AFMSS

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

Application for Permit to Drill

APD Package Report

Date Printed: 10/16/2025 07:18 AM

APD ID:	10400105546	Well Status:	AAPD
APD Received Date:	08/07/2025 09:48 AM	Well Name:	RIVERBEND 12-13 FEDERAI
Operator:	CIMAREX ENERGY COMPANY OF	Well Number:	5H

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

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

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

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

- PWD Report
- PWD Attachments
  -- None

- Bond Report
- Bond Attachments

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-- 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.: NMNM16104

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.: RIVERBEND 12-13 FEDERAL COM 5H

2. Name of Operator: CIMAREX ENERGY COMPANY OF COLORADO

9. API Well No.: 30-015-57614

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

3b. Phone No. *(include area code)*: (432) 620-1936

10. Field and Pool, or Exploratory: WILLOW LAKE/BONE SPRING, SOUTHE

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

At surface: SESW / 1147 FSL / 2302 FWL / LAT 32.155153 / LONG -104.042021

At proposed prod. zone: SWSE / 100 FSL / 1600 FEL / LAT 32.123003 / LONG -104.037478

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 1/T25S/R28E/NMP

14. Distance in miles and direction from nearest town or post office*: 5 miles

12. County or Parish: EDDY

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 1207 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 640.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 28 feet

19. Proposed Depth:

20. BLM/BIA Bond No. in file: FED: NMB001188

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 2934 feet

22. Approximate date work will start*: 12/30/2025

23. Estimated duration: 30 days

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: (Electronic Submission)

Name *(Printed/Typed)*: CRYSTAL DENSON / Ph: (432) 620-1936

Date: 08/07/2025

Title: Regulatory Analyst

Approved by *(Signature)*: (Electronic Submission)

Name *(Printed/Typed)*: CODY LAYTON / Ph: (575) 234-5959

Date: 10/07/2025

Title: Assistant Field Manager Lands & Minerals

Office: Carlsbad Field 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: 10/07/2025

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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.

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Approval Date: 10/07/2025

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Additional Operator Remarks

Location of Well

0. SHL: SESW / 1147 FSL / 2302 FWL / TWSP: 25S / RANGE: 28E / SECTION: 1 / LAT: 32.155153 / LONG: -104.042021 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 1325 FNL / 1592 FEL / TWSP: 25S / RANGE: 28E / SECTION: 13 / LAT: 32.133658 / LONG: -104.03767 (TVD: 0 feet, MD: 0 feet)

PPP: NWSE / 2650 FNL / 1592 FEL / TWSP: 25S / RANGE: 28E / SECTION: 13 / LAT: 32.130015 / LONG: -104.037471 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 1600 FEL / TWSP: 25S / RANGE: 28E / SECTION: 12 / LAT: 32.15165 / LONG: -104.037448 (TVD: 0 feet, MD: 0 feet)

BHL: SWSE / 100 FSL / 1600 FEL / TWSP: 25S / RANGE: 28E / SECTION: 13 / LAT: 32.123003 / LONG: -104.037478 (TVD: 0 feet, MD: 0 feet)

BLM Point of Contact

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

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Riverbend 12-13 FEDERAL COM 5H

APD - Geology COAs (Not in Potash or WIPP)

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

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

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

Be aware that:

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

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

PECOS DISTRICT

SURFACE USE

CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CIMAREX ENERGY COMPANY OF COLORADO
LEASE NO.:	NMNM16104
COUNTY:	Eddy County, New Mexico

Wells:

RIVERBEND 12-13 FEDERAL COM 3H

RIVERBEND 12-13 FEDERAL COM 4H

RIVERBEND 12-13 FEDERAL COM 5H

RIVERBEND 12-13 FEDERAL COM 6H

RIVERBEND 12-13 FEDERAL COM 7H

RIVERBEND 12-13 FEDERAL COM 8H

Approval Date: 10/07/2025

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1. GENERAL PROVISIONS

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

1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

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

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

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

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

1.2. RANGELAND RESOURCES

1.2.1. **Cattleguards**

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

1.2.2. **Fence Requirement**

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

1.2.3. **Livestock Watering Requirement**

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

1.3. NOXIOUS WEEDS

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

1.3.1 African Rue (Peganum harmala)

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

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

1.4. LIGHT POLLUTION

1.4.1. **Downfacing**

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

1.4.2. **Shielding**

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

1.4.3. **Lighting Color**

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

2. SPECIAL REQUIREMENTS

2.1. CAVE/KARST

2.1.1. **General Construction**

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

2.1.2. **Pad Construction**

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

2.1.3. **Surface Flowlines Installation**

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

2.1.4. **Production Mitigation**

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

2.1.5. **Residual and Cumulative Mitigation**

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

2.1.6. **Plugging and Abandonment Mitigation**

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

2.3 WILDLIFE

2.3.2. **Texas Hornshell Mussel**

Oil and Gas Zone D - CCA Boundary requirements.

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

2.4 SPECIAL STATUS PLANT SPECIES

2.5 VISUAL RESOURCE MANAGEMENT

2.5.1 **VRM IV**

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

3. CONSTRUCTION REQUIREMENTS

3.1 CONSTRUCTION NOTIFICATION

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

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

3.2 TOPSOIL

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

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

3.3 CLOSED LOOP SYSTEM

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

3.4 FEDERAL MINERAL PIT

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

3.5 WELL PAD & SURFACING

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

3.6 EXCLOSURE FENCING (CELLARS & PITS)

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

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

3.7 ON LEASE ACCESS ROAD

3.7.1 **Road Width**

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

3.7.2 **Surfacing**

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

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

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

3.7.3 Crowning

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

3.7.4 Ditching

Ditching shall be required on both sides of the road.

3.7.5 Turnouts

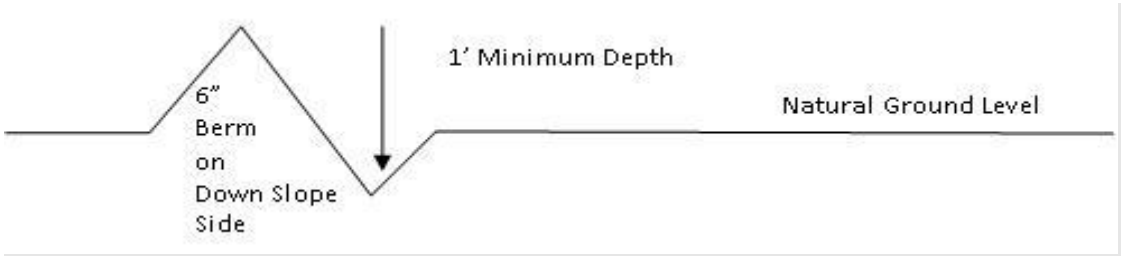
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

3.7.6 Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

3.7.7 **Public Access**

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

Approval Date: 10/07/2025

Construction Steps

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

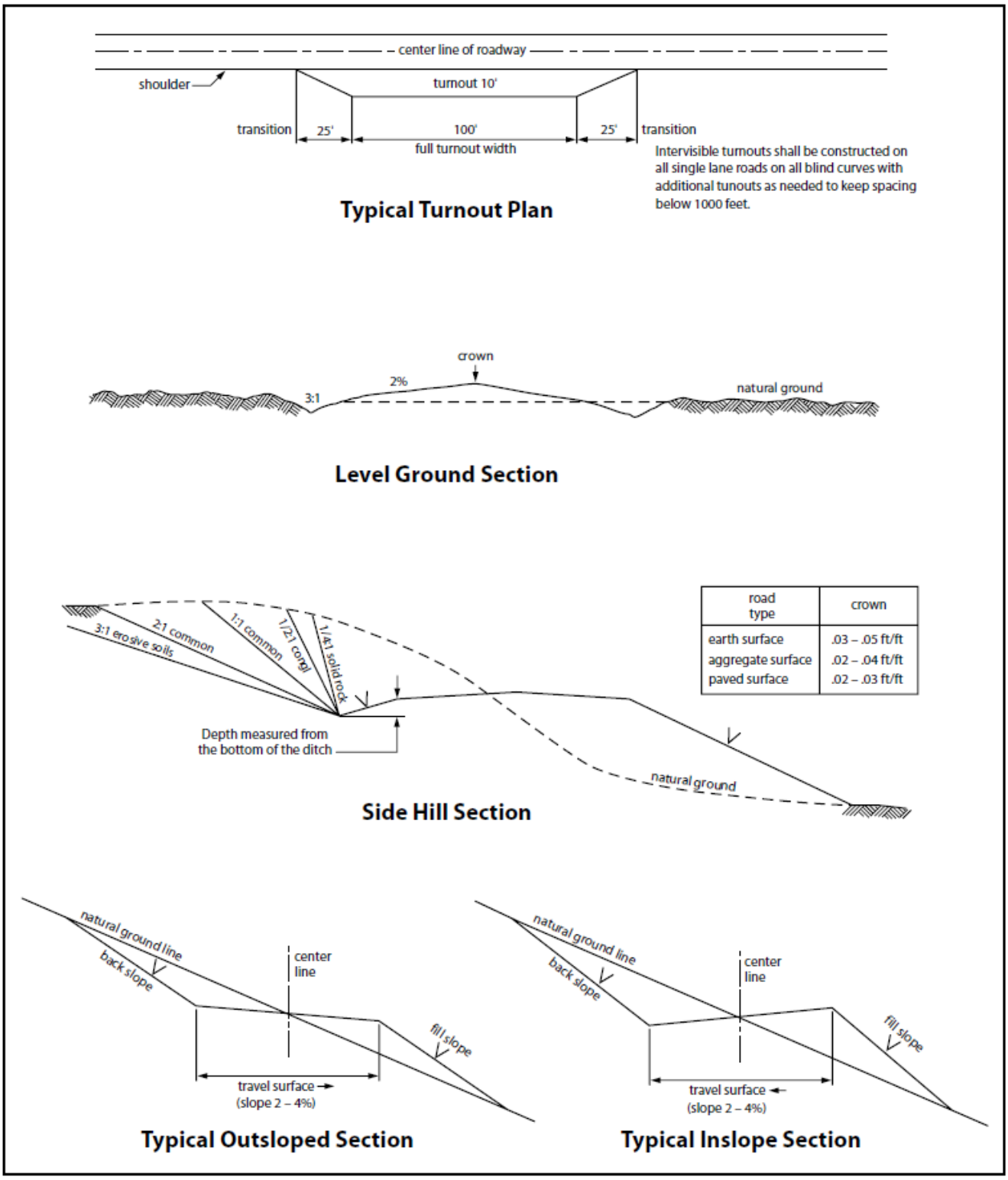


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

Approval Date: 10/07/2025

5. PRODUCTION (POST DRILLING)

5.1 WELL STRUCTURES & FACILITIES

5.1.1 **Placement of Production Facilities**

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

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

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

5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening

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

5.1.4. Open-Vent Exhaust Stack Exclosures

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

5.1.5. Containment Structures

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

6. RECLAMATION

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

6.1 ROAD AND SITE RECLAMATION

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

6.2 EROSION CONTROL

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

6.3 INTERIM RECLAMATION

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

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

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

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

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

6.4 FINAL ABANDONMENT & RECLAMATION

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

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

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

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

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

6.5 SEEDING TECHNIQUES

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

6.6 SOIL SPECIFIC SEED MIXTURE

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

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

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

Seed Mixture 1 for Loamy Sites

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

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

*Pounds of pure live seed:

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

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Cimarex Energy Company of Colorado**
LOCATION:	Section 1, T.25 S., R.28 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	**Riverbend 12-13 Federal Com 4H**
ATS/API ID:	**ATS-25-2216**
APD ID:	**10400105541**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Riverbend 12-13 Federal Com 5H**
ATS/API ID:	**ATS-25-2215**
APD ID:	**10400105546**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Riverbend 12-13 Federal Com 7H**
ATS/API ID:	**ATS-25-2213**
APD ID:	**10400105549**
Sundry ID:	**N/a**

WELL NAME & NO.:	**Riverbend 12-13 Federal Com 8H**
ATS/API ID:	**ATS-25-2212**
APD ID:	**10400105550**
Sundry ID:	**N/a**

COA

Approval Date: 10/07/2025

H2S	No		
Potash	None	None	
Cave/Karst Potential	Medium		
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☑ Flex Hose	☐ Other
Wellhead	Conventional and Multibowl		
Other	☐ 4 String ☐ 5 String	Capitan Reef None	☐ WIPP
Other	Pilot Hole None	☐ Open Annulus	
Cementing	Contingency Squeeze None	Echo-Meter None	Primary Cement Squeeze None
Special Requirements	☐ Water Disposal/Injection	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry	Waste Prevention Waste MP	
Special Requirements Variance	☐ BOPE Break Testing ☐ Offline BOPE Testing	☐ Offline Cementing	☐ Casing Clearance

Approval Date: 10/07/2025

A. HYDROGEN SULFIDE

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **350 feet** (a minimum of 70 feet into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.

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

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

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

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

 Approval Date: 10/07/2025

3. The minimum required fill of cement behind the **7** inch production casing is:

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
      Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

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

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

C. PRESSURE CONTROL

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

2.

Option 1:

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

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

Option 2:

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

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

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

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

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

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

A. CASING

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

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

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

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

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

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

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

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

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

B. PRESSURE CONTROL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

Long Vo (LVO) 9/30/2025

Approval Date: 10/07/2025

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

Operator Certification Data Report

10/16/2025

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: CRYSTAL DENSON **Signed on:** 09/25/2025

Title: Regulatory Analyst

Street Address: 6001 DEAUVILLE BLVD SUITE 300N

City: MIDLAND **State:** TX **Zip:** 76706

Phone: (432)620-1644

Email address: CRYSTAL.DENSON@COTERRA.COM

Field

Representative Name:

Street Address:

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

Phone:

Email address:

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

Application Data
10/16/2025

APD ID: 10400105546 **Submission Date:** 08/07/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - General

APD ID: 10400105546 **Tie to previous NOS?** N **Submission Date:** 08/07/2025

BLM Office: Carlsbad **User:** CRYSTAL DENSON **Title:** Regulatory Analyst

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

Lease number: NMNM16104 **Lease Acres:**

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

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

Agreement number:

Agreement name:

Keep application confidential? Y

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

Operator letter of

Operator Info

Operator Organization Name: CIMAREX ENERGY COMPANY OF COLORADO

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

Operator PO Box:

Operator City: MIDLAND **State:** TX

Operator Phone: (432)620-1936

Operator Internet Address:

Section 2 - Well Information

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

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

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

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** WILLOW LAKE **Pool Name:** BONE SPRING, SOUTHEAST

Released to Imaging: 1/5/2026 11:02:53 AM

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

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:** Riverbend 12-13 Fed Com **Number:** 5H

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

Well Work Type: Drill

Well Type: CONVENTIONAL GAS WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 5 Miles **Distance to nearest well:** 28 FT **Distance to lease line:** 1207 FT

Reservoir well spacing assigned acres Measurement: 640 Acres

Well plat: RIVERBEND_12_13_FED_COM_W2E2___C102__Well_5H_20250826170638.pdf

RIVERBEND_12_13_FED_COM_W2E2___C102__Well_5H_20250925101030.pdf

Well work start Date: 12/30/2025 **Duration:** 30 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

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

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	1147	FSL	2302	FWL	25S	28E	1	Aliquot SESW	32.155153	-104.042021	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 88128	2934			N
KOP Leg #1	100	FNL	1600	FEL	25S	28E	12	Aliquot NWNE	32.15165	-104.037448	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 16104	2934	0	0	Y

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	100	FNL	1600	FEL	25S	28E	12	Aliquot NWNE	32.15165	-104.037448	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 16104	2934	0	0	Y
PPP Leg #1-2	1325	FNL	1592	FEL	25S	28E	13	Aliquot SWNE	32.133658	-104.03767	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 16104	2934	0	0	Y
PPP Leg #1-3	2650	FNL	1592	FEL	25S	28E	13	Aliquot NWSE	32.130015	-104.037471	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 16104		0	0	Y
EXIT Leg #1	100	FSL	1600	FEL	25S	28E	13	Aliquot SWSE	32.123003	-104.037478	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 16104	2934	0	0	Y
BHL Leg #1	100	FSL	1600	FEL	25S	28E	13	Aliquot SWSE	32.123003	-104.037478	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 16104	2934	0	0	Y

CONFIDENTIAL

C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024

Submittal Type: ☑ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code 96217	Pool Name WILLOW LAKE; BONE SPRING, SOUTHEAST
Property Code	Property Name RIVERBEND 12-13 FEDERAL COM	Well Number 5H
OGRID No. 162683	Operator Name CIMAREX ENERGY CO. OF COLORADO	Ground Level Elevation 2934.1'

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

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
N	1	25S	28E		1147 SOUTH	2302 WEST	32.155153°	-104.042021°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
O	13	25S	28E		100 SOUTH	1600 EAST	32.123003°	-104.037478°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
640				

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

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
B	12	25S	28E		100 NORTH	1600 EAST	32.151650°	-104.037448°	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
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Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
O	13	25S	28E		100 SOUTH	1600 EAST	32.123003°	-104.037478°	EDDY

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

OPERATOR CERTIFICATIONS

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

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

Crystal Denson 6/4/2025
Signature Date

Crystal Denson
Printed Name

Crystal. Denson@coterra.com
Email Address

SURVEYOR CERTIFICATIONS

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

PAUL BUCHELE NEW MEXICO 23782 04-29-25 PROFESSIONAL SURVEYOR

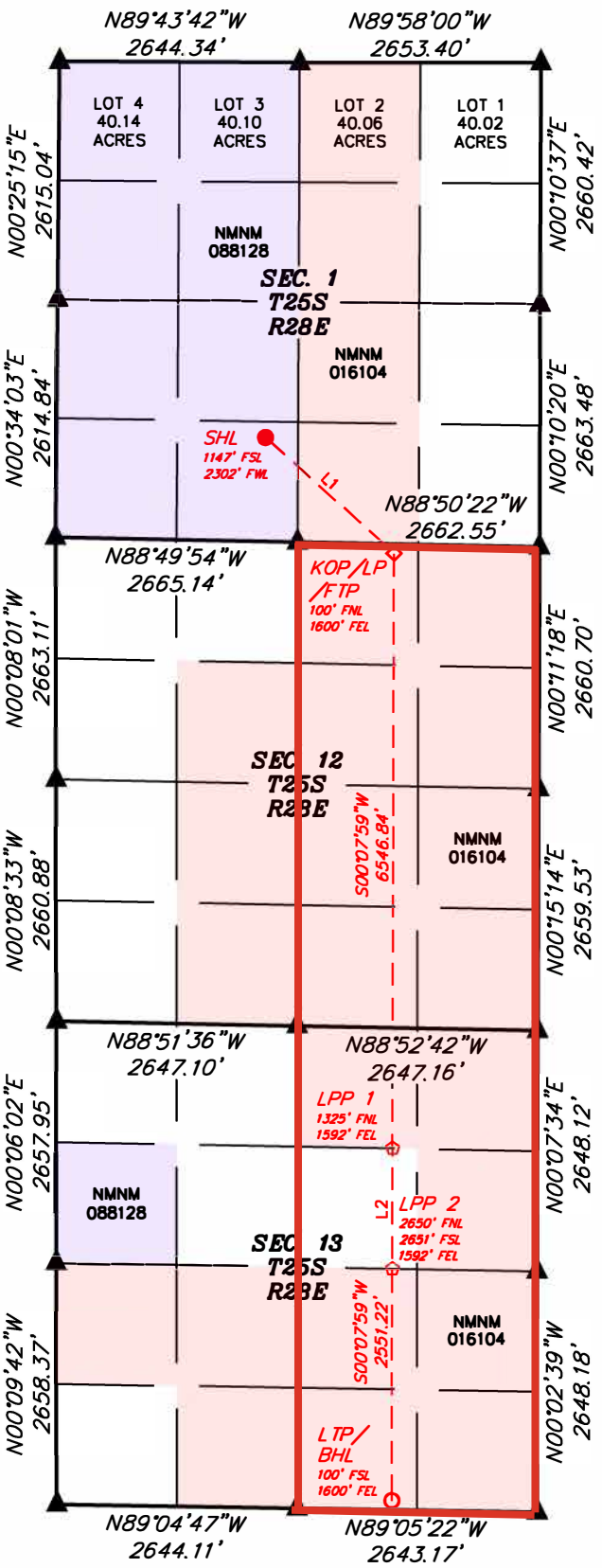
Signature and Seal of Professional Surveyor

23782 August 12, 2024
Certificate Number Date of Survey

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

Released to Imaging: 1/5/2026 11:02:53 AM

Property Name	Well Number	Drawn By	Revised By
RIVERBEND 12-13 FEDERAL COM	5H	L.T.T. 04-29-25	



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

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'18.55" (32.155153°)
LONGITUDE = -104°02'31.28" (-104.042021°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'18.11" (32.155030°)
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N: 420243.53' E: 590304.31'

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NAD 83 (LPP 1)
LATITUDE = 32°08'01.17" (32.133658°)
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LINE TABLE

LINE	DIRECTION	LENGTH
L1	S47°55'27"E	1904.74'
L2	S00°07'59"W	1325.40'

NOTE:
- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)
- Colored areas within section lines represent Federal oil & gas leases.

2000' 1000' 0' 1000'
SCALE

Sheet 2 of 2

C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024

Submittal Type: ☑ Initial Submittal ☐ Amended Report ☐ As Drilled

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Property Code	Property Name RIVERBEND 12-13 FEDERAL COM	Well Number 5H
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640				

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

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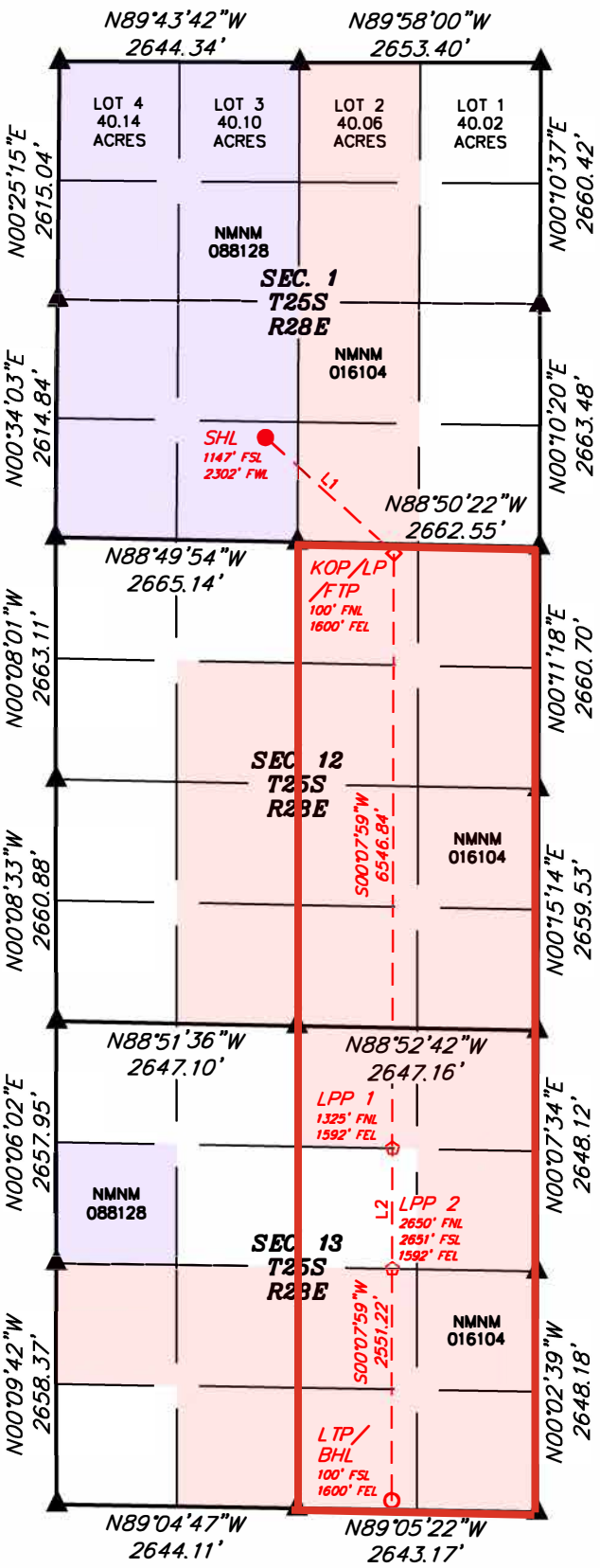
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23782 August 12, 2024
Certificate Number Date of Survey

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Sheet 1 of 2

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RIVERBEND 12-13 FEDERAL COM	5H	L.T.T. 04-29-25	



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2000' 1000' 0' 1000'
SCALE

Sheet 2 of 2

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

Drilling Plan Data Report
10/16/2025

APD ID: 10400105546 **Submission Date:** 08/07/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Well Type: CONVENTIONAL GAS 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
16546677	RUSTLER	0	407	407	ANHYDRITE	USEABLE WATER	N
16546678	TOP SALT	-1952	1952	1952	ANHYDRITE, SALT	NONE	N
16546679	LAMAR	-2679	2679	2679	ANHYDRITE, SALT	NONE	N
16546680	BELL CANYON	-2806	2806	2806	SANDSTONE	NONE	N
16546681	CHERRY CANYON	-3619	3619	3619	SANDSTONE	NONE	N
16546682	BRUSHY CANYON	-4817	4817	4817	SANDSTONE	NATURAL GAS, OIL	N
16546683	LOWER BRUSHY CANYON 8A	-5766	5766	5766	LIMESTONE	NATURAL GAS, OIL	N
16546684	BONE SPRING LIME	-6411	6411	6411	LIMESTONE	NATURAL GAS, OIL	N
16546685	BONE SPRING 1ST	-7361	7361	7361	SANDSTONE	NATURAL GAS, OIL	N
16546686	BONE SPRING 2ND	-8048	8048	8048	SANDSTONE	NATURAL GAS, OIL	N
16546687	BONE SPRING 3RD	-8432	8432	8432	SANDSTONE, SHALE	NATURAL GAS, OIL	N
16546689	BONE SPRING 3RD	-8782	8782	8782	SANDSTONE	NATURAL GAS, OIL	N
16546690	BONE SPRING 3RD	-8862	8862	8862	SANDSTONE	NATURAL GAS, OIL	Y
16546688		0					N

Section 2 - Blowout Prevention

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Pressure Rating (PSI): 10M **Rating Depth:** 19548

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

Variance request: See attached.

Testing Procedure: 1. After running the first string of casing, a 10M BOP/BOPE system with 10M annular will be installed. BOPs will be tested according to Onshore Order #2. BOPE will be tested to full rated pressure (10K for all BOPE). For the low test, the system will be tested to 250 psi. 2. All BOP equipment will be tested utilizing a conventional test plug. 3. A remote kill line is included in the BOPE system 4. All casing strings will be tested per Onshore Order #2, to 0.22 psi/ft or 1,500 psi, whichever is greater, not to exceed 70% of casing burst. 5. If well conditions dictate, conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

Choke Diagram Attachment:

NEW_MEXICO_STANDARD_VARIANCES_REV.1_20250801073318.pdf

10M_BOPE_BLM_SUBMISSION_REV.0_20250801073318.pdf

COTERRA_MBU_3T_CFL_20_X_13.38_X_9.58_X_7_X_4.5_20250801073318.pdf

COTERRA_10K_PROD_TREE_20250801073319.pdf

CHOKE_HOSE_M15486_20250801073320.pdf

NEW_MEXICO_STANDARD_VARIANCES_REV.1_20250925101111.pdf

CHOKE_HOSE_M15486_20250925101111.pdf

COTERRA_MBU_3T_CFL_20_X_13.38_X_9.58_X_7_X_4.5_20250925101111.pdf

10M_BOPE_BLM_SUBMISSION_REV.0_20250925101111.pdf

COTERRA_10K_PROD_TREE_20250925101111.pdf

BOP Diagram Attachment:

10M_BOP_DIAGRAM_20250801073255.pdf

10M_BOP_DIAGRAM_20250925101119.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	1190	0	1190	2934	1744	1190	OTHER - H-40/J-5	48	ST&C	1.44	3.36	BUOY	5.64	BUOY	5.64

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

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
														Hybrid								
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	2500	0	2500	2935	434	2500	J-55	36	LT&C	1.57	2.73	BUOY	5.08	BUOY	5.08
3	PRODUCTION	8.75	7.0	NEW	API	N	0	9809	0	8862	2935	-5928	9809	P-110	26	BUTT	1.42	2.28	BUOY	62.35	BUOY	62.35
4	COMPLETION SYSTEM	6	4.5	NEW	API	N	9545	19548	9545	8862	-6610	-5928	10003	HCP-110	11.6	BUTT	2.02	2.45	BUOY	61.79	BUOY	61.79

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

5H_Casing_Assumptions_20250801073617.pdf

5H_Casing_Assumptions_20250925101206.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Casing Attachments

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 4 **String** COMPLETION SYSTEM

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

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	890	577	1.72	13.5	992	45	Class C	Bentonite
SURFACE	Tail		890	1190	154	1.34	14.8	206	45	Class C	LCM
INTERMEDIATE	Lead		0	2200	441	1.88	12.9	829	59	35:65 (POZ C)	Salt, Bentonite
INTERMEDIATE	Tail		2200	2500	146	1.36	14.8	199	59	Class C	LCM
PRODUCTION	Lead		2300	8809	377	3.64	10.3	1372	25	Tuned Light	LCM

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Tail		8809	9809	242	1.36	14.8	329	25	Class C	Retarder
COMPLETION SYSTEM	Lead		9709	19548	813	1.3	14.2	1057	10	50:50(POZ H)	salt, Bentonite, Fluid Loss, Dispersant, SMS

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

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

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1190	OTHER : Fresh Water	7.83	8.33							
1190	2500	SALT SATURATED	9.5	10							
2500	9809	OIL-BASED MUD	9	9.5							
9809	19548	OIL-BASED MUD	9	9.5							

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Section 6 - Test, Logging, Coring

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

No DST Planned. Logs run on the 5H.

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

COMPENSATED NEUTRON LOG,DIRECTIONAL SURVEY,GAMMA RAY LOG,

Coring operation description for the well:

N/A

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4377 **Anticipated Surface Pressure:** 4377

Anticipated Bottom Hole Temperature(F): 160

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

H2S_PLAN_REV.0_20250801074746.pdf
H2S_PLAN_REV.0_20250925101253.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Riverbend_12_13_Federal_Com_5H___Plan_1_20250801075041.pdf
Riverbend_12_13_Federal_Com_5H___Plan_1_AC_20250801075042.pdf
Riverbend_12_13_Federal_Com_5H___Plan_1_Plot_20250801075042.pdf
5H_Drilling_Plans_20250801075101.pdf
WELL_CONTROL_PLAN_REV.0_20250801075117.pdf
Riverbend_12_13_Federal_Com_5H___Plan_1_20250925101357.pdf
Riverbend_12_13_Federal_Com_5H___Plan_1_Plot_20250925101357.pdf
Riverbend_12_13_Federal_Com_5H___Plan_1_AC_20250925101357.pdf
5H_Drilling_Plans_20250925101357.pdf
WELL_CONTROL_PLAN_REV.0_20250925101407.pdf

Other proposed operations facets description:

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Other proposed operations facets attachment:

RIVERBEND_12_13_FED_COM_W2E2_rig_layout_plat_20250801074910.pdf
Riverbend_12_13_5H_Natural_Gas_Plan_Cimarex_20250801074921.pdf
RIVERBEND_12_13_FED_COM_W2E2_rig_layout_plat_20250925101427.pdf
Riverbend_12_13_5H_Natural_Gas_Plan_Cimarex_20250925101443.pdf

Other Variance request(s)?: Y

Other Variance attachment:

NEW_MEXICO_STANDARD_VARIANCES_REV.1_20250801074943.pdf
CHOKE_HOSE_M15486_20250801074943.pdf
NEW_MEXICO_STANDARD_VARIANCES_REV.1_20250925101507.pdf
CHOKE_HOSE_M15486_20250925101508.pdf

CONFIDENTIAL

Standard New Mexico Variances

Variance Request #1: Skid Rig after Cementing Surface Casing

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

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

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

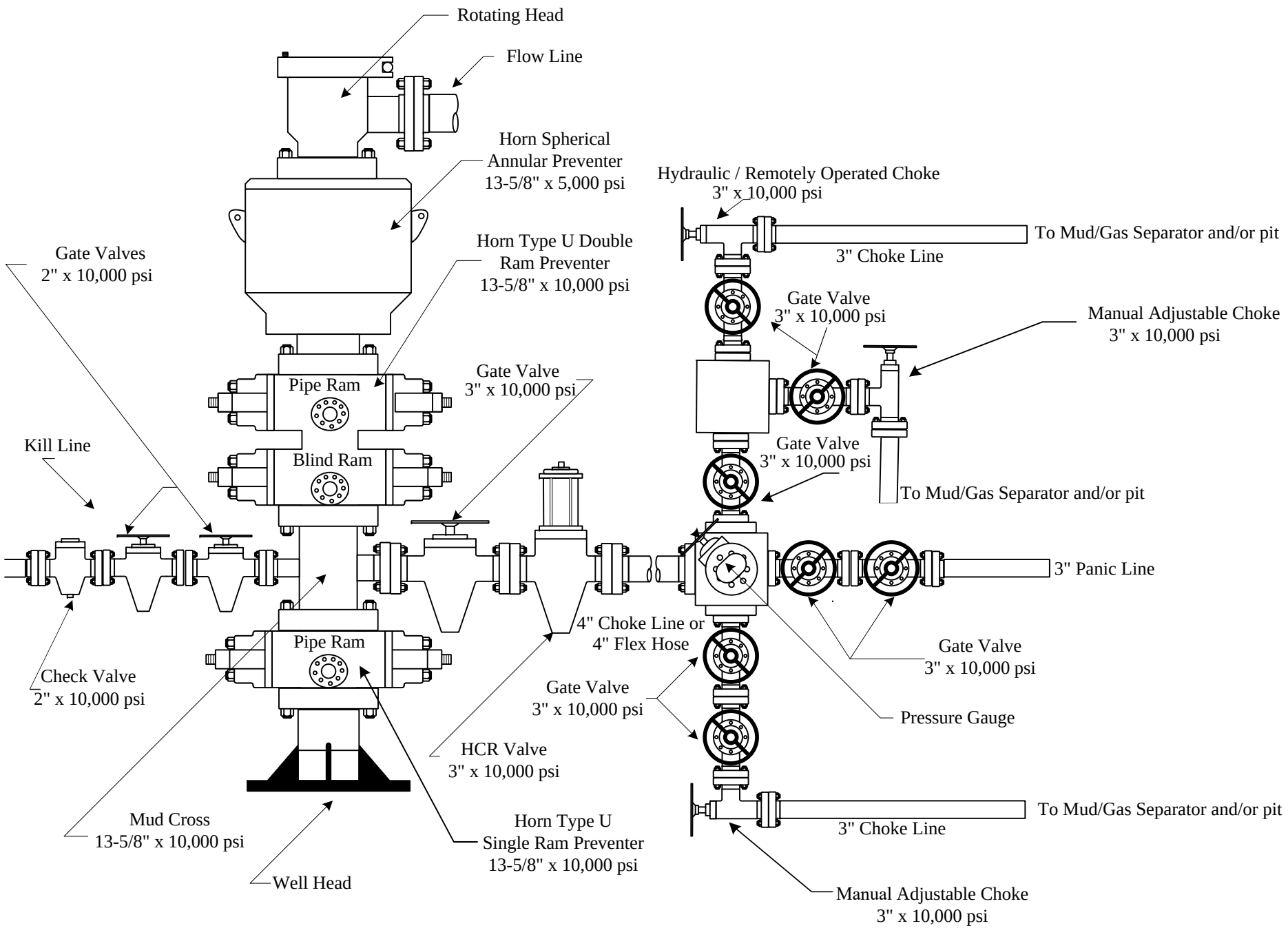
Variance Request #4: Utilize Co-Flex Choke Line

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

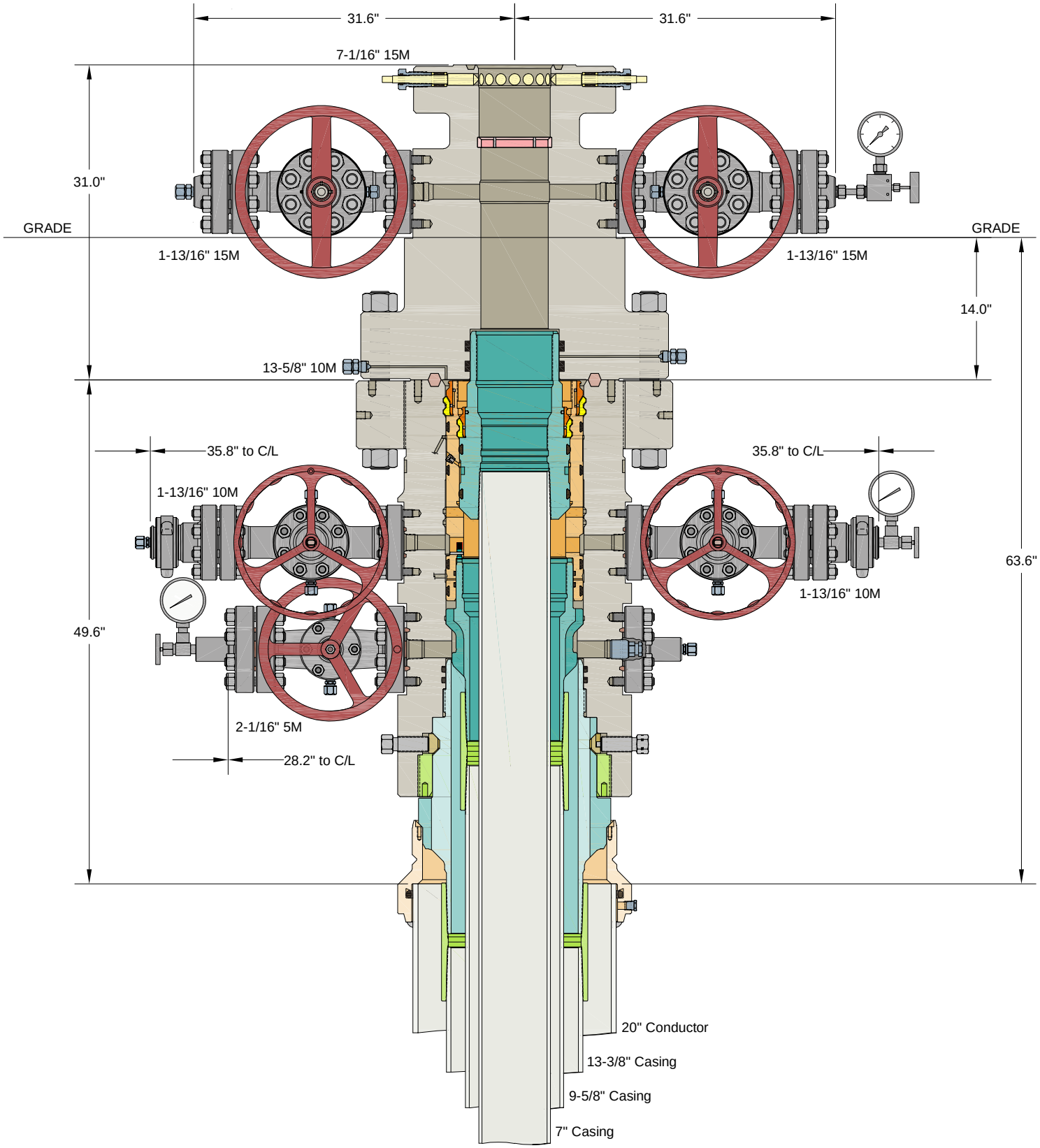
Released to Imaging: 1/5/2026 11:02:53 AM

Received by OCD: 11/13/2025 4:03:43 PM

COTERRA



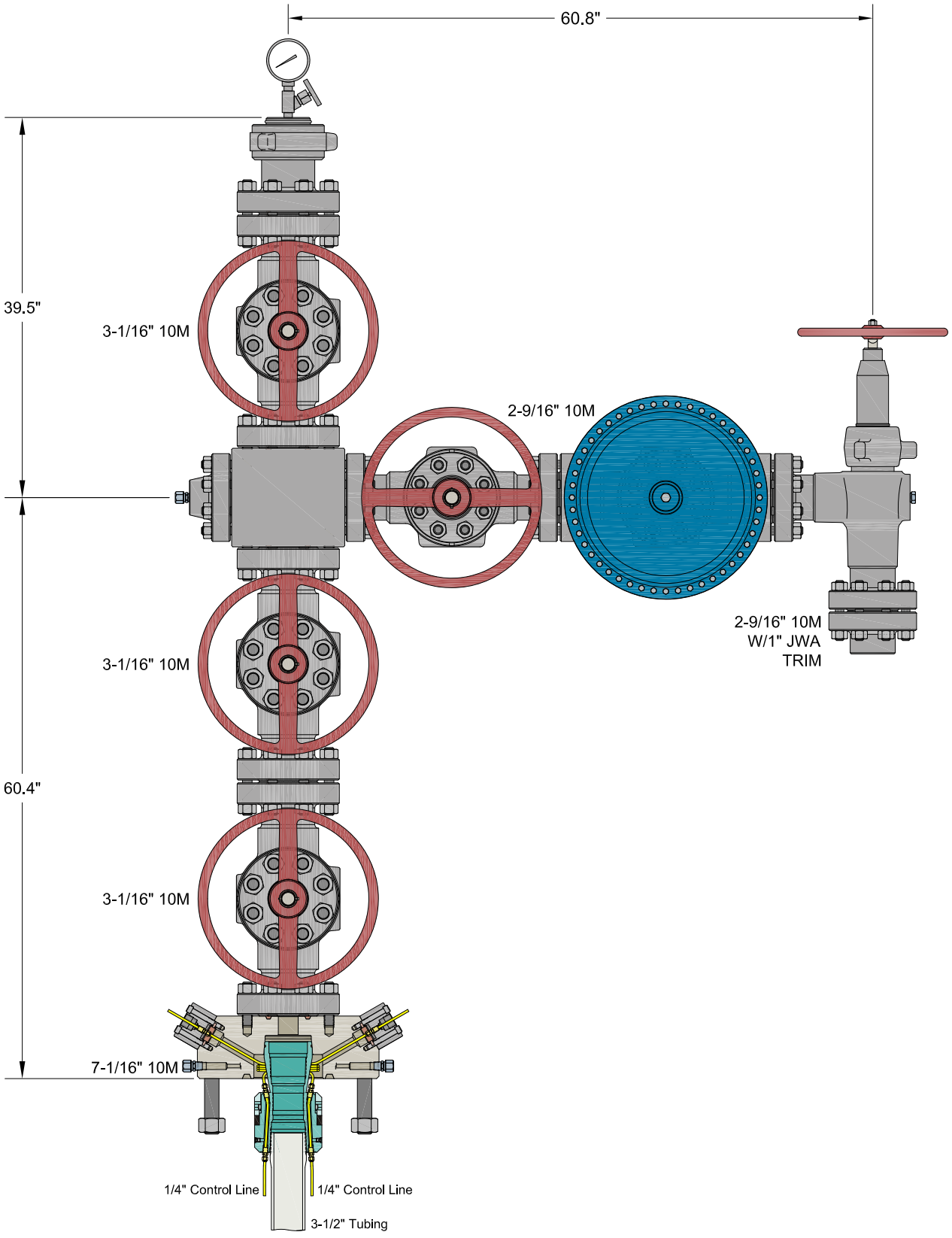
Page 48 of 366



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ALL DIMENSIONS APPROXIMAT

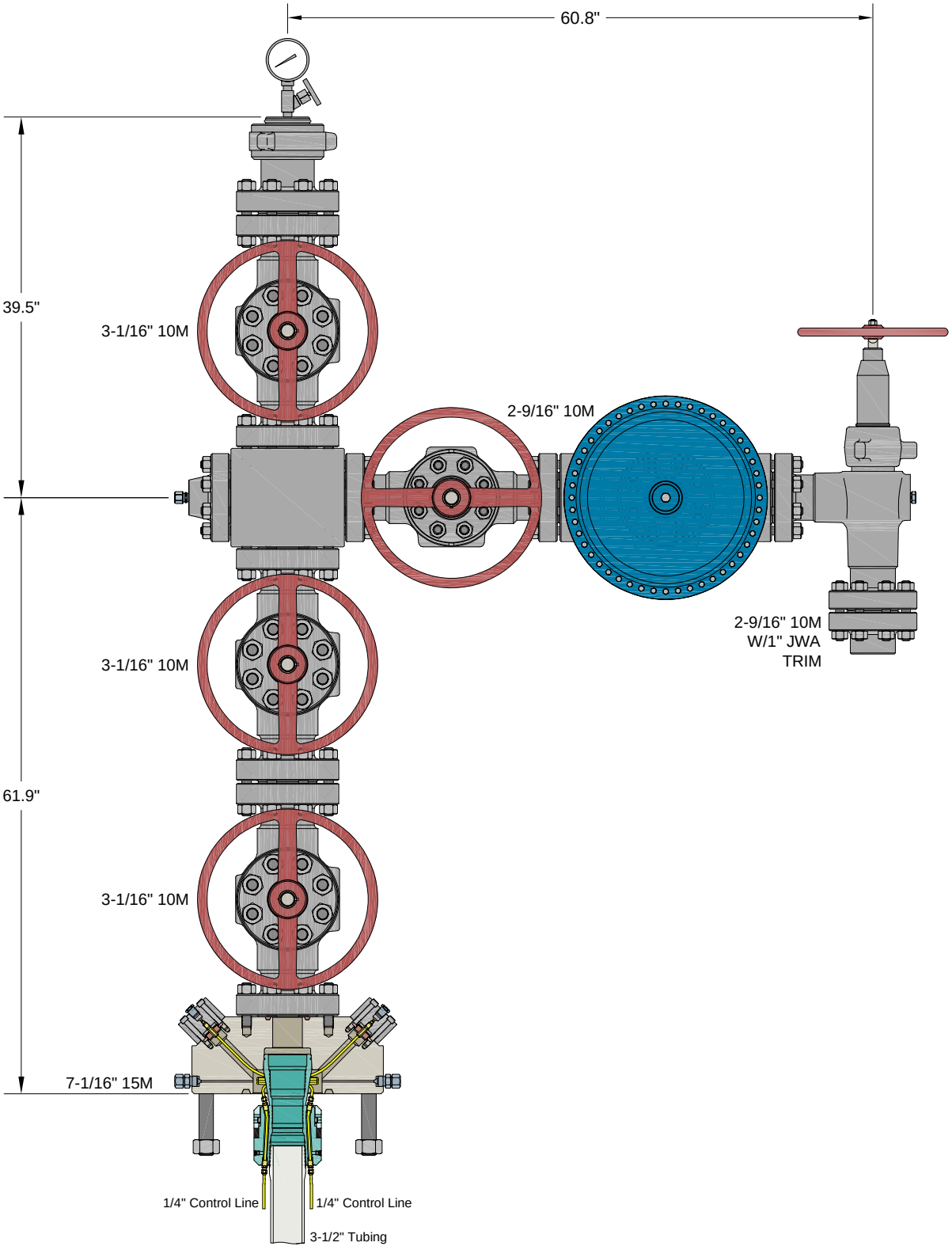
CACTUS WELLHEAD LLC	CIMAREX HOBBS, NM
20" x 13-3/8" x 9-5/8" x 7" MBU-3T-CFL-R-DBLO-SF Wellhead Sys. With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8" Fluted & 7" One Piece Mandrel Casing Hangers	DRAWN VJK 01FEB24 APPRV DRAWING NO. HBE0001053



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ALL DIMENSIONS APPROXIMATE

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



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ALL DIMENSIONS APPROXIMAT

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

Cactus

Quotation

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

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

Bill To: 7050

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

Ship To: 1016

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

	Quantity	Price	Ext Price

CIMAREX

HOBBS, NM

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

QUOTATION SUMMARY:

- PRODUCTION TREE ASSEMBLY - $49,338.02

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

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

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

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

Cactus

Quotation

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

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

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

Cactus

Quotation

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

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

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

OPTIONAL 15M ADAPTER

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

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

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

Cactus

Quotation

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

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

CACTUS WELLHEAD, LLC PURCHASE TERMS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

9. **RISK OF LOSS**.

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

Cactus

Quotation

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

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

material in respect of which such claim is made.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

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

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

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

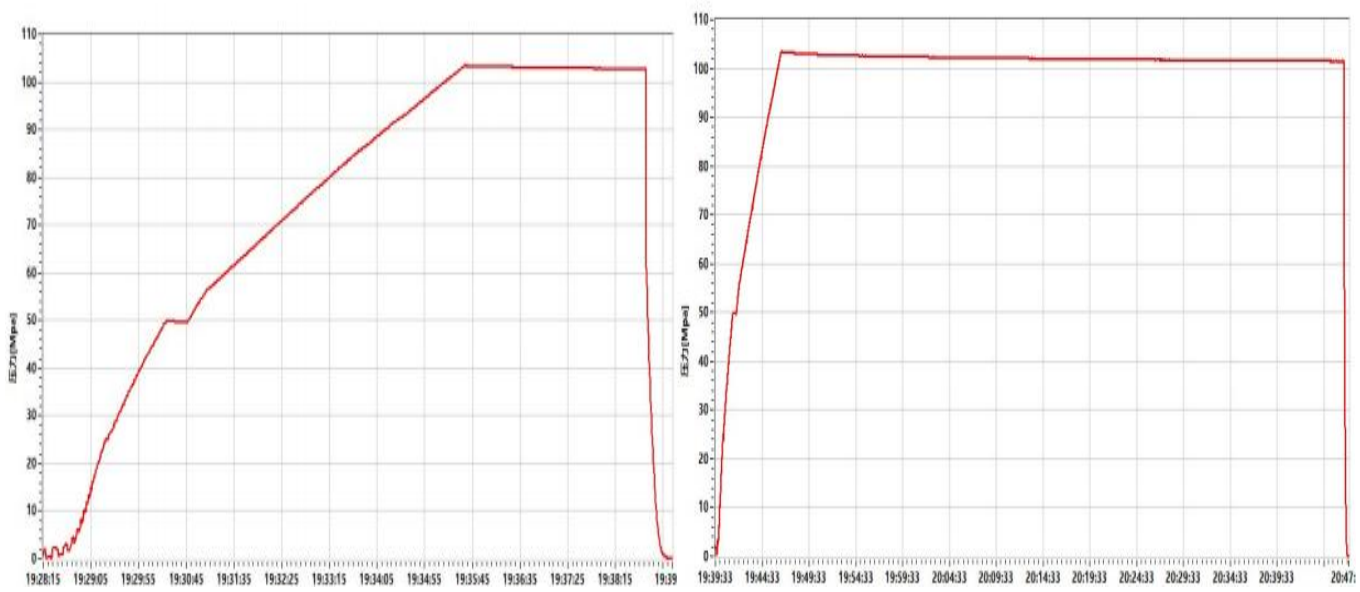
AustinHOSE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

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

Graph of pressure testing：



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

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

AustinHOSE

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

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

Serial Number：VTC-7660257

customer number：PO890145-001

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

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

QC Manager： Jane C Date:Sep 3, 2024

16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE

Standard New Mexico Variances

Variance Request #1: Skid Rig after Cementing Surface Casing

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

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

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

Variance Request #4: Utilize Co-Flex Choke Line

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

AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

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

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

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

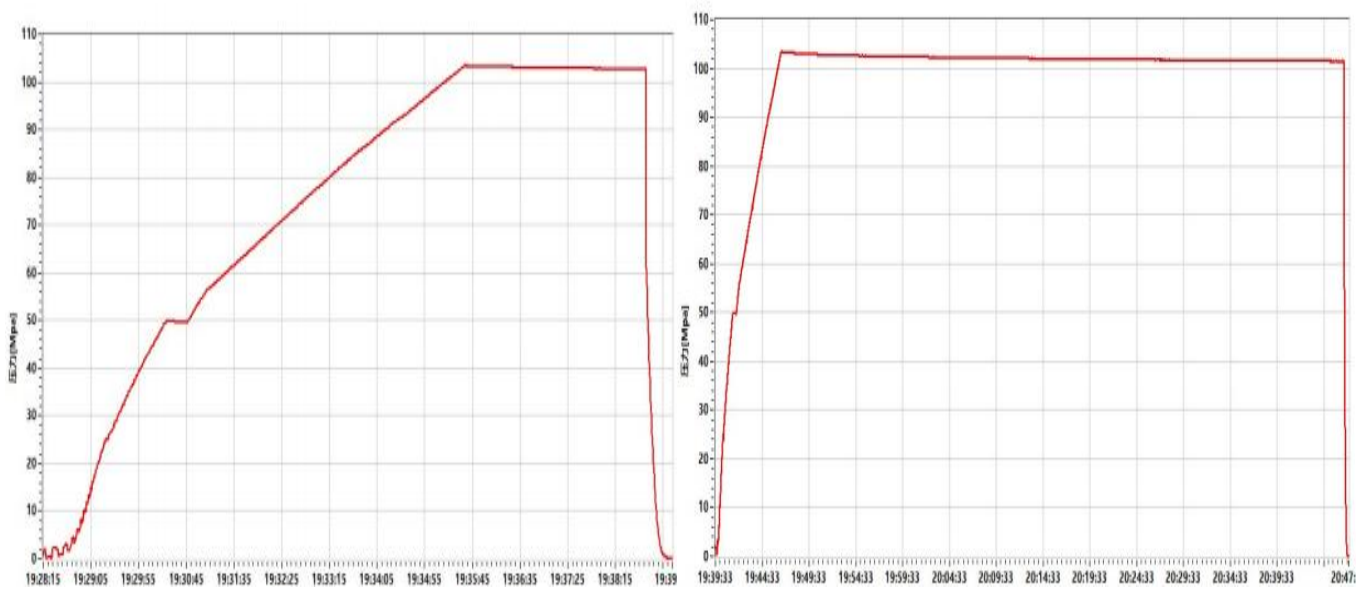
AustinHOSE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

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

Graph of pressure testing：



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

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

AustinHOSE

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

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

Serial Number：VTC-7660257

customer number：PO890145-001

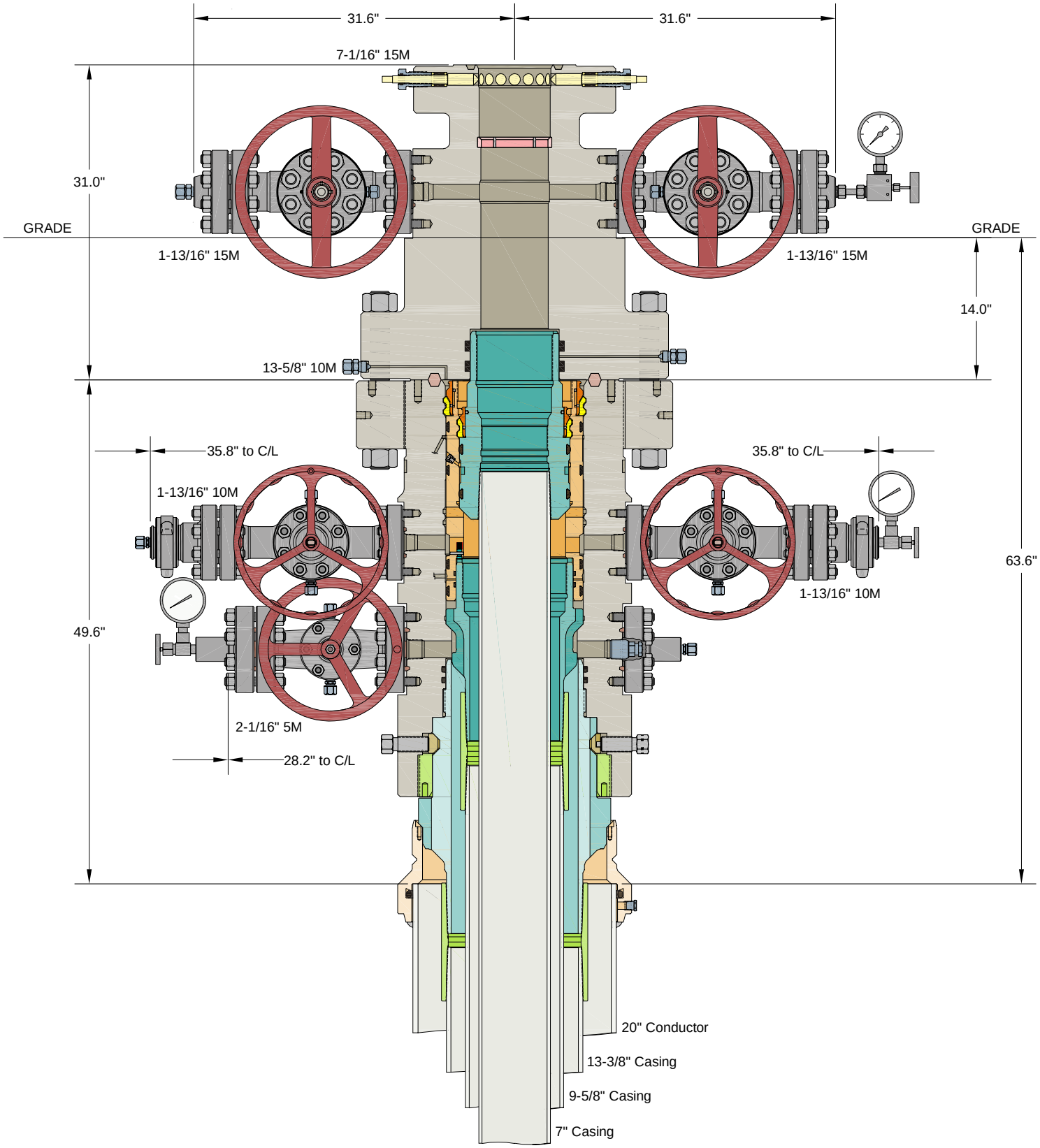
End Connections: 4-1/16″×10000psi Integral flange for sour gas service

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

QC Manager： Jane C Date:Sep 3, 2024

16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE



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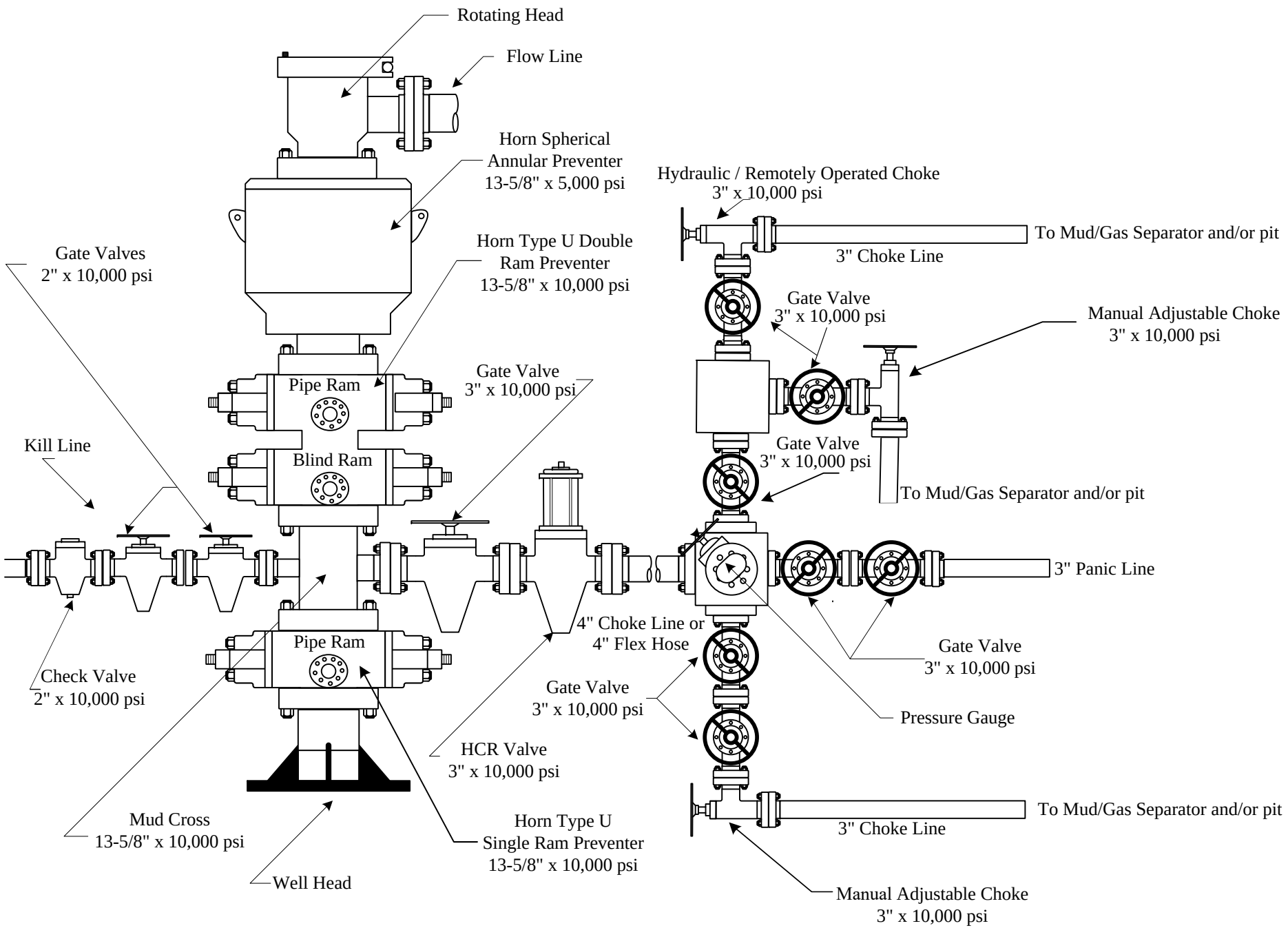
ALL DIMENSIONS APPROXIMAT

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

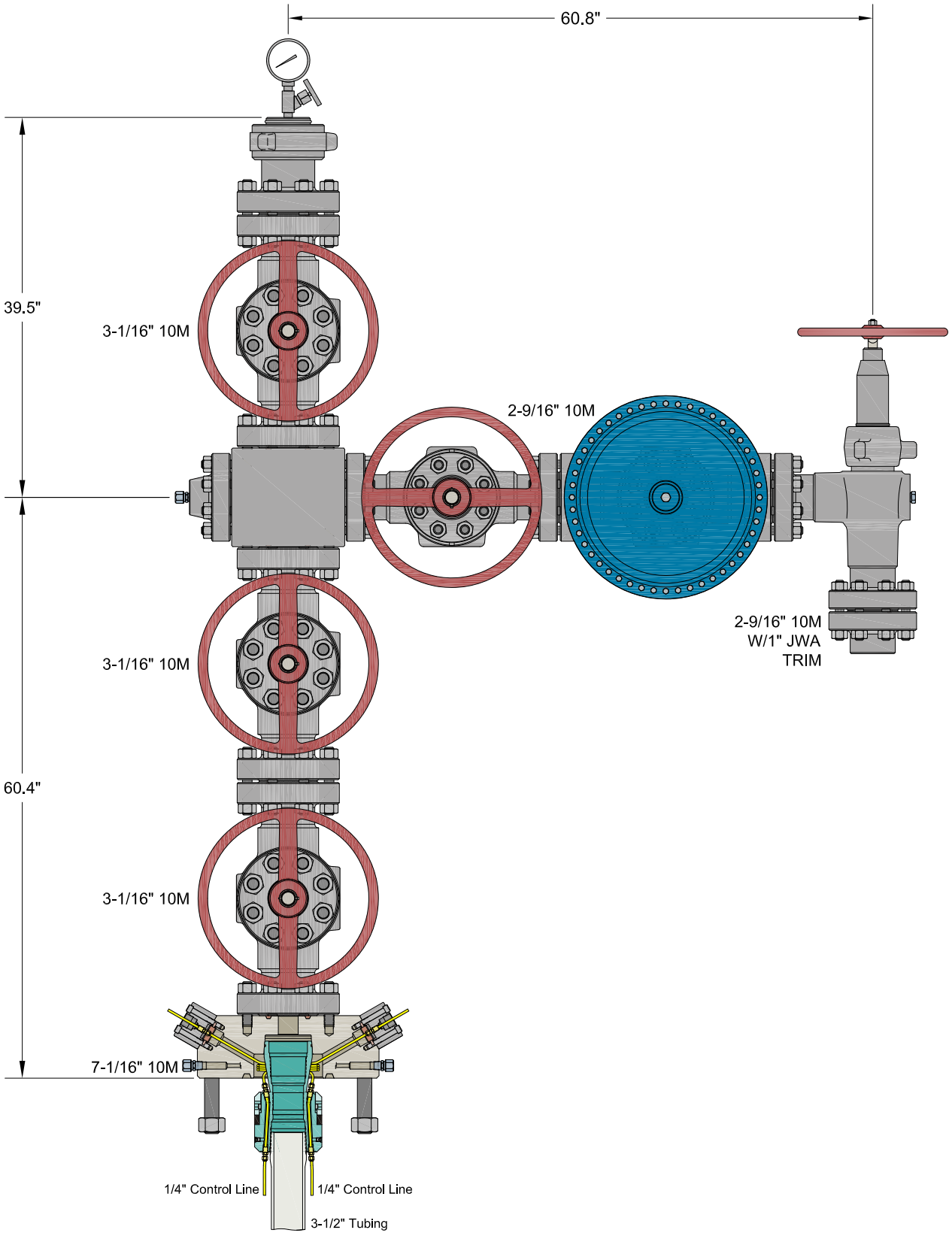
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Received by OCD: 11/13/2025 4:03:43 PM

COTERRA



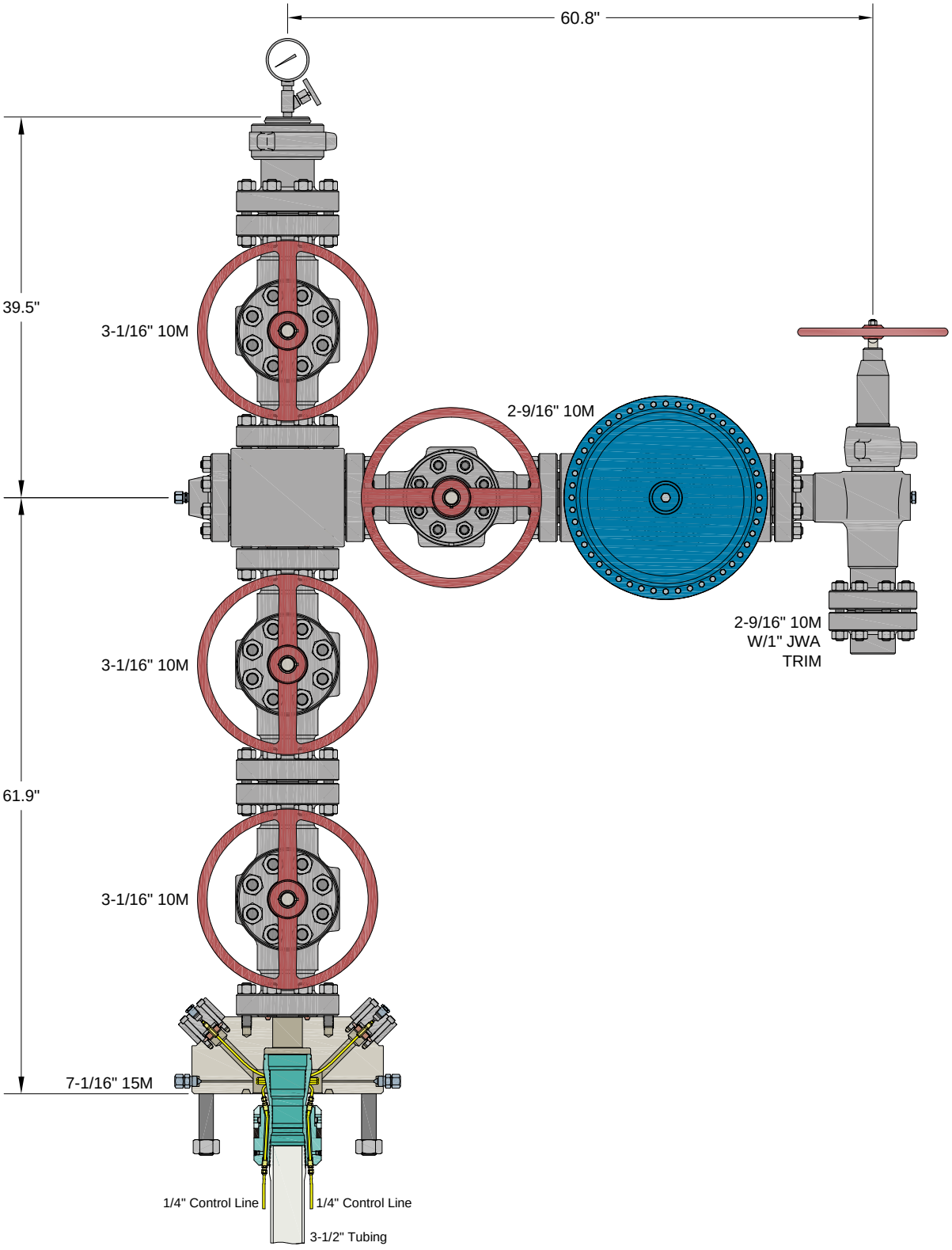
Page 65 of 366



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ALL DIMENSIONS APPROXIMATE

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



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ALL DIMENSIONS APPROXIMAT

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

Cactus

Quotation

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

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

Bill To: 7050

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

Ship To: 1016

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

	Quantity	Price	Ext Price

CIMAREX

HOBBS, NM

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

QUOTATION SUMMARY:

- PRODUCTION TREE ASSEMBLY - $49,338.02

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

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

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

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

Cactus

Quotation

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

Quote Number : HBE0001018

Date: 09/08/2023

Valid For 30 Days

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

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

OPTIONAL 15M ADAPTER

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

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

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

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

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Quotation

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

Quote Number : HBE0001018

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Valid For 30 Days

CACTUS WELLHEAD, LLC PURCHASE TERMS AND CONDITIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

9. **RISK OF LOSS**.

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

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Valid For 30 Days

material in respect of which such claim is made.

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

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

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

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

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

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

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

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

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

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

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

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

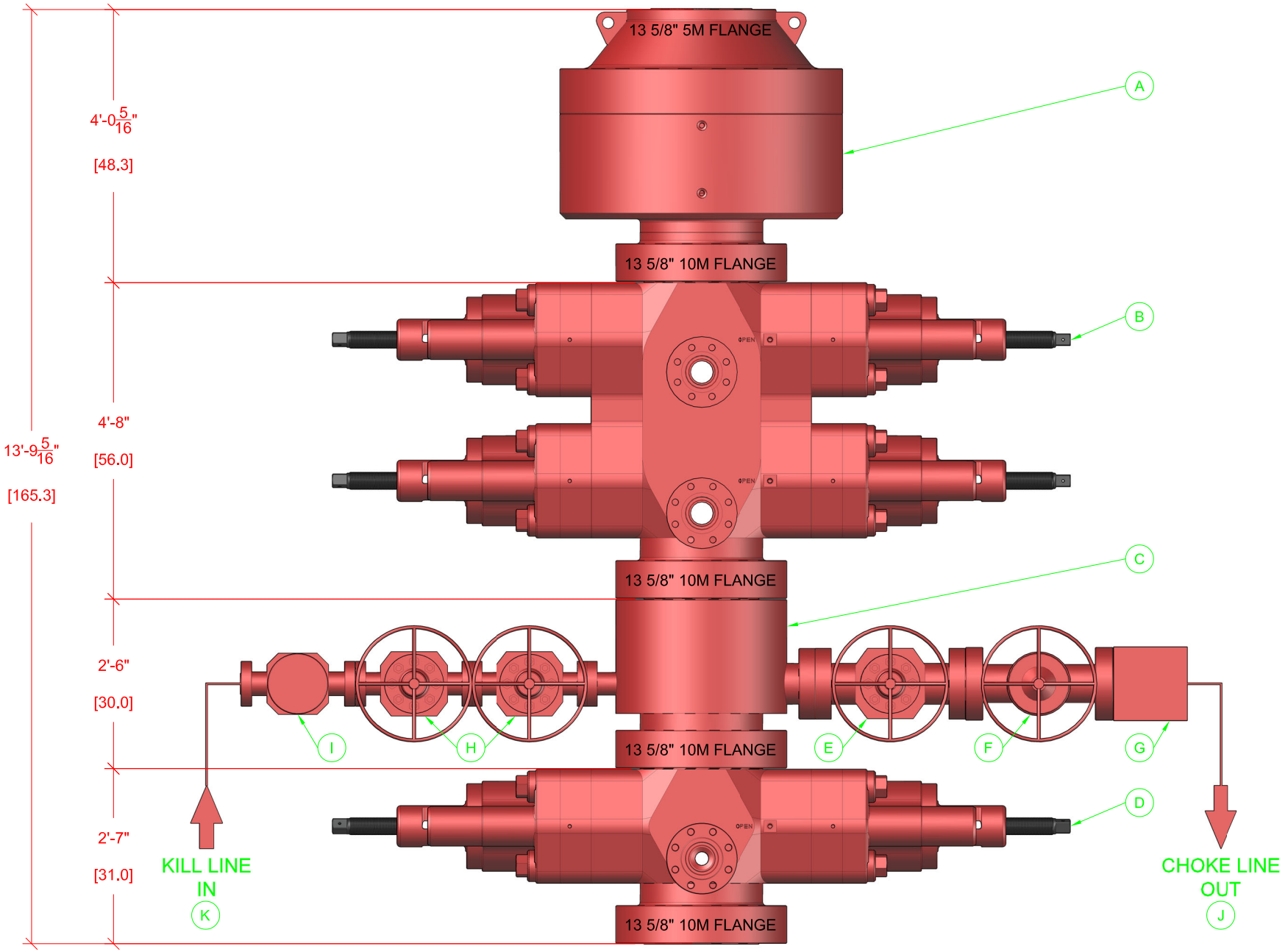
21. **AUTHORITY**. Customer warrants and represents that the individual receiving this order at issue on behalf of Customer has the authority to enter into these CACTUS Purchase Terms on behalf of Customer, and that upon receipt these CACTUS Purchase Terms shall be binding upon Customer.

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

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

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

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BOP EQUIPMENT INFORMATION

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

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

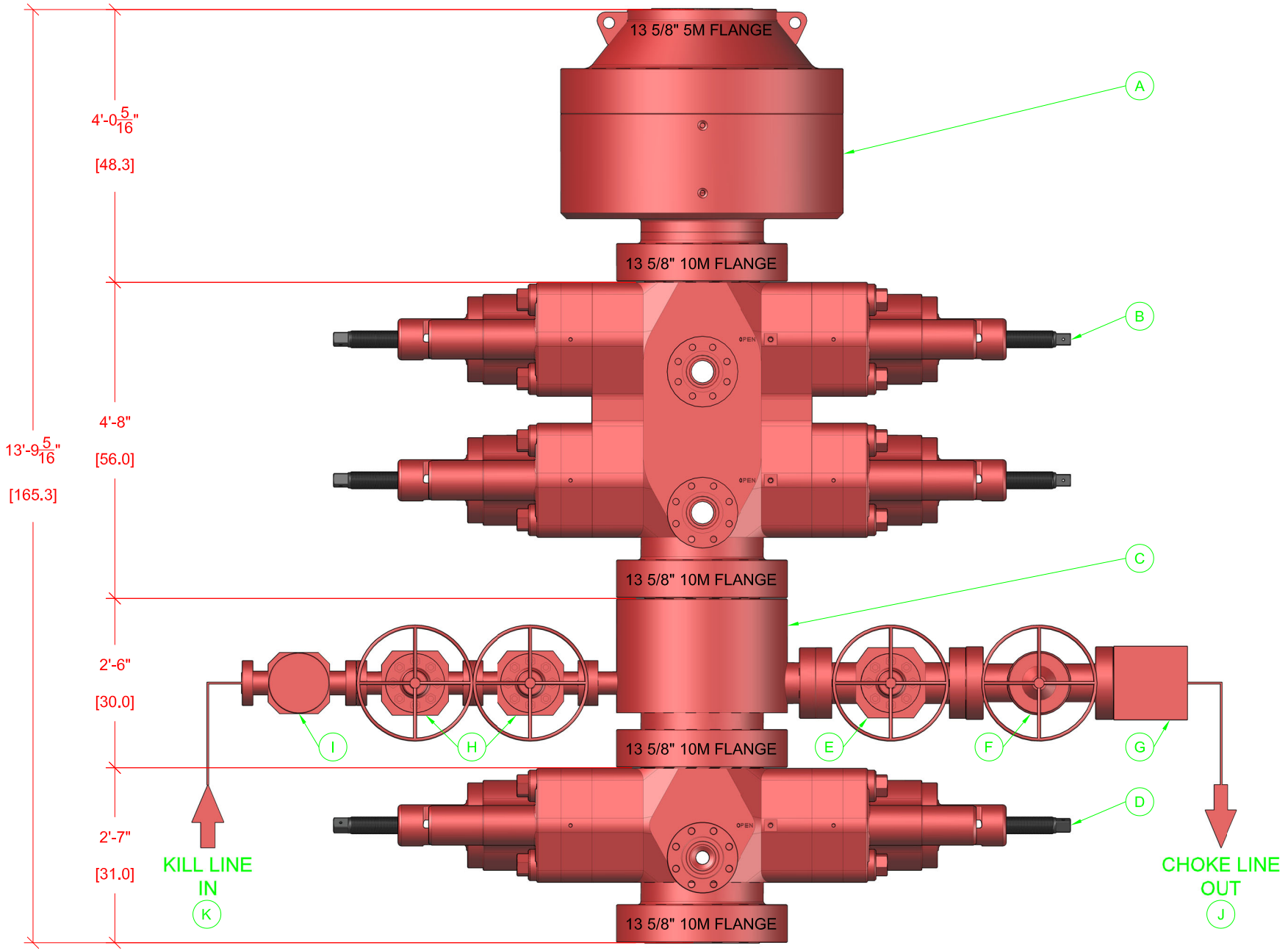
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L			

1. Geological Formations

TVD of target 8,862
MD at TD 19,548

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	407	N/A	
Top Salt	1952	N/A	
Base Salt/Lamar	2679	N/A	
Top Delaware Sands/Bell Canyon	2806	N/A	
Cherry Canyon	3619	N/A	
Brushy Canyon	4817	N/A	
Lower Brushy Canyon	5766	N/A	
Bone Spring Lime	6411	N/A	
1st Bone Spring Sand	7361	Hydrocarbons	
2nd Bone Spring Sand	8048	Hydrocarbons	
3rd Bone Spring Carb	8432	Hydrocarbons	
3rd Bone Spring Carb - Harkey	8782	Hydrocarbons	
3rd Bone Spring Carb - Harkey - Target	8862	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	1190	1190	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.44	3.36	5.64
12 1/4	0	2500	2477	9-5/8"	36.00	J-55	LT&C	1.57	2.73	5.08
8 3/4	0	8350	[redacted]							
8 3/4	8350	9809	8862	7"	26.00	P-110	BT&C	1.42	2.28	62.35
6	8350	19548	8862	4-1/2"	11.60	HCP-110	BT&C	2.02	2.45	61.79
					BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

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

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Lower Brushy Canyon	5766	N/A	
Bone Spring Lime	6411	N/A	
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H2S Drilling Operations Plan

Training

All company and contract personnel admitted on location must be trained by a qualified H2S safety instructor to do the following:

1. Characteristics of H2S
2. Physical effects and hazards
3. Principle and operation of H2S detectors, warning system, and briefing areas
4. Evacuation procedure, routes and first aid
5. Proper use of safety equipment & life support systems
6. Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

H2S Detection and Alarm Systems

1. H2S sensors/detectors to be located on the drilling rig floor, in the base of the sub structure/cellar area, on the mud pits in the shale shaker area. Additional H2S detectors may be placed as deemed necessary
2. An audio alarm system will be installed on the derrick floor and in the top doghouse

Windsock and/or wind streamers

1. Windsock at mudpit area should be high enough to be visible
2. Windsock on the rig floor and / or top of doghouse should be high enough to be visible

Condition Flags & Signs

1. Warning signs on access road to location
2. Flags are to be displayed on sign at the entrance to location. Green flag indicates normal safe condition. Yellow flag indicates potential pressure and danger. Red flag indicates

danger (H2S present in dangerous concentration). Only H2S trained and certified personnel admitted to location.

Well Control Equipment

1. See the pressure control section of this submission.

Communication

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

Drillstem Testing

1. No DSTs or cores are planned at this tmie
2. Drilling contractor supervisor will be required to be familiar with the effects that H2S has on tubular goods and other mechanical equipment.
3. If H2S is encountered, mud system will be altered if necessary to maintain control of the well. A mud gas separator will be brought into service along with H2S scavenger if necessary.

H2S Contingency Plan

Emergency Procedures

In the event of an H2S release, the first responder(s) must:

1. Isolate the area and prevent entry by other persons into the 100 PPM ROE.
2. Evacuate any public places encompassed by the 100 PPM ROE.
3. Be equipped with H2S monitors and air packs in order to control the release.
4. Use the buddy system
5. Take precautions to avoid personal injury during this operation
6. Contact operator and/or local officials to aid in operation. See list of emergency contacts attached.
7. Have received training the detection of H2S, measures for protection against the gas, and equipment used for protection and emergency response

Ignition of the Gas Source

1. Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Contacting Authorities

1. Coterra personnel must liaise with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours.
2. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. Coterra’s response must be in coordination with the State of New Mexico's" Hazardous Materials Emergency Response Plan" (HMER).

Coterra: H2S Plan

Emergency Contacts

Coterra Energy

Charlie Pritchard: Drilling Operations Manager: 432 – 238 – 7084

Darrell Kelly: Vice President EHS: 281 – 589 – 5795

Third Party

PERMIAN REGION CONTACT NUMBERS

CALL 911

Air Ambulance Services

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

Fire / Police / Medical Care

Sheriff's Office		Fire Departments		Hospital / Medical Care Facilities	
Andrews County	432-523-5545	Andrews	432-523-3111	Permian Regional Med.	432-523-2200
Reagan County	325-884-2929	Big Lake	325-884-3650	Reagan Memorial Hosp.	325-884-2561
Howard County	432-264-2244	Big Springs	432-264-2303	Scenic Mountain Med Ctr	432-263-1211
Terry County	806-637-2212	Brownfield	806-637-6633		
Crane County	432-558-3571	Crane	432-558-2361	Crane Memorial Hosp.	432-558-3555
Val Verde County	830-774-7513	Del Rio	830-774-8648	Val Verde Regional Med.	830-775-8566
		Denver City	806-592-3516	Yoakum County Hospital	806-592-2121
Pecos County	432-336-3521	Ft. Stockton	432-336-8525		
Glasscock County	432-354-2361	Garden City			
Winkler County	432-586-3461	Kermit	432-586-2577	Winkler County Memorial	432-586-5864
		McCamey	432-652-8232	McCamey Hospital	432-652-8626
Loving County	432-377-2411	Mentone			
Irion County	325-835-2551	Mertzon			
Ward County	432-943-6703	Monahans	432-943-2211	Ward Memorial Hospital	432-943-2511
Ector County	432-335-3050	Odessa	432-335-4650	Odessa Regional Hosp.	432-582-8340
Crocket County	325-392-2661	Ozona	325-392-2626		
Reeves County	432-445-4901	Pecos	505-757-6511	Reeves County Hospital	432-447-3551
Yoakum County	806-456-2377	Plains	806-456-2288		
Garza County	806-495-3595	Post			
Upton County	432-693-2422	Rankin			
Coke County	915-453-2717	Robert Lee			
		Roscoe	325-766-3931		
Hockley County	806-894-3126	Levelland	806-894-3155	Covenant Health	806-894-4963
Tom Green County	325-655-8111	San Angelo	325-657-4355	San Angelo Comm. Med.	325-949-9511
Gaines County	432-758-9871	Seminole	432-758-3621	Memorial Hospital	432-758-5811
Terrell County	432-345-2525	Sanderson			
Scurry County	325-573-3551	Snyder	325-573-3546	DM Cogdell Memorial	325-573-6374
Sterling County	325-378-4771	Sterling City			
Nolan County	325-235-5471	Sweetwater	325-235-8130	Rolling Plains Memorial	325-235-1701
Culberson County	432-283-2060	Van Horn		Culberson Hospital	432-283-2760
New Mexico					
Lea County	505-396-3611	Knowles	505-392-7469	Lea Reg Med Ctr	575-492-5000
Eddy County	575-887-7551	Carlsbad	575-885-3125	Carlsbad Medical	575-887-4100
		Artesia	575-746-5050	Artesia Hospital	575-748-3333
Roosevelt County	575-356-4408				
Chaves County	575-624-7590				

Ground Ambulance Services

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Coterra Energy

Eddy County, NM (NAD 83)
Riverbend 12-13 Federal Com
Riverbend 12-13 Federal Com 5H

OH

Plan: Plan 1

Total Directional
"Driven by TOTAL performance"
total

Standard Plan Report

24 June, 2025

Total Report Version 1.70

COMPASS 5000.16 Build 97

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Project Eddy County, NM (NAD 83)

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

Site Riverbend 12-13 Federal Com

Site Position:		**Northing:**	420,302.20 usft	**Latitude:**	32.1551540
From:	Map	**Easting:**	631,468.50 usft	**Longitude:**	-104.0420860
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well Riverbend 12-13 Federal Com 5H

Well Position	**+N/-S**	0.00 usft	**Northing:**	420,301.82 usft	**Latitude:**	32.1551528
	+E/-W	0.00 usft	**Easting:**	631,488.49 usft	**Longitude:**	-104.0420214
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	2,934.00 usft
Grid Convergence:		0.16 °				

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM2025	8/19/2025	6.42	59.67	47,172.80000000

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	179.89

Survey Tool Program **Date** 6/24/2025

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.00	19,547.53	Plan 1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Plan Summary

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,350.00	7.00	160.00	1,349.13	-20.07	7.30	2.00	2.00	0.00	160.00	
1,670.62	11.72	132.15	1,665.55	-60.32	38.16	2.00	1.47	-8.69	-58.16	
7,764.22	11.72	132.15	7,632.13	-890.93	955.73	0.00	0.00	0.00	0.00	
8,350.17	0.00	0.00	8,214.00	-931.00	1,000.00	2.00	-2.00	0.00	180.00	
9,100.17	75.00	147.40	8,767.43	-1,288.76	1,228.80	10.00	10.00	0.00	147.40	
9,809.00	90.00	179.89	8,862.20	-1,952.89	1,420.04	5.00	2.12	4.58	67.88	
19,547.53	90.00	179.89	8,862.00	-11,691.40	1,438.18	0.00	0.00	0.00	0.00	

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
407.00	0.00	0.00	407.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
Rustler													
500.00	0.00	0.00	500.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
1,100.00	2.00	160.00	1,099.98	-1.64	0.60	420,300.18	631,489.09	32.1551483	-104.0420195	1.64	2.00	2.00	0.00
1,200.00	4.00	160.00	1,199.84	-6.56	2.39	420,295.26	631,490.88	32.1551348	-104.0420137	6.56	2.00	2.00	0.00
1,300.00	6.00	160.00	1,299.45	-14.75	5.37	420,287.07	631,493.86	32.1551122	-104.0420042	14.76	2.00	2.00	0.00
1,350.00	7.00	160.00	1,349.13	-20.07	7.30	420,281.75	631,495.79	32.1550976	-104.0419980	20.08	2.00	2.00	0.00
1,400.00	7.58	153.54	1,398.73	-25.88	9.81	420,275.94	631,498.30	32.1550816	-104.0419899	25.90	2.00	1.15	-12.92
1,500.00	8.95	143.40	1,497.69	-38.03	17.39	420,263.79	631,505.88	32.1550481	-104.0419655	38.06	2.00	1.38	-10.15
1,600.00	10.53	136.10	1,596.25	-50.86	28.37	420,250.96	631,516.86	32.1550128	-104.0419302	50.91	2.00	1.58	-7.30
1,670.62	11.72	132.15	1,665.55	-60.32	38.16	420,241.50	631,526.65	32.1549867	-104.0418986	60.39	2.00	1.69	-5.58
1,700.00	11.72	132.15	1,694.31	-64.32	42.58	420,237.50	631,531.07	32.1549757	-104.0418844	64.40	0.00	0.00	0.00
1,800.00	11.72	132.15	1,792.23	-77.95	57.64	420,223.87	631,546.13	32.1549381	-104.0418358	78.06	0.00	0.00	0.00
1,900.00	11.72	132.15	1,890.14	-91.58	72.70	420,210.24	631,561.19	32.1549005	-104.0417873	91.72	0.00	0.00	0.00
1,963.17	11.72	132.15	1,952.00	-100.20	82.21	420,201.62	631,570.70	32.1548768	-104.0417566	100.35	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Top Salt													
2,000.00	11.72	132.15	1,988.06	-105.22	87.75	420,196.60	631,576.24	32.1548629	-104.0417388	105.38	0.00	0.00	0.00
2,100.00	11.72	132.15	2,085.97	-118.85	102.81	420,182.97	631,591.30	32.1548253	-104.0416902	119.04	0.00	0.00	0.00
2,200.00	11.72	132.15	2,183.89	-132.48	117.87	420,169.34	631,606.36	32.1547878	-104.0416417	132.70	0.00	0.00	0.00
2,300.00	11.72	132.15	2,281.80	-146.11	132.93	420,155.71	631,621.42	32.1547502	-104.0415931	146.36	0.00	0.00	0.00
2,400.00	11.72	132.15	2,379.72	-159.74	147.99	420,142.08	631,636.48	32.1547126	-104.0415446	160.02	0.00	0.00	0.00
2,500.00	11.72	132.15	2,477.64	-173.37	163.04	420,128.45	631,651.53	32.1546750	-104.0414961	173.68	0.00	0.00	0.00
2,600.00	11.72	132.15	2,575.55	-187.00	178.10	420,114.82	631,666.59	32.1546374	-104.0414475	187.34	0.00	0.00	0.00
2,700.00	11.72	132.15	2,673.47	-200.63	193.16	420,101.19	631,681.65	32.1545998	-104.0413990	201.00	0.00	0.00	0.00
2,705.65	11.72	132.15	2,679.00	-201.40	194.01	420,100.42	631,682.50	32.1545977	-104.0413963	201.77	0.00	0.00	0.00
Base Salt/Lamar													
2,800.00	11.72	132.15	2,771.38	-214.26	208.22	420,087.56	631,696.71	32.1545623	-104.0413505	214.66	0.00	0.00	0.00
2,835.35	11.72	132.15	2,806.00	-219.08	213.54	420,082.74	631,702.03	32.1545490	-104.0413333	219.49	0.00	0.00	0.00
Top Delaware Sands/Bell Canyon													
2,900.00	11.72	132.15	2,869.30	-227.89	223.28	420,073.93	631,711.77	32.1545247	-104.0413019	228.32	0.00	0.00	0.00
3,000.00	11.72	132.15	2,967.21	-241.52	238.33	420,060.30	631,726.82	32.1544871	-104.0412534	241.98	0.00	0.00	0.00
3,100.00	11.72	132.15	3,065.13	-255.15	253.39	420,046.67	631,741.88	32.1544495	-104.0412048	255.64	0.00	0.00	0.00
3,200.00	11.72	132.15	3,163.05	-268.78	268.45	420,033.04	631,756.94	32.1544119	-104.0411563	269.30	0.00	0.00	0.00
3,300.00	11.72	132.15	3,260.96	-282.42	283.51	420,019.40	631,772.00	32.1543743	-104.0411078	282.96	0.00	0.00	0.00
3,400.00	11.72	132.15	3,358.88	-296.05	298.57	420,005.77	631,787.06	32.1543368	-104.0410592	296.62	0.00	0.00	0.00
3,500.00	11.72	132.15	3,456.79	-309.68	313.62	419,992.14	631,802.11	32.1542992	-104.0410107	310.28	0.00	0.00	0.00
3,600.00	11.72	132.15	3,554.71	-323.31	328.68	419,978.51	631,817.17	32.1542616	-104.0409622	323.94	0.00	0.00	0.00
3,665.66	11.72	132.15	3,619.00	-332.26	338.57	419,969.56	631,827.06	32.1542369	-104.0409303	332.91	0.00	0.00	0.00
Cherry Canyon													
3,700.00	11.72	132.15	3,652.62	-336.94	343.74	419,964.88	631,832.23	32.1542240	-104.0409136	337.60	0.00	0.00	0.00
3,800.00	11.72	132.15	3,750.54	-350.57	358.80	419,951.25	631,847.29	32.1541864	-104.0408651	351.26	0.00	0.00	0.00
3,900.00	11.72	132.15	3,848.45	-364.20	373.86	419,937.62	631,862.35	32.1541489	-104.0408165	364.92	0.00	0.00	0.00
4,000.00	11.72	132.15	3,946.37	-377.83	388.91	419,923.99	631,877.40	32.1541113	-104.0407680	378.58	0.00	0.00	0.00
4,100.00	11.72	132.15	4,044.29	-391.46	403.97	419,910.36	631,892.46	32.1540737	-104.0407195	392.24	0.00	0.00	0.00
4,200.00	11.72	132.15	4,142.20	-405.09	419.03	419,896.73	631,907.52	32.1540361	-104.0406709	405.90	0.00	0.00	0.00
4,300.00	11.72	132.15	4,240.12	-418.72	434.09	419,883.10	631,922.58	32.1539985	-104.0406224	419.56	0.00	0.00	0.00
4,400.00	11.72	132.15	4,338.03	-432.35	449.15	419,869.47	631,937.64	32.1539609	-104.0405739	433.22	0.00	0.00	0.00
4,500.00	11.72	132.15	4,435.95	-445.99	464.20	419,855.83	631,952.69	32.1539234	-104.0405253	446.88	0.00	0.00	0.00
4,600.00	11.72	132.15	4,533.86	-459.62	479.26	419,842.20	631,967.75	32.1538858	-104.0404768	460.54	0.00	0.00	0.00
4,700.00	11.72	132.15	4,631.78	-473.25	494.32	419,828.57	631,982.81	32.1538482	-104.0404282	474.20	0.00	0.00	0.00
4,800.00	11.72	132.15	4,729.69	-486.88	509.38	419,814.94	631,997.87	32.1538106	-104.0403797	487.86	0.00	0.00	0.00
4,889.16	11.72	132.15	4,817.00	-499.03	522.80	419,802.79	632,011.29	32.1537771	-104.0403364	500.03	0.00	0.00	0.00
Brushy Canyon													

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	11.72	132.15	4,827.61	-500.51	524.44	419,801.31	632,012.93	32.1537730	-104.0403312	501.51	0.00	0.00	0.00
5,000.00	11.72	132.15	4,925.53	-514.14	539.49	419,787.68	632,027.98	32.1537355	-104.0402826	515.17	0.00	0.00	0.00
5,100.00	11.72	132.15	5,023.44	-527.77	554.55	419,774.05	632,043.04	32.1536979	-104.0402341	528.83	0.00	0.00	0.00
5,200.00	11.72	132.15	5,121.36	-541.40	569.61	419,760.42	632,058.10	32.1536603	-104.0401856	542.49	0.00	0.00	0.00
5,300.00	11.72	132.15	5,219.27	-555.03	584.67	419,746.79	632,073.16	32.1536227	-104.0401370	556.15	0.00	0.00	0.00
5,400.00	11.72	132.15	5,317.19	-568.66	599.73	419,733.16	632,088.22	32.1535851	-104.0400885	569.81	0.00	0.00	0.00
5,500.00	11.72	132.15	5,415.10	-582.29	614.78	419,719.53	632,103.27	32.1535475	-104.0400400	583.47	0.00	0.00	0.00
5,600.00	11.72	132.15	5,513.02	-595.92	629.84	419,705.90	632,118.33	32.1535100	-104.0399914	597.13	0.00	0.00	0.00
5,700.00	11.72	132.15	5,610.93	-609.56	644.90	419,692.26	632,133.39	32.1534724	-104.0399429	610.79	0.00	0.00	0.00
5,800.00	11.72	132.15	5,708.85	-623.19	659.96	419,678.63	632,148.45	32.1534348	-104.0398943	624.45	0.00	0.00	0.00
5,858.37	11.72	132.15	5,766.00	-631.14	668.75	419,670.68	632,157.24	32.1534129	-104.0398660	632.42	0.00	0.00	0.00
Lower Brushy Canyon													
5,900.00	11.72	132.15	5,806.77	-636.82	675.02	419,665.00	632,163.51	32.1533972	-104.0398458	638.11	0.00	0.00	0.00
6,000.00	11.72	132.15	5,904.68	-650.45	690.07	419,651.37	632,178.56	32.1533596	-104.0397973	651.77	0.00	0.00	0.00
6,100.00	11.72	132.15	6,002.60	-664.08	705.13	419,637.74	632,193.62	32.1533220	-104.0397487	665.43	0.00	0.00	0.00
6,200.00	11.72	132.15	6,100.51	-677.71	720.19	419,624.11	632,208.68	32.1532845	-104.0397002	679.09	0.00	0.00	0.00
6,300.00	11.72	132.15	6,198.43	-691.34	735.25	419,610.48	632,223.74	32.1532469	-104.0396517	692.75	0.00	0.00	0.00
6,400.00	11.72	132.15	6,296.34	-704.97	750.31	419,596.85	632,238.80	32.1532093	-104.0396031	706.41	0.00	0.00	0.00
6,500.00	11.72	132.15	6,394.26	-718.60	765.36	419,583.22	632,253.85	32.1531717	-104.0395546	720.07	0.00	0.00	0.00
6,517.10	11.72	132.15	6,411.00	-720.93	767.94	419,580.89	632,256.43	32.1531653	-104.0395463	722.41	0.00	0.00	0.00
Bone Spring Lime													
6,600.00	11.72	132.15	6,492.17	-732.23	780.42	419,569.59	632,268.91	32.1531341	-104.0395061	733.73	0.00	0.00	0.00
6,700.00	11.72	132.15	6,590.09	-745.86	795.48	419,555.96	632,283.97	32.1530965	-104.0394575	747.39	0.00	0.00	0.00
6,800.00	11.72	132.15	6,688.01	-759.49	810.54	419,542.33	632,299.03	32.1530590	-104.0394090	761.05	0.00	0.00	0.00
6,900.00	11.72	132.15	6,785.92	-773.12	825.60	419,528.70	632,314.09	32.1530214	-104.0393604	774.71	0.00	0.00	0.00
7,000.00	11.72	132.15	6,883.84	-786.76	840.65	419,515.06	632,329.14	32.1529838	-104.0393119	788.37	0.00	0.00	0.00
7,100.00	11.72	132.15	6,981.75	-800.39	855.71	419,501.43	632,344.20	32.1529462	-104.0392634	802.03	0.00	0.00	0.00
7,200.00	11.72	132.15	7,079.67	-814.02	870.77	419,487.80	632,359.26	32.1529086	-104.0392148	815.69	0.00	0.00	0.00
7,300.00	11.72	132.15	7,177.58	-827.65	885.83	419,474.17	632,374.32	32.1528711	-104.0391663	829.35	0.00	0.00	0.00
7,400.00	11.72	132.15	7,275.50	-841.28	900.89	419,460.54	632,389.38	32.1528335	-104.0391178	843.01	0.00	0.00	0.00
7,487.32	11.72	132.15	7,361.00	-853.18	914.03	419,448.64	632,402.52	32.1528006	-104.0390754	854.93	0.00	0.00	0.00
1st Bone Spring Sand													
7,500.00	11.72	132.15	7,373.41	-854.91	915.94	419,446.91	632,404.43	32.1527959	-104.0390692	856.67	0.00	0.00	0.00
7,600.00	11.72	132.15	7,471.33	-868.54	931.00	419,433.28	632,419.49	32.1527583	-104.0390207	870.33	0.00	0.00	0.00
7,700.00	11.72	132.15	7,569.25	-882.17	946.06	419,419.65	632,434.55	32.1527207	-104.0389722	883.99	0.00	0.00	0.00
7,764.22	11.72	132.15	7,632.13	-890.93	955.73	419,410.89	632,444.22	32.1526966	-104.0389410	892.76	0.00	0.00	0.00
7,800.00	11.00	132.15	7,667.21	-895.66	960.95	419,406.16	632,449.44	32.1526835	-104.0389241	897.50	2.00	-2.00	0.00
7,900.00	9.00	132.15	7,765.68	-907.31	973.83	419,394.51	632,462.32	32.1526514	-104.0388826	909.18	2.00	-2.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,000.00	7.00	132.15	7,864.70	-916.66	984.15	419,385.16	632,472.64	32.1526256	-104.0388494	918.54	2.00	-2.00	0.00
8,100.00	5.00	132.15	7,964.15	-923.67	991.91	419,378.15	632,480.40	32.1526063	-104.0388244	925.58	2.00	-2.00	0.00
8,184.08	3.32	132.15	8,048.00	-927.77	996.43	419,374.05	632,484.92	32.1525950	-104.0388098	929.68	2.00	-2.00	0.00
2nd Bone Spring Sand													
8,200.00	3.00	132.15	8,063.90	-928.36	997.08	419,373.46	632,485.57	32.1525934	-104.0388077	930.27	2.00	-2.00	0.00
8,300.00	1.00	132.15	8,163.83	-930.71	999.67	419,371.11	632,488.16	32.1525869	-104.0387993	932.62	2.00	-2.00	0.00
8,350.17	0.00	0.00	8,214.00	-931.00	1,000.00	419,370.82	632,488.49	32.1525861	-104.0387983	932.92	2.00	-2.00	0.00
8,400.00	4.98	147.40	8,263.77	-932.82	1,001.17	419,369.00	632,489.66	32.1525811	-104.0387945	934.74	10.00	10.00	0.00
8,450.00	9.98	147.40	8,313.33	-938.31	1,004.67	419,363.51	632,493.16	32.1525660	-104.0387833	940.24	10.00	10.00	0.00
8,500.00	14.98	147.40	8,362.13	-947.41	1,010.49	419,354.41	632,498.98	32.1525409	-104.0387645	949.35	10.00	10.00	0.00
8,550.00	19.98	147.40	8,409.80	-960.06	1,018.59	419,341.76	632,507.08	32.1525061	-104.0387385	962.01	10.00	10.00	0.00
8,573.81	22.36	147.40	8,432.00	-967.30	1,023.22	419,334.52	632,511.71	32.1524861	-104.0387236	969.27	10.00	10.00	0.00
3rd Bone Spring Carb													
8,600.00	24.98	147.40	8,455.99	-976.16	1,028.88	419,325.66	632,517.37	32.1524617	-104.0387054	978.14	10.00	10.00	0.00
8,650.00	29.98	147.40	8,500.33	-995.60	1,041.31	419,306.22	632,529.80	32.1524082	-104.0386654	997.59	10.00	10.00	0.00
8,700.00	34.98	147.40	8,542.50	-1,018.21	1,055.77	419,283.61	632,544.26	32.1523459	-104.0386188	1,020.24	10.00	10.00	0.00
8,750.00	39.98	147.40	8,582.16	-1,043.84	1,072.16	419,257.98	632,560.65	32.1522754	-104.0385661	1,045.89	10.00	10.00	0.00
8,800.00	44.98	147.40	8,619.02	-1,072.28	1,090.35	419,229.54	632,578.84	32.1521971	-104.0385076	1,074.37	10.00	10.00	0.00
8,850.00	49.98	147.40	8,652.80	-1,103.31	1,110.20	419,198.51	632,598.69	32.1521116	-104.0384437	1,105.44	10.00	10.00	0.00
8,900.00	54.98	147.40	8,683.24	-1,136.71	1,131.56	419,165.11	632,620.05	32.1520196	-104.0383750	1,138.88	10.00	10.00	0.00
8,950.00	59.98	147.40	8,710.11	-1,172.22	1,154.27	419,129.60	632,642.76	32.1519218	-104.0383020	1,174.43	10.00	10.00	0.00
9,000.00	64.98	147.40	8,733.20	-1,209.57	1,178.15	419,092.25	632,666.64	32.1518190	-104.0382251	1,211.83	10.00	10.00	0.00
9,050.00	69.98	147.40	8,752.35	-1,248.47	1,203.03	419,053.35	632,691.52	32.1517119	-104.0381451	1,250.77	10.00	10.00	0.00
9,100.17	75.00	147.40	8,767.43	-1,288.76	1,228.80	419,013.06	632,717.29	32.1516009	-104.0380622	1,291.12	10.00	10.00	0.00
9,158.56	76.12	150.19	8,782.00	-1,337.12	1,258.09	418,964.70	632,746.58	32.1514678	-104.0379679	1,339.53	5.00	1.91	4.77
Harkey SS													
9,200.00	76.93	152.15	8,791.66	-1,372.42	1,277.52	418,929.40	632,766.01	32.1513706	-104.0379055	1,374.87	5.00	1.96	4.73
9,300.00	78.94	156.83	8,812.57	-1,460.65	1,319.61	418,841.17	632,808.10	32.1511277	-104.0377702	1,463.18	5.00	2.02	4.68
9,400.00	81.03	161.44	8,829.97	-1,552.64	1,354.67	418,749.18	632,843.16	32.1508746	-104.0376578	1,555.24	5.00	2.09	4.61
9,500.00	83.17	166.00	8,843.72	-1,647.69	1,382.41	418,654.13	632,870.90	32.1506131	-104.0375690	1,650.34	5.00	2.14	4.56
9,600.00	85.36	170.52	8,853.72	-1,745.08	1,402.64	418,556.74	632,891.13	32.1503452	-104.0375045	1,747.77	5.00	2.19	4.52
9,700.00	87.57	175.01	8,859.89	-1,844.06	1,415.20	418,457.76	632,903.69	32.1500730	-104.0374648	1,846.78	5.00	2.21	4.49
9,777.10	89.29	178.47	8,862.00	-1,920.99	1,419.58	418,380.83	632,908.07	32.1498615	-104.0374513	1,923.72	5.00	2.23	4.48
Harkey LZ													
9,809.00	90.00	179.89	8,862.20	-1,952.89	1,420.04	418,348.93	632,908.53	32.1497739	-104.0374501	1,955.61	5.00	2.23	4.47
9,900.00	90.00	179.89	8,862.20	-2,043.89	1,420.21	418,257.93	632,908.70	32.1495237	-104.0374504	2,046.61	0.00	0.00	0.00
10,000.00	90.00	179.89	8,862.19	-2,143.89	1,420.39	418,157.93	632,908.88	32.1492488	-104.0374507	2,146.61	0.00	0.00	0.00
10,100.00	90.00	179.89	8,862.19	-2,243.89	1,420.58	418,057.93	632,909.07	32.1489739	-104.0374510	2,246.61	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,200.00	90.00	179.89	8,862.19	-2,343.89	1,420.76	417,957.93	632,909.25	32.1486990	-104.0374512	2,346.61	0.00	0.00	0.00
10,300.00	90.00	179.89	8,862.19	-2,443.89	1,420.95	417,857.93	632,909.44	32.1484241	-104.0374515	2,446.61	0.00	0.00	0.00
10,400.00	90.00	179.89	8,862.19	-2,543.89	1,421.14	417,757.93	632,909.63	32.1481492	-104.0374518	2,546.61	0.00	0.00	0.00
10,500.00	90.00	179.89	8,862.18	-2,643.89	1,421.32	417,657.93	632,909.81	32.1478743	-104.0374521	2,646.61	0.00	0.00	0.00
10,600.00	90.00	179.89	8,862.18	-2,743.89	1,421.51	417,557.93	632,910.00	32.1475995	-104.0374524	2,746.61	0.00	0.00	0.00
10,700.00	90.00	179.89	8,862.18	-2,843.89	1,421.70	417,457.93	632,910.19	32.1473246	-104.0374527	2,846.61	0.00	0.00	0.00
10,800.00	90.00	179.89	8,862.18	-2,943.89	1,421.88	417,357.93	632,910.37	32.1470497	-104.0374530	2,946.61	0.00	0.00	0.00
10,900.00	90.00	179.89	8,862.18	-3,043.89	1,422.07	417,257.93	632,910.56	32.1467748	-104.0374532	3,046.61	0.00	0.00	0.00
11,000.00	90.00	179.89	8,862.17	-3,143.89	1,422.25	417,157.93	632,910.74	32.1464999	-104.0374535	3,146.61	0.00	0.00	0.00
11,100.00	90.00	179.89	8,862.17	-3,243.89	1,422.44	417,057.93	632,910.93	32.1462250	-104.0374538	3,246.61	0.00	0.00	0.00
11,200.00	90.00	179.89	8,862.17	-3,343.89	1,422.63	416,957.93	632,911.12	32.1459501	-104.0374541	3,346.61	0.00	0.00	0.00
11,300.00	90.00	179.89	8,862.17	-3,443.89	1,422.81	416,857.93	632,911.30	32.1456752	-104.0374544	3,446.61	0.00	0.00	0.00
11,400.00	90.00	179.89	8,862.17	-3,543.89	1,423.00	416,757.93	632,911.49	32.1454003	-104.0374547	3,546.61	0.00	0.00	0.00
11,500.00	90.00	179.89	8,862.16	-3,643.89	1,423.19	416,657.93	632,911.68	32.1451254	-104.0374550	3,646.61	0.00	0.00	0.00
11,600.00	90.00	179.89	8,862.16	-3,743.89	1,423.37	416,557.93	632,911.86	32.1448505	-104.0374552	3,746.61	0.00	0.00	0.00
11,700.00	90.00	179.89	8,862.16	-3,843.89	1,423.56	416,457.93	632,912.05	32.1445756	-104.0374555	3,846.61	0.00	0.00	0.00
11,800.00	90.00	179.89	8,862.16	-3,943.89	1,423.75	416,357.93	632,912.24	32.1443008	-104.0374558	3,946.61	0.00	0.00	0.00
11,900.00	90.00	179.89	8,862.16	-4,043.89	1,423.93	416,257.93	632,912.42	32.1440259	-104.0374561	4,046.61	0.00	0.00	0.00
12,000.00	90.00	179.89	8,862.15	-4,143.89	1,424.12	416,157.93	632,912.61	32.1437510	-104.0374564	4,146.61	0.00	0.00	0.00
12,100.00	90.00	179.89	8,862.15	-4,243.89	1,424.30	416,057.93	632,912.79	32.1434761	-104.0374567	4,246.61	0.00	0.00	0.00
12,200.00	90.00	179.89	8,862.15	-4,343.89	1,424.49	415,957.93	632,912.98	32.1432012	-104.0374570	4,346.61	0.00	0.00	0.00
12,300.00	90.00	179.89	8,862.15	-4,443.89	1,424.68	415,857.93	632,913.17	32.1429263	-104.0374572	4,446.61	0.00	0.00	0.00
12,400.00	90.00	179.89	8,862.15	-4,543.89	1,424.86	415,757.93	632,913.35	32.1426514	-104.0374575	4,546.61	0.00	0.00	0.00
12,500.00	90.00	179.89	8,862.14	-4,643.89	1,425.05	415,657.93	632,913.54	32.1423765	-104.0374578	4,646.61	0.00	0.00	0.00
12,600.00	90.00	179.89	8,862.14	-4,743.89	1,425.24	415,557.93	632,913.73	32.1421016	-104.0374581	4,746.61	0.00	0.00	0.00
12,700.00	90.00	179.89	8,862.14	-4,843.89	1,425.42	415,457.93	632,913.91	32.1418267	-104.0374584	4,846.61	0.00	0.00	0.00
12,800.00	90.00	179.89	8,862.14	-4,943.89	1,425.61	415,357.93	632,914.10	32.1415518	-104.0374587	4,946.61	0.00	0.00	0.00
12,900.00	90.00	179.89	8,862.14	-5,043.89	1,425.79	415,257.93	632,914.28	32.1412770	-104.0374590	5,046.61	0.00	0.00	0.00
13,000.00	90.00	179.89	8,862.13	-5,143.89	1,425.98	415,157.93	632,914.47	32.1410021	-104.0374592	5,146.61	0.00	0.00	0.00
13,100.00	90.00	179.89	8,862.13	-5,243.89	1,426.17	415,057.93	632,914.66	32.1407272	-104.0374595	5,246.61	0.00	0.00	0.00
13,200.00	90.00	179.89	8,862.13	-5,343.89	1,426.35	414,957.93	632,914.84	32.1404523	-104.0374598	5,346.61	0.00	0.00	0.00
13,300.00	90.00	179.89	8,862.13	-5,443.89	1,426.54	414,857.93	632,915.03	32.1401774	-104.0374601	5,446.61	0.00	0.00	0.00
13,400.00	90.00	179.89	8,862.12	-5,543.89	1,426.73	414,757.93	632,915.22	32.1399025	-104.0374604	5,546.61	0.00	0.00	0.00
13,500.00	90.00	179.89	8,862.12	-5,643.89	1,426.91	414,657.94	632,915.40	32.1396276	-104.0374607	5,646.61	0.00	0.00	0.00
13,600.00	90.00	179.89	8,862.12	-5,743.88	1,427.10	414,557.94	632,915.59	32.1393527	-104.0374610	5,746.61	0.00	0.00	0.00
13,700.00	90.00	179.89	8,862.12	-5,843.88	1,427.29	414,457.94	632,915.78	32.1390778	-104.0374612	5,846.61	0.00	0.00	0.00
13,800.00	90.00	179.89	8,862.12	-5,943.88	1,427.47	414,357.94	632,915.96	32.1388029	-104.0374615	5,946.61	0.00	0.00	0.00
13,900.00	90.00	179.89	8,862.11	-6,043.88	1,427.66	414,257.94	632,916.15	32.1385280	-104.0374618	6,046.61	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,000.00	90.00	179.89	8,862.11	-6,143.88	1,427.84	414,157.94	632,916.33	32.1382531	-104.0374621	6,146.61	0.00	0.00	0.00
14,100.00	90.00	179.89	8,862.11	-6,243.88	1,428.03	414,057.94	632,916.52	32.1379783	-104.0374624	6,246.61	0.00	0.00	0.00
14,200.00	90.00	179.89	8,862.11	-6,343.88	1,428.22	413,957.94	632,916.71	32.1377034	-104.0374627	6,346.61	0.00	0.00	0.00
14,300.00	90.00	179.89	8,862.11	-6,443.88	1,428.40	413,857.94	632,916.89	32.1374285	-104.0374630	6,446.61	0.00	0.00	0.00
14,400.00	90.00	179.89	8,862.10	-6,543.88	1,428.59	413,757.94	632,917.08	32.1371536	-104.0374632	6,546.61	0.00	0.00	0.00
14,500.00	90.00	179.89	8,862.10	-6,643.88	1,428.78	413,657.94	632,917.27	32.1368787	-104.0374635	6,646.61	0.00	0.00	0.00
14,600.00	90.00	179.89	8,862.10	-6,743.88	1,428.96	413,557.94	632,917.45	32.1366038	-104.0374638	6,746.61	0.00	0.00	0.00
14,700.00	90.00	179.89	8,862.10	-6,843.88	1,429.15	413,457.94	632,917.64	32.1363289	-104.0374641	6,846.61	0.00	0.00	0.00
14,800.00	90.00	179.89	8,862.10	-6,943.88	1,429.33	413,357.94	632,917.82	32.1360540	-104.0374644	6,946.61	0.00	0.00	0.00
14,900.00	90.00	179.89	8,862.09	-7,043.88	1,429.52	413,257.94	632,918.01	32.1357791	-104.0374647	7,046.61	0.00	0.00	0.00
15,000.00	90.00	179.89	8,862.09	-7,143.88	1,429.71	413,157.94	632,918.20	32.1355042	-104.0374650	7,146.61	0.00	0.00	0.00
15,100.00	90.00	179.89	8,862.09	-7,243.88	1,429.89	413,057.94	632,918.38	32.1352293	-104.0374652	7,246.61	0.00	0.00	0.00
15,200.00	90.00	179.89	8,862.09	-7,343.88	1,430.08	412,957.94	632,918.57	32.1349544	-104.0374655	7,346.61	0.00	0.00	0.00
15,300.00	90.00	179.89	8,862.09	-7,443.88	1,430.27	412,857.94	632,918.76	32.1346796	-104.0374658	7,446.61	0.00	0.00	0.00
15,400.00	90.00	179.89	8,862.08	-7,543.88	1,430.45	412,757.94	632,918.94	32.1344047	-104.0374661	7,546.61	0.00	0.00	0.00
15,500.00	90.00	179.89	8,862.08	-7,643.88	1,430.64	412,657.94	632,919.13	32.1341298	-104.0374664	7,646.61	0.00	0.00	0.00
15,600.00	90.00	179.89	8,862.08	-7,743.88	1,430.83	412,557.94	632,919.32	32.1338549	-104.0374667	7,746.61	0.00	0.00	0.00
15,700.00	90.00	179.89	8,862.08	-7,843.88	1,431.01	412,457.94	632,919.50	32.1335800	-104.0374670	7,846.61	0.00	0.00	0.00
15,800.00	90.00	179.89	8,862.08	-7,943.88	1,431.20	412,357.94	632,919.69	32.1333051	-104.0374672	7,946.61	0.00	0.00	0.00
15,900.00	90.00	179.89	8,862.07	-8,043.88	1,431.38	412,257.94	632,919.87	32.1330302	-104.0374675	8,046.61	0.00	0.00	0.00
16,000.00	90.00	179.89	8,862.07	-8,143.88	1,431.57	412,157.94	632,920.06	32.1327553	-104.0374678	8,146.61	0.00	0.00	0.00
16,100.00	90.00	179.89	8,862.07	-8,243.88	1,431.76	412,057.94	632,920.25	32.1324804	-104.0374681	8,246.61	0.00	0.00	0.00
16,200.00	90.00	179.89	8,862.07	-8,343.88	1,431.94	411,957.94	632,920.43	32.1322055	-104.0374684	8,346.61	0.00	0.00	0.00
16,300.00	90.00	179.89	8,862.07	-8,443.88	1,432.13	411,857.94	632,920.62	32.1319306	-104.0374687	8,446.61	0.00	0.00	0.00
16,400.00	90.00	179.89	8,862.06	-8,543.88	1,432.32	411,757.94	632,920.81	32.1316557	-104.0374690	8,546.61	0.00	0.00	0.00
16,500.00	90.00	179.89	8,862.06	-8,643.88	1,432.50	411,657.94	632,920.99	32.1313808	-104.0374692	8,646.61	0.00	0.00	0.00
16,600.00	90.00	179.89	8,862.06	-8,743.88	1,432.69	411,557.94	632,921.18	32.1311060	-104.0374695	8,746.61	0.00	0.00	0.00
16,700.00	90.00	179.89	8,862.06	-8,843.88	1,432.87	411,457.94	632,921.36	32.1308311	-104.0374698	8,846.61	0.00	0.00	0.00
16,800.00	90.00	179.89	8,862.06	-8,943.88	1,433.06	411,357.94	632,921.55	32.1305562	-104.0374701	8,946.61	0.00	0.00	0.00
16,900.00	90.00	179.89	8,862.05	-9,043.88	1,433.25	411,257.94	632,921.74	32.1302813	-104.0374704	9,046.61	0.00	0.00	0.00
17,000.00	90.00	179.89	8,862.05	-9,143.88	1,433.43	411,157.94	632,921.92	32.1300064	-104.0374707	9,146.61	0.00	0.00	0.00
17,100.00	90.00	179.89	8,862.05	-9,243.88	1,433.62	411,057.94	632,922.11	32.1297315	-104.0374710	9,246.61	0.00	0.00	0.00
17,200.00	90.00	179.89	8,862.05	-9,343.88	1,433.81	410,957.94	632,922.30	32.1294566	-104.0374712	9,346.61	0.00	0.00	0.00
17,300.00	90.00	179.89	8,862.05	-9,443.88	1,433.99	410,857.94	632,922.48	32.1291817	-104.0374715	9,446.61	0.00	0.00	0.00
17,400.00	90.00	179.89	8,862.04	-9,543.88	1,434.18	410,757.94	632,922.67	32.1289068	-104.0374718	9,546.61	0.00	0.00	0.00
17,500.00	90.00	179.89	8,862.04	-9,643.88	1,434.37	410,657.94	632,922.86	32.1286319	-104.0374721	9,646.61	0.00	0.00	0.00
17,600.00	90.00	179.89	8,862.04	-9,743.88	1,434.55	410,557.94	632,923.04	32.1283570	-104.0374724	9,746.61	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,700.00	90.00	179.89	8,862.04	-9,843.88	1,434.74	410,457.94	632,923.23	32.1280821	-104.0374727	9,846.61	0.00	0.00	0.00
17,800.00	90.00	179.89	8,862.04	-9,943.88	1,434.92	410,357.94	632,923.41	32.1278073	-104.0374729	9,946.61	0.00	0.00	0.00
17,900.00	90.00	179.89	8,862.03	-10,043.88	1,435.11	410,257.94	632,923.60	32.1275324	-104.0374732	10,046.61	0.00	0.00	0.00
18,000.00	90.00	179.89	8,862.03	-10,143.88	1,435.30	410,157.94	632,923.79	32.1272575	-104.0374735	10,146.61	0.00	0.00	0.00
18,100.00	90.00	179.89	8,862.03	-10,243.88	1,435.48	410,057.94	632,923.97	32.1269826	-104.0374738	10,246.61	0.00	0.00	0.00
18,200.00	90.00	179.89	8,862.03	-10,343.88	1,435.67	409,957.94	632,924.16	32.1267077	-104.0374741	10,346.61	0.00	0.00	0.00
18,300.00	90.00	179.89	8,862.03	-10,443.88	1,435.86	409,857.94	632,924.35	32.1264328	-104.0374744	10,446.61	0.00	0.00	0.00
18,400.00	90.00	179.89	8,862.02	-10,543.88	1,436.04	409,757.94	632,924.53	32.1261579	-104.0374747	10,546.61	0.00	0.00	0.00
18,500.00	90.00	179.89	8,862.02	-10,643.88	1,436.23	409,657.94	632,924.72	32.1258830	-104.0374749	10,646.61	0.00	0.00	0.00
18,600.00	90.00	179.89	8,862.02	-10,743.88	1,436.41	409,557.94	632,924.90	32.1256081	-104.0374752	10,746.61	0.00	0.00	0.00
18,700.00	90.00	179.89	8,862.02	-10,843.88	1,436.60	409,457.94	632,925.09	32.1253332	-104.0374755	10,846.61	0.00	0.00	0.00
18,800.00	90.00	179.89	8,862.02	-10,943.88	1,436.79	409,357.94	632,925.28	32.1250583	-104.0374758	10,946.61	0.00	0.00	0.00
18,900.00	90.00	179.89	8,862.01	-11,043.88	1,436.97	409,257.94	632,925.46	32.1247834	-104.0374761	11,046.61	0.00	0.00	0.00
19,000.00	90.00	179.89	8,862.01	-11,143.88	1,437.16	409,157.94	632,925.65	32.1245085	-104.0374764	11,146.61	0.00	0.00	0.00
19,100.00	90.00	179.89	8,862.01	-11,243.88	1,437.35	409,057.94	632,925.84	32.1242337	-104.0374767	11,246.61	0.00	0.00	0.00
19,200.00	90.00	179.89	8,862.01	-11,343.88	1,437.53	408,957.94	632,926.02	32.1239588	-104.0374769	11,346.61	0.00	0.00	0.00
19,300.00	90.00	179.89	8,862.01	-11,443.88	1,437.72	408,857.95	632,926.21	32.1236839	-104.0374772	11,446.61	0.00	0.00	0.00
19,400.00	90.00	179.89	8,862.00	-11,543.87	1,437.91	408,757.95	632,926.40	32.1234090	-104.0374775	11,546.61	0.00	0.00	0.00
19,500.00	90.00	179.89	8,862.00	-11,643.87	1,438.09	408,657.95	632,926.58	32.1231341	-104.0374778	11,646.61	0.00	0.00	0.00
19,547.53	90.00	179.89	8,862.00	-11,691.40	1,438.18	408,610.42	632,926.67	32.1230034	-104.0374779	11,694.14	0.00	0.00	0.00

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
FTP (Riverbend 12-13 F	0.00	0.00	0.00	-1,270.20	1,418.83	419,031.62	632,907.32	32.1516505	-104.0374480
- plan misses target center by 1904.33usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
LTP (Riverbend 12-13 F	0.00	0.00	0.00	-11,691.40	1,438.18	408,610.42	632,926.67	32.1230034	-104.0374779
- plan misses target center by 8862.00usft at 19547.53usft MD (8862.00 TVD, -11691.40 N, 1438.18 E)									
- Point									

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
407.00	407.00	Rustler			
1,963.17	1,952.00	Top Salt			
2,705.65	2,679.00	Base Salt/Lamar			
2,835.35	2,806.00	Top Delaware Sands/Bell Canyon			
3,665.66	3,619.00	Cherry Canyon			
4,889.16	4,817.00	Brushy Canyon			
5,858.37	5,766.00	Lower Brushy Canyon			
6,517.10	6,411.00	Bone Spring Lime			
7,487.32	7,361.00	1st Bone Spring Sand			
8,184.08	8,048.00	2nd Bone Spring Sand			
8,573.81	8,432.00	3rd Bone Spring Carb			
9,158.56	8,782.00	Harkey SS			
9,777.10	8,862.00	Harkey LZ			

Checked By: _____ Approved By: _____ Date: _____

Coterra Energy

Eddy County, NM (NAD 83)
Riverbend 12-13 Federal Com
Riverbend 12-13 Federal Com 5H

OH
Plan 1

Total Directional
"Driven by TOTAL performance"
total

Anticollision Report

Minimum Magnetic Interference Warning level is 50' center to center

24 June, 2025

Total Report Version 1.60

COMPASS 5000.16 Build 97

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset 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:	Max. Cent. Dist. of 1,000.00usft or Max. SF of 6	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Well	Riverbend 12-13 Federal Com 5H						
Well Position	**+N/-S**	0.00 usft	**Northing:**	420,301.82 usft	**Latitude:**	32.1551528	
	+E/-W	0.00 usft	**Easting:**	631,488.49 usft	**Longitude:**	-104.0420214	
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	2,934.00	usft
Grid Convergence:		0.16 °					

Survey Tool Program **Date** 6/24/2025

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,547.53	Plan 1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Offset Listing

Site Name / Offset Well	Ground Level	KB Height	Map Coordinates Northing	Map Coordinates Easting	Geographical Coordinates Latitude	Geographical Coordinates Longitude	Surface Uncertainty Site	Surface Uncertainty Well
Coterra Energy - Riverbend 12-13 Federal Com								
Riverbend 12-13 Fed Com 19H -	2,934.70	2,957.70	420,359.13	631,629.58	32.1553093	-104.0415650	0.00	0.50
Riverbend 12-13 Fed Com 1H -	2,934.60	2,957.60	420,358.36	631,669.56	32.1553069	-104.0414358	0.00	0.50
Riverbend 12-13 Fed Com 20H -	2,935.00	2,958.00	420,359.51	631,609.59	32.1553105	-104.0416296	0.00	0.50
Riverbend 12-13 Fed Com 29H -	2,937.20	2,960.20	420,547.64	630,584.99	32.1558352	-104.0449388	0.00	0.00
Riverbend 12-13 Fed Com 2H -	2,934.60	2,957.60	420,358.74	631,649.57	32.1553081	-104.0415004	0.00	0.50
Riverbend 12-13 Fed Com 30H -	2,937.60	2,960.60	420,548.00	630,564.98	32.1558364	-104.0450035	0.00	0.00
Riverbend 12-13 Fed Com 31H -	2,937.50	2,960.50	420,608.75	630,526.15	32.1560036	-104.0451284	0.00	0.00
Coterra Energy - Riverbend 12-13 Federal Com								
Riverbend 12-13 Federal Com 3H -	2,934.00	2,957.00	420,302.20	631,468.50	32.1551540	-104.0420860	0.00	0.00
Riverbend 12-13 Federal Com 4H -	2,934.00	2,957.00	420,301.44	631,508.48	32.1551516	-104.0419568	0.00	0.00
Riverbend 12-13 Federal Com 6H -	2,934.00	2,957.00	420,301.06	631,528.48	32.1551504	-104.0418922	0.00	0.00
Riverbend 12-13 Federal Com 7H -	2,934.00	2,957.00	420,300.29	631,568.46	32.1551480	-104.0417630	0.00	0.00
Riverbend 12-13 Federal Com 8H -	2,934.00	2,957.00	420,300.68	631,548.47	32.1551492	-104.0418276	0.00	0.00
Coterra Energy - Riverbend 12-13 Federal Com								
Malaga 13 DM Fed Com 1H -	2,888.00	2,908.00	414,150.32	630,383.57	32.1382511	-104.0456449	0.50	0.50
Whistle Pig 1 SB Fee 5H -	2,912.00	2,937.00	424,125.66	633,731.20	32.1656472	-104.0347402	0.50	0.00
Whistle Pig 1 WA Fee 4 -	2,913.00	2,938.00	424,125.66	633,701.20	32.1656475	-104.0348371	0.50	0.00
Whistle Pig 1 WXY Fee 9H -	2,912.00	2,937.00	424,125.66	633,761.20	32.1656470	-104.0346432	0.50	0.00

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset 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
Riverbend 12-13 Fed Com						
Riverbend 12-13 Fed Com 19H - OH - Svy	1,752.08	1,746.74	131.06	119.14	11.00	CC, ES
Riverbend 12-13 Fed Com 19H - OH - Svy	8,500.00	8,512.80	254.06	191.75	4.08	SF
Riverbend 12-13 Fed Com 1H - OH - Svy	8,391.70	8,402.27	163.96	101.92	2.64	CC
Riverbend 12-13 Fed Com 1H - OH - Svy	8,400.00	8,410.59	163.97	101.87	2.64	ES
Riverbend 12-13 Fed Com 1H - OH - Svy	8,500.00	8,511.19	165.18	102.30	2.63	SF
Riverbend 12-13 Fed Com 20H - OH - Svy	1,512.50	1,515.79	123.32	113.16	12.13	CC, ES
Riverbend 12-13 Fed Com 20H - OH - Svy	7,600.00	7,631.57	363.75	308.16	6.54	SF
Riverbend 12-13 Fed Com 29H - OH - Svy	780.39	783.62	931.35	926.31	184.91	CC
Riverbend 12-13 Fed Com 29H - OH - Svy	1,000.00	999.35	932.20	925.64	142.12	ES
Riverbend 12-13 Fed Com 29H - OH - Svy	19,400.00	21,947.00	2,485.79	2,262.41	11.13	SF
Riverbend 12-13 Fed Com 2H - OH - Svy	0.00	0.00	170.84			
Riverbend 12-13 Fed Com 2H - OH - Svy	8,451.90	8,467.79	193.23	131.79	3.14	ES, SF
Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy	0.00	0.00	170.84			
Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy	8,451.90	8,467.79	193.23	131.79	3.14	ES, SF
Riverbend 12-13 Fed Com 30H - OH - Svy	0.00	0.00	955.77			
Riverbend 12-13 Fed Com 30H - OH - Svy	100.00	96.53	956.14	955.71	2,217.13	ES
Riverbend 12-13 Fed Com 30H - OH - Svy	19,298.98	20,738.00	1,676.09	1,424.52	6.66	SF
Riverbend 12-13 Fed Com 31H - OH - Svy	1,192.24	1,237.23	981.73	973.59	120.56	CC
Riverbend 12-13 Fed Com 31H - OH - Svy	1,200.00	1,244.46	981.74	973.55	119.81	ES
Riverbend 12-13 Fed Com 31H - OH - Svy	19,300.00	21,397.27	2,100.81	1,847.46	8.29	SF
Riverbend 12-13 Federal Com						
Riverbend 12-13 Federal Com 3H - OH - Plan 1	1,000.00	1,000.00	19.99	12.99	2.85	CC
Riverbend 12-13 Federal Com 3H - OH - Plan 1	1,100.00	1,099.98	20.69	12.98	2.69	ES, SF
Riverbend 12-13 Federal Com 4H - OH - Plan 1	1,203.07	1,202.90	18.65	10.24	2.22	CC, ES, SF
Riverbend 12-13 Federal Com 6H - OH - Plan 1	1,287.28	1,286.80	37.32	28.33	4.15	CC
Riverbend 12-13 Federal Com 6H - OH - Plan 1	1,300.00	1,299.45	37.34	28.26	4.11	ES
Riverbend 12-13 Federal Com 6H - OH - Plan 1	3,000.00	3,001.17	69.02	47.67	3.23	SF
Riverbend 12-13 Federal Com 7H - OH - Plan 1	1,000.00	1,000.00	79.98	72.98	11.42	CC, ES
Riverbend 12-13 Federal Com 7H - OH - Plan 1	7,300.00	7,277.70	337.37	282.57	6.16	SF
Riverbend 12-13 Federal Com 8H - OH - Plan 1	1,261.69	1,260.40	57.29	48.49	6.51	CC
Riverbend 12-13 Federal Com 8H - OH - Plan 1	1,300.00	1,298.03	57.52	48.46	6.35	ES
Riverbend 12-13 Federal Com 8H - OH - Plan 1	8,400.00	8,397.57	333.65	271.42	5.36	SF
Riverbend 12-13 Offsets						
Malaga 13 DM Fed Com 1H - OH - Svy	14,167.52	8,044.64	2,724.77	2,643.51	33.53	CC, ES
Malaga 13 DM Fed Com 1H - OH - Svy	19,547.53	13,305.00	3,401.63	3,219.17	18.64	SF
Whistle Pig 1 SB Fee 5H - OH - Svy	9,100.17	13,295.00	875.12	769.97	8.32	SF
Whistle Pig 1 SB Fee 5H - OH - Svy	9,200.00	13,295.00	861.93	759.49	8.41	ES
Whistle Pig 1 SB Fee 5H - OH - Svy	9,227.33	13,295.00	861.28	759.70	8.48	CC
Whistle Pig 1 WA Fee 4 - OH - Svy	9,200.00	14,593.00	1,296.30	1,226.77	18.64	SF
Whistle Pig 1 WA Fee 4 - OH - Svy	9,220.28	14,593.00	1,296.00	1,226.54	18.66	CC, ES
Whistle Pig 1 WXY Fee 9H - OH - Svy	9,387.86	14,503.00	1,783.42	1,688.58	18.81	CC, ES, SF

