,355.28	74.80	32.489	
6,300.00	3,056.99	2,500.00	2,520.00	95.23	43.63	-51.10	596.01	6,340.37	2,337.13	2,260.87	76.26	30.648	
6,400.00	3,057.69	2,500.00	2,520.00	97.67	43.63	-51.10	596.01	6,340.37	2,244.79	2,166.93	77.85	28.833	
6,500.00	3,058.39	2,500.00	2,520.00	100.12	43.63	-51.10	596.01	6,340.37	2,153.13	2,073.53	79.60	27.050	
6,600.00	3,059.08	2,500.00	2,520.00	102.56	43.63	-51.11	596.01	6,340.37	2,062.26	1,980.75	81.51	25.302	
6,700.00	3,059.78	2,500.00	2,520.00	105.00	43.63	-51.11	596.01	6,340.37	1,972.26	1,888.67	83.59	23.594	
6,800.00	3,060.48	2,500.00	2,520.00	107.45	43.63	-51.11	596.01	6,340.37	1,883.28	1,797.40	85.88	21.929	
6,900.00	3,061.18	2,500.00	2,520.00	109.90	43.63	-51.12	596.01	6,340.37	1,795.46	1,707.08	88.39	20.314	
7,000.00	3,061.87	2,500.00	2,520.00	112.35	43.63	-51.12	596.01	6,340.37	1,708.99	1,617.85	91.13	18.753	
7,100.00	3,062.57	2,500.00	2,520.00	114.79	43.63	-51.12	596.01	6,340.37	1,624.06	1,529.92	94.14	17.251	
7,200.00	3,063.27	2,500.00	2,520.00	117.24	43.63	-51.12	596.01	6,340.37	1,540.95	1,443.51	97.44	15.814	
7,300.00	3,063.97	2,500.00	2,520.00	119.70	43.63	-51.12	596.01	6,340.37	1,459.96	1,358.91	101.05	14.448	
7,400.00	3,064.67	2,500.00	2,520.00	122.15	43.63	-51.13	596.01	6,340.37	1,381.47	1,276.48	104.99	13.159	
7,500.00	3,065.36	2,500.00	2,520.00	124.60	43.63	-51.13	596.01	6,340.37	1,305.92	1,196.66	109.26	11.952	
7,600.00	3,066.06	2,500.00	2,520.00	127.05	43.63	-51.13	596.01	6,340.37	1,233.86	1,119.98	113.88	10.835	
7,700.00	3,066.76	2,500.00	2,520.00	129.51	43.63	-51.13	596.01	6,340.37	1,165.93	1,047.12	118.81	9.813	
7,800.00	3,067.46	2,500.00	2,520.00	131.96	43.63	-51.13	596.01	6,340.37	1,102.90	978.89	124.01	8.894	
7,900.00	3,068.16	2,500.00	2,520.00	134.42	43.63	-51.13	596.01	6,340.37	1,045.64	916.26	129.38	8.082	
8,000.00	3,068.86	2,500.00	2,520.00	136.87	43.63	-51.13	596.01	6,340.37	995.17	860.38	134.79	7.383	
8,100.00	3,069.55	2,500.00	2,520.00	139.33	43.63	-51.13	596.01	6,340.37	952.56	812.54	140.03	6.803	
8,200.00	3,070.25	2,500.00	2,520.00	141.78	43.63	-51.14	596.01	6,340.37	918.91	774.06	144.85	6.344	
8,300.00	3,070.95	2,500.00	2,520.00	144.24	43.63	-51.14	596.01	6,340.37	895.21	746.24	148.97	6.009	
8,400.00	3,071.65	2,500.00	2,520.00	146.70	43.63	-51.14	596.01	6,340.37	882.29	730.14	152.14	5.799	
8,464.87	3,072.11	2,500.00	2,520.00	148.29	43.63	-51.14	596.01	6,340.37	879.90	726.31	153.59	5.729	CC, ES
8,500.00	3,072.35	2,500.00	2,520.00	149.15	43.63	-51.14	596.01	6,340.37	880.60	726.44	154.16	5.712	SF
8,600.00	3,073.05	2,500.00	2,520.00	151.61	43.63	-51.14	596.01	6,340.37	890.22	735.28	154.95	5.745	
8,700.00	3,073.75	2,500.00	2,520.00	154.07	43.63	-51.14	596.01	6,340.37	910.79	756.26	154.53	5.894	
8,724.51	3,073.92	2,500.00	2,520.00	154.67	43.63	-51.14	596.01	6,340.37	917.43	763.17	154.26	5.947	
8,800.00	3,074.45	2,500.00	2,520.00	156.53	43.63	-51.14	596.01	6,340.37	941.59	788.53	153.05	6.152	
8,814.50	3,074.55	2,500.00	2,520.00	156.89	43.63	-51.14	596.01	6,340.37	946.85	794.08	152.77	6.198	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 5 29996 ACTIVE - 5 - 5 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,400.00	3,050.72	2,600.00	2,620.00	73.35	45.38	-2.18	-55.66	5,687.88	2,471.41	2,407.46	63.95	38.645	
5,500.00	3,051.41	2,600.00	2,620.00	75.78	45.38	-2.16	-55.66	5,687.88	2,373.14	2,309.02	64.11	37.014	
5,600.00	3,052.11	2,600.00	2,620.00	78.20	45.38	-2.14	-55.66	5,687.88	2,275.01	2,210.73	64.29	35.389	
5,700.00	3,052.81	2,600.00	2,620.00	80.63	45.38	-2.13	-55.66	5,687.88	2,177.06	2,112.59	64.47	33.768	
5,800.00	3,053.51	2,600.00	2,620.00	83.06	45.38	-2.11	-55.66	5,687.88	2,079.30	2,014.63	64.67	32.153	
5,900.00	3,054.20	2,600.00	2,620.00	85.49	45.38	-2.09	-55.66	5,687.88	1,981.77	1,916.89	64.88	30.545	
6,000.00	3,054.90	2,600.00	2,620.00	87.92	45.38	-2.08	-55.66	5,687.88	1,884.49	1,819.38	65.11	28.944	
6,100.00	3,055.60	2,600.00	2,620.00	90.36	45.38	-2.06	-55.66	5,687.88	1,787.52	1,722.16	65.35	27.351	
6,190.56	3,056.23	2,600.00	2,620.00	92.56	45.38	-2.05	-55.66	5,687.88	1,700.00	1,634.41	65.59	25.917	
6,200.00	3,056.30	2,600.00	2,620.00	92.79	45.38	-2.05	-55.66	5,687.88	1,690.89	1,625.27	65.62	25.768	
6,300.00	3,056.99	2,600.00	2,620.00	95.23	45.38	-2.06	-55.66	5,687.88	1,594.69	1,528.78	65.90	24.197	
6,400.00	3,057.69	2,600.00	2,620.00	97.67	45.38	-2.07	-55.66	5,687.88	1,498.98	1,432.76	66.21	22.639	
6,500.00	3,058.39	2,600.00	2,620.00	100.12	45.38	-2.08	-55.66	5,687.88	1,403.86	1,337.32	66.54	21.097	
6,600.00	3,059.08	2,600.00	2,620.00	102.56	45.38	-2.08	-55.66	5,687.88	1,309.48	1,242.58	66.90	19.574	
6,700.00	3,059.78	2,600.00	2,620.00	105.00	45.38	-2.09	-55.66	5,687.88	1,216.00	1,148.72	67.27	18.075	
6,800.00	3,060.48	2,600.00	2,620.00	107.45	45.38	-2.09	-55.66	5,687.88	1,123.63	1,055.97	67.66	16.606	
6,900.00	3,061.18	2,600.00	2,620.00	109.90	45.38	-2.10	-55.66	5,687.88	1,032.69	964.64	68.06	15.174	
7,000.00	3,061.87	2,600.00	2,620.00	112.35	45.38	-2.10	-55.66	5,687.88	943.59	875.16	68.43	13.789	
7,100.00	3,062.57	2,600.00	2,620.00	114.79	45.38	-2.11	-55.66	5,687.88	856.90	788.16	68.73	12.467	
7,200.00	3,063.27	2,600.00	2,620.00	117.24	45.38	-2.11	-55.66	5,687.88	773.42	704.54	68.88	11.228	
7,300.00	3,063.97	2,600.00	2,620.00	119.70	45.38	-2.12	-55.66	5,687.88	694.32	625.60	68.72	10.104	
7,400.00	3,064.67	2,600.00	2,620.00	122.15	45.38	-2.12	-55.66	5,687.88	621.28	553.31	67.98	9.140	
7,500.00	3,065.36	2,600.00	2,620.00	124.60	45.38	-2.12	-55.66	5,687.88	556.69	490.48	66.21	8.408	
7,600.00	3,066.06	2,600.00	2,620.00	127.05	45.38	-2.12	-55.66	5,687.88	503.79	440.98	62.82	8.020	SF
7,700.00	3,066.76	2,600.00	2,620.00	129.51	45.38	-2.12	-55.66	5,687.88	466.60	409.24	57.36	8.134	
7,800.00	3,067.46	2,600.00	2,620.00	131.96	45.38	-2.12	-55.66	5,687.88	449.02	397.74	51.28	8.756	
7,830.46	3,067.67	2,600.00	2,620.00	132.71	45.38	-2.12	-55.66	5,687.88	447.99	397.64	50.35	8.897	CC, ES
7,900.00	3,068.16	2,600.00	2,620.00	134.42	45.38	-2.12	-55.66	5,687.88	453.36	402.05	51.30	8.836	
8,000.00	3,068.86	2,600.00	2,620.00	136.87	45.38	-2.12	-55.66	5,687.88	479.00	423.71	55.29	8.664	
8,100.00	3,069.55	2,600.00	2,620.00	139.33	45.38	-2.12	-55.66	5,687.88	522.83	464.57	58.25	8.975	
8,200.00	3,070.25	2,600.00	2,620.00	141.78	45.38	-2.12	-55.66	5,687.88	580.74	520.90	59.84	9.706	
8,300.00	3,070.95	2,600.00	2,620.00	144.24	45.38	-2.12	-55.66	5,687.88	648.97	588.47	60.51	10.726	
8,400.00	3,071.65	2,600.00	2,620.00	146.70	45.38	-2.11	-55.66	5,687.88	724.62	663.93	60.69	11.939	
8,500.00	3,072.35	2,600.00	2,620.00	149.15	45.38	-2.11	-55.66	5,687.88	805.60	744.93	60.66	13.280	
8,600.00	3,073.05	2,600.00	2,620.00	151.61	45.38	-2.11	-55.66	5,687.88	890.45	829.88	60.56	14.703	
8,700.00	3,073.75	2,600.00	2,620.00	154.07	45.38	-2.10	-55.66	5,687.88	978.16	917.71	60.46	16.180	
8,724.51	3,073.92	2,600.00	2,620.00	154.67	45.38	-2.10	-55.66	5,687.88	1,000.01	939.58	60.43	16.548	
8,800.00	3,074.45	2,600.00	2,620.00	156.53	45.38	-2.10	-55.66	5,687.88	1,068.04	1,007.67	60.37	17.691	
8,814.50	3,074.55	2,600.00	2,620.00	156.89	45.38	-2.10	-55.66	5,687.88	1,081.23	1,020.86	60.36	17.912	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 6 29994 PA - 6 - 6 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,100.00	3,041.64	2,450.00	2,470.00	42.41	42.76	-2.58	-12.47	4,367.29	2,479.17	2,419.13	60.04	41.294	
4,200.00	3,042.33	2,450.00	2,470.00	44.73	42.76	-2.58	-12.47	4,367.29	2,382.15	2,322.02	60.13	39.614	
4,300.00	3,043.03	2,450.00	2,470.00	47.07	42.76	-2.58	-12.47	4,367.29	2,285.39	2,225.16	60.24	37.941	
4,400.00	3,043.73	2,450.00	2,470.00	49.42	42.76	-2.58	-12.47	4,367.29	2,188.93	2,128.58	60.34	36.276	
4,500.00	3,044.43	2,450.00	2,470.00	51.78	42.76	-2.58	-12.47	4,367.29	2,092.79	2,032.34	60.45	34.620	
4,600.00	3,045.13	2,450.00	2,470.00	54.15	42.76	-2.58	-12.47	4,367.29	1,997.03	1,936.47	60.56	32.976	
4,700.00	3,045.83	2,450.00	2,470.00	56.53	42.76	-2.58	-12.47	4,367.29	1,901.71	1,841.03	60.67	31.343	
4,800.00	3,046.53	2,450.00	2,470.00	58.92	42.76	-2.58	-12.47	4,367.29	1,806.89	1,746.10	60.79	29.724	
4,872.09	3,047.03	2,450.00	2,470.00	60.64	42.76	-2.58	-12.47	4,367.29	1,738.90	1,678.03	60.87	28.568	
4,900.00	3,047.23	2,450.00	2,470.00	61.31	42.76	-2.58	-12.47	4,367.29	1,712.67	1,651.76	60.90	28.122	
5,000.00	3,047.92	2,450.00	2,470.00	63.71	42.76	-2.57	-12.47	4,367.29	1,619.13	1,558.12	61.01	26.540	
5,100.00	3,048.62	2,450.00	2,470.00	66.11	42.76	-2.56	-12.47	4,367.29	1,526.42	1,465.31	61.11	24.980	
5,200.00	3,049.32	2,450.00	2,470.00	68.52	42.76	-2.55	-12.47	4,367.29	1,434.68	1,373.50	61.19	23.448	
5,300.00	3,050.02	2,450.00	2,470.00	70.94	42.76	-2.54	-12.47	4,367.29	1,344.13	1,282.89	61.24	21.949	
5,400.00	3,050.72	2,450.00	2,470.00	73.35	42.76	-2.54	-12.47	4,367.29	1,255.01	1,193.76	61.25	20.490	
5,500.00	3,051.41	2,450.00	2,470.00	75.78	42.76	-2.53	-12.47	4,367.29	1,167.65	1,106.46	61.19	19.081	
5,600.00	3,052.11	2,450.00	2,470.00	78.20	42.76	-2.52	-12.47	4,367.29	1,082.48	1,021.45	61.03	17.736	
5,700.00	3,052.81	2,450.00	2,470.00	80.63	42.76	-2.52	-12.47	4,367.29	1,000.07	939.35	60.72	16.470	
5,800.00	3,053.51	2,450.00	2,470.00	83.06	42.76	-2.51	-12.47	4,367.29	921.14	860.96	60.17	15.308	
5,900.00	3,054.20	2,450.00	2,470.00	85.49	42.76	-2.51	-12.47	4,367.29	846.67	787.39	59.28	14.283	
6,000.00	3,054.90	2,450.00	2,470.00	87.92	42.76	-2.51	-12.47	4,367.29	777.95	720.08	57.88	13.442	
6,100.00	3,055.60	2,450.00	2,470.00	90.36	42.76	-2.50	-12.47	4,367.29	716.64	660.88	55.76	12.853	
6,190.56	3,056.23	2,450.00	2,470.00	92.56	42.76	-2.50	-12.47	4,367.29	669.21	616.18	53.03	12.620	
6,200.00	3,056.30	2,450.00	2,470.00	92.79	42.76	-2.50	-12.47	4,367.29	664.78	612.09	52.69	12.616 SF	
6,300.00	3,056.99	2,450.00	2,470.00	95.23	42.76	-2.50	-12.47	4,367.29	624.73	576.18	48.56	12.866	
6,400.00	3,057.69	2,450.00	2,470.00	97.67	42.76	-2.50	-12.47	4,367.29	598.88	555.19	43.69	13.709	
6,500.00	3,058.39	2,450.00	2,470.00	100.12	42.76	-2.50	-12.47	4,367.29	589.08	549.00	40.08	14.698 ES	
6,508.20	3,058.44	2,450.00	2,470.00	100.32	42.76	-2.50	-12.47	4,367.29	589.02	549.05	39.97	14.737 CC	
6,600.00	3,059.08	2,450.00	2,470.00	102.56	42.76	-2.50	-12.47	4,367.29	596.13	555.12	41.01	14.537	
6,700.00	3,059.78	2,450.00	2,470.00	105.00	42.76	-2.50	-12.47	4,367.29	619.46	575.21	44.25	14.000	
6,800.00	3,060.48	2,450.00	2,470.00	107.45	42.76	-2.50	-12.47	4,367.29	657.34	610.05	47.29	13.900	
6,900.00	3,061.18	2,450.00	2,470.00	109.90	42.76	-2.50	-12.47	4,367.29	707.43	657.82	49.61	14.259	
7,000.00	3,061.87	2,450.00	2,470.00	112.35	42.76	-2.50	-12.47	4,367.29	767.34	716.08	51.26	14.969	
7,100.00	3,062.57	2,450.00	2,470.00	114.79	42.76	-2.50	-12.47	4,367.29	834.97	782.56	52.41	15.931	
7,200.00	3,063.27	2,450.00	2,470.00	117.24	42.76	-2.49	-12.47	4,367.29	908.59	855.37	53.22	17.072	
7,300.00	3,063.97	2,450.00	2,470.00	119.70	42.76	-2.49	-12.47	4,367.29	986.87	933.06	53.81	18.341	
7,400.00	3,064.67	2,450.00	2,470.00	122.15	42.76	-2.49	-12.47	4,367.29	1,068.77	1,014.52	54.25	19.700	
7,500.00	3,065.36	2,450.00	2,470.00	124.60	42.76	-2.48	-12.47	4,367.29	1,153.53	1,098.92	54.61	21.123	
7,600.00	3,066.06	2,450.00	2,470.00	127.05	42.76	-2.48	-12.47	4,367.29	1,240.56	1,185.65	54.91	22.593	
7,700.00	3,066.76	2,450.00	2,470.00	129.51	42.76	-2.47	-12.47	4,367.29	1,329.42	1,274.25	55.17	24.097	
7,800.00	3,067.46	2,450.00	2,470.00	131.96	42.76	-2.47	-12.47	4,367.29	1,419.76	1,364.36	55.41	25.625	
7,900.00	3,068.16	2,450.00	2,470.00	134.42	42.76	-2.46	-12.47	4,367.29	1,511.32	1,455.70	55.62	27.171	
8,000.00	3,068.86	2,450.00	2,470.00	136.87	42.76	-2.46	-12.47	4,367.29	1,603.89	1,548.06	55.83	28.730	
8,100.00	3,069.55	2,450.00	2,470.00	139.33	42.76	-2.45	-12.47	4,367.29	1,697.30	1,641.28	56.02	30.299	
8,200.00	3,070.25	2,450.00	2,470.00	141.78	42.76	-2.45	-12.47	4,367.29	1,791.42	1,735.22	56.20	31.876	
8,300.00	3,070.95	2,450.00	2,470.00	144.24	42.76	-2.44	-12.47	4,367.29	1,886.15	1,829.77	56.38	33.457	
8,400.00	3,071.65	2,450.00	2,470.00	146.70	42.76	-2.43	-12.47	4,367.29	1,981.39	1,924.85	56.54	35.042	
8,500.00	3,072.35	2,450.00	2,470.00	149.15	42.76	-2.42	-12.47	4,367.29	2,077.09	2,020.38	56.71	36.629	
8,600.00	3,073.05	2,450.00	2,470.00	151.61	42.76	-2.41	-12.47	4,367.29	2,173.17	2,116.30	56.86	38.218	
8,700.00	3,073.75	2,450.00	2,470.00	154.07	42.76	-2.41	-12.47	4,367.29	2,269.59	2,212.57	57.01	39.808	
8,724.51	3,073.92	2,450.00	2,470.00	154.67	42.76	-2.40	-12.47	4,367.29	2,293.26	2,236.21	57.05	40.198	
8,800.00	3,074.45	2,450.00	2,470.00	156.53	42.76	-2.40	-12.47	4,367.29	2,366.30	2,309.14	57.16	41.398	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 6 29994 PA - 6 - 6 AsDrilled

Survey Program: 100-INC-ONLY

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,814.50	3,074.55	2,450.00	2,470.00	156.89	42.76	-2.40	-12.47	4,367.29	2,380.35	2,323.17	57.18	41.629	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 7 30102 ACTIVE - 7 - 7 AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,872.09	3,047.03	2,450.00	2,470.00	60.64	42.76	-49.18	630.65	5,019.88	2,446.00	2,379.95	66.05	37.033	
4,900.00	3,047.23	2,450.00	2,470.00	61.31	42.76	-49.18	630.65	5,019.88	2,420.10	2,353.79	66.31	36.499	
5,000.00	3,047.92	2,450.00	2,470.00	63.71	42.76	-49.18	630.65	5,019.88	2,327.69	2,260.40	67.29	34.590	
5,100.00	3,048.62	2,450.00	2,470.00	66.11	42.76	-49.17	630.65	5,019.88	2,235.93	2,167.54	68.39	32.695	
5,200.00	3,049.32	2,450.00	2,470.00	68.52	42.76	-49.17	630.65	5,019.88	2,144.91	2,075.31	69.60	30.817	
5,300.00	3,050.02	2,450.00	2,470.00	70.94	42.76	-49.16	630.65	5,019.88	2,054.72	1,983.78	70.94	28.962	
5,400.00	3,050.72	2,450.00	2,470.00	73.35	42.76	-49.16	630.65	5,019.88	1,965.48	1,893.05	72.43	27.136	
5,500.00	3,051.41	2,450.00	2,470.00	75.78	42.76	-49.15	630.65	5,019.88	1,877.32	1,803.24	74.07	25.344	
5,600.00	3,052.11	2,450.00	2,470.00	78.20	42.76	-49.15	630.65	5,019.88	1,790.40	1,714.51	75.89	23.593	
5,700.00	3,052.81	2,450.00	2,470.00	80.63	42.76	-49.14	630.65	5,019.88	1,704.91	1,627.02	77.89	21.889	
5,800.00	3,053.51	2,450.00	2,470.00	83.06	42.76	-49.14	630.65	5,019.88	1,621.08	1,540.99	80.09	20.240	
5,900.00	3,054.20	2,450.00	2,470.00	85.49	42.76	-49.14	630.65	5,019.88	1,539.18	1,456.67	82.52	18.653	
6,000.00	3,054.90	2,450.00	2,470.00	87.92	42.76	-49.13	630.65	5,019.88	1,459.54	1,374.36	85.18	17.136	
6,100.00	3,055.60	2,450.00	2,470.00	90.36	42.76	-49.13	630.65	5,019.88	1,382.54	1,294.46	88.08	15.696	
6,190.56	3,056.23	2,450.00	2,470.00	92.56	42.76	-49.13	630.65	5,019.88	1,315.48	1,224.56	90.93	14.467	
6,200.00	3,056.30	2,450.00	2,470.00	92.79	42.76	-49.13	630.65	5,019.88	1,308.65	1,217.42	91.24	14.344	
6,300.00	3,056.99	2,450.00	2,470.00	95.23	42.76	-49.13	630.65	5,019.88	1,238.44	1,143.80	94.64	13.086	
6,400.00	3,057.69	2,450.00	2,470.00	97.67	42.76	-49.13	630.65	5,019.88	1,172.56	1,074.29	98.27	11.932	
6,500.00	3,058.39	2,450.00	2,470.00	100.12	42.76	-49.13	630.65	5,019.88	1,111.78	1,009.70	102.08	10.891	
6,600.00	3,059.08	2,450.00	2,470.00	102.56	42.76	-49.13	630.65	5,019.88	1,056.99	950.97	106.01	9.970	
6,700.00	3,059.78	2,450.00	2,470.00	105.00	42.76	-49.14	630.65	5,019.88	1,009.16	899.20	109.96	9.178	
6,800.00	3,060.48	2,450.00	2,470.00	107.45	42.76	-49.14	630.65	5,019.88	969.32	855.54	113.78	8.519	
6,900.00	3,061.18	2,450.00	2,470.00	109.90	42.76	-49.14	630.65	5,019.88	938.50	821.18	117.31	8.000	
7,000.00	3,061.87	2,450.00	2,470.00	112.35	42.76	-49.14	630.65	5,019.88	917.59	797.20	120.39	7.622	
7,100.00	3,062.57	2,450.00	2,470.00	114.79	42.76	-49.14	630.65	5,019.88	907.29	784.45	122.83	7.386	
7,143.98	3,062.88	2,450.00	2,470.00	115.87	42.76	-49.14	630.65	5,019.88	906.22	782.54	123.68	7.327	CC, ES
7,200.00	3,063.27	2,450.00	2,470.00	117.24	42.76	-49.14	630.65	5,019.88	907.95	783.41	124.54	7.291	SF
7,300.00	3,063.97	2,450.00	2,470.00	119.70	42.76	-49.14	630.65	5,019.88	919.56	794.12	125.44	7.331	
7,400.00	3,064.67	2,450.00	2,470.00	122.15	42.76	-49.14	630.65	5,019.88	941.70	816.15	125.55	7.500	
7,500.00	3,065.36	2,450.00	2,470.00	124.60	42.76	-49.14	630.65	5,019.88	973.67	848.71	124.96	7.792	
7,600.00	3,066.06	2,450.00	2,470.00	127.05	42.76	-49.14	630.65	5,019.88	1,014.52	890.76	123.77	8.197	
7,700.00	3,066.76	2,450.00	2,470.00	129.51	42.76	-49.13	630.65	5,019.88	1,063.25	941.11	122.14	8.705	
7,800.00	3,067.46	2,450.00	2,470.00	131.96	42.76	-49.13	630.65	5,019.88	1,118.81	998.61	120.20	9.308	
7,900.00	3,068.16	2,450.00	2,470.00	134.42	42.76	-49.13	630.65	5,019.88	1,180.25	1,062.16	118.09	9.995	
8,000.00	3,068.86	2,450.00	2,470.00	136.87	42.76	-49.13	630.65	5,019.88	1,246.69	1,130.79	115.90	10.757	
8,100.00	3,069.55	2,450.00	2,470.00	139.33	42.76	-49.13	630.65	5,019.88	1,317.38	1,203.68	113.70	11.587	
8,200.00	3,070.25	2,450.00	2,470.00	141.78	42.76	-49.13	630.65	5,019.88	1,391.67	1,280.13	111.54	12.477	
8,300.00	3,070.95	2,450.00	2,470.00	144.24	42.76	-49.13	630.65	5,019.88	1,469.02	1,359.56	109.47	13.420	
8,400.00	3,071.65	2,450.00	2,470.00	146.70	42.76	-49.12	630.65	5,019.88	1,548.97	1,441.48	107.49	14.411	
8,500.00	3,072.35	2,450.00	2,470.00	149.15	42.76	-49.12	630.65	5,019.88	1,631.13	1,525.51	105.62	15.444	
8,600.00	3,073.05	2,450.00	2,470.00	151.61	42.76	-49.12	630.65	5,019.88	1,715.19	1,611.33	103.86	16.514	
8,700.00	3,073.75	2,450.00	2,470.00	154.07	42.76	-49.12	630.65	5,019.88	1,800.88	1,698.66	102.22	17.618	
8,724.51	3,073.92	2,450.00	2,470.00	154.67	42.76	-49.12	630.65	5,019.88	1,822.10	1,720.27	101.83	17.894	
8,800.00	3,074.45	2,450.00	2,470.00	156.53	42.76	-49.12	630.65	5,019.88	1,887.98	1,787.30	100.68	18.753	
8,814.50	3,074.55	2,450.00	2,470.00	156.89	42.76	-49.12	630.65	5,019.88	1,900.72	1,800.25	100.46	18.919	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 8 30103 ACTIVE - 8 - 8 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,800.00	3,053.51	2,458.00	2,478.00	83.06	42.90	-66.34	1,273.76	5,672.46	2,465.15	2,375.61	89.55	27.530	
5,900.00	3,054.20	2,458.00	2,478.00	85.49	42.90	-66.34	1,273.76	5,672.46	2,385.57	2,293.38	92.20	25.874	
6,000.00	3,054.90	2,458.00	2,478.00	87.92	42.90	-66.34	1,273.76	5,672.46	2,307.58	2,212.56	95.02	24.285	
6,100.00	3,055.60	2,458.00	2,478.00	90.36	42.90	-66.33	1,273.76	5,672.46	2,231.34	2,133.33	98.01	22.766	
6,190.56	3,056.23	2,458.00	2,478.00	92.56	42.90	-66.33	1,273.76	5,672.46	2,163.97	2,063.09	100.88	21.452	
6,200.00	3,056.30	2,458.00	2,478.00	92.79	42.90	-66.33	1,273.76	5,672.46	2,157.04	2,055.86	101.18	21.318	
6,300.00	3,056.99	2,458.00	2,478.00	95.23	42.90	-66.33	1,273.76	5,672.46	2,084.89	1,980.36	104.53	19.945	
6,400.00	3,057.69	2,458.00	2,478.00	97.67	42.90	-66.34	1,273.76	5,672.46	2,015.12	1,907.05	108.07	18.647	
6,500.00	3,058.39	2,458.00	2,478.00	100.12	42.90	-66.34	1,273.76	5,672.46	1,947.99	1,836.22	111.77	17.428	
6,600.00	3,059.08	2,458.00	2,478.00	102.56	42.90	-66.34	1,273.76	5,672.46	1,883.78	1,768.13	115.65	16.288	
6,700.00	3,059.78	2,458.00	2,478.00	105.00	42.90	-66.34	1,273.76	5,672.46	1,822.81	1,703.12	119.68	15.230	
6,800.00	3,060.48	2,458.00	2,478.00	107.45	42.90	-66.34	1,273.76	5,672.46	1,765.39	1,641.55	123.85	14.255	
6,900.00	3,061.18	2,458.00	2,478.00	109.90	42.90	-66.34	1,273.76	5,672.46	1,711.91	1,583.79	128.11	13.363	
7,000.00	3,061.87	2,458.00	2,478.00	112.35	42.90	-66.34	1,273.76	5,672.46	1,662.72	1,530.28	132.44	12.555	
7,100.00	3,062.57	2,458.00	2,478.00	114.79	42.90	-66.34	1,273.76	5,672.46	1,618.23	1,481.46	136.77	11.831	
7,200.00	3,063.27	2,458.00	2,478.00	117.24	42.90	-66.34	1,273.76	5,672.46	1,578.83	1,437.77	141.06	11.193	
7,300.00	3,063.97	2,458.00	2,478.00	119.70	42.90	-66.34	1,273.76	5,672.46	1,544.91	1,399.69	145.22	10.638	
7,400.00	3,064.67	2,458.00	2,478.00	122.15	42.90	-66.34	1,273.76	5,672.46	1,516.84	1,367.66	149.18	10.168	
7,500.00	3,065.36	2,458.00	2,478.00	124.60	42.90	-66.34	1,273.76	5,672.46	1,494.95	1,342.09	152.87	9.779	
7,600.00	3,066.06	2,458.00	2,478.00	127.05	42.90	-66.34	1,273.76	5,672.46	1,479.52	1,323.33	156.19	9.472	
7,700.00	3,066.76	2,458.00	2,478.00	129.51	42.90	-66.34	1,273.76	5,672.46	1,470.74	1,311.65	159.09	9.245	
7,779.45	3,067.32	2,458.00	2,478.00	131.46	42.90	-66.34	1,273.76	5,672.46	1,468.59	1,307.54	161.05	9.119	CC
7,800.00	3,067.46	2,458.00	2,478.00	131.96	42.90	-66.34	1,273.76	5,672.46	1,468.73	1,307.23	161.50	9.094	ES
7,900.00	3,068.16	2,458.00	2,478.00	134.42	42.90	-66.34	1,273.76	5,672.46	1,473.53	1,310.14	163.39	9.018	
8,000.00	3,068.86	2,458.00	2,478.00	136.87	42.90	-66.34	1,273.76	5,672.46	1,485.07	1,320.32	164.75	9.014	SF
8,100.00	3,069.55	2,458.00	2,478.00	139.33	42.90	-66.34	1,273.76	5,672.46	1,503.18	1,337.62	165.56	9.079	
8,200.00	3,070.25	2,458.00	2,478.00	141.78	42.90	-66.34	1,273.76	5,672.46	1,527.65	1,361.77	165.88	9.210	
8,300.00	3,070.95	2,458.00	2,478.00	144.24	42.90	-66.34	1,273.76	5,672.46	1,558.17	1,392.44	165.72	9.402	
8,400.00	3,071.65	2,458.00	2,478.00	146.70	42.90	-66.34	1,273.76	5,672.46	1,594.38	1,429.23	165.15	9.654	
8,500.00	3,072.35	2,458.00	2,478.00	149.15	42.90	-66.34	1,273.76	5,672.46	1,635.92	1,471.69	164.23	9.961	
8,600.00	3,073.05	2,458.00	2,478.00	151.61	42.90	-66.34	1,273.76	5,672.46	1,682.39	1,519.38	163.01	10.321	
8,700.00	3,073.75	2,458.00	2,478.00	154.07	42.90	-66.34	1,273.76	5,672.46	1,733.39	1,571.83	161.56	10.729	
8,724.51	3,073.92	2,458.00	2,478.00	154.67	42.90	-66.34	1,273.76	5,672.46	1,746.54	1,585.36	161.18	10.836	
8,800.00	3,074.45	2,458.00	2,478.00	156.53	42.90	-66.34	1,273.76	5,672.46	1,788.54	1,628.61	159.93	11.183	
8,814.50	3,074.55	2,458.00	2,478.00	156.89	42.90	-66.34	1,273.76	5,672.46	1,796.86	1,637.17	159.68	11.253	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier 5 Federal 9 29975 PA - 9 - 9 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,400.00	3,043.73	2,455.00	2,475.00	49.42	42.85	-66.60	1,309.70	4,301.95	2,487.13	2,415.17	71.96	34.563	
4,500.00	3,044.43	2,455.00	2,475.00	51.78	42.85	-66.60	1,309.70	4,301.95	2,407.10	2,333.30	73.80	32.616	
4,600.00	3,045.13	2,455.00	2,475.00	54.15	42.85	-66.60	1,309.70	4,301.95	2,328.63	2,252.84	75.79	30.724	
4,700.00	3,045.83	2,455.00	2,475.00	56.53	42.85	-66.60	1,309.70	4,301.95	2,251.86	2,173.92	77.94	28.892	
4,800.00	3,046.53	2,455.00	2,475.00	58.92	42.85	-66.60	1,309.70	4,301.95	2,176.97	2,096.73	80.25	27.128	
4,872.09	3,047.03	2,455.00	2,475.00	60.64	42.85	-66.60	1,309.70	4,301.95	2,124.27	2,042.26	82.01	25.902	
4,900.00	3,047.23	2,455.00	2,475.00	61.31	42.85	-66.60	1,309.70	4,301.95	2,104.18	2,021.46	82.72	25.438	
5,000.00	3,047.92	2,455.00	2,475.00	63.71	42.85	-66.60	1,309.70	4,301.95	2,033.69	1,948.34	85.35	23.827	
5,100.00	3,048.62	2,455.00	2,475.00	66.11	42.85	-66.59	1,309.70	4,301.95	1,965.76	1,877.61	88.15	22.299	
5,200.00	3,049.32	2,455.00	2,475.00	68.52	42.85	-66.59	1,309.70	4,301.95	1,900.66	1,809.55	91.11	20.860	
5,300.00	3,050.02	2,455.00	2,475.00	70.94	42.85	-66.59	1,309.70	4,301.95	1,838.70	1,744.47	94.23	19.513	
5,400.00	3,050.72	2,455.00	2,475.00	73.35	42.85	-66.59	1,309.70	4,301.95	1,780.19	1,682.71	97.48	18.261	
5,500.00	3,051.41	2,455.00	2,475.00	75.78	42.85	-66.59	1,309.70	4,301.95	1,725.49	1,624.63	100.86	17.108	
5,600.00	3,052.11	2,455.00	2,475.00	78.20	42.85	-66.59	1,309.70	4,301.95	1,674.98	1,570.65	104.33	16.054	
5,700.00	3,052.81	2,455.00	2,475.00	80.63	42.85	-66.59	1,309.70	4,301.95	1,629.04	1,521.18	107.87	15.102	
5,800.00	3,053.51	2,455.00	2,475.00	83.06	42.85	-66.59	1,309.70	4,301.95	1,588.07	1,476.65	111.42	14.253	
5,900.00	3,054.20	2,455.00	2,475.00	85.49	42.85	-66.59	1,309.70	4,301.95	1,552.47	1,437.53	114.94	13.507	
6,000.00	3,054.90	2,455.00	2,475.00	87.92	42.85	-66.59	1,309.70	4,301.95	1,522.61	1,404.23	118.37	12.863	
6,100.00	3,055.60	2,455.00	2,475.00	90.36	42.85	-66.59	1,309.70	4,301.95	1,498.82	1,377.17	121.65	12.321	
6,190.56	3,056.23	2,455.00	2,475.00	92.56	42.85	-66.59	1,309.70	4,301.95	1,482.78	1,358.35	124.44	11.916	
6,200.00	3,056.30	2,455.00	2,475.00	92.79	42.85	-66.59	1,309.70	4,301.95	1,481.42	1,356.71	124.71	11.879	
6,300.00	3,056.99	2,455.00	2,475.00	95.23	42.85	-66.59	1,309.70	4,301.95	1,470.62	1,343.12	127.50	11.534	
6,400.00	3,057.69	2,455.00	2,475.00	97.67	42.85	-66.59	1,309.70	4,301.95	1,466.59	1,336.62	129.96	11.284	
6,409.26	3,057.75	2,455.00	2,475.00	97.90	42.85	-66.59	1,309.70	4,301.95	1,466.56	1,336.38	130.17	11.266	CC, ES
6,500.00	3,058.39	2,455.00	2,475.00	100.12	42.85	-66.59	1,309.70	4,301.95	1,469.36	1,337.31	132.06	11.127	
6,600.00	3,059.08	2,455.00	2,475.00	102.56	42.85	-66.59	1,309.70	4,301.95	1,478.92	1,345.16	133.76	11.057	SF
6,700.00	3,059.78	2,455.00	2,475.00	105.00	42.85	-66.59	1,309.70	4,301.95	1,495.12	1,360.06	135.06	11.070	
6,800.00	3,060.48	2,455.00	2,475.00	107.45	42.85	-66.59	1,309.70	4,301.95	1,517.75	1,381.79	135.96	11.163	
6,900.00	3,061.18	2,455.00	2,475.00	109.90	42.85	-66.59	1,309.70	4,301.95	1,546.53	1,410.05	136.48	11.331	
7,000.00	3,061.87	2,455.00	2,475.00	112.35	42.85	-66.59	1,309.70	4,301.95	1,581.13	1,444.46	136.66	11.569	
7,100.00	3,062.57	2,455.00	2,475.00	114.79	42.85	-66.58	1,309.70	4,301.95	1,621.17	1,484.63	136.54	11.873	
7,200.00	3,063.27	2,455.00	2,475.00	117.24	42.85	-66.58	1,309.70	4,301.95	1,666.26	1,530.10	136.16	12.238	
7,300.00	3,063.97	2,455.00	2,475.00	119.70	42.85	-66.58	1,309.70	4,301.95	1,716.00	1,580.45	135.55	12.660	
7,400.00	3,064.67	2,455.00	2,475.00	122.15	42.85	-66.58	1,309.70	4,301.95	1,770.01	1,635.24	134.77	13.134	
7,500.00	3,065.36	2,455.00	2,475.00	124.60	42.85	-66.58	1,309.70	4,301.95	1,827.89	1,694.04	133.85	13.656	
7,600.00	3,066.06	2,455.00	2,475.00	127.05	42.85	-66.58	1,309.70	4,301.95	1,889.30	1,756.48	132.82	14.224	
7,700.00	3,066.76	2,455.00	2,475.00	129.51	42.85	-66.58	1,309.70	4,301.95	1,953.91	1,822.18	131.72	14.834	
7,800.00	3,067.46	2,455.00	2,475.00	131.96	42.85	-66.58	1,309.70	4,301.95	2,021.40	1,890.83	130.57	15.481	
7,900.00	3,068.16	2,455.00	2,475.00	134.42	42.85	-66.58	1,309.70	4,301.95	2,091.50	1,962.11	129.39	16.164	
8,000.00	3,068.86	2,455.00	2,475.00	136.87	42.85	-66.58	1,309.70	4,301.95	2,163.95	2,035.75	128.20	16.879	
8,100.00	3,069.55	2,455.00	2,475.00	139.33	42.85	-66.58	1,309.70	4,301.95	2,238.53	2,111.52	127.01	17.625	
8,200.00	3,070.25	2,455.00	2,475.00	141.78	42.85	-66.58	1,309.70	4,301.95	2,315.03	2,189.20	125.83	18.398	
8,300.00	3,070.95	2,455.00	2,475.00	144.24	42.85	-66.58	1,309.70	4,301.95	2,393.27	2,268.60	124.67	19.197	
8,400.00	3,071.65	2,455.00	2,475.00	146.70	42.85	-66.57	1,309.70	4,301.95	2,473.07	2,349.54	123.53	20.020	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Carter Collier Federal #1 00790 Plugged - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,300.00	3,043.03	2,256.00	2,276.00	47.07	39.37	38.99	-672.89	4,374.95	2,448.40	2,387.88	60.52	40.458	
4,400.00	3,043.73	2,256.00	2,276.00	49.42	39.37	38.99	-672.89	4,374.95	2,357.61	2,296.43	61.18	38.538	
4,500.00	3,044.43	2,256.00	2,276.00	51.78	39.37	38.99	-672.89	4,374.95	2,267.59	2,205.68	61.90	36.631	
4,600.00	3,045.13	2,256.00	2,276.00	54.15	39.37	38.99	-672.89	4,374.95	2,178.44	2,115.73	62.71	34.740	
4,700.00	3,045.83	2,256.00	2,276.00	56.53	39.37	38.99	-672.89	4,374.95	2,090.27	2,026.68	63.59	32.870	
4,800.00	3,046.53	2,256.00	2,276.00	58.92	39.37	38.99	-672.89	4,374.95	2,003.22	1,938.65	64.57	31.026	
4,872.09	3,047.03	2,256.00	2,276.00	60.64	39.37	38.99	-672.89	4,374.95	1,941.24	1,875.91	65.33	29.716	
4,900.00	3,047.23	2,256.00	2,276.00	61.31	39.37	38.99	-672.89	4,374.95	1,917.43	1,851.79	65.63	29.214	
5,000.00	3,047.92	2,256.00	2,276.00	63.71	39.37	38.99	-672.89	4,374.95	1,833.08	1,766.27	66.80	27.440	
5,100.00	3,048.62	2,256.00	2,276.00	66.11	39.37	39.00	-672.89	4,374.95	1,750.38	1,682.30	68.08	25.709	
5,200.00	3,049.32	2,256.00	2,276.00	68.52	39.37	39.00	-672.89	4,374.95	1,669.58	1,600.10	69.48	24.030	
5,300.00	3,050.02	2,256.00	2,276.00	70.94	39.37	39.00	-672.89	4,374.95	1,590.97	1,519.97	70.99	22.410	
5,400.00	3,050.72	2,256.00	2,276.00	73.35	39.37	39.01	-672.89	4,374.95	1,514.88	1,442.25	72.63	20.857	
5,500.00	3,051.41	2,256.00	2,276.00	75.78	39.37	39.01	-672.89	4,374.95	1,441.72	1,367.33	74.38	19.382	
5,600.00	3,052.11	2,256.00	2,276.00	78.20	39.37	39.01	-672.89	4,374.95	1,371.95	1,295.70	76.25	17.993	
5,700.00	3,052.81	2,256.00	2,276.00	80.63	39.37	39.02	-672.89	4,374.95	1,306.12	1,227.91	78.21	16.700	
5,800.00	3,053.51	2,256.00	2,276.00	83.06	39.37	39.02	-672.89	4,374.95	1,244.85	1,164.60	80.25	15.512	
5,900.00	3,054.20	2,256.00	2,276.00	85.49	39.37	39.02	-672.89	4,374.95	1,188.86	1,106.53	82.33	14.440	
6,000.00	3,054.90	2,256.00	2,276.00	87.92	39.37	39.02	-672.89	4,374.95	1,138.91	1,054.50	84.41	13.492	
6,100.00	3,055.60	2,256.00	2,276.00	90.36	39.37	39.02	-672.89	4,374.95	1,095.83	1,009.39	86.44	12.677	
6,190.56	3,056.23	2,256.00	2,276.00	92.56	39.37	39.02	-672.89	4,374.95	1,063.45	975.26	88.20	12.058	
6,200.00	3,056.30	2,256.00	2,276.00	92.79	39.37	39.02	-672.89	4,374.95	1,060.47	972.09	88.37	12.000	
6,300.00	3,056.99	2,256.00	2,276.00	95.23	39.37	39.02	-672.89	4,374.95	1,033.60	943.45	90.15	11.465	
6,400.00	3,057.69	2,256.00	2,276.00	97.67	39.37	39.02	-672.89	4,374.95	1,015.91	924.18	91.74	11.074	
6,500.00	3,058.39	2,256.00	2,276.00	100.12	39.37	39.02	-672.89	4,374.95	1,007.87	914.79	93.09	10.827	
6,531.34	3,058.61	2,256.00	2,276.00	100.88	39.37	39.02	-672.89	4,374.95	1,007.39	913.93	93.46	10.779	CC, ES
6,600.00	3,059.08	2,256.00	2,276.00	102.56	39.37	39.02	-672.89	4,374.95	1,009.72	915.55	94.18	10.722	SF
6,700.00	3,059.78	2,256.00	2,276.00	105.00	39.37	39.02	-672.89	4,374.95	1,021.40	926.44	94.96	10.756	
6,800.00	3,060.48	2,256.00	2,276.00	107.45	39.37	39.02	-672.89	4,374.95	1,042.58	947.15	95.43	10.925	
6,900.00	3,061.18	2,256.00	2,276.00	109.90	39.37	39.02	-672.89	4,374.95	1,072.70	977.14	95.56	11.225	
7,000.00	3,061.87	2,256.00	2,276.00	112.35	39.37	39.03	-672.89	4,374.95	1,111.04	1,015.66	95.38	11.648	
7,100.00	3,062.57	2,256.00	2,276.00	114.79	39.37	39.03	-672.89	4,374.95	1,156.77	1,061.85	94.92	12.187	
7,200.00	3,063.27	2,256.00	2,276.00	117.24	39.37	39.03	-672.89	4,374.95	1,209.05	1,114.83	94.22	12.832	
7,300.00	3,063.97	2,256.00	2,276.00	119.70	39.37	39.03	-672.89	4,374.95	1,267.08	1,173.74	93.35	13.574	
7,400.00	3,064.67	2,256.00	2,276.00	122.15	39.37	39.03	-672.89	4,374.95	1,330.11	1,237.75	92.35	14.402	
7,500.00	3,065.36	2,256.00	2,276.00	124.60	39.37	39.03	-672.89	4,374.95	1,397.45	1,306.17	91.29	15.309	
7,600.00	3,066.06	2,256.00	2,276.00	127.05	39.37	39.03	-672.89	4,374.95	1,468.52	1,378.34	90.18	16.284	
7,700.00	3,066.76	2,256.00	2,276.00	129.51	39.37	39.04	-672.89	4,374.95	1,542.80	1,453.73	89.07	17.322	
7,800.00	3,067.46	2,256.00	2,276.00	131.96	39.37	39.04	-672.89	4,374.95	1,619.84	1,531.88	87.96	18.415	
7,900.00	3,068.16	2,256.00	2,276.00	134.42	39.37	39.04	-672.89	4,374.95	1,699.28	1,612.39	86.89	19.557	
8,000.00	3,068.86	2,256.00	2,276.00	136.87	39.37	39.04	-672.89	4,374.95	1,780.79	1,694.93	85.86	20.742	
8,100.00	3,069.55	2,256.00	2,276.00	139.33	39.37	39.05	-672.89	4,374.95	1,864.10	1,779.23	84.86	21.966	
8,200.00	3,070.25	2,256.00	2,276.00	141.78	39.37	39.05	-672.89	4,374.95	1,948.98	1,865.05	83.92	23.224	
8,300.00	3,070.95	2,256.00	2,276.00	144.24	39.37	39.05	-672.89	4,374.95	2,035.23	1,952.20	83.03	24.513	
8,400.00	3,071.65	2,256.00	2,276.00	146.70	39.37	39.06	-672.89	4,374.95	2,122.68	2,040.50	82.18	25.829	
8,500.00	3,072.35	2,256.00	2,276.00	149.15	39.37	39.06	-672.89	4,374.95	2,211.20	2,129.82	81.39	27.169	
8,600.00	3,073.05	2,256.00	2,276.00	151.61	39.37	39.06	-672.89	4,374.95	2,300.66	2,220.02	80.64	28.531	
8,700.00	3,073.75	2,256.00	2,276.00	154.07	39.37	39.07	-672.89	4,374.95	2,390.96	2,311.02	79.93	29.912	
8,724.51	3,073.92	2,256.00	2,276.00	154.67	39.37	39.07	-672.89	4,374.95	2,413.20	2,333.43	79.77	30.254	
8,800.00	3,074.45	2,256.00	2,276.00	156.53	39.37	39.07	-672.89	4,374.95	2,481.99	2,402.72	79.27	31.312	
8,814.50	3,074.55	2,256.00	2,276.00	156.89	39.37	39.07	-672.89	4,374.95	2,495.25	2,416.08	79.17	31.516	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 2 29706 ACTIVE - 2 - 2 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,400.00	2,981.56	2,961.56	2,981.56	27.00	51.69	15.82	-325.79	3,723.30	2,486.66	2,418.55	68.11	36.507	
3,450.00	3,001.31	2,981.31	3,001.31	27.99	52.03	19.49	-325.79	3,723.30	2,441.09	2,372.45	68.64	35.564	
3,500.00	3,016.97	2,996.97	3,016.97	29.02	52.31	25.22	-325.79	3,723.30	2,394.00	2,324.93	69.07	34.660	
3,550.00	3,028.45	3,008.45	3,028.45	30.08	52.51	34.95	-325.79	3,723.30	2,345.75	2,276.35	69.41	33.798	
3,600.00	3,035.63	3,015.63	3,035.63	31.16	52.63	53.01	-325.79	3,723.30	2,296.72	2,227.07	69.64	32.979	
3,653.66	3,038.52	3,018.52	3,038.52	32.33	52.68	87.07	-325.79	3,723.30	2,243.63	2,173.84	69.79	32.147	
3,700.00	3,038.84	3,018.84	3,038.84	33.34	52.69	87.13	-325.79	3,723.30	2,197.73	2,127.85	69.88	31.451	
3,800.00	3,039.54	3,019.54	3,039.54	35.57	52.70	87.26	-325.79	3,723.30	2,098.74	2,028.65	70.09	29.944	
3,900.00	3,040.24	3,020.24	3,040.24	37.83	52.71	87.40	-325.79	3,723.30	1,999.84	1,929.51	70.33	28.434	
4,000.00	3,040.94	3,020.94	3,040.94	40.11	52.73	87.53	-325.79	3,723.30	1,901.06	1,830.44	70.62	26.919	
4,100.00	3,041.64	3,021.64	3,041.64	42.41	52.74	87.66	-325.79	3,723.30	1,802.42	1,731.46	70.96	25.400	
4,200.00	3,042.33	3,022.33	3,042.33	44.73	52.75	87.79	-325.79	3,723.30	1,703.94	1,632.57	71.36	23.876	
4,300.00	3,043.03	3,023.03	3,043.03	47.07	52.76	87.92	-325.79	3,723.30	1,605.64	1,533.79	71.85	22.348	
4,400.00	3,043.73	3,023.73	3,043.73	49.42	52.77	88.05	-325.79	3,723.30	1,507.56	1,435.13	72.43	20.815	
4,500.00	3,044.43	3,024.43	3,044.43	51.78	52.79	88.19	-325.79	3,723.30	1,409.76	1,336.63	73.13	19.278	
4,600.00	3,045.13	3,025.13	3,045.13	54.15	52.80	88.32	-325.79	3,723.30	1,312.28	1,238.30	73.98	17.738	
4,700.00	3,045.83	3,025.83	3,045.83	56.53	52.81	88.45	-325.79	3,723.30	1,215.22	1,140.19	75.03	16.197	
4,800.00	3,046.53	3,026.53	3,046.53	58.92	52.82	88.58	-325.79	3,723.30	1,118.67	1,042.35	76.32	14.658	
4,872.09	3,047.03	3,027.03	3,047.03	60.64	52.83	88.68	-325.79	3,723.30	1,049.47	972.03	77.44	13.551	
4,900.00	3,047.23	3,027.23	3,047.23	61.31	52.84	88.71	-325.79	3,723.30	1,022.78	944.85	77.93	13.124	
5,000.00	3,047.92	3,027.92	3,047.92	63.71	52.85	88.84	-325.79	3,723.30	927.77	847.81	79.96	11.603	
5,100.00	3,048.62	3,028.62	3,048.62	66.11	52.86	88.98	-325.79	3,723.30	833.92	751.38	82.54	10.104	
5,200.00	3,049.32	3,029.32	3,049.32	68.52	52.87	89.11	-325.79	3,723.30	741.69	655.83	85.85	8.639	
5,300.00	3,050.02	3,030.02	3,050.02	70.94	52.88	89.24	-325.79	3,723.30	651.75	561.58	90.16	7.228	
5,400.00	3,050.72	3,030.72	3,050.72	73.35	52.90	89.37	-325.79	3,723.30	565.20	469.39	95.82	5.899	
5,500.00	3,051.41	3,031.41	3,051.41	75.78	52.91	89.50	-325.79	3,723.30	483.88	380.65	103.23	4.688	
5,600.00	3,052.11	3,032.11	3,052.11	78.20	52.92	89.64	-325.79	3,723.30	410.88	298.18	112.70	3.646	
5,700.00	3,052.81	3,032.81	3,052.81	80.63	52.93	89.77	-325.79	3,723.30	351.45	227.65	123.80	2.839	
5,800.00	3,053.51	3,033.51	3,053.51	83.06	52.94	89.90	-325.79	3,723.30	313.38	179.48	133.90	2.340	
5,876.53	3,054.04	3,034.04	3,054.04	84.92	52.95	90.00	-325.79	3,723.30	303.89	166.03	137.86	2.204	CC, ES, SF
5,900.00	3,054.20	3,034.20	3,054.20	85.49	52.96	90.03	-325.79	3,723.30	304.80	166.71	138.09	2.207	
6,000.00	3,054.90	3,034.90	3,054.90	87.92	52.97	90.16	-325.79	3,723.30	328.02	193.85	134.18	2.445	
6,100.00	3,055.60	3,035.60	3,055.60	90.36	52.98	90.29	-325.79	3,723.30	377.23	251.53	125.70	3.001	
6,190.56	3,056.23	3,036.23	3,056.23	92.56	52.99	90.41	-325.79	3,723.30	437.01	319.42	117.59	3.716	
6,200.00	3,056.30	3,036.30	3,056.30	92.79	52.99	90.43	-325.79	3,723.30	443.85	327.05	116.80	3.800	
6,300.00	3,056.99	3,036.99	3,056.99	95.23	53.01	90.56	-325.79	3,723.30	521.25	412.04	109.21	4.773	
6,400.00	3,057.69	3,037.69	3,057.69	97.67	53.02	90.69	-325.79	3,723.30	605.31	502.15	103.16	5.867	
6,500.00	3,058.39	3,038.39	3,058.39	100.12	53.03	90.82	-325.79	3,723.30	693.61	595.19	98.42	7.047	
6,600.00	3,059.08	3,039.08	3,059.08	102.56	53.04	90.95	-325.79	3,723.30	784.72	690.03	94.69	8.287	
6,700.00	3,059.78	3,039.78	3,059.78	105.00	53.05	91.08	-325.79	3,723.30	877.77	786.04	91.73	9.569	
6,800.00	3,060.48	3,040.48	3,060.48	107.45	53.07	91.21	-325.79	3,723.30	972.20	882.86	89.34	10.882	
6,900.00	3,061.18	3,041.18	3,061.18	109.90	53.08	91.35	-325.79	3,723.30	1,067.64	980.24	87.39	12.216	
7,000.00	3,061.87	3,041.87	3,061.87	112.35	53.09	91.48	-325.79	3,723.30	1,163.84	1,078.05	85.79	13.567	
7,100.00	3,062.57	3,042.57	3,062.57	114.79	53.10	91.61	-325.79	3,723.30	1,260.63	1,176.19	84.45	14.928	
7,200.00	3,063.27	3,043.27	3,063.27	117.24	53.12	91.74	-325.79	3,723.30	1,357.89	1,274.57	83.32	16.297	
7,300.00	3,063.97	3,043.97	3,063.97	119.70	53.13	91.87	-325.79	3,723.30	1,455.52	1,373.15	82.37	17.671	
7,400.00	3,064.67	3,044.67	3,064.67	122.15	53.14	92.00	-325.79	3,723.30	1,553.45	1,471.90	81.55	19.049	
7,500.00	3,065.36	3,045.36	3,065.36	124.60	53.15	92.13	-325.79	3,723.30	1,651.62	1,570.78	80.85	20.429	
7,600.00	3,066.06	3,046.06	3,066.06	127.05	53.16	92.26	-325.79	3,723.30	1,750.01	1,669.77	80.24	21.810	
7,700.00	3,066.76	3,046.76	3,066.76	129.51	53.18	92.39	-325.79	3,723.30	1,848.56	1,768.85	79.71	23.191	
7,800.00	3,067.46	3,047.46	3,067.46	131.96	53.19	92.53	-325.79	3,723.30	1,947.26	1,868.01	79.25	24.571	
7,900.00	3,068.16	3,048.16	3,068.16	134.42	53.20	92.66	-325.79	3,723.30	2,046.09	1,967.24	78.84	25.951	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 2 29706 ACTIVE - 2 - 2 AsDrilled