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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	0.71	0.71	0.00	0.50	67.89	57.31	141.09	152.29				
100.00	100.00	101.70	101.70	0.28	0.53	67.95	57.05	140.84	151.95	151.15	0.80	189.494	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
200.00	200.00	202.66	202.65	0.63	0.60	68.12	56.27	140.08	150.97	149.74	1.23	122.486	
300.00	300.00	302.76	302.75	0.99	0.85	68.29	55.34	139.02	149.64	147.80	1.84	81.226	
400.00	400.00	402.25	402.22	1.35	1.16	68.39	54.66	138.00	148.43	145.93	2.51	59.186	
500.00	500.00	501.77	501.74	1.71	1.49	68.47	54.17	137.34	147.64	144.45	3.20	46.198	
600.00	600.00	602.00	601.97	2.07	1.83	68.70	53.35	136.82	146.86	142.96	3.90	37.696	
700.00	700.00	702.26	702.21	2.43	2.17	69.25	51.69	136.44	145.91	141.31	4.60	31.717	
800.00	800.00	802.36	802.29	2.79	2.52	69.87	49.84	135.95	144.81	139.50	5.31	27.281	
900.00	900.00	902.83	902.74	3.14	2.88	70.43	48.10	135.33	143.64	137.62	6.02	23.860	
1,000.00	1,000.00	1,003.63	1,003.52	3.50	3.23	71.17	45.80	134.30	141.92	135.18	6.74	21.071	
1,100.00	1,099.98	1,103.84	1,103.65	3.84	3.59	-88.26	42.05	133.32	139.76	132.33	7.43	18.807	
1,200.00	1,199.84	1,203.14	1,202.86	4.17	3.94	-88.92	37.92	132.64	137.66	129.55	8.11	16.970	
1,288.80	1,288.31	1,289.60	1,289.29	4.47	4.25	-91.16	35.67	132.48	136.72	128.01	8.71	15.694	
1,300.00	1,299.45	1,300.44	1,300.12	4.51	4.29	-91.54	35.47	132.55	136.74	127.95	8.79	15.561	
1,350.00	1,349.13	1,349.49	1,349.17	4.68	4.46	-93.47	34.68	133.06	137.16	128.04	9.13	15.031	
1,400.00	1,398.73	1,398.92	1,398.59	4.85	4.63	-89.20	33.78	133.78	137.57	128.11	9.47	14.534	
1,500.00	1,497.69	1,498.83	1,498.46	5.19	4.98	-84.11	31.77	135.23	136.96	126.80	10.16	13.483	
1,600.00	1,596.25	1,598.47	1,598.07	5.54	5.33	-83.07	29.66	136.10	134.50	123.65	10.86	12.387	
1,670.62	1,665.55	1,667.79	1,667.38	5.78	5.58	-84.33	28.16	136.57	132.34	120.99	11.35	11.657	
1,700.00	1,694.31	1,696.52	1,696.11	5.89	5.68	-86.62	27.58	136.77	131.60	120.04	11.56	11.385	
1,752.08	1,745.31	1,746.74	1,746.32	6.07	5.85	-90.67	26.74	137.27	131.06	119.14	11.92	10.995	CC, ES
1,800.00	1,792.23	1,792.98	1,792.54	6.24	6.02	-94.40	26.22	137.92	131.52	119.27	12.25	10.735	
1,900.00	1,890.14	1,890.08	1,889.63	6.61	6.35	-102.10	25.78	139.64	135.12	122.18	12.94	10.441	
2,000.00	1,988.06	1,987.86	1,987.38	6.97	6.68	-109.18	25.74	141.96	141.74	128.11	13.63	10.396	
2,100.00	2,085.97	2,086.98	2,086.45	7.34	7.02	-115.32	25.23	145.07	150.14	135.80	14.34	10.471	
2,200.00	2,183.89	2,185.61	2,185.07	7.70	7.36	-121.37	24.90	146.41	159.94	144.90	15.04	10.633	
2,300.00	2,281.80	2,285.75	2,285.19	8.07	7.71	-127.70	24.09	144.87	170.64	154.88	15.76	10.830	
2,400.00	2,379.72	2,386.07	2,385.48	8.45	8.07	-132.80	21.85	144.80	181.69	165.21	16.48	11.028	
2,500.00	2,477.64	2,483.74	2,483.09	8.82	8.41	-136.54	19.07	146.91	193.17	175.99	17.19	11.240	
2,600.00	2,575.55	2,579.22	2,578.54	9.19	8.75	-139.84	17.80	148.59	206.93	189.05	17.88	11.573	
2,700.00	2,673.47	2,675.43	2,674.74	9.57	9.09	-143.13	17.05	148.73	222.17	203.60	18.57	11.961	
2,800.00	2,771.38	2,775.14	2,774.41	9.95	9.43	-146.76	16.40	145.98	238.93	219.63	19.29	12.385	
2,900.00	2,869.30	2,886.30	2,885.44	10.32	9.83	-150.37	11.77	143.67	253.01	232.94	20.07	12.607	
3,000.00	2,967.21	3,000.41	2,999.02	10.70	10.24	-153.56	0.97	143.97	262.06	241.24	20.82	12.587	
3,100.00	3,065.13	3,116.88	3,114.13	11.08	10.66	-156.25	-16.01	148.58	265.53	244.02	21.51	12.344	
3,200.00	3,163.05	3,224.06	3,219.23	11.46	11.05	-158.20	-35.23	156.91	264.70	242.50	22.20	11.922	
3,300.00	3,260.96	3,329.89	3,322.38	11.84	11.43	-159.33	-55.10	169.75	261.34	238.45	22.89	11.416	
3,400.00	3,358.88	3,432.52	3,421.95	12.22	11.80	-159.96	-74.81	184.93	256.42	232.81	23.60	10.864	
3,500.00	3,456.79	3,529.18	3,515.60	12.60	12.15	-160.46	-93.50	199.83	251.11	226.74	24.37	10.306	
3,600.00	3,554.71	3,622.30	3,606.43	12.98	12.48	-160.84	-108.87	213.41	248.75	223.59	25.16	9.888	
3,700.00	3,652.62	3,721.47	3,703.40	13.36	12.85	-161.13	-123.90	227.73	247.70	221.79	25.90	9.562	
3,800.00	3,750.54	3,819.92	3,799.70	13.75	13.20	-161.49	-138.86	241.68	246.75	220.10	26.66	9.257	
3,823.88	3,773.92	3,842.84	3,822.17	13.84	13.29	-161.61	-142.28	244.70	246.70	219.87	26.84	9.192	
3,900.00	3,848.45	3,918.23	3,896.13	14.13	13.57	-162.08	-153.38	254.17	246.93	219.53	27.41	9.009	
4,000.00	3,946.37	4,018.63	3,994.61	14.51	13.94	-162.74	-168.31	266.72	247.17	219.01	28.15	8.779	
4,100.00	4,044.29	4,118.54	4,092.61	14.89	14.30	-163.44	-183.36	279.10	247.32	218.42	28.90	8.558	
4,200.00	4,142.20	4,218.79	4,190.95	15.28	14.68	-164.22	-198.61	291.24	247.54	217.89	29.65	8.349	
4,300.00	4,240.12	4,318.99	4,289.21	15.66	15.05	-165.02	-214.06	303.35	247.63	217.23	30.40	8.146	
4,400.00	4,338.03	4,419.31	4,387.56	16.05	15.42	-165.84	-229.63	315.50	247.67	216.52	31.15	7.951	
4,500.00	4,435.95	4,521.23	4,487.39	16.43	15.80	-166.68	-245.86	328.05	247.31	215.43	31.89	7.755	
4,600.00	4,533.86	4,623.60	4,587.47	16.81	16.19	-167.46	-262.82	341.41	246.03	213.40	32.63	7.540	
4,700.00	4,631.78	4,720.21	4,681.95	17.20	16.55	-168.16	-278.48	354.06	245.06	211.65	33.41	7.336	
4,800.00	4,729.69	4,819.53	4,779.22	17.58	16.92	-168.83	-293.92	366.86	244.81	210.64	34.17	7.165	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
4,801.00	4,730.68	4,820.48	4,780.16	17.59	16.93	-168.84	-294.06	366.98	244.81	210.63	34.17	7.163	
4,900.00	4,827.61	4,915.47	4,873.40	17.97	17.28	-169.51	-308.07	378.48	245.70	210.76	34.94	7.032	
5,000.00	4,925.53	5,014.18	4,970.48	18.35	17.65	-170.27	-322.05	389.63	247.62	211.92	35.70	6.936	
5,100.00	5,023.44	5,113.18	5,067.93	18.74	18.02	-171.07	-335.85	400.35	250.05	213.59	36.46	6.858	
5,200.00	5,121.36	5,212.08	5,165.30	19.12	18.39	-171.91	-349.65	410.73	252.74	215.52	37.22	6.790	
5,300.00	5,219.27	5,310.44	5,262.31	19.51	18.76	-172.74	-362.68	420.46	256.43	218.44	37.98	6.751	
5,400.00	5,317.19	5,414.02	5,364.33	19.89	19.15	-173.52	-376.84	431.40	259.39	220.66	38.74	6.697	
5,500.00	5,415.10	5,514.27	5,462.88	20.28	19.53	-174.33	-391.47	442.46	261.39	221.89	39.50	6.618	
5,600.00	5,513.02	5,614.81	5,561.81	20.66	19.91	-175.12	-405.83	453.26	263.87	223.62	40.25	6.555	
5,700.00	5,610.93	5,719.89	5,664.94	21.05	20.30	-175.82	-421.47	465.93	265.04	224.05	41.00	6.465	
5,800.00	5,708.85	5,822.46	5,765.26	21.43	20.69	-176.52	-438.08	479.39	264.53	222.78	41.75	6.336	
5,900.00	5,806.77	5,921.65	5,862.21	21.82	21.07	-177.25	-454.45	492.44	263.80	221.28	42.52	6.204	
5,949.93	5,855.66	5,970.35	5,909.86	22.01	21.25	-177.61	-462.36	498.70	263.66	220.75	42.91	6.145	
6,000.00	5,904.68	6,018.80	5,957.31	22.21	21.44	-177.97	-470.04	504.73	263.81	220.51	43.30	6.093	
6,100.00	6,002.60	6,117.12	6,053.74	22.59	21.81	-178.71	-485.23	516.45	264.82	220.75	44.07	6.009	
6,200.00	6,100.51	6,214.47	6,149.35	22.98	22.18	-179.46	-499.88	527.51	266.58	221.73	44.85	5.944	
6,300.00	6,198.43	6,309.83	6,243.22	23.36	22.54	179.82	-513.40	537.42	269.71	224.09	45.62	5.913	
6,400.00	6,296.34	6,412.82	6,344.69	23.75	22.93	179.12	-527.49	547.97	273.33	226.95	46.38	5.893	
6,500.00	6,394.26	6,510.06	6,440.48	24.14	23.30	178.55	-540.64	558.37	276.75	229.60	47.14	5.870	
6,600.00	6,492.17	6,608.50	6,537.59	24.52	23.67	178.15	-552.89	568.83	280.96	233.05	47.90	5.865	
6,700.00	6,590.09	6,708.78	6,636.55	24.91	24.04	177.81	-565.07	579.48	285.37	236.70	48.67	5.864	
6,800.00	6,688.01	6,809.59	6,735.98	25.29	24.42	177.33	-578.00	590.00	289.50	240.07	49.43	5.857	
6,900.00	6,785.92	6,909.44	6,834.40	25.68	24.80	176.64	-591.78	599.66	293.62	243.43	50.19	5.850	
7,000.00	6,883.84	7,011.23	6,934.71	26.07	25.18	176.17	-605.21	610.51	297.39	246.43	50.96	5.836	
7,100.00	6,981.75	7,116.84	7,038.65	26.45	25.58	175.86	-619.03	623.07	300.28	248.57	51.72	5.806	
7,200.00	7,079.67	7,216.85	7,136.67	26.84	25.96	175.51	-633.68	636.48	300.97	248.49	52.48	5.735	
7,300.00	7,177.58	7,308.86	7,227.27	27.23	26.31	175.31	-645.39	647.48	304.02	250.77	53.25	5.709	
7,400.00	7,275.50	7,418.13	7,334.97	27.61	26.72	174.95	-659.28	659.48	307.99	253.98	54.01	5.703	
7,500.00	7,373.41	7,528.94	7,442.92	28.00	27.15	173.81	-680.01	673.48	306.78	252.05	54.73	5.605	
7,589.46	7,461.01	7,611.59	7,523.25	28.35	27.47	172.76	-696.51	683.62	305.46	249.98	55.47	5.506	
7,600.00	7,471.33	7,621.03	7,532.47	28.39	27.50	172.65	-698.29	684.67	305.47	249.91	55.56	5.498	
7,700.00	7,569.25	7,709.34	7,618.98	28.77	27.84	171.60	-713.85	693.15	307.73	251.38	56.35	5.461	
7,764.22	7,632.13	7,771.78	7,680.43	29.02	28.08	170.88	-723.90	697.85	310.91	254.06	56.85	5.469	
7,800.00	7,667.21	7,809.21	7,717.24	29.16	28.22	170.46	-729.97	700.83	312.33	255.20	57.13	5.467	
7,900.00	7,765.68	7,908.41	7,814.85	29.54	28.60	169.50	-745.30	709.65	313.67	255.78	57.90	5.418	
8,000.00	7,864.70	8,009.27	7,914.33	29.91	28.98	168.93	-758.26	720.04	311.83	253.18	58.65	5.317	
8,100.00	7,964.15	8,109.76	8,013.49	30.28	29.35	168.62	-769.51	731.80	306.25	246.86	59.39	5.157	
8,200.00	8,063.90	8,218.77	8,120.82	30.63	29.76	168.34	-781.47	746.62	295.75	235.64	60.11	4.920	
8,300.00	8,163.83	8,327.85	8,227.25	30.98	30.18	167.53	-797.03	764.65	277.56	216.81	60.75	4.569	
8,350.17	8,214.00	8,374.98	8,273.13	31.14	30.36	-60.91	-804.44	772.49	266.82	205.69	61.13	4.365	
8,400.00	8,263.77	8,420.93	8,317.93	31.31	30.54	151.71	-811.60	779.76	258.02	196.51	61.51	4.195	
8,450.00	8,313.33	8,466.74	8,362.75	31.49	30.71	151.97	-818.29	786.51	253.72	191.81	61.91	4.098	
8,472.53	8,335.43	8,488.00	8,383.60	31.58	30.80	152.17	-821.23	789.46	253.30	191.21	62.09	4.079	
8,500.00	8,362.13	8,512.80	8,407.95	31.69	30.89	152.46	-824.58	792.73	254.06	191.75	62.31	4.077	SF
8,550.00	8,409.80	8,558.59	8,452.99	31.89	31.06	153.09	-830.70	798.21	259.04	196.35	62.69	4.132	
8,600.00	8,455.99	8,604.19	8,497.94	32.09	31.24	153.81	-836.73	802.98	268.65	205.58	63.07	4.260	
8,650.00	8,500.33	8,649.26	8,542.42	32.31	31.41	154.55	-842.74	807.16	282.68	219.24	63.43	4.456	
8,700.00	8,542.50	8,691.97	8,584.60	32.53	31.57	155.21	-848.47	810.64	301.03	237.25	63.78	4.720	
8,750.00	8,582.16	8,731.30	8,623.51	32.75	31.71	155.73	-853.40	813.46	323.80	259.70	64.10	5.051	
8,800.00	8,619.02	8,771.00	8,662.87	32.97	31.86	156.24	-857.95	815.95	350.84	286.43	64.42	5.446	
8,850.00	8,652.80	8,807.24	8,698.83	33.19	32.00	156.49	-861.94	818.13	381.60	316.90	64.71	5.898	
8,900.00	8,683.24	8,844.32	8,735.60	33.42	32.13	156.66	-866.08	820.52	415.52	350.52	65.00	6.393	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
8,950.00	8,710.11	8,881.94	8,772.88	33.64	32.27	156.70	-870.40	823.16	452.31	387.01	65.29	6.927	
9,000.00	8,733.20	8,922.41	8,812.87	33.86	32.43	156.75	-875.58	826.56	491.32	425.74	65.58	7.492	
9,050.00	8,752.35	8,960.36	8,850.23	34.08	32.57	156.44	-881.01	830.37	532.30	466.47	65.82	8.087	
9,100.00	8,767.39	8,981.20	8,870.71	34.29	32.65	154.50	-884.10	832.59	575.40	509.40	65.99	8.719	
9,100.17	8,767.43	8,981.26	8,870.78	34.29	32.65	154.49	-884.11	832.60	575.55	509.55	65.99	8.721	
9,200.00	8,791.66	9,017.19	8,906.15	34.71	32.79	147.11	-889.20	836.35	664.13	597.86	66.27	10.021	
9,300.00	8,812.57	9,055.00	8,943.42	35.13	32.93	140.45	-894.26	840.19	753.38	686.85	66.53	11.323	
9,400.00	8,829.97	9,077.21	8,965.33	35.54	33.01	132.67	-897.11	842.37	842.79	776.09	66.70	12.635	
9,500.00	8,843.72	10,322.95	9,739.34	35.95	38.00	173.68	-1,574.84	1,261.55	905.98	863.91	42.07	21.536	
9,600.00	8,853.72	10,491.12	9,751.33	36.33	38.65	174.82	-1,732.53	1,318.16	900.97	860.07	40.90	22.028	
9,700.00	8,859.89	10,608.55	9,754.25	36.70	39.08	175.45	-1,846.98	1,344.07	896.50	855.39	41.11	21.807	
9,800.00	8,862.18	10,711.58	9,754.64	37.05	39.44	175.94	-1,949.18	1,356.81	894.01	852.34	41.66	21.458	
9,809.00	8,862.20	10,719.46	9,754.64	37.08	39.47	175.98	-1,957.04	1,357.39	893.95	852.21	41.74	21.419	
9,841.50	8,862.20	10,747.99	9,754.68	37.19	39.57	176.08	-1,985.52	1,359.02	893.87	851.86	42.01	21.275	
9,900.00	8,862.20	10,801.14	9,754.96	37.39	39.75	176.15	-2,038.65	1,360.20	894.09	851.56	42.54	21.019	
10,000.00	8,862.19	10,901.64	9,755.39	37.74	40.09	176.14	-2,139.15	1,360.22	894.53	851.15	43.38	20.620	
10,100.00	8,862.19	10,991.25	9,756.19	38.10	40.40	175.91	-2,228.68	1,356.68	895.71	851.20	44.51	20.125	
10,200.00	8,862.19	11,092.15	9,757.51	38.48	40.75	175.41	-2,329.27	1,348.87	897.63	852.00	45.62	19.675	
10,300.00	8,862.19	11,210.56	9,757.65	38.86	41.18	175.20	-2,447.59	1,345.77	897.92	851.49	46.43	19.339	
10,400.00	8,862.19	11,310.74	9,757.35	39.25	41.57	175.36	-2,547.73	1,348.59	897.41	850.05	47.36	18.951	
10,500.00	8,862.18	11,409.08	9,757.16	39.66	41.96	175.43	-2,646.06	1,349.82	897.13	848.76	48.37	18.546	
10,600.00	8,862.18	11,508.65	9,757.19	40.07	42.37	175.62	-2,745.58	1,353.00	896.93	847.58	49.36	18.173	
10,700.00	8,862.18	11,610.49	9,757.10	40.49	42.80	175.75	-2,847.39	1,355.17	896.70	846.34	50.36	17.805	
10,786.28	8,862.18	11,693.41	9,756.89	40.87	43.15	175.76	-2,930.31	1,355.57	896.46	845.12	51.35	17.458	
10,800.00	8,862.18	11,706.26	9,756.91	40.93	43.20	175.77	-2,943.15	1,355.79	896.47	844.96	51.51	17.405	
10,900.00	8,862.18	11,821.27	9,756.52	41.37	43.71	175.94	-3,058.13	1,358.60	896.01	843.62	52.39	17.102	
11,000.00	8,862.17	11,915.00	9,755.43	41.82	44.13	175.99	-3,151.85	1,359.63	894.79	841.20	53.60	16.695	
11,051.07	8,862.17	11,958.24	9,755.24	42.05	44.32	175.98	-3,195.09	1,359.68	894.57	840.28	54.29	16.479	
11,100.00	8,862.17	11,999.68	9,755.43	42.28	44.51	176.00	-3,236.52	1,359.99	894.77	839.83	54.94	16.285	
11,200.00	8,862.17	12,089.26	9,756.80	42.75	44.93	176.07	-3,326.09	1,361.13	896.22	839.99	56.24	15.937	
11,300.00	8,862.17	12,210.45	9,758.15	43.22	45.50	176.16	-3,447.25	1,362.69	897.31	840.15	57.16	15.699	
11,301.65	8,862.17	12,208.78	9,758.17	43.23	45.49	176.16	-3,445.58	1,362.67	897.32	840.11	57.22	15.683	
11,400.00	8,862.17	12,301.76	9,758.56	43.71	45.93	176.22	-3,538.55	1,363.85	897.66	839.20	58.46	15.355	
11,500.00	8,862.16	12,399.93	9,759.24	44.20	46.41	176.29	-3,636.72	1,365.09	898.28	838.59	59.70	15.048	
11,600.00	8,862.16	12,491.12	9,760.64	44.70	46.86	176.38	-3,727.88	1,366.54	899.72	838.70	61.02	14.744	
11,700.00	8,862.16	12,602.80	9,761.80	45.20	47.42	176.56	-3,839.52	1,369.47	900.57	838.48	62.09	14.504	
11,800.00	8,862.16	12,695.74	9,762.65	45.72	47.89	176.61	-3,932.44	1,370.39	901.44	838.00	63.44	14.210	
11,900.00	8,862.16	12,798.56	9,764.08	46.24	48.41	176.41	-4,035.19	1,367.31	903.04	838.26	64.78	13.940	
11,985.78	8,862.15	12,893.38	9,763.52	46.69	48.88	175.94	-4,129.74	1,360.12	902.93	836.94	65.99	13.682	
12,000.00	8,862.15	12,905.35	9,763.47	46.76	48.94	175.88	-4,141.68	1,359.23	902.95	836.72	66.23	13.634	
12,100.00	8,862.15	12,996.18	9,763.95	47.29	49.40	175.52	-4,232.34	1,353.68	903.93	836.14	67.79	13.334	
12,200.00	8,862.15	13,101.16	9,764.74	47.83	49.94	175.17	-4,337.17	1,348.30	905.13	835.92	69.21	13.078	
12,300.00	8,862.15	13,200.93	9,765.01	48.38	50.46	174.96	-4,436.88	1,345.16	905.68	835.05	70.64	12.822	
12,400.00	8,862.15	13,295.97	9,765.96	48.93	50.97	174.91	-4,531.91	1,344.40	906.78	834.72	72.06	12.584	
12,500.00	8,862.14	13,397.48	9,767.44	49.48	51.53	174.98	-4,633.41	1,345.60	908.14	834.77	73.37	12.378	
12,600.00	8,862.14	13,502.14	9,768.65	50.04	52.12	175.17	-4,738.02	1,348.64	909.06	834.44	74.62	12.183	
12,700.00	8,862.14	13,601.74	9,769.65	50.61	52.68	175.44	-4,837.51	1,353.12	909.71	833.83	75.89	11.988	
12,800.00	8,862.14	13,685.02	9,771.34	51.18	53.17	175.75	-4,920.63	1,358.01	911.31	834.00	77.31	11.788	
12,900.00	8,862.14	13,810.78	9,773.74	51.76	53.90	176.14	-5,046.17	1,364.31	912.98	834.67	78.31	11.659	
12,903.88	8,862.13	13,810.12	9,773.77	51.78	53.89	176.14	-5,045.51	1,364.33	913.01	834.61	78.41	11.645	
13,000.00	8,862.13	13,904.12	9,774.22	52.34	54.43	176.18	-5,139.50	1,365.06	913.43	833.68	79.75	11.453	
13,100.00	8,862.13	14,005.12	9,774.45	52.92	55.01	176.16	-5,240.50	1,365.02	913.67	832.52	81.15	11.259	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
13,200.00	8,862.13	14,095.68	9,775.49	53.51	55.54	176.19	-5,331.06	1,365.62	914.77	832.14	82.63	11.070	
13,300.00	8,862.13	14,210.69	9,776.19	54.10	56.21	176.17	-5,446.06	1,365.41	915.41	831.49	83.92	10.908	
13,400.00	8,862.12	14,333.17	9,774.39	54.70	56.93	176.02	-5,568.51	1,363.38	914.09	828.91	85.18	10.731	
13,500.00	8,862.12	14,429.89	9,771.51	55.30	57.51	175.90	-5,665.17	1,361.86	911.26	824.57	86.69	10.512	
13,600.00	8,862.12	14,523.03	9,769.76	55.91	58.06	175.91	-5,758.29	1,362.21	909.37	821.19	88.18	10.313	
13,700.00	8,862.12	14,617.54	9,768.57	56.52	58.63	175.91	-5,852.80	1,362.61	908.10	818.44	89.66	10.128	
13,800.00	8,862.12	14,725.28	9,767.23	57.13	59.29	175.90	-5,960.52	1,362.74	906.88	815.85	91.03	9.962	
13,900.00	8,862.11	14,820.96	9,765.53	57.75	59.87	175.79	-6,056.17	1,361.22	905.24	812.68	92.56	9.780	
14,000.00	8,862.11	14,923.90	9,763.74	58.37	60.49	175.57	-6,159.05	1,358.01	903.75	809.69	94.06	9.608	
14,100.00	8,862.11	15,016.00	9,762.16	58.99	61.05	175.35	-6,251.08	1,354.91	902.35	806.68	95.67	9.432	
14,200.00	8,862.11	15,111.22	9,761.40	59.62	61.64	175.28	-6,346.28	1,354.00	901.65	804.46	97.19	9.277	
14,300.00	8,862.11	15,218.79	9,760.84	60.25	62.31	175.44	-6,453.82	1,356.77	900.94	802.42	98.52	9.144	
14,400.00	8,862.10	15,317.81	9,759.78	60.88	62.94	175.52	-6,552.81	1,358.40	899.76	799.80	99.96	9.001	
14,467.02	8,862.10	15,376.05	9,759.54	61.31	63.30	175.56	-6,611.05	1,359.11	899.43	798.43	101.00	8.905	
14,500.00	8,862.10	15,406.94	9,759.63	61.52	63.50	175.59	-6,641.93	1,359.64	899.49	798.00	101.49	8.863	
14,600.00	8,862.10	15,509.20	9,759.96	62.16	64.15	175.76	-6,744.15	1,362.52	899.61	796.74	102.87	8.745	
14,700.00	8,862.10	15,610.08	9,760.02	62.80	64.79	175.95	-6,844.99	1,365.58	899.47	795.20	104.27	8.626	
14,724.51	8,862.10	15,633.63	9,760.05	62.96	64.95	175.99	-6,868.53	1,366.29	899.46	794.83	104.62	8.597	
14,800.00	8,862.10	15,710.82	9,760.23	63.44	65.44	176.13	-6,945.67	1,368.58	899.49	793.82	105.67	8.512	
14,900.00	8,862.09	15,810.94	9,759.87	64.09	66.09	176.22	-7,045.78	1,370.27	899.03	791.92	107.11	8.393	
14,917.98	8,862.09	15,827.15	9,759.87	64.21	66.19	176.24	-7,061.99	1,370.58	899.01	791.63	107.38	8.372	
15,000.00	8,862.09	15,905.20	9,760.24	64.74	66.70	176.35	-7,140.02	1,372.41	899.28	790.69	108.59	8.281	
15,100.00	8,862.09	16,004.30	9,760.85	65.39	67.34	176.48	-7,239.09	1,374.60	899.77	789.74	110.03	8.177	
15,200.00	8,862.09	16,103.39	9,761.54	66.05	67.98	176.58	-7,338.16	1,376.36	900.37	788.89	111.49	8.076	
15,300.00	8,862.09	16,197.54	9,762.48	66.70	68.60	176.74	-7,432.27	1,378.92	901.23	788.27	112.96	7.978	
15,400.00	8,862.08	16,301.71	9,764.06	67.36	69.29	176.91	-7,536.40	1,381.77	902.62	788.26	114.36	7.893	
15,500.00	8,862.08	16,403.55	9,764.77	68.02	69.96	177.07	-7,638.19	1,384.40	903.19	787.41	115.78	7.801	
15,600.00	8,862.08	16,497.60	9,765.78	68.69	70.58	177.25	-7,732.19	1,387.41	904.12	786.86	117.25	7.711	
15,700.00	8,862.08	16,615.60	9,766.56	69.35	71.36	177.40	-7,850.14	1,390.01	904.73	786.18	118.55	7.632	
15,800.00	8,862.08	16,712.80	9,766.16	70.02	72.00	177.37	-7,947.35	1,389.78	904.34	784.26	120.08	7.531	
15,900.00	8,862.07	16,826.76	9,764.01	70.69	72.75	177.11	-8,061.21	1,385.91	902.55	781.00	121.55	7.425	
16,000.00	8,862.07	16,909.90	9,763.20	71.36	73.30	176.94	-8,144.31	1,383.44	901.71	778.45	123.26	7.315	
16,009.74	8,862.07	16,919.32	9,763.18	71.42	73.36	176.93	-8,153.73	1,383.26	901.71	778.29	123.41	7.306	
16,100.00	8,862.07	17,007.94	9,763.24	72.03	73.95	176.85	-8,242.34	1,382.19	901.84	777.03	124.81	7.226	
16,200.00	8,862.07	17,112.21	9,763.18	72.71	74.64	176.78	-8,346.60	1,381.34	901.84	775.53	126.30	7.140	
16,300.00	8,862.07	17,212.14	9,762.56	73.38	75.30	176.68	-8,446.52	1,379.97	901.31	773.46	127.85	7.050	
16,323.51	8,862.07	17,233.13	9,762.49	73.54	75.44	176.64	-8,467.50	1,379.35	901.28	773.04	128.24	7.028	
16,400.00	8,862.06	17,307.81	9,762.52	74.06	75.94	176.44	-8,542.12	1,376.30	901.50	772.02	129.47	6.963	
16,500.00	8,862.06	17,410.79	9,762.25	74.74	76.62	176.24	-8,645.05	1,373.38	901.43	770.40	131.03	6.879	
16,600.00	8,862.06	17,512.09	9,762.01	75.42	77.30	176.13	-8,746.35	1,371.82	901.31	768.74	132.57	6.799	
16,681.21	8,862.06	17,590.97	9,761.75	75.97	77.84	176.08	-8,825.22	1,371.22	901.10	767.27	133.83	6.733	
16,700.00	8,862.06	17,608.26	9,761.76	76.10	77.95	176.08	-8,842.51	1,371.22	901.12	766.99	134.13	6.718	
16,800.00	8,862.06	17,711.21	9,762.03	76.79	78.65	176.11	-8,945.45	1,371.94	901.35	765.74	135.61	6.647	
16,900.00	8,862.05	17,815.12	9,761.58	77.47	79.36	176.13	-9,049.36	1,372.40	900.90	763.81	137.09	6.572	
17,000.00	8,862.05	17,915.49	9,760.90	78.16	80.04	176.08	-9,149.73	1,371.95	900.27	761.65	138.61	6.495	
17,100.00	8,862.05	18,020.03	9,759.95	78.85	80.75	176.04	-9,254.27	1,371.60	899.40	759.30	140.10	6.419	
17,200.00	8,862.05	18,120.91	9,758.77	79.54	81.44	175.99	-9,355.14	1,371.07	898.29	756.66	141.63	6.342	
17,300.00	8,862.05	18,233.19	9,756.10	80.23	82.21	175.86	-9,467.37	1,369.33	896.00	752.91	143.09	6.262	
17,400.00	8,862.04	18,324.17	9,754.13	80.92	82.83	175.73	-9,558.31	1,367.65	893.98	749.25	144.74	6.177	
17,500.00	8,862.04	18,421.54	9,752.57	81.62	83.50	175.61	-9,655.66	1,366.12	892.52	746.20	146.32	6.100	
17,600.00	8,862.04	18,519.76	9,751.30	82.31	84.17	175.49	-9,753.86	1,364.45	891.38	743.47	147.90	6.027	
17,700.00	8,862.04	18,621.66	9,750.06	83.01	84.88	175.47	-9,855.74	1,364.41	890.18	740.76	149.42	5.958	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS **Offset Well Error:** 0.50 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
17,800.00	8,862.04	18,722.66	9,748.75	83.71	85.58	175.57	-9,956.71	1,366.26	888.76	737.87	150.90	5.890	
17,900.00	8,862.03	18,821.88	9,747.70	84.41	86.28	175.83	-10,055.83	1,370.63	887.39	735.06	152.33	5.825	
18,000.00	8,862.03	18,923.16	9,746.41	85.11	86.98	175.92	-10,157.09	1,372.24	886.03	732.21	153.81	5.760	
18,100.00	8,862.03	19,017.11	9,745.25	85.81	87.64	175.98	-10,251.02	1,373.46	884.73	729.36	155.37	5.694	
18,200.00	8,862.03	19,114.28	9,744.95	86.51	88.32	176.11	-10,348.17	1,375.70	884.26	727.39	156.87	5.637	
18,300.00	8,862.03	19,220.47	9,744.31	87.21	89.07	176.27	-10,454.32	1,378.41	883.52	725.22	158.29	5.582	
18,400.00	8,862.02	19,319.75	9,743.21	87.92	89.77	176.37	-10,553.58	1,380.25	882.31	722.52	159.79	5.522	
18,500.00	8,862.02	19,421.23	9,742.18	88.62	90.48	176.50	-10,655.03	1,382.48	881.17	719.91	161.26	5.464	
18,600.00	8,862.02	19,517.87	9,741.29	89.33	91.16	176.65	-10,751.63	1,385.05	880.10	717.33	162.77	5.407	
18,700.00	8,862.02	19,621.22	9,740.28	90.03	91.89	176.83	-10,854.93	1,387.96	878.98	714.77	164.21	5.353	
18,800.00	8,862.02	19,716.23	9,739.45	90.74	92.56	176.86	-10,949.93	1,388.75	878.07	712.30	165.77	5.297	
18,900.00	8,862.01	19,817.21	9,738.62	91.45	93.27	176.78	-11,050.90	1,387.66	877.32	709.99	167.33	5.243	
19,000.00	8,862.01	19,916.25	9,737.75	92.16	93.96	176.64	-11,149.91	1,385.80	876.57	707.65	168.91	5.189	
19,100.00	8,862.01	20,017.66	9,737.00	92.87	94.68	176.52	-11,251.31	1,384.18	875.94	705.46	170.48	5.138	
19,200.00	8,862.01	20,116.41	9,735.83	93.58	95.37	176.37	-11,350.04	1,382.08	874.90	702.83	172.08	5.084	
19,257.61	8,862.01	20,168.00	9,735.60	93.99	95.73	176.29	-11,401.61	1,381.11	874.72	701.69	173.03	5.055	
19,300.00	8,862.01	20,204.06	9,735.75	94.30	95.99	176.25	-11,437.66	1,380.54	874.94	701.20	173.74	5.036	
19,400.00	8,862.00	20,227.00	9,735.89	95.01	96.15	176.23	-11,460.60	1,380.19	879.04	703.85	175.20	5.017	
19,500.00	8,862.00	20,227.00	9,735.89	95.72	96.15	176.23	-11,460.60	1,380.19	894.09	719.03	175.06	5.107	
19,547.53	8,862.00	20,227.00	9,735.89	96.06	96.15	176.23	-11,460.60	1,380.19	905.03	730.61	174.42	5.189	
19,548.26	8,862.00	20,227.00	9,735.89	96.14	96.15	176.23	-11,460.60	1,380.19	905.22	730.07	175.15	5.168	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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	0.61	0.61	0.00	0.50	72.66	56.54	181.07	189.69				
100.00	100.00	101.53	101.53	0.28	0.53	72.75	56.18	180.92	189.45	188.64	0.80	236.321	
200.00	200.00	202.74	202.73	0.63	0.60	73.02	55.09	180.48	188.71	187.48	1.23	153.074	
300.00	300.00	313.82	313.64	0.99	0.89	73.90	50.95	176.50	184.16	182.27	1.89	97.410	
400.00	400.00	409.49	409.11	1.35	1.19	74.73	46.91	171.80	178.29	175.75	2.54	70.171	
500.00	500.00	507.80	507.33	1.71	1.52	75.14	44.66	168.26	174.21	170.99	3.22	54.041	
600.00	600.00	607.84	607.28	2.07	1.86	75.16	43.56	164.40	170.21	166.28	3.92	43.400	
700.00	700.00	704.81	704.20	2.43	2.19	74.98	43.21	161.09	166.83	162.22	4.61	36.174	
769.89	769.89	771.11	770.49	2.68	2.41	74.85	43.41	160.36	166.13	161.04	5.09	32.666	
800.00	800.00	800.13	799.51	2.79	2.51	74.83	43.50	160.43	166.23	160.94	5.29	31.429	
900.00	900.00	897.18	896.54	3.14	2.83	74.95	43.57	162.05	167.86	161.90	5.96	28.146	
1,000.00	1,000.00	997.04	996.36	3.50	3.16	75.22	43.50	164.91	170.60	163.95	6.65	25.644	
1,100.00	1,099.98	1,098.61	1,097.91	3.84	3.50	-84.96	42.96	167.16	172.45	165.12	7.34	23.502	
1,200.00	1,199.84	1,197.34	1,196.63	4.17	3.83	-86.52	43.05	168.80	173.69	165.69	8.00	21.711	
1,300.00	1,299.45	1,294.35	1,293.59	4.51	4.16	-89.45	44.55	171.29	176.31	167.65	8.66	20.360	
1,350.00	1,349.13	1,343.26	1,342.46	4.68	4.33	-91.36	45.69	172.93	178.35	169.35	8.99	19.830	
1,400.00	1,398.73	1,392.74	1,391.90	4.85	4.50	-87.05	46.81	174.66	180.31	170.98	9.33	19.320	
1,500.00	1,497.69	1,491.50	1,490.57	5.19	4.84	-81.52	48.91	178.21	182.98	172.96	10.02	18.268	
1,600.00	1,596.25	1,589.88	1,588.86	5.54	5.18	-79.48	51.26	181.70	184.40	173.70	10.71	17.224	
1,670.62	1,665.55	1,658.53	1,657.44	5.78	5.42	-79.70	53.23	184.09	185.11	173.92	11.19	16.539	
1,700.00	1,694.31	1,686.99	1,685.86	5.89	5.52	-81.48	54.12	185.13	185.55	174.16	11.39	16.284	
1,800.00	1,792.23	1,784.71	1,783.46	6.24	5.87	-87.59	57.49	188.56	188.61	176.52	12.09	15.596	
1,900.00	1,890.14	1,882.86	1,881.50	6.61	6.21	-93.59	61.14	191.66	193.81	181.01	12.80	15.142	
2,000.00	1,988.06	1,979.26	1,977.77	6.97	6.55	-98.94	64.54	195.44	201.33	187.83	13.50	14.917	
2,100.00	2,085.97	2,077.93	2,076.21	7.34	6.90	-103.29	66.88	201.67	210.65	196.44	14.21	14.824	
2,200.00	2,183.89	2,177.03	2,174.98	7.70	7.25	-106.77	68.13	209.54	220.76	205.83	14.93	14.788	
2,300.00	2,281.80	2,277.66	2,275.20	8.07	7.60	-109.65	68.37	218.58	231.06	215.41	15.66	14.757	
2,400.00	2,379.72	2,379.95	2,376.86	8.45	7.97	-111.72	66.64	229.73	240.71	224.31	16.40	14.681	
2,500.00	2,477.64	2,483.46	2,479.55	8.82	8.34	-113.25	62.90	242.19	249.18	232.04	17.14	14.539	
2,600.00	2,575.55	2,589.55	2,584.93	9.19	8.71	-115.01	57.28	252.99	255.65	237.77	17.88	14.295	
2,700.00	2,673.47	2,690.19	2,685.06	9.57	9.07	-117.01	50.98	261.01	260.83	242.22	18.61	14.015	
2,800.00	2,771.38	2,793.21	2,787.55	9.95	9.44	-119.05	43.91	268.73	265.63	246.29	19.34	13.734	
2,900.00	2,869.30	2,898.09	2,891.56	10.32	9.81	-120.63	34.38	278.14	268.82	248.75	20.07	13.394	
3,000.00	2,967.21	3,007.36	2,999.30	10.70	10.20	-121.56	21.16	290.53	269.66	248.87	20.79	12.969	
3,100.00	3,065.13	3,117.69	3,106.98	11.08	10.60	-121.66	2.88	306.02	266.56	245.07	21.49	12.402	
3,200.00	3,163.05	3,218.12	3,204.50	11.46	10.96	-121.47	-15.92	320.98	261.48	239.25	22.23	11.764	
3,300.00	3,260.96	3,315.93	3,299.45	11.84	11.32	-121.21	-34.07	335.91	256.62	233.65	22.98	11.169	
3,400.00	3,358.88	3,410.85	3,391.87	12.22	11.67	-121.03	-50.14	350.34	253.37	229.64	23.74	10.674	
3,500.00	3,456.79	3,508.15	3,486.83	12.60	12.02	-120.91	-65.35	365.12	251.42	226.94	24.49	10.267	
3,561.20	3,516.71	3,566.07	3,543.56	12.83	12.24	-120.99	-73.55	373.45	251.03	226.08	24.95	10.061	
3,600.00	3,554.71	3,604.29	3,581.10	12.98	12.38	-121.12	-78.56	378.64	251.12	225.89	25.24	9.950	
3,700.00	3,652.62	3,706.69	3,681.58	13.36	12.76	-121.45	-92.42	392.65	250.97	224.99	25.98	9.660	
3,800.00	3,750.54	3,809.59	3,782.14	13.75	13.14	-121.41	-107.90	408.04	249.55	222.83	26.72	9.338	
3,900.00	3,848.45	3,910.16	3,880.04	14.13	13.52	-120.99	-123.95	424.49	247.47	220.00	27.47	9.007	
4,000.00	3,946.37	4,011.47	3,978.52	14.51	13.90	-120.41	-140.40	441.69	245.26	217.03	28.23	8.689	
4,100.00	4,044.29	4,112.78	4,076.94	14.89	14.28	-119.89	-157.62	458.40	242.23	213.25	28.98	8.359	
4,200.00	4,142.20	4,212.06	4,173.55	15.28	14.66	-119.57	-174.42	473.97	239.11	209.37	29.74	8.040	
4,300.00	4,240.12	4,310.35	4,269.26	15.66	15.03	-119.24	-190.54	489.48	236.54	206.04	30.50	7.755	
4,400.00	4,338.03	4,412.07	4,368.27	16.05	15.42	-118.83	-207.10	505.87	234.17	202.91	31.26	7.492	
4,500.00	4,435.95	4,515.64	4,468.45	16.43	15.81	-117.84	-225.77	524.34	230.50	198.49	32.01	7.202	
4,600.00	4,533.86	4,616.14	4,565.04	16.81	16.20	-116.31	-245.37	544.00	225.89	193.11	32.78	6.891	
4,700.00	4,631.78	4,716.00	4,660.82	17.20	16.59	-114.54	-265.17	564.15	221.32	187.76	33.56	6.594	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
4,800.00	4,729.69	4,817.64	4,758.55	17.58	16.98	-112.99	-285.46	583.33	216.42	182.09	34.33	6.304	
4,900.00	4,827.61	4,917.56	4,854.92	17.97	17.37	-111.82	-305.43	600.56	211.10	175.99	35.11	6.013	
5,000.00	4,925.53	5,015.34	4,949.88	18.35	17.75	-111.36	-323.61	615.14	206.37	170.49	35.89	5.751	
5,100.00	5,023.44	5,113.26	5,045.52	18.74	18.12	-111.49	-340.11	628.16	202.73	166.07	36.66	5.530	
5,200.00	5,121.36	5,212.05	5,142.24	19.12	18.49	-111.89	-355.84	640.69	199.75	162.33	37.42	5.338	
5,300.00	5,219.27	5,309.61	5,237.99	19.51	18.87	-112.57	-370.30	652.50	197.63	159.45	38.18	5.176	
5,400.00	5,317.19	5,408.36	5,334.94	19.89	19.24	-113.08	-383.84	665.50	196.93	157.99	38.94	5.057	
5,500.00	5,415.10	5,510.20	5,434.31	20.28	19.63	-112.74	-399.44	681.41	195.51	155.80	39.70	4.924	
5,600.00	5,513.02	5,608.97	5,530.57	20.66	20.01	-112.25	-414.88	697.29	193.94	153.46	40.47	4.792	
5,700.00	5,610.93	5,707.78	5,627.24	21.05	20.39	-112.22	-428.92	712.07	193.36	152.12	41.24	4.688	
5,800.00	5,708.85	5,808.04	5,725.38	21.43	20.78	-112.24	-443.04	726.94	192.85	150.85	42.00	4.591	
5,900.00	5,806.77	5,907.94	5,823.13	21.82	21.16	-112.21	-457.26	741.87	192.24	149.48	42.77	4.495	
6,000.00	5,904.68	6,006.98	5,920.24	22.21	21.54	-112.47	-470.79	755.87	191.91	148.38	43.53	4.409	
6,005.58	5,910.15	6,012.50	5,925.66	22.23	21.56	-112.49	-471.52	756.62	191.91	148.33	43.57	4.404	
6,100.00	6,002.60	6,105.63	6,017.22	22.59	21.91	-113.07	-483.30	768.93	192.22	147.94	44.28	4.341	
6,200.00	6,100.51	6,206.68	6,116.66	22.98	22.30	-113.83	-495.74	781.95	192.79	147.75	45.04	4.280	
6,300.00	6,198.43	6,306.73	6,215.00	23.36	22.68	-114.47	-508.68	795.02	192.86	147.06	45.79	4.211	
6,400.00	6,296.34	6,408.23	6,314.66	23.75	23.06	-114.97	-522.22	808.65	192.65	146.10	46.55	4.139	
6,500.00	6,394.26	6,508.32	6,412.71	24.14	23.45	-115.14	-536.33	823.00	192.00	144.69	47.31	4.058	
6,600.00	6,492.17	6,610.18	6,512.31	24.52	23.84	-115.13	-551.46	837.98	190.72	142.65	48.07	3.967	
6,700.00	6,590.09	6,707.96	6,608.03	24.91	24.22	-115.25	-565.74	852.00	189.58	140.74	48.84	3.881	
6,723.98	6,613.57	6,731.01	6,630.63	25.00	24.30	-115.33	-568.86	855.20	189.52	140.49	49.03	3.866	
6,800.00	6,688.01	6,805.07	6,703.43	25.29	24.59	-115.72	-578.08	865.28	190.08	140.48	49.60	3.832	
6,900.00	6,785.92	6,906.78	6,803.47	25.68	24.97	-116.45	-590.88	878.41	190.49	140.14	50.36	3.783	
7,000.00	6,883.84	7,007.55	6,902.60	26.07	25.36	-117.21	-603.69	891.27	190.80	139.69	51.11	3.733	
7,100.00	6,981.75	7,109.50	7,002.55	26.45	25.75	-117.68	-618.46	904.79	189.51	137.65	51.86	3.654	
7,166.16	7,046.53	7,173.16	7,064.93	26.71	25.99	-117.82	-627.43	913.83	189.08	136.71	52.37	3.610	
7,200.00	7,079.67	7,204.78	7,095.98	26.84	26.11	-117.96	-631.43	918.20	189.30	136.67	52.63	3.597	
7,300.00	7,177.58	7,303.37	7,193.19	27.23	26.49	-118.81	-641.88	930.92	191.75	138.37	53.38	3.592	
7,400.00	7,275.50	7,414.84	7,301.14	27.61	26.92	-117.21	-658.70	952.67	191.42	137.29	54.14	3.536	
7,500.00	7,373.41	7,519.01	7,399.40	28.00	27.35	-113.37	-681.81	978.39	185.76	130.83	54.93	3.382	
7,600.00	7,471.33	7,617.25	7,492.55	28.39	27.74	-110.08	-703.38	1,000.95	180.54	124.76	55.78	3.237	
7,700.00	7,569.25	7,714.82	7,586.06	28.77	28.13	-107.70	-722.86	1,020.81	176.72	120.11	56.62	3.121	
7,764.22	7,632.13	7,777.55	7,646.76	29.02	28.38	-106.81	-734.00	1,031.99	175.04	117.91	57.13	3.064	
7,800.00	7,667.21	7,812.55	7,680.92	29.16	28.52	-106.61	-739.54	1,037.29	174.27	116.86	57.41	3.035	
7,900.00	7,765.68	7,911.11	7,777.66	29.54	28.90	-106.21	-753.40	1,049.99	172.10	113.92	58.18	2.958	
8,000.00	7,864.70	8,007.29	7,872.06	29.91	29.26	-104.56	-765.98	1,063.45	170.40	111.45	58.95	2.891	
8,100.00	7,964.15	8,109.13	7,971.38	30.28	29.66	-100.50	-780.30	1,080.82	168.83	109.08	59.75	2.826	
8,200.00	8,063.90	8,209.30	8,069.14	30.63	30.05	-95.42	-795.12	1,096.79	166.47	105.93	60.54	2.750	
8,300.00	8,163.83	8,308.47	8,166.24	30.98	30.43	-89.61	-809.30	1,111.11	164.81	103.48	61.33	2.687	
8,350.17	8,214.00	8,359.95	8,216.57	31.14	30.63	46.16	-817.27	1,118.43	164.21	102.49	61.72	2.660	
8,391.70	8,255.49	8,402.27	8,257.85	31.28	30.80	-98.53	-824.48	1,124.35	163.96	101.92	62.04	2.643	CC
8,400.00	8,263.77	8,410.59	8,265.96	31.31	30.83	-98.10	-825.93	1,125.50	163.97	101.87	62.10	2.640	ES
8,450.00	8,313.33	8,460.98	8,315.10	31.49	31.02	-96.43	-834.74	1,132.32	164.38	101.88	62.49	2.630	
8,500.00	8,362.13	8,511.19	8,364.13	31.69	31.22	-96.32	-843.43	1,138.83	165.18	102.30	62.88	2.627	SF
8,550.00	8,409.80	8,560.73	8,412.67	31.89	31.41	-97.93	-851.35	1,144.74	166.55	103.30	63.25	2.633	
8,600.00	8,455.99	8,607.62	8,458.76	32.09	31.59	-100.89	-858.17	1,150.03	169.13	105.50	63.62	2.658	
8,650.00	8,500.33	8,652.31	8,502.70	32.31	31.76	-104.60	-864.09	1,155.56	174.21	110.25	63.97	2.724	
8,700.00	8,542.50	8,697.21	8,546.85	32.53	31.93	-108.91	-869.62	1,161.67	182.51	118.22	64.29	2.839	
8,750.00	8,582.16	8,742.46	8,591.23	32.75	32.10	-113.44	-875.50	1,168.25	194.01	129.42	64.60	3.003	
8,800.00	8,619.02	8,786.23	8,634.04	32.97	32.27	-117.75	-881.60	1,174.98	209.11	144.22	64.90	3.222	
8,850.00	8,652.80	8,828.10	8,674.92	33.19	32.44	-121.62	-887.74	1,181.59	228.10	162.93	65.18	3.500	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
8,900.00	8,683.24	8,867.61	8,713.45	33.42	32.59	-124.86	-893.80	1,187.94	251.12	185.68	65.44	3.838	
8,950.00	8,710.11	8,903.78	8,748.71	33.64	32.73	-127.30	-899.49	1,193.67	278.17	212.49	65.68	4.235	
9,000.00	8,733.20	8,936.63	8,780.74	33.86	32.86	-128.89	-904.73	1,198.73	309.12	243.21	65.91	4.690	
9,050.00	8,752.35	8,966.08	8,809.46	34.08	32.97	-129.54	-909.48	1,203.15	343.67	277.55	66.12	5.198	
9,100.00	8,767.39	8,992.26	8,835.00	34.29	33.08	-129.16	-913.78	1,207.02	381.40	315.11	66.30	5.753	
9,100.17	8,767.43	8,992.35	8,835.08	34.29	33.08	-129.15	-913.79	1,207.04	381.53	315.24	66.30	5.755	
9,200.00	8,791.66	9,039.47	8,881.01	34.71	33.26	-139.90	-921.74	1,213.94	463.72	397.09	66.62	6.960	
9,300.00	8,812.57	9,078.49	8,919.06	35.13	33.41	-150.24	-928.42	1,219.50	551.82	484.89	66.93	8.245	
9,400.00	8,829.97	9,110.65	8,950.48	35.54	33.54	-161.39	-933.74	1,223.77	643.86	576.66	67.20	9.581	
9,500.00	8,843.72	9,138.05	8,977.32	35.95	33.64	-174.51	-938.12	1,227.17	738.43	671.01	67.42	10.952	
9,600.00	8,853.72	9,162.56	9,001.35	36.33	33.74	169.89	-941.93	1,230.06	834.53	766.92	67.61	12.342	
9,700.00	8,859.89	9,183.55	9,021.94	36.70	33.82	152.55	-945.15	1,232.53	931.39	863.61	67.77	13.743	
9,800.00	8,862.18	9,199.98	9,038.07	37.05	33.88	135.34	-947.64	1,234.48	1,028.42	960.53	67.90	15.147	
9,809.00	8,862.20	9,201.23	9,039.30	37.08	33.89	133.88	-947.83	1,234.63	1,037.15	969.24	67.91	15.273	
9,900.00	8,862.20	10,454.00	9,766.91	37.39	39.33	-156.02	-1,575.39	1,821.53	1,094.52	1,039.88	54.65	20.029	
10,000.00	8,862.19	10,536.41	9,774.22	37.74	39.71	-153.39	-1,636.82	1,875.96	1,138.14	1,081.48	56.66	20.086	
10,100.00	8,862.19	10,621.00	9,781.50	38.10	40.12	-150.88	-1,700.29	1,931.40	1,183.41	1,124.82	58.59	20.198	
10,200.00	8,862.19	10,747.62	9,790.84	38.48	40.74	-147.43	-1,797.08	2,012.50	1,229.00	1,168.87	60.13	20.440	
10,300.00	8,862.19	10,895.63	9,794.90	38.86	41.47	-143.72	-1,913.20	2,104.15	1,271.70	1,210.07	61.64	20.632	
10,400.00	8,862.19	11,011.46	9,794.94	39.25	42.06	-141.05	-2,005.77	2,173.76	1,313.37	1,249.98	63.38	20.721	
10,500.00	8,862.18	11,201.79	9,796.33	39.66	43.04	-137.57	-2,167.51	2,273.85	1,351.02	1,286.45	64.57	20.925	
10,600.00	8,862.18	11,390.43	9,797.46	40.07	44.00	-134.97	-2,336.99	2,356.40	1,383.19	1,317.64	65.54	21.103	
10,700.00	8,862.18	11,482.39	9,798.34	40.49	44.47	-133.92	-2,421.55	2,392.54	1,412.86	1,345.84	67.03	21.079	
10,800.00	8,862.18	11,581.56	9,798.69	40.93	44.99	-132.81	-2,512.83	2,431.31	1,442.46	1,373.99	68.47	21.067	
10,900.00	8,862.18	11,669.41	9,798.94	41.37	45.46	-131.87	-2,593.63	2,465.81	1,472.60	1,402.63	69.97	21.046	
11,000.00	8,862.17	11,778.42	9,799.28	41.82	46.04	-130.75	-2,693.95	2,508.46	1,503.11	1,431.75	71.36	21.063	
11,100.00	8,862.17	11,969.05	9,799.72	42.28	47.07	-129.12	-2,872.88	2,574.01	1,530.23	1,457.98	72.26	21.178	
11,200.00	8,862.17	12,224.84	9,800.63	42.75	48.38	-127.66	-3,120.53	2,637.23	1,550.72	1,478.30	72.42	21.413	
11,300.00	8,862.17	12,440.86	9,801.25	43.22	49.43	-127.03	-3,334.43	2,666.82	1,562.14	1,489.67	72.47	21.555	
11,400.00	8,862.17	12,604.72	9,800.99	43.71	50.18	-126.81	-3,497.97	2,676.45	1,566.37	1,493.55	72.82	21.511	
11,500.00	8,862.16	12,707.34	9,801.61	44.20	50.65	-126.76	-3,600.52	2,680.10	1,569.44	1,495.68	73.76	21.276	
11,600.00	8,862.16	12,839.49	9,801.69	44.70	51.25	-126.71	-3,732.65	2,682.50	1,570.71	1,496.33	74.38	21.118	
11,700.00	8,862.16	12,939.54	9,801.99	45.20	51.70	-126.71	-3,832.70	2,683.04	1,571.18	1,495.82	75.35	20.851	
11,800.00	8,862.16	13,041.54	9,802.48	45.72	52.17	-126.72	-3,934.70	2,683.55	1,571.71	1,495.39	76.32	20.595	
11,900.00	8,862.16	13,140.30	9,803.25	46.24	52.64	-126.74	-4,033.45	2,683.73	1,572.17	1,494.85	77.33	20.331	
12,000.00	8,862.15	13,239.84	9,803.83	46.76	53.11	-126.75	-4,132.99	2,684.14	1,572.70	1,494.35	78.35	20.072	
12,100.00	8,862.15	13,338.57	9,804.59	47.29	53.59	-126.77	-4,231.72	2,684.48	1,573.29	1,493.89	79.40	19.814	
12,200.00	8,862.15	13,439.20	9,805.46	47.83	54.08	-126.80	-4,332.34	2,684.79	1,573.91	1,493.47	80.44	19.565	
12,300.00	8,862.15	13,539.36	9,805.87	48.38	54.57	-126.80	-4,432.50	2,685.30	1,574.42	1,492.90	81.52	19.314	
12,400.00	8,862.15	13,635.15	9,807.32	48.93	55.05	-126.85	-4,528.27	2,685.39	1,575.24	1,492.61	82.63	19.063	
12,500.00	8,862.14	13,742.19	9,808.26	49.48	55.59	-126.87	-4,635.31	2,685.61	1,575.78	1,492.14	83.64	18.840	
12,600.00	8,862.14	13,840.98	9,808.73	50.04	56.10	-126.88	-4,734.09	2,685.94	1,576.19	1,491.42	84.77	18.595	
12,700.00	8,862.14	13,941.64	9,809.05	50.61	56.62	-126.88	-4,834.75	2,686.53	1,576.70	1,490.81	85.89	18.357	
12,800.00	8,862.14	14,054.66	9,808.69	51.18	57.21	-126.86	-4,947.78	2,687.16	1,576.82	1,489.93	86.88	18.149	
12,843.43	8,862.14	14,091.87	9,808.26	51.43	57.41	-126.85	-4,984.98	2,687.38	1,576.67	1,489.19	87.47	18.025	
12,900.00	8,862.14	14,130.98	9,808.23	51.76	57.62	-126.84	-5,024.08	2,687.74	1,576.98	1,488.63	88.35	17.850	
13,000.00	8,862.13	14,241.18	9,809.47	52.34	58.21	-126.86	-5,134.27	2,688.92	1,578.42	1,489.04	89.38	17.659	
13,100.00	8,862.13	14,343.21	9,809.29	52.92	58.76	-126.84	-5,236.30	2,689.50	1,578.62	1,488.08	90.55	17.435	
13,200.00	8,862.13	14,456.68	9,808.13	53.51	59.38	-126.79	-5,349.76	2,690.46	1,578.53	1,486.94	91.60	17.234	
13,300.00	8,862.13	14,553.49	9,806.84	54.10	59.91	-126.75	-5,446.56	2,691.08	1,578.11	1,485.24	92.86	16.994	
13,400.00	8,862.12	14,650.29	9,805.84	54.70	60.45	-126.70	-5,543.36	2,691.80	1,577.94	1,483.80	94.13	16.763	
13,500.00	8,862.12	14,756.77	9,804.83	55.30	61.04	-126.67	-5,649.83	2,692.35	1,577.64	1,482.35	95.29	16.556	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
13,600.00	8,862.12	14,855.33	9,803.61	55.91	61.60	-126.63	-5,748.38	2,692.61	1,576.96	1,480.41	96.56	16.332	
13,641.77	8,862.12	14,890.27	9,803.41	56.17	61.79	-126.62	-5,783.32	2,692.73	1,576.87	1,479.71	97.16	16.229	
13,700.00	8,862.12	14,952.52	9,803.29	56.52	62.15	-126.62	-5,845.57	2,692.99	1,576.93	1,479.09	97.84	16.118	
13,800.00	8,862.12	15,061.14	9,801.88	57.13	62.77	-126.58	-5,954.18	2,693.16	1,576.10	1,477.11	98.99	15.921	
13,900.00	8,862.11	15,150.60	9,800.72	57.75	63.28	-126.54	-6,043.62	2,693.61	1,575.59	1,475.19	100.40	15.693	
13,916.31	8,862.11	15,164.83	9,800.62	57.85	63.36	-126.53	-6,057.86	2,693.70	1,575.58	1,474.95	100.64	15.656	
14,000.00	8,862.11	15,239.24	9,800.61	58.37	63.79	-126.53	-6,132.26	2,694.14	1,575.84	1,474.03	101.81	15.478	
14,100.00	8,862.11	15,344.07	9,801.36	58.99	64.40	-126.54	-6,237.09	2,694.66	1,576.53	1,473.52	103.01	15.304	
14,200.00	8,862.11	15,450.52	9,800.86	59.62	65.03	-126.52	-6,343.54	2,695.14	1,576.46	1,472.24	104.22	15.126	
14,300.00	8,862.11	15,563.63	9,799.85	60.25	65.69	-126.49	-6,456.64	2,695.46	1,576.02	1,470.67	105.35	14.960	
14,387.08	8,862.10	15,635.61	9,799.06	60.80	66.12	-126.46	-6,528.61	2,695.70	1,575.56	1,468.88	106.68	14.769	
14,400.00	8,862.10	15,646.04	9,799.01	60.88	66.18	-126.46	-6,539.05	2,695.77	1,575.57	1,468.69	106.88	14.742	
14,500.00	8,862.10	15,754.98	9,798.51	61.52	66.83	-126.44	-6,647.99	2,696.39	1,575.62	1,467.55	108.07	14.579	
14,600.00	8,862.10	15,849.00	9,798.11	62.16	67.40	-126.42	-6,742.00	2,696.72	1,575.50	1,466.04	109.46	14.394	
14,600.46	8,862.10	15,849.00	9,798.11	62.16	67.40	-126.42	-6,742.00	2,696.72	1,575.50	1,466.03	109.47	14.392	
14,700.00	8,862.10	15,943.00	9,797.80	62.80	67.96	-126.40	-6,836.00	2,697.45	1,575.78	1,464.92	110.85	14.215	
14,800.00	8,862.10	16,049.61	9,797.74	63.44	68.61	-126.39	-6,942.61	2,697.85	1,575.90	1,463.81	112.09	14.059	
14,900.00	8,862.09	16,149.62	9,798.15	64.09	69.21	-126.41	-7,042.61	2,697.72	1,575.89	1,462.49	113.40	13.897	
15,000.00	8,862.09	16,254.99	9,798.01	64.74	69.86	-126.42	-7,147.98	2,697.59	1,575.55	1,460.90	114.65	13.742	
15,100.00	8,862.09	16,356.30	9,797.87	65.39	70.48	-126.42	-7,249.29	2,697.46	1,575.21	1,459.25	115.96	13.584	
15,200.00	8,862.09	16,462.34	9,797.47	66.05	71.13	-126.42	-7,355.34	2,696.93	1,574.43	1,457.22	117.22	13.432	
15,300.00	8,862.09	16,555.69	9,797.02	66.70	71.70	-126.42	-7,448.68	2,696.54	1,573.68	1,455.03	118.64	13.264	
15,400.00	8,862.08	16,653.10	9,796.79	67.36	72.31	-126.42	-7,546.09	2,696.63	1,573.45	1,453.42	120.03	13.109	
15,500.00	8,862.08	16,755.86	9,796.48	68.02	72.95	-126.42	-7,648.85	2,696.51	1,573.03	1,451.69	121.34	12.964	
15,600.00	8,862.08	16,855.82	9,796.37	68.69	73.58	-126.42	-7,748.81	2,696.19	1,572.56	1,449.87	122.69	12.817	
15,700.00	8,862.08	16,958.46	9,796.22	69.35	74.22	-126.43	-7,851.45	2,695.82	1,572.04	1,448.03	124.01	12.677	
15,800.00	8,862.08	17,061.71	9,795.64	70.02	74.87	-126.43	-7,954.69	2,695.50	1,571.30	1,445.97	125.33	12.537	
15,900.00	8,862.07	17,159.00	9,795.15	70.69	75.49	-126.42	-8,051.98	2,695.16	1,570.57	1,443.84	126.74	12.393	
16,000.00	8,862.07	17,263.32	9,794.48	71.36	76.15	-126.41	-8,156.30	2,694.85	1,569.81	1,441.76	128.05	12.259	
16,100.00	8,862.07	17,366.42	9,793.21	72.03	76.81	-126.39	-8,259.39	2,694.54	1,568.69	1,439.29	129.40	12.123	
16,200.00	8,862.07	17,459.77	9,792.39	72.71	77.41	-126.37	-8,352.74	2,694.32	1,567.82	1,436.95	130.87	11.980	
16,300.00	8,862.07	17,560.72	9,791.48	73.38	78.06	-126.35	-8,453.68	2,694.20	1,567.04	1,434.79	132.25	11.849	
16,400.00	8,862.06	17,662.08	9,790.42	74.06	78.71	-126.32	-8,555.04	2,694.26	1,566.32	1,432.69	133.63	11.721	
16,500.00	8,862.06	17,767.40	9,788.82	74.74	79.40	-126.28	-8,660.34	2,694.16	1,565.19	1,430.23	134.97	11.597	
16,600.00	8,862.06	17,863.13	9,787.44	75.42	80.02	-126.25	-8,756.06	2,694.03	1,564.08	1,427.65	136.43	11.464	
16,700.00	8,862.06	17,950.02	9,786.82	76.10	80.59	-126.23	-8,842.95	2,693.98	1,563.48	1,425.48	138.00	11.329	
16,707.62	8,862.06	17,956.23	9,786.82	76.16	80.63	-126.23	-8,849.16	2,693.99	1,563.48	1,425.35	138.13	11.319	
16,800.00	8,862.06	18,043.58	9,787.21	76.79	81.20	-126.24	-8,936.51	2,694.30	1,563.83	1,424.35	139.48	11.212	
16,900.00	8,862.05	18,145.59	9,787.56	77.47	81.87	-126.26	-9,038.52	2,694.36	1,563.94	1,423.09	140.85	11.103	
17,000.00	8,862.05	18,252.50	9,788.40	78.16	82.57	-126.29	-9,145.43	2,694.16	1,564.11	1,421.95	142.15	11.003	
17,100.00	8,862.05	18,359.69	9,787.98	78.85	83.28	-126.29	-9,252.61	2,693.92	1,563.54	1,420.08	143.47	10.898	
17,200.00	8,862.05	18,456.32	9,787.02	79.54	83.92	-126.26	-9,349.24	2,694.04	1,562.91	1,417.98	144.93	10.784	
17,300.00	8,862.05	18,562.03	9,786.16	80.23	84.62	-126.24	-9,454.94	2,694.04	1,562.28	1,416.00	146.28	10.680	
17,400.00	8,862.04	18,656.00	9,785.21	80.92	85.24	-126.21	-9,548.91	2,694.14	1,561.62	1,413.83	147.78	10.567	
17,442.23	8,862.04	18,690.87	9,785.00	81.22	85.47	-126.21	-9,583.78	2,694.25	1,561.52	1,413.04	148.48	10.517	
17,500.00	8,862.04	18,738.62	9,784.93	81.62	85.79	-126.20	-9,631.53	2,694.58	1,561.70	1,412.27	149.43	10.451	
17,600.00	8,862.04	18,846.48	9,784.68	82.31	86.52	-126.17	-9,739.38	2,695.62	1,562.20	1,411.44	150.76	10.362	
17,700.00	8,862.04	18,937.14	9,784.28	83.01	87.13	-126.14	-9,830.04	2,696.60	1,562.66	1,410.35	152.31	10.259	
17,800.00	8,862.04	19,042.39	9,783.77	83.71	87.84	-126.11	-9,935.28	2,697.82	1,563.16	1,409.47	153.69	10.171	
17,900.00	8,862.03	19,123.00	9,783.63	84.41	88.38	-126.08	-10,015.88	2,698.78	1,563.93	1,408.57	155.36	10.067	
18,000.00	8,862.03	19,217.00	9,784.90	85.11	89.02	-126.10	-10,109.86	2,699.94	1,565.59	1,408.74	156.85	9.981	
18,100.00	8,862.03	19,328.33	9,786.20	85.81	89.78	-126.11	-10,221.17	2,701.50	1,567.25	1,409.10	158.15	9.910	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 0.50 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
18,200.00	8,862.03	19,427.40	9,787.12	86.51	90.45	-126.11	-10,320.23	2,702.82	1,568.73	1,409.13	159.60	9.829	
18,300.00	8,862.03	19,525.70	9,787.11	87.21	91.13	-126.09	-10,418.52	2,704.14	1,569.66	1,408.60	161.06	9.746	
18,400.00	8,862.02	19,591.00	9,789.30	87.92	91.57	-126.14	-10,483.77	2,704.80	1,572.29	1,409.44	162.85	9.655	
18,500.00	8,862.02	19,764.43	9,790.67	88.62	92.76	-126.17	-10,657.13	2,705.76	1,572.62	1,409.19	163.43	9.622	
18,600.00	8,862.02	19,914.77	9,787.75	89.33	93.78	-126.15	-10,807.40	2,703.07	1,569.82	1,405.68	164.14	9.564	
18,700.00	8,862.02	20,004.26	9,785.87	90.03	94.38	-126.15	-10,896.83	2,700.32	1,565.95	1,400.21	165.74	9.448	
18,800.00	8,862.02	20,097.30	9,783.71	90.74	95.01	-126.14	-10,989.82	2,698.37	1,562.73	1,395.44	167.29	9.341	
18,900.00	8,862.01	20,182.61	9,781.56	91.45	95.60	-126.11	-11,075.09	2,696.90	1,559.76	1,390.79	168.96	9.231	
19,000.00	8,862.01	20,255.00	9,780.66	92.16	96.09	-126.07	-11,147.47	2,697.36	1,559.15	1,388.34	170.81	9.128	
19,100.00	8,862.01	20,375.45	9,780.13	92.87	96.92	-126.06	-11,267.91	2,697.35	1,558.85	1,386.87	171.98	9.064	
19,200.00	8,862.01	20,488.52	9,779.42	93.58	97.69	-126.09	-11,380.96	2,695.27	1,556.86	1,383.63	173.23	8.987	
19,300.00	8,862.01	20,580.00	9,779.07	94.30	98.31	-126.15	-11,472.39	2,692.32	1,553.95	1,379.17	174.78	8.891	
19,330.84	8,862.00	20,580.00	9,779.07	94.52	98.31	-126.15	-11,472.39	2,692.32	1,553.64	1,377.99	175.65	8.845	
19,400.00	8,862.00	20,580.00	9,779.07	95.01	98.31	-126.15	-11,472.39	2,692.32	1,555.18	1,377.78	177.39	8.767	
19,500.00	8,862.00	20,580.00	9,779.07	95.72	98.31	-126.15	-11,472.39	2,692.32	1,562.82	1,383.40	179.42	8.711	
19,547.53	8,862.00	20,580.00	9,779.07	96.06	98.31	-126.15	-11,472.39	2,692.32	1,568.68	1,388.51	180.16	8.707	
19,548.26	8,862.00	20,580.00	9,779.07	96.14	98.31	-126.15	-11,472.39	2,692.32	1,568.78	1,388.32	180.45	8.693	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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	0.99	0.99	0.00	0.50	64.53	57.69	121.10	134.14				
100.00	100.00	100.36	100.36	0.28	0.52	64.59	57.66	121.38	134.38	133.58	0.80	167.772	
200.00	200.00	199.75	199.75	0.63	0.59	64.78	57.57	122.20	135.09	133.86	1.23	109.960	
300.00	300.00	300.40	300.40	0.99	0.84	64.88	57.64	122.93	135.77	133.94	1.84	73.934	
400.00	400.00	400.27	400.26	1.35	1.15	64.83	57.95	123.30	136.25	133.74	2.50	54.478	
500.00	500.00	499.39	499.38	1.71	1.48	64.79	58.37	124.00	137.06	133.87	3.19	43.007	
600.00	600.00	598.95	598.92	2.07	1.82	64.85	58.92	125.48	138.64	134.76	3.88	35.692	
700.00	700.00	701.60	701.57	2.43	2.16	64.66	59.60	125.87	139.27	134.67	4.59	30.333	
800.00	800.00	803.44	803.39	2.79	2.50	63.98	60.51	123.93	137.93	132.65	5.29	26.086	
900.00	900.00	904.45	904.36	3.14	2.84	63.19	61.30	121.29	135.94	129.96	5.98	22.725	
1,000.00	1,000.00	1,005.66	1,005.51	3.50	3.18	62.51	61.36	117.89	132.98	126.30	6.68	19.907	
1,100.00	1,099.98	1,105.95	1,105.73	3.84	3.52	-98.91	60.84	114.07	129.63	122.26	7.36	17.609	
1,200.00	1,199.84	1,206.00	1,205.71	4.17	3.87	-101.65	59.71	110.41	126.82	118.79	8.03	15.791	
1,300.00	1,299.45	1,306.02	1,305.64	4.51	4.21	-105.93	58.21	106.61	124.90	116.19	8.71	14.343	
1,350.00	1,349.13	1,355.94	1,355.51	4.68	4.38	-108.69	57.39	104.58	124.46	115.42	9.05	13.755	
1,400.00	1,398.73	1,405.76	1,405.28	4.85	4.56	-105.40	56.53	102.44	124.10	114.71	9.39	13.215	
1,500.00	1,497.69	1,503.77	1,503.20	5.19	4.90	-102.39	54.75	98.55	123.35	113.27	10.08	12.238	
1,512.50	1,510.03	1,515.79	1,515.20	5.23	4.94	-102.29	54.54	98.14	123.32	113.16	10.17	12.132	CC, ES
1,600.00	1,596.25	1,600.00	1,599.39	5.54	5.24	-103.00	53.49	96.28	124.52	113.75	10.77	11.564	
1,670.62	1,665.55	1,667.33	1,666.71	5.78	5.47	-104.96	53.22	95.78	127.33	116.08	11.25	11.317	
1,700.00	1,694.31	1,695.51	1,694.90	5.89	5.57	-107.43	53.26	95.77	129.06	117.60	11.45	11.268	
1,800.00	1,792.23	1,792.85	1,792.23	6.24	5.91	-115.38	53.74	95.97	137.16	125.01	12.15	11.292	
1,900.00	1,890.14	1,890.40	1,889.78	6.61	6.25	-122.32	54.49	96.34	147.98	135.13	12.84	11.522	
2,000.00	1,988.06	1,988.56	1,987.92	6.97	6.59	-127.93	55.23	97.76	160.76	147.22	13.54	11.871	
2,100.00	2,085.97	2,088.55	2,087.82	7.34	6.93	-131.92	55.17	101.83	174.02	159.77	14.25	12.212	
2,200.00	2,183.89	2,187.21	2,186.40	7.70	7.27	-135.21	54.75	106.11	187.61	172.65	14.95	12.546	
2,300.00	2,281.80	2,287.39	2,286.50	8.07	7.62	-138.36	53.73	109.58	201.23	185.57	15.66	12.846	
2,400.00	2,379.72	2,387.21	2,386.22	8.45	7.97	-140.94	52.00	113.74	214.56	198.18	16.38	13.102	
2,500.00	2,477.64	2,485.97	2,484.85	8.82	8.31	-142.99	50.24	118.66	228.06	210.97	17.09	13.348	
2,600.00	2,575.55	2,581.35	2,580.14	9.19	8.65	-145.01	48.57	122.31	242.12	224.34	17.78	13.618	
2,700.00	2,673.47	2,673.56	2,672.33	9.57	8.97	-147.78	47.82	120.85	258.77	240.32	18.45	14.027	
2,800.00	2,771.38	2,769.67	2,768.36	9.95	9.30	-150.70	48.05	117.16	277.70	258.56	19.14	14.510	
2,900.00	2,869.30	2,872.47	2,871.08	10.32	9.66	-153.42	47.64	113.43	296.62	276.74	19.88	14.923	
3,000.00	2,967.21	2,977.09	2,975.64	10.70	10.02	-155.81	44.81	110.92	313.49	292.86	20.62	15.201	
3,100.00	3,065.13	3,083.28	3,081.70	11.08	10.39	-158.04	39.93	108.87	328.95	307.58	21.37	15.393	
3,200.00	3,163.05	3,185.68	3,183.85	11.46	10.74	-160.04	33.01	107.69	342.52	320.42	22.10	15.499	
3,300.00	3,260.96	3,296.95	3,294.77	11.84	11.13	-161.76	24.51	108.96	354.61	331.76	22.85	15.517	
3,400.00	3,358.88	3,407.94	3,405.09	12.22	11.52	-163.08	13.39	113.81	363.22	339.63	23.59	15.397	
3,500.00	3,456.79	3,517.91	3,513.98	12.60	11.90	-164.26	-0.30	120.83	368.84	344.53	24.31	15.171	
3,600.00	3,554.71	3,628.43	3,622.99	12.98	12.29	-165.36	-16.27	129.56	372.09	347.07	25.02	14.872	
3,700.00	3,652.62	3,736.37	3,728.84	13.36	12.67	-166.50	-34.90	139.55	372.26	346.54	25.72	14.472	
3,800.00	3,750.54	3,844.84	3,834.83	13.75	13.06	-167.65	-55.13	150.56	370.92	344.51	26.42	14.041	
3,900.00	3,848.45	3,952.70	3,939.63	14.13	13.44	-168.74	-77.15	163.47	367.14	340.04	27.10	13.545	
4,000.00	3,946.37	4,044.23	4,028.56	14.51	13.77	-169.62	-95.65	174.70	363.47	335.58	27.89	13.032	
4,100.00	4,044.29	4,147.99	4,129.56	14.89	14.15	-170.70	-116.17	186.67	360.70	332.09	28.61	12.608	
4,200.00	4,142.20	4,248.63	4,227.28	15.28	14.51	-171.91	-137.34	198.10	357.17	327.82	29.35	12.170	
4,300.00	4,240.12	4,344.23	4,320.27	15.66	14.86	-173.06	-156.89	208.65	354.46	324.34	30.12	11.768	
4,400.00	4,338.03	4,450.96	4,423.95	16.05	15.25	-174.23	-178.71	221.50	351.24	320.42	30.83	11.394	
4,500.00	4,435.95	4,553.20	4,522.92	16.43	15.63	-175.33	-200.49	235.00	346.69	315.13	31.56	10.985	
4,600.00	4,533.86	4,651.63	4,618.22	16.81	15.99	-176.35	-221.18	248.29	342.27	309.95	32.32	10.589	
4,700.00	4,631.78	4,748.43	4,712.08	17.20	16.35	-177.31	-240.96	261.37	338.40	305.30	33.10	10.224	
4,800.00	4,729.69	4,845.79	4,806.79	17.58	16.71	-178.20	-259.65	274.05	335.87	301.99	33.87	9.916	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS **Offset Well Error:** 0.50 usft

Rule Assigned:

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
4,900.00	4,827.61	4,946.63	4,904.79	17.97	17.09	-179.27	-279.64	286.79	333.26	298.64	34.62	9.625	
5,000.00	4,925.53	5,040.77	4,996.37	18.35	17.44	179.69	-298.21	298.30	331.18	295.76	35.42	9.351	
5,024.77	4,949.78	5,062.95	5,018.02	18.45	17.52	179.47	-302.23	300.85	331.08	295.46	35.62	9.296	
5,100.00	5,023.44	5,135.27	5,088.83	18.74	17.79	178.79	-314.71	308.71	331.63	295.43	36.20	9.162	
5,200.00	5,121.36	5,234.88	5,186.31	19.12	18.16	177.67	-332.57	318.76	332.60	295.64	36.96	8.999	
5,300.00	5,219.27	5,334.65	5,283.91	19.51	18.54	176.46	-350.86	328.38	333.79	296.07	37.72	8.848	
5,400.00	5,317.19	5,439.39	5,386.26	19.89	18.93	175.17	-370.51	338.85	334.60	296.12	38.47	8.697	
5,500.00	5,415.10	5,541.73	5,485.78	20.28	19.32	173.62	-392.01	349.24	334.03	294.80	39.23	8.514	
5,543.36	5,457.56	5,582.95	5,525.86	20.44	19.47	173.01	-400.58	353.54	333.82	294.24	39.58	8.435	
5,600.00	5,513.02	5,634.69	5,576.34	20.66	19.67	172.33	-410.67	358.70	334.25	294.22	40.03	8.350	
5,700.00	5,610.93	5,745.40	5,684.23	21.05	20.09	170.80	-432.80	369.90	334.80	294.05	40.76	8.215	
5,800.00	5,708.85	5,855.41	5,790.08	21.43	20.51	168.72	-459.76	382.84	331.57	290.10	41.47	7.995	
5,900.00	5,806.77	5,952.30	5,882.99	21.82	20.88	166.71	-484.58	394.65	327.79	285.50	42.29	7.752	
6,000.00	5,904.68	6,051.15	5,977.96	22.21	21.26	164.73	-509.25	406.67	324.77	281.69	43.09	7.538	
6,100.00	6,002.60	6,149.25	6,072.34	22.59	21.64	162.81	-533.19	418.60	322.43	278.54	43.89	7.347	
6,200.00	6,100.51	6,246.65	6,166.21	22.98	22.02	160.95	-556.46	430.23	320.88	276.18	44.69	7.179	
6,300.00	6,198.43	6,344.18	6,260.52	23.36	22.40	159.24	-578.60	441.41	320.59	275.10	45.50	7.047	
6,400.00	6,296.34	6,445.76	6,358.88	23.75	22.79	157.67	-600.72	453.89	320.19	273.91	46.28	6.919	
6,464.64	6,359.64	6,509.18	6,420.39	24.00	23.03	156.81	-613.90	461.95	320.00	273.21	46.79	6.839	
6,500.00	6,394.26	6,541.25	6,451.55	24.14	23.16	156.40	-620.37	465.86	320.19	273.11	47.08	6.801	
6,600.00	6,492.17	6,632.17	6,540.22	24.52	23.51	155.27	-638.07	475.36	322.71	274.84	47.87	6.742	
6,700.00	6,590.09	6,727.39	6,633.55	24.91	23.87	154.24	-655.21	483.34	327.80	279.17	48.63	6.740	
6,800.00	6,688.01	6,829.61	6,733.89	25.29	24.26	153.39	-672.43	492.48	332.80	283.39	49.41	6.735	
6,900.00	6,785.92	6,929.00	6,831.57	25.68	24.63	152.79	-688.11	502.02	337.52	287.34	50.18	6.726	
7,000.00	6,883.84	7,031.29	6,932.23	26.07	25.02	152.35	-703.35	511.96	342.41	291.45	50.95	6.720	
7,100.00	6,981.75	7,135.89	7,034.83	26.45	25.42	151.75	-720.20	523.33	345.86	294.13	51.73	6.686	
7,200.00	7,079.67	7,228.97	7,126.11	26.84	25.77	151.22	-735.27	533.49	349.32	296.83	52.49	6.655	
7,300.00	7,177.58	7,327.41	7,223.13	27.23	26.14	150.93	-749.23	542.61	354.87	301.62	53.25	6.664	
7,400.00	7,275.50	7,439.05	7,332.69	27.61	26.57	150.33	-767.09	554.36	358.81	304.77	54.04	6.640	
7,500.00	7,373.41	7,539.14	7,430.29	28.00	26.95	149.45	-785.74	566.39	360.68	305.87	54.82	6.580	
7,600.00	7,471.33	7,631.57	7,520.65	28.39	27.31	148.72	-802.26	576.62	363.75	308.16	55.59	6.543	SF
7,700.00	7,569.25	7,721.78	7,609.38	28.77	27.65	148.31	-816.24	584.90	369.20	312.88	56.33	6.554	
7,764.22	7,632.13	7,780.50	7,667.41	29.02	27.87	148.22	-824.08	589.32	374.03	317.25	56.79	6.587	
7,800.00	7,667.21	7,813.28	7,699.88	29.16	27.99	148.24	-827.98	591.51	376.92	319.88	57.04	6.608	
7,900.00	7,765.68	7,904.75	7,790.76	29.54	28.33	148.40	-836.95	596.66	384.44	326.73	57.71	6.662	
8,000.00	7,864.70	7,996.71	7,882.43	29.91	28.66	148.64	-843.27	600.37	391.09	332.74	58.35	6.702	
8,100.00	7,964.15	8,085.70	7,971.30	30.28	28.97	148.89	-847.22	602.32	397.06	338.14	58.92	6.739	
8,200.00	8,063.90	8,178.86	8,064.44	30.63	29.29	149.15	-849.21	602.44	402.50	342.99	59.50	6.764	
8,300.00	8,163.83	8,279.70	8,165.27	30.98	29.63	149.38	-849.59	602.18	405.69	345.49	60.20	6.740	
8,350.17	8,214.00	8,329.39	8,214.97	31.14	29.79	-78.42	-849.49	602.26	406.00	345.49	60.51	6.709	
8,400.00	8,263.77	8,377.71	8,263.29	31.31	29.95	134.30	-849.34	602.20	407.61	346.80	60.81	6.703	
8,450.00	8,313.33	8,426.77	8,312.35	31.49	30.11	134.61	-849.17	602.01	412.42	351.28	61.14	6.746	
8,500.00	8,362.13	8,475.45	8,361.02	31.69	30.26	135.08	-849.08	601.79	420.38	358.91	61.47	6.839	
8,550.00	8,409.80	8,521.68	8,407.25	31.89	30.41	135.61	-849.05	601.49	431.63	369.85	61.77	6.987	
8,600.00	8,455.99	8,566.08	8,451.65	32.09	30.55	136.13	-849.07	601.02	446.37	384.30	62.07	7.192	
8,650.00	8,500.33	8,606.73	8,492.30	32.31	30.69	136.48	-849.14	600.36	464.73	402.41	62.32	7.457	
8,700.00	8,542.50	8,644.45	8,530.00	32.53	30.81	136.61	-849.23	599.38	486.86	424.31	62.55	7.784	
8,750.00	8,582.16	8,681.27	8,566.80	32.75	30.93	136.53	-849.36	598.10	512.67	449.88	62.79	8.165	
8,800.00	8,619.02	8,721.94	8,607.45	32.97	31.06	136.53	-849.44	596.85	541.63	478.49	63.14	8.579	
8,850.00	8,652.80	8,759.37	8,644.87	33.19	31.18	136.18	-849.42	596.05	573.49	510.04	63.45	9.038	
8,900.00	8,683.24	8,794.90	8,680.40	33.42	31.30	135.45	-849.42	595.61	608.11	544.35	63.76	9.537	
8,950.00	8,710.11	8,827.45	8,712.95	33.64	31.41	134.14	-849.61	595.43	645.27	581.22	64.05	10.075	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
9,000.00	8,733.20	8,856.29	8,741.78	33.86	31.51	132.02	-849.95	595.47	684.77	620.47	64.30	10.650	
9,050.00	8,752.35	8,876.85	8,762.34	34.08	31.58	128.37	-850.26	595.56	726.40	661.95	64.45	11.270	
9,100.00	8,767.39	8,892.24	8,777.74	34.29	31.63	122.99	-850.52	595.62	769.95	705.39	64.56	11.925	
9,100.17	8,767.43	8,892.29	8,777.78	34.29	31.63	122.97	-850.52	595.62	770.10	705.54	64.56	11.928	
9,200.00	8,791.66	8,917.43	8,802.91	34.71	31.72	117.42	-850.96	595.68	858.45	793.72	64.73	13.262	
9,300.00	8,812.57	8,939.44	8,824.92	35.13	31.79	112.14	-851.37	595.69	946.27	881.40	64.87	14.587	
9,400.00	8,829.97	8,958.22	8,843.70	35.54	31.86	107.22	-851.73	595.66	1,033.21	968.22	64.99	15.899	
9,500.00	8,843.72	8,974.31	8,859.78	35.95	31.92	102.77	-852.06	595.64	1,119.05	1,053.97	65.08	17.195	
9,600.00	8,853.72	8,986.65	8,872.12	36.33	31.96	98.71	-852.31	595.62	1,203.59	1,138.44	65.14	18.476	
9,700.00	8,859.89	8,995.12	8,880.60	36.70	31.99	95.05	-852.48	595.62	1,286.60	1,221.43	65.17	19.741	
9,800.00	8,862.18	10,913.79	9,963.18	37.05	38.63	147.21	-1,962.02	711.42	1,308.58	1,251.40	57.18	22.886	
9,809.00	8,862.20	10,921.75	9,963.00	37.08	38.66	147.20	-1,969.97	711.35	1,308.47	1,251.22	57.26	22.853	
9,900.00	8,862.20	11,004.72	9,961.84	37.39	38.93	147.15	-2,052.94	710.96	1,307.72	1,249.70	58.02	22.538	
10,000.00	8,862.19	11,103.54	9,961.16	37.74	39.27	147.14	-2,151.75	711.06	1,307.19	1,248.32	58.86	22.207	
10,100.00	8,862.19	11,204.10	9,959.46	38.10	39.63	147.03	-2,252.29	709.55	1,306.69	1,246.90	59.78	21.857	
10,200.00	8,862.19	11,305.65	9,958.20	38.48	40.00	146.97	-2,353.83	708.93	1,306.08	1,245.38	60.71	21.515	
10,300.00	8,862.19	11,406.55	9,957.05	38.86	40.38	146.93	-2,454.72	708.65	1,305.38	1,243.74	61.64	21.176	
10,400.00	8,862.19	11,509.82	9,955.57	39.25	40.78	146.87	-2,557.98	708.10	1,304.58	1,241.96	62.62	20.834	
10,500.00	8,862.18	11,600.85	9,954.66	39.66	41.14	146.84	-2,649.00	708.25	1,303.77	1,240.18	63.60	20.501	
10,524.23	8,862.18	11,621.32	9,954.65	39.76	41.22	146.84	-2,669.47	708.33	1,303.74	1,239.91	63.83	20.424	
10,600.00	8,862.18	11,689.61	9,954.93	40.07	41.50	146.85	-2,737.76	708.47	1,303.99	1,239.41	64.58	20.193	
10,700.00	8,862.18	11,796.58	9,954.74	40.49	41.94	146.80	-2,844.72	707.30	1,304.55	1,238.94	65.61	19.882	
10,800.00	8,862.18	11,904.04	9,952.49	40.93	42.40	146.64	-2,952.12	704.75	1,304.21	1,237.47	66.74	19.543	
10,859.38	8,862.18	11,956.55	9,951.84	41.19	42.63	146.60	-3,004.62	704.20	1,304.00	1,236.62	67.38	19.354	
10,900.00	8,862.18	11,990.63	9,951.65	41.37	42.78	146.58	-3,038.70	703.83	1,304.10	1,236.29	67.81	19.231	
11,000.00	8,862.17	12,085.68	9,951.90	41.82	43.20	146.55	-3,133.75	702.98	1,304.90	1,236.01	68.89	18.941	
11,100.00	8,862.17	12,180.77	9,952.91	42.28	43.63	146.57	-3,228.83	702.91	1,305.94	1,235.98	69.96	18.666	
11,200.00	8,862.17	12,290.29	9,954.34	42.75	44.13	146.61	-3,338.34	703.27	1,306.96	1,235.91	71.05	18.394	
11,300.00	8,862.17	12,372.96	9,955.31	43.22	44.52	146.62	-3,421.01	703.20	1,308.10	1,235.96	72.15	18.132	
11,400.00	8,862.17	12,562.84	9,953.14	43.71	45.44	146.62	-3,610.81	704.98	1,306.93	1,233.55	73.38	17.810	
11,500.00	8,862.16	12,635.46	9,949.85	44.20	45.80	146.57	-3,683.35	705.97	1,302.63	1,228.10	74.53	17.477	
11,600.00	8,862.16	12,714.46	9,948.25	44.70	46.20	146.53	-3,762.33	706.11	1,300.86	1,225.16	75.70	17.185	
11,700.00	8,862.16	12,804.95	9,947.61	45.20	46.65	146.55	-3,852.82	707.21	1,299.72	1,222.86	76.85	16.912	
11,738.19	8,862.16	12,835.57	9,947.63	45.40	46.81	146.56	-3,883.44	707.47	1,299.61	1,222.31	77.29	16.814	
11,800.00	8,862.16	12,893.19	9,947.84	45.72	47.10	146.56	-3,941.05	707.54	1,299.80	1,221.78	78.02	16.660	
11,900.00	8,862.16	12,995.74	9,946.93	46.24	47.62	146.48	-4,043.59	706.08	1,299.95	1,220.67	79.28	16.398	
12,000.00	8,862.15	13,102.71	9,944.85	46.76	48.18	146.31	-4,150.49	703.07	1,300.00	1,219.41	80.60	16.129	
12,100.00	8,862.15	13,199.25	9,943.86	47.29	48.69	146.27	-4,247.02	702.75	1,299.45	1,217.61	81.84	15.877	
12,111.99	8,862.15	13,209.48	9,943.74	47.36	48.74	146.26	-4,257.25	702.60	1,299.44	1,217.45	81.99	15.848	
12,200.00	8,862.15	13,295.45	9,942.97	47.83	49.20	146.19	-4,343.20	701.26	1,299.64	1,216.53	83.12	15.636	
12,300.00	8,862.15	13,403.73	9,943.48	48.38	49.78	146.24	-4,451.48	702.45	1,299.53	1,215.17	84.36	15.405	
12,400.00	8,862.15	13,507.80	9,943.64	48.93	50.35	146.30	-4,555.53	704.16	1,298.85	1,213.26	85.60	15.174	
12,500.00	8,862.14	13,607.85	9,943.57	49.48	50.90	146.34	-4,655.57	705.70	1,298.05	1,211.21	86.84	14.948	
12,600.00	8,862.14	13,705.00	9,943.96	50.04	51.45	146.43	-4,752.69	708.09	1,297.13	1,209.06	88.07	14.729	
12,700.00	8,862.14	13,799.00	9,944.91	50.61	51.98	146.54	-4,846.65	710.45	1,296.69	1,207.41	89.29	14.523	
12,800.00	8,862.14	13,947.66	9,946.14	51.18	52.83	146.86	-4,995.05	718.63	1,294.34	1,203.83	90.52	14.300	
12,900.00	8,862.14	14,031.84	9,946.01	51.76	53.32	147.07	-5,079.03	724.41	1,290.66	1,198.97	91.69	14.076	
13,000.00	8,862.13	14,105.66	9,946.24	52.34	53.75	147.15	-5,152.82	726.73	1,289.24	1,196.34	92.90	13.877	
13,075.92	8,862.13	14,174.00	9,945.28	52.78	54.15	147.09	-5,221.13	725.80	1,288.99	1,195.07	93.92	13.724	
13,100.00	8,862.13	14,194.44	9,944.86	52.92	54.27	147.05	-5,241.56	725.15	1,289.02	1,194.77	94.25	13.677	
13,200.00	8,862.13	14,278.67	9,945.23	53.51	54.76	147.03	-5,325.78	724.31	1,290.01	1,194.46	95.54	13.502	
13,300.00	8,862.13	14,384.10	9,946.85	54.10	55.38	147.07	-5,431.19	724.71	1,291.19	1,194.31	96.88	13.328	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Offset Well Error: 0.50 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
13,400.00	8,862.12	14,482.07	9,948.04	54.70	55.96	147.08	-5,529.15	724.40	1,292.49	1,194.28	98.21	13.161	
13,500.00	8,862.12	14,586.68	9,949.14	55.30	56.59	147.11	-5,633.75	724.56	1,293.38	1,193.82	99.56	12.991	
13,600.00	8,862.12	14,701.00	9,949.49	55.91	57.28	147.08	-5,748.08	723.75	1,294.18	1,193.21	100.97	12.817	
13,700.00	8,862.12	14,800.17	9,948.50	56.52	57.88	147.04	-5,847.24	723.53	1,293.57	1,191.22	102.35	12.639	
13,713.18	8,862.12	14,811.33	9,948.43	56.60	57.94	147.04	-5,858.39	723.47	1,293.56	1,191.04	102.53	12.617	
13,800.00	8,862.12	14,889.61	9,948.44	57.13	58.42	147.02	-5,936.67	723.08	1,293.89	1,190.19	103.69	12.478	
13,900.00	8,862.11	14,997.60	9,949.13	57.75	59.08	147.03	-6,044.66	723.23	1,294.47	1,189.39	105.09	12.318	
13,957.29	8,862.11	15,055.45	9,948.91	58.11	59.44	147.02	-6,102.51	723.09	1,294.42	1,188.53	105.88	12.225	
14,000.00	8,862.11	15,095.27	9,948.93	58.37	59.68	147.02	-6,142.33	723.12	1,294.46	1,188.00	106.46	12.159	
14,100.00	8,862.11	15,227.14	9,947.54	58.99	60.50	147.02	-6,274.18	724.31	1,293.11	1,185.18	107.93	11.981	
14,200.00	8,862.11	15,300.00	9,946.66	59.62	60.96	147.00	-6,347.03	724.63	1,291.94	1,182.69	109.25	11.825	
14,209.14	8,862.11	15,307.32	9,946.63	59.68	61.00	147.00	-6,354.36	724.62	1,291.94	1,182.57	109.37	11.812	
14,300.00	8,862.11	15,386.86	9,946.86	60.25	61.50	147.00	-6,433.89	724.47	1,292.34	1,181.74	110.60	11.685	
14,400.00	8,862.10	15,509.11	9,943.97	60.88	62.27	146.78	-6,556.01	720.84	1,292.02	1,179.85	112.17	11.518	
14,446.92	8,862.10	15,545.35	9,942.34	61.18	62.50	146.66	-6,592.15	718.71	1,291.82	1,178.97	112.85	11.447	
14,500.00	8,862.10	15,587.60	9,940.70	61.52	62.76	146.52	-6,634.28	715.94	1,292.07	1,178.45	113.62	11.372	
14,600.00	8,862.10	15,691.90	9,939.61	62.16	63.42	146.37	-6,738.50	712.94	1,292.90	1,177.79	115.11	11.232	
14,694.84	8,862.10	15,793.49	9,939.33	62.77	64.07	146.37	-6,840.08	713.30	1,292.55	1,176.09	116.47	11.098	
14,700.00	8,862.10	15,796.76	9,939.33	62.80	64.09	146.37	-6,843.35	713.31	1,292.56	1,176.03	116.53	11.092	
14,800.00	8,862.10	15,880.19	9,940.76	63.44	64.62	146.42	-6,926.76	713.83	1,293.68	1,175.82	117.85	10.977	
14,900.00	8,862.09	16,000.33	9,944.86	64.09	65.41	146.72	-7,046.69	719.61	1,293.91	1,174.69	119.21	10.854	
14,937.67	8,862.09	16,036.55	9,945.19	64.34	65.64	146.75	-7,082.90	720.22	1,293.89	1,174.16	119.73	10.807	
15,000.00	8,862.09	16,094.45	9,944.89	64.74	66.02	146.72	-7,140.79	719.71	1,293.98	1,173.37	120.61	10.729	
15,100.00	8,862.09	16,186.26	9,945.19	65.39	66.61	146.71	-7,232.60	719.23	1,294.64	1,172.63	122.01	10.611	
15,200.00	8,862.09	16,311.40	9,946.01	66.05	67.43	146.72	-7,357.73	719.36	1,295.39	1,171.87	123.52	10.487	
15,300.00	8,862.09	16,418.70	9,946.02	66.70	68.13	146.83	-7,464.99	722.59	1,293.83	1,168.91	124.92	10.357	
15,384.52	8,862.08	16,483.46	9,945.92	67.26	68.55	146.86	-7,529.74	723.57	1,293.13	1,167.08	126.05	10.259	
15,400.00	8,862.08	16,494.96	9,945.89	67.36	68.63	146.86	-7,541.23	723.51	1,293.15	1,166.89	126.26	10.242	
15,500.00	8,862.08	16,618.21	9,944.50	68.02	69.44	146.75	-7,664.46	721.74	1,293.23	1,165.40	127.82	10.117	
15,600.00	8,862.08	16,709.00	9,941.39	68.69	70.04	146.59	-7,755.16	719.54	1,291.82	1,162.52	129.30	9.991	
15,700.00	8,862.08	16,802.00	9,939.74	69.35	70.65	146.48	-7,848.11	717.82	1,291.46	1,160.69	130.76	9.876	
15,800.00	8,862.08	16,914.12	9,938.71	70.02	71.40	146.43	-7,960.22	717.44	1,291.01	1,158.74	132.27	9.760	
15,900.00	8,862.07	17,003.42	9,937.21	70.69	71.99	146.35	-8,049.49	716.39	1,290.35	1,156.64	133.71	9.650	
16,000.00	8,862.07	17,105.20	9,936.30	71.36	72.67	146.32	-8,151.27	716.26	1,289.78	1,154.60	135.18	9.541	
16,039.77	8,862.07	17,138.94	9,936.27	71.63	72.89	146.32	-8,185.01	716.42	1,289.69	1,153.96	135.73	9.502	
16,100.00	8,862.07	17,191.72	9,936.57	72.03	73.25	146.33	-8,237.79	716.64	1,289.89	1,153.33	136.57	9.445	
16,200.00	8,862.07	17,289.99	9,937.58	72.71	73.91	146.37	-8,336.05	717.12	1,290.59	1,152.59	137.99	9.352	
16,300.00	8,862.07	17,390.34	9,938.38	73.38	74.59	146.39	-8,436.39	717.52	1,291.13	1,151.69	139.44	9.260	
16,400.00	8,862.06	17,487.77	9,939.94	74.06	75.24	146.45	-8,533.81	718.06	1,292.26	1,151.40	140.86	9.174	
16,500.00	8,862.06	17,592.48	9,939.96	74.74	75.95	146.44	-8,638.52	718.14	1,292.31	1,149.96	142.35	9.079	
16,600.00	8,862.06	17,680.42	9,940.71	75.42	76.55	146.42	-8,726.45	717.08	1,293.73	1,149.98	143.75	9.000	
16,700.00	8,862.06	17,801.34	9,941.73	76.10	77.37	146.46	-8,847.36	717.84	1,294.15	1,148.85	145.30	8.907	
16,749.34	8,862.06	17,848.55	9,941.66	76.44	77.69	146.46	-8,894.57	718.04	1,294.03	1,148.01	146.01	8.862	
16,800.00	8,862.06	17,884.99	9,941.96	76.79	77.94	146.47	-8,931.01	718.20	1,294.31	1,147.62	146.68	8.824	
16,900.00	8,862.05	17,962.75	9,944.36	77.47	78.48	146.55	-9,008.73	718.97	1,296.40	1,148.42	147.98	8.760	
17,000.00	8,862.05	18,066.76	9,950.64	78.16	79.20	146.84	-9,112.47	722.84	1,299.53	1,150.16	149.37	8.700	
17,100.00	8,862.05	18,228.41	9,955.07	78.85	80.33	147.17	-9,273.92	729.06	1,299.93	1,148.94	150.99	8.609	
17,200.00	8,862.05	18,305.00	9,954.82	79.54	80.85	147.22	-9,350.48	730.89	1,298.50	1,146.13	152.36	8.522	
17,262.67	8,862.05	18,362.40	9,954.77	79.97	81.25	147.25	-9,407.87	731.71	1,298.07	1,144.81	153.26	8.470	
17,300.00	8,862.05	18,399.00	9,955.28	80.23	81.50	147.28	-9,444.47	732.25	1,298.24	1,144.44	153.79	8.441	
17,400.00	8,862.04	18,516.92	9,954.93	80.92	82.32	147.31	-9,562.38	733.43	1,297.54	1,142.21	155.33	8.354	
17,476.05	8,862.04	18,576.95	9,954.37	81.45	82.73	147.29	-9,622.40	733.46	1,297.00	1,140.60	156.40	8.293	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
17,500.00	8,862.04	18,597.63	9,954.31	81.62	82.88	147.28	-9,643.08	733.37	1,297.02	1,140.28	156.74	8.275	
17,600.00	8,862.04	18,692.65	9,954.03	82.31	83.53	147.24	-9,738.10	732.46	1,297.39	1,139.17	158.22	8.200	
17,700.00	8,862.04	18,790.51	9,954.77	83.01	84.21	147.26	-9,835.95	732.66	1,298.02	1,138.34	159.68	8.129	
17,800.00	8,862.04	18,887.31	9,955.22	83.71	84.88	147.24	-9,932.74	732.15	1,298.80	1,137.65	161.15	8.060	
17,900.00	8,862.03	18,985.23	9,955.89	84.41	85.56	147.21	-10,030.65	731.00	1,300.10	1,137.47	162.64	7.994	
18,000.00	8,862.03	19,110.45	9,955.43	85.11	86.44	147.18	-10,155.87	730.68	1,299.99	1,135.74	164.25	7.915	
18,100.00	8,862.03	19,211.17	9,953.91	85.81	87.14	147.12	-10,256.57	730.36	1,299.00	1,133.23	165.76	7.836	
18,200.00	8,862.03	19,304.26	9,952.51	86.51	87.79	147.05	-10,349.65	729.45	1,298.37	1,131.11	167.25	7.763	
18,253.90	8,862.03	19,353.73	9,952.06	86.89	88.13	147.02	-10,399.12	729.01	1,298.27	1,130.22	168.05	7.726	
18,300.00	8,862.03	19,395.67	9,951.66	87.21	88.43	146.98	-10,441.05	728.35	1,298.34	1,129.62	168.73	7.695	
18,400.00	8,862.02	19,491.30	9,951.10	87.92	89.10	146.90	-10,536.66	726.69	1,298.90	1,128.67	170.23	7.630	
18,500.00	8,862.02	19,605.93	9,951.79	88.62	89.90	146.93	-10,651.29	727.42	1,299.19	1,127.41	171.78	7.563	
18,600.00	8,862.02	19,712.26	9,951.03	89.33	90.65	146.93	-10,757.61	727.89	1,298.45	1,125.16	173.30	7.493	
18,700.00	8,862.02	19,814.19	9,947.80	90.03	91.37	146.76	-10,859.45	725.61	1,297.11	1,122.25	174.86	7.418	
18,744.57	8,862.02	19,844.56	9,946.88	90.35	91.58	146.69	-10,889.79	724.58	1,296.87	1,121.38	175.49	7.390	
18,800.00	8,862.02	19,891.00	9,946.49	90.74	91.91	146.64	-10,936.21	723.35	1,297.29	1,120.99	176.29	7.359	
18,900.00	8,862.01	19,973.93	9,947.30	91.45	92.49	146.60	-11,019.12	721.97	1,299.04	1,121.35	177.70	7.310	
19,000.00	8,862.01	20,121.78	9,943.90	92.16	93.53	146.42	-11,166.87	719.50	1,297.64	1,118.14	179.50	7.229	
19,100.00	8,862.01	20,200.20	9,942.31	92.87	94.09	146.32	-11,245.26	718.02	1,297.04	1,116.09	180.95	7.168	
19,141.75	8,862.01	20,241.93	9,941.74	93.17	94.38	146.27	-11,286.98	717.25	1,297.04	1,115.45	181.59	7.143	
19,200.00	8,862.01	20,300.17	9,940.95	93.58	94.80	146.21	-11,345.21	716.17	1,297.04	1,114.55	182.49	7.108	
19,300.00	8,862.01	20,305.00	9,940.88	94.30	94.83	146.20	-11,350.03	716.08	1,300.53	1,117.41	183.12	7.102	
19,400.00	8,862.00	20,305.00	9,940.88	95.01	94.83	146.20	-11,350.03	716.08	1,311.65	1,128.79	182.86	7.173	
19,500.00	8,862.00	20,305.00	9,940.88	95.72	94.83	146.20	-11,350.03	716.08	1,330.21	1,148.42	181.79	7.317	
19,547.53	8,862.00	20,305.00	9,940.88	96.06	94.83	146.20	-11,350.03	716.08	1,341.56	1,160.54	181.02	7.411	
19,548.26	8,862.00	20,305.00	9,940.88	96.14	94.83	146.20	-11,350.03	716.08	1,341.75	1,160.17	181.58	7.389	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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	3.26	3.26	0.00	0.01	-74.78	245.82	-903.50	936.34				
100.00	100.00	105.02	105.02	0.28	0.17	-74.77	246.02	-903.34	936.24	935.80	0.45	2,099.392	
200.00	200.00	206.77	206.77	0.63	0.34	-74.72	246.58	-902.88	935.96	934.99	0.97	965.855	
300.00	300.00	310.51	310.50	0.99	0.65	-74.67	247.25	-902.11	935.41	933.77	1.64	570.458	
400.00	400.00	412.91	412.90	1.35	1.01	-74.65	247.27	-901.07	934.43	932.07	2.36	395.531	
500.00	500.00	512.28	512.26	1.71	1.37	-74.64	247.21	-900.05	933.42	930.35	3.07	303.580	
600.00	600.00	612.16	612.14	2.07	1.72	-74.63	247.20	-899.06	932.47	928.68	3.79	246.036	
700.00	700.00	708.85	708.82	2.43	2.06	-74.61	247.24	-898.17	931.59	927.10	4.49	207.507	
780.39	780.39	783.62	783.59	2.72	2.32	-74.60	247.40	-897.89	931.35	926.31	5.04	184.906	CC
800.00	800.00	801.86	801.83	2.79	2.39	-74.59	247.45	-897.89	931.36	926.19	5.17	180.132	
900.00	900.00	898.97	898.94	3.14	2.72	-74.58	247.76	-898.21	931.76	925.90	5.86	158.976	
1,000.00	1,000.00	999.35	999.32	3.50	3.06	-74.59	247.74	-898.67	932.20	925.64	6.56	142.120	ES
1,100.00	1,099.98	1,099.07	1,099.04	3.84	3.40	125.45	247.45	-899.18	933.63	926.39	7.24	128.946	
1,200.00	1,199.84	1,198.35	1,198.32	4.17	3.74	125.64	247.36	-899.70	937.15	929.24	7.91	118.500	
1,300.00	1,299.45	1,297.10	1,297.06	4.51	4.08	125.96	247.33	-900.27	942.81	934.23	8.58	109.857	
1,350.00	1,349.13	1,345.58	1,345.54	4.68	4.25	126.16	247.23	-900.62	946.47	937.56	8.92	106.118	
1,400.00	1,398.73	1,393.52	1,393.48	4.85	4.42	132.84	247.16	-901.04	950.93	941.68	9.26	102.742	
1,500.00	1,497.69	1,489.10	1,489.06	5.19	4.75	143.43	247.12	-902.11	962.77	952.84	9.93	96.943	
1,600.00	1,596.25	1,593.53	1,593.47	5.54	5.11	151.21	247.19	-903.17	978.07	967.42	10.65	91.874	
1,670.62	1,665.55	1,660.59	1,660.54	5.78	5.35	155.45	247.39	-903.60	990.78	979.65	11.13	89.017	
1,700.00	1,694.31	1,688.24	1,688.19	5.89	5.45	155.59	247.57	-903.79	996.49	985.16	11.33	87.941	
1,800.00	1,792.23	1,785.93	1,785.87	6.24	5.79	156.09	248.33	-904.51	1,016.01	1,003.99	12.02	84.493	
1,900.00	1,890.14	1,883.67	1,883.60	6.61	6.14	156.60	249.48	-905.11	1,035.63	1,022.91	12.72	81.403	
2,000.00	1,988.06	2,004.73	2,004.64	6.97	6.56	157.25	251.42	-904.25	1,054.25	1,040.74	13.51	78.054	
2,100.00	2,085.97	2,116.28	2,116.12	7.34	6.95	157.89	253.34	-900.95	1,070.88	1,056.62	14.26	75.117	
2,200.00	2,183.89	2,222.12	2,221.88	7.70	7.32	158.48	255.24	-897.22	1,087.18	1,072.19	14.99	72.535	
2,300.00	2,281.80	2,328.67	2,328.31	8.07	7.69	159.06	256.70	-892.45	1,102.51	1,086.79	15.73	70.112	
2,400.00	2,379.72	2,419.13	2,418.68	8.45	8.01	159.51	257.51	-888.51	1,117.90	1,101.49	16.41	68.132	
2,500.00	2,477.64	2,505.26	2,504.76	8.82	8.31	159.91	258.18	-885.77	1,134.38	1,117.31	17.07	66.436	
2,600.00	2,575.55	2,590.85	2,590.33	9.19	8.62	160.28	258.81	-884.06	1,151.99	1,134.25	17.74	64.942	
2,700.00	2,673.47	2,683.10	2,682.58	9.57	8.94	160.65	259.68	-883.10	1,170.58	1,152.15	18.43	63.516	
2,800.00	2,771.38	2,778.19	2,777.66	9.95	9.28	161.02	260.64	-882.20	1,189.35	1,170.22	19.13	62.171	
2,900.00	2,869.30	2,870.89	2,870.36	10.32	9.60	161.31	260.52	-882.25	1,208.61	1,188.79	19.82	60.989	
3,000.00	2,967.21	2,995.84	2,995.30	10.70	10.03	161.65	259.38	-882.18	1,227.63	1,206.99	20.64	59.489	
3,100.00	3,065.13	3,160.72	3,159.95	11.08	10.60	162.01	253.62	-876.42	1,242.46	1,220.87	21.59	57.542	
3,200.00	3,163.05	3,343.56	3,341.65	11.46	11.24	162.32	241.39	-860.43	1,251.16	1,228.62	22.55	55.488	
3,300.00	3,260.96	3,496.71	3,492.71	11.84	11.80	162.60	227.97	-839.15	1,254.23	1,230.85	23.38	53.641	
3,400.00	3,358.88	3,611.15	3,605.17	12.22	12.22	162.90	218.80	-820.12	1,255.24	1,231.11	24.14	52.007	
3,500.00	3,456.79	3,738.17	3,729.43	12.60	12.70	163.31	208.96	-795.69	1,253.86	1,228.95	24.91	50.343	
3,600.00	3,554.71	3,845.43	3,834.09	12.98	13.12	163.69	200.72	-773.71	1,251.46	1,225.81	25.65	48.789	
3,700.00	3,652.62	3,950.59	3,936.59	13.36	13.53	164.06	192.44	-751.70	1,248.62	1,222.23	26.39	47.306	
3,800.00	3,750.54	4,037.70	4,021.54	13.75	13.88	164.36	185.50	-733.73	1,246.08	1,218.95	27.12	45.945	
3,900.00	3,848.45	4,140.14	4,121.57	14.13	14.29	164.70	177.16	-713.30	1,244.12	1,216.25	27.87	44.646	
4,000.00	3,946.37	4,229.91	4,209.27	14.51	14.65	164.98	169.64	-695.64	1,242.35	1,213.75	28.60	43.442	
4,100.00	4,044.29	4,314.47	4,292.06	14.89	15.00	165.23	162.70	-679.89	1,241.64	1,212.32	29.32	42.347	
4,104.52	4,048.71	4,318.27	4,295.78	14.91	15.01	165.24	162.39	-679.21	1,241.64	1,212.29	29.35	42.300	
4,200.00	4,142.20	4,408.56	4,384.36	15.28	15.38	165.49	155.08	-663.32	1,241.92	1,211.87	30.06	41.319	
4,300.00	4,240.12	4,510.45	4,484.33	15.66	15.79	165.79	146.96	-645.40	1,242.33	1,211.52	30.81	40.325	
4,400.00	4,338.03	4,621.85	4,593.51	16.05	16.25	166.11	137.92	-625.21	1,242.21	1,210.64	31.58	39.341	
4,500.00	4,435.95	4,723.82	4,693.33	16.43	16.68	166.41	129.50	-606.15	1,241.55	1,209.22	32.33	38.403	
4,600.00	4,533.86	4,825.49	4,792.82	16.81	17.10	166.72	121.05	-586.95	1,240.72	1,207.64	33.08	37.502	
4,700.00	4,631.78	4,923.60	4,888.83	17.20	17.52	167.01	112.87	-568.46	1,239.94	1,206.11	33.83	36.648	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM

Rule Assigned:

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
4,800.00	4,729.69	5,022.08	4,985.21	17.58	17.94	167.30	104.64	-550.03	1,239.31	1,204.73	34.59	35.833	
4,900.00	4,827.61	5,119.44	5,080.53	17.97	18.35	167.59	96.55	-531.93	1,238.85	1,203.51	35.34	35.059	
4,977.41	4,903.41	5,192.54	5,152.14	18.26	18.66	167.80	90.52	-518.53	1,238.71	1,202.80	35.91	34.492	
5,000.00	4,925.53	5,212.03	5,171.24	18.35	18.74	167.86	88.94	-515.01	1,238.75	1,202.67	36.08	34.335	
5,100.00	5,023.44	5,300.11	5,257.69	18.74	19.11	168.12	82.19	-499.55	1,239.58	1,202.77	36.81	33.674	
5,200.00	5,121.36	5,396.54	5,352.44	19.12	19.52	168.40	74.95	-483.14	1,241.01	1,203.45	37.56	33.041	
5,300.00	5,219.27	5,492.14	5,446.41	19.51	19.92	168.67	67.85	-467.06	1,242.68	1,204.38	38.31	32.441	
5,400.00	5,317.19	5,586.76	5,539.53	19.89	20.32	168.95	61.19	-451.66	1,245.04	1,205.99	39.05	31.883	
5,500.00	5,415.10	5,706.14	5,656.83	20.28	20.82	169.29	52.18	-431.37	1,246.54	1,206.70	39.85	31.282	
5,600.00	5,513.02	5,812.80	5,761.40	20.66	21.28	169.60	43.68	-412.20	1,247.02	1,206.40	40.62	30.699	
5,700.00	5,610.93	5,912.03	5,858.66	21.05	21.71	169.90	35.85	-394.10	1,247.34	1,205.96	41.38	30.144	
5,800.00	5,708.85	6,007.99	5,952.74	21.43	22.13	170.19	28.41	-376.73	1,247.89	1,205.76	42.13	29.619	
5,900.00	5,806.77	6,102.72	6,045.68	21.82	22.53	170.48	21.29	-359.85	1,248.85	1,205.97	42.88	29.123	
6,000.00	5,904.68	6,197.26	6,138.51	22.21	22.94	170.76	14.33	-343.38	1,250.25	1,206.62	43.63	28.655	
6,100.00	6,002.60	6,316.38	6,255.40	22.59	23.46	171.12	5.43	-322.26	1,251.43	1,207.00	44.43	28.165	
6,200.00	6,100.51	6,409.21	6,346.35	22.98	23.86	171.41	-1.72	-305.09	1,251.81	1,206.63	45.18	27.706	
6,300.00	6,198.43	6,499.74	6,435.17	23.36	24.25	171.69	-8.51	-288.95	1,252.91	1,206.98	45.93	27.281	
6,400.00	6,296.34	6,598.88	6,532.55	23.75	24.68	171.95	-16.43	-272.09	1,254.47	1,207.78	46.69	26.871	
6,500.00	6,394.26	6,698.00	6,629.93	24.14	25.11	172.14	-25.62	-256.08	1,256.03	1,208.59	47.44	26.474	
6,600.00	6,492.17	6,777.84	6,708.50	24.52	25.45	172.25	-33.38	-244.21	1,258.44	1,210.29	48.15	26.134	
6,700.00	6,590.09	6,854.76	6,784.42	24.91	25.76	172.34	-40.56	-234.16	1,262.59	1,213.75	48.84	25.851	
6,800.00	6,688.01	6,935.66	6,864.48	25.29	26.09	172.41	-47.68	-225.00	1,268.48	1,218.95	49.53	25.612	
6,900.00	6,785.92	7,025.20	6,953.25	25.68	26.45	172.53	-54.06	-215.12	1,275.57	1,225.33	50.24	25.390	
7,000.00	6,883.84	7,130.75	7,057.83	26.07	26.87	172.84	-58.42	-201.56	1,282.91	1,231.89	51.02	25.146	
7,100.00	6,981.75	7,230.91	7,156.96	26.45	27.28	173.16	-62.41	-187.83	1,289.64	1,237.87	51.78	24.908	
7,200.00	7,079.67	7,321.13	7,246.28	26.84	27.64	173.47	-65.28	-175.50	1,296.91	1,244.42	52.50	24.705	
7,300.00	7,177.58	7,440.74	7,364.65	27.23	28.13	173.92	-68.21	-158.57	1,304.35	1,251.01	53.33	24.456	
7,400.00	7,275.50	7,538.30	7,461.03	27.61	28.53	174.29	-71.29	-143.74	1,310.48	1,256.39	54.09	24.229	
7,500.00	7,373.41	7,617.22	7,539.15	28.00	28.85	174.54	-74.11	-132.88	1,317.61	1,262.85	54.76	24.060	
7,600.00	7,471.33	7,699.26	7,620.55	28.39	29.17	174.77	-76.74	-122.98	1,326.33	1,270.89	55.44	23.924	
7,700.00	7,569.25	7,770.63	7,691.45	28.77	29.45	174.99	-78.25	-114.96	1,336.49	1,280.45	56.05	23.845	
7,764.22	7,632.13	7,809.69	7,730.35	29.02	29.60	175.08	-78.91	-111.55	1,344.43	1,288.04	56.39	23.842	
7,800.00	7,667.21	7,830.00	7,750.61	29.16	29.67	175.13	-79.22	-110.10	1,349.14	1,292.57	56.56	23.853	
7,900.00	7,765.68	7,878.72	7,799.26	29.54	29.84	175.24	-79.32	-107.62	1,362.37	1,305.43	56.94	23.927	
8,000.00	7,864.70	7,925.00	7,845.51	29.91	29.99	175.35	-78.28	-106.60	1,375.91	1,318.68	57.23	24.043	
8,100.00	7,964.15	8,003.31	7,923.75	30.28	30.23	175.51	-75.05	-106.38	1,388.64	1,330.90	57.74	24.052	
8,200.00	8,063.90	8,095.53	8,015.85	30.63	30.51	175.69	-70.39	-106.89	1,399.11	1,340.76	58.35	23.978	
8,300.00	8,163.83	8,207.12	8,127.31	30.98	30.86	175.88	-64.80	-107.25	1,405.93	1,346.80	59.13	23.777	
8,350.17	8,214.00	8,255.14	8,175.26	31.14	31.00	-51.89	-62.43	-107.15	1,407.82	1,348.38	59.44	23.684	
8,400.00	8,263.77	8,304.00	8,224.07	31.31	31.16	160.70	-60.11	-107.24	1,411.39	1,351.63	59.77	23.614	
8,450.00	8,313.33	8,350.50	8,270.52	31.49	31.30	160.59	-57.96	-107.44	1,419.13	1,359.03	60.09	23.616	
8,500.00	8,362.13	8,398.00	8,317.97	31.69	31.44	160.39	-55.76	-107.68	1,430.94	1,370.50	60.44	23.676	
8,550.00	8,409.80	8,442.60	8,362.52	31.89	31.58	160.07	-53.66	-107.94	1,446.78	1,386.01	60.77	23.806	
8,600.00	8,455.99	8,485.82	8,405.68	32.09	31.71	159.64	-51.57	-108.23	1,466.55	1,405.45	61.11	24.000	
8,650.00	8,500.33	8,519.56	8,439.38	32.31	31.82	158.97	-49.91	-108.59	1,490.21	1,428.84	61.36	24.285	
8,700.00	8,542.50	8,550.02	8,469.80	32.53	31.91	158.07	-48.40	-109.18	1,517.70	1,456.10	61.60	24.639	
8,750.00	8,582.16	8,585.00	8,504.72	32.75	32.01	156.98	-46.66	-110.18	1,548.81	1,486.93	61.88	25.029	
8,800.00	8,619.02	8,606.62	8,526.31	32.97	32.08	155.39	-45.58	-110.95	1,583.17	1,521.12	62.05	25.515	
8,850.00	8,652.80	8,632.98	8,552.61	33.19	32.16	153.43	-44.25	-111.97	1,620.49	1,558.23	62.26	26.026	
8,900.00	8,683.24	8,656.25	8,575.83	33.42	32.22	150.83	-43.07	-112.95	1,660.45	1,597.99	62.46	26.585	
8,950.00	8,710.11	8,680.00	8,599.52	33.64	32.29	147.44	-41.86	-114.04	1,702.72	1,640.06	62.66	27.174	
9,000.00	8,733.20	8,712.40	8,631.86	33.86	32.39	143.28	-40.40	-115.54	1,746.86	1,683.91	62.95	27.752	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM

Rule Assigned:

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
9,050.00	8,752.35	8,747.99	8,667.39	34.08	32.50	137.88	-39.21	-117.08	1,792.42	1,729.16	63.26	28.335	
9,100.00	8,767.39	8,776.83	8,696.20	34.29	32.58	130.15	-38.57	-118.25	1,839.15	1,775.64	63.51	28.959	
9,100.17	8,767.43	8,776.91	8,696.29	34.29	32.58	130.11	-38.57	-118.25	1,839.31	1,775.80	63.51	28.961	
9,200.00	8,791.66	8,822.02	8,741.36	34.71	32.72	120.64	-37.95	-119.78	1,932.91	1,869.01	63.89	30.252	
9,300.00	8,812.57	8,865.17	8,784.50	35.13	32.85	113.29	-37.68	-120.81	2,025.01	1,960.76	64.25	31.516	
9,400.00	8,829.97	8,890.34	8,809.67	35.54	32.92	106.64	-37.62	-121.23	2,115.21	2,050.73	64.48	32.806	
9,500.00	8,843.72	8,909.82	8,829.14	35.95	32.98	101.18	-37.60	-121.47	2,203.27	2,138.61	64.66	34.077	
9,600.00	8,853.72	8,924.23	8,843.55	36.33	33.03	96.69	-37.58	-121.60	2,288.90	2,224.10	64.80	35.324	
9,700.00	8,859.89	8,933.22	8,852.54	36.70	33.06	92.97	-37.58	-121.67	2,371.81	2,306.91	64.90	36.545	
9,800.00	8,862.18	12,436.07	10,787.12	37.05	50.04	141.92	-1,937.84	-85.67	2,441.34	2,372.48	68.85	35.457	
9,809.00	8,862.20	12,440.95	10,787.11	37.08	50.08	141.92	-1,942.72	-85.71	2,441.39	2,372.46	68.92	35.421	
9,900.00	8,862.20	12,523.99	10,787.15	37.39	50.84	141.89	-2,025.75	-87.20	2,442.49	2,372.58	69.91	34.938	
10,000.00	8,862.19	12,634.32	10,787.05	37.74	51.86	141.88	-2,136.08	-87.56	2,442.69	2,371.53	71.16	34.328	
10,100.00	8,862.19	12,741.05	10,787.42	38.10	52.88	141.88	-2,242.80	-87.73	2,443.19	2,370.79	72.40	33.744	
10,200.00	8,862.19	12,846.89	10,788.07	38.48	53.92	141.90	-2,348.63	-86.68	2,443.18	2,369.52	73.65	33.171	
10,219.26	8,862.19	12,863.77	10,788.04	38.55	54.09	141.90	-2,365.52	-86.67	2,443.17	2,369.29	73.87	33.073	
10,300.00	8,862.19	12,927.72	10,787.64	38.86	54.73	141.88	-2,429.46	-87.44	2,443.46	2,368.71	74.75	32.689	
10,400.00	8,862.19	13,022.60	10,786.87	39.25	55.68	141.82	-2,524.31	-89.62	2,444.36	2,368.35	76.01	32.160	
10,500.00	8,862.18	13,106.06	10,786.99	39.66	56.54	141.80	-2,607.76	-90.89	2,445.54	2,368.38	77.16	31.694	
10,600.00	8,862.18	13,200.58	10,788.10	40.07	57.53	141.79	-2,702.26	-92.10	2,447.37	2,368.94	78.43	31.205	
10,700.00	8,862.18	13,343.87	10,792.00	40.49	59.07	141.90	-2,845.46	-89.21	2,448.41	2,368.31	80.10	30.567	
10,800.00	8,862.18	13,449.35	10,794.20	40.93	60.24	141.98	-2,950.87	-85.90	2,448.22	2,366.77	81.45	30.058	
10,833.62	8,862.18	13,478.86	10,794.76	41.08	60.57	142.01	-2,980.36	-85.08	2,448.19	2,366.34	81.86	29.908	
10,900.00	8,862.18	13,545.74	10,796.04	41.37	61.31	142.05	-3,047.20	-83.42	2,448.25	2,365.51	82.74	29.588	
10,997.07	8,862.17	13,642.37	10,797.33	41.81	62.40	142.11	-3,143.80	-81.25	2,448.06	2,364.00	84.05	29.125	
11,000.00	8,862.17	13,644.69	10,797.35	41.82	62.43	142.11	-3,146.12	-81.23	2,448.06	2,363.97	84.09	29.113	
11,100.00	8,862.17	13,729.54	10,797.42	42.28	63.38	142.10	-3,230.97	-81.57	2,448.47	2,363.12	85.35	28.687	
11,200.00	8,862.17	13,835.06	10,797.41	42.75	64.58	142.08	-3,336.48	-82.46	2,449.10	2,362.25	86.85	28.199	
11,300.00	8,862.17	13,946.37	10,796.25	43.22	65.85	142.03	-3,447.78	-83.95	2,449.22	2,360.77	88.45	27.691	
11,354.34	8,862.17	13,999.67	10,796.09	43.49	66.47	142.03	-3,501.08	-83.99	2,449.18	2,359.95	89.23	27.447	
11,400.00	8,862.17	14,039.62	10,796.00	43.71	66.93	142.02	-3,541.03	-84.11	2,449.23	2,359.39	89.84	27.261	
11,500.00	8,862.16	14,140.14	10,795.85	44.20	68.11	142.01	-3,641.54	-84.66	2,449.57	2,358.23	91.34	26.819	
11,600.00	8,862.16	14,228.74	10,796.20	44.70	69.16	142.01	-3,730.14	-84.51	2,449.90	2,357.21	92.70	26.429	
11,700.00	8,862.16	14,327.70	10,796.31	45.20	70.33	141.99	-3,829.09	-85.53	2,450.75	2,356.55	94.20	26.016	
11,800.00	8,862.16	14,424.04	10,796.08	45.72	71.48	141.96	-3,925.43	-86.77	2,451.46	2,355.77	95.69	25.618	
11,900.00	8,862.16	14,551.61	10,796.19	46.24	73.02	141.95	-4,052.99	-87.50	2,452.06	2,354.53	97.54	25.140	
12,000.00	8,862.15	14,744.26	10,793.30	46.76	75.39	141.99	-4,245.54	-82.49	2,448.92	2,348.87	100.05	24.477	
12,100.00	8,862.15	14,851.13	10,790.50	47.29	76.73	142.02	-4,352.31	-78.46	2,444.63	2,342.98	101.66	24.048	
12,200.00	8,862.15	14,941.02	10,788.92	47.83	77.86	142.07	-4,442.08	-74.38	2,440.57	2,337.49	103.08	23.677	
12,300.00	8,862.15	15,012.00	10,787.65	48.38	78.76	142.11	-4,512.99	-71.35	2,436.83	2,332.52	104.31	23.362	
12,400.00	8,862.15	15,081.91	10,786.55	48.93	79.64	142.12	-4,582.86	-69.55	2,434.30	2,328.76	105.54	23.066	
12,484.95	8,862.14	15,130.70	10,786.21	49.40	80.26	142.12	-4,631.66	-69.35	2,433.70	2,327.22	106.47	22.857	
12,500.00	8,862.14	15,139.92	10,786.21	49.48	80.37	142.12	-4,640.87	-69.35	2,433.71	2,327.07	106.64	22.821	
12,600.00	8,862.14	15,202.27	10,786.81	50.04	81.16	142.12	-4,703.22	-69.53	2,434.75	2,326.97	107.78	22.589	
12,700.00	8,862.14	15,330.76	10,787.57	50.61	82.77	142.10	-4,831.69	-70.93	2,436.02	2,326.27	109.75	22.197	
12,800.00	8,862.14	15,421.05	10,787.42	51.18	83.91	142.09	-4,921.98	-71.45	2,436.40	2,325.15	111.25	21.900	
12,900.00	8,862.14	15,482.00	10,787.98	51.76	84.69	142.07	-4,982.92	-72.66	2,438.37	2,325.97	112.40	21.694	
13,000.00	8,862.13	15,554.30	10,789.09	52.34	85.60	142.04	-5,055.17	-75.13	2,441.73	2,328.04	113.69	21.477	
13,100.00	8,862.13	15,666.01	10,790.43	52.92	87.01	141.97	-5,166.77	-79.83	2,445.40	2,329.87	115.53	21.166	
13,200.00	8,862.13	15,796.40	10,792.80	53.51	88.68	141.96	-5,297.10	-81.75	2,447.80	2,330.23	117.56	20.821	
13,300.00	8,862.13	15,895.59	10,794.40	54.10	89.96	141.96	-5,396.28	-82.96	2,449.93	2,330.73	119.20	20.553	
13,400.00	8,862.12	16,041.35	10,797.50	54.70	91.86	142.02	-5,541.99	-81.91	2,451.39	2,330.02	121.37	20.198	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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
13,500.00	8,862.12	16,188.45	10,799.55	55.30	93.80	142.15	-5,688.96	-76.19	2,450.02	2,326.54	123.47	19.842	
13,600.00	8,862.12	16,290.15	10,800.35	55.91	95.15	142.23	-5,790.57	-72.25	2,448.38	2,323.30	125.08	19.574	
13,700.00	8,862.12	16,380.34	10,800.02	56.52	96.34	142.26	-5,880.73	-69.90	2,446.63	2,320.03	126.60	19.326	
13,800.00	8,862.12	16,472.06	10,799.56	57.13	97.55	142.28	-5,972.45	-68.74	2,445.55	2,317.39	128.16	19.081	
13,900.00	8,862.11	16,568.69	10,799.19	57.75	98.83	142.29	-6,069.07	-67.33	2,444.49	2,314.70	129.78	18.835	
14,000.00	8,862.11	16,673.39	10,798.84	58.37	100.22	142.31	-6,173.76	-66.10	2,443.62	2,312.11	131.51	18.581	
14,100.00	8,862.11	16,786.91	10,798.21	58.99	101.73	142.33	-6,287.26	-64.09	2,442.21	2,308.87	133.34	18.316	
14,200.00	8,862.11	16,883.13	10,797.52	59.62	103.02	142.35	-6,383.46	-62.25	2,440.60	2,305.63	134.96	18.083	
14,300.00	8,862.11	16,947.38	10,797.09	60.25	103.87	142.35	-6,447.70	-61.78	2,439.76	2,303.55	136.22	17.911	
14,302.58	8,862.11	16,948.96	10,797.08	60.27	103.89	142.35	-6,449.28	-61.79	2,439.76	2,303.52	136.25	17.907	
14,400.00	8,862.10	17,022.67	10,796.67	60.88	104.87	142.32	-6,522.98	-63.06	2,440.41	2,302.78	137.63	17.732	
14,500.00	8,862.10	17,131.46	10,796.05	61.52	106.31	142.27	-6,631.75	-65.23	2,441.31	2,301.81	139.50	17.500	
14,600.00	8,862.10	17,221.22	10,795.65	62.16	107.51	142.24	-6,721.50	-66.42	2,441.91	2,300.81	141.10	17.306	
14,700.00	8,862.10	17,308.01	10,795.14	62.80	108.66	142.18	-6,808.24	-69.07	2,443.40	2,300.70	142.70	17.123	
14,800.00	8,862.10	17,404.47	10,794.04	63.44	109.94	142.09	-6,904.63	-72.63	2,444.89	2,300.43	144.45	16.925	
14,900.00	8,862.09	17,507.07	10,795.61	64.09	111.32	142.09	-7,007.21	-73.65	2,446.83	2,300.62	146.21	16.735	
15,000.00	8,862.09	17,649.50	10,799.12	64.74	113.25	142.19	-7,149.56	-70.64	2,447.60	2,299.22	148.38	16.495	
15,004.45	8,862.09	17,655.91	10,799.22	64.77	113.34	142.20	-7,155.96	-70.48	2,447.60	2,299.12	148.48	16.484	
15,100.00	8,862.09	17,739.00	10,800.99	65.39	114.47	142.26	-7,239.01	-68.40	2,447.83	2,297.93	149.90	16.330	
15,200.00	8,862.09	17,822.41	10,803.20	66.05	115.60	142.33	-7,322.36	-66.40	2,448.56	2,297.22	151.34	16.179	
15,300.00	8,862.09	17,923.89	10,805.64	66.70	116.99	142.39	-7,423.80	-64.71	2,449.55	2,296.54	153.02	16.008	
15,400.00	8,862.08	18,078.14	10,806.28	67.36	119.09	142.43	-7,578.04	-62.68	2,449.10	2,293.70	155.40	15.760	
15,500.00	8,862.08	18,152.88	10,806.57	68.02	120.11	142.47	-7,652.75	-60.76	2,448.05	2,291.27	156.78	15.615	
15,513.40	8,862.08	18,160.23	10,806.67	68.11	120.21	142.47	-7,660.10	-60.60	2,448.03	2,291.10	156.93	15.600	
15,600.00	8,862.08	18,207.00	10,807.67	68.69	120.85	142.50	-7,706.85	-59.81	2,448.72	2,290.86	157.87	15.511	
15,700.00	8,862.08	18,301.00	10,809.96	69.35	122.13	142.54	-7,800.82	-59.25	2,450.41	2,290.93	159.48	15.365	
15,800.00	8,862.08	18,414.74	10,813.79	70.02	123.69	142.61	-7,914.47	-58.09	2,452.66	2,291.33	161.32	15.203	
15,900.00	8,862.07	18,551.34	10,814.21	70.69	125.56	142.63	-8,051.06	-56.99	2,452.27	2,288.74	163.53	14.996	
16,000.00	8,862.07	18,681.38	10,815.65	71.36	127.35	142.70	-8,181.05	-53.90	2,451.93	2,286.36	165.57	14.809	
16,067.33	8,862.07	18,714.35	10,815.79	71.81	127.80	142.72	-8,214.02	-53.36	2,451.51	2,285.22	166.30	14.742	
16,100.00	8,862.07	18,732.12	10,815.95	72.03	128.05	142.72	-8,231.78	-53.21	2,451.61	2,284.95	166.66	14.710	
16,200.00	8,862.07	18,844.10	10,816.88	72.71	129.58	142.72	-8,343.75	-53.79	2,452.80	2,284.22	168.57	14.550	
16,241.89	8,862.07	18,888.93	10,816.38	72.99	130.19	142.70	-8,388.58	-54.26	2,452.73	2,283.36	169.37	14.482	
16,300.00	8,862.07	18,933.03	10,815.84	73.38	130.79	142.68	-8,432.67	-55.10	2,452.90	2,282.67	170.23	14.409	
16,400.00	8,862.06	19,038.15	10,814.55	74.06	132.22	142.61	-8,537.75	-57.71	2,453.55	2,281.42	172.14	14.254	
16,500.00	8,862.06	19,135.41	10,813.51	74.74	133.55	142.56	-8,634.98	-59.48	2,453.93	2,280.01	173.92	14.110	
16,600.00	8,862.06	19,248.13	10,812.19	75.42	135.10	142.50	-8,747.68	-61.33	2,454.11	2,278.20	175.91	13.951	
16,605.03	8,862.06	19,252.18	10,812.14	75.45	135.15	142.50	-8,751.73	-61.40	2,454.11	2,278.12	175.99	13.944	
16,700.00	8,862.06	19,333.00	10,811.40	76.10	136.26	142.46	-8,832.53	-62.73	2,454.47	2,276.95	177.52	13.826	
16,800.00	8,862.06	19,408.82	10,811.43	76.79	137.30	142.43	-8,908.34	-64.01	2,455.62	2,276.64	178.98	13.720	
16,900.00	8,862.05	19,474.89	10,812.39	77.47	138.21	142.43	-8,974.40	-64.98	2,457.81	2,277.55	180.26	13.635	
17,000.00	8,862.05	19,540.86	10,815.09	78.16	139.11	142.45	-9,040.31	-65.38	2,461.50	2,280.04	181.46	13.565	
17,100.00	8,862.05	19,630.64	10,818.79	78.85	140.35	142.47	-9,129.98	-67.47	2,466.28	2,283.23	183.05	13.473	
17,200.00	8,862.05	19,824.97	10,826.49	79.54	143.05	142.61	-9,324.13	-64.95	2,468.42	2,282.38	186.04	13.268	
17,300.00	8,862.05	19,937.49	10,829.34	80.23	144.62	142.71	-9,436.55	-61.65	2,468.74	2,280.88	187.86	13.142	
17,400.00	8,862.04	20,020.10	10,831.58	80.92	145.77	142.78	-9,519.12	-59.64	2,469.53	2,280.23	189.30	13.045	
17,500.00	8,862.04	20,192.82	10,833.90	81.62	148.18	142.86	-9,691.76	-56.69	2,470.05	2,278.14	191.92	12.871	
17,600.00	8,862.04	20,269.00	10,832.79	82.31	149.24	142.85	-9,767.92	-56.06	2,468.55	2,275.15	193.40	12.764	
17,652.06	8,862.04	20,299.84	10,832.83	82.68	149.67	142.86	-9,798.76	-55.63	2,468.27	2,274.23	194.04	12.720	
17,700.00	8,862.04	20,323.67	10,833.34	83.01	150.00	142.88	-9,822.58	-55.10	2,468.50	2,273.96	194.54	12.689	
17,800.00	8,862.04	20,392.35	10,836.75	83.71	150.96	142.96	-9,891.13	-52.80	2,470.42	2,274.68	195.75	12.621	
17,900.00	8,862.03	20,506.30	10,841.10	84.41	152.55	143.07	-10,004.96	-50.11	2,472.13	2,274.56	197.58	12.512	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM **Rule Assigned:** **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
18,000.00	8,862.03	20,589.47	10,842.59	85.11	153.71	143.08	-10,088.11	-50.65	2,474.09	2,274.99	199.10	12.427	
18,100.00	8,862.03	20,739.45	10,847.26	85.81	155.80	143.16	-10,237.99	-49.36	2,476.54	2,275.07	201.46	12.293	
18,200.00	8,862.03	20,824.98	10,848.41	86.51	157.00	143.19	-10,323.51	-48.62	2,477.20	2,274.19	203.01	12.203	
18,300.00	8,862.03	20,979.59	10,849.20	87.21	159.16	143.25	-10,478.08	-45.61	2,476.30	2,270.88	205.42	12.055	
18,400.00	8,862.02	21,058.23	10,850.18	87.92	160.27	143.31	-10,556.67	-42.95	2,475.41	2,268.57	206.84	11.968	
18,438.47	8,862.02	21,086.72	10,850.52	88.19	160.67	143.32	-10,585.15	-42.35	2,475.33	2,267.96	207.37	11.937	
18,500.00	8,862.02	21,152.88	10,851.19	88.62	161.59	143.35	-10,651.30	-41.39	2,475.37	2,266.88	208.49	11.873	
18,600.00	8,862.02	21,253.81	10,852.08	89.33	163.01	143.40	-10,752.21	-39.30	2,474.96	2,264.75	210.21	11.773	
18,636.36	8,862.02	21,284.92	10,852.27	89.58	163.44	143.41	-10,783.31	-38.93	2,474.92	2,264.14	210.78	11.742	
18,700.00	8,862.02	21,328.08	10,852.66	90.03	164.05	143.42	-10,826.47	-38.59	2,475.16	2,263.54	211.62	11.696	
18,800.00	8,862.02	21,397.71	10,854.28	90.74	165.02	143.45	-10,896.08	-38.08	2,476.67	2,263.75	212.92	11.632	
18,900.00	8,862.01	21,496.54	10,855.20	91.45	166.40	143.42	-10,994.88	-39.90	2,478.63	2,263.91	214.72	11.543	
19,000.00	8,862.01	21,574.00	10,854.79	92.16	167.46	143.34	-11,072.24	-43.68	2,481.22	2,264.94	216.28	11.473	
19,100.00	8,862.01	21,713.41	10,853.78	92.87	169.39	143.21	-11,211.51	-49.82	2,483.37	2,264.53	218.84	11.348	
19,200.00	8,862.01	21,870.27	10,852.04	93.58	171.57	143.12	-11,368.31	-52.99	2,483.90	2,262.37	221.53	11.212	
19,260.56	8,862.01	21,910.88	10,851.40	94.01	172.13	143.10	-11,408.91	-53.64	2,483.73	2,261.34	222.39	11.168	
19,300.00	8,862.01	21,947.00	10,850.77	94.30	172.64	143.08	-11,445.02	-54.37	2,483.71	2,260.62	223.09	11.133	
19,400.00	8,862.00	21,947.00	10,850.77	95.01	172.64	143.08	-11,445.02	-54.37	2,485.79	2,262.41	223.38	11.128	SF
19,500.00	8,862.00	21,947.00	10,850.77	95.72	172.64	143.08	-11,445.02	-54.37	2,491.88	2,268.52	223.36	11.156	
19,547.53	8,862.00	21,947.00	10,850.77	96.06	172.64	143.08	-11,445.02	-54.37	2,496.18	2,272.93	223.25	11.181	
19,548.26	8,862.00	21,947.00	10,850.77	96.14	172.64	143.08	-11,445.02	-54.37	2,496.25	2,272.83	223.42	11.173	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 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	0.00	0.00	0.50	70.54	56.92	161.08	170.84				
100.00	100.00	98.83	98.83	0.28	0.52	70.53	57.11	161.55	171.36	170.56	0.80	213.886	
200.00	200.00	197.05	197.04	0.63	0.59	70.50	57.70	162.96	172.91	171.68	1.23	141.053	
300.00	300.00	297.47	297.43	0.99	0.83	70.22	59.16	164.52	174.86	173.04	1.83	95.761	
400.00	400.00	397.70	397.63	1.35	1.14	69.59	61.58	165.49	176.60	174.11	2.49	70.924	
500.00	500.00	497.50	497.39	1.71	1.47	68.86	64.28	166.25	178.27	175.10	3.18	56.119	
600.00	600.00	597.70	597.53	2.07	1.81	68.08	67.31	167.25	180.31	176.43	3.88	46.527	
700.00	700.00	700.54	700.32	2.43	2.16	67.05	70.53	166.58	180.89	176.30	4.59	39.443	
800.00	800.00	800.55	800.27	2.79	2.51	65.93	73.90	165.40	181.16	175.87	5.29	34.244	
900.00	900.00	901.01	900.68	3.14	2.86	64.95	76.70	164.14	181.18	175.18	6.00	30.205	
1,000.00	1,000.00	1,002.53	1,002.17	3.50	3.21	64.21	78.69	162.85	180.87	174.16	6.71	26.958	
1,100.00	1,099.98	1,104.72	1,104.35	3.84	3.56	-96.82	79.26	160.87	179.57	172.17	7.40	24.271	
1,200.00	1,199.84	1,205.46	1,205.05	4.17	3.90	-98.73	78.67	158.41	177.84	169.77	8.07	22.046	
1,300.00	1,299.45	1,305.99	1,305.54	4.51	4.25	-101.82	77.98	155.52	176.56	167.82	8.74	20.199	
1,350.00	1,349.13	1,355.79	1,355.31	4.68	4.42	-103.77	77.54	153.93	176.23	167.15	9.08	19.409	
1,400.00	1,398.73	1,405.37	1,404.86	4.85	4.59	-99.55	77.10	152.34	175.92	166.50	9.42	18.675	
1,500.00	1,497.69	1,504.18	1,503.62	5.19	4.93	-94.51	76.12	149.20	174.45	164.34	10.11	17.262	
1,600.00	1,596.25	1,600.00	1,599.41	5.54	5.26	-92.95	75.31	147.06	173.24	162.45	10.79	16.056	
1,645.11	1,640.54	1,643.61	1,643.01	5.69	5.42	-93.18	75.05	146.56	173.14	162.04	11.10	15.597	
1,670.62	1,665.55	1,668.35	1,667.76	5.78	5.50	-93.53	74.91	146.33	173.18	161.90	11.28	15.357	
1,700.00	1,694.31	1,696.85	1,696.25	5.89	5.60	-95.47	74.78	146.11	173.41	161.93	11.48	15.105	
1,800.00	1,792.23	1,794.23	1,793.63	6.24	5.94	-102.13	74.67	145.14	175.92	163.74	12.18	14.444	
1,900.00	1,890.14	1,891.13	1,890.52	6.61	6.28	-108.59	75.03	144.05	181.25	168.37	12.88	14.070	
2,000.00	1,988.06	1,988.39	1,987.77	6.97	6.62	-114.20	75.27	144.46	189.18	175.61	13.58	13.932	
2,100.00	2,085.97	2,087.21	2,086.52	7.34	6.95	-118.46	74.57	148.09	198.65	184.37	14.28	13.915	
2,200.00	2,183.89	2,186.31	2,185.51	7.70	7.29	-122.05	73.50	152.72	208.90	193.93	14.98	13.948	
2,300.00	2,281.80	2,287.30	2,286.38	8.07	7.63	-125.43	71.70	157.08	219.18	203.49	15.69	13.972	
2,400.00	2,379.72	2,388.45	2,387.37	8.45	7.98	-128.32	68.80	162.08	229.08	212.68	16.40	13.970	
2,500.00	2,477.64	2,487.56	2,486.24	8.82	8.32	-130.70	65.08	167.84	238.64	221.53	17.10	13.952	
2,600.00	2,575.55	2,580.47	2,579.08	9.19	8.64	-133.43	62.74	170.32	249.87	232.09	17.79	14.048	
2,700.00	2,673.47	2,677.85	2,676.45	9.57	8.98	-136.79	61.65	169.43	263.36	244.87	18.49	14.245	
2,800.00	2,771.38	2,789.51	2,788.04	9.95	9.36	-140.44	59.20	167.60	276.93	257.68	19.25	14.387	
2,900.00	2,869.30	2,912.28	2,910.10	10.32	9.79	-143.69	46.40	169.41	282.41	262.44	19.97	14.144	
3,000.00	2,967.21	3,030.44	3,026.35	10.70	10.19	-146.09	26.49	175.96	281.33	260.73	20.60	13.656	
3,100.00	3,065.13	3,136.99	3,129.86	11.08	10.56	-146.90	5.33	189.59	275.75	254.48	21.27	12.965	
3,200.00	3,163.05	3,234.96	3,224.53	11.46	10.90	-146.76	-13.53	206.34	269.66	247.66	22.01	12.254	
3,300.00	3,260.96	3,332.33	3,318.72	11.84	11.24	-146.54	-31.49	223.22	264.33	241.57	22.75	11.618	
3,400.00	3,358.88	3,429.03	3,412.57	12.22	11.59	-146.40	-48.32	239.33	260.18	236.68	23.50	11.069	
3,500.00	3,456.79	3,523.80	3,504.84	12.60	11.92	-146.35	-63.83	254.42	257.29	233.02	24.27	10.602	
3,542.43	3,498.33	3,562.20	3,542.42	12.76	12.06	-146.43	-69.44	259.93	256.96	232.36	24.60	10.446	
3,600.00	3,554.71	3,617.64	3,596.87	12.98	12.26	-146.65	-76.87	267.26	257.35	232.32	25.03	10.282	
3,700.00	3,652.62	3,718.24	3,695.67	13.36	12.62	-147.02	-90.32	280.63	258.08	232.32	25.76	10.018	
3,800.00	3,750.54	3,818.34	3,793.95	13.75	12.99	-147.43	-103.95	293.82	258.60	232.10	26.50	9.759	
3,900.00	3,848.45	3,917.59	3,891.43	14.13	13.35	-147.82	-117.29	306.90	259.31	232.07	27.24	9.520	
4,000.00	3,946.37	4,016.13	3,988.22	14.51	13.71	-148.09	-130.04	320.26	260.41	232.43	27.98	9.306	
4,100.00	4,044.29	4,113.62	4,084.11	14.89	14.06	-148.38	-141.98	333.20	262.28	233.55	28.73	9.129	
4,200.00	4,142.20	4,216.44	4,185.39	15.28	14.44	-148.92	-154.54	345.72	264.51	235.05	29.47	8.977	
4,300.00	4,240.12	4,318.21	4,285.51	15.66	14.81	-149.79	-168.84	356.98	265.32	235.12	30.20	8.785	
4,400.00	4,338.03	4,416.05	4,381.83	16.05	15.17	-150.73	-182.62	367.28	266.34	235.39	30.95	8.605	
4,500.00	4,435.95	4,521.94	4,485.96	16.43	15.56	-151.59	-197.70	379.23	267.03	235.36	31.67	8.431	
4,600.00	4,533.86	4,625.68	4,587.43	16.81	15.94	-152.03	-213.90	393.43	265.61	233.21	32.40	8.197	
4,700.00	4,631.78	4,724.80	4,684.26	17.20	16.31	-152.33	-229.58	407.66	263.77	230.61	33.16	7.955	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy — **Offset Site Error:** 0.00 usft