Survey Program: 100-INC-ONLY

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,000.00	3,068.86	3,048.86	3,068.86	136.87	53.21	92.79	-325.79	3,723.30	2,145.02	2,066.53	78.49	27.329	
8,100.00	3,069.55	3,049.55	3,069.55	139.33	53.22	92.92	-325.79	3,723.30	2,244.05	2,165.87	78.18	28.705	
8,200.00	3,070.25	3,050.25	3,070.25	141.78	53.24	93.05	-325.79	3,723.30	2,343.16	2,265.26	77.90	30.080	
8,300.00	3,070.95	3,050.95	3,070.95	144.24	53.25	93.18	-325.79	3,723.30	2,442.34	2,364.69	77.65	31.452	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 4 29707 ACTIVE - 4 - 4 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,400.00	2,273.88	2,253.88	2,273.88	13.85	39.34	4.24	21.44	3,060.01	2,468.94	2,417.22	51.73	47.730	
2,500.00	2,359.12	2,339.12	2,359.12	14.75	40.83	4.33	21.44	3,060.01	2,416.76	2,363.25	53.52	45.158	
2,600.00	2,444.36	2,424.36	2,444.36	15.69	42.31	4.43	21.44	3,060.01	2,364.59	2,309.27	55.32	42.746	
2,700.00	2,529.60	2,509.60	2,529.60	16.66	43.80	4.53	21.44	3,060.01	2,312.42	2,255.29	57.12	40.480	
2,799.35	2,614.29	2,594.29	2,614.29	17.63	45.28	4.63	21.44	3,060.01	2,260.59	2,201.66	58.93	38.362	
2,799.99	2,614.84	2,594.84	2,614.84	17.64	45.29	4.62	21.44	3,060.01	2,260.25	2,201.31	58.94	38.348	
2,850.00	2,656.50	2,636.50	2,656.50	18.16	46.02	3.61	21.44	3,060.01	2,232.67	2,172.79	59.88	37.288	
2,900.00	2,696.15	2,676.15	2,696.15	18.75	46.71	2.75	21.44	3,060.01	2,202.25	2,141.39	60.86	36.185	
2,950.00	2,733.60	2,713.60	2,733.60	19.38	47.36	1.96	21.44	3,060.01	2,169.15	2,107.37	61.78	35.108	
3,000.00	2,768.66	2,748.66	2,768.66	20.07	47.97	1.21	21.44	3,060.01	2,133.53	2,070.88	62.64	34.057	
3,050.00	2,801.17	2,781.17	2,801.17	20.82	48.54	0.45	21.44	3,060.01	2,095.55	2,032.11	63.44	33.033	
3,100.00	2,830.97	2,810.97	2,830.97	21.62	49.06	-0.37	21.44	3,060.01	2,055.41	1,991.25	64.16	32.035	
3,150.00	2,857.90	2,837.90	2,857.90	22.46	49.53	-1.31	21.44	3,060.01	2,013.30	1,948.49	64.81	31.065	
3,157.67	2,861.77	2,841.77	2,861.77	22.60	49.60	-1.47	21.44	3,060.01	2,006.68	1,941.78	64.90	30.919	
3,200.00	2,882.94	2,862.94	2,882.94	23.35	49.97	-1.50	21.44	3,060.01	1,970.02	1,904.66	65.36	30.140	
3,300.00	2,932.94	2,912.94	2,932.94	25.15	50.84	-1.57	21.44	3,060.01	1,883.43	1,816.97	66.46	28.340	
3,357.67	2,961.77	2,941.77	2,961.77	26.20	51.34	-1.61	21.44	3,060.01	1,833.49	1,766.40	67.09	27.328	
3,400.00	2,981.56	2,961.56	2,981.56	27.00	51.69	-1.89	21.44	3,060.01	1,796.09	1,728.54	67.54	26.593	
3,450.00	3,001.31	2,981.31	3,001.31	27.99	52.03	-2.39	21.44	3,060.01	1,750.17	1,682.15	68.02	25.730	
3,500.00	3,016.97	2,996.97	3,016.97	29.02	52.31	-3.21	21.44	3,060.01	1,702.71	1,634.31	68.40	24.892	
3,550.00	3,028.45	3,008.45	3,028.45	30.08	52.51	-4.82	21.44	3,060.01	1,654.07	1,585.39	68.68	24.084	
3,600.00	3,035.63	3,015.63	3,035.63	31.16	52.63	-9.20	21.44	3,060.01	1,604.61	1,535.76	68.85	23.306	
3,653.66	3,038.52	3,018.52	3,038.52	32.33	52.68	-67.50	21.44	3,060.01	1,551.05	1,482.13	68.92	22.504	
3,700.00	3,038.84	3,018.84	3,038.84	33.34	52.69	-68.11	21.44	3,060.01	1,504.72	1,435.79	68.93	21.828	
3,800.00	3,039.54	3,019.54	3,039.54	35.57	52.70	-69.44	21.44	3,060.01	1,404.74	1,335.78	68.96	20.370	
3,900.00	3,040.24	3,020.24	3,040.24	37.83	52.71	-70.79	21.44	3,060.01	1,304.76	1,235.77	68.99	18.913	
4,000.00	3,040.94	3,020.94	3,040.94	40.11	52.73	-72.17	21.44	3,060.01	1,204.78	1,135.77	69.01	17.457	
4,100.00	3,041.64	3,021.64	3,041.64	42.41	52.74	-73.57	21.44	3,060.01	1,104.81	1,035.77	69.04	16.002	
4,200.00	3,042.33	3,022.33	3,042.33	44.73	52.75	-74.98	21.44	3,060.01	1,004.85	935.77	69.07	14.548	
4,300.00	3,043.03	3,023.03	3,043.03	47.07	52.76	-76.42	21.44	3,060.01	904.89	835.78	69.10	13.095	
4,400.00	3,043.73	3,023.73	3,043.73	49.42	52.77	-77.87	21.44	3,060.01	804.94	735.80	69.14	11.642	
4,500.00	3,044.43	3,024.43	3,044.43	51.78	52.79	-79.34	21.44	3,060.01	705.00	635.82	69.18	10.191	
4,600.00	3,045.13	3,025.13	3,045.13	54.15	52.80	-80.83	21.44	3,060.01	605.08	535.85	69.23	8.740	
4,700.00	3,045.83	3,025.83	3,045.83	56.53	52.81	-82.33	21.44	3,060.01	505.20	435.89	69.31	7.289	
4,800.00	3,046.53	3,026.53	3,046.53	58.92	52.82	-83.83	21.44	3,060.01	405.37	335.93	69.44	5.838	
4,872.09	3,047.03	3,027.03	3,047.03	60.64	52.83	-84.93	21.44	3,060.01	333.46	263.85	69.62	4.790	
4,900.00	3,047.23	3,027.23	3,047.23	61.31	52.84	-85.35	21.44	3,060.01	305.64	235.92	69.72	4.384	
5,000.00	3,047.92	3,027.92	3,047.92	63.71	52.85	-86.87	21.44	3,060.01	206.19	135.63	70.56	2.922	
5,100.00	3,048.62	3,028.62	3,048.62	66.11	52.86	-88.40	21.44	3,060.01	107.75	33.11	74.63	1.444	Level 3
5,200.00	3,049.32	3,029.32	3,049.32	68.52	52.87	-89.93	21.44	3,060.01	26.52	-93.68	120.20	0.221	Level 1
5,204.49	3,049.35	3,029.35	3,049.35	68.63	52.87	-90.00	21.44	3,060.01	26.13	-95.36	121.49	0.215	Level 1, CC, ES, SF
5,300.00	3,050.02	3,030.02	3,050.02	70.94	52.88	-91.46	21.44	3,060.01	98.97	20.43	78.54	1.260	Level 3
5,400.00	3,050.72	3,030.72	3,050.72	73.35	52.90	-92.99	21.44	3,060.01	197.20	124.43	72.77	2.710	
5,500.00	3,051.41	3,031.41	3,051.41	75.78	52.91	-94.51	21.44	3,060.01	296.61	225.25	71.36	4.156	
5,600.00	3,052.11	3,032.11	3,052.11	78.20	52.92	-96.02	21.44	3,060.01	396.31	325.49	70.82	5.596	
5,700.00	3,052.81	3,032.81	3,052.81	80.63	52.93	-97.51	21.44	3,060.01	496.14	425.57	70.57	7.030	
5,800.00	3,053.51	3,033.51	3,053.51	83.06	52.94	-98.99	21.44	3,060.01	596.02	525.58	70.44	8.461	
5,900.00	3,054.20	3,034.20	3,054.20	85.49	52.96	-100.45	21.44	3,060.01	695.93	625.56	70.37	9.889	
6,000.00	3,054.90	3,034.90	3,054.90	87.92	52.97	-101.89	21.44	3,060.01	795.87	725.53	70.34	11.314	
6,100.00	3,055.60	3,035.60	3,055.60	90.36	52.98	-103.31	21.44	3,060.01	895.82	825.49	70.33	12.737	
6,190.56	3,056.23	3,036.23	3,056.23	92.56	52.99	-104.57	21.44	3,060.01	986.34	916.00	70.34	14.023	
6,200.00	3,056.30	3,036.30	3,056.30	92.79	52.99	-104.71	21.44	3,060.01	995.77	925.44	70.34	14.157	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 4 29707 ACTIVE - 4 - 4 AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,300.00	3,056.99	3,036.99	3,056.99	95.23	53.01	-106.14	21.44	3,060.01	1,095.74	1,025.39	70.35	15.575	
6,400.00	3,057.69	3,037.69	3,057.69	97.67	53.02	-107.56	21.44	3,060.01	1,195.71	1,125.34	70.38	16.990	
6,500.00	3,058.39	3,038.39	3,058.39	100.12	53.03	-108.96	21.44	3,060.01	1,295.69	1,225.28	70.41	18.403	
6,600.00	3,059.08	3,039.08	3,059.08	102.56	53.04	-110.35	21.44	3,060.01	1,395.67	1,325.23	70.44	19.813	
6,700.00	3,059.78	3,039.78	3,059.78	105.00	53.05	-111.73	21.44	3,060.01	1,495.65	1,425.17	70.48	21.221	
6,800.00	3,060.48	3,040.48	3,060.48	107.45	53.07	-113.09	21.44	3,060.01	1,595.63	1,525.11	70.52	22.627	
6,900.00	3,061.18	3,041.18	3,061.18	109.90	53.08	-114.43	21.44	3,060.01	1,695.61	1,625.05	70.56	24.030	
7,000.00	3,061.87	3,041.87	3,061.87	112.35	53.09	-115.75	21.44	3,060.01	1,795.60	1,724.99	70.61	25.430	
7,100.00	3,062.57	3,042.57	3,062.57	114.79	53.10	-117.06	21.44	3,060.01	1,895.59	1,824.93	70.66	26.828	
7,200.00	3,063.27	3,043.27	3,063.27	117.24	53.12	-118.35	21.44	3,060.01	1,995.58	1,924.87	70.71	28.223	
7,300.00	3,063.97	3,043.97	3,063.97	119.70	53.13	-119.62	21.44	3,060.01	2,095.57	2,024.81	70.76	29.616	
7,400.00	3,064.67	3,044.67	3,064.67	122.15	53.14	-120.88	21.44	3,060.01	2,195.56	2,124.75	70.81	31.006	
7,500.00	3,065.36	3,045.36	3,065.36	124.60	53.15	-122.11	21.44	3,060.01	2,295.55	2,224.68	70.87	32.393	
7,600.00	3,066.06	3,046.06	3,066.06	127.05	53.16	-123.32	21.44	3,060.01	2,395.54	2,324.62	70.92	33.777	
7,700.00	3,066.76	3,046.76	3,066.76	129.51	53.18	-124.52	21.44	3,060.01	2,495.53	2,424.55	70.98	35.159	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 5 29650 ACTIVE - 5 - 5 AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,450.00	3,001.31	2,981.31	3,001.31	27.99	52.03	-39.03	664.78	3,713.98	2,483.61	2,415.04	68.57	36.221	
3,500.00	3,016.97	2,996.97	3,016.97	29.02	52.31	-47.19	664.78	3,713.98	2,438.02	2,368.93	69.09	35.287	
3,550.00	3,028.45	3,008.45	3,028.45	30.08	52.51	-58.05	664.78	3,713.98	2,391.38	2,321.85	69.53	34.394	
3,600.00	3,035.63	3,015.63	3,035.63	31.16	52.63	-71.83	664.78	3,713.98	2,344.04	2,274.15	69.89	33.540	
3,653.66	3,038.52	3,018.52	3,038.52	32.33	52.68	-88.72	664.78	3,713.98	2,292.87	2,222.69	70.19	32.669	
3,700.00	3,038.84	3,018.84	3,038.84	33.34	52.69	-88.75	664.78	3,713.98	2,248.71	2,178.29	70.42	31.934	
3,800.00	3,039.54	3,019.54	3,039.54	35.57	52.70	-88.81	664.78	3,713.98	2,153.70	2,082.70	70.99	30.337	
3,900.00	3,040.24	3,020.24	3,040.24	37.83	52.71	-88.87	664.78	3,713.98	2,059.16	1,987.48	71.69	28.725	
4,000.00	3,040.94	3,020.94	3,040.94	40.11	52.73	-88.93	664.78	3,713.98	1,965.17	1,892.65	72.51	27.101	
4,100.00	3,041.64	3,021.64	3,041.64	42.41	52.74	-88.98	664.78	3,713.98	1,871.79	1,798.30	73.49	25.470	
4,200.00	3,042.33	3,022.33	3,042.33	44.73	52.75	-89.04	664.78	3,713.98	1,779.14	1,704.49	74.65	23.834	
4,300.00	3,043.03	3,023.03	3,043.03	47.07	52.76	-89.10	664.78	3,713.98	1,687.33	1,611.32	76.00	22.200	
4,400.00	3,043.73	3,023.73	3,043.73	49.42	52.77	-89.16	664.78	3,713.98	1,596.49	1,518.90	77.59	20.576	
4,500.00	3,044.43	3,024.43	3,044.43	51.78	52.79	-89.22	664.78	3,713.98	1,506.83	1,427.38	79.44	18.968	
4,600.00	3,045.13	3,025.13	3,045.13	54.15	52.80	-89.28	664.78	3,713.98	1,418.54	1,336.95	81.59	17.386	
4,700.00	3,045.83	3,025.83	3,045.83	56.53	52.81	-89.33	664.78	3,713.98	1,331.91	1,247.82	84.08	15.841	
4,800.00	3,046.53	3,026.53	3,046.53	58.92	52.82	-89.39	664.78	3,713.98	1,247.28	1,160.32	86.96	14.343	
4,872.09	3,047.03	3,027.03	3,047.03	60.64	52.83	-89.43	664.78	3,713.98	1,187.75	1,098.45	89.30	13.301	
4,900.00	3,047.23	3,027.23	3,047.23	61.31	52.84	-89.45	664.78	3,713.98	1,165.08	1,074.81	90.27	12.906	
5,000.00	3,047.92	3,027.92	3,047.92	63.71	52.85	-89.51	664.78	3,713.98	1,085.88	991.81	94.07	11.543	
5,100.00	3,048.62	3,028.62	3,048.62	66.11	52.86	-89.57	664.78	3,713.98	1,010.37	911.97	98.40	10.268	
5,200.00	3,049.32	3,029.32	3,049.32	68.52	52.87	-89.63	664.78	3,713.98	939.43	836.16	103.28	9.096	
5,300.00	3,050.02	3,030.02	3,050.02	70.94	52.88	-89.68	664.78	3,713.98	874.20	765.52	108.68	8.044	
5,400.00	3,050.72	3,030.72	3,050.72	73.35	52.90	-89.74	664.78	3,713.98	816.03	701.52	114.50	7.127	
5,500.00	3,051.41	3,031.41	3,051.41	75.78	52.91	-89.80	664.78	3,713.98	766.53	645.98	120.54	6.359	
5,600.00	3,052.11	3,032.11	3,052.11	78.20	52.92	-89.86	664.78	3,713.98	727.48	601.04	126.44	5.754	
5,700.00	3,052.81	3,032.81	3,052.81	80.63	52.93	-89.92	664.78	3,713.98	700.62	568.93	131.69	5.320	
5,800.00	3,053.51	3,033.51	3,053.51	83.06	52.94	-89.98	664.78	3,713.98	687.39	551.63	135.76	5.063	
5,841.85	3,053.80	3,033.80	3,053.80	84.07	52.95	-90.00	664.78	3,713.98	686.12	549.10	137.01	5.008	CC, ES
5,900.00	3,054.20	3,034.20	3,054.20	85.49	52.96	-90.03	664.78	3,713.98	688.57	550.32	138.25	4.981	SF
6,000.00	3,054.90	3,034.90	3,054.90	87.92	52.97	-90.09	664.78	3,713.98	704.10	565.09	139.01	5.065	
6,100.00	3,055.60	3,035.60	3,055.60	90.36	52.98	-90.15	664.78	3,713.98	733.05	594.84	138.20	5.304	
6,190.56	3,056.23	3,036.23	3,056.23	92.56	52.99	-90.20	664.78	3,713.98	769.60	633.16	136.44	5.641	
6,200.00	3,056.30	3,036.30	3,056.30	92.79	52.99	-90.21	664.78	3,713.98	773.92	637.71	136.21	5.682	
6,300.00	3,056.99	3,036.99	3,056.99	95.23	53.01	-90.27	664.78	3,713.98	824.96	691.50	133.46	6.181	
6,400.00	3,057.69	3,037.69	3,057.69	97.67	53.02	-90.32	664.78	3,713.98	884.40	754.06	130.33	6.786	
6,500.00	3,058.39	3,038.39	3,058.39	100.12	53.03	-90.38	664.78	3,713.98	950.67	823.56	127.10	7.480	
6,600.00	3,059.08	3,039.08	3,059.08	102.56	53.04	-90.44	664.78	3,713.98	1,022.44	898.50	123.94	8.250	
6,700.00	3,059.78	3,039.78	3,059.78	105.00	53.05	-90.50	664.78	3,713.98	1,098.63	977.69	120.94	9.084	
6,800.00	3,060.48	3,040.48	3,060.48	107.45	53.07	-90.56	664.78	3,713.98	1,178.40	1,060.23	118.16	9.973	
6,900.00	3,061.18	3,041.18	3,061.18	109.90	53.08	-90.62	664.78	3,713.98	1,261.05	1,145.43	115.62	10.907	
7,000.00	3,061.87	3,041.87	3,061.87	112.35	53.09	-90.67	664.78	3,713.98	1,346.06	1,232.76	113.29	11.881	
7,100.00	3,062.57	3,042.57	3,062.57	114.79	53.10	-90.73	664.78	3,713.98	1,433.01	1,321.82	111.19	12.888	
7,200.00	3,063.27	3,043.27	3,063.27	117.24	53.12	-90.79	664.78	3,713.98	1,521.56	1,412.28	109.28	13.924	
7,300.00	3,063.97	3,043.97	3,063.97	119.70	53.13	-90.85	664.78	3,713.98	1,611.46	1,503.91	107.55	14.983	
7,400.00	3,064.67	3,044.67	3,064.67	122.15	53.14	-90.91	664.78	3,713.98	1,702.48	1,596.50	105.98	16.064	
7,500.00	3,065.36	3,045.36	3,065.36	124.60	53.15	-90.97	664.78	3,713.98	1,794.46	1,689.91	104.56	17.163	
7,600.00	3,066.06	3,046.06	3,066.06	127.05	53.16	-91.03	664.78	3,713.98	1,887.26	1,784.00	103.26	18.277	
7,700.00	3,066.76	3,046.76	3,066.76	129.51	53.18	-91.08	664.78	3,713.98	1,980.76	1,878.68	102.08	19.404	
7,800.00	3,067.46	3,047.46	3,067.46	131.96	53.19	-91.14	664.78	3,713.98	2,074.87	1,973.87	101.00	20.544	
7,900.00	3,068.16	3,048.16	3,068.16	134.42	53.20	-91.20	664.78	3,713.98	2,169.51	2,069.50	100.01	21.693	
8,000.00	3,068.86	3,048.86	3,068.86	136.87	53.21	-91.26	664.78	3,713.98	2,264.61	2,165.50	99.10	22.851	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 5 29650 ACTIVE - 5 - 5 AsDrilled

Survey Program: 100-INC-ONLY

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,100.00	3,069.55	3,049.55	3,069.55	139.33	53.22	-91.32	664.78	3,713.98	2,360.11	2,261.84	98.27	24.017	
8,200.00	3,070.25	3,050.25	3,070.25	141.78	53.24	-91.38	664.78	3,713.98	2,455.98	2,358.47	97.50	25.189	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 6 29651 ACTIVE - 6 - 6 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,000.00	2,768.66	2,748.66	2,768.66	20.07	47.97	-41.96	1,342.60	3,047.58	2,484.02	2,420.57	63.44	39.154	
3,050.00	2,801.17	2,781.17	2,801.17	20.82	48.54	-45.42	1,342.60	3,047.58	2,451.75	2,387.30	64.45	38.041	
3,100.00	2,830.97	2,810.97	2,830.97	21.62	49.06	-49.19	1,342.60	3,047.58	2,418.02	2,352.58	65.44	36.953	
3,150.00	2,857.90	2,837.90	2,857.90	22.46	49.53	-53.29	1,342.60	3,047.58	2,383.03	2,316.63	66.40	35.890	
3,157.67	2,861.77	2,841.77	2,861.77	22.60	49.60	-53.95	1,342.60	3,047.58	2,377.57	2,311.03	66.54	35.730	
3,200.00	2,882.94	2,862.94	2,882.94	23.35	49.97	-54.46	1,342.60	3,047.58	2,347.44	2,280.11	67.34	34.862	
3,300.00	2,932.94	2,912.94	2,932.94	25.15	50.84	-55.70	1,342.60	3,047.58	2,277.04	2,207.74	69.29	32.860	
3,357.67	2,961.77	2,941.77	2,961.77	26.20	51.34	-56.43	1,342.60	3,047.58	2,236.95	2,166.47	70.48	31.739	
3,400.00	2,981.56	2,961.56	2,981.56	27.00	51.69	-60.54	1,342.60	3,047.58	2,207.19	2,135.82	71.37	30.928	
3,450.00	3,001.31	2,981.31	3,001.31	27.99	52.03	-65.84	1,342.60	3,047.58	2,170.98	2,098.57	72.41	29.982	
3,500.00	3,016.97	2,996.97	3,016.97	29.02	52.31	-71.52	1,342.60	3,047.58	2,133.95	2,060.52	73.43	29.061	
3,550.00	3,028.45	3,008.45	3,028.45	30.08	52.51	-77.43	1,342.60	3,047.58	2,096.43	2,022.01	74.42	28.170	
3,600.00	3,035.63	3,015.63	3,035.63	31.16	52.63	-83.37	1,342.60	3,047.58	2,058.76	1,983.38	75.38	27.311	
3,653.66	3,038.52	3,018.52	3,038.52	32.33	52.68	-89.55	1,342.60	3,047.58	2,018.54	1,942.17	76.38	26.429	
3,700.00	3,038.84	3,018.84	3,038.84	33.34	52.69	-89.57	1,342.60	3,047.58	1,984.27	1,907.02	77.24	25.689	
3,800.00	3,039.54	3,019.54	3,039.54	35.57	52.70	-89.60	1,342.60	3,047.58	1,912.02	1,832.75	79.27	24.119	
3,900.00	3,040.24	3,020.24	3,040.24	37.83	52.71	-89.63	1,342.60	3,047.58	1,842.38	1,760.85	81.53	22.598	
4,000.00	3,040.94	3,020.94	3,040.94	40.11	52.73	-89.66	1,342.60	3,047.58	1,775.63	1,691.63	84.00	21.139	
4,100.00	3,041.64	3,021.64	3,041.64	42.41	52.74	-89.69	1,342.60	3,047.58	1,712.13	1,625.44	86.68	19.751	
4,200.00	3,042.33	3,022.33	3,042.33	44.73	52.75	-89.72	1,342.60	3,047.58	1,652.24	1,562.67	89.57	18.446	
4,300.00	3,043.03	3,023.03	3,043.03	47.07	52.76	-89.75	1,342.60	3,047.58	1,596.37	1,503.73	92.64	17.232	
4,400.00	3,043.73	3,023.73	3,043.73	49.42	52.77	-89.77	1,342.60	3,047.58	1,544.97	1,449.09	95.87	16.115	
4,500.00	3,044.43	3,024.43	3,044.43	51.78	52.79	-89.80	1,342.60	3,047.58	1,498.48	1,399.25	99.23	15.101	
4,600.00	3,045.13	3,025.13	3,045.13	54.15	52.80	-89.83	1,342.60	3,047.58	1,457.37	1,354.71	102.67	14.195	
4,700.00	3,045.83	3,025.83	3,045.83	56.53	52.81	-89.86	1,342.60	3,047.58	1,422.13	1,316.00	106.13	13.400	
4,800.00	3,046.53	3,026.53	3,046.53	58.92	52.82	-89.89	1,342.60	3,047.58	1,393.18	1,283.63	109.55	12.717	
4,872.09	3,047.03	3,027.03	3,047.03	60.64	52.83	-89.92	1,342.60	3,047.58	1,376.45	1,264.50	111.95	12.295	
4,900.00	3,047.23	3,027.23	3,047.23	61.31	52.84	-89.92	1,342.60	3,047.58	1,370.94	1,258.08	112.86	12.148	
5,000.00	3,047.92	3,027.92	3,047.92	63.71	52.85	-89.95	1,342.60	3,047.58	1,355.71	1,239.74	115.98	11.690	
5,100.00	3,048.62	3,028.62	3,048.62	66.11	52.86	-89.98	1,342.60	3,047.58	1,347.75	1,228.91	118.84	11.341	
5,157.72	3,049.03	3,029.03	3,049.03	67.50	52.87	-90.00	1,342.60	3,047.58	1,346.51	1,226.16	120.36	11.188	CC
5,200.00	3,049.32	3,029.32	3,049.32	68.52	52.87	-90.01	1,342.60	3,047.58	1,347.18	1,225.79	121.39	11.098	ES
5,300.00	3,050.02	3,030.02	3,050.02	70.94	52.88	-90.04	1,342.60	3,047.58	1,354.00	1,230.42	123.58	10.957	
5,400.00	3,050.72	3,030.72	3,050.72	73.35	52.90	-90.07	1,342.60	3,047.58	1,368.12	1,242.74	125.38	10.912	SF
5,500.00	3,051.41	3,031.41	3,051.41	75.78	52.91	-90.10	1,342.60	3,047.58	1,389.30	1,262.52	126.78	10.958	
5,600.00	3,052.11	3,032.11	3,052.11	78.20	52.92	-90.13	1,342.60	3,047.58	1,417.23	1,289.42	127.81	11.089	
5,700.00	3,052.81	3,032.81	3,052.81	80.63	52.93	-90.16	1,342.60	3,047.58	1,451.52	1,323.04	128.47	11.298	
5,800.00	3,053.51	3,033.51	3,053.51	83.06	52.94	-90.19	1,342.60	3,047.58	1,491.73	1,362.91	128.82	11.580	
5,900.00	3,054.20	3,034.20	3,054.20	85.49	52.96	-90.22	1,342.60	3,047.58	1,537.39	1,408.50	128.89	11.928	
6,000.00	3,054.90	3,034.90	3,054.90	87.92	52.97	-90.25	1,342.60	3,047.58	1,588.05	1,459.31	128.73	12.336	
6,100.00	3,055.60	3,035.60	3,055.60	90.36	52.98	-90.28	1,342.60	3,047.58	1,643.22	1,514.84	128.39	12.799	
6,190.56	3,056.23	3,036.23	3,056.23	92.56	52.99	-90.31	1,342.60	3,047.58	1,696.73	1,568.78	127.94	13.261	
6,200.00	3,056.30	3,036.30	3,056.30	92.79	52.99	-90.31	1,342.60	3,047.58	1,702.49	1,574.59	127.89	13.312	
6,300.00	3,056.99	3,036.99	3,056.99	95.23	53.01	-90.34	1,342.60	3,047.58	1,765.43	1,638.14	127.28	13.870	
6,400.00	3,057.69	3,037.69	3,057.69	97.67	53.02	-90.37	1,342.60	3,047.58	1,831.67	1,705.08	126.60	14.469	
6,500.00	3,058.39	3,038.39	3,058.39	100.12	53.03	-90.40	1,342.60	3,047.58	1,900.87	1,775.02	125.85	15.104	
6,600.00	3,059.08	3,039.08	3,059.08	102.56	53.04	-90.43	1,342.60	3,047.58	1,972.72	1,847.65	125.07	15.773	
6,700.00	3,059.78	3,039.78	3,059.78	105.00	53.05	-90.46	1,342.60	3,047.58	2,046.93	1,922.67	124.26	16.473	
6,800.00	3,060.48	3,040.48	3,060.48	107.45	53.07	-90.49	1,342.60	3,047.58	2,123.27	1,999.81	123.45	17.199	
6,900.00	3,061.18	3,041.18	3,061.18	109.90	53.08	-90.52	1,342.60	3,047.58	2,201.50	2,078.85	122.64	17.950	
7,000.00	3,061.87	3,041.87	3,061.87	112.35	53.09	-90.55	1,342.60	3,047.58	2,281.43	2,159.59	121.84	18.724	
7,100.00	3,062.57	3,042.57	3,062.57	114.79	53.10	-90.58	1,342.60	3,047.58	2,362.90	2,241.84	121.06	19.518	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Chalk Federal 6 29651 ACTIVE - 6 - 6 AsDrilled

Survey Program: 100-INC-ONLY

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,200.00	3,063.27	3,043.27	3,063.27	117.24	53.12	-90.61	1,342.60	3,047.58	2,445.74	2,325.45	120.30	20.331	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Evarts Federal 1 00793 ACTIVE - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	118.51	-589.72	1,085.67	1,235.66				
100.00	100.00	80.00	100.00	0.31	1.40	118.51	-589.72	1,085.67	1,235.50	1,233.94	1.56	792.409	
200.00	200.00	180.00	200.00	0.95	3.14	118.51	-589.72	1,085.67	1,235.50	1,231.80	3.69	334.473	
300.00	300.00	280.00	300.00	1.46	4.89	118.51	-589.72	1,085.67	1,235.50	1,229.69	5.81	212.661	
400.00	400.00	380.00	400.00	1.89	6.63	118.51	-589.72	1,085.67	1,235.50	1,227.58	7.92	156.022	
500.00	500.00	480.00	500.00	2.31	8.38	118.51	-589.72	1,085.67	1,235.50	1,225.47	10.03	123.235	
600.00	599.98	579.98	599.98	2.85	10.12	31.89	-589.72	1,085.67	1,234.02	1,221.54	12.48	98.884	
700.00	699.84	679.84	699.84	3.79	11.87	32.06	-589.72	1,085.67	1,229.57	1,214.21	15.37	80.004	
800.00	799.45	779.45	799.45	4.66	13.60	32.36	-589.72	1,085.67	1,222.19	1,204.20	17.99	67.946	
900.00	898.70	878.70	898.70	5.42	15.34	32.78	-589.72	1,085.67	1,211.90	1,191.43	20.47	59.200	
1,000.00	997.47	977.47	997.47	6.10	17.06	33.33	-589.72	1,085.67	1,198.74	1,175.87	22.87	52.422	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	34.01	-589.72	1,085.67	1,182.77	1,157.57	25.20	46.938	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	34.85	-589.72	1,085.67	1,164.06	1,136.59	27.48	42.363	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	35.83	-589.72	1,085.67	1,142.71	1,112.99	29.71	38.456	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	36.99	-589.72	1,085.67	1,118.82	1,086.90	31.91	35.057	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	38.33	-589.72	1,085.67	1,092.52	1,058.43	34.08	32.056	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	39.88	-589.72	1,085.67	1,063.97	1,027.74	36.22	29.373	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	41.65	-589.72	1,085.67	1,033.36	995.01	38.34	26.950	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	43.66	-589.72	1,085.67	1,000.91	960.47	40.45	24.746	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	45.93	-589.72	1,085.67	966.91	924.36	42.55	22.726	
2,000.00	1,932.39	1,871.00	1,891.00	11.47	32.66	47.49	-589.72	1,085.67	932.58	888.60	43.98	21.207	
2,076.26	1,997.92	1,871.00	1,891.00	11.82	32.66	47.83	-589.72	1,085.67	910.49	866.19	44.31	20.549	
2,100.00	2,018.16	1,871.00	1,891.00	11.92	32.66	47.83	-589.72	1,085.67	904.62	860.26	44.35	20.396	
2,200.00	2,103.40	1,871.00	1,891.00	12.40	32.66	47.83	-589.72	1,085.67	886.42	842.13	44.30	20.011	SF
2,300.00	2,188.64	1,871.00	1,891.00	13.05	32.66	47.83	-589.72	1,085.67	879.30	835.46	43.84	20.057	
2,312.91	2,199.64	1,871.00	1,891.00	13.15	32.66	47.83	-589.72	1,085.67	879.20	835.45	43.75	20.096	CC, ES
2,400.00	2,273.88	1,871.00	1,891.00	13.85	32.66	47.83	-589.72	1,085.67	883.51	840.54	42.97	20.563	
2,500.00	2,359.12	1,871.00	1,891.00	14.75	32.66	47.83	-589.72	1,085.67	898.89	857.16	41.73	21.542	
2,600.00	2,444.36	1,871.00	1,891.00	15.69	32.66	47.83	-589.72	1,085.67	924.89	884.67	40.22	22.996	
2,700.00	2,529.60	1,871.00	1,891.00	16.66	32.66	47.83	-589.72	1,085.67	960.65	922.09	38.55	24.916	
2,799.35	2,614.29	1,871.00	1,891.00	17.63	32.66	47.83	-589.72	1,085.67	1,004.80	967.95	36.86	27.264	
2,799.99	2,614.84	1,871.00	1,891.00	17.64	32.66	47.80	-589.72	1,085.67	1,005.12	968.27	36.84	27.280	
2,850.00	2,656.50	1,871.00	1,891.00	18.16	32.66	45.57	-589.72	1,085.67	1,029.07	993.03	36.04	28.551	
2,900.00	2,696.15	1,871.00	1,891.00	18.75	32.66	43.62	-589.72	1,085.67	1,052.48	1,017.12	35.36	29.768	
2,950.00	2,733.60	1,871.00	1,891.00	19.38	32.66	41.87	-589.72	1,085.67	1,075.27	1,040.54	34.73	30.960	
3,000.00	2,768.66	1,871.00	1,891.00	20.07	32.66	40.31	-589.72	1,085.67	1,097.36	1,063.18	34.18	32.105	
3,050.00	2,801.17	1,871.00	1,891.00	20.82	32.66	38.91	-589.72	1,085.67	1,118.71	1,084.98	33.72	33.175	
3,100.00	2,830.97	1,871.00	1,891.00	21.62	32.66	37.65	-589.72	1,085.67	1,139.24	1,105.88	33.36	34.147	
3,150.00	2,857.90	1,871.00	1,891.00	22.46	32.66	36.51	-589.72	1,085.67	1,158.90	1,125.79	33.11	35.001	
3,157.67	2,861.77	1,871.00	1,891.00	22.60	32.66	36.34	-589.72	1,085.67	1,161.84	1,128.78	33.06	35.141	
3,200.00	2,882.94	1,871.00	1,891.00	23.35	32.66	36.34	-589.72	1,085.67	1,178.64	1,145.79	32.84	35.886	
3,300.00	2,932.94	1,871.00	1,891.00	25.15	32.66	36.34	-589.72	1,085.67	1,223.23	1,190.72	32.51	37.630	
3,357.67	2,961.77	1,871.00	1,891.00	26.20	32.66	36.34	-589.72	1,085.67	1,251.86	1,219.45	32.41	38.624	
3,400.00	2,981.56	1,871.00	1,891.00	27.00	32.66	34.92	-589.72	1,085.67	1,273.04	1,240.61	32.43	39.251	
3,450.00	3,001.31	1,871.00	1,891.00	27.99	32.66	33.42	-589.72	1,085.67	1,296.56	1,263.87	32.69	39.664	
3,500.00	3,016.97	1,871.00	1,891.00	29.02	32.66	32.11	-589.72	1,085.67	1,318.36	1,285.26	33.10	39.830	
3,550.00	3,028.45	1,871.00	1,891.00	30.08	32.66	30.97	-589.72	1,085.67	1,338.37	1,304.74	33.64	39.790	
3,600.00	3,035.63	1,871.00	1,891.00	31.16	32.66	29.98	-589.72	1,085.67	1,356.52	1,322.23	34.29	39.565	
3,653.66	3,038.52	1,871.00	1,891.00	32.33	32.66	29.08	-589.72	1,085.67	1,373.85	1,338.73	35.13	39.111	
3,700.00	3,038.84	1,871.00	1,891.00	33.34	32.66	29.08	-589.72	1,085.67	1,388.55	1,352.79	35.76	38.830	
3,800.00	3,039.54	1,871.00	1,891.00	35.57	32.66	29.08	-589.72	1,085.67	1,424.88	1,387.82	37.07	38.441	
3,900.00	3,040.24	1,871.00	1,891.00	37.83	32.66	29.08	-589.72	1,085.67	1,467.15	1,428.76	38.39	38.219	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Evarts Federal 1 00793 ACTIVE - 1 - 1 AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,000.00	3,040.94	1,871.00	1,891.00	40.11	32.66	29.08	-589.72	1,085.67	1,514.85	1,475.17	39.67	38.184	
4,100.00	3,041.64	1,871.00	1,891.00	42.41	32.66	29.08	-589.72	1,085.67	1,567.48	1,526.59	40.89	38.332	
4,200.00	3,042.33	1,871.00	1,891.00	44.73	32.66	29.08	-589.72	1,085.67	1,624.57	1,582.54	42.03	38.652	
4,300.00	3,043.03	1,871.00	1,891.00	47.07	32.66	29.08	-589.72	1,085.67	1,685.66	1,642.58	43.08	39.128	
4,400.00	3,043.73	1,871.00	1,891.00	49.42	32.66	29.08	-589.72	1,085.67	1,750.34	1,706.30	44.04	39.745	
4,500.00	3,044.43	1,871.00	1,891.00	51.78	32.66	29.08	-589.72	1,085.67	1,818.22	1,773.31	44.91	40.487	
4,600.00	3,045.13	1,871.00	1,891.00	54.15	32.66	29.08	-589.72	1,085.67	1,888.95	1,843.26	45.70	41.338	
4,700.00	3,045.83	1,871.00	1,891.00	56.53	32.66	29.08	-589.72	1,085.67	1,962.24	1,915.83	46.40	42.286	
4,800.00	3,046.53	1,871.00	1,891.00	58.92	32.66	29.08	-589.72	1,085.67	2,037.79	1,990.75	47.04	43.318	
4,872.09	3,047.03	1,871.00	1,891.00	60.64	32.66	29.08	-589.72	1,085.67	2,093.53	2,046.07	47.46	44.111	
4,900.00	3,047.23	1,871.00	1,891.00	61.31	32.66	29.08	-589.72	1,085.67	2,115.38	2,067.77	47.61	44.428	
5,000.00	3,047.92	1,871.00	1,891.00	63.71	32.66	29.07	-589.72	1,085.67	2,194.78	2,146.66	48.13	45.603	
5,100.00	3,048.62	1,871.00	1,891.00	66.11	32.66	29.07	-589.72	1,085.67	2,275.81	2,227.22	48.60	46.832	
5,200.00	3,049.32	1,871.00	1,891.00	68.52	32.66	29.06	-589.72	1,085.67	2,358.30	2,309.28	49.02	48.111	
5,300.00	3,050.02	1,871.00	1,891.00	70.94	32.66	29.06	-589.72	1,085.67	2,442.10	2,392.70	49.40	49.435	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Federal BA Com 1 23542 ACTIVE - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,200.00	3,063.27	3,043.27	3,063.27	117.24	53.12	86.92	-428.79	7,442.30	2,417.16	2,340.29	76.87	31.443	
7,300.00	3,063.97	3,043.97	3,063.97	119.70	53.13	87.05	-428.79	7,442.30	2,318.03	2,240.44	77.59	29.876	
7,400.00	3,064.67	3,044.67	3,064.67	122.15	53.14	87.18	-428.79	7,442.30	2,218.98	2,140.59	78.38	28.309	
7,500.00	3,065.36	3,045.36	3,065.36	124.60	53.15	87.30	-428.79	7,442.30	2,120.01	2,040.74	79.27	26.744	
7,600.00	3,066.06	3,046.06	3,066.06	127.05	53.16	87.43	-428.79	7,442.30	2,021.15	1,940.89	80.26	25.182	
7,700.00	3,066.76	3,046.76	3,066.76	129.51	53.18	87.56	-428.79	7,442.30	1,922.40	1,841.03	81.38	23.623	
7,800.00	3,067.46	3,047.46	3,067.46	131.96	53.19	87.69	-428.79	7,442.30	1,823.79	1,741.16	82.64	22.070	
7,900.00	3,068.16	3,048.16	3,068.16	134.42	53.20	87.81	-428.79	7,442.30	1,725.34	1,641.28	84.07	20.524	
8,000.00	3,068.86	3,048.86	3,068.86	136.87	53.21	87.94	-428.79	7,442.30	1,627.08	1,541.38	85.69	18.987	
8,100.00	3,069.55	3,049.55	3,069.55	139.33	53.22	88.07	-428.79	7,442.30	1,529.04	1,441.48	87.56	17.463	
8,200.00	3,070.25	3,050.25	3,070.25	141.78	53.24	88.20	-428.79	7,442.30	1,431.27	1,341.56	89.71	15.954	
8,300.00	3,070.95	3,050.95	3,070.95	144.24	53.25	88.33	-428.79	7,442.30	1,333.83	1,241.62	92.21	14.465	
8,400.00	3,071.65	3,051.65	3,071.65	146.70	53.26	88.46	-428.79	7,442.30	1,236.79	1,141.66	95.14	13.000	
8,500.00	3,072.35	3,052.35	3,072.35	149.15	53.27	88.58	-428.79	7,442.30	1,140.27	1,041.68	98.59	11.566	
8,600.00	3,073.05	3,053.05	3,073.05	151.61	53.29	88.71	-428.79	7,442.30	1,044.40	941.69	102.71	10.169	
8,700.00	3,073.75	3,053.75	3,073.75	154.07	53.30	88.84	-428.79	7,442.30	949.38	841.71	107.68	8.817	
8,724.51	3,073.92	3,053.92	3,073.92	154.67	53.30	88.87	-428.79	7,442.30	926.26	817.21	109.05	8.494	
8,800.00	3,074.45	3,054.45	3,074.45	156.53	53.31	88.97	-428.79	7,442.30	855.50	741.76	113.74	7.522	
8,814.50	3,074.55	3,054.55	3,074.55	156.89	53.31	88.99	-428.79	7,442.30	842.00	727.27	114.73	7.339	CC, ES, SF

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Julia A Federal 003 Plugged 00779 - 003 - 003 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	97.78	-283.18	2,072.83	2,092.18				
100.00	100.00	80.00	100.00	0.31	1.40	97.78	-283.18	2,072.83	2,092.08	2,090.47	1.61	1,295.745	
200.00	200.00	180.00	200.00	0.95	3.14	97.78	-283.18	2,072.83	2,092.08	2,088.24	3.84	544.266	
300.00	300.00	280.00	300.00	1.46	4.89	97.78	-283.18	2,072.83	2,092.08	2,086.08	6.00	348.497	
400.00	400.00	380.00	400.00	1.89	6.63	97.78	-283.18	2,072.83	2,092.08	2,083.95	8.13	257.197	
500.00	500.00	480.00	500.00	2.31	8.38	97.78	-283.18	2,072.83	2,092.08	2,081.83	10.25	204.017	
600.00	599.98	579.98	599.98	2.85	10.12	11.11	-283.18	2,072.83	2,090.37	2,077.63	12.75	164.008	
700.00	699.84	679.84	699.84	3.79	11.87	11.16	-283.18	2,072.83	2,085.24	2,069.62	15.62	133.481	
800.00	799.45	779.45	799.45	4.66	13.60	11.24	-283.18	2,072.83	2,076.69	2,058.44	18.25	113.790	
900.00	898.70	878.70	898.70	5.42	15.34	11.36	-283.18	2,072.83	2,064.73	2,043.98	20.75	99.512	
1,000.00	997.47	977.47	997.47	6.10	17.06	11.50	-283.18	2,072.83	2,049.39	2,026.23	23.16	88.482	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	11.69	-283.18	2,072.83	2,030.69	2,005.18	25.51	79.603	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	11.91	-283.18	2,072.83	2,008.65	1,980.84	27.81	72.236	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	12.17	-283.18	2,072.83	1,983.30	1,953.24	30.06	65.983	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	12.48	-283.18	2,072.83	1,954.68	1,922.41	32.27	60.577	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	12.84	-283.18	2,072.83	1,922.84	1,888.40	34.44	55.832	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	13.25	-283.18	2,072.83	1,887.81	1,851.24	36.58	51.615	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	13.72	-283.18	2,072.83	1,849.66	1,810.98	38.68	47.825	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	14.26	-283.18	2,072.83	1,808.43	1,767.69	40.74	44.389	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	14.87	-283.18	2,072.83	1,764.21	1,721.43	42.77	41.246	
2,000.00	1,932.39	1,850.00	1,870.00	11.47	32.29	15.25	-283.18	2,072.83	1,718.18	1,674.43	43.74	39.279	
2,076.26	1,997.92	1,850.00	1,870.00	11.82	32.29	15.46	-283.18	2,072.83	1,684.02	1,639.96	44.06	38.222	
2,100.00	2,018.16	1,850.00	1,870.00	11.92	32.29	15.46	-283.18	2,072.83	1,673.67	1,629.55	44.12	37.933	
2,200.00	2,103.40	1,850.00	1,870.00	12.40	32.29	15.46	-283.18	2,072.83	1,633.18	1,588.86	44.32	36.852	
2,300.00	2,188.64	1,850.00	1,870.00	13.05	32.29	15.46	-283.18	2,072.83	1,597.92	1,553.51	44.41	35.978	
2,400.00	2,273.88	1,850.00	1,870.00	13.85	32.29	15.46	-283.18	2,072.83	1,568.26	1,523.88	44.38	35.335	
2,500.00	2,359.12	1,850.00	1,870.00	14.75	32.29	15.46	-283.18	2,072.83	1,544.51	1,500.31	44.21	34.939	
2,600.00	2,444.36	1,850.00	1,870.00	15.69	32.29	15.46	-283.18	2,072.83	1,526.96	1,483.09	43.87	34.804	SF
2,700.00	2,529.60	1,850.00	1,870.00	16.66	32.29	15.46	-283.18	2,072.83	1,515.81	1,472.44	43.38	34.944	
2,799.35	2,614.29	1,850.00	1,870.00	17.63	32.29	15.46	-283.18	2,072.83	1,511.23	1,468.50	42.72	35.372	
2,799.99	2,614.84	1,850.00	1,870.00	17.64	32.29	15.44	-283.18	2,072.83	1,511.22	1,468.50	42.72	35.375	
2,850.00	2,656.50	1,850.00	1,870.00	18.16	32.29	14.59	-283.18	2,072.83	1,509.62	1,467.23	42.39	35.613	
2,900.00	2,696.15	1,850.00	1,870.00	18.75	32.29	13.95	-283.18	2,072.83	1,506.21	1,464.06	42.15	35.734	
2,950.00	2,733.60	1,850.00	1,870.00	19.38	32.29	13.46	-283.18	2,072.83	1,501.00	1,459.12	41.87	35.845	
3,000.00	2,768.66	1,850.00	1,870.00	20.07	32.29	13.09	-283.18	2,072.83	1,493.98	1,452.42	41.56	35.944	
3,050.00	2,801.17	1,850.00	1,870.00	20.82	32.29	12.81	-283.18	2,072.83	1,485.18	1,443.96	41.22	36.027	
3,100.00	2,830.97	1,850.00	1,870.00	21.62	32.29	12.63	-283.18	2,072.83	1,474.60	1,433.74	40.86	36.093	
3,150.00	2,857.90	1,850.00	1,870.00	22.46	32.29	12.51	-283.18	2,072.83	1,462.25	1,421.79	40.46	36.142	
3,157.67	2,861.77	1,850.00	1,870.00	22.60	32.29	12.50	-283.18	2,072.83	1,460.20	1,419.83	40.38	36.165	
3,200.00	2,882.94	1,850.00	1,870.00	23.35	32.29	12.50	-283.18	2,072.83	1,449.35	1,409.47	39.88	36.342	
3,300.00	2,932.94	1,850.00	1,870.00	25.15	32.29	12.50	-283.18	2,072.83	1,428.39	1,389.78	38.61	36.999	
3,357.67	2,961.77	1,850.00	1,870.00	26.20	32.29	12.50	-283.18	2,072.83	1,419.36	1,381.56	37.80	37.546	
3,400.00	2,981.56	1,850.00	1,870.00	27.00	32.29	12.65	-283.18	2,072.83	1,412.68	1,375.45	37.23	37.945	
3,450.00	3,001.31	1,850.00	1,870.00	27.99	32.29	12.88	-283.18	2,072.83	1,402.51	1,365.80	36.71	38.208	
3,500.00	3,016.97	1,850.00	1,870.00	29.02	32.29	13.17	-283.18	2,072.83	1,389.88	1,353.67	36.21	38.382	
3,550.00	3,028.45	1,850.00	1,870.00	30.08	32.29	13.53	-283.18	2,072.83	1,374.84	1,339.12	35.71	38.496	
3,600.00	3,035.63	1,850.00	1,870.00	31.16	32.29	13.97	-283.18	2,072.83	1,357.41	1,322.19	35.22	38.543	
3,653.66	3,038.52	1,850.00	1,870.00	32.33	32.29	14.55	-283.18	2,072.83	1,336.09	1,301.37	34.73	38.474	
3,700.00	3,038.84	1,850.00	1,870.00	33.34	32.29	14.55	-283.18	2,072.83	1,317.21	1,283.06	34.15	38.567	
3,800.00	3,039.54	1,850.00	1,870.00	35.57	32.29	14.55	-283.18	2,072.83	1,281.23	1,248.46	32.77	39.092	
3,900.00	3,040.24	1,850.00	1,870.00	37.83	32.29	14.55	-283.18	2,072.83	1,252.22	1,220.80	31.43	39.848	
4,000.00	3,040.94	1,850.00	1,870.00	40.11	32.29	14.55	-283.18	2,072.83	1,230.68	1,200.46	30.22	40.729	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Julia A Federal 003 Plugged 00779 - 003 - 003 AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,100.00	3,041.64	1,850.00	1,870.00	42.41	32.29	14.55	-283.18	2,072.83	1,216.99	1,187.68	29.31	41.520	
4,200.00	3,042.33	1,850.00	1,870.00	44.73	32.29	14.55	-283.18	2,072.83	1,211.44	1,182.55	28.88	41.941	
4,217.46	3,042.46	1,850.00	1,870.00	45.14	32.29	14.55	-283.18	2,072.83	1,211.31	1,182.44	28.87	41.958	CC, ES
4,300.00	3,043.03	1,850.00	1,870.00	47.07	32.29	14.55	-283.18	2,072.83	1,214.12	1,185.08	29.04	41.804	
4,400.00	3,043.73	1,850.00	1,870.00	49.42	32.29	14.55	-283.18	2,072.83	1,224.99	1,195.24	29.75	41.176	
4,500.00	3,044.43	1,850.00	1,870.00	51.78	32.29	14.55	-283.18	2,072.83	1,243.83	1,212.98	30.85	40.318	
4,600.00	3,045.13	1,850.00	1,870.00	54.15	32.29	14.55	-283.18	2,072.83	1,270.28	1,238.11	32.17	39.490	
4,700.00	3,045.83	1,850.00	1,870.00	56.53	32.29	14.55	-283.18	2,072.83	1,303.89	1,270.33	33.56	38.850	
4,800.00	3,046.53	1,850.00	1,870.00	58.92	32.29	14.55	-283.18	2,072.83	1,344.11	1,309.17	34.94	38.469	
4,872.09	3,047.03	1,850.00	1,870.00	60.64	32.29	14.55	-283.18	2,072.83	1,376.89	1,341.00	35.89	38.365	
4,900.00	3,047.23	1,850.00	1,870.00	61.31	32.29	14.55	-283.18	2,072.83	1,390.37	1,354.13	36.24	38.363	
5,000.00	3,047.92	1,850.00	1,870.00	63.71	32.29	14.54	-283.18	2,072.83	1,442.10	1,404.65	37.45	38.510	
5,100.00	3,048.62	1,850.00	1,870.00	66.11	32.29	14.54	-283.18	2,072.83	1,498.72	1,460.17	38.55	38.878	
5,200.00	3,049.32	1,850.00	1,870.00	68.52	32.29	14.54	-283.18	2,072.83	1,559.71	1,520.16	39.54	39.445	
5,300.00	3,050.02	1,850.00	1,870.00	70.94	32.29	14.54	-283.18	2,072.83	1,624.56	1,584.13	40.43	40.183	
5,400.00	3,050.72	1,850.00	1,870.00	73.35	32.29	14.53	-283.18	2,072.83	1,692.85	1,651.63	41.22	41.068	
5,500.00	3,051.41	1,850.00	1,870.00	75.78	32.29	14.53	-283.18	2,072.83	1,764.16	1,722.23	41.92	42.080	
5,600.00	3,052.11	1,850.00	1,870.00	78.20	32.29	14.52	-283.18	2,072.83	1,838.15	1,795.60	42.55	43.199	
5,700.00	3,052.81	1,850.00	1,870.00	80.63	32.29	14.52	-283.18	2,072.83	1,914.50	1,871.39	43.11	44.410	
5,800.00	3,053.51	1,850.00	1,870.00	83.06	32.29	14.52	-283.18	2,072.83	1,992.95	1,949.35	43.61	45.702	
5,900.00	3,054.20	1,850.00	1,870.00	85.49	32.29	14.51	-283.18	2,072.83	2,073.26	2,029.21	44.05	47.061	
6,000.00	3,054.90	1,850.00	1,870.00	87.92	32.29	14.51	-283.18	2,072.83	2,155.22	2,110.76	44.46	48.480	
6,100.00	3,055.60	1,850.00	1,870.00	90.36	32.29	14.50	-283.18	2,072.83	2,238.64	2,193.82	44.82	49.949	
6,190.56	3,056.23	1,850.00	1,870.00	92.56	32.29	14.50	-283.18	2,072.83	2,315.32	2,270.20	45.12	51.319	
6,200.00	3,056.30	1,850.00	1,870.00	92.79	32.29	14.50	-283.18	2,072.83	2,323.37	2,278.23	45.15	51.465	
6,300.00	3,056.99	1,850.00	1,870.00	95.23	32.29	14.50	-283.18	2,072.83	2,409.28	2,363.84	45.44	53.021	
6,400.00	3,057.69	1,850.00	1,870.00	97.67	32.29	14.50	-283.18	2,072.83	2,496.23	2,450.52	45.71	54.607	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Julie A Federal 5 30048 PA - 5 - 5 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	88.51	50.36	1,939.69	1,940.44				
100.00	100.00	80.00	100.00	0.31	1.40	88.51	50.36	1,939.69	1,940.34	1,938.70	1.64	1,182.979	
200.00	200.00	180.00	200.00	0.95	3.14	88.51	50.36	1,939.69	1,940.34	1,936.42	3.92	495.568	
300.00	300.00	280.00	300.00	1.46	4.89	88.51	50.36	1,939.69	1,940.34	1,934.24	6.10	318.181	
400.00	400.00	380.00	400.00	1.89	6.63	88.51	50.36	1,939.69	1,940.34	1,932.10	8.24	235.408	
500.00	500.00	480.00	500.00	2.31	8.38	88.51	50.36	1,939.69	1,940.34	1,929.97	10.37	187.086	
600.00	599.98	579.98	599.98	2.85	10.12	1.83	50.36	1,939.69	1,938.60	1,925.75	12.84	150.939	
700.00	699.84	679.84	699.84	3.79	11.87	1.84	50.36	1,939.69	1,933.36	1,917.71	15.66	123.478	
800.00	799.45	779.45	799.45	4.66	13.60	1.86	50.36	1,939.69	1,924.65	1,906.40	18.25	105.451	
900.00	898.70	878.70	898.70	5.42	15.34	1.88	50.36	1,939.69	1,912.47	1,891.75	20.73	92.273	
1,000.00	997.47	977.47	997.47	6.10	17.06	1.90	50.36	1,939.69	1,896.84	1,873.72	23.12	82.041	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	1.94	50.36	1,939.69	1,877.77	1,852.32	25.45	73.773	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	1.97	50.36	1,939.69	1,855.29	1,827.55	27.74	66.892	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	2.02	50.36	1,939.69	1,829.42	1,799.45	29.97	61.035	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	2.08	50.36	1,939.69	1,800.20	1,768.03	32.17	55.959	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	2.14	50.36	1,939.69	1,767.67	1,733.34	34.33	51.493	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	2.21	50.36	1,939.69	1,731.86	1,695.41	36.45	47.515	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	2.30	50.36	1,939.69	1,692.81	1,654.28	38.53	43.932	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	2.40	50.36	1,939.69	1,650.58	1,610.00	40.58	40.676	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	2.51	50.36	1,939.69	1,605.22	1,562.63	42.59	37.692	
2,000.00	1,932.39	1,912.39	1,932.39	11.47	33.38	2.64	50.36	1,939.69	1,556.77	1,512.22	44.56	34.938	
2,076.26	1,997.92	1,977.92	1,997.92	11.82	34.52	2.75	50.36	1,939.69	1,517.80	1,471.82	45.98	33.010	
2,100.00	2,018.16	1,998.16	2,018.16	11.92	34.87	2.77	50.36	1,939.69	1,505.40	1,459.00	46.40	32.446	
2,200.00	2,103.40	2,083.40	2,103.40	12.40	36.36	2.87	50.36	1,939.69	1,453.16	1,405.01	48.15	30.180	
2,300.00	2,188.64	2,168.64	2,188.64	13.05	37.85	2.98	50.36	1,939.69	1,400.92	1,351.00	49.92	28.063	
2,400.00	2,273.88	2,253.88	2,273.88	13.85	39.34	3.09	50.36	1,939.69	1,348.69	1,296.98	51.70	26.086	
2,500.00	2,359.12	2,339.12	2,359.12	14.75	40.83	3.22	50.36	1,939.69	1,296.46	1,242.96	53.49	24.237	
2,600.00	2,444.36	2,395.00	2,415.00	15.69	41.80	3.30	50.36	1,939.69	1,244.58	1,189.73	54.85	22.692	
2,700.00	2,529.60	2,395.00	2,415.00	16.66	41.80	3.30	50.36	1,939.69	1,197.51	1,142.29	55.22	21.688	
2,799.35	2,614.29	2,395.00	2,415.00	17.63	41.80	3.30	50.36	1,939.69	1,157.42	1,102.11	55.32	20.924	
2,799.99	2,614.84	2,395.00	2,415.00	17.64	41.80	3.29	50.36	1,939.69	1,157.19	1,101.87	55.32	20.919	
2,850.00	2,656.50	2,395.00	2,415.00	18.16	41.80	2.27	50.36	1,939.69	1,138.11	1,082.81	55.30	20.580	
2,900.00	2,696.15	2,395.00	2,415.00	18.75	41.80	1.41	50.36	1,939.69	1,117.70	1,062.39	55.31	20.206	
2,950.00	2,733.60	2,395.00	2,415.00	19.38	41.80	0.67	50.36	1,939.69	1,095.98	1,040.74	55.24	19.840	
3,000.00	2,768.66	2,395.00	2,415.00	20.07	41.80	0.02	50.36	1,939.69	1,072.98	1,017.90	55.08	19.481	
3,050.00	2,801.17	2,395.00	2,415.00	20.82	41.80	-0.58	50.36	1,939.69	1,048.73	993.91	54.83	19.128	
3,100.00	2,830.97	2,395.00	2,415.00	21.62	41.80	-1.14	50.36	1,939.69	1,023.27	968.78	54.49	18.780	
3,150.00	2,857.90	2,395.00	2,415.00	22.46	41.80	-1.68	50.36	1,939.69	996.63	942.57	54.06	18.437	
3,157.67	2,861.77	2,395.00	2,415.00	22.60	41.80	-1.76	50.36	1,939.69	992.44	938.47	53.97	18.389	
3,200.00	2,882.94	2,395.00	2,415.00	23.35	41.80	-1.76	50.36	1,939.69	969.89	916.49	53.41	18.161	
3,300.00	2,932.94	2,395.00	2,415.00	25.15	41.80	-1.76	50.36	1,939.69	922.17	870.49	51.69	17.842	
3,357.67	2,961.77	2,395.00	2,415.00	26.20	41.80	-1.76	50.36	1,939.69	898.57	848.15	50.42	17.822	SF
3,400.00	2,981.56	2,395.00	2,415.00	27.00	41.80	-1.82	50.36	1,939.69	881.79	832.39	49.40	17.851	
3,450.00	3,001.31	2,395.00	2,415.00	27.99	41.80	-1.90	50.36	1,939.69	860.47	812.25	48.23	17.843	
3,500.00	3,016.97	2,395.00	2,415.00	29.02	41.80	-1.99	50.36	1,939.69	837.58	790.62	46.96	17.836	
3,550.00	3,028.45	2,395.00	2,415.00	30.08	41.80	-2.09	50.36	1,939.69	813.17	767.59	45.57	17.842	
3,600.00	3,035.63	2,395.00	2,415.00	31.16	41.80	-2.21	50.36	1,939.69	787.28	743.21	44.07	17.865	
3,653.66	3,038.52	2,395.00	2,415.00	32.33	41.80	-2.35	50.36	1,939.69	757.93	715.58	42.35	17.897	
3,700.00	3,038.84	2,395.00	2,415.00	33.34	41.80	-2.35	50.36	1,939.69	732.90	692.32	40.58	18.062	
3,800.00	3,039.54	2,395.00	2,415.00	35.57	41.80	-2.35	50.36	1,939.69	686.48	650.51	35.97	19.084	
3,900.00	3,040.24	2,395.00	2,415.00	37.83	41.80	-2.35	50.36	1,939.69	652.20	621.61	30.59	21.321	
4,000.00	3,040.94	2,395.00	2,415.00	40.11	41.80	-2.35	50.36	1,939.69	632.05	606.81	25.24	25.042	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Julie A Federal 5 30048 PA - 5 - 5 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,079.43	3,041.49	2,395.00	2,415.00	41.94	41.80	-2.35	50.36	1,939.69	627.03	604.36	22.67	27.656	CC, ES
4,100.00	3,041.64	2,395.00	2,415.00	42.41	41.80	-2.35	50.36	1,939.69	627.37	604.87	22.50	27.879	
4,200.00	3,042.33	2,395.00	2,415.00	44.73	41.80	-2.35	50.36	1,939.69	638.52	614.23	24.29	26.286	
4,300.00	3,043.03	2,395.00	2,415.00	47.07	41.80	-2.35	50.36	1,939.69	664.70	636.78	27.92	23.811	
4,400.00	3,043.73	2,395.00	2,415.00	49.42	41.80	-2.35	50.36	1,939.69	704.23	672.57	31.66	22.246	
4,500.00	3,044.43	2,395.00	2,415.00	51.78	41.80	-2.35	50.36	1,939.69	755.02	719.97	35.05	21.542	
4,600.00	3,045.13	2,395.00	2,415.00	54.15	41.80	-2.35	50.36	1,939.69	814.96	776.97	37.99	21.452	
4,700.00	3,045.83	2,395.00	2,415.00	56.53	41.80	-2.35	50.36	1,939.69	882.20	841.71	40.49	21.788	
4,800.00	3,046.53	2,395.00	2,415.00	58.92	41.80	-2.35	50.36	1,939.69	955.19	912.60	42.60	22.425	
4,872.09	3,047.03	2,395.00	2,415.00	60.64	41.80	-2.35	50.36	1,939.69	1,010.68	966.78	43.90	23.024	
4,900.00	3,047.23	2,395.00	2,415.00	61.31	41.80	-2.35	50.36	1,939.69	1,032.72	988.36	44.36	23.281	
5,000.00	3,047.92	2,395.00	2,415.00	63.71	41.80	-2.36	50.36	1,939.69	1,113.83	1,067.99	45.84	24.300	
5,100.00	3,048.62	2,395.00	2,415.00	66.11	41.80	-2.36	50.36	1,939.69	1,197.80	1,150.72	47.08	25.439	
5,200.00	3,049.32	2,395.00	2,415.00	68.52	41.80	-2.37	50.36	1,939.69	1,284.07	1,235.93	48.14	26.674	
5,300.00	3,050.02	2,395.00	2,415.00	70.94	41.80	-2.37	50.36	1,939.69	1,372.21	1,323.17	49.04	27.982	
5,400.00	3,050.72	2,395.00	2,415.00	73.35	41.80	-2.38	50.36	1,939.69	1,461.87	1,412.06	49.81	29.349	
5,500.00	3,051.41	2,395.00	2,415.00	75.78	41.80	-2.39	50.36	1,939.69	1,552.80	1,502.32	50.48	30.763	
5,600.00	3,052.11	2,395.00	2,415.00	78.20	41.80	-2.40	50.36	1,939.69	1,644.78	1,593.72	51.06	32.215	
5,700.00	3,052.81	2,395.00	2,415.00	80.63	41.80	-2.41	50.36	1,939.69	1,737.64	1,686.08	51.57	33.698	
5,800.00	3,053.51	2,395.00	2,415.00	83.06	41.80	-2.42	50.36	1,939.69	1,831.26	1,779.24	52.02	35.206	
5,900.00	3,054.20	2,395.00	2,415.00	85.49	41.80	-2.43	50.36	1,939.69	1,925.52	1,873.10	52.42	36.735	
6,000.00	3,054.90	2,395.00	2,415.00	87.92	41.80	-2.44	50.36	1,939.69	2,020.33	1,967.55	52.78	38.281	
6,100.00	3,055.60	2,395.00	2,415.00	90.36	41.80	-2.45	50.36	1,939.69	2,115.62	2,062.52	53.10	39.842	
6,190.56	3,056.23	2,395.00	2,415.00	92.56	41.80	-2.46	50.36	1,939.69	2,202.27	2,148.90	53.37	41.265	
6,200.00	3,056.30	2,395.00	2,415.00	92.79	41.80	-2.46	50.36	1,939.69	2,211.32	2,157.93	53.39	41.415	
6,300.00	3,056.99	2,395.00	2,415.00	95.23	41.80	-2.45	50.36	1,939.69	2,307.39	2,253.73	53.66	42.998	
6,400.00	3,057.69	2,395.00	2,415.00	97.67	41.80	-2.44	50.36	1,939.69	2,403.78	2,349.87	53.91	44.588	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Kite 5 I Federal 2 PA 29067 - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,800.00	3,053.51	2,350.00	2,370.00	83.06	41.02	55.71	-1,099.78	5,799.99	2,497.16	2,417.28	79.88	31.261	
5,900.00	3,054.20	2,350.00	2,370.00	85.49	41.02	55.71	-1,099.78	5,799.99	2,410.87	2,329.04	81.83	29.462	
6,000.00	3,054.90	2,350.00	2,370.00	87.92	41.02	55.71	-1,099.78	5,799.99	2,325.68	2,241.76	83.92	27.712	
6,100.00	3,055.60	2,350.00	2,370.00	90.36	41.02	55.72	-1,099.78	5,799.99	2,241.72	2,155.55	86.17	26.015	
6,190.56	3,056.23	2,350.00	2,370.00	92.56	41.02	55.72	-1,099.78	5,799.99	2,166.87	2,078.53	88.34	24.528	
6,200.00	3,056.30	2,350.00	2,370.00	92.79	41.02	55.72	-1,099.78	5,799.99	2,159.13	2,070.56	88.58	24.376	
6,300.00	3,056.99	2,350.00	2,370.00	95.23	41.02	55.72	-1,099.78	5,799.99	2,078.08	1,986.92	91.15	22.797	
6,400.00	3,057.69	2,350.00	2,370.00	97.67	41.02	55.72	-1,099.78	5,799.99	1,998.73	1,904.82	93.91	21.283	
6,500.00	3,058.39	2,350.00	2,370.00	100.12	41.02	55.71	-1,099.78	5,799.99	1,921.31	1,824.46	96.86	19.836	
6,600.00	3,059.08	2,350.00	2,370.00	102.56	41.02	55.71	-1,099.78	5,799.99	1,846.07	1,746.07	100.00	18.461	
6,700.00	3,059.78	2,350.00	2,370.00	105.00	41.02	55.71	-1,099.78	5,799.99	1,773.26	1,669.93	103.33	17.161	
6,800.00	3,060.48	2,350.00	2,370.00	107.45	41.02	55.71	-1,099.78	5,799.99	1,703.22	1,596.37	106.85	15.940	
6,900.00	3,061.18	2,350.00	2,370.00	109.90	41.02	55.71	-1,099.78	5,799.99	1,636.29	1,525.73	110.56	14.800	
7,000.00	3,061.87	2,350.00	2,370.00	112.35	41.02	55.71	-1,099.78	5,799.99	1,572.87	1,458.43	114.43	13.745	
7,100.00	3,062.57	2,350.00	2,370.00	114.79	41.02	55.71	-1,099.78	5,799.99	1,513.40	1,394.95	118.45	12.777	
7,200.00	3,063.27	2,350.00	2,370.00	117.24	41.02	55.71	-1,099.78	5,799.99	1,458.37	1,335.81	122.56	11.899	
7,300.00	3,063.97	2,350.00	2,370.00	119.70	41.02	55.70	-1,099.78	5,799.99	1,408.30	1,281.59	126.71	11.114	
7,400.00	3,064.67	2,350.00	2,370.00	122.15	41.02	55.70	-1,099.78	5,799.99	1,363.72	1,232.89	130.83	10.423	
7,500.00	3,065.36	2,350.00	2,370.00	124.60	41.02	55.70	-1,099.78	5,799.99	1,325.21	1,190.37	134.84	9.828	
7,600.00	3,066.06	2,350.00	2,370.00	127.05	41.02	55.70	-1,099.78	5,799.99	1,293.29	1,154.67	138.62	9.330	
7,700.00	3,066.76	2,350.00	2,370.00	129.51	41.02	55.70	-1,099.78	5,799.99	1,268.47	1,126.39	142.08	8.928	
7,800.00	3,067.46	2,350.00	2,370.00	131.96	41.02	55.70	-1,099.78	5,799.99	1,251.17	1,106.06	145.11	8.622	
7,900.00	3,068.16	2,350.00	2,370.00	134.42	41.02	55.70	-1,099.78	5,799.99	1,241.71	1,094.09	147.61	8.412	
7,968.01	3,068.63	2,350.00	2,370.00	136.09	41.02	55.70	-1,099.78	5,799.99	1,239.84	1,090.86	148.98	8.322	CC
8,000.00	3,068.86	2,350.00	2,370.00	136.87	41.02	55.70	-1,099.78	5,799.99	1,240.25	1,090.73	149.52	8.295	ES
8,100.00	3,069.55	2,350.00	2,370.00	139.33	41.02	55.70	-1,099.78	5,799.99	1,246.84	1,096.05	150.79	8.269	SF
8,200.00	3,070.25	2,350.00	2,370.00	141.78	41.02	55.70	-1,099.78	5,799.99	1,261.34	1,109.92	151.42	8.330	
8,300.00	3,070.95	2,350.00	2,370.00	144.24	41.02	55.70	-1,099.78	5,799.99	1,283.49	1,132.06	151.43	8.476	
8,400.00	3,071.65	2,350.00	2,370.00	146.70	41.02	55.70	-1,099.78	5,799.99	1,312.90	1,162.02	150.89	8.701	
8,500.00	3,072.35	2,350.00	2,370.00	149.15	41.02	55.70	-1,099.78	5,799.99	1,349.10	1,199.24	149.85	9.003	
8,600.00	3,073.05	2,350.00	2,370.00	151.61	41.02	55.70	-1,099.78	5,799.99	1,391.55	1,243.13	148.42	9.376	
8,700.00	3,073.75	2,350.00	2,370.00	154.07	41.02	55.70	-1,099.78	5,799.99	1,439.70	1,293.03	146.68	9.816	
8,724.51	3,073.92	2,350.00	2,370.00	154.67	41.02	55.70	-1,099.78	5,799.99	1,452.31	1,306.10	146.21	9.933	
8,800.00	3,074.45	2,350.00	2,370.00	156.53	41.02	55.70	-1,099.78	5,799.99	1,493.01	1,348.31	144.70	10.318	
8,814.50	3,074.55	2,350.00	2,370.00	156.89	41.02	55.70	-1,099.78	5,799.99	1,501.13	1,356.73	144.40	10.396	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Lago Rosa 4 Federal 4 30150 ACTIVE - 4 - 4 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,900.00	3,061.18	2,300.00	2,320.00	109.90	40.14	35.44	-645.06	7,014.80	2,452.76	2,379.90	72.86	33.665	
7,000.00	3,061.87	2,300.00	2,320.00	112.35	40.14	35.43	-645.06	7,014.80	2,360.52	2,286.40	74.12	31.849	
7,100.00	3,062.57	2,300.00	2,320.00	114.79	40.14	35.43	-645.06	7,014.80	2,268.93	2,193.46	75.48	30.061	
7,200.00	3,063.27	2,300.00	2,320.00	117.24	40.14	35.42	-645.06	7,014.80	2,178.08	2,101.14	76.95	28.306	
7,300.00	3,063.97	2,300.00	2,320.00	119.70	40.14	35.42	-645.06	7,014.80	2,088.07	2,009.53	78.54	26.585	
7,400.00	3,064.67	2,300.00	2,320.00	122.15	40.14	35.42	-645.06	7,014.80	1,999.01	1,918.74	80.27	24.904	
7,500.00	3,065.36	2,300.00	2,320.00	124.60	40.14	35.41	-645.06	7,014.80	1,911.03	1,828.88	82.14	23.265	
7,600.00	3,066.06	2,300.00	2,320.00	127.05	40.14	35.41	-645.06	7,014.80	1,824.28	1,740.11	84.17	21.674	
7,700.00	3,066.76	2,300.00	2,320.00	129.51	40.14	35.41	-645.06	7,014.80	1,738.96	1,652.59	86.37	20.135	
7,800.00	3,067.46	2,300.00	2,320.00	131.96	40.14	35.40	-645.06	7,014.80	1,655.28	1,566.54	88.74	18.653	
7,900.00	3,068.16	2,300.00	2,320.00	134.42	40.14	35.40	-645.06	7,014.80	1,573.50	1,482.19	91.31	17.233	
8,000.00	3,068.86	2,300.00	2,320.00	136.87	40.14	35.40	-645.06	7,014.80	1,493.95	1,399.87	94.07	15.880	
8,100.00	3,069.55	2,300.00	2,320.00	139.33	40.14	35.39	-645.06	7,014.80	1,416.98	1,319.94	97.04	14.602	
8,200.00	3,070.25	2,300.00	2,320.00	141.78	40.14	35.39	-645.06	7,014.80	1,343.05	1,242.86	100.20	13.404	
8,300.00	3,070.95	2,300.00	2,320.00	144.24	40.14	35.39	-645.06	7,014.80	1,272.69	1,169.16	103.53	12.293	
8,400.00	3,071.65	2,300.00	2,320.00	146.70	40.14	35.39	-645.06	7,014.80	1,206.52	1,099.51	107.00	11.275	
8,500.00	3,072.35	2,300.00	2,320.00	149.15	40.14	35.39	-645.06	7,014.80	1,145.26	1,034.70	110.56	10.359	
8,600.00	3,073.05	2,300.00	2,320.00	151.61	40.14	35.39	-645.06	7,014.80	1,089.75	975.64	114.12	9.549	
8,700.00	3,073.75	2,300.00	2,320.00	154.07	40.14	35.38	-645.06	7,014.80	1,040.91	923.34	117.57	8.853	
8,724.51	3,073.92	2,300.00	2,320.00	154.67	40.14	35.38	-645.06	7,014.80	1,030.07	911.68	118.39	8.701	
8,800.00	3,074.45	2,300.00	2,320.00	156.53	40.14	35.38	-645.06	7,014.80	999.71	878.93	120.79	8.277	
8,814.50	3,074.55	2,300.00	2,320.00	156.89	40.14	35.38	-645.06	7,014.80	994.43	873.21	121.23	8.203	CC, ES, SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Malco 2-B 00796 Plugged - 2-B - 2-B AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	-157.47	-565.47	-234.62	612.53				
100.00	100.00	80.00	100.00	0.31	1.40	-157.47	-565.47	-234.62	612.21	610.52	1.69	363.167	
200.00	200.00	180.00	200.00	0.95	3.14	-157.47	-565.47	-234.62	612.21	608.16	4.04	151.370	
300.00	300.00	280.00	300.00	1.46	4.89	-157.47	-565.47	-234.62	612.21	605.93	6.27	97.596	
400.00	400.00	380.00	400.00	1.89	6.63	-157.47	-565.47	-234.62	612.21	603.76	8.44	72.500	
500.00	500.00	480.00	500.00	2.31	8.38	-157.47	-565.47	-234.62	612.21	601.61	10.59	57.800	CC
600.00	599.98	579.98	599.98	2.85	10.12	115.99	-565.47	-234.62	612.97	600.29	12.68	48.341	ES
700.00	699.84	679.84	699.84	3.79	11.87	116.38	-565.47	-234.62	615.28	600.54	14.74	41.729	
800.00	799.45	779.45	799.45	4.66	13.60	117.03	-565.47	-234.62	619.21	602.38	16.83	36.792	
900.00	898.70	878.70	898.70	5.42	15.34	117.92	-565.47	-234.62	624.87	605.93	18.94	32.996	
1,000.00	997.47	977.47	997.47	6.10	17.06	119.03	-565.47	-234.62	632.40	611.33	21.07	30.016	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	120.33	-565.47	-234.62	641.98	618.76	23.22	27.643	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	121.80	-565.47	-234.62	653.81	628.41	25.40	25.738	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	123.40	-565.47	-234.62	668.11	640.50	27.60	24.203	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	125.10	-565.47	-234.62	685.07	655.24	29.83	22.969	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	126.87	-565.47	-234.62	704.90	672.84	32.06	21.987	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	128.67	-565.47	-234.62	727.80	693.50	34.30	21.218	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	130.48	-565.47	-234.62	753.91	717.37	36.54	20.631	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	132.26	-565.47	-234.62	783.37	744.59	38.78	20.203	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	133.99	-565.47	-234.62	816.26	775.27	40.99	19.914	
2,000.00	1,932.39	1,912.39	1,932.39	11.47	33.38	135.65	-565.47	-234.62	852.66	809.48	43.18	19.747	
2,076.26	1,997.92	1,977.92	1,997.92	11.82	34.52	136.86	-565.47	-234.62	882.79	837.98	44.81	19.702	SF
2,100.00	2,018.16	1,998.16	2,018.16	11.92	34.87	137.37	-565.47	-234.62	892.52	847.22	45.30	19.702	
2,200.00	2,103.40	2,050.00	2,070.00	12.40	35.78	138.63	-565.47	-234.62	934.82	888.15	46.67	20.031	
2,300.00	2,188.64	2,050.00	2,070.00	13.05	35.78	138.63	-565.47	-234.62	984.11	937.40	46.71	21.067	
2,400.00	2,273.88	2,050.00	2,070.00	13.85	35.78	138.63	-565.47	-234.62	1,040.71	994.22	46.48	22.389	
2,500.00	2,359.12	2,050.00	2,070.00	14.75	35.78	138.63	-565.47	-234.62	1,103.48	1,057.41	46.06	23.955	
2,600.00	2,444.36	2,050.00	2,070.00	15.69	35.78	138.63	-565.47	-234.62	1,171.43	1,125.90	45.53	25.730	
2,700.00	2,529.60	2,050.00	2,070.00	16.66	35.78	138.63	-565.47	-234.62	1,243.72	1,198.80	44.93	27.683	
2,799.35	2,614.29	2,050.00	2,070.00	17.63	35.78	138.63	-565.47	-234.62	1,319.13	1,274.83	44.30	29.774	
2,799.99	2,614.84	2,050.00	2,070.00	17.64	35.78	138.57	-565.47	-234.62	1,319.63	1,275.33	44.30	29.788	
2,850.00	2,656.50	2,050.00	2,070.00	18.16	35.78	133.55	-565.47	-234.62	1,359.44	1,315.41	44.02	30.880	
2,900.00	2,696.15	2,050.00	2,070.00	18.75	35.78	127.84	-565.47	-234.62	1,401.03	1,357.22	43.82	31.973	
2,950.00	2,733.60	2,050.00	2,070.00	19.38	35.78	121.31	-565.47	-234.62	1,444.08	1,400.42	43.67	33.072	
3,000.00	2,768.66	2,050.00	2,070.00	20.07	35.78	113.83	-565.47	-234.62	1,488.26	1,444.69	43.56	34.164	
3,050.00	2,801.17	2,050.00	2,070.00	20.82	35.78	105.46	-565.47	-234.62	1,533.25	1,489.74	43.51	35.238	
3,100.00	2,830.97	2,050.00	2,070.00	21.62	35.78	96.39	-565.47	-234.62	1,578.78	1,535.27	43.51	36.282	
3,150.00	2,857.90	2,050.00	2,070.00	22.46	35.78	87.03	-565.47	-234.62	1,624.60	1,581.03	43.57	37.288	
3,157.67	2,861.77	2,050.00	2,070.00	22.60	35.78	85.59	-565.47	-234.62	1,631.64	1,588.05	43.58	37.438	
3,200.00	2,882.94	2,050.00	2,070.00	23.35	35.78	85.59	-565.47	-234.62	1,670.57	1,626.91	43.66	38.266	
3,300.00	2,932.94	2,050.00	2,070.00	25.15	35.78	85.59	-565.47	-234.62	1,763.15	1,719.32	43.83	40.226	
3,357.67	2,961.77	2,050.00	2,070.00	26.20	35.78	85.59	-565.47	-234.62	1,816.90	1,772.98	43.93	41.362	
3,400.00	2,981.56	2,050.00	2,070.00	27.00	35.78	74.73	-565.47	-234.62	1,856.43	1,812.42	44.02	42.175	
3,450.00	3,001.31	2,050.00	2,070.00	27.99	35.78	63.04	-565.47	-234.62	1,902.89	1,858.71	44.18	43.074	
3,500.00	3,016.97	2,050.00	2,070.00	29.02	35.78	53.23	-565.47	-234.62	1,948.78	1,904.38	44.39	43.898	
3,550.00	3,028.45	2,050.00	2,070.00	30.08	35.78	45.38	-565.47	-234.62	1,993.81	1,949.14	44.66	44.641	
3,600.00	3,035.63	2,050.00	2,070.00	31.16	35.78	39.22	-565.47	-234.62	2,037.70	1,992.72	44.98	45.300	
3,653.66	3,038.52	2,050.00	2,070.00	32.33	35.78	34.07	-565.47	-234.62	2,083.26	2,037.88	45.39	45.901	
3,700.00	3,038.84	2,050.00	2,070.00	33.34	35.78	34.07	-565.47	-234.62	2,121.99	2,076.29	45.70	46.434	
3,800.00	3,039.54	2,050.00	2,070.00	35.57	35.78	34.07	-565.47	-234.62	2,206.56	2,160.25	46.31	47.644	
3,900.00	3,040.24	2,050.00	2,070.00	37.83	35.78	34.07	-565.47	-234.62	2,292.37	2,245.49	46.88	48.897	
4,000.00	3,040.94	2,050.00	2,070.00	40.11	35.78	34.07	-565.47	-234.62	2,379.29	2,331.89	47.41	50.190	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Malco 2-B 00796 Plugged - 2-B - 2-B AsDrilled