Survey Program: 200-MWD+IFR1+MS — **Rule Assigned:** — **Offset Well Error:** 0.50 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
4,800.00	4,729.69	4,825.54	4,782.56	17.58	16.69	-152.40	-245.21	423.16	261.86	227.95	33.90	7.724	
4,900.00	4,827.61	4,924.50	4,879.08	17.97	17.06	-152.33	-260.30	438.95	259.99	225.33	34.66	7.501	
5,000.00	4,925.53	5,021.33	4,973.70	18.35	17.42	-152.34	-274.55	453.86	258.84	223.41	35.43	7.305	
5,017.55	4,942.71	5,037.85	4,989.87	18.42	17.48	-152.36	-276.86	456.28	258.81	223.24	35.57	7.276	
5,100.00	5,023.44	5,118.62	5,069.14	18.74	17.78	-152.54	-287.61	467.46	259.41	223.22	36.19	7.167	
5,200.00	5,121.36	5,220.53	5,168.95	19.12	18.17	-152.70	-301.92	482.19	259.23	222.29	36.94	7.018	
5,204.59	5,125.85	5,224.91	5,173.25	19.14	18.18	-152.71	-302.53	482.82	259.23	222.25	36.98	7.011	
5,300.00	5,219.27	5,317.88	5,264.49	19.51	18.53	-152.97	-315.01	495.54	259.89	222.19	37.70	6.893	
5,400.00	5,317.19	5,421.87	5,366.56	19.89	18.92	-153.36	-329.33	509.32	260.44	222.00	38.44	6.775	
5,500.00	5,415.10	5,523.35	5,465.72	20.28	19.30	-153.51	-344.73	524.47	259.03	219.84	39.19	6.610	
5,566.85	5,480.56	5,587.22	5,528.20	20.53	19.54	-153.57	-353.92	533.98	258.59	218.88	39.71	6.512	
5,600.00	5,513.02	5,618.36	5,558.73	20.66	19.66	-153.63	-358.15	538.41	258.72	218.75	39.96	6.474	
5,700.00	5,610.93	5,720.64	5,659.15	21.05	20.05	-153.87	-371.60	552.43	259.70	218.99	40.71	6.379	
5,800.00	5,708.85	5,824.90	5,761.08	21.43	20.44	-154.04	-387.16	567.83	258.57	217.13	41.45	6.239	
5,900.00	5,806.77	5,923.25	5,857.18	21.82	20.81	-154.30	-402.44	582.17	256.97	214.76	42.21	6.087	
6,000.00	5,904.68	6,021.15	5,953.01	22.21	21.18	-154.56	-416.83	596.07	256.30	213.32	42.98	5.963	
6,035.54	5,939.48	6,055.96	5,987.09	22.34	21.31	-154.58	-421.67	601.23	256.25	212.99	43.25	5.924	
6,100.00	6,002.60	6,119.02	6,048.89	22.59	21.55	-154.63	-430.18	610.49	256.42	212.67	43.75	5.861	
6,200.00	6,100.51	6,214.79	6,142.93	22.98	21.91	-154.76	-442.32	623.88	257.74	213.23	44.51	5.790	
6,300.00	6,198.43	6,314.54	6,241.09	23.36	22.29	-155.02	-454.29	636.96	260.05	214.78	45.27	5.745	
6,400.00	6,296.34	6,420.64	6,345.28	23.75	22.69	-155.36	-468.43	651.14	261.00	214.99	46.01	5.673	
6,403.02	6,299.30	6,423.51	6,348.09	23.76	22.70	-155.37	-468.84	651.53	261.00	214.97	46.03	5.670	
6,500.00	6,394.26	6,515.60	6,438.54	24.14	23.05	-155.72	-481.22	663.61	261.93	215.15	46.78	5.599	
6,600.00	6,492.17	6,611.94	6,533.34	24.52	23.41	-155.82	-492.30	676.71	264.52	216.98	47.54	5.564	
6,700.00	6,590.09	6,710.58	6,630.64	24.91	23.78	-156.08	-502.90	689.02	268.26	219.96	48.29	5.555	
6,800.00	6,688.01	6,819.84	6,738.24	25.29	24.19	-156.72	-516.87	701.81	270.47	221.43	49.04	5.515	
6,900.00	6,785.92	6,928.72	6,844.65	25.68	24.61	-157.31	-534.58	716.43	268.70	218.95	49.75	5.401	
7,000.00	6,883.84	7,022.47	6,936.00	26.07	24.96	-157.48	-549.96	730.89	266.04	215.49	50.55	5.263	
7,011.23	6,894.84	7,032.02	6,945.35	26.11	25.00	-157.50	-551.33	732.26	266.01	215.36	50.65	5.252	
7,100.00	6,981.75	7,117.96	7,029.83	26.45	25.33	-157.74	-562.26	743.63	267.43	216.10	51.33	5.210	
7,200.00	7,079.67	7,236.30	7,145.32	26.84	25.78	-157.97	-580.80	761.40	265.68	213.73	51.95	5.114	
7,300.00	7,177.58	7,341.26	7,246.30	27.23	26.19	-157.89	-601.88	780.75	258.17	205.53	52.64	4.904	
7,400.00	7,275.50	7,432.41	7,334.15	27.61	26.55	-157.56	-618.80	798.19	251.82	198.28	53.54	4.704	
7,500.00	7,373.41	7,528.26	7,427.19	28.00	26.92	-157.14	-633.91	815.57	248.48	194.14	54.35	4.572	
7,600.00	7,471.33	7,624.16	7,520.49	28.39	27.29	-156.57	-647.61	833.01	246.52	191.38	55.14	4.471	
7,637.02	7,507.58	7,658.52	7,554.02	28.53	27.42	-156.39	-652.17	838.96	246.28	190.84	55.44	4.442	
7,700.00	7,569.25	7,715.66	7,610.04	28.77	27.64	-156.26	-659.12	847.79	247.03	191.10	55.93	4.417	
7,764.22	7,632.13	7,777.67	7,671.09	29.02	27.87	-156.28	-665.91	856.32	248.97	192.55	56.42	4.413	
7,800.00	7,667.21	7,813.04	7,705.90	29.16	28.01	-156.23	-669.61	861.32	249.95	193.27	56.69	4.409	
7,900.00	7,765.68	7,915.49	7,806.76	29.54	28.39	-156.00	-680.88	875.31	250.23	192.79	57.44	4.356	
8,000.00	7,864.70	8,014.27	7,904.11	29.91	28.76	-155.99	-693.10	886.75	246.92	188.74	58.18	4.244	
8,100.00	7,964.15	8,112.64	8,001.20	30.28	29.13	-155.80	-704.98	897.18	241.10	182.19	58.91	4.092	
8,200.00	8,063.90	8,223.66	8,110.22	30.63	29.56	-154.82	-720.45	911.21	229.55	169.94	59.60	3.851	
8,300.00	8,163.83	8,323.30	8,207.38	30.98	29.94	-152.79	-736.19	926.78	212.12	151.81	60.31	3.517	
8,350.17	8,214.00	8,369.82	8,252.79	31.14	30.12	-19.37	-743.20	933.99	202.69	142.01	60.68	3.340	
8,400.00	8,263.77	8,417.21	8,299.19	31.31	30.30	-165.79	-749.92	940.95	195.68	134.63	61.05	3.205	
8,450.00	8,313.33	8,465.93	8,346.93	31.49	30.49	-164.95	-756.54	947.99	193.24	131.81	61.43	3.146	
8,451.90	8,315.20	8,467.79	8,348.76	31.50	30.50	-164.92	-756.79	948.26	193.23	131.79	61.44	3.145	ES, SF
8,500.00	8,362.13	8,514.89	8,394.97	31.69	30.68	-164.32	-762.96	954.96	195.31	133.50	61.81	3.160	
8,550.00	8,409.80	8,563.60	8,442.82	31.89	30.86	-163.99	-769.21	961.61	201.79	139.59	62.20	3.244	
8,600.00	8,455.99	8,611.18	8,489.62	32.09	31.04	-163.95	-775.20	967.74	212.64	150.05	62.59	3.397	
8,650.00	8,500.33	8,657.29	8,535.06	32.31	31.22	-164.19	-780.88	973.09	227.86	164.89	62.97	3.618	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
8,700.00	8,542.50	8,700.13	8,577.38	32.53	31.38	-164.59	-786.00	977.46	247.45	184.12	63.34	3.907	
8,750.00	8,582.16	8,739.64	8,616.50	32.75	31.52	-165.04	-790.33	980.79	271.58	207.90	63.67	4.265	
8,800.00	8,619.02	8,776.40	8,653.00	32.97	31.66	-165.46	-794.01	983.28	300.02	236.04	63.98	4.690	
8,850.00	8,652.80	8,810.73	8,687.12	33.19	31.78	-165.73	-797.12	985.34	332.39	268.14	64.25	5.173	
8,900.00	8,683.24	8,841.69	8,717.92	33.42	31.90	-165.73	-799.64	987.08	368.31	303.81	64.50	5.710	
8,950.00	8,710.11	8,871.86	8,747.97	33.64	32.01	-165.55	-801.88	988.69	407.38	342.63	64.75	6.292	
9,000.00	8,733.20	8,908.34	8,784.25	33.86	32.14	-165.45	-804.91	991.00	448.68	383.62	65.07	6.896	
9,050.00	8,752.35	8,942.20	8,817.84	34.08	32.27	-164.98	-808.24	993.65	491.78	426.45	65.34	7.527	
9,100.00	8,767.39	8,973.04	8,848.36	34.29	32.38	-164.02	-811.69	996.48	536.52	470.95	65.57	8.183	
9,100.17	8,767.43	8,973.14	8,848.46	34.29	32.38	-164.02	-811.71	996.49	536.67	471.10	65.57	8.185	
9,200.00	8,791.66	9,011.40	8,886.28	34.71	32.52	-176.36	-816.05	1,000.24	628.71	562.84	65.87	9.545	
9,300.00	8,812.57	9,050.91	8,925.29	35.13	32.67	171.27	-820.67	1,004.46	722.13	655.97	66.16	10.915	
9,400.00	8,829.97	9,086.79	8,960.68	35.54	32.81	159.14	-824.96	1,008.54	816.24	749.83	66.42	12.290	
9,500.00	8,843.72	9,118.93	8,992.35	35.95	32.93	147.44	-828.88	1,012.37	910.66	844.02	66.64	13.665	
9,600.00	8,853.72	9,146.84	9,019.83	36.33	33.03	136.42	-832.34	1,015.82	1,005.04	938.21	66.83	15.038	
9,700.00	8,859.89	9,176.74	9,049.23	36.70	33.15	127.20	-836.17	1,019.71	1,099.03	1,032.01	67.02	16.398	
9,800.00	8,862.18	9,201.49	9,073.52	37.05	33.24	119.01	-839.49	1,023.12	1,192.32	1,125.15	67.17	17.751	
9,809.00	8,862.20	9,203.43	9,075.42	37.08	33.25	118.32	-839.75	1,023.39	1,200.67	1,133.49	67.18	17.872	
9,900.00	8,862.20	11,047.60	9,996.91	37.39	40.76	-160.61	-1,833.61	1,818.98	1,220.43	1,174.25	46.18	26.427	
10,000.00	8,862.19	11,156.15	9,997.49	37.74	41.23	-158.52	-1,931.24	1,866.42	1,237.62	1,190.09	47.53	26.041	
10,100.00	8,862.19	11,310.48	9,996.26	38.10	41.91	-156.01	-2,074.07	1,924.63	1,252.06	1,203.77	48.29	25.928	
10,200.00	8,862.19	11,480.09	9,994.90	38.48	42.64	-154.04	-2,236.81	1,971.74	1,263.61	1,214.87	48.73	25.929	
10,300.00	8,862.19	11,617.92	9,995.38	38.86	43.20	-153.21	-2,372.99	1,992.63	1,270.68	1,221.39	49.29	25.780	
10,400.00	8,862.19	11,772.15	9,991.76	39.25	43.81	-152.65	-2,526.64	2,005.02	1,271.14	1,221.57	49.57	25.645	
10,500.00	8,862.18	11,833.53	9,991.25	39.66	44.06	-152.43	-2,587.78	2,010.31	1,274.16	1,223.12	51.03	24.967	
10,600.00	8,862.18	11,952.39	9,990.06	40.07	44.55	-151.92	-2,705.98	2,022.77	1,278.17	1,226.31	51.86	24.647	
10,700.00	8,862.18	12,125.89	9,987.12	40.49	45.26	-151.63	-2,879.29	2,028.99	1,278.36	1,226.45	51.91	24.627	
10,800.00	8,862.18	12,230.97	9,982.55	40.93	45.69	-151.57	-2,984.26	2,028.19	1,274.02	1,221.24	52.78	24.138	
10,900.00	8,862.18	12,291.00	9,981.76	41.37	45.93	-151.56	-3,044.28	2,028.15	1,272.58	1,218.34	54.23	23.465	
11,000.00	8,862.17	12,385.00	9,981.30	41.82	46.33	-151.53	-3,138.28	2,028.83	1,272.42	1,217.13	55.30	23.011	
11,018.25	8,862.17	12,407.75	9,981.07	41.90	46.43	-151.52	-3,161.03	2,029.05	1,272.30	1,216.87	55.42	22.956	
11,100.00	8,862.17	12,459.41	9,981.49	42.28	46.65	-151.51	-3,212.67	2,029.65	1,273.26	1,216.61	56.65	22.475	
11,200.00	8,862.17	12,548.75	9,983.51	42.75	47.05	-151.46	-3,301.96	2,031.97	1,276.36	1,218.52	57.84	22.066	
11,300.00	8,862.17	12,706.33	9,983.10	43.22	47.75	-151.31	-3,459.44	2,035.84	1,277.18	1,219.00	58.17	21.954	
11,400.00	8,862.17	12,803.33	9,982.26	43.71	48.19	-151.35	-3,556.43	2,034.54	1,275.70	1,216.44	59.26	21.526	
11,500.00	8,862.16	12,893.25	9,981.34	44.20	48.60	-151.30	-3,646.34	2,035.52	1,275.21	1,214.71	60.50	21.077	
11,600.00	8,862.16	13,026.71	9,982.17	44.70	49.20	-151.58	-3,779.60	2,029.17	1,273.32	1,212.25	61.08	20.848	
11,700.00	8,862.16	13,138.00	9,981.77	45.20	49.69	-151.91	-3,890.56	2,020.88	1,269.32	1,207.37	61.95	20.490	
11,800.00	8,862.16	13,236.27	9,980.34	45.72	50.15	-152.04	-3,988.73	2,016.95	1,266.06	1,202.99	63.07	20.073	
11,900.00	8,862.16	13,311.44	9,978.37	46.24	50.52	-152.02	-4,063.87	2,016.67	1,263.46	1,198.90	64.57	19.568	
12,000.00	8,862.15	13,425.10	9,974.79	46.76	51.09	-151.86	-4,177.46	2,018.87	1,261.54	1,195.91	65.62	19.224	
12,085.47	8,862.15	13,475.94	9,973.57	47.22	51.35	-151.80	-4,228.27	2,019.98	1,260.47	1,193.35	67.12	18.779	
12,100.00	8,862.15	13,485.09	9,973.46	47.29	51.40	-151.78	-4,237.41	2,020.24	1,260.50	1,193.13	67.37	18.710	
12,200.00	8,862.15	13,576.01	9,973.33	47.83	51.87	-151.67	-4,328.29	2,023.20	1,261.78	1,193.04	68.74	18.356	
12,300.00	8,862.15	13,696.07	9,972.23	48.38	52.49	-151.52	-4,448.30	2,026.50	1,262.21	1,192.46	69.75	18.097	
12,364.87	8,862.15	13,755.46	9,971.17	48.73	52.81	-151.44	-4,507.65	2,028.23	1,262.03	1,191.39	70.65	17.864	
12,400.00	8,862.15	13,786.92	9,970.75	48.93	52.97	-151.39	-4,539.09	2,029.15	1,262.08	1,190.94	71.14	17.740	
12,500.00	8,862.14	13,916.43	9,967.62	49.48	53.66	-151.27	-4,668.54	2,030.87	1,260.31	1,188.27	72.04	17.494	
12,571.61	8,862.14	13,964.37	9,966.88	49.88	53.92	-151.24	-4,716.47	2,031.20	1,259.52	1,186.26	73.26	17.192	
12,600.00	8,862.14	13,983.00	9,966.84	50.04	54.02	-151.23	-4,735.11	2,031.39	1,259.58	1,185.83	73.75	17.079	
12,700.00	8,862.14	14,078.45	9,967.13	50.61	54.53	-151.20	-4,830.55	2,032.59	1,260.36	1,185.27	75.09	16.785	
12,800.00	8,862.14	14,170.00	9,967.51	51.18	55.03	-151.18	-4,922.09	2,033.53	1,261.18	1,184.69	76.49	16.489	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
12,900.00	8,862.14	14,249.01	9,968.53	51.76	55.46	-151.15	-5,001.07	2,035.00	1,263.23	1,185.17	78.05	16.184	
13,000.00	8,862.13	14,328.34	9,970.45	52.34	55.91	-151.05	-5,080.30	2,038.58	1,267.42	1,187.79	79.64	15.915	
13,100.00	8,862.13	14,471.24	9,973.49	52.92	56.72	-150.88	-5,222.99	2,044.89	1,271.63	1,191.17	80.46	15.804	
13,200.00	8,862.13	14,592.20	9,973.69	53.51	57.40	-150.94	-5,343.94	2,043.82	1,271.02	1,189.52	81.50	15.595	
13,204.06	8,862.13	14,595.07	9,973.70	53.53	57.42	-150.94	-5,346.82	2,043.80	1,271.02	1,189.45	81.57	15.582	
13,300.00	8,862.13	14,677.77	9,974.22	54.10	57.89	-150.92	-5,429.50	2,044.62	1,271.87	1,188.86	83.01	15.321	
13,400.00	8,862.12	14,779.92	9,972.18	54.70	58.48	-150.67	-5,531.48	2,050.08	1,272.64	1,188.25	84.39	15.081	
13,500.00	8,862.12	14,914.26	9,972.83	55.30	59.25	-150.72	-5,665.78	2,049.52	1,272.97	1,187.69	85.28	14.927	
13,600.00	8,862.12	15,027.90	9,972.87	55.91	59.89	-150.95	-5,779.28	2,043.69	1,270.38	1,183.99	86.39	14.705	
13,700.00	8,862.12	15,114.02	9,972.92	56.52	60.37	-151.12	-5,865.29	2,039.69	1,268.08	1,180.19	87.89	14.428	
13,800.00	8,862.12	15,211.06	9,972.99	57.13	60.93	-151.26	-5,962.28	2,036.44	1,266.45	1,177.19	89.26	14.188	
13,900.00	8,862.11	15,310.08	9,972.70	57.75	61.50	-151.37	-6,061.26	2,033.72	1,264.78	1,174.16	90.62	13.957	
13,977.66	8,862.11	15,369.26	9,972.68	58.23	61.85	-151.40	-6,120.44	2,032.96	1,264.22	1,172.30	91.91	13.754	
14,000.00	8,862.11	15,390.00	9,972.77	58.37	61.97	-151.40	-6,141.18	2,032.94	1,264.27	1,172.03	92.24	13.706	
14,100.00	8,862.11	15,485.74	9,973.28	58.99	62.54	-151.41	-6,236.92	2,033.17	1,264.75	1,171.08	93.67	13.502	
14,200.00	8,862.11	15,599.93	9,973.17	59.62	63.22	-151.43	-6,351.11	2,032.88	1,264.43	1,169.55	94.88	13.326	
14,300.00	8,862.11	15,691.85	9,972.84	60.25	63.78	-151.42	-6,443.03	2,033.07	1,264.13	1,167.75	96.38	13.117	
14,305.95	8,862.11	15,697.55	9,972.83	60.29	63.81	-151.42	-6,448.73	2,033.10	1,264.13	1,167.66	96.46	13.105	
14,400.00	8,862.10	15,789.10	9,972.88	60.88	64.37	-151.42	-6,540.28	2,033.44	1,264.26	1,166.45	97.81	12.926	
14,500.00	8,862.10	15,893.86	9,973.11	61.52	65.00	-151.43	-6,645.04	2,033.40	1,264.35	1,165.20	99.15	12.752	
14,600.00	8,862.10	15,993.98	9,973.09	62.16	65.62	-151.46	-6,745.15	2,032.74	1,263.93	1,163.38	100.55	12.570	
14,618.93	8,862.10	16,010.54	9,973.11	62.28	65.72	-151.47	-6,761.71	2,032.70	1,263.91	1,163.07	100.85	12.533	
14,700.00	8,862.10	16,086.27	9,973.38	62.80	66.18	-151.47	-6,837.44	2,032.85	1,264.16	1,162.11	102.05	12.387	
14,800.00	8,862.10	16,193.09	9,973.80	63.44	66.84	-151.49	-6,944.26	2,032.95	1,264.48	1,161.09	103.39	12.231	
14,900.00	8,862.09	16,301.60	9,973.29	64.09	67.52	-151.49	-7,052.77	2,032.83	1,263.92	1,159.22	104.70	12.072	
14,990.16	8,862.09	16,381.78	9,973.16	64.68	68.02	-151.51	-7,132.94	2,032.25	1,263.42	1,157.32	106.10	11.908	
15,000.00	8,862.09	16,389.91	9,973.20	64.74	68.07	-151.52	-7,141.07	2,032.20	1,263.43	1,157.16	106.26	11.890	
15,100.00	8,862.09	16,508.09	9,974.05	65.39	68.81	-151.61	-7,259.24	2,030.63	1,263.42	1,155.97	107.45	11.758	
15,200.00	8,862.09	16,594.74	9,974.65	66.05	69.34	-151.73	-7,345.84	2,027.94	1,262.50	1,153.46	109.03	11.579	
15,220.30	8,862.09	16,612.00	9,974.92	66.18	69.45	-151.76	-7,363.09	2,027.44	1,262.48	1,153.12	109.35	11.545	
15,300.00	8,862.09	16,681.64	9,975.81	66.70	69.89	-151.82	-7,432.72	2,026.53	1,262.81	1,152.20	110.61	11.417	
15,400.00	8,862.08	16,761.31	9,976.35	67.36	70.40	-151.77	-7,512.36	2,028.17	1,264.32	1,152.04	112.28	11.261	
15,500.00	8,862.08	16,875.27	9,977.43	68.02	71.14	-151.64	-7,626.23	2,032.39	1,266.91	1,153.32	113.59	11.153	
15,600.00	8,862.08	16,971.00	9,978.08	68.69	71.76	-151.60	-7,721.94	2,033.79	1,268.13	1,153.04	115.09	11.019	
15,700.00	8,862.08	17,052.55	9,978.39	69.35	72.29	-151.48	-7,803.42	2,037.31	1,270.45	1,153.71	116.75	10.882	
15,800.00	8,862.08	17,154.18	9,979.03	70.02	72.96	-151.26	-7,904.87	2,043.37	1,273.78	1,155.57	118.21	10.775	
15,900.00	8,862.07	17,268.78	9,979.41	70.69	73.72	-151.07	-8,019.34	2,048.62	1,276.20	1,156.65	119.55	10.675	
16,000.00	8,862.07	17,367.42	9,979.62	71.36	74.37	-150.93	-8,117.91	2,052.35	1,278.13	1,157.09	121.04	10.560	
16,100.00	8,862.07	17,487.58	9,979.74	72.03	75.16	-150.85	-8,238.04	2,054.70	1,279.03	1,156.75	122.28	10.460	
16,200.00	8,862.07	17,584.00	9,979.92	72.71	75.79	-150.84	-8,334.45	2,055.27	1,279.41	1,155.62	123.78	10.336	
16,300.00	8,862.07	17,584.00	9,979.92	73.38	75.79	-150.84	-8,334.45	2,055.27	1,283.95	1,157.85	126.11	10.181	
16,400.00	8,862.06	17,584.00	9,979.92	74.06	75.79	-150.84	-8,334.45	2,055.27	1,296.22	1,168.31	127.91	10.134	
16,500.00	8,862.06	17,584.00	9,979.92	74.74	75.79	-150.84	-8,334.45	2,055.27	1,316.00	1,186.81	129.19	10.187	
16,600.00	8,862.06	17,584.00	9,979.92	75.42	75.79	-150.84	-8,334.45	2,055.27	1,342.95	1,213.00	129.94	10.335	
16,700.00	8,862.06	17,584.00	9,979.92	76.10	75.79	-150.84	-8,334.45	2,055.27	1,376.65	1,246.42	130.23	10.571	
16,800.00	8,862.06	17,584.00	9,979.92	76.79	75.79	-150.84	-8,334.45	2,055.27	1,416.62	1,286.51	130.11	10.888	
16,900.00	8,862.05	17,584.00	9,979.92	77.47	75.79	-150.84	-8,334.45	2,055.27	1,462.36	1,332.70	129.65	11.279	
17,000.00	8,862.05	17,584.00	9,979.92	78.16	75.79	-150.84	-8,334.45	2,055.27	1,513.32	1,384.40	128.92	11.739	
17,100.00	8,862.05	17,584.00	9,979.92	78.85	75.79	-150.84	-8,334.45	2,055.27	1,569.01	1,441.03	127.98	12.260	
17,200.00	8,862.05	17,584.00	9,979.92	79.54	75.79	-150.84	-8,334.45	2,055.27	1,628.94	1,502.05	126.89	12.837	
17,300.00	8,862.05	17,584.00	9,979.92	80.23	75.79	-150.84	-8,334.45	2,055.27	1,692.66	1,566.96	125.70	13.466	
17,400.00	8,862.04	17,584.00	9,979.92	80.92	75.79	-150.84	-8,334.45	2,055.27	1,759.76	1,635.31	124.45	14.140	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
17,500.00	8,862.04	17,584.00	9,979.92	81.62	75.79	-150.84	-8,334.45	2,055.27	1,829.87	1,706.69	123.18	14.856	
17,600.00	8,862.04	17,584.00	9,979.92	82.31	75.79	-150.84	-8,334.45	2,055.27	1,902.65	1,780.75	121.90	15.608	
17,700.00	8,862.04	17,584.00	9,979.92	83.01	75.79	-150.84	-8,334.45	2,055.27	1,977.81	1,857.18	120.64	16.395	
17,800.00	8,862.04	17,584.00	9,979.92	83.71	75.79	-150.84	-8,334.45	2,055.27	2,055.09	1,935.69	119.40	17.211	
17,900.00	8,862.03	17,584.00	9,979.92	84.41	75.79	-150.84	-8,334.45	2,055.27	2,134.26	2,016.05	118.21	18.055	
18,000.00	8,862.03	17,584.00	9,979.92	85.11	75.79	-150.84	-8,334.45	2,055.27	2,215.11	2,098.05	117.06	18.923	
18,100.00	8,862.03	17,584.00	9,979.92	85.81	75.79	-150.84	-8,334.45	2,055.27	2,297.47	2,181.51	115.96	19.813	
18,200.00	8,862.03	17,584.00	9,979.92	86.51	75.79	-150.84	-8,334.45	2,055.27	2,381.18	2,266.28	114.91	20.723	
18,300.00	8,862.03	17,584.00	9,979.92	87.21	75.79	-150.84	-8,334.45	2,055.27	2,466.11	2,352.20	113.91	21.650	
18,400.00	8,862.02	17,584.00	9,979.92	87.92	75.79	-150.84	-8,334.45	2,055.27	2,552.13	2,439.17	112.96	22.594	
18,500.00	8,862.02	17,584.00	9,979.92	88.62	75.79	-150.84	-8,334.45	2,055.27	2,639.13	2,527.07	112.06	23.551	
18,600.00	8,862.02	17,584.00	9,979.92	89.33	75.79	-150.84	-8,334.45	2,055.27	2,727.02	2,615.82	111.21	24.522	
18,700.00	8,862.02	17,584.00	9,979.92	90.03	75.79	-150.84	-8,334.45	2,055.27	2,815.73	2,705.32	110.40	25.504	
18,800.00	8,862.02	17,584.00	9,979.92	90.74	75.79	-150.84	-8,334.45	2,055.27	2,905.16	2,795.52	109.64	26.496	
18,900.00	8,862.01	17,584.00	9,979.92	91.45	75.79	-150.84	-8,334.45	2,055.27	2,995.27	2,886.34	108.93	27.498	
19,000.00	8,862.01	17,584.00	9,979.92	92.16	75.79	-150.84	-8,334.45	2,055.27	3,085.98	2,977.73	108.25	28.508	
19,100.00	8,862.01	17,584.00	9,979.92	92.87	75.79	-150.84	-8,334.45	2,055.27	3,177.25	3,069.64	107.61	29.525	
19,200.00	8,862.01	17,584.00	9,979.92	93.58	75.79	-150.84	-8,334.45	2,055.27	3,269.04	3,162.03	107.01	30.549	
19,300.00	8,862.01	17,584.00	9,979.92	94.30	75.79	-150.84	-8,334.45	2,055.27	3,361.29	3,254.85	106.44	31.579	
19,400.00	8,862.00	17,584.00	9,979.92	95.01	75.79	-150.84	-8,334.45	2,055.27	3,453.97	3,348.07	105.90	32.614	
19,500.00	8,862.00	17,584.00	9,979.92	95.72	75.79	-150.84	-8,334.45	2,055.27	3,547.05	3,441.65	105.40	33.654	
19,547.53	8,862.00	17,584.00	9,979.92	96.06	75.79	-150.84	-8,334.45	2,055.27	3,591.42	3,486.25	105.17	34.150	
19,548.26	8,862.00	17,584.00	9,979.92	96.14	75.79	-150.84	-8,334.45	2,055.27	3,592.10	3,482.76	109.35	32.851	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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	0.00	0.00	0.50	70.54	56.92	161.08	170.84				
100.00	100.00	98.83	98.83	0.28	0.52	70.53	57.11	161.55	171.36	170.56	0.80	213.886	
200.00	200.00	197.05	197.04	0.63	0.59	70.50	57.70	162.96	172.91	171.68	1.23	141.053	
300.00	300.00	297.47	297.43	0.99	0.83	70.22	59.16	164.52	174.86	173.04	1.83	95.761	
400.00	400.00	397.70	397.63	1.35	1.14	69.59	61.58	165.49	176.60	174.11	2.49	70.924	
500.00	500.00	497.50	497.39	1.71	1.47	68.86	64.28	166.25	178.27	175.10	3.18	56.119	
600.00	600.00	597.70	597.53	2.07	1.81	68.08	67.31	167.25	180.31	176.43	3.88	46.527	
700.00	700.00	700.54	700.32	2.43	2.16	67.05	70.53	166.58	180.89	176.30	4.59	39.443	
800.00	800.00	800.55	800.27	2.79	2.51	65.93	73.90	165.40	181.16	175.87	5.29	34.244	
900.00	900.00	901.01	900.68	3.14	2.86	64.95	76.70	164.14	181.18	175.18	6.00	30.205	
1,000.00	1,000.00	1,002.53	1,002.17	3.50	3.21	64.21	78.69	162.85	180.87	174.16	6.71	26.958	
1,100.00	1,099.98	1,104.72	1,104.35	3.84	3.56	-96.82	79.26	160.87	179.57	172.17	7.40	24.271	
1,200.00	1,199.84	1,205.46	1,205.05	4.17	3.90	-98.73	78.67	158.41	177.84	169.77	8.07	22.046	
1,300.00	1,299.45	1,305.99	1,305.54	4.51	4.25	-101.82	77.98	155.52	176.56	167.82	8.74	20.199	
1,350.00	1,349.13	1,355.79	1,355.31	4.68	4.42	-103.77	77.54	153.93	176.23	167.15	9.08	19.409	
1,400.00	1,398.73	1,405.37	1,404.86	4.85	4.59	-99.55	77.10	152.34	175.92	166.50	9.42	18.675	
1,500.00	1,497.69	1,504.18	1,503.62	5.19	4.93	-94.51	76.12	149.20	174.45	164.34	10.11	17.262	
1,600.00	1,596.25	1,600.00	1,599.41	5.54	5.26	-92.95	75.31	147.06	173.24	162.45	10.79	16.056	
1,645.11	1,640.54	1,643.61	1,643.01	5.69	5.42	-93.18	75.05	146.56	173.14	162.04	11.10	15.597	
1,670.62	1,665.55	1,668.35	1,667.76	5.78	5.50	-93.53	74.91	146.33	173.18	161.90	11.28	15.357	
1,700.00	1,694.31	1,696.85	1,696.25	5.89	5.60	-95.47	74.78	146.11	173.41	161.93	11.48	15.105	
1,800.00	1,792.23	1,794.23	1,793.63	6.24	5.94	-102.13	74.67	145.14	175.92	163.74	12.18	14.444	
1,900.00	1,890.14	1,891.13	1,890.52	6.61	6.28	-108.59	75.03	144.05	181.25	168.37	12.88	14.070	
2,000.00	1,988.06	1,988.39	1,987.77	6.97	6.62	-114.20	75.27	144.46	189.18	175.61	13.58	13.932	
2,100.00	2,085.97	2,087.21	2,086.52	7.34	6.95	-118.46	74.57	148.09	198.65	184.37	14.28	13.915	
2,200.00	2,183.89	2,186.31	2,185.51	7.70	7.29	-122.05	73.50	152.72	208.90	193.93	14.98	13.948	
2,300.00	2,281.80	2,287.30	2,286.38	8.07	7.63	-125.43	71.70	157.08	219.18	203.49	15.69	13.972	
2,400.00	2,379.72	2,388.45	2,387.37	8.45	7.98	-128.32	68.80	162.08	229.08	212.68	16.40	13.970	
2,500.00	2,477.64	2,487.56	2,486.24	8.82	8.32	-130.70	65.08	167.84	238.64	221.53	17.10	13.952	
2,600.00	2,575.55	2,580.47	2,579.08	9.19	8.64	-133.43	62.74	170.32	249.87	232.09	17.79	14.048	
2,700.00	2,673.47	2,677.85	2,676.45	9.57	8.98	-136.79	61.65	169.43	263.36	244.87	18.49	14.245	
2,800.00	2,771.38	2,789.51	2,788.04	9.95	9.36	-140.44	59.20	167.60	276.93	257.68	19.25	14.387	
2,900.00	2,869.30	2,912.28	2,910.10	10.32	9.79	-143.69	46.40	169.41	282.41	262.44	19.97	14.144	
3,000.00	2,967.21	3,030.44	3,026.35	10.70	10.19	-146.09	26.49	175.96	281.33	260.73	20.60	13.656	
3,100.00	3,065.13	3,136.99	3,129.86	11.08	10.56	-146.90	5.33	189.59	275.75	254.48	21.27	12.965	
3,200.00	3,163.05	3,234.96	3,224.53	11.46	10.90	-146.76	-13.53	206.34	269.66	247.66	22.01	12.254	
3,300.00	3,260.96	3,332.33	3,318.72	11.84	11.24	-146.54	-31.49	223.22	264.33	241.57	22.75	11.618	
3,400.00	3,358.88	3,429.03	3,412.57	12.22	11.59	-146.40	-48.32	239.33	260.18	236.68	23.50	11.069	
3,500.00	3,456.79	3,523.80	3,504.84	12.60	11.92	-146.35	-63.83	254.42	257.29	233.02	24.27	10.602	
3,542.43	3,498.33	3,562.20	3,542.42	12.76	12.06	-146.43	-69.44	259.93	256.96	232.36	24.60	10.446	
3,600.00	3,554.71	3,617.64	3,596.87	12.98	12.26	-146.65	-76.87	267.26	257.35	232.32	25.03	10.282	
3,700.00	3,652.62	3,718.24	3,695.67	13.36	12.62	-147.02	-90.32	280.63	258.08	232.32	25.76	10.018	
3,800.00	3,750.54	3,818.34	3,793.95	13.75	12.99	-147.43	-103.95	293.82	258.60	232.10	26.50	9.759	
3,900.00	3,848.45	3,917.59	3,891.43	14.13	13.35	-147.82	-117.29	306.90	259.31	232.07	27.24	9.520	
4,000.00	3,946.37	4,016.13	3,988.22	14.51	13.71	-148.09	-130.04	320.26	260.41	232.43	27.98	9.306	
4,100.00	4,044.29	4,113.62	4,084.11	14.89	14.06	-148.38	-141.98	333.20	262.28	233.55	28.73	9.129	
4,200.00	4,142.20	4,216.44	4,185.39	15.28	14.44	-148.92	-154.54	345.72	264.51	235.05	29.47	8.977	
4,300.00	4,240.12	4,318.21	4,285.51	15.66	14.81	-149.79	-168.84	356.98	265.32	235.12	30.20	8.785	
4,400.00	4,338.03	4,416.05	4,381.83	16.05	15.17	-150.73	-182.62	367.28	266.34	235.39	30.95	8.605	
4,500.00	4,435.95	4,521.94	4,485.96	16.43	15.56	-151.59	-197.70	379.23	267.03	235.36	31.67	8.431	
4,600.00	4,533.86	4,625.68	4,587.43	16.81	15.94	-152.03	-213.90	393.43	265.61	233.21	32.40	8.197	
4,700.00	4,631.78	4,724.80	4,684.26	17.20	16.31	-152.33	-229.58	407.66	263.77	230.61	33.16	7.955	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
4,800.00	4,729.69	4,825.54	4,782.56	17.58	16.69	-152.40	-245.21	423.16	261.86	227.95	33.90	7.724	
4,900.00	4,827.61	4,924.50	4,879.08	17.97	17.06	-152.33	-260.30	438.95	259.99	225.33	34.66	7.501	
5,000.00	4,925.53	5,021.33	4,973.70	18.35	17.42	-152.34	-274.55	453.86	258.84	223.41	35.43	7.305	
5,017.55	4,942.71	5,037.85	4,989.87	18.42	17.48	-152.36	-276.86	456.28	258.81	223.24	35.57	7.276	
5,100.00	5,023.44	5,118.62	5,069.14	18.74	17.78	-152.54	-287.61	467.46	259.41	223.22	36.19	7.167	
5,200.00	5,121.36	5,220.53	5,168.95	19.12	18.17	-152.70	-301.92	482.19	259.23	222.29	36.94	7.018	
5,204.59	5,125.85	5,224.91	5,173.25	19.14	18.18	-152.71	-302.53	482.82	259.23	222.25	36.98	7.011	
5,300.00	5,219.27	5,317.88	5,264.49	19.51	18.53	-152.97	-315.01	495.54	259.89	222.19	37.70	6.893	
5,400.00	5,317.19	5,421.87	5,366.56	19.89	18.92	-153.36	-329.33	509.32	260.44	222.00	38.44	6.775	
5,500.00	5,415.10	5,523.35	5,465.72	20.28	19.30	-153.51	-344.73	524.47	259.03	219.84	39.19	6.610	
5,566.85	5,480.56	5,587.22	5,528.20	20.53	19.54	-153.57	-353.92	533.98	258.59	218.88	39.71	6.512	
5,600.00	5,513.02	5,618.36	5,558.73	20.66	19.66	-153.63	-358.15	538.41	258.72	218.75	39.96	6.474	
5,700.00	5,610.93	5,720.64	5,659.15	21.05	20.04	-153.87	-371.60	552.43	259.70	218.99	40.71	6.379	
5,800.00	5,708.85	5,824.90	5,761.08	21.43	20.44	-154.04	-387.16	567.83	258.57	217.13	41.45	6.239	
5,900.00	5,806.77	5,923.25	5,857.18	21.82	20.81	-154.30	-402.44	582.17	256.97	214.76	42.21	6.087	
6,000.00	5,904.68	6,021.15	5,953.01	22.21	21.18	-154.56	-416.83	596.07	256.30	213.32	42.98	5.963	
6,035.54	5,939.48	6,055.96	5,987.09	22.34	21.31	-154.58	-421.67	601.23	256.25	212.99	43.25	5.924	
6,100.00	6,002.60	6,119.02	6,048.89	22.59	21.55	-154.63	-430.18	610.49	256.42	212.67	43.75	5.861	
6,200.00	6,100.51	6,214.79	6,142.93	22.98	21.91	-154.76	-442.32	623.88	257.74	213.23	44.51	5.790	
6,300.00	6,198.43	6,314.54	6,241.09	23.36	22.29	-155.02	-454.29	636.96	260.05	214.78	45.27	5.745	
6,400.00	6,296.34	6,420.64	6,345.28	23.75	22.69	-155.36	-468.43	651.14	261.00	214.99	46.01	5.673	
6,403.02	6,299.30	6,423.51	6,348.09	23.76	22.70	-155.37	-468.84	651.53	261.00	214.97	46.03	5.670	
6,500.00	6,394.26	6,515.60	6,438.54	24.14	23.05	-155.72	-481.22	663.61	261.93	215.15	46.78	5.599	
6,600.00	6,492.17	6,611.94	6,533.34	24.52	23.41	-155.82	-492.30	676.71	264.52	216.98	47.54	5.564	
6,700.00	6,590.09	6,710.58	6,630.64	24.91	23.78	-156.08	-502.90	689.02	268.26	219.96	48.29	5.555	
6,800.00	6,688.01	6,819.84	6,738.24	25.29	24.19	-156.72	-516.87	701.81	270.47	221.43	49.04	5.515	
6,900.00	6,785.92	6,928.72	6,844.65	25.68	24.61	-157.31	-534.58	716.43	268.70	218.95	49.75	5.401	
7,000.00	6,883.84	7,022.47	6,936.00	26.07	24.96	-157.48	-549.96	730.89	266.04	215.49	50.55	5.263	
7,011.23	6,894.84	7,032.02	6,945.35	26.11	25.00	-157.50	-551.33	732.26	266.01	215.36	50.65	5.252	
7,100.00	6,981.75	7,117.96	7,029.83	26.45	25.33	-157.74	-562.26	743.63	267.43	216.10	51.33	5.210	
7,200.00	7,079.67	7,236.30	7,145.32	26.84	25.78	-157.97	-580.80	761.40	265.68	213.73	51.95	5.114	
7,300.00	7,177.58	7,341.26	7,246.30	27.23	26.19	-157.89	-601.88	780.75	258.17	205.53	52.64	4.904	
7,400.00	7,275.50	7,432.41	7,334.15	27.61	26.55	-157.56	-618.80	798.19	251.82	198.28	53.54	4.704	
7,500.00	7,373.41	7,528.26	7,427.19	28.00	26.92	-157.14	-633.91	815.57	248.48	194.14	54.35	4.572	
7,600.00	7,471.33	7,624.16	7,520.49	28.39	27.29	-156.57	-647.61	833.01	246.52	191.38	55.14	4.471	
7,637.02	7,507.58	7,658.52	7,554.02	28.53	27.42	-156.39	-652.17	838.96	246.28	190.84	55.44	4.442	
7,700.00	7,569.25	7,715.66	7,610.04	28.77	27.64	-156.26	-659.12	847.79	247.03	191.10	55.93	4.417	
7,764.22	7,632.13	7,777.67	7,671.09	29.02	27.87	-156.28	-665.91	856.32	248.97	192.55	56.42	4.413	
7,800.00	7,667.21	7,813.04	7,705.90	29.16	28.01	-156.23	-669.61	861.32	249.95	193.27	56.69	4.409	
7,900.00	7,765.68	7,915.49	7,806.76	29.54	28.39	-156.00	-680.88	875.31	250.23	192.79	57.44	4.356	
8,000.00	7,864.70	8,014.27	7,904.11	29.91	28.76	-155.99	-693.10	886.75	246.92	188.74	58.18	4.244	
8,100.00	7,964.15	8,112.64	8,001.20	30.28	29.13	-155.80	-704.98	897.18	241.10	182.19	58.91	4.092	
8,200.00	8,063.90	8,223.66	8,110.22	30.63	29.56	-154.82	-720.45	911.21	229.55	169.94	59.60	3.851	
8,300.00	8,163.83	8,323.30	8,207.38	30.98	29.94	-152.79	-736.19	926.78	212.12	151.81	60.31	3.517	
8,350.17	8,214.00	8,369.82	8,252.79	31.14	30.12	-19.37	-743.20	933.99	202.69	142.01	60.68	3.340	
8,400.00	8,263.77	8,417.21	8,299.19	31.31	30.30	-165.79	-749.92	940.95	195.68	134.63	61.05	3.205	
8,450.00	8,313.33	8,465.93	8,346.93	31.49	30.49	-164.95	-756.54	947.99	193.24	131.81	61.43	3.146	
8,451.90	8,315.20	8,467.79	8,348.76	31.50	30.50	-164.92	-756.79	948.26	193.23	131.79	61.44	3.145	ES, SF
8,500.00	8,362.13	8,514.89	8,394.97	31.69	30.68	-164.32	-762.96	954.96	195.31	133.50	61.81	3.160	
8,550.00	8,409.80	8,563.60	8,442.82	31.89	30.86	-163.99	-769.21	961.61	201.79	139.59	62.20	3.244	
8,600.00	8,455.99	8,611.18	8,489.62	32.09	31.04	-163.95	-775.20	967.74	212.64	150.05	62.59	3.397	
8,650.00	8,500.33	8,657.29	8,535.06	32.31	31.22	-164.19	-780.88	973.09	227.86	164.89	62.97	3.618	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
8,700.00	8,542.50	8,700.13	8,577.38	32.53	31.38	-164.59	-786.00	977.46	247.45	184.12	63.34	3.907	
8,750.00	8,582.16	8,739.64	8,616.50	32.75	31.52	-165.04	-790.33	980.79	271.58	207.90	63.67	4.265	
8,800.00	8,619.02	8,776.40	8,653.00	32.97	31.66	-165.46	-794.01	983.28	300.02	236.04	63.98	4.690	
8,850.00	8,652.80	8,810.73	8,687.12	33.19	31.78	-165.73	-797.12	985.34	332.39	268.14	64.25	5.173	
8,900.00	8,683.24	8,841.69	8,717.92	33.42	31.90	-165.73	-799.64	987.08	368.31	303.81	64.50	5.710	
8,950.00	8,710.11	8,871.86	8,747.97	33.64	32.01	-165.55	-801.88	988.69	407.38	342.63	64.75	6.292	
9,000.00	8,733.20	8,908.34	8,784.25	33.86	32.14	-165.45	-804.91	991.00	448.68	383.62	65.07	6.896	
9,050.00	8,752.35	8,942.20	8,817.84	34.08	32.27	-164.98	-808.24	993.65	491.78	426.45	65.34	7.527	
9,100.00	8,767.39	8,973.04	8,848.36	34.29	32.38	-164.02	-811.69	996.48	536.52	470.95	65.57	8.183	
9,100.17	8,767.43	8,973.14	8,848.46	34.29	32.38	-164.02	-811.71	996.49	536.67	471.10	65.57	8.185	
9,200.00	8,791.66	9,011.40	8,886.28	34.71	32.52	-176.36	-816.05	1,000.24	628.71	562.84	65.87	9.545	
9,300.00	8,812.57	9,050.91	8,925.29	35.13	32.67	171.27	-820.67	1,004.46	722.13	655.97	66.16	10.915	
9,400.00	8,829.97	9,086.79	8,960.68	35.54	32.81	159.14	-824.96	1,008.54	816.24	749.83	66.42	12.290	
9,500.00	8,843.72	9,118.93	8,992.35	35.95	32.93	147.44	-828.88	1,012.37	910.66	844.02	66.64	13.665	
9,600.00	8,853.72	9,146.84	9,019.83	36.33	33.03	136.42	-832.34	1,015.82	1,005.04	938.21	66.83	15.038	
9,700.00	8,859.89	9,176.74	9,049.23	36.70	33.15	127.20	-836.17	1,019.71	1,099.03	1,032.01	67.02	16.398	
9,800.00	8,862.18	9,201.49	9,073.52	37.05	33.24	119.01	-839.49	1,023.12	1,192.32	1,125.15	67.17	17.751	
9,809.00	8,862.20	11,011.16	10,013.74	37.08	38.74	-164.56	-1,825.81	1,737.59	1,200.69	1,159.44	41.25	29.110	
9,900.00	8,862.20	11,137.07	10,015.74	37.39	39.12	-163.12	-1,947.39	1,769.98	1,208.69	1,166.90	41.79	28.923	
10,000.00	8,862.19	11,274.43	10,018.27	37.74	39.53	-162.16	-2,082.91	1,792.07	1,215.32	1,172.99	42.33	28.713	
10,100.00	8,862.19	11,352.91	10,019.36	38.10	39.77	-161.62	-2,160.36	1,804.61	1,221.52	1,178.03	43.49	28.088	
10,200.00	8,862.19	11,452.63	10,020.68	38.48	40.09	-160.89	-2,258.59	1,821.80	1,228.34	1,183.82	44.52	27.592	
10,300.00	8,862.19	11,548.79	10,021.84	38.86	40.42	-160.16	-2,353.20	1,838.88	1,235.43	1,189.80	45.63	27.076	
10,400.00	8,862.19	11,649.07	10,023.33	39.25	40.77	-159.45	-2,451.98	1,856.13	1,242.79	1,196.06	46.73	26.596	
10,500.00	8,862.18	11,754.08	10,024.67	39.66	41.15	-158.73	-2,555.55	1,873.44	1,249.88	1,202.06	47.82	26.139	
10,600.00	8,862.18	11,849.88	10,025.74	40.07	41.50	-158.08	-2,650.02	1,889.28	1,257.02	1,208.01	49.01	25.648	
10,700.00	8,862.18	11,955.38	10,027.30	40.49	41.90	-157.39	-2,754.07	1,906.60	1,264.63	1,214.47	50.16	25.213	
10,800.00	8,862.18	12,068.42	10,028.74	40.93	42.34	-156.81	-2,866.16	1,921.20	1,270.76	1,219.55	51.21	24.812	
10,900.00	8,862.18	12,187.39	10,030.55	41.37	42.81	-156.33	-2,984.43	1,933.88	1,276.39	1,224.17	52.22	24.443	
11,000.00	8,862.17	12,326.58	10,030.77	41.82	43.36	-155.98	-3,123.31	1,942.69	1,278.87	1,225.81	53.06	24.103	
11,100.00	8,862.17	12,426.94	10,030.77	42.28	43.75	-155.82	-3,223.58	1,946.93	1,280.51	1,226.36	54.15	23.647	
11,200.00	8,862.17	12,545.54	10,030.71	42.75	44.23	-155.70	-3,342.14	1,950.02	1,281.49	1,226.37	55.12	23.247	
11,300.00	8,862.17	12,658.86	10,030.18	43.22	44.69	-155.71	-3,455.46	1,949.81	1,280.91	1,224.79	56.11	22.827	
11,400.00	8,862.17	12,749.72	10,029.72	43.71	45.07	-155.72	-3,546.31	1,949.50	1,280.23	1,222.96	57.27	22.355	
11,500.00	8,862.16	12,855.11	10,029.39	44.20	45.51	-155.72	-3,651.71	1,949.40	1,279.84	1,221.49	58.35	21.933	
11,600.00	8,862.16	12,950.00	10,029.00	44.70	45.92	-155.73	-3,746.59	1,949.34	1,279.36	1,219.84	59.52	21.493	
11,700.00	8,862.16	13,048.85	10,028.76	45.20	46.36	-155.72	-3,845.45	1,949.54	1,279.15	1,218.46	60.69	21.076	
11,800.00	8,862.16	13,156.53	10,028.38	45.72	46.84	-155.73	-3,953.12	1,949.22	1,278.62	1,216.80	61.82	20.683	
11,900.00	8,862.16	13,256.98	10,027.97	46.24	47.30	-155.78	-4,053.57	1,948.12	1,277.73	1,214.74	63.00	20.282	
12,000.00	8,862.15	13,352.20	10,027.71	46.76	47.74	-155.81	-4,148.78	1,947.46	1,277.12	1,212.90	64.22	19.885	
12,100.00	8,862.15	13,450.79	10,027.31	47.29	48.20	-155.80	-4,247.37	1,947.58	1,276.73	1,211.27	65.46	19.504	
12,200.00	8,862.15	13,554.23	10,026.86	47.83	48.70	-155.79	-4,350.81	1,947.82	1,276.35	1,209.67	66.68	19.141	
12,300.00	8,862.15	13,662.97	10,025.76	48.38	49.22	-155.78	-4,459.54	1,947.85	1,275.36	1,207.47	67.89	18.785	
12,400.00	8,862.15	13,760.48	10,024.72	48.93	49.70	-155.80	-4,557.04	1,947.13	1,274.02	1,204.85	69.16	18.420	
12,500.00	8,862.14	13,854.97	10,024.26	49.48	50.17	-155.83	-4,651.53	1,946.36	1,273.16	1,202.70	70.46	18.069	
12,600.00	8,862.14	13,953.64	10,023.64	50.04	50.67	-155.82	-4,750.20	1,946.51	1,272.58	1,200.82	71.76	17.734	
12,662.97	8,862.14	14,009.35	10,023.35	50.40	50.96	-155.81	-4,805.91	1,946.66	1,272.32	1,199.70	72.62	17.521	
12,700.00	8,862.14	14,038.58	10,023.44	50.61	51.11	-155.81	-4,835.13	1,946.74	1,272.43	1,199.29	73.14	17.398	
12,800.00	8,862.14	14,155.49	10,024.56	51.18	51.71	-155.87	-4,952.04	1,946.10	1,273.11	1,198.76	74.35	17.124	
12,900.00	8,862.14	14,282.80	10,023.70	51.76	52.36	-156.08	-5,079.23	1,940.79	1,270.55	1,195.08	75.48	16.834	
13,000.00	8,862.13	14,358.00	10,023.93	52.34	52.75	-156.19	-5,154.38	1,938.43	1,269.29	1,192.39	76.90	16.506	
13,010.82	8,862.13	14,358.00	10,023.93	52.40	52.75	-156.19	-5,154.38	1,938.43	1,269.24	1,192.15	77.09	16.464	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
13,100.00	8,862.13	14,424.76	10,024.98	52.92	53.11	-156.22	-5,221.13	1,938.21	1,270.25	1,191.86	78.38	16.205	
13,200.00	8,862.13	14,520.89	10,026.64	53.51	53.63	-156.21	-5,317.24	1,939.44	1,272.26	1,192.51	79.75	15.953	
13,300.00	8,862.13	14,627.99	10,028.22	54.10	54.22	-156.19	-5,424.31	1,940.80	1,274.06	1,192.98	81.08	15.714	
13,400.00	8,862.12	14,724.62	10,029.62	54.70	54.75	-156.19	-5,520.93	1,941.50	1,275.60	1,193.15	82.45	15.471	
13,500.00	8,862.12	14,824.33	10,031.37	55.30	55.31	-156.21	-5,620.62	1,942.04	1,277.36	1,193.54	83.82	15.240	
13,600.00	8,862.12	14,942.81	10,031.90	55.91	55.98	-156.16	-5,739.09	1,943.67	1,278.22	1,193.10	85.13	15.016	
13,700.00	8,862.12	15,042.95	10,031.75	56.52	56.55	-156.10	-5,839.22	1,945.21	1,278.63	1,192.11	86.52	14.779	
13,800.00	8,862.12	15,147.01	10,031.23	57.13	57.14	-156.05	-5,943.27	1,946.43	1,278.57	1,190.67	87.90	14.546	
13,804.10	8,862.12	15,150.78	10,031.22	57.16	57.16	-156.05	-5,947.04	1,946.46	1,278.57	1,190.61	87.96	14.536	
13,900.00	8,862.11	15,242.73	10,031.21	57.75	57.69	-156.03	-6,038.99	1,947.22	1,278.80	1,189.49	89.32	14.318	
14,000.00	8,862.11	15,342.92	10,031.16	58.37	58.28	-156.00	-6,139.17	1,948.16	1,279.07	1,188.35	90.72	14.099	
14,100.00	8,862.11	15,441.05	10,030.98	58.99	58.85	-155.94	-6,237.30	1,949.63	1,279.44	1,187.29	92.14	13.885	
14,200.00	8,862.11	15,543.97	10,030.75	59.62	59.46	-155.87	-6,340.20	1,951.37	1,279.85	1,186.30	93.55	13.681	
14,300.00	8,862.11	15,646.91	10,030.17	60.25	60.07	-155.80	-6,443.12	1,952.98	1,279.90	1,184.93	94.97	13.477	
14,330.78	8,862.11	15,677.45	10,029.99	60.45	60.26	-155.79	-6,473.66	1,953.40	1,279.89	1,184.48	95.41	13.415	
14,400.00	8,862.10	15,740.05	10,029.76	60.88	60.63	-155.74	-6,536.25	1,954.43	1,280.07	1,183.65	96.42	13.276	
14,500.00	8,862.10	15,849.07	10,029.61	61.52	61.29	-155.69	-6,645.26	1,955.92	1,280.45	1,182.63	97.82	13.090	
14,578.66	8,862.10	15,925.40	10,029.45	62.02	61.75	-155.68	-6,721.59	1,956.11	1,280.33	1,181.38	98.95	12.939	
14,600.00	8,862.10	15,945.54	10,029.41	62.16	61.87	-155.68	-6,741.73	1,956.25	1,280.34	1,181.08	99.26	12.899	
14,700.00	8,862.10	16,048.57	10,029.13	62.80	62.49	-155.65	-6,844.75	1,957.07	1,280.34	1,179.66	100.68	12.717	
14,756.63	8,862.10	16,103.37	10,028.99	63.16	62.83	-155.64	-6,899.55	1,957.38	1,280.30	1,178.80	101.50	12.613	
14,800.00	8,862.10	16,145.41	10,028.98	63.44	63.09	-155.63	-6,941.59	1,957.54	1,280.32	1,178.19	102.13	12.536	
14,900.00	8,862.09	16,248.11	10,029.03	64.09	63.71	-155.63	-7,044.29	1,957.91	1,280.44	1,176.88	103.56	12.365	
15,000.00	8,862.09	16,367.59	10,028.42	64.74	64.45	-155.70	-7,163.75	1,955.98	1,279.17	1,174.27	104.91	12.194	
15,100.00	8,862.09	16,463.76	10,028.15	65.39	65.03	-155.81	-7,259.88	1,953.42	1,277.75	1,171.40	106.35	12.015	
15,200.00	8,862.09	16,559.88	10,027.83	66.05	65.63	-155.90	-7,355.98	1,951.39	1,276.50	1,168.71	107.80	11.842	
15,300.00	8,862.09	16,654.00	10,027.70	66.70	66.21	-155.95	-7,450.09	1,950.12	1,275.75	1,166.49	109.26	11.676	
15,400.00	8,862.08	16,755.76	10,027.42	67.36	66.85	-155.98	-7,551.85	1,949.63	1,275.24	1,164.53	110.70	11.520	
15,500.00	8,862.08	16,855.76	10,026.91	68.02	67.48	-156.00	-7,651.85	1,948.95	1,274.41	1,162.26	112.15	11.363	
15,600.00	8,862.08	16,952.84	10,026.57	68.69	68.09	-156.02	-7,748.93	1,948.57	1,273.86	1,160.24	113.62	11.211	
15,700.00	8,862.08	17,051.89	10,026.34	69.35	68.72	-156.04	-7,847.97	1,948.22	1,273.44	1,158.35	115.08	11.065	
15,793.22	8,862.08	17,140.07	10,026.23	69.97	69.28	-156.05	-7,936.16	1,948.09	1,273.20	1,156.74	116.47	10.932	
15,800.00	8,862.08	17,146.35	10,026.22	70.02	69.32	-156.05	-7,942.43	1,948.12	1,273.20	1,156.64	116.57	10.923	
15,900.00	8,862.07	17,247.30	10,026.22	70.69	69.97	-156.04	-8,043.39	1,948.57	1,273.31	1,155.28	118.03	10.788	
16,000.00	8,862.07	17,353.68	10,026.07	71.36	70.65	-156.05	-8,149.76	1,948.38	1,273.04	1,153.56	119.48	10.655	
16,100.00	8,862.07	17,457.00	10,025.11	72.03	71.32	-156.04	-8,253.08	1,948.30	1,272.07	1,151.13	120.94	10.518	
16,200.00	8,862.07	17,551.00	10,024.59	72.71	71.93	-156.04	-8,347.08	1,948.29	1,271.49	1,149.06	122.43	10.385	
16,204.40	8,862.07	17,551.00	10,024.59	72.73	71.93	-156.04	-8,347.08	1,948.29	1,271.48	1,148.97	122.51	10.378	
16,300.00	8,862.07	17,623.90	10,025.18	73.38	72.40	-156.03	-8,419.97	1,948.95	1,272.44	1,148.46	123.98	10.263	
16,400.00	8,862.06	17,722.30	10,026.85	74.06	73.05	-156.01	-8,518.34	1,950.40	1,274.52	1,149.05	125.47	10.158	
16,500.00	8,862.06	17,839.48	10,027.90	74.74	73.82	-155.97	-8,635.50	1,952.06	1,275.84	1,148.93	126.92	10.053	
16,600.00	8,862.06	17,942.29	10,028.26	75.42	74.50	-155.95	-8,738.31	1,952.93	1,276.44	1,148.04	128.39	9.942	
16,700.00	8,862.06	18,055.29	10,027.90	76.10	75.24	-155.94	-8,851.31	1,953.11	1,276.12	1,146.28	129.84	9.828	
16,800.00	8,862.06	18,154.73	10,027.32	76.79	75.90	-155.94	-8,950.74	1,952.98	1,275.47	1,144.14	131.33	9.712	
16,900.00	8,862.05	18,252.78	10,026.94	77.47	76.55	-155.96	-9,048.80	1,952.71	1,274.92	1,142.10	132.82	9.599	
16,955.57	8,862.05	18,303.00	10,026.55	77.86	76.88	-155.93	-9,099.01	1,953.16	1,274.70	1,141.04	133.66	9.537	
17,000.00	8,862.05	18,332.76	10,026.40	78.16	77.08	-155.91	-9,128.77	1,953.83	1,274.89	1,140.53	134.37	9.488	
17,100.00	8,862.05	18,397.00	10,026.96	78.85	77.51	-155.79	-9,192.92	1,956.94	1,277.53	1,141.62	135.91	9.400	
17,200.00	8,862.05	18,533.87	10,027.92	79.54	78.44	-155.58	-9,329.64	1,962.95	1,279.86	1,142.47	137.39	9.316	
17,300.00	8,862.05	18,651.31	10,028.07	80.23	79.23	-155.55	-9,447.08	1,963.95	1,280.26	1,141.42	138.84	9.221	
17,400.00	8,862.04	18,749.99	10,027.48	80.92	79.89	-155.53	-9,545.76	1,964.34	1,279.81	1,139.47	140.34	9.119	
17,500.00	8,862.04	18,875.32	10,026.21	81.62	80.74	-155.51	-9,671.08	1,964.39	1,278.89	1,137.14	141.75	9.022	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
17,600.00	8,862.04	18,957.00	10,025.36	82.31	81.29	-155.50	-9,752.75	1,964.34	1,277.76	1,134.44	143.31	8.916	
17,680.04	8,862.04	19,027.20	10,025.04	82.87	81.76	-155.48	-9,822.95	1,964.85	1,277.59	1,133.04	144.55	8.839	
17,700.00	8,862.04	19,045.89	10,024.95	83.01	81.89	-155.47	-9,841.64	1,965.09	1,277.60	1,132.75	144.85	8.820	
17,800.00	8,862.04	19,153.41	10,024.25	83.71	82.62	-155.42	-9,949.15	1,966.23	1,277.37	1,131.03	146.33	8.729	
17,900.00	8,862.03	19,248.09	10,023.78	84.41	83.27	-155.39	-10,043.82	1,966.92	1,277.14	1,129.29	147.85	8.638	
18,000.00	8,862.03	19,353.50	10,023.26	85.11	83.98	-155.37	-10,149.23	1,967.42	1,276.81	1,127.47	149.34	8.550	
18,100.00	8,862.03	19,452.61	10,022.62	85.81	84.66	-155.35	-10,248.34	1,967.83	1,276.31	1,125.46	150.85	8.461	
18,200.00	8,862.03	19,551.75	10,022.01	86.51	85.34	-155.32	-10,347.48	1,968.56	1,275.99	1,123.63	152.36	8.375	
18,300.00	8,862.03	19,652.07	10,021.46	87.21	86.03	-155.30	-10,447.79	1,968.88	1,275.55	1,121.68	153.87	8.290	
18,400.00	8,862.02	19,753.30	10,020.92	87.92	86.72	-155.28	-10,549.02	1,969.42	1,275.21	1,119.84	155.37	8.207	
18,500.00	8,862.02	19,869.09	10,019.74	88.62	87.52	-155.26	-10,664.80	1,969.50	1,274.26	1,117.44	156.82	8.125	
18,600.00	8,862.02	19,955.04	10,018.70	89.33	88.11	-155.26	-10,750.74	1,969.02	1,272.88	1,114.50	158.38	8.037	
18,633.79	8,862.02	19,981.00	10,018.57	89.57	88.29	-155.26	-10,776.70	1,969.12	1,272.77	1,113.85	158.92	8.009	
18,700.00	8,862.02	20,037.59	10,018.61	90.03	88.68	-155.25	-10,833.29	1,969.59	1,272.99	1,113.05	159.94	7.959	
18,800.00	8,862.02	20,134.01	10,019.31	90.74	89.35	-155.22	-10,929.69	1,970.81	1,274.10	1,112.64	161.46	7.891	
18,900.00	8,862.01	20,267.60	10,018.93	91.45	90.27	-155.18	-11,063.28	1,971.78	1,274.16	1,111.28	162.88	7.823	
19,000.00	8,862.01	20,355.00	10,018.03	92.16	90.88	-155.18	-11,150.67	1,971.50	1,273.01	1,108.57	164.44	7.742	
19,100.00	8,862.01	20,449.00	10,017.60	92.87	91.53	-155.17	-11,244.67	1,971.71	1,272.61	1,106.65	165.97	7.668	
19,101.77	8,862.01	20,449.00	10,017.60	92.88	91.53	-155.17	-11,244.67	1,971.71	1,272.61	1,106.61	166.00	7.666	
19,200.00	8,862.01	20,527.20	10,017.94	93.58	92.08	-155.15	-11,322.86	1,972.67	1,273.43	1,105.91	167.52	7.602	
19,300.00	8,862.01	20,631.03	10,019.18	94.30	92.81	-155.12	-11,426.68	1,974.10	1,275.02	1,105.98	169.04	7.543	
19,400.00	8,862.00	20,672.00	10,019.63	95.01	93.09	-155.12	-11,467.64	1,974.43	1,277.65	1,107.17	170.48	7.494	
19,500.00	8,862.00	20,672.00	10,019.63	95.72	93.09	-155.12	-11,467.64	1,974.43	1,287.42	1,116.17	171.24	7.518	
19,547.53	8,862.00	20,672.00	10,019.63	96.06	93.09	-155.12	-11,467.64	1,974.43	1,294.74	1,123.42	171.33	7.557	
19,548.26	8,862.00	20,672.00	10,019.63	96.14	93.09	-155.12	-11,467.64	1,974.43	1,294.87	1,123.06	171.81	7.537	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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	0.00	0.00	0.00	-75.07	246.18	-923.51	955.77				
100.00	100.00	96.53	96.53	0.28	0.16	-75.08	246.24	-923.86	956.14	955.71	0.43	2,217.129	ES
200.00	200.00	189.69	189.68	0.63	0.31	-75.08	246.40	-924.88	957.24	956.30	0.94	1,019.611	
300.00	300.00	289.43	289.41	0.99	0.62	-75.11	246.39	-926.48	958.79	957.18	1.61	596.278	
400.00	400.00	390.10	390.07	1.35	0.98	-75.13	246.39	-927.95	960.20	957.87	2.33	412.758	
500.00	500.00	488.06	488.01	1.71	1.33	-75.11	247.11	-929.30	961.72	958.68	3.03	316.917	
600.00	600.00	587.09	587.03	2.07	1.68	-75.07	248.14	-930.68	963.33	959.59	3.75	257.161	
700.00	700.00	678.69	678.60	2.43	2.01	-75.14	247.46	-932.93	965.51	961.08	4.43	217.941	
800.00	800.00	773.32	773.15	2.79	2.35	-75.29	245.81	-936.17	968.38	963.25	5.13	188.905	
900.00	900.00	874.56	874.30	3.14	2.71	-75.45	244.00	-940.11	971.70	965.86	5.85	166.203	
1,000.00	1,000.00	996.53	996.20	3.50	3.14	-75.66	241.11	-943.36	973.71	967.07	6.64	146.666	
1,100.00	1,099.98	1,148.83	1,148.37	3.84	3.67	124.22	236.09	-941.45	972.61	965.12	7.49	129.773	
1,200.00	1,199.84	1,252.26	1,251.66	4.17	4.01	124.40	232.88	-937.05	970.66	962.50	8.17	118.841	
1,245.70	1,245.39	1,296.77	1,296.11	4.33	4.16	124.53	231.61	-935.11	970.43	961.96	8.47	114.570	
1,300.00	1,299.45	1,345.80	1,345.08	4.51	4.33	124.70	230.37	-933.08	970.84	962.02	8.82	110.090	
1,350.00	1,349.13	1,389.26	1,388.51	4.68	4.47	124.91	229.67	-931.46	972.07	962.94	9.14	106.398	
1,400.00	1,398.73	1,428.93	1,428.16	4.85	4.61	131.55	229.39	-930.19	974.39	964.95	9.44	103.183	
1,500.00	1,497.69	1,502.00	1,501.21	5.19	4.86	142.06	229.71	-929.09	983.62	973.58	10.04	97.983	
1,600.00	1,596.25	1,583.40	1,582.60	5.54	5.14	149.79	231.08	-929.41	998.56	987.89	10.67	93.619	
1,670.62	1,665.55	1,645.98	1,645.15	5.78	5.35	154.08	232.60	-930.35	1,012.12	1,000.98	11.13	90.929	
1,700.00	1,694.31	1,672.67	1,671.83	5.89	5.45	154.25	233.30	-930.82	1,018.22	1,006.89	11.33	89.893	
1,800.00	1,792.23	1,762.51	1,761.61	6.24	5.76	154.81	235.90	-932.76	1,039.50	1,027.51	11.99	86.724	
1,900.00	1,890.14	1,877.23	1,876.27	6.61	6.16	155.48	239.03	-935.06	1,060.75	1,048.00	12.75	83.225	
2,000.00	1,988.06	2,020.30	2,019.31	6.97	6.66	156.20	240.10	-933.85	1,078.75	1,065.14	13.60	79.316	
2,100.00	2,085.97	2,123.24	2,122.19	7.34	7.01	156.67	239.44	-930.54	1,094.19	1,079.88	14.31	76.443	
2,200.00	2,183.89	2,217.42	2,216.34	7.70	7.34	157.06	238.56	-928.25	1,110.35	1,095.34	15.00	74.018	
2,300.00	2,281.80	2,331.51	2,330.38	8.07	7.73	157.51	237.06	-925.03	1,126.11	1,110.35	15.76	71.450	
2,400.00	2,379.72	2,429.52	2,428.29	8.45	8.07	157.85	234.70	-921.55	1,140.84	1,124.37	16.47	69.275	
2,500.00	2,477.64	2,489.95	2,488.69	8.82	8.28	158.04	233.35	-920.30	1,157.20	1,140.16	17.04	67.917	
2,600.00	2,575.55	2,541.00	2,539.73	9.19	8.46	158.20	232.89	-921.16	1,177.39	1,159.84	17.55	67.091	
2,700.00	2,673.47	2,616.02	2,614.66	9.57	8.72	158.41	233.00	-924.81	1,200.74	1,182.59	18.15	66.149	
2,800.00	2,771.38	2,698.68	2,697.17	9.95	9.01	158.65	233.56	-929.71	1,225.35	1,206.56	18.79	65.223	
2,900.00	2,869.30	2,858.14	2,856.48	10.32	9.58	159.16	234.87	-935.81	1,248.16	1,228.38	19.79	63.079	
3,000.00	2,967.21	2,962.98	2,961.32	10.70	9.94	159.51	235.40	-936.79	1,268.25	1,247.72	20.53	61.771	
3,100.00	3,065.13	3,078.73	3,077.06	11.08	10.35	159.92	236.23	-936.68	1,287.56	1,266.24	21.32	60.393	
3,200.00	3,163.05	3,181.74	3,180.06	11.46	10.71	160.30	237.04	-935.24	1,305.73	1,283.67	22.05	59.211	
3,300.00	3,260.96	3,280.70	3,279.00	11.84	11.05	160.65	237.78	-933.80	1,323.88	1,301.11	22.77	58.145	
3,400.00	3,358.88	3,458.28	3,456.41	12.22	11.67	161.26	237.07	-926.71	1,339.53	1,315.75	23.78	56.328	
3,500.00	3,456.79	3,610.14	3,607.63	12.60	12.20	161.76	233.29	-913.40	1,349.85	1,325.18	24.66	54.731	
3,600.00	3,554.71	3,777.85	3,773.80	12.98	12.79	162.15	222.72	-893.60	1,355.94	1,330.39	25.55	53.070	
3,700.00	3,652.62	3,952.83	3,945.46	13.36	13.42	162.22	200.99	-867.75	1,356.74	1,330.34	26.40	51.400	
3,800.00	3,750.54	4,052.41	4,042.53	13.75	13.79	162.20	186.27	-851.11	1,354.71	1,327.59	27.13	49.938	
3,900.00	3,848.45	4,157.16	4,144.61	14.13	14.19	162.19	170.71	-833.49	1,352.55	1,324.69	27.87	48.533	
4,000.00	3,946.37	4,263.77	4,248.40	14.51	14.60	162.17	154.76	-815.10	1,349.95	1,321.34	28.61	47.178	
4,100.00	4,044.29	4,368.93	4,350.69	14.89	15.02	162.16	138.93	-796.51	1,346.91	1,317.55	29.36	45.875	
4,200.00	4,142.20	4,460.88	4,440.10	15.28	15.38	162.16	125.17	-780.05	1,343.72	1,313.63	30.10	44.649	
4,300.00	4,240.12	4,541.05	4,518.35	15.66	15.71	162.17	114.03	-766.57	1,341.95	1,311.13	30.82	43.547	
4,400.00	4,338.03	4,639.04	4,614.14	16.05	16.10	162.20	100.90	-750.66	1,340.95	1,309.39	31.56	42.489	
4,500.00	4,435.95	4,746.18	4,718.81	16.43	16.53	162.24	86.54	-732.91	1,339.65	1,307.33	32.32	41.452	
4,600.00	4,533.86	4,848.87	4,819.07	16.81	16.96	162.28	72.74	-715.51	1,337.98	1,304.90	33.07	40.456	
4,700.00	4,631.78	4,949.99	4,917.77	17.20	17.37	162.32	59.09	-698.28	1,336.20	1,302.38	33.83	39.503	
4,800.00	4,729.69	5,051.46	5,016.78	17.58	17.80	162.35	45.05	-681.04	1,334.32	1,299.74	34.58	38.585	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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
4,900.00	4,827.61	5,148.67	5,111.52	17.97	18.21	162.31	30.18	-665.18	1,332.43	1,297.10	35.33	37.710	
5,000.00	4,925.53	5,237.68	5,198.35	18.35	18.58	162.26	16.55	-651.12	1,331.04	1,294.97	36.08	36.895	
5,100.00	5,023.44	5,327.10	5,285.80	18.74	18.96	162.23	3.69	-637.54	1,330.60	1,293.78	36.82	36.141	
5,118.64	5,041.69	5,344.33	5,302.66	18.81	19.03	162.23	1.29	-634.96	1,330.59	1,293.63	36.96	36.004	
5,200.00	5,121.36	5,423.65	5,380.35	19.12	19.37	162.23	-9.59	-623.16	1,330.70	1,293.13	37.57	35.419	
5,300.00	5,219.27	5,517.90	5,472.67	19.51	19.76	162.22	-22.39	-609.23	1,330.97	1,292.65	38.32	34.734	
5,400.00	5,317.19	5,615.93	5,568.83	19.89	20.17	162.24	-35.10	-595.01	1,331.77	1,292.70	39.07	34.083	
5,500.00	5,415.10	5,717.32	5,668.26	20.28	20.60	162.26	-48.18	-580.10	1,332.40	1,292.57	39.84	33.447	
5,600.00	5,513.02	5,816.25	5,765.28	20.66	21.02	162.29	-60.84	-565.53	1,333.07	1,292.47	40.60	32.838	
5,700.00	5,610.93	5,911.90	5,859.14	21.05	21.43	162.32	-72.87	-551.53	1,333.91	1,292.56	41.35	32.262	
5,800.00	5,708.85	6,003.84	5,949.44	21.43	21.81	162.37	-83.98	-538.33	1,335.22	1,293.13	42.09	31.724	
5,900.00	5,806.77	6,124.52	6,067.98	21.82	22.32	162.46	-97.81	-520.43	1,336.41	1,293.51	42.89	31.158	
6,000.00	5,904.68	6,247.68	6,188.47	22.21	22.86	162.57	-112.90	-499.85	1,335.43	1,291.74	43.69	30.566	
6,100.00	6,002.60	6,346.47	6,284.92	22.59	23.29	162.61	-126.12	-483.02	1,333.72	1,289.26	44.45	30.003	
6,200.00	6,100.51	6,432.85	6,369.31	22.98	23.67	162.62	-138.19	-469.09	1,332.59	1,287.39	45.20	29.484	
6,233.20	6,133.02	6,459.01	6,394.91	23.11	23.79	162.62	-141.72	-465.06	1,332.50	1,287.06	45.44	29.325	
6,300.00	6,198.43	6,504.00	6,439.02	23.36	23.98	162.63	-147.50	-458.34	1,332.88	1,286.98	45.90	29.037	
6,400.00	6,296.34	6,581.46	6,515.19	23.75	24.31	162.65	-156.95	-447.94	1,335.08	1,288.47	46.61	28.644	
6,500.00	6,394.26	6,662.93	6,595.57	24.14	24.65	162.67	-166.36	-438.54	1,339.20	1,291.88	47.31	28.304	
6,600.00	6,492.17	6,814.46	6,744.81	24.52	25.28	162.69	-184.58	-419.81	1,342.57	1,294.36	48.22	27.846	
6,700.00	6,590.09	6,932.36	6,860.38	24.91	25.80	162.83	-197.78	-400.62	1,342.45	1,293.44	49.01	27.391	
6,800.00	6,688.01	7,032.39	6,958.37	25.29	26.23	162.96	-208.82	-383.81	1,341.96	1,292.19	49.77	26.962	
6,877.74	6,764.13	7,103.86	7,028.39	25.60	26.54	163.04	-216.94	-372.00	1,341.70	1,291.34	50.35	26.645	
6,900.00	6,785.92	7,122.57	7,046.73	25.68	26.62	163.06	-219.00	-368.98	1,341.72	1,291.21	50.52	26.560	
7,000.00	6,883.84	7,203.73	7,126.46	26.07	26.97	163.17	-227.40	-356.29	1,342.64	1,291.40	51.24	26.205	
7,100.00	6,981.75	7,280.35	7,201.94	26.45	27.30	163.30	-234.32	-345.15	1,345.14	1,293.21	51.93	25.902	
7,200.00	7,079.67	7,356.00	7,276.73	26.84	27.61	163.47	-239.68	-335.08	1,349.58	1,296.97	52.61	25.654	
7,300.00	7,177.58	7,451.00	7,370.78	27.23	27.99	163.70	-245.48	-323.03	1,355.07	1,301.73	53.34	25.405	
7,400.00	7,275.50	7,547.34	7,466.18	27.61	28.38	163.94	-251.33	-310.95	1,360.74	1,306.66	54.07	25.165	
7,500.00	7,373.41	7,638.00	7,555.97	28.00	28.74	164.15	-256.76	-299.68	1,366.58	1,311.80	54.79	24.944	
7,600.00	7,471.33	7,732.00	7,649.18	28.39	29.11	164.38	-261.94	-288.65	1,373.28	1,317.77	55.51	24.740	
7,700.00	7,569.25	7,810.07	7,726.72	28.77	29.42	164.58	-265.66	-280.40	1,381.29	1,325.13	56.16	24.595	
7,764.22	7,632.13	7,858.71	7,775.08	29.02	29.60	164.70	-267.75	-275.63	1,387.09	1,330.52	56.57	24.522	
7,800.00	7,667.21	7,884.19	7,800.45	29.16	29.70	164.78	-268.69	-273.34	1,390.46	1,333.68	56.78	24.489	
7,900.00	7,765.68	7,963.63	7,879.60	29.54	29.99	165.00	-270.98	-267.01	1,398.84	1,341.44	57.40	24.368	
8,000.00	7,864.70	8,061.40	7,977.07	29.91	30.35	165.22	-273.44	-259.90	1,404.72	1,346.60	58.12	24.171	
8,100.00	7,964.15	8,176.17	8,091.45	30.28	30.78	165.36	-277.73	-251.49	1,406.62	1,347.70	58.92	23.875	
8,200.00	8,063.90	8,278.85	8,193.68	30.63	31.17	165.31	-284.42	-244.54	1,404.35	1,344.70	59.65	23.544	
8,300.00	8,163.83	8,371.94	8,286.32	30.98	31.52	165.15	-291.68	-239.10	1,398.95	1,338.62	60.32	23.191	
8,350.17	8,214.00	8,418.37	8,332.54	31.14	31.70	-62.79	-295.27	-236.59	1,395.18	1,334.52	60.65	23.003	
8,400.00	8,263.77	8,464.95	8,378.92	31.31	31.87	149.88	-298.81	-234.16	1,393.00	1,332.02	60.98	22.843	
8,403.21	8,266.96	8,467.95	8,381.92	31.32	31.88	149.88	-299.03	-234.00	1,392.99	1,331.99	61.00	22.834	
8,450.00	8,313.33	8,506.96	8,420.77	31.49	32.03	149.82	-301.92	-232.06	1,394.74	1,333.43	61.30	22.752	
8,500.00	8,362.13	8,544.02	8,457.70	31.69	32.16	149.63	-304.49	-230.47	1,400.64	1,339.04	61.60	22.738	
8,550.00	8,409.80	8,583.00	8,496.58	31.89	32.30	149.29	-306.99	-229.09	1,410.71	1,348.80	61.91	22.786	
8,600.00	8,455.99	8,614.63	8,528.14	32.09	32.42	148.74	-308.84	-228.20	1,424.88	1,362.70	62.18	22.916	
8,650.00	8,500.33	8,647.42	8,560.88	32.31	32.53	148.01	-310.56	-227.49	1,443.04	1,380.59	62.45	23.107	
8,700.00	8,542.50	8,677.00	8,590.43	32.53	32.63	147.02	-311.95	-227.05	1,465.06	1,402.36	62.70	23.366	
8,750.00	8,582.16	8,717.54	8,630.93	32.75	32.77	145.94	-313.67	-226.57	1,490.60	1,427.57	63.03	23.650	
8,800.00	8,619.02	8,753.44	8,666.79	32.97	32.90	144.53	-315.08	-226.14	1,519.36	1,456.04	63.32	23.994	
8,850.00	8,652.80	8,785.29	8,698.62	33.19	33.00	142.72	-316.24	-225.78	1,551.16	1,487.57	63.59	24.395	
8,900.00	8,683.24	10,379.03	9,739.82	33.42	41.07	142.25	-1,088.51	-48.42	1,582.23	1,519.32	62.90	25.154	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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
8,922.23	8,695.64	10,407.89	9,740.36	33.52	41.26	141.53	-1,117.36	-48.96	1,581.87	1,518.40	63.47	24.922	
8,950.00	8,710.11	10,431.73	9,740.87	33.64	41.41	140.90	-1,141.20	-49.16	1,582.49	1,518.39	64.10	24.688	
9,000.00	8,733.20	10,475.68	9,742.18	33.86	41.72	139.60	-1,185.12	-49.07	1,586.65	1,521.46	65.19	24.339	
9,050.00	8,752.35	10,544.13	9,744.83	34.08	42.22	137.64	-1,253.51	-47.70	1,594.44	1,528.05	66.39	24.018	
9,100.00	8,767.39	10,619.13	9,747.03	34.29	42.79	135.46	-1,328.40	-44.39	1,604.69	1,537.10	67.58	23.744	
9,100.17	8,767.43	10,619.27	9,747.04	34.29	42.79	135.46	-1,328.55	-44.38	1,604.73	1,537.14	67.59	23.743	
9,200.00	8,791.66	10,710.63	9,749.64	34.71	43.52	131.76	-1,419.73	-39.52	1,627.17	1,557.76	69.41	23.442	
9,300.00	8,812.57	10,819.91	9,750.38	35.13	44.42	128.39	-1,528.87	-33.94	1,646.06	1,574.74	71.31	23.082	
9,400.00	8,829.97	10,881.00	9,750.16	35.54	44.94	126.16	-1,589.89	-31.11	1,661.89	1,589.25	72.64	22.878	
9,500.00	8,843.72	10,975.00	9,749.88	35.95	45.75	124.09	-1,683.86	-28.83	1,675.56	1,601.37	74.20	22.582	
9,600.00	8,853.72	11,050.97	9,749.69	36.33	46.42	122.69	-1,759.82	-28.36	1,686.51	1,611.05	75.45	22.351	
9,700.00	8,859.89	11,154.39	9,749.18	36.70	47.35	121.72	-1,863.24	-27.42	1,692.91	1,615.99	76.92	22.008	
9,800.00	8,862.18	11,245.54	9,748.63	37.05	48.19	121.39	-1,954.39	-26.78	1,694.90	1,616.75	78.15	21.688	
9,809.00	8,862.20	11,257.00	9,748.58	37.08	48.30	121.39	-1,965.84	-26.74	1,694.88	1,616.59	78.30	21.647	
9,900.00	8,862.20	11,349.85	9,748.47	37.39	49.18	121.40	-2,058.69	-26.03	1,694.38	1,614.89	79.49	21.315	
9,980.56	8,862.19	11,418.33	9,749.05	37.67	49.85	121.42	-2,127.16	-25.26	1,694.09	1,613.70	80.39	21.073	
10,000.00	8,862.19	11,434.79	9,749.33	37.74	50.01	121.44	-2,143.62	-25.07	1,694.11	1,613.50	80.61	21.017	
10,100.00	8,862.19	11,547.46	9,749.89	38.10	51.13	121.46	-2,256.28	-24.37	1,694.01	1,611.89	82.12	20.629	
10,200.00	8,862.19	11,660.42	9,748.54	38.48	52.28	121.43	-2,369.23	-23.67	1,693.01	1,609.32	83.69	20.229	
10,300.00	8,862.19	11,763.15	9,747.05	38.86	53.35	121.40	-2,471.94	-22.58	1,691.51	1,606.35	85.16	19.863	
10,400.00	8,862.19	11,865.03	9,745.23	39.25	54.43	121.36	-2,573.81	-21.80	1,690.08	1,603.43	86.65	19.505	
10,500.00	8,862.18	11,965.76	9,743.44	39.66	55.52	121.33	-2,674.51	-20.58	1,688.28	1,600.14	88.14	19.154	
10,600.00	8,862.18	12,057.29	9,741.85	40.07	56.52	121.29	-2,766.02	-19.89	1,686.89	1,597.37	89.52	18.843	
10,700.00	8,862.18	12,163.09	9,740.54	40.49	57.69	121.26	-2,871.81	-19.08	1,685.77	1,594.64	91.13	18.498	
10,800.00	8,862.18	12,264.22	9,738.66	40.93	58.82	121.22	-2,972.91	-18.04	1,684.09	1,591.38	92.70	18.167	
10,900.00	8,862.18	12,367.17	9,737.03	41.37	59.99	121.19	-3,075.85	-16.94	1,682.52	1,588.20	94.32	17.839	
11,000.00	8,862.17	12,474.44	9,735.30	41.82	61.23	121.17	-3,183.10	-15.34	1,680.56	1,584.55	96.02	17.503	
11,100.00	8,862.17	12,560.56	9,734.17	42.28	62.23	121.15	-3,269.20	-14.05	1,678.77	1,581.37	97.40	17.236	
11,200.00	8,862.17	12,648.60	9,733.92	42.75	63.26	121.16	-3,357.23	-13.04	1,677.79	1,578.99	98.80	16.981	
11,300.00	8,862.17	12,753.56	9,733.72	43.22	64.50	121.17	-3,462.19	-12.12	1,677.12	1,576.62	100.50	16.687	
11,400.00	8,862.17	12,840.86	9,733.66	43.71	65.54	121.18	-3,549.48	-11.37	1,676.51	1,574.59	101.92	16.449	
11,500.00	8,862.16	12,942.16	9,733.89	44.20	66.75	121.19	-3,650.78	-10.89	1,676.39	1,572.80	103.59	16.183	
11,531.42	8,862.16	12,969.38	9,734.13	44.36	67.08	121.20	-3,678.00	-10.64	1,676.33	1,572.30	104.03	16.114	
11,600.00	8,862.16	13,024.92	9,734.76	44.70	67.75	121.22	-3,733.53	-10.41	1,676.60	1,571.66	104.94	15.977	
11,700.00	8,862.16	13,120.10	9,736.26	45.20	68.90	121.26	-3,828.71	-10.46	1,677.62	1,571.11	106.51	15.751	
11,800.00	8,862.16	13,226.64	9,738.09	45.72	70.20	121.31	-3,935.22	-10.28	1,678.53	1,570.25	108.28	15.501	
11,900.00	8,862.16	13,332.15	9,740.32	46.24	71.51	121.39	-4,040.71	-9.37	1,679.05	1,569.01	110.04	15.258	
12,000.00	8,862.15	13,436.86	9,742.36	46.76	72.81	121.47	-4,145.39	-8.00	1,679.11	1,567.31	111.80	15.019	
12,100.00	8,862.15	13,512.00	9,744.07	47.29	73.75	121.53	-4,220.50	-7.33	1,679.75	1,566.70	113.04	14.859	
12,200.00	8,862.15	13,582.43	9,745.95	47.83	74.63	121.57	-4,290.91	-7.86	1,682.02	1,567.82	114.19	14.730	
12,300.00	8,862.15	13,669.61	9,747.93	48.38	75.71	121.58	-4,378.02	-10.52	1,685.94	1,570.26	115.67	14.575	
12,400.00	8,862.15	13,763.83	9,749.82	48.93	76.88	121.57	-4,472.17	-13.81	1,690.12	1,572.82	117.30	14.408	
12,500.00	8,862.14	13,904.70	9,752.11	49.48	78.65	121.56	-4,612.94	-18.10	1,693.89	1,574.04	119.86	14.133	
12,600.00	8,862.14	14,049.23	9,751.71	50.04	80.49	121.54	-4,757.47	-18.17	1,693.68	1,571.22	122.46	13.831	
12,700.00	8,862.14	14,153.58	9,751.25	50.61	81.83	121.54	-4,861.82	-17.36	1,692.95	1,568.62	124.32	13.618	
12,800.00	8,862.14	14,251.48	9,750.88	51.18	83.09	121.54	-4,959.70	-16.39	1,692.07	1,566.00	126.07	13.421	
12,900.00	8,862.14	14,342.48	9,751.11	51.76	84.27	121.56	-5,050.70	-15.51	1,691.54	1,563.84	127.70	13.246	
13,000.00	8,862.13	14,438.99	9,751.75	52.34	85.53	121.59	-5,147.21	-14.82	1,691.43	1,562.01	129.42	13.069	
13,018.91	8,862.13	14,457.28	9,751.86	52.45	85.76	121.59	-5,165.50	-14.71	1,691.43	1,561.67	129.75	13.036	
13,100.00	8,862.13	14,534.23	9,752.43	52.92	86.77	121.61	-5,242.45	-14.32	1,691.53	1,560.39	131.13	12.899	
13,200.00	8,862.13	14,643.48	9,753.20	53.51	88.20	121.65	-5,351.69	-13.65	1,691.53	1,558.42	133.11	12.708	
13,300.00	8,862.13	14,745.05	9,753.02	54.10	89.53	121.65	-5,453.26	-13.16	1,691.19	1,556.22	134.97	12.530	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Rule Assigned:

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
13,400.00	8,862.12	14,846.84	9,752.35	54.70	90.86	121.63	-5,555.05	-12.84	1,690.74	1,553.89	136.84	12.355	
13,500.00	8,862.12	14,948.75	9,751.80	55.30	92.21	121.62	-5,656.95	-12.34	1,690.19	1,551.46	138.73	12.184	
13,600.00	8,862.12	15,047.09	9,751.44	55.91	93.51	121.62	-5,755.29	-11.61	1,689.53	1,548.99	140.54	12.021	
13,700.00	8,862.12	15,148.05	9,751.47	56.52	94.85	121.63	-5,856.25	-11.03	1,689.22	1,546.81	142.41	11.862	
13,800.00	8,862.12	15,252.01	9,751.18	57.13	96.23	121.63	-5,960.20	-9.85	1,688.25	1,543.92	144.34	11.697	
13,900.00	8,862.11	15,347.44	9,750.85	57.75	97.50	121.63	-6,055.63	-9.25	1,687.70	1,541.58	146.12	11.550	
14,000.00	8,862.11	15,442.71	9,750.41	58.37	98.78	121.62	-6,150.90	-8.79	1,687.20	1,539.30	147.90	11.408	
14,100.00	8,862.11	15,549.79	9,750.09	58.99	100.21	121.62	-6,257.98	-8.49	1,686.98	1,537.07	149.92	11.253	
14,200.00	8,862.11	15,649.88	9,749.79	59.62	101.55	121.62	-6,358.06	-7.50	1,686.15	1,534.36	151.79	11.108	
14,300.00	8,862.11	15,740.75	9,749.80	60.25	102.77	121.63	-6,448.93	-6.87	1,685.72	1,532.23	153.49	10.982	
14,400.00	8,862.10	15,855.89	9,750.21	60.88	104.32	121.66	-6,564.06	-5.85	1,685.34	1,529.69	155.66	10.827	
14,500.00	8,862.10	15,949.09	9,750.31	61.52	105.58	121.68	-6,657.26	-4.67	1,684.48	1,527.08	157.40	10.702	
14,600.00	8,862.10	16,048.01	9,750.25	62.16	106.92	121.69	-6,756.17	-3.83	1,683.89	1,524.61	159.27	10.572	
14,700.00	8,862.10	16,147.26	9,750.21	62.80	108.27	121.70	-6,855.42	-3.01	1,683.33	1,522.17	161.15	10.446	
14,800.00	8,862.10	16,239.50	9,750.01	63.44	109.51	121.70	-6,947.66	-2.66	1,683.04	1,520.13	162.91	10.331	
14,851.44	8,862.10	16,289.86	9,750.04	63.78	110.20	121.70	-6,998.01	-2.52	1,683.02	1,519.16	163.86	10.271	
14,900.00	8,862.09	16,338.63	9,750.34	64.09	110.86	121.71	-7,046.79	-2.26	1,683.03	1,518.25	164.79	10.213	
15,000.00	8,862.09	16,448.58	9,749.80	64.74	112.35	121.70	-7,156.73	-1.92	1,682.67	1,515.77	166.90	10.082	
15,100.00	8,862.09	16,547.75	9,749.00	65.39	113.70	121.68	-7,255.90	-1.48	1,682.02	1,513.21	168.82	9.964	
15,200.00	8,862.09	16,643.19	9,748.15	66.05	115.00	121.65	-7,351.33	-1.42	1,681.66	1,511.00	170.66	9.854	
15,300.00	8,862.09	16,739.85	9,747.74	66.70	116.32	121.64	-7,447.99	-1.18	1,681.39	1,508.87	172.53	9.746	
15,313.86	8,862.09	16,752.27	9,747.72	66.79	116.49	121.64	-7,460.41	-1.16	1,681.39	1,508.62	172.76	9.732	
15,400.00	8,862.08	16,834.99	9,747.75	67.36	117.62	121.64	-7,543.13	-1.19	1,681.56	1,507.20	174.35	9.644	
15,500.00	8,862.08	16,942.02	9,748.33	68.02	119.08	121.66	-7,650.16	-0.67	1,681.59	1,505.18	176.41	9.532	
15,600.00	8,862.08	17,051.99	9,748.30	68.69	120.59	121.67	-7,760.12	0.18	1,681.08	1,502.55	178.53	9.416	
15,683.86	8,862.08	17,122.29	9,748.49	69.24	121.56	121.69	-7,830.42	0.94	1,680.59	1,500.72	179.87	9.344	
15,700.00	8,862.08	17,134.16	9,748.58	69.35	121.72	121.69	-7,842.29	1.00	1,680.61	1,500.52	180.09	9.332	
15,800.00	8,862.08	17,240.63	9,749.45	70.02	123.18	121.71	-7,948.76	1.05	1,681.19	1,499.05	182.14	9.230	
15,900.00	8,862.07	17,346.95	9,749.21	70.69	124.64	121.72	-8,055.07	1.74	1,680.67	1,496.47	184.20	9.124	
16,000.00	8,862.07	17,447.88	9,748.91	71.36	126.03	121.72	-8,156.00	2.36	1,680.15	1,493.98	186.16	9.025	
16,100.00	8,862.07	17,549.65	9,749.23	72.03	127.44	121.74	-8,257.76	3.49	1,679.53	1,491.41	188.12	8.928	
16,200.00	8,862.07	17,643.00	9,749.90	72.71	128.73	121.77	-8,351.10	4.39	1,679.23	1,489.32	189.91	8.842	
16,204.54	8,862.07	17,643.00	9,749.90	72.74	128.73	121.77	-8,351.10	4.39	1,679.23	1,489.32	189.91	8.842	
16,300.00	8,862.07	17,738.19	9,749.99	73.38	130.04	121.78	-8,446.29	4.57	1,679.28	1,487.52	191.76	8.757	
16,400.00	8,862.06	17,831.00	9,751.46	74.06	131.33	121.84	-8,539.07	5.94	1,679.05	1,485.54	193.51	8.677	
16,412.34	8,862.06	17,850.84	9,752.05	74.14	131.60	121.87	-8,558.90	6.41	1,678.98	1,485.09	193.88	8.660	
16,500.00	8,862.06	17,925.00	9,753.07	74.74	132.63	121.89	-8,633.04	6.30	1,679.79	1,484.49	195.29	8.601	
16,600.00	8,862.06	17,990.48	9,753.16	75.42	133.52	121.86	-8,698.51	4.59	1,682.02	1,485.52	196.50	8.560	
16,700.00	8,862.06	18,092.12	9,753.03	76.10	134.91	121.79	-8,800.08	1.11	1,685.02	1,486.48	198.54	8.487	
16,800.00	8,862.06	18,189.63	9,752.64	76.79	136.25	121.72	-8,897.53	-2.11	1,687.78	1,487.28	200.50	8.418	
16,900.00	8,862.05	18,341.60	9,753.90	77.47	138.35	121.73	-9,049.48	-3.10	1,688.82	1,485.24	203.58	8.296	
17,000.00	8,862.05	18,440.66	9,752.79	78.16	139.72	121.69	-9,148.54	-3.40	1,688.65	1,483.09	205.56	8.215	
17,100.00	8,862.05	18,550.65	9,751.13	78.85	141.25	121.63	-9,258.51	-3.91	1,688.42	1,480.64	207.78	8.126	
17,200.00	8,862.05	18,652.61	9,749.57	79.54	142.66	121.59	-9,360.46	-3.58	1,687.50	1,477.68	209.83	8.042	
17,300.00	8,862.05	18,760.51	9,747.85	80.23	144.16	121.54	-9,468.35	-3.21	1,686.54	1,474.55	211.99	7.956	
17,400.00	8,862.04	18,852.56	9,746.94	80.92	145.45	121.53	-9,560.38	-2.39	1,685.44	1,471.61	213.83	7.882	
17,500.00	8,862.04	18,951.39	9,746.66	81.62	146.83	121.53	-9,659.21	-1.50	1,684.68	1,468.91	215.77	7.808	
17,600.00	8,862.04	19,040.78	9,746.14	82.31	148.07	121.52	-9,748.59	-1.18	1,684.23	1,466.68	217.55	7.742	
17,700.00	8,862.04	19,151.13	9,745.08	83.01	149.61	121.49	-9,858.94	-1.12	1,683.85	1,464.08	219.77	7.662	
17,800.00	8,862.04	19,252.26	9,743.39	83.71	151.02	121.44	-9,960.05	-1.01	1,683.04	1,461.22	221.81	7.588	
17,900.00	8,862.03	19,345.80	9,741.63	84.41	152.32	121.38	-10,053.58	-1.27	1,682.45	1,458.73	223.72	7.520	
18,000.00	8,862.03	19,447.60	9,740.68	85.11	153.74	121.35	-10,155.37	-1.18	1,682.05	1,456.28	225.77	7.450	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Rule Assigned:

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
18,100.00	8,862.03	19,571.47	9,739.13	85.81	155.48	121.31	-10,279.23	-0.34	1,681.03	1,452.77	228.25	7.365	
18,200.00	8,862.03	19,689.95	9,739.59	86.51	157.15	121.40	-10,397.63	3.87	1,678.32	1,447.82	230.50	7.281	
18,300.00	8,862.03	19,771.70	9,739.70	87.21	158.30	121.45	-10,479.34	6.64	1,675.69	1,443.57	232.11	7.219	
18,400.00	8,862.02	19,850.54	9,739.51	87.92	159.41	121.46	-10,558.17	7.86	1,674.39	1,440.71	233.68	7.165	
18,500.00	8,862.02	19,940.13	9,738.83	88.62	160.66	121.44	-10,647.75	7.84	1,674.16	1,438.68	235.48	7.110	
18,600.00	8,862.02	20,039.22	9,737.83	89.33	162.05	121.40	-10,746.84	7.50	1,674.09	1,436.60	237.49	7.049	
18,609.97	8,862.02	20,048.92	9,737.75	89.40	162.18	121.40	-10,756.53	7.47	1,674.08	1,436.40	237.68	7.043	
18,700.00	8,862.02	20,138.71	9,737.22	90.03	163.44	121.38	-10,846.32	7.28	1,674.11	1,434.62	239.49	6.990	
18,800.00	8,862.02	20,239.26	9,736.62	90.74	164.85	121.35	-10,946.87	7.11	1,674.10	1,432.58	241.52	6.932	
18,900.00	8,862.01	20,342.94	9,735.92	91.45	166.30	121.33	-11,050.55	7.00	1,674.01	1,430.39	243.62	6.871	
18,924.38	8,862.01	20,364.00	9,735.77	91.62	166.60	121.32	-11,071.61	7.01	1,673.95	1,429.91	244.04	6.859	
19,000.00	8,862.01	20,416.60	9,735.90	92.16	167.33	121.32	-11,124.21	6.88	1,674.37	1,429.32	245.04	6.833	
19,100.00	8,862.01	20,504.53	9,737.57	92.87	168.56	121.35	-11,212.11	5.82	1,676.48	1,429.75	246.73	6.795	
19,200.00	8,862.01	20,653.54	9,736.28	93.58	170.65	121.27	-11,361.10	3.98	1,677.34	1,427.46	249.88	6.713	
19,298.98	8,862.01	20,738.00	9,735.41	94.29	171.84	121.26	-11,445.55	4.99	1,676.09	1,424.52	251.57	6.663	SF
19,300.00	8,862.01	20,738.00	9,735.41	94.30	171.84	121.26	-11,445.55	4.99	1,676.09	1,424.52	251.57	6.663	
19,400.00	8,862.00	20,738.00	9,735.41	95.01	171.84	121.26	-11,445.55	4.99	1,679.13	1,428.09	251.04	6.689	
19,500.00	8,862.00	20,738.00	9,735.41	95.72	171.84	121.26	-11,445.55	4.99	1,688.10	1,438.36	249.74	6.760	
19,547.53	8,862.00	20,738.00	9,735.41	96.06	171.84	121.26	-11,445.55	4.99	1,694.42	1,445.56	248.85	6.809	
19,548.26	8,862.00	20,738.00	9,735.41	96.14	171.84	121.26	-11,445.55	4.99	1,694.52	1,445.52	249.01	6.805	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

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	3.43	3.43	0.00	0.01	-72.31	306.93	-962.34	1,010.10				
100.00	100.00	101.32	101.32	0.28	0.16	-72.29	307.33	-962.33	1,010.21	1,009.78	0.44	2,311.647	
200.00	200.00	201.00	200.99	0.63	0.32	-72.22	308.51	-962.29	1,010.54	1,009.58	0.95	1,059.496	
300.00	300.00	308.67	308.65	0.99	0.70	-72.13	310.11	-961.73	1,010.50	1,008.81	1.70	595.646	
400.00	400.00	426.16	426.11	1.35	1.12	-72.02	311.48	-959.86	1,009.39	1,006.92	2.47	408.255	
500.00	500.00	538.11	538.00	1.71	1.51	-71.99	310.82	-956.25	1,006.09	1,002.86	3.22	312.117	
600.00	600.00	641.18	641.01	2.07	1.88	-71.98	309.88	-952.83	1,002.66	998.71	3.94	254.240	
700.00	700.00	742.97	742.73	2.43	2.24	-71.97	308.96	-948.95	998.75	994.09	4.66	214.207	
800.00	800.00	844.56	844.23	2.79	2.61	-71.94	308.16	-944.94	994.75	989.37	5.38	184.820	
900.00	900.00	945.36	944.94	3.14	2.97	-71.91	307.25	-940.86	990.62	984.52	6.10	162.396	
1,000.00	1,000.00	1,048.99	1,048.48	3.50	3.34	-71.91	305.92	-936.47	986.20	979.38	6.83	144.441	
1,100.00	1,099.98	1,147.33	1,146.71	3.84	3.70	128.22	304.58	-932.28	982.80	975.28	7.52	130.699	
1,192.24	1,192.09	1,237.23	1,236.53	4.15	4.02	128.45	303.35	-928.60	981.73	973.59	8.14	120.560	CC
1,200.00	1,199.84	1,244.46	1,243.76	4.17	4.05	128.47	303.26	-928.31	981.74	973.55	8.19	119.806	ES
1,300.00	1,299.45	1,338.77	1,337.99	4.51	4.39	128.82	302.09	-924.94	983.40	974.54	8.87	110.930	
1,350.00	1,349.13	1,388.22	1,387.42	4.68	4.57	129.04	301.49	-923.29	985.20	975.98	9.21	106.968	
1,400.00	1,398.73	1,437.63	1,436.79	4.85	4.75	135.72	300.90	-921.65	987.73	978.18	9.56	103.358	
1,500.00	1,497.69	1,535.56	1,534.66	5.19	5.10	146.29	299.74	-918.47	995.52	985.26	10.25	97.121	
1,600.00	1,596.25	1,629.82	1,628.88	5.54	5.44	153.98	298.81	-915.62	1,007.08	996.15	10.94	92.080	
1,670.62	1,665.55	1,695.00	1,694.03	5.78	5.68	158.18	298.38	-913.97	1,017.76	1,006.34	11.42	89.121	
1,700.00	1,694.31	1,721.09	1,720.12	5.89	5.77	158.30	298.26	-913.39	1,022.67	1,011.05	11.62	88.027	
1,800.00	1,792.23	1,815.95	1,814.96	6.24	6.11	158.72	297.87	-911.53	1,039.66	1,027.35	12.31	84.471	
1,900.00	1,890.14	1,917.94	1,916.93	6.61	6.48	159.17	297.80	-909.51	1,056.83	1,043.80	13.03	81.121	
2,000.00	1,988.06	2,033.48	2,032.42	6.97	6.89	159.65	297.13	-906.06	1,072.95	1,059.15	13.80	77.745	
2,100.00	2,085.97	2,137.31	2,136.15	7.34	7.27	160.09	296.24	-901.66	1,087.86	1,073.33	14.53	74.846	
2,200.00	2,183.89	2,251.09	2,249.79	7.70	7.68	160.56	295.30	-896.17	1,102.35	1,087.04	15.31	72.018	
2,300.00	2,281.80	2,375.84	2,374.23	8.07	8.14	161.08	293.42	-887.74	1,114.84	1,098.72	16.12	69.172	
2,400.00	2,379.72	2,491.98	2,489.90	8.45	8.57	161.57	291.04	-877.45	1,125.21	1,108.31	16.90	66.588	
2,500.00	2,477.64	2,586.90	2,584.32	8.82	8.93	162.07	290.80	-867.74	1,135.18	1,117.56	17.61	64.448	
2,600.00	2,575.55	2,674.01	2,671.02	9.19	9.25	162.53	291.18	-859.39	1,146.08	1,127.78	18.30	62.613	
2,700.00	2,673.47	2,767.56	2,764.22	9.57	9.60	163.02	291.85	-851.23	1,157.97	1,138.95	19.02	60.895	
2,800.00	2,771.38	2,868.58	2,864.83	9.95	9.97	163.53	292.59	-842.34	1,169.90	1,150.14	19.75	59.221	
2,900.00	2,869.30	2,968.84	2,964.70	10.32	10.35	164.03	293.16	-833.45	1,181.78	1,161.29	20.49	57.669	
3,000.00	2,967.21	3,068.90	3,064.36	10.70	10.72	164.51	293.67	-824.46	1,193.62	1,172.39	21.23	56.222	
3,100.00	3,065.13	3,174.16	3,169.15	11.08	11.11	165.03	294.35	-814.65	1,205.31	1,183.32	21.99	54.815	
3,200.00	3,163.05	3,304.80	3,298.96	11.46	11.61	165.71	295.34	-800.00	1,215.46	1,192.62	22.83	53.228	
3,300.00	3,260.96	3,403.34	3,396.70	11.84	11.99	166.25	296.09	-787.47	1,224.40	1,200.82	23.58	51.936	
3,400.00	3,358.88	3,495.98	3,488.61	12.22	12.34	166.75	296.89	-775.89	1,233.68	1,209.38	24.30	50.776	
3,500.00	3,456.79	3,581.88	3,573.93	12.60	12.67	167.19	297.74	-765.94	1,243.92	1,218.92	24.99	49.770	
3,600.00	3,554.71	3,677.91	3,669.38	12.98	13.04	167.67	298.88	-755.52	1,254.98	1,229.25	25.73	48.784	
3,700.00	3,652.62	3,805.23	3,795.70	13.36	13.53	168.34	300.45	-739.74	1,264.78	1,238.21	26.57	47.600	
3,800.00	3,750.54	3,908.53	3,897.99	13.75	13.93	168.91	301.73	-725.40	1,273.46	1,246.13	27.33	46.588	
3,900.00	3,848.45	4,004.06	3,992.60	14.13	14.30	169.43	302.96	-712.25	1,282.38	1,254.31	28.07	45.681	
4,000.00	3,946.37	4,102.62	4,090.24	14.51	14.69	169.96	304.30	-698.85	1,291.61	1,262.78	28.82	44.812	
4,100.00	4,044.29	4,203.44	4,190.09	14.89	15.08	170.50	305.79	-684.94	1,300.82	1,271.24	29.58	43.975	
4,200.00	4,142.20	4,303.07	4,288.72	15.28	15.48	171.03	307.35	-671.00	1,310.04	1,279.70	30.34	43.183	
4,300.00	4,240.12	4,400.85	4,385.54	15.66	15.86	171.55	308.88	-657.33	1,319.37	1,288.29	31.09	42.440	
4,400.00	4,338.03	4,499.49	4,483.19	16.05	16.25	172.07	310.50	-643.57	1,328.89	1,297.04	31.84	41.734	
4,500.00	4,435.95	4,600.05	4,582.75	16.43	16.65	172.59	312.21	-629.44	1,338.45	1,305.84	32.61	41.050	
4,600.00	4,533.86	4,700.94	4,682.58	16.81	17.05	173.11	313.95	-615.05	1,347.97	1,314.60	33.37	40.394	
4,700.00	4,631.78	4,798.76	4,779.39	17.20	17.44	173.61	315.58	-601.09	1,357.55	1,323.43	34.13	39.782	
4,800.00	4,729.69	4,896.64	4,876.29	17.58	17.83	174.10	317.08	-587.32	1,367.32	1,332.44	34.88	39.200	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM **Rule Assigned:** **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
4,900.00	4,827.61	4,996.59	4,975.24	17.97	18.22	174.58	318.48	-573.29	1,377.14	1,341.50	35.64	38.636	
5,000.00	4,925.53	5,088.64	5,066.42	18.35	18.59	175.00	319.64	-560.74	1,387.29	1,350.92	36.38	38.137	
5,100.00	5,023.44	5,176.00	5,153.03	18.74	18.93	175.38	320.69	-549.34	1,397.98	1,360.89	37.09	37.694	
5,200.00	5,121.36	5,271.00	5,247.32	19.12	19.31	175.77	321.83	-537.82	1,409.46	1,371.63	37.83	37.260	
5,300.00	5,219.27	5,364.09	5,339.80	19.51	19.67	176.13	322.93	-527.21	1,421.55	1,382.99	38.56	36.868	
5,400.00	5,317.19	5,469.82	5,444.85	19.89	20.08	176.50	323.60	-515.31	1,433.48	1,394.14	39.34	36.437	
5,500.00	5,415.10	5,576.38	5,550.76	20.28	20.49	176.84	323.13	-503.55	1,444.97	1,404.84	40.13	36.010	
5,600.00	5,513.02	5,681.36	5,655.07	20.66	20.90	177.14	322.01	-491.78	1,455.96	1,415.05	40.90	35.594	
5,700.00	5,610.93	5,780.90	5,753.97	21.05	21.28	177.42	320.74	-480.56	1,466.83	1,425.17	41.66	35.210	
5,800.00	5,708.85	5,878.61	5,851.05	21.43	21.66	177.69	319.50	-469.59	1,477.76	1,435.35	42.41	34.847	
5,900.00	5,806.77	5,964.69	5,936.61	21.82	21.99	177.92	318.41	-460.24	1,489.04	1,445.94	43.10	34.546	
6,000.00	5,904.68	6,041.69	6,013.30	22.21	22.29	178.08	317.48	-453.35	1,501.78	1,458.03	43.75	34.326	
6,100.00	6,002.60	6,117.00	6,088.37	22.59	22.57	178.23	316.73	-447.37	1,515.59	1,471.21	44.38	34.152	
6,200.00	6,100.51	6,207.77	6,178.91	22.98	22.90	178.39	316.27	-441.03	1,530.38	1,485.30	45.08	33.950	
6,300.00	6,198.43	6,305.00	6,275.99	23.36	23.26	178.55	316.50	-435.60	1,546.64	1,500.83	45.81	33.763	
6,400.00	6,296.34	6,366.80	6,337.73	23.75	23.48	178.65	317.04	-432.80	1,563.87	1,517.53	46.34	33.747	
6,500.00	6,394.26	6,453.75	6,424.60	24.14	23.79	178.77	318.15	-429.58	1,582.23	1,535.23	47.01	33.660	
6,600.00	6,492.17	6,541.84	6,512.66	24.52	24.10	178.86	318.78	-427.37	1,601.15	1,553.48	47.67	33.586	
6,700.00	6,590.09	6,632.97	6,603.80	24.91	24.41	178.89	318.79	-426.46	1,620.72	1,572.37	48.35	33.519	
6,800.00	6,688.01	6,729.25	6,700.07	25.29	24.74	178.91	318.52	-425.94	1,640.44	1,591.38	49.06	33.438	
6,900.00	6,785.92	6,820.95	6,791.77	25.68	25.04	178.92	318.25	-425.70	1,660.38	1,610.65	49.73	33.387	
7,000.00	6,883.84	6,912.29	6,883.11	26.07	25.33	178.93	318.32	-425.77	1,680.79	1,630.40	50.39	33.355	
7,100.00	6,981.75	7,007.09	6,977.91	26.45	25.63	178.94	318.51	-426.03	1,701.43	1,650.36	51.07	33.319	
7,200.00	7,079.67	7,098.70	7,069.52	26.84	25.92	178.95	318.71	-426.54	1,722.29	1,670.57	51.72	33.301	
7,300.00	7,177.58	7,186.06	7,156.87	27.23	26.19	178.93	318.59	-427.91	1,743.66	1,691.31	52.34	33.312	
7,400.00	7,275.50	7,275.72	7,246.50	27.61	26.46	178.89	318.42	-430.05	1,765.60	1,712.62	52.98	33.327	
7,500.00	7,373.41	7,371.80	7,342.54	28.00	26.76	178.84	318.11	-432.70	1,787.74	1,734.08	53.65	33.319	
7,600.00	7,471.33	7,469.37	7,440.06	28.39	27.06	178.77	317.59	-435.69	1,809.97	1,755.63	54.34	33.308	
7,700.00	7,569.25	7,572.24	7,542.87	28.77	27.38	178.69	316.61	-438.98	1,832.03	1,776.96	55.06	33.273	
7,764.22	7,632.13	7,637.96	7,608.55	29.02	27.58	178.64	315.70	-441.09	1,846.02	1,790.50	55.52	33.249	
7,800.00	7,667.21	7,671.98	7,642.55	29.16	27.69	178.61	315.11	-442.27	1,853.59	1,797.83	55.76	33.241	
7,900.00	7,765.68	7,768.91	7,739.39	29.54	27.99	178.51	313.15	-445.97	1,872.50	1,816.06	56.44	33.178	
8,000.00	7,864.70	7,879.30	7,849.73	29.91	28.33	178.43	311.82	-449.15	1,887.82	1,830.63	57.19	33.007	
8,100.00	7,964.15	7,993.23	7,963.64	30.28	28.70	178.41	311.34	-450.37	1,898.80	1,840.84	57.97	32.757	
8,200.00	8,063.90	8,115.56	8,085.97	30.63	29.10	178.42	311.02	-450.06	1,905.42	1,846.63	58.79	32.410	
8,300.00	8,163.83	8,230.55	8,200.95	30.98	29.49	178.43	309.85	-448.81	1,907.41	1,847.85	59.56	32.023	
8,350.17	8,214.00	8,281.95	8,252.35	31.14	29.67	-49.43	309.13	-448.22	1,906.95	1,847.04	59.91	31.831	
8,361.20	8,225.03	8,293.25	8,263.65	31.18	29.71	163.18	308.96	-448.09	1,906.85	1,846.87	59.98	31.789	
8,400.00	8,263.77	8,332.98	8,303.37	31.31	29.85	163.15	308.31	-447.67	1,908.10	1,847.85	60.25	31.667	
8,450.00	8,313.33	8,384.07	8,354.44	31.49	30.02	163.04	307.39	-447.17	1,913.38	1,852.76	60.62	31.564	
8,500.00	8,362.13	8,435.82	8,406.18	31.69	30.20	162.85	306.38	-446.65	1,922.73	1,861.73	61.00	31.522	
8,550.00	8,409.80	8,484.88	8,455.23	31.89	30.37	162.56	305.36	-446.11	1,936.08	1,874.71	61.37	31.549	
8,600.00	8,455.99	8,528.12	8,498.46	32.09	30.51	162.15	304.48	-445.69	1,953.44	1,891.73	61.71	31.655	
8,650.00	8,500.33	8,570.02	8,540.35	32.31	30.66	161.59	303.66	-445.34	1,974.72	1,912.67	62.05	31.825	
8,700.00	8,542.50	8,614.70	8,585.02	32.53	30.81	160.91	302.76	-445.00	1,999.70	1,937.30	62.40	32.044	
8,750.00	8,582.16	11,009.39	9,942.04	32.75	40.43	139.47	-1,053.42	-428.74	2,023.01	1,960.42	62.59	32.324	
8,800.00	8,619.02	11,039.95	9,942.42	32.97	40.65	139.49	-1,083.97	-428.18	2,012.02	1,948.45	63.57	31.651	
8,850.00	8,652.80	11,070.35	9,942.78	33.19	40.87	139.28	-1,114.36	-427.64	2,005.01	1,940.48	64.54	31.068	
8,900.00	8,683.24	11,096.50	9,943.00	33.42	41.07	138.92	-1,140.51	-427.30	2,002.06	1,936.61	65.45	30.589	
8,911.76	8,689.89	11,106.56	9,943.06	33.47	41.14	138.72	-1,150.57	-427.20	2,001.94	1,936.26	65.69	30.477	
8,950.00	8,710.11	11,130.06	9,943.17	33.64	41.32	138.18	-1,174.07	-427.07	2,003.11	1,936.72	66.38	30.175	
9,000.00	8,733.20	11,151.00	9,943.20	33.86	41.48	137.44	-1,195.01	-427.04	2,008.10	1,940.92	67.18	29.891	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

Rule Assigned:

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
9,050.00	8,752.35	11,187.25	9,943.25	34.08	41.76	136.18	-1,231.26	-427.21	2,016.91	1,948.86	68.05	29.640	
9,100.00	8,767.39	11,215.23	9,943.35	34.29	41.98	134.80	-1,259.24	-427.54	2,029.45	1,960.66	68.79	29.502	
9,100.17	8,767.43	11,215.33	9,943.35	34.29	41.98	134.80	-1,259.33	-427.54	2,029.50	1,960.71	68.79	29.501	
9,200.00	8,791.66	11,279.96	9,943.65	34.71	42.49	131.37	-1,323.95	-428.92	2,057.50	1,987.26	70.24	29.294	
9,300.00	8,812.57	11,360.04	9,943.50	35.13	43.14	128.19	-1,403.99	-431.54	2,083.47	2,011.75	71.72	29.051	
9,400.00	8,829.97	11,488.22	9,944.19	35.54	44.23	125.14	-1,532.13	-434.31	2,105.83	2,032.28	73.55	28.630	
9,500.00	8,843.72	11,627.01	9,945.87	35.95	45.47	122.84	-1,670.90	-432.91	2,122.02	2,046.60	75.42	28.135	
9,600.00	8,853.72	11,725.66	9,946.33	36.33	46.39	121.43	-1,769.53	-431.38	2,133.16	2,056.29	76.87	27.750	
9,700.00	8,859.89	11,828.60	9,946.80	36.70	47.37	120.59	-1,872.46	-429.64	2,139.63	2,061.33	78.30	27.327	
9,800.00	8,862.18	11,936.58	9,947.46	37.05	48.44	120.35	-1,980.41	-427.37	2,141.10	2,061.39	79.71	26.861	
9,809.00	8,862.20	11,946.47	9,947.51	37.08	48.54	120.35	-1,990.30	-427.14	2,140.98	2,061.14	79.84	26.817	
9,900.00	8,862.20	12,038.75	9,947.85	37.39	49.47	120.39	-2,082.55	-424.94	2,139.42	2,058.38	81.04	26.400	
10,000.00	8,862.19	12,132.52	9,948.03	37.74	50.43	120.42	-2,176.31	-423.06	2,137.94	2,055.64	82.31	25.975	
10,100.00	8,862.19	12,231.57	9,948.48	38.10	51.47	120.45	-2,275.33	-421.12	2,136.65	2,052.99	83.66	25.539	
10,200.00	8,862.19	12,337.22	9,948.91	38.48	52.59	120.49	-2,380.96	-418.94	2,135.24	2,050.12	85.12	25.085	
10,300.00	8,862.19	12,416.06	9,949.30	38.86	53.44	120.52	-2,459.78	-417.29	2,133.91	2,047.63	86.28	24.731	
10,333.13	8,862.19	12,436.73	9,949.33	38.99	53.67	120.52	-2,480.45	-417.16	2,133.82	2,047.21	86.61	24.637	
10,400.00	8,862.19	12,480.69	9,949.24	39.25	54.15	120.51	-2,524.41	-417.44	2,134.20	2,046.91	87.30	24.448	
10,500.00	8,862.18	12,563.00	9,949.05	39.66	55.04	120.49	-2,606.70	-418.91	2,135.78	2,047.23	88.55	24.121	
10,600.00	8,862.18	12,652.28	9,949.20	40.07	56.03	120.46	-2,695.96	-420.99	2,138.02	2,048.12	89.90	23.782	
10,700.00	8,862.18	12,759.21	9,949.72	40.49	57.22	120.44	-2,802.87	-423.27	2,140.27	2,048.76	91.51	23.389	
10,800.00	8,862.18	12,860.64	9,950.19	40.93	58.37	120.42	-2,904.27	-425.20	2,142.30	2,049.24	93.06	23.020	
10,900.00	8,862.18	12,958.97	9,950.56	41.37	59.50	120.40	-3,002.58	-427.13	2,144.35	2,049.75	94.60	22.668	
11,000.00	8,862.17	13,057.44	9,951.12	41.82	60.64	120.38	-3,101.03	-429.08	2,146.50	2,050.35	96.15	22.325	
11,100.00	8,862.17	13,160.40	9,951.84	42.28	61.85	120.37	-3,203.97	-430.93	2,148.57	2,050.79	97.78	21.973	
11,200.00	8,862.17	13,288.10	9,952.62	42.75	63.37	120.36	-3,331.66	-432.73	2,150.34	2,050.56	99.78	21.550	
11,300.00	8,862.17	13,441.68	9,952.37	43.22	65.22	120.37	-3,485.23	-431.27	2,149.48	2,047.34	102.15	21.043	
11,400.00	8,862.17	13,546.27	9,951.98	43.71	66.49	120.39	-3,589.80	-429.10	2,147.66	2,043.81	103.85	20.680	
11,500.00	8,862.16	13,648.27	9,951.65	44.20	67.75	120.42	-3,691.76	-426.60	2,145.54	2,040.01	105.54	20.330	
11,600.00	8,862.16	13,743.83	9,951.20	44.70	68.93	120.43	-3,787.30	-424.53	2,143.60	2,036.45	107.15	20.006	
11,700.00	8,862.16	13,844.47	9,950.77	45.20	70.19	120.45	-3,887.92	-422.44	2,141.75	2,032.91	108.84	19.677	
11,800.00	8,862.16	13,944.34	9,950.42	45.72	71.44	120.47	-3,987.76	-420.23	2,139.83	2,029.29	110.54	19.358	
11,900.00	8,862.16	14,043.36	9,950.21	46.24	72.69	120.49	-4,086.75	-418.04	2,137.98	2,025.75	112.23	19.050	
12,000.00	8,862.15	14,136.55	9,949.98	46.76	73.87	120.51	-4,179.92	-416.12	2,136.24	2,022.39	113.85	18.763	
12,100.00	8,862.15	14,250.05	9,949.69	47.29	75.32	120.53	-4,293.40	-413.88	2,134.60	2,018.82	115.78	18.437	
12,200.00	8,862.15	14,341.23	9,949.53	47.83	76.48	120.55	-4,384.55	-411.63	2,132.55	2,015.17	117.39	18.167	
12,300.00	8,862.15	14,437.67	9,949.66	48.38	77.73	120.58	-4,480.97	-409.56	2,130.93	2,011.85	119.08	17.895	
12,400.00	8,862.15	14,530.16	9,950.05	48.93	78.92	120.61	-4,573.44	-407.62	2,129.51	2,008.79	120.72	17.640	
12,500.00	8,862.14	14,630.84	9,950.59	49.48	80.22	120.65	-4,674.10	-405.70	2,128.31	2,005.82	122.49	17.375	
12,580.22	8,862.14	14,684.28	9,950.85	49.93	80.92	120.67	-4,727.54	-404.98	2,127.74	2,004.23	123.50	17.228	
12,600.00	8,862.14	14,696.46	9,950.91	50.04	81.07	120.67	-4,739.71	-404.95	2,127.77	2,004.03	123.74	17.196	
12,700.00	8,862.14	14,771.53	9,951.30	50.61	82.05	120.67	-4,814.78	-405.64	2,128.92	2,003.79	125.13	17.013	
12,800.00	8,862.14	14,859.46	9,952.19	51.18	83.19	120.67	-4,902.70	-406.61	2,130.57	2,003.84	126.73	16.812	
12,900.00	8,862.14	14,932.16	9,953.06	51.76	84.13	120.66	-4,975.37	-408.32	2,133.34	2,005.27	128.07	16.657	
13,000.00	8,862.13	15,057.29	9,955.42	52.34	85.76	120.68	-5,100.45	-411.25	2,136.57	2,006.28	130.30	16.398	
13,100.00	8,862.13	15,183.70	9,958.20	52.92	87.42	120.74	-5,226.82	-410.89	2,137.47	2,004.95	132.52	16.130	
13,200.00	8,862.13	15,272.39	9,960.10	53.51	88.60	120.78	-5,315.49	-410.85	2,138.69	2,004.56	134.14	15.944	
13,300.00	8,862.13	15,410.98	9,961.97	54.10	90.43	120.83	-5,454.07	-410.75	2,139.56	2,002.99	136.57	15.666	
13,400.00	8,862.12	15,504.87	9,962.44	54.70	91.68	120.84	-5,547.95	-410.08	2,139.36	2,001.06	138.30	15.469	
13,404.42	8,862.12	15,508.67	9,962.46	54.73	91.73	120.84	-5,551.75	-410.06	2,139.36	2,000.99	138.38	15.461	
13,500.00	8,862.12	15,591.54	9,962.97	55.30	92.83	120.86	-5,634.62	-409.90	2,139.66	1,999.73	139.93	15.291	
13,600.00	8,862.12	15,694.42	9,963.62	55.91	94.20	120.87	-5,737.50	-409.88	2,140.13	1,998.31	141.82	15.090	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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
13,700.00	8,862.12	15,778.67	9,964.05	56.52	95.32	120.87	-5,821.75	-410.29	2,140.96	1,997.54	143.42	14.928	
13,800.00	8,862.12	15,914.97	9,963.84	57.13	97.15	120.86	-5,958.05	-410.43	2,141.07	1,995.19	145.88	14.677	
13,900.00	8,862.11	16,022.20	9,963.28	57.75	98.59	120.85	-6,065.26	-409.69	2,140.37	1,992.50	147.87	14.475	
14,000.00	8,862.11	16,119.86	9,962.74	58.37	99.90	120.85	-6,162.93	-408.87	2,139.52	1,989.81	149.71	14.291	
14,100.00	8,862.11	16,213.39	9,962.19	58.99	101.16	120.84	-6,256.45	-408.39	2,138.95	1,987.45	151.50	14.119	
14,200.00	8,862.11	16,311.71	9,961.68	59.62	102.49	120.83	-6,354.77	-408.12	2,138.60	1,985.24	153.36	13.945	
14,300.00	8,862.11	16,447.85	9,960.94	60.25	104.34	120.83	-6,490.90	-406.59	2,137.56	1,981.74	155.82	13.718	
14,400.00	8,862.10	16,532.00	9,960.40	60.88	105.48	120.84	-6,575.03	-404.97	2,135.77	1,978.30	157.47	13.563	
14,500.00	8,862.10	16,615.64	9,960.12	61.52	106.62	120.85	-6,658.66	-403.95	2,134.73	1,975.62	159.11	13.417	
14,584.91	8,862.10	16,689.21	9,959.92	62.06	107.62	120.84	-6,732.23	-403.73	2,134.53	1,973.99	160.54	13.296	
14,600.00	8,862.10	16,702.53	9,959.88	62.16	107.80	120.84	-6,745.55	-403.74	2,134.53	1,973.74	160.80	13.275	
14,700.00	8,862.10	16,792.10	9,959.70	62.80	109.01	120.83	-6,835.12	-404.02	2,134.87	1,972.33	162.53	13.135	
14,800.00	8,862.10	16,873.80	9,959.71	63.44	110.12	120.82	-6,916.82	-404.76	2,135.82	1,971.68	164.14	13.012	
14,900.00	8,862.09	16,969.95	9,959.78	64.09	111.43	120.79	-7,012.96	-406.45	2,137.52	1,971.52	166.00	12.877	
15,000.00	8,862.09	17,072.18	9,959.66	64.74	112.82	120.77	-7,115.17	-408.11	2,139.01	1,971.04	167.97	12.735	
15,100.00	8,862.09	17,189.92	9,959.43	65.39	114.42	120.74	-7,232.90	-409.66	2,140.23	1,970.02	170.21	12.574	
15,200.00	8,862.09	17,318.30	9,959.36	66.05	116.18	120.73	-7,361.27	-409.69	2,140.42	1,967.80	172.62	12.400	
15,300.00	8,862.09	17,449.31	9,959.06	66.70	117.98	120.76	-7,492.26	-407.14	2,138.71	1,963.68	175.02	12.219	
15,400.00	8,862.08	17,556.03	9,957.67	67.36	119.45	120.75	-7,598.95	-404.95	2,136.44	1,959.37	177.07	12.066	
15,500.00	8,862.08	17,651.28	9,955.18	68.02	120.77	120.71	-7,694.15	-403.67	2,134.11	1,955.14	178.97	11.925	
15,600.00	8,862.08	17,731.35	9,952.30	68.69	121.87	120.64	-7,774.17	-403.58	2,132.35	1,951.70	180.64	11.804	
15,700.00	8,862.08	17,834.90	9,948.95	69.35	123.29	120.56	-7,877.67	-403.97	2,131.19	1,948.48	182.71	11.664	
15,800.00	8,862.08	17,925.75	9,946.44	70.02	124.55	120.50	-7,968.48	-403.91	2,129.91	1,945.35	184.55	11.541	
15,900.00	8,862.07	18,008.69	9,945.34	70.69	125.69	120.47	-8,051.41	-403.81	2,129.29	1,943.05	186.24	11.433	
16,000.00	8,862.07	18,122.18	9,943.75	71.36	127.26	120.43	-8,164.89	-404.18	2,129.06	1,940.61	188.45	11.298	
16,100.00	8,862.07	18,263.42	9,942.07	72.03	129.22	120.42	-8,306.08	-401.48	2,126.84	1,935.78	191.06	11.132	
16,200.00	8,862.07	18,351.72	9,942.01	72.71	130.45	120.45	-8,394.35	-398.76	2,124.32	1,931.50	192.82	11.017	
16,300.00	8,862.07	18,452.02	9,942.05	73.38	131.84	120.49	-8,494.61	-396.29	2,122.38	1,927.62	194.76	10.897	
16,400.00	8,862.06	18,559.66	9,941.83	74.06	133.35	120.53	-8,602.19	-392.78	2,119.60	1,922.79	196.82	10.770	
16,500.00	8,862.06	18,650.13	9,942.12	74.74	134.61	120.57	-8,692.62	-390.08	2,117.34	1,918.74	198.60	10.661	
16,600.00	8,862.06	18,749.89	9,942.39	75.42	136.00	120.61	-8,792.35	-387.25	2,115.20	1,914.67	200.53	10.548	
16,700.00	8,862.06	18,847.55	9,942.46	76.10	137.37	120.65	-8,889.97	-384.65	2,113.11	1,910.67	202.44	10.438	
16,800.00	8,862.06	18,956.15	9,942.02	76.79	138.89	120.67	-8,998.54	-382.04	2,111.01	1,906.48	204.53	10.321	
16,900.00	8,862.05	19,051.31	9,942.06	77.47	140.22	120.71	-9,093.65	-379.15	2,108.58	1,902.19	206.39	10.216	
17,000.00	8,862.05	19,140.10	9,942.48	78.16	141.46	120.75	-9,182.41	-376.73	2,106.65	1,898.49	208.16	10.120	
17,100.00	8,862.05	19,227.72	9,941.00	78.85	142.68	120.72	-9,270.01	-376.04	2,105.26	1,895.31	209.96	10.027	
17,200.00	8,862.05	19,320.93	9,939.24	79.54	143.98	120.68	-9,363.20	-375.98	2,104.40	1,892.55	211.86	9.933	
17,300.00	8,862.05	19,418.72	9,938.01	80.23	145.35	120.65	-9,460.99	-375.73	2,103.70	1,889.88	213.82	9.839	
17,400.00	8,862.04	19,511.40	9,937.26	80.92	146.64	120.64	-9,553.66	-375.44	2,103.18	1,887.49	215.69	9.751	
17,492.25	8,862.04	19,597.26	9,937.60	81.56	147.84	120.65	-9,639.52	-374.95	2,103.07	1,885.67	217.40	9.674	
17,500.00	8,862.04	19,604.63	9,937.64	81.62	147.95	120.65	-9,646.88	-374.92	2,103.07	1,885.53	217.54	9.667	
17,600.00	8,862.04	19,731.00	9,937.91	82.31	149.72	120.68	-9,773.24	-373.22	2,102.11	1,882.16	219.95	9.557	
17,700.00	8,862.04	19,827.00	9,938.20	83.01	151.06	120.70	-9,869.22	-371.64	2,101.01	1,879.16	221.85	9.470	
17,721.95	8,862.04	19,827.00	9,938.20	83.16	151.06	120.70	-9,869.22	-371.64	2,100.89	1,878.99	221.91	9.467	
17,800.00	8,862.04	19,899.43	9,938.57	83.71	152.08	120.71	-9,941.65	-371.55	2,101.13	1,877.78	223.35	9.407	
17,900.00	8,862.03	19,998.49	9,938.65	84.41	153.46	120.71	-10,040.71	-371.63	2,101.40	1,876.08	225.32	9.326	
18,000.00	8,862.03	20,114.84	9,938.12	85.11	155.09	120.69	-10,157.06	-371.71	2,101.40	1,873.79	227.61	9.232	
18,100.00	8,862.03	20,219.84	9,937.02	85.81	156.56	120.67	-10,262.05	-371.41	2,100.78	1,871.07	229.71	9.145	
18,200.00	8,862.03	20,314.57	9,936.46	86.51	157.89	120.66	-10,356.78	-370.97	2,100.24	1,868.62	231.62	9.068	
18,300.00	8,862.03	20,419.36	9,935.83	87.21	159.36	120.65	-10,461.57	-370.46	2,099.67	1,865.96	233.71	8.984	
18,400.00	8,862.02	20,518.88	9,934.84	87.92	160.76	120.63	-10,561.08	-369.98	2,098.92	1,863.21	235.72	8.904	
18,500.00	8,862.02	20,609.98	9,934.24	88.62	162.04	120.62	-10,652.18	-369.72	2,098.50	1,860.92	237.57	8.833	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

Rule Assigned:

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
18,570.93	8,862.02	20,676.00	9,934.13	89.12	162.96	120.61	-10,718.20	-369.57	2,098.40	1,859.50	238.90	8.784	
18,600.00	8,862.02	20,700.79	9,934.15	89.33	163.31	120.61	-10,742.99	-369.53	2,098.43	1,859.03	239.41	8.765	
18,700.00	8,862.02	20,792.19	9,934.45	90.03	164.59	120.62	-10,834.38	-369.79	2,098.99	1,857.74	241.25	8.701	
18,800.00	8,862.02	20,897.92	9,934.72	90.74	166.08	120.62	-10,940.11	-369.69	2,099.18	1,855.84	243.34	8.626	
18,900.00	8,862.01	20,985.57	9,935.01	91.45	167.31	120.62	-11,027.76	-370.21	2,100.00	1,854.88	245.12	8.567	
19,000.00	8,862.01	21,105.44	9,934.97	92.16	168.99	120.61	-11,147.63	-370.58	2,100.40	1,852.91	247.49	8.487	
19,093.57	8,862.01	21,198.66	9,933.80	92.83	170.30	120.57	-11,240.84	-370.94	2,100.27	1,850.87	249.40	8.421	
19,100.00	8,862.01	21,204.41	9,933.75	92.87	170.38	120.57	-11,246.60	-370.96	2,100.27	1,850.75	249.51	8.417	
19,200.00	8,862.01	21,299.08	9,933.85	93.58	171.71	120.57	-11,341.26	-370.96	2,100.48	1,849.05	251.42	8.354	
19,300.00	8,862.01	21,397.27	9,935.22	94.30	173.10	120.61	-11,439.44	-370.35	2,100.81	1,847.46	253.36	8.292	SF
19,400.00	8,862.00	21,398.00	9,935.23	95.01	173.11	120.61	-11,440.17	-370.35	2,103.53	1,850.23	253.30	8.305	
19,500.00	8,862.00	21,398.00	9,935.23	95.72	173.11	120.61	-11,440.17	-370.35	2,110.98	1,858.27	252.72	8.353	
19,547.53	8,862.00	21,398.00	9,935.23	96.06	173.11	120.61	-11,440.17	-370.35	2,116.17	1,863.91	252.27	8.389	
19,548.26	8,862.00	21,398.00	9,935.23	96.14	173.11	120.61	-11,440.17	-370.35	2,116.26	1,863.88	252.38	8.385	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Rule Assigned:** — **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	0.00	0.00	0.00	-88.91	0.38	-19.99	19.99				
100.00	100.00	100.00	100.00	0.28	0.28	-88.91	0.38	-19.99	19.99	19.44	0.55	36.217	
200.00	200.00	200.00	200.00	0.63	0.63	-88.91	0.38	-19.99	19.99	18.72	1.27	15.756	
300.00	300.00	300.00	300.00	0.99	0.99	-88.91	0.38	-19.99	19.99	18.01	1.99	10.068	
400.00	400.00	400.00	400.00	1.35	1.35	-88.91	0.38	-19.99	19.99	17.29	2.70	7.397	
500.00	500.00	500.00	500.00	1.71	1.71	-88.91	0.38	-19.99	19.99	16.57	3.42	5.846	
600.00	600.00	600.00	600.00	2.07	2.07	-88.91	0.38	-19.99	19.99	15.86	4.14	4.833	
700.00	700.00	700.00	700.00	2.43	2.43	-88.91	0.38	-19.99	19.99	15.14	4.85	4.119	
800.00	800.00	800.00	800.00	2.79	2.79	-88.91	0.38	-19.99	19.99	14.42	5.57	3.589	
900.00	900.00	900.00	900.00	3.14	3.14	-88.91	0.38	-19.99	19.99	13.71	6.29	3.180	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-88.91	0.38	-19.99	19.99	12.99	7.00	2.854	CC
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	115.59	0.38	-19.99	20.69	12.98	7.70	2.685	ES, SF
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	127.16	0.38	-19.99	23.43	15.04	8.39	2.792	
1,300.00	1,299.45	1,299.45	1,299.45	4.51	4.58	140.66	0.38	-19.99	29.53	20.45	9.08	3.252	
1,350.00	1,349.13	1,349.13	1,349.13	4.68	4.75	146.64	0.38	-19.99	34.10	24.67	9.43	3.617	
1,400.00	1,398.73	1,398.73	1,398.73	4.85	4.93	157.66	0.38	-19.99	39.72	29.95	9.78	4.063	
1,500.00	1,497.69	1,497.69	1,497.69	5.19	5.29	172.29	0.38	-19.99	53.59	43.12	10.47	5.117	
1,600.00	1,596.25	1,596.25	1,596.25	5.54	5.64	-179.43	0.38	-19.99	70.45	59.28	11.17	6.305	
1,670.62	1,665.55	1,665.55	1,665.55	5.78	5.89	-175.84	0.38	-19.99	84.06	72.39	11.67	7.203	
1,700.00	1,694.31	1,694.31	1,694.31	5.89	5.99	-176.11	0.38	-19.99	90.01	78.13	11.88	7.579	
1,800.00	1,792.23	1,792.23	1,792.23	6.24	6.34	-176.83	0.38	-19.99	110.28	97.71	12.57	8.770	
1,900.00	1,890.14	1,894.26	1,894.25	6.61	6.69	-177.52	-0.96	-19.20	129.14	115.86	13.28	9.726	
2,000.00	1,988.06	1,997.81	1,997.66	6.97	7.03	-178.43	-5.51	-16.53	144.60	130.64	13.96	10.355	
2,100.00	2,085.97	2,102.32	2,101.76	7.34	7.38	-179.56	-13.36	-11.92	156.65	142.00	14.65	10.695	
2,200.00	2,183.89	2,207.53	2,206.15	7.70	7.73	179.07	-24.57	-5.33	165.28	149.96	15.33	10.784	
2,300.00	2,281.80	2,312.84	2,310.11	8.07	8.08	177.40	-39.09	3.20	170.54	154.54	16.00	10.658	
2,400.00	2,379.72	2,412.64	2,408.34	8.45	8.42	175.73	-54.26	12.11	174.37	157.66	16.71	10.434	
2,500.00	2,477.64	2,512.44	2,506.58	8.82	8.76	174.12	-69.43	21.03	178.35	160.92	17.43	10.235	
2,600.00	2,575.55	2,612.24	2,604.81	9.19	9.10	172.59	-84.61	29.94	182.46	164.32	18.15	10.055	
2,700.00	2,673.47	2,712.04	2,703.05	9.57	9.45	171.12	-99.78	38.86	186.70	167.83	18.87	9.894	
2,800.00	2,771.38	2,811.83	2,801.28	9.95	9.80	169.72	-114.95	47.77	191.05	171.45	19.60	9.749	
2,900.00	2,869.30	2,911.63	2,899.52	10.32	10.15	168.39	-130.12	56.69	195.51	175.18	20.33	9.618	
3,000.00	2,967.21	3,011.43	2,997.75	10.70	10.50	167.11	-145.29	65.60	200.07	179.01	21.06	9.500	
3,100.00	3,065.13	3,111.23	3,095.99	11.08	10.86	165.89	-160.47	74.51	204.73	182.93	21.80	9.392	
3,200.00	3,163.05	3,211.03	3,194.22	11.46	11.22	164.73	-175.64	83.43	209.48	186.94	22.54	9.295	
3,300.00	3,260.96	3,310.83	3,292.46	11.84	11.58	163.62	-190.81	92.34	214.31	191.03	23.28	9.207	
3,400.00	3,358.88	3,410.63	3,390.69	12.22	11.94	162.55	-205.98	101.26	219.21	195.19	24.02	9.126	
3,500.00	3,456.79	3,510.42	3,488.93	12.60	12.30	161.54	-221.16	110.17	224.19	199.42	24.77	9.053	
3,600.00	3,554.71	3,610.22	3,587.16	12.98	12.66	160.57	-236.33	119.09	229.23	203.72	25.51	8.986	
3,700.00	3,652.62	3,710.02	3,685.40	13.36	13.02	159.64	-251.50	128.00	234.34	208.08	26.26	8.924	
3,800.00	3,750.54	3,809.82	3,783.63	13.75	13.39	158.75	-266.67	136.92	239.51	212.50	27.01	8.868	
3,900.00	3,848.45	3,909.62	3,881.87	14.13	13.75	157.89	-281.85	145.83	244.73	216.97	27.76	8.816	
4,000.00	3,946.37	4,009.42	3,980.10	14.51	14.12	157.08	-297.02	154.75	250.01	221.50	28.51	8.769	
4,100.00	4,044.29	4,109.22	4,078.34	14.89	14.49	156.29	-312.19	163.66	255.33	226.07	29.26	8.725	
4,200.00	4,142.20	4,209.02	4,176.57	15.28	14.85	155.54	-327.36	172.57	260.70	230.68	30.02	8.685	
4,300.00	4,240.12	4,308.81	4,274.81	15.66	15.22	154.82	-342.54	181.49	266.11	235.34	30.77	8.648	
4,400.00	4,338.03	4,408.61	4,373.04	16.05	15.59	154.13	-357.71	190.40	271.56	240.03	31.53	8.613	
4,500.00	4,435.95	4,508.41	4,471.28	16.43	15.96	153.47	-372.88	199.32	277.05	244.77	32.28	8.581	
4,600.00	4,533.86	4,608.21	4,569.51	16.81	16.33	152.83	-388.05	208.23	282.58	249.53	33.04	8.552	
4,700.00	4,631.78	4,708.01	4,667.75	17.20	16.70	152.22	-403.23	217.15	288.14	254.34	33.80	8.525	
4,800.00	4,729.69	4,807.81	4,765.98	17.58	17.07	151.63	-418.40	226.06	293.73	259.17	34.56	8.500	
4,900.00	4,827.61	4,907.61	4,864.22	17.97	17.44	151.06	-433.57	234.98	299.35	264.03	35.32	8.476	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
5,000.00	4,925.53	5,007.41	4,962.45	18.35	17.81	150.51	-448.74	243.89	305.00	268.92	36.08	8.454	
5,100.00	5,023.44	5,107.20	5,060.69	18.74	18.19	149.98	-463.92	252.80	310.67	273.83	36.84	8.434	
5,200.00	5,121.36	5,207.00	5,158.92	19.12	18.56	149.47	-479.09	261.72	316.37	278.77	37.60	8.415	
5,300.00	5,219.27	5,306.80	5,257.16	19.51	18.93	148.98	-494.26	270.63	322.10	283.74	38.36	8.397	
5,400.00	5,317.19	5,406.60	5,355.39	19.89	19.30	148.51	-509.43	279.55	327.84	288.72	39.12	8.381	
5,500.00	5,415.10	5,506.40	5,453.63	20.28	19.68	148.05	-524.61	288.46	333.61	293.73	39.88	8.365	
5,600.00	5,513.02	5,606.20	5,551.86	20.66	20.05	147.61	-539.78	297.38	339.40	298.76	40.64	8.351	
5,700.00	5,610.93	5,706.00	5,650.10	21.05	20.43	147.19	-554.95	306.29	345.21	303.81	41.41	8.337	
5,800.00	5,708.85	5,805.79	5,748.33	21.43	20.80	146.77	-570.12	315.21	351.04	308.87	42.17	8.325	
5,900.00	5,806.77	5,905.59	5,846.57	21.82	21.17	146.37	-585.30	324.12	356.88	313.95	42.93	8.313	
6,000.00	5,904.68	6,005.39	5,944.80	22.21	21.55	145.99	-600.47	333.03	362.75	319.05	43.69	8.302	
6,100.00	6,002.60	6,105.19	6,043.04	22.59	21.92	145.61	-615.64	341.95	368.62	324.17	44.46	8.291	
6,200.00	6,100.51	6,204.99	6,141.27	22.98	22.30	145.25	-630.81	350.86	374.52	329.29	45.22	8.282	
6,300.00	6,198.43	6,304.79	6,239.51	23.36	22.67	144.90	-645.98	359.78	380.42	334.44	45.99	8.272	
6,400.00	6,296.34	6,404.59	6,337.74	23.75	23.05	144.56	-661.16	368.69	386.34	339.59	46.75	8.264	
6,500.00	6,394.26	6,504.39	6,435.98	24.14	23.43	144.23	-676.33	377.61	392.28	344.76	47.52	8.256	
6,600.00	6,492.17	6,604.18	6,534.21	24.52	23.80	143.91	-691.50	386.52	398.23	349.95	48.28	8.248	
6,700.00	6,590.09	6,703.98	6,632.45	24.91	24.18	143.60	-706.67	395.44	404.18	355.14	49.05	8.241	
6,800.00	6,688.01	6,803.78	6,730.68	25.29	24.55	143.30	-721.85	404.35	410.15	360.34	49.81	8.234	
6,900.00	6,785.92	6,903.58	6,828.92	25.68	24.93	143.01	-737.02	413.26	416.14	365.56	50.58	8.228	
7,000.00	6,883.84	7,003.38	6,927.15	26.07	25.31	142.72	-752.19	422.18	422.13	370.79	51.34	8.222	
7,100.00	6,981.75	7,103.18	7,025.39	26.45	25.68	142.45	-767.36	431.09	428.13	376.02	52.11	8.216	
7,200.00	7,079.67	7,202.98	7,123.62	26.84	26.06	142.18	-782.54	440.01	434.14	381.27	52.87	8.211	
7,300.00	7,177.58	7,302.78	7,221.86	27.23	26.44	141.92	-797.71	448.92	440.16	386.52	53.64	8.206	
7,400.00	7,275.50	7,400.00	7,317.56	27.61	26.80	141.67	-812.49	457.61	446.20	391.81	54.39	8.203	
7,500.00	7,373.41	7,493.67	7,410.03	28.00	27.16	141.61	-825.32	465.15	453.25	398.13	55.12	8.223	
7,600.00	7,471.33	7,584.97	7,500.59	28.39	27.49	141.85	-835.32	471.02	462.11	406.29	55.82	8.279	
7,700.00	7,569.25	7,675.79	7,590.99	28.77	27.82	142.38	-842.78	475.41	472.80	416.31	56.49	8.370	
7,764.22	7,632.13	7,733.78	7,648.84	29.02	28.03	142.85	-846.26	477.45	480.65	423.75	56.91	8.447	
7,800.00	7,667.21	7,765.98	7,680.99	29.16	28.15	143.20	-847.75	478.33	485.20	428.07	57.13	8.493	
7,900.00	7,765.68	7,855.76	7,770.73	29.54	28.45	144.15	-850.27	479.80	497.34	439.60	57.73	8.615	
8,000.00	7,864.70	7,980.94	7,895.67	29.91	28.89	144.84	-855.46	481.77	507.04	448.33	58.71	8.637	
8,100.00	7,964.15	8,141.95	8,050.13	30.28	29.51	141.44	-896.37	496.66	503.39	443.73	59.66	8.438	
8,200.00	8,063.90	8,275.68	8,165.13	30.63	30.06	134.47	-959.97	519.81	488.91	428.54	60.37	8.099	
8,300.00	8,163.83	8,375.46	8,239.00	30.98	30.47	126.58	-1,022.81	542.68	472.20	410.90	61.30	7.703	
8,350.17	8,214.00	8,414.29	8,264.43	31.14	30.63	-104.94	-1,050.38	552.72	465.68	403.92	61.76	7.540	
8,400.00	8,263.77	8,448.86	8,285.35	31.31	30.77	104.68	-1,076.23	562.13	462.37	400.26	62.11	7.444	
8,415.08	8,278.77	8,459.04	8,291.19	31.36	30.81	103.74	-1,084.07	564.98	462.19	400.00	62.19	7.432	
8,450.00	8,313.33	8,482.19	8,303.91	31.49	30.90	101.49	-1,102.24	571.59	463.17	400.86	62.31	7.433	
8,500.00	8,362.13	8,514.44	8,320.31	31.69	31.03	98.11	-1,128.33	581.09	467.84	405.53	62.31	7.508	
8,550.00	8,409.80	8,545.80	8,334.74	31.89	31.15	94.56	-1,154.49	590.61	476.03	413.92	62.11	7.664	
8,600.00	8,455.99	8,576.43	8,347.34	32.09	31.27	90.88	-1,180.72	600.16	487.29	425.57	61.72	7.895	
8,650.00	8,500.33	8,606.45	8,358.22	32.31	31.39	87.14	-1,207.01	609.72	501.16	439.97	61.19	8.191	
8,700.00	8,542.50	8,635.96	8,367.48	32.53	31.50	83.38	-1,233.33	619.31	517.12	456.58	60.54	8.542	
8,750.00	8,582.16	8,664.40	8,375.09	32.75	31.60	79.71	-1,259.10	628.64	534.72	474.89	59.82	8.938	
8,800.00	8,619.02	8,692.29	8,381.97	32.97	31.70	76.23	-1,284.66	637.43	553.56	494.44	59.12	9.363	
8,850.00	8,652.80	8,720.90	8,388.63	33.19	31.81	72.97	-1,311.15	645.94	573.16	514.66	58.50	9.797	
8,900.00	8,683.24	8,750.04	8,394.99	33.42	31.91	70.00	-1,338.40	654.07	593.09	535.09	58.00	10.226	
8,950.00	8,710.11	8,779.51	8,400.99	33.64	32.02	67.36	-1,366.21	661.73	613.01	555.38	57.63	10.637	
9,000.00	8,733.20	8,800.00	8,404.89	33.86	32.09	65.13	-1,385.70	666.73	632.74	575.54	57.21	11.060	
9,050.00	8,752.35	8,838.76	8,411.69	34.08	32.23	63.11	-1,422.85	675.43	651.78	594.47	57.31	11.373	
9,100.00	8,767.39	8,868.22	8,416.33	34.29	32.34	61.48	-1,451.33	681.38	670.29	612.93	57.36	11.686	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
9,100.17	8,767.43	8,868.32	8,416.34	34.29	32.34	61.48	-1,451.42	681.40	670.35	612.99	57.36	11.687	
9,200.00	8,791.66	8,926.74	8,424.20	34.71	32.55	60.94	-1,508.43	691.48	704.96	647.38	57.58	12.244	
9,300.00	8,812.57	9,000.00	8,431.49	35.13	32.80	60.50	-1,580.70	700.88	736.52	678.52	58.00	12.699	
9,400.00	8,829.97	9,043.17	8,434.44	35.54	32.95	59.99	-1,623.59	704.72	764.14	706.29	57.85	13.209	
9,500.00	8,843.72	9,100.00	8,436.80	35.95	33.14	59.62	-1,680.28	707.83	788.49	730.59	57.89	13.619	
9,600.00	8,853.72	9,166.16	8,437.43	36.33	33.36	59.34	-1,746.42	708.76	809.17	751.15	58.03	13.945	
9,700.00	8,859.89	9,265.17	8,437.43	36.70	33.69	59.20	-1,845.43	708.96	822.95	764.35	58.60	14.045	
9,800.00	8,862.18	9,365.00	8,437.43	37.05	34.03	59.14	-1,945.27	709.16	828.07	768.91	59.16	13.998	
9,809.00	8,862.20	9,374.00	8,437.43	37.08	34.06	59.14	-1,954.27	709.17	828.11	768.90	59.21	13.987	
9,900.00	8,862.20	9,465.00	8,437.42	37.39	34.39	59.14	-2,045.27	709.35	828.10	768.37	59.73	13.865	
10,000.00	8,862.19	9,565.00	8,437.42	37.74	34.76	59.14	-2,145.27	709.55	828.09	767.76	60.33	13.726	
10,100.00	8,862.19	9,665.00	8,437.41	38.10	35.14	59.14	-2,245.27	709.74	828.08	767.12	60.97	13.583	
10,200.00	8,862.19	9,765.00	8,437.41	38.48	35.54	59.14	-2,345.27	709.94	828.08	766.44	61.64	13.435	
10,300.00	8,862.19	9,865.00	8,437.40	38.86	35.94	59.14	-2,445.27	710.14	828.07	765.74	62.33	13.284	
10,400.00	8,862.19	9,965.00	8,437.40	39.25	36.36	59.14	-2,545.27	710.33	828.06	765.00	63.06	13.131	
10,500.00	8,862.18	10,065.00	8,437.40	39.66	36.79	59.14	-2,645.27	710.53	828.05	764.23	63.82	12.975	
10,600.00	8,862.18	10,165.00	8,437.39	40.07	37.23	59.14	-2,745.27	710.73	828.05	763.44	64.61	12.817	
10,700.00	8,862.18	10,265.00	8,437.39	40.49	37.68	59.14	-2,845.27	710.92	828.04	762.62	65.42	12.658	
10,800.00	8,862.18	10,365.00	8,437.38	40.93	38.14	59.13	-2,945.27	711.12	828.03	761.78	66.25	12.498	
10,900.00	8,862.18	10,465.00	8,437.38	41.37	38.61	59.13	-3,045.27	711.32	828.02	760.91	67.12	12.337	
11,000.00	8,862.17	10,565.00	8,437.37	41.82	39.09	59.13	-3,145.27	711.51	828.02	760.01	68.00	12.176	
11,100.00	8,862.17	10,665.00	8,437.37	42.28	39.58	59.13	-3,245.27	711.71	828.01	759.10	68.91	12.015	
11,200.00	8,862.17	10,765.00	8,437.36	42.75	40.07	59.13	-3,345.27	711.90	828.00	758.16	69.84	11.855	
11,300.00	8,862.17	10,865.00	8,437.36	43.22	40.58	59.13	-3,445.27	712.10	828.00	757.20	70.80	11.696	
11,400.00	8,862.17	10,965.00	8,437.36	43.71	41.09	59.13	-3,545.27	712.30	827.99	756.22	71.77	11.537	
11,500.00	8,862.16	11,065.00	8,437.35	44.20	41.61	59.13	-3,645.27	712.49	827.98	755.22	72.76	11.380	
11,600.00	8,862.16	11,165.00	8,437.35	44.70	42.14	59.13	-3,745.27	712.69	827.97	754.20	73.77	11.224	
11,700.00	8,862.16	11,265.00	8,437.34	45.20	42.67	59.13	-3,845.27	712.89	827.97	753.17	74.80	11.069	
11,800.00	8,862.16	11,365.00	8,437.34	45.72	43.21	59.13	-3,945.27	713.08	827.96	752.11	75.85	10.916	
11,900.00	8,862.16	11,465.00	8,437.33	46.24	43.76	59.13	-4,045.26	713.28	827.95	751.04	76.91	10.765	
12,000.00	8,862.15	11,565.00	8,437.33	46.76	44.31	59.13	-4,145.26	713.48	827.94	749.96	77.99	10.616	
12,100.00	8,862.15	11,665.00	8,437.33	47.29	44.87	59.13	-4,245.26	713.67	827.94	748.85	79.08	10.469	
12,200.00	8,862.15	11,765.00	8,437.32	47.83	45.44	59.13	-4,345.26	713.87	827.93	747.74	80.19	10.325	
12,300.00	8,862.15	11,865.00	8,437.32	48.38	46.01	59.13	-4,445.26	714.07	827.92	746.61	81.31	10.182	
12,400.00	8,862.15	11,965.00	8,437.31	48.93	46.59	59.13	-4,545.26	714.26	827.91	745.47	82.45	10.042	
12,500.00	8,862.14	12,065.00	8,437.31	49.48	47.17	59.13	-4,645.26	714.46	827.91	744.31	83.60	9.904	
12,600.00	8,862.14	12,165.00	8,437.30	50.04	47.76	59.13	-4,745.26	714.65	827.90	743.14	84.76	9.768	
12,700.00	8,862.14	12,265.00	8,437.30	50.61	48.35	59.13	-4,845.26	714.85	827.89	741.96	85.93	9.635	
12,800.00	8,862.14	12,365.00	8,437.29	51.18	48.95	59.12	-4,945.26	715.05	827.88	740.77	87.11	9.503	
12,900.00	8,862.14	12,465.00	8,437.29	51.76	49.55	59.12	-5,045.26	715.24	827.88	739.57	88.31	9.375	
13,000.00	8,862.13	12,565.00	8,437.29	52.34	50.16	59.12	-5,145.26	715.44	827.87	738.35	89.51	9.248	
13,100.00	8,862.13	12,665.00	8,437.28	52.92	50.77	59.12	-5,245.26	715.64	827.86	737.13	90.73	9.124	
13,200.00	8,862.13	12,765.00	8,437.28	53.51	51.38	59.12	-5,345.26	715.83	827.85	735.90	91.96	9.003	
13,300.00	8,862.13	12,865.00	8,437.27	54.10	52.00	59.12	-5,445.26	716.03	827.85	734.66	93.19	8.883	
13,400.00	8,862.12	12,965.00	8,437.27	54.70	52.62	59.12	-5,545.26	716.23	827.84	733.40	94.43	8.766	
13,500.00	8,862.12	13,065.00	8,437.26	55.30	53.25	59.12	-5,645.26	716.42	827.83	732.14	95.69	8.652	
13,600.00	8,862.12	13,165.00	8,437.26	55.91	53.88	59.12	-5,745.26	716.62	827.82	730.88	96.95	8.539	
13,700.00	8,862.12	13,265.00	8,437.26	56.52	54.51	59.12	-5,845.26	716.81	827.82	729.60	98.21	8.429	
13,800.00	8,862.12	13,365.00	8,437.25	57.13	55.15	59.12	-5,945.26	717.01	827.81	728.32	99.49	8.320	
13,900.00	8,862.11	13,465.00	8,437.25	57.75	55.79	59.12	-6,045.26	717.21	827.80	727.03	100.77	8.214	
14,000.00	8,862.11	13,565.00	8,437.24	58.37	56.43	59.12	-6,145.26	717.40	827.79	725.73	102.06	8.110	
14,100.00	8,862.11	13,665.00	8,437.24	58.99	57.08	59.12	-6,245.26	717.60	827.79	724.42	103.36	8.009	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
14,200.00	8,862.11	13,765.00	8,437.23	59.62	57.73	59.12	-6,345.26	717.80	827.78	723.11	104.67	7.909	
14,300.00	8,862.11	13,865.00	8,437.23	60.25	58.38	59.12	-6,445.26	717.99	827.77	721.80	105.98	7.811	
14,400.00	8,862.10	13,965.00	8,437.22	60.88	59.03	59.12	-6,545.26	718.19	827.76	720.47	107.29	7.715	
14,500.00	8,862.10	14,065.00	8,437.22	61.52	59.69	59.12	-6,645.26	718.39	827.76	719.14	108.61	7.621	
14,600.00	8,862.10	14,165.00	8,437.22	62.16	60.35	59.12	-6,745.26	718.58	827.75	717.81	109.94	7.529	
14,700.00	8,862.10	14,265.00	8,437.21	62.80	61.01	59.12	-6,845.26	718.78	827.74	716.47	111.27	7.439	
14,800.00	8,862.10	14,365.00	8,437.21	63.44	61.67	59.12	-6,945.26	718.97	827.73	715.12	112.61	7.350	
14,900.00	8,862.09	14,465.00	8,437.20	64.09	62.34	59.11	-7,045.26	719.17	827.73	713.77	113.96	7.264	
15,000.00	8,862.09	14,565.00	8,437.20	64.74	63.01	59.11	-7,145.26	719.37	827.72	712.42	115.30	7.179	
15,100.00	8,862.09	14,665.00	8,437.19	65.39	63.68	59.11	-7,245.26	719.56	827.71	711.06	116.66	7.095	
15,200.00	8,862.09	14,765.00	8,437.19	66.05	64.35	59.11	-7,345.26	719.76	827.70	709.69	118.01	7.014	
15,300.00	8,862.09	14,865.00	8,437.19	66.70	65.03	59.11	-7,445.26	719.96	827.70	708.32	119.38	6.934	
15,400.00	8,862.08	14,965.00	8,437.18	67.36	65.70	59.11	-7,545.26	720.15	827.69	706.95	120.74	6.855	
15,500.00	8,862.08	15,065.00	8,437.18	68.02	66.38	59.11	-7,645.26	720.35	827.68	705.57	122.11	6.778	
15,600.00	8,862.08	15,165.00	8,437.17	68.69	67.06	59.11	-7,745.26	720.55	827.67	704.19	123.49	6.703	
15,700.00	8,862.08	15,265.00	8,437.17	69.35	67.74	59.11	-7,845.26	720.74	827.67	702.80	124.86	6.629	
15,800.00	8,862.08	15,365.00	8,437.16	70.02	68.43	59.11	-7,945.26	720.94	827.66	701.41	126.25	6.556	
15,900.00	8,862.07	15,465.00	8,437.16	70.69	69.11	59.11	-8,045.26	721.14	827.65	700.02	127.63	6.485	
16,000.00	8,862.07	15,565.00	8,437.15	71.36	69.80	59.11	-8,145.26	721.33	827.64	698.62	129.02	6.415	
16,100.00	8,862.07	15,665.00	8,437.15	72.03	70.49	59.11	-8,245.26	721.53	827.64	697.22	130.41	6.346	
16,200.00	8,862.07	15,765.00	8,437.15	72.71	71.18	59.11	-8,345.26	721.72	827.63	695.82	131.81	6.279	
16,300.00	8,862.07	15,865.00	8,437.14	73.38	71.87	59.11	-8,445.26	721.92	827.62	694.42	133.21	6.213	
16,400.00	8,862.06	15,965.00	8,437.14	74.06	72.57	59.11	-8,545.26	722.12	827.61	693.01	134.61	6.148	
16,500.00	8,862.06	16,065.00	8,437.13	74.74	73.26	59.11	-8,645.26	722.31	827.61	691.59	136.01	6.085	
16,600.00	8,862.06	16,165.00	8,437.13	75.42	73.96	59.11	-8,745.26	722.51	827.60	690.18	137.42	6.022	
16,700.00	8,862.06	16,265.00	8,437.12	76.10	74.66	59.11	-8,845.26	722.71	827.59	688.76	138.83	5.961	
16,800.00	8,862.06	16,365.00	8,437.12	76.79	75.35	59.11	-8,945.26	722.90	827.59	687.34	140.24	5.901	
16,900.00	8,862.05	16,465.00	8,437.12	77.47	76.06	59.10	-9,045.26	723.10	827.58	685.92	141.66	5.842	
17,000.00	8,862.05	16,565.00	8,437.11	78.16	76.76	59.10	-9,145.26	723.30	827.57	684.49	143.08	5.784	
17,100.00	8,862.05	16,665.00	8,437.11	78.85	77.46	59.10	-9,245.26	723.49	827.56	683.06	144.50	5.727	
17,200.00	8,862.05	16,765.00	8,437.10	79.54	78.16	59.10	-9,345.25	723.69	827.56	681.63	145.92	5.671	
17,300.00	8,862.05	16,865.00	8,437.10	80.23	78.87	59.10	-9,445.25	723.88	827.55	680.20	147.35	5.616	
17,400.00	8,862.04	16,965.00	8,437.09	80.92	79.57	59.10	-9,545.25	724.08	827.54	678.77	148.77	5.562	
17,500.00	8,862.04	17,065.00	8,437.09	81.62	80.28	59.10	-9,645.25	724.28	827.53	677.33	150.20	5.509	
17,600.00	8,862.04	17,165.00	8,437.08	82.31	80.99	59.10	-9,745.25	724.47	827.53	675.89	151.64	5.457	
17,700.00	8,862.04	17,265.00	8,437.08	83.01	81.70	59.10	-9,845.25	724.67	827.52	674.45	153.07	5.406	
17,800.00	8,862.04	17,365.00	8,437.08	83.71	82.41	59.10	-9,945.25	724.87	827.51	673.00	154.51	5.356	
17,900.00	8,862.03	17,465.00	8,437.07	84.41	83.12	59.10	-10,045.25	725.06	827.50	671.56	155.94	5.306	
18,000.00	8,862.03	17,565.00	8,437.07	85.11	83.83	59.10	-10,145.25	725.26	827.50	670.11	157.38	5.258	
18,100.00	8,862.03	17,665.00	8,437.06	85.81	84.54	59.10	-10,245.25	725.46	827.49	668.66	158.83	5.210	
18,200.00	8,862.03	17,765.00	8,437.06	86.51	85.26	59.10	-10,345.25	725.65	827.48	667.21	160.27	5.163	
18,300.00	8,862.03	17,865.00	8,437.05	87.21	85.97	59.10	-10,445.25	725.85	827.47	665.76	161.71	5.117	
18,400.00	8,862.02	17,965.00	8,437.05	87.92	86.69	59.10	-10,545.25	726.05	827.47	664.30	163.16	5.071	
18,500.00	8,862.02	18,065.00	8,437.05	88.62	87.40	59.10	-10,645.25	726.24	827.46	662.85	164.61	5.027	
18,600.00	8,862.02	18,165.00	8,437.04	89.33	88.12	59.10	-10,745.25	726.44	827.45	661.39	166.06	4.983	
18,700.00	8,862.02	18,265.00	8,437.04	90.03	88.84	59.10	-10,845.25	726.63	827.44	659.93	167.51	4.940	
18,800.00	8,862.02	18,365.00	8,437.03	90.74	89.56	59.10	-10,945.25	726.83	827.44	658.47	168.97	4.897	
18,900.00	8,862.01	18,465.00	8,437.03	91.45	90.28	59.09	-11,045.25	727.03	827.43	657.01	170.42	4.855	
19,000.00	8,862.01	18,565.00	8,437.02	92.16	91.00	59.09	-11,145.25	727.22	827.42	655.54	171.88	4.814	
19,100.00	8,862.01	18,665.00	8,437.02	92.87	91.72	59.09	-11,245.25	727.42	827.41	654.08	173.34	4.773	
19,200.00	8,862.01	18,765.00	8,437.01	93.58	92.44	59.09	-11,345.25	727.62	827.41	652.61	174.79	4.734	
19,300.00	8,862.01	18,865.00	8,437.01	94.30	93.16	59.09	-11,445.25	727.81	827.40	651.14	176.26	4.694	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,400.00	8,862.00	18,965.00	8,437.01	95.01	93.89	59.09	-11,545.25	728.01	827.39	649.67	177.72	4.656	
19,500.00	8,862.00	19,065.00	8,437.00	95.72	94.61	59.09	-11,645.25	728.21	827.38	648.20	179.18	4.618	
19,538.86	8,862.00	19,103.82	8,437.00	96.00	94.91	59.09	-11,684.06	728.28	827.38	647.64	179.75	4.603	
19,547.53	8,862.00	19,103.82	8,437.00	96.06	94.91	59.09	-11,684.06	728.28	827.43	647.85	179.58	4.608	
19,548.26	8,862.00	19,103.82	8,437.00	96.14	94.91	59.09	-11,684.06	728.28	827.43	647.89	179.54	4.609	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Rule Assigned:** — **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	0.00	0.00	0.00	91.09	-0.38	19.99	19.99				
100.00	100.00	100.00	100.00	0.28	0.28	91.09	-0.38	19.99	19.99	19.44	0.55	36.217	
200.00	200.00	200.00	200.00	0.63	0.63	91.09	-0.38	19.99	19.99	18.72	1.27	15.756	
300.00	300.00	300.00	300.00	0.99	0.99	91.09	-0.38	19.99	19.99	18.01	1.99	10.068	
400.00	400.00	400.00	400.00	1.35	1.35	91.09	-0.38	19.99	19.99	17.29	2.70	7.397	
500.00	500.00	500.00	500.00	1.71	1.71	91.09	-0.38	19.99	19.99	16.57	3.42	5.846	
600.00	600.00	600.00	600.00	2.07	2.07	91.09	-0.38	19.99	19.99	15.86	4.14	4.833	
700.00	700.00	700.00	700.00	2.43	2.43	91.09	-0.38	19.99	19.99	15.14	4.85	4.119	
800.00	800.00	800.00	800.00	2.79	2.79	91.09	-0.38	19.99	19.99	14.42	5.57	3.589	
900.00	900.00	900.00	900.00	3.14	3.14	91.09	-0.38	19.99	19.99	13.71	6.29	3.180	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.09	-0.38	19.99	19.99	12.99	7.00	2.854	
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	-73.73	-0.38	19.99	19.43	11.73	7.70	2.523	
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	-89.34	-0.38	19.99	18.66	10.27	8.39	2.224	
1,203.07	1,202.90	1,202.90	1,202.90	4.18	4.23	-90.00	-0.38	19.99	18.65	10.24	8.41	2.218	CC, ES, SF
1,300.00	1,299.45	1,299.45	1,299.45	4.51	4.58	-114.38	-0.38	19.99	20.50	11.42	9.08	2.258	
1,350.00	1,349.13	1,349.13	1,349.13	4.68	4.75	-126.99	-0.38	19.99	23.42	13.99	9.43	2.484	
1,400.00	1,398.73	1,398.73	1,398.73	4.85	4.93	-131.54	-0.38	19.99	27.46	17.68	9.78	2.808	
1,500.00	1,497.69	1,497.69	1,497.69	5.19	5.29	-139.10	-0.38	19.99	37.74	27.26	10.48	3.602	
1,600.00	1,596.25	1,596.25	1,596.25	5.54	5.64	-145.06	-0.38	19.99	51.17	39.99	11.18	4.579	
1,670.62	1,665.55	1,665.55	1,665.55	5.78	5.89	-148.48	-0.38	19.99	62.63	50.96	11.67	5.367	
1,700.00	1,694.31	1,694.31	1,694.31	5.89	5.99	-151.10	-0.38	19.99	67.82	55.94	11.88	5.710	
1,800.00	1,792.23	1,792.23	1,792.23	6.24	6.34	-157.62	-0.38	19.99	86.23	73.65	12.58	6.856	
1,900.00	1,890.14	1,890.14	1,890.14	6.61	6.69	-161.82	-0.38	19.99	105.34	92.06	13.28	7.933	
2,000.00	1,988.06	1,988.06	1,988.06	6.97	7.04	-164.73	-0.38	19.99	124.83	110.85	13.98	8.926	
2,100.00	2,085.97	2,090.51	2,090.50	7.34	7.40	-166.92	-1.54	20.83	143.19	128.49	14.70	9.742	
2,200.00	2,183.89	2,194.78	2,194.63	7.70	7.74	-168.64	-5.74	23.87	158.16	142.76	15.40	10.273	
2,300.00	2,281.80	2,300.07	2,299.53	8.07	8.09	-170.11	-13.10	29.20	169.60	153.52	16.08	10.544	
2,400.00	2,379.72	2,406.11	2,404.75	8.45	8.44	-171.46	-23.66	36.84	177.48	160.71	16.76	10.586	
2,500.00	2,477.64	2,512.61	2,509.88	8.82	8.80	-172.80	-37.43	46.81	181.74	164.31	17.43	10.425	
2,600.00	2,575.55	2,619.28	2,614.47	9.19	9.16	-174.20	-54.39	59.08	182.39	164.30	18.09	10.084	
2,700.00	2,673.47	2,720.78	2,713.44	9.57	9.51	-175.63	-72.66	72.30	180.50	161.72	18.78	9.609	
2,800.00	2,771.38	2,820.66	2,810.80	9.95	9.85	-177.06	-90.72	85.37	178.63	159.12	19.51	9.158	
2,900.00	2,869.30	2,920.54	2,908.16	10.32	10.20	-178.53	-108.78	98.44	176.86	156.63	20.23	8.742	
3,000.00	2,967.21	3,020.42	3,005.52	10.70	10.55	179.97	-126.84	111.52	175.22	154.26	20.96	8.360	
3,100.00	3,065.13	3,120.31	3,102.88	11.08	10.90	178.45	-144.90	124.59	173.70	152.00	21.69	8.007	
3,200.00	3,163.05	3,220.19	3,200.24	11.46	11.26	176.90	-162.97	137.66	172.30	149.87	22.43	7.681	
3,300.00	3,260.96	3,320.07	3,297.60	11.84	11.62	175.32	-181.03	150.73	171.03	147.86	23.17	7.380	
3,400.00	3,358.88	3,419.95	3,394.96	12.22	11.98	173.73	-199.09	163.81	169.89	145.97	23.92	7.103	
3,500.00	3,456.79	3,519.83	3,492.32	12.60	12.34	172.11	-217.15	176.88	168.89	144.22	24.67	6.847	
3,600.00	3,554.71	3,619.71	3,589.68	12.98	12.71	170.48	-235.21	189.95	168.02	142.60	25.42	6.610	
3,700.00	3,652.62	3,719.59	3,687.04	13.36	13.07	168.83	-253.27	203.02	167.29	141.12	26.17	6.392	
3,800.00	3,750.54	3,819.47	3,784.40	13.75	13.44	167.17	-271.34	216.09	166.70	139.77	26.93	6.190	
3,900.00	3,848.45	3,919.35	3,881.76	14.13	13.81	165.49	-289.40	229.17	166.25	138.56	27.69	6.004	
4,000.00	3,946.37	4,019.23	3,979.12	14.51	14.18	163.81	-307.46	242.24	165.95	137.50	28.45	5.833	
4,100.00	4,044.29	4,119.11	4,076.48	14.89	14.55	162.13	-325.52	255.31	165.79	136.57	29.22	5.675	
4,162.16	4,105.15	4,181.20	4,137.00	15.13	14.79	161.08	-336.75	263.44	165.76	136.07	29.69	5.583	
4,200.00	4,142.20	4,218.99	4,173.84	15.28	14.93	160.44	-343.58	268.38	165.77	135.79	29.98	5.529	
4,300.00	4,240.12	4,318.87	4,271.20	15.66	15.30	158.75	-361.64	281.46	165.89	135.15	30.75	5.395	
4,400.00	4,338.03	4,418.75	4,368.56	16.05	15.68	157.07	-379.71	294.53	166.16	134.65	31.52	5.272	
4,500.00	4,435.95	4,518.63	4,465.92	16.43	16.05	155.40	-397.77	307.60	166.58	134.29	32.29	5.159	
4,600.00	4,533.86	4,618.51	4,563.28	16.81	16.43	153.73	-415.83	320.67	167.13	134.07	33.06	5.055	
4,700.00	4,631.78	4,718.39	4,660.64	17.20	16.81	152.08	-433.89	333.74	167.83	133.99	33.83	4.960	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
4,800.00	4,729.69	4,818.27	4,758.00	17.58	17.18	150.44	-451.95	346.82	168.66	134.05	34.61	4.873	
4,900.00	4,827.61	4,918.15	4,855.36	17.97	17.56	148.82	-470.01	359.89	169.63	134.25	35.38	4.794	
5,000.00	4,925.53	5,018.04	4,952.72	18.35	17.94	147.22	-488.08	372.96	170.74	134.58	36.16	4.722	
5,100.00	5,023.44	5,117.92	5,050.08	18.74	18.32	145.64	-506.14	386.03	171.98	135.04	36.94	4.656	
5,200.00	5,121.36	5,217.80	5,147.44	19.12	18.70	144.08	-524.20	399.10	173.34	135.63	37.72	4.596	
5,300.00	5,219.27	5,317.68	5,244.80	19.51	19.08	142.55	-542.26	412.18	174.84	136.34	38.49	4.542	
5,400.00	5,317.19	5,417.56	5,342.16	19.89	19.47	141.05	-560.32	425.25	176.45	137.18	39.27	4.493	
5,500.00	5,415.10	5,517.44	5,439.52	20.28	19.85	139.58	-578.38	438.32	178.19	138.14	40.05	4.449	
5,600.00	5,513.02	5,617.32	5,536.88	20.66	20.23	138.13	-596.45	451.39	180.04	139.21	40.83	4.410	
5,700.00	5,610.93	5,717.20	5,634.24	21.05	20.61	136.71	-614.51	464.47	182.00	140.39	41.61	4.374	
5,800.00	5,708.85	5,817.08	5,731.60	21.43	21.00	135.33	-632.57	477.54	184.07	141.69	42.39	4.343	
5,900.00	5,806.77	5,916.96	5,828.96	21.82	21.38	133.98	-650.63	490.61	186.25	143.08	43.17	4.315	
6,000.00	5,904.68	6,016.84	5,926.32	22.21	21.76	132.66	-668.69	503.68	188.53	144.58	43.94	4.290	
6,100.00	6,002.60	6,116.72	6,023.68	22.59	22.15	131.37	-686.76	516.75	190.91	146.18	44.72	4.269	
6,200.00	6,100.51	6,216.60	6,121.04	22.98	22.53	130.11	-704.82	529.83	193.38	147.88	45.50	4.250	
6,300.00	6,198.43	6,316.48	6,218.40	23.36	22.92	128.89	-722.88	542.90	195.94	149.66	46.28	4.234	
6,400.00	6,296.34	6,416.36	6,315.76	23.75	23.30	127.69	-740.94	555.97	198.59	151.53	47.06	4.220	
6,500.00	6,394.26	6,513.49	6,410.75	24.14	23.67	126.95	-757.33	567.83	201.97	154.14	47.82	4.223	
6,600.00	6,492.17	6,610.42	6,506.19	24.52	24.04	127.05	-771.08	577.78	206.80	158.23	48.57	4.258	
6,700.00	6,590.09	6,707.09	6,601.87	24.91	24.40	127.95	-782.17	585.81	213.11	163.81	49.30	4.323	
6,800.00	6,688.01	6,803.27	6,697.48	25.29	24.75	129.54	-790.62	591.92	221.02	171.01	50.01	4.420	
6,900.00	6,785.92	6,900.00	6,793.94	25.68	25.09	131.74	-796.48	596.17	230.75	180.05	50.70	4.551	
7,000.00	6,883.84	6,993.33	6,887.18	26.07	25.42	134.32	-799.63	598.45	242.57	191.25	51.32	4.726	
7,100.00	6,981.75	7,090.03	6,983.87	26.45	25.75	137.21	-800.87	599.09	256.63	204.66	51.98	4.938	
7,200.00	7,079.67	7,199.36	7,092.01	26.84	26.14	137.30	-815.49	602.06	268.99	216.11	52.89	5.086	
7,300.00	7,177.58	7,306.00	7,192.90	27.23	26.55	133.34	-848.86	608.85	278.21	224.46	53.74	5.176	
7,400.00	7,275.50	7,403.37	7,278.08	27.61	26.94	126.62	-894.85	618.21	287.72	233.25	54.47	5.283	
7,500.00	7,373.41	7,487.91	7,344.68	28.00	27.29	118.81	-945.74	628.56	302.76	248.00	54.76	5.529	
7,600.00	7,471.33	7,559.05	7,394.31	28.39	27.58	111.27	-995.63	638.72	327.90	273.71	54.19	6.051	
7,700.00	7,569.25	7,618.04	7,430.42	28.77	27.81	104.73	-1,041.31	648.01	365.29	312.65	52.63	6.941	
7,764.22	7,632.13	7,650.00	7,447.92	29.02	27.94	101.19	-1,067.51	653.34	395.67	344.44	51.23	7.723	
7,800.00	7,667.21	7,666.69	7,456.46	29.16	28.00	99.79	-1,081.56	656.20	414.55	364.15	50.40	8.226	
7,900.00	7,765.68	7,700.00	7,472.24	29.54	28.14	97.57	-1,110.30	662.04	473.84	426.23	47.61	9.953	
8,000.00	7,864.70	7,737.12	7,487.79	29.91	28.28	95.29	-1,143.33	668.76	541.22	495.83	45.38	11.925	
8,100.00	7,964.15	7,761.97	7,496.96	30.28	28.37	94.73	-1,165.96	673.37	615.17	572.02	43.15	14.256	
8,200.00	8,063.90	7,781.71	7,503.52	30.63	28.45	95.10	-1,184.19	677.08	694.17	652.92	41.25	16.829	
8,300.00	8,163.83	7,800.00	7,509.03	30.98	28.52	95.99	-1,201.29	680.56	777.05	737.28	39.77	19.536	
8,350.17	8,214.00	7,800.00	7,509.03	31.14	28.52	-130.24	-1,201.29	680.56	819.80	780.93	38.88	21.086	
8,400.00	8,263.77	7,810.57	7,511.96	31.31	28.55	72.99	-1,211.24	682.58	862.68	824.27	38.41	22.458	
8,450.00	8,313.33	7,816.16	7,513.43	31.49	28.58	64.65	-1,216.52	683.65	905.69	867.89	37.80	23.959	
8,500.00	8,362.13	7,816.16	7,513.43	31.69	28.58	57.45	-1,216.52	683.65	948.43	911.39	37.05	25.601	
8,550.00	8,409.80	7,845.05	7,520.60	31.89	28.68	49.96	-1,243.98	689.07	989.89	952.72	37.16	26.637	
8,600.00	8,455.99	7,859.94	7,524.05	32.09	28.73	44.46	-1,258.21	691.74	1,030.40	993.54	36.86	27.954	
8,650.00	8,500.33	7,875.93	7,527.57	32.31	28.79	39.97	-1,273.57	694.52	1,069.49	1,032.89	36.59	29.226	
8,700.00	8,542.50	7,900.00	7,532.50	32.53	28.88	36.32	-1,296.78	698.53	1,106.95	1,070.40	36.55	30.289	
8,750.00	8,582.16	7,900.00	7,532.50	32.75	28.88	33.42	-1,296.78	698.53	1,142.53	1,106.64	35.90	31.830	
8,800.00	8,619.02	7,929.17	7,537.88	32.97	28.98	31.08	-1,325.09	703.09	1,175.90	1,139.91	35.99	32.674	
8,850.00	8,652.80	7,948.25	7,541.05	33.19	29.05	29.19	-1,343.69	705.91	1,207.16	1,171.30	35.85	33.672	
8,900.00	8,683.24	7,967.80	7,544.01	33.42	29.12	27.68	-1,362.82	708.65	1,236.05	1,200.31	35.75	34.579	
8,950.00	8,710.11	8,000.00	7,548.24	33.64	29.24	26.62	-1,394.46	712.85	1,262.61	1,226.67	35.94	35.134	
9,000.00	8,733.20	8,000.00	7,548.24	33.86	29.24	25.44	-1,394.46	712.85	1,286.40	1,250.91	35.49	36.248	
9,050.00	8,752.35	8,028.28	7,551.30	34.08	29.33	24.83	-1,422.37	716.22	1,307.57	1,271.91	35.66	36.665	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
9,100.00	8,767.39	8,048.74	7,553.12	34.29	29.41	24.31	-1,442.62	718.46	1,326.09	1,290.37	35.72	37.120	
9,100.17	8,767.43	8,048.80	7,553.13	34.29	29.41	24.31	-1,442.69	718.47	1,326.15	1,290.43	35.72	37.122	
9,200.00	8,791.66	8,100.00	7,556.27	34.71	29.58	25.06	-1,493.55	723.37	1,359.39	1,323.33	36.06	37.698	
9,300.00	8,812.57	8,131.86	7,557.19	35.13	29.69	25.48	-1,525.29	725.90	1,390.20	1,354.16	36.04	38.578	
9,400.00	8,829.97	8,199.98	7,557.37	35.54	29.92	26.14	-1,593.26	730.42	1,418.04	1,381.54	36.50	38.848	
9,500.00	8,843.72	8,296.63	7,557.36	35.95	30.25	26.74	-1,689.71	736.71	1,439.94	1,402.65	37.29	38.616	
9,600.00	8,853.72	8,395.13	7,557.36	36.33	30.61	27.07	-1,788.00	743.11	1,455.12	1,417.10	38.02	38.272	
9,700.00	8,859.89	8,494.72	7,557.36	36.70	30.98	27.14	-1,887.38	749.58	1,463.39	1,424.69	38.70	37.818	
9,800.00	8,862.18	8,594.65	7,557.35	37.05	31.37	26.98	-1,987.09	756.08	1,464.66	1,425.34	39.31	37.256	
9,809.00	8,862.20	8,603.63	7,557.35	37.08	31.41	26.95	-1,996.05	756.66	1,464.43	1,425.06	39.37	37.201	
9,900.00	8,862.20	8,694.45	7,557.35	37.39	31.77	26.75	-2,086.68	762.56	1,461.83	1,421.91	39.92	36.622	
10,000.00	8,862.19	8,794.25	7,557.35	37.74	32.19	26.53	-2,186.27	769.05	1,458.99	1,418.42	40.57	35.961	
10,100.00	8,862.19	8,894.05	7,557.34	38.10	32.62	26.31	-2,285.86	775.54	1,456.18	1,414.91	41.27	35.281	
10,200.00	8,862.19	8,993.85	7,557.34	38.48	33.06	26.08	-2,385.45	782.03	1,453.39	1,411.37	42.02	34.585	
10,300.00	8,862.19	9,093.65	7,557.34	38.86	33.51	25.86	-2,485.04	788.51	1,450.62	1,407.81	42.82	33.880	
10,400.00	8,862.19	9,193.45	7,557.33	39.25	33.97	25.64	-2,584.63	795.00	1,447.88	1,404.23	43.65	33.169	
10,500.00	8,862.18	9,293.25	7,557.33	39.66	34.44	25.41	-2,684.22	801.49	1,445.15	1,400.63	44.53	32.456	
10,600.00	8,862.18	9,393.05	7,557.33	40.07	34.93	25.19	-2,783.81	807.98	1,442.45	1,397.01	45.44	31.746	
10,700.00	8,862.18	9,492.85	7,557.32	40.49	35.42	24.96	-2,883.40	814.46	1,439.77	1,393.39	46.38	31.040	
10,800.00	8,862.18	9,592.65	7,557.32	40.93	35.93	24.73	-2,982.99	820.95	1,437.12	1,389.75	47.36	30.342	
10,900.00	8,862.18	9,692.45	7,557.31	41.37	36.44	24.50	-3,082.58	827.44	1,434.48	1,386.11	48.38	29.653	
11,000.00	8,862.17	9,792.25	7,557.31	41.82	36.96	24.27	-3,182.17	833.93	1,431.87	1,382.46	49.42	28.976	
11,100.00	8,862.17	9,892.05	7,557.31	42.28	37.49	24.04	-3,281.76	840.41	1,429.29	1,378.80	50.48	28.311	
11,200.00	8,862.17	9,991.85	7,557.30	42.75	38.03	23.81	-3,381.35	846.90	1,426.72	1,375.14	51.58	27.661	
11,300.00	8,862.17	10,091.65	7,557.30	43.22	38.58	23.58	-3,480.93	853.39	1,424.18	1,371.48	52.70	27.025	
11,400.00	8,862.17	10,191.45	7,557.30	43.71	39.13	23.35	-3,580.52	859.88	1,421.67	1,367.83	53.84	26.405	
11,500.00	8,862.16	10,291.25	7,557.29	44.20	39.69	23.11	-3,680.11	866.36	1,419.17	1,364.17	55.01	25.800	
11,600.00	8,862.16	10,391.06	7,557.29	44.70	40.26	22.88	-3,779.70	872.85	1,416.70	1,360.51	56.19	25.212	
11,700.00	8,862.16	10,490.86	7,557.29	45.20	40.84	22.64	-3,879.29	879.34	1,414.26	1,356.86	57.40	24.641	
11,800.00	8,862.16	10,590.66	7,557.28	45.72	41.42	22.41	-3,978.88	885.82	1,411.84	1,353.22	58.62	24.085	
11,900.00	8,862.16	10,690.46	7,557.28	46.24	42.01	22.17	-4,078.47	892.31	1,409.44	1,349.58	59.86	23.546	
12,000.00	8,862.15	10,790.26	7,557.27	46.76	42.60	21.93	-4,178.06	898.80	1,407.07	1,345.95	61.11	23.024	
12,100.00	8,862.15	10,890.06	7,557.27	47.29	43.20	21.69	-4,277.65	905.29	1,404.72	1,342.33	62.39	22.517	
12,200.00	8,862.15	10,989.86	7,557.27	47.83	43.80	21.45	-4,377.24	911.77	1,402.39	1,338.72	63.67	22.025	
12,300.00	8,862.15	11,089.66	7,557.26	48.38	44.41	21.21	-4,476.83	918.26	1,400.09	1,335.12	64.97	21.549	
12,400.00	8,862.15	11,189.46	7,557.26	48.93	45.02	20.97	-4,576.42	924.75	1,397.82	1,331.53	66.29	21.088	
12,500.00	8,862.14	11,289.26	7,557.26	49.48	45.64	20.73	-4,676.01	931.24	1,395.57	1,327.96	67.61	20.641	
12,600.00	8,862.14	11,389.06	7,557.25	50.04	46.27	20.49	-4,775.60	937.72	1,393.34	1,324.40	68.95	20.209	
12,700.00	8,862.14	11,488.86	7,557.25	50.61	46.89	20.24	-4,875.19	944.21	1,391.14	1,320.85	70.30	19.790	
12,800.00	8,862.14	11,588.66	7,557.25	51.18	47.53	20.00	-4,974.77	950.70	1,388.97	1,317.31	71.65	19.384	
12,900.00	8,862.14	11,688.46	7,557.24	51.76	48.16	19.76	-5,074.36	957.19	1,386.82	1,313.80	73.02	18.991	
13,000.00	8,862.13	11,788.26	7,557.24	52.34	48.80	19.51	-5,173.95	963.67	1,384.70	1,310.29	74.40	18.611	
13,100.00	8,862.13	11,888.06	7,557.23	52.92	49.44	19.26	-5,273.54	970.16	1,382.60	1,306.81	75.79	18.242	
13,200.00	8,862.13	11,987.86	7,557.23	53.51	50.09	19.02	-5,373.13	976.65	1,380.53	1,303.34	77.19	17.886	
13,300.00	8,862.13	12,087.66	7,557.23	54.10	50.74	18.77	-5,472.72	983.14	1,378.48	1,299.89	78.59	17.540	
13,400.00	8,862.12	12,187.46	7,557.22	54.70	51.40	18.52	-5,572.31	989.62	1,376.46	1,296.45	80.00	17.205	
13,500.00	8,862.12	12,287.26	7,557.22	55.30	52.05	18.27	-5,671.90	996.11	1,374.46	1,293.04	81.42	16.880	
13,600.00	8,862.12	12,387.06	7,557.22	55.91	52.71	18.02	-5,771.49	1,002.60	1,372.49	1,289.64	82.85	16.566	
13,700.00	8,862.12	12,486.86	7,557.21	56.52	53.38	17.77	-5,871.08	1,009.09	1,370.55	1,286.27	84.28	16.261	
13,800.00	8,862.12	12,586.66	7,557.21	57.13	54.04	17.52	-5,970.67	1,015.57	1,368.64	1,282.91	85.73	15.965	
13,900.00	8,862.11	12,686.47	7,557.21	57.75	54.71	17.27	-6,070.26	1,022.06	1,366.75	1,279.57	87.17	15.679	
14,000.00	8,862.11	12,786.27	7,557.20	58.37	55.38	17.02	-6,169.85	1,028.55	1,364.88	1,276.26	88.63	15.400	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
14,100.00	8,862.11	12,886.07	7,557.20	58.99	56.06	16.76	-6,269.44	1,035.03	1,363.05	1,272.96	90.09	15.131	
14,200.00	8,862.11	12,985.87	7,557.19	59.62	56.73	16.51	-6,369.03	1,041.52	1,361.24	1,269.69	91.55	14.869	
14,300.00	8,862.11	13,085.67	7,557.19	60.25	57.41	16.25	-6,468.62	1,048.01	1,359.45	1,266.43	93.02	14.615	
14,400.00	8,862.10	13,185.47	7,557.19	60.88	58.09	16.00	-6,568.20	1,054.50	1,357.70	1,263.20	94.50	14.368	
14,500.00	8,862.10	13,285.27	7,557.18	61.52	58.78	15.74	-6,667.79	1,060.98	1,355.97	1,259.99	95.98	14.128	
14,600.00	8,862.10	13,385.07	7,557.18	62.16	59.46	15.49	-6,767.38	1,067.47	1,354.27	1,256.81	97.46	13.895	
14,700.00	8,862.10	13,484.87	7,557.18	62.80	60.15	15.23	-6,866.97	1,073.96	1,352.60	1,253.64	98.95	13.669	
14,800.00	8,862.10	13,584.67	7,557.17	63.44	60.84	14.97	-6,966.56	1,080.45	1,350.95	1,250.50	100.45	13.449	
14,900.00	8,862.09	13,684.47	7,557.17	64.09	61.53	14.71	-7,066.15	1,086.93	1,349.33	1,247.38	101.95	13.236	
15,000.00	8,862.09	13,784.27	7,557.17	64.74	62.22	14.45	-7,165.74	1,093.42	1,347.74	1,244.29	103.45	13.028	
15,100.00	8,862.09	13,884.07	7,557.16	65.39	62.92	14.19	-7,265.33	1,099.91	1,346.18	1,241.22	104.96	12.826	
15,200.00	8,862.09	13,983.87	7,557.16	66.05	63.62	13.93	-7,364.92	1,106.40	1,344.64	1,238.17	106.47	12.630	
15,300.00	8,862.09	14,083.67	7,557.15	66.70	64.32	13.67	-7,464.51	1,112.88	1,343.13	1,235.15	107.98	12.438	
15,400.00	8,862.08	14,183.47	7,557.15	67.36	65.02	13.41	-7,564.10	1,119.37	1,341.65	1,232.15	109.50	12.252	
15,500.00	8,862.08	14,283.27	7,557.15	68.02	65.72	13.15	-7,663.69	1,125.86	1,340.20	1,229.18	111.02	12.071	
15,600.00	8,862.08	14,383.07	7,557.14	68.69	66.42	12.89	-7,763.28	1,132.35	1,338.78	1,226.23	112.55	11.895	
15,700.00	8,862.08	14,482.87	7,557.14	69.35	67.13	12.62	-7,862.87	1,138.83	1,337.38	1,223.30	114.08	11.723	
15,800.00	8,862.08	14,582.67	7,557.14	70.02	67.83	12.36	-7,962.46	1,145.32	1,336.02	1,220.41	115.61	11.556	
15,900.00	8,862.07	14,682.47	7,557.13	70.69	68.54	12.09	-8,062.05	1,151.81	1,334.68	1,217.53	117.15	11.393	
16,000.00	8,862.07	14,782.27	7,557.13	71.36	69.25	11.83	-8,161.63	1,158.29	1,333.37	1,214.68	118.69	11.235	
16,100.00	8,862.07	14,882.08	7,557.13	72.03	69.96	11.56	-8,261.22	1,164.78	1,332.09	1,211.86	120.23	11.080	
16,200.00	8,862.07	14,981.88	7,557.12	72.71	70.67	11.30	-8,360.81	1,171.27	1,330.84	1,209.06	121.77	10.929	
16,300.00	8,862.07	15,081.68	7,557.12	73.38	71.38	11.03	-8,460.40	1,177.76	1,329.61	1,206.29	123.32	10.782	
16,400.00	8,862.06	15,181.48	7,557.11	74.06	72.10	10.76	-8,559.99	1,184.24	1,328.42	1,203.55	124.87	10.638	
16,500.00	8,862.06	15,281.28	7,557.11	74.74	72.81	10.50	-8,659.58	1,190.73	1,327.25	1,200.83	126.42	10.499	
16,600.00	8,862.06	15,381.08	7,557.11	75.42	73.53	10.23	-8,759.17	1,197.22	1,326.12	1,198.14	127.98	10.362	
16,700.00	8,862.06	15,480.88	7,557.10	76.10	74.25	9.96	-8,858.76	1,203.71	1,325.01	1,195.47	129.54	10.229	
16,800.00	8,862.06	15,580.68	7,557.10	76.79	74.97	9.69	-8,958.35	1,210.19	1,323.93	1,192.83	131.10	10.099	
16,900.00	8,862.05	15,680.48	7,557.10	77.47	75.69	9.42	-9,057.94	1,216.68	1,322.88	1,190.22	132.66	9.972	
17,000.00	8,862.05	15,780.28	7,557.09	78.16	76.41	9.15	-9,157.53	1,223.17	1,321.86	1,187.64	134.23	9.848	
17,100.00	8,862.05	15,880.08	7,557.09	78.85	77.13	8.88	-9,257.12	1,229.66	1,320.87	1,185.08	135.79	9.727	
17,200.00	8,862.05	15,979.88	7,557.09	79.54	77.85	8.61	-9,356.71	1,236.14	1,319.91	1,182.55	137.36	9.609	
17,300.00	8,862.05	16,079.68	7,557.08	80.23	78.57	8.34	-9,456.30	1,242.63	1,318.98	1,180.04	138.94	9.493	
17,400.00	8,862.04	16,179.48	7,557.08	80.92	79.30	8.07	-9,555.89	1,249.12	1,318.08	1,177.57	140.51	9.381	
17,500.00	8,862.04	16,279.28	7,557.07	81.62	80.02	7.80	-9,655.48	1,255.61	1,317.21	1,175.12	142.09	9.270	
17,600.00	8,862.04	16,379.08	7,557.07	82.31	80.75	7.53	-9,755.06	1,262.09	1,316.36	1,172.70	143.67	9.163	
17,700.00	8,862.04	16,478.88	7,557.07	83.01	81.48	7.26	-9,854.65	1,268.58	1,315.55	1,170.30	145.25	9.057	
17,800.00	8,862.04	16,578.68	7,557.06	83.71	82.21	6.98	-9,954.24	1,275.07	1,314.77	1,167.94	146.83	8.954	
17,900.00	8,862.03	16,678.48	7,557.06	84.41	82.93	6.71	-10,053.83	1,281.56	1,314.01	1,165.60	148.41	8.854	
18,000.00	8,862.03	16,778.28	7,557.06	85.11	83.66	6.44	-10,153.42	1,288.04	1,313.29	1,163.29	150.00	8.755	
18,100.00	8,862.03	16,878.08	7,557.05	85.81	84.39	6.17	-10,253.01	1,294.53	1,312.60	1,161.01	151.59	8.659	
18,200.00	8,862.03	16,977.88	7,557.05	86.51	85.12	5.89	-10,352.60	1,301.02	1,311.94	1,158.76	153.18	8.565	
18,300.00	8,862.03	17,077.68	7,557.05	87.21	85.86	5.62	-10,452.19	1,307.50	1,311.30	1,156.53	154.77	8.473	
18,400.00	8,862.02	17,177.49	7,557.04	87.92	86.59	5.34	-10,551.78	1,313.99	1,310.70	1,154.34	156.36	8.382	
18,500.00	8,862.02	17,277.29	7,557.04	88.62	87.32	5.07	-10,651.37	1,320.48	1,310.13	1,152.17	157.96	8.294	
18,600.00	8,862.02	17,377.09	7,557.03	89.33	88.06	4.79	-10,750.96	1,326.97	1,309.59	1,150.03	159.55	8.208	
18,700.00	8,862.02	17,476.89	7,557.03	90.03	88.79	4.52	-10,850.55	1,333.45	1,309.07	1,147.92	161.15	8.123	
18,800.00	8,862.02	17,576.69	7,557.03	90.74	89.52	4.24	-10,950.14	1,339.94	1,308.59	1,145.84	162.75	8.040	
18,900.00	8,862.01	17,676.49	7,557.02	91.45	90.26	3.97	-11,049.73	1,346.43	1,308.14	1,143.79	164.35	7.959	
19,000.00	8,862.01	17,776.29	7,557.02	92.16	91.00	3.69	-11,149.32	1,352.92	1,307.72	1,141.76	165.96	7.880	
19,100.00	8,862.01	17,876.09	7,557.02	92.87	91.73	3.42	-11,248.91	1,359.40	1,307.33	1,139.77	167.56	7.802	
19,200.00	8,862.01	17,975.89	7,557.01	93.58	92.47	3.14	-11,348.49	1,365.89	1,306.97	1,137.80	169.17	7.726	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,300.00	8,862.01	18,075.69	7,557.01	94.30	93.21	2.87	-11,448.08	1,372.38	1,306.64	1,135.86	170.77	7.651	
19,400.00	8,862.00	18,175.49	7,557.01	95.01	93.95	2.59	-11,547.67	1,378.87	1,306.34	1,133.96	172.38	7.578	
19,500.00	8,862.00	18,275.29	7,557.00	95.72	94.68	2.31	-11,647.26	1,385.35	1,306.07	1,132.08	173.99	7.507	
19,546.85	8,862.00	18,318.93	7,557.00	96.06	95.01	2.19	-11,690.81	1,388.19	1,305.96	1,131.27	174.68	7.476	
19,547.53	8,862.00	18,318.93	7,557.00	96.06	95.01	2.19	-11,690.81	1,388.19	1,305.96	1,131.28	174.68	7.476	
19,548.26	8,862.00	18,318.93	7,557.00	96.14	95.01	2.19	-11,690.81	1,388.19	1,305.96	1,131.29	174.67	7.477	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **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	0.00	0.00	0.00	91.09	-0.76	39.99	40.00				
100.00	100.00	100.00	100.00	0.28	0.28	91.09	-0.76	39.99	40.00	39.45	0.55	72.453	
200.00	200.00	200.00	200.00	0.63	0.63	91.09	-0.76	39.99	40.00	38.73	1.27	31.519	
300.00	300.00	300.00	300.00	0.99	0.99	91.09	-0.76	39.99	40.00	38.01	1.99	20.140	
400.00	400.00	400.00	400.00	1.35	1.35	91.09	-0.76	39.99	40.00	37.29	2.70	14.798	
500.00	500.00	500.00	500.00	1.71	1.71	91.09	-0.76	39.99	40.00	36.58	3.42	11.696	
600.00	600.00	600.00	600.00	2.07	2.07	91.09	-0.76	39.99	40.00	35.86	4.14	9.669	
700.00	700.00	700.00	700.00	2.43	2.43	91.09	-0.76	39.99	40.00	35.14	4.85	8.241	
800.00	800.00	800.00	800.00	2.79	2.79	91.09	-0.76	39.99	40.00	34.43	5.57	7.180	
900.00	900.00	900.00	900.00	3.14	3.14	91.09	-0.76	39.99	40.00	33.71	6.29	6.361	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.09	-0.76	39.99	40.00	32.99	7.00	5.710	
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	-71.29	-0.76	39.99	39.40	31.70	7.70	5.115	
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	-78.79	-0.76	39.99	38.05	29.66	8.39	4.535	
1,287.28	1,286.80	1,286.80	1,286.80	4.47	4.53	-90.00	-0.76	39.99	37.32	28.33	8.99	4.151	CC
1,300.00	1,299.45	1,299.45	1,299.45	4.51	4.58	-91.99	-0.76	39.99	37.34	28.26	9.08	4.113	ES
1,350.00	1,349.13	1,349.13	1,349.13	4.68	4.75	-100.49	-0.76	39.99	37.96	28.54	9.43	4.028	
1,400.00	1,398.73	1,398.73	1,398.73	4.85	4.93	-103.21	-0.76	39.99	39.26	29.49	9.77	4.017	
1,500.00	1,497.69	1,497.83	1,497.81	5.19	5.27	-109.77	-1.79	41.31	43.42	32.96	10.46	4.151	
1,600.00	1,596.25	1,597.43	1,597.28	5.54	5.61	-115.61	-4.95	45.35	48.96	37.82	11.14	4.396	
1,670.62	1,665.55	1,668.07	1,667.68	5.78	5.84	-119.32	-8.48	49.87	53.19	41.57	11.62	4.577	
1,700.00	1,694.31	1,697.53	1,696.99	5.89	5.94	-122.05	-10.26	52.15	54.97	43.15	11.82	4.650	
1,800.00	1,792.23	1,798.24	1,796.96	6.24	6.28	-128.36	-17.77	61.77	60.51	48.00	12.50	4.839	
1,900.00	1,890.14	1,899.41	1,896.88	6.61	6.63	-131.14	-27.49	74.21	64.46	51.27	13.19	4.887	
2,000.00	1,988.06	2,000.79	1,996.40	6.97	6.98	-131.20	-39.40	89.45	66.36	52.48	13.88	4.780	
2,100.00	2,085.97	2,102.13	2,095.13	7.34	7.34	-128.78	-53.47	107.45	66.18	51.59	14.59	4.537	
2,200.00	2,183.89	2,202.59	2,192.26	7.70	7.69	-124.09	-69.24	127.64	64.53	49.21	15.32	4.212	
2,300.00	2,281.80	2,302.41	2,288.68	8.07	8.05	-118.89	-85.14	148.00	63.17	47.10	16.07	3.930	
2,400.00	2,379.72	2,402.23	2,385.10	8.45	8.42	-113.51	-101.05	168.36	62.36	45.53	16.83	3.706	
2,494.63	2,472.38	2,496.69	2,476.34	8.80	8.76	-108.33	-116.10	187.62	62.10	44.56	17.54	3.540	
2,500.00	2,477.64	2,502.06	2,481.52	8.82	8.78	-108.03	-116.96	188.71	62.10	44.52	17.58	3.532	
2,600.00	2,575.55	2,601.88	2,577.94	9.19	9.15	-102.56	-132.86	209.07	62.42	44.08	18.34	3.403	
2,700.00	2,673.47	2,701.70	2,674.36	9.57	9.53	-97.20	-148.77	229.43	63.29	44.20	19.09	3.315	
2,800.00	2,771.38	2,801.52	2,770.78	9.95	9.90	-92.02	-164.67	249.79	64.71	44.87	19.85	3.261	
2,900.00	2,869.30	2,901.35	2,867.21	10.32	10.28	-87.11	-180.58	270.15	66.63	46.04	20.60	3.235	
3,000.00	2,967.21	3,001.17	2,963.63	10.70	10.66	-82.50	-196.49	290.51	69.02	47.67	21.35	3.233	SF
3,100.00	3,065.13	3,100.99	3,060.05	11.08	11.04	-78.22	-212.39	310.87	71.82	49.72	22.10	3.250	
3,200.00	3,163.05	3,200.81	3,156.47	11.46	11.42	-74.28	-228.30	331.23	74.99	52.14	22.85	3.282	
3,300.00	3,260.96	3,300.63	3,252.89	11.84	11.81	-70.68	-244.21	351.59	78.48	54.88	23.60	3.326	
3,400.00	3,358.88	3,400.46	3,349.31	12.22	12.19	-67.39	-260.11	371.95	82.26	57.91	24.35	3.378	
3,500.00	3,456.79	3,500.28	3,445.73	12.60	12.58	-64.41	-276.02	392.30	86.29	61.18	25.11	3.437	
3,600.00	3,554.71	3,600.10	3,542.15	12.98	12.97	-61.69	-291.92	412.66	90.53	64.66	25.87	3.500	
3,700.00	3,652.62	3,699.92	3,638.57	13.36	13.36	-59.22	-307.83	433.02	94.95	68.33	26.62	3.566	
3,800.00	3,750.54	3,799.75	3,734.99	13.75	13.75	-56.98	-323.74	453.38	99.54	72.15	27.39	3.635	
3,900.00	3,848.45	3,899.57	3,831.42	14.13	14.14	-54.93	-339.64	473.74	104.26	76.11	28.15	3.704	
4,000.00	3,946.37	3,999.39	3,927.84	14.51	14.53	-53.07	-355.55	494.10	109.10	80.19	28.91	3.774	
4,100.00	4,044.29	4,099.21	4,024.26	14.89	14.92	-51.36	-371.46	514.46	114.06	84.38	29.68	3.843	
4,200.00	4,142.20	4,199.04	4,120.68	15.28	15.31	-49.80	-387.36	534.82	119.10	88.65	30.45	3.912	
4,300.00	4,240.12	4,298.86	4,217.10	15.66	15.70	-48.37	-403.27	555.18	124.22	93.01	31.22	3.979	
4,400.00	4,338.03	4,398.68	4,313.52	16.05	16.10	-47.05	-419.17	575.54	129.42	97.43	31.99	4.046	
4,500.00	4,435.95	4,498.50	4,409.94	16.43	16.49	-45.83	-435.08	595.89	134.68	101.92	32.76	4.111	
4,600.00	4,533.86	4,598.32	4,506.36	16.81	16.89	-44.70	-450.99	616.25	139.99	106.46	33.53	4.175	
4,700.00	4,631.78	4,698.15	4,602.78	17.20	17.28	-43.66	-466.89	636.61	145.36	111.05	34.31	4.237	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,800.00	4,729.69	4,797.97	4,699.20	17.58	17.68	-42.69	-482.80	656.97	150.76	115.68	35.08	4.298	
4,900.00	4,827.61	4,897.79	4,795.62	17.97	18.07	-41.79	-498.70	677.33	156.21	120.36	35.86	4.357	
5,000.00	4,925.53	4,997.61	4,892.05	18.35	18.47	-40.95	-514.61	697.69	161.70	125.07	36.63	4.414	
5,100.00	5,023.44	5,097.44	4,988.47	18.74	18.87	-40.16	-530.52	718.05	167.22	129.81	37.41	4.470	
5,200.00	5,121.36	5,199.68	5,087.34	19.12	19.27	-39.50	-546.55	738.58	172.43	134.20	38.23	4.510	
5,300.00	5,219.27	5,302.63	5,187.58	19.51	19.67	-39.41	-560.95	757.04	175.36	136.32	39.05	4.491	
5,400.00	5,317.19	5,402.60	5,285.07	19.89	20.06	-39.45	-574.55	774.50	177.80	137.97	39.83	4.464	
5,500.00	5,415.10	5,502.57	5,382.56	20.28	20.45	-39.48	-588.15	791.96	180.23	139.63	40.60	4.439	
5,600.00	5,513.02	5,602.54	5,480.05	20.66	20.84	-39.52	-601.75	809.41	182.66	141.28	41.38	4.414	
5,700.00	5,610.93	5,702.51	5,577.55	21.05	21.23	-39.55	-615.34	826.87	185.10	142.94	42.16	4.390	
5,800.00	5,708.85	5,802.48	5,675.04	21.43	21.62	-39.58	-628.94	844.32	187.53	144.59	42.94	4.367	
5,900.00	5,806.77	5,902.45	5,772.53	21.82	22.01	-39.62	-642.54	861.78	189.96	146.24	43.72	4.345	
6,000.00	5,904.68	6,002.42	5,870.02	22.21	22.40	-39.65	-656.14	879.23	192.40	147.90	44.50	4.324	
6,100.00	6,002.60	6,102.39	5,967.51	22.59	22.79	-39.68	-669.74	896.69	194.83	149.55	45.28	4.303	
6,200.00	6,100.51	6,202.36	6,065.00	22.98	23.18	-39.71	-683.34	914.15	197.26	151.21	46.05	4.283	
6,300.00	6,198.43	6,302.33	6,162.49	23.36	23.57	-39.74	-696.94	931.60	199.70	152.86	46.83	4.264	
6,400.00	6,296.34	6,402.30	6,259.98	23.75	23.96	-39.77	-710.54	949.06	202.13	154.52	47.61	4.245	
6,500.00	6,394.26	6,502.27	6,357.47	24.14	24.35	-39.79	-724.14	966.51	204.56	156.17	48.39	4.227	
6,600.00	6,492.17	6,602.24	6,454.96	24.52	24.74	-39.82	-737.74	983.97	207.00	157.82	49.17	4.210	
6,700.00	6,590.09	6,702.21	6,552.45	24.91	25.13	-39.85	-751.34	1,001.43	209.43	159.48	49.95	4.193	
6,800.00	6,688.01	6,802.18	6,649.94	25.29	25.52	-39.87	-764.94	1,018.88	211.86	161.13	50.73	4.176	
6,900.00	6,785.92	6,902.15	6,747.43	25.68	25.92	-39.90	-778.54	1,036.34	214.30	162.78	51.51	4.160	
7,000.00	6,883.84	7,002.12	6,844.92	26.07	26.31	-39.92	-792.14	1,053.79	216.73	164.44	52.29	4.145	
7,100.00	6,981.75	7,102.09	6,942.41	26.45	26.70	-39.95	-805.74	1,071.25	219.16	166.09	53.07	4.129	
7,200.00	7,079.67	7,202.06	7,039.90	26.84	27.09	-39.97	-819.34	1,088.70	221.60	167.74	53.85	4.115	
7,300.00	7,177.58	7,302.04	7,137.39	27.23	27.48	-39.99	-832.94	1,106.16	224.03	169.40	54.63	4.101	
7,400.00	7,275.50	7,402.01	7,234.89	27.61	27.87	-40.02	-846.54	1,123.62	226.46	171.05	55.42	4.087	
7,500.00	7,373.41	7,501.98	7,332.38	28.00	28.26	-40.04	-860.14	1,141.07	228.90	172.70	56.20	4.073	
7,600.00	7,471.33	7,601.95	7,429.87	28.39	28.65	-40.06	-873.74	1,158.53	231.33	174.36	56.98	4.060	
7,700.00	7,569.25	7,701.92	7,527.36	28.77	29.04	-40.08	-887.34	1,175.98	233.77	176.01	57.76	4.047	
7,764.22	7,632.13	7,766.12	7,589.97	29.02	29.30	-40.10	-896.07	1,187.19	235.33	177.07	58.26	4.039	
7,800.00	7,667.21	7,801.88	7,624.84	29.16	29.44	-40.08	-900.93	1,193.44	236.37	177.83	58.54	4.038	
7,900.00	7,765.68	7,901.75	7,722.23	29.54	29.83	-39.70	-914.52	1,210.88	241.10	181.79	59.31	4.065	
8,000.00	7,864.70	8,001.39	7,819.40	29.91	30.22	-38.87	-928.07	1,228.27	248.55	188.49	60.06	4.138	
8,100.00	7,964.15	8,094.99	7,910.63	30.28	30.58	-37.71	-940.93	1,244.77	259.04	198.31	60.73	4.265	
8,200.00	8,063.90	8,164.46	7,976.75	30.63	30.87	-36.08	-953.95	1,261.48	279.56	218.78	60.78	4.599	
8,300.00	8,163.83	8,228.11	8,034.68	30.98	31.15	-33.96	-970.13	1,282.21	313.15	252.88	60.28	5.195	
8,350.17	8,214.00	8,250.00	8,053.88	31.14	31.25	98.92	-976.60	1,290.50	334.83	275.36	59.47	5.630	
8,400.00	8,263.77	8,285.30	8,083.95	31.31	31.41	-45.16	-987.97	1,305.06	357.39	298.07	59.32	6.025	
8,450.00	8,313.33	8,313.10	8,106.80	31.49	31.54	-42.68	-997.71	1,317.54	379.56	320.83	58.73	6.462	
8,500.00	8,362.13	8,350.00	8,135.89	31.69	31.71	-40.51	-1,011.67	1,335.42	401.11	342.50	58.61	6.844	
8,550.00	8,409.80	8,367.99	8,149.53	31.89	31.80	-38.95	-1,018.89	1,344.67	421.35	363.95	57.39	7.341	
8,600.00	8,455.99	8,400.00	8,172.86	32.09	31.95	-37.59	-1,032.37	1,361.94	440.73	383.78	56.95	7.738	
8,650.00	8,500.33	8,422.01	8,188.18	32.31	32.06	-36.50	-1,042.10	1,374.39	458.85	402.94	55.91	8.207	
8,700.00	8,542.50	8,450.00	8,206.77	32.53	32.20	-35.66	-1,054.98	1,390.89	475.78	420.56	55.22	8.616	
8,750.00	8,582.16	8,475.25	8,222.63	32.75	32.32	-35.02	-1,067.07	1,406.36	491.41	437.04	54.38	9.037	
8,800.00	8,619.02	8,500.00	8,237.34	32.97	32.44	-34.54	-1,079.32	1,422.05	505.73	452.19	53.54	9.446	
8,850.00	8,652.80	8,527.80	8,252.81	33.19	32.58	-34.30	-1,093.54	1,440.25	518.68	465.75	52.93	9.799	
8,900.00	8,683.24	8,550.00	8,264.34	33.42	32.69	-34.09	-1,105.21	1,455.20	530.29	478.24	52.06	10.187	
8,950.00	8,710.11	8,579.77	8,278.65	33.64	32.84	-34.21	-1,121.28	1,475.77	540.48	488.77	51.72	10.451	
9,000.00	8,733.20	8,600.00	8,287.58	33.86	32.94	-34.22	-1,132.45	1,490.07	549.38	498.45	50.93	10.787	
9,050.00	8,752.35	8,631.27	8,300.12	34.08	33.09	-34.68	-1,150.09	1,512.65	556.82	505.92	50.90	10.940	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
9,100.00	8,767.39	8,650.00	8,306.88	34.29	33.18	-34.88	-1,160.84	1,526.41	563.05	512.73	50.32	11.188	
9,100.17	8,767.43	8,650.00	8,306.88	34.29	33.18	-34.88	-1,160.84	1,526.41	563.07	512.75	50.32	11.190	
9,200.00	8,791.66	8,713.78	8,325.63	34.71	33.49	-37.35	-1,198.40	1,574.39	579.31	528.28	51.03	11.353	
9,300.00	8,812.57	8,825.65	8,352.85	35.13	34.04	-40.93	-1,270.08	1,655.79	600.57	546.43	54.14	11.093	
9,400.00	8,829.97	8,942.69	8,378.04	35.54	34.63	-44.12	-1,353.62	1,733.71	622.52	565.29	57.23	10.878	
9,500.00	8,843.72	9,065.35	8,400.56	35.95	35.25	-46.94	-1,449.63	1,806.56	644.61	584.41	60.20	10.708	
9,600.00	8,853.72	9,194.02	8,419.64	36.33	35.88	-49.36	-1,558.46	1,872.38	666.26	603.30	62.96	10.583	
9,700.00	8,859.89	9,328.98	8,434.39	36.70	36.52	-51.39	-1,680.05	1,928.87	686.88	621.44	65.44	10.496	
9,800.00	8,862.18	9,470.32	8,443.85	37.05	37.15	-53.00	-1,813.75	1,973.42	705.85	638.26	67.60	10.442	
9,809.00	8,862.20	9,483.34	8,444.41	37.08	37.20	-53.12	-1,826.33	1,976.75	707.46	639.68	67.77	10.439	
9,900.00	8,862.20	9,617.56	8,447.04	37.39	37.75	-54.55	-1,957.81	2,003.24	720.90	651.61	69.29	10.404	
10,000.00	8,862.19	9,742.53	8,447.00	37.74	38.23	-55.25	-2,081.79	2,018.79	730.98	660.46	70.51	10.367	
10,100.00	8,862.19	9,868.61	8,446.88	38.10	38.71	-55.68	-2,207.45	2,028.99	737.55	665.92	71.63	10.297	
10,200.00	8,862.19	9,995.33	8,446.68	38.48	39.19	-55.86	-2,334.07	2,033.65	740.53	667.88	72.65	10.193	
10,300.00	8,862.19	10,103.35	8,446.45	38.86	39.59	-55.86	-2,442.09	2,034.07	740.78	667.19	73.59	10.067	
10,400.00	8,862.19	10,203.35	8,446.24	39.25	39.97	-55.85	-2,542.09	2,034.22	740.86	666.33	74.53	9.940	
10,500.00	8,862.18	10,303.35	8,446.03	39.66	40.36	-55.83	-2,642.09	2,034.37	740.95	665.45	75.50	9.814	
10,600.00	8,862.18	10,403.35	8,445.82	40.07	40.76	-55.82	-2,742.09	2,034.52	741.04	664.56	76.48	9.689	
10,700.00	8,862.18	10,503.35	8,445.61	40.49	41.17	-55.80	-2,842.09	2,034.67	741.13	663.64	77.49	9.564	
10,800.00	8,862.18	10,603.35	8,445.40	40.93	41.59	-55.79	-2,942.09	2,034.82	741.22	662.71	78.51	9.441	
10,900.00	8,862.18	10,703.35	8,445.19	41.37	42.03	-55.77	-3,042.08	2,034.97	741.30	661.76	79.55	9.319	
11,000.00	8,862.17	10,803.35	8,444.98	41.82	42.46	-55.76	-3,142.08	2,035.13	741.39	660.79	80.60	9.198	
11,100.00	8,862.17	10,903.35	8,444.77	42.28	42.91	-55.74	-3,242.08	2,035.28	741.48	659.81	81.67	9.079	
11,200.00	8,862.17	11,003.35	8,444.56	42.75	43.37	-55.73	-3,342.08	2,035.43	741.57	658.82	82.75	8.961	
11,300.00	8,862.17	11,103.35	8,444.35	43.22	43.83	-55.71	-3,442.08	2,035.58	741.66	657.81	83.85	8.845	
11,400.00	8,862.17	11,203.35	8,444.14	43.71	44.31	-55.70	-3,542.08	2,035.73	741.75	656.78	84.97	8.730	
11,500.00	8,862.16	11,303.35	8,443.93	44.20	44.79	-55.68	-3,642.08	2,035.88	741.84	655.74	86.09	8.617	
11,600.00	8,862.16	11,403.35	8,443.72	44.70	45.27	-55.67	-3,742.08	2,036.04	741.92	654.69	87.23	8.505	
11,700.00	8,862.16	11,503.35	8,443.51	45.20	45.77	-55.65	-3,842.08	2,036.19	742.01	653.63	88.38	8.396	
11,800.00	8,862.16	11,603.35	8,443.30	45.72	46.27	-55.64	-3,942.08	2,036.34	742.10	652.56	89.55	8.287	
11,900.00	8,862.16	11,703.34	8,443.09	46.24	46.78	-55.62	-4,042.08	2,036.49	742.19	651.47	90.72	8.181	
12,000.00	8,862.15	11,803.34	8,442.88	46.76	47.29	-55.61	-4,142.08	2,036.64	742.28	650.37	91.90	8.077	
12,100.00	8,862.15	11,903.34	8,442.67	47.29	47.82	-55.59	-4,242.08	2,036.79	742.37	649.27	93.10	7.974	
12,200.00	8,862.15	12,003.34	8,442.46	47.83	48.34	-55.58	-4,342.08	2,036.94	742.46	648.15	94.31	7.873	
12,300.00	8,862.15	12,103.34	8,442.25	48.38	48.88	-55.56	-4,442.08	2,037.10	742.55	647.02	95.52	7.774	
12,400.00	8,862.15	12,203.34	8,442.04	48.93	49.42	-55.55	-4,542.08	2,037.25	742.63	645.89	96.75	7.676	
12,500.00	8,862.14	12,303.34	8,441.83	49.48	49.96	-55.53	-4,642.08	2,037.40	742.72	644.74	97.98	7.580	
12,600.00	8,862.14	12,403.34	8,441.62	50.04	50.52	-55.52	-4,742.08	2,037.55	742.81	643.59	99.22	7.486	
12,700.00	8,862.14	12,503.34	8,441.41	50.61	51.07	-55.51	-4,842.07	2,037.70	742.90	642.43	100.48	7.394	
12,800.00	8,862.14	12,603.34	8,441.20	51.18	51.63	-55.49	-4,942.07	2,037.85	742.99	641.26	101.74	7.303	
12,900.00	8,862.14	12,703.34	8,440.99	51.76	52.20	-55.48	-5,042.07	2,038.00	743.08	640.08	103.00	7.214	
13,000.00	8,862.13	12,803.34	8,440.78	52.34	52.77	-55.46	-5,142.07	2,038.16	743.17	638.89	104.28	7.127	
13,100.00	8,862.13	12,903.34	8,440.57	52.92	53.35	-55.45	-5,242.07	2,038.31	743.26	637.70	105.56	7.041	
13,200.00	8,862.13	13,003.34	8,440.36	53.51	53.93	-55.43	-5,342.07	2,038.46	743.35	636.50	106.85	6.957	
13,300.00	8,862.13	13,103.34	8,440.15	54.10	54.51	-55.42	-5,442.07	2,038.61	743.44	635.30	108.14	6.875	
13,400.00	8,862.12	13,203.34	8,439.94	54.70	55.10	-55.40	-5,542.07	2,038.76	743.53	634.08	109.45	6.794	
13,500.00	8,862.12	13,303.34	8,439.73	55.30	55.70	-55.39	-5,642.07	2,038.91	743.62	632.86	110.75	6.714	
13,600.00	8,862.12	13,403.34	8,439.52	55.91	56.30	-55.37	-5,742.07	2,039.07	743.71	631.64	112.07	6.636	
13,700.00	8,862.12	13,503.34	8,439.31	56.52	56.90	-55.36	-5,842.07	2,039.22	743.80	630.41	113.39	6.560	
13,800.00	8,862.12	13,603.34	8,439.10	57.13	57.50	-55.34	-5,942.07	2,039.37	743.89	629.17	114.71	6.485	
13,900.00	8,862.11	13,703.34	8,438.89	57.75	58.11	-55.33	-6,042.07	2,039.52	743.98	627.93	116.04	6.411	
14,000.00	8,862.11	13,803.34	8,438.68	58.37	58.72	-55.31	-6,142.07	2,039.67	744.07	626.69	117.38	6.339	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
14,100.00	8,862.11	13,903.34	8,438.47	58.99	59.34	-55.30	-6,242.07	2,039.82	744.16	625.43	118.72	6.268	
14,200.00	8,862.11	14,003.34	8,438.26	59.62	59.96	-55.28	-6,342.07	2,039.97	744.25	624.18	120.07	6.199	
14,300.00	8,862.11	14,103.34	8,438.05	60.25	60.58	-55.27	-6,442.07	2,040.13	744.34	622.92	121.42	6.130	
14,400.00	8,862.10	14,203.34	8,437.84	60.88	61.21	-55.25	-6,542.07	2,040.28	744.43	621.65	122.77	6.063	
14,500.00	8,862.10	14,303.34	8,437.63	61.52	61.84	-55.24	-6,642.06	2,040.43	744.52	620.38	124.13	5.998	
14,600.00	8,862.10	14,403.34	8,437.42	62.16	62.47	-55.23	-6,742.06	2,040.58	744.61	619.11	125.50	5.933	
14,700.00	8,862.10	14,503.34	8,437.21	62.80	63.10	-55.21	-6,842.06	2,040.73	744.70	617.83	126.87	5.870	
14,800.00	8,862.10	14,603.34	8,437.00	63.44	63.74	-55.20	-6,942.06	2,040.88	744.79	616.55	128.24	5.808	
14,900.00	8,862.09	14,703.34	8,436.79	64.09	64.38	-55.18	-7,042.06	2,041.03	744.88	615.26	129.62	5.747	
15,000.00	8,862.09	14,803.34	8,436.58	64.74	65.02	-55.17	-7,142.06	2,041.19	744.97	613.97	131.00	5.687	
15,100.00	8,862.09	14,903.34	8,436.37	65.39	65.67	-55.15	-7,242.06	2,041.34	745.06	612.68	132.38	5.628	
15,200.00	8,862.09	15,003.34	8,436.16	66.05	66.32	-55.14	-7,342.06	2,041.49	745.15	611.38	133.77	5.570	
15,300.00	8,862.09	15,103.34	8,435.94	66.70	66.97	-55.12	-7,442.06	2,041.64	745.24	610.08	135.16	5.514	
15,400.00	8,862.08	15,203.34	8,435.73	67.36	67.62	-55.11	-7,542.06	2,041.79	745.33	608.78	136.55	5.458	
15,500.00	8,862.08	15,303.34	8,435.52	68.02	68.28	-55.09	-7,642.06	2,041.94	745.42	607.47	137.95	5.404	
15,600.00	8,862.08	15,403.34	8,435.31	68.69	68.93	-55.08	-7,742.06	2,042.10	745.51	606.16	139.35	5.350	
15,700.00	8,862.08	15,503.34	8,435.10	69.35	69.59	-55.06	-7,842.06	2,042.25	745.60	604.85	140.75	5.297	
15,800.00	8,862.08	15,603.34	8,434.89	70.02	70.25	-55.05	-7,942.06	2,042.40	745.69	603.53	142.16	5.245	
15,900.00	8,862.07	15,703.34	8,434.68	70.69	70.92	-55.03	-8,042.06	2,042.55	745.78	602.21	143.57	5.195	
16,000.00	8,862.07	15,803.34	8,434.47	71.36	71.58	-55.02	-8,142.06	2,042.70	745.87	600.89	144.98	5.145	
16,100.00	8,862.07	15,903.34	8,434.26	72.03	72.25	-55.01	-8,242.06	2,042.85	745.96	599.57	146.40	5.095	
16,200.00	8,862.07	16,003.34	8,434.05	72.71	72.92	-54.99	-8,342.06	2,043.00	746.05	598.24	147.81	5.047	
16,300.00	8,862.07	16,103.34	8,433.84	73.38	73.59	-54.98	-8,442.05	2,043.16	746.14	596.91	149.23	5.000	
16,400.00	8,862.06	16,203.34	8,433.63	74.06	74.26	-54.96	-8,542.05	2,043.31	746.24	595.58	150.66	4.953	
16,500.00	8,862.06	16,303.33	8,433.42	74.74	74.94	-54.95	-8,642.05	2,043.46	746.33	594.25	152.08	4.907	
16,600.00	8,862.06	16,403.33	8,433.21	75.42	75.62	-54.93	-8,742.05	2,043.61	746.42	592.91	153.51	4.862	
16,700.00	8,862.06	16,503.33	8,433.00	76.10	76.29	-54.92	-8,842.05	2,043.76	746.51	591.57	154.94	4.818	
16,800.00	8,862.06	16,603.33	8,432.79	76.79	76.97	-54.90	-8,942.05	2,043.91	746.60	590.23	156.37	4.775	
16,900.00	8,862.05	16,703.33	8,432.58	77.47	77.65	-54.89	-9,042.05	2,044.07	746.69	588.89	157.80	4.732	
17,000.00	8,862.05	16,803.33	8,432.37	78.16	78.34	-54.87	-9,142.05	2,044.22	746.78	587.54	159.24	4.690	
17,100.00	8,862.05	16,903.33	8,432.16	78.85	79.02	-54.86	-9,242.05	2,044.37	746.87	586.20	160.68	4.648	
17,200.00	8,862.05	17,003.33	8,431.95	79.54	79.71	-54.84	-9,342.05	2,044.52	746.96	584.85	162.12	4.608	
17,300.00	8,862.05	17,103.33	8,431.74	80.23	80.39	-54.83	-9,442.05	2,044.67	747.06	583.50	163.56	4.568	
17,400.00	8,862.04	17,203.33	8,431.53	80.92	81.08	-54.82	-9,542.05	2,044.82	747.15	582.15	165.00	4.528	
17,500.00	8,862.04	17,303.33	8,431.32	81.62	81.77	-54.80	-9,642.05	2,044.97	747.24	580.79	166.45	4.489	
17,600.00	8,862.04	17,403.33	8,431.11	82.31	82.46	-54.79	-9,742.05	2,045.13	747.33	579.44	167.89	4.451	
17,700.00	8,862.04	17,503.33	8,430.90	83.01	83.16	-54.77	-9,842.05	2,045.28	747.42	578.08	169.34	4.414	
17,800.00	8,862.04	17,603.33	8,430.69	83.71	83.85	-54.76	-9,942.05	2,045.43	747.51	576.72	170.79	4.377	
17,900.00	8,862.03	17,703.33	8,430.48	84.41	84.54	-54.74	-10,042.05	2,045.58	747.61	575.36	172.25	4.340	
18,000.00	8,862.03	17,803.33	8,430.27	85.11	85.24	-54.73	-10,142.05	2,045.73	747.70	574.00	173.70	4.304	
18,100.00	8,862.03	17,903.33	8,430.06	85.81	85.94	-54.71	-10,242.04	2,045.88	747.79	572.63	175.16	4.269	
18,200.00	8,862.03	18,003.33	8,429.85	86.51	86.64	-54.70	-10,342.04	2,046.03	747.88	571.27	176.61	4.235	
18,300.00	8,862.03	18,103.33	8,429.64	87.21	87.34	-54.68	-10,442.04	2,046.19	747.97	569.90	178.07	4.200	
18,400.00	8,862.02	18,203.33	8,429.43	87.92	88.04	-54.67	-10,542.04	2,046.34	748.06	568.53	179.53	4.167	
18,500.00	8,862.02	18,303.33	8,429.22	88.62	88.74	-54.66	-10,642.04	2,046.49	748.16	567.16	180.99	4.134	
18,600.00	8,862.02	18,403.33	8,429.01	89.33	89.44	-54.64	-10,742.04	2,046.64	748.25	565.79	182.46	4.101	
18,700.00	8,862.02	18,503.33	8,428.80	90.03	90.14	-54.63	-10,842.04	2,046.79	748.34	564.42	183.92	4.069	
18,800.00	8,862.02	18,603.33	8,428.59	90.74	90.85	-54.61	-10,942.04	2,046.94	748.43	563.05	185.39	4.037	
18,900.00	8,862.01	18,703.33	8,428.38	91.45	91.55	-54.60	-11,042.04	2,047.10	748.53	561.67	186.85	4.006	
19,000.00	8,862.01	18,803.33	8,428.17	92.16	92.26	-54.58	-11,142.04	2,047.25	748.62	560.29	188.32	3.975	
19,100.00	8,862.01	18,903.33	8,427.96	92.87	92.97	-54.57	-11,242.04	2,047.40	748.71	558.92	189.79	3.945	
19,200.00	8,862.01	19,003.33	8,427.75	93.58	93.68	-54.55	-11,342.04	2,047.55	748.80	557.54	191.26	3.915	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,300.00	8,862.01	19,103.33	8,427.54	94.30	94.38	-54.54	-11,442.04	2,047.70	748.89	556.16	192.73	3.886	
19,400.00	8,862.00	19,203.33	8,427.33	95.01	95.09	-54.52	-11,542.04	2,047.85	748.99	554.78	194.21	3.857	
19,500.00	8,862.00	19,303.33	8,427.12	95.72	95.81	-54.51	-11,642.04	2,048.00	749.08	553.40	195.68	3.828	
19,547.53	8,862.00	19,350.85	8,427.02	96.06	96.14	-54.50	-11,689.56	2,048.08	749.12	552.74	196.38	3.815	
19,548.26	8,862.00	19,351.58	8,427.02	96.14	96.15	-54.50	-11,690.29	2,048.08	749.12	552.73	196.39	3.814	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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	0.00	0.00	0.00	91.10	-1.53	79.97	79.98				
100.00	100.00	100.00	100.00	0.28	0.28	91.10	-1.53	79.97	79.98	79.43	0.55	144.887	
200.00	200.00	200.00	200.00	0.63	0.63	91.10	-1.53	79.97	79.98	78.72	1.27	63.030	
300.00	300.00	300.00	300.00	0.99	0.99	91.10	-1.53	79.97	79.98	78.00	1.99	40.276	
400.00	400.00	400.00	400.00	1.35	1.35	91.10	-1.53	79.97	79.98	77.28	2.70	29.592	
500.00	500.00	500.00	500.00	1.71	1.71	91.10	-1.53	79.97	79.98	76.56	3.42	23.389	
600.00	600.00	600.00	600.00	2.07	2.07	91.10	-1.53	79.97	79.98	75.85	4.14	19.335	
700.00	700.00	700.00	700.00	2.43	2.43	91.10	-1.53	79.97	79.98	75.13	4.85	16.479	
800.00	800.00	800.00	800.00	2.79	2.79	91.10	-1.53	79.97	79.98	74.41	5.57	14.358	
900.00	900.00	900.00	900.00	3.14	3.14	91.10	-1.53	79.97	79.98	73.70	6.29	12.721	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.10	-1.53	79.97	79.98	72.98	7.00	11.419	CC, ES
1,100.00	1,099.98	1,097.81	1,097.79	3.84	3.84	-69.31	-2.56	81.29	80.72	73.04	7.68	10.511	
1,200.00	1,199.84	1,195.56	1,195.41	4.17	4.17	-70.48	-5.64	85.23	82.96	74.64	8.33	9.964	
1,300.00	1,299.45	1,293.22	1,292.71	4.51	4.50	-72.29	-10.76	91.78	86.77	77.79	8.98	9.666	
1,350.00	1,349.13	1,342.00	1,341.18	4.68	4.67	-73.37	-14.08	96.04	89.29	79.99	9.30	9.597	
1,400.00	1,398.73	1,390.76	1,389.54	4.85	4.83	-68.01	-17.91	100.94	91.93	82.30	9.63	9.546	
1,500.00	1,497.69	1,488.29	1,485.93	5.19	5.17	-59.31	-27.09	112.68	96.64	86.35	10.29	9.391	
1,600.00	1,596.25	1,585.81	1,581.74	5.54	5.51	-52.61	-38.28	127.00	100.49	89.54	10.95	9.175	
1,670.62	1,665.55	1,654.66	1,648.98	5.78	5.76	-48.64	-47.38	138.66	102.68	91.25	11.42	8.989	
1,700.00	1,694.31	1,683.29	1,676.83	5.89	5.86	-48.48	-51.46	143.88	103.60	91.98	11.62	8.917	
1,800.00	1,792.23	1,782.76	1,773.36	6.24	6.22	-47.56	-66.25	162.80	107.48	95.16	12.32	8.722	
1,900.00	1,890.14	1,882.67	1,870.30	6.61	6.58	-46.68	-81.13	181.85	111.43	98.39	13.04	8.543	
2,000.00	1,988.06	1,982.58	1,967.24	6.97	6.95	-45.86	-96.01	200.90	115.41	101.64	13.77	8.380	
2,100.00	2,085.97	2,082.49	2,064.18	7.34	7.32	-45.10	-110.89	219.94	119.41	104.90	14.51	8.231	
2,200.00	2,183.89	2,182.40	2,161.12	7.70	7.70	-44.38	-125.77	238.99	123.42	108.17	15.25	8.095	
2,300.00	2,281.80	2,282.30	2,258.06	8.07	8.07	-43.71	-140.65	258.04	127.46	111.46	15.99	7.970	
2,400.00	2,379.72	2,382.21	2,355.00	8.45	8.45	-43.08	-155.53	277.08	131.51	114.77	16.74	7.856	
2,500.00	2,477.64	2,482.12	2,451.94	8.82	8.83	-42.49	-170.41	296.13	135.57	118.08	17.49	7.750	
2,600.00	2,575.55	2,582.03	2,548.88	9.19	9.22	-41.94	-185.29	315.17	139.65	121.40	18.25	7.653	
2,700.00	2,673.47	2,681.94	2,645.82	9.57	9.60	-41.41	-200.17	334.22	143.74	124.74	19.01	7.563	
2,800.00	2,771.38	2,781.84	2,742.76	9.95	9.98	-40.92	-215.05	353.27	147.85	128.08	19.77	7.480	
2,900.00	2,869.30	2,881.75	2,839.70	10.32	10.37	-40.45	-229.93	372.31	151.96	131.43	20.53	7.402	
3,000.00	2,967.21	2,981.66	2,936.64	10.70	10.76	-40.01	-244.81	391.36	156.08	134.79	21.29	7.330	
3,100.00	3,065.13	3,081.57	3,033.58	11.08	11.14	-39.59	-259.69	410.40	160.21	138.16	22.06	7.263	
3,200.00	3,163.05	3,181.48	3,130.52	11.46	11.53	-39.19	-274.57	429.45	164.35	141.53	22.83	7.200	
3,300.00	3,260.96	3,281.38	3,227.46	11.84	11.92	-38.81	-289.45	448.50	168.50	144.91	23.60	7.141	
3,400.00	3,358.88	3,381.29	3,324.40	12.22	12.31	-38.44	-304.34	467.54	172.66	148.29	24.37	7.086	
3,500.00	3,456.79	3,481.20	3,421.34	12.60	12.70	-38.10	-319.22	486.59	176.82	151.68	25.14	7.034	
3,600.00	3,554.71	3,581.11	3,518.28	12.98	13.09	-37.77	-334.10	505.64	180.98	155.08	25.91	6.985	
3,700.00	3,652.62	3,681.01	3,615.22	13.36	13.48	-37.46	-348.98	524.68	185.16	158.48	26.68	6.939	
3,800.00	3,750.54	3,780.92	3,712.17	13.75	13.87	-37.16	-363.86	543.73	189.34	161.88	27.46	6.896	
3,900.00	3,848.45	3,880.83	3,809.11	14.13	14.27	-36.87	-378.74	562.77	193.52	165.29	28.23	6.855	
4,000.00	3,946.37	3,980.74	3,906.05	14.51	14.66	-36.59	-393.62	581.82	197.71	168.70	29.01	6.816	
4,100.00	4,044.29	4,080.65	4,002.99	14.89	15.05	-36.33	-408.50	600.87	201.90	172.12	29.78	6.779	
4,200.00	4,142.20	4,180.55	4,099.93	15.28	15.45	-36.08	-423.38	619.91	206.10	175.54	30.56	6.744	
4,300.00	4,240.12	4,280.46	4,196.87	15.66	15.84	-35.83	-438.26	638.96	210.30	178.96	31.34	6.711	
4,400.00	4,338.03	4,380.37	4,293.81	16.05	16.23	-35.60	-453.14	658.00	214.50	182.38	32.11	6.679	
4,500.00	4,435.95	4,480.28	4,390.75	16.43	16.63	-35.38	-468.02	677.05	218.71	185.81	32.89	6.649	
4,600.00	4,533.86	4,580.19	4,487.69	16.81	17.02	-35.16	-482.90	696.10	222.92	189.24	33.67	6.620	
4,700.00	4,631.78	4,680.09	4,584.63	17.20	17.42	-34.95	-497.78	715.14	227.13	192.68	34.45	6.593	
4,800.00	4,729.69	4,780.00	4,681.57	17.58	17.81	-34.75	-512.66	734.19	231.35	196.12	35.23	6.567	
4,900.00	4,827.61	4,879.91	4,778.51	17.97	18.20	-34.56	-527.54	753.24	235.57	199.55	36.01	6.542	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
5,000.00	4,925.53	4,979.82	4,875.45	18.35	18.60	-34.37	-542.42	772.28	239.79	203.00	36.79	6.518	
5,100.00	5,023.44	5,079.72	4,972.39	18.74	18.99	-34.19	-557.30	791.33	244.01	206.44	37.57	6.495	
5,200.00	5,121.36	5,179.63	5,069.33	19.12	19.39	-34.02	-572.18	810.37	248.24	209.88	38.35	6.472	
5,300.00	5,219.27	5,279.54	5,166.27	19.51	19.79	-33.85	-587.06	829.42	252.47	213.33	39.13	6.451	
5,400.00	5,317.19	5,379.45	5,263.21	19.89	20.18	-33.69	-601.94	848.47	256.70	216.78	39.92	6.431	
5,500.00	5,415.10	5,479.36	5,360.15	20.28	20.58	-33.53	-616.83	867.51	260.93	220.23	40.70	6.411	
5,600.00	5,513.02	5,579.26	5,457.09	20.66	20.97	-33.38	-631.71	886.56	265.16	223.68	41.48	6.393	
5,700.00	5,610.93	5,679.17	5,554.03	21.05	21.37	-33.23	-646.59	905.60	269.40	227.14	42.26	6.375	
5,800.00	5,708.85	5,779.08	5,650.97	21.43	21.77	-33.09	-661.47	924.65	273.64	230.59	43.04	6.357	
5,900.00	5,806.77	5,878.99	5,747.91	21.82	22.16	-32.95	-676.35	943.70	277.88	234.05	43.83	6.340	
6,000.00	5,904.68	5,978.90	5,844.85	22.21	22.56	-32.82	-691.23	962.74	282.12	237.51	44.61	6.324	
6,100.00	6,002.60	6,078.80	5,941.79	22.59	22.95	-32.69	-706.11	981.79	286.36	240.97	45.39	6.309	
6,200.00	6,100.51	6,178.71	6,038.73	22.98	23.35	-32.56	-720.99	1,000.84	290.61	244.43	46.18	6.294	
6,300.00	6,198.43	6,278.62	6,135.67	23.36	23.75	-32.44	-735.87	1,019.88	294.85	247.89	46.96	6.279	
6,400.00	6,296.34	6,378.53	6,232.61	23.75	24.14	-32.32	-750.75	1,038.93	299.10	251.36	47.74	6.265	
6,500.00	6,394.26	6,478.43	6,329.55	24.14	24.54	-32.20	-765.63	1,057.97	303.35	254.82	48.53	6.251	
6,600.00	6,492.17	6,578.34	6,426.49	24.52	24.94	-32.09	-780.51	1,077.02	307.60	258.29	49.31	6.238	
6,700.00	6,590.09	6,678.25	6,523.43	24.91	25.33	-31.98	-795.39	1,096.07	311.85	261.75	50.09	6.225	
6,800.00	6,688.01	6,778.16	6,620.37	25.29	25.73	-31.87	-810.27	1,115.11	316.10	265.22	50.88	6.213	
6,900.00	6,785.92	6,878.07	6,717.31	25.68	26.13	-31.77	-825.15	1,134.16	320.35	268.69	51.66	6.201	
7,000.00	6,883.84	6,977.97	6,814.25	26.07	26.53	-31.67	-840.03	1,153.20	324.61	272.16	52.45	6.189	
7,100.00	6,981.75	7,077.88	6,911.19	26.45	26.92	-31.57	-854.91	1,172.25	328.86	275.63	53.23	6.178	
7,200.00	7,079.67	7,177.79	7,008.13	26.84	27.32	-31.47	-869.79	1,191.30	333.12	279.10	54.01	6.167	
7,300.00	7,177.58	7,277.70	7,105.07	27.23	27.72	-31.38	-884.67	1,210.34	337.37	282.57	54.80	6.157	SF
7,400.00	7,275.50	7,350.00	7,174.84	27.61	28.01	-31.20	-896.31	1,225.24	344.04	288.90	55.14	6.240	
7,500.00	7,373.41	7,417.35	7,237.48	28.00	28.30	-30.49	-911.47	1,244.64	360.16	305.08	55.08	6.538	
7,600.00	7,471.33	7,477.80	7,290.91	28.39	28.57	-29.45	-928.85	1,266.88	386.01	331.49	54.52	7.080	
7,700.00	7,569.25	7,534.13	7,337.76	28.77	28.83	-28.21	-948.08	1,291.49	421.01	367.43	53.58	7.857	
7,764.22	7,632.13	7,567.86	7,364.27	29.02	29.00	-27.39	-960.91	1,307.92	447.98	395.15	52.83	8.480	
7,800.00	7,667.21	7,585.72	7,377.79	29.16	29.08	-27.10	-968.09	1,317.11	464.60	412.23	52.37	8.871	
7,900.00	7,765.68	7,631.58	7,410.79	29.54	29.31	-26.37	-987.68	1,342.19	517.77	466.77	51.01	10.151	
8,000.00	7,864.70	7,671.45	7,437.35	29.91	29.51	-25.81	-1,005.99	1,365.62	579.77	530.16	49.61	11.686	
8,100.00	7,964.15	7,700.00	7,455.05	30.28	29.65	-25.70	-1,019.78	1,383.27	649.29	601.29	48.00	13.527	
8,200.00	8,063.90	7,734.66	7,475.02	30.63	29.82	-25.46	-1,037.22	1,405.59	724.92	677.86	47.06	15.404	
8,300.00	8,163.83	7,750.00	7,483.30	30.98	29.90	-26.08	-1,045.17	1,415.76	805.83	760.22	45.61	17.670	
8,350.17	8,214.00	7,769.77	7,493.46	31.14	30.00	106.19	-1,055.61	1,429.13	847.86	802.33	45.52	18.624	
8,400.00	8,263.77	7,780.31	7,498.63	31.31	30.05	-36.10	-1,061.26	1,436.36	889.56	844.50	45.06	19.741	
8,450.00	8,313.33	7,800.00	7,507.84	31.49	30.15	-31.91	-1,071.97	1,450.08	930.08	885.17	44.91	20.709	
8,500.00	8,362.13	7,800.00	7,507.84	31.69	30.15	-28.82	-1,071.97	1,450.08	968.79	924.83	43.96	22.039	
8,550.00	8,409.80	7,815.97	7,514.87	31.89	30.23	-26.21	-1,080.80	1,461.38	1,005.76	962.17	43.59	23.073	
8,600.00	8,455.99	7,828.90	7,520.27	32.09	30.30	-24.13	-1,088.04	1,470.64	1,040.79	997.70	43.08	24.159	
8,650.00	8,500.33	7,850.00	7,528.50	32.31	30.41	-22.48	-1,100.00	1,485.94	1,073.80	1,030.96	42.84	25.065	
8,700.00	8,542.50	7,850.00	7,528.50	32.53	30.41	-21.04	-1,100.00	1,485.94	1,104.50	1,062.65	41.85	26.393	
8,750.00	8,582.16	7,869.91	7,535.60	32.75	30.51	-19.97	-1,111.44	1,500.59	1,132.87	1,091.34	41.54	27.274	
8,800.00	8,619.02	7,900.00	7,545.11	32.97	30.66	-19.22	-1,129.02	1,523.09	1,159.21	1,117.66	41.55	27.900	
8,850.00	8,652.80	7,900.00	7,545.11	33.19	30.66	-18.38	-1,129.02	1,523.09	1,182.42	1,141.84	40.58	29.139	
8,900.00	8,683.24	7,919.09	7,550.36	33.42	30.75	-17.87	-1,140.32	1,537.56	1,203.44	1,163.21	40.24	29.910	
8,950.00	8,710.11	7,919.09	7,550.36	33.64	30.75	-17.27	-1,140.32	1,537.56	1,221.87	1,182.54	39.33	31.071	
9,000.00	8,733.20	7,955.03	7,559.11	33.86	30.93	-17.21	-1,161.78	1,565.03	1,237.11	1,197.59	39.52	31.301	
9,050.00	8,752.35	7,977.74	7,564.08	34.08	31.05	-17.12	-1,175.42	1,582.48	1,249.52	1,210.18	39.34	31.762	
9,100.00	8,767.39	8,000.00	7,568.52	34.29	31.16	-17.14	-1,188.85	1,599.67	1,258.91	1,219.74	39.17	32.137	
9,100.17	8,767.43	8,000.00	7,568.52	34.29	31.16	-17.14	-1,188.85	1,599.67	1,258.94	1,219.77	39.17	32.140	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
9,200.00	8,791.66	8,045.43	7,576.27	34.71	31.39	-18.09	-1,216.41	1,634.95	1,276.43	1,237.37	39.05	32.685	
9,300.00	8,812.57	8,100.00	7,583.22	35.13	31.66	-19.01	-1,249.73	1,677.59	1,297.67	1,258.18	39.49	32.864	
9,400.00	8,829.97	8,129.55	7,585.91	35.54	31.81	-19.18	-1,267.85	1,700.78	1,322.35	1,282.70	39.64	33.357	
9,500.00	8,843.72	8,168.29	7,588.28	35.95	32.01	-19.26	-1,291.65	1,731.25	1,350.77	1,310.38	40.39	33.441	
9,600.00	8,853.72	8,200.00	7,589.24	36.33	32.17	-18.86	-1,311.16	1,756.23	1,382.82	1,341.48	41.35	33.445	
9,700.00	8,859.89	8,259.35	7,589.40	36.70	32.47	-18.96	-1,347.71	1,803.00	1,418.06	1,374.93	43.13	32.881	
9,800.00	8,862.18	8,324.59	7,589.40	37.05	32.80	-19.07	-1,387.87	1,854.40	1,455.28	1,410.04	45.24	32.165	
9,809.00	8,862.20	8,330.17	7,589.40	37.08	32.83	-19.06	-1,391.30	1,858.80	1,458.73	1,413.29	45.44	32.103	
9,900.00	8,862.20	8,386.33	7,589.40	37.39	33.13	-20.82	-1,425.88	1,903.05	1,495.02	1,447.62	47.40	31.540	
10,000.00	8,862.19	8,451.29	7,589.40	37.74	33.49	-22.80	-1,465.88	1,954.24	1,537.75	1,488.19	49.57	31.025	
10,100.00	8,862.19	8,573.40	7,589.40	38.10	34.18	-26.28	-1,544.44	2,047.70	1,581.93	1,529.35	52.57	30.089	
10,200.00	8,862.19	8,715.70	7,589.40	38.48	35.02	-29.85	-1,643.29	2,150.01	1,625.62	1,569.93	55.69	29.190	
10,300.00	8,862.19	8,881.61	7,589.40	38.86	36.01	-33.42	-1,767.77	2,259.61	1,667.48	1,608.56	58.91	28.304	
10,400.00	8,862.19	9,074.33	7,589.40	39.25	37.17	-36.82	-1,923.65	2,372.80	1,705.97	1,643.77	62.20	27.427	
10,500.00	8,862.18	9,295.97	7,589.39	39.66	38.49	-39.85	-2,115.94	2,482.78	1,739.37	1,673.91	65.47	26.568	
10,600.00	8,862.18	9,546.22	7,589.39	40.07	39.90	-42.31	-2,346.65	2,579.24	1,765.83	1,697.26	68.57	25.753	
10,700.00	8,862.18	9,774.50	7,589.38	40.49	41.10	-43.75	-2,566.60	2,639.77	1,783.43	1,712.43	71.00	25.120	
10,800.00	8,862.18	10,110.98	7,589.37	40.93	42.67	-44.70	-2,900.00	2,681.45	1,791.22	1,717.70	73.52	24.362	
10,900.00	8,862.18	10,252.34	7,589.36	41.37	43.27	-44.73	-3,041.35	2,682.76	1,791.48	1,716.68	74.80	23.950	
11,000.00	8,862.17	10,352.34	7,589.36	41.82	43.69	-44.73	-3,141.35	2,682.95	1,791.49	1,715.55	75.94	23.592	
11,100.00	8,862.17	10,452.34	7,589.35	42.28	44.12	-44.73	-3,241.35	2,683.15	1,791.50	1,714.41	77.08	23.241	
11,200.00	8,862.17	10,552.34	7,589.35	42.75	44.57	-44.73	-3,341.35	2,683.35	1,791.51	1,713.26	78.25	22.895	
11,300.00	8,862.17	10,652.34	7,589.34	43.22	45.02	-44.73	-3,441.35	2,683.55	1,791.52	1,712.09	79.42	22.557	
11,400.00	8,862.17	10,752.34	7,589.34	43.71	45.47	-44.73	-3,541.35	2,683.74	1,791.53	1,710.91	80.61	22.224	
11,500.00	8,862.16	10,852.34	7,589.34	44.20	45.94	-44.73	-3,641.35	2,683.94	1,791.53	1,709.72	81.81	21.898	
11,600.00	8,862.16	10,952.34	7,589.33	44.70	46.41	-44.73	-3,741.35	2,684.14	1,791.54	1,708.52	83.03	21.578	
11,700.00	8,862.16	11,052.34	7,589.33	45.20	46.89	-44.73	-3,841.35	2,684.34	1,791.55	1,707.30	84.25	21.265	
11,800.00	8,862.16	11,152.34	7,589.32	45.72	47.38	-44.73	-3,941.35	2,684.53	1,791.56	1,706.08	85.48	20.958	
11,900.00	8,862.16	11,252.34	7,589.32	46.24	47.87	-44.73	-4,041.35	2,684.73	1,791.57	1,704.84	86.73	20.657	
12,000.00	8,862.15	11,352.34	7,589.32	46.76	48.37	-44.73	-4,141.35	2,684.93	1,791.58	1,703.60	87.98	20.363	
12,100.00	8,862.15	11,452.34	7,589.31	47.29	48.88	-44.73	-4,241.35	2,685.12	1,791.59	1,702.35	89.25	20.075	
12,200.00	8,862.15	11,552.34	7,589.31	47.83	49.39	-44.73	-4,341.35	2,685.32	1,791.60	1,701.08	90.52	19.793	
12,300.00	8,862.15	11,652.34	7,589.30	48.38	49.91	-44.73	-4,441.35	2,685.52	1,791.61	1,699.81	91.80	19.517	
12,400.00	8,862.15	11,752.34	7,589.30	48.93	50.44	-44.73	-4,541.34	2,685.72	1,791.62	1,698.53	93.09	19.246	
12,500.00	8,862.14	11,852.34	7,589.29	49.48	50.97	-44.73	-4,641.34	2,685.91	1,791.63	1,697.24	94.39	18.982	
12,600.00	8,862.14	11,952.34	7,589.29	50.04	51.51	-44.73	-4,741.34	2,686.11	1,791.64	1,695.95	95.69	18.723	
12,700.00	8,862.14	12,052.34	7,589.29	50.61	52.05	-44.73	-4,841.34	2,686.31	1,791.65	1,694.64	97.00	18.470	
12,800.00	8,862.14	12,152.34	7,589.28	51.18	52.60	-44.73	-4,941.34	2,686.51	1,791.66	1,693.33	98.32	18.222	
12,900.00	8,862.14	12,252.34	7,589.28	51.76	53.16	-44.73	-5,041.34	2,686.70	1,791.66	1,692.02	99.65	17.980	
13,000.00	8,862.13	12,352.34	7,589.27	52.34	53.71	-44.73	-5,141.34	2,686.90	1,791.67	1,690.70	100.98	17.743	
13,100.00	8,862.13	12,452.34	7,589.27	52.92	54.28	-44.73	-5,241.34	2,687.10	1,791.68	1,689.37	102.32	17.511	
13,200.00	8,862.13	12,552.34	7,589.27	53.51	54.85	-44.73	-5,341.34	2,687.30	1,791.69	1,688.03	103.66	17.284	
13,300.00	8,862.13	12,652.34	7,589.26	54.10	55.42	-44.73	-5,441.34	2,687.49	1,791.70	1,686.69	105.01	17.062	
13,400.00	8,862.12	12,752.34	7,589.26	54.70	56.00	-44.73	-5,541.34	2,687.69	1,791.71	1,685.34	106.37	16.845	
13,500.00	8,862.12	12,852.34	7,589.25	55.30	56.58	-44.73	-5,641.34	2,687.89	1,791.72	1,683.99	107.73	16.632	
13,600.00	8,862.12	12,952.34	7,589.25	55.91	57.17	-44.73	-5,741.34	2,688.09	1,791.73	1,682.64	109.09	16.424	
13,700.00	8,862.12	13,052.34	7,589.24	56.52	57.76	-44.73	-5,841.34	2,688.28	1,791.74	1,681.27	110.46	16.220	
13,800.00	8,862.12	13,152.34	7,589.24	57.13	58.35	-44.73	-5,941.34	2,688.48	1,791.75	1,679.91	111.84	16.021	
13,900.00	8,862.11	13,252.34	7,589.24	57.75	58.95	-44.73	-6,041.34	2,688.68	1,791.76	1,678.54	113.22	15.825	
14,000.00	8,862.11	13,352.34	7,589.23	58.37	59.55	-44.73	-6,141.34	2,688.88	1,791.77	1,677.16	114.60	15.634	
14,100.00	8,862.11	13,452.34	7,589.23	58.99	60.16	-44.73	-6,241.34	2,689.07	1,791.78	1,675.78	115.99	15.447	
14,200.00	8,862.11	13,552.34	7,589.22	59.62	60.77	-44.73	-6,341.34	2,689.27	1,791.79	1,674.40	117.39	15.264	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
14,300.00	8,862.11	13,652.34	7,589.22	60.25	61.38	-44.73	-6,441.34	2,689.47	1,791.80	1,673.01	118.78	15.085	
14,400.00	8,862.10	13,752.34	7,589.22	60.88	62.00	-44.73	-6,541.34	2,689.66	1,791.80	1,671.62	120.18	14.909	
14,500.00	8,862.10	13,852.34	7,589.21	61.52	62.62	-44.73	-6,641.34	2,689.86	1,791.81	1,670.23	121.59	14.737	
14,600.00	8,862.10	13,952.34	7,589.21	62.16	63.24	-44.73	-6,741.34	2,690.06	1,791.82	1,668.83	123.00	14.568	
14,700.00	8,862.10	14,052.34	7,589.20	62.80	63.87	-44.73	-6,841.34	2,690.26	1,791.83	1,667.43	124.41	14.403	
14,800.00	8,862.10	14,152.34	7,589.20	63.44	64.50	-44.73	-6,941.34	2,690.45	1,791.84	1,666.02	125.82	14.241	
14,900.00	8,862.09	14,252.34	7,589.19	64.09	65.13	-44.73	-7,041.34	2,690.65	1,791.85	1,664.61	127.24	14.083	
15,000.00	8,862.09	14,352.34	7,589.19	64.74	65.77	-44.73	-7,141.34	2,690.85	1,791.86	1,663.20	128.66	13.927	
15,100.00	8,862.09	14,452.34	7,589.19	65.39	66.40	-44.73	-7,241.34	2,691.05	1,791.87	1,661.79	130.08	13.775	
15,200.00	8,862.09	14,552.34	7,589.18	66.05	67.04	-44.73	-7,341.34	2,691.24	1,791.88	1,660.37	131.51	13.625	
15,300.00	8,862.09	14,652.34	7,589.18	66.70	67.69	-44.73	-7,441.34	2,691.44	1,791.89	1,658.95	132.94	13.479	
15,400.00	8,862.08	14,752.34	7,589.17	67.36	68.33	-44.73	-7,541.34	2,691.64	1,791.90	1,657.53	134.37	13.335	
15,500.00	8,862.08	14,852.34	7,589.17	68.02	68.98	-44.74	-7,641.34	2,691.84	1,791.91	1,656.10	135.81	13.195	
15,600.00	8,862.08	14,952.34	7,589.17	68.69	69.63	-44.74	-7,741.34	2,692.03	1,791.92	1,654.67	137.24	13.056	
15,700.00	8,862.08	15,052.34	7,589.16	69.35	70.28	-44.74	-7,841.34	2,692.23	1,791.93	1,653.24	138.68	12.921	
15,800.00	8,862.08	15,152.34	7,589.16	70.02	70.94	-44.74	-7,941.34	2,692.43	1,791.94	1,651.81	140.13	12.788	
15,900.00	8,862.07	15,252.34	7,589.15	70.69	71.59	-44.74	-8,041.34	2,692.63	1,791.94	1,650.37	141.57	12.658	
16,000.00	8,862.07	15,352.34	7,589.15	71.36	72.25	-44.74	-8,141.34	2,692.82	1,791.95	1,648.94	143.02	12.530	
16,100.00	8,862.07	15,452.34	7,589.14	72.03	72.91	-44.74	-8,241.34	2,693.02	1,791.96	1,647.50	144.47	12.404	
16,200.00	8,862.07	15,552.34	7,589.14	72.71	73.58	-44.74	-8,341.34	2,693.22	1,791.97	1,646.05	145.92	12.281	
16,300.00	8,862.07	15,652.34	7,589.14	73.38	74.24	-44.74	-8,441.34	2,693.42	1,791.98	1,644.61	147.37	12.160	
16,400.00	8,862.06	15,752.34	7,589.13	74.06	74.91	-44.74	-8,541.34	2,693.61	1,791.99	1,643.17	148.83	12.041	
16,500.00	8,862.06	15,852.34	7,589.13	74.74	75.58	-44.74	-8,641.34	2,693.81	1,792.00	1,641.72	150.28	11.924	
16,600.00	8,862.06	15,952.34	7,589.12	75.42	76.25	-44.74	-8,741.34	2,694.01	1,792.01	1,640.27	151.74	11.810	
16,700.00	8,862.06	16,052.34	7,589.12	76.10	76.92	-44.74	-8,841.34	2,694.20	1,792.02	1,638.82	153.20	11.697	
16,800.00	8,862.06	16,152.34	7,589.12	76.79	77.59	-44.74	-8,941.34	2,694.40	1,792.03	1,637.36	154.67	11.587	
16,900.00	8,862.05	16,252.34	7,589.11	77.47	78.27	-44.74	-9,041.34	2,694.60	1,792.04	1,635.91	156.13	11.478	
17,000.00	8,862.05	16,352.34	7,589.11	78.16	78.95	-44.74	-9,141.34	2,694.80	1,792.05	1,634.45	157.60	11.371	
17,100.00	8,862.05	16,452.34	7,589.10	78.85	79.63	-44.74	-9,241.34	2,694.99	1,792.06	1,632.99	159.06	11.266	
17,200.00	8,862.05	16,552.34	7,589.10	79.54	80.31	-44.74	-9,341.34	2,695.19	1,792.07	1,631.53	160.53	11.163	
17,300.00	8,862.05	16,652.34	7,589.09	80.23	80.99	-44.74	-9,441.34	2,695.39	1,792.08	1,630.07	162.00	11.062	
17,400.00	8,862.04	16,752.34	7,589.09	80.92	81.67	-44.74	-9,541.34	2,695.59	1,792.08	1,628.61	163.47	10.962	
17,500.00	8,862.04	16,852.34	7,589.09	81.62	82.36	-44.74	-9,641.34	2,695.78	1,792.09	1,627.15	164.95	10.865	
17,600.00	8,862.04	16,952.34	7,589.08	82.31	83.04	-44.74	-9,741.33	2,695.98	1,792.10	1,625.68	166.42	10.768	
17,700.00	8,862.04	17,052.34	7,589.08	83.01	83.73	-44.74	-9,841.33	2,696.18	1,792.11	1,624.21	167.90	10.674	
17,800.00	8,862.04	17,152.34	7,589.07	83.71	84.42	-44.74	-9,941.33	2,696.38	1,792.12	1,622.74	169.38	10.581	
17,900.00	8,862.03	17,252.34	7,589.07	84.41	85.11	-44.74	-10,041.33	2,696.57	1,792.13	1,621.27	170.86	10.489	
18,000.00	8,862.03	17,352.34	7,589.07	85.11	85.80	-44.74	-10,141.33	2,696.77	1,792.14	1,619.80	172.34	10.399	
18,100.00	8,862.03	17,452.34	7,589.06	85.81	86.50	-44.74	-10,241.33	2,696.97	1,792.15	1,618.33	173.82	10.310	
18,200.00	8,862.03	17,552.34	7,589.06	86.51	87.19	-44.74	-10,341.33	2,697.17	1,792.16	1,616.86	175.30	10.223	
18,300.00	8,862.03	17,652.34	7,589.05	87.21	87.89	-44.74	-10,441.33	2,697.36	1,792.17	1,615.38	176.79	10.138	
18,400.00	8,862.02	17,752.34	7,589.05	87.92	88.58	-44.74	-10,541.33	2,697.56	1,792.18	1,613.91	178.27	10.053	
18,500.00	8,862.02	17,852.34	7,589.04	88.62	89.28	-44.74	-10,641.33	2,697.76	1,792.19	1,612.43	179.76	9.970	
18,600.00	8,862.02	17,952.34	7,589.04	89.33	89.98	-44.74	-10,741.33	2,697.96	1,792.20	1,610.95	181.24	9.888	
18,700.00	8,862.02	18,052.34	7,589.04	90.03	90.68	-44.74	-10,841.33	2,698.15	1,792.21	1,609.47	182.73	9.808	
18,800.00	8,862.02	18,152.34	7,589.03	90.74	91.38	-44.74	-10,941.33	2,698.35	1,792.21	1,607.99	184.22	9.729	
18,900.00	8,862.01	18,252.34	7,589.03	91.45	92.08	-44.74	-11,041.33	2,698.55	1,792.22	1,606.51	185.71	9.651	
19,000.00	8,862.01	18,352.34	7,589.02	92.16	92.78	-44.74	-11,141.33	2,698.75	1,792.23	1,605.03	187.20	9.574	
19,100.00	8,862.01	18,452.34	7,589.02	92.87	93.49	-44.74	-11,241.33	2,698.94	1,792.24	1,603.55	188.70	9.498	
19,200.00	8,862.01	18,552.34	7,589.02	93.58	94.19	-44.74	-11,341.33	2,699.14	1,792.25	1,602.06	190.19	9.423	
19,300.00	8,862.01	18,652.34	7,589.01	94.30	94.90	-44.74	-11,441.33	2,699.34	1,792.26	1,600.58	191.68	9.350	
19,400.00	8,862.00	18,752.34	7,589.01	95.01	95.60	-44.74	-11,541.33	2,699.53	1,792.27	1,599.09	193.18	9.278	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS **Rule Assigned:** **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
19,500.00	8,862.00	18,852.34	7,589.00	95.72	96.31	-44.74	-11,641.33	2,699.73	1,792.28	1,597.60	194.68	9.206	
19,547.53	8,862.00	18,899.87	7,589.00	96.06	96.65	-44.74	-11,688.86	2,699.83	1,792.28	1,596.90	195.39	9.173	
19,548.26	8,862.00	18,900.60	7,589.00	96.14	96.65	-44.74	-11,689.59	2,699.83	1,792.28	1,596.89	195.40	9.173	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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	0.00	0.00	0.00	91.09	-1.14	59.98	59.99				
100.00	100.00	100.00	100.00	0.28	0.28	91.09	-1.14	59.98	59.99	59.44	0.55	108.670	
200.00	200.00	200.00	200.00	0.63	0.63	91.09	-1.14	59.98	59.99	58.72	1.27	47.274	
300.00	300.00	300.00	300.00	0.99	0.99	91.09	-1.14	59.98	59.99	58.00	1.99	30.208	
400.00	400.00	400.00	400.00	1.35	1.35	91.09	-1.14	59.98	59.99	57.29	2.70	22.195	
500.00	500.00	500.00	500.00	1.71	1.71	91.09	-1.14	59.98	59.99	56.57	3.42	17.542	
600.00	600.00	600.00	600.00	2.07	2.07	91.09	-1.14	59.98	59.99	55.85	4.14	14.502	
700.00	700.00	700.00	700.00	2.43	2.43	91.09	-1.14	59.98	59.99	55.14	4.85	12.360	
800.00	800.00	800.00	800.00	2.79	2.79	91.09	-1.14	59.98	59.99	54.42	5.57	10.769	
900.00	900.00	900.00	900.00	3.14	3.14	91.09	-1.14	59.98	59.99	53.70	6.29	9.541	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.09	-1.14	59.98	59.99	52.99	7.00	8.565	
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	-70.49	-1.14	59.98	59.39	51.68	7.70	7.709	
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	-75.41	-1.14	59.98	57.85	49.46	8.39	6.896	
1,261.69	1,261.33	1,260.40	1,260.40	4.38	4.43	-79.77	-1.46	60.53	57.29	48.49	8.80	6.509	CC
1,300.00	1,299.45	1,298.03	1,298.01	4.51	4.56	-82.72	-1.98	61.43	57.52	48.46	9.06	6.350	ES
1,350.00	1,349.13	1,347.14	1,347.08	4.68	4.72	-86.71	-3.03	63.25	58.52	49.13	9.39	6.234	
1,400.00	1,398.73	1,396.29	1,396.13	4.85	4.89	-84.16	-4.50	65.80	59.99	50.27	9.72	6.172	
1,500.00	1,497.69	1,494.74	1,494.22	5.19	5.22	-80.77	-8.71	73.10	63.05	52.66	10.39	6.068	
1,600.00	1,596.25	1,593.41	1,592.18	5.54	5.56	-79.02	-14.63	83.34	65.96	54.89	11.07	5.958	
1,670.62	1,665.55	1,663.21	1,661.20	5.78	5.80	-78.42	-19.82	92.34	67.78	56.22	11.56	5.863	
1,700.00	1,694.31	1,692.28	1,689.86	5.89	5.90	-79.57	-22.24	96.52	68.56	56.80	11.76	5.828	
1,800.00	1,792.23	1,791.30	1,787.11	6.24	6.25	-81.65	-31.54	112.64	72.15	59.68	12.46	5.788	
1,900.00	1,890.14	1,891.07	1,884.64	6.61	6.60	-81.88	-42.10	130.83	76.54	63.37	13.18	5.808	
2,000.00	1,988.06	1,990.98	1,982.29	6.97	6.96	-82.05	-52.70	149.09	80.96	67.06	13.90	5.824	
2,100.00	2,085.97	2,090.88	2,079.93	7.34	7.32	-82.20	-63.30	167.36	85.37	70.74	14.63	5.836	
2,200.00	2,183.89	2,190.78	2,177.58	7.70	7.68	-82.33	-73.90	185.62	89.78	74.42	15.36	5.845	
2,300.00	2,281.80	2,290.68	2,275.22	8.07	8.05	-82.45	-84.51	203.89	94.20	78.10	16.10	5.852	
2,400.00	2,379.72	2,390.59	2,372.87	8.45	8.42	-82.56	-95.11	222.15	98.61	81.77	16.84	5.856	
2,500.00	2,477.64	2,490.49	2,470.51	8.82	8.79	-82.66	-105.71	240.41	103.03	85.45	17.58	5.860	
2,600.00	2,575.55	2,590.39	2,568.16	9.19	9.16	-82.75	-116.31	258.68	107.44	89.11	18.33	5.862	
2,700.00	2,673.47	2,690.29	2,665.80	9.57	9.53	-82.84	-126.91	276.94	111.86	92.78	19.08	5.863	
2,800.00	2,771.38	2,790.19	2,763.45	9.95	9.91	-82.91	-137.52	295.21	116.27	96.44	19.83	5.864	
2,900.00	2,869.30	2,890.10	2,861.09	10.32	10.28	-82.99	-148.12	313.47	120.69	100.11	20.58	5.864	
3,000.00	2,967.21	2,990.00	2,958.73	10.70	10.66	-83.06	-158.72	331.73	125.11	103.77	21.34	5.863	
3,100.00	3,065.13	3,089.90	3,056.38	11.08	11.03	-83.12	-169.32	350.00	129.52	107.43	22.09	5.862	
3,200.00	3,163.05	3,189.80	3,154.02	11.46	11.41	-83.18	-179.93	368.26	133.94	111.09	22.85	5.861	
3,300.00	3,260.96	3,289.71	3,251.67	11.84	11.79	-83.23	-190.53	386.53	138.35	114.74	23.61	5.860	
3,400.00	3,358.88	3,389.61	3,349.31	12.22	12.17	-83.28	-201.13	404.79	142.77	118.40	24.37	5.858	
3,500.00	3,456.79	3,489.51	3,446.96	12.60	12.55	-83.33	-211.73	423.05	147.19	122.05	25.13	5.856	
3,600.00	3,554.71	3,589.41	3,544.60	12.98	12.93	-83.38	-222.34	441.32	151.60	125.71	25.90	5.854	
3,700.00	3,652.62	3,689.32	3,642.25	13.36	13.31	-83.42	-232.94	459.58	156.02	129.36	26.66	5.852	
3,800.00	3,750.54	3,789.22	3,739.89	13.75	13.69	-83.46	-243.54	477.84	160.44	133.01	27.42	5.850	
3,900.00	3,848.45	3,889.12	3,837.54	14.13	14.07	-83.50	-254.14	496.11	164.86	136.67	28.19	5.848	
4,000.00	3,946.37	3,989.02	3,935.18	14.51	14.46	-83.54	-264.75	514.37	169.27	140.32	28.95	5.846	
4,100.00	4,044.29	4,088.93	4,032.83	14.89	14.84	-83.57	-275.35	532.64	173.69	143.97	29.72	5.844	
4,200.00	4,142.20	4,188.83	4,130.47	15.28	15.22	-83.61	-285.95	550.90	178.11	147.62	30.49	5.842	
4,300.00	4,240.12	4,288.73	4,228.12	15.66	15.61	-83.64	-296.55	569.16	182.52	151.27	31.25	5.840	
4,400.00	4,338.03	4,388.63	4,325.76	16.05	15.99	-83.67	-307.16	587.43	186.94	154.92	32.02	5.838	
4,500.00	4,435.95	4,488.53	4,423.41	16.43	16.37	-83.69	-317.76	605.69	191.36	158.57	32.79	5.836	
4,600.00	4,533.86	4,588.44	4,521.05	16.81	16.76	-83.72	-328.36	623.96	195.78	162.22	33.56	5.834	
4,700.00	4,631.78	4,688.34	4,618.70	17.20	17.14	-83.75	-338.96	642.22	200.19	165.86	34.33	5.832	
4,800.00	4,729.69	4,788.24	4,716.34	17.58	17.53	-83.77	-349.57	660.48	204.61	169.51	35.10	5.830	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
4,900.00	4,827.61	4,888.14	4,813.99	17.97	17.91	-83.80	-360.17	678.75	209.03	173.16	35.87	5.828	
5,000.00	4,925.53	4,988.05	4,911.63	18.35	18.30	-83.82	-370.77	697.01	213.45	176.81	36.64	5.826	
5,100.00	5,023.44	5,087.95	5,009.27	18.74	18.68	-83.84	-381.37	715.27	217.86	180.45	37.41	5.824	
5,200.00	5,121.36	5,187.85	5,106.92	19.12	19.07	-83.86	-391.97	733.54	222.28	184.10	38.18	5.822	
5,300.00	5,219.27	5,287.75	5,204.56	19.51	19.45	-83.88	-402.58	751.80	226.70	187.75	38.95	5.820	
5,400.00	5,317.19	5,387.66	5,302.21	19.89	19.84	-83.90	-413.18	770.07	231.12	191.39	39.72	5.818	
5,500.00	5,415.10	5,487.56	5,399.85	20.28	20.22	-83.92	-423.78	788.33	235.53	195.04	40.49	5.816	
5,600.00	5,513.02	5,587.46	5,497.50	20.66	20.61	-83.94	-434.38	806.59	239.95	198.69	41.27	5.815	
5,700.00	5,610.93	5,687.36	5,595.14	21.05	21.00	-83.96	-444.99	824.86	244.37	202.33	42.04	5.813	
5,800.00	5,708.85	5,787.27	5,692.79	21.43	21.38	-83.97	-455.59	843.12	248.79	205.98	42.81	5.811	
5,900.00	5,806.77	5,887.17	5,790.43	21.82	21.77	-83.99	-466.19	861.39	253.21	209.62	43.58	5.810	
6,000.00	5,904.68	5,987.07	5,888.08	22.21	22.16	-84.01	-476.79	879.65	257.62	213.27	44.36	5.808	
6,100.00	6,002.60	6,086.97	5,985.72	22.59	22.54	-84.02	-487.40	897.91	262.04	216.91	45.13	5.807	
6,200.00	6,100.51	6,186.87	6,083.37	22.98	22.93	-84.04	-498.00	916.18	266.46	220.56	45.90	5.805	
6,300.00	6,198.43	6,286.78	6,181.01	23.36	23.32	-84.05	-508.60	934.44	270.88	224.20	46.67	5.804	
6,400.00	6,296.34	6,386.68	6,278.66	23.75	23.70	-84.06	-519.20	952.70	275.30	227.85	47.45	5.802	
6,500.00	6,394.26	6,486.58	6,376.30	24.14	24.09	-84.08	-529.81	970.97	279.71	231.49	48.22	5.801	
6,600.00	6,492.17	6,586.48	6,473.95	24.52	24.48	-84.09	-540.41	989.23	284.13	235.14	49.00	5.799	
6,700.00	6,590.09	6,686.39	6,571.59	24.91	24.86	-84.10	-551.01	1,007.50	288.55	238.78	49.77	5.798	
6,800.00	6,688.01	6,786.29	6,669.24	25.29	25.25	-84.11	-561.61	1,025.76	292.97	242.42	50.54	5.796	
6,900.00	6,785.92	6,886.19	6,766.88	25.68	25.64	-84.13	-572.22	1,044.02	297.39	246.07	51.32	5.795	
7,000.00	6,883.84	6,986.09	6,864.53	26.07	26.03	-84.14	-582.82	1,062.29	301.80	249.71	52.09	5.794	
7,100.00	6,981.75	7,086.00	6,962.17	26.45	26.41	-84.15	-593.42	1,080.55	306.22	253.36	52.86	5.793	
7,200.00	7,079.67	7,185.90	7,059.81	26.84	26.80	-84.16	-604.02	1,098.82	310.64	257.00	53.64	5.791	
7,300.00	7,177.58	7,285.80	7,157.46	27.23	27.19	-84.17	-614.63	1,117.08	315.06	260.64	54.41	5.790	
7,400.00	7,275.50	7,387.86	7,257.36	27.61	27.58	-84.30	-625.10	1,135.13	319.27	264.06	55.20	5.784	
7,500.00	7,373.41	7,491.14	7,359.10	28.00	27.97	-85.02	-634.00	1,150.46	322.50	266.51	55.98	5.761	
7,600.00	7,471.33	7,594.08	7,461.08	28.39	28.36	-86.35	-641.04	1,162.58	324.79	268.05	56.75	5.724	
7,700.00	7,569.25	7,696.42	7,562.89	28.77	28.73	-88.27	-646.21	1,171.48	326.40	268.91	57.49	5.678	
7,764.22	7,632.13	7,761.71	7,628.02	29.02	28.96	-89.81	-648.55	1,175.51	327.21	269.26	57.95	5.646	
7,800.00	7,667.21	7,797.94	7,664.19	29.16	29.08	-90.73	-649.52	1,177.19	327.64	269.43	58.21	5.628	
7,900.00	7,765.68	7,898.88	7,765.08	29.54	29.43	-93.31	-651.03	1,179.80	328.79	269.87	58.92	5.580	
8,000.00	7,864.70	7,998.50	7,864.70	29.91	29.75	-95.70	-651.14	1,179.98	329.92	270.33	59.59	5.537	
8,100.00	7,964.15	8,097.95	7,964.15	30.28	30.07	-97.51	-651.14	1,179.98	331.13	270.88	60.25	5.496	
8,200.00	8,063.90	8,197.70	8,063.90	30.63	30.39	-98.73	-651.14	1,179.98	332.12	271.20	60.92	5.452	
8,300.00	8,163.83	8,297.63	8,163.83	30.98	30.71	-99.33	-651.14	1,179.98	332.67	271.09	61.58	5.403	
8,350.17	8,214.00	8,347.80	8,214.00	31.14	30.87	32.75	-651.14	1,179.98	332.74	270.84	61.90	5.375	
8,400.00	8,263.77	8,397.57	8,263.77	31.31	31.03	-114.91	-651.14	1,179.98	333.65	271.42	62.23	5.362	SF
8,450.00	8,313.33	8,451.61	8,317.80	31.49	31.20	-115.70	-651.49	1,180.27	336.33	273.75	62.58	5.374	
8,500.00	8,362.13	8,513.76	8,379.65	31.69	31.43	-116.54	-656.03	1,183.94	339.55	276.60	62.95	5.394	
8,550.00	8,409.80	8,576.82	8,441.38	31.89	31.66	-117.11	-665.92	1,191.95	342.89	279.62	63.27	5.419	
8,600.00	8,455.99	8,640.61	8,502.02	32.09	31.92	-117.40	-681.22	1,204.34	346.26	282.73	63.53	5.450	
8,650.00	8,500.33	8,704.94	8,560.57	32.31	32.18	-117.41	-701.86	1,221.05	349.60	285.87	63.73	5.486	
8,700.00	8,542.50	8,769.58	8,616.04	32.53	32.45	-117.13	-727.60	1,241.90	352.85	288.98	63.87	5.525	
8,750.00	8,582.16	8,834.30	8,667.49	32.75	32.73	-116.59	-758.08	1,266.58	356.00	292.01	63.99	5.564	
8,800.00	8,619.02	8,898.87	8,714.08	32.97	33.01	-115.78	-792.78	1,294.68	359.03	294.92	64.11	5.600	
8,850.00	8,652.80	8,963.07	8,755.14	33.19	33.29	-114.73	-831.10	1,325.71	361.96	297.69	64.28	5.631	
8,900.00	8,683.24	9,026.68	8,790.13	33.42	33.57	-113.46	-872.35	1,359.11	364.82	300.30	64.52	5.654	
8,950.00	8,710.11	9,089.53	8,818.72	33.64	33.84	-111.98	-915.82	1,394.32	367.64	302.78	64.86	5.668	
9,000.00	8,733.20	9,151.46	8,840.73	33.86	34.10	-110.33	-960.79	1,430.73	370.47	305.15	65.32	5.672	
9,050.00	8,752.35	9,208.94	8,855.85	34.08	34.33	-108.68	-1,003.87	1,465.61	373.49	307.59	65.90	5.668	
9,100.00	8,767.39	9,263.36	8,867.29	34.29	34.55	-107.31	-1,045.21	1,499.09	377.27	310.81	66.47	5.676	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
9,100.17	8,767.43	9,263.54	8,867.32	34.29	34.55	-107.31	-1,045.35	1,499.21	377.29	310.82	66.47	5.676	
9,200.00	8,791.66	9,370.73	8,882.39	34.71	34.98	-106.13	-1,127.80	1,565.97	388.94	321.24	67.70	5.745	
9,300.00	8,812.57	9,474.23	8,887.47	35.13	35.40	-103.77	-1,208.11	1,631.00	407.86	338.74	69.12	5.901	
9,400.00	8,829.97	9,568.08	8,887.48	35.54	35.77	-101.23	-1,281.04	1,690.06	435.39	364.94	70.45	6.180	
9,500.00	8,843.72	9,659.41	8,887.48	35.95	36.16	-98.95	-1,352.02	1,747.54	471.86	400.31	71.56	6.594	
9,600.00	8,853.72	9,747.82	8,887.48	36.33	36.55	-96.89	-1,420.73	1,803.18	516.50	444.00	72.50	7.124	
9,700.00	8,859.89	9,832.65	8,887.48	36.70	36.93	-94.98	-1,486.65	1,856.56	568.60	495.27	73.33	7.754	
9,800.00	8,862.18	9,913.25	8,887.48	37.05	37.31	-93.11	-1,549.29	1,907.28	627.54	553.48	74.07	8.473	
9,809.00	8,862.20	9,920.27	8,887.48	37.08	37.35	-92.94	-1,554.74	1,911.70	633.16	559.03	74.13	8.541	
9,900.00	8,862.20	9,991.10	8,887.48	37.39	37.69	-92.70	-1,609.79	1,956.28	690.26	615.49	74.77	9.232	
10,000.00	8,862.19	10,068.93	8,887.48	37.74	38.08	-92.47	-1,670.27	2,005.26	753.01	677.53	75.48	9.976	
10,100.00	8,862.19	10,151.92	8,887.48	38.10	38.51	-92.27	-1,734.81	2,057.44	815.72	739.48	76.24	10.700	
10,200.00	8,862.19	10,264.64	8,887.48	38.48	39.10	-92.05	-1,824.21	2,126.07	876.45	799.27	77.18	11.356	
10,300.00	8,862.19	10,384.26	8,887.48	38.86	39.74	-91.87	-1,921.97	2,195.00	933.91	855.75	78.16	11.948	
10,400.00	8,862.19	10,510.99	8,887.48	39.25	40.43	-91.72	-2,028.57	2,263.50	987.81	908.64	79.17	12.477	
10,500.00	8,862.18	10,644.93	8,887.48	39.66	41.17	-91.59	-2,144.42	2,330.70	1,037.82	957.62	80.20	12.941	
10,600.00	8,862.18	10,786.08	8,887.47	40.07	41.94	-91.49	-2,269.77	2,395.58	1,083.62	1,002.40	81.22	13.341	
10,700.00	8,862.18	10,934.30	8,887.47	40.49	42.75	-91.40	-2,404.66	2,456.97	1,124.88	1,042.65	82.23	13.680	
10,800.00	8,862.18	11,089.28	8,887.47	40.93	43.59	-91.33	-2,548.90	2,513.62	1,161.27	1,078.08	83.19	13.960	
10,900.00	8,862.18	11,250.54	8,887.46	41.37	44.45	-91.27	-2,702.00	2,564.18	1,192.46	1,108.38	84.08	14.183	
11,000.00	8,862.17	11,417.37	8,887.46	41.82	45.31	-91.22	-2,863.12	2,607.35	1,218.16	1,133.29	84.87	14.353	
11,100.00	8,862.17	11,588.89	8,887.45	42.28	46.18	-91.19	-3,031.11	2,641.87	1,238.11	1,152.56	85.55	14.473	
11,200.00	8,862.17	11,764.02	8,887.44	42.75	47.03	-91.16	-3,204.45	2,666.68	1,252.10	1,166.02	86.08	14.545	
11,300.00	8,862.17	11,941.55	8,887.44	43.22	47.86	-91.15	-3,381.36	2,680.98	1,259.97	1,173.52	86.46	14.573	
11,400.00	8,862.17	12,101.77	8,887.43	43.71	48.58	-91.15	-3,541.52	2,684.55	1,261.81	1,174.95	86.85	14.528	
11,500.00	8,862.16	12,201.77	8,887.42	44.20	49.02	-91.15	-3,641.52	2,684.74	1,261.81	1,173.99	87.82	14.368	
11,600.00	8,862.16	12,301.77	8,887.42	44.70	49.47	-91.15	-3,741.52	2,684.93	1,261.81	1,173.00	88.80	14.209	
11,700.00	8,862.16	12,401.77	8,887.41	45.20	49.93	-91.15	-3,841.52	2,685.11	1,261.81	1,172.01	89.80	14.051	
11,800.00	8,862.16	12,501.77	8,887.41	45.72	50.40	-91.15	-3,941.52	2,685.30	1,261.81	1,171.00	90.81	13.894	
11,900.00	8,862.16	12,601.77	8,887.40	46.24	50.87	-91.15	-4,041.52	2,685.49	1,261.81	1,169.97	91.84	13.739	
12,000.00	8,862.15	12,701.77	8,887.40	46.76	51.35	-91.15	-4,141.52	2,685.68	1,261.81	1,168.93	92.88	13.585	
12,100.00	8,862.15	12,801.77	8,887.39	47.29	51.83	-91.15	-4,241.52	2,685.86	1,261.81	1,167.88	93.94	13.433	
12,200.00	8,862.15	12,901.77	8,887.39	47.83	52.32	-91.15	-4,341.52	2,686.05	1,261.81	1,166.81	95.00	13.282	
12,300.00	8,862.15	13,001.77	8,887.38	48.38	52.82	-91.15	-4,441.52	2,686.24	1,261.82	1,165.73	96.08	13.133	
12,400.00	8,862.15	13,101.77	8,887.37	48.93	53.32	-91.15	-4,541.52	2,686.43	1,261.82	1,164.64	97.17	12.985	
12,500.00	8,862.14	13,201.77	8,887.37	49.48	53.83	-91.15	-4,641.52	2,686.61	1,261.82	1,163.54	98.28	12.839	
12,600.00	8,862.14	13,301.77	8,887.36	50.04	54.35	-91.15	-4,741.52	2,686.80	1,261.82	1,162.43	99.39	12.695	
12,700.00	8,862.14	13,401.77	8,887.36	50.61	54.87	-91.15	-4,841.52	2,686.99	1,261.82	1,161.30	100.52	12.553	
12,800.00	8,862.14	13,501.77	8,887.35	51.18	55.39	-91.15	-4,941.52	2,687.18	1,261.82	1,160.17	101.65	12.413	
12,900.00	8,862.14	13,601.77	8,887.35	51.76	55.92	-91.14	-5,041.52	2,687.36	1,261.82	1,159.02	102.80	12.275	
13,000.00	8,862.13	13,701.77	8,887.34	52.34	56.46	-91.14	-5,141.52	2,687.55	1,261.82	1,157.87	103.96	12.138	
13,100.00	8,862.13	13,801.77	8,887.34	52.92	57.00	-91.14	-5,241.52	2,687.74	1,261.82	1,156.70	105.12	12.003	
13,200.00	8,862.13	13,901.77	8,887.33	53.51	57.55	-91.14	-5,341.52	2,687.93	1,261.83	1,155.53	106.30	11.871	
13,300.00	8,862.13	14,001.77	8,887.33	54.10	58.10	-91.14	-5,441.52	2,688.11	1,261.83	1,154.35	107.48	11.740	
13,400.00	8,862.12	14,101.77	8,887.32	54.70	58.65	-91.14	-5,541.52	2,688.30	1,261.83	1,153.16	108.67	11.611	
13,500.00	8,862.12	14,201.77	8,887.32	55.30	59.21	-91.14	-5,641.52	2,688.49	1,261.83	1,151.96	109.87	11.484	
13,600.00	8,862.12	14,301.77	8,887.31	55.91	59.78	-91.14	-5,741.52	2,688.68	1,261.83	1,150.75	111.08	11.359	
13,700.00	8,862.12	14,401.77	8,887.31	56.52	60.35	-91.14	-5,841.52	2,688.86	1,261.83	1,149.53	112.30	11.236	
13,800.00	8,862.12	14,501.77	8,887.30	57.13	60.92	-91.14	-5,941.52	2,689.05	1,261.83	1,148.31	113.52	11.115	
13,900.00	8,862.11	14,601.77	8,887.30	57.75	61.50	-91.14	-6,041.52	2,689.24	1,261.83	1,147.08	114.76	10.996	
14,000.00	8,862.11	14,701.77	8,887.29	58.37	62.08	-91.14	-6,141.52	2,689.43	1,261.84	1,145.84	115.99	10.878	
14,100.00	8,862.11	14,801.77	8,887.29	58.99	62.66	-91.14	-6,241.52	2,689.61	1,261.84	1,144.60	117.24	10.763	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
14,200.00	8,862.11	14,901.77	8,887.28	59.62	63.25	-91.14	-6,341.52	2,689.80	1,261.84	1,143.35	118.49	10.649	
14,300.00	8,862.11	15,001.77	8,887.28	60.25	63.84	-91.14	-6,441.52	2,689.99	1,261.84	1,142.09	119.75	10.537	
14,400.00	8,862.10	15,101.77	8,887.27	60.88	64.44	-91.14	-6,541.52	2,690.18	1,261.84	1,140.82	121.02	10.427	
14,500.00	8,862.10	15,201.77	8,887.26	61.52	65.04	-91.14	-6,641.52	2,690.36	1,261.84	1,139.55	122.29	10.319	
14,600.00	8,862.10	15,301.77	8,887.26	62.16	65.64	-91.14	-6,741.52	2,690.55	1,261.84	1,138.28	123.56	10.212	
14,700.00	8,862.10	15,401.77	8,887.25	62.80	66.25	-91.14	-6,841.52	2,690.74	1,261.84	1,137.00	124.85	10.107	
14,800.00	8,862.10	15,501.77	8,887.25	63.44	66.86	-91.14	-6,941.52	2,690.93	1,261.84	1,135.71	126.13	10.004	
14,900.00	8,862.09	15,601.77	8,887.24	64.09	67.47	-91.14	-7,041.52	2,691.11	1,261.85	1,134.42	127.43	9.903	
15,000.00	8,862.09	15,701.77	8,887.24	64.74	68.08	-91.14	-7,141.52	2,691.30	1,261.85	1,133.12	128.73	9.803	
15,100.00	8,862.09	15,801.77	8,887.23	65.39	68.70	-91.14	-7,241.52	2,691.49	1,261.85	1,131.82	130.03	9.704	
15,200.00	8,862.09	15,901.77	8,887.23	66.05	69.32	-91.14	-7,341.52	2,691.68	1,261.85	1,130.51	131.34	9.608	
15,300.00	8,862.09	16,001.77	8,887.22	66.70	69.95	-91.14	-7,441.52	2,691.86	1,261.85	1,129.20	132.65	9.513	
15,400.00	8,862.08	16,101.77	8,887.22	67.36	70.57	-91.14	-7,541.52	2,692.05	1,261.85	1,127.88	133.97	9.419	
15,500.00	8,862.08	16,201.77	8,887.21	68.02	71.20	-91.14	-7,641.52	2,692.24	1,261.85	1,126.56	135.29	9.327	
15,600.00	8,862.08	16,301.77	8,887.21	68.69	71.84	-91.14	-7,741.52	2,692.43	1,261.85	1,125.24	136.62	9.236	
15,700.00	8,862.08	16,401.77	8,887.20	69.35	72.47	-91.14	-7,841.52	2,692.61	1,261.85	1,123.91	137.95	9.147	
15,800.00	8,862.08	16,501.77	8,887.20	70.02	73.11	-91.14	-7,941.52	2,692.80	1,261.86	1,122.57	139.28	9.060	
15,900.00	8,862.07	16,601.77	8,887.19	70.69	73.75	-91.14	-8,041.52	2,692.99	1,261.86	1,121.24	140.62	8.973	
16,000.00	8,862.07	16,701.77	8,887.19	71.36	74.39	-91.14	-8,141.52	2,693.18	1,261.86	1,119.89	141.96	8.889	
16,100.00	8,862.07	16,801.77	8,887.18	72.03	75.03	-91.14	-8,241.52	2,693.36	1,261.86	1,118.55	143.31	8.805	
16,200.00	8,862.07	16,901.77	8,887.18	72.71	75.68	-91.14	-8,341.52	2,693.55	1,261.86	1,117.20	144.66	8.723	
16,300.00	8,862.07	17,001.77	8,887.17	73.38	76.33	-91.14	-8,441.52	2,693.74	1,261.86	1,115.85	146.01	8.642	
16,400.00	8,862.06	17,101.77	8,887.17	74.06	76.98	-91.14	-8,541.52	2,693.93	1,261.86	1,114.49	147.37	8.563	
16,500.00	8,862.06	17,201.77	8,887.16	74.74	77.63	-91.14	-8,641.52	2,694.11	1,261.86	1,113.13	148.73	8.484	
16,600.00	8,862.06	17,301.77	8,887.16	75.42	78.29	-91.14	-8,741.52	2,694.30	1,261.86	1,111.77	150.09	8.407	
16,700.00	8,862.06	17,401.77	8,887.15	76.10	78.94	-91.14	-8,841.52	2,694.49	1,261.87	1,110.40	151.46	8.331	
16,800.00	8,862.06	17,501.77	8,887.14	76.79	79.60	-91.14	-8,941.52	2,694.68	1,261.87	1,109.04	152.83	8.257	
16,900.00	8,862.05	17,601.77	8,887.14	77.47	80.26	-91.14	-9,041.51	2,694.86	1,261.87	1,107.66	154.20	8.183	
17,000.00	8,862.05	17,701.77	8,887.13	78.16	80.93	-91.14	-9,141.51	2,695.05	1,261.87	1,106.29	155.58	8.111	
17,100.00	8,862.05	17,801.77	8,887.13	78.85	81.59	-91.14	-9,241.51	2,695.24	1,261.87	1,104.91	156.96	8.040	
17,200.00	8,862.05	17,901.77	8,887.12	79.54	82.26	-91.14	-9,341.51	2,695.43	1,261.87	1,103.53	158.34	7.969	
17,300.00	8,862.05	18,001.77	8,887.12	80.23	82.92	-91.14	-9,441.51	2,695.61	1,261.87	1,102.15	159.72	7.900	
17,400.00	8,862.04	18,101.77	8,887.11	80.92	83.59	-91.14	-9,541.51	2,695.80	1,261.87	1,100.76	161.11	7.832	
17,500.00	8,862.04	18,201.77	8,887.11	81.62	84.26	-91.14	-9,641.51	2,695.99	1,261.87	1,099.37	162.50	7.765	
17,600.00	8,862.04	18,301.77	8,887.10	82.31	84.94	-91.14	-9,741.51	2,696.18	1,261.88	1,097.98	163.89	7.699	
17,700.00	8,862.04	18,401.77	8,887.10	83.01	85.61	-91.14	-9,841.51	2,696.36	1,261.88	1,096.59	165.29	7.634	
17,800.00	8,862.04	18,501.77	8,887.09	83.71	86.29	-91.14	-9,941.51	2,696.55	1,261.88	1,095.20	166.68	7.571	
17,900.00	8,862.03	18,601.77	8,887.09	84.41	86.96	-91.14	-10,041.51	2,696.74	1,261.88	1,093.80	168.08	7.508	
18,000.00	8,862.03	18,701.77	8,887.08	85.11	87.64	-91.14	-10,141.51	2,696.93	1,261.88	1,092.40	169.48	7.445	
18,100.00	8,862.03	18,801.77	8,887.08	85.81	88.32	-91.14	-10,241.51	2,697.11	1,261.88	1,091.00	170.89	7.384	
18,200.00	8,862.03	18,901.77	8,887.07	86.51	89.00	-91.14	-10,341.51	2,697.30	1,261.88	1,089.59	172.29	7.324	
18,300.00	8,862.03	19,001.77	8,887.07	87.21	89.69	-91.14	-10,441.51	2,697.49	1,261.88	1,088.18	173.70	7.265	
18,400.00	8,862.02	19,101.77	8,887.06	87.92	90.37	-91.14	-10,541.51	2,697.68	1,261.88	1,086.78	175.11	7.206	
18,500.00	8,862.02	19,201.77	8,887.06	88.62	91.05	-91.14	-10,641.51	2,697.86	1,261.89	1,085.36	176.52	7.149	
18,600.00	8,862.02	19,301.77	8,887.05	89.33	91.74	-91.14	-10,741.51	2,698.05	1,261.89	1,083.95	177.93	7.092	
18,700.00	8,862.02	19,401.77	8,887.05	90.03	92.43	-91.14	-10,841.51	2,698.24	1,261.89	1,082.54	179.35	7.036	
18,800.00	8,862.02	19,501.77	8,887.04	90.74	93.12	-91.14	-10,941.51	2,698.43	1,261.89	1,081.12	180.77	6.981	
18,900.00	8,862.01	19,601.77	8,887.03	91.45	93.81	-91.14	-11,041.51	2,698.61	1,261.89	1,079.70	182.19	6.926	
19,000.00	8,862.01	19,701.77	8,887.03	92.16	94.50	-91.14	-11,141.51	2,698.80	1,261.89	1,078.28	183.61	6.873	
19,100.00	8,862.01	19,801.77	8,887.02	92.87	95.19	-91.14	-11,241.51	2,698.99	1,261.89	1,076.86	185.03	6.820	
19,200.00	8,862.01	19,901.77	8,887.02	93.58	95.89	-91.14	-11,341.51	2,699.18	1,261.89	1,075.44	186.45	6.768	
19,300.00	8,862.01	20,001.77	8,887.01	94.30	96.58	-91.14	-11,441.51	2,699.36	1,261.89	1,074.01	187.88	6.716	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,400.00	8,862.00	20,101.77	8,887.01	95.01	97.28	-91.14	-11,541.51	2,699.55	1,261.90	1,072.59	189.31	6.666	
19,500.00	8,862.00	20,201.77	8,887.00	95.72	97.97	-91.14	-11,641.51	2,699.74	1,261.90	1,071.16	190.74	6.616	
19,547.53	8,862.00	20,249.29	8,887.00	96.06	98.30	-91.14	-11,689.04	2,699.83	1,261.90	1,070.48	191.42	6.592	
19,548.26	8,862.00	20,250.02	8,887.00	96.14	98.31	-91.14	-11,689.77	2,699.83	1,261.90	1,070.47	191.43	6.592	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD

Offset Well Error: 0.50 usft

Rule Assigned:

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	0.00	0.00	0.71	-169.82	-6,151.50	-1,104.92	6,250.14				
100.00	100.00	45.02	45.02	0.28	0.71	-169.82	-6,151.52	-1,104.94	6,249.97	6,248.98	0.99	6,339.045	
200.00	200.00	139.91	139.91	0.63	0.76	-169.82	-6,151.65	-1,105.15	6,250.14	6,248.74	1.40	4,479.641	
300.00	300.00	251.54	251.53	0.99	0.98	-169.80	-6,151.52	-1,106.53	6,250.25	6,248.28	1.97	3,171.630	
400.00	400.00	365.63	365.60	1.35	1.29	-169.78	-6,150.96	-1,108.78	6,250.11	6,247.47	2.64	2,365.217	
500.00	500.00	452.72	452.67	1.71	1.56	-169.76	-6,150.47	-1,110.55	6,249.92	6,246.66	3.27	1,912.903	
600.00	600.00	576.18	576.10	2.07	1.95	-169.75	-6,149.82	-1,112.62	6,249.71	6,245.69	4.02	1,554.526	
700.00	700.00	770.40	770.30	2.43	2.59	-169.73	-6,146.95	-1,113.60	6,248.15	6,243.13	5.02	1,244.910	
800.00	800.00	876.01	875.88	2.79	2.95	-169.72	-6,144.74	-1,113.94	6,246.14	6,240.41	5.73	1,089.529	
900.00	900.00	1,022.66	1,022.48	3.14	3.45	-169.71	-6,140.98	-1,115.04	6,243.74	6,237.15	6.59	947.354	
1,000.00	1,000.00	1,100.00	1,099.78	3.50	3.72	-169.69	-6,138.68	-1,116.20	6,241.11	6,233.90	7.22	864.951	
1,100.00	1,099.98	1,159.77	1,159.52	3.84	3.93	30.36	-6,137.16	-1,117.39	6,237.49	6,229.73	7.76	803.342	
1,200.00	1,199.84	1,200.00	1,199.73	4.17	4.07	30.44	-6,136.40	-1,118.32	6,231.64	6,223.40	8.23	756.818	
1,300.00	1,299.45	1,261.86	1,261.57	4.51	4.28	30.56	-6,135.68	-1,119.86	6,223.51	6,214.73	8.78	708.607	
1,350.00	1,349.13	1,300.00	1,299.69	4.68	4.41	30.64	-6,135.55	-1,120.85	6,218.67	6,209.59	9.08	684.531	
1,400.00	1,398.73	1,300.00	1,299.69	4.85	4.41	37.15	-6,135.55	-1,120.85	6,213.61	6,204.36	9.25	671.517	
1,500.00	1,497.69	1,383.09	1,382.75	5.19	4.70	47.48	-6,135.77	-1,123.13	6,203.83	6,193.95	9.88	627.795	
1,600.00	1,596.25	1,454.15	1,453.78	5.54	4.94	54.97	-6,136.31	-1,125.21	6,194.53	6,184.06	10.47	591.388	
1,670.62	1,665.55	1,500.00	1,499.60	5.78	5.10	59.04	-6,136.80	-1,126.65	6,188.22	6,177.34	10.88	568.710	
1,700.00	1,694.31	1,529.70	1,529.28	5.89	5.21	59.10	-6,137.17	-1,127.62	6,185.65	6,174.56	11.09	557.867	
1,800.00	1,792.23	1,612.24	1,611.77	6.24	5.49	59.26	-6,138.33	-1,130.34	6,177.11	6,165.38	11.73	526.589	
1,900.00	1,890.14	1,700.00	1,699.47	6.61	5.80	59.42	-6,139.72	-1,133.40	6,168.84	6,156.45	12.39	497.700	
2,000.00	1,988.06	1,786.48	1,785.88	6.97	6.10	59.59	-6,141.27	-1,136.26	6,160.81	6,147.75	13.06	471.844	
2,100.00	2,085.97	1,893.37	1,892.73	7.34	6.48	59.78	-6,143.42	-1,138.75	6,152.86	6,139.07	13.79	446.145	
2,200.00	2,183.89	2,022.65	2,021.98	7.70	6.92	60.00	-6,145.99	-1,139.69	6,144.63	6,130.03	14.60	420.751	
2,300.00	2,281.80	2,142.01	2,141.31	8.07	7.33	60.18	-6,148.10	-1,139.16	6,136.00	6,120.61	15.38	398.840	
2,400.00	2,379.72	2,268.98	2,268.23	8.45	7.77	60.37	-6,150.40	-1,136.35	6,127.11	6,110.91	16.19	378.333	
2,500.00	2,477.64	2,355.91	2,355.08	8.82	8.07	60.48	-6,152.02	-1,132.94	6,117.94	6,101.07	16.87	362.642	
2,600.00	2,575.55	2,441.47	2,440.52	9.19	8.37	60.58	-6,154.13	-1,128.83	6,109.18	6,091.64	17.54	348.216	
2,700.00	2,673.47	2,554.70	2,553.63	9.57	8.77	60.72	-6,156.58	-1,124.57	6,100.39	6,082.07	18.31	333.113	
2,800.00	2,771.38	2,667.69	2,666.58	9.95	9.17	60.88	-6,158.32	-1,122.07	6,091.35	6,072.27	19.08	319.265	
2,900.00	2,869.30	2,785.29	2,784.16	10.32	9.57	61.06	-6,159.68	-1,120.13	6,082.12	6,062.26	19.86	306.237	
3,000.00	2,967.21	2,884.46	2,883.31	10.70	9.92	61.21	-6,160.63	-1,118.50	6,072.73	6,052.15	20.58	295.078	
3,100.00	3,065.13	2,983.03	2,981.87	11.08	10.26	61.36	-6,161.56	-1,116.98	6,063.39	6,042.09	21.30	284.692	
3,200.00	3,163.05	3,088.05	3,086.88	11.46	10.63	61.53	-6,162.39	-1,115.79	6,054.04	6,032.01	22.04	274.705	
3,300.00	3,260.96	3,192.46	3,191.28	11.84	10.99	61.70	-6,163.03	-1,114.88	6,044.63	6,021.85	22.78	265.383	
3,400.00	3,358.88	3,275.96	3,274.77	12.22	11.28	61.83	-6,163.60	-1,114.11	6,035.31	6,011.87	23.45	257.417	
3,500.00	3,456.79	3,354.22	3,353.02	12.60	11.55	61.95	-6,164.36	-1,113.40	6,026.33	6,002.24	24.10	250.084	
3,600.00	3,554.71	3,442.44	3,441.24	12.98	11.86	62.10	-6,165.46	-1,112.82	6,017.71	5,992.92	24.78	242.814	
3,700.00	3,652.62	3,547.68	3,546.47	13.36	12.23	62.27	-6,166.61	-1,112.59	6,009.10	5,983.57	25.53	235.399	
3,800.00	3,750.54	3,650.05	3,648.84	13.75	12.58	62.45	-6,167.59	-1,112.49	6,000.43	5,974.17	26.26	228.482	
3,900.00	3,848.45	3,744.24	3,743.02	14.13	12.91	62.61	-6,168.47	-1,112.42	5,991.81	5,964.84	26.97	222.167	
4,000.00	3,946.37	3,837.64	3,836.42	14.51	13.24	62.77	-6,169.42	-1,112.50	5,983.35	5,955.67	27.68	216.198	
4,100.00	4,044.29	3,938.70	3,937.47	14.89	13.59	62.94	-6,170.42	-1,112.65	5,974.93	5,946.53	28.41	210.332	
4,200.00	4,142.20	4,037.39	4,036.16	15.28	13.93	63.12	-6,171.30	-1,112.97	5,966.53	5,937.40	29.13	204.815	
4,300.00	4,240.12	4,132.81	4,131.57	15.66	14.26	63.28	-6,172.16	-1,113.39	5,958.21	5,928.36	29.84	199.640	
4,400.00	4,338.03	4,228.80	4,227.56	16.05	14.60	63.46	-6,173.01	-1,113.96	5,949.98	5,919.42	30.56	194.695	
4,500.00	4,435.95	4,320.52	4,319.27	16.43	14.92	63.62	-6,173.83	-1,114.68	5,941.85	5,910.59	31.26	190.065	
4,600.00	4,533.86	4,400.00	4,398.74	16.81	15.20	63.77	-6,174.69	-1,115.32	5,933.99	5,902.06	31.92	185.885	
4,700.00	4,631.78	4,489.77	4,488.50	17.20	15.51	63.93	-6,175.88	-1,116.03	5,926.39	5,893.78	32.62	181.687	
4,800.00	4,729.69	4,581.22	4,579.94	17.58	15.83	64.09	-6,177.24	-1,116.77	5,919.02	5,885.70	33.32	177.640	
4,900.00	4,827.61	4,676.30	4,675.00	17.97	16.16	64.26	-6,178.74	-1,117.53	5,911.77	5,877.74	34.03	173.699	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD

Rule Assigned:

Offset Well Error: 0.50 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
5,000.00	4,925.53	4,759.78	4,758.47	18.35	16.45	64.41	-6,180.18	-1,118.10	5,904.70	5,869.99	34.71	170.117	
5,100.00	5,023.44	4,840.60	4,839.27	18.74	16.74	64.56	-6,181.87	-1,118.50	5,897.99	5,862.61	35.38	166.723	
5,200.00	5,121.36	4,926.76	4,925.41	19.12	17.04	64.71	-6,183.92	-1,118.93	5,891.59	5,855.52	36.06	163.381	
5,300.00	5,219.27	5,021.78	5,020.39	19.51	17.37	64.88	-6,186.28	-1,119.38	5,885.33	5,848.56	36.78	160.035	
5,400.00	5,317.19	5,120.68	5,119.26	19.89	17.71	65.05	-6,188.84	-1,119.80	5,879.23	5,841.72	37.50	156.763	
5,500.00	5,415.10	5,244.91	5,243.46	20.28	18.15	65.27	-6,191.60	-1,120.15	5,872.76	5,834.44	38.32	153.261	
5,600.00	5,513.02	5,340.85	5,339.38	20.66	18.48	65.44	-6,193.66	-1,120.40	5,866.30	5,827.26	39.04	150.273	
5,700.00	5,610.93	5,436.35	5,434.85	21.05	18.82	65.61	-6,195.69	-1,120.67	5,859.89	5,820.13	39.75	147.400	
5,800.00	5,708.85	5,526.15	5,524.64	21.43	19.13	65.77	-6,197.67	-1,121.12	5,853.67	5,813.21	40.45	144.702	
5,900.00	5,806.77	5,622.02	5,620.48	21.82	19.47	65.94	-6,199.90	-1,121.50	5,847.58	5,806.40	41.17	142.027	
6,000.00	5,904.68	5,718.79	5,717.22	22.21	19.81	66.12	-6,202.18	-1,121.89	5,841.58	5,799.69	41.89	139.436	
6,100.00	6,002.60	5,839.85	5,838.24	22.59	20.23	66.33	-6,204.93	-1,122.33	5,835.57	5,792.87	42.70	136.667	
6,200.00	6,100.51	5,960.49	5,958.86	22.98	20.65	66.55	-6,207.04	-1,122.23	5,828.95	5,785.44	43.50	133.993	
6,300.00	6,198.43	6,062.89	6,061.25	23.36	21.01	66.73	-6,208.82	-1,122.07	5,822.37	5,778.13	44.24	131.599	
6,400.00	6,296.34	6,165.43	6,163.78	23.75	21.37	66.91	-6,210.44	-1,121.91	5,815.70	5,770.72	44.99	129.280	
6,500.00	6,394.26	6,264.01	6,262.35	24.14	21.71	67.09	-6,211.99	-1,121.74	5,809.08	5,763.36	45.71	127.074	
6,600.00	6,492.17	6,360.93	6,359.25	24.52	22.05	67.26	-6,213.52	-1,121.57	5,802.51	5,756.07	46.44	124.953	
6,700.00	6,590.09	6,506.80	6,505.11	24.91	22.56	67.53	-6,215.20	-1,121.86	5,795.78	5,748.46	47.32	122.473	
6,800.00	6,688.01	6,606.64	6,604.94	25.29	22.91	67.73	-6,215.36	-1,123.26	5,788.54	5,740.48	48.06	120.455	
6,900.00	6,785.92	6,690.85	6,689.10	25.68	23.20	67.91	-6,214.99	-1,126.06	5,781.45	5,732.71	48.74	118.625	
7,000.00	6,883.84	6,839.01	6,837.05	26.07	23.72	68.26	-6,212.85	-1,133.68	5,774.12	5,724.49	49.63	116.343	
7,100.00	6,981.75	6,984.55	6,982.48	26.45	24.23	68.59	-6,210.37	-1,138.74	5,766.13	5,715.62	50.51	114.160	
7,200.00	7,079.67	7,098.90	7,096.76	26.84	24.63	68.84	-6,208.01	-1,141.71	5,757.57	5,706.28	51.29	112.262	
7,300.00	7,177.58	7,239.01	7,236.83	27.23	25.12	69.13	-6,205.11	-1,143.13	5,748.52	5,696.38	52.14	110.247	
7,400.00	7,275.50	7,343.95	7,341.76	27.61	25.48	69.34	-6,202.98	-1,142.93	5,739.19	5,686.30	52.89	108.517	
7,500.00	7,373.41	7,447.35	7,445.13	28.00	25.84	69.54	-6,200.83	-1,142.66	5,729.85	5,676.22	53.63	106.844	
7,600.00	7,471.33	7,527.94	7,525.70	28.39	26.12	69.70	-6,199.19	-1,142.21	5,720.55	5,666.25	54.30	105.351	
7,700.00	7,569.25	7,600.00	7,597.76	28.77	26.37	69.83	-6,198.39	-1,141.66	5,711.98	5,657.03	54.94	103.959	
7,764.22	7,632.13	7,642.41	7,640.16	29.02	26.51	69.91	-6,198.14	-1,141.23	5,706.75	5,651.41	55.35	103.109	
7,800.00	7,667.21	7,688.58	7,686.32	29.16	26.68	69.94	-6,197.84	-1,140.61	5,703.89	5,648.25	55.64	102.514	
7,900.00	7,765.68	7,690.00	7,687.75	29.54	26.68	69.82	-6,197.83	-1,140.59	5,697.47	5,641.42	56.05	101.645	
8,000.00	7,864.70	7,690.00	7,687.75	29.91	26.68	69.76	-6,197.83	-1,140.59	5,694.01	5,637.57	56.44	100.886	
8,066.99	7,931.28	7,690.00	7,687.75	30.16	26.68	69.74	-6,197.83	-1,140.59	5,693.34	5,636.66	56.69	100.436	
8,100.00	7,964.15	7,690.00	7,687.75	30.28	26.68	69.75	-6,197.83	-1,140.59	5,693.50	5,636.70	56.81	100.228	
8,200.00	8,063.90	7,745.00	7,742.65	30.63	26.78	69.81	-6,200.55	-1,140.50	5,695.56	5,638.31	57.25	99.483	
8,300.00	8,163.83	7,745.00	7,742.65	30.98	26.78	69.89	-6,200.55	-1,140.50	5,700.01	5,642.43	57.58	98.997	
8,350.17	8,214.00	7,745.00	7,742.65	31.14	26.78	-157.89	-6,200.55	-1,140.50	5,703.36	5,645.63	57.73	98.798	
8,400.00	8,263.77	7,745.00	7,742.65	31.31	26.78	54.49	-6,200.55	-1,140.50	5,706.01	5,648.13	57.88	98.590	
8,450.00	8,313.33	7,745.00	7,742.65	31.49	26.78	54.44	-6,200.55	-1,140.50	5,706.58	5,648.55	58.04	98.326	
8,500.00	8,362.13	7,745.00	7,742.65	31.69	26.78	54.57	-6,200.55	-1,140.50	5,705.06	5,646.85	58.20	98.018	
8,550.00	8,409.80	7,745.00	7,742.65	31.89	26.78	54.86	-6,200.55	-1,140.50	5,701.45	5,643.07	58.38	97.668	
8,600.00	8,455.99	7,745.00	7,742.65	32.09	26.78	55.33	-6,200.55	-1,140.50	5,695.77	5,637.22	58.55	97.279	
8,650.00	8,500.33	7,745.00	7,742.65	32.31	26.78	55.98	-6,200.55	-1,140.50	5,688.06	5,629.33	58.73	96.854	
8,700.00	8,542.50	7,745.00	7,742.65	32.53	26.78	56.80	-6,200.55	-1,140.50	5,678.38	5,619.47	58.91	96.396	
8,750.00	8,582.16	7,745.00	7,742.65	32.75	26.78	57.80	-6,200.55	-1,140.50	5,666.79	5,607.70	59.09	95.908	
8,800.00	8,619.02	7,760.54	7,758.06	32.97	26.78	59.09	-6,202.51	-1,140.78	5,653.01	5,593.73	59.28	95.362	
8,850.00	8,652.80	7,777.00	7,774.28	33.19	26.78	60.59	-6,205.27	-1,141.26	5,638.01	5,578.53	59.47	94.799	
8,900.00	8,683.24	7,777.00	7,774.28	33.42	26.78	62.18	-6,205.27	-1,141.26	5,620.99	5,561.34	59.65	94.231	
8,950.00	8,710.11	7,777.00	7,774.28	33.64	26.78	63.95	-6,205.27	-1,141.26	5,602.45	5,542.63	59.83	93.645	
9,000.00	8,733.20	7,777.00	7,774.28	33.86	26.78	65.92	-6,205.27	-1,141.26	5,582.53	5,522.53	60.00	93.042	
9,050.00	8,752.35	7,777.00	7,774.28	34.08	26.78	68.07	-6,205.27	-1,141.26	5,561.36	5,501.19	60.17	92.426	
9,100.00	8,767.39	7,777.00	7,774.28	34.29	26.78	70.40	-6,205.27	-1,141.26	5,539.09	5,478.75	60.34	91.800	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD

Rule Assigned:

Offset Well Error: 0.50 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
9,100.17	8,767.43	7,777.00	7,774.28	34.29	26.78	70.41	-6,205.27	-1,141.26	5,539.01	5,478.67	60.34	91.798	
9,200.00	8,791.66	7,777.00	7,774.28	34.71	26.78	69.38	-6,205.27	-1,141.26	5,490.42	5,429.75	60.67	90.500	
9,300.00	8,812.57	7,777.00	7,774.28	35.13	26.78	68.56	-6,205.27	-1,141.26	5,435.62	5,374.64	60.99	89.129	
9,400.00	8,829.97	7,777.00	7,774.28	35.54	26.78	67.95	-6,205.27	-1,141.26	5,374.94	5,313.66	61.29	87.699	
9,500.00	8,843.72	7,777.00	7,774.28	35.95	26.78	67.56	-6,205.27	-1,141.26	5,308.65	5,247.08	61.57	86.219	
9,600.00	8,853.72	7,777.00	7,774.28	36.33	26.78	67.41	-6,205.27	-1,141.26	5,237.03	5,175.20	61.83	84.698	
9,700.00	8,859.89	7,777.00	7,774.28	36.70	26.78	67.53	-6,205.27	-1,141.26	5,160.44	5,098.37	62.07	83.141	
9,800.00	8,862.18	7,777.00	7,774.28	37.05	26.78	67.93	-6,205.27	-1,141.26	5,079.24	5,016.96	62.28	81.558	
9,809.00	8,862.20	7,777.00	7,774.28	37.08	26.78	67.98	-6,205.27	-1,141.26	5,071.72	5,009.42	62.30	81.412	
9,900.00	8,862.20	7,777.00	7,774.28	37.39	26.78	67.98	-6,205.27	-1,141.26	4,995.75	4,933.27	62.48	79.962	
10,000.00	8,862.19	7,777.00	7,774.28	37.74	26.78	67.98	-6,205.27	-1,141.26	4,912.86	4,850.18	62.68	78.381	
10,100.00	8,862.19	7,777.00	7,774.28	38.10	26.78	67.98	-6,205.27	-1,141.26	4,830.62	4,767.73	62.89	76.808	
10,200.00	8,862.19	7,791.72	7,788.67	38.48	26.79	68.27	-6,208.33	-1,141.87	4,748.75	4,685.61	63.14	75.207	
10,300.00	8,862.19	7,793.44	7,790.34	38.86	26.79	68.30	-6,208.72	-1,141.95	4,667.83	4,604.45	63.38	73.647	
10,400.00	8,862.19	7,808.00	7,804.41	39.25	26.79	68.58	-6,212.35	-1,142.75	4,587.89	4,524.23	63.66	72.074	
10,500.00	8,862.18	7,808.00	7,804.41	39.66	26.79	68.58	-6,212.35	-1,142.75	4,508.43	4,444.52	63.91	70.538	
10,600.00	8,862.18	7,808.00	7,804.41	40.07	26.79	68.58	-6,212.35	-1,142.75	4,429.81	4,365.63	64.19	69.015	
10,700.00	8,862.18	7,808.00	7,804.41	40.49	26.79	68.58	-6,212.35	-1,142.75	4,352.07	4,287.60	64.47	67.506	
10,800.00	8,862.18	7,808.00	7,804.41	40.93	26.79	68.58	-6,212.35	-1,142.75	4,275.25	4,210.48	64.77	66.010	
10,900.00	8,862.18	7,808.00	7,804.41	41.37	26.79	68.58	-6,212.35	-1,142.75	4,199.41	4,134.33	65.08	64.530	
11,000.00	8,862.17	7,808.00	7,804.41	41.82	26.79	68.58	-6,212.35	-1,142.75	4,124.59	4,059.19	65.40	63.067	
11,100.00	8,862.17	7,808.00	7,804.41	42.28	26.79	68.58	-6,212.35	-1,142.75	4,050.87	3,985.13	65.74	61.622	
11,200.00	8,862.17	7,808.00	7,804.41	42.75	26.79	68.58	-6,212.35	-1,142.75	3,978.29	3,912.20	66.09	60.195	
11,300.00	8,862.17	7,808.00	7,804.41	43.22	26.79	68.58	-6,212.35	-1,142.75	3,906.93	3,840.47	66.46	58.789	
11,400.00	8,862.17	7,808.00	7,804.41	43.71	26.79	68.58	-6,212.35	-1,142.75	3,836.84	3,770.00	66.84	57.406	
11,500.00	8,862.16	7,808.00	7,804.41	44.20	26.79	68.58	-6,212.35	-1,142.75	3,768.10	3,700.87	67.23	56.046	
11,600.00	8,862.16	7,823.24	7,818.98	44.70	26.79	68.87	-6,216.70	-1,143.79	3,700.47	3,632.78	67.69	54.666	
11,700.00	8,862.16	7,840.00	7,834.78	45.20	26.80	69.18	-6,222.12	-1,145.18	3,634.78	3,566.61	68.17	53.317	
11,800.00	8,862.16	7,840.00	7,834.78	45.72	26.80	69.18	-6,222.12	-1,145.18	3,570.29	3,501.67	68.62	52.032	
11,900.00	8,862.16	7,840.00	7,834.78	46.24	26.80	69.18	-6,222.12	-1,145.18	3,507.46	3,438.38	69.08	50.777	
12,000.00	8,862.15	7,840.00	7,834.78	46.76	26.80	69.18	-6,222.12	-1,145.18	3,446.39	3,376.84	69.55	49.555	
12,100.00	8,862.15	7,840.00	7,834.78	47.29	26.80	69.18	-6,222.12	-1,145.18	3,387.16	3,317.13	70.03	48.366	
12,200.00	8,862.15	7,840.00	7,834.78	47.83	26.80	69.18	-6,222.12	-1,145.18	3,329.89	3,259.37	70.53	47.214	
12,300.00	8,862.15	7,840.00	7,834.78	48.38	26.80	69.18	-6,222.12	-1,145.18	3,274.68	3,203.64	71.03	46.100	
12,400.00	8,862.15	7,857.43	7,850.97	48.93	26.80	69.51	-6,228.37	-1,146.85	3,221.33	3,149.71	71.63	44.973	
12,500.00	8,862.14	7,872.00	7,864.32	49.48	26.80	69.78	-6,233.99	-1,148.37	3,170.36	3,098.14	72.22	43.898	
12,600.00	8,862.14	7,872.00	7,864.32	50.04	26.80	69.78	-6,233.99	-1,148.37	3,121.56	3,048.80	72.76	42.903	
12,700.00	8,862.14	7,872.00	7,864.32	50.61	26.80	69.78	-6,233.99	-1,148.37	3,075.23	3,001.93	73.30	41.955	
12,800.00	8,862.14	7,886.28	7,877.26	51.18	26.81	70.05	-6,239.80	-1,149.99	3,031.33	2,957.41	73.91	41.011	
12,900.00	8,862.14	7,904.00	7,893.15	51.76	26.81	70.38	-6,247.32	-1,152.23	2,990.12	2,915.57	74.55	40.107	
13,000.00	8,862.13	7,904.00	7,893.15	52.34	26.81	70.38	-6,247.32	-1,152.23	2,951.46	2,876.36	75.10	39.301	
13,100.00	8,862.13	7,922.18	7,909.30	52.92	26.82	70.71	-6,255.29	-1,154.68	2,915.59	2,839.84	75.74	38.494	
13,200.00	8,862.13	7,935.00	7,920.63	53.51	26.82	70.95	-6,261.03	-1,156.44	2,882.45	2,806.10	76.35	37.753	
13,300.00	8,862.13	7,951.46	7,935.09	54.10	26.82	71.25	-6,268.54	-1,158.81	2,852.20	2,775.22	76.98	37.053	
13,400.00	8,862.12	7,967.00	7,948.61	54.70	26.83	71.54	-6,275.81	-1,161.21	2,824.98	2,747.40	77.59	36.411	
13,500.00	8,862.12	7,967.00	7,948.61	55.30	26.83	71.54	-6,275.81	-1,161.21	2,800.91	2,722.83	78.08	35.873	
13,600.00	8,862.12	7,985.39	7,964.39	55.91	26.83	71.87	-6,284.74	-1,164.28	2,779.95	2,701.28	78.68	35.334	
13,700.00	8,862.12	7,999.00	7,975.87	56.52	26.84	72.12	-6,291.61	-1,166.74	2,762.32	2,683.10	79.22	34.868	
13,800.00	8,862.12	7,999.00	7,975.87	57.13	26.84	72.12	-6,291.61	-1,166.74	2,748.06	2,668.42	79.64	34.506	
13,900.00	8,862.11	8,016.28	7,990.20	57.75	26.84	72.43	-6,300.66	-1,170.13	2,737.09	2,656.93	80.16	34.145	
14,000.00	8,862.11	8,031.00	8,002.16	58.37	26.85	72.69	-6,308.62	-1,173.32	2,729.62	2,648.99	80.63	33.853	
14,100.00	8,862.11	8,031.00	8,002.16	58.99	26.85	72.69	-6,308.62	-1,173.32	2,725.59	2,644.64	80.95	33.671	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy — **Offset Site Error:** 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD — **Rule Assigned:** — **Offset Well Error:** 0.50 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
14,167.52	8,862.11	8,044.64	8,013.02	59.42	26.86	72.92	-6,316.24	-1,176.49	2,724.77	2,643.51	81.26	33.533	CC, ES
14,200.00	8,862.11	8,048.34	8,015.92	59.62	26.86	72.99	-6,318.36	-1,177.39	2,724.95	2,643.58	81.37	33.486	
14,300.00	8,862.11	8,062.00	8,026.47	60.25	26.87	73.22	-6,326.32	-1,180.84	2,727.78	2,646.04	81.74	33.373	
14,400.00	8,862.10	8,062.00	8,026.47	60.88	26.87	73.22	-6,326.32	-1,180.84	2,734.09	2,652.16	81.93	33.370	
14,500.00	8,862.10	8,094.00	8,050.23	61.52	26.90	73.75	-6,345.80	-1,189.77	2,743.65	2,661.25	82.40	33.298	
14,600.00	8,862.10	8,094.00	8,050.23	62.16	26.90	73.75	-6,345.80	-1,189.77	2,756.48	2,673.97	82.51	33.407	
14,700.00	8,862.10	8,126.00	8,072.66	62.80	26.94	74.26	-6,366.29	-1,199.80	2,772.67	2,689.75	82.92	33.437	
14,800.00	8,862.10	8,126.00	8,072.66	63.44	26.94	74.26	-6,366.29	-1,199.80	2,791.81	2,708.85	82.96	33.652	
14,900.00	8,862.09	8,158.00	8,093.58	64.09	26.99	74.75	-6,387.85	-1,210.79	2,814.13	2,730.81	83.32	33.777	
15,000.00	8,862.09	8,158.00	8,093.58	64.74	26.99	74.75	-6,387.85	-1,210.79	2,839.28	2,755.99	83.28	34.092	
15,100.00	8,862.09	8,176.22	8,104.76	65.39	27.03	75.01	-6,400.55	-1,217.55	2,867.39	2,783.96	83.43	34.369	
15,200.00	8,862.09	8,189.00	8,112.28	66.05	27.05	75.19	-6,409.58	-1,222.57	2,898.38	2,814.90	83.48	34.718	
15,300.00	8,862.09	8,221.00	8,130.08	66.70	27.13	75.62	-6,432.68	-1,235.75	2,932.01	2,848.25	83.75	35.007	
15,400.00	8,862.08	8,243.40	8,141.77	67.36	27.18	75.91	-6,449.23	-1,245.29	2,967.92	2,884.03	83.89	35.378	
15,500.00	8,862.08	9,098.41	8,276.14	68.02	32.45	79.54	-7,237.54	-1,477.46	2,985.04	2,889.48	95.56	31.239	
15,600.00	8,862.08	9,192.10	8,280.65	68.69	33.31	79.67	-7,330.08	-1,491.37	2,998.99	2,901.90	97.08	30.891	
15,700.00	8,862.08	9,398.70	8,287.90	69.35	35.37	79.90	-7,534.91	-1,517.12	3,010.44	2,910.12	100.32	30.009	
15,800.00	8,862.08	9,531.17	8,290.85	70.02	36.78	80.00	-7,666.67	-1,530.52	3,020.15	2,917.61	102.54	29.453	
15,900.00	8,862.07	9,578.00	8,291.87	70.69	37.29	80.03	-7,713.24	-1,535.30	3,030.22	2,926.69	103.53	29.270	
16,000.00	8,862.07	9,641.00	8,293.74	71.36	38.00	80.09	-7,775.77	-1,542.76	3,041.69	2,936.92	104.76	29.034	
16,100.00	8,862.07	9,742.96	8,296.81	72.03	39.19	80.19	-7,876.80	-1,556.11	3,054.28	2,947.63	106.65	28.638	
16,200.00	8,862.07	9,874.53	8,299.99	72.71	40.76	80.30	-8,007.40	-1,571.77	3,065.73	2,956.68	109.05	28.112	
16,300.00	8,862.07	9,975.41	8,301.26	73.38	42.00	80.36	-8,107.62	-1,583.19	3,076.87	2,965.89	110.98	27.724	
16,400.00	8,862.06	10,091.20	8,301.22	74.06	43.46	80.40	-8,222.74	-1,595.66	3,087.68	2,974.50	113.18	27.281	
16,500.00	8,862.06	10,169.83	8,300.56	74.74	44.46	80.42	-8,300.92	-1,603.94	3,098.43	2,983.65	114.78	26.995	
16,600.00	8,862.06	10,215.00	8,300.19	75.42	45.05	80.43	-8,345.78	-1,609.27	3,110.47	2,994.67	115.80	26.860	
16,700.00	8,862.06	10,278.00	8,300.13	76.10	45.88	80.45	-8,408.20	-1,617.82	3,124.04	3,006.91	117.14	26.670	
16,800.00	8,862.06	10,351.03	8,300.44	76.79	46.85	80.49	-8,480.42	-1,628.63	3,138.71	3,020.06	118.66	26.451	
16,900.00	8,862.05	10,765.59	8,303.98	77.47	52.49	80.69	-8,892.17	-1,672.62	3,150.96	3,024.78	126.18	24.971	
17,000.00	8,862.05	10,826.26	8,302.40	78.16	53.33	80.67	-8,952.75	-1,675.55	3,156.43	3,028.82	127.61	24.735	
17,100.00	8,862.05	10,873.82	8,301.83	78.85	54.00	80.67	-9,000.20	-1,678.76	3,163.48	3,034.68	128.81	24.560	
17,200.00	8,862.05	10,925.85	8,302.19	79.54	54.73	80.69	-9,052.02	-1,683.36	3,172.20	3,042.13	130.07	24.388	
17,300.00	8,862.05	11,051.15	8,302.80	80.23	56.51	80.74	-9,176.80	-1,694.67	3,181.23	3,048.59	132.63	23.985	
17,400.00	8,862.04	11,107.00	8,302.39	80.92	57.30	80.74	-9,232.44	-1,699.51	3,190.26	3,056.29	133.96	23.814	
17,500.00	8,862.04	11,171.00	8,301.88	81.62	58.22	80.75	-9,296.12	-1,705.86	3,200.51	3,065.08	135.43	23.632	
17,600.00	8,862.04	11,235.43	8,301.89	82.31	59.16	80.77	-9,360.11	-1,713.33	3,212.12	3,075.22	136.90	23.463	
17,700.00	8,862.04	11,349.65	8,301.76	83.01	60.82	80.81	-9,473.52	-1,726.96	3,224.12	3,084.79	139.33	23.140	
17,800.00	8,862.04	11,410.32	8,301.19	83.71	61.71	80.82	-9,533.75	-1,734.19	3,236.28	3,095.55	140.73	22.996	
17,900.00	8,862.03	11,489.00	8,301.00	84.41	62.87	80.85	-9,611.79	-1,744.23	3,249.17	3,106.69	142.48	22.804	
18,000.00	8,862.03	11,552.00	8,300.78	85.11	63.81	80.87	-9,674.20	-1,752.78	3,262.95	3,119.04	143.92	22.673	
18,100.00	8,862.03	11,615.00	8,300.56	85.81	64.74	80.89	-9,736.44	-1,762.59	3,278.38	3,133.04	145.34	22.556	
18,200.00	8,862.03	12,044.83	8,307.64	86.51	71.17	81.14	-10,163.46	-1,806.86	3,286.63	3,132.79	153.84	21.364	
18,300.00	8,862.03	12,107.91	8,306.63	87.21	72.12	81.13	-10,226.43	-1,810.43	3,292.73	3,137.33	155.40	21.189	
18,400.00	8,862.02	12,173.62	8,304.57	87.92	73.10	81.11	-10,291.95	-1,814.89	3,300.09	3,143.10	156.98	21.022	
18,500.00	8,862.02	12,229.53	8,302.38	88.62	73.95	81.08	-10,347.65	-1,819.20	3,308.52	3,150.15	158.38	20.890	
18,600.00	8,862.02	12,286.42	8,299.92	89.33	74.81	81.06	-10,404.25	-1,824.36	3,318.33	3,158.56	159.76	20.770	
18,700.00	8,862.02	12,358.74	8,298.53	90.03	75.91	81.05	-10,476.15	-1,832.02	3,329.24	3,167.79	161.44	20.622	
18,800.00	8,862.02	12,482.41	8,301.84	90.74	77.80	81.15	-10,599.00	-1,845.78	3,339.98	3,175.82	164.16	20.345	
18,900.00	8,862.01	12,568.00	8,303.11	91.45	79.12	81.19	-10,684.07	-1,855.08	3,350.68	3,184.55	166.13	20.169	
19,000.00	8,862.01	12,683.67	8,303.66	92.16	80.90	81.24	-10,799.03	-1,867.87	3,361.78	3,193.09	168.69	19.929	
19,100.00	8,862.01	12,888.90	8,305.81	92.87	84.06	81.32	-11,003.41	-1,886.16	3,370.57	3,197.64	172.94	19.490	
19,200.00	8,862.01	13,007.03	8,304.95	93.58	85.88	81.33	-11,121.24	-1,894.51	3,377.89	3,202.38	175.51	19.246	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD **Rule Assigned:** **Offset Well Error:** 0.50 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
19,300.00	8,862.01	13,105.24	8,306.36	94.30	87.40	81.37	-11,219.22	-1,901.03	3,384.44	3,206.69	177.75	19.041	
19,400.00	8,862.00	13,212.14	8,306.17	95.01	89.06	81.39	-11,325.87	-1,908.41	3,391.50	3,211.37	180.13	18.828	
19,500.00	8,862.00	13,305.00	8,304.53	95.72	90.49	81.37	-11,418.53	-1,914.15	3,398.06	3,215.80	182.26	18.644	
19,547.53	8,862.00	13,305.00	8,304.53	96.06	90.49	81.37	-11,418.53	-1,914.15	3,401.63	3,219.17	182.46	18.643	SF
19,548.26	8,862.00	13,305.00	8,304.53	96.14	90.49	81.37	-11,418.53	-1,914.15	3,401.69	3,219.28	182.41	18.648	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

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	0.00	0.00	0.50	30.39	3,823.84	2,242.71	4,433.05				
100.00	100.00	54.40	54.40	0.28	0.51	30.39	3,824.01	2,242.72	4,433.23	4,432.45	0.78	5,674.535	
200.00	200.00	142.91	142.90	0.63	0.59	30.39	3,824.82	2,242.82	4,434.06	4,432.83	1.22	3,627.819	
300.00	300.00	246.59	246.58	0.99	0.84	30.38	3,825.57	2,243.07	4,434.81	4,432.97	1.84	2,414.869	
400.00	400.00	384.28	384.27	1.35	1.26	30.39	3,826.11	2,243.70	4,435.46	4,432.85	2.62	1,695.318	
498.67	498.67	478.69	478.67	1.71	1.57	30.40	3,825.61	2,244.04	4,435.20	4,431.93	3.28	1,354.104	
500.00	500.00	479.66	479.64	1.71	1.57	30.40	3,825.61	2,244.05	4,435.20	4,431.92	3.28	1,350.830	
600.00	600.00	562.08	562.07	2.07	1.85	30.40	3,825.70	2,244.31	4,435.45	4,431.53	3.92	1,131.511	
700.00	700.00	657.57	657.55	2.43	2.18	30.40	3,826.14	2,244.48	4,435.94	4,431.33	4.61	962.758	
800.00	800.00	750.13	750.11	2.79	2.50	30.39	3,826.69	2,244.57	4,436.50	4,431.21	5.29	839.034	
900.00	900.00	846.34	846.32	3.14	2.84	30.39	3,827.51	2,244.57	4,437.24	4,431.26	5.98	741.744	
1,000.00	1,000.00	935.39	935.36	3.50	3.15	30.38	3,828.42	2,244.54	4,438.10	4,431.45	6.65	667.090	
1,100.00	1,099.98	1,040.85	1,040.82	3.84	3.52	-129.62	3,829.83	2,244.22	4,440.22	4,432.85	7.36	602.913	
1,200.00	1,199.84	1,146.24	1,146.20	4.17	3.89	-129.62	3,831.06	2,243.86	4,444.39	4,436.33	8.06	551.099	
1,300.00	1,299.45	1,289.39	1,289.35	4.51	4.39	-129.67	3,831.93	2,243.05	4,450.19	4,441.30	8.90	500.237	
1,350.00	1,349.13	1,346.68	1,346.63	4.68	4.59	-129.68	3,831.98	2,242.57	4,453.64	4,444.38	9.26	480.876	
1,400.00	1,398.73	1,396.92	1,396.86	4.85	4.76	-123.28	3,831.97	2,242.18	4,457.22	4,447.61	9.60	464.182	
1,500.00	1,497.69	1,488.13	1,488.08	5.19	5.07	-113.27	3,832.05	2,241.44	4,463.63	4,453.37	10.26	435.099	
1,600.00	1,596.25	1,615.91	1,615.82	5.54	5.52	-106.28	3,832.80	2,238.52	4,468.68	4,457.63	11.05	404.329	
1,670.62	1,665.55	1,682.17	1,682.01	5.78	5.75	-102.55	3,833.75	2,235.70	4,471.49	4,459.96	11.53	387.705	
1,700.00	1,694.31	1,706.95	1,706.75	5.89	5.84	-102.63	3,834.16	2,234.57	4,472.59	4,460.86	11.72	381.470	
1,800.00	1,792.23	1,797.31	1,797.03	6.24	6.16	-102.91	3,835.58	2,230.93	4,476.56	4,464.16	12.40	360.981	
1,900.00	1,890.14	1,886.59	1,886.25	6.61	6.47	-103.17	3,836.71	2,227.88	4,480.69	4,467.61	13.08	342.625	
2,000.00	1,988.06	1,943.00	1,942.63	6.97	6.67	-103.34	3,837.64	2,226.00	4,485.41	4,471.77	13.64	328.848	
2,100.00	2,085.97	2,032.00	2,031.57	7.34	6.99	-103.61	3,839.62	2,223.46	4,490.86	4,476.54	14.32	313.565	
2,200.00	2,183.89	2,104.48	2,104.01	7.70	7.25	-103.81	3,841.39	2,222.05	4,496.97	4,482.03	14.95	300.870	
2,300.00	2,281.80	2,186.35	2,185.82	8.07	7.54	-104.06	3,843.77	2,220.16	4,503.49	4,487.88	15.61	288.553	
2,400.00	2,379.72	2,293.15	2,292.37	8.45	7.93	-104.41	3,848.60	2,214.72	4,510.29	4,493.92	16.36	275.656	
2,500.00	2,477.64	2,383.47	2,382.50	8.82	8.25	-104.71	3,852.37	2,210.45	4,517.09	4,500.03	17.06	264.811	
2,600.00	2,575.55	2,478.00	2,476.97	9.19	8.59	-104.98	3,855.18	2,208.37	4,524.08	4,506.31	17.77	254.607	
2,700.00	2,673.47	2,562.92	2,561.77	9.57	8.90	-105.24	3,858.36	2,205.46	4,531.35	4,512.90	18.45	245.647	
2,800.00	2,771.38	2,655.18	2,653.70	9.95	9.23	-105.56	3,863.46	2,199.49	4,538.99	4,519.84	19.15	236.967	
2,900.00	2,869.30	2,761.56	2,759.61	10.32	9.62	-105.95	3,869.68	2,191.64	4,546.71	4,526.79	19.92	228.266	
3,000.00	2,967.21	2,840.00	2,837.68	10.70	9.91	-106.23	3,874.29	2,185.59	4,554.53	4,533.96	20.58	221.330	
3,100.00	3,065.13	2,890.79	2,888.17	11.08	10.10	-106.42	3,877.79	2,181.40	4,563.23	4,542.10	21.13	215.933	
3,200.00	3,163.05	2,929.00	2,926.09	11.46	10.24	-106.57	3,881.02	2,178.02	4,573.23	4,551.59	21.64	211.376	
3,300.00	3,260.96	3,019.00	3,015.16	11.84	10.57	-106.94	3,890.02	2,168.76	4,584.14	4,561.80	22.35	205.153	
3,400.00	3,358.88	3,102.90	3,097.99	12.22	10.89	-107.30	3,899.13	2,159.02	4,595.53	4,572.49	23.03	199.515	
3,500.00	3,456.79	3,198.00	3,191.91	12.60	11.25	-107.70	3,909.19	2,147.93	4,606.90	4,583.13	23.77	193.817	
3,600.00	3,554.71	3,262.62	3,255.64	12.98	11.50	-107.98	3,916.34	2,140.11	4,618.85	4,594.47	24.38	189.438	
3,700.00	3,652.62	3,311.84	3,304.07	13.36	11.69	-108.20	3,922.50	2,133.71	4,631.93	4,607.00	24.93	185.803	
3,800.00	3,750.54	3,376.00	3,366.99	13.75	11.95	-108.49	3,931.47	2,125.03	4,646.25	4,620.71	25.54	181.923	
3,900.00	3,848.45	3,454.03	3,443.42	14.13	12.26	-108.85	3,942.89	2,114.15	4,661.32	4,635.11	26.21	177.832	
4,000.00	3,946.37	3,578.14	3,565.06	14.51	12.75	-109.41	3,960.35	2,096.85	4,676.26	4,649.17	27.09	172.623	
4,100.00	4,044.29	12,524.48	8,407.11	14.89	67.96	-77.05	-352.47	2,017.90	4,670.70	4,621.85	48.85	95.617	
4,200.00	4,142.20	12,538.08	8,407.33	15.28	68.13	-76.50	-366.08	2,017.65	4,573.77	4,524.51	49.27	92.835	
4,300.00	4,240.12	12,551.71	8,407.54	15.66	68.31	-75.95	-379.70	2,017.41	4,476.94	4,427.24	49.70	90.082	
4,400.00	4,338.03	12,565.37	8,407.75	16.05	68.49	-75.38	-393.35	2,017.19	4,380.20	4,330.05	50.14	87.356	
4,500.00	4,435.95	12,581.30	8,408.00	16.43	68.69	-74.72	-409.28	2,016.94	4,283.55	4,232.94	50.62	84.629	
4,600.00	4,533.86	12,599.21	8,408.26	16.81	68.93	-73.95	-427.18	2,016.67	4,187.01	4,135.89	51.12	81.907	
4,700.00	4,631.78	12,616.89	8,408.50	17.20	69.16	-73.18	-444.87	2,016.42	4,090.56	4,038.93	51.63	79.221	
4,800.00	4,729.69	12,634.36	8,408.72	17.58	69.38	-72.41	-462.33	2,016.18	3,994.23	3,942.07	52.16	76.571	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

Rule Assigned:

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
4,900.00	4,827.61	12,651.61	8,408.92	17.97	69.61	-71.63	-479.58	2,015.96	3,898.02	3,845.31	52.71	73.955	
5,000.00	4,925.53	12,668.81	8,409.10	18.35	69.83	-70.85	-496.77	2,015.74	3,801.93	3,748.66	53.27	71.372	
5,100.00	5,023.44	12,686.01	8,409.27	18.74	70.05	-70.04	-513.97	2,015.53	3,705.99	3,652.14	53.85	68.821	
5,200.00	5,121.36	12,703.04	8,409.43	19.12	70.28	-69.24	-531.00	2,015.31	3,610.19	3,555.75	54.45	66.304	
5,300.00	5,219.27	12,719.90	8,409.57	19.51	70.50	-68.43	-547.86	2,015.09	3,514.57	3,459.50	55.07	63.821	
5,400.00	5,317.19	12,736.61	8,409.70	19.89	70.71	-67.62	-564.56	2,014.86	3,419.12	3,363.41	55.71	61.372	
5,500.00	5,415.10	12,753.19	8,409.82	20.28	70.93	-66.80	-581.14	2,014.63	3,323.87	3,267.49	56.38	58.957	
5,600.00	5,513.02	12,769.76	8,409.92	20.66	71.15	-65.96	-597.72	2,014.42	3,228.84	3,171.76	57.07	56.573	
5,700.00	5,610.93	12,786.03	8,409.99	21.05	71.36	-65.14	-613.98	2,014.23	3,134.04	3,076.24	57.80	54.225	
5,800.00	5,708.85	12,801.98	8,410.04	21.43	71.57	-64.31	-629.94	2,014.08	3,039.50	2,980.95	58.55	51.912	
5,900.00	5,806.77	12,817.65	8,410.06	21.82	71.77	-63.49	-645.60	2,013.95	2,945.25	2,885.91	59.34	49.633	
6,000.00	5,904.68	12,833.02	8,410.05	22.21	71.97	-62.68	-660.97	2,013.85	2,851.31	2,791.15	60.17	47.390	
6,100.00	6,002.60	12,846.73	8,410.03	22.59	72.15	-61.94	-674.68	2,013.77	2,757.73	2,696.71	61.02	45.191	
6,200.00	6,100.51	12,859.24	8,410.01	22.98	72.32	-61.27	-687.19	2,013.71	2,664.56	2,602.64	61.92	43.033	
6,300.00	6,198.43	12,871.80	8,410.00	23.36	72.48	-60.58	-699.75	2,013.65	2,571.83	2,508.96	62.87	40.909	
6,400.00	6,296.34	12,884.41	8,409.98	23.75	72.65	-59.89	-712.36	2,013.59	2,479.59	2,415.72	63.87	38.820	
6,500.00	6,394.26	12,897.07	8,409.97	24.14	72.81	-59.18	-725.02	2,013.54	2,387.91	2,322.97	64.94	36.768	
6,600.00	6,492.17	12,909.79	8,409.97	24.52	72.98	-58.47	-737.74	2,013.49	2,296.85	2,230.76	66.09	34.754	
6,700.00	6,590.09	12,922.56	8,409.97	24.91	73.15	-57.75	-750.51	2,013.44	2,206.49	2,139.18	67.31	32.781	
6,800.00	6,688.01	12,935.97	8,409.96	25.29	73.33	-56.99	-763.92	2,013.40	2,116.91	2,048.28	68.63	30.847	
6,900.00	6,785.92	12,949.89	8,409.95	25.68	73.51	-56.19	-777.84	2,013.36	2,028.21	1,958.17	70.04	28.956	
7,000.00	6,883.84	12,963.67	8,409.93	26.07	73.69	-55.40	-791.62	2,013.33	1,940.52	1,868.95	71.57	27.114	
7,100.00	6,981.75	12,977.31	8,409.90	26.45	73.87	-54.61	-805.26	2,013.32	1,853.97	1,780.76	73.21	25.324	
7,200.00	7,079.67	12,990.82	8,409.85	26.84	74.05	-53.82	-818.77	2,013.32	1,768.74	1,693.75	74.98	23.588	
7,300.00	7,177.58	13,004.19	8,409.80	27.23	74.22	-53.03	-832.14	2,013.32	1,685.02	1,608.13	76.90	21.913	
7,400.00	7,275.50	13,017.44	8,409.73	27.61	74.40	-52.24	-845.38	2,013.34	1,603.07	1,524.11	78.96	20.301	
7,500.00	7,373.41	13,028.76	8,409.68	28.00	74.55	-51.57	-856.71	2,013.37	1,523.17	1,441.99	81.18	18.764	
7,600.00	7,471.33	13,040.07	8,409.62	28.39	74.70	-50.89	-868.02	2,013.41	1,445.66	1,362.10	83.56	17.301	
7,700.00	7,569.25	13,051.46	8,409.57	28.77	74.85	-50.21	-879.41	2,013.47	1,370.96	1,284.85	86.11	15.921	
7,764.22	7,632.13	13,058.82	8,409.53	29.02	74.95	-49.77	-886.77	2,013.52	1,324.69	1,236.85	87.84	15.081	
7,800.00	7,667.21	13,062.80	8,409.52	29.16	75.00	-49.00	-890.75	2,013.55	1,299.66	1,210.83	88.83	14.631	
7,900.00	7,765.68	13,072.62	8,409.47	29.54	75.13	-47.10	-900.57	2,013.64	1,233.64	1,141.92	91.72	13.450	
8,000.00	7,864.70	13,080.46	8,409.44	29.91	75.23	-45.57	-908.41	2,013.71	1,174.31	1,079.59	94.72	12.398	
8,100.00	7,964.15	13,086.29	8,409.42	30.28	75.31	-44.38	-914.24	2,013.78	1,122.85	1,025.12	97.73	11.490	
8,200.00	8,063.90	13,090.09	8,409.40	30.63	75.36	-43.52	-918.04	2,013.82	1,080.49	979.90	100.59	10.742	
8,300.00	8,163.83	13,091.84	8,409.40	30.98	75.38	-42.95	-919.78	2,013.84	1,048.42	945.29	103.12	10.167	
8,350.17	8,214.00	13,091.93	8,409.40	31.14	75.39	89.37	-919.88	2,013.84	1,036.53	932.33	104.20	9.947	
8,400.00	8,263.77	13,093.38	8,409.39	31.31	75.40	-58.85	-921.32	2,013.86	1,026.21	921.06	105.15	9.759	
8,450.00	8,313.33	13,098.06	8,409.37	31.49	75.47	-59.48	-926.01	2,013.92	1,015.97	909.97	106.00	9.585	
8,500.00	8,362.13	13,108.00	8,409.34	31.69	75.60	-59.80	-935.95	2,014.05	1,005.87	899.11	106.75	9.422	
8,550.00	8,409.80	13,117.04	8,409.31	31.89	75.72	-60.17	-944.98	2,014.18	995.90	888.58	107.32	9.280	
8,600.00	8,455.99	13,131.27	8,409.28	32.09	75.91	-60.26	-959.21	2,014.41	986.03	878.24	107.80	9.147	
8,650.00	8,500.33	13,148.62	8,409.26	32.31	76.14	-60.18	-976.56	2,014.73	976.19	868.05	108.15	9.027	
8,700.00	8,542.50	13,169.00	8,409.27	32.53	76.41	-59.98	-996.93	2,015.15	966.27	857.89	108.39	8.915	
8,750.00	8,582.16	13,192.29	8,409.32	32.75	76.72	-59.67	-1,020.22	2,015.71	956.14	847.62	108.52	8.810	
8,800.00	8,619.02	13,217.47	8,409.42	32.97	77.05	-59.35	-1,045.39	2,016.41	945.65	837.09	108.56	8.711	
8,850.00	8,652.80	13,246.49	8,409.56	33.19	77.44	-58.95	-1,074.39	2,017.34	934.65	826.10	108.55	8.610	
8,900.00	8,683.24	13,280.74	8,409.74	33.42	77.90	-58.44	-1,108.62	2,018.48	922.86	814.32	108.54	8.502	
8,950.00	8,710.11	13,295.00	8,409.82	33.64	78.09	-58.93	-1,122.88	2,018.95	910.31	802.22	108.10	8.421	
9,000.00	8,733.20	13,295.00	8,409.82	33.86	78.09	-60.02	-1,122.88	2,018.95	898.05	790.79	107.26	8.372	
9,050.00	8,752.35	13,295.00	8,409.82	34.08	78.09	-61.07	-1,122.88	2,018.95	886.30	780.02	106.28	8.339	
9,100.00	8,767.39	13,295.00	8,409.82	34.29	78.09	-62.08	-1,122.88	2,018.95	875.16	770.00	105.16	8.322	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

Rule Assigned:

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
9,100.17	8,767.43	13,295.00	8,409.82	34.29	78.09	-62.08	-1,122.88	2,018.95	875.12	769.97	105.15	8.322	SF
9,200.00	8,791.66	13,295.00	8,409.82	34.71	78.09	-63.74	-1,122.88	2,018.95	861.93	759.49	102.43	8.415	ES
9,227.33	8,797.72	13,295.00	8,409.82	34.83	78.09	-64.05	-1,122.88	2,018.95	861.28	759.70	101.58	8.479	CC
9,300.00	8,812.57	13,295.00	8,409.82	35.13	78.09	-64.57	-1,122.88	2,018.95	865.83	766.70	99.13	8.735	
9,400.00	8,829.97	13,295.00	8,409.82	35.54	78.09	-64.56	-1,122.88	2,018.95	886.62	791.09	95.52	9.282	
9,500.00	8,843.72	13,295.00	8,409.82	35.95	78.09	-63.65	-1,122.88	2,018.95	923.00	831.05	91.95	10.038	
9,600.00	8,853.72	13,295.00	8,409.82	36.33	78.09	-61.79	-1,122.88	2,018.95	972.97	884.28	88.69	10.971	
9,700.00	8,859.89	13,295.00	8,409.82	36.70	78.09	-58.85	-1,122.88	2,018.95	1,034.21	948.30	85.90	12.039	
9,800.00	8,862.18	13,295.00	8,409.82	37.05	78.09	-54.68	-1,122.88	2,018.95	1,104.43	1,020.76	83.67	13.200	
9,809.00	8,862.20	13,295.00	8,409.82	37.08	78.09	-54.24	-1,122.88	2,018.95	1,111.11	1,027.62	83.49	13.308	
9,900.00	8,862.20	13,295.00	8,409.82	37.39	78.09	-54.24	-1,122.88	2,018.95	1,180.56	1,098.73	81.83	14.427	
10,000.00	8,862.19	13,295.00	8,409.82	37.74	78.09	-54.24	-1,122.88	2,018.95	1,260.04	1,179.85	80.19	15.713	
10,100.00	8,862.19	13,295.00	8,409.82	38.10	78.09	-54.24	-1,122.88	2,018.95	1,342.26	1,263.53	78.74	17.048	
10,200.00	8,862.19	13,295.00	8,409.82	38.48	78.09	-54.24	-1,122.88	2,018.95	1,426.76	1,349.31	77.46	18.420	
10,300.00	8,862.19	13,295.00	8,409.82	38.86	78.09	-54.24	-1,122.88	2,018.95	1,513.15	1,436.82	76.33	19.824	
10,400.00	8,862.19	13,295.00	8,409.82	39.25	78.09	-54.24	-1,122.88	2,018.95	1,601.13	1,525.78	75.34	21.251	
10,500.00	8,862.18	13,295.00	8,409.82	39.66	78.09	-54.24	-1,122.88	2,018.95	1,690.44	1,615.96	74.47	22.698	
10,600.00	8,862.18	13,295.00	8,409.82	40.07	78.09	-54.24	-1,122.88	2,018.95	1,780.89	1,707.17	73.71	24.160	
10,700.00	8,862.18	13,295.00	8,409.82	40.49	78.09	-54.24	-1,122.88	2,018.95	1,872.31	1,799.26	73.04	25.633	
10,800.00	8,862.18	13,295.00	8,409.82	40.93	78.09	-54.24	-1,122.88	2,018.95	1,964.56	1,892.11	72.45	27.115	
10,900.00	8,862.18	13,295.00	8,409.82	41.37	78.09	-54.24	-1,122.88	2,018.95	2,057.54	1,985.61	71.93	28.603	
11,000.00	8,862.17	13,295.00	8,409.82	41.82	78.09	-54.24	-1,122.88	2,018.95	2,151.16	2,079.68	71.47	30.097	
11,100.00	8,862.17	13,295.00	8,409.82	42.28	78.09	-54.24	-1,122.88	2,018.95	2,245.32	2,174.25	71.07	31.594	
11,200.00	8,862.17	13,295.00	8,409.82	42.75	78.09	-54.24	-1,122.88	2,018.95	2,339.96	2,269.25	70.71	33.093	
11,300.00	8,862.17	13,295.00	8,409.82	43.22	78.09	-54.24	-1,122.88	2,018.95	2,435.04	2,364.65	70.39	34.594	
11,400.00	8,862.17	13,295.00	8,409.82	43.71	78.09	-54.24	-1,122.88	2,018.95	2,530.49	2,460.38	70.11	36.095	
11,500.00	8,862.16	13,295.00	8,409.82	44.20	78.09	-54.24	-1,122.88	2,018.95	2,626.28	2,556.43	69.86	37.596	
11,600.00	8,862.16	13,295.00	8,409.82	44.70	78.09	-54.24	-1,122.88	2,018.95	2,722.38	2,652.75	69.63	39.097	
11,700.00	8,862.16	13,295.00	8,409.82	45.20	78.09	-54.24	-1,122.88	2,018.95	2,818.74	2,749.31	69.43	40.597	
11,800.00	8,862.16	13,295.00	8,409.82	45.72	78.09	-54.24	-1,122.88	2,018.95	2,915.35	2,846.10	69.26	42.095	
11,900.00	8,862.16	13,295.00	8,409.82	46.24	78.09	-54.24	-1,122.88	2,018.95	3,012.19	2,943.09	69.10	43.592	
12,000.00	8,862.15	13,295.00	8,409.82	46.76	78.09	-54.24	-1,122.88	2,018.95	3,109.22	3,040.26	68.96	45.087	
12,100.00	8,862.15	13,295.00	8,409.82	47.29	78.09	-54.24	-1,122.88	2,018.95	3,206.44	3,137.60	68.84	46.580	
12,200.00	8,862.15	13,295.00	8,409.82	47.83	78.09	-54.24	-1,122.88	2,018.95	3,303.82	3,235.09	68.73	48.071	
12,300.00	8,862.15	13,295.00	8,409.82	48.38	78.09	-54.24	-1,122.88	2,018.95	3,401.35	3,332.72	68.63	49.560	
12,400.00	8,862.15	13,295.00	8,409.82	48.93	78.09	-54.24	-1,122.88	2,018.95	3,499.02	3,430.48	68.55	51.046	
12,500.00	8,862.14	13,295.00	8,409.82	49.48	78.09	-54.24	-1,122.88	2,018.95	3,596.82	3,528.35	68.47	52.530	
12,600.00	8,862.14	13,295.00	8,409.82	50.04	78.09	-54.24	-1,122.88	2,018.95	3,694.74	3,626.33	68.41	54.011	
12,700.00	8,862.14	13,295.00	8,409.82	50.61	78.09	-54.24	-1,122.88	2,018.95	3,792.77	3,724.42	68.35	55.489	
12,800.00	8,862.14	13,295.00	8,409.82	51.18	78.09	-54.24	-1,122.88	2,018.95	3,890.90	3,822.59	68.30	56.965	
12,900.00	8,862.14	13,295.00	8,409.82	51.76	78.09	-54.24	-1,122.88	2,018.95	3,989.12	3,920.85	68.26	58.438	
13,000.00	8,862.13	13,295.00	8,409.82	52.34	78.09	-54.24	-1,122.88	2,018.95	4,087.42	4,019.19	68.23	59.908	
13,100.00	8,862.13	13,295.00	8,409.82	52.92	78.09	-54.24	-1,122.88	2,018.95	4,185.81	4,117.61	68.20	61.374	
13,200.00	8,862.13	13,295.00	8,409.82	53.51	78.09	-54.24	-1,122.88	2,018.95	4,284.27	4,216.09	68.18	62.838	
13,300.00	8,862.13	13,295.00	8,409.82	54.10	78.09	-54.24	-1,122.88	2,018.95	4,382.80	4,314.64	68.16	64.299	
13,400.00	8,862.12	13,295.00	8,409.82	54.70	78.09	-54.24	-1,122.88	2,018.95	4,481.40	4,413.25	68.15	65.757	
13,500.00	8,862.12	13,295.00	8,409.82	55.30	78.09	-54.24	-1,122.88	2,018.95	4,580.06	4,511.91	68.14	67.211	
13,600.00	8,862.12	13,295.00	8,409.82	55.91	78.09	-54.24	-1,122.88	2,018.95	4,678.77	4,610.63	68.14	68.663	
13,700.00	8,862.12	13,295.00	8,409.82	56.52	78.09	-54.24	-1,122.88	2,018.95	4,777.54	4,709.40	68.14	70.111	
13,800.00	8,862.12	13,295.00	8,409.82	57.13	78.09	-54.24	-1,122.88	2,018.95	4,876.36	4,808.21	68.15	71.556	
13,900.00	8,862.11	13,295.00	8,409.82	57.75	78.09	-54.24	-1,122.88	2,018.95	4,975.22	4,907.07	68.16	72.997	
14,000.00	8,862.11	13,295.00	8,409.82	58.37	78.09	-54.24	-1,122.88	2,018.95	5,074.13	5,005.96	68.17	74.436	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

Rule Assigned:

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
14,100.00	8,862.11	13,295.00	8,409.82	58.99	78.09	-54.24	-1,122.88	2,018.95	5,173.08	5,104.90	68.18	75.871	
14,200.00	8,862.11	13,295.00	8,409.82	59.62	78.09	-54.24	-1,122.88	2,018.95	5,272.07	5,203.87	68.20	77.302	
14,300.00	8,862.11	13,295.00	8,409.82	60.25	78.09	-54.24	-1,122.88	2,018.95	5,371.10	5,302.88	68.22	78.730	
14,400.00	8,862.10	13,295.00	8,409.82	60.88	78.09	-54.24	-1,122.88	2,018.95	5,470.17	5,401.92	68.24	80.155	
14,500.00	8,862.10	13,295.00	8,409.82	61.52	78.09	-54.24	-1,122.88	2,018.95	5,569.26	5,500.99	68.27	81.577	
14,600.00	8,862.10	13,295.00	8,409.82	62.16	78.09	-54.24	-1,122.88	2,018.95	5,668.39	5,600.09	68.30	82.994	
14,700.00	8,862.10	13,295.00	8,409.82	62.80	78.09	-54.24	-1,122.88	2,018.95	5,767.55	5,699.22	68.33	84.409	
14,800.00	8,862.10	13,295.00	8,409.82	63.44	78.09	-54.24	-1,122.88	2,018.95	5,866.74	5,798.38	68.36	85.819	
14,900.00	8,862.09	13,295.00	8,409.82	64.09	78.09	-54.24	-1,122.88	2,018.95	5,965.95	5,897.56	68.40	87.227	
15,000.00	8,862.09	13,295.00	8,409.82	64.74	78.09	-54.24	-1,122.88	2,018.95	6,065.19	5,996.76	68.43	88.630	
15,100.00	8,862.09	13,295.00	8,409.82	65.39	78.09	-54.24	-1,122.88	2,018.95	6,164.46	6,095.99	68.47	90.030	
15,200.00	8,862.09	13,295.00	8,409.82	66.05	78.09	-54.24	-1,122.88	2,018.95	6,263.75	6,195.24	68.51	91.427	
15,300.00	8,862.09	13,295.00	8,409.82	66.70	78.09	-54.24	-1,122.88	2,018.95	6,363.06	6,294.51	68.55	92.819	
15,400.00	8,862.08	13,295.00	8,409.82	67.36	78.09	-54.24	-1,122.88	2,018.95	6,462.39	6,393.79	68.60	94.208	
15,500.00	8,862.08	13,295.00	8,409.82	68.02	78.09	-54.24	-1,122.88	2,018.95	6,561.74	6,493.10	68.64	95.594	
15,600.00	8,862.08	13,295.00	8,409.82	68.69	78.09	-54.24	-1,122.88	2,018.95	6,661.11	6,592.43	68.69	96.975	
15,700.00	8,862.08	13,295.00	8,409.82	69.35	78.09	-54.24	-1,122.88	2,018.95	6,760.51	6,691.77	68.74	98.353	
15,800.00	8,862.08	13,295.00	8,409.82	70.02	78.09	-54.24	-1,122.88	2,018.95	6,859.91	6,791.13	68.79	99.727	
15,900.00	8,862.07	13,295.00	8,409.82	70.69	78.09	-54.24	-1,122.88	2,018.95	6,959.34	6,890.50	68.84	101.097	
16,000.00	8,862.07	13,295.00	8,409.82	71.36	78.09	-54.24	-1,122.88	2,018.95	7,058.78	6,989.89	68.89	102.464	
16,100.00	8,862.07	13,295.00	8,409.82	72.03	78.09	-54.24	-1,122.88	2,018.95	7,158.24	7,089.29	68.94	103.826	
16,200.00	8,862.07	13,295.00	8,409.82	72.71	78.09	-54.24	-1,122.88	2,018.95	7,257.71	7,188.71	69.00	105.185	
16,300.00	8,862.07	13,295.00	8,409.82	73.38	78.09	-54.24	-1,122.88	2,018.95	7,357.19	7,288.14	69.06	106.540	
16,400.00	8,862.06	13,295.00	8,409.82	74.06	78.09	-54.24	-1,122.88	2,018.95	7,456.69	7,387.58	69.11	107.891	
16,500.00	8,862.06	13,295.00	8,409.82	74.74	78.09	-54.24	-1,122.88	2,018.95	7,556.21	7,487.03	69.17	109.238	
16,600.00	8,862.06	13,295.00	8,409.82	75.42	78.09	-54.24	-1,122.88	2,018.95	7,655.73	7,586.50	69.23	110.581	
16,700.00	8,862.06	13,295.00	8,409.82	76.10	78.09	-54.24	-1,122.88	2,018.95	7,755.27	7,685.98	69.29	111.920	
16,800.00	8,862.06	13,295.00	8,409.82	76.79	78.09	-54.24	-1,122.88	2,018.95	7,854.82	7,785.46	69.35	113.255	
16,900.00	8,862.05	13,295.00	8,409.82	77.47	78.09	-54.24	-1,122.88	2,018.95	7,954.38	7,884.96	69.42	114.587	
17,000.00	8,862.05	13,295.00	8,409.82	78.16	78.09	-54.24	-1,122.88	2,018.95	8,053.95	7,984.47	69.48	115.914	
17,100.00	8,862.05	13,295.00	8,409.82	78.85	78.09	-54.24	-1,122.88	2,018.95	8,153.53	8,083.99	69.55	117.237	
17,200.00	8,862.05	13,295.00	8,409.82	79.54	78.09	-54.24	-1,122.88	2,018.95	8,253.13	8,183.51	69.61	118.556	
17,300.00	8,862.05	13,295.00	8,409.82	80.23	78.09	-54.24	-1,122.88	2,018.95	8,352.73	8,283.05	69.68	119.871	
17,400.00	8,862.04	13,295.00	8,409.82	80.92	78.09	-54.24	-1,122.88	2,018.95	8,452.34	8,382.59	69.75	121.182	
17,500.00	8,862.04	13,295.00	8,409.82	81.62	78.09	-54.24	-1,122.88	2,018.95	8,551.96	8,482.14	69.82	122.489	
17,600.00	8,862.04	13,295.00	8,409.82	82.31	78.09	-54.24	-1,122.88	2,018.95	8,651.59	8,581.70	69.89	123.792	
17,700.00	8,862.04	13,295.00	8,409.82	83.01	78.09	-54.24	-1,122.88	2,018.95	8,751.23	8,681.27	69.96	125.091	
17,800.00	8,862.04	13,295.00	8,409.82	83.71	78.09	-54.24	-1,122.88	2,018.95	8,850.87	8,780.84	70.03	126.386	
17,900.00	8,862.03	13,295.00	8,409.82	84.41	78.09	-54.24	-1,122.88	2,018.95	8,950.53	8,880.42	70.10	127.676	
18,000.00	8,862.03	13,295.00	8,409.82	85.11	78.09	-54.24	-1,122.88	2,018.95	9,050.19	8,980.01	70.18	128.963	
18,100.00	8,862.03	13,295.00	8,409.82	85.81	78.09	-54.24	-1,122.88	2,018.95	9,149.86	9,079.61	70.25	130.245	
18,200.00	8,862.03	13,295.00	8,409.82	86.51	78.09	-54.24	-1,122.88	2,018.95	9,249.53	9,179.21	70.33	131.523	
18,300.00	8,862.03	13,295.00	8,409.82	87.21	78.09	-54.24	-1,122.88	2,018.95	9,349.22	9,278.81	70.40	132.797	
18,400.00	8,862.02	13,295.00	8,409.82	87.92	78.09	-54.24	-1,122.88	2,018.95	9,448.91	9,378.43	70.48	134.067	
18,500.00	8,862.02	13,295.00	8,409.82	88.62	78.09	-54.24	-1,122.88	2,018.95	9,548.60	9,478.05	70.56	135.332	
18,600.00	8,862.02	13,295.00	8,409.82	89.33	78.09	-54.24	-1,122.88	2,018.95	9,648.31	9,577.67	70.64	136.594	
18,700.00	8,862.02	13,295.00	8,409.82	90.03	78.09	-54.24	-1,122.88	2,018.95	9,748.01	9,677.30	70.71	137.851	
18,800.00	8,862.02	13,295.00	8,409.82	90.74	78.09	-54.24	-1,122.88	2,018.95	9,847.73	9,776.93	70.79	139.104	
18,900.00	8,862.01	13,295.00	8,409.82	91.45	78.09	-54.24	-1,122.88	2,018.95	9,947.45	9,876.57	70.87	140.353	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM

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	0.00	0.00	0.50	30.06	3,823.84	2,212.70	4,417.94				
100.00	100.00	54.79	54.78	0.28	0.51	30.06	3,823.98	2,212.78	4,418.14	4,417.35	0.78	5,642.686	
200.00	200.00	145.00	144.99	0.63	0.55	30.06	3,824.84	2,213.25	4,419.18	4,418.00	1.18	3,747.128	
300.00	300.00	261.83	261.82	0.99	0.80	30.06	3,825.50	2,213.86	4,419.95	4,418.16	1.80	2,459.217	
400.00	400.00	334.00	333.99	1.35	1.02	30.06	3,826.01	2,214.30	4,420.82	4,418.45	2.37	1,865.803	
500.00	500.00	437.06	437.04	1.71	1.35	30.06	3,826.92	2,215.22	4,422.04	4,418.97	3.06	1,444.408	
600.00	600.00	540.43	540.41	2.07	1.70	30.07	3,827.48	2,215.90	4,422.83	4,419.06	3.77	1,173.412	
700.00	700.00	620.78	620.75	2.43	1.98	30.07	3,828.40	2,216.25	4,424.03	4,419.62	4.40	1,004.731	
800.00	800.00	721.59	721.55	2.79	2.32	30.06	3,829.91	2,216.37	4,425.38	4,420.28	5.11	866.069	
900.00	900.00	814.28	814.22	3.14	2.65	30.05	3,831.27	2,216.54	4,426.75	4,420.96	5.79	764.409	
1,000.00	1,000.00	909.53	909.46	3.50	2.98	30.04	3,833.14	2,216.49	4,428.42	4,421.94	6.48	683.134	
1,100.00	1,099.98	1,040.64	1,040.53	3.84	3.44	-129.98	3,836.01	2,214.89	4,430.84	4,423.56	7.28	608.611	
1,200.00	1,199.84	1,166.44	1,166.20	4.17	3.87	-130.06	3,839.25	2,210.46	4,434.64	4,426.59	8.05	551.225	
1,300.00	1,299.45	1,255.83	1,255.48	4.51	4.18	-130.10	3,841.91	2,206.84	4,440.83	4,432.14	8.69	510.960	
1,350.00	1,349.13	1,330.45	1,330.02	4.68	4.45	-130.17	3,843.82	2,203.92	4,444.63	4,435.51	9.12	487.277	
1,400.00	1,398.73	1,406.78	1,406.27	4.85	4.71	-123.84	3,845.25	2,200.95	4,448.30	4,438.75	9.56	465.441	
1,500.00	1,497.69	1,487.23	1,486.66	5.19	5.00	-113.84	3,846.56	2,197.99	4,454.78	4,444.60	10.18	437.517	
1,600.00	1,596.25	1,639.07	1,638.35	5.54	5.53	-106.94	3,848.93	2,191.59	4,460.00	4,448.94	11.06	403.119	
1,670.62	1,665.55	1,711.29	1,710.45	5.78	5.79	-103.25	3,849.83	2,187.63	4,462.46	4,450.90	11.57	385.771	
1,700.00	1,694.31	1,732.57	1,731.70	5.89	5.86	-103.32	3,850.15	2,186.46	4,463.46	4,451.71	11.75	379.957	
1,800.00	1,792.23	1,805.89	1,804.91	6.24	6.12	-103.55	3,851.40	2,182.65	4,467.27	4,454.91	12.37	361.263	
1,900.00	1,890.14	1,897.70	1,896.61	6.61	6.45	-103.84	3,853.05	2,178.61	4,471.65	4,458.60	13.05	342.573	
2,000.00	1,988.06	2,053.68	2,052.51	6.97	7.00	-104.29	3,853.52	2,173.87	4,475.54	4,461.58	13.96	320.555	
2,100.00	2,085.97	2,170.72	2,169.51	7.34	7.40	-104.60	3,851.83	2,171.59	4,478.46	4,463.73	14.73	304.061	
2,200.00	2,183.89	2,286.85	2,285.57	7.70	7.80	-104.92	3,850.62	2,167.87	4,481.30	4,465.80	15.50	289.119	
2,300.00	2,281.80	2,407.99	2,406.63	8.07	8.22	-105.26	3,848.44	2,164.03	4,483.58	4,467.29	16.29	275.253	
2,400.00	2,379.72	2,479.00	2,477.61	8.45	8.47	-105.44	3,846.81	2,162.55	4,486.04	4,469.13	16.91	265.360	
2,500.00	2,477.64	2,568.00	2,566.58	8.82	8.78	-105.68	3,845.27	2,160.72	4,489.07	4,471.49	17.59	255.263	
2,600.00	2,575.55	2,649.61	2,648.14	9.19	9.07	-105.91	3,844.70	2,157.97	4,492.54	4,474.29	18.25	246.186	
2,700.00	2,673.47	2,739.47	2,737.94	9.57	9.39	-106.17	3,844.37	2,154.66	4,496.28	4,477.34	18.94	237.376	
2,800.00	2,771.38	2,827.20	2,825.56	9.95	9.70	-106.44	3,844.69	2,150.47	4,500.31	4,480.68	19.63	229.250	
2,900.00	2,869.30	2,897.26	2,895.43	10.32	9.96	-106.67	3,846.02	2,145.46	4,504.84	4,484.58	20.26	222.325	
3,000.00	2,967.21	2,963.28	2,961.09	10.70	10.20	-106.92	3,848.54	2,139.09	4,510.17	4,489.29	20.88	215.999	
3,100.00	3,065.13	3,028.00	3,025.23	11.08	10.44	-107.19	3,852.18	2,131.31	4,516.33	4,494.84	21.49	210.128	
3,200.00	3,163.05	3,109.00	3,105.11	11.46	10.74	-107.55	3,858.40	2,119.41	4,523.41	4,501.24	22.17	204.055	
3,300.00	3,260.96	3,174.65	3,169.59	11.84	10.99	-107.86	3,864.29	2,108.58	4,531.15	4,508.35	22.79	198.814	
3,400.00	3,358.88	3,267.24	3,260.42	12.22	11.35	-108.31	3,872.84	2,092.75	4,539.28	4,515.75	23.52	192.958	
3,500.00	3,456.79	3,382.41	3,373.30	12.60	11.80	-108.86	3,883.43	2,072.53	4,547.53	4,523.17	24.36	186.713	
3,600.00	3,554.71	3,484.99	3,473.80	12.98	12.21	-109.36	3,892.58	2,054.11	4,555.73	4,530.58	25.14	181.193	
3,700.00	3,652.62	3,592.37	3,579.03	13.36	12.64	-109.88	3,901.83	2,034.87	4,564.00	4,538.05	25.95	175.864	
3,800.00	3,750.54	3,701.00	3,685.66	13.75	13.08	-110.39	3,910.48	2,016.03	4,572.20	4,545.44	26.77	170.804	
3,900.00	3,848.45	3,787.89	3,770.94	14.13	13.43	-110.80	3,917.32	2,000.81	4,580.59	4,553.09	27.50	166.585	
4,000.00	3,946.37	3,888.93	3,869.96	14.51	13.85	-111.28	3,925.63	1,982.48	4,589.40	4,561.11	28.29	162.228	
4,100.00	4,044.29	3,998.92	3,977.55	14.89	14.31	-111.82	3,934.59	1,961.49	4,598.14	4,569.01	29.13	157.855	
4,200.00	4,142.20	4,106.49	4,082.66	15.28	14.76	-112.35	3,943.19	1,940.27	4,606.88	4,576.93	29.96	153.771	
4,300.00	4,240.12	4,212.80	4,186.47	15.66	15.22	-112.87	3,951.46	1,918.89	4,615.66	4,584.87	30.80	149.877	
4,400.00	4,338.03	4,319.15	4,290.28	16.05	15.67	-113.39	3,959.46	1,897.22	4,624.48	4,592.85	31.63	146.195	
4,500.00	4,435.95	4,425.41	4,393.96	16.43	16.13	-113.92	3,967.19	1,875.31	4,633.34	4,600.87	32.47	142.704	
4,600.00	4,533.86	4,575.80	4,540.88	16.81	16.78	-114.65	3,976.86	1,844.67	4,641.91	4,608.41	33.50	138.557	
4,700.00	4,631.78	4,886.95	4,847.21	17.20	18.07	-115.99	3,985.02	1,791.36	4,649.03	4,613.86	35.17	132.198	
4,800.00	4,729.69	4,933.19	4,893.03	17.58	18.25	-116.16	3,984.59	1,785.12	4,653.47	4,617.74	35.73	130.225	
4,900.00	4,827.61	4,985.00	4,944.44	17.97	18.45	-116.35	3,984.77	1,778.77	4,659.34	4,623.03	36.32	128.294	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM **Rule Assigned:** **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
5,000.00	4,925.53	4,985.00	4,944.44	18.35	18.45	-116.35	3,984.77	1,778.77	4,666.62	4,629.93	36.69	127.190	
5,100.00	5,023.44	5,046.11	5,005.17	18.74	18.68	-116.57	3,985.92	1,772.08	4,675.02	4,637.72	37.30	125.348	
5,200.00	5,121.36	5,083.73	5,042.59	19.12	18.83	-116.70	3,987.16	1,768.37	4,684.92	4,647.11	37.80	123.927	
5,300.00	5,219.27	5,164.00	5,122.46	19.51	19.13	-116.97	3,991.12	1,761.51	4,696.65	4,658.17	38.48	122.044	
5,400.00	5,317.19	5,164.00	5,122.46	19.89	19.13	-116.97	3,991.12	1,761.51	4,708.74	4,669.92	38.82	121.291	
5,500.00	5,415.10	14,208.00	9,899.30	20.28	72.46	-103.19	-506.88	1,691.72	4,630.79	4,579.05	51.74	89.497	
5,600.00	5,513.02	14,208.00	9,899.30	20.66	72.46	-103.19	-506.88	1,691.72	4,532.33	4,480.34	51.98	87.188	
5,700.00	5,610.93	14,208.00	9,899.30	21.05	72.46	-103.19	-506.88	1,691.72	4,433.93	4,381.70	52.23	84.892	
5,800.00	5,708.85	14,242.82	9,899.81	21.43	72.90	-101.91	-541.68	1,692.70	4,335.55	4,282.81	52.74	82.207	
5,900.00	5,806.77	14,275.31	9,900.01	21.82	73.31	-100.59	-574.14	1,694.17	4,237.12	4,183.87	53.24	79.583	
6,000.00	5,904.68	14,305.42	9,899.95	22.21	73.69	-99.25	-604.19	1,696.02	4,138.65	4,084.91	53.74	77.018	
6,100.00	6,002.60	14,329.17	9,899.77	22.59	74.00	-98.11	-627.88	1,697.70	4,040.17	3,985.97	54.19	74.553	
6,200.00	6,100.51	14,352.29	9,899.52	22.98	74.29	-96.93	-650.94	1,699.41	3,941.68	3,887.02	54.65	72.124	
6,300.00	6,198.43	14,374.49	9,899.21	23.36	74.57	-95.73	-673.07	1,701.15	3,843.18	3,788.07	55.11	69.734	
6,400.00	6,296.34	14,395.81	9,898.84	23.75	74.85	-94.51	-694.31	1,702.89	3,744.70	3,689.12	55.58	67.380	
6,500.00	6,394.26	14,416.31	9,898.42	24.14	75.11	-93.28	-714.73	1,704.63	3,646.21	3,590.17	56.04	65.061	
6,600.00	6,492.17	14,397.00	9,898.81	24.52	74.86	-94.44	-695.50	1,702.99	3,547.88	3,491.68	56.20	63.130	
6,700.00	6,590.09	14,397.00	9,898.81	24.91	74.86	-94.44	-695.50	1,702.99	3,449.62	3,393.10	56.52	61.032	
6,800.00	6,688.01	14,421.98	9,898.44	25.29	75.18	-92.94	-720.38	1,705.07	3,351.26	3,294.21	57.05	58.738	
6,900.00	6,785.92	14,593.00	9,893.67	25.68	77.38	-80.17	-890.91	1,715.56	3,253.07	3,194.29	58.78	55.344	
7,000.00	6,883.84	14,593.00	9,893.67	26.07	77.38	-80.17	-890.91	1,715.56	3,154.38	3,095.25	59.14	53.342	
7,100.00	6,981.75	14,593.00	9,893.67	26.45	77.38	-80.17	-890.91	1,715.56	3,055.78	2,996.28	59.51	51.353	
7,200.00	7,079.67	14,593.00	9,893.67	26.84	77.38	-80.17	-890.91	1,715.56	2,957.27	2,897.38	59.89	49.378	
7,300.00	7,177.58	14,593.00	9,893.67	27.23	77.38	-80.17	-890.91	1,715.56	2,858.87	2,798.58	60.29	47.417	
7,400.00	7,275.50	14,593.00	9,893.67	27.61	77.38	-80.17	-890.91	1,715.56	2,760.58	2,699.87	60.71	45.471	
7,500.00	7,373.41	14,593.00	9,893.67	28.00	77.38	-80.17	-890.91	1,715.56	2,662.42	2,601.27	61.15	43.539	
7,600.00	7,471.33	14,593.00	9,893.67	28.39	77.38	-80.17	-890.91	1,715.56	2,564.40	2,502.79	61.61	41.622	
7,700.00	7,569.25	14,593.00	9,893.67	28.77	77.38	-80.17	-890.91	1,715.56	2,466.54	2,404.45	62.10	39.721	
7,764.22	7,632.13	14,593.00	9,893.67	29.02	77.38	-80.17	-890.91	1,715.56	2,403.79	2,341.37	62.42	38.508	
7,800.00	7,667.21	14,593.00	9,893.67	29.16	77.38	-77.03	-890.91	1,715.56	2,368.87	2,306.26	62.61	37.834	
7,900.00	7,765.68	14,593.00	9,893.67	29.54	77.38	-68.95	-890.91	1,715.56	2,271.56	2,208.37	63.19	35.945	
8,000.00	7,864.70	14,593.00	9,893.67	29.91	77.38	-61.98	-890.91	1,715.56	2,174.81	2,110.94	63.86	34.054	
8,100.00	7,964.15	14,593.00	9,893.67	30.28	77.38	-56.10	-890.91	1,715.56	2,078.82	2,014.18	64.63	32.163	
8,200.00	8,063.90	14,593.00	9,893.67	30.63	77.38	-51.20	-890.91	1,715.56	1,983.82	1,918.30	65.52	30.278	
8,300.00	8,163.83	14,593.00	9,893.67	30.98	77.38	-47.13	-890.91	1,715.56	1,890.11	1,823.56	66.55	28.402	
8,350.17	8,214.00	14,593.00	9,893.67	31.14	77.38	86.79	-890.91	1,715.56	1,843.67	1,776.55	67.12	27.468	
8,400.00	8,263.77	14,593.00	9,893.67	31.31	77.38	-71.82	-890.91	1,715.56	1,797.50	1,729.79	67.71	26.548	
8,450.00	8,313.33	14,593.00	9,893.67	31.49	77.38	-84.45	-890.91	1,715.56	1,750.86	1,682.59	68.27	25.645	
8,500.00	8,362.13	14,593.00	9,893.67	31.69	77.38	-97.29	-890.91	1,715.56	1,704.25	1,635.45	68.80	24.771	
8,550.00	8,409.80	14,593.00	9,893.67	31.89	77.38	-109.04	-890.91	1,715.56	1,658.06	1,588.77	69.29	23.931	
8,600.00	8,455.99	14,593.00	9,893.67	32.09	77.38	-118.92	-890.91	1,715.56	1,612.67	1,542.96	69.72	23.132	
8,650.00	8,500.33	14,593.00	9,893.67	32.31	77.38	-126.82	-890.91	1,715.56	1,568.52	1,498.44	70.08	22.380	
8,700.00	8,542.50	14,593.00	9,893.67	32.53	77.38	-133.00	-890.91	1,715.56	1,526.07	1,455.69	70.38	21.682	
8,750.00	8,582.16	14,593.00	9,893.67	32.75	77.38	-137.77	-890.91	1,715.56	1,485.80	1,415.19	70.61	21.043	
8,800.00	8,619.02	14,593.00	9,893.67	32.97	77.38	-141.47	-890.91	1,715.56	1,448.21	1,377.46	70.75	20.469	
8,850.00	8,652.80	14,593.00	9,893.67	33.19	77.38	-144.34	-890.91	1,715.56	1,413.80	1,342.99	70.81	19.965	
8,900.00	8,683.24	14,593.00	9,893.67	33.42	77.38	-146.55	-890.91	1,715.56	1,383.10	1,312.30	70.80	19.536	
8,950.00	8,710.11	14,593.00	9,893.67	33.64	77.38	-148.24	-890.91	1,715.56	1,356.59	1,285.89	70.70	19.188	
9,000.00	8,733.20	14,593.00	9,893.67	33.86	77.38	-149.50	-890.91	1,715.56	1,334.72	1,264.19	70.53	18.924	
9,050.00	8,752.35	14,593.00	9,893.67	34.08	77.38	-150.39	-890.91	1,715.56	1,317.91	1,247.61	70.30	18.748	
9,100.00	8,767.39	14,593.00	9,893.67	34.29	77.38	-150.97	-890.91	1,715.56	1,306.47	1,236.46	70.01	18.662	
9,100.17	8,767.43	14,593.00	9,893.67	34.29	77.38	-150.97	-890.91	1,715.56	1,306.44	1,236.43	70.01	18.661	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM

Rule Assigned:

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
9,200.00	8,791.66	14,593.00	9,893.67	34.71	77.38	-151.80	-890.91	1,715.56	1,296.30	1,226.77	69.53	18.644	SF
9,220.28	8,796.18	14,593.00	9,893.67	34.80	77.38	-152.01	-890.91	1,715.56	1,296.00	1,226.54	69.47	18.657	CC, ES
9,300.00	8,812.57	14,593.00	9,893.67	35.13	77.38	-152.92	-890.91	1,715.56	1,300.61	1,231.30	69.31	18.766	
9,400.00	8,829.97	14,593.00	9,893.67	35.54	77.38	-154.32	-890.91	1,715.56	1,319.23	1,249.94	69.29	19.038	
9,500.00	8,843.72	14,593.00	9,893.67	35.95	77.38	-156.04	-890.91	1,715.56	1,351.43	1,282.00	69.43	19.464	
9,600.00	8,853.72	14,593.00	9,893.67	36.33	77.38	-158.13	-890.91	1,715.56	1,396.03	1,326.36	69.67	20.037	
9,700.00	8,859.89	14,593.00	9,893.67	36.70	77.38	-160.70	-890.91	1,715.56	1,451.58	1,381.61	69.97	20.747	
9,800.00	8,862.18	14,593.00	9,893.67	37.05	77.38	-163.87	-890.91	1,715.56	1,516.46	1,446.18	70.28	21.577	
9,809.00	8,862.20	14,593.00	9,893.67	37.08	77.38	-164.19	-890.91	1,715.56	1,522.70	1,452.39	70.31	21.657	
9,900.00	8,862.20	14,593.00	9,893.67	37.39	77.38	-164.19	-890.91	1,715.56	1,587.48	1,516.90	70.58	22.492	
10,000.00	8,862.19	14,593.00	9,893.67	37.74	77.38	-164.19	-890.91	1,715.56	1,661.50	1,590.67	70.83	23.456	
10,100.00	8,862.19	14,593.00	9,893.67	38.10	77.38	-164.19	-890.91	1,715.56	1,738.13	1,667.07	71.05	24.462	
10,200.00	8,862.19	14,593.00	9,893.67	38.48	77.38	-164.19	-890.91	1,715.56	1,817.02	1,745.78	71.24	25.504	
10,300.00	8,862.19	14,593.00	9,893.67	38.86	77.38	-164.19	-890.91	1,715.56	1,897.91	1,826.50	71.41	26.576	
10,400.00	8,862.19	14,593.00	9,893.67	39.25	77.38	-164.19	-890.91	1,715.56	1,980.54	1,908.98	71.57	27.675	
10,500.00	8,862.18	14,593.00	9,893.67	39.66	77.38	-164.19	-890.91	1,715.56	2,064.71	1,993.01	71.70	28.796	
10,600.00	8,862.18	14,593.00	9,893.67	40.07	77.38	-164.19	-890.91	1,715.56	2,150.24	2,078.41	71.83	29.937	
10,700.00	8,862.18	14,593.00	9,893.67	40.49	77.38	-164.19	-890.91	1,715.56	2,236.97	2,165.03	71.94	31.094	
10,800.00	8,862.18	14,593.00	9,893.67	40.93	77.38	-164.19	-890.91	1,715.56	2,324.76	2,252.71	72.05	32.267	
10,900.00	8,862.18	14,593.00	9,893.67	41.37	77.38	-164.19	-890.91	1,715.56	2,413.50	2,341.36	72.15	33.452	
11,000.00	8,862.17	14,593.00	9,893.67	41.82	77.38	-164.19	-890.91	1,715.56	2,503.10	2,430.86	72.24	34.649	
11,100.00	8,862.17	14,593.00	9,893.67	42.28	77.38	-164.19	-890.91	1,715.56	2,593.45	2,521.12	72.33	35.856	
11,200.00	8,862.17	14,593.00	9,893.67	42.75	77.38	-164.19	-890.91	1,715.56	2,684.49	2,612.07	72.41	37.071	
11,300.00	8,862.17	14,593.00	9,893.67	43.22	77.38	-164.19	-890.91	1,715.56	2,776.14	2,703.65	72.50	38.294	
11,400.00	8,862.17	14,593.00	9,893.67	43.71	77.38	-164.19	-890.91	1,715.56	2,868.35	2,795.78	72.57	39.523	
11,500.00	8,862.16	14,593.00	9,893.67	44.20	77.38	-164.19	-890.91	1,715.56	2,961.07	2,888.42	72.65	40.759	
11,600.00	8,862.16	14,593.00	9,893.67	44.70	77.38	-164.19	-890.91	1,715.56	3,054.25	2,981.53	72.72	41.999	
11,700.00	8,862.16	14,593.00	9,893.67	45.20	77.38	-164.19	-890.91	1,715.56	3,147.85	3,075.05	72.79	43.244	
11,800.00	8,862.16	14,593.00	9,893.67	45.72	77.38	-164.19	-890.91	1,715.56	3,241.82	3,168.96	72.86	44.493	
11,900.00	8,862.16	14,593.00	9,893.67	46.24	77.38	-164.19	-890.91	1,715.56	3,336.15	3,263.22	72.93	45.745	
12,000.00	8,862.15	14,593.00	9,893.67	46.76	77.38	-164.19	-890.91	1,715.56	3,430.80	3,357.81	73.00	46.999	
12,100.00	8,862.15	14,593.00	9,893.67	47.29	77.38	-164.19	-890.91	1,715.56	3,525.75	3,452.68	73.06	48.257	
12,200.00	8,862.15	14,593.00	9,893.67	47.83	77.38	-164.19	-890.91	1,715.56	3,620.96	3,547.84	73.13	49.516	
12,300.00	8,862.15	14,593.00	9,893.67	48.38	77.38	-164.19	-890.91	1,715.56	3,716.43	3,643.24	73.19	50.777	
12,400.00	8,862.15	14,593.00	9,893.67	48.93	77.38	-164.19	-890.91	1,715.56	3,812.13	3,738.88	73.25	52.040	
12,500.00	8,862.14	14,593.00	9,893.67	49.48	77.38	-164.19	-890.91	1,715.56	3,908.05	3,834.73	73.32	53.304	
12,600.00	8,862.14	14,593.00	9,893.67	50.04	77.38	-164.19	-890.91	1,715.56	4,004.17	3,930.79	73.38	54.568	
12,700.00	8,862.14	14,593.00	9,893.67	50.61	77.38	-164.19	-890.91	1,715.56	4,100.47	4,027.03	73.44	55.834	
12,800.00	8,862.14	14,593.00	9,893.67	51.18	77.38	-164.19	-890.91	1,715.56	4,196.94	4,123.44	73.50	57.100	
12,900.00	8,862.14	14,593.00	9,893.67	51.76	77.38	-164.19	-890.91	1,715.56	4,293.58	4,220.02	73.56	58.366	
13,000.00	8,862.13	14,593.00	9,893.67	52.34	77.38	-164.19	-890.91	1,715.56	4,390.37	4,316.74	73.62	59.632	
13,100.00	8,862.13	14,593.00	9,893.67	52.92	77.38	-164.19	-890.91	1,715.56	4,487.29	4,413.61	73.69	60.898	
13,200.00	8,862.13	14,593.00	9,893.67	53.51	77.38	-164.19	-890.91	1,715.56	4,584.35	4,510.61	73.75	62.164	
13,300.00	8,862.13	14,593.00	9,893.67	54.10	77.38	-164.19	-890.91	1,715.56	4,681.54	4,607.73	73.81	63.429	
13,400.00	8,862.12	14,593.00	9,893.67	54.70	77.38	-164.19	-890.91	1,715.56	4,778.84	4,704.97	73.87	64.694	
13,500.00	8,862.12	14,593.00	9,893.67	55.30	77.38	-164.19	-890.91	1,715.56	4,876.24	4,802.32	73.93	65.958	
13,600.00	8,862.12	14,593.00	9,893.67	55.91	77.38	-164.19	-890.91	1,715.56	4,973.76	4,899.77	73.99	67.221	
13,700.00	8,862.12	14,593.00	9,893.67	56.52	77.38	-164.19	-890.91	1,715.56	5,071.37	4,997.31	74.05	68.484	
13,800.00	8,862.12	14,593.00	9,893.67	57.13	77.38	-164.19	-890.91	1,715.56	5,169.07	5,094.95	74.11	69.745	
13,900.00	8,862.11	14,593.00	9,893.67	57.75	77.38	-164.19	-890.91	1,715.56	5,266.85	5,192.68	74.18	71.005	
14,000.00	8,862.11	14,593.00	9,893.67	58.37	77.38	-164.19	-890.91	1,715.56	5,364.72	5,290.48	74.24	72.264	
14,100.00	8,862.11	14,593.00	9,893.67	58.99	77.38	-164.19	-890.91	1,715.56	5,462.66	5,388.37	74.30	73.522	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM

Rule Assigned:

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
14,200.00	8,862.11	14,593.00	9,893.67	59.62	77.38	-164.19	-890.91	1,715.56	5,560.68	5,486.32	74.36	74.778	
14,300.00	8,862.11	14,593.00	9,893.67	60.25	77.38	-164.19	-890.91	1,715.56	5,658.77	5,584.35	74.43	76.033	
14,400.00	8,862.10	14,593.00	9,893.67	60.88	77.38	-164.19	-890.91	1,715.56	5,756.92	5,682.44	74.49	77.286	
14,500.00	8,862.10	14,593.00	9,893.67	61.52	77.38	-164.19	-890.91	1,715.56	5,855.14	5,780.59	74.55	78.538	
14,600.00	8,862.10	14,593.00	9,893.67	62.16	77.38	-164.19	-890.91	1,715.56	5,953.42	5,878.80	74.62	79.787	
14,700.00	8,862.10	14,593.00	9,893.67	62.80	77.38	-164.19	-890.91	1,715.56	6,051.75	5,977.07	74.68	81.035	
14,800.00	8,862.10	14,593.00	9,893.67	63.44	77.38	-164.19	-890.91	1,715.56	6,150.13	6,075.39	74.74	82.282	
14,900.00	8,862.09	14,593.00	9,893.67	64.09	77.38	-164.19	-890.91	1,715.56	6,248.57	6,173.76	74.81	83.526	
15,000.00	8,862.09	14,593.00	9,893.67	64.74	77.38	-164.19	-890.91	1,715.56	6,347.06	6,272.18	74.88	84.768	
15,100.00	8,862.09	14,593.00	9,893.67	65.39	77.38	-164.19	-890.91	1,715.56	6,445.59	6,370.65	74.94	86.008	
15,200.00	8,862.09	14,593.00	9,893.67	66.05	77.38	-164.19	-890.91	1,715.56	6,544.17	6,469.16	75.01	87.246	
15,300.00	8,862.09	14,593.00	9,893.67	66.70	77.38	-164.19	-890.91	1,715.56	6,642.79	6,567.71	75.07	88.482	
15,400.00	8,862.08	14,593.00	9,893.67	67.36	77.38	-164.19	-890.91	1,715.56	6,741.45	6,666.30	75.14	89.716	
15,500.00	8,862.08	14,593.00	9,893.67	68.02	77.38	-164.19	-890.91	1,715.56	6,840.14	6,764.93	75.21	90.948	
15,600.00	8,862.08	14,593.00	9,893.67	68.69	77.38	-164.19	-890.91	1,715.56	6,938.88	6,863.60	75.28	92.177	
15,700.00	8,862.08	14,593.00	9,893.67	69.35	77.38	-164.19	-890.91	1,715.56	7,037.65	6,962.31	75.35	93.404	
15,800.00	8,862.08	14,593.00	9,893.67	70.02	77.38	-164.19	-890.91	1,715.56	7,136.46	7,061.04	75.42	94.628	
15,900.00	8,862.07	14,593.00	9,893.67	70.69	77.38	-164.19	-890.91	1,715.56	7,235.30	7,159.81	75.49	95.850	
16,000.00	8,862.07	14,593.00	9,893.67	71.36	77.38	-164.19	-890.91	1,715.56	7,334.17	7,258.61	75.56	97.070	
16,100.00	8,862.07	14,593.00	9,893.67	72.03	77.38	-164.19	-890.91	1,715.56	7,433.07	7,357.44	75.63	98.287	
16,200.00	8,862.07	14,593.00	9,893.67	72.71	77.38	-164.19	-890.91	1,715.56	7,532.00	7,456.30	75.70	99.502	
16,300.00	8,862.07	14,593.00	9,893.67	73.38	77.38	-164.19	-890.91	1,715.56	7,630.96	7,555.19	75.77	100.714	
16,400.00	8,862.06	14,593.00	9,893.67	74.06	77.38	-164.19	-890.91	1,715.56	7,729.94	7,654.10	75.84	101.923	
16,500.00	8,862.06	14,593.00	9,893.67	74.74	77.38	-164.19	-890.91	1,715.56	7,828.95	7,753.04	75.91	103.130	
16,600.00	8,862.06	14,593.00	9,893.67	75.42	77.38	-164.19	-890.91	1,715.56	7,927.99	7,852.00	75.99	104.334	
16,700.00	8,862.06	14,593.00	9,893.67	76.10	77.38	-164.19	-890.91	1,715.56	8,027.05	7,950.99	76.06	105.536	
16,800.00	8,862.06	14,593.00	9,893.67	76.79	77.38	-164.19	-890.91	1,715.56	8,126.13	8,049.99	76.13	106.734	
16,900.00	8,862.05	14,593.00	9,893.67	77.47	77.38	-164.19	-890.91	1,715.56	8,225.23	8,149.02	76.21	107.930	
17,000.00	8,862.05	14,593.00	9,893.67	78.16	77.38	-164.19	-890.91	1,715.56	8,324.36	8,248.07	76.28	109.123	
17,100.00	8,862.05	14,593.00	9,893.67	78.85	77.38	-164.19	-890.91	1,715.56	8,423.50	8,347.14	76.36	110.314	
17,200.00	8,862.05	14,593.00	9,893.67	79.54	77.38	-164.19	-890.91	1,715.56	8,522.67	8,446.23	76.44	111.501	
17,300.00	8,862.05	14,593.00	9,893.67	80.23	77.38	-164.19	-890.91	1,715.56	8,621.86	8,545.34	76.51	112.686	
17,400.00	8,862.04	14,593.00	9,893.67	80.92	77.38	-164.19	-890.91	1,715.56	8,721.06	8,644.47	76.59	113.867	
17,500.00	8,862.04	14,593.00	9,893.67	81.62	77.38	-164.19	-890.91	1,715.56	8,820.28	8,743.62	76.67	115.046	
17,600.00	8,862.04	14,593.00	9,893.67	82.31	77.38	-164.19	-890.91	1,715.56	8,919.52	8,842.78	76.75	116.222	
17,700.00	8,862.04	14,593.00	9,893.67	83.01	77.38	-164.19	-890.91	1,715.56	9,018.78	8,941.95	76.82	117.394	
17,800.00	8,862.04	14,593.00	9,893.67	83.71	77.38	-164.19	-890.91	1,715.56	9,118.05	9,041.15	76.90	118.564	
17,900.00	8,862.03	14,593.00	9,893.67	84.41	77.38	-164.19	-890.91	1,715.56	9,217.34	9,140.36	76.98	119.731	
18,000.00	8,862.03	14,593.00	9,893.67	85.11	77.38	-164.19	-890.91	1,715.56	9,316.64	9,239.58	77.06	120.895	
18,100.00	8,862.03	14,593.00	9,893.67	85.81	77.38	-164.19	-890.91	1,715.56	9,415.96	9,338.82	77.14	122.056	
18,200.00	8,862.03	14,593.00	9,893.67	86.51	77.38	-164.19	-890.91	1,715.56	9,515.29	9,438.07	77.23	123.213	
18,300.00	8,862.03	14,593.00	9,893.67	87.21	77.38	-164.19	-890.91	1,715.56	9,614.64	9,537.33	77.31	124.368	
18,400.00	8,862.02	14,593.00	9,893.67	87.92	77.38	-164.19	-890.91	1,715.56	9,714.00	9,636.61	77.39	125.519	
18,500.00	8,862.02	14,593.00	9,893.67	88.62	77.38	-164.19	-890.91	1,715.56	9,813.37	9,735.90	77.47	126.668	
18,600.00	8,862.02	14,593.00	9,893.67	89.33	77.38	-164.19	-890.91	1,715.56	9,912.76	9,835.20	77.56	127.813	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 55-MWD+HRGM

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	0.00	0.00	0.50	30.73	3,823.84	2,272.70	4,448.30				
100.00	100.00	55.00	54.99	0.28	0.51	30.73	3,823.61	2,273.39	4,448.47	4,447.69	0.78	5,708.770	
200.00	200.00	119.93	119.91	0.63	0.58	30.74	3,823.89	2,274.12	4,449.42	4,448.21	1.21	3,677.194	
300.00	300.00	262.35	262.29	0.99	0.93	30.70	3,826.56	2,272.12	4,450.33	4,448.41	1.92	2,315.502	
400.00	400.00	334.00	333.94	1.35	1.15	30.69	3,827.41	2,271.79	4,451.09	4,448.58	2.50	1,777.625	
500.00	500.00	566.13	566.03	1.71	1.93	30.66	3,827.64	2,268.98	4,450.45	4,446.82	3.63	1,224.571	
600.00	600.00	662.29	662.17	2.07	2.25	30.64	3,826.80	2,266.70	4,448.50	4,444.18	4.32	1,029.688	
700.00	700.00	729.66	729.52	2.43	2.49	30.63	3,826.32	2,265.43	4,446.95	4,442.04	4.91	905.557	
800.00	800.00	781.00	780.86	2.79	2.66	30.62	3,826.14	2,265.02	4,446.31	4,440.86	5.45	816.325	
821.51	821.51	800.69	800.55	2.86	2.73	30.62	3,826.13	2,264.98	4,446.28	4,440.69	5.59	795.260	
900.00	900.00	845.99	845.85	3.14	2.89	30.62	3,826.27	2,265.09	4,446.59	4,440.56	6.03	737.791	
1,000.00	1,000.00	938.31	938.16	3.50	3.20	30.63	3,827.07	2,265.62	4,447.61	4,440.91	6.70	663.661	
1,100.00	1,099.98	1,059.62	1,059.47	3.84	3.62	-129.37	3,827.95	2,265.81	4,449.43	4,441.96	7.46	596.325	
1,200.00	1,199.84	1,124.79	1,124.64	4.17	3.84	-129.33	3,828.18	2,266.57	4,453.63	4,445.62	8.01	555.839	
1,300.00	1,299.45	1,188.73	1,188.55	4.51	4.06	-129.26	3,828.50	2,268.06	4,460.78	4,452.22	8.56	520.823	
1,350.00	1,349.13	1,219.06	1,218.87	4.68	4.16	-129.22	3,828.79	2,268.92	4,465.50	4,456.67	8.84	505.281	
1,400.00	1,398.73	1,246.00	1,245.80	4.85	4.26	-122.74	3,829.13	2,269.74	4,470.58	4,461.48	9.10	491.367	
1,500.00	1,497.69	1,314.56	1,314.30	5.19	4.49	-112.61	3,830.27	2,272.21	4,480.47	4,470.80	9.68	463.097	
1,600.00	1,596.25	1,386.64	1,386.30	5.54	4.75	-105.35	3,831.72	2,275.42	4,489.96	4,479.69	10.27	437.196	
1,670.62	1,665.55	1,452.11	1,451.66	5.78	4.97	-101.49	3,833.05	2,278.83	4,496.28	4,485.54	10.75	418.442	
1,700.00	1,694.31	1,491.39	1,490.89	5.89	5.11	-101.57	3,833.79	2,280.85	4,498.75	4,487.77	10.99	409.458	
1,800.00	1,792.23	1,615.92	1,615.27	6.24	5.55	-101.84	3,835.91	2,286.59	4,506.79	4,495.01	11.78	382.463	
1,900.00	1,890.14	1,734.69	1,733.94	6.61	5.97	-102.11	3,837.88	2,290.89	4,514.38	4,501.81	12.56	359.320	
2,000.00	1,988.06	1,825.72	1,824.91	6.97	6.29	-102.32	3,839.43	2,293.66	4,521.81	4,508.56	13.25	341.323	
2,100.00	2,085.97	1,901.21	1,900.33	7.34	6.56	-102.48	3,840.80	2,296.51	4,529.74	4,515.86	13.88	326.392	
2,200.00	2,183.89	1,986.09	1,985.11	7.70	6.86	-102.66	3,842.37	2,300.48	4,538.19	4,523.65	14.54	312.018	
2,300.00	2,281.80	2,100.06	2,098.89	8.07	7.27	-102.89	3,843.65	2,307.03	4,546.58	4,531.26	15.32	296.769	
2,400.00	2,379.72	2,222.66	2,221.24	8.45	7.71	-103.11	3,843.94	2,314.71	4,554.48	4,538.35	16.13	282.366	
2,500.00	2,477.64	2,318.00	2,316.40	8.82	8.05	-103.28	3,843.98	2,320.54	4,562.21	4,545.37	16.84	270.897	
2,600.00	2,575.55	2,388.65	2,386.88	9.19	8.30	-103.41	3,844.11	2,325.48	4,570.51	4,553.05	17.46	261.717	
2,700.00	2,673.47	2,470.89	2,468.86	9.57	8.60	-103.54	3,844.26	2,331.99	4,579.28	4,561.15	18.13	252.572	
2,800.00	2,771.38	2,551.20	2,548.92	9.95	8.89	-103.67	3,844.76	2,338.27	4,588.44	4,569.65	18.79	244.179	
2,900.00	2,869.30	2,660.10	2,657.59	10.32	9.29	-103.88	3,846.49	2,345.17	4,597.80	4,578.24	19.56	235.055	
3,000.00	2,967.21	2,730.49	2,727.84	10.70	9.54	-104.01	3,847.58	2,349.54	4,607.17	4,586.99	20.18	228.252	
3,100.00	3,065.13	2,754.00	2,751.28	11.08	9.63	-104.05	3,848.03	2,351.18	4,617.71	4,597.08	20.63	223.867	
3,200.00	3,163.05	2,804.47	2,801.57	11.46	9.81	-104.14	3,849.48	2,355.28	4,629.43	4,608.25	21.17	218.659	
3,300.00	3,260.96	2,843.00	2,839.87	11.84	9.96	-104.20	3,851.14	2,359.01	4,642.72	4,621.06	21.67	214.281	
3,400.00	3,358.88	2,843.00	2,839.87	12.22	9.96	-104.20	3,851.14	2,359.01	4,657.64	4,635.64	22.00	211.713	
3,500.00	3,456.79	2,897.57	2,894.01	12.60	10.16	-104.29	3,854.39	2,365.13	4,673.62	4,651.07	22.55	207.229	
3,600.00	3,554.71	2,932.00	2,928.06	12.98	10.29	-104.34	3,857.02	2,369.45	4,691.26	4,668.24	23.02	203.806	
3,700.00	3,652.62	2,968.49	2,964.08	13.36	10.43	-104.39	3,860.16	2,374.39	4,710.21	4,686.72	23.49	200.528	
3,800.00	3,750.54	3,022.00	3,016.77	13.75	10.63	-104.46	3,865.21	2,382.21	4,730.38	4,706.35	24.03	196.851	
3,900.00	3,848.45	3,069.88	3,063.82	14.13	10.82	-104.52	3,870.03	2,389.67	4,751.51	4,726.97	24.55	193.579	
4,000.00	3,946.37	3,146.97	3,139.47	14.51	11.11	-104.62	3,877.99	2,402.21	4,773.32	4,748.13	25.19	189.486	
4,100.00	4,044.29	3,251.37	3,241.91	14.89	11.52	-104.74	3,888.93	2,419.04	4,795.25	4,769.28	25.96	184.705	
4,200.00	4,142.20	3,367.88	3,356.35	15.28	11.98	-104.89	3,900.99	2,437.30	4,816.88	4,790.09	26.79	179.806	
4,300.00	4,240.12	3,462.70	3,449.55	15.66	12.36	-105.01	3,910.81	2,451.73	4,838.33	4,810.81	27.52	175.815	
4,400.00	4,338.03	3,640.65	3,624.85	16.05	13.07	-105.25	3,928.23	2,476.84	4,858.68	4,830.05	28.63	169.719	
4,500.00	4,435.95	3,712.50	3,695.72	16.43	13.35	-105.35	3,934.96	2,486.55	4,878.65	4,849.40	29.26	166.758	
4,600.00	4,533.86	3,765.21	3,747.58	16.81	13.56	-105.42	3,940.10	2,494.45	4,899.56	4,869.76	29.80	164.434	
4,700.00	4,631.78	3,826.00	3,807.26	17.20	13.81	-105.49	3,946.43	2,504.12	4,921.39	4,891.01	30.37	162.030	
4,800.00	4,729.69	3,897.72	3,877.57	17.58	14.11	-105.57	3,954.17	2,515.97	4,943.86	4,912.86	31.00	159.469	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 55-MWD+HRGM

Rule Assigned:

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
4,900.00	4,827.61	3,983.43	3,961.57	17.97	14.46	-105.66	3,963.57	2,530.23	4,966.59	4,934.89	31.70	156.688	
5,000.00	4,925.53	4,087.08	4,063.17	18.35	14.89	-105.78	3,975.25	2,547.04	4,989.43	4,956.95	32.48	153.621	
5,100.00	5,023.44	4,514.37	4,484.58	18.74	16.62	-106.29	4,009.88	2,607.91	5,007.57	4,972.82	34.75	144.115	
5,200.00	5,121.36	4,603.35	4,572.69	19.12	16.98	-106.40	4,014.93	2,619.21	5,023.99	4,988.53	35.46	141.674	
5,300.00	5,219.27	13,968.89	9,757.25	19.51	70.59	-72.72	-370.57	2,691.64	5,024.79	4,970.47	54.32	92.495	
5,400.00	5,317.19	13,988.40	9,757.66	19.89	70.84	-72.12	-390.05	2,692.45	4,930.24	4,875.33	54.90	89.796	
5,500.00	5,415.10	14,007.74	9,758.05	20.28	71.08	-71.52	-409.37	2,693.26	4,835.83	4,780.33	55.50	87.134	
5,600.00	5,513.02	14,026.92	9,758.42	20.66	71.32	-70.92	-428.53	2,694.07	4,741.59	4,685.48	56.11	84.510	
5,700.00	5,610.93	14,038.51	9,758.63	21.05	71.47	-70.55	-440.11	2,694.58	4,647.54	4,590.87	56.67	82.005	
5,800.00	5,708.85	14,052.06	9,758.88	21.43	71.65	-70.12	-453.65	2,695.20	4,553.69	4,496.42	57.27	79.508	
5,900.00	5,806.77	14,065.59	9,759.12	21.82	71.82	-69.68	-467.16	2,695.86	4,460.07	4,402.18	57.89	77.042	
6,000.00	5,904.68	14,079.09	9,759.35	22.21	71.99	-69.25	-480.64	2,696.54	4,366.67	4,308.14	58.53	74.606	
6,100.00	6,002.60	14,160.77	9,760.14	22.59	73.03	-66.53	-562.22	2,700.46	4,273.35	4,213.62	59.73	71.544	
6,200.00	6,100.51	14,238.98	9,760.15	22.98	74.04	-63.83	-640.36	2,703.37	4,180.20	4,119.28	60.93	68.611	
6,300.00	6,198.43	14,249.84	9,760.09	23.36	74.17	-63.45	-651.22	2,703.69	4,087.13	4,025.52	61.61	66.337	
6,400.00	6,296.34	14,260.79	9,760.03	23.75	74.31	-63.06	-662.16	2,704.03	3,994.36	3,932.04	62.32	64.091	
6,500.00	6,394.26	14,271.81	9,759.98	24.14	74.46	-62.67	-673.17	2,704.37	3,901.91	3,838.85	63.06	61.874	
6,600.00	6,492.17	14,282.91	9,759.93	24.52	74.60	-62.27	-684.27	2,704.72	3,809.80	3,745.97	63.83	59.687	
6,700.00	6,590.09	14,302.00	9,759.86	24.91	74.84	-61.58	-703.35	2,705.34	3,718.06	3,653.37	64.69	57.472	
6,800.00	6,688.01	14,302.00	9,759.86	25.29	74.84	-61.58	-703.35	2,705.34	3,626.70	3,561.27	65.44	55.424	
6,900.00	6,785.92	14,302.00	9,759.86	25.68	74.84	-61.58	-703.35	2,705.34	3,535.81	3,469.60	66.21	53.402	
7,000.00	6,883.84	14,302.00	9,759.86	26.07	74.84	-61.58	-703.35	2,705.34	3,445.43	3,378.40	67.02	51.406	
7,100.00	6,981.75	14,325.94	9,759.83	26.45	75.15	-60.71	-727.28	2,706.20	3,355.42	3,287.35	68.07	49.291	
7,200.00	7,079.67	14,333.55	9,759.84	26.84	75.25	-60.43	-734.88	2,706.49	3,266.05	3,197.01	69.03	47.312	
7,300.00	7,177.58	14,341.34	9,759.86	27.23	75.35	-60.15	-742.66	2,706.81	3,177.27	3,107.23	70.04	45.366	
7,400.00	7,275.50	14,349.31	9,759.90	27.61	75.45	-59.86	-750.62	2,707.14	3,089.14	3,018.05	71.09	43.453	
7,500.00	7,373.41	14,357.46	9,759.95	28.00	75.56	-59.56	-758.77	2,707.50	3,001.72	2,929.52	72.20	41.576	
7,600.00	7,471.33	14,365.80	9,760.01	28.39	75.67	-59.25	-767.10	2,707.87	2,915.06	2,841.70	73.36	39.734	
7,700.00	7,569.25	14,374.34	9,760.09	28.77	75.78	-58.93	-775.63	2,708.28	2,829.24	2,754.65	74.59	37.930	
7,764.22	7,632.13	14,396.00	9,760.35	29.02	76.06	-58.12	-797.26	2,709.36	2,774.68	2,699.13	75.55	36.726	
7,800.00	7,667.21	14,396.00	9,760.35	29.16	76.06	-57.17	-797.26	2,709.36	2,744.44	2,668.45	76.00	36.113	
7,900.00	7,765.68	14,396.00	9,760.35	29.54	76.06	-54.70	-797.26	2,709.36	2,661.40	2,584.09	77.31	34.424	
8,000.00	7,864.70	14,396.00	9,760.35	29.91	76.06	-52.50	-797.26	2,709.36	2,580.76	2,502.02	78.74	32.777	
8,100.00	7,964.15	14,396.00	9,760.35	30.28	76.06	-50.55	-797.26	2,709.36	2,502.84	2,422.57	80.27	31.179	
8,200.00	8,063.90	14,406.45	9,760.50	30.63	76.19	-48.47	-807.70	2,709.92	2,427.98	2,345.96	82.02	29.602	
8,300.00	8,163.83	14,408.90	9,760.54	30.98	76.22	-46.88	-810.14	2,710.06	2,356.63	2,272.82	83.81	28.120	
8,350.17	8,214.00	14,409.57	9,760.55	31.14	76.23	85.98	-810.81	2,710.09	2,322.27	2,237.54	84.73	27.407	
8,400.00	8,263.77	14,411.22	9,760.58	31.31	76.25	-65.54	-812.45	2,710.19	2,288.22	2,202.55	85.67	26.708	
8,450.00	8,313.33	14,415.20	9,760.64	31.49	76.31	-69.91	-816.43	2,710.41	2,253.31	2,166.67	86.64	26.008	
8,500.00	8,362.13	14,421.54	9,760.75	31.69	76.39	-74.47	-822.76	2,710.78	2,217.88	2,130.27	87.61	25.315	
8,550.00	8,409.80	14,430.21	9,760.91	31.89	76.50	-79.15	-831.42	2,711.29	2,182.14	2,093.56	88.58	24.635	
8,600.00	8,455.99	14,446.00	9,761.22	32.09	76.71	-83.71	-847.17	2,712.28	2,146.33	2,056.74	89.59	23.958	
8,650.00	8,500.33	14,459.46	9,761.50	32.31	76.88	-88.40	-860.60	2,713.15	2,110.61	2,020.08	90.53	23.313	
8,700.00	8,542.50	14,483.84	9,762.01	32.53	77.20	-92.74	-884.92	2,714.72	2,075.16	1,983.62	91.54	22.669	
8,750.00	8,582.16	14,503.00	9,762.41	32.75	77.45	-97.14	-904.04	2,715.96	2,040.15	1,947.71	92.45	22.068	
8,800.00	8,619.02	14,503.00	9,762.41	32.97	77.45	-101.73	-904.04	2,715.96	2,006.09	1,913.00	93.09	21.550	
8,850.00	8,652.80	14,503.00	9,762.41	33.19	77.45	-105.93	-904.04	2,715.96	1,973.37	1,879.72	93.65	21.071	
8,900.00	8,683.24	14,503.00	9,762.41	33.42	77.45	-109.70	-904.04	2,715.96	1,942.33	1,848.20	94.13	20.634	
8,950.00	8,710.11	14,503.00	9,762.41	33.64	77.45	-113.03	-904.04	2,715.96	1,913.28	1,818.76	94.52	20.242	
9,000.00	8,733.20	14,503.00	9,762.41	33.86	77.45	-115.91	-904.04	2,715.96	1,886.54	1,791.74	94.80	19.900	
9,050.00	8,752.35	14,503.00	9,762.41	34.08	77.45	-118.36	-904.04	2,715.96	1,862.43	1,767.45	94.98	19.609	
9,100.00	8,767.39	14,503.00	9,762.41	34.29	77.45	-120.40	-904.04	2,715.96	1,841.22	1,746.18	95.04	19.373	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 55-MWD+HRGM

Rule Assigned:

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
9,100.17	8,767.43	14,503.00	9,762.41	34.29	77.45	-120.41	-904.04	2,715.96	1,841.15	1,746.11	95.04	19.372	
9,200.00	8,791.66	14,503.00	9,762.41	34.71	77.45	-121.31	-904.04	2,715.96	1,808.34	1,713.31	95.03	19.029	
9,300.00	8,812.57	14,503.00	9,762.41	35.13	77.45	-122.15	-904.04	2,715.96	1,788.91	1,693.95	94.96	18.839	
9,387.86	8,828.05	14,503.00	9,762.41	35.49	77.45	-122.83	-904.04	2,715.96	1,783.42	1,688.58	94.84	18.805	CC, ES, SF
9,400.00	8,829.97	14,503.00	9,762.41	35.54	77.45	-122.92	-904.04	2,715.96	1,783.52	1,688.71	94.82	18.810	
9,500.00	8,843.72	14,503.00	9,762.41	35.95	77.45	-123.61	-904.04	2,715.96	1,792.35	1,697.76	94.59	18.948	
9,600.00	8,853.72	14,503.00	9,762.41	36.33	77.45	-124.22	-904.04	2,715.96	1,815.11	1,720.82	94.29	19.250	
9,700.00	8,859.89	14,503.00	9,762.41	36.70	77.45	-124.78	-904.04	2,715.96	1,851.13	1,757.21	93.93	19.708	
9,800.00	8,862.18	14,503.00	9,762.41	37.05	77.45	-125.29	-904.04	2,715.96	1,899.39	1,805.87	93.52	20.310	
9,809.00	8,862.20	14,503.00	9,762.41	37.08	77.45	-125.34	-904.04	2,715.96	1,904.29	1,810.80	93.48	20.370	
9,900.00	8,862.20	14,503.00	9,762.41	37.39	77.45	-125.34	-904.04	2,715.96	1,955.77	1,862.68	93.09	21.010	
10,000.00	8,862.19	14,503.00	9,762.41	37.74	77.45	-125.34	-904.04	2,715.96	2,015.57	1,922.95	92.62	21.762	
10,100.00	8,862.19	14,503.00	9,762.41	38.10	77.45	-125.34	-904.04	2,715.96	2,078.47	1,986.34	92.13	22.561	
10,200.00	8,862.19	14,503.00	9,762.41	38.48	77.45	-125.34	-904.04	2,715.96	2,144.18	2,052.56	91.62	23.402	
10,300.00	8,862.19	14,503.00	9,762.41	38.86	77.45	-125.34	-904.04	2,715.96	2,212.47	2,121.35	91.11	24.283	
10,400.00	8,862.19	14,503.00	9,762.41	39.25	77.45	-125.34	-904.04	2,715.96	2,283.09	2,192.49	90.60	25.199	
10,500.00	8,862.18	14,503.00	9,762.41	39.66	77.45	-125.34	-904.04	2,715.96	2,355.84	2,265.75	90.10	26.148	
10,600.00	8,862.18	14,503.00	9,762.41	40.07	77.45	-125.34	-904.04	2,715.96	2,430.53	2,340.93	89.60	27.126	
10,700.00	8,862.18	14,503.00	9,762.41	40.49	77.45	-125.34	-904.04	2,715.96	2,506.99	2,417.87	89.12	28.130	
10,800.00	8,862.18	14,503.00	9,762.41	40.93	77.45	-125.34	-904.04	2,715.96	2,585.05	2,496.39	88.65	29.159	
10,900.00	8,862.18	14,503.00	9,762.41	41.37	77.45	-125.34	-904.04	2,715.96	2,664.58	2,576.37	88.20	30.210	
11,000.00	8,862.17	14,503.00	9,762.41	41.82	77.45	-125.34	-904.04	2,715.96	2,745.44	2,657.67	87.77	31.280	
11,100.00	8,862.17	14,503.00	9,762.41	42.28	77.45	-125.34	-904.04	2,715.96	2,827.53	2,740.18	87.35	32.369	
11,200.00	8,862.17	14,503.00	9,762.41	42.75	77.45	-125.34	-904.04	2,715.96	2,910.74	2,823.79	86.96	33.473	
11,300.00	8,862.17	14,503.00	9,762.41	43.22	77.45	-125.34	-904.04	2,715.96	2,994.98	2,908.40	86.58	34.592	
11,400.00	8,862.17	14,503.00	9,762.41	43.71	77.45	-125.34	-904.04	2,715.96	3,080.17	2,993.94	86.22	35.724	
11,500.00	8,862.16	14,503.00	9,762.41	44.20	77.45	-125.34	-904.04	2,715.96	3,166.21	3,080.33	85.88	36.868	
11,600.00	8,862.16	14,503.00	9,762.41	44.70	77.45	-125.34	-904.04	2,715.96	3,253.06	3,167.50	85.56	38.022	
11,700.00	8,862.16	14,503.00	9,762.41	45.20	77.45	-125.34	-904.04	2,715.96	3,340.64	3,255.39	85.25	39.186	
11,800.00	8,862.16	14,503.00	9,762.41	45.72	77.45	-125.34	-904.04	2,715.96	3,428.90	3,343.94	84.96	40.359	
11,900.00	8,862.16	14,503.00	9,762.41	46.24	77.45	-125.34	-904.04	2,715.96	3,517.79	3,433.11	84.69	41.539	
12,000.00	8,862.15	14,503.00	9,762.41	46.76	77.45	-125.34	-904.04	2,715.96	3,607.27	3,522.84	84.43	42.726	
12,100.00	8,862.15	14,503.00	9,762.41	47.29	77.45	-125.34	-904.04	2,715.96	3,697.28	3,613.09	84.18	43.919	
12,200.00	8,862.15	14,503.00	9,762.41	47.83	77.45	-125.34	-904.04	2,715.96	3,787.79	3,703.84	83.95	45.117	
12,300.00	8,862.15	14,503.00	9,762.41	48.38	77.45	-125.34	-904.04	2,715.96	3,878.77	3,795.03	83.74	46.321	
12,400.00	8,862.15	14,503.00	9,762.41	48.93	77.45	-125.34	-904.04	2,715.96	3,970.18	3,886.65	83.53	47.529	
12,500.00	8,862.14	14,503.00	9,762.41	49.48	77.45	-125.34	-904.04	2,715.96	4,062.00	3,978.66	83.34	48.740	
12,600.00	8,862.14	14,503.00	9,762.41	50.04	77.45	-125.34	-904.04	2,715.96	4,154.19	4,071.03	83.16	49.955	
12,700.00	8,862.14	14,503.00	9,762.41	50.61	77.45	-125.34	-904.04	2,715.96	4,246.74	4,163.75	82.99	51.173	
12,800.00	8,862.14	14,503.00	9,762.41	51.18	77.45	-125.34	-904.04	2,715.96	4,339.62	4,256.79	82.83	52.393	
12,900.00	8,862.14	14,503.00	9,762.41	51.76	77.45	-125.34	-904.04	2,715.96	4,432.81	4,350.13	82.68	53.616	
13,000.00	8,862.13	14,503.00	9,762.41	52.34	77.45	-125.34	-904.04	2,715.96	4,526.29	4,443.75	82.54	54.840	
13,100.00	8,862.13	14,503.00	9,762.41	52.92	77.45	-125.34	-904.04	2,715.96	4,620.04	4,537.64	82.40	56.066	
13,200.00	8,862.13	14,503.00	9,762.41	53.51	77.45	-125.34	-904.04	2,715.96	4,714.05	4,631.77	82.28	57.293	
13,300.00	8,862.13	14,503.00	9,762.41	54.10	77.45	-125.34	-904.04	2,715.96	4,808.30	4,726.14	82.16	58.522	
13,400.00	8,862.12	14,503.00	9,762.41	54.70	77.45	-125.34	-904.04	2,715.96	4,902.78	4,820.73	82.05	59.751	
13,500.00	8,862.12	14,503.00	9,762.41	55.30	77.45	-125.34	-904.04	2,715.96	4,997.47	4,915.52	81.95	60.980	
13,600.00	8,862.12	14,503.00	9,762.41	55.91	77.45	-125.34	-904.04	2,715.96	5,092.37	5,010.51	81.86	62.210	
13,700.00	8,862.12	14,503.00	9,762.41	56.52	77.45	-125.34	-904.04	2,715.96	5,187.46	5,105.69	81.77	63.440	
13,800.00	8,862.12	14,503.00	9,762.41	57.13	77.45	-125.34	-904.04	2,715.96	5,282.73	5,201.04	81.69	64.670	
13,900.00	8,862.11	14,503.00	9,762.41	57.75	77.45	-125.34	-904.04	2,715.96	5,378.17	5,296.56	81.61	65.900	
14,000.00	8,862.11	14,503.00	9,762.41	58.37	77.45	-125.34	-904.04	2,715.96	5,473.77	5,392.23	81.54	67.130	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 55-MWD+HRGM

Rule Assigned:

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
14,100.00	8,862.11	14,503.00	9,762.41	58.99	77.45	-125.34	-904.04	2,715.96	5,569.53	5,488.06	81.48	68.359	
14,200.00	8,862.11	14,503.00	9,762.41	59.62	77.45	-125.34	-904.04	2,715.96	5,665.44	5,584.02	81.42	69.587	
14,300.00	8,862.11	14,503.00	9,762.41	60.25	77.45	-125.34	-904.04	2,715.96	5,761.48	5,680.12	81.36	70.815	
14,400.00	8,862.10	14,503.00	9,762.41	60.88	77.45	-125.34	-904.04	2,715.96	5,857.66	5,776.35	81.31	72.042	
14,500.00	8,862.10	14,503.00	9,762.41	61.52	77.45	-125.34	-904.04	2,715.96	5,953.96	5,872.70	81.26	73.268	
14,600.00	8,862.10	14,503.00	9,762.41	62.16	77.45	-125.34	-904.04	2,715.96	6,050.38	5,969.16	81.22	74.493	
14,700.00	8,862.10	14,503.00	9,762.41	62.80	77.45	-125.34	-904.04	2,715.96	6,146.92	6,065.74	81.18	75.716	
14,800.00	8,862.10	14,503.00	9,762.41	63.44	77.45	-125.34	-904.04	2,715.96	6,243.57	6,162.42	81.15	76.939	
14,900.00	8,862.09	14,503.00	9,762.41	64.09	77.45	-125.34	-904.04	2,715.96	6,340.32	6,259.20	81.12	78.160	
15,000.00	8,862.09	14,503.00	9,762.41	64.74	77.45	-125.34	-904.04	2,715.96	6,437.17	6,356.07	81.09	79.380	
15,100.00	8,862.09	14,503.00	9,762.41	65.39	77.45	-125.34	-904.04	2,715.96	6,534.11	6,453.04	81.07	80.598	
15,200.00	8,862.09	14,503.00	9,762.41	66.05	77.45	-125.34	-904.04	2,715.96	6,631.15	6,550.09	81.05	81.815	
15,300.00	8,862.09	14,503.00	9,762.41	66.70	77.45	-125.34	-904.04	2,715.96	6,728.27	6,647.23	81.03	83.030	
15,400.00	8,862.08	14,503.00	9,762.41	67.36	77.45	-125.34	-904.04	2,715.96	6,825.47	6,744.45	81.02	84.243	
15,500.00	8,862.08	14,503.00	9,762.41	68.02	77.45	-125.34	-904.04	2,715.96	6,922.76	6,841.75	81.01	85.454	
15,600.00	8,862.08	14,503.00	9,762.41	68.69	77.45	-125.34	-904.04	2,715.96	7,020.12	6,939.11	81.00	86.664	
15,700.00	8,862.08	14,503.00	9,762.41	69.35	77.45	-125.34	-904.04	2,715.96	7,117.55	7,036.55	81.00	87.872	
15,800.00	8,862.08	14,503.00	9,762.41	70.02	77.45	-125.34	-904.04	2,715.96	7,215.06	7,134.06	81.00	89.078	
15,900.00	8,862.07	14,503.00	9,762.41	70.69	77.45	-125.34	-904.04	2,715.96	7,312.63	7,231.63	81.00	90.282	
16,000.00	8,862.07	14,503.00	9,762.41	71.36	77.45	-125.34	-904.04	2,715.96	7,410.26	7,329.26	81.00	91.484	
16,100.00	8,862.07	14,503.00	9,762.41	72.03	77.45	-125.34	-904.04	2,715.96	7,507.96	7,426.96	81.01	92.683	
16,200.00	8,862.07	14,503.00	9,762.41	72.71	77.45	-125.34	-904.04	2,715.96	7,605.72	7,524.71	81.01	93.881	
16,300.00	8,862.07	14,503.00	9,762.41	73.38	77.45	-125.34	-904.04	2,715.96	7,703.54	7,622.51	81.02	95.076	
16,400.00	8,862.06	14,503.00	9,762.41	74.06	77.45	-125.34	-904.04	2,715.96	7,801.41	7,720.37	81.04	96.269	
16,500.00	8,862.06	14,503.00	9,762.41	74.74	77.45	-125.34	-904.04	2,715.96	7,899.33	7,818.28	81.05	97.460	
16,600.00	8,862.06	14,503.00	9,762.41	75.42	77.45	-125.34	-904.04	2,715.96	7,997.31	7,916.24	81.07	98.649	
16,700.00	8,862.06	14,503.00	9,762.41	76.10	77.45	-125.34	-904.04	2,715.96	8,095.34	8,014.25	81.09	99.835	
16,800.00	8,862.06	14,503.00	9,762.41	76.79	77.45	-125.34	-904.04	2,715.96	8,193.41	8,112.30	81.11	101.019	
16,900.00	8,862.05	14,503.00	9,762.41	77.47	77.45	-125.34	-904.04	2,715.96	8,291.53	8,210.40	81.13	102.200	
17,000.00	8,862.05	14,503.00	9,762.41	78.16	77.45	-125.34	-904.04	2,715.96	8,389.69	8,308.54	81.15	103.379	
17,100.00	8,862.05	14,503.00	9,762.41	78.85	77.45	-125.34	-904.04	2,715.96	8,487.90	8,406.72	81.18	104.556	
17,200.00	8,862.05	14,503.00	9,762.41	79.54	77.45	-125.34	-904.04	2,715.96	8,586.15	8,504.94	81.21	105.730	
17,300.00	8,862.05	14,503.00	9,762.41	80.23	77.45	-125.34	-904.04	2,715.96	8,684.43	8,603.20	81.24	106.901	
17,400.00	8,862.04	14,503.00	9,762.41	80.92	77.45	-125.34	-904.04	2,715.96	8,782.76	8,701.49	81.27	108.070	
17,500.00	8,862.04	14,503.00	9,762.41	81.62	77.45	-125.34	-904.04	2,715.96	8,881.13	8,799.82	81.30	109.237	
17,600.00	8,862.04	14,503.00	9,762.41	82.31	77.45	-125.34	-904.04	2,715.96	8,979.53	8,898.19	81.34	110.400	
17,700.00	8,862.04	14,503.00	9,762.41	83.01	77.45	-125.34	-904.04	2,715.96	9,077.96	8,996.59	81.37	111.561	
17,800.00	8,862.04	14,503.00	9,762.41	83.71	77.45	-125.34	-904.04	2,715.96	9,176.43	9,095.02	81.41	112.720	
17,900.00	8,862.03	14,503.00	9,762.41	84.41	77.45	-125.34	-904.04	2,715.96	9,274.93	9,193.48	81.45	113.875	
18,000.00	8,862.03	14,503.00	9,762.41	85.11	77.45	-125.34	-904.04	2,715.96	9,373.47	9,291.98	81.49	115.028	
18,100.00	8,862.03	14,503.00	9,762.41	85.81	77.45	-125.34	-904.04	2,715.96	9,472.03	9,390.50	81.53	116.178	
18,200.00	8,862.03	14,503.00	9,762.41	86.51	77.45	-125.34	-904.04	2,715.96	9,570.62	9,489.05	81.57	117.326	
18,300.00	8,862.03	14,503.00	9,762.41	87.21	77.45	-125.34	-904.04	2,715.96	9,669.25	9,587.63	81.62	118.471	
18,400.00	8,862.02	14,503.00	9,762.41	87.92	77.45	-125.34	-904.04	2,715.96	9,767.90	9,686.23	81.66	119.612	
18,500.00	8,862.02	14,503.00	9,762.41	88.62	77.45	-125.34	-904.04	2,715.96	9,866.58	9,784.87	81.71	120.751	
18,600.00	8,862.02	14,503.00	9,762.41	89.33	77.45	-125.34	-904.04	2,715.96	9,965.28	9,883.52	81.76	121.887	

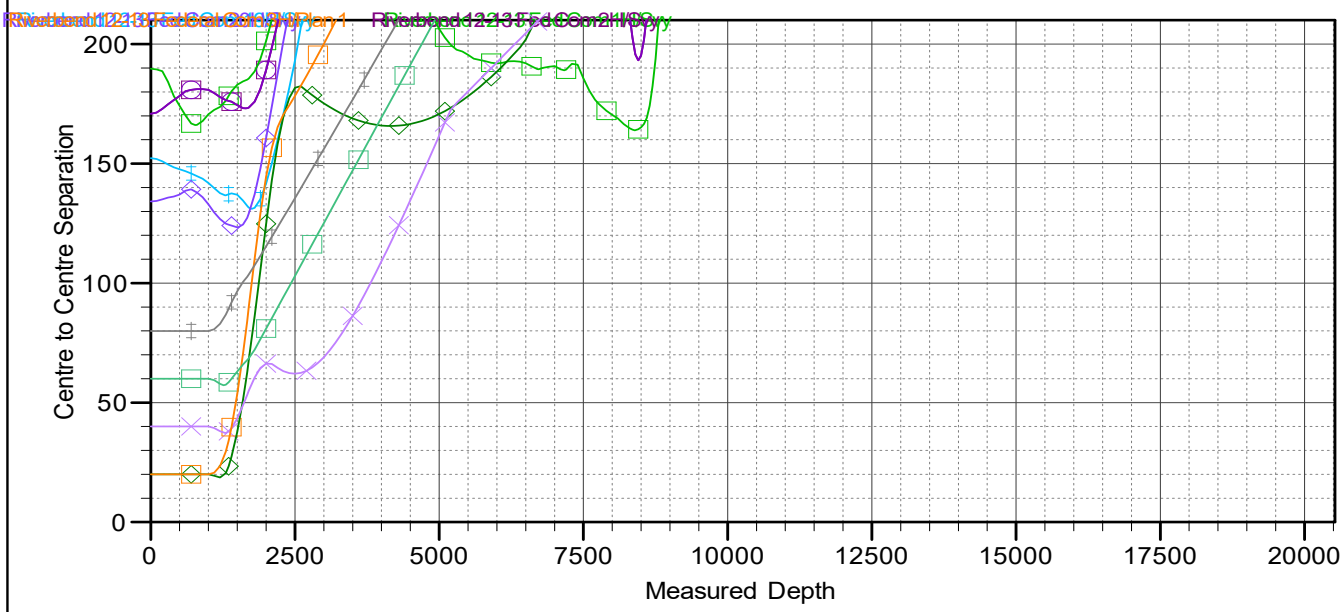
Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 2934' GL + 23 @ 2957.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Riverbend 12-13 Federal Com 5H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.16°

Ladder Plot



LEGEND

- Riverbend 12-13 Fed Com 1H, OH, Svy V0
- Riverbend 12-13 Fed Com 31H, OH, Svy V0
- Riverbend 12-13 Fed Com 30H, OH, Svy V0
- Riverbend 12-13 Fed Com 19H, OH, Svy V0
- Riverbend 12-13 Fed Com 2H, OH, Svy V0
- Riverbend 12-13 Fed Com 2H, ST01, ST01 Svy V0
- Riverbend 12-13 Fed Com 20H, OH, Svy V0
- Riverbend 12-13 Fed Com 29H, OH, Svy V0
- Whistle Pig 1 SB Fee 5H, OH, Svy V0
- Whistle Pig 1 WA Fee 4, OH, Svy V0
- Malaga 13 DM Fed Com 1H, OH, Svy V0
- Whistle Pig 1 WXY Fee 9H, OH, Svy V0
- Riverbend 12-13 Federal Com 4H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 6H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 3H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 7H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 8H, OH, Plan 1 V0

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 2934' GL + 23 @ 2957.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Riverbend 12-13 Federal Com 5H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.16°

Separation Factor Plot



COTERRA

Coterra Energy

Site: Riverbend 12-13 Federal Com
Well: Riverbend 12-13 Federal Com 5H
Wellbore: OH
Design: Plan 1
Rig:

PROJECT DETAILS: Eddy County, NM (NAD 83)

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

total



Azimuths to Grid North
True North: -0.16°
Magnetic North: 6.26°

Magnetic Field
Strength: 47172.8nT
Dip Angle: 59.67°
Date: 8/19/2025
Model: HDGM2025

SHL

RKB Elevation: 2934' GL + 23 @ 2957.00usft

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.00	0.00	420301.82	631488.49	32.1551528	-104.0420214	

Formations

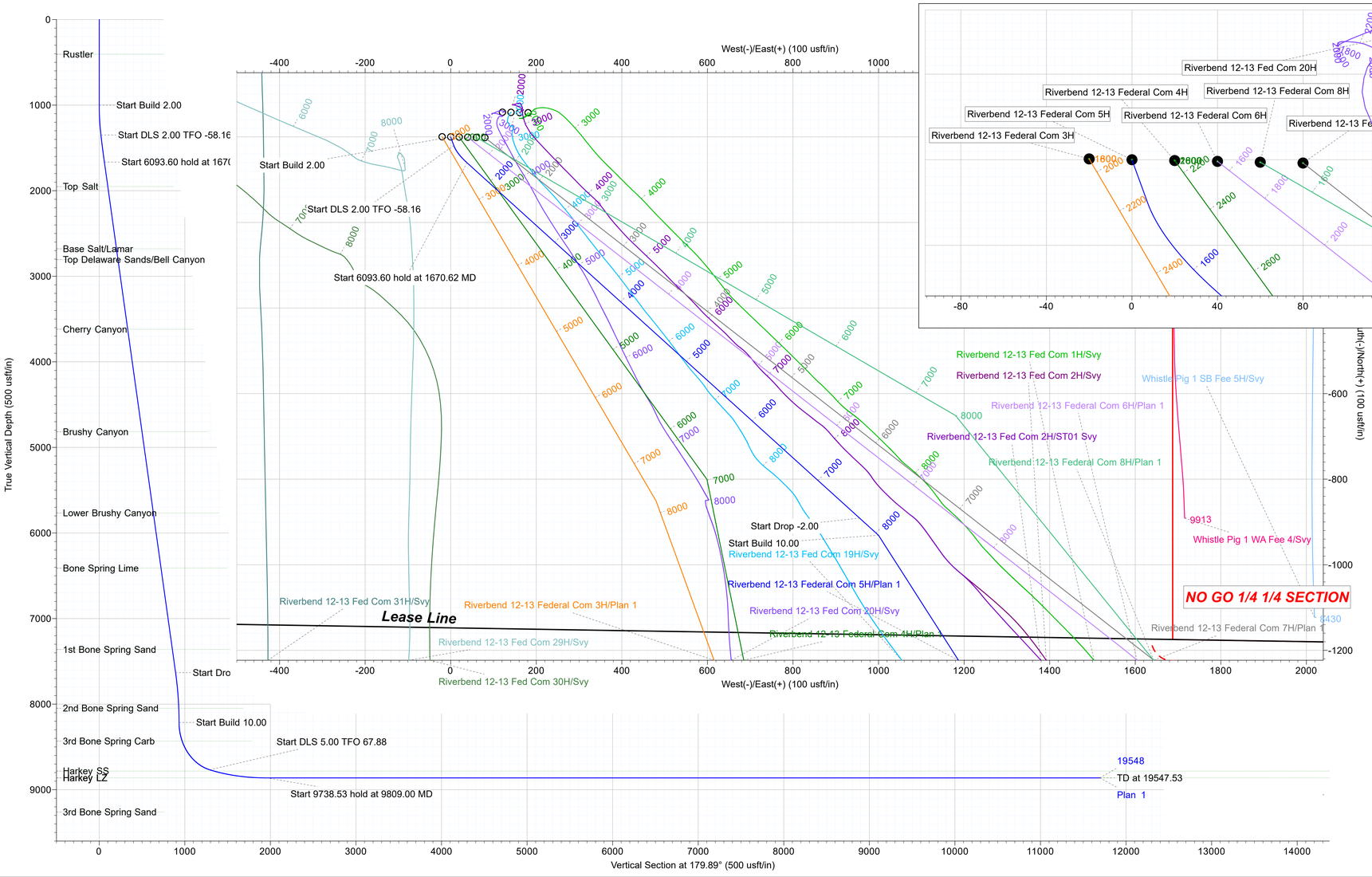
TVDPath	MDPath	Formation
407.00	407.00	Rustler
1952.00	1963.17	Top Salt
2679.00	2705.65	Base Salt/Lamar
2806.00	2835.36	Top Delaware Sands/Bell Canyon
3619.00	3665.66	Cherry Canyon
4817.00	4889.16	Brushy Canyon
5766.00	5858.37	Lower Brushy Canyon
6411.00	6517.10	Bone Spring Lime
7361.00	7487.32	1st Bone Spring Sand
8048.00	8184.08	2nd Bone Spring Sand
8432.00	8573.81	3rd Bone Spring Carb
8782.00	9158.56	Harkey SS
8862.00	9777.10	Harkey LZ

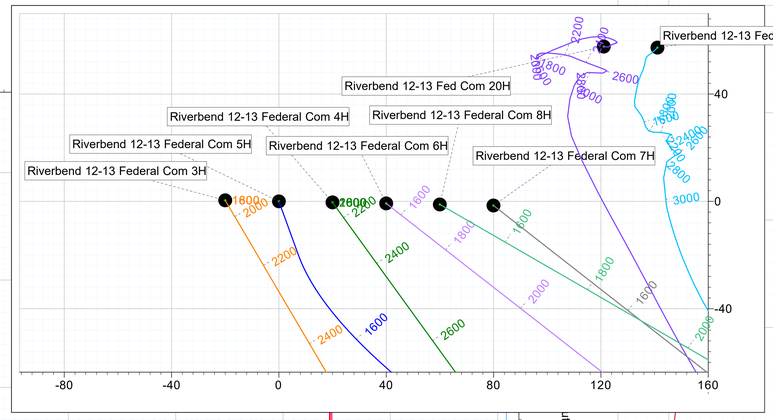
SECTION DETAILS

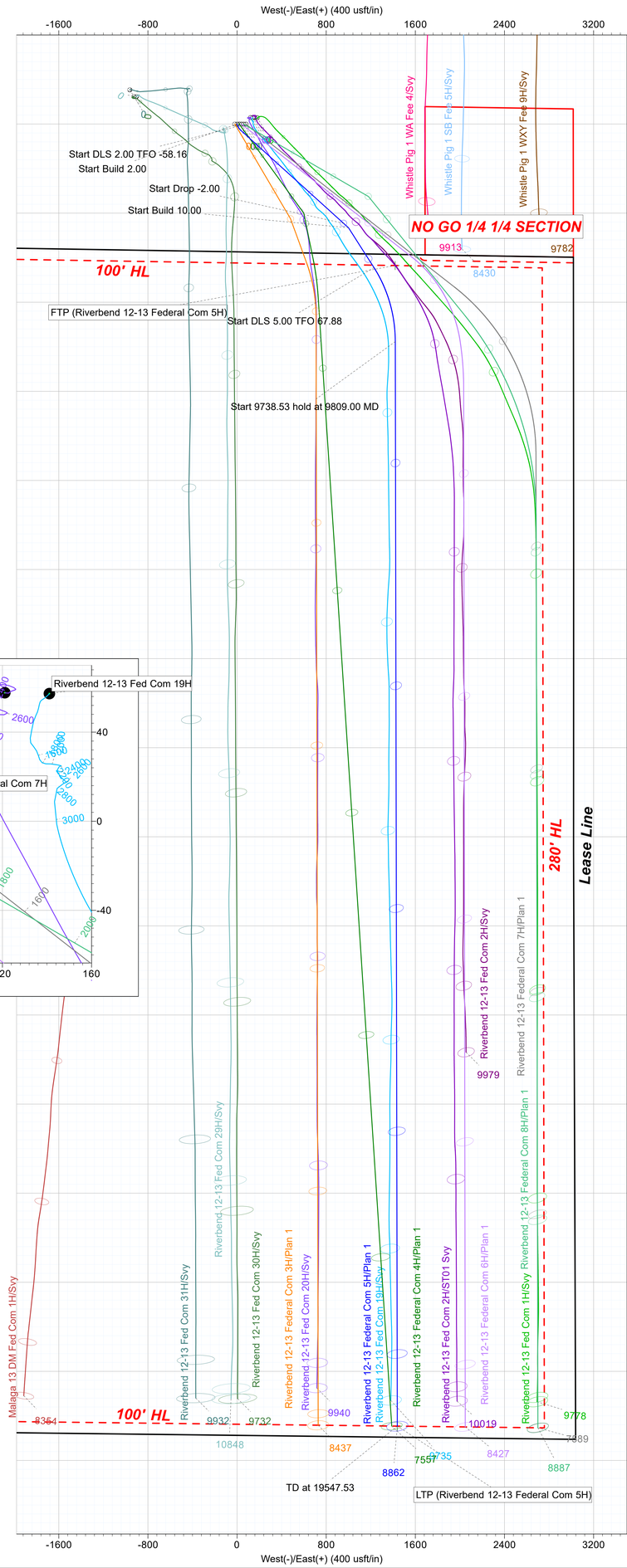
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
1350.00	7.00	160.00	1349.13	-20.07	7.30	2.00	160.00	20.08	
1670.62	11.72	132.15	1665.55	-60.32	38.16	2.00	-58.16	60.39	
7764.22	11.72	132.15	7632.13	-890.93	955.73	0.00	0.00	892.76	
8350.17	0.00	0.00	8214.00	-931.00	1000.00	2.00	180.00	932.92	
9100.17	75.00	147.40	8767.43	-1288.76	1228.80	10.00	147.40	1291.12	
9809.00	90.00	179.89	8862.20	-1952.89	1420.04	5.00	67.88	1955.61	
19547.53	90.00	179.89	8862.00	-11691.40	1438.18	0.00	0.00	11694.14	

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP (Riverbend 12-13 Federal Com 5H)	0.00	-1270.20	1418.83	419031.62	632907.32	32.1516505	-104.0374480
LTP (Riverbend 12-13 Federal Com 5H)	0.00	-11691.40	1438.18	408610.42	632926.67	32.1230034	-104.0374779







1. Geological Formations

TVD of target 8,862
MD at TD 19,548

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	407	N/A	
Top Salt	1952	N/A	
Base Salt/Lamar	2679	N/A	
Top Delaware Sands/Bell Canyon	2806	N/A	
Cherry Canyon	3619	N/A	
Brushy Canyon	4817	N/A	
Lower Brushy Canyon	5766	N/A	
Bone Spring Lime	6411	N/A	
1st Bone Spring Sand	7361	Hydrocarbons	
2nd Bone Spring Sand	8048	Hydrocarbons	
3rd Bone Spring Carb	8432	Hydrocarbons	
3rd Bone Spring Carb - Harkey	8782	Hydrocarbons	
3rd Bone Spring Carb - Harkey - Target	8862	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	1190	1190	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.44	3.36	5.64
12 1/4	0	2500	2477	9-5/8"	36.00	J-55	LT&C	1.57	2.73	5.08
8 3/4	0	8350								
8 3/4	8350	9809	8862	7"	26.00	P-110	BT&C	1.42	2.28	62.35
6	8350	19548	8862	4-1/2"	11.60	HCP-110	BT&C	2.02	2.45	61.79
					BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

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

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

3. Cementing Program

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	577	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	154	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	441	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	146	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	377	10.30	3.64	22.18	12	Lead: Tuned Light + LCM
	242	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Completion System	813	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	59
Production	2200	25
Completion System	8500	10

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

4. Pressure Control Equipment

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

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	10M	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		
8 3/4	13 5/8	10M	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		
6	13 5/8	10M	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		

	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.	
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1190'	Fresh Water	7.83 - 8.33	28	N/C
1190' to 2500'	Brine Water	9.50 - 10.00	30-32	N/C
2500' to 9809'	Cut Brine or OBM	9.00 - 9.50	27-70	N/C
9809' to 19548'	OBM	9.00 - 9.50	50-70	N/C

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

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

6. Logging and Testing Procedures

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

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	4377 psi
Abnormal Temperature	No

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

8. Other Facets of Operation

9. Wellhead

10M
1. The multi-bowl wellhead will be installed by a vendor representative. A copy of the installation instructions has been sent to the BLM field office.
2. A packoff will be installed after running and cementing the production casing. This packoff will be tested to 10K psi.