Survey Program: 100-INC-ONLY

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,100.00	3,041.64	2,050.00	2,070.00	42.41	35.78	34.07	-565.47	-234.62	2,467.21	2,419.32	47.89	51.520	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Malco B Federal 4 29922 PA - 4 - 4 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	-14.88	904.89	-240.36	936.48				
100.00	100.00	80.00	100.00	0.31	1.40	-14.88	904.89	-240.36	936.27	934.67	1.59	587.257	
200.00	200.00	180.00	200.00	0.95	3.14	-14.88	904.89	-240.36	936.27	932.48	3.79	247.159	
300.00	300.00	280.00	300.00	1.46	4.89	-14.88	904.89	-240.36	936.27	930.34	5.93	157.882	
400.00	400.00	380.00	400.00	1.89	6.63	-14.88	904.89	-240.36	936.27	928.22	8.05	116.277	
500.00	500.00	480.00	500.00	2.31	8.38	-14.88	904.89	-240.36	936.27	926.10	10.17	92.094	CC
600.00	599.98	579.98	599.98	2.85	10.12	-101.65	904.89	-240.36	936.62	924.37	12.25	76.457	
700.00	699.84	679.84	699.84	3.79	11.87	-101.95	904.89	-240.36	937.69	923.15	14.54	64.505	
800.00	799.45	779.45	799.45	4.66	13.60	-102.43	904.89	-240.36	939.54	922.75	16.78	55.976	ES
900.00	898.70	878.70	898.70	5.42	15.34	-103.09	904.89	-240.36	942.25	923.23	19.02	49.543	
1,000.00	997.47	977.47	997.47	6.10	17.06	-103.93	904.89	-240.36	945.95	924.70	21.25	44.509	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	-104.94	904.89	-240.36	950.79	927.29	23.50	40.466	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	-106.09	904.89	-240.36	956.95	931.20	25.75	37.159	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	-107.37	904.89	-240.36	964.65	936.62	28.03	34.419	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	-108.77	904.89	-240.36	974.09	943.77	30.32	32.128	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	-110.26	904.89	-240.36	985.52	952.89	32.63	30.204	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	-111.82	904.89	-240.36	999.18	964.23	34.95	28.586	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	-113.43	904.89	-240.36	1,015.31	978.02	37.29	27.229	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	-115.07	904.89	-240.36	1,034.13	994.50	39.63	26.096	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	-116.72	904.89	-240.36	1,055.86	1,013.89	41.96	25.161	
2,000.00	1,932.39	1,912.39	1,932.39	11.47	33.38	-118.34	904.89	-240.36	1,080.69	1,036.40	44.29	24.401	
2,076.26	1,997.92	1,977.92	1,997.92	11.82	34.52	-119.56	904.89	-240.36	1,101.81	1,055.79	46.02	23.944	
2,100.00	2,018.16	1,998.16	2,018.16	11.92	34.87	-120.06	904.89	-240.36	1,108.73	1,062.19	46.54	23.825	
2,200.00	2,103.40	2,083.40	2,103.40	12.40	36.36	-122.10	904.89	-240.36	1,138.92	1,090.21	48.72	23.379	
2,300.00	2,188.64	2,168.64	2,188.64	13.05	37.85	-124.06	904.89	-240.36	1,170.67	1,119.79	50.89	23.005	
2,400.00	2,273.88	2,253.88	2,273.88	13.85	39.34	-125.92	904.89	-240.36	1,203.86	1,150.82	53.03	22.700	
2,500.00	2,359.12	2,339.12	2,359.12	14.75	40.83	-127.71	904.89	-240.36	1,238.36	1,183.21	55.15	22.453	
2,600.00	2,444.36	2,424.36	2,444.36	15.69	42.31	-129.41	904.89	-240.36	1,274.08	1,216.83	57.25	22.255	SF
2,700.00	2,529.60	2,450.00	2,470.00	16.66	42.76	-129.91	904.89	-240.36	1,312.26	1,254.15	58.11	22.582	
2,799.35	2,614.29	2,450.00	2,470.00	17.63	42.76	-129.91	904.89	-240.36	1,356.20	1,297.96	58.24	23.286	
2,799.99	2,614.84	2,450.00	2,470.00	17.64	42.76	-129.90	904.89	-240.36	1,356.51	1,298.27	58.24	23.291	
2,850.00	2,656.50	2,450.00	2,470.00	18.16	42.76	-129.18	904.89	-240.36	1,381.97	1,323.70	58.27	23.718	
2,900.00	2,696.15	2,450.00	2,470.00	18.75	42.76	-127.89	904.89	-240.36	1,410.83	1,352.51	58.32	24.191	
2,950.00	2,733.60	2,450.00	2,470.00	19.38	42.76	-126.03	904.89	-240.36	1,442.77	1,384.42	58.36	24.723	
3,000.00	2,768.66	2,450.00	2,470.00	20.07	42.76	-123.57	904.89	-240.36	1,477.43	1,419.04	58.39	25.303	
3,050.00	2,801.17	2,450.00	2,470.00	20.82	42.76	-120.45	904.89	-240.36	1,514.47	1,456.04	58.43	25.918	
3,100.00	2,830.97	2,450.00	2,470.00	21.62	42.76	-116.60	904.89	-240.36	1,553.53	1,495.04	58.49	26.561	
3,150.00	2,857.90	2,450.00	2,470.00	22.46	42.76	-111.94	904.89	-240.36	1,594.29	1,535.73	58.57	27.222	
3,157.67	2,861.77	2,450.00	2,470.00	22.60	42.76	-111.15	904.89	-240.36	1,600.67	1,542.09	58.58	27.324	
3,200.00	2,882.94	2,450.00	2,470.00	23.35	42.76	-111.15	904.89	-240.36	1,636.16	1,577.51	58.64	27.900	
3,300.00	2,932.94	2,450.00	2,470.00	25.15	42.76	-111.15	904.89	-240.36	1,721.20	1,662.42	58.78	29.283	
3,357.67	2,961.77	2,450.00	2,470.00	26.20	42.76	-111.15	904.89	-240.36	1,770.95	1,712.11	58.84	30.095	
3,400.00	2,981.56	2,450.00	2,470.00	27.00	42.76	-103.84	904.89	-240.36	1,808.02	1,749.11	58.91	30.692	
3,450.00	3,001.31	2,450.00	2,470.00	27.99	42.76	-94.22	904.89	-240.36	1,852.51	1,793.49	59.02	31.386	
3,500.00	3,016.97	2,450.00	2,470.00	29.02	42.76	-84.02	904.89	-240.36	1,897.42	1,838.25	59.18	32.064	
3,550.00	3,028.45	2,450.00	2,470.00	30.08	42.76	-73.94	904.89	-240.36	1,942.39	1,883.02	59.36	32.719	
3,600.00	3,035.63	2,450.00	2,470.00	31.16	42.76	-64.63	904.89	-240.36	1,987.07	1,927.48	59.59	33.347	
3,653.66	3,038.52	2,450.00	2,470.00	32.33	42.76	-55.95	904.89	-240.36	2,034.37	1,974.50	59.86	33.983	
3,700.00	3,038.84	2,450.00	2,470.00	33.34	42.76	-55.95	904.89	-240.36	2,074.93	2,014.83	60.10	34.523	
3,800.00	3,039.54	2,450.00	2,470.00	35.57	42.76	-55.95	904.89	-240.36	2,163.26	2,102.68	60.58	35.706	
3,900.00	3,040.24	2,450.00	2,470.00	37.83	42.76	-55.95	904.89	-240.36	2,252.57	2,191.54	61.03	36.911	
4,000.00	3,040.94	2,450.00	2,470.00	40.11	42.76	-55.95	904.89	-240.36	2,342.74	2,281.30	61.44	38.133	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Malco B Federal 4 29922 PA - 4 - 4 AsDrilled

Survey Program: 100-INC-ONLY

Offset Site Error: 0.00 usft

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,100.00	3,041.64	2,450.00	2,470.00	42.41	42.76	-55.95	904.89	-240.36	2,433.68	2,371.87	61.81	39.373	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Malco B Federal 6 29924 PA - 6 - 6 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	-130.05	-283.54	-337.27	441.08				
100.00	100.00	80.00	100.00	0.31	1.40	-130.05	-283.54	-337.27	440.62	438.92	1.70	258.741	
200.00	200.00	180.00	200.00	0.95	3.14	-130.05	-283.54	-337.27	440.62	436.53	4.09	107.634	
300.00	300.00	280.00	300.00	1.46	4.89	-130.05	-283.54	-337.27	440.62	434.28	6.34	69.495	
400.00	400.00	380.00	400.00	1.89	6.63	-130.05	-283.54	-337.27	440.62	432.10	8.52	51.698	
500.00	500.00	480.00	500.00	2.31	8.38	-130.05	-283.54	-337.27	440.62	429.94	10.68	41.262	CC
600.00	599.98	579.98	599.98	2.85	10.12	143.38	-283.54	-337.27	442.02	429.09	12.94	34.169	ES
700.00	699.84	679.84	699.84	3.79	11.87	143.74	-283.54	-337.27	446.24	430.95	15.29	29.186	
800.00	799.45	779.45	799.45	4.66	13.60	144.30	-283.54	-337.27	453.30	435.70	17.60	25.762	
900.00	898.70	878.70	898.70	5.42	15.34	145.07	-283.54	-337.27	463.27	443.39	19.88	23.307	
1,000.00	997.47	977.47	997.47	6.10	17.06	145.99	-283.54	-337.27	476.22	454.07	22.14	21.506	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	147.05	-283.54	-337.27	492.22	467.82	24.40	20.173	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	148.21	-283.54	-337.27	511.36	484.71	26.65	19.191	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	149.43	-283.54	-337.27	533.71	504.83	28.88	18.480	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	150.68	-283.54	-337.27	559.32	528.22	31.10	17.984	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	151.93	-283.54	-337.27	588.23	554.93	33.30	17.664	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	153.16	-283.54	-337.27	620.48	585.00	35.48	17.489	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	154.35	-283.54	-337.27	656.06	618.43	37.63	17.436	SF
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	155.49	-283.54	-337.27	694.97	655.22	39.74	17.486	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	156.56	-283.54	-337.27	737.17	695.34	41.83	17.624	
2,000.00	1,932.39	1,912.39	1,932.39	11.47	33.38	157.56	-283.54	-337.27	782.64	738.77	43.87	17.839	
2,076.26	1,997.92	1,977.92	1,997.92	11.82	34.52	158.28	-283.54	-337.27	819.47	774.11	45.37	18.064	
2,100.00	2,018.16	1,998.16	2,018.16	11.92	34.87	158.59	-283.54	-337.27	831.24	785.43	45.81	18.145	
2,200.00	2,103.40	2,083.40	2,103.40	12.40	36.36	159.81	-283.54	-337.27	880.98	833.32	47.66	18.483	
2,300.00	2,188.64	2,168.64	2,188.64	13.05	37.85	160.90	-283.54	-337.27	931.01	881.49	49.52	18.801	
2,400.00	2,273.88	2,253.88	2,273.88	13.85	39.34	161.89	-283.54	-337.27	981.27	929.90	51.37	19.102	
2,500.00	2,359.12	2,339.12	2,359.12	14.75	40.83	162.78	-283.54	-337.27	1,031.73	978.51	53.22	19.385	
2,600.00	2,444.36	2,424.36	2,444.36	15.69	42.31	163.59	-283.54	-337.27	1,082.36	1,027.29	55.07	19.653	
2,700.00	2,529.60	2,450.00	2,470.00	16.66	42.76	163.82	-283.54	-337.27	1,134.72	1,079.09	55.63	20.399	
2,799.35	2,614.29	2,450.00	2,470.00	17.63	42.76	163.82	-283.54	-337.27	1,192.50	1,137.09	55.40	21.524	
2,799.99	2,614.84	2,450.00	2,470.00	17.64	42.76	163.79	-283.54	-337.27	1,192.89	1,137.49	55.40	21.532	
2,850.00	2,656.50	2,450.00	2,470.00	18.16	42.76	161.45	-283.54	-337.27	1,225.24	1,169.98	55.26	22.173	
2,900.00	2,696.15	2,450.00	2,470.00	18.75	42.76	158.90	-283.54	-337.27	1,260.96	1,205.80	55.16	22.859	
2,950.00	2,733.60	2,450.00	2,470.00	19.38	42.76	155.95	-283.54	-337.27	1,299.62	1,244.57	55.05	23.609	
3,000.00	2,768.66	2,450.00	2,470.00	20.07	42.76	152.42	-283.54	-337.27	1,340.77	1,285.84	54.93	24.408	
3,050.00	2,801.17	2,450.00	2,470.00	20.82	42.76	148.03	-283.54	-337.27	1,384.01	1,329.19	54.82	25.245	
3,100.00	2,830.97	2,450.00	2,470.00	21.62	42.76	142.41	-283.54	-337.27	1,428.95	1,374.22	54.73	26.109	
3,150.00	2,857.90	2,450.00	2,470.00	22.46	42.76	135.06	-283.54	-337.27	1,475.21	1,420.55	54.66	26.989	
3,157.67	2,861.77	2,450.00	2,470.00	22.60	42.76	133.74	-283.54	-337.27	1,482.40	1,427.75	54.65	27.124	
3,200.00	2,882.94	2,450.00	2,470.00	23.35	42.76	133.74	-283.54	-337.27	1,522.24	1,467.64	54.60	27.882	
3,300.00	2,932.94	2,450.00	2,470.00	25.15	42.76	133.74	-283.54	-337.27	1,616.84	1,562.37	54.47	29.685	
3,357.67	2,961.77	2,450.00	2,470.00	26.20	42.76	133.74	-283.54	-337.27	1,671.68	1,617.28	54.40	30.731	
3,400.00	2,981.56	2,450.00	2,470.00	27.00	42.76	122.21	-283.54	-337.27	1,712.34	1,657.97	54.37	31.497	
3,450.00	3,001.31	2,450.00	2,470.00	27.99	42.76	102.88	-283.54	-337.27	1,760.98	1,706.61	54.37	32.388	
3,500.00	3,016.97	2,450.00	2,470.00	29.02	42.76	79.46	-283.54	-337.27	1,809.89	1,755.48	54.41	33.263	
3,550.00	3,028.45	2,450.00	2,470.00	30.08	42.76	58.57	-283.54	-337.27	1,858.70	1,804.21	54.49	34.110	
3,600.00	3,035.63	2,450.00	2,470.00	31.16	42.76	43.79	-283.54	-337.27	1,907.05	1,852.45	54.61	34.921	
3,653.66	3,038.52	2,450.00	2,470.00	32.33	42.76	33.50	-283.54	-337.27	1,958.09	1,903.30	54.78	35.742	
3,700.00	3,038.84	2,450.00	2,470.00	33.34	42.76	33.50	-283.54	-337.27	2,001.72	1,946.79	54.93	36.441	
3,800.00	3,039.54	2,450.00	2,470.00	35.57	42.76	33.50	-283.54	-337.27	2,096.28	2,041.06	55.22	37.961	
3,900.00	3,040.24	2,450.00	2,470.00	37.83	42.76	33.50	-283.54	-337.27	2,191.32	2,135.84	55.49	39.494	
4,000.00	3,040.94	2,450.00	2,470.00	40.11	42.76	33.50	-283.54	-337.27	2,286.79	2,231.06	55.73	41.036	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Malco B Federal 6 29924 PA - 6 - 6 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,100.00	3,041.64	2,450.00	2,470.00	42.41	42.76	33.50	-283.54	-337.27	2,382.63	2,326.68	55.95	42.588	
4,200.00	3,042.33	2,450.00	2,470.00	44.73	42.76	33.50	-283.54	-337.27	2,478.80	2,422.65	56.15	44.147	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Red Raiders Federal 1 36260 ACTIVE - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	122.71	-1,124.10	1,750.62	2,080.54				
100.00	100.00	80.00	100.00	0.31	1.40	122.71	-1,124.10	1,750.62	2,080.45	2,078.90	1.55	1,341.399	
200.00	200.00	180.00	200.00	0.95	3.14	122.71	-1,124.10	1,750.62	2,080.45	2,076.78	3.67	566.507	
300.00	300.00	280.00	300.00	1.46	4.89	122.71	-1,124.10	1,750.62	2,080.45	2,074.67	5.78	359.756	
400.00	400.00	380.00	400.00	1.89	6.63	122.71	-1,124.10	1,750.62	2,080.45	2,072.56	7.89	263.695	
500.00	500.00	480.00	500.00	2.31	8.38	122.71	-1,124.10	1,750.62	2,080.45	2,070.45	9.99	208.149	
600.00	599.98	579.98	599.98	2.85	10.12	36.07	-1,124.10	1,750.62	2,079.04	2,066.61	12.43	167.306	
700.00	699.84	679.84	699.84	3.79	11.87	36.20	-1,124.10	1,750.62	2,074.81	2,059.51	15.30	135.645	
800.00	799.45	779.45	799.45	4.66	13.60	36.43	-1,124.10	1,750.62	2,067.78	2,049.88	17.90	115.515	
900.00	898.70	878.70	898.70	5.42	15.34	36.75	-1,124.10	1,750.62	2,057.97	2,037.59	20.37	101.009	
1,000.00	997.47	977.47	997.47	6.10	17.06	37.16	-1,124.10	1,750.62	2,045.41	2,022.65	22.76	89.854	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	37.67	-1,124.10	1,750.62	2,030.15	2,005.06	25.09	80.909	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	38.29	-1,124.10	1,750.62	2,012.25	1,984.88	27.37	73.514	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	39.00	-1,124.10	1,750.62	1,991.76	1,962.15	29.61	67.259	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	39.83	-1,124.10	1,750.62	1,968.78	1,936.96	31.82	61.869	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	40.78	-1,124.10	1,750.62	1,943.38	1,909.38	34.00	57.154	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	41.84	-1,124.10	1,750.62	1,915.67	1,879.51	36.16	52.977	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	43.03	-1,124.10	1,750.62	1,885.77	1,847.47	38.30	49.236	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	44.35	-1,124.10	1,750.62	1,853.82	1,813.39	40.43	45.854	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	45.81	-1,124.10	1,750.62	1,819.96	1,777.41	42.55	42.773	
2,000.00	1,932.39	1,912.39	1,932.39	11.47	33.38	47.41	-1,124.10	1,750.62	1,784.37	1,739.70	44.67	39.946	
2,076.26	1,997.92	1,977.92	1,997.92	11.82	34.52	48.73	-1,124.10	1,750.62	1,756.18	1,709.94	46.25	37.975	
2,100.00	2,018.16	1,998.16	2,018.16	11.92	34.87	49.01	-1,124.10	1,750.62	1,747.30	1,700.58	46.72	37.398	
2,200.00	2,103.40	2,083.40	2,103.40	12.40	36.36	50.22	-1,124.10	1,750.62	1,710.37	1,661.61	48.76	35.080	
2,300.00	2,188.64	2,168.64	2,188.64	13.05	37.85	51.48	-1,124.10	1,750.62	1,674.25	1,623.39	50.86	32.920	
2,400.00	2,273.88	2,253.88	2,273.88	13.85	39.34	52.78	-1,124.10	1,750.62	1,639.01	1,586.00	53.01	30.919	
2,500.00	2,359.12	2,339.12	2,359.12	14.75	40.83	54.12	-1,124.10	1,750.62	1,604.69	1,549.48	55.21	29.065	
2,600.00	2,444.36	2,424.36	2,444.36	15.69	42.31	55.52	-1,124.10	1,750.62	1,571.37	1,513.91	57.46	27.348	
2,700.00	2,529.60	2,509.60	2,529.60	16.66	43.80	56.96	-1,124.10	1,750.62	1,539.10	1,479.35	59.75	25.757	
2,799.35	2,614.29	2,594.29	2,614.29	17.63	45.28	58.44	-1,124.10	1,750.62	1,508.15	1,446.08	62.08	24.294	
2,799.99	2,614.84	2,594.84	2,614.84	17.64	45.29	58.45	-1,124.10	1,750.62	1,507.96	1,445.86	62.09	24.285	
2,850.00	2,656.50	2,636.50	2,656.50	18.16	46.02	59.44	-1,124.10	1,750.62	1,491.75	1,428.45	63.30	23.566	
2,900.00	2,696.15	2,676.15	2,696.15	18.75	46.71	60.84	-1,124.10	1,750.62	1,473.89	1,409.33	64.55	22.832	
2,950.00	2,733.60	2,713.60	2,733.60	19.38	47.36	62.60	-1,124.10	1,750.62	1,454.55	1,388.75	65.81	22.104	
3,000.00	2,768.66	2,748.66	2,768.66	20.07	47.97	64.66	-1,124.10	1,750.62	1,433.97	1,366.91	67.06	21.382	
3,050.00	2,801.17	2,781.17	2,801.17	20.82	48.54	66.96	-1,124.10	1,750.62	1,412.37	1,344.04	68.33	20.669	
3,100.00	2,830.97	2,810.97	2,830.97	21.62	49.06	69.46	-1,124.10	1,750.62	1,390.00	1,320.39	69.61	19.968	
3,150.00	2,857.90	2,837.90	2,857.90	22.46	49.53	72.09	-1,124.10	1,750.62	1,367.11	1,296.21	70.90	19.282	
3,157.67	2,861.77	2,841.77	2,861.77	22.60	49.60	72.50	-1,124.10	1,750.62	1,363.57	1,292.47	71.10	19.179	
3,200.00	2,882.94	2,862.94	2,882.94	23.35	49.97	73.33	-1,124.10	1,750.62	1,344.37	1,272.18	72.20	18.621	
3,300.00	2,932.94	2,912.94	2,932.94	25.15	50.84	75.33	-1,124.10	1,750.62	1,302.00	1,227.10	74.90	17.383	
3,357.67	2,961.77	2,941.77	2,961.77	26.20	51.34	76.49	-1,124.10	1,750.62	1,279.60	1,203.08	76.52	16.723	
3,400.00	2,981.56	2,961.56	2,981.56	27.00	51.69	78.98	-1,124.10	1,750.62	1,263.85	1,186.12	77.73	16.260	
3,450.00	3,001.31	2,981.31	3,001.31	27.99	52.03	81.76	-1,124.10	1,750.62	1,245.78	1,166.62	79.16	15.738	
3,500.00	3,016.97	2,996.97	3,016.97	29.02	52.31	84.30	-1,124.10	1,750.62	1,228.62	1,148.05	80.57	15.248	
3,550.00	3,028.45	3,008.45	3,028.45	30.08	52.51	86.53	-1,124.10	1,750.62	1,212.71	1,130.75	81.96	14.796	
3,600.00	3,035.63	3,015.63	3,035.63	31.16	52.63	88.38	-1,124.10	1,750.62	1,198.35	1,115.04	83.31	14.385	
3,653.66	3,038.52	3,018.52	3,038.52	32.33	52.68	89.91	-1,124.10	1,750.62	1,184.92	1,100.25	84.67	13.994	
3,700.00	3,038.84	3,018.84	3,038.84	33.34	52.69	89.92	-1,124.10	1,750.62	1,175.15	1,089.35	85.81	13.695	
3,800.00	3,039.54	3,019.54	3,039.54	35.57	52.70	89.96	-1,124.10	1,750.62	1,160.12	1,071.89	88.23	13.149	
3,900.00	3,040.24	3,020.24	3,040.24	37.83	52.71	89.99	-1,124.10	1,750.62	1,153.58	1,063.06	90.53	12.743	
3,925.58	3,040.42	3,020.42	3,040.42	38.41	52.72	90.00	-1,124.10	1,750.62	1,153.30	1,062.21	91.09	12.661	CC, ES

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Red Raiders Federal 1 36260 ACTIVE - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,000.00	3,040.94	3,020.94	3,040.94	40.11	52.73	90.03	-1,124.10	1,750.62	1,155.70	1,063.06	92.63	12.476	
4,100.00	3,041.64	3,021.64	3,041.64	42.41	52.74	90.06	-1,124.10	1,750.62	1,166.41	1,071.92	94.49	12.344	
4,200.00	3,042.33	3,022.33	3,042.33	44.73	52.75	90.10	-1,124.10	1,750.62	1,185.50	1,089.43	96.07	12.340	SF
4,300.00	3,043.03	3,023.03	3,043.03	47.07	52.76	90.13	-1,124.10	1,750.62	1,212.55	1,115.21	97.35	12.456	
4,400.00	3,043.73	3,023.73	3,043.73	49.42	52.77	90.16	-1,124.10	1,750.62	1,247.06	1,148.73	98.34	12.682	
4,500.00	3,044.43	3,024.43	3,044.43	51.78	52.79	90.20	-1,124.10	1,750.62	1,288.43	1,189.37	99.06	13.007	
4,600.00	3,045.13	3,025.13	3,045.13	54.15	52.80	90.23	-1,124.10	1,750.62	1,336.01	1,236.46	99.55	13.420	
4,700.00	3,045.83	3,025.83	3,045.83	56.53	52.81	90.27	-1,124.10	1,750.62	1,389.17	1,289.33	99.84	13.914	
4,800.00	3,046.53	3,026.53	3,046.53	58.92	52.82	90.30	-1,124.10	1,750.62	1,447.30	1,347.32	99.97	14.477	
4,872.09	3,047.03	3,027.03	3,047.03	60.64	52.83	90.33	-1,124.10	1,750.62	1,491.95	1,391.97	99.98	14.922	
4,900.00	3,047.23	3,027.23	3,047.23	61.31	52.84	90.34	-1,124.10	1,750.62	1,509.82	1,409.84	99.97	15.102	
5,000.00	3,047.92	3,027.92	3,047.92	63.71	52.85	90.37	-1,124.10	1,750.62	1,576.21	1,476.33	99.87	15.782	
5,100.00	3,048.62	3,028.62	3,048.62	66.11	52.86	90.41	-1,124.10	1,750.62	1,646.00	1,546.30	99.70	16.510	
5,200.00	3,049.32	3,029.32	3,049.32	68.52	52.87	90.44	-1,124.10	1,750.62	1,718.79	1,619.32	99.47	17.279	
5,300.00	3,050.02	3,030.02	3,050.02	70.94	52.88	90.48	-1,124.10	1,750.62	1,794.20	1,695.00	99.21	18.085	
5,400.00	3,050.72	3,030.72	3,050.72	73.35	52.90	90.51	-1,124.10	1,750.62	1,871.93	1,773.01	98.92	18.924	
5,500.00	3,051.41	3,031.41	3,051.41	75.78	52.91	90.55	-1,124.10	1,750.62	1,951.68	1,853.07	98.61	19.792	
5,600.00	3,052.11	3,032.11	3,052.11	78.20	52.92	90.58	-1,124.10	1,750.62	2,033.23	1,934.93	98.30	20.684	
5,700.00	3,052.81	3,032.81	3,052.81	80.63	52.93	90.62	-1,124.10	1,750.62	2,116.37	2,018.38	97.98	21.599	
5,800.00	3,053.51	3,033.51	3,053.51	83.06	52.94	90.65	-1,124.10	1,750.62	2,200.91	2,103.24	97.67	22.534	
5,900.00	3,054.20	3,034.20	3,054.20	85.49	52.96	90.68	-1,124.10	1,750.62	2,286.70	2,189.34	97.36	23.487	
6,000.00	3,054.90	3,034.90	3,054.90	87.92	52.97	90.72	-1,124.10	1,750.62	2,373.61	2,276.55	97.06	24.455	
6,100.00	3,055.60	3,035.60	3,055.60	90.36	52.98	90.75	-1,124.10	1,750.62	2,461.52	2,364.75	96.77	25.437	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Welch Federal 1 20049 PA - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	108.62	-253.55	752.49	794.31				
100.00	100.00	80.00	100.00	0.31	1.40	108.62	-253.55	752.49	794.06	792.48	1.58	501.348	
200.00	200.00	180.00	200.00	0.95	3.14	108.62	-253.55	752.49	794.06	790.30	3.76	211.203	
300.00	300.00	280.00	300.00	1.46	4.89	108.62	-253.55	752.49	794.06	788.17	5.89	134.736	
400.00	400.00	380.00	400.00	1.89	6.63	108.62	-253.55	752.49	794.06	786.05	8.01	99.121	
500.00	500.00	480.00	500.00	2.31	8.38	108.62	-253.55	752.49	794.06	783.94	10.12	78.442	
600.00	599.98	579.98	599.98	2.85	10.12	22.00	-253.55	752.49	792.44	779.83	12.61	62.846	
700.00	699.84	679.84	699.84	3.79	11.87	22.18	-253.55	752.49	787.59	772.08	15.52	50.761	
800.00	799.45	779.45	799.45	4.66	13.60	22.48	-253.55	752.49	779.53	761.37	18.15	42.942	
900.00	898.70	878.70	898.70	5.42	15.34	22.92	-253.55	752.49	768.27	747.62	20.65	37.198	
1,000.00	997.47	977.47	997.47	6.10	17.06	23.50	-253.55	752.49	753.87	730.80	23.06	32.685	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	24.23	-253.55	752.49	736.36	710.95	25.41	28.980	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	25.14	-253.55	752.49	715.83	688.13	27.70	25.843	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	26.26	-253.55	752.49	692.36	662.42	29.94	23.122	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	27.62	-253.55	752.49	666.07	633.92	32.15	20.720	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	29.25	-253.55	752.49	637.08	602.77	34.31	18.568	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	31.22	-253.55	752.49	605.60	569.16	36.44	16.619	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	33.60	-253.55	752.49	571.86	533.32	38.54	14.838	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	36.47	-253.55	752.49	536.18	495.57	40.62	13.201	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	39.95	-253.55	752.49	499.00	456.33	42.67	11.693	
2,000.00	1,932.39	1,912.39	1,932.39	11.47	33.38	44.16	-253.55	752.49	460.93	416.20	44.73	10.305	
2,076.26	1,997.92	1,977.92	1,997.92	11.82	34.52	47.97	-253.55	752.49	431.80	385.55	46.26	9.335	
2,100.00	2,018.16	1,998.16	2,018.16	11.92	34.87	49.12	-253.55	752.49	422.87	376.15	46.72	9.051	
2,200.00	2,103.40	2,083.40	2,103.40	12.40	36.36	54.42	-253.55	752.49	387.36	338.62	48.74	7.947	
2,300.00	2,188.64	2,168.64	2,188.64	13.05	37.85	60.52	-253.55	752.49	356.00	305.10	50.90	6.994	
2,400.00	2,273.88	2,253.88	2,273.88	13.85	39.34	67.46	-253.55	752.49	329.99	276.81	53.19	6.204	
2,500.00	2,359.12	2,339.12	2,359.12	14.75	40.83	75.17	-253.55	752.49	310.68	255.11	55.57	5.591	
2,600.00	2,444.36	2,424.36	2,444.36	15.69	42.31	83.46	-253.55	752.49	299.36	241.38	57.99	5.163	
2,676.23	2,509.34	2,489.34	2,509.34	16.43	43.45	90.00	-253.55	752.49	296.69	236.91	59.78	4.963	CC
2,700.00	2,529.60	2,509.60	2,529.60	16.66	43.80	92.04	-253.55	752.49	296.95	236.63	60.32	4.923	ES
2,799.35	2,614.29	2,594.29	2,614.29	17.63	45.28	100.47	-253.55	752.49	303.59	241.11	62.48	4.859	SF
2,799.99	2,614.84	2,594.84	2,614.84	17.64	45.29	100.51	-253.55	752.49	303.66	241.17	62.49	4.859	
2,850.00	2,656.50	2,636.50	2,656.50	18.16	46.02	103.34	-253.55	752.49	310.47	246.97	63.50	4.890	
2,900.00	2,696.15	2,676.15	2,696.15	18.75	46.71	106.21	-253.55	752.49	320.10	255.66	64.44	4.968	
2,950.00	2,733.60	2,713.60	2,733.60	19.38	47.36	108.91	-253.55	752.49	333.02	267.71	65.31	5.099	
3,000.00	2,768.66	2,748.66	2,768.66	20.07	47.97	111.29	-253.55	752.49	349.55	283.45	66.10	5.288	
3,050.00	2,801.17	2,781.17	2,801.17	20.82	48.54	113.21	-253.55	752.49	369.82	303.01	66.81	5.536	
3,100.00	2,830.97	2,810.97	2,830.97	21.62	49.06	114.58	-253.55	752.49	393.82	326.39	67.43	5.840	
3,150.00	2,857.90	2,837.90	2,857.90	22.46	49.53	115.32	-253.55	752.49	421.40	353.42	67.97	6.199	
3,157.67	2,861.77	2,841.77	2,861.77	22.60	49.60	115.37	-253.55	752.49	425.93	357.88	68.05	6.259	
3,200.00	2,882.94	2,862.94	2,882.94	23.35	49.97	118.08	-253.55	752.49	451.94	383.49	68.44	6.603	
3,300.00	2,932.94	2,912.94	2,932.94	25.15	50.84	123.96	-253.55	752.49	518.52	449.17	69.35	7.477	
3,357.67	2,961.77	2,940.00	2,960.00	26.20	51.31	126.85	-253.55	752.49	559.41	489.59	69.82	8.012	
3,400.00	2,981.56	2,940.00	2,960.00	27.00	51.31	122.85	-253.55	752.49	591.35	521.72	69.63	8.493	
3,450.00	3,001.31	2,940.00	2,960.00	27.99	51.31	116.81	-253.55	752.49	631.90	562.51	69.39	9.106	
3,500.00	3,016.97	2,940.00	2,960.00	29.02	51.31	109.16	-253.55	752.49	674.73	605.55	69.18	9.753	
3,550.00	3,028.45	2,940.00	2,960.00	30.08	51.31	99.80	-253.55	752.49	719.14	650.12	69.02	10.419	
3,600.00	3,035.63	2,940.00	2,960.00	31.16	51.31	89.00	-253.55	752.49	764.54	695.62	68.92	11.093	
3,653.66	3,038.52	2,940.00	2,960.00	32.33	51.31	76.67	-253.55	752.49	813.82	744.94	68.89	11.814	
3,700.00	3,038.84	2,940.00	2,960.00	33.34	51.31	76.67	-253.55	752.49	856.67	787.79	68.88	12.437	
3,800.00	3,039.54	2,940.00	2,960.00	35.57	51.31	76.67	-253.55	752.49	950.26	881.38	68.88	13.797	
3,900.00	3,040.24	2,940.00	2,960.00	37.83	51.31	76.67	-253.55	752.49	1,045.04	976.17	68.87	15.174	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Welch Federal 1 20049 PA - 1 - 1 AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,000.00	3,040.94	2,940.00	2,960.00	40.11	51.31	76.67	-253.55	752.49	1,140.71	1,071.84	68.87	16.564	
4,100.00	3,041.64	2,940.00	2,960.00	42.41	51.31	76.67	-253.55	752.49	1,237.06	1,168.20	68.87	17.964	
4,200.00	3,042.33	2,940.00	2,960.00	44.73	51.31	76.67	-253.55	752.49	1,333.96	1,265.09	68.87	19.370	
4,300.00	3,043.03	2,940.00	2,960.00	47.07	51.31	76.67	-253.55	752.49	1,431.27	1,362.41	68.87	20.783	
4,400.00	3,043.73	2,940.00	2,960.00	49.42	51.31	76.67	-253.55	752.49	1,528.94	1,460.07	68.87	22.199	
4,500.00	3,044.43	2,940.00	2,960.00	51.78	51.31	76.67	-253.55	752.49	1,626.89	1,558.01	68.88	23.619	
4,600.00	3,045.13	2,940.00	2,960.00	54.15	51.31	76.67	-253.55	752.49	1,725.07	1,656.18	68.89	25.041	
4,700.00	3,045.83	2,940.00	2,960.00	56.53	51.31	76.67	-253.55	752.49	1,823.46	1,754.55	68.90	26.464	
4,800.00	3,046.53	2,940.00	2,960.00	58.92	51.31	76.67	-253.55	752.49	1,922.00	1,853.09	68.91	27.890	
4,872.09	3,047.03	2,940.00	2,960.00	60.64	51.31	76.67	-253.55	752.49	1,993.13	1,924.21	68.92	28.917	
4,900.00	3,047.23	2,940.00	2,960.00	61.31	51.31	76.66	-253.55	752.49	2,020.70	1,951.77	68.93	29.316	
5,000.00	3,047.92	2,940.00	2,960.00	63.71	51.31	76.66	-253.55	752.49	2,119.51	2,050.57	68.94	30.742	
5,100.00	3,048.62	2,940.00	2,960.00	66.11	51.31	76.65	-253.55	752.49	2,218.43	2,149.47	68.96	32.169	
5,200.00	3,049.32	2,940.00	2,960.00	68.52	51.31	76.65	-253.55	752.49	2,317.45	2,248.47	68.98	33.596	
5,300.00	3,050.02	2,940.00	2,960.00	70.94	51.31	76.64	-253.55	752.49	2,416.54	2,347.54	69.00	35.022	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - West Ribbon Federal 1 32717 ACTIVE - 1 - AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	20.00	0.00	0.00	44.82	347.04	344.82	489.64				
100.00	100.00	80.00	100.00	0.31	1.40	44.82	347.04	344.82	489.23	487.52	1.70	287.131	
200.00	200.00	180.00	200.00	0.95	3.14	44.82	347.04	344.82	489.23	485.13	4.10	119.432	
300.00	300.00	280.00	300.00	1.46	4.89	44.82	347.04	344.82	489.23	482.88	6.34	77.119	
400.00	400.00	380.00	400.00	1.89	6.63	44.82	347.04	344.82	489.23	480.70	8.53	57.373	
500.00	500.00	480.00	500.00	2.31	8.38	44.82	347.04	344.82	489.23	478.54	10.68	45.794	
600.00	599.98	579.98	599.98	2.85	10.12	-42.02	347.04	344.82	487.93	475.03	12.90	37.813	
700.00	699.84	679.84	699.84	3.79	11.87	-42.49	347.04	344.82	484.05	468.88	15.17	31.910	
800.00	799.45	779.45	799.45	4.66	13.60	-43.28	347.04	344.82	477.65	460.28	17.38	27.489	
900.00	898.70	878.70	898.70	5.42	15.34	-44.42	347.04	344.82	468.83	449.30	19.53	24.002	
1,000.00	997.47	977.47	997.47	6.10	17.06	-45.94	347.04	344.82	457.74	436.09	21.64	21.148	
1,100.00	1,095.62	1,075.62	1,095.62	6.74	18.77	-47.89	347.04	344.82	444.57	420.86	23.71	18.747	
1,200.00	1,193.06	1,173.06	1,193.06	7.33	20.47	-50.31	347.04	344.82	429.62	403.88	25.75	16.686	
1,300.00	1,289.64	1,269.64	1,289.64	7.90	22.16	-53.28	347.04	344.82	413.27	385.52	27.75	14.892	
1,400.00	1,385.27	1,365.27	1,385.27	8.44	23.83	-56.86	347.04	344.82	396.02	366.28	29.74	13.316	
1,500.00	1,479.82	1,459.82	1,479.82	8.97	25.48	-61.13	347.04	344.82	378.55	346.81	31.74	11.926	
1,600.00	1,573.17	1,553.17	1,573.17	9.47	27.11	-66.14	347.04	344.82	361.74	327.95	33.79	10.705	
1,700.00	1,665.21	1,645.21	1,665.21	9.97	28.71	-71.92	347.04	344.82	346.71	310.78	35.94	9.648	
1,800.00	1,755.84	1,735.84	1,755.84	10.47	30.30	-78.42	347.04	344.82	334.87	296.63	38.23	8.759	
1,900.00	1,844.94	1,824.94	1,844.94	10.96	31.85	-85.51	347.04	344.82	327.78	287.08	40.70	8.054	
1,960.59	1,898.13	1,878.13	1,898.13	11.27	32.78	-90.00	347.04	344.82	326.50	284.22	42.28	7.723	CC
2,000.00	1,932.39	1,912.39	1,932.39	11.47	33.38	-92.96	347.04	344.82	327.08	283.76	43.31	7.552	ES
2,076.26	1,997.92	1,977.92	1,997.92	11.82	34.52	-98.68	347.04	344.82	331.69	286.35	45.34	7.316	
2,100.00	2,018.16	1,998.16	2,018.16	11.92	34.87	-100.49	347.04	344.82	334.10	288.15	45.96	7.270	
2,200.00	2,103.40	2,083.40	2,103.40	12.40	36.36	-107.83	347.04	344.82	348.96	300.46	48.50	7.195	SF
2,300.00	2,188.64	2,168.64	2,188.64	13.05	37.85	-114.61	347.04	344.82	370.66	319.77	50.89	7.283	
2,400.00	2,273.88	2,253.88	2,273.88	13.85	39.34	-120.74	347.04	344.82	398.08	344.97	53.12	7.495	
2,500.00	2,359.12	2,339.12	2,359.12	14.75	40.83	-126.17	347.04	344.82	430.14	374.94	55.20	7.792	
2,600.00	2,444.36	2,424.36	2,444.36	15.69	42.31	-130.95	347.04	344.82	465.87	408.69	57.18	8.147	
2,700.00	2,529.60	2,509.60	2,529.60	16.66	43.80	-135.12	347.04	344.82	504.51	445.42	59.09	8.539	
2,799.35	2,614.29	2,594.29	2,614.29	17.63	45.28	-138.74	347.04	344.82	545.15	484.22	60.93	8.947	
2,799.99	2,614.84	2,594.84	2,614.84	17.64	45.29	-138.76	347.04	344.82	545.42	484.47	60.94	8.950	
2,850.00	2,656.50	2,636.50	2,656.50	18.16	46.02	-140.27	347.04	344.82	567.95	506.07	61.87	9.179	
2,900.00	2,696.15	2,676.15	2,696.15	18.75	46.71	-141.45	347.04	344.82	593.54	530.71	62.83	9.447	
2,950.00	2,733.60	2,713.60	2,733.60	19.38	47.36	-142.30	347.04	344.82	622.10	558.37	63.73	9.761	
3,000.00	2,768.66	2,748.66	2,768.66	20.07	47.97	-142.83	347.04	344.82	653.50	588.93	64.57	10.120	
3,050.00	2,801.17	2,781.17	2,801.17	20.82	48.54	-143.00	347.04	344.82	687.59	622.24	65.36	10.521	
3,100.00	2,830.97	2,810.97	2,830.97	21.62	49.06	-142.77	347.04	344.82	724.19	658.12	66.07	10.960	
3,150.00	2,857.90	2,837.90	2,857.90	22.46	49.53	-142.06	347.04	344.82	763.11	696.39	66.72	11.437	
3,157.67	2,861.77	2,841.77	2,861.77	22.60	49.60	-141.90	347.04	344.82	769.26	702.45	66.81	11.514	
3,200.00	2,882.94	2,862.94	2,882.94	23.35	49.97	-143.28	347.04	344.82	803.51	736.23	67.28	11.942	
3,300.00	2,932.94	2,912.94	2,932.94	25.15	50.84	-146.22	347.04	344.82	885.17	816.79	68.38	12.944	
3,357.67	2,961.77	2,941.77	2,961.77	26.20	51.34	-147.74	347.04	344.82	932.67	863.66	69.01	13.514	
3,400.00	2,981.56	2,961.56	2,981.56	27.00	51.69	-145.13	347.04	344.82	968.41	898.95	69.46	13.943	
3,450.00	3,001.31	2,981.31	3,001.31	27.99	52.03	-140.86	347.04	344.82	1,012.44	942.51	69.93	14.478	
3,500.00	3,016.97	2,996.97	3,016.97	29.02	52.31	-134.65	347.04	344.82	1,058.13	987.82	70.31	15.049	
3,550.00	3,028.45	3,008.45	3,028.45	30.08	52.51	-125.44	347.04	344.82	1,105.11	1,034.53	70.59	15.656	
3,600.00	3,035.63	3,015.63	3,035.63	31.16	52.63	-111.83	347.04	344.82	1,153.03	1,082.26	70.76	16.294	
3,653.66	3,038.52	3,018.52	3,038.52	32.33	52.68	-91.67	347.04	344.82	1,205.05	1,134.21	70.84	17.010	
3,700.00	3,038.84	3,018.84	3,038.84	33.34	52.69	-91.74	347.04	344.82	1,250.16	1,179.30	70.86	17.642	
3,800.00	3,039.54	3,019.54	3,039.54	35.57	52.70	-91.88	347.04	344.82	1,347.80	1,276.90	70.90	19.010	
3,900.00	3,040.24	3,020.24	3,040.24	37.83	52.71	-92.02	347.04	344.82	1,445.76	1,374.82	70.93	20.382	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - West Ribbon Federal 1 32717 ACTIVE - 1 - AsDrilled

Offset Site Error: 0.00 usft

Survey Program: 100-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,000.00	3,040.94	3,020.94	3,040.94	40.11	52.73	-92.17	347.04	344.82	1,543.98	1,473.01	70.97	21.756	
4,100.00	3,041.64	3,021.64	3,041.64	42.41	52.74	-92.31	347.04	344.82	1,642.41	1,571.41	71.00	23.132	
4,200.00	3,042.33	3,022.33	3,042.33	44.73	52.75	-92.45	347.04	344.82	1,741.02	1,669.99	71.04	24.509	
4,300.00	3,043.03	3,023.03	3,043.03	47.07	52.76	-92.59	347.04	344.82	1,839.78	1,768.71	71.07	25.887	
4,400.00	3,043.73	3,023.73	3,043.73	49.42	52.77	-92.74	347.04	344.82	1,938.67	1,867.57	71.10	27.265	
4,500.00	3,044.43	3,024.43	3,044.43	51.78	52.79	-92.88	347.04	344.82	2,037.67	1,966.53	71.14	28.644	
4,600.00	3,045.13	3,025.13	3,045.13	54.15	52.80	-93.02	347.04	344.82	2,136.76	2,065.59	71.17	30.022	
4,700.00	3,045.83	3,025.83	3,045.83	56.53	52.81	-93.16	347.04	344.82	2,235.93	2,164.72	71.21	31.400	
4,800.00	3,046.53	3,026.53	3,046.53	58.92	52.82	-93.30	347.04	344.82	2,335.17	2,263.93	71.24	32.777	
4,872.09	3,047.03	3,027.03	3,047.03	60.64	52.83	-93.41	347.04	344.82	2,406.75	2,335.48	71.27	33.769	
4,900.00	3,047.23	3,027.23	3,047.23	61.31	52.84	-93.45	347.04	344.82	2,434.47	2,363.19	71.28	34.154	

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Offset Design Calmer Than You 5 Fed Com Pad - Yates Federal Cellier #1 00781 Plugged - 1 - 1 AsDrilled — **Offset Site Error:** 0.00 usft

Survey Program: 100-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,300.00	3,043.03	3,023.03	3,043.03	47.07	52.76	89.16	-1,108.31	4,379.28	2,493.53	2,414.70	78.83	31.633	
4,400.00	3,043.73	3,023.73	3,043.73	49.42	52.77	89.19	-1,108.31	4,379.28	2,403.56	2,323.29	80.27	29.945	
4,500.00	3,044.43	3,024.43	3,044.43	51.78	52.79	89.23	-1,108.31	4,379.28	2,314.41	2,232.56	81.86	28.274	
4,600.00	3,045.13	3,025.13	3,045.13	54.15	52.80	89.27	-1,108.31	4,379.28	2,226.19	2,142.59	83.61	26.626	
4,700.00	3,045.83	3,025.83	3,045.83	56.53	52.81	89.31	-1,108.31	4,379.28	2,139.01	2,053.47	85.54	25.007	
4,800.00	3,046.53	3,026.53	3,046.53	58.92	52.82	89.34	-1,108.31	4,379.28	2,052.99	1,965.34	87.65	23.422	
4,872.09	3,047.03	3,027.03	3,047.03	60.64	52.83	89.37	-1,108.31	4,379.28	1,991.80	1,902.49	89.30	22.304	
4,900.00	3,047.23	3,027.23	3,047.23	61.31	52.84	89.38	-1,108.31	4,379.28	1,968.30	1,878.33	89.97	21.877	
5,000.00	3,047.92	3,027.92	3,047.92	63.71	52.85	89.42	-1,108.31	4,379.28	1,885.11	1,792.60	92.51	20.377	
5,100.00	3,048.62	3,028.62	3,048.62	66.11	52.86	89.46	-1,108.31	4,379.28	1,803.63	1,708.34	95.29	18.928	
5,200.00	3,049.32	3,029.32	3,049.32	68.52	52.87	89.49	-1,108.31	4,379.28	1,724.10	1,625.78	98.32	17.535	
5,300.00	3,050.02	3,030.02	3,050.02	70.94	52.88	89.53	-1,108.31	4,379.28	1,646.81	1,545.19	101.62	16.205	
5,400.00	3,050.72	3,030.72	3,050.72	73.35	52.90	89.57	-1,108.31	4,379.28	1,572.09	1,466.89	105.20	14.943	
5,500.00	3,051.41	3,031.41	3,051.41	75.78	52.91	89.61	-1,108.31	4,379.28	1,500.32	1,391.25	109.07	13.756	
5,600.00	3,052.11	3,032.11	3,052.11	78.20	52.92	89.64	-1,108.31	4,379.28	1,431.94	1,318.73	113.22	12.648	
5,700.00	3,052.81	3,032.81	3,052.81	80.63	52.93	89.68	-1,108.31	4,379.28	1,367.47	1,249.84	117.64	11.624	
5,800.00	3,053.51	3,033.51	3,053.51	83.06	52.94	89.72	-1,108.31	4,379.28	1,307.48	1,185.19	122.29	10.692	
5,900.00	3,054.20	3,034.20	3,054.20	85.49	52.96	89.76	-1,108.31	4,379.28	1,252.62	1,125.49	127.12	9.853	
6,000.00	3,054.90	3,034.90	3,054.90	87.92	52.97	89.79	-1,108.31	4,379.28	1,203.58	1,071.53	132.05	9.115	
6,100.00	3,055.60	3,035.60	3,055.60	90.36	52.98	89.83	-1,108.31	4,379.28	1,161.11	1,024.16	136.95	8.478	
6,190.56	3,056.23	3,036.23	3,056.23	92.56	52.99	89.87	-1,108.31	4,379.28	1,128.94	987.69	141.25	7.993	
6,200.00	3,056.30	3,036.30	3,056.30	92.79	52.99	89.87	-1,108.31	4,379.28	1,125.95	984.27	141.68	7.947	
6,300.00	3,056.99	3,036.99	3,056.99	95.23	53.01	89.91	-1,108.31	4,379.28	1,098.79	952.73	146.06	7.523	
6,400.00	3,057.69	3,037.69	3,057.69	97.67	53.02	89.94	-1,108.31	4,379.28	1,080.23	930.32	149.92	7.206	
6,500.00	3,058.39	3,038.39	3,058.39	100.12	53.03	89.98	-1,108.31	4,379.28	1,070.73	917.65	153.08	6.994	
6,552.23	3,058.75	3,038.75	3,058.75	101.39	53.04	90.00	-1,108.31	4,379.28	1,069.46	915.04	154.42	6.926	CC, ES
6,600.00	3,059.08	3,039.08	3,059.08	102.56	53.04	90.02	-1,108.31	4,379.28	1,070.52	915.08	155.44	6.887	
6,700.00	3,059.78	3,039.78	3,059.78	105.00	53.05	90.06	-1,108.31	4,379.28	1,079.61	922.69	156.92	6.880	SF
6,800.00	3,060.48	3,040.48	3,060.48	107.45	53.07	90.09	-1,108.31	4,379.28	1,097.76	940.24	157.52	6.969	
6,900.00	3,061.18	3,041.18	3,061.18	109.90	53.08	90.13	-1,108.31	4,379.28	1,124.55	967.22	157.33	7.148	
7,000.00	3,061.87	3,041.87	3,061.87	112.35	53.09	90.17	-1,108.31	4,379.28	1,159.36	1,002.92	156.44	7.411	
7,100.00	3,062.57	3,042.57	3,062.57	114.79	53.10	90.20	-1,108.31	4,379.28	1,201.51	1,046.50	155.01	7.751	
7,200.00	3,063.27	3,043.27	3,063.27	117.24	53.12	90.24	-1,108.31	4,379.28	1,250.24	1,097.09	153.15	8.163	
7,300.00	3,063.97	3,043.97	3,063.97	119.70	53.13	90.28	-1,108.31	4,379.28	1,304.83	1,153.82	151.01	8.641	
7,400.00	3,064.67	3,044.67	3,064.67	122.15	53.14	90.32	-1,108.31	4,379.28	1,364.57	1,215.87	148.70	9.177	
7,500.00	3,065.36	3,045.36	3,065.36	124.60	53.15	90.35	-1,108.31	4,379.28	1,428.82	1,282.52	146.30	9.766	
7,600.00	3,066.06	3,046.06	3,066.06	127.05	53.16	90.39	-1,108.31	4,379.28	1,496.99	1,353.11	143.88	10.404	
7,700.00	3,066.76	3,046.76	3,066.76	129.51	53.18	90.43	-1,108.31	4,379.28	1,568.57	1,427.08	141.49	11.086	
7,800.00	3,067.46	3,047.46	3,067.46	131.96	53.19	90.47	-1,108.31	4,379.28	1,643.12	1,503.95	139.17	11.807	
7,900.00	3,068.16	3,048.16	3,068.16	134.42	53.20	90.50	-1,108.31	4,379.28	1,720.25	1,583.32	136.93	12.563	
8,000.00	3,068.86	3,048.86	3,068.86	136.87	53.21	90.54	-1,108.31	4,379.28	1,799.63	1,664.84	134.79	13.351	
8,100.00	3,069.55	3,049.55	3,069.55	139.33	53.22	90.58	-1,108.31	4,379.28	1,880.98	1,748.22	132.76	14.168	
8,200.00	3,070.25	3,050.25	3,070.25	141.78	53.24	90.62	-1,108.31	4,379.28	1,964.04	1,833.20	130.84	15.011	
8,300.00	3,070.95	3,050.95	3,070.95	144.24	53.25	90.65	-1,108.31	4,379.28	2,048.62	1,919.60	129.03	15.878	
8,400.00	3,071.65	3,051.65	3,071.65	146.70	53.26	90.69	-1,108.31	4,379.28	2,134.53	2,007.21	127.32	16.765	
8,500.00	3,072.35	3,052.35	3,072.35	149.15	53.27	90.73	-1,108.31	4,379.28	2,221.62	2,095.91	125.71	17.672	
8,600.00	3,073.05	3,053.05	3,073.05	151.61	53.29	90.77	-1,108.31	4,379.28	2,309.75	2,185.55	124.20	18.597	
8,700.00	3,073.75	3,053.75	3,073.75	154.07	53.30	90.80	-1,108.31	4,379.28	2,398.81	2,276.03	122.78	19.538	
8,724.51	3,073.92	3,053.92	3,073.92	154.67	53.30	90.81	-1,108.31	4,379.28	2,420.76	2,298.32	122.44	19.770	
8,800.00	3,074.45	3,054.45	3,074.45	156.53	53.31	90.84	-1,108.31	4,379.28	2,488.70	2,367.25	121.44	20.493	

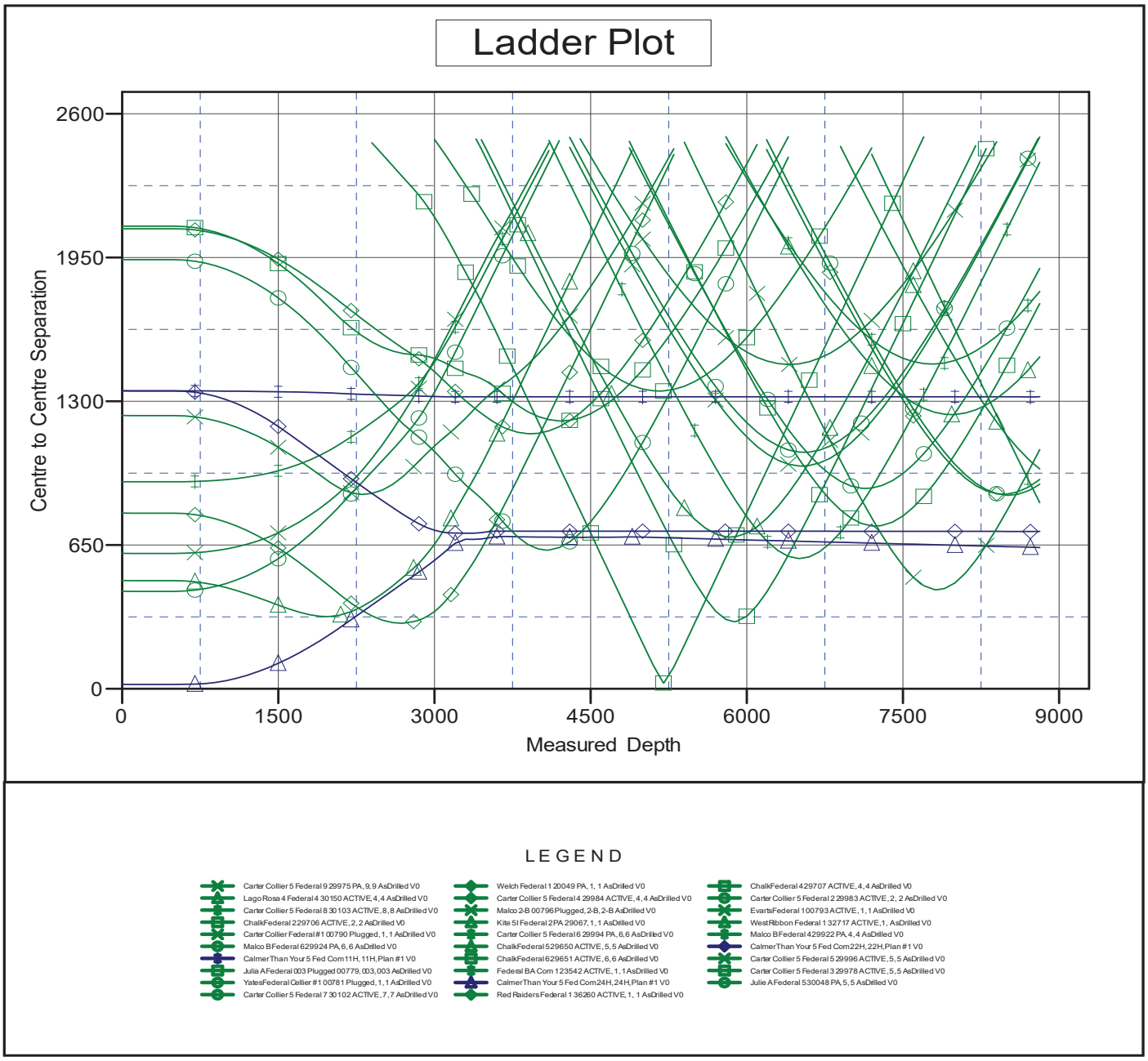
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to 3468+20 @ 3488.00usft (Savanna)
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Calmer Than Your 5 Fed Com 13H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.01°



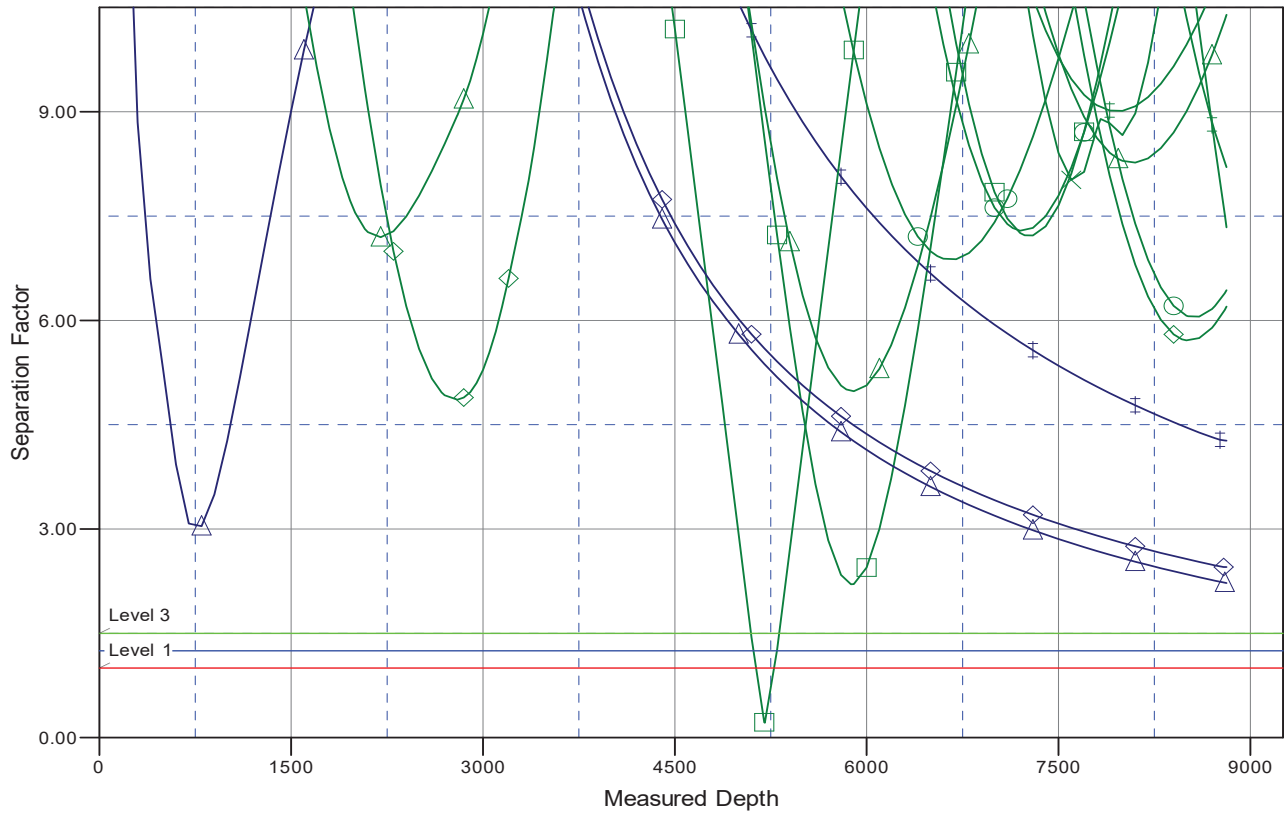
Anticollision Report

Company:	RILEY PERMIAN OPERATING CO,. LLC	**Local Co-ordinate Reference:**	Well Calmer Than Your 5 Fed Com 13H
Project:	Eddy County, NM (NAD83) NMEZ Grid	**TVD Reference:**	3468+20 @ 3488.00usft (Savanna)
Reference Site:	Calmer Than You 5 Fed Com Pad	**MD Reference:**	3468+20 @ 3488.00usft (Savanna)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Calmer Than Your 5 Fed Com 13H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	13H	**Database:**	EDM 5000.1 Single User Db
Reference Design:	Plan #1	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to 3468+20 @ 3488.00usft (Savanna)
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Calmer Than Your 5 Fed Com 13H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.01°

Separation Factor Plot



LEGEND

Carter Collier 5 Federal 9 29975 PA, 9, 9 AsDrilled V0
Lago Rosa 4 Federal 4 30150 ACTIVE, 4, 4 AsDrilled V0
Carter Collier 5 Federal 8 30103 ACTIVE, 8, 8 AsDrilled V0
ChalkFederal 229706 ACTIVE, 2, 2 AsDrilled V0
Carter Collier Federal #1 00790 Plugged, 1, 1 AsDrilled V0
Malco B Federal 629924 PA, 6, 6 AsDrilled V0
Calmer Than Your 5 Fed Com 11H, 11H, Plan #1 V0
Julia A Federal 003 Plugged 00779, 003, 003 AsDrilled V0
Yates Federal Cellier #1 00781 Plugged, 1, 1 AsDrilled V0
Carter Collier 5 Federal 7 30102 ACTIVE, 7, 7 AsDrilled V0
Welch Federal 1 20049 PA, 1, 1 AsDrilled V0
Carter Collier 5 Federal 4 29984 ACTIVE, 4, 4 AsDrilled V0
Malco 2-B 00796 Plugged, 2-B, 2-B AsDrilled V0
Kite 5 I Federal 2 PA 29067, 1, 1 AsDrilled V0
Carter Collier 5 Federal 6 29994 PA, 6, 6 AsDrilled V0
ChalkFederal 529650 ACTIVE, 5, 5 AsDrilled V0
ChalkFederal 629651 ACTIVE, 6, 6 AsDrilled V0
Federal BA Com 123542 ACTIVE, 1, 1 AsDrilled V0
Calmer Than Your 5 Fed Com 24H, 24H, Plan #1 V0
Red Raiders Federal 1 36260 ACTIVE, 1, 1 AsDrilled V0
ChalkFederal 429707 ACTIVE, 4, 4 AsDrilled V0
Carter Collier 5 Federal 2 29983 ACTIVE, 2, 2 AsDrilled V0
Evarts Federal 100793 ACTIVE, 1, 1 AsDrilled V0
West Ribbon Federal 1 32717 ACTIVE, 1, AsDrilled V0
Malco B Federal 429922 PA, 4, 4 AsDrilled V0
Calmer Than Your 5 Fed Com 22H, 22H, Plan #1 V0
Carter Collier 5 Federal 5 29996 ACTIVE, 5, 5 AsDrilled V0
Carter Collier 5 Federal 3 29978 ACTIVE, 5, 5 AsDrilled V0
Julie A Federal 530048 PA, 5, 5 AsDrilled V0

DRILLING PROGRAM

Riley Exploration-Permian, LLC

Calmer Than You South Pad

Calmer Than You 5 Fed Com 13H

Lot G Section 6, Township 18 South, Range 27 East, 6th P.M.

Eddy County, New Mexico

Owner: Bureau of Land Management

Land code: Exempt Agricultural Land

1. Geologic Name of Surface Formation

Quaternary

Estimated Tops of Important Geologic Markers:

Top	Subsea	Top from KB	Lithology	Expected Fluids
Seven Rivers	3,275	**213**	Salt	Usable Water
Queen	2,806	**682**	ANHY/Dolomite	None
Grayburg	2,407	**1,081**	ANHY/Dolomite	Natural Gas, Oil
San Andres	2,138	**1,350**	ANHY/Dolomite	Natural Gas, Oil
Glorieta	809	**2,679**	ANHY/Dolomite	Natural Gas, Oil
Paddock	725	**2,763**	ANHY	Natural Gas, Oil
Target	460	**3,028**		Natural Gas, Oil
Blinebry	329	**3,159**	Dolomite	Natural Gas, Oil
Tubb	-667	**4,155**		

Target @ 0' VS	TVD	INC
	3,025	**89.60**

2. Blowout Prevention

Variance Requested for flex hose

Riley Permian requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available from manufacturer on site. No external damage to the flex line. Flex line to be installed as straight as possible with no bends.

Riley Permian will be utilizing a 5M BOP

Condition	Specify what type and where?
BH Pressure at Deepest TVD	~2,750 psi
Abnormal Temperature	No
BH Temperature at Deepest TVD	110-deg F

BOP/BOPE will be tested by an independent service company to 250 psi low and 70% of working pressure high unless otherwise required, as per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed with be functional and tested.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.

	Y	Are anchors required by manufacturer?
	A conventional wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. See attached schematics.	

3. BOP Break Testing Request

Riley Exploration Permian LLC requests permission to adjust the BOP break testing requirements as follows:

BOP break test under the following conditions:

- After a full BOP test is conducted
- When skidding to drill the production section, where the surface casing point is shallower than the 3 Bone Spring or 10,000' TVD
- When skidding to drill a production section that does not penetrate the 3rd Bone Spring or deeper

If the kill line is broken prior to skid, four tests will be performed:

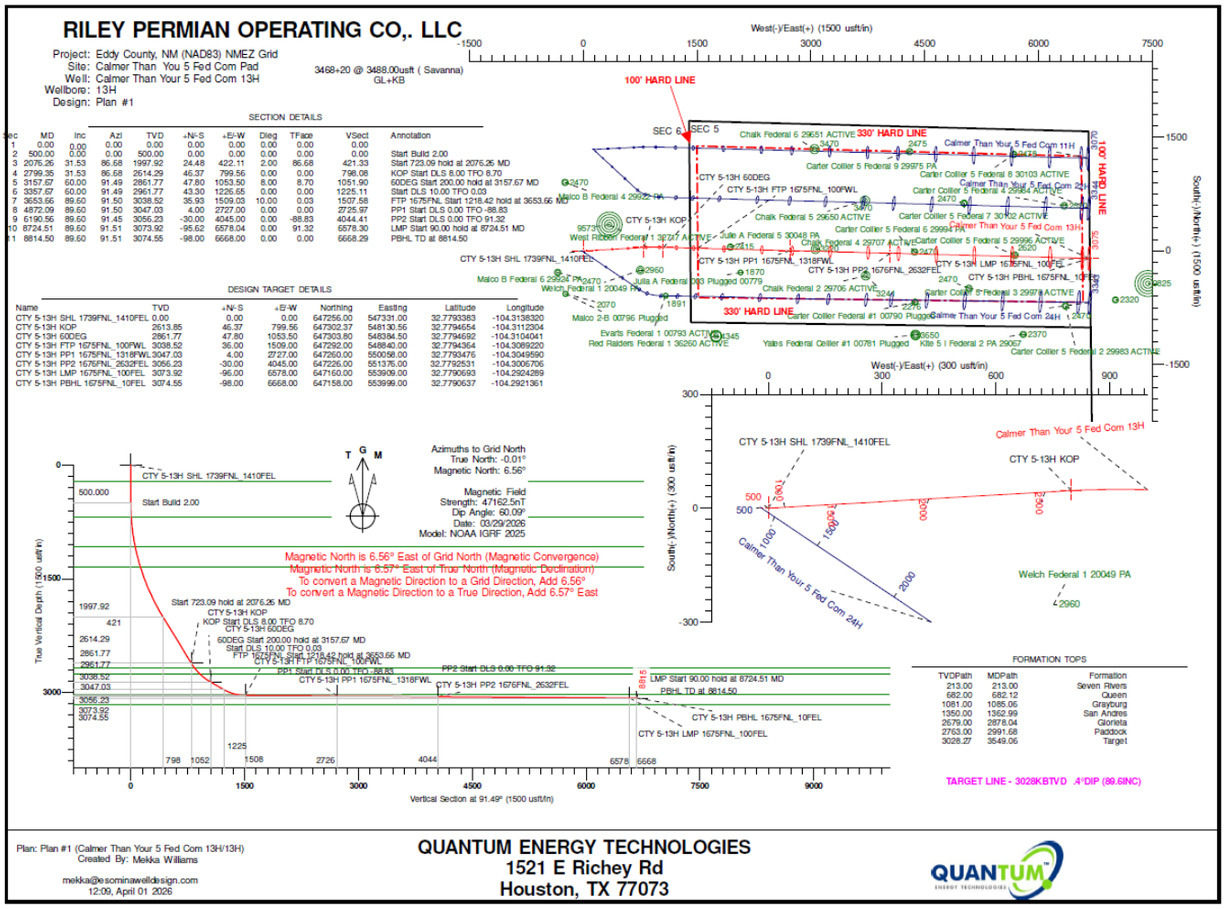
- The void between the wellhead and the spool (one on each side for two tests)
- The spool between the kill lines and the choke manifold (consisting of two tests)

If the kill line is not broken prior to skid, two tests will be performed:

- The void between the wellhead and the pipe rams

4. Proposed Directional Plan

	MD	TVD	Latitude	Longitude
Surface Hole Location	-	-	32.7793383	-104.3138320
Kick Off Point	2,799	2,614	32.7794654	-104.3112304
Bottom Hole Location	8,814	3,074	32.7790637	-104.2921361



5. Proposed Casing Program

All casing strings will be test in accordance with onshore oil and gas order #2 III.B.1.h.

Casing String Type	Hole Size (in.)	Casing Interval		Casing Size (in.)	Weight (lbs.)	Grade	Conn.	SF Collapse	SF Burst	Body SF Tension	Joint SF Tension
		From (ft.)	To (ft.)								
Surface	12.25	0	1250	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
Production	8.75	0	3300	7	32	HCL-80	BTC	1.125	1.2	1.4	1.4
Production	8.75	3300	8814	5.5	20	HCL-80	BTC	1.125	1.2	1.4	1.4
								SF Values will MEET or EXCEED			

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

6. Proposed Cement Program:

Casing String	Top (ft.)	Bottom (ft.)	% Excess
Surface (Lead)	0	950	100%
Surface (Tail)	950	1250	100%
Production (Lead)	0	2300	35%+
Production (Tail)	2300	8814	35%+

Casing String	# Sx	Wt. (lb./gal)	Yld (ft3/sk)	H20 (gal/sk)	500# Compressive Strength (hours)	Slurry Description	Additives, Comments
Surface (lead)	450	12.8	1.43	6.65	6:44	50/50 Poz C Premium Plus	20 bbl gel spacer, 50sx of 11# scavenger cement
Surface (tail)	195	14.8	1.33	6.32	8:05	Class C Premium Plus	50sx of 11# scavenger cement
Production (lead)	200	11.5	2.29	12.63	N/A	50/50 Poz C Premium Plus	20 bbl gel spacer, 50sx of 11# scavenger cement
Production (tail)	1575	13.7	1.31	5.61	N/A	35/65 Poz C Premium Plus	50sx of 11# scavenger cement

7. Types and Characteristics of the Proposed Mud System:

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Saltwater Clay, CACL2. Riley will utilize a closed mud system.

Depth		Type	Weight (ppg)	PH	Viscosity (cp)	Water Loss
From (ft.)	To (ft.)					
0	1250	Water-Based Spud Mud	8.6 – 8.9	11	29-33	N/C
1250	TD	Water-Based Mud (Cut Brine)	8.3 – 9.0	11	29-33	N/C

PVT/Pason/Visual Monitoring will be used to monitor the loss or gain of fluid and digitally recorded.

8. Logging, Testing and Coring Program:

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

Additional logs planned		Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	SCP - TD
No	PEX	

9. Drilling Conditions

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT (Pason), digitally recorded. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Estimated bottom hole at TD is 110 degrees. Low levels of Hydrogen sulfide have been monitors in producing wells in the area, so H2S may be present while drilling of the well; a plan is attached to the Drilling program. No major loss of circulation zones has been reported in offsetting wells.

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

NOTES REGARDING THE BLOWOUT PREVENTERS

Calmer Than You 5 Fed Com 13H

Eddy County, New Mexico

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.

2. Wear ring to be properly installed in head.

3. Blow out preventer and all fittings must be in good condition, 3000 psi WP minimum.

4. All fittings to be flanged.

5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 3000 psi WP minimum.

6. All choke and fill lines to be securely anchored especially ends of choke lines.

7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.

8. Kelly cock on Kelly.

9. Extension wrenches and hands wheels to be properly installed.

10. Blow out preventer control to be located as close to driller's position as feasible.

11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.

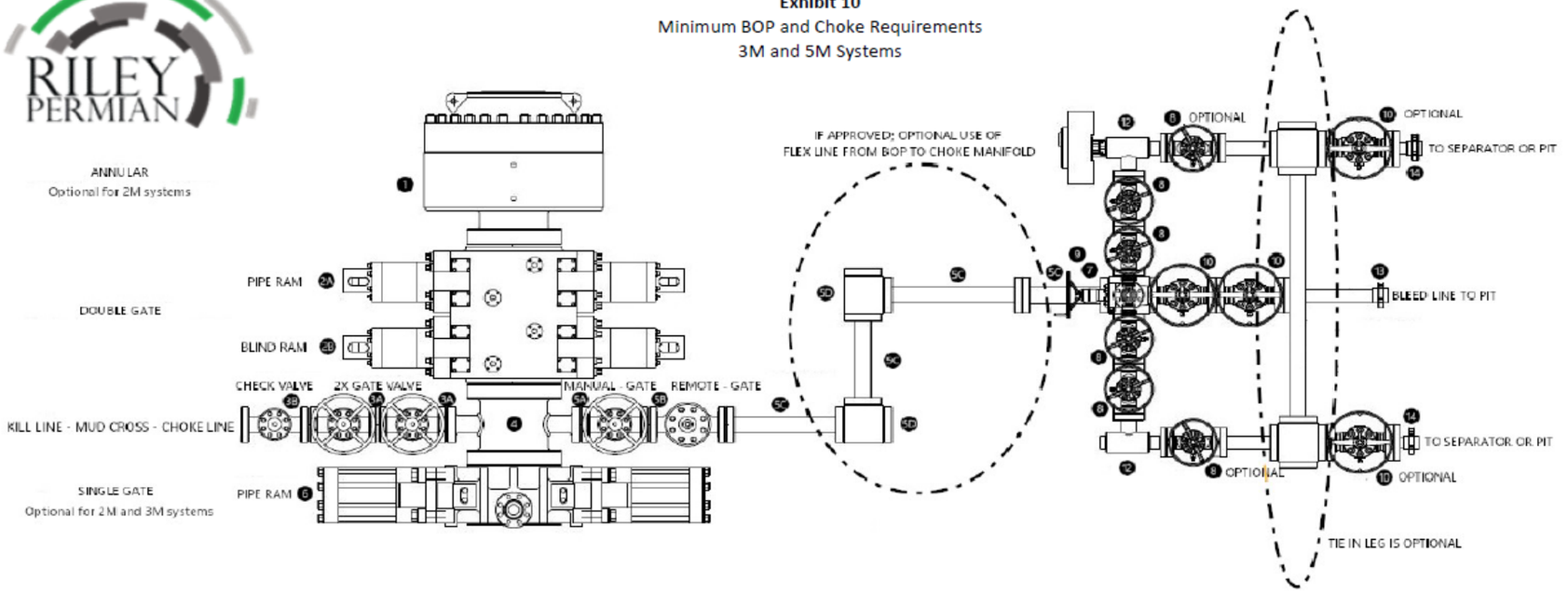
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Riley Permian

Exhibit 10

Minimum BOP and Choke Requirements

3M and 5M Systems



BOP - Minimum Requirements						
	Description		ID (in.)	Nom. OD (in.)	Optional	Note
1	Annular				Yes - 2M	
2A	Double Gate	Pipe Ram	3 1/8		No	
2B		Blind Ram				
3A	Kill Line	Gate	2		No	
3A		Gate				
3B		Check Valve				
		Line		2		
4	Mud Cross		2 1/16		No	Kill Line - 2" min. Choke Line - 3" min.
5A	Choke Line	Gate - Manual (2)	3 1/8		No	
5B		Gate - Remote (2)				
5C		Line		3	No	
5D		Targeted Tee			No	
6	Single Gate - Pipe Ram				Yes - 2M and 3M	

(1) Only one required in 2M system
(2) Choke line valve order is interchangable
(3) Remote operated hydraulic choke required on 5M and 10M systems

Choke Manifold - Minimum Requirements											
			3000 MWP			5000 MWP			10000 MWP		
	Description		ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)	ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)	ID (in.)	Nominal OD (in. unless otherwise noted)	Rating (psi)
7	Cross - 3" x 3" x 3" x 2"				3,000			5,000			10,000
8	Valve	Gate (2)	2 1/16		3,000	2 1/16		5,000	3 1/8		10,000
		Plug									
9	Pressure Gauge				3,000			5,000			10,000
10	Valve	Gate (2)	3 1/8		3,000	3 1/8		5,000	3 1/8		10,000
		Plug									
11	Remote Operated Adjustable Choke (3)		2 1/16		3,000			5,000			10,000
12	Manual Adjustable Choke		2 1/16		3,000			5,000			10,000
13	Line			3	3,000		3	5,000		3	10,000
14	Line			2	3,000		2	5,000		2	10,000
15	Gas Separator (4)			2' x 5'			2' x 5'			2' x 5'	

(1) Only one required in 2M system
(2) Gate valves only to be used for 10M system
(3) Remote chokes are required for 5M and 10M systems
(4) Gas separator is optional for 2M and 3M systems

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Released to Imaging: 11/18/2026 1:59:10 PM

Riley Permian Operating Company, LLC

Onshore Order #6
Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards an characteristics of hydrogen sulfide (H2S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H2S detectors alarms warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H2S on metal components. If high tensile tubular are to be used, personnel well be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H2S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. **The concentrations of H2S of wells in this area from surface to TD are low enough that a contingency plan is not required.**

II. H2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H2S.

1. Well Control Equipment:

A. Flare line.
B. Choke manifold.
C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
D. Auxiliary equipment may include if applicable: annular preventer & rotating head.

2. Protective equipment for essential personnel:

A. Mark II Survive air 30-minute units located in the doghouse and at briefing areas, as indicated on well site diagram.

3. H2S detection and monitoring equipment:

A. 3x portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

4. Visual warning systems:

A. Wind direction indicators as shown on well site diagram (Exhibit #8).
B. Caution/Danger signs (Exhibit #7) shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

5. Mud program:

A. The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

6. Metallurgy:

A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
B. All elastomers used for packing and seals shall be H2S trim.

7. Communication:

A. Radio communications in company vehicles including cellular telephone and 2-way radio.
B. Land line (telephone) communication at Office.

8. Well testing:

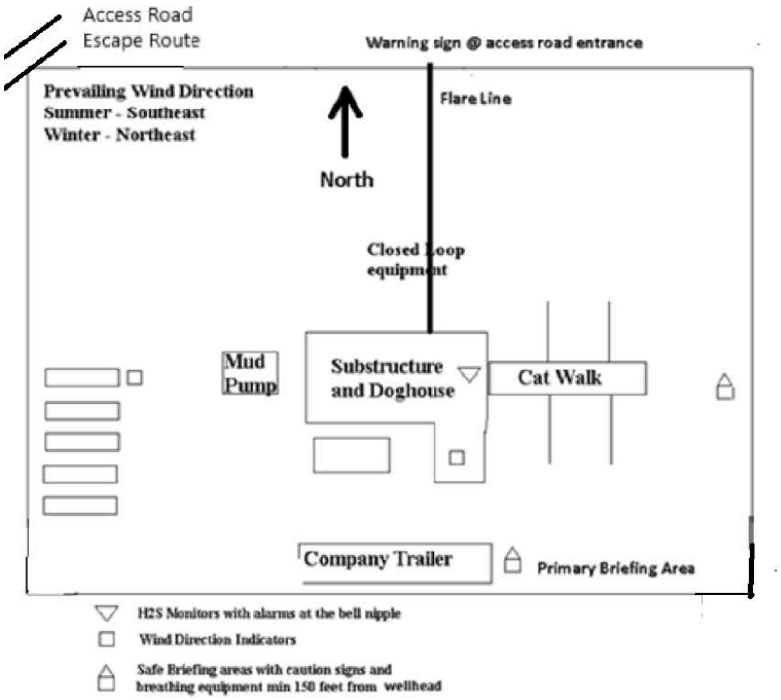
A. There will be no drill stem testing.

WARNING

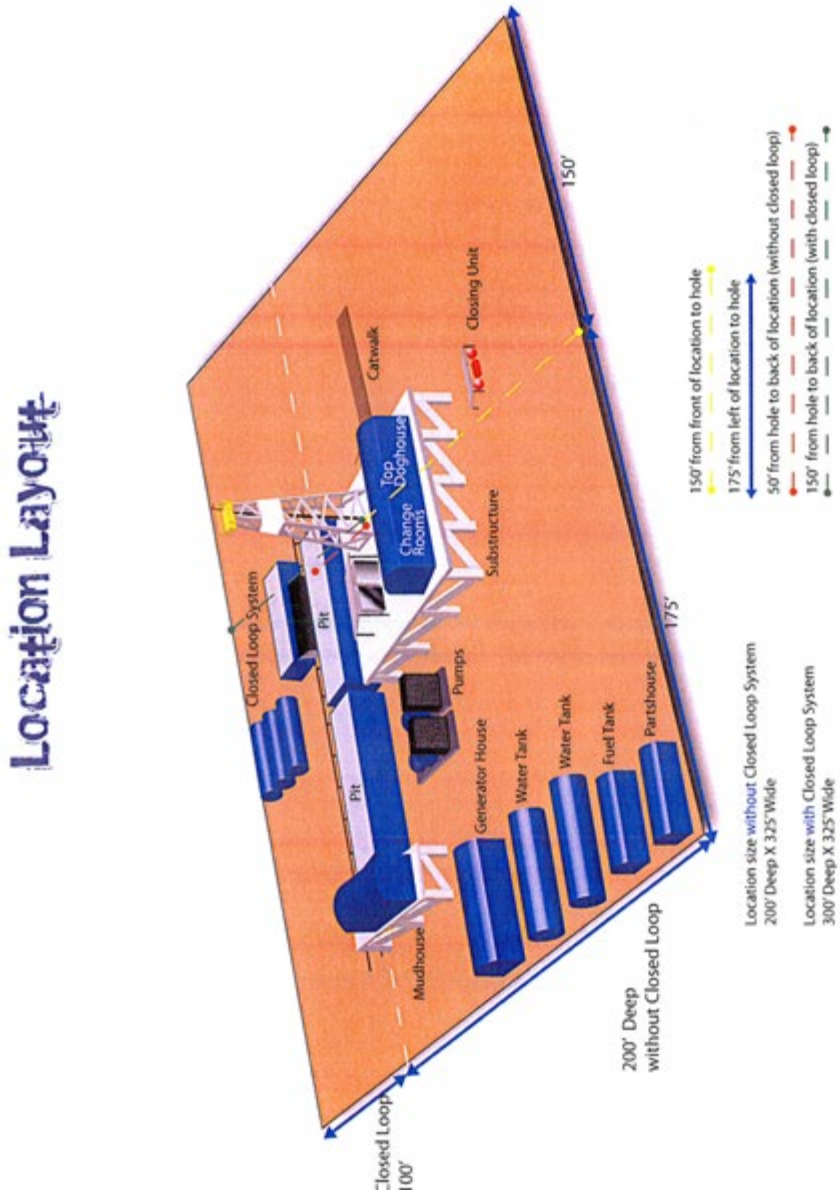
YOU ARE ENTERING AN H2S AREA
AUTHORIZED PERSONNEL ONLY

1. BEARDS OR CONTACT LENSES NOT ALLOWED
2. HARD HATS REQUIRED
3. SMOKING IN DESIGNATED AREAS ONLY
4. BE WIND CONSCIOUS AT ALL TIMES
5. CHECK WITH RILEY PERMIAN OPERATING COMPANY MAN AT OFFICE

RILEY PERMIAN OPERATING COMPANY, LLC
1-405-415-8699



DRILLING LOCATION H2S SAFTY EQUIPMENT
Exhibit # 8



EMERGENCY CONTACT LIST – EDDY COUNTY

Artesia	Cellular	Office
Spence Laird	575-703-7382	405-420-8415
Steve Forister	505-400-4571	405-666-0113
Travis Kerr	713-823-6933	
Justing Sappington	361-550-0494	

Agency Call List (575)

Artesia

State Police.....746-2703

City Police.....746-2703

Sheriff's Office.....746-9888

Ambulance.....911

Fire Department.....746-2701

LEPC (Local Emergency Planning Committee.....746-2122

NMOCD.....748-1283

Carlsbad

State Police.....885-3137

City Police.....885-2111

Sheriff's Office.....887-7551

Ambulance.....911

Fire Department.....885-2111

LEPC (Local Emergency Planning Committee.....887-3798

Bureau of Land Management.....887-6544

New Mexico Emergency Response Commission.....(505)476-9690

24 Hour.....(505)827-9126

National Emergency Response Center (Washington)……(800)424-8802

Emergency Services

Boots & Coots IWC……1-800-256-9688 or (281)931-8884

Cudd pressure Control…….(915)699-0139 or (915)563-3356

Halliburton……..746-2757

Par Five……..748-9539

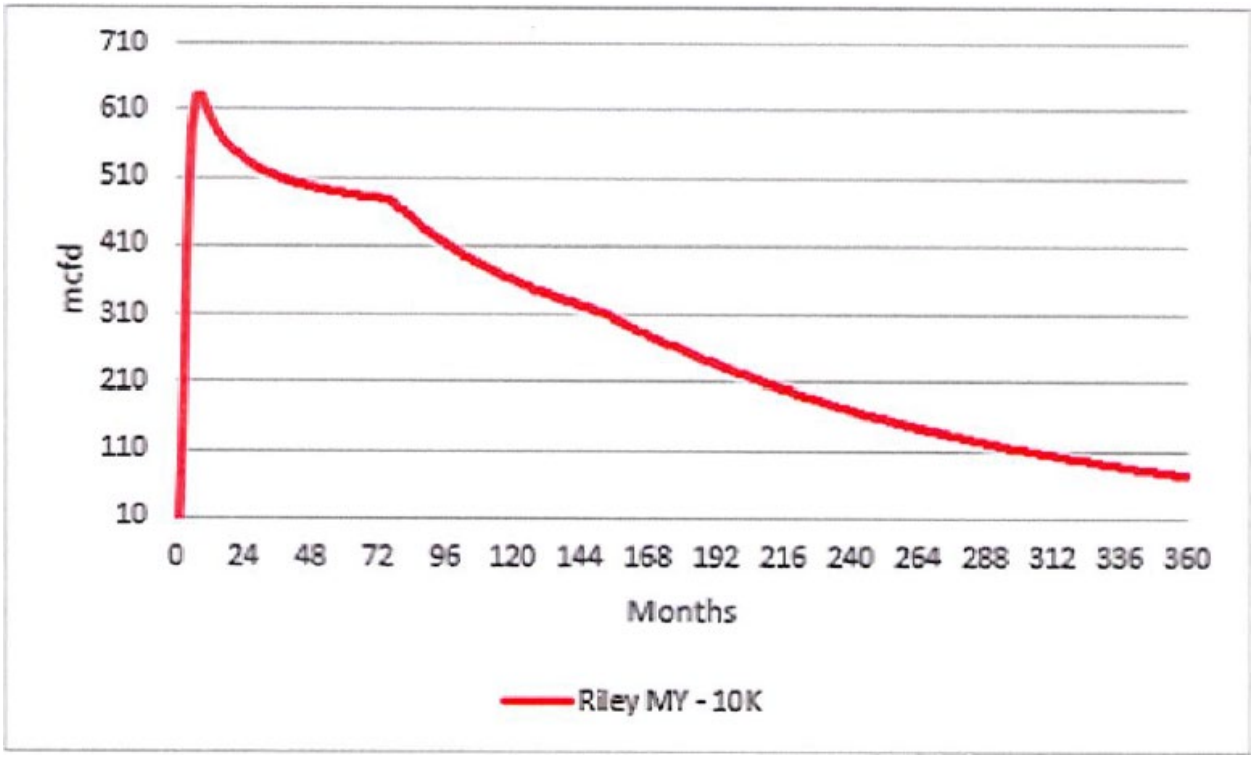
Flight For Life-Lubbock, TX……(806)743-9911

Aerocare-Lubbock, TX……..(806)747-8923

Med Flight Air Amb-Albuquerque, NM…….(505)842-4433

Lifeguard Air Med Svc. Albuquerque, NM……(505)272-3115

Calmer Than You 5 Fed Com 13H Gas Plot



Waste Minimization Plan

Riley Exploration-Permian, LLC

Wells: Calmer Than You 5 Fed Com 11H, Calmer Than You 5 Fed Com 22H, Calmer Than You 5 Fed Com 13H, Calmer Than You 5 Fed Com 24H

I. Anticipated Oil Production Rates

The anticipated initial oil production rates for all the proposed Calmer Than You oil-wells are ~450 bopd, reducing to under 100 bopd over the first 3 years of production.

II. Anticipated Gas Production Rates

The anticipated initial gas production rates for all the proposed Calmer Than You oil-wells are ~700 mcfd, reducing to under 600 mcfd over the first 3 years of production.

III. Gas Sales Contract Certification

Please see attached for the self-certification of an executed gas sales contract to sell to a purchaser 100 percent of the produced oil-well gas, less gas anticipated for use on-lease pursuant to 43 CFR subpart 3178.

IV. Minimization of Production Gas Waste

Riley Permian commits to the sale of 100 percent of produced oil-well gas barring emergency situations where flaring may be required. Field staff will regularly test pipes, fittings, and production equipment for leaks and will repair leaks as soon as practicable to minimize production gas waste.

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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: Riley Permian Operating Company, LLC **OGRID:** 372290 **Date:** 3 / 10 / 2026

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
Calmer Than You 5 Fed Com 11H	30-015-Pending	1-6-18S-27E	397 FNL, 1245 FEL	450	700	4,000
Calmer Than You 5 Fed Com 22H	30-015-Pending	1-6-18S-27E	397 FNL, 1265 FEL	450	700	4,000
Calmer Than You 5 Fed Com 13H	30-015-Pending	G-6-18S-27E	1739 FNL, 1410 FEL	450	700	4,000
Calmer Than You 5 Fed Com 24H	30-015-Pending	G-6-18S-27E	1737 FNL, 1430 FEL	450	700	4,000

IV. Central Delivery Point Name: Calmer Than You South 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
Calmer Than You 5 Fed Com 11H	30-015-Pending	7/5/2027	7/12/2027	9/15/2027	11/1/2027	11/1/2027
Calmer Than You 5 Fed Com 22H	30-015-Pending	7/13/2027	7/19/2027	9/15/2027	11/1/2027	11/1/2027
Calmer Than You 5 Fed Com 13H	30-015-Pending	7/20/2027	7/27/2027	9/15/2027	11/1/2027	11/1/2027
Calmer Than You 5 Fed Com 24H	30-015-Pending	7/28/2027	8/5/2027	9/15/2027	11/1/2027	11/1/2027

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

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

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

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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.

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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.

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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:	
Printed Name:	Alex Rizzo
Title:	Senior Regulatory Specialist
E-mail Address:	alexrizzo@rileypermian.com
Date:	3/10/2026
Phone:	918-839-2995

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

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

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Natural Gas Management Plan – Attachment

VI. Separation equipment will be sized by construction engineering staff based on anticipated daily production to ensure adequate capacity.

VII. Riley Permian Operating Company LLC ("Riley") will take the following actions to comply with the regulations listed in 19.15.27.8:

A. Riley will maximize the recovery of natural gas by minimizing waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. Spur will ensure that our wells will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.

B. All drilling operations will be equipped with a rig flare at least 100 feet from the nearest surface hole location. Rig flare will be utilized to combust any natural gas that is brought to surface during normal operations. In the case of emergency, flaring volumes will be reported appropriately.

C. During completion operations any natural gas brought to surface will be flared. Immediately following completion operations, wells will flow to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. If natural gas does not meet gathering pipeline specifications, Riley will flare for 60 days or until natural gas meets the pipeline specifications. Riley will ensure flare is properly sized and is equipped with an automatic igniter or continuous pilot. Gas samples will be taken twice per week and natural gas will be routed into a gathering system as soon as the pipeline specifications are met.

D. Natural gas will not be flared with the exception of 19.15.27.8(D)(1-4). If there is no adequate takeaway for the separator gas, wells will be shut-in until that natural gas gathering system is available with exception of emergency or malfunction situations. Volumes will be reported appropriately.

E. Riley will comply with performance standards pursuant to 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressures to minimize waste. Storage tanks constructed after May 25, 2021 will be equipped with an automatic gauging system that reduces venting of natural gas. Flare stacks installed or replaced after May 25, 2021 will be equipped with an automatic ignitor or continuous pilot. Riley 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 or malfunctions will be resolved as quickly and safely as possible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of an emergency or malfunction during drilling and/or completion operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared, or beneficially used during production operations will be measured and reported accordingly. Riley will install equipment to measure the volume of natural gas flared from existing piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or VRUs associated with a well of facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production of less than 60,000 cubic feet of natural gas.

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If metering is not practicable due to circumstances such as low flow rate or low pressure venting or flaring, Riley will estimate the volume of flared or vented natural gas. Measuring equipment will conform to industry standards and will not be equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing equipment.

VIII. For maintenance activities involving production equipment and compression, venting be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment, the associated producing wells will be shut-in to eliminate venting. For maintenance of VRUs, all natural gas normally routed to the VRU will be routed to flare.

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

SUPO Data Report
10/26/2026

APD ID: 10400112521 **Submission Date:** 06/18/2026

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Calmer_Than_You_5_Fed_Com_Drone_Review_Meeting_Notes_R1_Contours_20260617120942.pdf
Calmer_Than_You_5_Fed_Com_Drone_Review_Meeting_Notes_R1_Imagery_20260617120946.pdf

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

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

Existing Road Improvement Description: Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on this lease.

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

EP_CALMER_THAN_YOU_5_FED_COM_SOUTH_PAD_ACCESS_ROAD_SEC6_20260617121725.pdf

New road type: RESOURCE

Length: 395 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: 24

New road access erosion control: N/A

New road access plan or profile prepared? N

New road access plan

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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: 0

Offsite topsoil source description:

Onsite topsoil removal process: 0

Access other construction information: Topsoil will be stockpiled along side the pad and then used for interim reclamation where caliche is picked up. Access roads are constructed to provide safe and reliable transportation of equipment, materials, and personnel to the well site. The process begins with route selection to minimize environmental impacts and avoid sensitive areas such as wetlands, steep slopes, and riparian zones. Clearing and grubbing remove vegetation and obstacles, and topsoil is salvaged and stockpiled for use in reclamation. Grading establishes a stable roadbed, and where necessary, cut and-fill operations are used to achieve proper alignment and drainage. The road surface is typically built using locally sourced aggregate or stabilized soil to support heavy loads and reduce maintenance. Drainage structures such as culverts and ditches are installed to manage runoff and prevent erosion. Roads are designed to accommodate large vehicles and maintain safe travel under varying weather conditions.

Access miscellaneous information: The Maximum width of the running surface will be 30'. The road will be crowned and ditched and constructed of 6 rolled and compacted caliche. Ditches will be at 3:1 slope and 3 feet wide. Water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and to be consistent with local drainage patterns. If fugitive dust becomes a concern during construction, drilling, or other surface-disturbing activities, fresh water will be applied to affected areas to suppress dust and minimize air quality impacts. Water applications will be conducted as needed to maintain compliance with applicable air quality standards and to reduce visibility hazards and nuisance conditions.

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Other Description: N/A

Drainage Control comments: N/A

Road Drainage Control Structures (DCS) description: N/A

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Existing Well map Attachment:

Calmer_Than_You_5_Fed_Com_C102_13H_existing_wells_map_20260617122328.pdf

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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

Submit or defer a Proposed Production Facilities plan? DEFER

Estimated Production Facilities description: Production Facilities for all Calmer Than You wells will be located on the Calmer Than You South Pad location. Production facilities will consist of the following: 1) Number, size, and material of oil tanks (e.g., (4) 750 bbl steel oil tanks)? a. (4) 750 bbl steel oil tanks 2) Number, size, and material of water tanks (e.g., (2) 750 bbl FG water tanks)? a. (3) 750 bbl fiberglass water tanks 3) Number and size heater? a. (1) 8x20 HT b. (1) 6x20 4) Number and size FWKO? a. 1 - 8 x 20 FWKO b. 1 - 6 x 15 FWKO 5) Number and size gas meters for production and test side? a. (1) 4 meter for each train, 2 total. 6) Number and size separator? a. Listed in 3&4 7) Number of water transfer pumps? a. - 2 8) Number VRU units? a. - 1 9) Number, size, and material of flowlines? a. qty 2 4 SDR 7 HDPE per well. 10) Working pressure of flowlines? a. -100 psi 11) Max pressure of flowlines? a. 150 psi 12) Burst pressure of flowlines? a. 336 psi

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: GW WELL

Water source use type: DUST CONTROL
CAMP USE
SURFACE CASING
INTERMEDIATE/PRODUCTION CASING

Source latitude: 32.769419 **Source longitude:** -104.286844

Source datum: NAD83

City:

Water source permit type: OTHER

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: PRIVATE

Water source volume (barrels): 2000 **Source volume (acre-feet):** 0.25778619

Source volume (gal): 84000

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Water source and transportation

Calmer_Than_You_5_Fed_Com_Water_Source_Map_20260617122911.pdf

Water source comments: The well will be drilled with combination brine and freshwater mud system as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to location by transport truck over the existing and proposed access roads shown in Exhibit #6. If a commercial fresh water source is nearby, fasline may be laid along existing road ROWs and fresh water pumped to the well. No water well will be drilled on the location. City/Municipal Water: Town of Hageman, Sec 10 T14S R26E, Mor-West Sec 20 T17S R30E. Brine Water: Salty Dog Sec 5 T19S R36E, Wasserhund Sec 36 T16S R34E

New water well? N

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: 1. What type of surfacing material will be used for construction of pad - CALICHE a. Where does it come from Clinton Key Livestock at 32.743139, -104.18325 b. Who owns it Clinton Key Livestock Caliche required will be obtained from a third-party pit located in Sec. 16 T18SS R28E, or BLM approved pit located at NESW Sec. 19 T15S R29E. Obtaining caliche method: One primary way of obtaining caliche to build locations and roads will be by turning over the location. This means, caliche will be obtained from the actual well site and any additional needed will be obtained from Clinton Key Livestock. Amount will vary for each pad. The procedure below has been previously approved by BLM personnel: A. The top 6 inches of topsoil is pushed off and stockpiled along the side of the location. B. An approximate 160 X 160 area is used within the proposed well site to remove caliche. C. Subsoil is removed and stockpiled within the surveyed well pad. D. When caliche is found, material will be stockpiled within the pad site to build the location and road. E. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road. F. Once well is drilled, the stockpiled topsoil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. G. Neither caliche, nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in the Well

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Site Layout or survey plat.

Construction Materials source location

Calmer_Than_You_5_Fed_Com_Construction_Materials_Map_20260617123002.pdf

Section 7 - Methods for Handling

Waste type: SEWAGE

Waste content description: black and grey matter

Amount of waste: 5 barrels

Waste disposal frequency : Daily

Safe containment description: plastic holding tanks and chemical toilets

Safe containmant attachment:

Waste disposal type: OTHER **Disposal location ownership:** OTHER

Disposal type description: public

Disposal location description: Artesia Wastewater Treatment Plant. Sewage and Gray Water will be placed in container and hauled to an approved facility. Container and disposal handled by Black Hawk.

Waste type: GARBAGE

Waste content description: Trash

Amount of waste: 10 barrels

Waste disposal frequency : Daily

Safe containment description: portable trash cage

Safe containmant attachment:

Waste disposal type: OTHER **Disposal location ownership:** OTHER

Disposal type description: Public

Disposal location description: Eddy County Landfill. Garbage and trash produced during drilling or completion operations will be collected in a trash bin and hauled to an approved local landfill. No toxic waste or hazardous chemicals will be produced by this operation.

Waste type: DRILLING

Waste content description: Drill cuttings, mud, salts, and other chemicals

Amount of waste: 1120.21 barrels

Waste disposal frequency : Daily

Safe containment description: steel cuttings bins

Safe containmant attachment:

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

Disposal type description:

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Disposal location description: Drill cuttings and fluids will be disposed into the steel tanks and hauled to R-360 disposal facility, permit number NM-01-0006. Located on Hwy 62 at MM 66.

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

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Section 9 - Well Site

Well Site Layout Diagram:

Rig_Layout_20260617123416.pdf

Pages_from_Calmer_Than_You_5_Fed_Com_PadLayout_20260617123818.pdf

Comments:

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: Calmer Than You

Multiple Well Pad Number: South Pad

Recontouring

Calmer_Than_You_5_Fed_Com_C102_13H_3_Reclamation_20260617130024.pdf

Drainage/Erosion control construction: Edges of location will be bermed to prevent runoff or erosion.

Drainage/Erosion control reclamation: Ditches will be at 3:1 slope and 3' wide, water will be diverted where necessary to avoid ponding, prevent erosion, maintain good drainage, and be consistent with location drainage patterns.

Well pad proposed disturbance (acres): 3.62	**Well pad interim reclamation (acres):** 0.33	**Well pad long term disturbance (acres):** 3.29
Road proposed disturbance (acres): 0.27	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 0.27
Powerline proposed disturbance (acres): 0.8	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 0.8
Pipeline proposed disturbance (acres): 0.99	**Pipeline interim reclamation (acres):** 0.99	**Pipeline long term disturbance (acres):** 0
Other proposed disturbance (acres): 0	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 0
Total proposed disturbance: 5.680000000000001	**Total interim reclamation:** 1.32	**Total long term disturbance:** 4.36

Disturbance Comments:

Reconstruction method: Caliche will be removed, ground ripped and stockpiled topsoil used to recontoured as close as possible to the original natural level to prevent erosion and ponding water. Area will be reseeded as per BLM specifications, seeding will be done when moisture is available and weather is permitting, pure live seed will be used to prevent noxious weeds, annual inspection of growth will be done and necessary measures taken to eliminate noxious weeds.

Topsoil redistribution: Caliche will be removed, ground ripped and stockpiles topsoil used to recontoured as close as possible to the original natural level to prevent erosion and ponding of water. Area will be reseeded as per BLM specifications, seeding will be done when moisture is available and weather permitting, pure live seed will be used to prevent noxious weeds, annual inspection of growth will be done and necessary measures taken to eliminate noxious weeds

Soil treatment: Soils underlying the proposed project include Gypsum land (GA) and Gypsum land-Cottonwood complex (GC). Neither are listed as hydric or shallow soils. Soil stabilization methods will be employed as needed to minimize erosion, support safe access, and reduce dust generation. Treatments may include the use of water, mechanical compaction, or other approved methods appropriate to site conditions and regulatory requirements

Existing Vegetation at the well pad: Vegetation in the project area was dominated by shrubs, intermixed with forbs and grasses. Species observed include creosote, acacia, broom snakeweed, prickly pear cactus, Texas rainbow cactus, burro grass, lovegrass, and black grama.

Existing Vegetation at the well pad

Existing Vegetation Community at the road: Vegetation in the project area was dominated by shrubs, intermixed with forbs and grasses. Species observed include creosote, acacia, broom snakeweed, prickly pear cactus, Texas rainbow cactus, burro grass, lovegrass, and black grama.

Existing Vegetation Community at the road

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Existing Vegetation Community at the pipeline: Vegetation in the project area was dominated by shrubs, intermixed with forbs and grasses. Species observed include creosote, acacia, broom snakeweed, prickly pear cactus, Texas rainbow cactus, burro grass, lovegrass, and black grama.
Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: N/A

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation

Operator Contact/Responsible Official

First Name: **Last Name:**

Phone: **Email:**

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Weed treatment plan description: Operator understands they are responsible if noxious weeds become established within the areas of operations. Weed control will be performed on disturbed land where noxious weeds exist, which includes roads, pads, and associated pipeline corridors. Operator shall be responsible for segregating the topsoil, backfilling, repacking, reseeding, and recontouring the surface of any disturbed area so as not to interfere with Owners operations and shall reclaim such area to be returned to pre-existing conditions as best as reasonably practicable with control of all weeds. Operator will maintain the location in such a manner as to precent noxious weeds and keep the surface use area, as well as any roads or other areas, safe and in good order. Operator shall consult with the BLM for acceptable weed control methods that comply with BLM requirements and policies.

Weed treatment plan

Monitoring plan description: Annual inspection of growth will be done and necessary measures taken to eliminate noxious weeds

Monitoring plan

Success standards: Seeding will be repeated until satisfactory stand is established as determined by authorized office. Evaluation of growth will be made before completion of at least one full growing season after season.

Pit closure description: No pits

Pit closure attachment:

Section 11 - Surface

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Disturbance type: TRANSMISSION LINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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? Y **Use APD as ROW?** Y

ROW Type(s): 281001 ROW - ROADS,288103 ROW – Salt Water Disposal Pipeline/Facility,FLPMA (Powerline)

ROW

SUPO Additional Information:

Use a previously conducted onsite? Y

Previous Onsite information: Onsite completed on 2/18/2026 by the following attendees: Spence Laird (Riley). Alex Rizzo (Riley). Kevin Hayes (Riley). Josh Gonzales (Ascent), Casey Childs (Ascent), Frank Hernandez (BLM), Brandon Carico (BLM) Water diversion. BLM made no requests for modifications to proposed plans for the Calmer Than You locations and infrastructure during the onsite.

Other SUPO

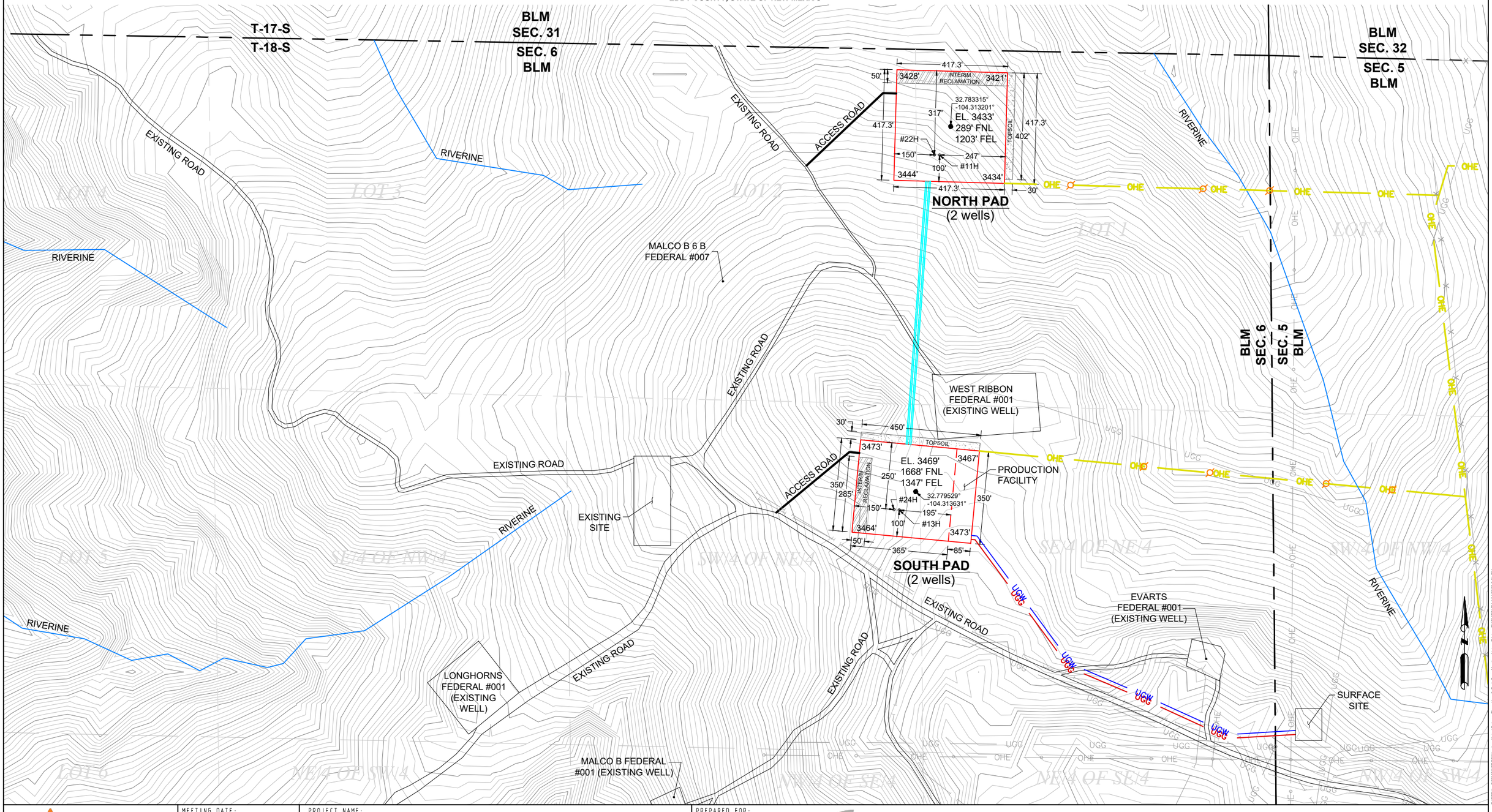
Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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OHE__Access_SWD_Pipeline_Details_for_The_Calmer_Than_You_South_Pad_20260617131554.pdf

Page 154 of 180

CALMER THAN YOU 5 FED COM
DESKTOP DRONE REVIEW / MEETING NOTES
SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST
EDDY COUNTY, STATE OF NEW MEXICO



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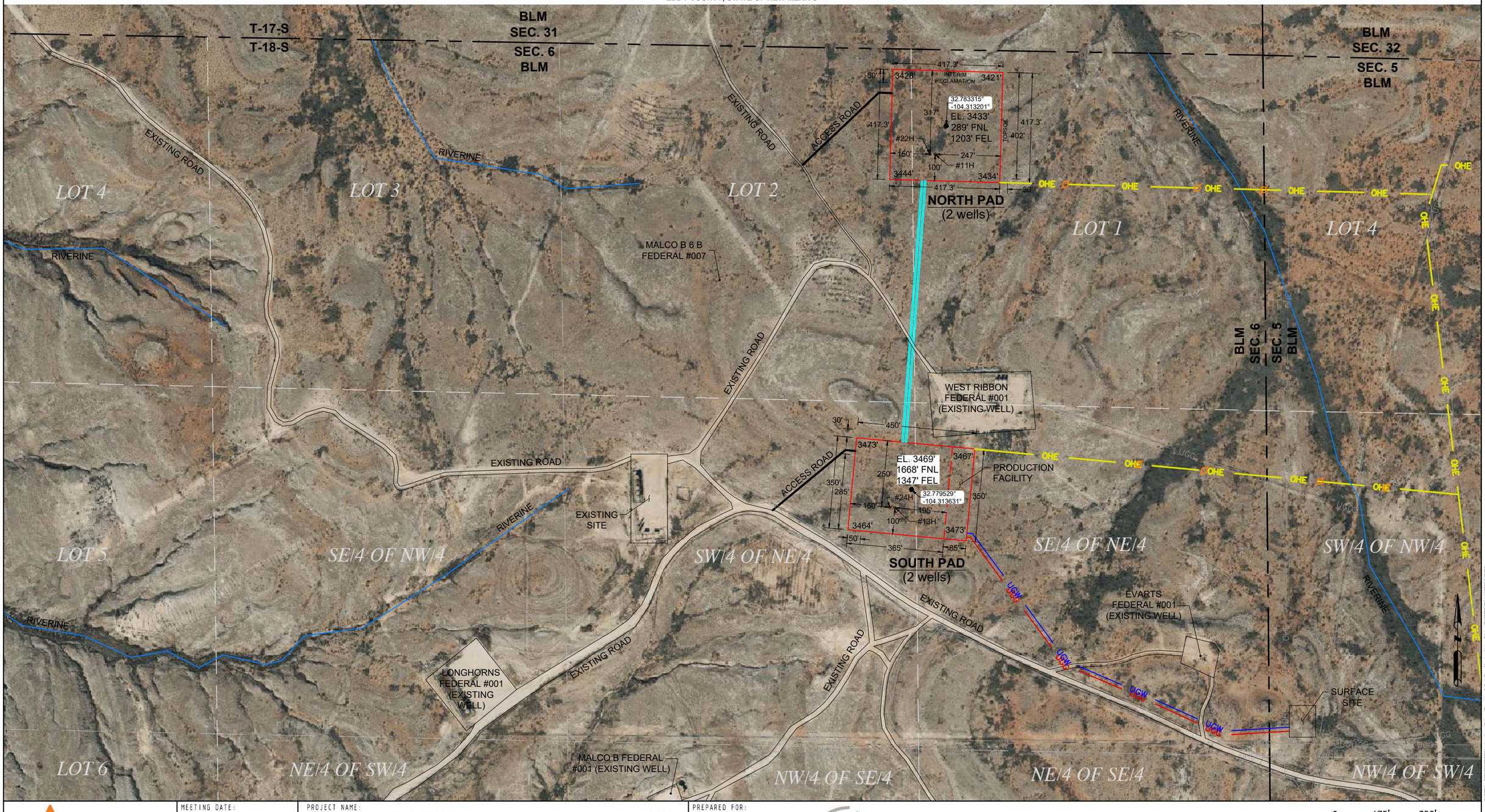
MEETING DATE:	04/17/2026
DRAWING DATE:	04/14/2026
BY:	RH
CHECKED:	CJ
PROJECT NAME:	CALMER THAN YOU 5 FED COM — REV. 1
SURFACE LOCATION:	SEC. 6, T18S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO
PROJECT NUMBER:	B25.REPX.0050
PREPARED FOR:	RILEY PERMIAN

0 175' 350'
SCALE: 1"= 350'

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Received by OCD: 11/11/2026 11:05:12 AM
Released to Imaging: 11/18/2026 1:59:10 PM

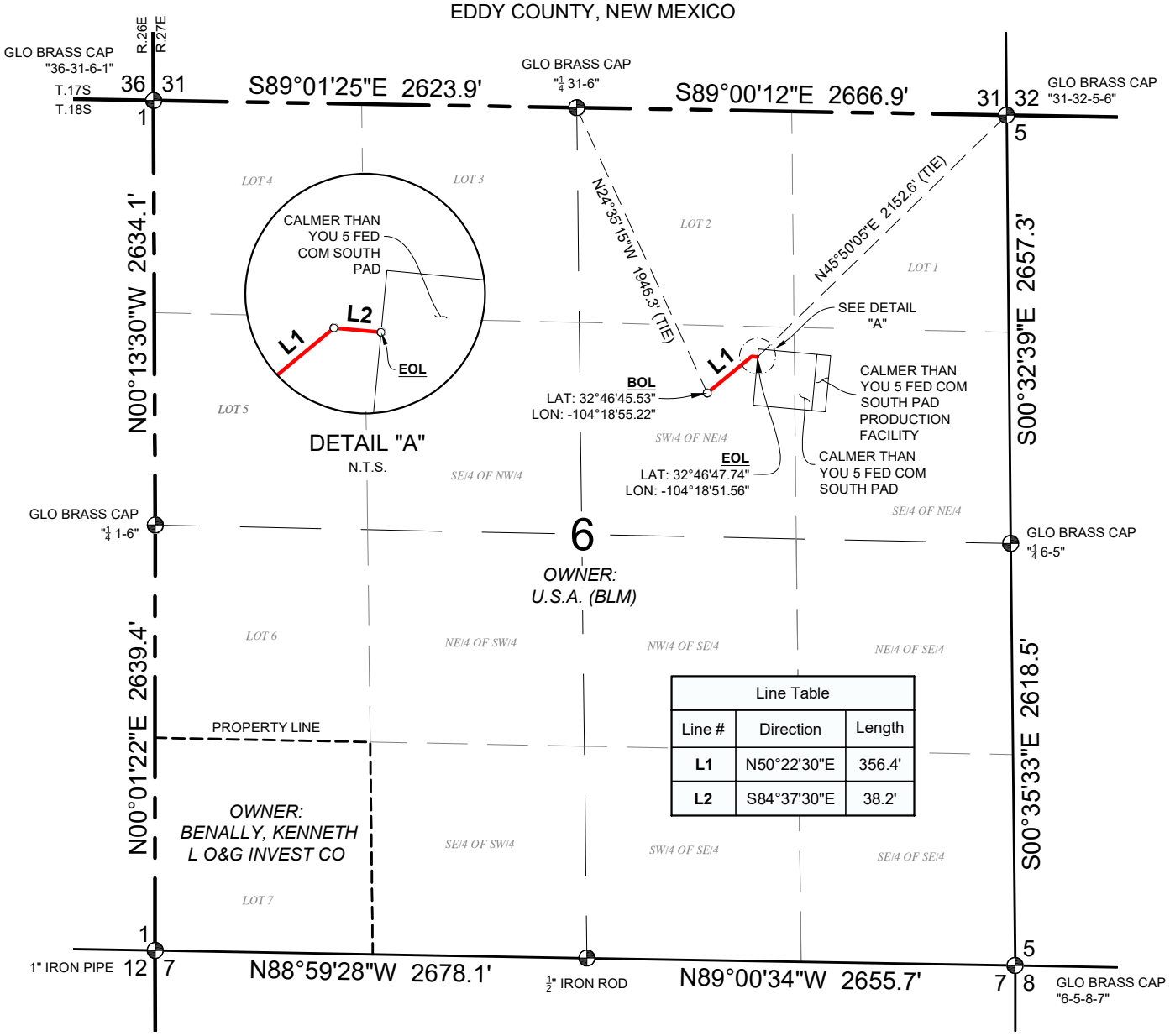
CALMER THAN YOU 5 FED COM
DESKTOP DRONE REVIEW / MEETING NOTES
SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST
EDDY COUNTY, STATE OF NEW MEXICO



Ascent Geomatics Solutions 8620 Wolff Ct. Suite 200 Westminster, CO 80031 Office: (303) 928-7128 www.AscentGeomatics.com	MEETING DATE: 04/17/2026 DRAWING DATE: 04/14/2026 BY: RH CHECKED: CJ	PROJECT NAME: CALMER THAN YOU 5 FED COM REV. 1 SURFACE LOCATION: SEC. 6, T18S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO PROJECT NUMBER: B25.REPX.0050	PREPARED FOR: RILEY PERMIAN

Received by OCD: 11/11/2026 11:05:12 AM
Released to Imaging: 11/18/2026 1:59:10 PM

SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST,
EDDY COUNTY, NEW MEXICO



Line Table		
Line #	Direction	Length
L1	N50°22'30"E	356.4'
L2	S84°37'30"E	38.2'

CALMER THAN YOU 5 FED COM SOUTH PAD PROPOSED ACCESS ROAD
CENTERLINE DESCRIPTION

A STRIP OF LAND 30 FEET IN WIDTH AND 394.6 FEET, 23.9 RODS OR 0.07 MILES IN LENGTH, CONTAINING 0.27 ACRES, SITUATED IN SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 15 FEET ON EACH SIDE OF THE CENTERLINE SHOWN HEREON.

LEGEND

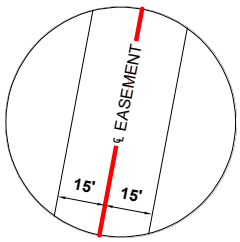
BOL / EOL BEGINNING/END OF LINE

PROPOSED ACCESS ROAD

POINT FOR BEGIN/END OR ANGLE POINT

NOTES:
- BEARINGS, COORDINATES, AND DISTANCES (GRID) SHOWN HEREON ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83- 2011 (EPOCH 2010) FRAMEWORK, AS DERIVED BY OPUS SOLUTION. THE ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88.
- LAND OWNERSHIP INFORMATION REFLECTED HEREON WAS PROVIDED BY CLIENT AND/OR OBTAINED FROM PUBLIC DOMAIN DATA, NO INDEPENDENT OWNERSHIP SEARCH WAS PERFORMED BY ASCENT

0 500' 1000'
SCALE: 1"= 1000'



TYPICAL RIGHT-OF-WAY EASEMENT CONFIGURATION



I, MITCHELL L. MCDONALD, NEW MEXICO PROFESSIONAL SURVEYOR NO. 29821, DO HEREBY CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY 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 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 PLAT OF A PROPOSED EASEMENT.

MITCHELL L. MCDONALD, N.M. P.L.S. **No.29821**

SURVEY DATE: 01/14/2026
JOB NO.: B25.REPX.0050
SHEET: 1 OF 1
DRAFTED BY: IT
CHECKED BY: OP
REV: 0

RILEY PERMIAN

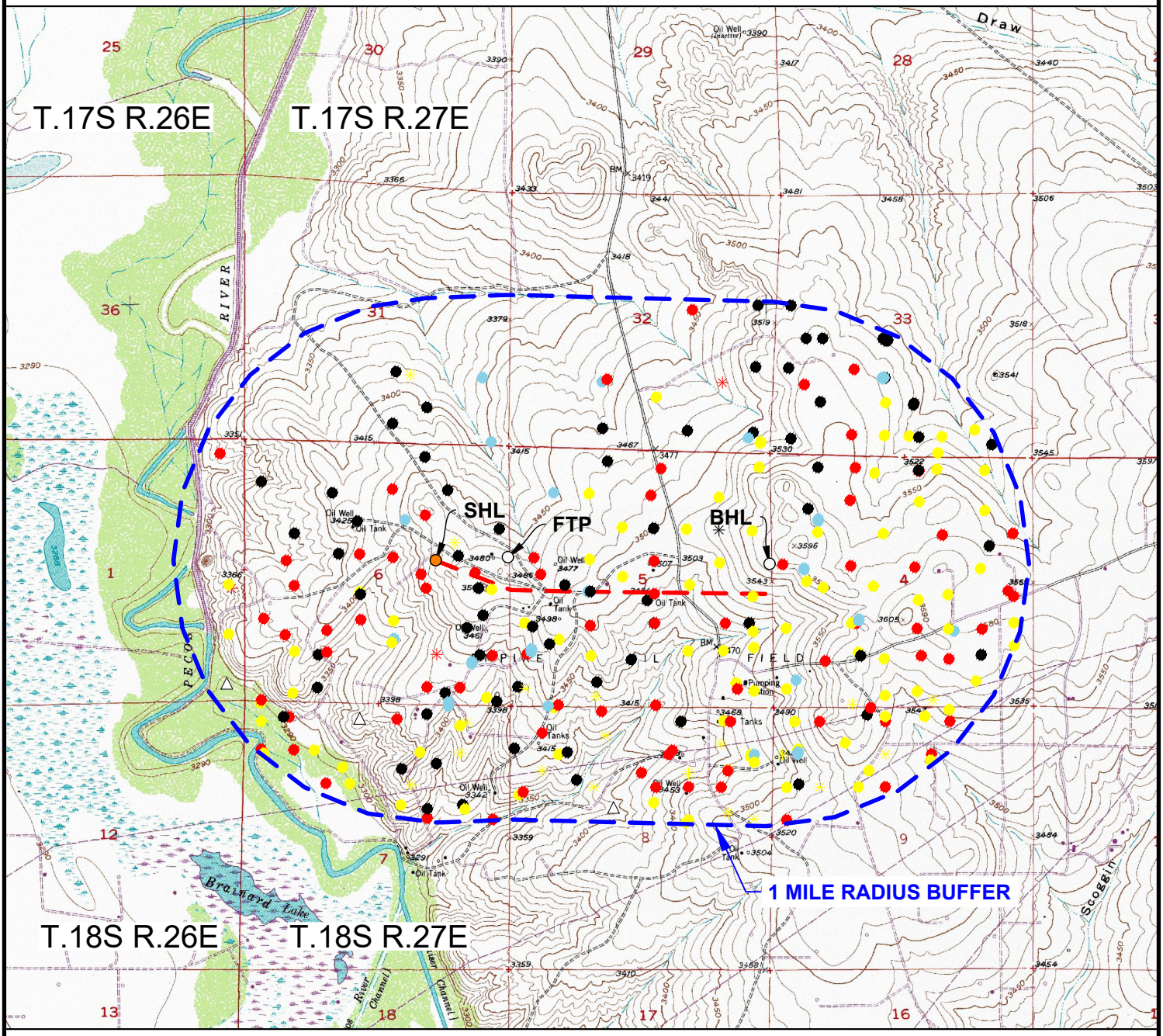
CALMER THAN YOU 5 FED COM SOUTH PAD
PROPOSED ACCESS ROAD
SEC. 6, T-18-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

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Westminster, CO 80031
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PLAT: P:\REPX_B250050\PROD\ROWACCESS\EP_CALMER_THAN_YOU_SOUTH_PAD_PROPOSED_ACCESS_ROAD_SEC6 6/9/26 9:51 AM Jbryant

EXHIBIT 3

1-MILE RADIUS MAP



LEGEND

- = SHL
- = FTP, BHL
- = BORE LINE
- = SECTION
- = TOWNSHIP
- = ONE MILE RADIUS
- = OIL WELL CANCELLED
- = OIL WELL PLUGGED
- = OIL WELL NEW
- = OIL WELL ACTIVE
- = GAS WELL ACTIVE
- = GAS WELL PLUGGED
- = GAS WELL CANCELLED
- = SALT WATER INJECTION PLUGGED

N

0 1500' 3000'

SCALE: 1"= 3000'

LATITUDE: N 32.779338°
LONGITUDE: W 104.313832°
SURFACE HOLE: 1739' FNL & 1410' FEL
SURFACE HOLE ELEVATION: 3468'
CENTER OF PAD: 1668' FNL & 1347' FEL

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Westminster, CO 80031
Office: (303) 928-7128
www.AscentGeomatics.com

FIELD DATE:	PROJECT NO.:	SITE NAME:	REV.
01-14-2026	B25.REPX.0050	CALMER THAN YOU 5 FED COM #13H	0

DRAWING DATE:	BY:	CHECKED:
04-13-2026	RH	CJ

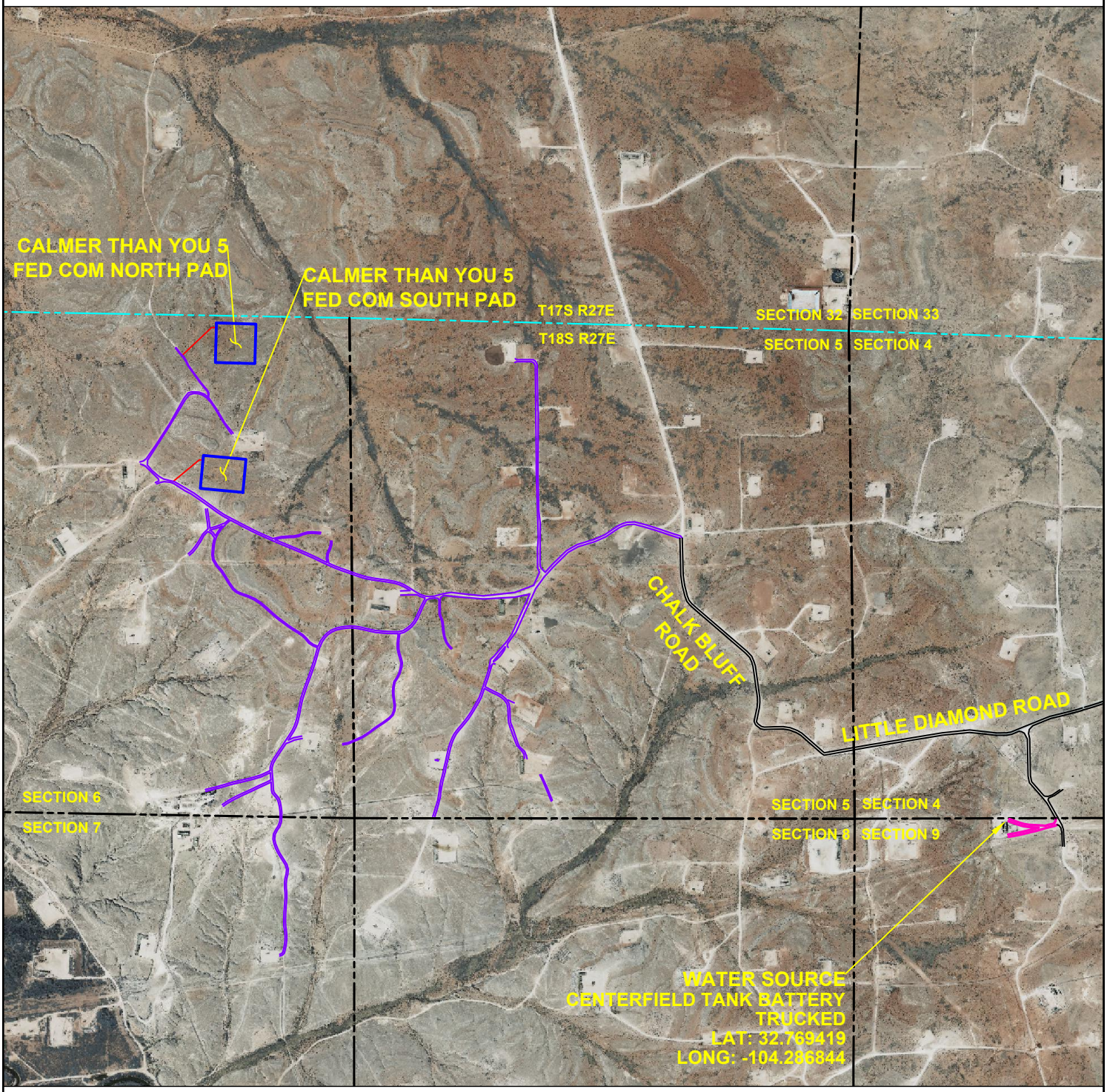
DISCLAIMER:
THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE FOLLOWING COORDINATE SYSTEM: NAD83 NEW MEXICO STATE PLANE, EAST ZONE, U.S.. SURVEY FEET.

SURFACE LOCATION:
SEC. 6, T18S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

PREPARED FOR:
RILEY PERMIAN

PLAT: P:\REPX_B250050\PROD\C102_PACKAGE\1_MILE_RADIUS\CALMER_THAN_YOU_5_FED_COM_SOUTH_PAD_13H_1_MILE_RADIUS 4/14/26 1:16 PM Rhomesley

EXHIBIT A
WATER SOURCE MAP



N

0 750' 1500'

SCALE: 1"= 1500'

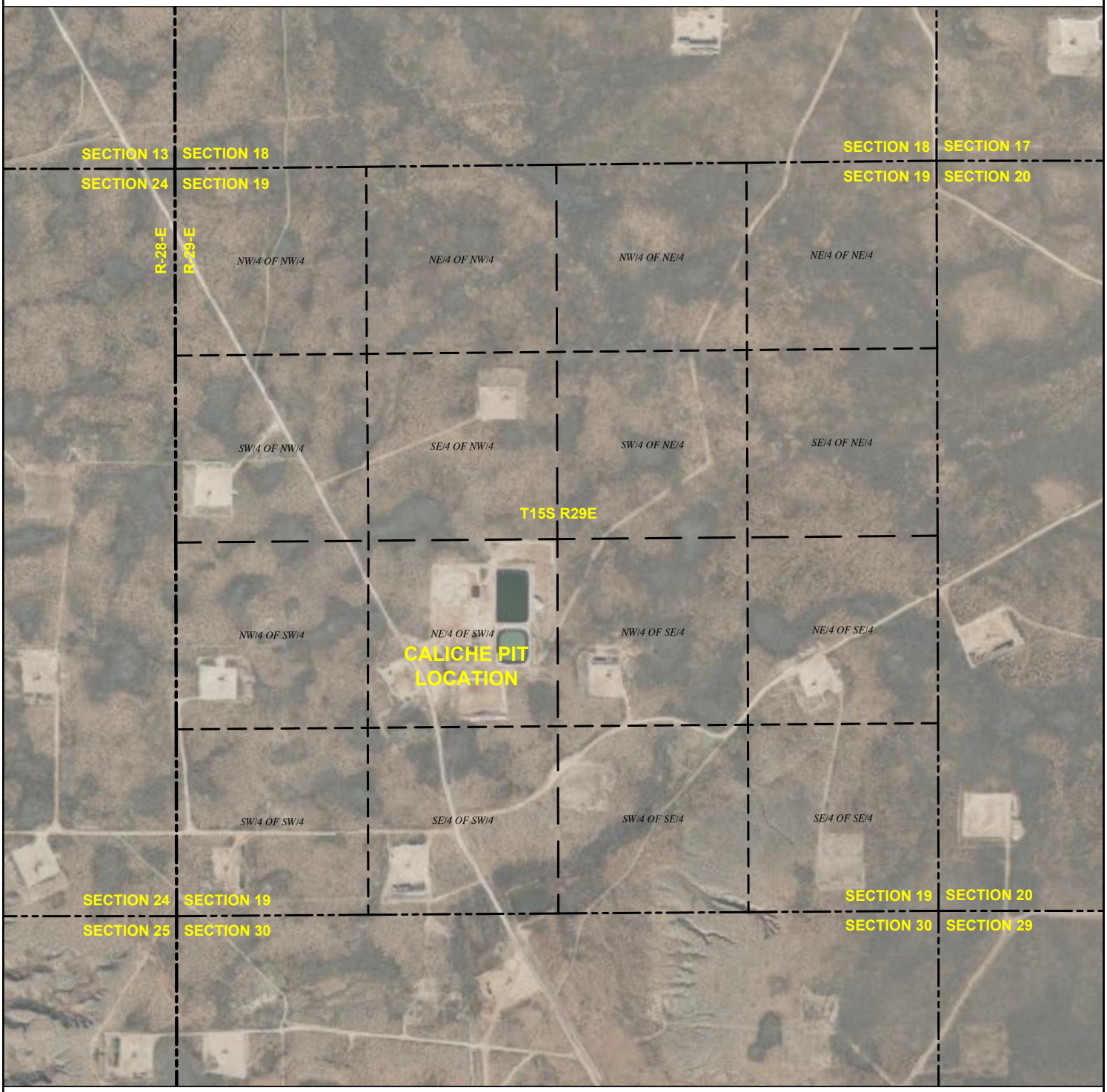
LEGEND

- = EXISTING ACCESS ROADS
- = EXISTING LEASE ROADS
- = EXISTING ROADS
- = PROPOSED ACCESS ROADS
- = PROPOSED PAD
- = SECTION
- = TOWNSHIP

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FIELD DATE:	PROJECT NO.:	SITE NAME:	PREPARED FOR:
01-28-2026	B25.REPX.0050	CALMER THAN YOU 5 FED COM REV. 0	RILEY PERMIAN
DRAWING DATE: 03-25-2026	DISCLAIMER: THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE FOLLOWING COORDINATE SYSTEM: NAD83 NEW MEXICO STATE PLANE, EAST ZONE, U.S.. SURVEY FEET.	SURFACE LOCATION: SEC. 4, T18S, R27E, N.M.P.M. EDDY COUNTY, NEW MEXICO	
BY: RH CHECKED: CLP			

EXHIBIT A
CONSTRUCTION MATERIAL MAP



N

0 500' 1000'

SCALE: 1"= 1000'

LEGEND

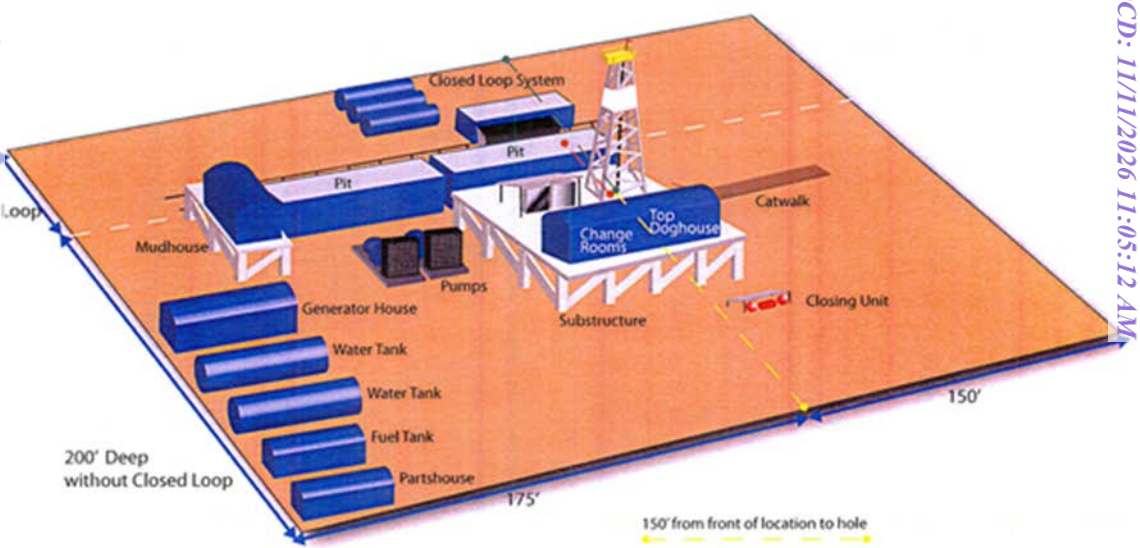
- = SECTION
- = QUARTER SECTION LINES
- = QUARTER QUARTER SECTION LINES

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Office: (303) 928-7128
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FIELD DATE:	PROJECT NO.:	SITE NAME:		PREPARED FOR:
01-14-2026	B25.REPX.0050	CALMER THAN YOU 5 FED COM	REV. 0	RILEY PERMIAN
DRAWING DATE: 03-25-2026	DISCLAIMER: THIS PLOT DOES NOT REPRESENT A MONUMENTED LAND SURVEY AND SHOULD NOT BE RELIED UPON TO DETERMINE BOUNDARY LINES, PROPERTY OWNERSHIP OR OTHER PROPERTY INTERESTS. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE FOLLOWING COORDINATE SYSTEM: NAD83 NEW MEXICO STATE PLANE, EAST ZONE, U.S.. SURVEY FEET.	SURFACE LOCATION: SEC. 19, T15S, R29E, N.M.P.M. CHAVES COUNTY, NEW MEXICO		
BY: RH CHECKED: CP				

Released to Imaging: 11/18/2026 1:59:10 PM
Received by OCD: 11/11/2026 11:05:12 AM

Location Layout



150' from front of location to hole

175' from left of location to hole

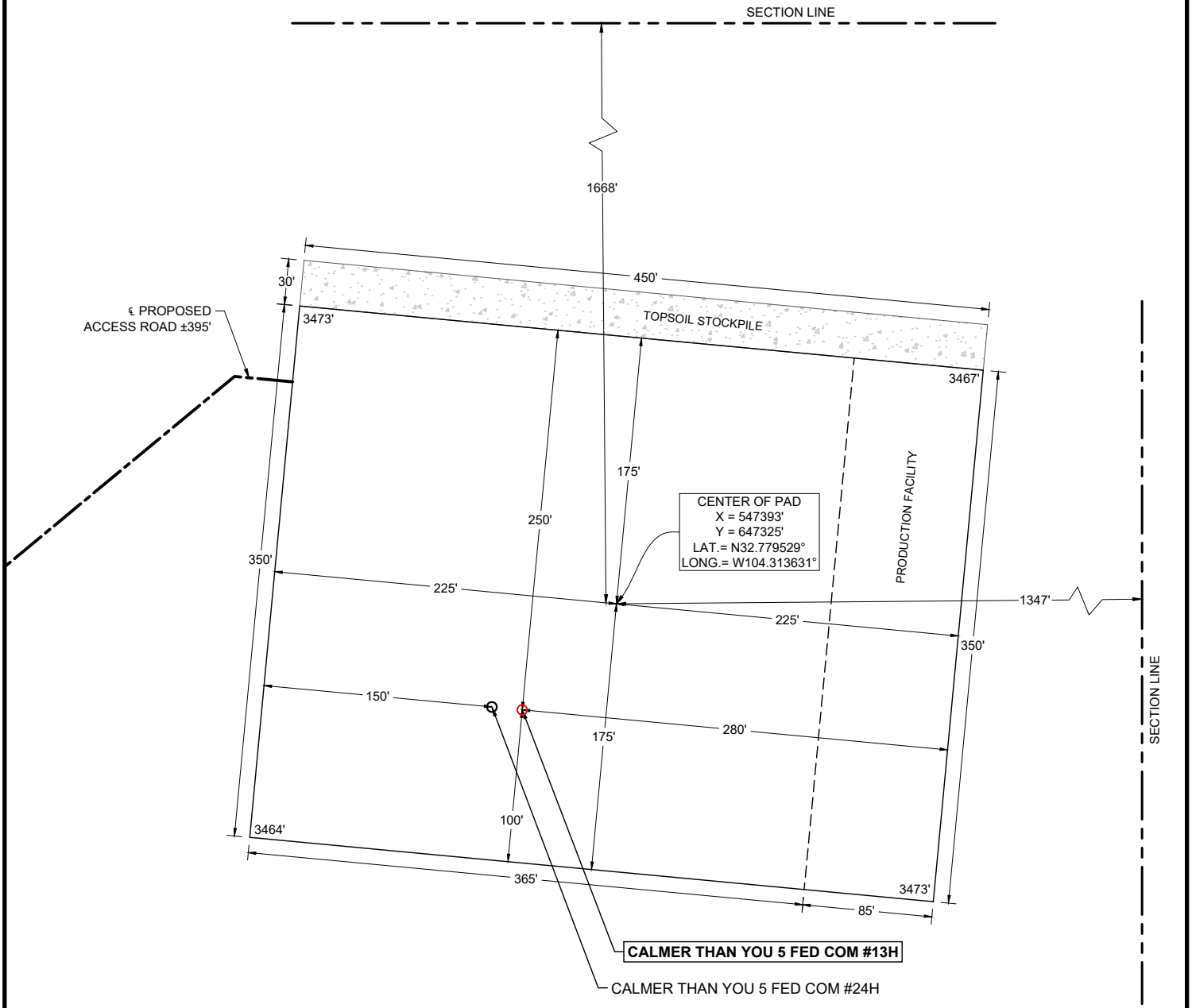
50' from hole to back of location (without closed loop)

150' from hole to back of location (with closed loop)

Location size without Closed Loop System
200' Deep X 325' Wide

Location size with Closed Loop System
300' Deep X 325' Wide

EXHIBIT 5
PAD LAYOUT



N

0 50' 100'

SCALE: 1"= 100'

LEGEND

- = PROPOSED WELL
- = PROPOSED ACCESS ROAD
- = SECTION LINE

SHEET 1 OF 1

LATITUDE: N 32.779338°
LONGITUDE: W 104.313832°
SURFACE HOLE: 1739' FNL & 1410' FEL
SURFACE HOLE ELEVATION: 3468'
CENTER OF PAD: 1668' FNL & 1347' FEL

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8620 Wolff Ct.
Suite 200
Westminster, CO 80031
Office: (303) 928-7128
www.AscentGeomatics.com

FIELD DATE:	PROJECT NO.:	SITE NAME:	REV.
01-14-2026	B25.REPX.0050	CALMER THAN YOU 5 FED COM #13H	REV. 0

DRAWING DATE: 04-10-2026
BY: RH CHECKED: CJ

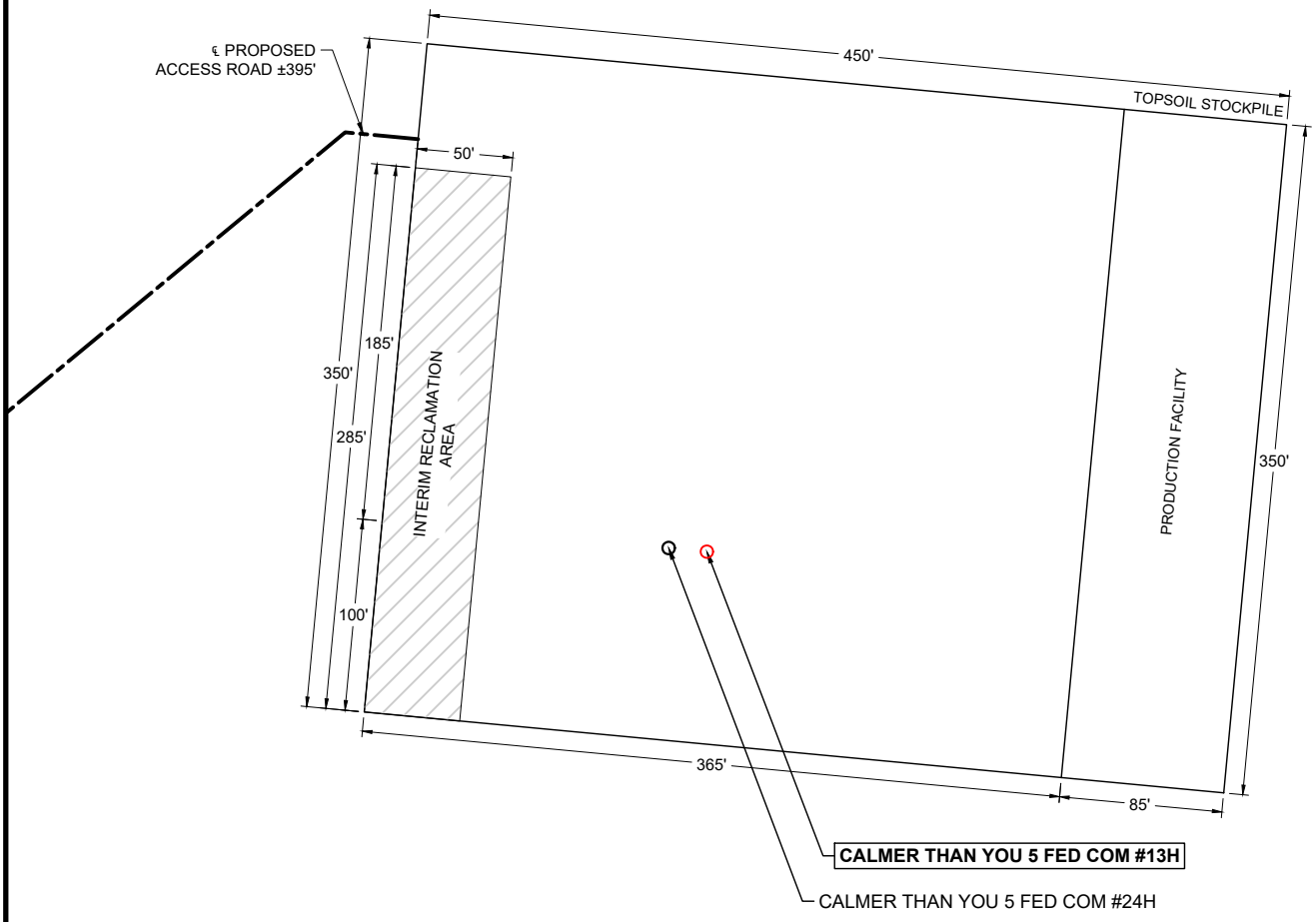
DISCLAIMER:
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SURFACE LOCATION:
SEC. 6, T18S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

PREPARED FOR: RILEY PERMIAN

PLAT: \\AGSFS\PROJECTS\REPX__B250050\PROD\C102_PACKAGE\PADSITES\SOUTH_PAD\CALMER_THAN_YOU_5_FED_COM_SOUTH_PAD_13H_PADSITE 4/15/26 10:01 AM Rhomesley

EXHIBIT 6
RECLAMATION DIAGRAM



N

0 50' 100'

SCALE: 1"= 100'

LEGEND

= PROPOSED WELL

= PROPOSED ACCESS ROAD

INTERIM RECLAMATION AREA: 0.33 ACRES
LATITUDE: N 32.779338°
LONGITUDE: W 104.313832°
SURFACE HOLE: 1739' FNL & 1410' FEL
SURFACE HOLE ELEVATION: 3468'
CENTER OF PAD: 1668' FNL & 1347' FEL

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FIELD DATE:	PROJECT NO.:	SITE NAME:	REV.
01-14-2026	B25.REPX.0050	CALMER THAN YOU 5 FED COM #13H	REV. 0

DRAWING DATE: 04-13-2026
BY: RH CHECKED: CJ

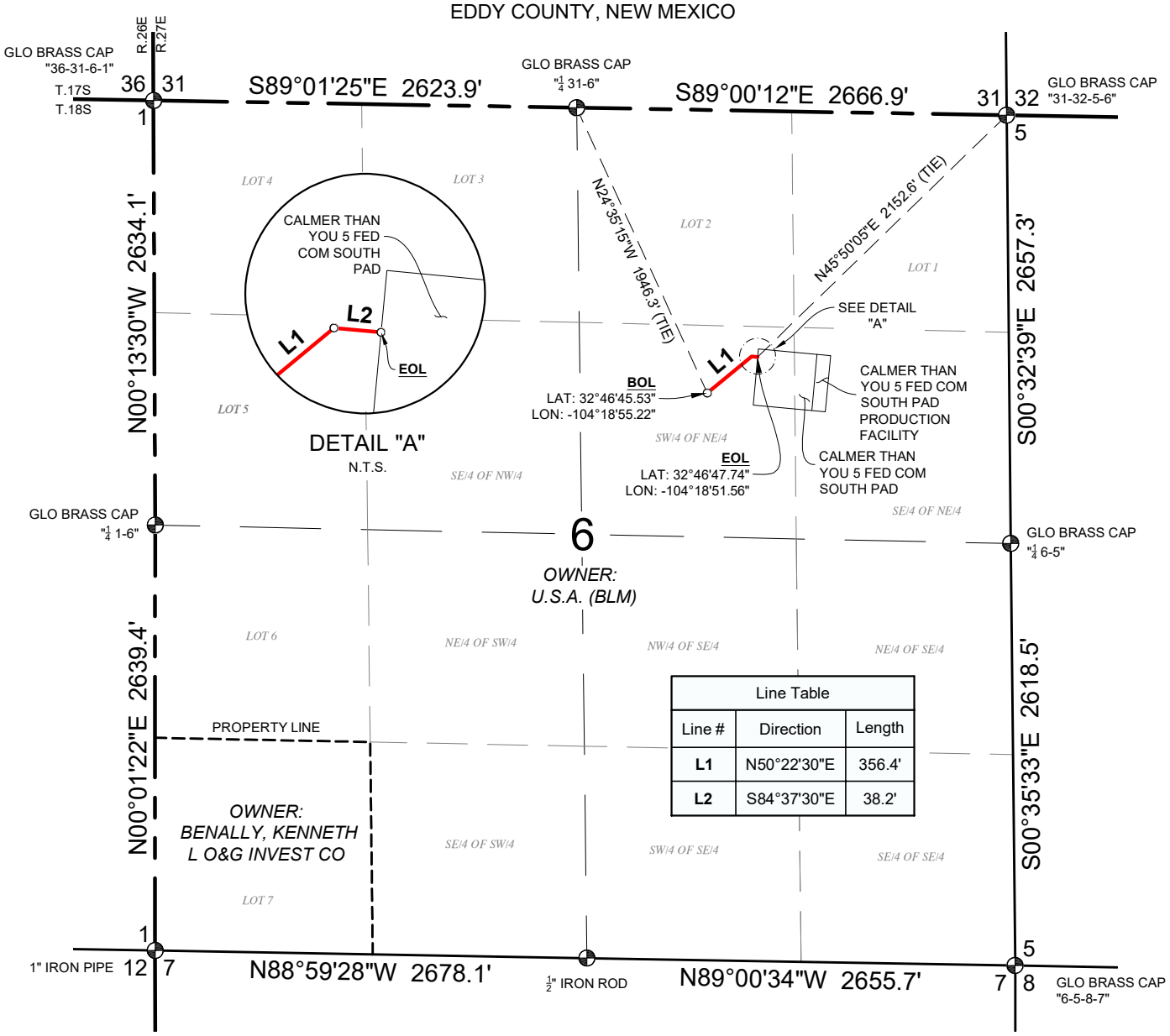
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ALL BEARINGS, DISTANCES, GRID, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE FOLLOWING COORDINATE SYSTEM: NAD83 NEW MEXICO STATE PLANE, EAST ZONE, U.S.. SURVEY FEET.

SURFACE LOCATION:
SEC. 6, T18S, R27E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

PREPARED FOR:
RILEY PERMIAN

PLAT: P:\REPX___B250050\PROD\C102_PACKAGE\RECLAMATION_DIAGRAMS\SOUTH_PAD\CALMER_THAN_YOU_5_FED_COM_SOUTH_PAD_13H_RECLAMATION_DIAGRAM 4/14/26 12:54 PM Rhomesley

SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST,
EDDY COUNTY, NEW MEXICO



Line Table		
Line #	Direction	Length
L1	N50°22'30"E	356.4'
L2	S84°37'30"E	38.2'

CALMER THAN YOU 5 FED COM SOUTH PAD PROPOSED ACCESS ROAD
CENTERLINE DESCRIPTION

A STRIP OF LAND 30 FEET IN WIDTH AND 394.6 FEET, 23.9 RODS OR 0.07 MILES IN LENGTH, CONTAINING 0.27 ACRES, SITUATED IN SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 15 FEET ON EACH SIDE OF THE CENTERLINE SHOWN HEREON.

LEGEND

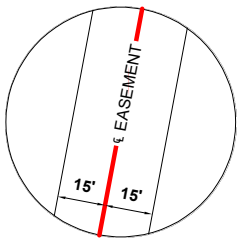
BOL / EOL BEGINNING/END OF LINE

PROPOSED ACCESS ROAD

POINT FOR BEGIN/END OR ANGLE POINT

NOTES:
- BEARINGS, COORDINATES, AND DISTANCES (GRID) SHOWN HEREON ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83- 2011 (EPOCH 2010) FRAMEWORK, AS DERIVED BY OPUS SOLUTION. THE ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88.
- LAND OWNERSHIP INFORMATION REFLECTED HEREON WAS PROVIDED BY CLIENT AND/OR OBTAINED FROM PUBLIC DOMAIN DATA, NO INDEPENDENT OWNERSHIP SEARCH WAS PERFORMED BY ASCENT

0 500' 1000'
SCALE: 1"= 1000'



TYPICAL RIGHT-OF-WAY EASEMENT CONFIGURATION



I, MITCHELL L. MCDONALD, NEW MEXICO PROFESSIONAL SURVEYOR NO. 29821, DO HEREBY CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY 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 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 PLAT OF A PROPOSED EASEMENT.

MITCHELL L. MCDONALD, N.M. P.L.S. **No.29821**

SURVEY DATE: 01/14/2026
JOB NO.: B25.REPX.0050
SHEET: 1 OF 1
DRAFTED BY: IT
CHECKED BY: OP
REV: 0

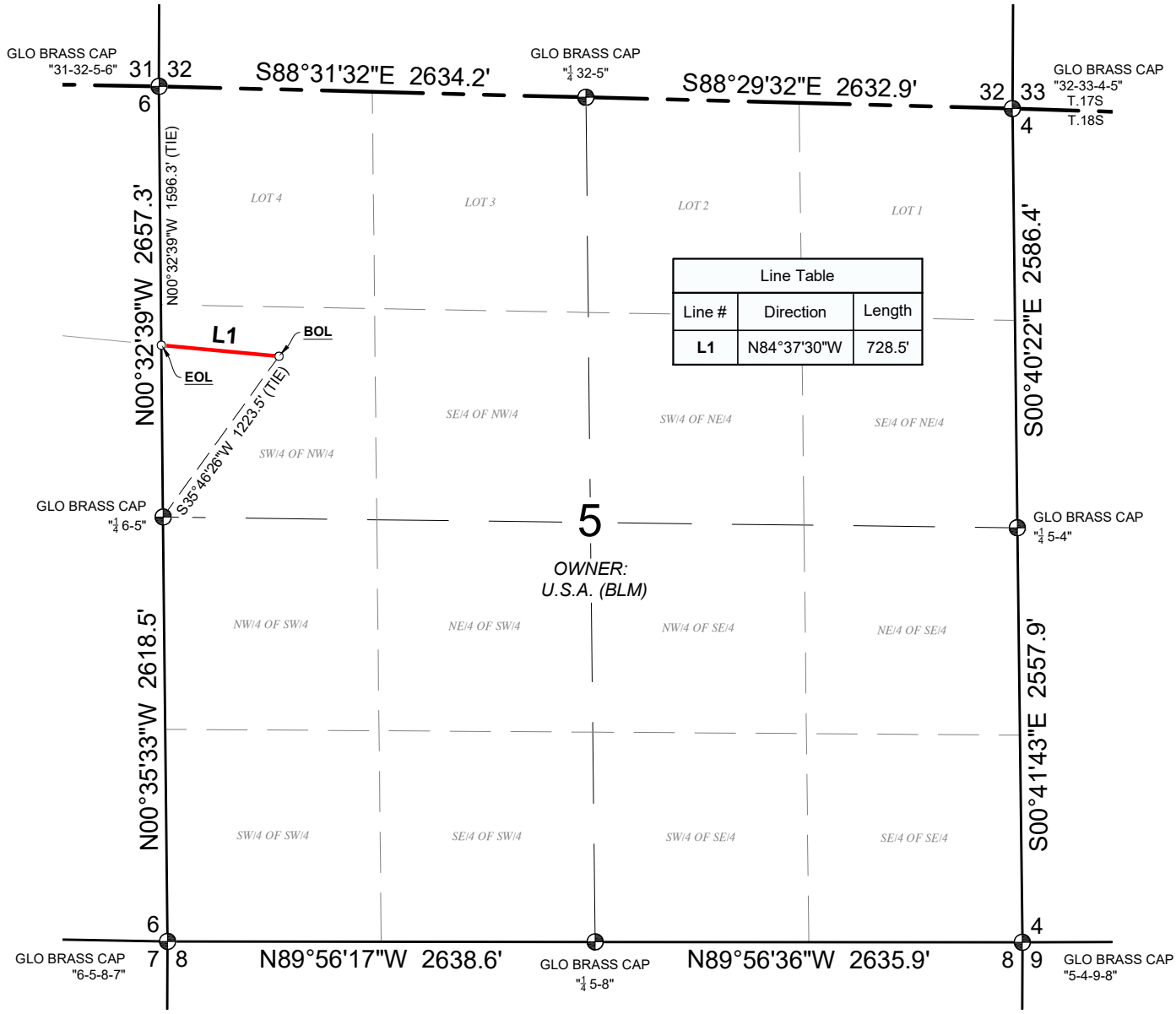
RILEY PERMIAN

CALMER THAN YOU 5 FED COM SOUTH PAD
PROPOSED ACCESS ROAD
SEC. 6, T-18-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

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PLAT: P:\REPX_B250050\PROD\ROWACCESS\EP_CALMER_THAN_YOU_SOUTH_PAD_PROPOSED_ACCESS_ROAD_SEC6 6/9/26 9:51 AM Jbryant

SECTION 5, TOWNSHIP 18 SOUTH, RANGE 27 EAST,
EDDY COUNTY, NEW MEXICO



Line Table		
Line #	Direction	Length
L1	N84°37'30"W	728.5'

CALMER THAN YOU 5 FED COM SOUTH PAD PROPOSED OVERHEAD ELECTRIC LINE

CENTERLINE DESCRIPTION

A STRIP OF LAND 30 FEET IN WIDTH AND 728.5 FEET, 44.2 RODS OR 0.14 MILES IN LENGTH, CONTAINING 0.50 ACRES, SITUATED IN SECTION 5, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 15 FEET ON EACH SIDE OF THE CENTERLINE SHOWN HEREON.

LEGEND

BOL / EOL BEGINNING/END OF LINE

PROPOSED OVERHEAD ELECTRIC LINE

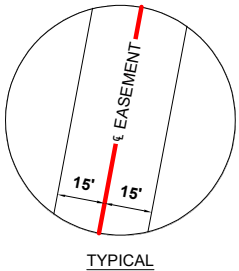
PROPOSED TIE-IN OVERHEAD ELECTRIC LINE

POINT FOR BEGIN/END OR ANGLE POINT

NOTES:
- BEARINGS, COORDINATES, AND DISTANCES (GRID) SHOWN HEREON ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83- 2011 (EPOCH 2010) FRAMEWORK, AS DERIVED BY OPUS SOLUTION. THE ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88.
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0 500' 1000'

SCALE: 1"= 1000'



TYPICAL RIGHT-OF-WAY EASEMENT CONFIGURATION



I, MITCHELL L. MCDONALD, NEW MEXICO PROFESSIONAL SURVEYOR NO. 29821, DO HEREBY CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY 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 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 PLAT OF A PROPOSED EASEMENT.

MITCHELL L. MCDONALD, N.M. P.L.S. **No.29821**

SURVEY DATE: 01/13/2026
JOB NO.: B25.REPX.0051
SHEET: 1 OF 1

DRAFTED BY: MB
CHECKED BY: OP
REV: 0

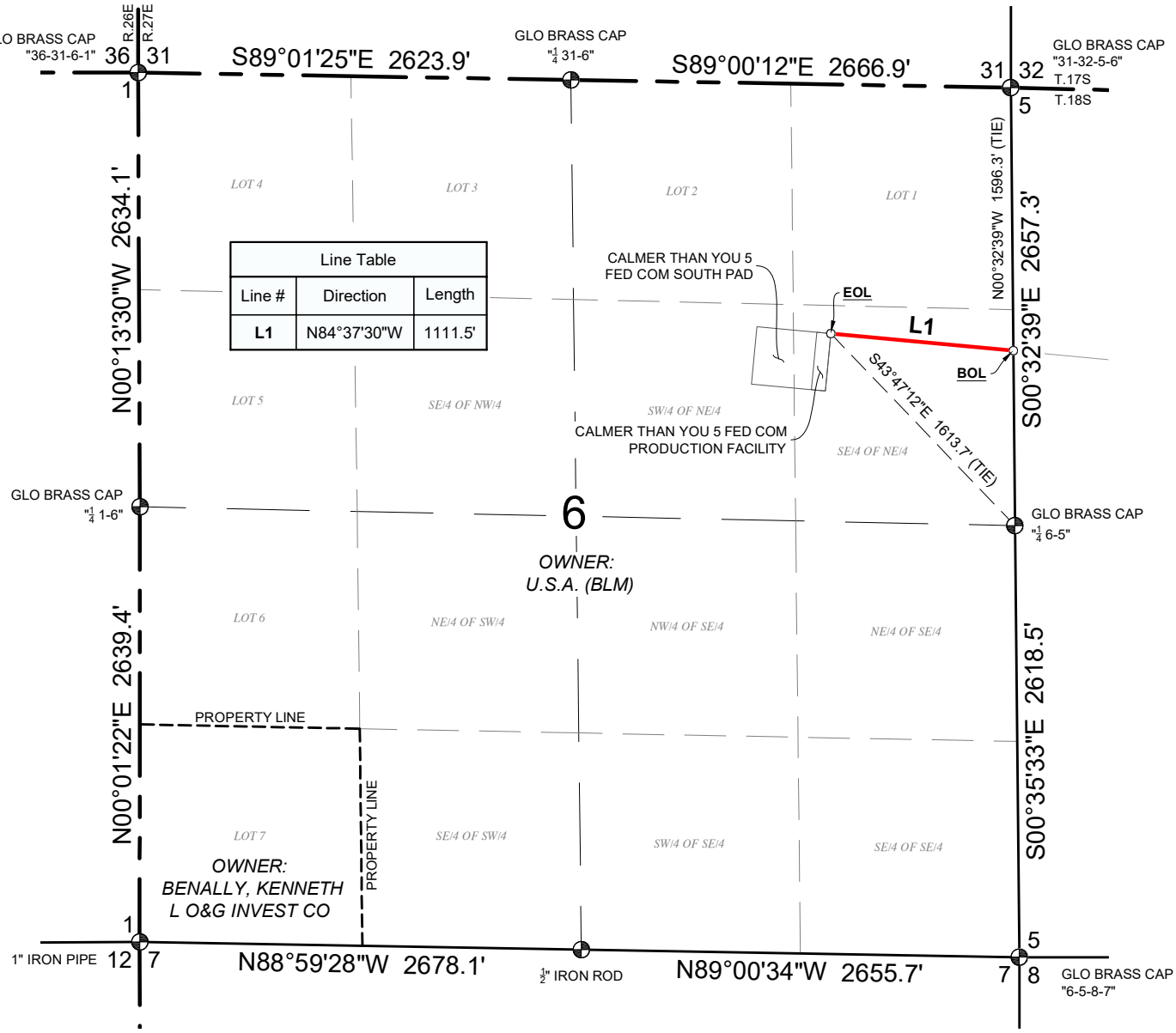
RILEY PERMIAN

CALMER THAN YOU 5 FED COM SOUTH PAD
PROPOSED OVERHEAD ELECTRIC LINE
SEC. 5, T-18-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

ASCENT GEOMATICS SOLUTIONS
Ascent Geomatics Solutions
8620 Wolff Ct.
Suite 200
Westminster, CO 80031
Office: (303) 928-7128
www.AscentGeomatics.com

PLAT: P:\REPX_B25\0051\PROD\ROW_EXHIBIT\OHEEP_CALMER_THAN_YOU_SOUTH_PAD_OVERHEAD_ELECTRIC_LINE 6/9/26 10:42 AM Jbryant

SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST,
EDDY COUNTY, NEW MEXICO



CALMER THAN YOU 5 FED COM SOUTH PAD PROPOSED OVERHEAD ELECTRIC LINE

CENTERLINE DESCRIPTION

A STRIP OF LAND 30 FEET IN WIDTH AND 1111.5 FEET, 67.4 RODS OR 0.21 MILES IN LENGTH, CONTAINING 0.77 ACRES, SITUATED IN SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 15 FEET ON EACH SIDE OF THE CENTERLINE SHOWN HEREON.

LEGEND

BOL / EOL BEGINNING/END OF LINE

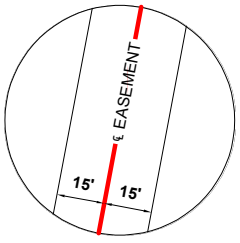
PROPOSED OVERHEAD ELECTRIC LINE

PROPOSED TIE-IN OVERHEAD ELECTRIC LINE

POINT FOR BEGIN/END OR ANGLE POINT

NOTES:
- BEARINGS, COORDINATES, AND DISTANCES (GRID) SHOWN HEREON ARE BASED ON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, NAD 83- 2011 (EPOCH 2010) FRAMEWORK, AS DERIVED BY OPUS SOLUTION. THE ELEVATIONS SHOWN HEREON ARE BASED ON NAVD 88.
- LAND OWNERSHIP INFORMATION REFLECTED HEREON WAS PROVIDED BY CLIENT AND/OR OBTAINED FROM PUBLIC DOMAIN DATA, NO INDEPENDENT OWNERSHIP SEARCH WAS PERFORMED BY ASCENT

0 500' 1000'
SCALE: 1"= 1000'



TYPICAL RIGHT-OF-WAY EASEMENT CONFIGURATION



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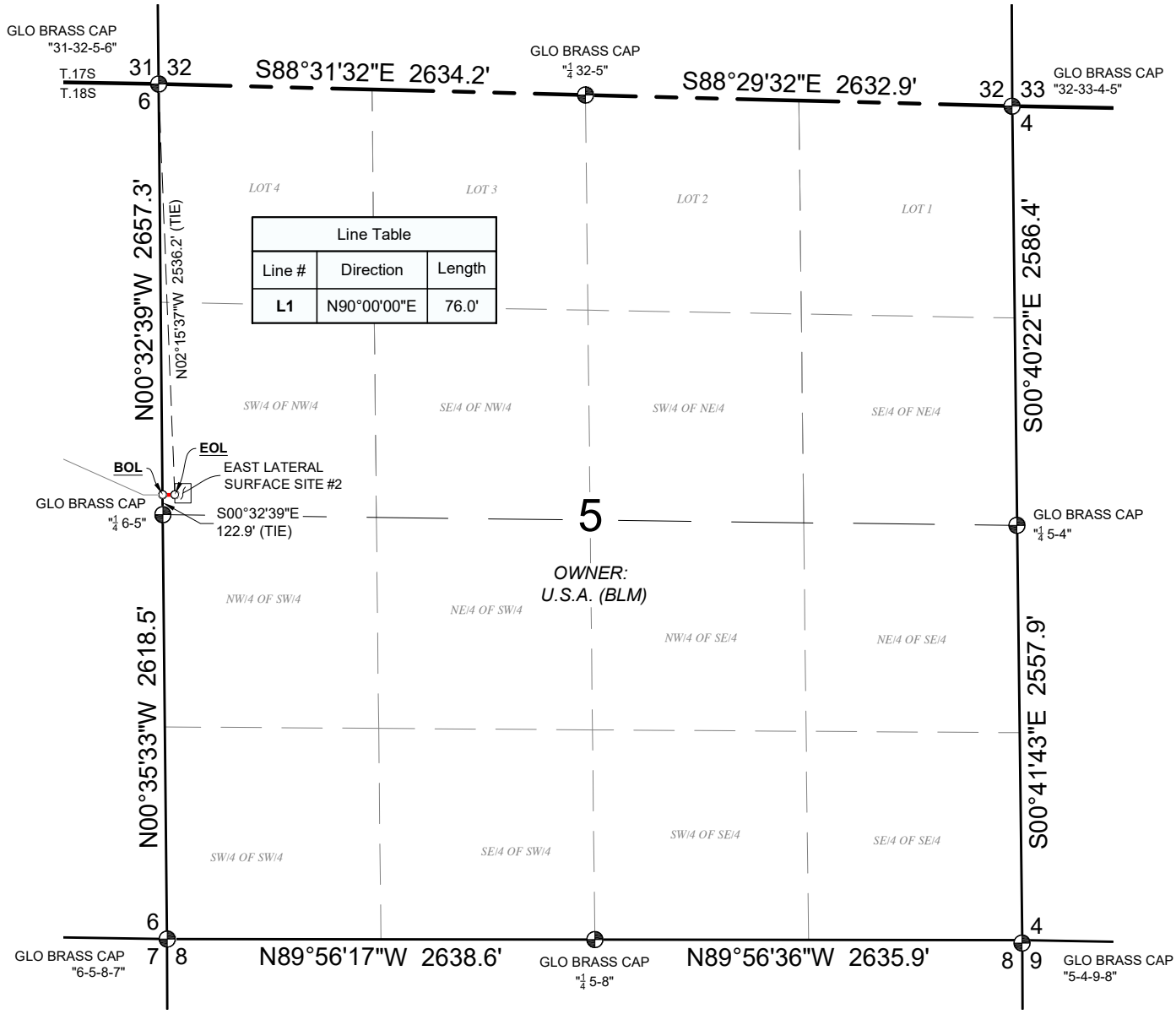
RILEY PERMIAN

CALMER THAN YOU 5 FED COM SOUTH PAD
PROPOSED OVERHEAD ELECTRIC LINE
SEC. 6, T-18-S, R-27-E, N.M.P.M.
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PLAT: P:\REPX_B25\0051\PROD\ROW_EXHIBIT\OH\EEP_CALMER_THAN_YOU_SOUTH_PAD_OVERHEAD_ELECTRIC_LINE 6/9/26 10:42 AM Jbryant

SECTION 5, TOWNSHIP 18 SOUTH, RANGE 27 EAST,
EDDY COUNTY, NEW MEXICO



CALMER THAN YOU 5 FED COM PROPOSED SOUTH WATER LINE

CENTERLINE DESCRIPTION

A STRIP OF LAND 15 FEET IN WIDTH AND 76.0 FEET, 4.6 RODS OR 0.01 MILES IN LENGTH, CONTAINING 0.03 ACRES, SITUATED IN SECTION 5, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 7.5 FEET ON EACH SIDE OF THE CENTERLINE SHOWN HEREON.

LEGEND

BOL / EOL BEGINNING/END OF LINE

PROPOSED SOUTH WATER LINE

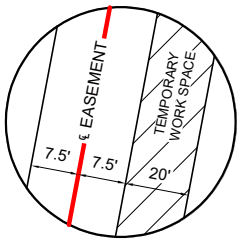
PROPOSED TIE- IN SOUTH WATER LINE

O POINT FOR BEGIN/END OR ANGLE POINT

NOTES:
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0 500' 1000'

SCALE: 1"= 1000'



TYPICAL N.T.S.
RIGHT-OF-WAY EASEMENT, TEMPORARY WORK SPACE CONFIGURATION



I, MITCHELL L. MCDONALD, NEW MEXICO PROFESSIONAL SURVEYOR NO. 29821, DO HEREBY CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY 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 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 PLAT OF A PROPOSED EASEMENT.

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SHEET: 1 OF 1
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CHECKED BY: OP
REV: 0

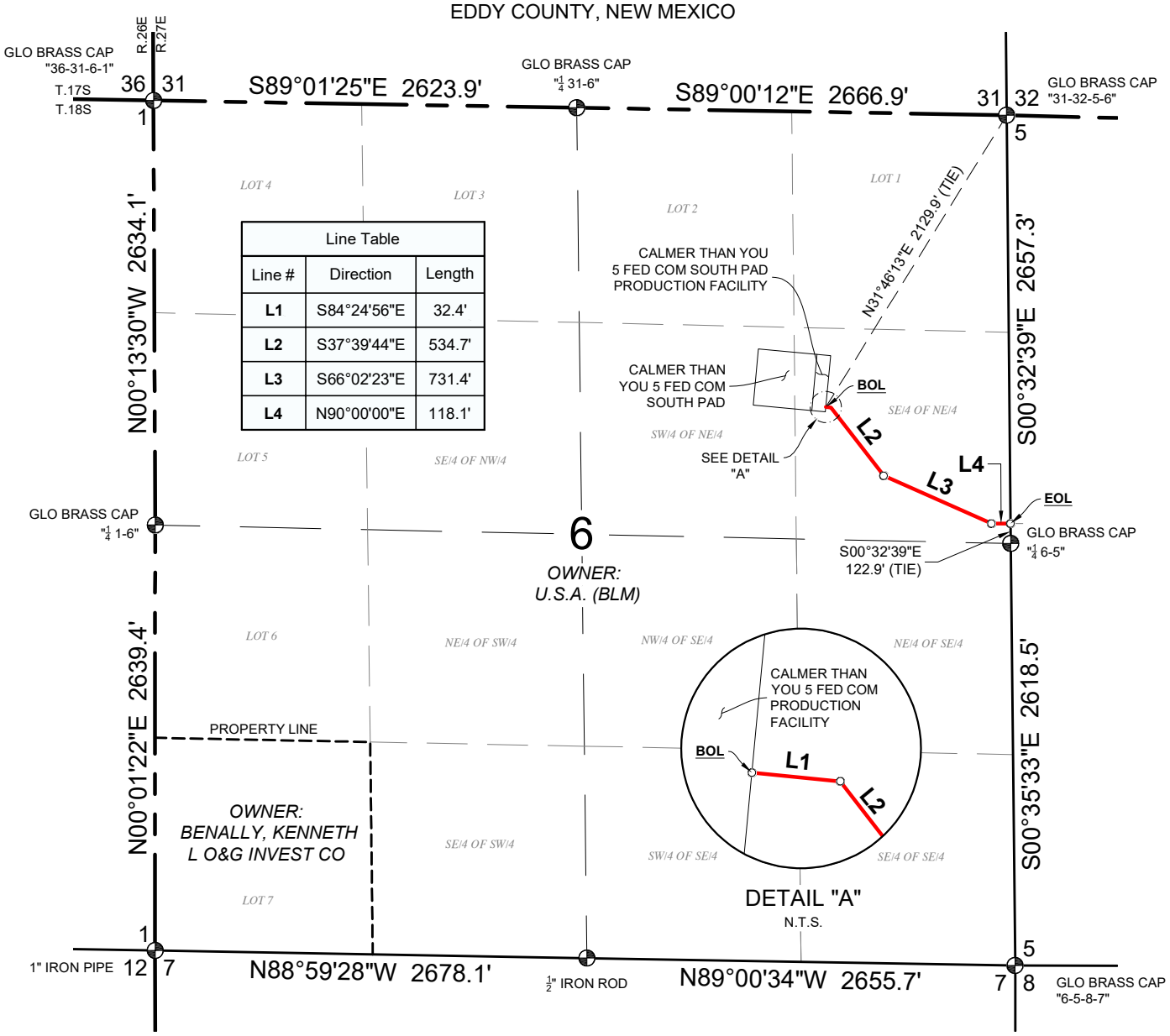
RILEY PERMIAN

CALMER THAN YOU 5 FED COM
PROPOSED SOUTH WATER LINE
SEC. 5, T-18-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

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PLAT: P:\REPX_ B25\0051\PROD\ROW_EXHIBIT\WATER\EP_CALMER_THAN_YOU_SOUTH_PAD_WATER_LINE 6/9/26 10:35 AM Operez

SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST,
EDDY COUNTY, NEW MEXICO



Line Table		
Line #	Direction	Length
L1	S84°24'56"E	32.4'
L2	S37°39'44"E	534.7'
L3	S66°02'23"E	731.4'
L4	N90°00'00"E	118.1'

CALMER THAN YOU 5 FED COM PROPOSED SOUTH WATER LINE

CENTERLINE DESCRIPTION

A STRIP OF LAND 15 FEET IN WIDTH AND 1416.6 FEET, 85.9 RODS OR 0.27 MILES IN LENGTH, CONTAINING 0.49 ACRES, SITUATED IN SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 7.5 FEET ON EACH SIDE OF THE CENTERLINE SHOWN HEREON.

LEGEND

BOL / EOL BEGINNING/END OF LINE

PROPOSED SOUTH WATER LINE

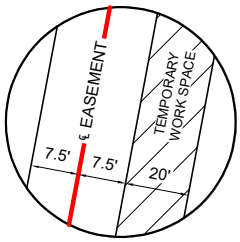
PROPOSED TIE-IN SOUTH WATER LINE

POINT FOR BEGIN/END OR ANGLE POINT

NOTES:
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0 500' 1000'

SCALE: 1"= 1000'



TYPICAL N.T.S.
RIGHT-OF-WAY EASEMENT, TEMPORARY WORK SPACE CONFIGURATION



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SURVEY DATE: 01/14/2026
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REV: 0

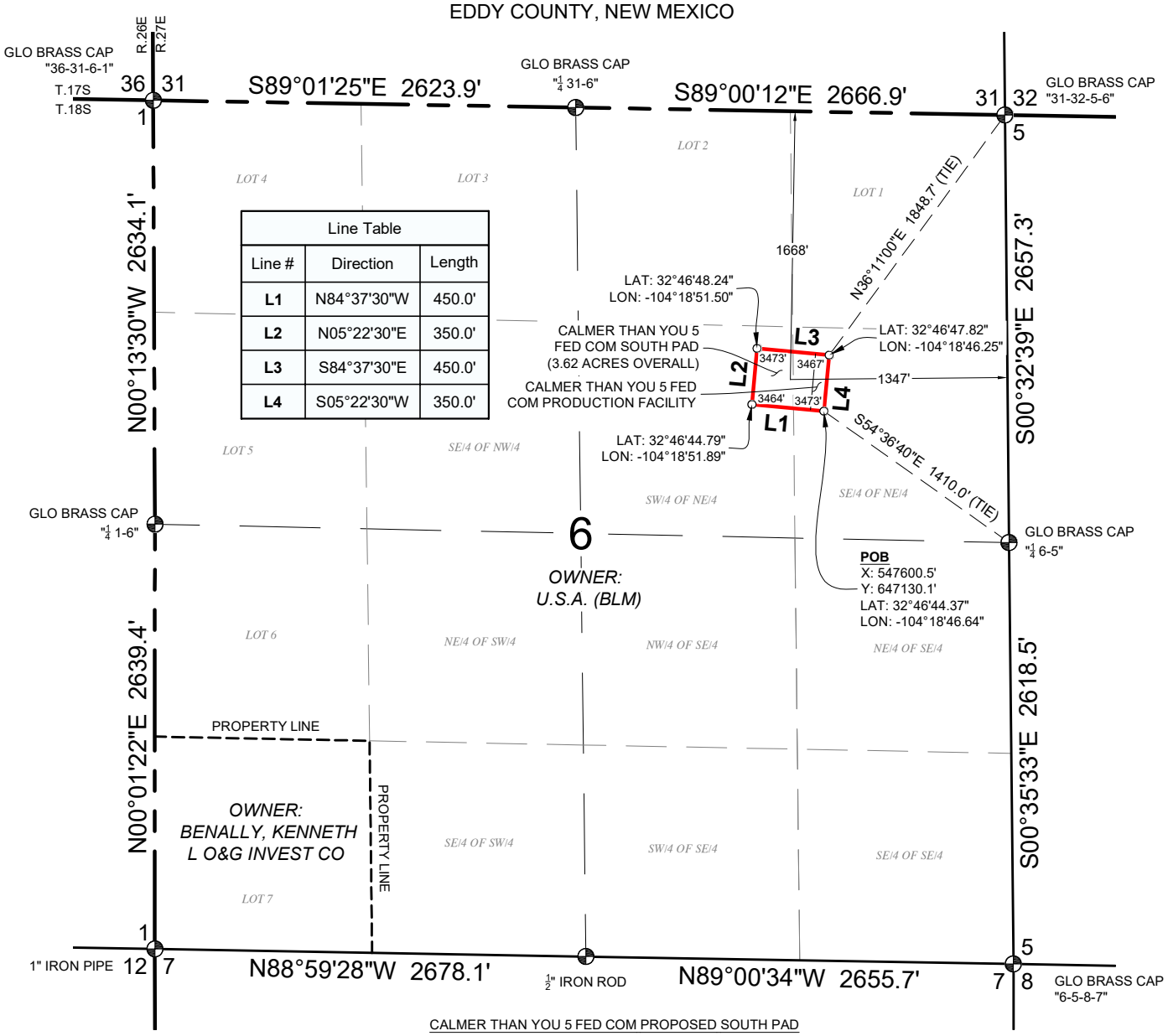
RILEY PERMIAN

CALMER THAN YOU 5 FED COM
PROPOSED SOUTH WATER LINE
SEC. 6, T-18-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

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PLAT: P:\REPX_ B25\0051\PROD\ROW_EXHIBIT\WATER\EP_CALMER_THAN_YOU_SOUTH_PAD_WATER_LINE 6/9/26 10:38 AM Operez

SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST,
EDDY COUNTY, NEW MEXICO



Line Table		
Line #	Direction	Length
L1	N84°37'30"W	450.0'
L2	N05°22'30"E	350.0'
L3	S84°37'30"E	450.0'
L4	S05°22'30"W	350.0'

CALMER THAN YOU 5 FED COM PROPOSED SOUTH PAD

SITE DESCRIPTION

A PROPOSED SITE SITUATED IN THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 6, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT, FROM WHICH A GLO BRASS CAP FOUND AND ACCEPTED AS THE EAST QUARTER CORNER OF SAID SECTION 6 BEARS S54°36'40"E, 1410.0' FEET, SAID POINT BEING THE SOUTHEAST CORNER HEREOF;

THENCE THE FOLLOWING FOUR (4) COURSES AND DISTANCES:
N84°37'30"W, 450.0 FEET;
N05°22'30"E, 350.0 FEET;
S84°37'30"E, 450.0 FEET;
S05°22'30"W, 350.0 FEET TO THE POINT OF **BEGINNING**, CONTAINING 3.62 ACRES

NOTES:
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LEGEND

POB	POINT OF BEGINNING
———	PROPOSED SOUTH PAD
○	POINT FOR BEGIN/END OR ANGLE POINT

0 500' 1000'
SCALE: 1"= 1000'

MITCHELL L. McDONALD NEW MEXICO 29821 PROFESSIONAL SURVEYOR 06/09/2026

I, MITCHELL L. MCDONALD, NEW MEXICO PROFESSIONAL SURVEYOR NO. 29821, DO HEREBY CERTIFY THAT THIS EASEMENT PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY 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 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 PLAT OF A PROPOSED EASEMENT.

MITCHELL L. MCDONALD, N.M. P.L.S. **No.29821**

SURVEY DATE: 01/14/2026
JOB NO.: B25.REPX.0050
SHEET: 1 OF 1
DRAFTED BY: RH
CHECKED BY: OP
REV: 0

RILEY PERMIAN

CALMER THAN YOU 5 FED COM PROPOSED SOUTH PAD
SEC. 6, T-18-S, R-27-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

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PLAT: P:\REPX_ B250050\PROD\ROW\SITE\EP_CALMER_THAN_YOU_SOUTH_PAD 6/9/26 9:54 AM Rhomesley

The Calmer Than You Fed South Pad will require Row for access, OHE, and SWD Pipeline. See all attached plats for locations specifics.

The Calmer Than You Fed South Pad Electric Line Details –

Primary voltage will be 12.47kV (Phase to Phase)

Secondary voltage will be 7.2kV (Phase to ground)

ROW width - 30 feet.

Length of ROW –1,840 feet

Acres – 1.27

Overhead Electric Line Construction

The construction of overhead electric distribution lines begins with route selection and staking in accordance with approved plans and regulatory requirements. The alignment is chosen to minimize environmental impacts and avoid sensitive resources such as wetlands and riparian zones to the extent practicable. Where wetlands or riparian areas must be crossed, the shortest practicable crossing area will be chosen. Known cultural sites and karst areas will be avoided. In areas of high karst potential, construction activities will follow BLM-approved measures to prevent subsurface impacts.

In this area of New Mexico, clearing and grading are typically not required for overhead electric line installation. In rare circumstances, the right-of-way may be mowed to reduce vegetation height for safe construction access. Because ground disturbance is minimal, reclamation practices such as regrading and revegetation are generally not required. Drainage and erosion control measures are implemented throughout construction to protect soil and water resources.

Temporary access routes may be established to allow safe movement of equipment and materials. Pole installation typically involves drilling or augering holes for foundations, which may include concrete footings depending on soil conditions and structural requirements. Poles—wood, steel, or composite—are then set and secured. Crossarms, insulators, and hardware are installed to support conductors. Once structures are in place, conductors are strung using tension-controlled methods to maintain proper clearances and prevent damage. Stringing may involve specialized equipment such as tensioners and pullers.

Construction practices follow BLM standards and best management practices to minimize surface disturbance, protect sensitive resources, and maintain long-term land health.

The Calmer Than You Fed South Pad Access Road Details –

Access Road Length – 394.6 feet

ROW Width – 30 feet

Acres – 0.27

Access Road Construction

Access roads are constructed to provide safe and reliable transportation of equipment, materials, and personnel to the well site. The process begins with route selection to minimize environmental impacts and avoid sensitive areas such as wetlands, steep slopes, and riparian zones. Clearing and grubbing remove vegetation and obstacles, and topsoil is salvaged and stockpiled for use in reclamation. Grading establishes a stable roadbed, and where necessary, cut-and-fill operations are used to achieve proper alignment and drainage.

The road surface is typically built using locally sourced aggregate or stabilized soil to support heavy loads and reduce maintenance. Drainage structures such as culverts and ditches are installed to manage runoff and prevent erosion. Roads are designed to accommodate large vehicles and maintain safe travel under varying weather conditions. Construction practices prioritize minimizing surface disturbance and maintaining reclamation potential, consistent with BLM standards and best management practices.

The Calmer Than You Fed South Pad Saltwater Disposal Pipeline Details –

Water pipeline length –1,492.6 feet.

ROW width - 15’.

Acres – 0.52

Pipeline Diameter – up to 12”

Anticipated water volume – Up to 20,000 BBL per day.

Pipeline Material – HDPE

Pipeline Construction

Pipeline installation begins with preparation of the right-of-way (ROW). If necessary, survey stakes are re-established to define the construction corridor. The ROW is then cleared and graded to create a smooth, stable work surface suitable for equipment and personnel. Following site preparation, a trench is excavated to accommodate the pipeline.

For steel pipelines, bending machines are used to shape the pipe to match trench contours. The pipe is then cribbed—typically with wood blocks—to elevate it for welding. Welders operate from trucks equipped with mounted welding machines, moving from joint to joint to complete welds. Once welding is complete, each joint is inspected to ensure compliance with applicable quality standards. While steel pipe is typically delivered with a factory-applied corrosion coating, field-applied coating is added to protect welded areas.

If Polyethylene (poly) pipe is used, installation differs in that it does not require bending machines, as the pipe will conform naturally to the trench contours, or welding trucks. Instead, joints are fused using a plastic welding machine that evenly heats and melts the pipe joints, permanently bonding them. These joints are also tested to verify they meet quality requirements.

After the pipe is positioned, side boom tractors travel along the ROW to lower it into the trench. Excavated soil is then backfilled using motor graders or similar equipment and compacted with wheeled machinery to minimize future settling. Once the main line is installed, ancillary facilities such as pig launchers, side taps, and meter stations are constructed. The final step is hydrostatic testing, during which the pipeline is filled with water and pressurized above its normal operating level to confirm structural integrity and ensure safe operation.

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

PWD Data Report
10/26/2026

APD ID: 10400112521 **Submission Date:** 06/18/2026

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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

Section 1 - General

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

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

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

Other PWD Surface Owner Description:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Lined pit Monitor description:

Lined pit Monitor

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

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

Other PWD Surface Owner Description:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

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

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Precipitated Solids Permit

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

TDS lab results:

Geologic and hydrologic

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

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

PWD Surface Owner Description:

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements

AFMSS

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

Bond Info Data

10/26/2026

APD ID: 10400112521 **Submission Date:** 06/18/2026

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: CALMER THAN YOU 5 FED COM **Well Number:** 13H

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

Highlighted data reflects the most recent changes

Show Final Text

Bond

Federal/Indian APD: FED

BLM Bond number: NMB001563

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:

Page 177 of 180

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

Property Name and Well Number: **CALMER THAN YOU 5 FED COM 13H**

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-015-59186	51120	Red Lake; Glorieta-Yeso

Property Code	Property Name	Well Number
339658	CALMER THAN YOU 5 FED COM	13H

OGRID No.	Operator Name	Ground Level Elevation
372290	RILEY PERMIAN OPERATING COMPANY LLC	3468'

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

Surface Location

UL or Lot No.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
G	6	18 S	27 E		1739 FNL	1410 FEL	N 32.779338°	W 104.313832°	EDDY

Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
H	5	18 S	27 E		1650 FNL	10 FEL	N 32.779132°	W 104.292134°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidated Code
323.88	Defining	N/A	No	Pending

Order Numbers: Pending — Well Setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL or lot no.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
H	6	18 S	27 E		1679 FNL	610 FEL	N 32.779465°	W 104.311230°	EDDY

First Take Point (FTP)

UL or lot no.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
E	5	18 S	27 E		1650 FNL	100 FWL	N 32.779506°	W 104.308921°	EDDY

Last Take Point (LTP)

UL or lot no.	Section	Township	Range	Lot	Feet from the N/S	Feet from the E/W	Latitude	Longitude	County
H	5	18 S	27 E		1650 FNL	100 FEL	N 32.779138°	W 104.292427°	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unity Type	Ground Floor Elevation
	☒ Horizontal ☐ Vertical	3493'

OPERATOR CERTIFICATION

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.

Signature — Date: 5-28-26

Print Name: Abel Rizzo

E-mail Address: Abelrizzo@rileypermian.com

SURVEYORS CERTIFICATION

MITCHELL L. McDONALD — NEW MEXICO — 29821 — 05/27/2026 — PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor — Date

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.

MITCHELL L. MCDONALD, N.M. P.L.S.

Certificate Number	Date of Survey
29821	JANUARY 14, 2026

P:\WDPA_EDS\059\PROD\C102_Plat\wpaC102\NS_CALMER_THAN_YOU_5_FED_COM_C102_13H_R2.dwg RHOMBELEY 5/28/2026 11:43 AM

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.

Received by OCD: 11/11/2026 11:05:12 AM

Released to Imaging: 11/18/2026 1:59:10 PM

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

Property Name and Well Number

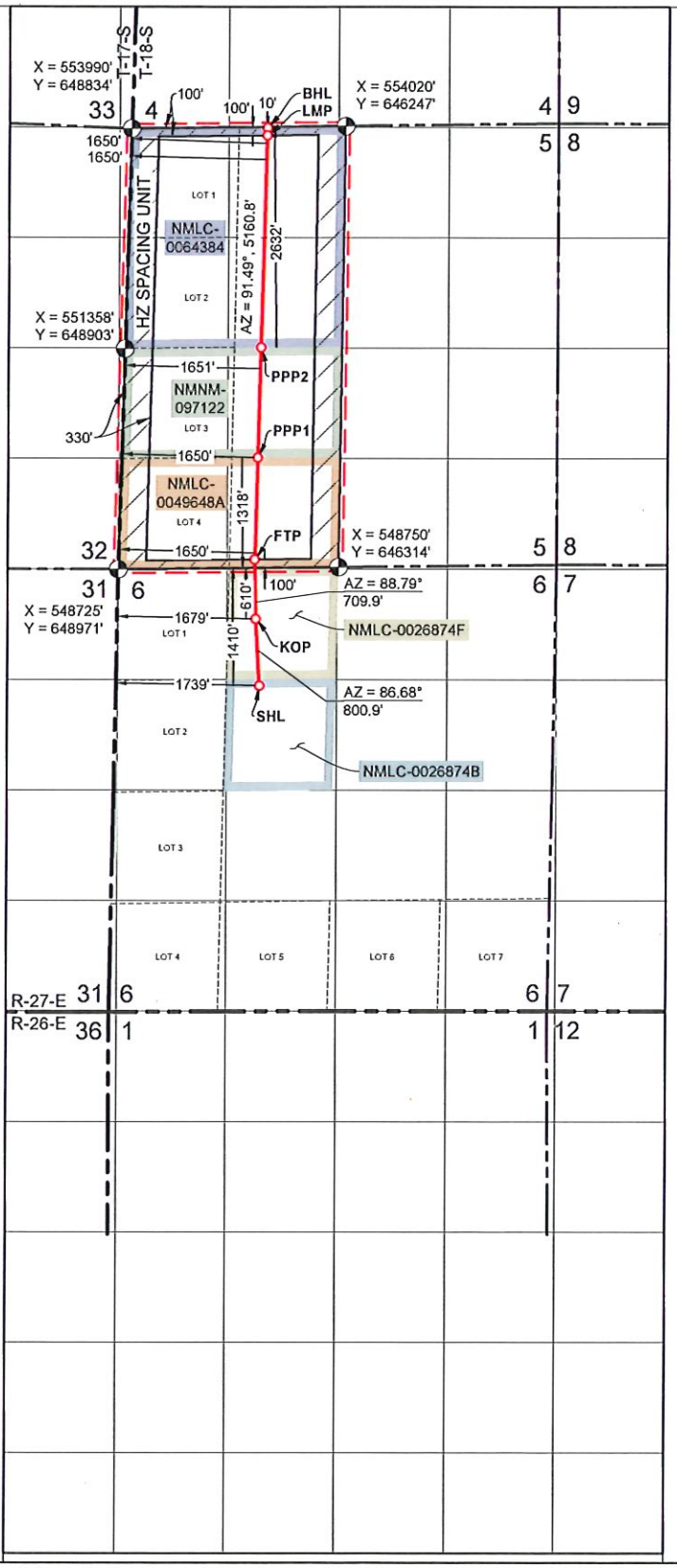
CALMER THAN YOU 5 FED COM 13H

SURFACE LOCATION
NEW MEXICO EAST
NAD 1983
X=547331' Y=647256'
LAT=N32.779338°
LONG=W104.313832°
NAD 1927
X=506152' Y=647193'
LAT=N32.779224°
LONG=W104.313316°
1739' FNL 1410' FEL

KOP LOCATION
NEW MEXICO EAST
NAD 1983
X=548131' Y=647302'
LAT=N32.779465°
LONG=W104.311230°
NAD 1927
X=506952' Y=647240'
LAT=N32.779351°
LONG=W104.310715°
1679' FNL 610' FEL

FIRST TAKE POINT
NEW MEXICO EAST
NAD 1983
X=548840' Y=647317'
LAT=N32.779506°
LONG=W104.308921°
NAD 1927
X=507661' Y=647254'
LAT=N32.779391°
LONG=W104.308405°
1650' FNL 100' FWL

PROPOSED PENETRATION POINT 1
NEW MEXICO EAST
NAD 1983
X=550058' Y=647285'
LAT=N32.779418°
LONG=W104.304958°
NAD 1927
X=508879' Y=647223'
LAT=N32.779303°
LONG=W104.304443°
1650' FNL 1318' FWL



PROPOSED PENETRATION POINT 2
NEW MEXICO EAST
NAD 1983
X=551376' Y=647251'
LAT=N32.779322°
LONG=W104.300669°
NAD 1927
X=510197' Y=647188'
LAT=N32.779208°
LONG=W104.300155°
1651' FNL 2632' FEL

LOWER MOST PERF.
NEW MEXICO EAST
NAD 1983
X=553909' Y=647185'
LAT=N32.779138°
LONG=W104.292427°
NAD 1927
X=512730' Y=647122'
LAT=N32.779024°
LONG=W104.291913°
1650' FNL 100' FEL

BOTTOM HOLE LOCATION
NEW MEXICO EAST
NAD 1983
X=553999' Y=647183'
LAT=N32.779132°
LONG=W104.292134°
NAD 1927
X=512820' Y=647120'
LAT=N32.779018°
LONG=W104.291620°
1650' FNL 10' FEL

Note: Bearings, coordinates, and distances (grid) shown hereon are based on the New Mexico State Plane Coordinate System, East Zone, NAD 83-2011 (EPOCH 2010) framework, as derived by OPUS Solution. The elevations shown hereon are based on NAVD 88.

Received by OCD: 11/11/2026 11:05:12 AM
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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Operator: RILEY PERMIAN OPERATING COMPANY, LLC 29 E Reno Avenue Oklahoma City, OK 73104	OGRID: 372290
	Action Number: 641336
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

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

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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

Operator:	OGRID:
RILEY PERMIAN OPERATING COMPANY, LLC 29 E Reno Avenue Oklahoma City, OK 73104	372290
	Action Number: 641336
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ascentrepx	Cement is required to circulate on both surface and intermediate1 strings of casing.	11/11/2026
ascentrepx	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	11/11/2026
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	11/18/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	11/18/2026
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	11/18/2026
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	11/18/2026
ward.rikala	Cement is required to circulate on both surface and production strings of casing.	11/18/2026
ward.rikala	If the method of isolation was not by circulation, a CBL must be performed; if strata isolation is not achieved, then remediation will be required before further operations.	11/18/2026
ward.rikala	If a DV tool is utilized during the casing cementing operations, the following COA applies: 1- Once the DV tool is opened and circulation is established, it needs to be noted if cement is circulated off of the top of the DV tool and how much. 2- If cement is not circulated off of the top of the DV tool, then a CBL will be required. Depending upon the results of the CBL, remedial action may be required prior to drilling operations continuing.	11/18/2026