BOPE Additional Information & Testing
1. After running the first string of casing, a 10M BOP/BOPE system with 10M annular will be installed. BOPs will be tested according to Onshore Order #2. BOPE will be tested to full rated pressure (10K for all BOPE). For the low test, the system will be tested to 250 psi.
2. All BOP equipment will be tested utilizing a conventional test plug.
3. A remote kill line is included in the BOPE system
4. All casing strings will be tested per Onshore Order #2, to 0.22 psi/ft or 1,500 psi, whichever is greater, not to exceed 70% of casing burst.
5. If well conditions dictate, conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

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

Well Control Plan

Warning Signs of a Kick

If a kick is ever suspected, perform flow check.

While Drilling:

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

While Tripping:

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

While Out of the Hole:

1. Flow
2. Pit gain

Well Control Procedures with Diverter

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

If rotating head is installed:

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

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

If rotating head is not installed:

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

Well Control Procedures

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

General Well Control

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

Hard Shut-In

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

Flow Check when on Bottom

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

Shutting in while Drilling

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

Flow Check while Tripping

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

Shutting in while Tripping

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

Shutting in while Out of Hole

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

Information to Record while Shut-In

1. Shut in drill pipe pressure every 5 minutes

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

H2S with Annular Diverter:

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

H2S with BOP's:

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

Procedure for Closing Blind Rams

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

Procedure for Opening Blind Rams

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

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

BOP Drills

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

Choke Manifold Freeze Prevention

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

Coterra Energy

Eddy County, NM (NAD 83)
Riverbend 12-13 Federal Com
Riverbend 12-13 Federal Com 5H

OH

Plan: Plan 1

Total Directional
"Driven by TOTAL performance"
total

Standard Plan Report

24 June, 2025

Total Report Version 1.70

COMPASS 5000.16 Build 97

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Project Eddy County, NM (NAD 83)

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

Site Riverbend 12-13 Federal Com

Site Position:		**Northing:**	420,302.20 usft	**Latitude:**	32.1551540
From:	Map	**Easting:**	631,468.50 usft	**Longitude:**	-104.0420860
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well Riverbend 12-13 Federal Com 5H

Well Position	**+N/-S**	0.00 usft	**Northing:**	420,301.82 usft	**Latitude:**	32.1551528
	+E/-W	0.00 usft	**Easting:**	631,488.49 usft	**Longitude:**	-104.0420214
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	2,934.00 usft
Grid Convergence:		0.16 °				

Wellbore OH

Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM2025	8/19/2025	6.42	59.67	47,172.80000000

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	179.89

Survey Tool Program **Date** 6/24/2025

From (usft)	**To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Description**
0.00	19,547.53	Plan 1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Plan Summary

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,350.00	7.00	160.00	1,349.13	-20.07	7.30	2.00	2.00	0.00	160.00	
1,670.62	11.72	132.15	1,665.55	-60.32	38.16	2.00	1.47	-8.69	-58.16	
7,764.22	11.72	132.15	7,632.13	-890.93	955.73	0.00	0.00	0.00	0.00	
8,350.17	0.00	0.00	8,214.00	-931.00	1,000.00	2.00	-2.00	0.00	180.00	
9,100.17	75.00	147.40	8,767.43	-1,288.76	1,228.80	10.00	10.00	0.00	147.40	
9,809.00	90.00	179.89	8,862.20	-1,952.89	1,420.04	5.00	2.12	4.58	67.88	
19,547.53	90.00	179.89	8,862.00	-11,691.40	1,438.18	0.00	0.00	0.00	0.00	

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
407.00	0.00	0.00	407.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
Rustler													
500.00	0.00	0.00	500.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	420,301.82	631,488.49	32.1551528	-104.0420214	0.00	0.00	0.00	0.00
1,100.00	2.00	160.00	1,099.98	-1.64	0.60	420,300.18	631,489.09	32.1551483	-104.0420195	1.64	2.00	2.00	0.00
1,200.00	4.00	160.00	1,199.84	-6.56	2.39	420,295.26	631,490.88	32.1551348	-104.0420137	6.56	2.00	2.00	0.00
1,300.00	6.00	160.00	1,299.45	-14.75	5.37	420,287.07	631,493.86	32.1551122	-104.0420042	14.76	2.00	2.00	0.00
1,350.00	7.00	160.00	1,349.13	-20.07	7.30	420,281.75	631,495.79	32.1550976	-104.0419980	20.08	2.00	2.00	0.00
1,400.00	7.58	153.54	1,398.73	-25.88	9.81	420,275.94	631,498.30	32.1550816	-104.0419899	25.90	2.00	1.15	-12.92
1,500.00	8.95	143.40	1,497.69	-38.03	17.39	420,263.79	631,505.88	32.1550481	-104.0419655	38.06	2.00	1.38	-10.15
1,600.00	10.53	136.10	1,596.25	-50.86	28.37	420,250.96	631,516.86	32.1550128	-104.0419302	50.91	2.00	1.58	-7.30
1,670.62	11.72	132.15	1,665.55	-60.32	38.16	420,241.50	631,526.65	32.1549867	-104.0418986	60.39	2.00	1.69	-5.58
1,700.00	11.72	132.15	1,694.31	-64.32	42.58	420,237.50	631,531.07	32.1549757	-104.0418844	64.40	0.00	0.00	0.00
1,800.00	11.72	132.15	1,792.23	-77.95	57.64	420,223.87	631,546.13	32.1549381	-104.0418358	78.06	0.00	0.00	0.00
1,900.00	11.72	132.15	1,890.14	-91.58	72.70	420,210.24	631,561.19	32.1549005	-104.0417873	91.72	0.00	0.00	0.00
1,963.17	11.72	132.15	1,952.00	-100.20	82.21	420,201.62	631,570.70	32.1548768	-104.0417566	100.35	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Top Salt													
2,000.00	11.72	132.15	1,988.06	-105.22	87.75	420,196.60	631,576.24	32.1548629	-104.0417388	105.38	0.00	0.00	0.00
2,100.00	11.72	132.15	2,085.97	-118.85	102.81	420,182.97	631,591.30	32.1548253	-104.0416902	119.04	0.00	0.00	0.00
2,200.00	11.72	132.15	2,183.89	-132.48	117.87	420,169.34	631,606.36	32.1547878	-104.0416417	132.70	0.00	0.00	0.00
2,300.00	11.72	132.15	2,281.80	-146.11	132.93	420,155.71	631,621.42	32.1547502	-104.0415931	146.36	0.00	0.00	0.00
2,400.00	11.72	132.15	2,379.72	-159.74	147.99	420,142.08	631,636.48	32.1547126	-104.0415446	160.02	0.00	0.00	0.00
2,500.00	11.72	132.15	2,477.64	-173.37	163.04	420,128.45	631,651.53	32.1546750	-104.0414961	173.68	0.00	0.00	0.00
2,600.00	11.72	132.15	2,575.55	-187.00	178.10	420,114.82	631,666.59	32.1546374	-104.0414475	187.34	0.00	0.00	0.00
2,700.00	11.72	132.15	2,673.47	-200.63	193.16	420,101.19	631,681.65	32.1545998	-104.0413990	201.00	0.00	0.00	0.00
2,705.65	11.72	132.15	2,679.00	-201.40	194.01	420,100.42	631,682.50	32.1545977	-104.0413963	201.77	0.00	0.00	0.00
Base Salt/Lamar													
2,800.00	11.72	132.15	2,771.38	-214.26	208.22	420,087.56	631,696.71	32.1545623	-104.0413505	214.66	0.00	0.00	0.00
2,835.35	11.72	132.15	2,806.00	-219.08	213.54	420,082.74	631,702.03	32.1545490	-104.0413333	219.49	0.00	0.00	0.00
Top Delaware Sands/Bell Canyon													
2,900.00	11.72	132.15	2,869.30	-227.89	223.28	420,073.93	631,711.77	32.1545247	-104.0413019	228.32	0.00	0.00	0.00
3,000.00	11.72	132.15	2,967.21	-241.52	238.33	420,060.30	631,726.82	32.1544871	-104.0412534	241.98	0.00	0.00	0.00
3,100.00	11.72	132.15	3,065.13	-255.15	253.39	420,046.67	631,741.88	32.1544495	-104.0412048	255.64	0.00	0.00	0.00
3,200.00	11.72	132.15	3,163.05	-268.78	268.45	420,033.04	631,756.94	32.1544119	-104.0411563	269.30	0.00	0.00	0.00
3,300.00	11.72	132.15	3,260.96	-282.42	283.51	420,019.40	631,772.00	32.1543743	-104.0411078	282.96	0.00	0.00	0.00
3,400.00	11.72	132.15	3,358.88	-296.05	298.57	420,005.77	631,787.06	32.1543368	-104.0410592	296.62	0.00	0.00	0.00
3,500.00	11.72	132.15	3,456.79	-309.68	313.62	419,992.14	631,802.11	32.1542992	-104.0410107	310.28	0.00	0.00	0.00
3,600.00	11.72	132.15	3,554.71	-323.31	328.68	419,978.51	631,817.17	32.1542616	-104.0409622	323.94	0.00	0.00	0.00
3,665.66	11.72	132.15	3,619.00	-332.26	338.57	419,969.56	631,827.06	32.1542369	-104.0409303	332.91	0.00	0.00	0.00
Cherry Canyon													
3,700.00	11.72	132.15	3,652.62	-336.94	343.74	419,964.88	631,832.23	32.1542240	-104.0409136	337.60	0.00	0.00	0.00
3,800.00	11.72	132.15	3,750.54	-350.57	358.80	419,951.25	631,847.29	32.1541864	-104.0408651	351.26	0.00	0.00	0.00
3,900.00	11.72	132.15	3,848.45	-364.20	373.86	419,937.62	631,862.35	32.1541489	-104.0408165	364.92	0.00	0.00	0.00
4,000.00	11.72	132.15	3,946.37	-377.83	388.91	419,923.99	631,877.40	32.1541113	-104.0407680	378.58	0.00	0.00	0.00
4,100.00	11.72	132.15	4,044.29	-391.46	403.97	419,910.36	631,892.46	32.1540737	-104.0407195	392.24	0.00	0.00	0.00
4,200.00	11.72	132.15	4,142.20	-405.09	419.03	419,896.73	631,907.52	32.1540361	-104.0406709	405.90	0.00	0.00	0.00
4,300.00	11.72	132.15	4,240.12	-418.72	434.09	419,883.10	631,922.58	32.1539985	-104.0406224	419.56	0.00	0.00	0.00
4,400.00	11.72	132.15	4,338.03	-432.35	449.15	419,869.47	631,937.64	32.1539609	-104.0405739	433.22	0.00	0.00	0.00
4,500.00	11.72	132.15	4,435.95	-445.99	464.20	419,855.83	631,952.69	32.1539234	-104.0405253	446.88	0.00	0.00	0.00
4,600.00	11.72	132.15	4,533.86	-459.62	479.26	419,842.20	631,967.75	32.1538858	-104.0404768	460.54	0.00	0.00	0.00
4,700.00	11.72	132.15	4,631.78	-473.25	494.32	419,828.57	631,982.81	32.1538482	-104.0404282	474.20	0.00	0.00	0.00
4,800.00	11.72	132.15	4,729.69	-486.88	509.38	419,814.94	631,997.87	32.1538106	-104.0403797	487.86	0.00	0.00	0.00
4,889.16	11.72	132.15	4,817.00	-499.03	522.80	419,802.79	632,011.29	32.1537771	-104.0403364	500.03	0.00	0.00	0.00
Brushy Canyon													

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.00	11.72	132.15	4,827.61	-500.51	524.44	419,801.31	632,012.93	32.1537730	-104.0403312	501.51	0.00	0.00	0.00
5,000.00	11.72	132.15	4,925.53	-514.14	539.49	419,787.68	632,027.98	32.1537355	-104.0402826	515.17	0.00	0.00	0.00
5,100.00	11.72	132.15	5,023.44	-527.77	554.55	419,774.05	632,043.04	32.1536979	-104.0402341	528.83	0.00	0.00	0.00
5,200.00	11.72	132.15	5,121.36	-541.40	569.61	419,760.42	632,058.10	32.1536603	-104.0401856	542.49	0.00	0.00	0.00
5,300.00	11.72	132.15	5,219.27	-555.03	584.67	419,746.79	632,073.16	32.1536227	-104.0401370	556.15	0.00	0.00	0.00
5,400.00	11.72	132.15	5,317.19	-568.66	599.73	419,733.16	632,088.22	32.1535851	-104.0400885	569.81	0.00	0.00	0.00
5,500.00	11.72	132.15	5,415.10	-582.29	614.78	419,719.53	632,103.27	32.1535475	-104.0400400	583.47	0.00	0.00	0.00
5,600.00	11.72	132.15	5,513.02	-595.92	629.84	419,705.90	632,118.33	32.1535100	-104.0399914	597.13	0.00	0.00	0.00
5,700.00	11.72	132.15	5,610.93	-609.56	644.90	419,692.26	632,133.39	32.1534724	-104.0399429	610.79	0.00	0.00	0.00
5,800.00	11.72	132.15	5,708.85	-623.19	659.96	419,678.63	632,148.45	32.1534348	-104.0398943	624.45	0.00	0.00	0.00
5,858.37	11.72	132.15	5,766.00	-631.14	668.75	419,670.68	632,157.24	32.1534129	-104.0398660	632.42	0.00	0.00	0.00
Lower Brushy Canyon													
5,900.00	11.72	132.15	5,806.77	-636.82	675.02	419,665.00	632,163.51	32.1533972	-104.0398458	638.11	0.00	0.00	0.00
6,000.00	11.72	132.15	5,904.68	-650.45	690.07	419,651.37	632,178.56	32.1533596	-104.0397973	651.77	0.00	0.00	0.00
6,100.00	11.72	132.15	6,002.60	-664.08	705.13	419,637.74	632,193.62	32.1533220	-104.0397487	665.43	0.00	0.00	0.00
6,200.00	11.72	132.15	6,100.51	-677.71	720.19	419,624.11	632,208.68	32.1532845	-104.0397002	679.09	0.00	0.00	0.00
6,300.00	11.72	132.15	6,198.43	-691.34	735.25	419,610.48	632,223.74	32.1532469	-104.0396517	692.75	0.00	0.00	0.00
6,400.00	11.72	132.15	6,296.34	-704.97	750.31	419,596.85	632,238.80	32.1532093	-104.0396031	706.41	0.00	0.00	0.00
6,500.00	11.72	132.15	6,394.26	-718.60	765.36	419,583.22	632,253.85	32.1531717	-104.0395546	720.07	0.00	0.00	0.00
6,517.10	11.72	132.15	6,411.00	-720.93	767.94	419,580.89	632,256.43	32.1531653	-104.0395463	722.41	0.00	0.00	0.00
Bone Spring Lime													
6,600.00	11.72	132.15	6,492.17	-732.23	780.42	419,569.59	632,268.91	32.1531341	-104.0395061	733.73	0.00	0.00	0.00
6,700.00	11.72	132.15	6,590.09	-745.86	795.48	419,555.96	632,283.97	32.1530965	-104.0394575	747.39	0.00	0.00	0.00
6,800.00	11.72	132.15	6,688.01	-759.49	810.54	419,542.33	632,299.03	32.1530590	-104.0394090	761.05	0.00	0.00	0.00
6,900.00	11.72	132.15	6,785.92	-773.12	825.60	419,528.70	632,314.09	32.1530214	-104.0393604	774.71	0.00	0.00	0.00
7,000.00	11.72	132.15	6,883.84	-786.76	840.65	419,515.06	632,329.14	32.1529838	-104.0393119	788.37	0.00	0.00	0.00
7,100.00	11.72	132.15	6,981.75	-800.39	855.71	419,501.43	632,344.20	32.1529462	-104.0392634	802.03	0.00	0.00	0.00
7,200.00	11.72	132.15	7,079.67	-814.02	870.77	419,487.80	632,359.26	32.1529086	-104.0392148	815.69	0.00	0.00	0.00
7,300.00	11.72	132.15	7,177.58	-827.65	885.83	419,474.17	632,374.32	32.1528711	-104.0391663	829.35	0.00	0.00	0.00
7,400.00	11.72	132.15	7,275.50	-841.28	900.89	419,460.54	632,389.38	32.1528335	-104.0391178	843.01	0.00	0.00	0.00
7,487.32	11.72	132.15	7,361.00	-853.18	914.03	419,448.64	632,402.52	32.1528006	-104.0390754	854.93	0.00	0.00	0.00
1st Bone Spring Sand													
7,500.00	11.72	132.15	7,373.41	-854.91	915.94	419,446.91	632,404.43	32.1527959	-104.0390692	856.67	0.00	0.00	0.00
7,600.00	11.72	132.15	7,471.33	-868.54	931.00	419,433.28	632,419.49	32.1527583	-104.0390207	870.33	0.00	0.00	0.00
7,700.00	11.72	132.15	7,569.25	-882.17	946.06	419,419.65	632,434.55	32.1527207	-104.0389722	883.99	0.00	0.00	0.00
7,764.22	11.72	132.15	7,632.13	-890.93	955.73	419,410.89	632,444.22	32.1526966	-104.0389410	892.76	0.00	0.00	0.00
7,800.00	11.00	132.15	7,667.21	-895.66	960.95	419,406.16	632,449.44	32.1526835	-104.0389241	897.50	2.00	-2.00	0.00
7,900.00	9.00	132.15	7,765.68	-907.31	973.83	419,394.51	632,462.32	32.1526514	-104.0388826	909.18	2.00	-2.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,000.00	7.00	132.15	7,864.70	-916.66	984.15	419,385.16	632,472.64	32.1526256	-104.0388494	918.54	2.00	-2.00	0.00
8,100.00	5.00	132.15	7,964.15	-923.67	991.91	419,378.15	632,480.40	32.1526063	-104.0388244	925.58	2.00	-2.00	0.00
8,184.08	3.32	132.15	8,048.00	-927.77	996.43	419,374.05	632,484.92	32.1525950	-104.0388098	929.68	2.00	-2.00	0.00
2nd Bone Spring Sand													
8,200.00	3.00	132.15	8,063.90	-928.36	997.08	419,373.46	632,485.57	32.1525934	-104.0388077	930.27	2.00	-2.00	0.00
8,300.00	1.00	132.15	8,163.83	-930.71	999.67	419,371.11	632,488.16	32.1525869	-104.0387993	932.62	2.00	-2.00	0.00
8,350.17	0.00	0.00	8,214.00	-931.00	1,000.00	419,370.82	632,488.49	32.1525861	-104.0387983	932.92	2.00	-2.00	0.00
8,400.00	4.98	147.40	8,263.77	-932.82	1,001.17	419,369.00	632,489.66	32.1525811	-104.0387945	934.74	10.00	10.00	0.00
8,450.00	9.98	147.40	8,313.33	-938.31	1,004.67	419,363.51	632,493.16	32.1525660	-104.0387833	940.24	10.00	10.00	0.00
8,500.00	14.98	147.40	8,362.13	-947.41	1,010.49	419,354.41	632,498.98	32.1525409	-104.0387645	949.35	10.00	10.00	0.00
8,550.00	19.98	147.40	8,409.80	-960.06	1,018.59	419,341.76	632,507.08	32.1525061	-104.0387385	962.01	10.00	10.00	0.00
8,573.81	22.36	147.40	8,432.00	-967.30	1,023.22	419,334.52	632,511.71	32.1524861	-104.0387236	969.27	10.00	10.00	0.00
3rd Bone Spring Carb													
8,600.00	24.98	147.40	8,455.99	-976.16	1,028.88	419,325.66	632,517.37	32.1524617	-104.0387054	978.14	10.00	10.00	0.00
8,650.00	29.98	147.40	8,500.33	-995.60	1,041.31	419,306.22	632,529.80	32.1524082	-104.0386654	997.59	10.00	10.00	0.00
8,700.00	34.98	147.40	8,542.50	-1,018.21	1,055.77	419,283.61	632,544.26	32.1523459	-104.0386188	1,020.24	10.00	10.00	0.00
8,750.00	39.98	147.40	8,582.16	-1,043.84	1,072.16	419,257.98	632,560.65	32.1522754	-104.0385661	1,045.89	10.00	10.00	0.00
8,800.00	44.98	147.40	8,619.02	-1,072.28	1,090.35	419,229.54	632,578.84	32.1521971	-104.0385076	1,074.37	10.00	10.00	0.00
8,850.00	49.98	147.40	8,652.80	-1,103.31	1,110.20	419,198.51	632,598.69	32.1521116	-104.0384437	1,105.44	10.00	10.00	0.00
8,900.00	54.98	147.40	8,683.24	-1,136.71	1,131.56	419,165.11	632,620.05	32.1520196	-104.0383750	1,138.88	10.00	10.00	0.00
8,950.00	59.98	147.40	8,710.11	-1,172.22	1,154.27	419,129.60	632,642.76	32.1519218	-104.0383020	1,174.43	10.00	10.00	0.00
9,000.00	64.98	147.40	8,733.20	-1,209.57	1,178.15	419,092.25	632,666.64	32.1518190	-104.0382251	1,211.83	10.00	10.00	0.00
9,050.00	69.98	147.40	8,752.35	-1,248.47	1,203.03	419,053.35	632,691.52	32.1517119	-104.0381451	1,250.77	10.00	10.00	0.00
9,100.17	75.00	147.40	8,767.43	-1,288.76	1,228.80	419,013.06	632,717.29	32.1516009	-104.0380622	1,291.12	10.00	10.00	0.00
9,158.56	76.12	150.19	8,782.00	-1,337.12	1,258.09	418,964.70	632,746.58	32.1514678	-104.0379679	1,339.53	5.00	1.91	4.77
Harkey SS													
9,200.00	76.93	152.15	8,791.66	-1,372.42	1,277.52	418,929.40	632,766.01	32.1513706	-104.0379055	1,374.87	5.00	1.96	4.73
9,300.00	78.94	156.83	8,812.57	-1,460.65	1,319.61	418,841.17	632,808.10	32.1511277	-104.0377702	1,463.18	5.00	2.02	4.68
9,400.00	81.03	161.44	8,829.97	-1,552.64	1,354.67	418,749.18	632,843.16	32.1508746	-104.0376578	1,555.24	5.00	2.09	4.61
9,500.00	83.17	166.00	8,843.72	-1,647.69	1,382.41	418,654.13	632,870.90	32.1506131	-104.0375690	1,650.34	5.00	2.14	4.56
9,600.00	85.36	170.52	8,853.72	-1,745.08	1,402.64	418,556.74	632,891.13	32.1503452	-104.0375045	1,747.77	5.00	2.19	4.52
9,700.00	87.57	175.01	8,859.89	-1,844.06	1,415.20	418,457.76	632,903.69	32.1500730	-104.0374648	1,846.78	5.00	2.21	4.49
9,777.10	89.29	178.47	8,862.00	-1,920.99	1,419.58	418,380.83	632,908.07	32.1498615	-104.0374513	1,923.72	5.00	2.23	4.48
Harkey LZ													
9,809.00	90.00	179.89	8,862.20	-1,952.89	1,420.04	418,348.93	632,908.53	32.1497739	-104.0374501	1,955.61	5.00	2.23	4.47
9,900.00	90.00	179.89	8,862.20	-2,043.89	1,420.21	418,257.93	632,908.70	32.1495237	-104.0374504	2,046.61	0.00	0.00	0.00
10,000.00	90.00	179.89	8,862.19	-2,143.89	1,420.39	418,157.93	632,908.88	32.1492488	-104.0374507	2,146.61	0.00	0.00	0.00
10,100.00	90.00	179.89	8,862.19	-2,243.89	1,420.58	418,057.93	632,909.07	32.1489739	-104.0374510	2,246.61	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,200.00	90.00	179.89	8,862.19	-2,343.89	1,420.76	417,957.93	632,909.25	32.1486990	-104.0374512	2,346.61	0.00	0.00	0.00
10,300.00	90.00	179.89	8,862.19	-2,443.89	1,420.95	417,857.93	632,909.44	32.1484241	-104.0374515	2,446.61	0.00	0.00	0.00
10,400.00	90.00	179.89	8,862.19	-2,543.89	1,421.14	417,757.93	632,909.63	32.1481492	-104.0374518	2,546.61	0.00	0.00	0.00
10,500.00	90.00	179.89	8,862.18	-2,643.89	1,421.32	417,657.93	632,909.81	32.1478743	-104.0374521	2,646.61	0.00	0.00	0.00
10,600.00	90.00	179.89	8,862.18	-2,743.89	1,421.51	417,557.93	632,910.00	32.1475995	-104.0374524	2,746.61	0.00	0.00	0.00
10,700.00	90.00	179.89	8,862.18	-2,843.89	1,421.70	417,457.93	632,910.19	32.1473246	-104.0374527	2,846.61	0.00	0.00	0.00
10,800.00	90.00	179.89	8,862.18	-2,943.89	1,421.88	417,357.93	632,910.37	32.1470497	-104.0374530	2,946.61	0.00	0.00	0.00
10,900.00	90.00	179.89	8,862.18	-3,043.89	1,422.07	417,257.93	632,910.56	32.1467748	-104.0374532	3,046.61	0.00	0.00	0.00
11,000.00	90.00	179.89	8,862.17	-3,143.89	1,422.25	417,157.93	632,910.74	32.1464999	-104.0374535	3,146.61	0.00	0.00	0.00
11,100.00	90.00	179.89	8,862.17	-3,243.89	1,422.44	417,057.93	632,910.93	32.1462250	-104.0374538	3,246.61	0.00	0.00	0.00
11,200.00	90.00	179.89	8,862.17	-3,343.89	1,422.63	416,957.93	632,911.12	32.1459501	-104.0374541	3,346.61	0.00	0.00	0.00
11,300.00	90.00	179.89	8,862.17	-3,443.89	1,422.81	416,857.93	632,911.30	32.1456752	-104.0374544	3,446.61	0.00	0.00	0.00
11,400.00	90.00	179.89	8,862.17	-3,543.89	1,423.00	416,757.93	632,911.49	32.1454003	-104.0374547	3,546.61	0.00	0.00	0.00
11,500.00	90.00	179.89	8,862.16	-3,643.89	1,423.19	416,657.93	632,911.68	32.1451254	-104.0374550	3,646.61	0.00	0.00	0.00
11,600.00	90.00	179.89	8,862.16	-3,743.89	1,423.37	416,557.93	632,911.86	32.1448505	-104.0374552	3,746.61	0.00	0.00	0.00
11,700.00	90.00	179.89	8,862.16	-3,843.89	1,423.56	416,457.93	632,912.05	32.1445756	-104.0374555	3,846.61	0.00	0.00	0.00
11,800.00	90.00	179.89	8,862.16	-3,943.89	1,423.75	416,357.93	632,912.24	32.1443008	-104.0374558	3,946.61	0.00	0.00	0.00
11,900.00	90.00	179.89	8,862.16	-4,043.89	1,423.93	416,257.93	632,912.42	32.1440259	-104.0374561	4,046.61	0.00	0.00	0.00
12,000.00	90.00	179.89	8,862.15	-4,143.89	1,424.12	416,157.93	632,912.61	32.1437510	-104.0374564	4,146.61	0.00	0.00	0.00
12,100.00	90.00	179.89	8,862.15	-4,243.89	1,424.30	416,057.93	632,912.79	32.1434761	-104.0374567	4,246.61	0.00	0.00	0.00
12,200.00	90.00	179.89	8,862.15	-4,343.89	1,424.49	415,957.93	632,912.98	32.1432012	-104.0374570	4,346.61	0.00	0.00	0.00
12,300.00	90.00	179.89	8,862.15	-4,443.89	1,424.68	415,857.93	632,913.17	32.1429263	-104.0374572	4,446.61	0.00	0.00	0.00
12,400.00	90.00	179.89	8,862.15	-4,543.89	1,424.86	415,757.93	632,913.35	32.1426514	-104.0374575	4,546.61	0.00	0.00	0.00
12,500.00	90.00	179.89	8,862.14	-4,643.89	1,425.05	415,657.93	632,913.54	32.1423765	-104.0374578	4,646.61	0.00	0.00	0.00
12,600.00	90.00	179.89	8,862.14	-4,743.89	1,425.24	415,557.93	632,913.73	32.1421016	-104.0374581	4,746.61	0.00	0.00	0.00
12,700.00	90.00	179.89	8,862.14	-4,843.89	1,425.42	415,457.93	632,913.91	32.1418267	-104.0374584	4,846.61	0.00	0.00	0.00
12,800.00	90.00	179.89	8,862.14	-4,943.89	1,425.61	415,357.93	632,914.10	32.1415518	-104.0374587	4,946.61	0.00	0.00	0.00
12,900.00	90.00	179.89	8,862.14	-5,043.89	1,425.79	415,257.93	632,914.28	32.1412770	-104.0374590	5,046.61	0.00	0.00	0.00
13,000.00	90.00	179.89	8,862.13	-5,143.89	1,425.98	415,157.93	632,914.47	32.1410021	-104.0374592	5,146.61	0.00	0.00	0.00
13,100.00	90.00	179.89	8,862.13	-5,243.89	1,426.17	415,057.93	632,914.66	32.1407272	-104.0374595	5,246.61	0.00	0.00	0.00
13,200.00	90.00	179.89	8,862.13	-5,343.89	1,426.35	414,957.93	632,914.84	32.1404523	-104.0374598	5,346.61	0.00	0.00	0.00
13,300.00	90.00	179.89	8,862.13	-5,443.89	1,426.54	414,857.93	632,915.03	32.1401774	-104.0374601	5,446.61	0.00	0.00	0.00
13,400.00	90.00	179.89	8,862.12	-5,543.89	1,426.73	414,757.93	632,915.22	32.1399025	-104.0374604	5,546.61	0.00	0.00	0.00
13,500.00	90.00	179.89	8,862.12	-5,643.89	1,426.91	414,657.94	632,915.40	32.1396276	-104.0374607	5,646.61	0.00	0.00	0.00
13,600.00	90.00	179.89	8,862.12	-5,743.88	1,427.10	414,557.94	632,915.59	32.1393527	-104.0374610	5,746.61	0.00	0.00	0.00
13,700.00	90.00	179.89	8,862.12	-5,843.88	1,427.29	414,457.94	632,915.78	32.1390778	-104.0374612	5,846.61	0.00	0.00	0.00
13,800.00	90.00	179.89	8,862.12	-5,943.88	1,427.47	414,357.94	632,915.96	32.1388029	-104.0374615	5,946.61	0.00	0.00	0.00
13,900.00	90.00	179.89	8,862.11	-6,043.88	1,427.66	414,257.94	632,916.15	32.1385280	-104.0374618	6,046.61	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,000.00	90.00	179.89	8,862.11	-6,143.88	1,427.84	414,157.94	632,916.33	32.1382531	-104.0374621	6,146.61	0.00	0.00	0.00
14,100.00	90.00	179.89	8,862.11	-6,243.88	1,428.03	414,057.94	632,916.52	32.1379783	-104.0374624	6,246.61	0.00	0.00	0.00
14,200.00	90.00	179.89	8,862.11	-6,343.88	1,428.22	413,957.94	632,916.71	32.1377034	-104.0374627	6,346.61	0.00	0.00	0.00
14,300.00	90.00	179.89	8,862.11	-6,443.88	1,428.40	413,857.94	632,916.89	32.1374285	-104.0374630	6,446.61	0.00	0.00	0.00
14,400.00	90.00	179.89	8,862.10	-6,543.88	1,428.59	413,757.94	632,917.08	32.1371536	-104.0374632	6,546.61	0.00	0.00	0.00
14,500.00	90.00	179.89	8,862.10	-6,643.88	1,428.78	413,657.94	632,917.27	32.1368787	-104.0374635	6,646.61	0.00	0.00	0.00
14,600.00	90.00	179.89	8,862.10	-6,743.88	1,428.96	413,557.94	632,917.45	32.1366038	-104.0374638	6,746.61	0.00	0.00	0.00
14,700.00	90.00	179.89	8,862.10	-6,843.88	1,429.15	413,457.94	632,917.64	32.1363289	-104.0374641	6,846.61	0.00	0.00	0.00
14,800.00	90.00	179.89	8,862.10	-6,943.88	1,429.33	413,357.94	632,917.82	32.1360540	-104.0374644	6,946.61	0.00	0.00	0.00
14,900.00	90.00	179.89	8,862.09	-7,043.88	1,429.52	413,257.94	632,918.01	32.1357791	-104.0374647	7,046.61	0.00	0.00	0.00
15,000.00	90.00	179.89	8,862.09	-7,143.88	1,429.71	413,157.94	632,918.20	32.1355042	-104.0374650	7,146.61	0.00	0.00	0.00
15,100.00	90.00	179.89	8,862.09	-7,243.88	1,429.89	413,057.94	632,918.38	32.1352293	-104.0374652	7,246.61	0.00	0.00	0.00
15,200.00	90.00	179.89	8,862.09	-7,343.88	1,430.08	412,957.94	632,918.57	32.1349544	-104.0374655	7,346.61	0.00	0.00	0.00
15,300.00	90.00	179.89	8,862.09	-7,443.88	1,430.27	412,857.94	632,918.76	32.1346796	-104.0374658	7,446.61	0.00	0.00	0.00
15,400.00	90.00	179.89	8,862.08	-7,543.88	1,430.45	412,757.94	632,918.94	32.1344047	-104.0374661	7,546.61	0.00	0.00	0.00
15,500.00	90.00	179.89	8,862.08	-7,643.88	1,430.64	412,657.94	632,919.13	32.1341298	-104.0374664	7,646.61	0.00	0.00	0.00
15,600.00	90.00	179.89	8,862.08	-7,743.88	1,430.83	412,557.94	632,919.32	32.1338549	-104.0374667	7,746.61	0.00	0.00	0.00
15,700.00	90.00	179.89	8,862.08	-7,843.88	1,431.01	412,457.94	632,919.50	32.1335800	-104.0374670	7,846.61	0.00	0.00	0.00
15,800.00	90.00	179.89	8,862.08	-7,943.88	1,431.20	412,357.94	632,919.69	32.1333051	-104.0374672	7,946.61	0.00	0.00	0.00
15,900.00	90.00	179.89	8,862.07	-8,043.88	1,431.38	412,257.94	632,919.87	32.1330302	-104.0374675	8,046.61	0.00	0.00	0.00
16,000.00	90.00	179.89	8,862.07	-8,143.88	1,431.57	412,157.94	632,920.06	32.1327553	-104.0374678	8,146.61	0.00	0.00	0.00
16,100.00	90.00	179.89	8,862.07	-8,243.88	1,431.76	412,057.94	632,920.25	32.1324804	-104.0374681	8,246.61	0.00	0.00	0.00
16,200.00	90.00	179.89	8,862.07	-8,343.88	1,431.94	411,957.94	632,920.43	32.1322055	-104.0374684	8,346.61	0.00	0.00	0.00
16,300.00	90.00	179.89	8,862.07	-8,443.88	1,432.13	411,857.94	632,920.62	32.1319306	-104.0374687	8,446.61	0.00	0.00	0.00
16,400.00	90.00	179.89	8,862.06	-8,543.88	1,432.32	411,757.94	632,920.81	32.1316557	-104.0374690	8,546.61	0.00	0.00	0.00
16,500.00	90.00	179.89	8,862.06	-8,643.88	1,432.50	411,657.94	632,920.99	32.1313808	-104.0374692	8,646.61	0.00	0.00	0.00
16,600.00	90.00	179.89	8,862.06	-8,743.88	1,432.69	411,557.94	632,921.18	32.1311060	-104.0374695	8,746.61	0.00	0.00	0.00
16,700.00	90.00	179.89	8,862.06	-8,843.88	1,432.87	411,457.94	632,921.36	32.1308311	-104.0374698	8,846.61	0.00	0.00	0.00
16,800.00	90.00	179.89	8,862.06	-8,943.88	1,433.06	411,357.94	632,921.55	32.1305562	-104.0374701	8,946.61	0.00	0.00	0.00
16,900.00	90.00	179.89	8,862.05	-9,043.88	1,433.25	411,257.94	632,921.74	32.1302813	-104.0374704	9,046.61	0.00	0.00	0.00
17,000.00	90.00	179.89	8,862.05	-9,143.88	1,433.43	411,157.94	632,921.92	32.1300064	-104.0374707	9,146.61	0.00	0.00	0.00
17,100.00	90.00	179.89	8,862.05	-9,243.88	1,433.62	411,057.94	632,922.11	32.1297315	-104.0374710	9,246.61	0.00	0.00	0.00
17,200.00	90.00	179.89	8,862.05	-9,343.88	1,433.81	410,957.94	632,922.30	32.1294566	-104.0374712	9,346.61	0.00	0.00	0.00
17,300.00	90.00	179.89	8,862.05	-9,443.88	1,433.99	410,857.94	632,922.48	32.1291817	-104.0374715	9,446.61	0.00	0.00	0.00
17,400.00	90.00	179.89	8,862.04	-9,543.88	1,434.18	410,757.94	632,922.67	32.1289068	-104.0374718	9,546.61	0.00	0.00	0.00
17,500.00	90.00	179.89	8,862.04	-9,643.88	1,434.37	410,657.94	632,922.86	32.1286319	-104.0374721	9,646.61	0.00	0.00	0.00
17,600.00	90.00	179.89	8,862.04	-9,743.88	1,434.55	410,557.94	632,923.04	32.1283570	-104.0374724	9,746.61	0.00	0.00	0.00

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Planned Survey

Measured Depth (usft)	INC (°)	AZI (°)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Map Coordinates Northing (usft)	Map Coordinates Easting (usft)	Geo Coordinates Latitude (°)	Geo Coordinates Longitude (°)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,700.00	90.00	179.89	8,862.04	-9,843.88	1,434.74	410,457.94	632,923.23	32.1280821	-104.0374727	9,846.61	0.00	0.00	0.00
17,800.00	90.00	179.89	8,862.04	-9,943.88	1,434.92	410,357.94	632,923.41	32.1278073	-104.0374729	9,946.61	0.00	0.00	0.00
17,900.00	90.00	179.89	8,862.03	-10,043.88	1,435.11	410,257.94	632,923.60	32.1275324	-104.0374732	10,046.61	0.00	0.00	0.00
18,000.00	90.00	179.89	8,862.03	-10,143.88	1,435.30	410,157.94	632,923.79	32.1272575	-104.0374735	10,146.61	0.00	0.00	0.00
18,100.00	90.00	179.89	8,862.03	-10,243.88	1,435.48	410,057.94	632,923.97	32.1269826	-104.0374738	10,246.61	0.00	0.00	0.00
18,200.00	90.00	179.89	8,862.03	-10,343.88	1,435.67	409,957.94	632,924.16	32.1267077	-104.0374741	10,346.61	0.00	0.00	0.00
18,300.00	90.00	179.89	8,862.03	-10,443.88	1,435.86	409,857.94	632,924.35	32.1264328	-104.0374744	10,446.61	0.00	0.00	0.00
18,400.00	90.00	179.89	8,862.02	-10,543.88	1,436.04	409,757.94	632,924.53	32.1261579	-104.0374747	10,546.61	0.00	0.00	0.00
18,500.00	90.00	179.89	8,862.02	-10,643.88	1,436.23	409,657.94	632,924.72	32.1258830	-104.0374749	10,646.61	0.00	0.00	0.00
18,600.00	90.00	179.89	8,862.02	-10,743.88	1,436.41	409,557.94	632,924.90	32.1256081	-104.0374752	10,746.61	0.00	0.00	0.00
18,700.00	90.00	179.89	8,862.02	-10,843.88	1,436.60	409,457.94	632,925.09	32.1253332	-104.0374755	10,846.61	0.00	0.00	0.00
18,800.00	90.00	179.89	8,862.02	-10,943.88	1,436.79	409,357.94	632,925.28	32.1250583	-104.0374758	10,946.61	0.00	0.00	0.00
18,900.00	90.00	179.89	8,862.01	-11,043.88	1,436.97	409,257.94	632,925.46	32.1247834	-104.0374761	11,046.61	0.00	0.00	0.00
19,000.00	90.00	179.89	8,862.01	-11,143.88	1,437.16	409,157.94	632,925.65	32.1245085	-104.0374764	11,146.61	0.00	0.00	0.00
19,100.00	90.00	179.89	8,862.01	-11,243.88	1,437.35	409,057.94	632,925.84	32.1242337	-104.0374767	11,246.61	0.00	0.00	0.00
19,200.00	90.00	179.89	8,862.01	-11,343.88	1,437.53	408,957.94	632,926.02	32.1239588	-104.0374769	11,346.61	0.00	0.00	0.00
19,300.00	90.00	179.89	8,862.01	-11,443.88	1,437.72	408,857.95	632,926.21	32.1236839	-104.0374772	11,446.61	0.00	0.00	0.00
19,400.00	90.00	179.89	8,862.00	-11,543.87	1,437.91	408,757.95	632,926.40	32.1234090	-104.0374775	11,546.61	0.00	0.00	0.00
19,500.00	90.00	179.89	8,862.00	-11,643.87	1,438.09	408,657.95	632,926.58	32.1231341	-104.0374778	11,646.61	0.00	0.00	0.00
19,547.53	90.00	179.89	8,862.00	-11,691.40	1,438.18	408,610.42	632,926.67	32.1230034	-104.0374779	11,694.14	0.00	0.00	0.00

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
FTP (Riverbend 12-13 F	0.00	0.00	0.00	-1,270.20	1,418.83	419,031.62	632,907.32	32.1516505	-104.0374480
- plan misses target center by 1904.33usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
LTP (Riverbend 12-13 F	0.00	0.00	0.00	-11,691.40	1,438.18	408,610.42	632,926.67	32.1230034	-104.0374779
- plan misses target center by 8862.00usft at 19547.53usft MD (8862.00 TVD, -11691.40 N, 1438.18 E)									
- Point									

Planned Survey Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Well:	Riverbend 12-13 Federal Com 5H	**North Reference:**	Grid
Wellbore:	OH	**Survey Calculation Method:**	Minimum Curvature
Design:	Plan 1	**Database:**	.Total Directional Production DB

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
407.00	407.00	Rustler			
1,963.17	1,952.00	Top Salt			
2,705.65	2,679.00	Base Salt/Lamar			
2,835.35	2,806.00	Top Delaware Sands/Bell Canyon			
3,665.66	3,619.00	Cherry Canyon			
4,889.16	4,817.00	Brushy Canyon			
5,858.37	5,766.00	Lower Brushy Canyon			
6,517.10	6,411.00	Bone Spring Lime			
7,487.32	7,361.00	1st Bone Spring Sand			
8,184.08	8,048.00	2nd Bone Spring Sand			
8,573.81	8,432.00	3rd Bone Spring Carb			
9,158.56	8,782.00	Harkey SS			
9,777.10	8,862.00	Harkey LZ			

Checked By: _____ Approved By: _____ Date: _____

COTERRA

Coterra Energy

Site: Riverbend 12-13 Federal Com
Well: Riverbend 12-13 Federal Com 5H
Wellbore: OH
Design: Plan 1
Rig:

PROJECT DETAILS: Eddy County, NM (NAD 83)

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

total



Azimuths to Grid North
True North: -0.16°
Magnetic North: 6.26°

Magnetic Field
Strength: 47172.8nT
Dip Angle: 59.67°
Date: 8/19/2025
Model: HDGM2025

SHL

RKB Elevation: 2934' GL + 23 @ 2957.00usft

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	Slot
0.00	0.00	420301.82	631488.49	32.1551528	-104.0420214	

Formations

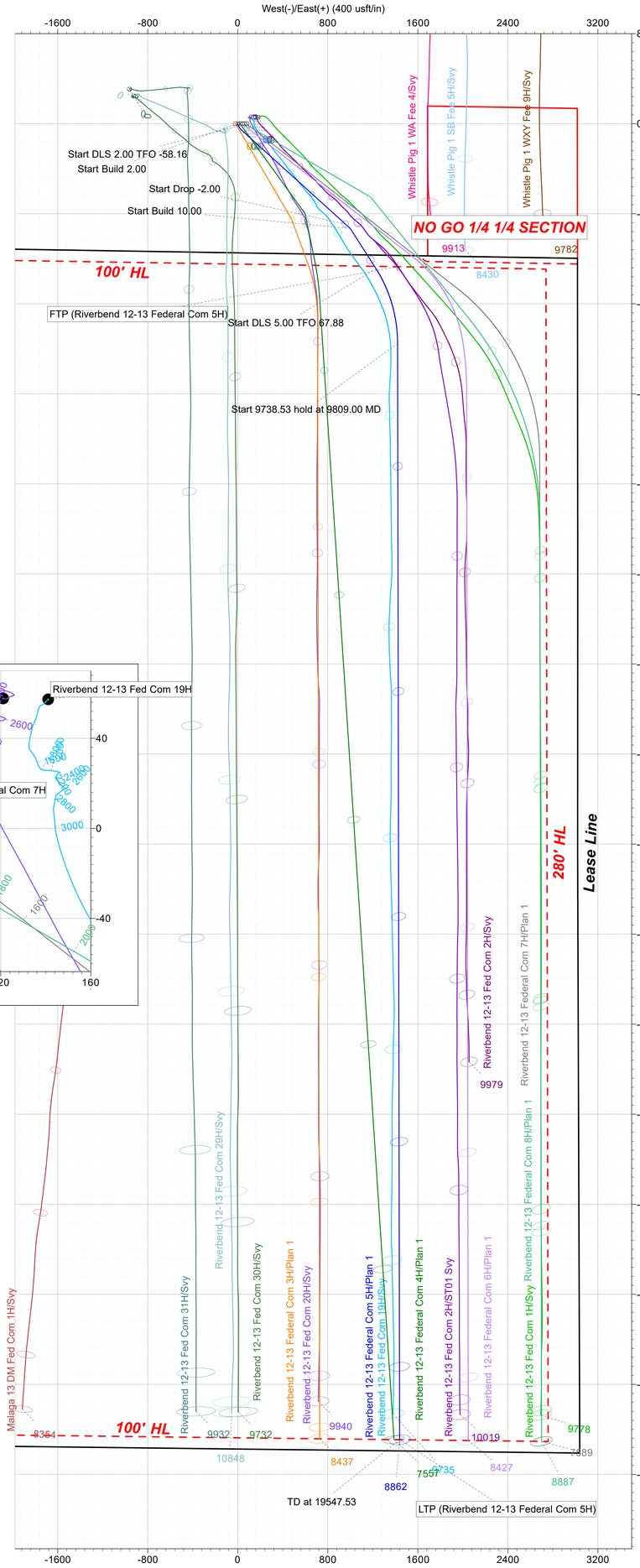
TVDPath	MDPath	Formation
407.00	407.00	Rustler
1952.00	1963.17	Top Salt
2679.00	2705.65	Base Salt/Lamar
2806.00	2835.36	Top Delaware Sands/Bell Canyon
3619.00	3665.66	Cherry Canyon
4817.00	4889.16	Brushy Canyon
5766.00	5858.37	Lower Brushy Canyon
6411.00	6517.10	Bone Spring Lime
7361.00	7487.32	1st Bone Spring Sand
8048.00	8184.08	2nd Bone Spring Sand
8432.00	8573.81	3rd Bone Spring Carb
8782.00	9158.56	Harkey SS
8862.00	9777.10	Harkey LZ

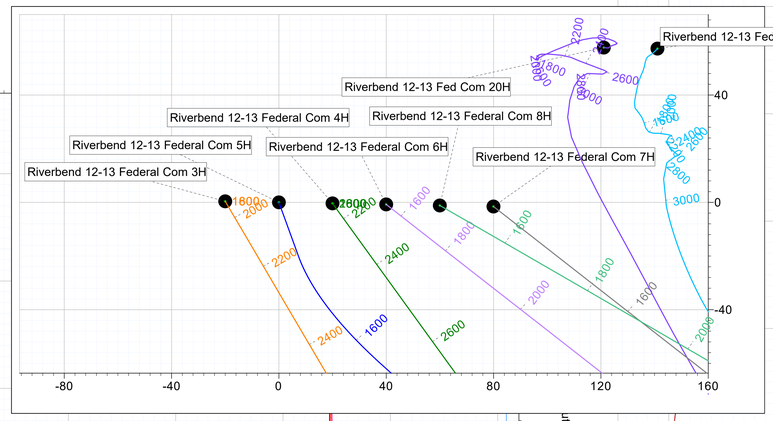
SECTION DETAILS

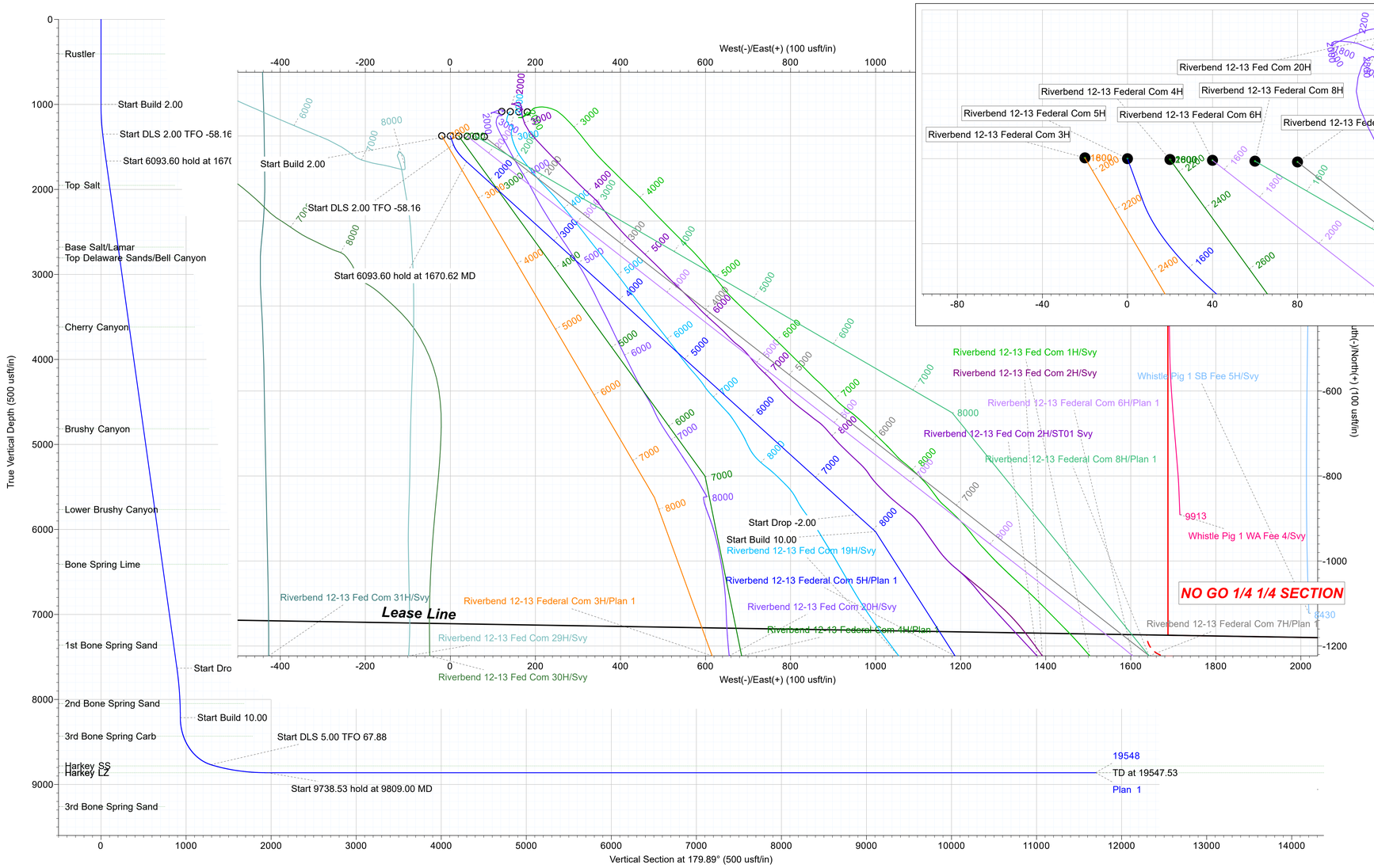
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
1350.00	7.00	160.00	1349.13	-20.07	7.30	2.00	160.00	20.08	
1670.62	11.72	132.15	1665.55	-60.32	38.16	2.00	-58.16	60.39	
7764.22	11.72	132.15	7632.13	-890.93	955.73	0.00	0.00	892.76	
8350.17	0.00	0.00	8214.00	-931.00	1000.00	2.00	180.00	932.92	
9100.17	75.00	147.40	8767.43	-1288.76	1228.80	10.00	147.40	1291.12	
9809.00	90.00	179.89	8862.20	-1952.89	1420.04	5.00	67.88	1955.61	
19547.53	90.00	179.89	8862.00	-11691.40	1438.18	0.00	0.00	11694.14	

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP (Riverbend 12-13 Federal Com 5H)	0.00	-1270.20	1418.83	419031.62	632907.32	32.1516505	-104.0374480
LTP (Riverbend 12-13 Federal Com 5H)	0.00	-11691.40	1438.18	408610.42	632926.67	32.1230034	-104.0374779







Coterra Energy

Eddy County, NM (NAD 83)
Riverbend 12-13 Federal Com
Riverbend 12-13 Federal Com 5H

OH
Plan 1

Total Directional
"Driven by TOTAL performance"
total

Anticollision Report

Minimum Magnetic Interference Warning level is 50' center to center

24 June, 2025

Total Report Version 1.60

COMPASS 5000.16 Build 97

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset 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:	Max. Cent. Dist. of 1,000.00usft or Max. SF of 6	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Well	Riverbend 12-13 Federal Com 5H						
Well Position	**+N/-S**	0.00 usft	**Northing:**	420,301.82	usft	**Latitude:**	32.1551528
	+E/-W	0.00 usft	**Easting:**	631,488.49	usft	**Longitude:**	-104.0420214
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		usft	**Ground Level:**	2,934.00 usft
Grid Convergence:		0.16 °					

Survey Tool Program **Date** 6/24/2025

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,547.53	Plan 1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Offset Listing

Site Name / Offset Well	Ground Level	KB Height	Map Coordinates Northing	Map Coordinates Easting	Geographical Coordinates Latitude	Geographical Coordinates Longitude	Surface Uncertainty Site	Surface Uncertainty Well
Coterra Energy - Riverbend 12-13 Federal Com								
Riverbend 12-13 Fed Com 19H -	2,934.70	2,957.70	420,359.13	631,629.58	32.1553093	-104.0415650	0.00	0.50
Riverbend 12-13 Fed Com 1H -	2,934.60	2,957.60	420,358.36	631,669.56	32.1553069	-104.0414358	0.00	0.50
Riverbend 12-13 Fed Com 20H -	2,935.00	2,958.00	420,359.51	631,609.59	32.1553105	-104.0416296	0.00	0.50
Riverbend 12-13 Fed Com 29H -	2,937.20	2,960.20	420,547.64	630,584.99	32.1558352	-104.0449388	0.00	0.00
Riverbend 12-13 Fed Com 2H -	2,934.60	2,957.60	420,358.74	631,649.57	32.1553081	-104.0415004	0.00	0.50
Riverbend 12-13 Fed Com 30H -	2,937.60	2,960.60	420,548.00	630,564.98	32.1558364	-104.0450035	0.00	0.00
Riverbend 12-13 Fed Com 31H -	2,937.50	2,960.50	420,608.75	630,526.15	32.1560036	-104.0451284	0.00	0.00
Coterra Energy - Riverbend 12-13 Federal Com								
Riverbend 12-13 Federal Com 3H -	2,934.00	2,957.00	420,302.20	631,468.50	32.1551540	-104.0420860	0.00	0.00
Riverbend 12-13 Federal Com 4H -	2,934.00	2,957.00	420,301.44	631,508.48	32.1551516	-104.0419568	0.00	0.00
Riverbend 12-13 Federal Com 6H -	2,934.00	2,957.00	420,301.06	631,528.48	32.1551504	-104.0418922	0.00	0.00
Riverbend 12-13 Federal Com 7H -	2,934.00	2,957.00	420,300.29	631,568.46	32.1551480	-104.0417630	0.00	0.00
Riverbend 12-13 Federal Com 8H -	2,934.00	2,957.00	420,300.68	631,548.47	32.1551492	-104.0418276	0.00	0.00
Coterra Energy - Riverbend 12-13 Federal Com								
Malaga 13 DM Fed Com 1H -	2,888.00	2,908.00	414,150.32	630,383.57	32.1382511	-104.0456449	0.50	0.50
Whistle Pig 1 SB Fee 5H -	2,912.00	2,937.00	424,125.66	633,731.20	32.1656472	-104.0347402	0.50	0.00
Whistle Pig 1 WA Fee 4 -	2,913.00	2,938.00	424,125.66	633,701.20	32.1656475	-104.0348371	0.50	0.00
Whistle Pig 1 WXY Fee 9H -	2,912.00	2,937.00	424,125.66	633,761.20	32.1656470	-104.0346432	0.50	0.00

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset 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
Riverbend 12-13 Fed Com						
Riverbend 12-13 Fed Com 19H - OH - Svy	1,752.08	1,746.74	131.06	119.14	11.00	CC, ES
Riverbend 12-13 Fed Com 19H - OH - Svy	8,500.00	8,512.80	254.06	191.75	4.08	SF
Riverbend 12-13 Fed Com 1H - OH - Svy	8,391.70	8,402.27	163.96	101.92	2.64	CC
Riverbend 12-13 Fed Com 1H - OH - Svy	8,400.00	8,410.59	163.97	101.87	2.64	ES
Riverbend 12-13 Fed Com 1H - OH - Svy	8,500.00	8,511.19	165.18	102.30	2.63	SF
Riverbend 12-13 Fed Com 20H - OH - Svy	1,512.50	1,515.79	123.32	113.16	12.13	CC, ES
Riverbend 12-13 Fed Com 20H - OH - Svy	7,600.00	7,631.57	363.75	308.16	6.54	SF
Riverbend 12-13 Fed Com 29H - OH - Svy	780.39	783.62	931.35	926.31	184.91	CC
Riverbend 12-13 Fed Com 29H - OH - Svy	1,000.00	999.35	932.20	925.64	142.12	ES
Riverbend 12-13 Fed Com 29H - OH - Svy	19,400.00	21,947.00	2,485.79	2,262.41	11.13	SF
Riverbend 12-13 Fed Com 2H - OH - Svy	0.00	0.00	170.84			
Riverbend 12-13 Fed Com 2H - OH - Svy	8,451.90	8,467.79	193.23	131.79	3.14	ES, SF
Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy	0.00	0.00	170.84			
Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy	8,451.90	8,467.79	193.23	131.79	3.14	ES, SF
Riverbend 12-13 Fed Com 30H - OH - Svy	0.00	0.00	955.77			
Riverbend 12-13 Fed Com 30H - OH - Svy	100.00	96.53	956.14	955.71	2,217.13	ES
Riverbend 12-13 Fed Com 30H - OH - Svy	19,298.98	20,738.00	1,676.09	1,424.52	6.66	SF
Riverbend 12-13 Fed Com 31H - OH - Svy	1,192.24	1,237.23	981.73	973.59	120.56	CC
Riverbend 12-13 Fed Com 31H - OH - Svy	1,200.00	1,244.46	981.74	973.55	119.81	ES
Riverbend 12-13 Fed Com 31H - OH - Svy	19,300.00	21,397.27	2,100.81	1,847.46	8.29	SF
Riverbend 12-13 Federal Com						
Riverbend 12-13 Federal Com 3H - OH - Plan 1	1,000.00	1,000.00	19.99	12.99	2.85	CC
Riverbend 12-13 Federal Com 3H - OH - Plan 1	1,100.00	1,099.98	20.69	12.98	2.69	ES, SF
Riverbend 12-13 Federal Com 4H - OH - Plan 1	1,203.07	1,202.90	18.65	10.24	2.22	CC, ES, SF
Riverbend 12-13 Federal Com 6H - OH - Plan 1	1,287.28	1,286.80	37.32	28.33	4.15	CC
Riverbend 12-13 Federal Com 6H - OH - Plan 1	1,300.00	1,299.45	37.34	28.26	4.11	ES
Riverbend 12-13 Federal Com 6H - OH - Plan 1	3,000.00	3,001.17	69.02	47.67	3.23	SF
Riverbend 12-13 Federal Com 7H - OH - Plan 1	1,000.00	1,000.00	79.98	72.98	11.42	CC, ES
Riverbend 12-13 Federal Com 7H - OH - Plan 1	7,300.00	7,277.70	337.37	282.57	6.16	SF
Riverbend 12-13 Federal Com 8H - OH - Plan 1	1,261.69	1,260.40	57.29	48.49	6.51	CC
Riverbend 12-13 Federal Com 8H - OH - Plan 1	1,300.00	1,298.03	57.52	48.46	6.35	ES
Riverbend 12-13 Federal Com 8H - OH - Plan 1	8,400.00	8,397.57	333.65	271.42	5.36	SF
Riverbend 12-13 Offsets						
Malaga 13 DM Fed Com 1H - OH - Svy	14,167.52	8,044.64	2,724.77	2,643.51	33.53	CC, ES
Malaga 13 DM Fed Com 1H - OH - Svy	19,547.53	13,305.00	3,401.63	3,219.17	18.64	SF
Whistle Pig 1 SB Fee 5H - OH - Svy	9,100.17	13,295.00	875.12	769.97	8.32	SF
Whistle Pig 1 SB Fee 5H - OH - Svy	9,200.00	13,295.00	861.93	759.49	8.41	ES
Whistle Pig 1 SB Fee 5H - OH - Svy	9,227.33	13,295.00	861.28	759.70	8.48	CC
Whistle Pig 1 WA Fee 4 - OH - Svy	9,200.00	14,593.00	1,296.30	1,226.77	18.64	SF
Whistle Pig 1 WA Fee 4 - OH - Svy	9,220.28	14,593.00	1,296.00	1,226.54	18.66	CC, ES
Whistle Pig 1 WXY Fee 9H - OH - Svy	9,387.86	14,503.00	1,783.42	1,688.58	18.81	CC, ES, SF

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 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)	Rule Assigned: Distance Between Centres (usft)	Rule Assigned: Distance Between Ellipses (usft)	Rule Assigned: Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.71	0.71	0.00	0.50	67.89	57.31	141.09	152.29				
100.00	100.00	101.70	101.70	0.28	0.53	67.95	57.05	140.84	151.95	151.15	0.80	189.494	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
200.00	200.00	202.66	202.65	0.63	0.60	68.12	56.27	140.08	150.97	149.74	1.23	122.486	
300.00	300.00	302.76	302.75	0.99	0.85	68.29	55.34	139.02	149.64	147.80	1.84	81.226	
400.00	400.00	402.25	402.22	1.35	1.16	68.39	54.66	138.00	148.43	145.93	2.51	59.186	
500.00	500.00	501.77	501.74	1.71	1.49	68.47	54.17	137.34	147.64	144.45	3.20	46.198	
600.00	600.00	602.00	601.97	2.07	1.83	68.70	53.35	136.82	146.86	142.96	3.90	37.696	
700.00	700.00	702.26	702.21	2.43	2.17	69.25	51.69	136.44	145.91	141.31	4.60	31.717	
800.00	800.00	802.36	802.29	2.79	2.52	69.87	49.84	135.95	144.81	139.50	5.31	27.281	
900.00	900.00	902.83	902.74	3.14	2.88	70.43	48.10	135.33	143.64	137.62	6.02	23.860	
1,000.00	1,000.00	1,003.63	1,003.52	3.50	3.23	71.17	45.80	134.30	141.92	135.18	6.74	21.071	
1,100.00	1,099.98	1,103.84	1,103.65	3.84	3.59	-88.26	42.05	133.32	139.76	132.33	7.43	18.807	
1,200.00	1,199.84	1,203.14	1,202.86	4.17	3.94	-88.92	37.92	132.64	137.66	129.55	8.11	16.970	
1,288.80	1,288.31	1,289.60	1,289.29	4.47	4.25	-91.16	35.67	132.48	136.72	128.01	8.71	15.694	
1,300.00	1,299.45	1,300.44	1,300.12	4.51	4.29	-91.54	35.47	132.55	136.74	127.95	8.79	15.561	
1,350.00	1,349.13	1,349.49	1,349.17	4.68	4.46	-93.47	34.68	133.06	137.16	128.04	9.13	15.031	
1,400.00	1,398.73	1,398.92	1,398.59	4.85	4.63	-89.20	33.78	133.78	137.57	128.11	9.47	14.534	
1,500.00	1,497.69	1,498.83	1,498.46	5.19	4.98	-84.11	31.77	135.23	136.96	126.80	10.16	13.483	
1,600.00	1,596.25	1,598.47	1,598.07	5.54	5.33	-83.07	29.66	136.10	134.50	123.65	10.86	12.387	
1,670.62	1,665.55	1,667.79	1,667.38	5.78	5.58	-84.33	28.16	136.57	132.34	120.99	11.35	11.657	
1,700.00	1,694.31	1,696.52	1,696.11	5.89	5.68	-86.62	27.58	136.77	131.60	120.04	11.56	11.385	
1,752.08	1,745.31	1,746.74	1,746.32	6.07	5.85	-90.67	26.74	137.27	131.06	119.14	11.92	10.995	CC, ES
1,800.00	1,792.23	1,792.98	1,792.54	6.24	6.02	-94.40	26.22	137.92	131.52	119.27	12.25	10.735	
1,900.00	1,890.14	1,890.08	1,889.63	6.61	6.35	-102.10	25.78	139.64	135.12	122.18	12.94	10.441	
2,000.00	1,988.06	1,987.86	1,987.38	6.97	6.68	-109.18	25.74	141.96	141.74	128.11	13.63	10.396	
2,100.00	2,085.97	2,086.98	2,086.45	7.34	7.02	-115.32	25.23	145.07	150.14	135.80	14.34	10.471	
2,200.00	2,183.89	2,185.61	2,185.07	7.70	7.36	-121.37	24.90	146.41	159.94	144.90	15.04	10.633	
2,300.00	2,281.80	2,285.75	2,285.19	8.07	7.71	-127.70	24.09	144.87	170.64	154.88	15.76	10.830	
2,400.00	2,379.72	2,386.07	2,385.48	8.45	8.07	-132.80	21.85	144.80	181.69	165.21	16.48	11.028	
2,500.00	2,477.64	2,483.74	2,483.09	8.82	8.41	-136.54	19.07	146.91	193.17	175.99	17.19	11.240	
2,600.00	2,575.55	2,579.22	2,578.54	9.19	8.75	-139.84	17.80	148.59	206.93	189.05	17.88	11.573	
2,700.00	2,673.47	2,675.43	2,674.74	9.57	9.09	-143.13	17.05	148.73	222.17	203.60	18.57	11.961	
2,800.00	2,771.38	2,775.14	2,774.41	9.95	9.43	-146.76	16.40	145.98	238.93	219.63	19.29	12.385	
2,900.00	2,869.30	2,886.30	2,885.44	10.32	9.83	-150.37	11.77	143.67	253.01	232.94	20.07	12.607	
3,000.00	2,967.21	3,000.41	2,999.02	10.70	10.24	-153.56	0.97	143.97	262.06	241.24	20.82	12.587	
3,100.00	3,065.13	3,116.88	3,114.13	11.08	10.66	-156.25	-16.01	148.58	265.53	244.02	21.51	12.344	
3,200.00	3,163.05	3,224.06	3,219.23	11.46	11.05	-158.20	-35.23	156.91	264.70	242.50	22.20	11.922	
3,300.00	3,260.96	3,329.89	3,322.38	11.84	11.43	-159.33	-55.10	169.75	261.34	238.45	22.89	11.416	
3,400.00	3,358.88	3,432.52	3,421.95	12.22	11.80	-159.96	-74.81	184.93	256.42	232.81	23.60	10.864	
3,500.00	3,456.79	3,529.18	3,515.60	12.60	12.15	-160.46	-93.50	199.83	251.11	226.74	24.37	10.306	
3,600.00	3,554.71	3,622.30	3,606.43	12.98	12.48	-160.84	-108.87	213.41	248.75	223.59	25.16	9.888	
3,700.00	3,652.62	3,721.47	3,703.40	13.36	12.85	-161.13	-123.90	227.73	247.70	221.79	25.90	9.562	
3,800.00	3,750.54	3,819.92	3,799.70	13.75	13.20	-161.49	-138.86	241.68	246.75	220.10	26.66	9.257	
3,823.88	3,773.92	3,842.84	3,822.17	13.84	13.29	-161.61	-142.28	244.70	246.70	219.87	26.84	9.192	
3,900.00	3,848.45	3,918.23	3,896.13	14.13	13.57	-162.08	-153.38	254.17	246.93	219.53	27.41	9.009	
4,000.00	3,946.37	4,018.63	3,994.61	14.51	13.94	-162.74	-168.31	266.72	247.17	219.01	28.15	8.779	
4,100.00	4,044.29	4,118.54	4,092.61	14.89	14.30	-163.44	-183.36	279.10	247.32	218.42	28.90	8.558	
4,200.00	4,142.20	4,218.79	4,190.95	15.28	14.68	-164.22	-198.61	291.24	247.54	217.89	29.65	8.349	
4,300.00	4,240.12	4,318.99	4,289.21	15.66	15.05	-165.02	-214.06	303.35	247.63	217.23	30.40	8.146	
4,400.00	4,338.03	4,419.31	4,387.56	16.05	15.42	-165.84	-229.63	315.50	247.67	216.52	31.15	7.951	
4,500.00	4,435.95	4,521.23	4,487.39	16.43	15.80	-166.68	-245.86	328.05	247.31	215.43	31.89	7.755	
4,600.00	4,533.86	4,623.60	4,587.47	16.81	16.19	-167.46	-262.82	341.41	246.03	213.40	32.63	7.540	
4,700.00	4,631.78	4,720.21	4,681.95	17.20	16.55	-168.16	-278.48	354.06	245.06	211.65	33.41	7.336	
4,800.00	4,729.69	4,819.53	4,779.22	17.58	16.92	-168.83	-293.92	366.86	244.81	210.64	34.17	7.165	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
4,801.00	4,730.68	4,820.48	4,780.16	17.59	16.93	-168.84	-294.06	366.98	244.81	210.63	34.17	7.163	
4,900.00	4,827.61	4,915.47	4,873.40	17.97	17.28	-169.51	-308.07	378.48	245.70	210.76	34.94	7.032	
5,000.00	4,925.53	5,014.18	4,970.48	18.35	17.65	-170.27	-322.05	389.63	247.62	211.92	35.70	6.936	
5,100.00	5,023.44	5,113.18	5,067.93	18.74	18.02	-171.07	-335.85	400.35	250.05	213.59	36.46	6.858	
5,200.00	5,121.36	5,212.08	5,165.30	19.12	18.39	-171.91	-349.65	410.73	252.74	215.52	37.22	6.790	
5,300.00	5,219.27	5,310.44	5,262.31	19.51	18.76	-172.74	-362.68	420.46	256.43	218.44	37.98	6.751	
5,400.00	5,317.19	5,414.02	5,364.33	19.89	19.15	-173.52	-376.84	431.40	259.39	220.66	38.74	6.697	
5,500.00	5,415.10	5,514.27	5,462.88	20.28	19.53	-174.33	-391.47	442.46	261.39	221.89	39.50	6.618	
5,600.00	5,513.02	5,614.81	5,561.81	20.66	19.91	-175.12	-405.83	453.26	263.87	223.62	40.25	6.555	
5,700.00	5,610.93	5,719.89	5,664.94	21.05	20.30	-175.82	-421.47	465.93	265.04	224.05	41.00	6.465	
5,800.00	5,708.85	5,822.46	5,765.26	21.43	20.69	-176.52	-438.08	479.39	264.53	222.78	41.75	6.336	
5,900.00	5,806.77	5,921.65	5,862.21	21.82	21.07	-177.25	-454.45	492.44	263.80	221.28	42.52	6.204	
5,949.93	5,855.66	5,970.35	5,909.86	22.01	21.25	-177.61	-462.36	498.70	263.66	220.75	42.91	6.145	
6,000.00	5,904.68	6,018.80	5,957.31	22.21	21.44	-177.97	-470.04	504.73	263.81	220.51	43.30	6.093	
6,100.00	6,002.60	6,117.12	6,053.74	22.59	21.81	-178.71	-485.23	516.45	264.82	220.75	44.07	6.009	
6,200.00	6,100.51	6,214.47	6,149.35	22.98	22.18	-179.46	-499.88	527.51	266.58	221.73	44.85	5.944	
6,300.00	6,198.43	6,309.83	6,243.22	23.36	22.54	179.82	-513.40	537.42	269.71	224.09	45.62	5.913	
6,400.00	6,296.34	6,412.82	6,344.69	23.75	22.93	179.12	-527.49	547.97	273.33	226.95	46.38	5.893	
6,500.00	6,394.26	6,510.06	6,440.48	24.14	23.30	178.55	-540.64	558.37	276.75	229.60	47.14	5.870	
6,600.00	6,492.17	6,608.50	6,537.59	24.52	23.67	178.15	-552.89	568.83	280.96	233.05	47.90	5.865	
6,700.00	6,590.09	6,708.78	6,636.55	24.91	24.04	177.81	-565.07	579.48	285.37	236.70	48.67	5.864	
6,800.00	6,688.01	6,809.59	6,735.98	25.29	24.42	177.33	-578.00	590.00	289.50	240.07	49.43	5.857	
6,900.00	6,785.92	6,909.44	6,834.40	25.68	24.80	176.64	-591.78	599.66	293.62	243.43	50.19	5.850	
7,000.00	6,883.84	7,011.23	6,934.71	26.07	25.18	176.17	-605.21	610.51	297.39	246.43	50.96	5.836	
7,100.00	6,981.75	7,116.84	7,038.65	26.45	25.58	175.86	-619.03	623.07	300.28	248.57	51.72	5.806	
7,200.00	7,079.67	7,216.85	7,136.67	26.84	25.96	175.51	-633.68	636.48	300.97	248.49	52.48	5.735	
7,300.00	7,177.58	7,308.86	7,227.27	27.23	26.31	175.31	-645.39	647.48	304.02	250.77	53.25	5.709	
7,400.00	7,275.50	7,418.13	7,334.97	27.61	26.72	174.95	-659.28	659.48	307.99	253.98	54.01	5.703	
7,500.00	7,373.41	7,528.94	7,442.92	28.00	27.15	173.81	-680.01	673.48	306.78	252.05	54.73	5.605	
7,589.46	7,461.01	7,611.59	7,523.25	28.35	27.47	172.76	-696.51	683.62	305.46	249.98	55.47	5.506	
7,600.00	7,471.33	7,621.03	7,532.47	28.39	27.50	172.65	-698.29	684.67	305.47	249.91	55.56	5.498	
7,700.00	7,569.25	7,709.34	7,618.98	28.77	27.84	171.60	-713.85	693.15	307.73	251.38	56.35	5.461	
7,764.22	7,632.13	7,771.78	7,680.43	29.02	28.08	170.88	-723.90	697.85	310.91	254.06	56.85	5.469	
7,800.00	7,667.21	7,809.21	7,717.24	29.16	28.22	170.46	-729.97	700.83	312.33	255.20	57.13	5.467	
7,900.00	7,765.68	7,908.41	7,814.85	29.54	28.60	169.50	-745.30	709.65	313.67	255.78	57.90	5.418	
8,000.00	7,864.70	8,009.27	7,914.33	29.91	28.98	168.93	-758.26	720.04	311.83	253.18	58.65	5.317	
8,100.00	7,964.15	8,109.76	8,013.49	30.28	29.35	168.62	-769.51	731.80	306.25	246.86	59.39	5.157	
8,200.00	8,063.90	8,218.77	8,120.82	30.63	29.76	168.34	-781.47	746.62	295.75	235.64	60.11	4.920	
8,300.00	8,163.83	8,327.85	8,227.25	30.98	30.18	167.53	-797.03	764.65	277.56	216.81	60.75	4.569	
8,350.17	8,214.00	8,374.98	8,273.13	31.14	30.36	-60.91	-804.44	772.49	266.82	205.69	61.13	4.365	
8,400.00	8,263.77	8,420.93	8,317.93	31.31	30.54	151.71	-811.60	779.76	258.02	196.51	61.51	4.195	
8,450.00	8,313.33	8,466.74	8,362.75	31.49	30.71	151.97	-818.29	786.51	253.72	191.81	61.91	4.098	
8,472.53	8,335.43	8,488.00	8,383.60	31.58	30.80	152.17	-821.23	789.46	253.30	191.21	62.09	4.079	
8,500.00	8,362.13	8,512.80	8,407.95	31.69	30.89	152.46	-824.58	792.73	254.06	191.75	62.31	4.077	SF
8,550.00	8,409.80	8,558.59	8,452.99	31.89	31.06	153.09	-830.70	798.21	259.04	196.35	62.69	4.132	
8,600.00	8,455.99	8,604.19	8,497.94	32.09	31.24	153.81	-836.73	802.98	268.65	205.58	63.07	4.260	
8,650.00	8,500.33	8,649.26	8,542.42	32.31	31.41	154.55	-842.74	807.16	282.68	219.24	63.43	4.456	
8,700.00	8,542.50	8,691.97	8,584.60	32.53	31.57	155.21	-848.47	810.64	301.03	237.25	63.78	4.720	
8,750.00	8,582.16	8,731.30	8,623.51	32.75	31.71	155.73	-853.40	813.46	323.80	259.70	64.10	5.051	
8,800.00	8,619.02	8,771.00	8,662.87	32.97	31.86	156.24	-857.95	815.95	350.84	286.43	64.42	5.446	
8,850.00	8,652.80	8,807.24	8,698.83	33.19	32.00	156.49	-861.94	818.13	381.60	316.90	64.71	5.898	
8,900.00	8,683.24	8,844.32	8,735.60	33.42	32.13	156.66	-866.08	820.52	415.52	350.52	65.00	6.393	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
8,950.00	8,710.11	8,881.94	8,772.88	33.64	32.27	156.70	-870.40	823.16	452.31	387.01	65.29	6.927	
9,000.00	8,733.20	8,922.41	8,812.87	33.86	32.43	156.75	-875.58	826.56	491.32	425.74	65.58	7.492	
9,050.00	8,752.35	8,960.36	8,850.23	34.08	32.57	156.44	-881.01	830.37	532.30	466.47	65.82	8.087	
9,100.00	8,767.39	8,981.20	8,870.71	34.29	32.65	154.50	-884.10	832.59	575.40	509.40	65.99	8.719	
9,100.17	8,767.43	8,981.26	8,870.78	34.29	32.65	154.49	-884.11	832.60	575.55	509.55	65.99	8.721	
9,200.00	8,791.66	9,017.19	8,906.15	34.71	32.79	147.11	-889.20	836.35	664.13	597.86	66.27	10.021	
9,300.00	8,812.57	9,055.00	8,943.42	35.13	32.93	140.45	-894.26	840.19	753.38	686.85	66.53	11.323	
9,400.00	8,829.97	9,077.21	8,965.33	35.54	33.01	132.67	-897.11	842.37	842.79	776.09	66.70	12.635	
9,500.00	8,843.72	10,322.95	9,739.34	35.95	38.00	173.68	-1,574.84	1,261.55	905.98	863.91	42.07	21.536	
9,600.00	8,853.72	10,491.12	9,751.33	36.33	38.65	174.82	-1,732.53	1,318.16	900.97	860.07	40.90	22.028	
9,700.00	8,859.89	10,608.55	9,754.25	36.70	39.08	175.45	-1,846.98	1,344.07	896.50	855.39	41.11	21.807	
9,800.00	8,862.18	10,711.58	9,754.64	37.05	39.44	175.94	-1,949.18	1,356.81	894.01	852.34	41.66	21.458	
9,809.00	8,862.20	10,719.46	9,754.64	37.08	39.47	175.98	-1,957.04	1,357.39	893.95	852.21	41.74	21.419	
9,841.50	8,862.20	10,747.99	9,754.68	37.19	39.57	176.08	-1,985.52	1,359.02	893.87	851.86	42.01	21.275	
9,900.00	8,862.20	10,801.14	9,754.96	37.39	39.75	176.15	-2,038.65	1,360.20	894.09	851.56	42.54	21.019	
10,000.00	8,862.19	10,901.64	9,755.39	37.74	40.09	176.14	-2,139.15	1,360.22	894.53	851.15	43.38	20.620	
10,100.00	8,862.19	10,991.25	9,756.19	38.10	40.40	175.91	-2,228.68	1,356.68	895.71	851.20	44.51	20.125	
10,200.00	8,862.19	11,092.15	9,757.51	38.48	40.75	175.41	-2,329.27	1,348.87	897.63	852.00	45.62	19.675	
10,300.00	8,862.19	11,210.56	9,757.65	38.86	41.18	175.20	-2,447.59	1,345.77	897.92	851.49	46.43	19.339	
10,400.00	8,862.19	11,310.74	9,757.35	39.25	41.57	175.36	-2,547.73	1,348.59	897.41	850.05	47.36	18.951	
10,500.00	8,862.18	11,409.08	9,757.16	39.66	41.96	175.43	-2,646.06	1,349.82	897.13	848.76	48.37	18.546	
10,600.00	8,862.18	11,508.65	9,757.19	40.07	42.37	175.62	-2,745.58	1,353.00	896.93	847.58	49.36	18.173	
10,700.00	8,862.18	11,610.49	9,757.10	40.49	42.80	175.75	-2,847.39	1,355.17	896.70	846.34	50.36	17.805	
10,786.28	8,862.18	11,693.41	9,756.89	40.87	43.15	175.76	-2,930.31	1,355.57	896.46	845.12	51.35	17.458	
10,800.00	8,862.18	11,706.26	9,756.91	40.93	43.20	175.77	-2,943.15	1,355.79	896.47	844.96	51.51	17.405	
10,900.00	8,862.18	11,821.27	9,756.52	41.37	43.71	175.94	-3,058.13	1,358.60	896.01	843.62	52.39	17.102	
11,000.00	8,862.17	11,915.00	9,755.43	41.82	44.13	175.99	-3,151.85	1,359.63	894.79	841.20	53.60	16.695	
11,051.07	8,862.17	11,958.24	9,755.24	42.05	44.32	175.98	-3,195.09	1,359.68	894.57	840.28	54.29	16.479	
11,100.00	8,862.17	11,999.68	9,755.43	42.28	44.51	176.00	-3,236.52	1,359.99	894.77	839.83	54.94	16.285	
11,200.00	8,862.17	12,089.26	9,756.80	42.75	44.93	176.07	-3,326.09	1,361.13	896.22	839.99	56.24	15.937	
11,300.00	8,862.17	12,210.45	9,758.15	43.22	45.50	176.16	-3,447.25	1,362.69	897.31	840.15	57.16	15.699	
11,301.65	8,862.17	12,208.78	9,758.17	43.23	45.49	176.16	-3,445.58	1,362.67	897.32	840.11	57.22	15.683	
11,400.00	8,862.17	12,301.76	9,758.56	43.71	45.93	176.22	-3,538.55	1,363.85	897.66	839.20	58.46	15.355	
11,500.00	8,862.16	12,399.93	9,759.24	44.20	46.41	176.29	-3,636.72	1,365.09	898.28	838.59	59.70	15.048	
11,600.00	8,862.16	12,491.12	9,760.64	44.70	46.86	176.38	-3,727.88	1,366.54	899.72	838.70	61.02	14.744	
11,700.00	8,862.16	12,602.80	9,761.80	45.20	47.42	176.56	-3,839.52	1,369.47	900.57	838.48	62.09	14.504	
11,800.00	8,862.16	12,695.74	9,762.65	45.72	47.89	176.61	-3,932.44	1,370.39	901.44	838.00	63.44	14.210	
11,900.00	8,862.16	12,798.56	9,764.08	46.24	48.41	176.41	-4,035.19	1,367.31	903.04	838.26	64.78	13.940	
11,985.78	8,862.15	12,893.38	9,763.52	46.69	48.88	175.94	-4,129.74	1,360.12	902.93	836.94	65.99	13.682	
12,000.00	8,862.15	12,905.35	9,763.47	46.76	48.94	175.88	-4,141.68	1,359.23	902.95	836.72	66.23	13.634	
12,100.00	8,862.15	12,996.18	9,763.95	47.29	49.40	175.52	-4,232.34	1,353.68	903.93	836.14	67.79	13.334	
12,200.00	8,862.15	13,101.16	9,764.74	47.83	49.94	175.17	-4,337.17	1,348.30	905.13	835.92	69.21	13.078	
12,300.00	8,862.15	13,200.93	9,765.01	48.38	50.46	174.96	-4,436.88	1,345.16	905.68	835.05	70.64	12.822	
12,400.00	8,862.15	13,295.97	9,765.96	48.93	50.97	174.91	-4,531.91	1,344.40	906.78	834.72	72.06	12.584	
12,500.00	8,862.14	13,397.48	9,767.44	49.48	51.53	174.98	-4,633.41	1,345.60	908.14	834.77	73.37	12.378	
12,600.00	8,862.14	13,502.14	9,768.65	50.04	52.12	175.17	-4,738.02	1,348.64	909.06	834.44	74.62	12.183	
12,700.00	8,862.14	13,601.74	9,769.65	50.61	52.68	175.44	-4,837.51	1,353.12	909.71	833.83	75.89	11.988	
12,800.00	8,862.14	13,685.02	9,771.34	51.18	53.17	175.75	-4,920.63	1,358.01	911.31	834.00	77.31	11.788	
12,900.00	8,862.14	13,810.78	9,773.74	51.76	53.90	176.14	-5,046.17	1,364.31	912.98	834.67	78.31	11.659	
12,903.88	8,862.13	13,810.12	9,773.77	51.78	53.89	176.14	-5,045.51	1,364.33	913.01	834.61	78.41	11.645	
13,000.00	8,862.13	13,904.12	9,774.22	52.34	54.43	176.18	-5,139.50	1,365.06	913.43	833.68	79.75	11.453	
13,100.00	8,862.13	14,005.12	9,774.45	52.92	55.01	176.16	-5,240.50	1,365.02	913.67	832.52	81.15	11.259	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
13,200.00	8,862.13	14,095.68	9,775.49	53.51	55.54	176.19	-5,331.06	1,365.62	914.77	832.14	82.63	11.070	
13,300.00	8,862.13	14,210.69	9,776.19	54.10	56.21	176.17	-5,446.06	1,365.41	915.41	831.49	83.92	10.908	
13,400.00	8,862.12	14,333.17	9,774.39	54.70	56.93	176.02	-5,568.51	1,363.38	914.09	828.91	85.18	10.731	
13,500.00	8,862.12	14,429.89	9,771.51	55.30	57.51	175.90	-5,665.17	1,361.86	911.26	824.57	86.69	10.512	
13,600.00	8,862.12	14,523.03	9,769.76	55.91	58.06	175.91	-5,758.29	1,362.21	909.37	821.19	88.18	10.313	
13,700.00	8,862.12	14,617.54	9,768.57	56.52	58.63	175.91	-5,852.80	1,362.61	908.10	818.44	89.66	10.128	
13,800.00	8,862.12	14,725.28	9,767.23	57.13	59.29	175.90	-5,960.52	1,362.74	906.88	815.85	91.03	9.962	
13,900.00	8,862.11	14,820.96	9,765.53	57.75	59.87	175.79	-6,056.17	1,361.22	905.24	812.68	92.56	9.780	
14,000.00	8,862.11	14,923.90	9,763.74	58.37	60.49	175.57	-6,159.05	1,358.01	903.75	809.69	94.06	9.608	
14,100.00	8,862.11	15,016.00	9,762.16	58.99	61.05	175.35	-6,251.08	1,354.91	902.35	806.68	95.67	9.432	
14,200.00	8,862.11	15,111.22	9,761.40	59.62	61.64	175.28	-6,346.28	1,354.00	901.65	804.46	97.19	9.277	
14,300.00	8,862.11	15,218.79	9,760.84	60.25	62.31	175.44	-6,453.82	1,356.77	900.94	802.42	98.52	9.144	
14,400.00	8,862.10	15,317.81	9,759.78	60.88	62.94	175.52	-6,552.81	1,358.40	899.76	799.80	99.96	9.001	
14,467.02	8,862.10	15,376.05	9,759.54	61.31	63.30	175.56	-6,611.05	1,359.11	899.43	798.43	101.00	8.905	
14,500.00	8,862.10	15,406.94	9,759.63	61.52	63.50	175.59	-6,641.93	1,359.64	899.49	798.00	101.49	8.863	
14,600.00	8,862.10	15,509.20	9,759.96	62.16	64.15	175.76	-6,744.15	1,362.52	899.61	796.74	102.87	8.745	
14,700.00	8,862.10	15,610.08	9,760.02	62.80	64.79	175.95	-6,844.99	1,365.58	899.47	795.20	104.27	8.626	
14,724.51	8,862.10	15,633.63	9,760.05	62.96	64.95	175.99	-6,868.53	1,366.29	899.46	794.83	104.62	8.597	
14,800.00	8,862.10	15,710.82	9,760.23	63.44	65.44	176.13	-6,945.67	1,368.58	899.49	793.82	105.67	8.512	
14,900.00	8,862.09	15,810.94	9,759.87	64.09	66.09	176.22	-7,045.78	1,370.27	899.03	791.92	107.11	8.393	
14,917.98	8,862.09	15,827.15	9,759.87	64.21	66.19	176.24	-7,061.99	1,370.58	899.01	791.63	107.38	8.372	
15,000.00	8,862.09	15,905.20	9,760.24	64.74	66.70	176.35	-7,140.02	1,372.41	899.28	790.69	108.59	8.281	
15,100.00	8,862.09	16,004.30	9,760.85	65.39	67.34	176.48	-7,239.09	1,374.60	899.77	789.74	110.03	8.177	
15,200.00	8,862.09	16,103.39	9,761.54	66.05	67.98	176.58	-7,338.16	1,376.36	900.37	788.89	111.49	8.076	
15,300.00	8,862.09	16,197.54	9,762.48	66.70	68.60	176.74	-7,432.27	1,378.92	901.23	788.27	112.96	7.978	
15,400.00	8,862.08	16,301.71	9,764.06	67.36	69.29	176.91	-7,536.40	1,381.77	902.62	788.26	114.36	7.893	
15,500.00	8,862.08	16,403.55	9,764.77	68.02	69.96	177.07	-7,638.19	1,384.40	903.19	787.41	115.78	7.801	
15,600.00	8,862.08	16,497.60	9,765.78	68.69	70.58	177.25	-7,732.19	1,387.41	904.12	786.86	117.25	7.711	
15,700.00	8,862.08	16,615.60	9,766.56	69.35	71.36	177.40	-7,850.14	1,390.01	904.73	786.18	118.55	7.632	
15,800.00	8,862.08	16,712.80	9,766.16	70.02	72.00	177.37	-7,947.35	1,389.78	904.34	784.26	120.08	7.531	
15,900.00	8,862.07	16,826.76	9,764.01	70.69	72.75	177.11	-8,061.21	1,385.91	902.55	781.00	121.55	7.425	
16,000.00	8,862.07	16,909.90	9,763.20	71.36	73.30	176.94	-8,144.31	1,383.44	901.71	778.45	123.26	7.315	
16,009.74	8,862.07	16,919.32	9,763.18	71.42	73.36	176.93	-8,153.73	1,383.26	901.71	778.29	123.41	7.306	
16,100.00	8,862.07	17,007.94	9,763.24	72.03	73.95	176.85	-8,242.34	1,382.19	901.84	777.03	124.81	7.226	
16,200.00	8,862.07	17,112.21	9,763.18	72.71	74.64	176.78	-8,346.60	1,381.34	901.84	775.53	126.30	7.140	
16,300.00	8,862.07	17,212.14	9,762.56	73.38	75.30	176.68	-8,446.52	1,379.97	901.31	773.46	127.85	7.050	
16,323.51	8,862.07	17,233.13	9,762.49	73.54	75.44	176.64	-8,467.50	1,379.35	901.28	773.04	128.24	7.028	
16,400.00	8,862.06	17,307.81	9,762.52	74.06	75.94	176.44	-8,542.12	1,376.30	901.50	772.02	129.47	6.963	
16,500.00	8,862.06	17,410.79	9,762.25	74.74	76.62	176.24	-8,645.05	1,373.38	901.43	770.40	131.03	6.879	
16,600.00	8,862.06	17,512.09	9,762.01	75.42	77.30	176.13	-8,746.35	1,371.82	901.31	768.74	132.57	6.799	
16,681.21	8,862.06	17,590.97	9,761.75	75.97	77.84	176.08	-8,825.22	1,371.22	901.10	767.27	133.83	6.733	
16,700.00	8,862.06	17,608.26	9,761.76	76.10	77.95	176.08	-8,842.51	1,371.22	901.12	766.99	134.13	6.718	
16,800.00	8,862.06	17,711.21	9,762.03	76.79	78.65	176.11	-8,945.45	1,371.94	901.35	765.74	135.61	6.647	
16,900.00	8,862.05	17,815.12	9,761.58	77.47	79.36	176.13	-9,049.36	1,372.40	900.90	763.81	137.09	6.572	
17,000.00	8,862.05	17,915.49	9,760.90	78.16	80.04	176.08	-9,149.73	1,371.95	900.27	761.65	138.61	6.495	
17,100.00	8,862.05	18,020.03	9,759.95	78.85	80.75	176.04	-9,254.27	1,371.60	899.40	759.30	140.10	6.419	
17,200.00	8,862.05	18,120.91	9,758.77	79.54	81.44	175.99	-9,355.14	1,371.07	898.29	756.66	141.63	6.342	
17,300.00	8,862.05	18,233.19	9,756.10	80.23	82.21	175.86	-9,467.37	1,369.33	896.00	752.91	143.09	6.262	
17,400.00	8,862.04	18,324.17	9,754.13	80.92	82.83	175.73	-9,558.31	1,367.65	893.98	749.25	144.74	6.177	
17,500.00	8,862.04	18,421.54	9,752.57	81.62	83.50	175.61	-9,655.66	1,366.12	892.52	746.20	146.32	6.100	
17,600.00	8,862.04	18,519.76	9,751.30	82.31	84.17	175.49	-9,753.86	1,364.45	891.38	743.47	147.90	6.027	
17,700.00	8,862.04	18,621.66	9,750.06	83.01	84.88	175.47	-9,855.74	1,364.41	890.18	740.76	149.42	5.958	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 19H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS **Offset Well Error:** 0.50 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
17,800.00	8,862.04	18,722.66	9,748.75	83.71	85.58	175.57	-9,956.71	1,366.26	888.76	737.87	150.90	5.890	
17,900.00	8,862.03	18,821.88	9,747.70	84.41	86.28	175.83	-10,055.83	1,370.63	887.39	735.06	152.33	5.825	
18,000.00	8,862.03	18,923.16	9,746.41	85.11	86.98	175.92	-10,157.09	1,372.24	886.03	732.21	153.81	5.760	
18,100.00	8,862.03	19,017.11	9,745.25	85.81	87.64	175.98	-10,251.02	1,373.46	884.73	729.36	155.37	5.694	
18,200.00	8,862.03	19,114.28	9,744.95	86.51	88.32	176.11	-10,348.17	1,375.70	884.26	727.39	156.87	5.637	
18,300.00	8,862.03	19,220.47	9,744.31	87.21	89.07	176.27	-10,454.32	1,378.41	883.52	725.22	158.29	5.582	
18,400.00	8,862.02	19,319.75	9,743.21	87.92	89.77	176.37	-10,553.58	1,380.25	882.31	722.52	159.79	5.522	
18,500.00	8,862.02	19,421.23	9,742.18	88.62	90.48	176.50	-10,655.03	1,382.48	881.17	719.91	161.26	5.464	
18,600.00	8,862.02	19,517.87	9,741.29	89.33	91.16	176.65	-10,751.63	1,385.05	880.10	717.33	162.77	5.407	
18,700.00	8,862.02	19,621.22	9,740.28	90.03	91.89	176.83	-10,854.93	1,387.96	878.98	714.77	164.21	5.353	
18,800.00	8,862.02	19,716.23	9,739.45	90.74	92.56	176.86	-10,949.93	1,388.75	878.07	712.30	165.77	5.297	
18,900.00	8,862.01	19,817.21	9,738.62	91.45	93.27	176.78	-11,050.90	1,387.66	877.32	709.99	167.33	5.243	
19,000.00	8,862.01	19,916.25	9,737.75	92.16	93.96	176.64	-11,149.91	1,385.80	876.57	707.65	168.91	5.189	
19,100.00	8,862.01	20,017.66	9,737.00	92.87	94.68	176.52	-11,251.31	1,384.18	875.94	705.46	170.48	5.138	
19,200.00	8,862.01	20,116.41	9,735.83	93.58	95.37	176.37	-11,350.04	1,382.08	874.90	702.83	172.08	5.084	
19,257.61	8,862.01	20,168.00	9,735.60	93.99	95.73	176.29	-11,401.61	1,381.11	874.72	701.69	173.03	5.055	
19,300.00	8,862.01	20,204.06	9,735.75	94.30	95.99	176.25	-11,437.66	1,380.54	874.94	701.20	173.74	5.036	
19,400.00	8,862.00	20,227.00	9,735.89	95.01	96.15	176.23	-11,460.60	1,380.19	879.04	703.85	175.20	5.017	
19,500.00	8,862.00	20,227.00	9,735.89	95.72	96.15	176.23	-11,460.60	1,380.19	894.09	719.03	175.06	5.107	
19,547.53	8,862.00	20,227.00	9,735.89	96.06	96.15	176.23	-11,460.60	1,380.19	905.03	730.61	174.42	5.189	
19,548.26	8,862.00	20,227.00	9,735.89	96.14	96.15	176.23	-11,460.60	1,380.19	905.22	730.07	175.15	5.168	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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	0.61	0.61	0.00	0.50	72.66	56.54	181.07	189.69				
100.00	100.00	101.53	101.53	0.28	0.53	72.75	56.18	180.92	189.45	188.64	0.80	236.321	
200.00	200.00	202.74	202.73	0.63	0.60	73.02	55.09	180.48	188.71	187.48	1.23	153.074	
300.00	300.00	313.82	313.64	0.99	0.89	73.90	50.95	176.50	184.16	182.27	1.89	97.410	
400.00	400.00	409.49	409.11	1.35	1.19	74.73	46.91	171.80	178.29	175.75	2.54	70.171	
500.00	500.00	507.80	507.33	1.71	1.52	75.14	44.66	168.26	174.21	170.99	3.22	54.041	
600.00	600.00	607.84	607.28	2.07	1.86	75.16	43.56	164.40	170.21	166.28	3.92	43.400	
700.00	700.00	704.81	704.20	2.43	2.19	74.98	43.21	161.09	166.83	162.22	4.61	36.174	
769.89	769.89	771.11	770.49	2.68	2.41	74.85	43.41	160.36	166.13	161.04	5.09	32.666	
800.00	800.00	800.13	799.51	2.79	2.51	74.83	43.50	160.43	166.23	160.94	5.29	31.429	
900.00	900.00	897.18	896.54	3.14	2.83	74.95	43.57	162.05	167.86	161.90	5.96	28.146	
1,000.00	1,000.00	997.04	996.36	3.50	3.16	75.22	43.50	164.91	170.60	163.95	6.65	25.644	
1,100.00	1,099.98	1,098.61	1,097.91	3.84	3.50	-84.96	42.96	167.16	172.45	165.12	7.34	23.502	
1,200.00	1,199.84	1,197.34	1,196.63	4.17	3.83	-86.52	43.05	168.80	173.69	165.69	8.00	21.711	
1,300.00	1,299.45	1,294.35	1,293.59	4.51	4.16	-89.45	44.55	171.29	176.31	167.65	8.66	20.360	
1,350.00	1,349.13	1,343.26	1,342.46	4.68	4.33	-91.36	45.69	172.93	178.35	169.35	8.99	19.830	
1,400.00	1,398.73	1,392.74	1,391.90	4.85	4.50	-87.05	46.81	174.66	180.31	170.98	9.33	19.320	
1,500.00	1,497.69	1,491.50	1,490.57	5.19	4.84	-81.52	48.91	178.21	182.98	172.96	10.02	18.268	
1,600.00	1,596.25	1,589.88	1,588.86	5.54	5.18	-79.48	51.26	181.70	184.40	173.70	10.71	17.224	
1,670.62	1,665.55	1,658.53	1,657.44	5.78	5.42	-79.70	53.23	184.09	185.11	173.92	11.19	16.539	
1,700.00	1,694.31	1,686.99	1,685.86	5.89	5.52	-81.48	54.12	185.13	185.55	174.16	11.39	16.284	
1,800.00	1,792.23	1,784.71	1,783.46	6.24	5.87	-87.59	57.49	188.56	188.61	176.52	12.09	15.596	
1,900.00	1,890.14	1,882.86	1,881.50	6.61	6.21	-93.59	61.14	191.66	193.81	181.01	12.80	15.142	
2,000.00	1,988.06	1,979.26	1,977.77	6.97	6.55	-98.94	64.54	195.44	201.33	187.83	13.50	14.917	
2,100.00	2,085.97	2,077.93	2,076.21	7.34	6.90	-103.29	66.88	201.67	210.65	196.44	14.21	14.824	
2,200.00	2,183.89	2,177.03	2,174.98	7.70	7.25	-106.77	68.13	209.54	220.76	205.83	14.93	14.788	
2,300.00	2,281.80	2,277.66	2,275.20	8.07	7.60	-109.65	68.37	218.58	231.06	215.41	15.66	14.757	
2,400.00	2,379.72	2,379.95	2,376.86	8.45	7.97	-111.72	66.64	229.73	240.71	224.31	16.40	14.681	
2,500.00	2,477.64	2,483.46	2,479.55	8.82	8.34	-113.25	62.90	242.19	249.18	232.04	17.14	14.539	
2,600.00	2,575.55	2,589.55	2,584.93	9.19	8.71	-115.01	57.28	252.99	255.65	237.77	17.88	14.295	
2,700.00	2,673.47	2,690.19	2,685.06	9.57	9.07	-117.01	50.98	261.01	260.83	242.22	18.61	14.015	
2,800.00	2,771.38	2,793.21	2,787.55	9.95	9.44	-119.05	43.91	268.73	265.63	246.29	19.34	13.734	
2,900.00	2,869.30	2,898.09	2,891.56	10.32	9.81	-120.63	34.38	278.14	268.82	248.75	20.07	13.394	
3,000.00	2,967.21	3,007.36	2,999.30	10.70	10.20	-121.56	21.16	290.53	269.66	248.87	20.79	12.969	
3,100.00	3,065.13	3,117.69	3,106.98	11.08	10.60	-121.66	2.88	306.02	266.56	245.07	21.49	12.402	
3,200.00	3,163.05	3,218.12	3,204.50	11.46	10.96	-121.47	-15.92	320.98	261.48	239.25	22.23	11.764	
3,300.00	3,260.96	3,315.93	3,299.45	11.84	11.32	-121.21	-34.07	335.91	256.62	233.65	22.98	11.169	
3,400.00	3,358.88	3,410.85	3,391.87	12.22	11.67	-121.03	-50.14	350.34	253.37	229.64	23.74	10.674	
3,500.00	3,456.79	3,508.15	3,486.83	12.60	12.02	-120.91	-65.35	365.12	251.42	226.94	24.49	10.267	
3,561.20	3,516.71	3,566.07	3,543.56	12.83	12.24	-120.99	-73.55	373.45	251.03	226.08	24.95	10.061	
3,600.00	3,554.71	3,604.29	3,581.10	12.98	12.38	-121.12	-78.56	378.64	251.12	225.89	25.24	9.950	
3,700.00	3,652.62	3,706.69	3,681.58	13.36	12.76	-121.45	-92.42	392.65	250.97	224.99	25.98	9.660	
3,800.00	3,750.54	3,809.59	3,782.14	13.75	13.14	-121.41	-107.90	408.04	249.55	222.83	26.72	9.338	
3,900.00	3,848.45	3,910.16	3,880.04	14.13	13.52	-120.99	-123.95	424.49	247.47	220.00	27.47	9.007	
4,000.00	3,946.37	4,011.47	3,978.52	14.51	13.90	-120.41	-140.40	441.69	245.26	217.03	28.23	8.689	
4,100.00	4,044.29	4,112.78	4,076.94	14.89	14.28	-119.89	-157.62	458.40	242.23	213.25	28.98	8.359	
4,200.00	4,142.20	4,212.06	4,173.55	15.28	14.66	-119.57	-174.42	473.97	239.11	209.37	29.74	8.040	
4,300.00	4,240.12	4,310.35	4,269.26	15.66	15.03	-119.24	-190.54	489.48	236.54	206.04	30.50	7.755	
4,400.00	4,338.03	4,412.07	4,368.27	16.05	15.42	-118.83	-207.10	505.87	234.17	202.91	31.26	7.492	
4,500.00	4,435.95	4,515.64	4,468.45	16.43	15.81	-117.84	-225.77	524.34	230.50	198.49	32.01	7.202	
4,600.00	4,533.86	4,616.14	4,565.04	16.81	16.20	-116.31	-245.37	544.00	225.89	193.11	32.78	6.891	
4,700.00	4,631.78	4,716.00	4,660.82	17.20	16.59	-114.54	-265.17	564.15	221.32	187.76	33.56	6.594	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
4,800.00	4,729.69	4,817.64	4,758.55	17.58	16.98	-112.99	-285.46	583.33	216.42	182.09	34.33	6.304	
4,900.00	4,827.61	4,917.56	4,854.92	17.97	17.37	-111.82	-305.43	600.56	211.10	175.99	35.11	6.013	
5,000.00	4,925.53	5,015.34	4,949.88	18.35	17.75	-111.36	-323.61	615.14	206.37	170.49	35.89	5.751	
5,100.00	5,023.44	5,113.26	5,045.52	18.74	18.12	-111.49	-340.11	628.16	202.73	166.07	36.66	5.530	
5,200.00	5,121.36	5,212.05	5,142.24	19.12	18.49	-111.89	-355.84	640.69	199.75	162.33	37.42	5.338	
5,300.00	5,219.27	5,309.61	5,237.99	19.51	18.87	-112.57	-370.30	652.50	197.63	159.45	38.18	5.176	
5,400.00	5,317.19	5,408.36	5,334.94	19.89	19.24	-113.08	-383.84	665.50	196.93	157.99	38.94	5.057	
5,500.00	5,415.10	5,510.20	5,434.31	20.28	19.63	-112.74	-399.44	681.41	195.51	155.80	39.70	4.924	
5,600.00	5,513.02	5,608.97	5,530.57	20.66	20.01	-112.25	-414.88	697.29	193.94	153.46	40.47	4.792	
5,700.00	5,610.93	5,707.78	5,627.24	21.05	20.39	-112.22	-428.92	712.07	193.36	152.12	41.24	4.688	
5,800.00	5,708.85	5,808.04	5,725.38	21.43	20.78	-112.24	-443.04	726.94	192.85	150.85	42.00	4.591	
5,900.00	5,806.77	5,907.94	5,823.13	21.82	21.16	-112.21	-457.26	741.87	192.24	149.48	42.77	4.495	
6,000.00	5,904.68	6,006.98	5,920.24	22.21	21.54	-112.47	-470.79	755.87	191.91	148.38	43.53	4.409	
6,005.58	5,910.15	6,012.50	5,925.66	22.23	21.56	-112.49	-471.52	756.62	191.91	148.33	43.57	4.404	
6,100.00	6,002.60	6,105.63	6,017.22	22.59	21.91	-113.07	-483.30	768.93	192.22	147.94	44.28	4.341	
6,200.00	6,100.51	6,206.68	6,116.66	22.98	22.30	-113.83	-495.74	781.95	192.79	147.75	45.04	4.280	
6,300.00	6,198.43	6,306.73	6,215.00	23.36	22.68	-114.47	-508.68	795.02	192.86	147.06	45.79	4.211	
6,400.00	6,296.34	6,408.23	6,314.66	23.75	23.06	-114.97	-522.22	808.65	192.65	146.10	46.55	4.139	
6,500.00	6,394.26	6,508.32	6,412.71	24.14	23.45	-115.14	-536.33	823.00	192.00	144.69	47.31	4.058	
6,600.00	6,492.17	6,610.18	6,512.31	24.52	23.84	-115.13	-551.46	837.98	190.72	142.65	48.07	3.967	
6,700.00	6,590.09	6,707.96	6,608.03	24.91	24.22	-115.25	-565.74	852.00	189.58	140.74	48.84	3.881	
6,723.98	6,613.57	6,731.01	6,630.63	25.00	24.30	-115.33	-568.86	855.20	189.52	140.49	49.03	3.866	
6,800.00	6,688.01	6,805.07	6,703.43	25.29	24.59	-115.72	-578.08	865.28	190.08	140.48	49.60	3.832	
6,900.00	6,785.92	6,906.78	6,803.47	25.68	24.97	-116.45	-590.88	878.41	190.49	140.14	50.36	3.783	
7,000.00	6,883.84	7,007.55	6,902.60	26.07	25.36	-117.21	-603.69	891.27	190.80	139.69	51.11	3.733	
7,100.00	6,981.75	7,109.50	7,002.55	26.45	25.75	-117.68	-618.46	904.79	189.51	137.65	51.86	3.654	
7,166.16	7,046.53	7,173.16	7,064.93	26.71	25.99	-117.82	-627.43	913.83	189.08	136.71	52.37	3.610	
7,200.00	7,079.67	7,204.78	7,095.98	26.84	26.11	-117.96	-631.43	918.20	189.30	136.67	52.63	3.597	
7,300.00	7,177.58	7,303.37	7,193.19	27.23	26.49	-118.81	-641.88	930.92	191.75	138.37	53.38	3.592	
7,400.00	7,275.50	7,414.84	7,301.14	27.61	26.92	-117.21	-658.70	952.67	191.42	137.29	54.14	3.536	
7,500.00	7,373.41	7,519.01	7,399.40	28.00	27.35	-113.37	-681.81	978.39	185.76	130.83	54.93	3.382	
7,600.00	7,471.33	7,617.25	7,492.55	28.39	27.74	-110.08	-703.38	1,000.95	180.54	124.76	55.78	3.237	
7,700.00	7,569.25	7,714.82	7,586.06	28.77	28.13	-107.70	-722.86	1,020.81	176.72	120.11	56.62	3.121	
7,764.22	7,632.13	7,777.55	7,646.76	29.02	28.38	-106.81	-734.00	1,031.99	175.04	117.91	57.13	3.064	
7,800.00	7,667.21	7,812.55	7,680.92	29.16	28.52	-106.61	-739.54	1,037.29	174.27	116.86	57.41	3.035	
7,900.00	7,765.68	7,911.11	7,777.66	29.54	28.90	-106.21	-753.40	1,049.99	172.10	113.92	58.18	2.958	
8,000.00	7,864.70	8,007.29	7,872.06	29.91	29.26	-104.56	-765.98	1,063.45	170.40	111.45	58.95	2.891	
8,100.00	7,964.15	8,109.13	7,971.38	30.28	29.66	-100.50	-780.30	1,080.82	168.83	109.08	59.75	2.826	
8,200.00	8,063.90	8,209.30	8,069.14	30.63	30.05	-95.42	-795.12	1,096.79	166.47	105.93	60.54	2.750	
8,300.00	8,163.83	8,308.47	8,166.24	30.98	30.43	-89.61	-809.30	1,111.11	164.81	103.48	61.33	2.687	
8,350.17	8,214.00	8,359.95	8,216.57	31.14	30.63	46.16	-817.27	1,118.43	164.21	102.49	61.72	2.660	
8,391.70	8,255.49	8,402.27	8,257.85	31.28	30.80	-98.53	-824.48	1,124.35	163.96	101.92	62.04	2.643	CC
8,400.00	8,263.77	8,410.59	8,265.96	31.31	30.83	-98.10	-825.93	1,125.50	163.97	101.87	62.10	2.640	ES
8,450.00	8,313.33	8,460.98	8,315.10	31.49	31.02	-96.43	-834.74	1,132.32	164.38	101.88	62.49	2.630	
8,500.00	8,362.13	8,511.19	8,364.13	31.69	31.22	-96.32	-843.43	1,138.83	165.18	102.30	62.88	2.627	SF
8,550.00	8,409.80	8,560.73	8,412.67	31.89	31.41	-97.93	-851.35	1,144.74	166.55	103.30	63.25	2.633	
8,600.00	8,455.99	8,607.62	8,458.76	32.09	31.59	-100.89	-858.17	1,150.03	169.13	105.50	63.62	2.658	
8,650.00	8,500.33	8,652.31	8,502.70	32.31	31.76	-104.60	-864.09	1,155.56	174.21	110.25	63.97	2.724	
8,700.00	8,542.50	8,697.21	8,546.85	32.53	31.93	-108.91	-869.62	1,161.67	182.51	118.22	64.29	2.839	
8,750.00	8,582.16	8,742.46	8,591.23	32.75	32.10	-113.44	-875.50	1,168.25	194.01	129.42	64.60	3.003	
8,800.00	8,619.02	8,786.23	8,634.04	32.97	32.27	-117.75	-881.60	1,174.98	209.11	144.22	64.90	3.222	
8,850.00	8,652.80	8,828.10	8,674.92	33.19	32.44	-121.62	-887.74	1,181.59	228.10	162.93	65.18	3.500	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
8,900.00	8,683.24	8,867.61	8,713.45	33.42	32.59	-124.86	-893.80	1,187.94	251.12	185.68	65.44	3.838	
8,950.00	8,710.11	8,903.78	8,748.71	33.64	32.73	-127.30	-899.49	1,193.67	278.17	212.49	65.68	4.235	
9,000.00	8,733.20	8,936.63	8,780.74	33.86	32.86	-128.89	-904.73	1,198.73	309.12	243.21	65.91	4.690	
9,050.00	8,752.35	8,966.08	8,809.46	34.08	32.97	-129.54	-909.48	1,203.15	343.67	277.55	66.12	5.198	
9,100.00	8,767.39	8,992.26	8,835.00	34.29	33.08	-129.16	-913.78	1,207.02	381.40	315.11	66.30	5.753	
9,100.17	8,767.43	8,992.35	8,835.08	34.29	33.08	-129.15	-913.79	1,207.04	381.53	315.24	66.30	5.755	
9,200.00	8,791.66	9,039.47	8,881.01	34.71	33.26	-139.90	-921.74	1,213.94	463.72	397.09	66.62	6.960	
9,300.00	8,812.57	9,078.49	8,919.06	35.13	33.41	-150.24	-928.42	1,219.50	551.82	484.89	66.93	8.245	
9,400.00	8,829.97	9,110.65	8,950.48	35.54	33.54	-161.39	-933.74	1,223.77	643.86	576.66	67.20	9.581	
9,500.00	8,843.72	9,138.05	8,977.32	35.95	33.64	-174.51	-938.12	1,227.17	738.43	671.01	67.42	10.952	
9,600.00	8,853.72	9,162.56	9,001.35	36.33	33.74	169.89	-941.93	1,230.06	834.53	766.92	67.61	12.342	
9,700.00	8,859.89	9,183.55	9,021.94	36.70	33.82	152.55	-945.15	1,232.53	931.39	863.61	67.77	13.743	
9,800.00	8,862.18	9,199.98	9,038.07	37.05	33.88	135.34	-947.64	1,234.48	1,028.42	960.53	67.90	15.147	
9,809.00	8,862.20	9,201.23	9,039.30	37.08	33.89	133.88	-947.83	1,234.63	1,037.15	969.24	67.91	15.273	
9,900.00	8,862.20	10,454.00	9,766.91	37.39	39.33	-156.02	-1,575.39	1,821.53	1,094.52	1,039.88	54.65	20.029	
10,000.00	8,862.19	10,536.41	9,774.22	37.74	39.71	-153.39	-1,636.82	1,875.96	1,138.14	1,081.48	56.66	20.086	
10,100.00	8,862.19	10,621.00	9,781.50	38.10	40.12	-150.88	-1,700.29	1,931.40	1,183.41	1,124.82	58.59	20.198	
10,200.00	8,862.19	10,747.62	9,790.84	38.48	40.74	-147.43	-1,797.08	2,012.50	1,229.00	1,168.87	60.13	20.440	
10,300.00	8,862.19	10,895.63	9,794.90	38.86	41.47	-143.72	-1,913.20	2,104.15	1,271.70	1,210.07	61.64	20.632	
10,400.00	8,862.19	11,011.46	9,794.94	39.25	42.06	-141.05	-2,005.77	2,173.76	1,313.37	1,249.98	63.38	20.721	
10,500.00	8,862.18	11,201.79	9,796.33	39.66	43.04	-137.57	-2,167.51	2,273.85	1,351.02	1,286.45	64.57	20.925	
10,600.00	8,862.18	11,390.43	9,797.46	40.07	44.00	-134.97	-2,336.99	2,356.40	1,383.19	1,317.64	65.54	21.103	
10,700.00	8,862.18	11,482.39	9,798.34	40.49	44.47	-133.92	-2,421.55	2,392.54	1,412.86	1,345.84	67.03	21.079	
10,800.00	8,862.18	11,581.56	9,798.69	40.93	44.99	-132.81	-2,512.83	2,431.31	1,442.46	1,373.99	68.47	21.067	
10,900.00	8,862.18	11,669.41	9,798.94	41.37	45.46	-131.87	-2,593.63	2,465.81	1,472.60	1,402.63	69.97	21.046	
11,000.00	8,862.17	11,778.42	9,799.28	41.82	46.04	-130.75	-2,693.95	2,508.46	1,503.11	1,431.75	71.36	21.063	
11,100.00	8,862.17	11,969.05	9,799.72	42.28	47.07	-129.12	-2,872.88	2,574.01	1,530.23	1,457.98	72.26	21.178	
11,200.00	8,862.17	12,224.84	9,800.63	42.75	48.38	-127.66	-3,120.53	2,637.23	1,550.72	1,478.30	72.42	21.413	
11,300.00	8,862.17	12,440.86	9,801.25	43.22	49.43	-127.03	-3,334.43	2,666.82	1,562.14	1,489.67	72.47	21.555	
11,400.00	8,862.17	12,604.72	9,800.99	43.71	50.18	-126.81	-3,497.97	2,676.45	1,566.37	1,493.55	72.82	21.511	
11,500.00	8,862.16	12,707.34	9,801.61	44.20	50.65	-126.76	-3,600.52	2,680.10	1,569.44	1,495.68	73.76	21.276	
11,600.00	8,862.16	12,839.49	9,801.69	44.70	51.25	-126.71	-3,732.65	2,682.50	1,570.71	1,496.33	74.38	21.118	
11,700.00	8,862.16	12,939.54	9,801.99	45.20	51.70	-126.71	-3,832.70	2,683.04	1,571.18	1,495.82	75.35	20.851	
11,800.00	8,862.16	13,041.54	9,802.48	45.72	52.17	-126.72	-3,934.70	2,683.55	1,571.71	1,495.39	76.32	20.595	
11,900.00	8,862.16	13,140.30	9,803.25	46.24	52.64	-126.74	-4,033.45	2,683.73	1,572.17	1,494.85	77.33	20.331	
12,000.00	8,862.15	13,239.84	9,803.83	46.76	53.11	-126.75	-4,132.99	2,684.14	1,572.70	1,494.35	78.35	20.072	
12,100.00	8,862.15	13,338.57	9,804.59	47.29	53.59	-126.77	-4,231.72	2,684.48	1,573.29	1,493.89	79.40	19.814	
12,200.00	8,862.15	13,439.20	9,805.46	47.83	54.08	-126.80	-4,332.34	2,684.79	1,573.91	1,493.47	80.44	19.565	
12,300.00	8,862.15	13,539.36	9,805.87	48.38	54.57	-126.80	-4,432.50	2,685.30	1,574.42	1,492.90	81.52	19.314	
12,400.00	8,862.15	13,635.15	9,807.32	48.93	55.05	-126.85	-4,528.27	2,685.39	1,575.24	1,492.61	82.63	19.063	
12,500.00	8,862.14	13,742.19	9,808.26	49.48	55.59	-126.87	-4,635.31	2,685.61	1,575.78	1,492.14	83.64	18.840	
12,600.00	8,862.14	13,840.98	9,808.73	50.04	56.10	-126.88	-4,734.09	2,685.94	1,576.19	1,491.42	84.77	18.595	
12,700.00	8,862.14	13,941.64	9,809.05	50.61	56.62	-126.88	-4,834.75	2,686.53	1,576.70	1,490.81	85.89	18.357	
12,800.00	8,862.14	14,054.66	9,808.69	51.18	57.21	-126.86	-4,947.78	2,687.16	1,576.82	1,489.93	86.88	18.149	
12,843.43	8,862.14	14,091.87	9,808.26	51.43	57.41	-126.85	-4,984.98	2,687.38	1,576.67	1,489.19	87.47	18.025	
12,900.00	8,862.14	14,130.98	9,808.23	51.76	57.62	-126.84	-5,024.08	2,687.74	1,576.98	1,488.63	88.35	17.850	
13,000.00	8,862.13	14,241.18	9,809.47	52.34	58.21	-126.86	-5,134.27	2,688.92	1,578.42	1,489.04	89.38	17.659	
13,100.00	8,862.13	14,343.21	9,809.29	52.92	58.76	-126.84	-5,236.30	2,689.50	1,578.62	1,488.08	90.55	17.435	
13,200.00	8,862.13	14,456.68	9,808.13	53.51	59.38	-126.79	-5,349.76	2,690.46	1,578.53	1,486.94	91.60	17.234	
13,300.00	8,862.13	14,553.49	9,806.84	54.10	59.91	-126.75	-5,446.56	2,691.08	1,578.11	1,485.24	92.86	16.994	
13,400.00	8,862.12	14,650.29	9,805.84	54.70	60.45	-126.70	-5,543.36	2,691.80	1,577.94	1,483.80	94.13	16.763	
13,500.00	8,862.12	14,756.77	9,804.83	55.30	61.04	-126.67	-5,649.83	2,692.35	1,577.64	1,482.35	95.29	16.556	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
13,600.00	8,862.12	14,855.33	9,803.61	55.91	61.60	-126.63	-5,748.38	2,692.61	1,576.96	1,480.41	96.56	16.332	
13,641.77	8,862.12	14,890.27	9,803.41	56.17	61.79	-126.62	-5,783.32	2,692.73	1,576.87	1,479.71	97.16	16.229	
13,700.00	8,862.12	14,952.52	9,803.29	56.52	62.15	-126.62	-5,845.57	2,692.99	1,576.93	1,479.09	97.84	16.118	
13,800.00	8,862.12	15,061.14	9,801.88	57.13	62.77	-126.58	-5,954.18	2,693.16	1,576.10	1,477.11	98.99	15.921	
13,900.00	8,862.11	15,150.60	9,800.72	57.75	63.28	-126.54	-6,043.62	2,693.61	1,575.59	1,475.19	100.40	15.693	
13,916.31	8,862.11	15,164.83	9,800.62	57.85	63.36	-126.53	-6,057.86	2,693.70	1,575.58	1,474.95	100.64	15.656	
14,000.00	8,862.11	15,239.24	9,800.61	58.37	63.79	-126.53	-6,132.26	2,694.14	1,575.84	1,474.03	101.81	15.478	
14,100.00	8,862.11	15,344.07	9,801.36	58.99	64.40	-126.54	-6,237.09	2,694.66	1,576.53	1,473.52	103.01	15.304	
14,200.00	8,862.11	15,450.52	9,800.86	59.62	65.03	-126.52	-6,343.54	2,695.14	1,576.46	1,472.24	104.22	15.126	
14,300.00	8,862.11	15,563.63	9,799.85	60.25	65.69	-126.49	-6,456.64	2,695.46	1,576.02	1,470.67	105.35	14.960	
14,387.08	8,862.10	15,635.61	9,799.06	60.80	66.12	-126.46	-6,528.61	2,695.70	1,575.56	1,468.88	106.68	14.769	
14,400.00	8,862.10	15,646.04	9,799.01	60.88	66.18	-126.46	-6,539.05	2,695.77	1,575.57	1,468.69	106.88	14.742	
14,500.00	8,862.10	15,754.98	9,798.51	61.52	66.83	-126.44	-6,647.99	2,696.39	1,575.62	1,467.55	108.07	14.579	
14,600.00	8,862.10	15,849.00	9,798.11	62.16	67.40	-126.42	-6,742.00	2,696.72	1,575.50	1,466.04	109.46	14.394	
14,600.46	8,862.10	15,849.00	9,798.11	62.16	67.40	-126.42	-6,742.00	2,696.72	1,575.50	1,466.03	109.47	14.392	
14,700.00	8,862.10	15,943.00	9,797.80	62.80	67.96	-126.40	-6,836.00	2,697.45	1,575.78	1,464.92	110.85	14.215	
14,800.00	8,862.10	16,049.61	9,797.74	63.44	68.61	-126.39	-6,942.61	2,697.85	1,575.90	1,463.81	112.09	14.059	
14,900.00	8,862.09	16,149.62	9,798.15	64.09	69.21	-126.41	-7,042.61	2,697.72	1,575.89	1,462.49	113.40	13.897	
15,000.00	8,862.09	16,254.99	9,798.01	64.74	69.86	-126.42	-7,147.98	2,697.59	1,575.55	1,460.90	114.65	13.742	
15,100.00	8,862.09	16,356.30	9,797.87	65.39	70.48	-126.42	-7,249.29	2,697.46	1,575.21	1,459.25	115.96	13.584	
15,200.00	8,862.09	16,462.34	9,797.47	66.05	71.13	-126.42	-7,355.34	2,696.93	1,574.43	1,457.22	117.22	13.432	
15,300.00	8,862.09	16,555.69	9,797.02	66.70	71.70	-126.42	-7,448.68	2,696.54	1,573.68	1,455.03	118.64	13.264	
15,400.00	8,862.08	16,653.10	9,796.79	67.36	72.31	-126.42	-7,546.09	2,696.63	1,573.45	1,453.42	120.03	13.109	
15,500.00	8,862.08	16,755.86	9,796.48	68.02	72.95	-126.42	-7,648.85	2,696.51	1,573.03	1,451.69	121.34	12.964	
15,600.00	8,862.08	16,855.82	9,796.37	68.69	73.58	-126.42	-7,748.81	2,696.19	1,572.56	1,449.87	122.69	12.817	
15,700.00	8,862.08	16,958.46	9,796.22	69.35	74.22	-126.43	-7,851.45	2,695.82	1,572.04	1,448.03	124.01	12.677	
15,800.00	8,862.08	17,061.71	9,795.64	70.02	74.87	-126.43	-7,954.69	2,695.50	1,571.30	1,445.97	125.33	12.537	
15,900.00	8,862.07	17,159.00	9,795.15	70.69	75.49	-126.42	-8,051.98	2,695.16	1,570.57	1,443.84	126.74	12.393	
16,000.00	8,862.07	17,263.32	9,794.48	71.36	76.15	-126.41	-8,156.30	2,694.85	1,569.81	1,441.76	128.05	12.259	
16,100.00	8,862.07	17,366.42	9,793.21	72.03	76.81	-126.39	-8,259.39	2,694.54	1,568.69	1,439.29	129.40	12.123	
16,200.00	8,862.07	17,459.77	9,792.39	72.71	77.41	-126.37	-8,352.74	2,694.32	1,567.82	1,436.95	130.87	11.980	
16,300.00	8,862.07	17,560.72	9,791.48	73.38	78.06	-126.35	-8,453.68	2,694.20	1,567.04	1,434.79	132.25	11.849	
16,400.00	8,862.06	17,662.08	9,790.42	74.06	78.71	-126.32	-8,555.04	2,694.26	1,566.32	1,432.69	133.63	11.721	
16,500.00	8,862.06	17,767.40	9,788.82	74.74	79.40	-126.28	-8,660.34	2,694.16	1,565.19	1,430.23	134.97	11.597	
16,600.00	8,862.06	17,863.13	9,787.44	75.42	80.02	-126.25	-8,756.06	2,694.03	1,564.08	1,427.65	136.43	11.464	
16,700.00	8,862.06	17,950.02	9,786.82	76.10	80.59	-126.23	-8,842.95	2,693.98	1,563.48	1,425.48	138.00	11.329	
16,707.62	8,862.06	17,956.23	9,786.82	76.16	80.63	-126.23	-8,849.16	2,693.99	1,563.48	1,425.35	138.13	11.319	
16,800.00	8,862.06	18,043.58	9,787.21	76.79	81.20	-126.24	-8,936.51	2,694.30	1,563.83	1,424.35	139.48	11.212	
16,900.00	8,862.05	18,145.59	9,787.56	77.47	81.87	-126.26	-9,038.52	2,694.36	1,563.94	1,423.09	140.85	11.103	
17,000.00	8,862.05	18,252.50	9,788.40	78.16	82.57	-126.29	-9,145.43	2,694.16	1,564.11	1,421.95	142.15	11.003	
17,100.00	8,862.05	18,359.69	9,787.98	78.85	83.28	-126.29	-9,252.61	2,693.92	1,563.54	1,420.08	143.47	10.898	
17,200.00	8,862.05	18,456.32	9,787.02	79.54	83.92	-126.26	-9,349.24	2,694.04	1,562.91	1,417.98	144.93	10.784	
17,300.00	8,862.05	18,562.03	9,786.16	80.23	84.62	-126.24	-9,454.94	2,694.04	1,562.28	1,416.00	146.28	10.680	
17,400.00	8,862.04	18,656.00	9,785.21	80.92	85.24	-126.21	-9,548.91	2,694.14	1,561.62	1,413.83	147.78	10.567	
17,442.23	8,862.04	18,690.87	9,785.00	81.22	85.47	-126.21	-9,583.78	2,694.25	1,561.52	1,413.04	148.48	10.517	
17,500.00	8,862.04	18,738.62	9,784.93	81.62	85.79	-126.20	-9,631.53	2,694.58	1,561.70	1,412.27	149.43	10.451	
17,600.00	8,862.04	18,846.48	9,784.68	82.31	86.52	-126.17	-9,739.38	2,695.62	1,562.20	1,411.44	150.76	10.362	
17,700.00	8,862.04	18,937.14	9,784.28	83.01	87.13	-126.14	-9,830.04	2,696.60	1,562.66	1,410.35	152.31	10.259	
17,800.00	8,862.04	19,042.39	9,783.77	83.71	87.84	-126.11	-9,935.28	2,697.82	1,563.16	1,409.47	153.69	10.171	
17,900.00	8,862.03	19,123.00	9,783.63	84.41	88.38	-126.08	-10,015.88	2,698.78	1,563.93	1,408.57	155.36	10.067	
18,000.00	8,862.03	19,217.00	9,784.90	85.11	89.02	-126.10	-10,109.86	2,699.94	1,565.59	1,408.74	156.85	9.981	
18,100.00	8,862.03	19,328.33	9,786.20	85.81	89.78	-126.11	-10,221.17	2,701.50	1,567.25	1,409.10	158.15	9.910	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 1H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 0.50 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
18,200.00	8,862.03	19,427.40	9,787.12	86.51	90.45	-126.11	-10,320.23	2,702.82	1,568.73	1,409.13	159.60	9.829	
18,300.00	8,862.03	19,525.70	9,787.11	87.21	91.13	-126.09	-10,418.52	2,704.14	1,569.66	1,408.60	161.06	9.746	
18,400.00	8,862.02	19,591.00	9,789.30	87.92	91.57	-126.14	-10,483.77	2,704.80	1,572.29	1,409.44	162.85	9.655	
18,500.00	8,862.02	19,764.43	9,790.67	88.62	92.76	-126.17	-10,657.13	2,705.76	1,572.62	1,409.19	163.43	9.622	
18,600.00	8,862.02	19,914.77	9,787.75	89.33	93.78	-126.15	-10,807.40	2,703.07	1,569.82	1,405.68	164.14	9.564	
18,700.00	8,862.02	20,004.26	9,785.87	90.03	94.38	-126.15	-10,896.83	2,700.32	1,565.95	1,400.21	165.74	9.448	
18,800.00	8,862.02	20,097.30	9,783.71	90.74	95.01	-126.14	-10,989.82	2,698.37	1,562.73	1,395.44	167.29	9.341	
18,900.00	8,862.01	20,182.61	9,781.56	91.45	95.60	-126.11	-11,075.09	2,696.90	1,559.76	1,390.79	168.96	9.231	
19,000.00	8,862.01	20,255.00	9,780.66	92.16	96.09	-126.07	-11,147.47	2,697.36	1,559.15	1,388.34	170.81	9.128	
19,100.00	8,862.01	20,375.45	9,780.13	92.87	96.92	-126.06	-11,267.91	2,697.35	1,558.85	1,386.87	171.98	9.064	
19,200.00	8,862.01	20,488.52	9,779.42	93.58	97.69	-126.09	-11,380.96	2,695.27	1,556.86	1,383.63	173.23	8.987	
19,300.00	8,862.01	20,580.00	9,779.07	94.30	98.31	-126.15	-11,472.39	2,692.32	1,553.95	1,379.17	174.78	8.891	
19,330.84	8,862.00	20,580.00	9,779.07	94.52	98.31	-126.15	-11,472.39	2,692.32	1,553.64	1,377.99	175.65	8.845	
19,400.00	8,862.00	20,580.00	9,779.07	95.01	98.31	-126.15	-11,472.39	2,692.32	1,555.18	1,377.78	177.39	8.767	
19,500.00	8,862.00	20,580.00	9,779.07	95.72	98.31	-126.15	-11,472.39	2,692.32	1,562.82	1,383.40	179.42	8.711	
19,547.53	8,862.00	20,580.00	9,779.07	96.06	98.31	-126.15	-11,472.39	2,692.32	1,568.68	1,388.51	180.16	8.707	
19,548.26	8,862.00	20,580.00	9,779.07	96.14	98.31	-126.15	-11,472.39	2,692.32	1,568.78	1,388.32	180.45	8.693	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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	0.99	0.99	0.00	0.50	64.53	57.69	121.10	134.14				
100.00	100.00	100.36	100.36	0.28	0.52	64.59	57.66	121.38	134.38	133.58	0.80	167.772	
200.00	200.00	199.75	199.75	0.63	0.59	64.78	57.57	122.20	135.09	133.86	1.23	109.960	
300.00	300.00	300.40	300.40	0.99	0.84	64.88	57.64	122.93	135.77	133.94	1.84	73.934	
400.00	400.00	400.27	400.26	1.35	1.15	64.83	57.95	123.30	136.25	133.74	2.50	54.478	
500.00	500.00	499.39	499.38	1.71	1.48	64.79	58.37	124.00	137.06	133.87	3.19	43.007	
600.00	600.00	598.95	598.92	2.07	1.82	64.85	58.92	125.48	138.64	134.76	3.88	35.692	
700.00	700.00	701.60	701.57	2.43	2.16	64.66	59.60	125.87	139.27	134.67	4.59	30.333	
800.00	800.00	803.44	803.39	2.79	2.50	63.98	60.51	123.93	137.93	132.65	5.29	26.086	
900.00	900.00	904.45	904.36	3.14	2.84	63.19	61.30	121.29	135.94	129.96	5.98	22.725	
1,000.00	1,000.00	1,005.66	1,005.51	3.50	3.18	62.51	61.36	117.89	132.98	126.30	6.68	19.907	
1,100.00	1,099.98	1,105.95	1,105.73	3.84	3.52	-98.91	60.84	114.07	129.63	122.26	7.36	17.609	
1,200.00	1,199.84	1,206.00	1,205.71	4.17	3.87	-101.65	59.71	110.41	126.82	118.79	8.03	15.791	
1,300.00	1,299.45	1,306.02	1,305.64	4.51	4.21	-105.93	58.21	106.61	124.90	116.19	8.71	14.343	
1,350.00	1,349.13	1,355.94	1,355.51	4.68	4.38	-108.69	57.39	104.58	124.46	115.42	9.05	13.755	
1,400.00	1,398.73	1,405.76	1,405.28	4.85	4.56	-105.40	56.53	102.44	124.10	114.71	9.39	13.215	
1,500.00	1,497.69	1,503.77	1,503.20	5.19	4.90	-102.39	54.75	98.55	123.35	113.27	10.08	12.238	
1,512.50	1,510.03	1,515.79	1,515.20	5.23	4.94	-102.29	54.54	98.14	123.32	113.16	10.17	12.132	CC, ES
1,600.00	1,596.25	1,600.00	1,599.39	5.54	5.24	-103.00	53.49	96.28	124.52	113.75	10.77	11.564	
1,670.62	1,665.55	1,667.33	1,666.71	5.78	5.47	-104.96	53.22	95.78	127.33	116.08	11.25	11.317	
1,700.00	1,694.31	1,695.51	1,694.90	5.89	5.57	-107.43	53.26	95.77	129.06	117.60	11.45	11.268	
1,800.00	1,792.23	1,792.85	1,792.23	6.24	5.91	-115.38	53.74	95.97	137.16	125.01	12.15	11.292	
1,900.00	1,890.14	1,890.40	1,889.78	6.61	6.25	-122.32	54.49	96.34	147.98	135.13	12.84	11.522	
2,000.00	1,988.06	1,988.56	1,987.92	6.97	6.59	-127.93	55.23	97.76	160.76	147.22	13.54	11.871	
2,100.00	2,085.97	2,088.55	2,087.82	7.34	6.93	-131.92	55.17	101.83	174.02	159.77	14.25	12.212	
2,200.00	2,183.89	2,187.21	2,186.40	7.70	7.27	-135.21	54.75	106.11	187.61	172.65	14.95	12.546	
2,300.00	2,281.80	2,287.39	2,286.50	8.07	7.62	-138.36	53.73	109.58	201.23	185.57	15.66	12.846	
2,400.00	2,379.72	2,387.21	2,386.22	8.45	7.97	-140.94	52.00	113.74	214.56	198.18	16.38	13.102	
2,500.00	2,477.64	2,485.97	2,484.85	8.82	8.31	-142.99	50.24	118.66	228.06	210.97	17.09	13.348	
2,600.00	2,575.55	2,581.35	2,580.14	9.19	8.65	-145.01	48.57	122.31	242.12	224.34	17.78	13.618	
2,700.00	2,673.47	2,673.56	2,672.33	9.57	8.97	-147.78	47.82	120.85	258.77	240.32	18.45	14.027	
2,800.00	2,771.38	2,769.67	2,768.36	9.95	9.30	-150.70	48.05	117.16	277.70	258.56	19.14	14.510	
2,900.00	2,869.30	2,872.47	2,871.08	10.32	9.66	-153.42	47.64	113.43	296.62	276.74	19.88	14.923	
3,000.00	2,967.21	2,977.09	2,975.64	10.70	10.02	-155.81	44.81	110.92	313.49	292.86	20.62	15.201	
3,100.00	3,065.13	3,083.28	3,081.70	11.08	10.39	-158.04	39.93	108.87	328.95	307.58	21.37	15.393	
3,200.00	3,163.05	3,185.68	3,183.85	11.46	10.74	-160.04	33.01	107.69	342.52	320.42	22.10	15.499	
3,300.00	3,260.96	3,296.95	3,294.77	11.84	11.13	-161.76	24.51	108.96	354.61	331.76	22.85	15.517	
3,400.00	3,358.88	3,407.94	3,405.09	12.22	11.52	-163.08	13.39	113.81	363.22	339.63	23.59	15.397	
3,500.00	3,456.79	3,517.91	3,513.98	12.60	11.90	-164.26	-0.30	120.83	368.84	344.53	24.31	15.171	
3,600.00	3,554.71	3,628.43	3,622.99	12.98	12.29	-165.36	-16.27	129.56	372.09	347.07	25.02	14.872	
3,700.00	3,652.62	3,736.37	3,728.84	13.36	12.67	-166.50	-34.90	139.55	372.26	346.54	25.72	14.472	
3,800.00	3,750.54	3,844.84	3,834.83	13.75	13.06	-167.65	-55.13	150.56	370.92	344.51	26.42	14.041	
3,900.00	3,848.45	3,952.70	3,939.63	14.13	13.44	-168.74	-77.15	163.47	367.14	340.04	27.10	13.545	
4,000.00	3,946.37	4,044.23	4,028.56	14.51	13.77	-169.62	-95.65	174.70	363.47	335.58	27.89	13.032	
4,100.00	4,044.29	4,147.99	4,129.56	14.89	14.15	-170.70	-116.17	186.67	360.70	332.09	28.61	12.608	
4,200.00	4,142.20	4,248.63	4,227.28	15.28	14.51	-171.91	-137.34	198.10	357.17	327.82	29.35	12.170	
4,300.00	4,240.12	4,344.23	4,320.27	15.66	14.86	-173.06	-156.89	208.65	354.46	324.34	30.12	11.768	
4,400.00	4,338.03	4,450.96	4,423.95	16.05	15.25	-174.23	-178.71	221.50	351.24	320.42	30.83	11.394	
4,500.00	4,435.95	4,553.20	4,522.92	16.43	15.63	-175.33	-200.49	235.00	346.69	315.13	31.56	10.985	
4,600.00	4,533.86	4,651.63	4,618.22	16.81	15.99	-176.35	-221.18	248.29	342.27	309.95	32.32	10.589	
4,700.00	4,631.78	4,748.43	4,712.08	17.20	16.35	-177.31	-240.96	261.37	338.40	305.30	33.10	10.224	
4,800.00	4,729.69	4,845.79	4,806.79	17.58	16.71	-178.20	-259.65	274.05	335.87	301.99	33.87	9.916	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS **Offset Well Error:** 0.50 usft

Rule Assigned:

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
4,900.00	4,827.61	4,946.63	4,904.79	17.97	17.09	-179.27	-279.64	286.79	333.26	298.64	34.62	9.625	
5,000.00	4,925.53	5,040.77	4,996.37	18.35	17.44	179.69	-298.21	298.30	331.18	295.76	35.42	9.351	
5,024.77	4,949.78	5,062.95	5,018.02	18.45	17.52	179.47	-302.23	300.85	331.08	295.46	35.62	9.296	
5,100.00	5,023.44	5,135.27	5,088.83	18.74	17.79	178.79	-314.71	308.71	331.63	295.43	36.20	9.162	
5,200.00	5,121.36	5,234.88	5,186.31	19.12	18.16	177.67	-332.57	318.76	332.60	295.64	36.96	8.999	
5,300.00	5,219.27	5,334.65	5,283.91	19.51	18.54	176.46	-350.86	328.38	333.79	296.07	37.72	8.848	
5,400.00	5,317.19	5,439.39	5,386.26	19.89	18.93	175.17	-370.51	338.85	334.60	296.12	38.47	8.697	
5,500.00	5,415.10	5,541.73	5,485.78	20.28	19.32	173.62	-392.01	349.24	334.03	294.80	39.23	8.514	
5,543.36	5,457.56	5,582.95	5,525.86	20.44	19.47	173.01	-400.58	353.54	333.82	294.24	39.58	8.435	
5,600.00	5,513.02	5,634.69	5,576.34	20.66	19.67	172.33	-410.67	358.70	334.25	294.22	40.03	8.350	
5,700.00	5,610.93	5,745.40	5,684.23	21.05	20.09	170.80	-432.80	369.90	334.80	294.05	40.76	8.215	
5,800.00	5,708.85	5,855.41	5,790.08	21.43	20.51	168.72	-459.76	382.84	331.57	290.10	41.47	7.995	
5,900.00	5,806.77	5,952.30	5,882.99	21.82	20.88	166.71	-484.58	394.65	327.79	285.50	42.29	7.752	
6,000.00	5,904.68	6,051.15	5,977.96	22.21	21.26	164.73	-509.25	406.67	324.77	281.69	43.09	7.538	
6,100.00	6,002.60	6,149.25	6,072.34	22.59	21.64	162.81	-533.19	418.60	322.43	278.54	43.89	7.347	
6,200.00	6,100.51	6,246.65	6,166.21	22.98	22.02	160.95	-556.46	430.23	320.88	276.18	44.69	7.179	
6,300.00	6,198.43	6,344.18	6,260.52	23.36	22.40	159.24	-578.60	441.41	320.59	275.10	45.50	7.047	
6,400.00	6,296.34	6,445.76	6,358.88	23.75	22.79	157.67	-600.72	453.89	320.19	273.91	46.28	6.919	
6,464.64	6,359.64	6,509.18	6,420.39	24.00	23.03	156.81	-613.90	461.95	320.00	273.21	46.79	6.839	
6,500.00	6,394.26	6,541.25	6,451.55	24.14	23.16	156.40	-620.37	465.86	320.19	273.11	47.08	6.801	
6,600.00	6,492.17	6,632.17	6,540.22	24.52	23.51	155.27	-638.07	475.36	322.71	274.84	47.87	6.742	
6,700.00	6,590.09	6,727.39	6,633.55	24.91	23.87	154.24	-655.21	483.34	327.80	279.17	48.63	6.740	
6,800.00	6,688.01	6,829.61	6,733.89	25.29	24.26	153.39	-672.43	492.48	332.80	283.39	49.41	6.735	
6,900.00	6,785.92	6,929.00	6,831.57	25.68	24.63	152.79	-688.11	502.02	337.52	287.34	50.18	6.726	
7,000.00	6,883.84	7,031.29	6,932.23	26.07	25.02	152.35	-703.35	511.96	342.41	291.45	50.95	6.720	
7,100.00	6,981.75	7,135.89	7,034.83	26.45	25.42	151.75	-720.20	523.33	345.86	294.13	51.73	6.686	
7,200.00	7,079.67	7,228.97	7,126.11	26.84	25.77	151.22	-735.27	533.49	349.32	296.83	52.49	6.655	
7,300.00	7,177.58	7,327.41	7,223.13	27.23	26.14	150.93	-749.23	542.61	354.87	301.62	53.25	6.664	
7,400.00	7,275.50	7,439.05	7,332.69	27.61	26.57	150.33	-767.09	554.36	358.81	304.77	54.04	6.640	
7,500.00	7,373.41	7,539.14	7,430.29	28.00	26.95	149.45	-785.74	566.39	360.68	305.87	54.82	6.580	
7,600.00	7,471.33	7,631.57	7,520.65	28.39	27.31	148.72	-802.26	576.62	363.75	308.16	55.59	6.543	SF
7,700.00	7,569.25	7,721.78	7,609.38	28.77	27.65	148.31	-816.24	584.90	369.20	312.88	56.33	6.554	
7,764.22	7,632.13	7,780.50	7,667.41	29.02	27.87	148.22	-824.08	589.32	374.03	317.25	56.79	6.587	
7,800.00	7,667.21	7,813.28	7,699.88	29.16	27.99	148.24	-827.98	591.51	376.92	319.88	57.04	6.608	
7,900.00	7,765.68	7,904.75	7,790.76	29.54	28.33	148.40	-836.95	596.66	384.44	326.73	57.71	6.662	
8,000.00	7,864.70	7,996.71	7,882.43	29.91	28.66	148.64	-843.27	600.37	391.09	332.74	58.35	6.702	
8,100.00	7,964.15	8,085.70	7,971.30	30.28	28.97	148.89	-847.22	602.32	397.06	338.14	58.92	6.739	
8,200.00	8,063.90	8,178.86	8,064.44	30.63	29.29	149.15	-849.21	602.44	402.50	342.99	59.50	6.764	
8,300.00	8,163.83	8,279.70	8,165.27	30.98	29.63	149.38	-849.59	602.18	405.69	345.49	60.20	6.740	
8,350.17	8,214.00	8,329.39	8,214.97	31.14	29.79	-78.42	-849.49	602.26	406.00	345.49	60.51	6.709	
8,400.00	8,263.77	8,377.71	8,263.29	31.31	29.95	134.30	-849.34	602.20	407.61	346.80	60.81	6.703	
8,450.00	8,313.33	8,426.77	8,312.35	31.49	30.11	134.61	-849.17	602.01	412.42	351.28	61.14	6.746	
8,500.00	8,362.13	8,475.45	8,361.02	31.69	30.26	135.08	-849.08	601.79	420.38	358.91	61.47	6.839	
8,550.00	8,409.80	8,521.68	8,407.25	31.89	30.41	135.61	-849.05	601.49	431.63	369.85	61.77	6.987	
8,600.00	8,455.99	8,566.08	8,451.65	32.09	30.55	136.13	-849.07	601.02	446.37	384.30	62.07	7.192	
8,650.00	8,500.33	8,606.73	8,492.30	32.31	30.69	136.48	-849.14	600.36	464.73	402.41	62.32	7.457	
8,700.00	8,542.50	8,644.45	8,530.00	32.53	30.81	136.61	-849.23	599.38	486.86	424.31	62.55	7.784	
8,750.00	8,582.16	8,681.27	8,566.80	32.75	30.93	136.53	-849.36	598.10	512.67	449.88	62.79	8.165	
8,800.00	8,619.02	8,721.94	8,607.45	32.97	31.06	136.53	-849.44	596.85	541.63	478.49	63.14	8.579	
8,850.00	8,652.80	8,759.37	8,644.87	33.19	31.18	136.18	-849.42	596.05	573.49	510.04	63.45	9.038	
8,900.00	8,683.24	8,794.90	8,680.40	33.42	31.30	135.45	-849.42	595.61	608.11	544.35	63.76	9.537	
8,950.00	8,710.11	8,827.45	8,712.95	33.64	31.41	134.14	-849.61	595.43	645.27	581.22	64.05	10.075	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
9,000.00	8,733.20	8,856.29	8,741.78	33.86	31.51	132.02	-849.95	595.47	684.77	620.47	64.30	10.650	
9,050.00	8,752.35	8,876.85	8,762.34	34.08	31.58	128.37	-850.26	595.56	726.40	661.95	64.45	11.270	
9,100.00	8,767.39	8,892.24	8,777.74	34.29	31.63	122.99	-850.52	595.62	769.95	705.39	64.56	11.925	
9,100.17	8,767.43	8,892.29	8,777.78	34.29	31.63	122.97	-850.52	595.62	770.10	705.54	64.56	11.928	
9,200.00	8,791.66	8,917.43	8,802.91	34.71	31.72	117.42	-850.96	595.68	858.45	793.72	64.73	13.262	
9,300.00	8,812.57	8,939.44	8,824.92	35.13	31.79	112.14	-851.37	595.69	946.27	881.40	64.87	14.587	
9,400.00	8,829.97	8,958.22	8,843.70	35.54	31.86	107.22	-851.73	595.66	1,033.21	968.22	64.99	15.899	
9,500.00	8,843.72	8,974.31	8,859.78	35.95	31.92	102.77	-852.06	595.64	1,119.05	1,053.97	65.08	17.195	
9,600.00	8,853.72	8,986.65	8,872.12	36.33	31.96	98.71	-852.31	595.62	1,203.59	1,138.44	65.14	18.476	
9,700.00	8,859.89	8,995.12	8,880.60	36.70	31.99	95.05	-852.48	595.62	1,286.60	1,221.43	65.17	19.741	
9,800.00	8,862.18	10,913.79	9,963.18	37.05	38.63	147.21	-1,962.02	711.42	1,308.58	1,251.40	57.18	22.886	
9,809.00	8,862.20	10,921.75	9,963.00	37.08	38.66	147.20	-1,969.97	711.35	1,308.47	1,251.22	57.26	22.853	
9,900.00	8,862.20	11,004.72	9,961.84	37.39	38.93	147.15	-2,052.94	710.96	1,307.72	1,249.70	58.02	22.538	
10,000.00	8,862.19	11,103.54	9,961.16	37.74	39.27	147.14	-2,151.75	711.06	1,307.19	1,248.32	58.86	22.207	
10,100.00	8,862.19	11,204.10	9,959.46	38.10	39.63	147.03	-2,252.29	709.55	1,306.69	1,246.90	59.78	21.857	
10,200.00	8,862.19	11,305.65	9,958.20	38.48	40.00	146.97	-2,353.83	708.93	1,306.08	1,245.38	60.71	21.515	
10,300.00	8,862.19	11,406.55	9,957.05	38.86	40.38	146.93	-2,454.72	708.65	1,305.38	1,243.74	61.64	21.176	
10,400.00	8,862.19	11,509.82	9,955.57	39.25	40.78	146.87	-2,557.98	708.10	1,304.58	1,241.96	62.62	20.834	
10,500.00	8,862.18	11,600.85	9,954.66	39.66	41.14	146.84	-2,649.00	708.25	1,303.77	1,240.18	63.60	20.501	
10,524.23	8,862.18	11,621.32	9,954.65	39.76	41.22	146.84	-2,669.47	708.33	1,303.74	1,239.91	63.83	20.424	
10,600.00	8,862.18	11,689.61	9,954.93	40.07	41.50	146.85	-2,737.76	708.47	1,303.99	1,239.41	64.58	20.193	
10,700.00	8,862.18	11,796.58	9,954.74	40.49	41.94	146.80	-2,844.72	707.30	1,304.55	1,238.94	65.61	19.882	
10,800.00	8,862.18	11,904.04	9,952.49	40.93	42.40	146.64	-2,952.12	704.75	1,304.21	1,237.47	66.74	19.543	
10,859.38	8,862.18	11,956.55	9,951.84	41.19	42.63	146.60	-3,004.62	704.20	1,304.00	1,236.62	67.38	19.354	
10,900.00	8,862.18	11,990.63	9,951.65	41.37	42.78	146.58	-3,038.70	703.83	1,304.10	1,236.29	67.81	19.231	
11,000.00	8,862.17	12,085.68	9,951.90	41.82	43.20	146.55	-3,133.75	702.98	1,304.90	1,236.01	68.89	18.941	
11,100.00	8,862.17	12,180.77	9,952.91	42.28	43.63	146.57	-3,228.83	702.91	1,305.94	1,235.98	69.96	18.666	
11,200.00	8,862.17	12,290.29	9,954.34	42.75	44.13	146.61	-3,338.34	703.27	1,306.96	1,235.91	71.05	18.394	
11,300.00	8,862.17	12,372.96	9,955.31	43.22	44.52	146.62	-3,421.01	703.20	1,308.10	1,235.96	72.15	18.132	
11,400.00	8,862.17	12,562.84	9,953.14	43.71	45.44	146.62	-3,610.81	704.98	1,306.93	1,233.55	73.38	17.810	
11,500.00	8,862.16	12,635.46	9,949.85	44.20	45.80	146.57	-3,683.35	705.97	1,302.63	1,228.10	74.53	17.477	
11,600.00	8,862.16	12,714.46	9,948.25	44.70	46.20	146.53	-3,762.33	706.11	1,300.86	1,225.16	75.70	17.185	
11,700.00	8,862.16	12,804.95	9,947.61	45.20	46.65	146.55	-3,852.82	707.21	1,299.72	1,222.86	76.85	16.912	
11,738.19	8,862.16	12,835.57	9,947.63	45.40	46.81	146.56	-3,883.44	707.47	1,299.61	1,222.31	77.29	16.814	
11,800.00	8,862.16	12,893.19	9,947.84	45.72	47.10	146.56	-3,941.05	707.54	1,299.80	1,221.78	78.02	16.660	
11,900.00	8,862.16	12,995.74	9,946.93	46.24	47.62	146.48	-4,043.59	706.08	1,299.95	1,220.67	79.28	16.398	
12,000.00	8,862.15	13,102.71	9,944.85	46.76	48.18	146.31	-4,150.49	703.07	1,300.00	1,219.41	80.60	16.129	
12,100.00	8,862.15	13,199.25	9,943.86	47.29	48.69	146.27	-4,247.02	702.75	1,299.45	1,217.61	81.84	15.877	
12,111.99	8,862.15	13,209.48	9,943.74	47.36	48.74	146.26	-4,257.25	702.60	1,299.44	1,217.45	81.99	15.848	
12,200.00	8,862.15	13,295.45	9,942.97	47.83	49.20	146.19	-4,343.20	701.26	1,299.64	1,216.53	83.12	15.636	
12,300.00	8,862.15	13,403.73	9,943.48	48.38	49.78	146.24	-4,451.48	702.45	1,299.53	1,215.17	84.36	15.405	
12,400.00	8,862.15	13,507.80	9,943.64	48.93	50.35	146.30	-4,555.53	704.16	1,298.85	1,213.26	85.60	15.174	
12,500.00	8,862.14	13,607.85	9,943.57	49.48	50.90	146.34	-4,655.57	705.70	1,298.05	1,211.21	86.84	14.948	
12,600.00	8,862.14	13,705.00	9,943.96	50.04	51.45	146.43	-4,752.69	708.09	1,297.13	1,209.06	88.07	14.729	
12,700.00	8,862.14	13,799.00	9,944.91	50.61	51.98	146.54	-4,846.65	710.45	1,296.69	1,207.41	89.29	14.523	
12,800.00	8,862.14	13,947.66	9,946.14	51.18	52.83	146.86	-4,995.05	718.63	1,294.34	1,203.83	90.52	14.300	
12,900.00	8,862.14	14,031.84	9,946.01	51.76	53.32	147.07	-5,079.03	724.41	1,290.66	1,198.97	91.69	14.076	
13,000.00	8,862.13	14,105.66	9,946.24	52.34	53.75	147.15	-5,152.82	726.73	1,289.24	1,196.34	92.90	13.877	
13,075.92	8,862.13	14,174.00	9,945.28	52.78	54.15	147.09	-5,221.13	725.80	1,288.99	1,195.07	93.92	13.724	
13,100.00	8,862.13	14,194.44	9,944.86	52.92	54.27	147.05	-5,241.56	725.15	1,289.02	1,194.77	94.25	13.677	
13,200.00	8,862.13	14,278.67	9,945.23	53.51	54.76	147.03	-5,325.78	724.31	1,290.01	1,194.46	95.54	13.502	
13,300.00	8,862.13	14,384.10	9,946.85	54.10	55.38	147.07	-5,431.19	724.71	1,291.19	1,194.31	96.88	13.328	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Offset Well Error: 0.50 usft

Rule Assigned:

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
13,400.00	8,862.12	14,482.07	9,948.04	54.70	55.96	147.08	-5,529.15	724.40	1,292.49	1,194.28	98.21	13.161	
13,500.00	8,862.12	14,586.68	9,949.14	55.30	56.59	147.11	-5,633.75	724.56	1,293.38	1,193.82	99.56	12.991	
13,600.00	8,862.12	14,701.00	9,949.49	55.91	57.28	147.08	-5,748.08	723.75	1,294.18	1,193.21	100.97	12.817	
13,700.00	8,862.12	14,800.17	9,948.50	56.52	57.88	147.04	-5,847.24	723.53	1,293.57	1,191.22	102.35	12.639	
13,713.18	8,862.12	14,811.33	9,948.43	56.60	57.94	147.04	-5,858.39	723.47	1,293.56	1,191.04	102.53	12.617	
13,800.00	8,862.12	14,889.61	9,948.44	57.13	58.42	147.02	-5,936.67	723.08	1,293.89	1,190.19	103.69	12.478	
13,900.00	8,862.11	14,997.60	9,949.13	57.75	59.08	147.03	-6,044.66	723.23	1,294.47	1,189.39	105.09	12.318	
13,957.29	8,862.11	15,055.45	9,948.91	58.11	59.44	147.02	-6,102.51	723.09	1,294.42	1,188.53	105.88	12.225	
14,000.00	8,862.11	15,095.27	9,948.93	58.37	59.68	147.02	-6,142.33	723.12	1,294.46	1,188.00	106.46	12.159	
14,100.00	8,862.11	15,227.14	9,947.54	58.99	60.50	147.02	-6,274.18	724.31	1,293.11	1,185.18	107.93	11.981	
14,200.00	8,862.11	15,300.00	9,946.66	59.62	60.96	147.00	-6,347.03	724.63	1,291.94	1,182.69	109.25	11.825	
14,209.14	8,862.11	15,307.32	9,946.63	59.68	61.00	147.00	-6,354.36	724.62	1,291.94	1,182.57	109.37	11.812	
14,300.00	8,862.11	15,386.86	9,946.86	60.25	61.50	147.00	-6,433.89	724.47	1,292.34	1,181.74	110.60	11.685	
14,400.00	8,862.10	15,509.11	9,943.97	60.88	62.27	146.78	-6,556.01	720.84	1,292.02	1,179.85	112.17	11.518	
14,446.92	8,862.10	15,545.35	9,942.34	61.18	62.50	146.66	-6,592.15	718.71	1,291.82	1,178.97	112.85	11.447	
14,500.00	8,862.10	15,587.60	9,940.70	61.52	62.76	146.52	-6,634.28	715.94	1,292.07	1,178.45	113.62	11.372	
14,600.00	8,862.10	15,691.90	9,939.61	62.16	63.42	146.37	-6,738.50	712.94	1,292.90	1,177.79	115.11	11.232	
14,694.84	8,862.10	15,793.49	9,939.33	62.77	64.07	146.37	-6,840.08	713.30	1,292.55	1,176.09	116.47	11.098	
14,700.00	8,862.10	15,796.76	9,939.33	62.80	64.09	146.37	-6,843.35	713.31	1,292.56	1,176.03	116.53	11.092	
14,800.00	8,862.10	15,880.19	9,940.76	63.44	64.62	146.42	-6,926.76	713.83	1,293.68	1,175.82	117.85	10.977	
14,900.00	8,862.09	16,000.33	9,944.86	64.09	65.41	146.72	-7,046.69	719.61	1,293.91	1,174.69	119.21	10.854	
14,937.67	8,862.09	16,036.55	9,945.19	64.34	65.64	146.75	-7,082.90	720.22	1,293.89	1,174.16	119.73	10.807	
15,000.00	8,862.09	16,094.45	9,944.89	64.74	66.02	146.72	-7,140.79	719.71	1,293.98	1,173.37	120.61	10.729	
15,100.00	8,862.09	16,186.26	9,945.19	65.39	66.61	146.71	-7,232.60	719.23	1,294.64	1,172.63	122.01	10.611	
15,200.00	8,862.09	16,311.40	9,946.01	66.05	67.43	146.72	-7,357.73	719.36	1,295.39	1,171.87	123.52	10.487	
15,300.00	8,862.09	16,418.70	9,946.02	66.70	68.13	146.83	-7,464.99	722.59	1,293.83	1,168.91	124.92	10.357	
15,384.52	8,862.08	16,483.46	9,945.92	67.26	68.55	146.86	-7,529.74	723.57	1,293.13	1,167.08	126.05	10.259	
15,400.00	8,862.08	16,494.96	9,945.89	67.36	68.63	146.86	-7,541.23	723.51	1,293.15	1,166.89	126.26	10.242	
15,500.00	8,862.08	16,618.21	9,944.50	68.02	69.44	146.75	-7,664.46	721.74	1,293.23	1,165.40	127.82	10.117	
15,600.00	8,862.08	16,709.00	9,941.39	68.69	70.04	146.59	-7,755.16	719.54	1,291.82	1,162.52	129.30	9.991	
15,700.00	8,862.08	16,802.00	9,939.74	69.35	70.65	146.48	-7,848.11	717.82	1,291.46	1,160.69	130.76	9.876	
15,800.00	8,862.08	16,914.12	9,938.71	70.02	71.40	146.43	-7,960.22	717.44	1,291.01	1,158.74	132.27	9.760	
15,900.00	8,862.07	17,003.42	9,937.21	70.69	71.99	146.35	-8,049.49	716.39	1,290.35	1,156.64	133.71	9.650	
16,000.00	8,862.07	17,105.20	9,936.30	71.36	72.67	146.32	-8,151.27	716.26	1,289.78	1,154.60	135.18	9.541	
16,039.77	8,862.07	17,138.94	9,936.27	71.63	72.89	146.32	-8,185.01	716.42	1,289.69	1,153.96	135.73	9.502	
16,100.00	8,862.07	17,191.72	9,936.57	72.03	73.25	146.33	-8,237.79	716.64	1,289.89	1,153.33	136.57	9.445	
16,200.00	8,862.07	17,289.99	9,937.58	72.71	73.91	146.37	-8,336.05	717.12	1,290.59	1,152.59	137.99	9.352	
16,300.00	8,862.07	17,390.34	9,938.38	73.38	74.59	146.39	-8,436.39	717.52	1,291.13	1,151.69	139.44	9.260	
16,400.00	8,862.06	17,487.77	9,939.94	74.06	75.24	146.45	-8,533.81	718.06	1,292.26	1,151.40	140.86	9.174	
16,500.00	8,862.06	17,592.48	9,939.96	74.74	75.95	146.44	-8,638.52	718.14	1,292.31	1,149.96	142.35	9.079	
16,600.00	8,862.06	17,680.42	9,940.71	75.42	76.55	146.42	-8,726.45	717.08	1,293.73	1,149.98	143.75	9.000	
16,700.00	8,862.06	17,801.34	9,941.73	76.10	77.37	146.46	-8,847.36	717.84	1,294.15	1,148.85	145.30	8.907	
16,749.34	8,862.06	17,848.55	9,941.66	76.44	77.69	146.46	-8,894.57	718.04	1,294.03	1,148.01	146.01	8.862	
16,800.00	8,862.06	17,884.99	9,941.96	76.79	77.94	146.47	-8,931.01	718.20	1,294.31	1,147.62	146.68	8.824	
16,900.00	8,862.05	17,962.75	9,944.36	77.47	78.48	146.55	-9,008.73	718.97	1,296.40	1,148.42	147.98	8.760	
17,000.00	8,862.05	18,066.76	9,950.64	78.16	79.20	146.84	-9,112.47	722.84	1,299.53	1,150.16	149.37	8.700	
17,100.00	8,862.05	18,228.41	9,955.07	78.85	80.33	147.17	-9,273.92	729.06	1,299.93	1,148.94	150.99	8.609	
17,200.00	8,862.05	18,305.00	9,954.82	79.54	80.85	147.22	-9,350.48	730.89	1,298.50	1,146.13	152.36	8.522	
17,262.67	8,862.05	18,362.40	9,954.77	79.97	81.25	147.25	-9,407.87	731.71	1,298.07	1,144.81	153.26	8.470	
17,300.00	8,862.05	18,399.00	9,955.28	80.23	81.50	147.28	-9,444.47	732.25	1,298.24	1,144.44	153.79	8.441	
17,400.00	8,862.04	18,516.92	9,954.93	80.92	82.32	147.31	-9,562.38	733.43	1,297.54	1,142.21	155.33	8.354	
17,476.05	8,862.04	18,576.95	9,954.37	81.45	82.73	147.29	-9,622.40	733.46	1,297.00	1,140.60	156.40	8.293	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 20H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 198-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
17,500.00	8,862.04	18,597.63	9,954.31	81.62	82.88	147.28	-9,643.08	733.37	1,297.02	1,140.28	156.74	8.275	
17,600.00	8,862.04	18,692.65	9,954.03	82.31	83.53	147.24	-9,738.10	732.46	1,297.39	1,139.17	158.22	8.200	
17,700.00	8,862.04	18,790.51	9,954.77	83.01	84.21	147.26	-9,835.95	732.66	1,298.02	1,138.34	159.68	8.129	
17,800.00	8,862.04	18,887.31	9,955.22	83.71	84.88	147.24	-9,932.74	732.15	1,298.80	1,137.65	161.15	8.060	
17,900.00	8,862.03	18,985.23	9,955.89	84.41	85.56	147.21	-10,030.65	731.00	1,300.10	1,137.47	162.64	7.994	
18,000.00	8,862.03	19,110.45	9,955.43	85.11	86.44	147.18	-10,155.87	730.68	1,299.99	1,135.74	164.25	7.915	
18,100.00	8,862.03	19,211.17	9,953.91	85.81	87.14	147.12	-10,256.57	730.36	1,299.00	1,133.23	165.76	7.836	
18,200.00	8,862.03	19,304.26	9,952.51	86.51	87.79	147.05	-10,349.65	729.45	1,298.37	1,131.11	167.25	7.763	
18,253.90	8,862.03	19,353.73	9,952.06	86.89	88.13	147.02	-10,399.12	729.01	1,298.27	1,130.22	168.05	7.726	
18,300.00	8,862.03	19,395.67	9,951.66	87.21	88.43	146.98	-10,441.05	728.35	1,298.34	1,129.62	168.73	7.695	
18,400.00	8,862.02	19,491.30	9,951.10	87.92	89.10	146.90	-10,536.66	726.69	1,298.90	1,128.67	170.23	7.630	
18,500.00	8,862.02	19,605.93	9,951.79	88.62	89.90	146.93	-10,651.29	727.42	1,299.19	1,127.41	171.78	7.563	
18,600.00	8,862.02	19,712.26	9,951.03	89.33	90.65	146.93	-10,757.61	727.89	1,298.45	1,125.16	173.30	7.493	
18,700.00	8,862.02	19,814.19	9,947.80	90.03	91.37	146.76	-10,859.45	725.61	1,297.11	1,122.25	174.86	7.418	
18,744.57	8,862.02	19,844.56	9,946.88	90.35	91.58	146.69	-10,889.79	724.58	1,296.87	1,121.38	175.49	7.390	
18,800.00	8,862.02	19,891.00	9,946.49	90.74	91.91	146.64	-10,936.21	723.35	1,297.29	1,120.99	176.29	7.359	
18,900.00	8,862.01	19,973.93	9,947.30	91.45	92.49	146.60	-11,019.12	721.97	1,299.04	1,121.35	177.70	7.310	
19,000.00	8,862.01	20,121.78	9,943.90	92.16	93.53	146.42	-11,166.87	719.50	1,297.64	1,118.14	179.50	7.229	
19,100.00	8,862.01	20,200.20	9,942.31	92.87	94.09	146.32	-11,245.26	718.02	1,297.04	1,116.09	180.95	7.168	
19,141.75	8,862.01	20,241.93	9,941.74	93.17	94.38	146.27	-11,286.98	717.25	1,297.04	1,115.45	181.59	7.143	
19,200.00	8,862.01	20,300.17	9,940.95	93.58	94.80	146.21	-11,345.21	716.17	1,297.04	1,114.55	182.49	7.108	
19,300.00	8,862.01	20,305.00	9,940.88	94.30	94.83	146.20	-11,350.03	716.08	1,300.53	1,117.41	183.12	7.102	
19,400.00	8,862.00	20,305.00	9,940.88	95.01	94.83	146.20	-11,350.03	716.08	1,311.65	1,128.79	182.86	7.173	
19,500.00	8,862.00	20,305.00	9,940.88	95.72	94.83	146.20	-11,350.03	716.08	1,330.21	1,148.42	181.79	7.317	
19,547.53	8,862.00	20,305.00	9,940.88	96.06	94.83	146.20	-11,350.03	716.08	1,341.56	1,160.54	181.02	7.411	
19,548.26	8,862.00	20,305.00	9,940.88	96.14	94.83	146.20	-11,350.03	716.08	1,341.75	1,160.17	181.58	7.389	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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	3.26	3.26	0.00	0.01	-74.78	245.82	-903.50	936.34				
100.00	100.00	105.02	105.02	0.28	0.17	-74.77	246.02	-903.34	936.24	935.80	0.45	2,099.392	
200.00	200.00	206.77	206.77	0.63	0.34	-74.72	246.58	-902.88	935.96	934.99	0.97	965.855	
300.00	300.00	310.51	310.50	0.99	0.65	-74.67	247.25	-902.11	935.41	933.77	1.64	570.458	
400.00	400.00	412.91	412.90	1.35	1.01	-74.65	247.27	-901.07	934.43	932.07	2.36	395.531	
500.00	500.00	512.28	512.26	1.71	1.37	-74.64	247.21	-900.05	933.42	930.35	3.07	303.580	
600.00	600.00	612.16	612.14	2.07	1.72	-74.63	247.20	-899.06	932.47	928.68	3.79	246.036	
700.00	700.00	708.85	708.82	2.43	2.06	-74.61	247.24	-898.17	931.59	927.10	4.49	207.507	
780.39	780.39	783.62	783.59	2.72	2.32	-74.60	247.40	-897.89	931.35	926.31	5.04	184.906	CC
800.00	800.00	801.86	801.83	2.79	2.39	-74.59	247.45	-897.89	931.36	926.19	5.17	180.132	
900.00	900.00	898.97	898.94	3.14	2.72	-74.58	247.76	-898.21	931.76	925.90	5.86	158.976	
1,000.00	1,000.00	999.35	999.32	3.50	3.06	-74.59	247.74	-898.67	932.20	925.64	6.56	142.120	ES
1,100.00	1,099.98	1,099.07	1,099.04	3.84	3.40	125.45	247.45	-899.18	933.63	926.39	7.24	128.946	
1,200.00	1,199.84	1,198.35	1,198.32	4.17	3.74	125.64	247.36	-899.70	937.15	929.24	7.91	118.500	
1,300.00	1,299.45	1,297.10	1,297.06	4.51	4.08	125.96	247.33	-900.27	942.81	934.23	8.58	109.857	
1,350.00	1,349.13	1,345.58	1,345.54	4.68	4.25	126.16	247.23	-900.62	946.47	937.56	8.92	106.118	
1,400.00	1,398.73	1,393.52	1,393.48	4.85	4.42	132.84	247.16	-901.04	950.93	941.68	9.26	102.742	
1,500.00	1,497.69	1,489.10	1,489.06	5.19	4.75	143.43	247.12	-902.11	962.77	952.84	9.93	96.943	
1,600.00	1,596.25	1,593.53	1,593.47	5.54	5.11	151.21	247.19	-903.17	978.07	967.42	10.65	91.874	
1,670.62	1,665.55	1,660.59	1,660.54	5.78	5.35	155.45	247.39	-903.60	990.78	979.65	11.13	89.017	
1,700.00	1,694.31	1,688.24	1,688.19	5.89	5.45	155.59	247.57	-903.79	996.49	985.16	11.33	87.941	
1,800.00	1,792.23	1,785.93	1,785.87	6.24	5.79	156.09	248.33	-904.51	1,016.01	1,003.99	12.02	84.493	
1,900.00	1,890.14	1,883.67	1,883.60	6.61	6.14	156.60	249.48	-905.11	1,035.63	1,022.91	12.72	81.403	
2,000.00	1,988.06	2,004.73	2,004.64	6.97	6.56	157.25	251.42	-904.25	1,054.25	1,040.74	13.51	78.054	
2,100.00	2,085.97	2,116.28	2,116.12	7.34	6.95	157.89	253.34	-900.95	1,070.88	1,056.62	14.26	75.117	
2,200.00	2,183.89	2,222.12	2,221.88	7.70	7.32	158.48	255.24	-897.22	1,087.18	1,072.19	14.99	72.535	
2,300.00	2,281.80	2,328.67	2,328.31	8.07	7.69	159.06	256.70	-892.45	1,102.51	1,086.79	15.73	70.112	
2,400.00	2,379.72	2,419.13	2,418.68	8.45	8.01	159.51	257.51	-888.51	1,117.90	1,101.49	16.41	68.132	
2,500.00	2,477.64	2,505.26	2,504.76	8.82	8.31	159.91	258.18	-885.77	1,134.38	1,117.31	17.07	66.436	
2,600.00	2,575.55	2,590.85	2,590.33	9.19	8.62	160.28	258.81	-884.06	1,151.99	1,134.25	17.74	64.942	
2,700.00	2,673.47	2,683.10	2,682.58	9.57	8.94	160.65	259.68	-883.10	1,170.58	1,152.15	18.43	63.516	
2,800.00	2,771.38	2,778.19	2,777.66	9.95	9.28	161.02	260.64	-882.20	1,189.35	1,170.22	19.13	62.171	
2,900.00	2,869.30	2,870.89	2,870.36	10.32	9.60	161.31	260.52	-882.25	1,208.61	1,188.79	19.82	60.989	
3,000.00	2,967.21	2,995.84	2,995.30	10.70	10.03	161.65	259.38	-882.18	1,227.63	1,206.99	20.64	59.489	
3,100.00	3,065.13	3,160.72	3,159.95	11.08	10.60	162.01	253.62	-876.42	1,242.46	1,220.87	21.59	57.542	
3,200.00	3,163.05	3,343.56	3,341.65	11.46	11.24	162.32	241.39	-860.43	1,251.16	1,228.62	22.55	55.488	
3,300.00	3,260.96	3,496.71	3,492.71	11.84	11.80	162.60	227.97	-839.15	1,254.23	1,230.85	23.38	53.641	
3,400.00	3,358.88	3,611.15	3,605.17	12.22	12.22	162.90	218.80	-820.12	1,255.24	1,231.11	24.14	52.007	
3,500.00	3,456.79	3,738.17	3,729.43	12.60	12.70	163.31	208.96	-795.69	1,253.86	1,228.95	24.91	50.343	
3,600.00	3,554.71	3,845.43	3,834.09	12.98	13.12	163.69	200.72	-773.71	1,251.46	1,225.81	25.65	48.789	
3,700.00	3,652.62	3,950.59	3,936.59	13.36	13.53	164.06	192.44	-751.70	1,248.62	1,222.23	26.39	47.306	
3,800.00	3,750.54	4,037.70	4,021.54	13.75	13.88	164.36	185.50	-733.73	1,246.08	1,218.95	27.12	45.945	
3,900.00	3,848.45	4,140.14	4,121.57	14.13	14.29	164.70	177.16	-713.30	1,244.12	1,216.25	27.87	44.646	
4,000.00	3,946.37	4,229.91	4,209.27	14.51	14.65	164.98	169.64	-695.64	1,242.35	1,213.75	28.60	43.442	
4,100.00	4,044.29	4,314.47	4,292.06	14.89	15.00	165.23	162.70	-679.89	1,241.64	1,212.32	29.32	42.347	
4,104.52	4,048.71	4,318.27	4,295.78	14.91	15.01	165.24	162.39	-679.21	1,241.64	1,212.29	29.35	42.300	
4,200.00	4,142.20	4,408.56	4,384.36	15.28	15.38	165.49	155.08	-663.32	1,241.92	1,211.87	30.06	41.319	
4,300.00	4,240.12	4,510.45	4,484.33	15.66	15.79	165.79	146.96	-645.40	1,242.33	1,211.52	30.81	40.325	
4,400.00	4,338.03	4,621.85	4,593.51	16.05	16.25	166.11	137.92	-625.21	1,242.21	1,210.64	31.58	39.341	
4,500.00	4,435.95	4,723.82	4,693.33	16.43	16.68	166.41	129.50	-606.15	1,241.55	1,209.22	32.33	38.403	
4,600.00	4,533.86	4,825.49	4,792.82	16.81	17.10	166.72	121.05	-586.95	1,240.72	1,207.64	33.08	37.502	
4,700.00	4,631.78	4,923.60	4,888.83	17.20	17.52	167.01	112.87	-568.46	1,239.94	1,206.11	33.83	36.648	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM

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
4,800.00	4,729.69	5,022.08	4,985.21	17.58	17.94	167.30	104.64	-550.03	1,239.31	1,204.73	34.59	35.833	
4,900.00	4,827.61	5,119.44	5,080.53	17.97	18.35	167.59	96.55	-531.93	1,238.85	1,203.51	35.34	35.059	
4,977.41	4,903.41	5,192.54	5,152.14	18.26	18.66	167.80	90.52	-518.53	1,238.71	1,202.80	35.91	34.492	
5,000.00	4,925.53	5,212.03	5,171.24	18.35	18.74	167.86	88.94	-515.01	1,238.75	1,202.67	36.08	34.335	
5,100.00	5,023.44	5,300.11	5,257.69	18.74	19.11	168.12	82.19	-499.55	1,239.58	1,202.77	36.81	33.674	
5,200.00	5,121.36	5,396.54	5,352.44	19.12	19.52	168.40	74.95	-483.14	1,241.01	1,203.45	37.56	33.041	
5,300.00	5,219.27	5,492.14	5,446.41	19.51	19.92	168.67	67.85	-467.06	1,242.68	1,204.38	38.31	32.441	
5,400.00	5,317.19	5,586.76	5,539.53	19.89	20.32	168.95	61.19	-451.66	1,245.04	1,205.99	39.05	31.883	
5,500.00	5,415.10	5,706.14	5,656.83	20.28	20.82	169.29	52.18	-431.37	1,246.54	1,206.70	39.85	31.282	
5,600.00	5,513.02	5,812.80	5,761.40	20.66	21.28	169.60	43.68	-412.20	1,247.02	1,206.40	40.62	30.699	
5,700.00	5,610.93	5,912.03	5,858.66	21.05	21.71	169.90	35.85	-394.10	1,247.34	1,205.96	41.38	30.144	
5,800.00	5,708.85	6,007.99	5,952.74	21.43	22.13	170.19	28.41	-376.73	1,247.89	1,205.76	42.13	29.619	
5,900.00	5,806.77	6,102.72	6,045.68	21.82	22.53	170.48	21.29	-359.85	1,248.85	1,205.97	42.88	29.123	
6,000.00	5,904.68	6,197.26	6,138.51	22.21	22.94	170.76	14.33	-343.38	1,250.25	1,206.62	43.63	28.655	
6,100.00	6,002.60	6,316.38	6,255.40	22.59	23.46	171.12	5.43	-322.26	1,251.43	1,207.00	44.43	28.165	
6,200.00	6,100.51	6,409.21	6,346.35	22.98	23.86	171.41	-1.72	-305.09	1,251.81	1,206.63	45.18	27.706	
6,300.00	6,198.43	6,499.74	6,435.17	23.36	24.25	171.69	-8.51	-288.95	1,252.91	1,206.98	45.93	27.281	
6,400.00	6,296.34	6,598.88	6,532.55	23.75	24.68	171.95	-16.43	-272.09	1,254.47	1,207.78	46.69	26.871	
6,500.00	6,394.26	6,698.00	6,629.93	24.14	25.11	172.14	-25.62	-256.08	1,256.03	1,208.59	47.44	26.474	
6,600.00	6,492.17	6,777.84	6,708.50	24.52	25.45	172.25	-33.38	-244.21	1,258.44	1,210.29	48.15	26.134	
6,700.00	6,590.09	6,854.76	6,784.42	24.91	25.76	172.34	-40.56	-234.16	1,262.59	1,213.75	48.84	25.851	
6,800.00	6,688.01	6,935.66	6,864.48	25.29	26.09	172.41	-47.68	-225.00	1,268.48	1,218.95	49.53	25.612	
6,900.00	6,785.92	7,025.20	6,953.25	25.68	26.45	172.53	-54.06	-215.12	1,275.57	1,225.33	50.24	25.390	
7,000.00	6,883.84	7,130.75	7,057.83	26.07	26.87	172.84	-58.42	-201.56	1,282.91	1,231.89	51.02	25.146	
7,100.00	6,981.75	7,230.91	7,156.96	26.45	27.28	173.16	-62.41	-187.83	1,289.64	1,237.87	51.78	24.908	
7,200.00	7,079.67	7,321.13	7,246.28	26.84	27.64	173.47	-65.28	-175.50	1,296.91	1,244.42	52.50	24.705	
7,300.00	7,177.58	7,440.74	7,364.65	27.23	28.13	173.92	-68.21	-158.57	1,304.35	1,251.01	53.33	24.456	
7,400.00	7,275.50	7,538.30	7,461.03	27.61	28.53	174.29	-71.29	-143.74	1,310.48	1,256.39	54.09	24.229	
7,500.00	7,373.41	7,617.22	7,539.15	28.00	28.85	174.54	-74.11	-132.88	1,317.61	1,262.85	54.76	24.060	
7,600.00	7,471.33	7,699.26	7,620.55	28.39	29.17	174.77	-76.74	-122.98	1,326.33	1,270.89	55.44	23.924	
7,700.00	7,569.25	7,770.63	7,691.45	28.77	29.45	174.99	-78.25	-114.96	1,336.49	1,280.45	56.05	23.845	
7,764.22	7,632.13	7,809.69	7,730.35	29.02	29.60	175.08	-78.91	-111.55	1,344.43	1,288.04	56.39	23.842	
7,800.00	7,667.21	7,830.00	7,750.61	29.16	29.67	175.13	-79.22	-110.10	1,349.14	1,292.57	56.56	23.853	
7,900.00	7,765.68	7,878.72	7,799.26	29.54	29.84	175.24	-79.32	-107.62	1,362.37	1,305.43	56.94	23.927	
8,000.00	7,864.70	7,925.00	7,845.51	29.91	29.99	175.35	-78.28	-106.60	1,375.91	1,318.68	57.23	24.043	
8,100.00	7,964.15	8,003.31	7,923.75	30.28	30.23	175.51	-75.05	-106.38	1,388.64	1,330.90	57.74	24.052	
8,200.00	8,063.90	8,095.53	8,015.85	30.63	30.51	175.69	-70.39	-106.89	1,399.11	1,340.76	58.35	23.978	
8,300.00	8,163.83	8,207.12	8,127.31	30.98	30.86	175.88	-64.80	-107.25	1,405.93	1,346.80	59.13	23.777	
8,350.17	8,214.00	8,255.14	8,175.26	31.14	31.00	-51.89	-62.43	-107.15	1,407.82	1,348.38	59.44	23.684	
8,400.00	8,263.77	8,304.00	8,224.07	31.31	31.16	160.70	-60.11	-107.24	1,411.39	1,351.63	59.77	23.614	
8,450.00	8,313.33	8,350.50	8,270.52	31.49	31.30	160.59	-57.96	-107.44	1,419.13	1,359.03	60.09	23.616	
8,500.00	8,362.13	8,398.00	8,317.97	31.69	31.44	160.39	-55.76	-107.68	1,430.94	1,370.50	60.44	23.676	
8,550.00	8,409.80	8,442.60	8,362.52	31.89	31.58	160.07	-53.66	-107.94	1,446.78	1,386.01	60.77	23.806	
8,600.00	8,455.99	8,485.82	8,405.68	32.09	31.71	159.64	-51.57	-108.23	1,466.55	1,405.45	61.11	24.000	
8,650.00	8,500.33	8,519.56	8,439.38	32.31	31.82	158.97	-49.91	-108.59	1,490.21	1,428.84	61.36	24.285	
8,700.00	8,542.50	8,550.02	8,469.80	32.53	31.91	158.07	-48.40	-109.18	1,517.70	1,456.10	61.60	24.639	
8,750.00	8,582.16	8,585.00	8,504.72	32.75	32.01	156.98	-46.66	-110.18	1,548.81	1,486.93	61.88	25.029	
8,800.00	8,619.02	8,606.62	8,526.31	32.97	32.08	155.39	-45.58	-110.95	1,583.17	1,521.12	62.05	25.515	
8,850.00	8,652.80	8,632.98	8,552.61	33.19	32.16	153.43	-44.25	-111.97	1,620.49	1,558.23	62.26	26.026	
8,900.00	8,683.24	8,656.25	8,575.83	33.42	32.22	150.83	-43.07	-112.95	1,660.45	1,597.99	62.46	26.585	
8,950.00	8,710.11	8,680.00	8,599.52	33.64	32.29	147.44	-41.86	-114.04	1,702.72	1,640.06	62.66	27.174	
9,000.00	8,733.20	8,712.40	8,631.86	33.86	32.39	143.28	-40.40	-115.54	1,746.86	1,683.91	62.95	27.752	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM **Rule Assigned:** **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
9,050.00	8,752.35	8,747.99	8,667.39	34.08	32.50	137.88	-39.21	-117.08	1,792.42	1,729.16	63.26	28.335	
9,100.00	8,767.39	8,776.83	8,696.20	34.29	32.58	130.15	-38.57	-118.25	1,839.15	1,775.64	63.51	28.959	
9,100.17	8,767.43	8,776.91	8,696.29	34.29	32.58	130.11	-38.57	-118.25	1,839.31	1,775.80	63.51	28.961	
9,200.00	8,791.66	8,822.02	8,741.36	34.71	32.72	120.64	-37.95	-119.78	1,932.91	1,869.01	63.89	30.252	
9,300.00	8,812.57	8,865.17	8,784.50	35.13	32.85	113.29	-37.68	-120.81	2,025.01	1,960.76	64.25	31.516	
9,400.00	8,829.97	8,890.34	8,809.67	35.54	32.92	106.64	-37.62	-121.23	2,115.21	2,050.73	64.48	32.806	
9,500.00	8,843.72	8,909.82	8,829.14	35.95	32.98	101.18	-37.60	-121.47	2,203.27	2,138.61	64.66	34.077	
9,600.00	8,853.72	8,924.23	8,843.55	36.33	33.03	96.69	-37.58	-121.60	2,288.90	2,224.10	64.80	35.324	
9,700.00	8,859.89	8,933.22	8,852.54	36.70	33.06	92.97	-37.58	-121.67	2,371.81	2,306.91	64.90	36.545	
9,800.00	8,862.18	12,436.07	10,787.12	37.05	50.04	141.92	-1,937.84	-85.67	2,441.34	2,372.48	68.85	35.457	
9,809.00	8,862.20	12,440.95	10,787.11	37.08	50.08	141.92	-1,942.72	-85.71	2,441.39	2,372.46	68.92	35.421	
9,900.00	8,862.20	12,523.99	10,787.15	37.39	50.84	141.89	-2,025.75	-87.20	2,442.49	2,372.58	69.91	34.938	
10,000.00	8,862.19	12,634.32	10,787.05	37.74	51.86	141.88	-2,136.08	-87.56	2,442.69	2,371.53	71.16	34.328	
10,100.00	8,862.19	12,741.05	10,787.42	38.10	52.88	141.88	-2,242.80	-87.73	2,443.19	2,370.79	72.40	33.744	
10,200.00	8,862.19	12,846.89	10,788.07	38.48	53.92	141.90	-2,348.63	-86.68	2,443.18	2,369.52	73.65	33.171	
10,219.26	8,862.19	12,863.77	10,788.04	38.55	54.09	141.90	-2,365.52	-86.67	2,443.17	2,369.29	73.87	33.073	
10,300.00	8,862.19	12,927.72	10,787.64	38.86	54.73	141.88	-2,429.46	-87.44	2,443.46	2,368.71	74.75	32.689	
10,400.00	8,862.19	13,022.60	10,786.87	39.25	55.68	141.82	-2,524.31	-89.62	2,444.36	2,368.35	76.01	32.160	
10,500.00	8,862.18	13,106.06	10,786.99	39.66	56.54	141.80	-2,607.76	-90.89	2,445.54	2,368.38	77.16	31.694	
10,600.00	8,862.18	13,200.58	10,788.10	40.07	57.53	141.79	-2,702.26	-92.10	2,447.37	2,368.94	78.43	31.205	
10,700.00	8,862.18	13,343.87	10,792.00	40.49	59.07	141.90	-2,845.46	-89.21	2,448.41	2,368.31	80.10	30.567	
10,800.00	8,862.18	13,449.35	10,794.20	40.93	60.24	141.98	-2,950.87	-85.90	2,448.22	2,366.77	81.45	30.058	
10,833.62	8,862.18	13,478.86	10,794.76	41.08	60.57	142.01	-2,980.36	-85.08	2,448.19	2,366.34	81.86	29.908	
10,900.00	8,862.18	13,545.74	10,796.04	41.37	61.31	142.05	-3,047.20	-83.42	2,448.25	2,365.51	82.74	29.588	
10,997.07	8,862.17	13,642.37	10,797.33	41.81	62.40	142.11	-3,143.80	-81.25	2,448.06	2,364.00	84.05	29.125	
11,000.00	8,862.17	13,644.69	10,797.35	41.82	62.43	142.11	-3,146.12	-81.23	2,448.06	2,363.97	84.09	29.113	
11,100.00	8,862.17	13,729.54	10,797.42	42.28	63.38	142.10	-3,230.97	-81.57	2,448.47	2,363.12	85.35	28.687	
11,200.00	8,862.17	13,835.06	10,797.41	42.75	64.58	142.08	-3,336.48	-82.46	2,449.10	2,362.25	86.85	28.199	
11,300.00	8,862.17	13,946.37	10,796.25	43.22	65.85	142.03	-3,447.78	-83.95	2,449.22	2,360.77	88.45	27.691	
11,354.34	8,862.17	13,999.67	10,796.09	43.49	66.47	142.03	-3,501.08	-83.99	2,449.18	2,359.95	89.23	27.447	
11,400.00	8,862.17	14,039.62	10,796.00	43.71	66.93	142.02	-3,541.03	-84.11	2,449.23	2,359.39	89.84	27.261	
11,500.00	8,862.16	14,140.14	10,795.85	44.20	68.11	142.01	-3,641.54	-84.66	2,449.57	2,358.23	91.34	26.819	
11,600.00	8,862.16	14,228.74	10,796.20	44.70	69.16	142.01	-3,730.14	-84.51	2,449.90	2,357.21	92.70	26.429	
11,700.00	8,862.16	14,327.70	10,796.31	45.20	70.33	141.99	-3,829.09	-85.53	2,450.75	2,356.55	94.20	26.016	
11,800.00	8,862.16	14,424.04	10,796.08	45.72	71.48	141.96	-3,925.43	-86.77	2,451.46	2,355.77	95.69	25.618	
11,900.00	8,862.16	14,551.61	10,796.19	46.24	73.02	141.95	-4,052.99	-87.50	2,452.06	2,354.53	97.54	25.140	
12,000.00	8,862.15	14,744.26	10,793.30	46.76	75.39	141.99	-4,245.54	-82.49	2,448.92	2,348.87	100.05	24.477	
12,100.00	8,862.15	14,851.13	10,790.50	47.29	76.73	142.02	-4,352.31	-78.46	2,444.63	2,342.98	101.66	24.048	
12,200.00	8,862.15	14,941.02	10,788.92	47.83	77.86	142.07	-4,442.08	-74.38	2,440.57	2,337.49	103.08	23.677	
12,300.00	8,862.15	15,012.00	10,787.65	48.38	78.76	142.11	-4,512.99	-71.35	2,436.83	2,332.52	104.31	23.362	
12,400.00	8,862.15	15,081.91	10,786.55	48.93	79.64	142.12	-4,582.86	-69.55	2,434.30	2,328.76	105.54	23.066	
12,484.95	8,862.14	15,130.70	10,786.21	49.40	80.26	142.12	-4,631.66	-69.35	2,433.70	2,327.22	106.47	22.857	
12,500.00	8,862.14	15,139.92	10,786.21	49.48	80.37	142.12	-4,640.87	-69.35	2,433.71	2,327.07	106.64	22.821	
12,600.00	8,862.14	15,202.27	10,786.81	50.04	81.16	142.12	-4,703.22	-69.53	2,434.75	2,326.97	107.78	22.589	
12,700.00	8,862.14	15,330.76	10,787.57	50.61	82.77	142.10	-4,831.69	-70.93	2,436.02	2,326.27	109.75	22.197	
12,800.00	8,862.14	15,421.05	10,787.42	51.18	83.91	142.09	-4,921.98	-71.45	2,436.40	2,325.15	111.25	21.900	
12,900.00	8,862.14	15,482.00	10,787.98	51.76	84.69	142.07	-4,982.92	-72.66	2,438.37	2,325.97	112.40	21.694	
13,000.00	8,862.13	15,554.30	10,789.09	52.34	85.60	142.04	-5,055.17	-75.13	2,441.73	2,328.04	113.69	21.477	
13,100.00	8,862.13	15,666.01	10,790.43	52.92	87.01	141.97	-5,166.77	-79.83	2,445.40	2,329.87	115.53	21.166	
13,200.00	8,862.13	15,796.40	10,792.80	53.51	88.68	141.96	-5,297.10	-81.75	2,447.80	2,330.23	117.56	20.821	
13,300.00	8,862.13	15,895.59	10,794.40	54.10	89.96	141.96	-5,396.28	-82.96	2,449.93	2,330.73	119.20	20.553	
13,400.00	8,862.12	16,041.35	10,797.50	54.70	91.86	142.02	-5,541.99	-81.91	2,451.39	2,330.02	121.37	20.198	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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
13,500.00	8,862.12	16,188.45	10,799.55	55.30	93.80	142.15	-5,688.96	-76.19	2,450.02	2,326.54	123.47	19.842	
13,600.00	8,862.12	16,290.15	10,800.35	55.91	95.15	142.23	-5,790.57	-72.25	2,448.38	2,323.30	125.08	19.574	
13,700.00	8,862.12	16,380.34	10,800.02	56.52	96.34	142.26	-5,880.73	-69.90	2,446.63	2,320.03	126.60	19.326	
13,800.00	8,862.12	16,472.06	10,799.56	57.13	97.55	142.28	-5,972.45	-68.74	2,445.55	2,317.39	128.16	19.081	
13,900.00	8,862.11	16,568.69	10,799.19	57.75	98.83	142.29	-6,069.07	-67.33	2,444.49	2,314.70	129.78	18.835	
14,000.00	8,862.11	16,673.39	10,798.84	58.37	100.22	142.31	-6,173.76	-66.10	2,443.62	2,312.11	131.51	18.581	
14,100.00	8,862.11	16,786.91	10,798.21	58.99	101.73	142.33	-6,287.26	-64.09	2,442.21	2,308.87	133.34	18.316	
14,200.00	8,862.11	16,883.13	10,797.52	59.62	103.02	142.35	-6,383.46	-62.25	2,440.60	2,305.63	134.96	18.083	
14,300.00	8,862.11	16,947.38	10,797.09	60.25	103.87	142.35	-6,447.70	-61.78	2,439.76	2,303.55	136.22	17.911	
14,302.58	8,862.11	16,948.96	10,797.08	60.27	103.89	142.35	-6,449.28	-61.79	2,439.76	2,303.52	136.25	17.907	
14,400.00	8,862.10	17,022.67	10,796.67	60.88	104.87	142.32	-6,522.98	-63.06	2,440.41	2,302.78	137.63	17.732	
14,500.00	8,862.10	17,131.46	10,796.05	61.52	106.31	142.27	-6,631.75	-65.23	2,441.31	2,301.81	139.50	17.500	
14,600.00	8,862.10	17,221.22	10,795.65	62.16	107.51	142.24	-6,721.50	-66.42	2,441.91	2,300.81	141.10	17.306	
14,700.00	8,862.10	17,308.01	10,795.14	62.80	108.66	142.18	-6,808.24	-69.07	2,443.40	2,300.70	142.70	17.123	
14,800.00	8,862.10	17,404.47	10,794.04	63.44	109.94	142.09	-6,904.63	-72.63	2,444.89	2,300.43	144.45	16.925	
14,900.00	8,862.09	17,507.07	10,795.61	64.09	111.32	142.09	-7,007.21	-73.65	2,446.83	2,300.62	146.21	16.735	
15,000.00	8,862.09	17,649.50	10,799.12	64.74	113.25	142.19	-7,149.56	-70.64	2,447.60	2,299.22	148.38	16.495	
15,004.45	8,862.09	17,655.91	10,799.22	64.77	113.34	142.20	-7,155.96	-70.48	2,447.60	2,299.12	148.48	16.484	
15,100.00	8,862.09	17,739.00	10,800.99	65.39	114.47	142.26	-7,239.01	-68.40	2,447.83	2,297.93	149.90	16.330	
15,200.00	8,862.09	17,822.41	10,803.20	66.05	115.60	142.33	-7,322.36	-66.40	2,448.56	2,297.22	151.34	16.179	
15,300.00	8,862.09	17,923.89	10,805.64	66.70	116.99	142.39	-7,423.80	-64.71	2,449.55	2,296.54	153.02	16.008	
15,400.00	8,862.08	18,078.14	10,806.28	67.36	119.09	142.43	-7,578.04	-62.68	2,449.10	2,293.70	155.40	15.760	
15,500.00	8,862.08	18,152.88	10,806.57	68.02	120.11	142.47	-7,652.75	-60.76	2,448.05	2,291.27	156.78	15.615	
15,513.40	8,862.08	18,160.23	10,806.67	68.11	120.21	142.47	-7,660.10	-60.60	2,448.03	2,291.10	156.93	15.600	
15,600.00	8,862.08	18,207.00	10,807.67	68.69	120.85	142.50	-7,706.85	-59.81	2,448.72	2,290.86	157.87	15.511	
15,700.00	8,862.08	18,301.00	10,809.96	69.35	122.13	142.54	-7,800.82	-59.25	2,450.41	2,290.93	159.48	15.365	
15,800.00	8,862.08	18,414.74	10,813.79	70.02	123.69	142.61	-7,914.47	-58.09	2,452.66	2,291.33	161.32	15.203	
15,900.00	8,862.07	18,551.34	10,814.21	70.69	125.56	142.63	-8,051.06	-56.99	2,452.27	2,288.74	163.53	14.996	
16,000.00	8,862.07	18,681.38	10,815.65	71.36	127.35	142.70	-8,181.05	-53.90	2,451.93	2,286.36	165.57	14.809	
16,067.33	8,862.07	18,714.35	10,815.79	71.81	127.80	142.72	-8,214.02	-53.36	2,451.51	2,285.22	166.30	14.742	
16,100.00	8,862.07	18,732.12	10,815.95	72.03	128.05	142.72	-8,231.78	-53.21	2,451.61	2,284.95	166.66	14.710	
16,200.00	8,862.07	18,844.10	10,816.88	72.71	129.58	142.72	-8,343.75	-53.79	2,452.80	2,284.22	168.57	14.550	
16,241.89	8,862.07	18,888.93	10,816.38	72.99	130.19	142.70	-8,388.58	-54.26	2,452.73	2,283.36	169.37	14.482	
16,300.00	8,862.07	18,933.03	10,815.84	73.38	130.79	142.68	-8,432.67	-55.10	2,452.90	2,282.67	170.23	14.409	
16,400.00	8,862.06	19,038.15	10,814.55	74.06	132.22	142.61	-8,537.75	-57.71	2,453.55	2,281.42	172.14	14.254	
16,500.00	8,862.06	19,135.41	10,813.51	74.74	133.55	142.56	-8,634.98	-59.48	2,453.93	2,280.01	173.92	14.110	
16,600.00	8,862.06	19,248.13	10,812.19	75.42	135.10	142.50	-8,747.68	-61.33	2,454.11	2,278.20	175.91	13.951	
16,605.03	8,862.06	19,252.18	10,812.14	75.45	135.15	142.50	-8,751.73	-61.40	2,454.11	2,278.12	175.99	13.944	
16,700.00	8,862.06	19,333.00	10,811.40	76.10	136.26	142.46	-8,832.53	-62.73	2,454.47	2,276.95	177.52	13.826	
16,800.00	8,862.06	19,408.82	10,811.43	76.79	137.30	142.43	-8,908.34	-64.01	2,455.62	2,276.64	178.98	13.720	
16,900.00	8,862.05	19,474.89	10,812.39	77.47	138.21	142.43	-8,974.40	-64.98	2,457.81	2,277.55	180.26	13.635	
17,000.00	8,862.05	19,540.86	10,815.09	78.16	139.11	142.45	-9,040.31	-65.38	2,461.50	2,280.04	181.46	13.565	
17,100.00	8,862.05	19,630.64	10,818.79	78.85	140.35	142.47	-9,129.98	-67.47	2,466.28	2,283.23	183.05	13.473	
17,200.00	8,862.05	19,824.97	10,826.49	79.54	143.05	142.61	-9,324.13	-64.95	2,468.42	2,282.38	186.04	13.268	
17,300.00	8,862.05	19,937.49	10,829.34	80.23	144.62	142.71	-9,436.55	-61.65	2,468.74	2,280.88	187.86	13.142	
17,400.00	8,862.04	20,020.10	10,831.58	80.92	145.77	142.78	-9,519.12	-59.64	2,469.53	2,280.23	189.30	13.045	
17,500.00	8,862.04	20,192.82	10,833.90	81.62	148.18	142.86	-9,691.76	-56.69	2,470.05	2,278.14	191.92	12.871	
17,600.00	8,862.04	20,269.00	10,832.79	82.31	149.24	142.85	-9,767.92	-56.06	2,468.55	2,275.15	193.40	12.764	
17,652.06	8,862.04	20,299.84	10,832.83	82.68	149.67	142.86	-9,798.76	-55.63	2,468.27	2,274.23	194.04	12.720	
17,700.00	8,862.04	20,323.67	10,833.34	83.01	150.00	142.88	-9,822.58	-55.10	2,468.50	2,273.96	194.54	12.689	
17,800.00	8,862.04	20,392.35	10,836.75	83.71	150.96	142.96	-9,891.13	-52.80	2,470.42	2,274.68	195.75	12.621	
17,900.00	8,862.03	20,506.30	10,841.10	84.41	152.55	143.07	-10,004.96	-50.11	2,472.13	2,274.56	197.58	12.512	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 29H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 236-MWD+HRGM **Rule Assigned:** **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
18,000.00	8,862.03	20,589.47	10,842.59	85.11	153.71	143.08	-10,088.11	-50.65	2,474.09	2,274.99	199.10	12.427	
18,100.00	8,862.03	20,739.45	10,847.26	85.81	155.80	143.16	-10,237.99	-49.36	2,476.54	2,275.07	201.46	12.293	
18,200.00	8,862.03	20,824.98	10,848.41	86.51	157.00	143.19	-10,323.51	-48.62	2,477.20	2,274.19	203.01	12.203	
18,300.00	8,862.03	20,979.59	10,849.20	87.21	159.16	143.25	-10,478.08	-45.61	2,476.30	2,270.88	205.42	12.055	
18,400.00	8,862.02	21,058.23	10,850.18	87.92	160.27	143.31	-10,556.67	-42.95	2,475.41	2,268.57	206.84	11.968	
18,438.47	8,862.02	21,086.72	10,850.52	88.19	160.67	143.32	-10,585.15	-42.35	2,475.33	2,267.96	207.37	11.937	
18,500.00	8,862.02	21,152.88	10,851.19	88.62	161.59	143.35	-10,651.30	-41.39	2,475.37	2,266.88	208.49	11.873	
18,600.00	8,862.02	21,253.81	10,852.08	89.33	163.01	143.40	-10,752.21	-39.30	2,474.96	2,264.75	210.21	11.773	
18,636.36	8,862.02	21,284.92	10,852.27	89.58	163.44	143.41	-10,783.31	-38.93	2,474.92	2,264.14	210.78	11.742	
18,700.00	8,862.02	21,328.08	10,852.66	90.03	164.05	143.42	-10,826.47	-38.59	2,475.16	2,263.54	211.62	11.696	
18,800.00	8,862.02	21,397.71	10,854.28	90.74	165.02	143.45	-10,896.08	-38.08	2,476.67	2,263.75	212.92	11.632	
18,900.00	8,862.01	21,496.54	10,855.20	91.45	166.40	143.42	-10,994.88	-39.90	2,478.63	2,263.91	214.72	11.543	
19,000.00	8,862.01	21,574.00	10,854.79	92.16	167.46	143.34	-11,072.24	-43.68	2,481.22	2,264.94	216.28	11.473	
19,100.00	8,862.01	21,713.41	10,853.78	92.87	169.39	143.21	-11,211.51	-49.82	2,483.37	2,264.53	218.84	11.348	
19,200.00	8,862.01	21,870.27	10,852.04	93.58	171.57	143.12	-11,368.31	-52.99	2,483.90	2,262.37	221.53	11.212	
19,260.56	8,862.01	21,910.88	10,851.40	94.01	172.13	143.10	-11,408.91	-53.64	2,483.73	2,261.34	222.39	11.168	
19,300.00	8,862.01	21,947.00	10,850.77	94.30	172.64	143.08	-11,445.02	-54.37	2,483.71	2,260.62	223.09	11.133	
19,400.00	8,862.00	21,947.00	10,850.77	95.01	172.64	143.08	-11,445.02	-54.37	2,485.79	2,262.41	223.38	11.128	SF
19,500.00	8,862.00	21,947.00	10,850.77	95.72	172.64	143.08	-11,445.02	-54.37	2,491.88	2,268.52	223.36	11.156	
19,547.53	8,862.00	21,947.00	10,850.77	96.06	172.64	143.08	-11,445.02	-54.37	2,496.18	2,272.93	223.25	11.181	
19,548.26	8,862.00	21,947.00	10,850.77	96.14	172.64	143.08	-11,445.02	-54.37	2,496.25	2,272.83	223.42	11.173	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Offset Well Error: 0.50 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	0.00	0.00	0.50	70.54	56.92	161.08	170.84				
100.00	100.00	98.83	98.83	0.28	0.52	70.53	57.11	161.55	171.36	170.56	0.80	213.886	
200.00	200.00	197.05	197.04	0.63	0.59	70.50	57.70	162.96	172.91	171.68	1.23	141.053	
300.00	300.00	297.47	297.43	0.99	0.83	70.22	59.16	164.52	174.86	173.04	1.83	95.761	
400.00	400.00	397.70	397.63	1.35	1.14	69.59	61.58	165.49	176.60	174.11	2.49	70.924	
500.00	500.00	497.50	497.39	1.71	1.47	68.86	64.28	166.25	178.27	175.10	3.18	56.119	
600.00	600.00	597.70	597.53	2.07	1.81	68.08	67.31	167.25	180.31	176.43	3.88	46.527	
700.00	700.00	700.54	700.32	2.43	2.16	67.05	70.53	166.58	180.89	176.30	4.59	39.443	
800.00	800.00	800.55	800.27	2.79	2.51	65.93	73.90	165.40	181.16	175.87	5.29	34.244	
900.00	900.00	901.01	900.68	3.14	2.86	64.95	76.70	164.14	181.18	175.18	6.00	30.205	
1,000.00	1,000.00	1,002.53	1,002.17	3.50	3.21	64.21	78.69	162.85	180.87	174.16	6.71	26.958	
1,100.00	1,099.98	1,104.72	1,104.35	3.84	3.56	-96.82	79.26	160.87	179.57	172.17	7.40	24.271	
1,200.00	1,199.84	1,205.46	1,205.05	4.17	3.90	-98.73	78.67	158.41	177.84	169.77	8.07	22.046	
1,300.00	1,299.45	1,305.99	1,305.54	4.51	4.25	-101.82	77.98	155.52	176.56	167.82	8.74	20.199	
1,350.00	1,349.13	1,355.79	1,355.31	4.68	4.42	-103.77	77.54	153.93	176.23	167.15	9.08	19.409	
1,400.00	1,398.73	1,405.37	1,404.86	4.85	4.59	-99.55	77.10	152.34	175.92	166.50	9.42	18.675	
1,500.00	1,497.69	1,504.18	1,503.62	5.19	4.93	-94.51	76.12	149.20	174.45	164.34	10.11	17.262	
1,600.00	1,596.25	1,600.00	1,599.41	5.54	5.26	-92.95	75.31	147.06	173.24	162.45	10.79	16.056	
1,645.11	1,640.54	1,643.61	1,643.01	5.69	5.42	-93.18	75.05	146.56	173.14	162.04	11.10	15.597	
1,670.62	1,665.55	1,668.35	1,667.76	5.78	5.50	-93.53	74.91	146.33	173.18	161.90	11.28	15.357	
1,700.00	1,694.31	1,696.85	1,696.25	5.89	5.60	-95.47	74.78	146.11	173.41	161.93	11.48	15.105	
1,800.00	1,792.23	1,794.23	1,793.63	6.24	5.94	-102.13	74.67	145.14	175.92	163.74	12.18	14.444	
1,900.00	1,890.14	1,891.13	1,890.52	6.61	6.28	-108.59	75.03	144.05	181.25	168.37	12.88	14.070	
2,000.00	1,988.06	1,988.39	1,987.77	6.97	6.62	-114.20	75.27	144.46	189.18	175.61	13.58	13.932	
2,100.00	2,085.97	2,087.21	2,086.52	7.34	6.95	-118.46	74.57	148.09	198.65	184.37	14.28	13.915	
2,200.00	2,183.89	2,186.31	2,185.51	7.70	7.29	-122.05	73.50	152.72	208.90	193.93	14.98	13.948	
2,300.00	2,281.80	2,287.30	2,286.38	8.07	7.63	-125.43	71.70	157.08	219.18	203.49	15.69	13.972	
2,400.00	2,379.72	2,388.45	2,387.37	8.45	7.98	-128.32	68.80	162.08	229.08	212.68	16.40	13.970	
2,500.00	2,477.64	2,487.56	2,486.24	8.82	8.32	-130.70	65.08	167.84	238.64	221.53	17.10	13.952	
2,600.00	2,575.55	2,580.47	2,579.08	9.19	8.64	-133.43	62.74	170.32	249.87	232.09	17.79	14.048	
2,700.00	2,673.47	2,677.85	2,676.45	9.57	8.98	-136.79	61.65	169.43	263.36	244.87	18.49	14.245	
2,800.00	2,771.38	2,789.51	2,788.04	9.95	9.36	-140.44	59.20	167.60	276.93	257.68	19.25	14.387	
2,900.00	2,869.30	2,912.28	2,910.10	10.32	9.79	-143.69	46.40	169.41	282.41	262.44	19.97	14.144	
3,000.00	2,967.21	3,030.44	3,026.35	10.70	10.19	-146.09	26.49	175.96	281.33	260.73	20.60	13.656	
3,100.00	3,065.13	3,136.99	3,129.86	11.08	10.56	-146.90	5.33	189.59	275.75	254.48	21.27	12.965	
3,200.00	3,163.05	3,234.96	3,224.53	11.46	10.90	-146.76	-13.53	206.34	269.66	247.66	22.01	12.254	
3,300.00	3,260.96	3,332.33	3,318.72	11.84	11.24	-146.54	-31.49	223.22	264.33	241.57	22.75	11.618	
3,400.00	3,358.88	3,429.03	3,412.57	12.22	11.59	-146.40	-48.32	239.33	260.18	236.68	23.50	11.069	
3,500.00	3,456.79	3,523.80	3,504.84	12.60	11.92	-146.35	-63.83	254.42	257.29	233.02	24.27	10.602	
3,542.43	3,498.33	3,562.20	3,542.42	12.76	12.06	-146.43	-69.44	259.93	256.96	232.36	24.60	10.446	
3,600.00	3,554.71	3,617.64	3,596.87	12.98	12.26	-146.65	-76.87	267.26	257.35	232.32	25.03	10.282	
3,700.00	3,652.62	3,718.24	3,695.67	13.36	12.62	-147.02	-90.32	280.63	258.08	232.32	25.76	10.018	
3,800.00	3,750.54	3,818.34	3,793.95	13.75	12.99	-147.43	-103.95	293.82	258.60	232.10	26.50	9.759	
3,900.00	3,848.45	3,917.59	3,891.43	14.13	13.35	-147.82	-117.29	306.90	259.31	232.07	27.24	9.520	
4,000.00	3,946.37	4,016.13	3,988.22	14.51	13.71	-148.09	-130.04	320.26	260.41	232.43	27.98	9.306	
4,100.00	4,044.29	4,113.62	4,084.11	14.89	14.06	-148.38	-141.98	333.20	262.28	233.55	28.73	9.129	
4,200.00	4,142.20	4,216.44	4,185.39	15.28	14.44	-148.92	-154.54	345.72	264.51	235.05	29.47	8.977	
4,300.00	4,240.12	4,318.21	4,285.51	15.66	14.81	-149.79	-168.84	356.98	265.32	235.12	30.20	8.785	
4,400.00	4,338.03	4,416.05	4,381.83	16.05	15.17	-150.73	-182.62	367.28	266.34	235.39	30.95	8.605	
4,500.00	4,435.95	4,521.94	4,485.96	16.43	15.56	-151.59	-197.70	379.23	267.03	235.36	31.67	8.431	
4,600.00	4,533.86	4,625.68	4,587.43	16.81	15.94	-152.03	-213.90	393.43	265.61	233.21	32.40	8.197	
4,700.00	4,631.78	4,724.80	4,684.26	17.20	16.31	-152.33	-229.58	407.66	263.77	230.61	33.16	7.955	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy — **Offset Site Error:** 0.00 usft

Survey Program: 200-MWD+IFR1+MS — **Rule Assigned:** — **Offset Well Error:** 0.50 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
4,800.00	4,729.69	4,825.54	4,782.56	17.58	16.69	-152.40	-245.21	423.16	261.86	227.95	33.90	7.724	
4,900.00	4,827.61	4,924.50	4,879.08	17.97	17.06	-152.33	-260.30	438.95	259.99	225.33	34.66	7.501	
5,000.00	4,925.53	5,021.33	4,973.70	18.35	17.42	-152.34	-274.55	453.86	258.84	223.41	35.43	7.305	
5,017.55	4,942.71	5,037.85	4,989.87	18.42	17.48	-152.36	-276.86	456.28	258.81	223.24	35.57	7.276	
5,100.00	5,023.44	5,118.62	5,069.14	18.74	17.78	-152.54	-287.61	467.46	259.41	223.22	36.19	7.167	
5,200.00	5,121.36	5,220.53	5,168.95	19.12	18.17	-152.70	-301.92	482.19	259.23	222.29	36.94	7.018	
5,204.59	5,125.85	5,224.91	5,173.25	19.14	18.18	-152.71	-302.53	482.82	259.23	222.25	36.98	7.011	
5,300.00	5,219.27	5,317.88	5,264.49	19.51	18.53	-152.97	-315.01	495.54	259.89	222.19	37.70	6.893	
5,400.00	5,317.19	5,421.87	5,366.56	19.89	18.92	-153.36	-329.33	509.32	260.44	222.00	38.44	6.775	
5,500.00	5,415.10	5,523.35	5,465.72	20.28	19.30	-153.51	-344.73	524.47	259.03	219.84	39.19	6.610	
5,566.85	5,480.56	5,587.22	5,528.20	20.53	19.54	-153.57	-353.92	533.98	258.59	218.88	39.71	6.512	
5,600.00	5,513.02	5,618.36	5,558.73	20.66	19.66	-153.63	-358.15	538.41	258.72	218.75	39.96	6.474	
5,700.00	5,610.93	5,720.64	5,659.15	21.05	20.05	-153.87	-371.60	552.43	259.70	218.99	40.71	6.379	
5,800.00	5,708.85	5,824.90	5,761.08	21.43	20.44	-154.04	-387.16	567.83	258.57	217.13	41.45	6.239	
5,900.00	5,806.77	5,923.25	5,857.18	21.82	20.81	-154.30	-402.44	582.17	256.97	214.76	42.21	6.087	
6,000.00	5,904.68	6,021.15	5,953.01	22.21	21.18	-154.56	-416.83	596.07	256.30	213.32	42.98	5.963	
6,035.54	5,939.48	6,055.96	5,987.09	22.34	21.31	-154.58	-421.67	601.23	256.25	212.99	43.25	5.924	
6,100.00	6,002.60	6,119.02	6,048.89	22.59	21.55	-154.63	-430.18	610.49	256.42	212.67	43.75	5.861	
6,200.00	6,100.51	6,214.79	6,142.93	22.98	21.91	-154.76	-442.32	623.88	257.74	213.23	44.51	5.790	
6,300.00	6,198.43	6,314.54	6,241.09	23.36	22.29	-155.02	-454.29	636.96	260.05	214.78	45.27	5.745	
6,400.00	6,296.34	6,420.64	6,345.28	23.75	22.69	-155.36	-468.43	651.14	261.00	214.99	46.01	5.673	
6,403.02	6,299.30	6,423.51	6,348.09	23.76	22.70	-155.37	-468.84	651.53	261.00	214.97	46.03	5.670	
6,500.00	6,394.26	6,515.60	6,438.54	24.14	23.05	-155.72	-481.22	663.61	261.93	215.15	46.78	5.599	
6,600.00	6,492.17	6,611.94	6,533.34	24.52	23.41	-155.82	-492.30	676.71	264.52	216.98	47.54	5.564	
6,700.00	6,590.09	6,710.58	6,630.64	24.91	23.78	-156.08	-502.90	689.02	268.26	219.96	48.29	5.555	
6,800.00	6,688.01	6,819.84	6,738.24	25.29	24.19	-156.72	-516.87	701.81	270.47	221.43	49.04	5.515	
6,900.00	6,785.92	6,928.72	6,844.65	25.68	24.61	-157.31	-534.58	716.43	268.70	218.95	49.75	5.401	
7,000.00	6,883.84	7,022.47	6,936.00	26.07	24.96	-157.48	-549.96	730.89	266.04	215.49	50.55	5.263	
7,011.23	6,894.84	7,032.02	6,945.35	26.11	25.00	-157.50	-551.33	732.26	266.01	215.36	50.65	5.252	
7,100.00	6,981.75	7,117.96	7,029.83	26.45	25.33	-157.74	-562.26	743.63	267.43	216.10	51.33	5.210	
7,200.00	7,079.67	7,236.30	7,145.32	26.84	25.78	-157.97	-580.80	761.40	265.68	213.73	51.95	5.114	
7,300.00	7,177.58	7,341.26	7,246.30	27.23	26.19	-157.89	-601.88	780.75	258.17	205.53	52.64	4.904	
7,400.00	7,275.50	7,432.41	7,334.15	27.61	26.55	-157.56	-618.80	798.19	251.82	198.28	53.54	4.704	
7,500.00	7,373.41	7,528.26	7,427.19	28.00	26.92	-157.14	-633.91	815.57	248.48	194.14	54.35	4.572	
7,600.00	7,471.33	7,624.16	7,520.49	28.39	27.29	-156.57	-647.61	833.01	246.52	191.38	55.14	4.471	
7,637.02	7,507.58	7,658.52	7,554.02	28.53	27.42	-156.39	-652.17	838.96	246.28	190.84	55.44	4.442	
7,700.00	7,569.25	7,715.66	7,610.04	28.77	27.64	-156.26	-659.12	847.79	247.03	191.10	55.93	4.417	
7,764.22	7,632.13	7,777.67	7,671.09	29.02	27.87	-156.28	-665.91	856.32	248.97	192.55	56.42	4.413	
7,800.00	7,667.21	7,813.04	7,705.90	29.16	28.01	-156.23	-669.61	861.32	249.95	193.27	56.69	4.409	
7,900.00	7,765.68	7,915.49	7,806.76	29.54	28.39	-156.00	-680.88	875.31	250.23	192.79	57.44	4.356	
8,000.00	7,864.70	8,014.27	7,904.11	29.91	28.76	-155.99	-693.10	886.75	246.92	188.74	58.18	4.244	
8,100.00	7,964.15	8,112.64	8,001.20	30.28	29.13	-155.80	-704.98	897.18	241.10	182.19	58.91	4.092	
8,200.00	8,063.90	8,223.66	8,110.22	30.63	29.56	-154.82	-720.45	911.21	229.55	169.94	59.60	3.851	
8,300.00	8,163.83	8,323.30	8,207.38	30.98	29.94	-152.79	-736.19	926.78	212.12	151.81	60.31	3.517	
8,350.17	8,214.00	8,369.82	8,252.79	31.14	30.12	-19.37	-743.20	933.99	202.69	142.01	60.68	3.340	
8,400.00	8,263.77	8,417.21	8,299.19	31.31	30.30	-165.79	-749.92	940.95	195.68	134.63	61.05	3.205	
8,450.00	8,313.33	8,465.93	8,346.93	31.49	30.49	-164.95	-756.54	947.99	193.24	131.81	61.43	3.146	
8,451.90	8,315.20	8,467.79	8,348.76	31.50	30.50	-164.92	-756.79	948.26	193.23	131.79	61.44	3.145	ES, SF
8,500.00	8,362.13	8,514.89	8,394.97	31.69	30.68	-164.32	-762.96	954.96	195.31	133.50	61.81	3.160	
8,550.00	8,409.80	8,563.60	8,442.82	31.89	30.86	-163.99	-769.21	961.61	201.79	139.59	62.20	3.244	
8,600.00	8,455.99	8,611.18	8,489.62	32.09	31.04	-163.95	-775.20	967.74	212.64	150.05	62.59	3.397	
8,650.00	8,500.33	8,657.29	8,535.06	32.31	31.22	-164.19	-780.88	973.09	227.86	164.89	62.97	3.618	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
8,700.00	8,542.50	8,700.13	8,577.38	32.53	31.38	-164.59	-786.00	977.46	247.45	184.12	63.34	3.907	
8,750.00	8,582.16	8,739.64	8,616.50	32.75	31.52	-165.04	-790.33	980.79	271.58	207.90	63.67	4.265	
8,800.00	8,619.02	8,776.40	8,653.00	32.97	31.66	-165.46	-794.01	983.28	300.02	236.04	63.98	4.690	
8,850.00	8,652.80	8,810.73	8,687.12	33.19	31.78	-165.73	-797.12	985.34	332.39	268.14	64.25	5.173	
8,900.00	8,683.24	8,841.69	8,717.92	33.42	31.90	-165.73	-799.64	987.08	368.31	303.81	64.50	5.710	
8,950.00	8,710.11	8,871.86	8,747.97	33.64	32.01	-165.55	-801.88	988.69	407.38	342.63	64.75	6.292	
9,000.00	8,733.20	8,908.34	8,784.25	33.86	32.14	-165.45	-804.91	991.00	448.68	383.62	65.07	6.896	
9,050.00	8,752.35	8,942.20	8,817.84	34.08	32.27	-164.98	-808.24	993.65	491.78	426.45	65.34	7.527	
9,100.00	8,767.39	8,973.04	8,848.36	34.29	32.38	-164.02	-811.69	996.48	536.52	470.95	65.57	8.183	
9,100.17	8,767.43	8,973.14	8,848.46	34.29	32.38	-164.02	-811.71	996.49	536.67	471.10	65.57	8.185	
9,200.00	8,791.66	9,011.40	8,886.28	34.71	32.52	-176.36	-816.05	1,000.24	628.71	562.84	65.87	9.545	
9,300.00	8,812.57	9,050.91	8,925.29	35.13	32.67	171.27	-820.67	1,004.46	722.13	655.97	66.16	10.915	
9,400.00	8,829.97	9,086.79	8,960.68	35.54	32.81	159.14	-824.96	1,008.54	816.24	749.83	66.42	12.290	
9,500.00	8,843.72	9,118.93	8,992.35	35.95	32.93	147.44	-828.88	1,012.37	910.66	844.02	66.64	13.665	
9,600.00	8,853.72	9,146.84	9,019.83	36.33	33.03	136.42	-832.34	1,015.82	1,005.04	938.21	66.83	15.038	
9,700.00	8,859.89	9,176.74	9,049.23	36.70	33.15	127.20	-836.17	1,019.71	1,099.03	1,032.01	67.02	16.398	
9,800.00	8,862.18	9,201.49	9,073.52	37.05	33.24	119.01	-839.49	1,023.12	1,192.32	1,125.15	67.17	17.751	
9,809.00	8,862.20	9,203.43	9,075.42	37.08	33.25	118.32	-839.75	1,023.39	1,200.67	1,133.49	67.18	17.872	
9,900.00	8,862.20	11,047.60	9,996.91	37.39	40.76	-160.61	-1,833.61	1,818.98	1,220.43	1,174.25	46.18	26.427	
10,000.00	8,862.19	11,156.15	9,997.49	37.74	41.23	-158.52	-1,931.24	1,866.42	1,237.62	1,190.09	47.53	26.041	
10,100.00	8,862.19	11,310.48	9,996.26	38.10	41.91	-156.01	-2,074.07	1,924.63	1,252.06	1,203.77	48.29	25.928	
10,200.00	8,862.19	11,480.09	9,994.90	38.48	42.64	-154.04	-2,236.81	1,971.74	1,263.61	1,214.87	48.73	25.929	
10,300.00	8,862.19	11,617.92	9,995.38	38.86	43.20	-153.21	-2,372.99	1,992.63	1,270.68	1,221.39	49.29	25.780	
10,400.00	8,862.19	11,772.15	9,991.76	39.25	43.81	-152.65	-2,526.64	2,005.02	1,271.14	1,221.57	49.57	25.645	
10,500.00	8,862.18	11,833.53	9,991.25	39.66	44.06	-152.43	-2,587.78	2,010.31	1,274.16	1,223.12	51.03	24.967	
10,600.00	8,862.18	11,952.39	9,990.06	40.07	44.55	-151.92	-2,705.98	2,022.77	1,278.17	1,226.31	51.86	24.647	
10,700.00	8,862.18	12,125.89	9,987.12	40.49	45.26	-151.63	-2,879.29	2,028.99	1,278.36	1,226.45	51.91	24.627	
10,800.00	8,862.18	12,230.97	9,982.55	40.93	45.69	-151.57	-2,984.26	2,028.19	1,274.02	1,221.24	52.78	24.138	
10,900.00	8,862.18	12,291.00	9,981.76	41.37	45.93	-151.56	-3,044.28	2,028.15	1,272.58	1,218.34	54.23	23.465	
11,000.00	8,862.17	12,385.00	9,981.30	41.82	46.33	-151.53	-3,138.28	2,028.83	1,272.42	1,217.13	55.30	23.011	
11,018.25	8,862.17	12,407.75	9,981.07	41.90	46.43	-151.52	-3,161.03	2,029.05	1,272.30	1,216.87	55.42	22.956	
11,100.00	8,862.17	12,459.41	9,981.49	42.28	46.65	-151.51	-3,212.67	2,029.65	1,273.26	1,216.61	56.65	22.475	
11,200.00	8,862.17	12,548.75	9,983.51	42.75	47.05	-151.46	-3,301.96	2,031.97	1,276.36	1,218.52	57.84	22.066	
11,300.00	8,862.17	12,706.33	9,983.10	43.22	47.75	-151.31	-3,459.44	2,035.84	1,277.18	1,219.00	58.17	21.954	
11,400.00	8,862.17	12,803.33	9,982.26	43.71	48.19	-151.35	-3,556.43	2,034.54	1,275.70	1,216.44	59.26	21.526	
11,500.00	8,862.16	12,893.25	9,981.34	44.20	48.60	-151.30	-3,646.34	2,035.52	1,275.21	1,214.71	60.50	21.077	
11,600.00	8,862.16	13,026.71	9,982.17	44.70	49.20	-151.58	-3,779.60	2,029.17	1,273.32	1,212.25	61.08	20.848	
11,700.00	8,862.16	13,138.00	9,981.77	45.20	49.69	-151.91	-3,890.56	2,020.88	1,269.32	1,207.37	61.95	20.490	
11,800.00	8,862.16	13,236.27	9,980.34	45.72	50.15	-152.04	-3,988.73	2,016.95	1,266.06	1,202.99	63.07	20.073	
11,900.00	8,862.16	13,311.44	9,978.37	46.24	50.52	-152.02	-4,063.87	2,016.67	1,263.46	1,198.90	64.57	19.568	
12,000.00	8,862.15	13,425.10	9,974.79	46.76	51.09	-151.86	-4,177.46	2,018.87	1,261.54	1,195.91	65.62	19.224	
12,085.47	8,862.15	13,475.94	9,973.57	47.22	51.35	-151.80	-4,228.27	2,019.98	1,260.47	1,193.35	67.12	18.779	
12,100.00	8,862.15	13,485.09	9,973.46	47.29	51.40	-151.78	-4,237.41	2,020.24	1,260.50	1,193.13	67.37	18.710	
12,200.00	8,862.15	13,576.01	9,973.33	47.83	51.87	-151.67	-4,328.29	2,023.20	1,261.78	1,193.04	68.74	18.356	
12,300.00	8,862.15	13,696.07	9,972.23	48.38	52.49	-151.52	-4,448.30	2,026.50	1,262.21	1,192.46	69.75	18.097	
12,364.87	8,862.15	13,755.46	9,971.17	48.73	52.81	-151.44	-4,507.65	2,028.23	1,262.03	1,191.39	70.65	17.864	
12,400.00	8,862.15	13,786.92	9,970.75	48.93	52.97	-151.39	-4,539.09	2,029.15	1,262.08	1,190.94	71.14	17.740	
12,500.00	8,862.14	13,916.43	9,967.62	49.48	53.66	-151.27	-4,668.54	2,030.87	1,260.31	1,188.27	72.04	17.494	
12,571.61	8,862.14	13,964.37	9,966.88	49.88	53.92	-151.24	-4,716.47	2,031.20	1,259.52	1,186.26	73.26	17.192	
12,600.00	8,862.14	13,983.00	9,966.84	50.04	54.02	-151.23	-4,735.11	2,031.39	1,259.58	1,185.83	73.75	17.079	
12,700.00	8,862.14	14,078.45	9,967.13	50.61	54.53	-151.20	-4,830.55	2,032.59	1,260.36	1,185.27	75.09	16.785	
12,800.00	8,862.14	14,170.00	9,967.51	51.18	55.03	-151.18	-4,922.09	2,033.53	1,261.18	1,184.69	76.49	16.489	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
12,900.00	8,862.14	14,249.01	9,968.53	51.76	55.46	-151.15	-5,001.07	2,035.00	1,263.23	1,185.17	78.05	16.184	
13,000.00	8,862.13	14,328.34	9,970.45	52.34	55.91	-151.05	-5,080.30	2,038.58	1,267.42	1,187.79	79.64	15.915	
13,100.00	8,862.13	14,471.24	9,973.49	52.92	56.72	-150.88	-5,222.99	2,044.89	1,271.63	1,191.17	80.46	15.804	
13,200.00	8,862.13	14,592.20	9,973.69	53.51	57.40	-150.94	-5,343.94	2,043.82	1,271.02	1,189.52	81.50	15.595	
13,204.06	8,862.13	14,595.07	9,973.70	53.53	57.42	-150.94	-5,346.82	2,043.80	1,271.02	1,189.45	81.57	15.582	
13,300.00	8,862.13	14,677.77	9,974.22	54.10	57.89	-150.92	-5,429.50	2,044.62	1,271.87	1,188.86	83.01	15.321	
13,400.00	8,862.12	14,779.92	9,972.18	54.70	58.48	-150.67	-5,531.48	2,050.08	1,272.64	1,188.25	84.39	15.081	
13,500.00	8,862.12	14,914.26	9,972.83	55.30	59.25	-150.72	-5,665.78	2,049.52	1,272.97	1,187.69	85.28	14.927	
13,600.00	8,862.12	15,027.90	9,972.87	55.91	59.89	-150.95	-5,779.28	2,043.69	1,270.38	1,183.99	86.39	14.705	
13,700.00	8,862.12	15,114.02	9,972.92	56.52	60.37	-151.12	-5,865.29	2,039.69	1,268.08	1,180.19	87.89	14.428	
13,800.00	8,862.12	15,211.06	9,972.99	57.13	60.93	-151.26	-5,962.28	2,036.44	1,266.45	1,177.19	89.26	14.188	
13,900.00	8,862.11	15,310.08	9,972.70	57.75	61.50	-151.37	-6,061.26	2,033.72	1,264.78	1,174.16	90.62	13.957	
13,977.66	8,862.11	15,369.26	9,972.68	58.23	61.85	-151.40	-6,120.44	2,032.96	1,264.22	1,172.30	91.91	13.754	
14,000.00	8,862.11	15,390.00	9,972.77	58.37	61.97	-151.40	-6,141.18	2,032.94	1,264.27	1,172.03	92.24	13.706	
14,100.00	8,862.11	15,485.74	9,973.28	58.99	62.54	-151.41	-6,236.92	2,033.17	1,264.75	1,171.08	93.67	13.502	
14,200.00	8,862.11	15,599.93	9,973.17	59.62	63.22	-151.43	-6,351.11	2,032.88	1,264.43	1,169.55	94.88	13.326	
14,300.00	8,862.11	15,691.85	9,972.84	60.25	63.78	-151.42	-6,443.03	2,033.07	1,264.13	1,167.75	96.38	13.117	
14,305.95	8,862.11	15,697.55	9,972.83	60.29	63.81	-151.42	-6,448.73	2,033.10	1,264.13	1,167.66	96.46	13.105	
14,400.00	8,862.10	15,789.10	9,972.88	60.88	64.37	-151.42	-6,540.28	2,033.44	1,264.26	1,166.45	97.81	12.926	
14,500.00	8,862.10	15,893.86	9,973.11	61.52	65.00	-151.43	-6,645.04	2,033.40	1,264.35	1,165.20	99.15	12.752	
14,600.00	8,862.10	15,993.98	9,973.09	62.16	65.62	-151.46	-6,745.15	2,032.74	1,263.93	1,163.38	100.55	12.570	
14,618.93	8,862.10	16,010.54	9,973.11	62.28	65.72	-151.47	-6,761.71	2,032.70	1,263.91	1,163.07	100.85	12.533	
14,700.00	8,862.10	16,086.27	9,973.38	62.80	66.18	-151.47	-6,837.44	2,032.85	1,264.16	1,162.11	102.05	12.387	
14,800.00	8,862.10	16,193.09	9,973.80	63.44	66.84	-151.49	-6,944.26	2,032.95	1,264.48	1,161.09	103.39	12.231	
14,900.00	8,862.09	16,301.60	9,973.29	64.09	67.52	-151.49	-7,052.77	2,032.83	1,263.92	1,159.22	104.70	12.072	
14,990.16	8,862.09	16,381.78	9,973.16	64.68	68.02	-151.51	-7,132.94	2,032.25	1,263.42	1,157.32	106.10	11.908	
15,000.00	8,862.09	16,389.91	9,973.20	64.74	68.07	-151.52	-7,141.07	2,032.20	1,263.43	1,157.16	106.26	11.890	
15,100.00	8,862.09	16,508.09	9,974.05	65.39	68.81	-151.61	-7,259.24	2,030.63	1,263.42	1,155.97	107.45	11.758	
15,200.00	8,862.09	16,594.74	9,974.65	66.05	69.34	-151.73	-7,345.84	2,027.94	1,262.50	1,153.46	109.03	11.579	
15,220.30	8,862.09	16,612.00	9,974.92	66.18	69.45	-151.76	-7,363.09	2,027.44	1,262.48	1,153.12	109.35	11.545	
15,300.00	8,862.09	16,681.64	9,975.81	66.70	69.89	-151.82	-7,432.72	2,026.53	1,262.81	1,152.20	110.61	11.417	
15,400.00	8,862.08	16,761.31	9,976.35	67.36	70.40	-151.77	-7,512.36	2,028.17	1,264.32	1,152.04	112.28	11.261	
15,500.00	8,862.08	16,875.27	9,977.43	68.02	71.14	-151.64	-7,626.23	2,032.39	1,266.91	1,153.32	113.59	11.153	
15,600.00	8,862.08	16,971.00	9,978.08	68.69	71.76	-151.60	-7,721.94	2,033.79	1,268.13	1,153.04	115.09	11.019	
15,700.00	8,862.08	17,052.55	9,978.39	69.35	72.29	-151.48	-7,803.42	2,037.31	1,270.45	1,153.71	116.75	10.882	
15,800.00	8,862.08	17,154.18	9,979.03	70.02	72.96	-151.26	-7,904.87	2,043.37	1,273.78	1,155.57	118.21	10.775	
15,900.00	8,862.07	17,268.78	9,979.41	70.69	73.72	-151.07	-8,019.34	2,048.62	1,276.20	1,156.65	119.55	10.675	
16,000.00	8,862.07	17,367.42	9,979.62	71.36	74.37	-150.93	-8,117.91	2,052.35	1,278.13	1,157.09	121.04	10.560	
16,100.00	8,862.07	17,487.58	9,979.74	72.03	75.16	-150.85	-8,238.04	2,054.70	1,279.03	1,156.75	122.28	10.460	
16,200.00	8,862.07	17,584.00	9,979.92	72.71	75.79	-150.84	-8,334.45	2,055.27	1,279.41	1,155.62	123.78	10.336	
16,300.00	8,862.07	17,584.00	9,979.92	73.38	75.79	-150.84	-8,334.45	2,055.27	1,283.95	1,157.85	126.11	10.181	
16,400.00	8,862.06	17,584.00	9,979.92	74.06	75.79	-150.84	-8,334.45	2,055.27	1,296.22	1,168.31	127.91	10.134	
16,500.00	8,862.06	17,584.00	9,979.92	74.74	75.79	-150.84	-8,334.45	2,055.27	1,316.00	1,186.81	129.19	10.187	
16,600.00	8,862.06	17,584.00	9,979.92	75.42	75.79	-150.84	-8,334.45	2,055.27	1,342.95	1,213.00	129.94	10.335	
16,700.00	8,862.06	17,584.00	9,979.92	76.10	75.79	-150.84	-8,334.45	2,055.27	1,376.65	1,246.42	130.23	10.571	
16,800.00	8,862.06	17,584.00	9,979.92	76.79	75.79	-150.84	-8,334.45	2,055.27	1,416.62	1,286.51	130.11	10.888	
16,900.00	8,862.05	17,584.00	9,979.92	77.47	75.79	-150.84	-8,334.45	2,055.27	1,462.36	1,332.70	129.65	11.279	
17,000.00	8,862.05	17,584.00	9,979.92	78.16	75.79	-150.84	-8,334.45	2,055.27	1,513.32	1,384.40	128.92	11.739	
17,100.00	8,862.05	17,584.00	9,979.92	78.85	75.79	-150.84	-8,334.45	2,055.27	1,569.01	1,441.03	127.98	12.260	
17,200.00	8,862.05	17,584.00	9,979.92	79.54	75.79	-150.84	-8,334.45	2,055.27	1,628.94	1,502.05	126.89	12.837	
17,300.00	8,862.05	17,584.00	9,979.92	80.23	75.79	-150.84	-8,334.45	2,055.27	1,692.66	1,566.96	125.70	13.466	
17,400.00	8,862.04	17,584.00	9,979.92	80.92	75.79	-150.84	-8,334.45	2,055.27	1,759.76	1,635.31	124.45	14.140	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 0.50 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
17,500.00	8,862.04	17,584.00	9,979.92	81.62	75.79	-150.84	-8,334.45	2,055.27	1,829.87	1,706.69	123.18	14.856	
17,600.00	8,862.04	17,584.00	9,979.92	82.31	75.79	-150.84	-8,334.45	2,055.27	1,902.65	1,780.75	121.90	15.608	
17,700.00	8,862.04	17,584.00	9,979.92	83.01	75.79	-150.84	-8,334.45	2,055.27	1,977.81	1,857.18	120.64	16.395	
17,800.00	8,862.04	17,584.00	9,979.92	83.71	75.79	-150.84	-8,334.45	2,055.27	2,055.09	1,935.69	119.40	17.211	
17,900.00	8,862.03	17,584.00	9,979.92	84.41	75.79	-150.84	-8,334.45	2,055.27	2,134.26	2,016.05	118.21	18.055	
18,000.00	8,862.03	17,584.00	9,979.92	85.11	75.79	-150.84	-8,334.45	2,055.27	2,215.11	2,098.05	117.06	18.923	
18,100.00	8,862.03	17,584.00	9,979.92	85.81	75.79	-150.84	-8,334.45	2,055.27	2,297.47	2,181.51	115.96	19.813	
18,200.00	8,862.03	17,584.00	9,979.92	86.51	75.79	-150.84	-8,334.45	2,055.27	2,381.18	2,266.28	114.91	20.723	
18,300.00	8,862.03	17,584.00	9,979.92	87.21	75.79	-150.84	-8,334.45	2,055.27	2,466.11	2,352.20	113.91	21.650	
18,400.00	8,862.02	17,584.00	9,979.92	87.92	75.79	-150.84	-8,334.45	2,055.27	2,552.13	2,439.17	112.96	22.594	
18,500.00	8,862.02	17,584.00	9,979.92	88.62	75.79	-150.84	-8,334.45	2,055.27	2,639.13	2,527.07	112.06	23.551	
18,600.00	8,862.02	17,584.00	9,979.92	89.33	75.79	-150.84	-8,334.45	2,055.27	2,727.02	2,615.82	111.21	24.522	
18,700.00	8,862.02	17,584.00	9,979.92	90.03	75.79	-150.84	-8,334.45	2,055.27	2,815.73	2,705.32	110.40	25.504	
18,800.00	8,862.02	17,584.00	9,979.92	90.74	75.79	-150.84	-8,334.45	2,055.27	2,905.16	2,795.52	109.64	26.496	
18,900.00	8,862.01	17,584.00	9,979.92	91.45	75.79	-150.84	-8,334.45	2,055.27	2,995.27	2,886.34	108.93	27.498	
19,000.00	8,862.01	17,584.00	9,979.92	92.16	75.79	-150.84	-8,334.45	2,055.27	3,085.98	2,977.73	108.25	28.508	
19,100.00	8,862.01	17,584.00	9,979.92	92.87	75.79	-150.84	-8,334.45	2,055.27	3,177.25	3,069.64	107.61	29.525	
19,200.00	8,862.01	17,584.00	9,979.92	93.58	75.79	-150.84	-8,334.45	2,055.27	3,269.04	3,162.03	107.01	30.549	
19,300.00	8,862.01	17,584.00	9,979.92	94.30	75.79	-150.84	-8,334.45	2,055.27	3,361.29	3,254.85	106.44	31.579	
19,400.00	8,862.00	17,584.00	9,979.92	95.01	75.79	-150.84	-8,334.45	2,055.27	3,453.97	3,348.07	105.90	32.614	
19,500.00	8,862.00	17,584.00	9,979.92	95.72	75.79	-150.84	-8,334.45	2,055.27	3,547.05	3,441.65	105.40	33.654	
19,547.53	8,862.00	17,584.00	9,979.92	96.06	75.79	-150.84	-8,334.45	2,055.27	3,591.42	3,486.25	105.17	34.150	
19,548.26	8,862.00	17,584.00	9,979.92	96.14	75.79	-150.84	-8,334.45	2,055.27	3,592.10	3,482.76	109.35	32.851	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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	0.00	0.00	0.50	70.54	56.92	161.08	170.84				
100.00	100.00	98.83	98.83	0.28	0.52	70.53	57.11	161.55	171.36	170.56	0.80	213.886	
200.00	200.00	197.05	197.04	0.63	0.59	70.50	57.70	162.96	172.91	171.68	1.23	141.053	
300.00	300.00	297.47	297.43	0.99	0.83	70.22	59.16	164.52	174.86	173.04	1.83	95.761	
400.00	400.00	397.70	397.63	1.35	1.14	69.59	61.58	165.49	176.60	174.11	2.49	70.924	
500.00	500.00	497.50	497.39	1.71	1.47	68.86	64.28	166.25	178.27	175.10	3.18	56.119	
600.00	600.00	597.70	597.53	2.07	1.81	68.08	67.31	167.25	180.31	176.43	3.88	46.527	
700.00	700.00	700.54	700.32	2.43	2.16	67.05	70.53	166.58	180.89	176.30	4.59	39.443	
800.00	800.00	800.55	800.27	2.79	2.51	65.93	73.90	165.40	181.16	175.87	5.29	34.244	
900.00	900.00	901.01	900.68	3.14	2.86	64.95	76.70	164.14	181.18	175.18	6.00	30.205	
1,000.00	1,000.00	1,002.53	1,002.17	3.50	3.21	64.21	78.69	162.85	180.87	174.16	6.71	26.958	
1,100.00	1,099.98	1,104.72	1,104.35	3.84	3.56	-96.82	79.26	160.87	179.57	172.17	7.40	24.271	
1,200.00	1,199.84	1,205.46	1,205.05	4.17	3.90	-98.73	78.67	158.41	177.84	169.77	8.07	22.046	
1,300.00	1,299.45	1,305.99	1,305.54	4.51	4.25	-101.82	77.98	155.52	176.56	167.82	8.74	20.199	
1,350.00	1,349.13	1,355.79	1,355.31	4.68	4.42	-103.77	77.54	153.93	176.23	167.15	9.08	19.409	
1,400.00	1,398.73	1,405.37	1,404.86	4.85	4.59	-99.55	77.10	152.34	175.92	166.50	9.42	18.675	
1,500.00	1,497.69	1,504.18	1,503.62	5.19	4.93	-94.51	76.12	149.20	174.45	164.34	10.11	17.262	
1,600.00	1,596.25	1,600.00	1,599.41	5.54	5.26	-92.95	75.31	147.06	173.24	162.45	10.79	16.056	
1,645.11	1,640.54	1,643.61	1,643.01	5.69	5.42	-93.18	75.05	146.56	173.14	162.04	11.10	15.597	
1,670.62	1,665.55	1,668.35	1,667.76	5.78	5.50	-93.53	74.91	146.33	173.18	161.90	11.28	15.357	
1,700.00	1,694.31	1,696.85	1,696.25	5.89	5.60	-95.47	74.78	146.11	173.41	161.93	11.48	15.105	
1,800.00	1,792.23	1,794.23	1,793.63	6.24	5.94	-102.13	74.67	145.14	175.92	163.74	12.18	14.444	
1,900.00	1,890.14	1,891.13	1,890.52	6.61	6.28	-108.59	75.03	144.05	181.25	168.37	12.88	14.070	
2,000.00	1,988.06	1,988.39	1,987.77	6.97	6.62	-114.20	75.27	144.46	189.18	175.61	13.58	13.932	
2,100.00	2,085.97	2,087.21	2,086.52	7.34	6.95	-118.46	74.57	148.09	198.65	184.37	14.28	13.915	
2,200.00	2,183.89	2,186.31	2,185.51	7.70	7.29	-122.05	73.50	152.72	208.90	193.93	14.98	13.948	
2,300.00	2,281.80	2,287.30	2,286.38	8.07	7.63	-125.43	71.70	157.08	219.18	203.49	15.69	13.972	
2,400.00	2,379.72	2,388.45	2,387.37	8.45	7.98	-128.32	68.80	162.08	229.08	212.68	16.40	13.970	
2,500.00	2,477.64	2,487.56	2,486.24	8.82	8.32	-130.70	65.08	167.84	238.64	221.53	17.10	13.952	
2,600.00	2,575.55	2,580.47	2,579.08	9.19	8.64	-133.43	62.74	170.32	249.87	232.09	17.79	14.048	
2,700.00	2,673.47	2,677.85	2,676.45	9.57	8.98	-136.79	61.65	169.43	263.36	244.87	18.49	14.245	
2,800.00	2,771.38	2,789.51	2,788.04	9.95	9.36	-140.44	59.20	167.60	276.93	257.68	19.25	14.387	
2,900.00	2,869.30	2,912.28	2,910.10	10.32	9.79	-143.69	46.40	169.41	282.41	262.44	19.97	14.144	
3,000.00	2,967.21	3,030.44	3,026.35	10.70	10.19	-146.09	26.49	175.96	281.33	260.73	20.60	13.656	
3,100.00	3,065.13	3,136.99	3,129.86	11.08	10.56	-146.90	5.33	189.59	275.75	254.48	21.27	12.965	
3,200.00	3,163.05	3,234.96	3,224.53	11.46	10.90	-146.76	-13.53	206.34	269.66	247.66	22.01	12.254	
3,300.00	3,260.96	3,332.33	3,318.72	11.84	11.24	-146.54	-31.49	223.22	264.33	241.57	22.75	11.618	
3,400.00	3,358.88	3,429.03	3,412.57	12.22	11.59	-146.40	-48.32	239.33	260.18	236.68	23.50	11.069	
3,500.00	3,456.79	3,523.80	3,504.84	12.60	11.92	-146.35	-63.83	254.42	257.29	233.02	24.27	10.602	
3,542.43	3,498.33	3,562.20	3,542.42	12.76	12.06	-146.43	-69.44	259.93	256.96	232.36	24.60	10.446	
3,600.00	3,554.71	3,617.64	3,596.87	12.98	12.26	-146.65	-76.87	267.26	257.35	232.32	25.03	10.282	
3,700.00	3,652.62	3,718.24	3,695.67	13.36	12.62	-147.02	-90.32	280.63	258.08	232.32	25.76	10.018	
3,800.00	3,750.54	3,818.34	3,793.95	13.75	12.99	-147.43	-103.95	293.82	258.60	232.10	26.50	9.759	
3,900.00	3,848.45	3,917.59	3,891.43	14.13	13.35	-147.82	-117.29	306.90	259.31	232.07	27.24	9.520	
4,000.00	3,946.37	4,016.13	3,988.22	14.51	13.71	-148.09	-130.04	320.26	260.41	232.43	27.98	9.306	
4,100.00	4,044.29	4,113.62	4,084.11	14.89	14.06	-148.38	-141.98	333.20	262.28	233.55	28.73	9.129	
4,200.00	4,142.20	4,216.44	4,185.39	15.28	14.44	-148.92	-154.54	345.72	264.51	235.05	29.47	8.977	
4,300.00	4,240.12	4,318.21	4,285.51	15.66	14.81	-149.79	-168.84	356.98	265.32	235.12	30.20	8.785	
4,400.00	4,338.03	4,416.05	4,381.83	16.05	15.17	-150.73	-182.62	367.28	266.34	235.39	30.95	8.605	
4,500.00	4,435.95	4,521.94	4,485.96	16.43	15.56	-151.59	-197.70	379.23	267.03	235.36	31.67	8.431	
4,600.00	4,533.86	4,625.68	4,587.43	16.81	15.94	-152.03	-213.90	393.43	265.61	233.21	32.40	8.197	
4,700.00	4,631.78	4,724.80	4,684.26	17.20	16.31	-152.33	-229.58	407.66	263.77	230.61	33.16	7.955	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
4,800.00	4,729.69	4,825.54	4,782.56	17.58	16.69	-152.40	-245.21	423.16	261.86	227.95	33.90	7.724	
4,900.00	4,827.61	4,924.50	4,879.08	17.97	17.06	-152.33	-260.30	438.95	259.99	225.33	34.66	7.501	
5,000.00	4,925.53	5,021.33	4,973.70	18.35	17.42	-152.34	-274.55	453.86	258.84	223.41	35.43	7.305	
5,017.55	4,942.71	5,037.85	4,989.87	18.42	17.48	-152.36	-276.86	456.28	258.81	223.24	35.57	7.276	
5,100.00	5,023.44	5,118.62	5,069.14	18.74	17.78	-152.54	-287.61	467.46	259.41	223.22	36.19	7.167	
5,200.00	5,121.36	5,220.53	5,168.95	19.12	18.17	-152.70	-301.92	482.19	259.23	222.29	36.94	7.018	
5,204.59	5,125.85	5,224.91	5,173.25	19.14	18.18	-152.71	-302.53	482.82	259.23	222.25	36.98	7.011	
5,300.00	5,219.27	5,317.88	5,264.49	19.51	18.53	-152.97	-315.01	495.54	259.89	222.19	37.70	6.893	
5,400.00	5,317.19	5,421.87	5,366.56	19.89	18.92	-153.36	-329.33	509.32	260.44	222.00	38.44	6.775	
5,500.00	5,415.10	5,523.35	5,465.72	20.28	19.30	-153.51	-344.73	524.47	259.03	219.84	39.19	6.610	
5,566.85	5,480.56	5,587.22	5,528.20	20.53	19.54	-153.57	-353.92	533.98	258.59	218.88	39.71	6.512	
5,600.00	5,513.02	5,618.36	5,558.73	20.66	19.66	-153.63	-358.15	538.41	258.72	218.75	39.96	6.474	
5,700.00	5,610.93	5,720.64	5,659.15	21.05	20.04	-153.87	-371.60	552.43	259.70	218.99	40.71	6.379	
5,800.00	5,708.85	5,824.90	5,761.08	21.43	20.44	-154.04	-387.16	567.83	258.57	217.13	41.45	6.239	
5,900.00	5,806.77	5,923.25	5,857.18	21.82	20.81	-154.30	-402.44	582.17	256.97	214.76	42.21	6.087	
6,000.00	5,904.68	6,021.15	5,953.01	22.21	21.18	-154.56	-416.83	596.07	256.30	213.32	42.98	5.963	
6,035.54	5,939.48	6,055.96	5,987.09	22.34	21.31	-154.58	-421.67	601.23	256.25	212.99	43.25	5.924	
6,100.00	6,002.60	6,119.02	6,048.89	22.59	21.55	-154.63	-430.18	610.49	256.42	212.67	43.75	5.861	
6,200.00	6,100.51	6,214.79	6,142.93	22.98	21.91	-154.76	-442.32	623.88	257.74	213.23	44.51	5.790	
6,300.00	6,198.43	6,314.54	6,241.09	23.36	22.29	-155.02	-454.29	636.96	260.05	214.78	45.27	5.745	
6,400.00	6,296.34	6,420.64	6,345.28	23.75	22.69	-155.36	-468.43	651.14	261.00	214.99	46.01	5.673	
6,403.02	6,299.30	6,423.51	6,348.09	23.76	22.70	-155.37	-468.84	651.53	261.00	214.97	46.03	5.670	
6,500.00	6,394.26	6,515.60	6,438.54	24.14	23.05	-155.72	-481.22	663.61	261.93	215.15	46.78	5.599	
6,600.00	6,492.17	6,611.94	6,533.34	24.52	23.41	-155.82	-492.30	676.71	264.52	216.98	47.54	5.564	
6,700.00	6,590.09	6,710.58	6,630.64	24.91	23.78	-156.08	-502.90	689.02	268.26	219.96	48.29	5.555	
6,800.00	6,688.01	6,819.84	6,738.24	25.29	24.19	-156.72	-516.87	701.81	270.47	221.43	49.04	5.515	
6,900.00	6,785.92	6,928.72	6,844.65	25.68	24.61	-157.31	-534.58	716.43	268.70	218.95	49.75	5.401	
7,000.00	6,883.84	7,022.47	6,936.00	26.07	24.96	-157.48	-549.96	730.89	266.04	215.49	50.55	5.263	
7,011.23	6,894.84	7,032.02	6,945.35	26.11	25.00	-157.50	-551.33	732.26	266.01	215.36	50.65	5.252	
7,100.00	6,981.75	7,117.96	7,029.83	26.45	25.33	-157.74	-562.26	743.63	267.43	216.10	51.33	5.210	
7,200.00	7,079.67	7,236.30	7,145.32	26.84	25.78	-157.97	-580.80	761.40	265.68	213.73	51.95	5.114	
7,300.00	7,177.58	7,341.26	7,246.30	27.23	26.19	-157.89	-601.88	780.75	258.17	205.53	52.64	4.904	
7,400.00	7,275.50	7,432.41	7,334.15	27.61	26.55	-157.56	-618.80	798.19	251.82	198.28	53.54	4.704	
7,500.00	7,373.41	7,528.26	7,427.19	28.00	26.92	-157.14	-633.91	815.57	248.48	194.14	54.35	4.572	
7,600.00	7,471.33	7,624.16	7,520.49	28.39	27.29	-156.57	-647.61	833.01	246.52	191.38	55.14	4.471	
7,637.02	7,507.58	7,658.52	7,554.02	28.53	27.42	-156.39	-652.17	838.96	246.28	190.84	55.44	4.442	
7,700.00	7,569.25	7,715.66	7,610.04	28.77	27.64	-156.26	-659.12	847.79	247.03	191.10	55.93	4.417	
7,764.22	7,632.13	7,777.67	7,671.09	29.02	27.87	-156.28	-665.91	856.32	248.97	192.55	56.42	4.413	
7,800.00	7,667.21	7,813.04	7,705.90	29.16	28.01	-156.23	-669.61	861.32	249.95	193.27	56.69	4.409	
7,900.00	7,765.68	7,915.49	7,806.76	29.54	28.39	-156.00	-680.88	875.31	250.23	192.79	57.44	4.356	
8,000.00	7,864.70	8,014.27	7,904.11	29.91	28.76	-155.99	-693.10	886.75	246.92	188.74	58.18	4.244	
8,100.00	7,964.15	8,112.64	8,001.20	30.28	29.13	-155.80	-704.98	897.18	241.10	182.19	58.91	4.092	
8,200.00	8,063.90	8,223.66	8,110.22	30.63	29.56	-154.82	-720.45	911.21	229.55	169.94	59.60	3.851	
8,300.00	8,163.83	8,323.30	8,207.38	30.98	29.94	-152.79	-736.19	926.78	212.12	151.81	60.31	3.517	
8,350.17	8,214.00	8,369.82	8,252.79	31.14	30.12	-19.37	-743.20	933.99	202.69	142.01	60.68	3.340	
8,400.00	8,263.77	8,417.21	8,299.19	31.31	30.30	-165.79	-749.92	940.95	195.68	134.63	61.05	3.205	
8,450.00	8,313.33	8,465.93	8,346.93	31.49	30.49	-164.95	-756.54	947.99	193.24	131.81	61.43	3.146	
8,451.90	8,315.20	8,467.79	8,348.76	31.50	30.50	-164.92	-756.79	948.26	193.23	131.79	61.44	3.145	ES, SF
8,500.00	8,362.13	8,514.89	8,394.97	31.69	30.68	-164.32	-762.96	954.96	195.31	133.50	61.81	3.160	
8,550.00	8,409.80	8,563.60	8,442.82	31.89	30.86	-163.99	-769.21	961.61	201.79	139.59	62.20	3.244	
8,600.00	8,455.99	8,611.18	8,489.62	32.09	31.04	-163.95	-775.20	967.74	212.64	150.05	62.59	3.397	
8,650.00	8,500.33	8,657.29	8,535.06	32.31	31.22	-164.19	-780.88	973.09	227.86	164.89	62.97	3.618	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
8,700.00	8,542.50	8,700.13	8,577.38	32.53	31.38	-164.59	-786.00	977.46	247.45	184.12	63.34	3.907	
8,750.00	8,582.16	8,739.64	8,616.50	32.75	31.52	-165.04	-790.33	980.79	271.58	207.90	63.67	4.265	
8,800.00	8,619.02	8,776.40	8,653.00	32.97	31.66	-165.46	-794.01	983.28	300.02	236.04	63.98	4.690	
8,850.00	8,652.80	8,810.73	8,687.12	33.19	31.78	-165.73	-797.12	985.34	332.39	268.14	64.25	5.173	
8,900.00	8,683.24	8,841.69	8,717.92	33.42	31.90	-165.73	-799.64	987.08	368.31	303.81	64.50	5.710	
8,950.00	8,710.11	8,871.86	8,747.97	33.64	32.01	-165.55	-801.88	988.69	407.38	342.63	64.75	6.292	
9,000.00	8,733.20	8,908.34	8,784.25	33.86	32.14	-165.45	-804.91	991.00	448.68	383.62	65.07	6.896	
9,050.00	8,752.35	8,942.20	8,817.84	34.08	32.27	-164.98	-808.24	993.65	491.78	426.45	65.34	7.527	
9,100.00	8,767.39	8,973.04	8,848.36	34.29	32.38	-164.02	-811.69	996.48	536.52	470.95	65.57	8.183	
9,100.17	8,767.43	8,973.14	8,848.46	34.29	32.38	-164.02	-811.71	996.49	536.67	471.10	65.57	8.185	
9,200.00	8,791.66	9,011.40	8,886.28	34.71	32.52	-176.36	-816.05	1,000.24	628.71	562.84	65.87	9.545	
9,300.00	8,812.57	9,050.91	8,925.29	35.13	32.67	171.27	-820.67	1,004.46	722.13	655.97	66.16	10.915	
9,400.00	8,829.97	9,086.79	8,960.68	35.54	32.81	159.14	-824.96	1,008.54	816.24	749.83	66.42	12.290	
9,500.00	8,843.72	9,118.93	8,992.35	35.95	32.93	147.44	-828.88	1,012.37	910.66	844.02	66.64	13.665	
9,600.00	8,853.72	9,146.84	9,019.83	36.33	33.03	136.42	-832.34	1,015.82	1,005.04	938.21	66.83	15.038	
9,700.00	8,859.89	9,176.74	9,049.23	36.70	33.15	127.20	-836.17	1,019.71	1,099.03	1,032.01	67.02	16.398	
9,800.00	8,862.18	9,201.49	9,073.52	37.05	33.24	119.01	-839.49	1,023.12	1,192.32	1,125.15	67.17	17.751	
9,809.00	8,862.20	11,011.16	10,013.74	37.08	38.74	-164.56	-1,825.81	1,737.59	1,200.69	1,159.44	41.25	29.110	
9,900.00	8,862.20	11,137.07	10,015.74	37.39	39.12	-163.12	-1,947.39	1,769.98	1,208.69	1,166.90	41.79	28.923	
10,000.00	8,862.19	11,274.43	10,018.27	37.74	39.53	-162.16	-2,082.91	1,792.07	1,215.32	1,172.99	42.33	28.713	
10,100.00	8,862.19	11,352.91	10,019.36	38.10	39.77	-161.62	-2,160.36	1,804.61	1,221.52	1,178.03	43.49	28.088	
10,200.00	8,862.19	11,452.63	10,020.68	38.48	40.09	-160.89	-2,258.59	1,821.80	1,228.34	1,183.82	44.52	27.592	
10,300.00	8,862.19	11,548.79	10,021.84	38.86	40.42	-160.16	-2,353.20	1,838.88	1,235.43	1,189.80	45.63	27.076	
10,400.00	8,862.19	11,649.07	10,023.33	39.25	40.77	-159.45	-2,451.98	1,856.13	1,242.79	1,196.06	46.73	26.596	
10,500.00	8,862.18	11,754.08	10,024.67	39.66	41.15	-158.73	-2,555.55	1,873.44	1,249.88	1,202.06	47.82	26.139	
10,600.00	8,862.18	11,849.88	10,025.74	40.07	41.50	-158.08	-2,650.02	1,889.28	1,257.02	1,208.01	49.01	25.648	
10,700.00	8,862.18	11,955.38	10,027.30	40.49	41.90	-157.39	-2,754.07	1,906.60	1,264.63	1,214.47	50.16	25.213	
10,800.00	8,862.18	12,068.42	10,028.74	40.93	42.34	-156.81	-2,866.16	1,921.20	1,270.76	1,219.55	51.21	24.812	
10,900.00	8,862.18	12,187.39	10,030.55	41.37	42.81	-156.33	-2,984.43	1,933.88	1,276.39	1,224.17	52.22	24.443	
11,000.00	8,862.17	12,326.58	10,030.77	41.82	43.36	-155.98	-3,123.31	1,942.69	1,278.87	1,225.81	53.06	24.103	
11,100.00	8,862.17	12,426.94	10,030.77	42.28	43.75	-155.82	-3,223.58	1,946.93	1,280.51	1,226.36	54.15	23.647	
11,200.00	8,862.17	12,545.54	10,030.71	42.75	44.23	-155.70	-3,342.14	1,950.02	1,281.49	1,226.37	55.12	23.247	
11,300.00	8,862.17	12,658.86	10,030.18	43.22	44.69	-155.71	-3,455.46	1,949.81	1,280.91	1,224.79	56.11	22.827	
11,400.00	8,862.17	12,749.72	10,029.72	43.71	45.07	-155.72	-3,546.31	1,949.50	1,280.23	1,222.96	57.27	22.355	
11,500.00	8,862.16	12,855.11	10,029.39	44.20	45.51	-155.72	-3,651.71	1,949.40	1,279.84	1,221.49	58.35	21.933	
11,600.00	8,862.16	12,950.00	10,029.00	44.70	45.92	-155.73	-3,746.59	1,949.34	1,279.36	1,219.84	59.52	21.493	
11,700.00	8,862.16	13,048.85	10,028.76	45.20	46.36	-155.72	-3,845.45	1,949.54	1,279.15	1,218.46	60.69	21.076	
11,800.00	8,862.16	13,156.53	10,028.38	45.72	46.84	-155.73	-3,953.12	1,949.22	1,278.62	1,216.80	61.82	20.683	
11,900.00	8,862.16	13,256.98	10,027.97	46.24	47.30	-155.78	-4,053.57	1,948.12	1,277.73	1,214.74	63.00	20.282	
12,000.00	8,862.15	13,352.20	10,027.71	46.76	47.74	-155.81	-4,148.78	1,947.46	1,277.12	1,212.90	64.22	19.885	
12,100.00	8,862.15	13,450.79	10,027.31	47.29	48.20	-155.80	-4,247.37	1,947.58	1,276.73	1,211.27	65.46	19.504	
12,200.00	8,862.15	13,554.23	10,026.86	47.83	48.70	-155.79	-4,350.81	1,947.82	1,276.35	1,209.67	66.68	19.141	
12,300.00	8,862.15	13,662.97	10,025.76	48.38	49.22	-155.78	-4,459.54	1,947.85	1,275.36	1,207.47	67.89	18.785	
12,400.00	8,862.15	13,760.48	10,024.72	48.93	49.70	-155.80	-4,557.04	1,947.13	1,274.02	1,204.85	69.16	18.420	
12,500.00	8,862.14	13,854.97	10,024.26	49.48	50.17	-155.83	-4,651.53	1,946.36	1,273.16	1,202.70	70.46	18.069	
12,600.00	8,862.14	13,953.64	10,023.64	50.04	50.67	-155.82	-4,750.20	1,946.51	1,272.58	1,200.82	71.76	17.734	
12,662.97	8,862.14	14,009.35	10,023.35	50.40	50.96	-155.81	-4,805.91	1,946.66	1,272.32	1,199.70	72.62	17.521	
12,700.00	8,862.14	14,038.58	10,023.44	50.61	51.11	-155.81	-4,835.13	1,946.74	1,272.43	1,199.29	73.14	17.398	
12,800.00	8,862.14	14,155.49	10,024.56	51.18	51.71	-155.87	-4,952.04	1,946.10	1,273.11	1,198.76	74.35	17.124	
12,900.00	8,862.14	14,282.80	10,023.70	51.76	52.36	-156.08	-5,079.23	1,940.79	1,270.55	1,195.08	75.48	16.834	
13,000.00	8,862.13	14,358.00	10,023.93	52.34	52.75	-156.19	-5,154.38	1,938.43	1,269.29	1,192.39	76.90	16.506	
13,010.82	8,862.13	14,358.00	10,023.93	52.40	52.75	-156.19	-5,154.38	1,938.43	1,269.24	1,192.15	77.09	16.464	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
13,100.00	8,862.13	14,424.76	10,024.98	52.92	53.11	-156.22	-5,221.13	1,938.21	1,270.25	1,191.86	78.38	16.205	
13,200.00	8,862.13	14,520.89	10,026.64	53.51	53.63	-156.21	-5,317.24	1,939.44	1,272.26	1,192.51	79.75	15.953	
13,300.00	8,862.13	14,627.99	10,028.22	54.10	54.22	-156.19	-5,424.31	1,940.80	1,274.06	1,192.98	81.08	15.714	
13,400.00	8,862.12	14,724.62	10,029.62	54.70	54.75	-156.19	-5,520.93	1,941.50	1,275.60	1,193.15	82.45	15.471	
13,500.00	8,862.12	14,824.33	10,031.37	55.30	55.31	-156.21	-5,620.62	1,942.04	1,277.36	1,193.54	83.82	15.240	
13,600.00	8,862.12	14,942.81	10,031.90	55.91	55.98	-156.16	-5,739.09	1,943.67	1,278.22	1,193.10	85.13	15.016	
13,700.00	8,862.12	15,042.95	10,031.75	56.52	56.55	-156.10	-5,839.22	1,945.21	1,278.63	1,192.11	86.52	14.779	
13,800.00	8,862.12	15,147.01	10,031.23	57.13	57.14	-156.05	-5,943.27	1,946.43	1,278.57	1,190.67	87.90	14.546	
13,804.10	8,862.12	15,150.78	10,031.22	57.16	57.16	-156.05	-5,947.04	1,946.46	1,278.57	1,190.61	87.96	14.536	
13,900.00	8,862.11	15,242.73	10,031.21	57.75	57.69	-156.03	-6,038.99	1,947.22	1,278.80	1,189.49	89.32	14.318	
14,000.00	8,862.11	15,342.92	10,031.16	58.37	58.28	-156.00	-6,139.17	1,948.16	1,279.07	1,188.35	90.72	14.099	
14,100.00	8,862.11	15,441.05	10,030.98	58.99	58.85	-155.94	-6,237.30	1,949.63	1,279.44	1,187.29	92.14	13.885	
14,200.00	8,862.11	15,543.97	10,030.75	59.62	59.46	-155.87	-6,340.20	1,951.37	1,279.85	1,186.30	93.55	13.681	
14,300.00	8,862.11	15,646.91	10,030.17	60.25	60.07	-155.80	-6,443.12	1,952.98	1,279.90	1,184.93	94.97	13.477	
14,330.78	8,862.11	15,677.45	10,029.99	60.45	60.26	-155.79	-6,473.66	1,953.40	1,279.89	1,184.48	95.41	13.415	
14,400.00	8,862.10	15,740.05	10,029.76	60.88	60.63	-155.74	-6,536.25	1,954.43	1,280.07	1,183.65	96.42	13.276	
14,500.00	8,862.10	15,849.07	10,029.61	61.52	61.29	-155.69	-6,645.26	1,955.92	1,280.45	1,182.63	97.82	13.090	
14,578.66	8,862.10	15,925.40	10,029.45	62.02	61.75	-155.68	-6,721.59	1,956.11	1,280.33	1,181.38	98.95	12.939	
14,600.00	8,862.10	15,945.54	10,029.41	62.16	61.87	-155.68	-6,741.73	1,956.25	1,280.34	1,181.08	99.26	12.899	
14,700.00	8,862.10	16,048.57	10,029.13	62.80	62.49	-155.65	-6,844.75	1,957.07	1,280.34	1,179.66	100.68	12.717	
14,756.63	8,862.10	16,103.37	10,028.99	63.16	62.83	-155.64	-6,899.55	1,957.38	1,280.30	1,178.80	101.50	12.613	
14,800.00	8,862.10	16,145.41	10,028.98	63.44	63.09	-155.63	-6,941.59	1,957.54	1,280.32	1,178.19	102.13	12.536	
14,900.00	8,862.09	16,248.11	10,029.03	64.09	63.71	-155.63	-7,044.29	1,957.91	1,280.44	1,176.88	103.56	12.365	
15,000.00	8,862.09	16,367.59	10,028.42	64.74	64.45	-155.70	-7,163.75	1,955.98	1,279.17	1,174.27	104.91	12.194	
15,100.00	8,862.09	16,463.76	10,028.15	65.39	65.03	-155.81	-7,259.88	1,953.42	1,277.75	1,171.40	106.35	12.015	
15,200.00	8,862.09	16,559.88	10,027.83	66.05	65.63	-155.90	-7,355.98	1,951.39	1,276.50	1,168.71	107.80	11.842	
15,300.00	8,862.09	16,654.00	10,027.70	66.70	66.21	-155.95	-7,450.09	1,950.12	1,275.75	1,166.49	109.26	11.676	
15,400.00	8,862.08	16,755.76	10,027.42	67.36	66.85	-155.98	-7,551.85	1,949.63	1,275.24	1,164.53	110.70	11.520	
15,500.00	8,862.08	16,855.76	10,026.91	68.02	67.48	-156.00	-7,651.85	1,948.95	1,274.41	1,162.26	112.15	11.363	
15,600.00	8,862.08	16,952.84	10,026.57	68.69	68.09	-156.02	-7,748.93	1,948.57	1,273.86	1,160.24	113.62	11.211	
15,700.00	8,862.08	17,051.89	10,026.34	69.35	68.72	-156.04	-7,847.97	1,948.22	1,273.44	1,158.35	115.08	11.065	
15,793.22	8,862.08	17,140.07	10,026.23	69.97	69.28	-156.05	-7,936.16	1,948.09	1,273.20	1,156.74	116.47	10.932	
15,800.00	8,862.08	17,146.35	10,026.22	70.02	69.32	-156.05	-7,942.43	1,948.12	1,273.20	1,156.64	116.57	10.923	
15,900.00	8,862.07	17,247.30	10,026.22	70.69	69.97	-156.04	-8,043.39	1,948.57	1,273.31	1,155.28	118.03	10.788	
16,000.00	8,862.07	17,353.68	10,026.07	71.36	70.65	-156.05	-8,149.76	1,948.38	1,273.04	1,153.56	119.48	10.655	
16,100.00	8,862.07	17,457.00	10,025.11	72.03	71.32	-156.04	-8,253.08	1,948.30	1,272.07	1,151.13	120.94	10.518	
16,200.00	8,862.07	17,551.00	10,024.59	72.71	71.93	-156.04	-8,347.08	1,948.29	1,271.49	1,149.06	122.43	10.385	
16,204.40	8,862.07	17,551.00	10,024.59	72.73	71.93	-156.04	-8,347.08	1,948.29	1,271.48	1,148.97	122.51	10.378	
16,300.00	8,862.07	17,623.90	10,025.18	73.38	72.40	-156.03	-8,419.97	1,948.95	1,272.44	1,148.46	123.98	10.263	
16,400.00	8,862.06	17,722.30	10,026.85	74.06	73.05	-156.01	-8,518.34	1,950.40	1,274.52	1,149.05	125.47	10.158	
16,500.00	8,862.06	17,839.48	10,027.90	74.74	73.82	-155.97	-8,635.50	1,952.06	1,275.84	1,148.93	126.92	10.053	
16,600.00	8,862.06	17,942.29	10,028.26	75.42	74.50	-155.95	-8,738.31	1,952.93	1,276.44	1,148.04	128.39	9.942	
16,700.00	8,862.06	18,055.29	10,027.90	76.10	75.24	-155.94	-8,851.31	1,953.11	1,276.12	1,146.28	129.84	9.828	
16,800.00	8,862.06	18,154.73	10,027.32	76.79	75.90	-155.94	-8,950.74	1,952.98	1,275.47	1,144.14	131.33	9.712	
16,900.00	8,862.05	18,252.78	10,026.94	77.47	76.55	-155.96	-9,048.80	1,952.71	1,274.92	1,142.10	132.82	9.599	
16,955.57	8,862.05	18,303.00	10,026.55	77.86	76.88	-155.93	-9,099.01	1,953.16	1,274.70	1,141.04	133.66	9.537	
17,000.00	8,862.05	18,332.76	10,026.40	78.16	77.08	-155.91	-9,128.77	1,953.83	1,274.89	1,140.53	134.37	9.488	
17,100.00	8,862.05	18,397.00	10,026.96	78.85	77.51	-155.79	-9,192.92	1,956.94	1,277.53	1,141.62	135.91	9.400	
17,200.00	8,862.05	18,533.87	10,027.92	79.54	78.44	-155.58	-9,329.64	1,962.95	1,279.86	1,142.47	137.39	9.316	
17,300.00	8,862.05	18,651.31	10,028.07	80.23	79.23	-155.55	-9,447.08	1,963.95	1,280.26	1,141.42	138.84	9.221	
17,400.00	8,862.04	18,749.99	10,027.48	80.92	79.89	-155.53	-9,545.76	1,964.34	1,279.81	1,139.47	140.34	9.119	
17,500.00	8,862.04	18,875.32	10,026.21	81.62	80.74	-155.51	-9,671.08	1,964.39	1,278.89	1,137.14	141.75	9.022	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 2H - ST01 - ST01 Svy

Offset Site Error: 0.00 usft

Survey Program: 200-MWD+IFR1+MS, 10055-MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 0.50 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
17,600.00	8,862.04	18,957.00	10,025.36	82.31	81.29	-155.50	-9,752.75	1,964.34	1,277.76	1,134.44	143.31	8.916	
17,680.04	8,862.04	19,027.20	10,025.04	82.87	81.76	-155.48	-9,822.95	1,964.85	1,277.59	1,133.04	144.55	8.839	
17,700.00	8,862.04	19,045.89	10,024.95	83.01	81.89	-155.47	-9,841.64	1,965.09	1,277.60	1,132.75	144.85	8.820	
17,800.00	8,862.04	19,153.41	10,024.25	83.71	82.62	-155.42	-9,949.15	1,966.23	1,277.37	1,131.03	146.33	8.729	
17,900.00	8,862.03	19,248.09	10,023.78	84.41	83.27	-155.39	-10,043.82	1,966.92	1,277.14	1,129.29	147.85	8.638	
18,000.00	8,862.03	19,353.50	10,023.26	85.11	83.98	-155.37	-10,149.23	1,967.42	1,276.81	1,127.47	149.34	8.550	
18,100.00	8,862.03	19,452.61	10,022.62	85.81	84.66	-155.35	-10,248.34	1,967.83	1,276.31	1,125.46	150.85	8.461	
18,200.00	8,862.03	19,551.75	10,022.01	86.51	85.34	-155.32	-10,347.48	1,968.56	1,275.99	1,123.63	152.36	8.375	
18,300.00	8,862.03	19,652.07	10,021.46	87.21	86.03	-155.30	-10,447.79	1,968.88	1,275.55	1,121.68	153.87	8.290	
18,400.00	8,862.02	19,753.30	10,020.92	87.92	86.72	-155.28	-10,549.02	1,969.42	1,275.21	1,119.84	155.37	8.207	
18,500.00	8,862.02	19,869.09	10,019.74	88.62	87.52	-155.26	-10,664.80	1,969.50	1,274.26	1,117.44	156.82	8.125	
18,600.00	8,862.02	19,955.04	10,018.70	89.33	88.11	-155.26	-10,750.74	1,969.02	1,272.88	1,114.50	158.38	8.037	
18,633.79	8,862.02	19,981.00	10,018.57	89.57	88.29	-155.26	-10,776.70	1,969.12	1,272.77	1,113.85	158.92	8.009	
18,700.00	8,862.02	20,037.59	10,018.61	90.03	88.68	-155.25	-10,833.29	1,969.59	1,272.99	1,113.05	159.94	7.959	
18,800.00	8,862.02	20,134.01	10,019.31	90.74	89.35	-155.22	-10,929.69	1,970.81	1,274.10	1,112.64	161.46	7.891	
18,900.00	8,862.01	20,267.60	10,018.93	91.45	90.27	-155.18	-11,063.28	1,971.78	1,274.16	1,111.28	162.88	7.823	
19,000.00	8,862.01	20,355.00	10,018.03	92.16	90.88	-155.18	-11,150.67	1,971.50	1,273.01	1,108.57	164.44	7.742	
19,100.00	8,862.01	20,449.00	10,017.60	92.87	91.53	-155.17	-11,244.67	1,971.71	1,272.61	1,106.65	165.97	7.668	
19,101.77	8,862.01	20,449.00	10,017.60	92.88	91.53	-155.17	-11,244.67	1,971.71	1,272.61	1,106.61	166.00	7.666	
19,200.00	8,862.01	20,527.20	10,017.94	93.58	92.08	-155.15	-11,322.86	1,972.67	1,273.43	1,105.91	167.52	7.602	
19,300.00	8,862.01	20,631.03	10,019.18	94.30	92.81	-155.12	-11,426.68	1,974.10	1,275.02	1,105.98	169.04	7.543	
19,400.00	8,862.00	20,672.00	10,019.63	95.01	93.09	-155.12	-11,467.64	1,974.43	1,277.65	1,107.17	170.48	7.494	
19,500.00	8,862.00	20,672.00	10,019.63	95.72	93.09	-155.12	-11,467.64	1,974.43	1,287.42	1,116.17	171.24	7.518	
19,547.53	8,862.00	20,672.00	10,019.63	96.06	93.09	-155.12	-11,467.64	1,974.43	1,294.74	1,123.42	171.33	7.557	
19,548.26	8,862.00	20,672.00	10,019.63	96.14	93.09	-155.12	-11,467.64	1,974.43	1,294.87	1,123.06	171.81	7.537	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Rule Assigned:

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	0.00	0.00	0.00	-75.07	246.18	-923.51	955.77				
100.00	100.00	96.53	96.53	0.28	0.16	-75.08	246.24	-923.86	956.14	955.71	0.43	2,217.129	ES
200.00	200.00	189.69	189.68	0.63	0.31	-75.08	246.40	-924.88	957.24	956.30	0.94	1,019.611	
300.00	300.00	289.43	289.41	0.99	0.62	-75.11	246.39	-926.48	958.79	957.18	1.61	596.278	
400.00	400.00	390.10	390.07	1.35	0.98	-75.13	246.39	-927.95	960.20	957.87	2.33	412.758	
500.00	500.00	488.06	488.01	1.71	1.33	-75.11	247.11	-929.30	961.72	958.68	3.03	316.917	
600.00	600.00	587.09	587.03	2.07	1.68	-75.07	248.14	-930.68	963.33	959.59	3.75	257.161	
700.00	700.00	678.69	678.60	2.43	2.01	-75.14	247.46	-932.93	965.51	961.08	4.43	217.941	
800.00	800.00	773.32	773.15	2.79	2.35	-75.29	245.81	-936.17	968.38	963.25	5.13	188.905	
900.00	900.00	874.56	874.30	3.14	2.71	-75.45	244.00	-940.11	971.70	965.86	5.85	166.203	
1,000.00	1,000.00	996.53	996.20	3.50	3.14	-75.66	241.11	-943.36	973.71	967.07	6.64	146.666	
1,100.00	1,099.98	1,148.83	1,148.37	3.84	3.67	124.22	236.09	-941.45	972.61	965.12	7.49	129.773	
1,200.00	1,199.84	1,252.26	1,251.66	4.17	4.01	124.40	232.88	-937.05	970.66	962.50	8.17	118.841	
1,245.70	1,245.39	1,296.77	1,296.11	4.33	4.16	124.53	231.61	-935.11	970.43	961.96	8.47	114.570	
1,300.00	1,299.45	1,345.80	1,345.08	4.51	4.33	124.70	230.37	-933.08	970.84	962.02	8.82	110.090	
1,350.00	1,349.13	1,389.26	1,388.51	4.68	4.47	124.91	229.67	-931.46	972.07	962.94	9.14	106.398	
1,400.00	1,398.73	1,428.93	1,428.16	4.85	4.61	131.55	229.39	-930.19	974.39	964.95	9.44	103.183	
1,500.00	1,497.69	1,502.00	1,501.21	5.19	4.86	142.06	229.71	-929.09	983.62	973.58	10.04	97.983	
1,600.00	1,596.25	1,583.40	1,582.60	5.54	5.14	149.79	231.08	-929.41	998.56	987.89	10.67	93.619	
1,670.62	1,665.55	1,645.98	1,645.15	5.78	5.35	154.08	232.60	-930.35	1,012.12	1,000.98	11.13	90.929	
1,700.00	1,694.31	1,672.67	1,671.83	5.89	5.45	154.25	233.30	-930.82	1,018.22	1,006.89	11.33	89.893	
1,800.00	1,792.23	1,762.51	1,761.61	6.24	5.76	154.81	235.90	-932.76	1,039.50	1,027.51	11.99	86.724	
1,900.00	1,890.14	1,877.23	1,876.27	6.61	6.16	155.48	239.03	-935.06	1,060.75	1,048.00	12.75	83.225	
2,000.00	1,988.06	2,020.30	2,019.31	6.97	6.66	156.20	240.10	-933.85	1,078.75	1,065.14	13.60	79.316	
2,100.00	2,085.97	2,123.24	2,122.19	7.34	7.01	156.67	239.44	-930.54	1,094.19	1,079.88	14.31	76.443	
2,200.00	2,183.89	2,217.42	2,216.34	7.70	7.34	157.06	238.56	-928.25	1,110.35	1,095.34	15.00	74.018	
2,300.00	2,281.80	2,331.51	2,330.38	8.07	7.73	157.51	237.06	-925.03	1,126.11	1,110.35	15.76	71.450	
2,400.00	2,379.72	2,429.52	2,428.29	8.45	8.07	157.85	234.70	-921.55	1,140.84	1,124.37	16.47	69.275	
2,500.00	2,477.64	2,489.95	2,488.69	8.82	8.28	158.04	233.35	-920.30	1,157.20	1,140.16	17.04	67.917	
2,600.00	2,575.55	2,541.00	2,539.73	9.19	8.46	158.20	232.89	-921.16	1,177.39	1,159.84	17.55	67.091	
2,700.00	2,673.47	2,616.02	2,614.66	9.57	8.72	158.41	233.00	-924.81	1,200.74	1,182.59	18.15	66.149	
2,800.00	2,771.38	2,698.68	2,697.17	9.95	9.01	158.65	233.56	-929.71	1,225.35	1,206.56	18.79	65.223	
2,900.00	2,869.30	2,858.14	2,856.48	10.32	9.58	159.16	234.87	-935.81	1,248.16	1,228.38	19.79	63.079	
3,000.00	2,967.21	2,962.98	2,961.32	10.70	9.94	159.51	235.40	-936.79	1,268.25	1,247.72	20.53	61.771	
3,100.00	3,065.13	3,078.73	3,077.06	11.08	10.35	159.92	236.23	-936.68	1,287.56	1,266.24	21.32	60.393	
3,200.00	3,163.05	3,181.74	3,180.06	11.46	10.71	160.30	237.04	-935.24	1,305.73	1,283.67	22.05	59.211	
3,300.00	3,260.96	3,280.70	3,279.00	11.84	11.05	160.65	237.78	-933.80	1,323.88	1,301.11	22.77	58.145	
3,400.00	3,358.88	3,458.28	3,456.41	12.22	11.67	161.26	237.07	-926.71	1,339.53	1,315.75	23.78	56.328	
3,500.00	3,456.79	3,610.14	3,607.63	12.60	12.20	161.76	233.29	-913.40	1,349.85	1,325.18	24.66	54.731	
3,600.00	3,554.71	3,777.85	3,773.80	12.98	12.79	162.15	222.72	-893.60	1,355.94	1,330.39	25.55	53.070	
3,700.00	3,652.62	3,952.83	3,945.46	13.36	13.42	162.22	200.99	-867.75	1,356.74	1,330.34	26.40	51.400	
3,800.00	3,750.54	4,052.41	4,042.53	13.75	13.79	162.20	186.27	-851.11	1,354.71	1,327.59	27.13	49.938	
3,900.00	3,848.45	4,157.16	4,144.61	14.13	14.19	162.19	170.71	-833.49	1,352.55	1,324.69	27.87	48.533	
4,000.00	3,946.37	4,263.77	4,248.40	14.51	14.60	162.17	154.76	-815.10	1,349.95	1,321.34	28.61	47.178	
4,100.00	4,044.29	4,368.93	4,350.69	14.89	15.02	162.16	138.93	-796.51	1,346.91	1,317.55	29.36	45.875	
4,200.00	4,142.20	4,460.88	4,440.10	15.28	15.38	162.16	125.17	-780.05	1,343.72	1,313.63	30.10	44.649	
4,300.00	4,240.12	4,541.05	4,518.35	15.66	15.71	162.17	114.03	-766.57	1,341.95	1,311.13	30.82	43.547	
4,400.00	4,338.03	4,639.04	4,614.14	16.05	16.10	162.20	100.90	-750.66	1,340.95	1,309.39	31.56	42.489	
4,500.00	4,435.95	4,746.18	4,718.81	16.43	16.53	162.24	86.54	-732.91	1,339.65	1,307.33	32.32	41.452	
4,600.00	4,533.86	4,848.87	4,819.07	16.81	16.96	162.28	72.74	-715.51	1,337.98	1,304.90	33.07	40.456	
4,700.00	4,631.78	4,949.99	4,917.77	17.20	17.37	162.32	59.09	-698.28	1,336.20	1,302.38	33.83	39.503	
4,800.00	4,729.69	5,051.46	5,016.78	17.58	17.80	162.35	45.05	-681.04	1,334.32	1,299.74	34.58	38.585	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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
4,900.00	4,827.61	5,148.67	5,111.52	17.97	18.21	162.31	30.18	-665.18	1,332.43	1,297.10	35.33	37.710	
5,000.00	4,925.53	5,237.68	5,198.35	18.35	18.58	162.26	16.55	-651.12	1,331.04	1,294.97	36.08	36.895	
5,100.00	5,023.44	5,327.10	5,285.80	18.74	18.96	162.23	3.69	-637.54	1,330.60	1,293.78	36.82	36.141	
5,118.64	5,041.69	5,344.33	5,302.66	18.81	19.03	162.23	1.29	-634.96	1,330.59	1,293.63	36.96	36.004	
5,200.00	5,121.36	5,423.65	5,380.35	19.12	19.37	162.23	-9.59	-623.16	1,330.70	1,293.13	37.57	35.419	
5,300.00	5,219.27	5,517.90	5,472.67	19.51	19.76	162.22	-22.39	-609.23	1,330.97	1,292.65	38.32	34.734	
5,400.00	5,317.19	5,615.93	5,568.83	19.89	20.17	162.24	-35.10	-595.01	1,331.77	1,292.70	39.07	34.083	
5,500.00	5,415.10	5,717.32	5,668.26	20.28	20.60	162.26	-48.18	-580.10	1,332.40	1,292.57	39.84	33.447	
5,600.00	5,513.02	5,816.25	5,765.28	20.66	21.02	162.29	-60.84	-565.53	1,333.07	1,292.47	40.60	32.838	
5,700.00	5,610.93	5,911.90	5,859.14	21.05	21.43	162.32	-72.87	-551.53	1,333.91	1,292.56	41.35	32.262	
5,800.00	5,708.85	6,003.84	5,949.44	21.43	21.81	162.37	-83.98	-538.33	1,335.22	1,293.13	42.09	31.724	
5,900.00	5,806.77	6,124.52	6,067.98	21.82	22.32	162.46	-97.81	-520.43	1,336.41	1,293.51	42.89	31.158	
6,000.00	5,904.68	6,247.68	6,188.47	22.21	22.86	162.57	-112.90	-499.85	1,335.43	1,291.74	43.69	30.566	
6,100.00	6,002.60	6,346.47	6,284.92	22.59	23.29	162.61	-126.12	-483.02	1,333.72	1,289.26	44.45	30.003	
6,200.00	6,100.51	6,432.85	6,369.31	22.98	23.67	162.62	-138.19	-469.09	1,332.59	1,287.39	45.20	29.484	
6,233.20	6,133.02	6,459.01	6,394.91	23.11	23.79	162.62	-141.72	-465.06	1,332.50	1,287.06	45.44	29.325	
6,300.00	6,198.43	6,504.00	6,439.02	23.36	23.98	162.63	-147.50	-458.34	1,332.88	1,286.98	45.90	29.037	
6,400.00	6,296.34	6,581.46	6,515.19	23.75	24.31	162.65	-156.95	-447.94	1,335.08	1,288.47	46.61	28.644	
6,500.00	6,394.26	6,662.93	6,595.57	24.14	24.65	162.67	-166.36	-438.54	1,339.20	1,291.88	47.31	28.304	
6,600.00	6,492.17	6,814.46	6,744.81	24.52	25.28	162.69	-184.58	-419.81	1,342.57	1,294.36	48.22	27.846	
6,700.00	6,590.09	6,932.36	6,860.38	24.91	25.80	162.83	-197.78	-400.62	1,342.45	1,293.44	49.01	27.391	
6,800.00	6,688.01	7,032.39	6,958.37	25.29	26.23	162.96	-208.82	-383.81	1,341.96	1,292.19	49.77	26.962	
6,877.74	6,764.13	7,103.86	7,028.39	25.60	26.54	163.04	-216.94	-372.00	1,341.70	1,291.34	50.35	26.645	
6,900.00	6,785.92	7,122.57	7,046.73	25.68	26.62	163.06	-219.00	-368.98	1,341.72	1,291.21	50.52	26.560	
7,000.00	6,883.84	7,203.73	7,126.46	26.07	26.97	163.17	-227.40	-356.29	1,342.64	1,291.40	51.24	26.205	
7,100.00	6,981.75	7,280.35	7,201.94	26.45	27.30	163.30	-234.32	-345.15	1,345.14	1,293.21	51.93	25.902	
7,200.00	7,079.67	7,356.00	7,276.73	26.84	27.61	163.47	-239.68	-335.08	1,349.58	1,296.97	52.61	25.654	
7,300.00	7,177.58	7,451.00	7,370.78	27.23	27.99	163.70	-245.48	-323.03	1,355.07	1,301.73	53.34	25.405	
7,400.00	7,275.50	7,547.34	7,466.18	27.61	28.38	163.94	-251.33	-310.95	1,360.74	1,306.66	54.07	25.165	
7,500.00	7,373.41	7,638.00	7,555.97	28.00	28.74	164.15	-256.76	-299.68	1,366.58	1,311.80	54.79	24.944	
7,600.00	7,471.33	7,732.00	7,649.18	28.39	29.11	164.38	-261.94	-288.65	1,373.28	1,317.77	55.51	24.740	
7,700.00	7,569.25	7,810.07	7,726.72	28.77	29.42	164.58	-265.66	-280.40	1,381.29	1,325.13	56.16	24.595	
7,764.22	7,632.13	7,858.71	7,775.08	29.02	29.60	164.70	-267.75	-275.63	1,387.09	1,330.52	56.57	24.522	
7,800.00	7,667.21	7,884.19	7,800.45	29.16	29.70	164.78	-268.69	-273.34	1,390.46	1,333.68	56.78	24.489	
7,900.00	7,765.68	7,963.63	7,879.60	29.54	29.99	165.00	-270.98	-267.01	1,398.84	1,341.44	57.40	24.368	
8,000.00	7,864.70	8,061.40	7,977.07	29.91	30.35	165.22	-273.44	-259.90	1,404.72	1,346.60	58.12	24.171	
8,100.00	7,964.15	8,176.17	8,091.45	30.28	30.78	165.36	-277.73	-251.49	1,406.62	1,347.70	58.92	23.875	
8,200.00	8,063.90	8,278.85	8,193.68	30.63	31.17	165.31	-284.42	-244.54	1,404.35	1,344.70	59.65	23.544	
8,300.00	8,163.83	8,371.94	8,286.32	30.98	31.52	165.15	-291.68	-239.10	1,398.95	1,338.62	60.32	23.191	
8,350.17	8,214.00	8,418.37	8,332.54	31.14	31.70	-62.79	-295.27	-236.59	1,395.18	1,334.52	60.65	23.003	
8,400.00	8,263.77	8,464.95	8,378.92	31.31	31.87	149.88	-298.81	-234.16	1,393.00	1,332.02	60.98	22.843	
8,403.21	8,266.96	8,467.95	8,381.92	31.32	31.88	149.88	-299.03	-234.00	1,392.99	1,331.99	61.00	22.834	
8,450.00	8,313.33	8,506.96	8,420.77	31.49	32.03	149.82	-301.92	-232.06	1,394.74	1,333.43	61.30	22.752	
8,500.00	8,362.13	8,544.02	8,457.70	31.69	32.16	149.63	-304.49	-230.47	1,400.64	1,339.04	61.60	22.738	
8,550.00	8,409.80	8,583.00	8,496.58	31.89	32.30	149.29	-306.99	-229.09	1,410.71	1,348.80	61.91	22.786	
8,600.00	8,455.99	8,614.63	8,528.14	32.09	32.42	148.74	-308.84	-228.20	1,424.88	1,362.70	62.18	22.916	
8,650.00	8,500.33	8,647.42	8,560.88	32.31	32.53	148.01	-310.56	-227.49	1,443.04	1,380.59	62.45	23.107	
8,700.00	8,542.50	8,677.00	8,590.43	32.53	32.63	147.02	-311.95	-227.05	1,465.06	1,402.36	62.70	23.366	
8,750.00	8,582.16	8,717.54	8,630.93	32.75	32.77	145.94	-313.67	-226.57	1,490.60	1,427.57	63.03	23.650	
8,800.00	8,619.02	8,753.44	8,666.79	32.97	32.90	144.53	-315.08	-226.14	1,519.36	1,456.04	63.32	23.994	
8,850.00	8,652.80	8,785.29	8,698.62	33.19	33.00	142.72	-316.24	-225.78	1,551.16	1,487.57	63.59	24.395	
8,900.00	8,683.24	10,379.03	9,739.82	33.42	41.07	142.25	-1,088.51	-48.42	1,582.23	1,519.32	62.90	25.154	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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
8,922.23	8,695.64	10,407.89	9,740.36	33.52	41.26	141.53	-1,117.36	-48.96	1,581.87	1,518.40	63.47	24.922	
8,950.00	8,710.11	10,431.73	9,740.87	33.64	41.41	140.90	-1,141.20	-49.16	1,582.49	1,518.39	64.10	24.688	
9,000.00	8,733.20	10,475.68	9,742.18	33.86	41.72	139.60	-1,185.12	-49.07	1,586.65	1,521.46	65.19	24.339	
9,050.00	8,752.35	10,544.13	9,744.83	34.08	42.22	137.64	-1,253.51	-47.70	1,594.44	1,528.05	66.39	24.018	
9,100.00	8,767.39	10,619.13	9,747.03	34.29	42.79	135.46	-1,328.40	-44.39	1,604.69	1,537.10	67.58	23.744	
9,100.17	8,767.43	10,619.27	9,747.04	34.29	42.79	135.46	-1,328.55	-44.38	1,604.73	1,537.14	67.59	23.743	
9,200.00	8,791.66	10,710.63	9,749.64	34.71	43.52	131.76	-1,419.73	-39.52	1,627.17	1,557.76	69.41	23.442	
9,300.00	8,812.57	10,819.91	9,750.38	35.13	44.42	128.39	-1,528.87	-33.94	1,646.06	1,574.74	71.31	23.082	
9,400.00	8,829.97	10,881.00	9,750.16	35.54	44.94	126.16	-1,589.89	-31.11	1,661.89	1,589.25	72.64	22.878	
9,500.00	8,843.72	10,975.00	9,749.88	35.95	45.75	124.09	-1,683.86	-28.83	1,675.56	1,601.37	74.20	22.582	
9,600.00	8,853.72	11,050.97	9,749.69	36.33	46.42	122.69	-1,759.82	-28.36	1,686.51	1,611.05	75.45	22.351	
9,700.00	8,859.89	11,154.39	9,749.18	36.70	47.35	121.72	-1,863.24	-27.42	1,692.91	1,615.99	76.92	22.008	
9,800.00	8,862.18	11,245.54	9,748.63	37.05	48.19	121.39	-1,954.39	-26.78	1,694.90	1,616.75	78.15	21.688	
9,809.00	8,862.20	11,257.00	9,748.58	37.08	48.30	121.39	-1,965.84	-26.74	1,694.88	1,616.59	78.30	21.647	
9,900.00	8,862.20	11,349.85	9,748.47	37.39	49.18	121.40	-2,058.69	-26.03	1,694.38	1,614.89	79.49	21.315	
9,980.56	8,862.19	11,418.33	9,749.05	37.67	49.85	121.42	-2,127.16	-25.26	1,694.09	1,613.70	80.39	21.073	
10,000.00	8,862.19	11,434.79	9,749.33	37.74	50.01	121.44	-2,143.62	-25.07	1,694.11	1,613.50	80.61	21.017	
10,100.00	8,862.19	11,547.46	9,749.89	38.10	51.13	121.46	-2,256.28	-24.37	1,694.01	1,611.89	82.12	20.629	
10,200.00	8,862.19	11,660.42	9,748.54	38.48	52.28	121.43	-2,369.23	-23.67	1,693.01	1,609.32	83.69	20.229	
10,300.00	8,862.19	11,763.15	9,747.05	38.86	53.35	121.40	-2,471.94	-22.58	1,691.51	1,606.35	85.16	19.863	
10,400.00	8,862.19	11,865.03	9,745.23	39.25	54.43	121.36	-2,573.81	-21.80	1,690.08	1,603.43	86.65	19.505	
10,500.00	8,862.18	11,965.76	9,743.44	39.66	55.52	121.33	-2,674.51	-20.58	1,688.28	1,600.14	88.14	19.154	
10,600.00	8,862.18	12,057.29	9,741.85	40.07	56.52	121.29	-2,766.02	-19.89	1,686.89	1,597.37	89.52	18.843	
10,700.00	8,862.18	12,163.09	9,740.54	40.49	57.69	121.26	-2,871.81	-19.08	1,685.77	1,594.64	91.13	18.498	
10,800.00	8,862.18	12,264.22	9,738.66	40.93	58.82	121.22	-2,972.91	-18.04	1,684.09	1,591.38	92.70	18.167	
10,900.00	8,862.18	12,367.17	9,737.03	41.37	59.99	121.19	-3,075.85	-16.94	1,682.52	1,588.20	94.32	17.839	
11,000.00	8,862.17	12,474.44	9,735.30	41.82	61.23	121.17	-3,183.10	-15.34	1,680.56	1,584.55	96.02	17.503	
11,100.00	8,862.17	12,560.56	9,734.17	42.28	62.23	121.15	-3,269.20	-14.05	1,678.77	1,581.37	97.40	17.236	
11,200.00	8,862.17	12,648.60	9,733.92	42.75	63.26	121.16	-3,357.23	-13.04	1,677.79	1,578.99	98.80	16.981	
11,300.00	8,862.17	12,753.56	9,733.72	43.22	64.50	121.17	-3,462.19	-12.12	1,677.12	1,576.62	100.50	16.687	
11,400.00	8,862.17	12,840.86	9,733.66	43.71	65.54	121.18	-3,549.48	-11.37	1,676.51	1,574.59	101.92	16.449	
11,500.00	8,862.16	12,942.16	9,733.89	44.20	66.75	121.19	-3,650.78	-10.89	1,676.39	1,572.80	103.59	16.183	
11,531.42	8,862.16	12,969.38	9,734.13	44.36	67.08	121.20	-3,678.00	-10.64	1,676.33	1,572.30	104.03	16.114	
11,600.00	8,862.16	13,024.92	9,734.76	44.70	67.75	121.22	-3,733.53	-10.41	1,676.60	1,571.66	104.94	15.977	
11,700.00	8,862.16	13,120.10	9,736.26	45.20	68.90	121.26	-3,828.71	-10.46	1,677.62	1,571.11	106.51	15.751	
11,800.00	8,862.16	13,226.64	9,738.09	45.72	70.20	121.31	-3,935.22	-10.28	1,678.53	1,570.25	108.28	15.501	
11,900.00	8,862.16	13,332.15	9,740.32	46.24	71.51	121.39	-4,040.71	-9.37	1,679.05	1,569.01	110.04	15.258	
12,000.00	8,862.15	13,436.86	9,742.36	46.76	72.81	121.47	-4,145.39	-8.00	1,679.11	1,567.31	111.80	15.019	
12,100.00	8,862.15	13,512.00	9,744.07	47.29	73.75	121.53	-4,220.50	-7.33	1,679.75	1,566.70	113.04	14.859	
12,200.00	8,862.15	13,582.43	9,745.95	47.83	74.63	121.57	-4,290.91	-7.86	1,682.02	1,567.82	114.19	14.730	
12,300.00	8,862.15	13,669.61	9,747.93	48.38	75.71	121.58	-4,378.02	-10.52	1,685.94	1,570.26	115.67	14.575	
12,400.00	8,862.15	13,763.83	9,749.82	48.93	76.88	121.57	-4,472.17	-13.81	1,690.12	1,572.82	117.30	14.408	
12,500.00	8,862.14	13,904.70	9,752.11	49.48	78.65	121.56	-4,612.94	-18.10	1,693.89	1,574.04	119.86	14.133	
12,600.00	8,862.14	14,049.23	9,751.71	50.04	80.49	121.54	-4,757.47	-18.17	1,693.68	1,571.22	122.46	13.831	
12,700.00	8,862.14	14,153.58	9,751.25	50.61	81.83	121.54	-4,861.82	-17.36	1,692.95	1,568.62	124.32	13.618	
12,800.00	8,862.14	14,251.48	9,750.88	51.18	83.09	121.54	-4,959.70	-16.39	1,692.07	1,566.00	126.07	13.421	
12,900.00	8,862.14	14,342.48	9,751.11	51.76	84.27	121.56	-5,050.70	-15.51	1,691.54	1,563.84	127.70	13.246	
13,000.00	8,862.13	14,438.99	9,751.75	52.34	85.53	121.59	-5,147.21	-14.82	1,691.43	1,562.01	129.42	13.069	
13,018.91	8,862.13	14,457.28	9,751.86	52.45	85.76	121.59	-5,165.50	-14.71	1,691.43	1,561.67	129.75	13.036	
13,100.00	8,862.13	14,534.23	9,752.43	52.92	86.77	121.61	-5,242.45	-14.32	1,691.53	1,560.39	131.13	12.899	
13,200.00	8,862.13	14,643.48	9,753.20	53.51	88.20	121.65	-5,351.69	-13.65	1,691.53	1,558.42	133.11	12.708	
13,300.00	8,862.13	14,745.05	9,753.02	54.10	89.53	121.65	-5,453.26	-13.16	1,691.19	1,556.22	134.97	12.530	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

Rule Assigned:

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
13,400.00	8,862.12	14,846.84	9,752.35	54.70	90.86	121.63	-5,555.05	-12.84	1,690.74	1,553.89	136.84	12.355	
13,500.00	8,862.12	14,948.75	9,751.80	55.30	92.21	121.62	-5,656.95	-12.34	1,690.19	1,551.46	138.73	12.184	
13,600.00	8,862.12	15,047.09	9,751.44	55.91	93.51	121.62	-5,755.29	-11.61	1,689.53	1,548.99	140.54	12.021	
13,700.00	8,862.12	15,148.05	9,751.47	56.52	94.85	121.63	-5,856.25	-11.03	1,689.22	1,546.81	142.41	11.862	
13,800.00	8,862.12	15,252.01	9,751.18	57.13	96.23	121.63	-5,960.20	-9.85	1,688.25	1,543.92	144.34	11.697	
13,900.00	8,862.11	15,347.44	9,750.85	57.75	97.50	121.63	-6,055.63	-9.25	1,687.70	1,541.58	146.12	11.550	
14,000.00	8,862.11	15,442.71	9,750.41	58.37	98.78	121.62	-6,150.90	-8.79	1,687.20	1,539.30	147.90	11.408	
14,100.00	8,862.11	15,549.79	9,750.09	58.99	100.21	121.62	-6,257.98	-8.49	1,686.98	1,537.07	149.92	11.253	
14,200.00	8,862.11	15,649.88	9,749.79	59.62	101.55	121.62	-6,358.06	-7.50	1,686.15	1,534.36	151.79	11.108	
14,300.00	8,862.11	15,740.75	9,749.80	60.25	102.77	121.63	-6,448.93	-6.87	1,685.72	1,532.23	153.49	10.982	
14,400.00	8,862.10	15,855.89	9,750.21	60.88	104.32	121.66	-6,564.06	-5.85	1,685.34	1,529.69	155.66	10.827	
14,500.00	8,862.10	15,949.09	9,750.31	61.52	105.58	121.68	-6,657.26	-4.67	1,684.48	1,527.08	157.40	10.702	
14,600.00	8,862.10	16,048.01	9,750.25	62.16	106.92	121.69	-6,756.17	-3.83	1,683.89	1,524.61	159.27	10.572	
14,700.00	8,862.10	16,147.26	9,750.21	62.80	108.27	121.70	-6,855.42	-3.01	1,683.33	1,522.17	161.15	10.446	
14,800.00	8,862.10	16,239.50	9,750.01	63.44	109.51	121.70	-6,947.66	-2.66	1,683.04	1,520.13	162.91	10.331	
14,851.44	8,862.10	16,289.86	9,750.04	63.78	110.20	121.70	-6,998.01	-2.52	1,683.02	1,519.16	163.86	10.271	
14,900.00	8,862.09	16,338.63	9,750.34	64.09	110.86	121.71	-7,046.79	-2.26	1,683.03	1,518.25	164.79	10.213	
15,000.00	8,862.09	16,448.58	9,749.80	64.74	112.35	121.70	-7,156.73	-1.92	1,682.67	1,515.77	166.90	10.082	
15,100.00	8,862.09	16,547.75	9,749.00	65.39	113.70	121.68	-7,255.90	-1.48	1,682.02	1,513.21	168.82	9.964	
15,200.00	8,862.09	16,643.19	9,748.15	66.05	115.00	121.65	-7,351.33	-1.42	1,681.66	1,511.00	170.66	9.854	
15,300.00	8,862.09	16,739.85	9,747.74	66.70	116.32	121.64	-7,447.99	-1.18	1,681.39	1,508.87	172.53	9.746	
15,313.86	8,862.09	16,752.27	9,747.72	66.79	116.49	121.64	-7,460.41	-1.16	1,681.39	1,508.62	172.76	9.732	
15,400.00	8,862.08	16,834.99	9,747.75	67.36	117.62	121.64	-7,543.13	-1.19	1,681.56	1,507.20	174.35	9.644	
15,500.00	8,862.08	16,942.02	9,748.33	68.02	119.08	121.66	-7,650.16	-0.67	1,681.59	1,505.18	176.41	9.532	
15,600.00	8,862.08	17,051.99	9,748.30	68.69	120.59	121.67	-7,760.12	0.18	1,681.08	1,502.55	178.53	9.416	
15,683.86	8,862.08	17,122.29	9,748.49	69.24	121.56	121.69	-7,830.42	0.94	1,680.59	1,500.72	179.87	9.344	
15,700.00	8,862.08	17,134.16	9,748.58	69.35	121.72	121.69	-7,842.29	1.00	1,680.61	1,500.52	180.09	9.332	
15,800.00	8,862.08	17,240.63	9,749.45	70.02	123.18	121.71	-7,948.76	1.05	1,681.19	1,499.05	182.14	9.230	
15,900.00	8,862.07	17,346.95	9,749.21	70.69	124.64	121.72	-8,055.07	1.74	1,680.67	1,496.47	184.20	9.124	
16,000.00	8,862.07	17,447.88	9,748.91	71.36	126.03	121.72	-8,156.00	2.36	1,680.15	1,493.98	186.16	9.025	
16,100.00	8,862.07	17,549.65	9,749.23	72.03	127.44	121.74	-8,257.76	3.49	1,679.53	1,491.41	188.12	8.928	
16,200.00	8,862.07	17,643.00	9,749.90	72.71	128.73	121.77	-8,351.10	4.39	1,679.23	1,489.32	189.91	8.842	
16,204.54	8,862.07	17,643.00	9,749.90	72.74	128.73	121.77	-8,351.10	4.39	1,679.23	1,489.32	189.91	8.842	
16,300.00	8,862.07	17,738.19	9,749.99	73.38	130.04	121.78	-8,446.29	4.57	1,679.28	1,487.52	191.76	8.757	
16,400.00	8,862.06	17,831.00	9,751.46	74.06	131.33	121.84	-8,539.07	5.94	1,679.05	1,485.54	193.51	8.677	
16,412.34	8,862.06	17,850.84	9,752.05	74.14	131.60	121.87	-8,558.90	6.41	1,678.98	1,485.09	193.88	8.660	
16,500.00	8,862.06	17,925.00	9,753.07	74.74	132.63	121.89	-8,633.04	6.30	1,679.79	1,484.49	195.29	8.601	
16,600.00	8,862.06	17,990.48	9,753.16	75.42	133.52	121.86	-8,698.51	4.59	1,682.02	1,485.52	196.50	8.560	
16,700.00	8,862.06	18,092.12	9,753.03	76.10	134.91	121.79	-8,800.08	1.11	1,685.02	1,486.48	198.54	8.487	
16,800.00	8,862.06	18,189.63	9,752.64	76.79	136.25	121.72	-8,897.53	-2.11	1,687.78	1,487.28	200.50	8.418	
16,900.00	8,862.05	18,341.60	9,753.90	77.47	138.35	121.73	-9,049.48	-3.10	1,688.82	1,485.24	203.58	8.296	
17,000.00	8,862.05	18,440.66	9,752.79	78.16	139.72	121.69	-9,148.54	-3.40	1,688.65	1,483.09	205.56	8.215	
17,100.00	8,862.05	18,550.65	9,751.13	78.85	141.25	121.63	-9,258.51	-3.91	1,688.42	1,480.64	207.78	8.126	
17,200.00	8,862.05	18,652.61	9,749.57	79.54	142.66	121.59	-9,360.46	-3.58	1,687.50	1,477.68	209.83	8.042	
17,300.00	8,862.05	18,760.51	9,747.85	80.23	144.16	121.54	-9,468.35	-3.21	1,686.54	1,474.55	211.99	7.956	
17,400.00	8,862.04	18,852.56	9,746.94	80.92	145.45	121.53	-9,560.38	-2.39	1,685.44	1,471.61	213.83	7.882	
17,500.00	8,862.04	18,951.39	9,746.66	81.62	146.83	121.53	-9,659.21	-1.50	1,684.68	1,468.91	215.77	7.808	
17,600.00	8,862.04	19,040.78	9,746.14	82.31	148.07	121.52	-9,748.59	-1.18	1,684.23	1,466.68	217.55	7.742	
17,700.00	8,862.04	19,151.13	9,745.08	83.01	149.61	121.49	-9,858.94	-1.12	1,683.85	1,464.08	219.77	7.662	
17,800.00	8,862.04	19,252.26	9,743.39	83.71	151.02	121.44	-9,960.05	-1.01	1,683.04	1,461.22	221.81	7.588	
17,900.00	8,862.03	19,345.80	9,741.63	84.41	152.32	121.38	-10,053.58	-1.27	1,682.45	1,458.73	223.72	7.520	
18,000.00	8,862.03	19,447.60	9,740.68	85.11	153.74	121.35	-10,155.37	-1.18	1,682.05	1,456.28	225.77	7.450	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 30H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 213-MWD+HRGM

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
18,100.00	8,862.03	19,571.47	9,739.13	85.81	155.48	121.31	-10,279.23	-0.34	1,681.03	1,452.77	228.25	7.365	
18,200.00	8,862.03	19,689.95	9,739.59	86.51	157.15	121.40	-10,397.63	3.87	1,678.32	1,447.82	230.50	7.281	
18,300.00	8,862.03	19,771.70	9,739.70	87.21	158.30	121.45	-10,479.34	6.64	1,675.69	1,443.57	232.11	7.219	
18,400.00	8,862.02	19,850.54	9,739.51	87.92	159.41	121.46	-10,558.17	7.86	1,674.39	1,440.71	233.68	7.165	
18,500.00	8,862.02	19,940.13	9,738.83	88.62	160.66	121.44	-10,647.75	7.84	1,674.16	1,438.68	235.48	7.110	
18,600.00	8,862.02	20,039.22	9,737.83	89.33	162.05	121.40	-10,746.84	7.50	1,674.09	1,436.60	237.49	7.049	
18,609.97	8,862.02	20,048.92	9,737.75	89.40	162.18	121.40	-10,756.53	7.47	1,674.08	1,436.40	237.68	7.043	
18,700.00	8,862.02	20,138.71	9,737.22	90.03	163.44	121.38	-10,846.32	7.28	1,674.11	1,434.62	239.49	6.990	
18,800.00	8,862.02	20,239.26	9,736.62	90.74	164.85	121.35	-10,946.87	7.11	1,674.10	1,432.58	241.52	6.932	
18,900.00	8,862.01	20,342.94	9,735.92	91.45	166.30	121.33	-11,050.55	7.00	1,674.01	1,430.39	243.62	6.871	
18,924.38	8,862.01	20,364.00	9,735.77	91.62	166.60	121.32	-11,071.61	7.01	1,673.95	1,429.91	244.04	6.859	
19,000.00	8,862.01	20,416.60	9,735.90	92.16	167.33	121.32	-11,124.21	6.88	1,674.37	1,429.32	245.04	6.833	
19,100.00	8,862.01	20,504.53	9,737.57	92.87	168.56	121.35	-11,212.11	5.82	1,676.48	1,429.75	246.73	6.795	
19,200.00	8,862.01	20,653.54	9,736.28	93.58	170.65	121.27	-11,361.10	3.98	1,677.34	1,427.46	249.88	6.713	
19,298.98	8,862.01	20,738.00	9,735.41	94.29	171.84	121.26	-11,445.55	4.99	1,676.09	1,424.52	251.57	6.663	SF
19,300.00	8,862.01	20,738.00	9,735.41	94.30	171.84	121.26	-11,445.55	4.99	1,676.09	1,424.52	251.57	6.663	
19,400.00	8,862.00	20,738.00	9,735.41	95.01	171.84	121.26	-11,445.55	4.99	1,679.13	1,428.09	251.04	6.689	
19,500.00	8,862.00	20,738.00	9,735.41	95.72	171.84	121.26	-11,445.55	4.99	1,688.10	1,438.36	249.74	6.760	
19,547.53	8,862.00	20,738.00	9,735.41	96.06	171.84	121.26	-11,445.55	4.99	1,694.42	1,445.56	248.85	6.809	
19,548.26	8,862.00	20,738.00	9,735.41	96.14	171.84	121.26	-11,445.55	4.99	1,694.52	1,445.52	249.01	6.805	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

Offset Well Error: 0.00 usft

Rule Assigned:

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	3.43	3.43	0.00	0.01	-72.31	306.93	-962.34	1,010.10				
100.00	100.00	101.32	101.32	0.28	0.16	-72.29	307.33	-962.33	1,010.21	1,009.78	0.44	2,311.647	
200.00	200.00	201.00	200.99	0.63	0.32	-72.22	308.51	-962.29	1,010.54	1,009.58	0.95	1,059.496	
300.00	300.00	308.67	308.65	0.99	0.70	-72.13	310.11	-961.73	1,010.50	1,008.81	1.70	595.646	
400.00	400.00	426.16	426.11	1.35	1.12	-72.02	311.48	-959.86	1,009.39	1,006.92	2.47	408.255	
500.00	500.00	538.11	538.00	1.71	1.51	-71.99	310.82	-956.25	1,006.09	1,002.86	3.22	312.117	
600.00	600.00	641.18	641.01	2.07	1.88	-71.98	309.88	-952.83	1,002.66	998.71	3.94	254.240	
700.00	700.00	742.97	742.73	2.43	2.24	-71.97	308.96	-948.95	998.75	994.09	4.66	214.207	
800.00	800.00	844.56	844.23	2.79	2.61	-71.94	308.16	-944.94	994.75	989.37	5.38	184.820	
900.00	900.00	945.36	944.94	3.14	2.97	-71.91	307.25	-940.86	990.62	984.52	6.10	162.396	
1,000.00	1,000.00	1,048.99	1,048.48	3.50	3.34	-71.91	305.92	-936.47	986.20	979.38	6.83	144.441	
1,100.00	1,099.98	1,147.33	1,146.71	3.84	3.70	128.22	304.58	-932.28	982.80	975.28	7.52	130.699	
1,192.24	1,192.09	1,237.23	1,236.53	4.15	4.02	128.45	303.35	-928.60	981.73	973.59	8.14	120.560	CC
1,200.00	1,199.84	1,244.46	1,243.76	4.17	4.05	128.47	303.26	-928.31	981.74	973.55	8.19	119.806	ES
1,300.00	1,299.45	1,338.77	1,337.99	4.51	4.39	128.82	302.09	-924.94	983.40	974.54	8.87	110.930	
1,350.00	1,349.13	1,388.22	1,387.42	4.68	4.57	129.04	301.49	-923.29	985.20	975.98	9.21	106.968	
1,400.00	1,398.73	1,437.63	1,436.79	4.85	4.75	135.72	300.90	-921.65	987.73	978.18	9.56	103.358	
1,500.00	1,497.69	1,535.56	1,534.66	5.19	5.10	146.29	299.74	-918.47	995.52	985.26	10.25	97.121	
1,600.00	1,596.25	1,629.82	1,628.88	5.54	5.44	153.98	298.81	-915.62	1,007.08	996.15	10.94	92.080	
1,670.62	1,665.55	1,695.00	1,694.03	5.78	5.68	158.18	298.38	-913.97	1,017.76	1,006.34	11.42	89.121	
1,700.00	1,694.31	1,721.09	1,720.12	5.89	5.77	158.30	298.26	-913.39	1,022.67	1,011.05	11.62	88.027	
1,800.00	1,792.23	1,815.95	1,814.96	6.24	6.11	158.72	297.87	-911.53	1,039.66	1,027.35	12.31	84.471	
1,900.00	1,890.14	1,917.94	1,916.93	6.61	6.48	159.17	297.80	-909.51	1,056.83	1,043.80	13.03	81.121	
2,000.00	1,988.06	2,033.48	2,032.42	6.97	6.89	159.65	297.13	-906.06	1,072.95	1,059.15	13.80	77.745	
2,100.00	2,085.97	2,137.31	2,136.15	7.34	7.27	160.09	296.24	-901.66	1,087.86	1,073.33	14.53	74.846	
2,200.00	2,183.89	2,251.09	2,249.79	7.70	7.68	160.56	295.30	-896.17	1,102.35	1,087.04	15.31	72.018	
2,300.00	2,281.80	2,375.84	2,374.23	8.07	8.14	161.08	293.42	-887.74	1,114.84	1,098.72	16.12	69.172	
2,400.00	2,379.72	2,491.98	2,489.90	8.45	8.57	161.57	291.04	-877.45	1,125.21	1,108.31	16.90	66.588	
2,500.00	2,477.64	2,586.90	2,584.32	8.82	8.93	162.07	290.80	-867.74	1,135.18	1,117.56	17.61	64.448	
2,600.00	2,575.55	2,674.01	2,671.02	9.19	9.25	162.53	291.18	-859.39	1,146.08	1,127.78	18.30	62.613	
2,700.00	2,673.47	2,767.56	2,764.22	9.57	9.60	163.02	291.85	-851.23	1,157.97	1,138.95	19.02	60.895	
2,800.00	2,771.38	2,868.58	2,864.83	9.95	9.97	163.53	292.59	-842.34	1,169.90	1,150.14	19.75	59.221	
2,900.00	2,869.30	2,968.84	2,964.70	10.32	10.35	164.03	293.16	-833.45	1,181.78	1,161.29	20.49	57.669	
3,000.00	2,967.21	3,068.90	3,064.36	10.70	10.72	164.51	293.67	-824.46	1,193.62	1,172.39	21.23	56.222	
3,100.00	3,065.13	3,174.16	3,169.15	11.08	11.11	165.03	294.35	-814.65	1,205.31	1,183.32	21.99	54.815	
3,200.00	3,163.05	3,304.80	3,298.96	11.46	11.61	165.71	295.34	-800.00	1,215.46	1,192.62	22.83	53.228	
3,300.00	3,260.96	3,403.34	3,396.70	11.84	11.99	166.25	296.09	-787.47	1,224.40	1,200.82	23.58	51.936	
3,400.00	3,358.88	3,495.98	3,488.61	12.22	12.34	166.75	296.89	-775.89	1,233.68	1,209.38	24.30	50.776	
3,500.00	3,456.79	3,581.88	3,573.93	12.60	12.67	167.19	297.74	-765.94	1,243.92	1,218.92	24.99	49.770	
3,600.00	3,554.71	3,677.91	3,669.38	12.98	13.04	167.67	298.88	-755.52	1,254.98	1,229.25	25.73	48.784	
3,700.00	3,652.62	3,805.23	3,795.70	13.36	13.53	168.34	300.45	-739.74	1,264.78	1,238.21	26.57	47.600	
3,800.00	3,750.54	3,908.53	3,897.99	13.75	13.93	168.91	301.73	-725.40	1,273.46	1,246.13	27.33	46.588	
3,900.00	3,848.45	4,004.06	3,992.60	14.13	14.30	169.43	302.96	-712.25	1,282.38	1,254.31	28.07	45.681	
4,000.00	3,946.37	4,102.62	4,090.24	14.51	14.69	169.96	304.30	-698.85	1,291.61	1,262.78	28.82	44.812	
4,100.00	4,044.29	4,203.44	4,190.09	14.89	15.08	170.50	305.79	-684.94	1,300.82	1,271.24	29.58	43.975	
4,200.00	4,142.20	4,303.07	4,288.72	15.28	15.48	171.03	307.35	-671.00	1,310.04	1,279.70	30.34	43.183	
4,300.00	4,240.12	4,400.85	4,385.54	15.66	15.86	171.55	308.88	-657.33	1,319.37	1,288.29	31.09	42.440	
4,400.00	4,338.03	4,499.49	4,483.19	16.05	16.25	172.07	310.50	-643.57	1,328.89	1,297.04	31.84	41.734	
4,500.00	4,435.95	4,600.05	4,582.75	16.43	16.65	172.59	312.21	-629.44	1,338.45	1,305.84	32.61	41.050	
4,600.00	4,533.86	4,700.94	4,682.58	16.81	17.05	173.11	313.95	-615.05	1,347.97	1,314.60	33.37	40.394	
4,700.00	4,631.78	4,798.76	4,779.39	17.20	17.44	173.61	315.58	-601.09	1,357.55	1,323.43	34.13	39.782	
4,800.00	4,729.69	4,896.64	4,876.29	17.58	17.83	174.10	317.08	-587.32	1,367.32	1,332.44	34.88	39.200	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

Rule Assigned:

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
4,900.00	4,827.61	4,996.59	4,975.24	17.97	18.22	174.58	318.48	-573.29	1,377.14	1,341.50	35.64	38.636	
5,000.00	4,925.53	5,088.64	5,066.42	18.35	18.59	175.00	319.64	-560.74	1,387.29	1,350.92	36.38	38.137	
5,100.00	5,023.44	5,176.00	5,153.03	18.74	18.93	175.38	320.69	-549.34	1,397.98	1,360.89	37.09	37.694	
5,200.00	5,121.36	5,271.00	5,247.32	19.12	19.31	175.77	321.83	-537.82	1,409.46	1,371.63	37.83	37.260	
5,300.00	5,219.27	5,364.09	5,339.80	19.51	19.67	176.13	322.93	-527.21	1,421.55	1,382.99	38.56	36.868	
5,400.00	5,317.19	5,469.82	5,444.85	19.89	20.08	176.50	323.60	-515.31	1,433.48	1,394.14	39.34	36.437	
5,500.00	5,415.10	5,576.38	5,550.76	20.28	20.49	176.84	323.13	-503.55	1,444.97	1,404.84	40.13	36.010	
5,600.00	5,513.02	5,681.36	5,655.07	20.66	20.90	177.14	322.01	-491.78	1,455.96	1,415.05	40.90	35.594	
5,700.00	5,610.93	5,780.90	5,753.97	21.05	21.28	177.42	320.74	-480.56	1,466.83	1,425.17	41.66	35.210	
5,800.00	5,708.85	5,878.61	5,851.05	21.43	21.66	177.69	319.50	-469.59	1,477.76	1,435.35	42.41	34.847	
5,900.00	5,806.77	5,964.69	5,936.61	21.82	21.99	177.92	318.41	-460.24	1,489.04	1,445.94	43.10	34.546	
6,000.00	5,904.68	6,041.69	6,013.30	22.21	22.29	178.08	317.48	-453.35	1,501.78	1,458.03	43.75	34.326	
6,100.00	6,002.60	6,117.00	6,088.37	22.59	22.57	178.23	316.73	-447.37	1,515.59	1,471.21	44.38	34.152	
6,200.00	6,100.51	6,207.77	6,178.91	22.98	22.90	178.39	316.27	-441.03	1,530.38	1,485.30	45.08	33.950	
6,300.00	6,198.43	6,305.00	6,275.99	23.36	23.26	178.55	316.50	-435.60	1,546.64	1,500.83	45.81	33.763	
6,400.00	6,296.34	6,366.80	6,337.73	23.75	23.48	178.65	317.04	-432.80	1,563.87	1,517.53	46.34	33.747	
6,500.00	6,394.26	6,453.75	6,424.60	24.14	23.79	178.77	318.15	-429.58	1,582.23	1,535.23	47.01	33.660	
6,600.00	6,492.17	6,541.84	6,512.66	24.52	24.10	178.86	318.78	-427.37	1,601.15	1,553.48	47.67	33.586	
6,700.00	6,590.09	6,632.97	6,603.80	24.91	24.41	178.89	318.79	-426.46	1,620.72	1,572.37	48.35	33.519	
6,800.00	6,688.01	6,729.25	6,700.07	25.29	24.74	178.91	318.52	-425.94	1,640.44	1,591.38	49.06	33.438	
6,900.00	6,785.92	6,820.95	6,791.77	25.68	25.04	178.92	318.25	-425.70	1,660.38	1,610.65	49.73	33.387	
7,000.00	6,883.84	6,912.29	6,883.11	26.07	25.33	178.93	318.32	-425.77	1,680.79	1,630.40	50.39	33.355	
7,100.00	6,981.75	7,007.09	6,977.91	26.45	25.63	178.94	318.51	-426.03	1,701.43	1,650.36	51.07	33.319	
7,200.00	7,079.67	7,098.70	7,069.52	26.84	25.92	178.95	318.71	-426.54	1,722.29	1,670.57	51.72	33.301	
7,300.00	7,177.58	7,186.06	7,156.87	27.23	26.19	178.93	318.59	-427.91	1,743.66	1,691.31	52.34	33.312	
7,400.00	7,275.50	7,275.72	7,246.50	27.61	26.46	178.89	318.42	-430.05	1,765.60	1,712.62	52.98	33.327	
7,500.00	7,373.41	7,371.80	7,342.54	28.00	26.76	178.84	318.11	-432.70	1,787.74	1,734.08	53.65	33.319	
7,600.00	7,471.33	7,469.37	7,440.06	28.39	27.06	178.77	317.59	-435.69	1,809.97	1,755.63	54.34	33.308	
7,700.00	7,569.25	7,572.24	7,542.87	28.77	27.38	178.69	316.61	-438.98	1,832.03	1,776.96	55.06	33.273	
7,764.22	7,632.13	7,637.96	7,608.55	29.02	27.58	178.64	315.70	-441.09	1,846.02	1,790.50	55.52	33.249	
7,800.00	7,667.21	7,671.98	7,642.55	29.16	27.69	178.61	315.11	-442.27	1,853.59	1,797.83	55.76	33.241	
7,900.00	7,765.68	7,768.91	7,739.39	29.54	27.99	178.51	313.15	-445.97	1,872.50	1,816.06	56.44	33.178	
8,000.00	7,864.70	7,879.30	7,849.73	29.91	28.33	178.43	311.82	-449.15	1,887.82	1,830.63	57.19	33.007	
8,100.00	7,964.15	7,993.23	7,963.64	30.28	28.70	178.41	311.34	-450.37	1,898.80	1,840.84	57.97	32.757	
8,200.00	8,063.90	8,115.56	8,085.97	30.63	29.10	178.42	311.02	-450.06	1,905.42	1,846.63	58.79	32.410	
8,300.00	8,163.83	8,230.55	8,200.95	30.98	29.49	178.43	309.85	-448.81	1,907.41	1,847.85	59.56	32.023	
8,350.17	8,214.00	8,281.95	8,252.35	31.14	29.67	-49.43	309.13	-448.22	1,906.95	1,847.04	59.91	31.831	
8,361.20	8,225.03	8,293.25	8,263.65	31.18	29.71	163.18	308.96	-448.09	1,906.85	1,846.87	59.98	31.789	
8,400.00	8,263.77	8,332.98	8,303.37	31.31	29.85	163.15	308.31	-447.67	1,908.10	1,847.85	60.25	31.667	
8,450.00	8,313.33	8,384.07	8,354.44	31.49	30.02	163.04	307.39	-447.17	1,913.38	1,852.76	60.62	31.564	
8,500.00	8,362.13	8,435.82	8,406.18	31.69	30.20	162.85	306.38	-446.65	1,922.73	1,861.73	61.00	31.522	
8,550.00	8,409.80	8,484.88	8,455.23	31.89	30.37	162.56	305.36	-446.11	1,936.08	1,874.71	61.37	31.549	
8,600.00	8,455.99	8,528.12	8,498.46	32.09	30.51	162.15	304.48	-445.69	1,953.44	1,891.73	61.71	31.655	
8,650.00	8,500.33	8,570.02	8,540.35	32.31	30.66	161.59	303.66	-445.34	1,974.72	1,912.67	62.05	31.825	
8,700.00	8,542.50	8,614.70	8,585.02	32.53	30.81	160.91	302.76	-445.00	1,999.70	1,937.30	62.40	32.044	
8,750.00	8,582.16	11,009.39	9,942.04	32.75	40.43	139.47	-1,053.42	-428.74	2,023.01	1,960.42	62.59	32.324	
8,800.00	8,619.02	11,039.95	9,942.42	32.97	40.65	139.49	-1,083.97	-428.18	2,012.02	1,948.45	63.57	31.651	
8,850.00	8,652.80	11,070.35	9,942.78	33.19	40.87	139.28	-1,114.36	-427.64	2,005.01	1,940.48	64.54	31.068	
8,900.00	8,683.24	11,096.50	9,943.00	33.42	41.07	138.92	-1,140.51	-427.30	2,002.06	1,936.61	65.45	30.589	
8,911.76	8,689.89	11,106.56	9,943.06	33.47	41.14	138.72	-1,150.57	-427.20	2,001.94	1,936.26	65.69	30.477	
8,950.00	8,710.11	11,130.06	9,943.17	33.64	41.32	138.18	-1,174.07	-427.07	2,003.11	1,936.72	66.38	30.175	
9,000.00	8,733.20	11,151.00	9,943.20	33.86	41.48	137.44	-1,195.01	-427.04	2,008.10	1,940.92	67.18	29.891	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM **Rule Assigned:** **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
9,050.00	8,752.35	11,187.25	9,943.25	34.08	41.76	136.18	-1,231.26	-427.21	2,016.91	1,948.86	68.05	29.640	
9,100.00	8,767.39	11,215.23	9,943.35	34.29	41.98	134.80	-1,259.24	-427.54	2,029.45	1,960.66	68.79	29.502	
9,100.17	8,767.43	11,215.33	9,943.35	34.29	41.98	134.80	-1,259.33	-427.54	2,029.50	1,960.71	68.79	29.501	
9,200.00	8,791.66	11,279.96	9,943.65	34.71	42.49	131.37	-1,323.95	-428.92	2,057.50	1,987.26	70.24	29.294	
9,300.00	8,812.57	11,360.04	9,943.50	35.13	43.14	128.19	-1,403.99	-431.54	2,083.47	2,011.75	71.72	29.051	
9,400.00	8,829.97	11,488.22	9,944.19	35.54	44.23	125.14	-1,532.13	-434.31	2,105.83	2,032.28	73.55	28.630	
9,500.00	8,843.72	11,627.01	9,945.87	35.95	45.47	122.84	-1,670.90	-432.91	2,122.02	2,046.60	75.42	28.135	
9,600.00	8,853.72	11,725.66	9,946.33	36.33	46.39	121.43	-1,769.53	-431.38	2,133.16	2,056.29	76.87	27.750	
9,700.00	8,859.89	11,828.60	9,946.80	36.70	47.37	120.59	-1,872.46	-429.64	2,139.63	2,061.33	78.30	27.327	
9,800.00	8,862.18	11,936.58	9,947.46	37.05	48.44	120.35	-1,980.41	-427.37	2,141.10	2,061.39	79.71	26.861	
9,809.00	8,862.20	11,946.47	9,947.51	37.08	48.54	120.35	-1,990.30	-427.14	2,140.98	2,061.14	79.84	26.817	
9,900.00	8,862.20	12,038.75	9,947.85	37.39	49.47	120.39	-2,082.55	-424.94	2,139.42	2,058.38	81.04	26.400	
10,000.00	8,862.19	12,132.52	9,948.03	37.74	50.43	120.42	-2,176.31	-423.06	2,137.94	2,055.64	82.31	25.975	
10,100.00	8,862.19	12,231.57	9,948.48	38.10	51.47	120.45	-2,275.33	-421.12	2,136.65	2,052.99	83.66	25.539	
10,200.00	8,862.19	12,337.22	9,948.91	38.48	52.59	120.49	-2,380.96	-418.94	2,135.24	2,050.12	85.12	25.085	
10,300.00	8,862.19	12,416.06	9,949.30	38.86	53.44	120.52	-2,459.78	-417.29	2,133.91	2,047.63	86.28	24.731	
10,333.13	8,862.19	12,436.73	9,949.33	38.99	53.67	120.52	-2,480.45	-417.16	2,133.82	2,047.21	86.61	24.637	
10,400.00	8,862.19	12,480.69	9,949.24	39.25	54.15	120.51	-2,524.41	-417.44	2,134.20	2,046.91	87.30	24.448	
10,500.00	8,862.18	12,563.00	9,949.05	39.66	55.04	120.49	-2,606.70	-418.91	2,135.78	2,047.23	88.55	24.121	
10,600.00	8,862.18	12,652.28	9,949.20	40.07	56.03	120.46	-2,695.96	-420.99	2,138.02	2,048.12	89.90	23.782	
10,700.00	8,862.18	12,759.21	9,949.72	40.49	57.22	120.44	-2,802.87	-423.27	2,140.27	2,048.76	91.51	23.389	
10,800.00	8,862.18	12,860.64	9,950.19	40.93	58.37	120.42	-2,904.27	-425.20	2,142.30	2,049.24	93.06	23.020	
10,900.00	8,862.18	12,958.97	9,950.56	41.37	59.50	120.40	-3,002.58	-427.13	2,144.35	2,049.75	94.60	22.668	
11,000.00	8,862.17	13,057.44	9,951.12	41.82	60.64	120.38	-3,101.03	-429.08	2,146.50	2,050.35	96.15	22.325	
11,100.00	8,862.17	13,160.40	9,951.84	42.28	61.85	120.37	-3,203.97	-430.93	2,148.57	2,050.79	97.78	21.973	
11,200.00	8,862.17	13,288.10	9,952.62	42.75	63.37	120.36	-3,331.66	-432.73	2,150.34	2,050.56	99.78	21.550	
11,300.00	8,862.17	13,441.68	9,952.37	43.22	65.22	120.37	-3,485.23	-431.27	2,149.48	2,047.34	102.15	21.043	
11,400.00	8,862.17	13,546.27	9,951.98	43.71	66.49	120.39	-3,589.80	-429.10	2,147.66	2,043.81	103.85	20.680	
11,500.00	8,862.16	13,648.27	9,951.65	44.20	67.75	120.42	-3,691.76	-426.60	2,145.54	2,040.01	105.54	20.330	
11,600.00	8,862.16	13,743.83	9,951.20	44.70	68.93	120.43	-3,787.30	-424.53	2,143.60	2,036.45	107.15	20.006	
11,700.00	8,862.16	13,844.47	9,950.77	45.20	70.19	120.45	-3,887.92	-422.44	2,141.75	2,032.91	108.84	19.677	
11,800.00	8,862.16	13,944.34	9,950.42	45.72	71.44	120.47	-3,987.76	-420.23	2,139.83	2,029.29	110.54	19.358	
11,900.00	8,862.16	14,043.36	9,950.21	46.24	72.69	120.49	-4,086.75	-418.04	2,137.98	2,025.75	112.23	19.050	
12,000.00	8,862.15	14,136.55	9,949.98	46.76	73.87	120.51	-4,179.92	-416.12	2,136.24	2,022.39	113.85	18.763	
12,100.00	8,862.15	14,250.05	9,949.69	47.29	75.32	120.53	-4,293.40	-413.88	2,134.60	2,018.82	115.78	18.437	
12,200.00	8,862.15	14,341.23	9,949.53	47.83	76.48	120.55	-4,384.55	-411.63	2,132.55	2,015.17	117.39	18.167	
12,300.00	8,862.15	14,437.67	9,949.66	48.38	77.73	120.58	-4,480.97	-409.56	2,130.93	2,011.85	119.08	17.895	
12,400.00	8,862.15	14,530.16	9,950.05	48.93	78.92	120.61	-4,573.44	-407.62	2,129.51	2,008.79	120.72	17.640	
12,500.00	8,862.14	14,630.84	9,950.59	49.48	80.22	120.65	-4,674.10	-405.70	2,128.31	2,005.82	122.49	17.375	
12,580.22	8,862.14	14,684.28	9,950.85	49.93	80.92	120.67	-4,727.54	-404.98	2,127.74	2,004.23	123.50	17.228	
12,600.00	8,862.14	14,696.46	9,950.91	50.04	81.07	120.67	-4,739.71	-404.95	2,127.77	2,004.03	123.74	17.196	
12,700.00	8,862.14	14,771.53	9,951.30	50.61	82.05	120.67	-4,814.78	-405.64	2,128.92	2,003.79	125.13	17.013	
12,800.00	8,862.14	14,859.46	9,952.19	51.18	83.19	120.67	-4,902.70	-406.61	2,130.57	2,003.84	126.73	16.812	
12,900.00	8,862.14	14,932.16	9,953.06	51.76	84.13	120.66	-4,975.37	-408.32	2,133.34	2,005.27	128.07	16.657	
13,000.00	8,862.13	15,057.29	9,955.42	52.34	85.76	120.68	-5,100.45	-411.25	2,136.57	2,006.28	130.30	16.398	
13,100.00	8,862.13	15,183.70	9,958.20	52.92	87.42	120.74	-5,226.82	-410.89	2,137.47	2,004.95	132.52	16.130	
13,200.00	8,862.13	15,272.39	9,960.10	53.51	88.60	120.78	-5,315.49	-410.85	2,138.69	2,004.56	134.14	15.944	
13,300.00	8,862.13	15,410.98	9,961.97	54.10	90.43	120.83	-5,454.07	-410.75	2,139.56	2,002.99	136.57	15.666	
13,400.00	8,862.12	15,504.87	9,962.44	54.70	91.68	120.84	-5,547.95	-410.08	2,139.36	2,001.06	138.30	15.469	
13,404.42	8,862.12	15,508.67	9,962.46	54.73	91.73	120.84	-5,551.75	-410.06	2,139.36	2,000.99	138.38	15.461	
13,500.00	8,862.12	15,591.54	9,962.97	55.30	92.83	120.86	-5,634.62	-409.90	2,139.66	1,999.73	139.93	15.291	
13,600.00	8,862.12	15,694.42	9,963.62	55.91	94.20	120.87	-5,737.50	-409.88	2,140.13	1,998.31	141.82	15.090	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

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
13,700.00	8,862.12	15,778.67	9,964.05	56.52	95.32	120.87	-5,821.75	-410.29	2,140.96	1,997.54	143.42	14.928	
13,800.00	8,862.12	15,914.97	9,963.84	57.13	97.15	120.86	-5,958.05	-410.43	2,141.07	1,995.19	145.88	14.677	
13,900.00	8,862.11	16,022.20	9,963.28	57.75	98.59	120.85	-6,065.26	-409.69	2,140.37	1,992.50	147.87	14.475	
14,000.00	8,862.11	16,119.86	9,962.74	58.37	99.90	120.85	-6,162.93	-408.87	2,139.52	1,989.81	149.71	14.291	
14,100.00	8,862.11	16,213.39	9,962.19	58.99	101.16	120.84	-6,256.45	-408.39	2,138.95	1,987.45	151.50	14.119	
14,200.00	8,862.11	16,311.71	9,961.68	59.62	102.49	120.83	-6,354.77	-408.12	2,138.60	1,985.24	153.36	13.945	
14,300.00	8,862.11	16,447.85	9,960.94	60.25	104.34	120.83	-6,490.90	-406.59	2,137.56	1,981.74	155.82	13.718	
14,400.00	8,862.10	16,532.00	9,960.40	60.88	105.48	120.84	-6,575.03	-404.97	2,135.77	1,978.30	157.47	13.563	
14,500.00	8,862.10	16,615.64	9,960.12	61.52	106.62	120.85	-6,658.66	-403.95	2,134.73	1,975.62	159.11	13.417	
14,584.91	8,862.10	16,689.21	9,959.92	62.06	107.62	120.84	-6,732.23	-403.73	2,134.53	1,973.99	160.54	13.296	
14,600.00	8,862.10	16,702.53	9,959.88	62.16	107.80	120.84	-6,745.55	-403.74	2,134.53	1,973.74	160.80	13.275	
14,700.00	8,862.10	16,792.10	9,959.70	62.80	109.01	120.83	-6,835.12	-404.02	2,134.87	1,972.33	162.53	13.135	
14,800.00	8,862.10	16,873.80	9,959.71	63.44	110.12	120.82	-6,916.82	-404.76	2,135.82	1,971.68	164.14	13.012	
14,900.00	8,862.09	16,969.95	9,959.78	64.09	111.43	120.79	-7,012.96	-406.45	2,137.52	1,971.52	166.00	12.877	
15,000.00	8,862.09	17,072.18	9,959.66	64.74	112.82	120.77	-7,115.17	-408.11	2,139.01	1,971.04	167.97	12.735	
15,100.00	8,862.09	17,189.92	9,959.43	65.39	114.42	120.74	-7,232.90	-409.66	2,140.23	1,970.02	170.21	12.574	
15,200.00	8,862.09	17,318.30	9,959.36	66.05	116.18	120.73	-7,361.27	-409.69	2,140.42	1,967.80	172.62	12.400	
15,300.00	8,862.09	17,449.31	9,959.06	66.70	117.98	120.76	-7,492.26	-407.14	2,138.71	1,963.68	175.02	12.219	
15,400.00	8,862.08	17,556.03	9,957.67	67.36	119.45	120.75	-7,598.95	-404.95	2,136.44	1,959.37	177.07	12.066	
15,500.00	8,862.08	17,651.28	9,955.18	68.02	120.77	120.71	-7,694.15	-403.67	2,134.11	1,955.14	178.97	11.925	
15,600.00	8,862.08	17,731.35	9,952.30	68.69	121.87	120.64	-7,774.17	-403.58	2,132.35	1,951.70	180.64	11.804	
15,700.00	8,862.08	17,834.90	9,948.95	69.35	123.29	120.56	-7,877.67	-403.97	2,131.19	1,948.48	182.71	11.664	
15,800.00	8,862.08	17,925.75	9,946.44	70.02	124.55	120.50	-7,968.48	-403.91	2,129.91	1,945.35	184.55	11.541	
15,900.00	8,862.07	18,008.69	9,945.34	70.69	125.69	120.47	-8,051.41	-403.81	2,129.29	1,943.05	186.24	11.433	
16,000.00	8,862.07	18,122.18	9,943.75	71.36	127.26	120.43	-8,164.89	-404.18	2,129.06	1,940.61	188.45	11.298	
16,100.00	8,862.07	18,263.42	9,942.07	72.03	129.22	120.42	-8,306.08	-401.48	2,126.84	1,935.78	191.06	11.132	
16,200.00	8,862.07	18,351.72	9,942.01	72.71	130.45	120.45	-8,394.35	-398.76	2,124.32	1,931.50	192.82	11.017	
16,300.00	8,862.07	18,452.02	9,942.05	73.38	131.84	120.49	-8,494.61	-396.29	2,122.38	1,927.62	194.76	10.897	
16,400.00	8,862.06	18,559.66	9,941.83	74.06	133.35	120.53	-8,602.19	-392.78	2,119.60	1,922.79	196.82	10.770	
16,500.00	8,862.06	18,650.13	9,942.12	74.74	134.61	120.57	-8,692.62	-390.08	2,117.34	1,918.74	198.60	10.661	
16,600.00	8,862.06	18,749.89	9,942.39	75.42	136.00	120.61	-8,792.35	-387.25	2,115.20	1,914.67	200.53	10.548	
16,700.00	8,862.06	18,847.55	9,942.46	76.10	137.37	120.65	-8,889.97	-384.65	2,113.11	1,910.67	202.44	10.438	
16,800.00	8,862.06	18,956.15	9,942.02	76.79	138.89	120.67	-8,998.54	-382.04	2,111.01	1,906.48	204.53	10.321	
16,900.00	8,862.05	19,051.31	9,942.06	77.47	140.22	120.71	-9,093.65	-379.15	2,108.58	1,902.19	206.39	10.216	
17,000.00	8,862.05	19,140.10	9,942.48	78.16	141.46	120.75	-9,182.41	-376.73	2,106.65	1,898.49	208.16	10.120	
17,100.00	8,862.05	19,227.72	9,941.00	78.85	142.68	120.72	-9,270.01	-376.04	2,105.26	1,895.31	209.96	10.027	
17,200.00	8,862.05	19,320.93	9,939.24	79.54	143.98	120.68	-9,363.20	-375.98	2,104.40	1,892.55	211.86	9.933	
17,300.00	8,862.05	19,418.72	9,938.01	80.23	145.35	120.65	-9,460.99	-375.73	2,103.70	1,889.88	213.82	9.839	
17,400.00	8,862.04	19,511.40	9,937.26	80.92	146.64	120.64	-9,553.66	-375.44	2,103.18	1,887.49	215.69	9.751	
17,492.25	8,862.04	19,597.26	9,937.60	81.56	147.84	120.65	-9,639.52	-374.95	2,103.07	1,885.67	217.40	9.674	
17,500.00	8,862.04	19,604.63	9,937.64	81.62	147.95	120.65	-9,646.88	-374.92	2,103.07	1,885.53	217.54	9.667	
17,600.00	8,862.04	19,731.00	9,937.91	82.31	149.72	120.68	-9,773.24	-373.22	2,102.11	1,882.16	219.95	9.557	
17,700.00	8,862.04	19,827.00	9,938.20	83.01	151.06	120.70	-9,869.22	-371.64	2,101.01	1,879.16	221.85	9.470	
17,721.95	8,862.04	19,827.00	9,938.20	83.16	151.06	120.70	-9,869.22	-371.64	2,100.89	1,878.99	221.91	9.467	
17,800.00	8,862.04	19,899.43	9,938.57	83.71	152.08	120.71	-9,941.65	-371.55	2,101.13	1,877.78	223.35	9.407	
17,900.00	8,862.03	19,998.49	9,938.65	84.41	153.46	120.71	-10,040.71	-371.63	2,101.40	1,876.08	225.32	9.326	
18,000.00	8,862.03	20,114.84	9,938.12	85.11	155.09	120.69	-10,157.06	-371.71	2,101.40	1,873.79	227.61	9.232	
18,100.00	8,862.03	20,219.84	9,937.02	85.81	156.56	120.67	-10,262.05	-371.41	2,100.78	1,871.07	229.71	9.145	
18,200.00	8,862.03	20,314.57	9,936.46	86.51	157.89	120.66	-10,356.78	-370.97	2,100.24	1,868.62	231.62	9.068	
18,300.00	8,862.03	20,419.36	9,935.83	87.21	159.36	120.65	-10,461.57	-370.46	2,099.67	1,865.96	233.71	8.984	
18,400.00	8,862.02	20,518.88	9,934.84	87.92	160.76	120.63	-10,561.08	-369.98	2,098.92	1,863.21	235.72	8.904	
18,500.00	8,862.02	20,609.98	9,934.24	88.62	162.04	120.62	-10,652.18	-369.72	2,098.50	1,860.92	237.57	8.833	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Fed Com - Riverbend 12-13 Fed Com 31H - OH - Svy

Offset Site Error: 0.00 usft

Survey Program: 201-MWD+HRGM

Rule Assigned:

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
18,570.93	8,862.02	20,676.00	9,934.13	89.12	162.96	120.61	-10,718.20	-369.57	2,098.40	1,859.50	238.90	8.784	
18,600.00	8,862.02	20,700.79	9,934.15	89.33	163.31	120.61	-10,742.99	-369.53	2,098.43	1,859.03	239.41	8.765	
18,700.00	8,862.02	20,792.19	9,934.45	90.03	164.59	120.62	-10,834.38	-369.79	2,098.99	1,857.74	241.25	8.701	
18,800.00	8,862.02	20,897.92	9,934.72	90.74	166.08	120.62	-10,940.11	-369.69	2,099.18	1,855.84	243.34	8.626	
18,900.00	8,862.01	20,985.57	9,935.01	91.45	167.31	120.62	-11,027.76	-370.21	2,100.00	1,854.88	245.12	8.567	
19,000.00	8,862.01	21,105.44	9,934.97	92.16	168.99	120.61	-11,147.63	-370.58	2,100.40	1,852.91	247.49	8.487	
19,093.57	8,862.01	21,198.66	9,933.80	92.83	170.30	120.57	-11,240.84	-370.94	2,100.27	1,850.87	249.40	8.421	
19,100.00	8,862.01	21,204.41	9,933.75	92.87	170.38	120.57	-11,246.60	-370.96	2,100.27	1,850.75	249.51	8.417	
19,200.00	8,862.01	21,299.08	9,933.85	93.58	171.71	120.57	-11,341.26	-370.96	2,100.48	1,849.05	251.42	8.354	
19,300.00	8,862.01	21,397.27	9,935.22	94.30	173.10	120.61	-11,439.44	-370.35	2,100.81	1,847.46	253.36	8.292	SF
19,400.00	8,862.00	21,398.00	9,935.23	95.01	173.11	120.61	-11,440.17	-370.35	2,103.53	1,850.23	253.30	8.305	
19,500.00	8,862.00	21,398.00	9,935.23	95.72	173.11	120.61	-11,440.17	-370.35	2,110.98	1,858.27	252.72	8.353	
19,547.53	8,862.00	21,398.00	9,935.23	96.06	173.11	120.61	-11,440.17	-370.35	2,116.17	1,863.91	252.27	8.389	
19,548.26	8,862.00	21,398.00	9,935.23	96.14	173.11	120.61	-11,440.17	-370.35	2,116.26	1,863.88	252.38	8.385	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Rule Assigned:** — **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	0.00	0.00	0.00	-88.91	0.38	-19.99	19.99				
100.00	100.00	100.00	100.00	0.28	0.28	-88.91	0.38	-19.99	19.99	19.44	0.55	36.217	
200.00	200.00	200.00	200.00	0.63	0.63	-88.91	0.38	-19.99	19.99	18.72	1.27	15.756	
300.00	300.00	300.00	300.00	0.99	0.99	-88.91	0.38	-19.99	19.99	18.01	1.99	10.068	
400.00	400.00	400.00	400.00	1.35	1.35	-88.91	0.38	-19.99	19.99	17.29	2.70	7.397	
500.00	500.00	500.00	500.00	1.71	1.71	-88.91	0.38	-19.99	19.99	16.57	3.42	5.846	
600.00	600.00	600.00	600.00	2.07	2.07	-88.91	0.38	-19.99	19.99	15.86	4.14	4.833	
700.00	700.00	700.00	700.00	2.43	2.43	-88.91	0.38	-19.99	19.99	15.14	4.85	4.119	
800.00	800.00	800.00	800.00	2.79	2.79	-88.91	0.38	-19.99	19.99	14.42	5.57	3.589	
900.00	900.00	900.00	900.00	3.14	3.14	-88.91	0.38	-19.99	19.99	13.71	6.29	3.180	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	-88.91	0.38	-19.99	19.99	12.99	7.00	2.854	CC
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	115.59	0.38	-19.99	20.69	12.98	7.70	2.685	ES, SF
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	127.16	0.38	-19.99	23.43	15.04	8.39	2.792	
1,300.00	1,299.45	1,299.45	1,299.45	4.51	4.58	140.66	0.38	-19.99	29.53	20.45	9.08	3.252	
1,350.00	1,349.13	1,349.13	1,349.13	4.68	4.75	146.64	0.38	-19.99	34.10	24.67	9.43	3.617	
1,400.00	1,398.73	1,398.73	1,398.73	4.85	4.93	157.66	0.38	-19.99	39.72	29.95	9.78	4.063	
1,500.00	1,497.69	1,497.69	1,497.69	5.19	5.29	172.29	0.38	-19.99	53.59	43.12	10.47	5.117	
1,600.00	1,596.25	1,596.25	1,596.25	5.54	5.64	-179.43	0.38	-19.99	70.45	59.28	11.17	6.305	
1,670.62	1,665.55	1,665.55	1,665.55	5.78	5.89	-175.84	0.38	-19.99	84.06	72.39	11.67	7.203	
1,700.00	1,694.31	1,694.31	1,694.31	5.89	5.99	-176.11	0.38	-19.99	90.01	78.13	11.88	7.579	
1,800.00	1,792.23	1,792.23	1,792.23	6.24	6.34	-176.83	0.38	-19.99	110.28	97.71	12.57	8.770	
1,900.00	1,890.14	1,894.26	1,894.25	6.61	6.69	-177.52	-0.96	-19.20	129.14	115.86	13.28	9.726	
2,000.00	1,988.06	1,997.81	1,997.66	6.97	7.03	-178.43	-5.51	-16.53	144.60	130.64	13.96	10.355	
2,100.00	2,085.97	2,102.32	2,101.76	7.34	7.38	-179.56	-13.36	-11.92	156.65	142.00	14.65	10.695	
2,200.00	2,183.89	2,207.53	2,206.15	7.70	7.73	179.07	-24.57	-5.33	165.28	149.96	15.33	10.784	
2,300.00	2,281.80	2,312.84	2,310.11	8.07	8.08	177.40	-39.09	3.20	170.54	154.54	16.00	10.658	
2,400.00	2,379.72	2,412.64	2,408.34	8.45	8.42	175.73	-54.26	12.11	174.37	157.66	16.71	10.434	
2,500.00	2,477.64	2,512.44	2,506.58	8.82	8.76	174.12	-69.43	21.03	178.35	160.92	17.43	10.235	
2,600.00	2,575.55	2,612.24	2,604.81	9.19	9.10	172.59	-84.61	29.94	182.46	164.32	18.15	10.055	
2,700.00	2,673.47	2,712.04	2,703.05	9.57	9.45	171.12	-99.78	38.86	186.70	167.83	18.87	9.894	
2,800.00	2,771.38	2,811.83	2,801.28	9.95	9.80	169.72	-114.95	47.77	191.05	171.45	19.60	9.749	
2,900.00	2,869.30	2,911.63	2,899.52	10.32	10.15	168.39	-130.12	56.69	195.51	175.18	20.33	9.618	
3,000.00	2,967.21	3,011.43	2,997.75	10.70	10.50	167.11	-145.29	65.60	200.07	179.01	21.06	9.500	
3,100.00	3,065.13	3,111.23	3,095.99	11.08	10.86	165.89	-160.47	74.51	204.73	182.93	21.80	9.392	
3,200.00	3,163.05	3,211.03	3,194.22	11.46	11.22	164.73	-175.64	83.43	209.48	186.94	22.54	9.295	
3,300.00	3,260.96	3,310.83	3,292.46	11.84	11.58	163.62	-190.81	92.34	214.31	191.03	23.28	9.207	
3,400.00	3,358.88	3,410.63	3,390.69	12.22	11.94	162.55	-205.98	101.26	219.21	195.19	24.02	9.126	
3,500.00	3,456.79	3,510.42	3,488.93	12.60	12.30	161.54	-221.16	110.17	224.19	199.42	24.77	9.053	
3,600.00	3,554.71	3,610.22	3,587.16	12.98	12.66	160.57	-236.33	119.09	229.23	203.72	25.51	8.986	
3,700.00	3,652.62	3,710.02	3,685.40	13.36	13.02	159.64	-251.50	128.00	234.34	208.08	26.26	8.924	
3,800.00	3,750.54	3,809.82	3,783.63	13.75	13.39	158.75	-266.67	136.92	239.51	212.50	27.01	8.868	
3,900.00	3,848.45	3,909.62	3,881.87	14.13	13.75	157.89	-281.85	145.83	244.73	216.97	27.76	8.816	
4,000.00	3,946.37	4,009.42	3,980.10	14.51	14.12	157.08	-297.02	154.75	250.01	221.50	28.51	8.769	
4,100.00	4,044.29	4,109.22	4,078.34	14.89	14.49	156.29	-312.19	163.66	255.33	226.07	29.26	8.725	
4,200.00	4,142.20	4,209.02	4,176.57	15.28	14.85	155.54	-327.36	172.57	260.70	230.68	30.02	8.685	
4,300.00	4,240.12	4,308.81	4,274.81	15.66	15.22	154.82	-342.54	181.49	266.11	235.34	30.77	8.648	
4,400.00	4,338.03	4,408.61	4,373.04	16.05	15.59	154.13	-357.71	190.40	271.56	240.03	31.53	8.613	
4,500.00	4,435.95	4,508.41	4,471.28	16.43	15.96	153.47	-372.88	199.32	277.05	244.77	32.28	8.581	
4,600.00	4,533.86	4,608.21	4,569.51	16.81	16.33	152.83	-388.05	208.23	282.58	249.53	33.04	8.552	
4,700.00	4,631.78	4,708.01	4,667.75	17.20	16.70	152.22	-403.23	217.15	288.14	254.34	33.80	8.525	
4,800.00	4,729.69	4,807.81	4,765.98	17.58	17.07	151.63	-418.40	226.06	293.73	259.17	34.56	8.500	
4,900.00	4,827.61	4,907.61	4,864.22	17.97	17.44	151.06	-433.57	234.98	299.35	264.03	35.32	8.476	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
5,000.00	4,925.53	5,007.41	4,962.45	18.35	17.81	150.51	-448.74	243.89	305.00	268.92	36.08	8.454	
5,100.00	5,023.44	5,107.20	5,060.69	18.74	18.19	149.98	-463.92	252.80	310.67	273.83	36.84	8.434	
5,200.00	5,121.36	5,207.00	5,158.92	19.12	18.56	149.47	-479.09	261.72	316.37	278.77	37.60	8.415	
5,300.00	5,219.27	5,306.80	5,257.16	19.51	18.93	148.98	-494.26	270.63	322.10	283.74	38.36	8.397	
5,400.00	5,317.19	5,406.60	5,355.39	19.89	19.30	148.51	-509.43	279.55	327.84	288.72	39.12	8.381	
5,500.00	5,415.10	5,506.40	5,453.63	20.28	19.68	148.05	-524.61	288.46	333.61	293.73	39.88	8.365	
5,600.00	5,513.02	5,606.20	5,551.86	20.66	20.05	147.61	-539.78	297.38	339.40	298.76	40.64	8.351	
5,700.00	5,610.93	5,706.00	5,650.10	21.05	20.43	147.19	-554.95	306.29	345.21	303.81	41.41	8.337	
5,800.00	5,708.85	5,805.79	5,748.33	21.43	20.80	146.77	-570.12	315.21	351.04	308.87	42.17	8.325	
5,900.00	5,806.77	5,905.59	5,846.57	21.82	21.17	146.37	-585.30	324.12	356.88	313.95	42.93	8.313	
6,000.00	5,904.68	6,005.39	5,944.80	22.21	21.55	145.99	-600.47	333.03	362.75	319.05	43.69	8.302	
6,100.00	6,002.60	6,105.19	6,043.04	22.59	21.92	145.61	-615.64	341.95	368.62	324.17	44.46	8.291	
6,200.00	6,100.51	6,204.99	6,141.27	22.98	22.30	145.25	-630.81	350.86	374.52	329.29	45.22	8.282	
6,300.00	6,198.43	6,304.79	6,239.51	23.36	22.67	144.90	-645.98	359.78	380.42	334.44	45.99	8.272	
6,400.00	6,296.34	6,404.59	6,337.74	23.75	23.05	144.56	-661.16	368.69	386.34	339.59	46.75	8.264	
6,500.00	6,394.26	6,504.39	6,435.98	24.14	23.43	144.23	-676.33	377.61	392.28	344.76	47.52	8.256	
6,600.00	6,492.17	6,604.18	6,534.21	24.52	23.80	143.91	-691.50	386.52	398.23	349.95	48.28	8.248	
6,700.00	6,590.09	6,703.98	6,632.45	24.91	24.18	143.60	-706.67	395.44	404.18	355.14	49.05	8.241	
6,800.00	6,688.01	6,803.78	6,730.68	25.29	24.55	143.30	-721.85	404.35	410.15	360.34	49.81	8.234	
6,900.00	6,785.92	6,903.58	6,828.92	25.68	24.93	143.01	-737.02	413.26	416.14	365.56	50.58	8.228	
7,000.00	6,883.84	7,003.38	6,927.15	26.07	25.31	142.72	-752.19	422.18	422.13	370.79	51.34	8.222	
7,100.00	6,981.75	7,103.18	7,025.39	26.45	25.68	142.45	-767.36	431.09	428.13	376.02	52.11	8.216	
7,200.00	7,079.67	7,202.98	7,123.62	26.84	26.06	142.18	-782.54	440.01	434.14	381.27	52.87	8.211	
7,300.00	7,177.58	7,302.78	7,221.86	27.23	26.44	141.92	-797.71	448.92	440.16	386.52	53.64	8.206	
7,400.00	7,275.50	7,400.00	7,317.56	27.61	26.80	141.67	-812.49	457.61	446.20	391.81	54.39	8.203	
7,500.00	7,373.41	7,493.67	7,410.03	28.00	27.16	141.61	-825.32	465.15	453.25	398.13	55.12	8.223	
7,600.00	7,471.33	7,584.97	7,500.59	28.39	27.49	141.85	-835.32	471.02	462.11	406.29	55.82	8.279	
7,700.00	7,569.25	7,675.79	7,590.99	28.77	27.82	142.38	-842.78	475.41	472.80	416.31	56.49	8.370	
7,764.22	7,632.13	7,733.78	7,648.84	29.02	28.03	142.85	-846.26	477.45	480.65	423.75	56.91	8.447	
7,800.00	7,667.21	7,765.98	7,680.99	29.16	28.15	143.20	-847.75	478.33	485.20	428.07	57.13	8.493	
7,900.00	7,765.68	7,855.76	7,770.73	29.54	28.45	144.15	-850.27	479.80	497.34	439.60	57.73	8.615	
8,000.00	7,864.70	7,980.94	7,895.67	29.91	28.89	144.84	-855.46	481.77	507.04	448.33	58.71	8.637	
8,100.00	7,964.15	8,141.95	8,050.13	30.28	29.51	141.44	-896.37	496.66	503.39	443.73	59.66	8.438	
8,200.00	8,063.90	8,275.68	8,165.13	30.63	30.06	134.47	-959.97	519.81	488.91	428.54	60.37	8.099	
8,300.00	8,163.83	8,375.46	8,239.00	30.98	30.47	126.58	-1,022.81	542.68	472.20	410.90	61.30	7.703	
8,350.17	8,214.00	8,414.29	8,264.43	31.14	30.63	-104.94	-1,050.38	552.72	465.68	403.92	61.76	7.540	
8,400.00	8,263.77	8,448.86	8,285.35	31.31	30.77	104.68	-1,076.23	562.13	462.37	400.26	62.11	7.444	
8,415.08	8,278.77	8,459.04	8,291.19	31.36	30.81	103.74	-1,084.07	564.98	462.19	400.00	62.19	7.432	
8,450.00	8,313.33	8,482.19	8,303.91	31.49	30.90	101.49	-1,102.24	571.59	463.17	400.86	62.31	7.433	
8,500.00	8,362.13	8,514.44	8,320.31	31.69	31.03	98.11	-1,128.33	581.09	467.84	405.53	62.31	7.508	
8,550.00	8,409.80	8,545.80	8,334.74	31.89	31.15	94.56	-1,154.49	590.61	476.03	413.92	62.11	7.664	
8,600.00	8,455.99	8,576.43	8,347.34	32.09	31.27	90.88	-1,180.72	600.16	487.29	425.57	61.72	7.895	
8,650.00	8,500.33	8,606.45	8,358.22	32.31	31.39	87.14	-1,207.01	609.72	501.16	439.97	61.19	8.191	
8,700.00	8,542.50	8,635.96	8,367.48	32.53	31.50	83.38	-1,233.33	619.31	517.12	456.58	60.54	8.542	
8,750.00	8,582.16	8,664.40	8,375.09	32.75	31.60	79.71	-1,259.10	628.64	534.72	474.89	59.82	8.938	
8,800.00	8,619.02	8,692.29	8,381.97	32.97	31.70	76.23	-1,284.66	637.43	553.56	494.44	59.12	9.363	
8,850.00	8,652.80	8,720.90	8,388.63	33.19	31.81	72.97	-1,311.15	645.94	573.16	514.66	58.50	9.797	
8,900.00	8,683.24	8,750.04	8,394.99	33.42	31.91	70.00	-1,338.40	654.07	593.09	535.09	58.00	10.226	
8,950.00	8,710.11	8,779.51	8,400.99	33.64	32.02	67.36	-1,366.21	661.73	613.01	555.38	57.63	10.637	
9,000.00	8,733.20	8,800.00	8,404.89	33.86	32.09	65.13	-1,385.70	666.73	632.74	575.54	57.21	11.060	
9,050.00	8,752.35	8,838.76	8,411.69	34.08	32.23	63.11	-1,422.85	675.43	651.78	594.47	57.31	11.373	
9,100.00	8,767.39	8,868.22	8,416.33	34.29	32.34	61.48	-1,451.33	681.38	670.29	612.93	57.36	11.686	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
9,100.17	8,767.43	8,868.32	8,416.34	34.29	32.34	61.48	-1,451.42	681.40	670.35	612.99	57.36	11.687	
9,200.00	8,791.66	8,926.74	8,424.20	34.71	32.55	60.94	-1,508.43	691.48	704.96	647.38	57.58	12.244	
9,300.00	8,812.57	9,000.00	8,431.49	35.13	32.80	60.50	-1,580.70	700.88	736.52	678.52	58.00	12.699	
9,400.00	8,829.97	9,043.17	8,434.44	35.54	32.95	59.99	-1,623.59	704.72	764.14	706.29	57.85	13.209	
9,500.00	8,843.72	9,100.00	8,436.80	35.95	33.14	59.62	-1,680.28	707.83	788.49	730.59	57.89	13.619	
9,600.00	8,853.72	9,166.16	8,437.43	36.33	33.36	59.34	-1,746.42	708.76	809.17	751.15	58.03	13.945	
9,700.00	8,859.89	9,265.17	8,437.43	36.70	33.69	59.20	-1,845.43	708.96	822.95	764.35	58.60	14.045	
9,800.00	8,862.18	9,365.00	8,437.43	37.05	34.03	59.14	-1,945.27	709.16	828.07	768.91	59.16	13.998	
9,809.00	8,862.20	9,374.00	8,437.43	37.08	34.06	59.14	-1,954.27	709.17	828.11	768.90	59.21	13.987	
9,900.00	8,862.20	9,465.00	8,437.42	37.39	34.39	59.14	-2,045.27	709.35	828.10	768.37	59.73	13.865	
10,000.00	8,862.19	9,565.00	8,437.42	37.74	34.76	59.14	-2,145.27	709.55	828.09	767.76	60.33	13.726	
10,100.00	8,862.19	9,665.00	8,437.41	38.10	35.14	59.14	-2,245.27	709.74	828.08	767.12	60.97	13.583	
10,200.00	8,862.19	9,765.00	8,437.41	38.48	35.54	59.14	-2,345.27	709.94	828.08	766.44	61.64	13.435	
10,300.00	8,862.19	9,865.00	8,437.40	38.86	35.94	59.14	-2,445.27	710.14	828.07	765.74	62.33	13.284	
10,400.00	8,862.19	9,965.00	8,437.40	39.25	36.36	59.14	-2,545.27	710.33	828.06	765.00	63.06	13.131	
10,500.00	8,862.18	10,065.00	8,437.40	39.66	36.79	59.14	-2,645.27	710.53	828.05	764.23	63.82	12.975	
10,600.00	8,862.18	10,165.00	8,437.39	40.07	37.23	59.14	-2,745.27	710.73	828.05	763.44	64.61	12.817	
10,700.00	8,862.18	10,265.00	8,437.39	40.49	37.68	59.14	-2,845.27	710.92	828.04	762.62	65.42	12.658	
10,800.00	8,862.18	10,365.00	8,437.38	40.93	38.14	59.13	-2,945.27	711.12	828.03	761.78	66.25	12.498	
10,900.00	8,862.18	10,465.00	8,437.38	41.37	38.61	59.13	-3,045.27	711.32	828.02	760.91	67.12	12.337	
11,000.00	8,862.17	10,565.00	8,437.37	41.82	39.09	59.13	-3,145.27	711.51	828.02	760.01	68.00	12.176	
11,100.00	8,862.17	10,665.00	8,437.37	42.28	39.58	59.13	-3,245.27	711.71	828.01	759.10	68.91	12.015	
11,200.00	8,862.17	10,765.00	8,437.36	42.75	40.07	59.13	-3,345.27	711.90	828.00	758.16	69.84	11.855	
11,300.00	8,862.17	10,865.00	8,437.36	43.22	40.58	59.13	-3,445.27	712.10	828.00	757.20	70.80	11.696	
11,400.00	8,862.17	10,965.00	8,437.36	43.71	41.09	59.13	-3,545.27	712.30	827.99	756.22	71.77	11.537	
11,500.00	8,862.16	11,065.00	8,437.35	44.20	41.61	59.13	-3,645.27	712.49	827.98	755.22	72.76	11.380	
11,600.00	8,862.16	11,165.00	8,437.35	44.70	42.14	59.13	-3,745.27	712.69	827.97	754.20	73.77	11.224	
11,700.00	8,862.16	11,265.00	8,437.34	45.20	42.67	59.13	-3,845.27	712.89	827.97	753.17	74.80	11.069	
11,800.00	8,862.16	11,365.00	8,437.34	45.72	43.21	59.13	-3,945.27	713.08	827.96	752.11	75.85	10.916	
11,900.00	8,862.16	11,465.00	8,437.33	46.24	43.76	59.13	-4,045.26	713.28	827.95	751.04	76.91	10.765	
12,000.00	8,862.15	11,565.00	8,437.33	46.76	44.31	59.13	-4,145.26	713.48	827.94	749.96	77.99	10.616	
12,100.00	8,862.15	11,665.00	8,437.33	47.29	44.87	59.13	-4,245.26	713.67	827.94	748.85	79.08	10.469	
12,200.00	8,862.15	11,765.00	8,437.32	47.83	45.44	59.13	-4,345.26	713.87	827.93	747.74	80.19	10.325	
12,300.00	8,862.15	11,865.00	8,437.32	48.38	46.01	59.13	-4,445.26	714.07	827.92	746.61	81.31	10.182	
12,400.00	8,862.15	11,965.00	8,437.31	48.93	46.59	59.13	-4,545.26	714.26	827.91	745.47	82.45	10.042	
12,500.00	8,862.14	12,065.00	8,437.31	49.48	47.17	59.13	-4,645.26	714.46	827.91	744.31	83.60	9.904	
12,600.00	8,862.14	12,165.00	8,437.30	50.04	47.76	59.13	-4,745.26	714.65	827.90	743.14	84.76	9.768	
12,700.00	8,862.14	12,265.00	8,437.30	50.61	48.35	59.13	-4,845.26	714.85	827.89	741.96	85.93	9.635	
12,800.00	8,862.14	12,365.00	8,437.29	51.18	48.95	59.12	-4,945.26	715.05	827.88	740.77	87.11	9.503	
12,900.00	8,862.14	12,465.00	8,437.29	51.76	49.55	59.12	-5,045.26	715.24	827.88	739.57	88.31	9.375	
13,000.00	8,862.13	12,565.00	8,437.29	52.34	50.16	59.12	-5,145.26	715.44	827.87	738.35	89.51	9.248	
13,100.00	8,862.13	12,665.00	8,437.28	52.92	50.77	59.12	-5,245.26	715.64	827.86	737.13	90.73	9.124	
13,200.00	8,862.13	12,765.00	8,437.28	53.51	51.38	59.12	-5,345.26	715.83	827.85	735.90	91.96	9.003	
13,300.00	8,862.13	12,865.00	8,437.27	54.10	52.00	59.12	-5,445.26	716.03	827.85	734.66	93.19	8.883	
13,400.00	8,862.12	12,965.00	8,437.27	54.70	52.62	59.12	-5,545.26	716.23	827.84	733.40	94.43	8.766	
13,500.00	8,862.12	13,065.00	8,437.26	55.30	53.25	59.12	-5,645.26	716.42	827.83	732.14	95.69	8.652	
13,600.00	8,862.12	13,165.00	8,437.26	55.91	53.88	59.12	-5,745.26	716.62	827.82	730.88	96.95	8.539	
13,700.00	8,862.12	13,265.00	8,437.26	56.52	54.51	59.12	-5,845.26	716.81	827.82	729.60	98.21	8.429	
13,800.00	8,862.12	13,365.00	8,437.25	57.13	55.15	59.12	-5,945.26	717.01	827.81	728.32	99.49	8.320	
13,900.00	8,862.11	13,465.00	8,437.25	57.75	55.79	59.12	-6,045.26	717.21	827.80	727.03	100.77	8.214	
14,000.00	8,862.11	13,565.00	8,437.24	58.37	56.43	59.12	-6,145.26	717.40	827.79	725.73	102.06	8.110	
14,100.00	8,862.11	13,665.00	8,437.24	58.99	57.08	59.12	-6,245.26	717.60	827.79	724.42	103.36	8.009	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
14,200.00	8,862.11	13,765.00	8,437.23	59.62	57.73	59.12	-6,345.26	717.80	827.78	723.11	104.67	7.909	
14,300.00	8,862.11	13,865.00	8,437.23	60.25	58.38	59.12	-6,445.26	717.99	827.77	721.80	105.98	7.811	
14,400.00	8,862.10	13,965.00	8,437.22	60.88	59.03	59.12	-6,545.26	718.19	827.76	720.47	107.29	7.715	
14,500.00	8,862.10	14,065.00	8,437.22	61.52	59.69	59.12	-6,645.26	718.39	827.76	719.14	108.61	7.621	
14,600.00	8,862.10	14,165.00	8,437.22	62.16	60.35	59.12	-6,745.26	718.58	827.75	717.81	109.94	7.529	
14,700.00	8,862.10	14,265.00	8,437.21	62.80	61.01	59.12	-6,845.26	718.78	827.74	716.47	111.27	7.439	
14,800.00	8,862.10	14,365.00	8,437.21	63.44	61.67	59.12	-6,945.26	718.97	827.73	715.12	112.61	7.350	
14,900.00	8,862.09	14,465.00	8,437.20	64.09	62.34	59.11	-7,045.26	719.17	827.73	713.77	113.96	7.264	
15,000.00	8,862.09	14,565.00	8,437.20	64.74	63.01	59.11	-7,145.26	719.37	827.72	712.42	115.30	7.179	
15,100.00	8,862.09	14,665.00	8,437.19	65.39	63.68	59.11	-7,245.26	719.56	827.71	711.06	116.66	7.095	
15,200.00	8,862.09	14,765.00	8,437.19	66.05	64.35	59.11	-7,345.26	719.76	827.70	709.69	118.01	7.014	
15,300.00	8,862.09	14,865.00	8,437.19	66.70	65.03	59.11	-7,445.26	719.96	827.70	708.32	119.38	6.934	
15,400.00	8,862.08	14,965.00	8,437.18	67.36	65.70	59.11	-7,545.26	720.15	827.69	706.95	120.74	6.855	
15,500.00	8,862.08	15,065.00	8,437.18	68.02	66.38	59.11	-7,645.26	720.35	827.68	705.57	122.11	6.778	
15,600.00	8,862.08	15,165.00	8,437.17	68.69	67.06	59.11	-7,745.26	720.55	827.67	704.19	123.49	6.703	
15,700.00	8,862.08	15,265.00	8,437.17	69.35	67.74	59.11	-7,845.26	720.74	827.67	702.80	124.86	6.629	
15,800.00	8,862.08	15,365.00	8,437.16	70.02	68.43	59.11	-7,945.26	720.94	827.66	701.41	126.25	6.556	
15,900.00	8,862.07	15,465.00	8,437.16	70.69	69.11	59.11	-8,045.26	721.14	827.65	700.02	127.63	6.485	
16,000.00	8,862.07	15,565.00	8,437.15	71.36	69.80	59.11	-8,145.26	721.33	827.64	698.62	129.02	6.415	
16,100.00	8,862.07	15,665.00	8,437.15	72.03	70.49	59.11	-8,245.26	721.53	827.64	697.22	130.41	6.346	
16,200.00	8,862.07	15,765.00	8,437.15	72.71	71.18	59.11	-8,345.26	721.72	827.63	695.82	131.81	6.279	
16,300.00	8,862.07	15,865.00	8,437.14	73.38	71.87	59.11	-8,445.26	721.92	827.62	694.42	133.21	6.213	
16,400.00	8,862.06	15,965.00	8,437.14	74.06	72.57	59.11	-8,545.26	722.12	827.61	693.01	134.61	6.148	
16,500.00	8,862.06	16,065.00	8,437.13	74.74	73.26	59.11	-8,645.26	722.31	827.61	691.59	136.01	6.085	
16,600.00	8,862.06	16,165.00	8,437.13	75.42	73.96	59.11	-8,745.26	722.51	827.60	690.18	137.42	6.022	
16,700.00	8,862.06	16,265.00	8,437.12	76.10	74.66	59.11	-8,845.26	722.71	827.59	688.76	138.83	5.961	
16,800.00	8,862.06	16,365.00	8,437.12	76.79	75.35	59.11	-8,945.26	722.90	827.59	687.34	140.24	5.901	
16,900.00	8,862.05	16,465.00	8,437.12	77.47	76.06	59.10	-9,045.26	723.10	827.58	685.92	141.66	5.842	
17,000.00	8,862.05	16,565.00	8,437.11	78.16	76.76	59.10	-9,145.26	723.30	827.57	684.49	143.08	5.784	
17,100.00	8,862.05	16,665.00	8,437.11	78.85	77.46	59.10	-9,245.26	723.49	827.56	683.06	144.50	5.727	
17,200.00	8,862.05	16,765.00	8,437.10	79.54	78.16	59.10	-9,345.25	723.69	827.56	681.63	145.92	5.671	
17,300.00	8,862.05	16,865.00	8,437.10	80.23	78.87	59.10	-9,445.25	723.88	827.55	680.20	147.35	5.616	
17,400.00	8,862.04	16,965.00	8,437.09	80.92	79.57	59.10	-9,545.25	724.08	827.54	678.77	148.77	5.562	
17,500.00	8,862.04	17,065.00	8,437.09	81.62	80.28	59.10	-9,645.25	724.28	827.53	677.33	150.20	5.509	
17,600.00	8,862.04	17,165.00	8,437.08	82.31	80.99	59.10	-9,745.25	724.47	827.53	675.89	151.64	5.457	
17,700.00	8,862.04	17,265.00	8,437.08	83.01	81.70	59.10	-9,845.25	724.67	827.52	674.45	153.07	5.406	
17,800.00	8,862.04	17,365.00	8,437.08	83.71	82.41	59.10	-9,945.25	724.87	827.51	673.00	154.51	5.356	
17,900.00	8,862.03	17,465.00	8,437.07	84.41	83.12	59.10	-10,045.25	725.06	827.50	671.56	155.94	5.306	
18,000.00	8,862.03	17,565.00	8,437.07	85.11	83.83	59.10	-10,145.25	725.26	827.50	670.11	157.38	5.258	
18,100.00	8,862.03	17,665.00	8,437.06	85.81	84.54	59.10	-10,245.25	725.46	827.49	668.66	158.83	5.210	
18,200.00	8,862.03	17,765.00	8,437.06	86.51	85.26	59.10	-10,345.25	725.65	827.48	667.21	160.27	5.163	
18,300.00	8,862.03	17,865.00	8,437.05	87.21	85.97	59.10	-10,445.25	725.85	827.47	665.76	161.71	5.117	
18,400.00	8,862.02	17,965.00	8,437.05	87.92	86.69	59.10	-10,545.25	726.05	827.47	664.30	163.16	5.071	
18,500.00	8,862.02	18,065.00	8,437.05	88.62	87.40	59.10	-10,645.25	726.24	827.46	662.85	164.61	5.027	
18,600.00	8,862.02	18,165.00	8,437.04	89.33	88.12	59.10	-10,745.25	726.44	827.45	661.39	166.06	4.983	
18,700.00	8,862.02	18,265.00	8,437.04	90.03	88.84	59.10	-10,845.25	726.63	827.44	659.93	167.51	4.940	
18,800.00	8,862.02	18,365.00	8,437.03	90.74	89.56	59.10	-10,945.25	726.83	827.44	658.47	168.97	4.897	
18,900.00	8,862.01	18,465.00	8,437.03	91.45	90.28	59.09	-11,045.25	727.03	827.43	657.01	170.42	4.855	
19,000.00	8,862.01	18,565.00	8,437.02	92.16	91.00	59.09	-11,145.25	727.22	827.42	655.54	171.88	4.814	
19,100.00	8,862.01	18,665.00	8,437.02	92.87	91.72	59.09	-11,245.25	727.42	827.41	654.08	173.34	4.773	
19,200.00	8,862.01	18,765.00	8,437.01	93.58	92.44	59.09	-11,345.25	727.62	827.41	652.61	174.79	4.734	
19,300.00	8,862.01	18,865.00	8,437.01	94.30	93.16	59.09	-11,445.25	727.81	827.40	651.14	176.26	4.694	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 3H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,400.00	8,862.00	18,965.00	8,437.01	95.01	93.89	59.09	-11,545.25	728.01	827.39	649.67	177.72	4.656	
19,500.00	8,862.00	19,065.00	8,437.00	95.72	94.61	59.09	-11,645.25	728.21	827.38	648.20	179.18	4.618	
19,538.86	8,862.00	19,103.82	8,437.00	96.00	94.91	59.09	-11,684.06	728.28	827.38	647.64	179.75	4.603	
19,547.53	8,862.00	19,103.82	8,437.00	96.06	94.91	59.09	-11,684.06	728.28	827.43	647.85	179.58	4.608	
19,548.26	8,862.00	19,103.82	8,437.00	96.14	94.91	59.09	-11,684.06	728.28	827.43	647.89	179.54	4.609	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Rule Assigned:** — **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	0.00	0.00	0.00	91.09	-0.38	19.99	19.99				
100.00	100.00	100.00	100.00	0.28	0.28	91.09	-0.38	19.99	19.99	19.44	0.55	36.217	
200.00	200.00	200.00	200.00	0.63	0.63	91.09	-0.38	19.99	19.99	18.72	1.27	15.756	
300.00	300.00	300.00	300.00	0.99	0.99	91.09	-0.38	19.99	19.99	18.01	1.99	10.068	
400.00	400.00	400.00	400.00	1.35	1.35	91.09	-0.38	19.99	19.99	17.29	2.70	7.397	
500.00	500.00	500.00	500.00	1.71	1.71	91.09	-0.38	19.99	19.99	16.57	3.42	5.846	
600.00	600.00	600.00	600.00	2.07	2.07	91.09	-0.38	19.99	19.99	15.86	4.14	4.833	
700.00	700.00	700.00	700.00	2.43	2.43	91.09	-0.38	19.99	19.99	15.14	4.85	4.119	
800.00	800.00	800.00	800.00	2.79	2.79	91.09	-0.38	19.99	19.99	14.42	5.57	3.589	
900.00	900.00	900.00	900.00	3.14	3.14	91.09	-0.38	19.99	19.99	13.71	6.29	3.180	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.09	-0.38	19.99	19.99	12.99	7.00	2.854	
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	-73.73	-0.38	19.99	19.43	11.73	7.70	2.523	
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	-89.34	-0.38	19.99	18.66	10.27	8.39	2.224	
1,203.07	1,202.90	1,202.90	1,202.90	4.18	4.23	-90.00	-0.38	19.99	18.65	10.24	8.41	2.218	CC, ES, SF
1,300.00	1,299.45	1,299.45	1,299.45	4.51	4.58	-114.38	-0.38	19.99	20.50	11.42	9.08	2.258	
1,350.00	1,349.13	1,349.13	1,349.13	4.68	4.75	-126.99	-0.38	19.99	23.42	13.99	9.43	2.484	
1,400.00	1,398.73	1,398.73	1,398.73	4.85	4.93	-131.54	-0.38	19.99	27.46	17.68	9.78	2.808	
1,500.00	1,497.69	1,497.69	1,497.69	5.19	5.29	-139.10	-0.38	19.99	37.74	27.26	10.48	3.602	
1,600.00	1,596.25	1,596.25	1,596.25	5.54	5.64	-145.06	-0.38	19.99	51.17	39.99	11.18	4.579	
1,670.62	1,665.55	1,665.55	1,665.55	5.78	5.89	-148.48	-0.38	19.99	62.63	50.96	11.67	5.367	
1,700.00	1,694.31	1,694.31	1,694.31	5.89	5.99	-151.10	-0.38	19.99	67.82	55.94	11.88	5.710	
1,800.00	1,792.23	1,792.23	1,792.23	6.24	6.34	-157.62	-0.38	19.99	86.23	73.65	12.58	6.856	
1,900.00	1,890.14	1,890.14	1,890.14	6.61	6.69	-161.82	-0.38	19.99	105.34	92.06	13.28	7.933	
2,000.00	1,988.06	1,988.06	1,988.06	6.97	7.04	-164.73	-0.38	19.99	124.83	110.85	13.98	8.926	
2,100.00	2,085.97	2,090.51	2,090.50	7.34	7.40	-166.92	-1.54	20.83	143.19	128.49	14.70	9.742	
2,200.00	2,183.89	2,194.78	2,194.63	7.70	7.74	-168.64	-5.74	23.87	158.16	142.76	15.40	10.273	
2,300.00	2,281.80	2,300.07	2,299.53	8.07	8.09	-170.11	-13.10	29.20	169.60	153.52	16.08	10.544	
2,400.00	2,379.72	2,406.11	2,404.75	8.45	8.44	-171.46	-23.66	36.84	177.48	160.71	16.76	10.586	
2,500.00	2,477.64	2,512.61	2,509.88	8.82	8.80	-172.80	-37.43	46.81	181.74	164.31	17.43	10.425	
2,600.00	2,575.55	2,619.28	2,614.47	9.19	9.16	-174.20	-54.39	59.08	182.39	164.30	18.09	10.084	
2,700.00	2,673.47	2,720.78	2,713.44	9.57	9.51	-175.63	-72.66	72.30	180.50	161.72	18.78	9.609	
2,800.00	2,771.38	2,820.66	2,810.80	9.95	9.85	-177.06	-90.72	85.37	178.63	159.12	19.51	9.158	
2,900.00	2,869.30	2,920.54	2,908.16	10.32	10.20	-178.53	-108.78	98.44	176.86	156.63	20.23	8.742	
3,000.00	2,967.21	3,020.42	3,005.52	10.70	10.55	179.97	-126.84	111.52	175.22	154.26	20.96	8.360	
3,100.00	3,065.13	3,120.31	3,102.88	11.08	10.90	178.45	-144.90	124.59	173.70	152.00	21.69	8.007	
3,200.00	3,163.05	3,220.19	3,200.24	11.46	11.26	176.90	-162.97	137.66	172.30	149.87	22.43	7.681	
3,300.00	3,260.96	3,320.07	3,297.60	11.84	11.62	175.32	-181.03	150.73	171.03	147.86	23.17	7.380	
3,400.00	3,358.88	3,419.95	3,394.96	12.22	11.98	173.73	-199.09	163.81	169.89	145.97	23.92	7.103	
3,500.00	3,456.79	3,519.83	3,492.32	12.60	12.34	172.11	-217.15	176.88	168.89	144.22	24.67	6.847	
3,600.00	3,554.71	3,619.71	3,589.68	12.98	12.71	170.48	-235.21	189.95	168.02	142.60	25.42	6.610	
3,700.00	3,652.62	3,719.59	3,687.04	13.36	13.07	168.83	-253.27	203.02	167.29	141.12	26.17	6.392	
3,800.00	3,750.54	3,819.47	3,784.40	13.75	13.44	167.17	-271.34	216.09	166.70	139.77	26.93	6.190	
3,900.00	3,848.45	3,919.35	3,881.76	14.13	13.81	165.49	-289.40	229.17	166.25	138.56	27.69	6.004	
4,000.00	3,946.37	4,019.23	3,979.12	14.51	14.18	163.81	-307.46	242.24	165.95	137.50	28.45	5.833	
4,100.00	4,044.29	4,119.11	4,076.48	14.89	14.55	162.13	-325.52	255.31	165.79	136.57	29.22	5.675	
4,162.16	4,105.15	4,181.20	4,137.00	15.13	14.79	161.08	-336.75	263.44	165.76	136.07	29.69	5.583	
4,200.00	4,142.20	4,218.99	4,173.84	15.28	14.93	160.44	-343.58	268.38	165.77	135.79	29.98	5.529	
4,300.00	4,240.12	4,318.87	4,271.20	15.66	15.30	158.75	-361.64	281.46	165.89	135.15	30.75	5.395	
4,400.00	4,338.03	4,418.75	4,368.56	16.05	15.68	157.07	-379.71	294.53	166.16	134.65	31.52	5.272	
4,500.00	4,435.95	4,518.63	4,465.92	16.43	16.05	155.40	-397.77	307.60	166.58	134.29	32.29	5.159	
4,600.00	4,533.86	4,618.51	4,563.28	16.81	16.43	153.73	-415.83	320.67	167.13	134.07	33.06	5.055	
4,700.00	4,631.78	4,718.39	4,660.64	17.20	16.81	152.08	-433.89	333.74	167.83	133.99	33.83	4.960	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
4,800.00	4,729.69	4,818.27	4,758.00	17.58	17.18	150.44	-451.95	346.82	168.66	134.05	34.61	4.873	
4,900.00	4,827.61	4,918.15	4,855.36	17.97	17.56	148.82	-470.01	359.89	169.63	134.25	35.38	4.794	
5,000.00	4,925.53	5,018.04	4,952.72	18.35	17.94	147.22	-488.08	372.96	170.74	134.58	36.16	4.722	
5,100.00	5,023.44	5,117.92	5,050.08	18.74	18.32	145.64	-506.14	386.03	171.98	135.04	36.94	4.656	
5,200.00	5,121.36	5,217.80	5,147.44	19.12	18.70	144.08	-524.20	399.10	173.34	135.63	37.72	4.596	
5,300.00	5,219.27	5,317.68	5,244.80	19.51	19.08	142.55	-542.26	412.18	174.84	136.34	38.49	4.542	
5,400.00	5,317.19	5,417.56	5,342.16	19.89	19.47	141.05	-560.32	425.25	176.45	137.18	39.27	4.493	
5,500.00	5,415.10	5,517.44	5,439.52	20.28	19.85	139.58	-578.38	438.32	178.19	138.14	40.05	4.449	
5,600.00	5,513.02	5,617.32	5,536.88	20.66	20.23	138.13	-596.45	451.39	180.04	139.21	40.83	4.410	
5,700.00	5,610.93	5,717.20	5,634.24	21.05	20.61	136.71	-614.51	464.47	182.00	140.39	41.61	4.374	
5,800.00	5,708.85	5,817.08	5,731.60	21.43	21.00	135.33	-632.57	477.54	184.07	141.69	42.39	4.343	
5,900.00	5,806.77	5,916.96	5,828.96	21.82	21.38	133.98	-650.63	490.61	186.25	143.08	43.17	4.315	
6,000.00	5,904.68	6,016.84	5,926.32	22.21	21.76	132.66	-668.69	503.68	188.53	144.58	43.94	4.290	
6,100.00	6,002.60	6,116.72	6,023.68	22.59	22.15	131.37	-686.76	516.75	190.91	146.18	44.72	4.269	
6,200.00	6,100.51	6,216.60	6,121.04	22.98	22.53	130.11	-704.82	529.83	193.38	147.88	45.50	4.250	
6,300.00	6,198.43	6,316.48	6,218.40	23.36	22.92	128.89	-722.88	542.90	195.94	149.66	46.28	4.234	
6,400.00	6,296.34	6,416.36	6,315.76	23.75	23.30	127.69	-740.94	555.97	198.59	151.53	47.06	4.220	
6,500.00	6,394.26	6,513.49	6,410.75	24.14	23.67	126.95	-757.33	567.83	201.97	154.14	47.82	4.223	
6,600.00	6,492.17	6,610.42	6,506.19	24.52	24.04	127.05	-771.08	577.78	206.80	158.23	48.57	4.258	
6,700.00	6,590.09	6,707.09	6,601.87	24.91	24.40	127.95	-782.17	585.81	213.11	163.81	49.30	4.323	
6,800.00	6,688.01	6,803.27	6,697.48	25.29	24.75	129.54	-790.62	591.92	221.02	171.01	50.01	4.420	
6,900.00	6,785.92	6,900.00	6,793.94	25.68	25.09	131.74	-796.48	596.17	230.75	180.05	50.70	4.551	
7,000.00	6,883.84	6,993.33	6,887.18	26.07	25.42	134.32	-799.63	598.45	242.57	191.25	51.32	4.726	
7,100.00	6,981.75	7,090.03	6,983.87	26.45	25.75	137.21	-800.87	599.09	256.63	204.66	51.98	4.938	
7,200.00	7,079.67	7,199.36	7,092.01	26.84	26.14	137.30	-815.49	602.06	268.99	216.11	52.89	5.086	
7,300.00	7,177.58	7,306.00	7,192.90	27.23	26.55	133.34	-848.86	608.85	278.21	224.46	53.74	5.176	
7,400.00	7,275.50	7,403.37	7,278.08	27.61	26.94	126.62	-894.85	618.21	287.72	233.25	54.47	5.283	
7,500.00	7,373.41	7,487.91	7,344.68	28.00	27.29	118.81	-945.74	628.56	302.76	248.00	54.76	5.529	
7,600.00	7,471.33	7,559.05	7,394.31	28.39	27.58	111.27	-995.63	638.72	327.90	273.71	54.19	6.051	
7,700.00	7,569.25	7,618.04	7,430.42	28.77	27.81	104.73	-1,041.31	648.01	365.29	312.65	52.63	6.941	
7,764.22	7,632.13	7,650.00	7,447.92	29.02	27.94	101.19	-1,067.51	653.34	395.67	344.44	51.23	7.723	
7,800.00	7,667.21	7,666.69	7,456.46	29.16	28.00	99.79	-1,081.56	656.20	414.55	364.15	50.40	8.226	
7,900.00	7,765.68	7,700.00	7,472.24	29.54	28.14	97.57	-1,110.30	662.04	473.84	426.23	47.61	9.953	
8,000.00	7,864.70	7,737.12	7,487.79	29.91	28.28	95.29	-1,143.33	668.76	541.22	495.83	45.38	11.925	
8,100.00	7,964.15	7,761.97	7,496.96	30.28	28.37	94.73	-1,165.96	673.37	615.17	572.02	43.15	14.256	
8,200.00	8,063.90	7,781.71	7,503.52	30.63	28.45	95.10	-1,184.19	677.08	694.17	652.92	41.25	16.829	
8,300.00	8,163.83	7,800.00	7,509.03	30.98	28.52	95.99	-1,201.29	680.56	777.05	737.28	39.77	19.536	
8,350.17	8,214.00	7,800.00	7,509.03	31.14	28.52	-130.24	-1,201.29	680.56	819.80	780.93	38.88	21.086	
8,400.00	8,263.77	7,810.57	7,511.96	31.31	28.55	72.99	-1,211.24	682.58	862.68	824.27	38.41	22.458	
8,450.00	8,313.33	7,816.16	7,513.43	31.49	28.58	64.65	-1,216.52	683.65	905.69	867.89	37.80	23.959	
8,500.00	8,362.13	7,816.16	7,513.43	31.69	28.58	57.45	-1,216.52	683.65	948.43	911.39	37.05	25.601	
8,550.00	8,409.80	7,845.05	7,520.60	31.89	28.68	49.96	-1,243.98	689.07	989.89	952.72	37.16	26.637	
8,600.00	8,455.99	7,859.94	7,524.05	32.09	28.73	44.46	-1,258.21	691.74	1,030.40	993.54	36.86	27.954	
8,650.00	8,500.33	7,875.93	7,527.57	32.31	28.79	39.97	-1,273.57	694.52	1,069.49	1,032.89	36.59	29.226	
8,700.00	8,542.50	7,900.00	7,532.50	32.53	28.88	36.32	-1,296.78	698.53	1,106.95	1,070.40	36.55	30.289	
8,750.00	8,582.16	7,900.00	7,532.50	32.75	28.88	33.42	-1,296.78	698.53	1,142.53	1,106.64	35.90	31.830	
8,800.00	8,619.02	7,929.17	7,537.88	32.97	28.98	31.08	-1,325.09	703.09	1,175.90	1,139.91	35.99	32.674	
8,850.00	8,652.80	7,948.25	7,541.05	33.19	29.05	29.19	-1,343.69	705.91	1,207.16	1,171.30	35.85	33.672	
8,900.00	8,683.24	7,967.80	7,544.01	33.42	29.12	27.68	-1,362.82	708.65	1,236.05	1,200.31	35.75	34.579	
8,950.00	8,710.11	8,000.00	7,548.24	33.64	29.24	26.62	-1,394.46	712.85	1,262.61	1,226.67	35.94	35.134	
9,000.00	8,733.20	8,000.00	7,548.24	33.86	29.24	25.44	-1,394.46	712.85	1,286.40	1,250.91	35.49	36.248	
9,050.00	8,752.35	8,028.28	7,551.30	34.08	29.33	24.83	-1,422.37	716.22	1,307.57	1,271.91	35.66	36.665	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
9,100.00	8,767.39	8,048.74	7,553.12	34.29	29.41	24.31	-1,442.62	718.46	1,326.09	1,290.37	35.72	37.120	
9,100.17	8,767.43	8,048.80	7,553.13	34.29	29.41	24.31	-1,442.69	718.47	1,326.15	1,290.43	35.72	37.122	
9,200.00	8,791.66	8,100.00	7,556.27	34.71	29.58	25.06	-1,493.55	723.37	1,359.39	1,323.33	36.06	37.698	
9,300.00	8,812.57	8,131.86	7,557.19	35.13	29.69	25.48	-1,525.29	725.90	1,390.20	1,354.16	36.04	38.578	
9,400.00	8,829.97	8,199.98	7,557.37	35.54	29.92	26.14	-1,593.26	730.42	1,418.04	1,381.54	36.50	38.848	
9,500.00	8,843.72	8,296.63	7,557.36	35.95	30.25	26.74	-1,689.71	736.71	1,439.94	1,402.65	37.29	38.616	
9,600.00	8,853.72	8,395.13	7,557.36	36.33	30.61	27.07	-1,788.00	743.11	1,455.12	1,417.10	38.02	38.272	
9,700.00	8,859.89	8,494.72	7,557.36	36.70	30.98	27.14	-1,887.38	749.58	1,463.39	1,424.69	38.70	37.818	
9,800.00	8,862.18	8,594.65	7,557.35	37.05	31.37	26.98	-1,987.09	756.08	1,464.66	1,425.34	39.31	37.256	
9,809.00	8,862.20	8,603.63	7,557.35	37.08	31.41	26.95	-1,996.05	756.66	1,464.43	1,425.06	39.37	37.201	
9,900.00	8,862.20	8,694.45	7,557.35	37.39	31.77	26.75	-2,086.68	762.56	1,461.83	1,421.91	39.92	36.622	
10,000.00	8,862.19	8,794.25	7,557.35	37.74	32.19	26.53	-2,186.27	769.05	1,458.99	1,418.42	40.57	35.961	
10,100.00	8,862.19	8,894.05	7,557.34	38.10	32.62	26.31	-2,285.86	775.54	1,456.18	1,414.91	41.27	35.281	
10,200.00	8,862.19	8,993.85	7,557.34	38.48	33.06	26.08	-2,385.45	782.03	1,453.39	1,411.37	42.02	34.585	
10,300.00	8,862.19	9,093.65	7,557.34	38.86	33.51	25.86	-2,485.04	788.51	1,450.62	1,407.81	42.82	33.880	
10,400.00	8,862.19	9,193.45	7,557.33	39.25	33.97	25.64	-2,584.63	795.00	1,447.88	1,404.23	43.65	33.169	
10,500.00	8,862.18	9,293.25	7,557.33	39.66	34.44	25.41	-2,684.22	801.49	1,445.15	1,400.63	44.53	32.456	
10,600.00	8,862.18	9,393.05	7,557.33	40.07	34.93	25.19	-2,783.81	807.98	1,442.45	1,397.01	45.44	31.746	
10,700.00	8,862.18	9,492.85	7,557.32	40.49	35.42	24.96	-2,883.40	814.46	1,439.77	1,393.39	46.38	31.040	
10,800.00	8,862.18	9,592.65	7,557.32	40.93	35.93	24.73	-2,982.99	820.95	1,437.12	1,389.75	47.36	30.342	
10,900.00	8,862.18	9,692.45	7,557.31	41.37	36.44	24.50	-3,082.58	827.44	1,434.48	1,386.11	48.38	29.653	
11,000.00	8,862.17	9,792.25	7,557.31	41.82	36.96	24.27	-3,182.17	833.93	1,431.87	1,382.46	49.42	28.976	
11,100.00	8,862.17	9,892.05	7,557.31	42.28	37.49	24.04	-3,281.76	840.41	1,429.29	1,378.80	50.48	28.311	
11,200.00	8,862.17	9,991.85	7,557.30	42.75	38.03	23.81	-3,381.35	846.90	1,426.72	1,375.14	51.58	27.661	
11,300.00	8,862.17	10,091.65	7,557.30	43.22	38.58	23.58	-3,480.93	853.39	1,424.18	1,371.48	52.70	27.025	
11,400.00	8,862.17	10,191.45	7,557.30	43.71	39.13	23.35	-3,580.52	859.88	1,421.67	1,367.83	53.84	26.405	
11,500.00	8,862.16	10,291.25	7,557.29	44.20	39.69	23.11	-3,680.11	866.36	1,419.17	1,364.17	55.01	25.800	
11,600.00	8,862.16	10,391.06	7,557.29	44.70	40.26	22.88	-3,779.70	872.85	1,416.70	1,360.51	56.19	25.212	
11,700.00	8,862.16	10,490.86	7,557.29	45.20	40.84	22.64	-3,879.29	879.34	1,414.26	1,356.86	57.40	24.641	
11,800.00	8,862.16	10,590.66	7,557.28	45.72	41.42	22.41	-3,978.88	885.82	1,411.84	1,353.22	58.62	24.085	
11,900.00	8,862.16	10,690.46	7,557.28	46.24	42.01	22.17	-4,078.47	892.31	1,409.44	1,349.58	59.86	23.546	
12,000.00	8,862.15	10,790.26	7,557.27	46.76	42.60	21.93	-4,178.06	898.80	1,407.07	1,345.95	61.11	23.024	
12,100.00	8,862.15	10,890.06	7,557.27	47.29	43.20	21.69	-4,277.65	905.29	1,404.72	1,342.33	62.39	22.517	
12,200.00	8,862.15	10,989.86	7,557.27	47.83	43.80	21.45	-4,377.24	911.77	1,402.39	1,338.72	63.67	22.025	
12,300.00	8,862.15	11,089.66	7,557.26	48.38	44.41	21.21	-4,476.83	918.26	1,400.09	1,335.12	64.97	21.549	
12,400.00	8,862.15	11,189.46	7,557.26	48.93	45.02	20.97	-4,576.42	924.75	1,397.82	1,331.53	66.29	21.088	
12,500.00	8,862.14	11,289.26	7,557.26	49.48	45.64	20.73	-4,676.01	931.24	1,395.57	1,327.96	67.61	20.641	
12,600.00	8,862.14	11,389.06	7,557.25	50.04	46.27	20.49	-4,775.60	937.72	1,393.34	1,324.40	68.95	20.209	
12,700.00	8,862.14	11,488.86	7,557.25	50.61	46.89	20.24	-4,875.19	944.21	1,391.14	1,320.85	70.30	19.790	
12,800.00	8,862.14	11,588.66	7,557.25	51.18	47.53	20.00	-4,974.77	950.70	1,388.97	1,317.31	71.65	19.384	
12,900.00	8,862.14	11,688.46	7,557.24	51.76	48.16	19.76	-5,074.36	957.19	1,386.82	1,313.80	73.02	18.991	
13,000.00	8,862.13	11,788.26	7,557.24	52.34	48.80	19.51	-5,173.95	963.67	1,384.70	1,310.29	74.40	18.611	
13,100.00	8,862.13	11,888.06	7,557.23	52.92	49.44	19.26	-5,273.54	970.16	1,382.60	1,306.81	75.79	18.242	
13,200.00	8,862.13	11,987.86	7,557.23	53.51	50.09	19.02	-5,373.13	976.65	1,380.53	1,303.34	77.19	17.886	
13,300.00	8,862.13	12,087.66	7,557.23	54.10	50.74	18.77	-5,472.72	983.14	1,378.48	1,299.89	78.59	17.540	
13,400.00	8,862.12	12,187.46	7,557.22	54.70	51.40	18.52	-5,572.31	989.62	1,376.46	1,296.45	80.00	17.205	
13,500.00	8,862.12	12,287.26	7,557.22	55.30	52.05	18.27	-5,671.90	996.11	1,374.46	1,293.04	81.42	16.880	
13,600.00	8,862.12	12,387.06	7,557.22	55.91	52.71	18.02	-5,771.49	1,002.60	1,372.49	1,289.64	82.85	16.566	
13,700.00	8,862.12	12,486.86	7,557.21	56.52	53.38	17.77	-5,871.08	1,009.09	1,370.55	1,286.27	84.28	16.261	
13,800.00	8,862.12	12,586.66	7,557.21	57.13	54.04	17.52	-5,970.67	1,015.57	1,368.64	1,282.91	85.73	15.965	
13,900.00	8,862.11	12,686.47	7,557.21	57.75	54.71	17.27	-6,070.26	1,022.06	1,366.75	1,279.57	87.17	15.679	
14,000.00	8,862.11	12,786.27	7,557.20	58.37	55.38	17.02	-6,169.85	1,028.55	1,364.88	1,276.26	88.63	15.400	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
14,100.00	8,862.11	12,886.07	7,557.20	58.99	56.06	16.76	-6,269.44	1,035.03	1,363.05	1,272.96	90.09	15.131	
14,200.00	8,862.11	12,985.87	7,557.19	59.62	56.73	16.51	-6,369.03	1,041.52	1,361.24	1,269.69	91.55	14.869	
14,300.00	8,862.11	13,085.67	7,557.19	60.25	57.41	16.25	-6,468.62	1,048.01	1,359.45	1,266.43	93.02	14.615	
14,400.00	8,862.10	13,185.47	7,557.19	60.88	58.09	16.00	-6,568.20	1,054.50	1,357.70	1,263.20	94.50	14.368	
14,500.00	8,862.10	13,285.27	7,557.18	61.52	58.78	15.74	-6,667.79	1,060.98	1,355.97	1,259.99	95.98	14.128	
14,600.00	8,862.10	13,385.07	7,557.18	62.16	59.46	15.49	-6,767.38	1,067.47	1,354.27	1,256.81	97.46	13.895	
14,700.00	8,862.10	13,484.87	7,557.18	62.80	60.15	15.23	-6,866.97	1,073.96	1,352.60	1,253.64	98.95	13.669	
14,800.00	8,862.10	13,584.67	7,557.17	63.44	60.84	14.97	-6,966.56	1,080.45	1,350.95	1,250.50	100.45	13.449	
14,900.00	8,862.09	13,684.47	7,557.17	64.09	61.53	14.71	-7,066.15	1,086.93	1,349.33	1,247.38	101.95	13.236	
15,000.00	8,862.09	13,784.27	7,557.17	64.74	62.22	14.45	-7,165.74	1,093.42	1,347.74	1,244.29	103.45	13.028	
15,100.00	8,862.09	13,884.07	7,557.16	65.39	62.92	14.19	-7,265.33	1,099.91	1,346.18	1,241.22	104.96	12.826	
15,200.00	8,862.09	13,983.87	7,557.16	66.05	63.62	13.93	-7,364.92	1,106.40	1,344.64	1,238.17	106.47	12.630	
15,300.00	8,862.09	14,083.67	7,557.15	66.70	64.32	13.67	-7,464.51	1,112.88	1,343.13	1,235.15	107.98	12.438	
15,400.00	8,862.08	14,183.47	7,557.15	67.36	65.02	13.41	-7,564.10	1,119.37	1,341.65	1,232.15	109.50	12.252	
15,500.00	8,862.08	14,283.27	7,557.15	68.02	65.72	13.15	-7,663.69	1,125.86	1,340.20	1,229.18	111.02	12.071	
15,600.00	8,862.08	14,383.07	7,557.14	68.69	66.42	12.89	-7,763.28	1,132.35	1,338.78	1,226.23	112.55	11.895	
15,700.00	8,862.08	14,482.87	7,557.14	69.35	67.13	12.62	-7,862.87	1,138.83	1,337.38	1,223.30	114.08	11.723	
15,800.00	8,862.08	14,582.67	7,557.14	70.02	67.83	12.36	-7,962.46	1,145.32	1,336.02	1,220.41	115.61	11.556	
15,900.00	8,862.07	14,682.47	7,557.13	70.69	68.54	12.09	-8,062.05	1,151.81	1,334.68	1,217.53	117.15	11.393	
16,000.00	8,862.07	14,782.27	7,557.13	71.36	69.25	11.83	-8,161.63	1,158.29	1,333.37	1,214.68	118.69	11.235	
16,100.00	8,862.07	14,882.08	7,557.13	72.03	69.96	11.56	-8,261.22	1,164.78	1,332.09	1,211.86	120.23	11.080	
16,200.00	8,862.07	14,981.88	7,557.12	72.71	70.67	11.30	-8,360.81	1,171.27	1,330.84	1,209.06	121.77	10.929	
16,300.00	8,862.07	15,081.68	7,557.12	73.38	71.38	11.03	-8,460.40	1,177.76	1,329.61	1,206.29	123.32	10.782	
16,400.00	8,862.06	15,181.48	7,557.11	74.06	72.10	10.76	-8,559.99	1,184.24	1,328.42	1,203.55	124.87	10.638	
16,500.00	8,862.06	15,281.28	7,557.11	74.74	72.81	10.50	-8,659.58	1,190.73	1,327.25	1,200.83	126.42	10.499	
16,600.00	8,862.06	15,381.08	7,557.11	75.42	73.53	10.23	-8,759.17	1,197.22	1,326.12	1,198.14	127.98	10.362	
16,700.00	8,862.06	15,480.88	7,557.10	76.10	74.25	9.96	-8,858.76	1,203.71	1,325.01	1,195.47	129.54	10.229	
16,800.00	8,862.06	15,580.68	7,557.10	76.79	74.97	9.69	-8,958.35	1,210.19	1,323.93	1,192.83	131.10	10.099	
16,900.00	8,862.05	15,680.48	7,557.10	77.47	75.69	9.42	-9,057.94	1,216.68	1,322.88	1,190.22	132.66	9.972	
17,000.00	8,862.05	15,780.28	7,557.09	78.16	76.41	9.15	-9,157.53	1,223.17	1,321.86	1,187.64	134.23	9.848	
17,100.00	8,862.05	15,880.08	7,557.09	78.85	77.13	8.88	-9,257.12	1,229.66	1,320.87	1,185.08	135.79	9.727	
17,200.00	8,862.05	15,979.88	7,557.09	79.54	77.85	8.61	-9,356.71	1,236.14	1,319.91	1,182.55	137.36	9.609	
17,300.00	8,862.05	16,079.68	7,557.08	80.23	78.57	8.34	-9,456.30	1,242.63	1,318.98	1,180.04	138.94	9.493	
17,400.00	8,862.04	16,179.48	7,557.08	80.92	79.30	8.07	-9,555.89	1,249.12	1,318.08	1,177.57	140.51	9.381	
17,500.00	8,862.04	16,279.28	7,557.07	81.62	80.02	7.80	-9,655.48	1,255.61	1,317.21	1,175.12	142.09	9.270	
17,600.00	8,862.04	16,379.08	7,557.07	82.31	80.75	7.53	-9,755.06	1,262.09	1,316.36	1,172.70	143.67	9.163	
17,700.00	8,862.04	16,478.88	7,557.07	83.01	81.48	7.26	-9,854.65	1,268.58	1,315.55	1,170.30	145.25	9.057	
17,800.00	8,862.04	16,578.68	7,557.06	83.71	82.21	6.98	-9,954.24	1,275.07	1,314.77	1,167.94	146.83	8.954	
17,900.00	8,862.03	16,678.48	7,557.06	84.41	82.93	6.71	-10,053.83	1,281.56	1,314.01	1,165.60	148.41	8.854	
18,000.00	8,862.03	16,778.28	7,557.06	85.11	83.66	6.44	-10,153.42	1,288.04	1,313.29	1,163.29	150.00	8.755	
18,100.00	8,862.03	16,878.08	7,557.05	85.81	84.39	6.17	-10,253.01	1,294.53	1,312.60	1,161.01	151.59	8.659	
18,200.00	8,862.03	16,977.88	7,557.05	86.51	85.12	5.89	-10,352.60	1,301.02	1,311.94	1,158.76	153.18	8.565	
18,300.00	8,862.03	17,077.68	7,557.05	87.21	85.86	5.62	-10,452.19	1,307.50	1,311.30	1,156.53	154.77	8.473	
18,400.00	8,862.02	17,177.49	7,557.04	87.92	86.59	5.34	-10,551.78	1,313.99	1,310.70	1,154.34	156.36	8.382	
18,500.00	8,862.02	17,277.29	7,557.04	88.62	87.32	5.07	-10,651.37	1,320.48	1,310.13	1,152.17	157.96	8.294	
18,600.00	8,862.02	17,377.09	7,557.03	89.33	88.06	4.79	-10,750.96	1,326.97	1,309.59	1,150.03	159.55	8.208	
18,700.00	8,862.02	17,476.89	7,557.03	90.03	88.79	4.52	-10,850.55	1,333.45	1,309.07	1,147.92	161.15	8.123	
18,800.00	8,862.02	17,576.69	7,557.03	90.74	89.52	4.24	-10,950.14	1,339.94	1,308.59	1,145.84	162.75	8.040	
18,900.00	8,862.01	17,676.49	7,557.02	91.45	90.26	3.97	-11,049.73	1,346.43	1,308.14	1,143.79	164.35	7.959	
19,000.00	8,862.01	17,776.29	7,557.02	92.16	91.00	3.69	-11,149.32	1,352.92	1,307.72	1,141.76	165.96	7.880	
19,100.00	8,862.01	17,876.09	7,557.02	92.87	91.73	3.42	-11,248.91	1,359.40	1,307.33	1,139.77	167.56	7.802	
19,200.00	8,862.01	17,975.89	7,557.01	93.58	92.47	3.14	-11,348.49	1,365.89	1,306.97	1,137.80	169.17	7.726	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 4H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,300.00	8,862.01	18,075.69	7,557.01	94.30	93.21	2.87	-11,448.08	1,372.38	1,306.64	1,135.86	170.77	7.651	
19,400.00	8,862.00	18,175.49	7,557.01	95.01	93.95	2.59	-11,547.67	1,378.87	1,306.34	1,133.96	172.38	7.578	
19,500.00	8,862.00	18,275.29	7,557.00	95.72	94.68	2.31	-11,647.26	1,385.35	1,306.07	1,132.08	173.99	7.507	
19,546.85	8,862.00	18,318.93	7,557.00	96.06	95.01	2.19	-11,690.81	1,388.19	1,305.96	1,131.27	174.68	7.476	
19,547.53	8,862.00	18,318.93	7,557.00	96.06	95.01	2.19	-11,690.81	1,388.19	1,305.96	1,131.28	174.68	7.476	
19,548.26	8,862.00	18,318.93	7,557.00	96.14	95.01	2.19	-11,690.81	1,388.19	1,305.96	1,131.29	174.67	7.477	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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	0.00	0.00	0.00	91.09	-0.76	39.99	40.00				
100.00	100.00	100.00	100.00	0.28	0.28	91.09	-0.76	39.99	40.00	39.45	0.55	72.453	
200.00	200.00	200.00	200.00	0.63	0.63	91.09	-0.76	39.99	40.00	38.73	1.27	31.519	
300.00	300.00	300.00	300.00	0.99	0.99	91.09	-0.76	39.99	40.00	38.01	1.99	20.140	
400.00	400.00	400.00	400.00	1.35	1.35	91.09	-0.76	39.99	40.00	37.29	2.70	14.798	
500.00	500.00	500.00	500.00	1.71	1.71	91.09	-0.76	39.99	40.00	36.58	3.42	11.696	
600.00	600.00	600.00	600.00	2.07	2.07	91.09	-0.76	39.99	40.00	35.86	4.14	9.669	
700.00	700.00	700.00	700.00	2.43	2.43	91.09	-0.76	39.99	40.00	35.14	4.85	8.241	
800.00	800.00	800.00	800.00	2.79	2.79	91.09	-0.76	39.99	40.00	34.43	5.57	7.180	
900.00	900.00	900.00	900.00	3.14	3.14	91.09	-0.76	39.99	40.00	33.71	6.29	6.361	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.09	-0.76	39.99	40.00	32.99	7.00	5.710	
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	-71.29	-0.76	39.99	39.40	31.70	7.70	5.115	
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	-78.79	-0.76	39.99	38.05	29.66	8.39	4.535	
1,287.28	1,286.80	1,286.80	1,286.80	4.47	4.53	-90.00	-0.76	39.99	37.32	28.33	8.99	4.151	CC
1,300.00	1,299.45	1,299.45	1,299.45	4.51	4.58	-91.99	-0.76	39.99	37.34	28.26	9.08	4.113	ES
1,350.00	1,349.13	1,349.13	1,349.13	4.68	4.75	-100.49	-0.76	39.99	37.96	28.54	9.43	4.028	
1,400.00	1,398.73	1,398.73	1,398.73	4.85	4.93	-103.21	-0.76	39.99	39.26	29.49	9.77	4.017	
1,500.00	1,497.69	1,497.83	1,497.81	5.19	5.27	-109.77	-1.79	41.31	43.42	32.96	10.46	4.151	
1,600.00	1,596.25	1,597.43	1,597.28	5.54	5.61	-115.61	-4.95	45.35	48.96	37.82	11.14	4.396	
1,670.62	1,665.55	1,668.07	1,667.68	5.78	5.84	-119.32	-8.48	49.87	53.19	41.57	11.62	4.577	
1,700.00	1,694.31	1,697.53	1,696.99	5.89	5.94	-122.05	-10.26	52.15	54.97	43.15	11.82	4.650	
1,800.00	1,792.23	1,798.24	1,796.96	6.24	6.28	-128.36	-17.77	61.77	60.51	48.00	12.50	4.839	
1,900.00	1,890.14	1,899.41	1,896.88	6.61	6.63	-131.14	-27.49	74.21	64.46	51.27	13.19	4.887	
2,000.00	1,988.06	2,000.79	1,996.40	6.97	6.98	-131.20	-39.40	89.45	66.36	52.48	13.88	4.780	
2,100.00	2,085.97	2,102.13	2,095.13	7.34	7.34	-128.78	-53.47	107.45	66.18	51.59	14.59	4.537	
2,200.00	2,183.89	2,202.59	2,192.26	7.70	7.69	-124.09	-69.24	127.64	64.53	49.21	15.32	4.212	
2,300.00	2,281.80	2,302.41	2,288.68	8.07	8.05	-118.89	-85.14	148.00	63.17	47.10	16.07	3.930	
2,400.00	2,379.72	2,402.23	2,385.10	8.45	8.42	-113.51	-101.05	168.36	62.36	45.53	16.83	3.706	
2,494.63	2,472.38	2,496.69	2,476.34	8.80	8.76	-108.33	-116.10	187.62	62.10	44.56	17.54	3.540	
2,500.00	2,477.64	2,502.06	2,481.52	8.82	8.78	-108.03	-116.96	188.71	62.10	44.52	17.58	3.532	
2,600.00	2,575.55	2,601.88	2,577.94	9.19	9.15	-102.56	-132.86	209.07	62.42	44.08	18.34	3.403	
2,700.00	2,673.47	2,701.70	2,674.36	9.57	9.53	-97.20	-148.77	229.43	63.29	44.20	19.09	3.315	
2,800.00	2,771.38	2,801.52	2,770.78	9.95	9.90	-92.02	-164.67	249.79	64.71	44.87	19.85	3.261	
2,900.00	2,869.30	2,901.35	2,867.21	10.32	10.28	-87.11	-180.58	270.15	66.63	46.04	20.60	3.235	
3,000.00	2,967.21	3,001.17	2,963.63	10.70	10.66	-82.50	-196.49	290.51	69.02	47.67	21.35	3.233	SF
3,100.00	3,065.13	3,100.99	3,060.05	11.08	11.04	-78.22	-212.39	310.87	71.82	49.72	22.10	3.250	
3,200.00	3,163.05	3,200.81	3,156.47	11.46	11.42	-74.28	-228.30	331.23	74.99	52.14	22.85	3.282	
3,300.00	3,260.96	3,300.63	3,252.89	11.84	11.81	-70.68	-244.21	351.59	78.48	54.88	23.60	3.326	
3,400.00	3,358.88	3,400.46	3,349.31	12.22	12.19	-67.39	-260.11	371.95	82.26	57.91	24.35	3.378	
3,500.00	3,456.79	3,500.28	3,445.73	12.60	12.58	-64.41	-276.02	392.30	86.29	61.18	25.11	3.437	
3,600.00	3,554.71	3,600.10	3,542.15	12.98	12.97	-61.69	-291.92	412.66	90.53	64.66	25.87	3.500	
3,700.00	3,652.62	3,699.92	3,638.57	13.36	13.36	-59.22	-307.83	433.02	94.95	68.33	26.62	3.566	
3,800.00	3,750.54	3,799.75	3,734.99	13.75	13.75	-56.98	-323.74	453.38	99.54	72.15	27.39	3.635	
3,900.00	3,848.45	3,899.57	3,831.42	14.13	14.14	-54.93	-339.64	473.74	104.26	76.11	28.15	3.704	
4,000.00	3,946.37	3,999.39	3,927.84	14.51	14.53	-53.07	-355.55	494.10	109.10	80.19	28.91	3.774	
4,100.00	4,044.29	4,099.21	4,024.26	14.89	14.92	-51.36	-371.46	514.46	114.06	84.38	29.68	3.843	
4,200.00	4,142.20	4,199.04	4,120.68	15.28	15.31	-49.80	-387.36	534.82	119.10	88.65	30.45	3.912	
4,300.00	4,240.12	4,298.86	4,217.10	15.66	15.70	-48.37	-403.27	555.18	124.22	93.01	31.22	3.979	
4,400.00	4,338.03	4,398.68	4,313.52	16.05	16.10	-47.05	-419.17	575.54	129.42	97.43	31.99	4.046	
4,500.00	4,435.95	4,498.50	4,409.94	16.43	16.49	-45.83	-435.08	595.89	134.68	101.92	32.76	4.111	
4,600.00	4,533.86	4,598.32	4,506.36	16.81	16.89	-44.70	-450.99	616.25	139.99	106.46	33.53	4.175	
4,700.00	4,631.78	4,698.15	4,602.78	17.20	17.28	-43.66	-466.89	636.61	145.36	111.05	34.31	4.237	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
4,800.00	4,729.69	4,797.97	4,699.20	17.58	17.68	-42.69	-482.80	656.97	150.76	115.68	35.08	4.298	
4,900.00	4,827.61	4,897.79	4,795.62	17.97	18.07	-41.79	-498.70	677.33	156.21	120.36	35.86	4.357	
5,000.00	4,925.53	4,997.61	4,892.05	18.35	18.47	-40.95	-514.61	697.69	161.70	125.07	36.63	4.414	
5,100.00	5,023.44	5,097.44	4,988.47	18.74	18.87	-40.16	-530.52	718.05	167.22	129.81	37.41	4.470	
5,200.00	5,121.36	5,199.68	5,087.34	19.12	19.27	-39.50	-546.55	738.58	172.43	134.20	38.23	4.510	
5,300.00	5,219.27	5,302.63	5,187.58	19.51	19.67	-39.41	-560.95	757.04	175.36	136.32	39.05	4.491	
5,400.00	5,317.19	5,402.60	5,285.07	19.89	20.06	-39.45	-574.55	774.50	177.80	137.97	39.83	4.464	
5,500.00	5,415.10	5,502.57	5,382.56	20.28	20.45	-39.48	-588.15	791.96	180.23	139.63	40.60	4.439	
5,600.00	5,513.02	5,602.54	5,480.05	20.66	20.84	-39.52	-601.75	809.41	182.66	141.28	41.38	4.414	
5,700.00	5,610.93	5,702.51	5,577.55	21.05	21.23	-39.55	-615.34	826.87	185.10	142.94	42.16	4.390	
5,800.00	5,708.85	5,802.48	5,675.04	21.43	21.62	-39.58	-628.94	844.32	187.53	144.59	42.94	4.367	
5,900.00	5,806.77	5,902.45	5,772.53	21.82	22.01	-39.62	-642.54	861.78	189.96	146.24	43.72	4.345	
6,000.00	5,904.68	6,002.42	5,870.02	22.21	22.40	-39.65	-656.14	879.23	192.40	147.90	44.50	4.324	
6,100.00	6,002.60	6,102.39	5,967.51	22.59	22.79	-39.68	-669.74	896.69	194.83	149.55	45.28	4.303	
6,200.00	6,100.51	6,202.36	6,065.00	22.98	23.18	-39.71	-683.34	914.15	197.26	151.21	46.05	4.283	
6,300.00	6,198.43	6,302.33	6,162.49	23.36	23.57	-39.74	-696.94	931.60	199.70	152.86	46.83	4.264	
6,400.00	6,296.34	6,402.30	6,259.98	23.75	23.96	-39.77	-710.54	949.06	202.13	154.52	47.61	4.245	
6,500.00	6,394.26	6,502.27	6,357.47	24.14	24.35	-39.79	-724.14	966.51	204.56	156.17	48.39	4.227	
6,600.00	6,492.17	6,602.24	6,454.96	24.52	24.74	-39.82	-737.74	983.97	207.00	157.82	49.17	4.210	
6,700.00	6,590.09	6,702.21	6,552.45	24.91	25.13	-39.85	-751.34	1,001.43	209.43	159.48	49.95	4.193	
6,800.00	6,688.01	6,802.18	6,649.94	25.29	25.52	-39.87	-764.94	1,018.88	211.86	161.13	50.73	4.176	
6,900.00	6,785.92	6,902.15	6,747.43	25.68	25.92	-39.90	-778.54	1,036.34	214.30	162.78	51.51	4.160	
7,000.00	6,883.84	7,002.12	6,844.92	26.07	26.31	-39.92	-792.14	1,053.79	216.73	164.44	52.29	4.145	
7,100.00	6,981.75	7,102.09	6,942.41	26.45	26.70	-39.95	-805.74	1,071.25	219.16	166.09	53.07	4.129	
7,200.00	7,079.67	7,202.06	7,039.90	26.84	27.09	-39.97	-819.34	1,088.70	221.60	167.74	53.85	4.115	
7,300.00	7,177.58	7,302.04	7,137.39	27.23	27.48	-39.99	-832.94	1,106.16	224.03	169.40	54.63	4.101	
7,400.00	7,275.50	7,402.01	7,234.89	27.61	27.87	-40.02	-846.54	1,123.62	226.46	171.05	55.42	4.087	
7,500.00	7,373.41	7,501.98	7,332.38	28.00	28.26	-40.04	-860.14	1,141.07	228.90	172.70	56.20	4.073	
7,600.00	7,471.33	7,601.95	7,429.87	28.39	28.65	-40.06	-873.74	1,158.53	231.33	174.36	56.98	4.060	
7,700.00	7,569.25	7,701.92	7,527.36	28.77	29.04	-40.08	-887.34	1,175.98	233.77	176.01	57.76	4.047	
7,764.22	7,632.13	7,766.12	7,589.97	29.02	29.30	-40.10	-896.07	1,187.19	235.33	177.07	58.26	4.039	
7,800.00	7,667.21	7,801.88	7,624.84	29.16	29.44	-40.08	-900.93	1,193.44	236.37	177.83	58.54	4.038	
7,900.00	7,765.68	7,901.75	7,722.23	29.54	29.83	-39.70	-914.52	1,210.88	241.10	181.79	59.31	4.065	
8,000.00	7,864.70	8,001.39	7,819.40	29.91	30.22	-38.87	-928.07	1,228.27	248.55	188.49	60.06	4.138	
8,100.00	7,964.15	8,094.99	7,910.63	30.28	30.58	-37.71	-940.93	1,244.77	259.04	198.31	60.73	4.265	
8,200.00	8,063.90	8,164.46	7,976.75	30.63	30.87	-36.08	-953.95	1,261.48	279.56	218.78	60.78	4.599	
8,300.00	8,163.83	8,228.11	8,034.68	30.98	31.15	-33.96	-970.13	1,282.21	313.15	252.88	60.28	5.195	
8,350.17	8,214.00	8,250.00	8,053.88	31.14	31.25	98.92	-976.60	1,290.50	334.83	275.36	59.47	5.630	
8,400.00	8,263.77	8,285.30	8,083.95	31.31	31.41	-45.16	-987.97	1,305.06	357.39	298.07	59.32	6.025	
8,450.00	8,313.33	8,313.10	8,106.80	31.49	31.54	-42.68	-997.71	1,317.54	379.56	320.83	58.73	6.462	
8,500.00	8,362.13	8,350.00	8,135.89	31.69	31.71	-40.51	-1,011.67	1,335.42	401.11	342.50	58.61	6.844	
8,550.00	8,409.80	8,367.99	8,149.53	31.89	31.80	-38.95	-1,018.89	1,344.67	421.35	363.95	57.39	7.341	
8,600.00	8,455.99	8,400.00	8,172.86	32.09	31.95	-37.59	-1,032.37	1,361.94	440.73	383.78	56.95	7.738	
8,650.00	8,500.33	8,422.01	8,188.18	32.31	32.06	-36.50	-1,042.10	1,374.39	458.85	402.94	55.91	8.207	
8,700.00	8,542.50	8,450.00	8,206.77	32.53	32.20	-35.66	-1,054.98	1,390.89	475.78	420.56	55.22	8.616	
8,750.00	8,582.16	8,475.25	8,222.63	32.75	32.32	-35.02	-1,067.07	1,406.36	491.41	437.04	54.38	9.037	
8,800.00	8,619.02	8,500.00	8,237.34	32.97	32.44	-34.54	-1,079.32	1,422.05	505.73	452.19	53.54	9.446	
8,850.00	8,652.80	8,527.80	8,252.81	33.19	32.58	-34.30	-1,093.54	1,440.25	518.68	465.75	52.93	9.799	
8,900.00	8,683.24	8,550.00	8,264.34	33.42	32.69	-34.09	-1,105.21	1,455.20	530.29	478.24	52.06	10.187	
8,950.00	8,710.11	8,579.77	8,278.65	33.64	32.84	-34.21	-1,121.28	1,475.77	540.48	488.77	51.72	10.451	
9,000.00	8,733.20	8,600.00	8,287.58	33.86	32.94	-34.22	-1,132.45	1,490.07	549.38	498.45	50.93	10.787	
9,050.00	8,752.35	8,631.27	8,300.12	34.08	33.09	-34.68	-1,150.09	1,512.65	556.82	505.92	50.90	10.940	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
9,100.00	8,767.39	8,650.00	8,306.88	34.29	33.18	-34.88	-1,160.84	1,526.41	563.05	512.73	50.32	11.188	
9,100.17	8,767.43	8,650.00	8,306.88	34.29	33.18	-34.88	-1,160.84	1,526.41	563.07	512.75	50.32	11.190	
9,200.00	8,791.66	8,713.78	8,325.63	34.71	33.49	-37.35	-1,198.40	1,574.39	579.31	528.28	51.03	11.353	
9,300.00	8,812.57	8,825.65	8,352.85	35.13	34.04	-40.93	-1,270.08	1,655.79	600.57	546.43	54.14	11.093	
9,400.00	8,829.97	8,942.69	8,378.04	35.54	34.63	-44.12	-1,353.62	1,733.71	622.52	565.29	57.23	10.878	
9,500.00	8,843.72	9,065.35	8,400.56	35.95	35.25	-46.94	-1,449.63	1,806.56	644.61	584.41	60.20	10.708	
9,600.00	8,853.72	9,194.02	8,419.64	36.33	35.88	-49.36	-1,558.46	1,872.38	666.26	603.30	62.96	10.583	
9,700.00	8,859.89	9,328.98	8,434.39	36.70	36.52	-51.39	-1,680.05	1,928.87	686.88	621.44	65.44	10.496	
9,800.00	8,862.18	9,470.32	8,443.85	37.05	37.15	-53.00	-1,813.75	1,973.42	705.85	638.26	67.60	10.442	
9,809.00	8,862.20	9,483.34	8,444.41	37.08	37.20	-53.12	-1,826.33	1,976.75	707.46	639.68	67.77	10.439	
9,900.00	8,862.20	9,617.56	8,447.04	37.39	37.75	-54.55	-1,957.81	2,003.24	720.90	651.61	69.29	10.404	
10,000.00	8,862.19	9,742.53	8,447.00	37.74	38.23	-55.25	-2,081.79	2,018.79	730.98	660.46	70.51	10.367	
10,100.00	8,862.19	9,868.61	8,446.88	38.10	38.71	-55.68	-2,207.45	2,028.99	737.55	665.92	71.63	10.297	
10,200.00	8,862.19	9,995.33	8,446.68	38.48	39.19	-55.86	-2,334.07	2,033.65	740.53	667.88	72.65	10.193	
10,300.00	8,862.19	10,103.35	8,446.45	38.86	39.59	-55.86	-2,442.09	2,034.07	740.78	667.19	73.59	10.067	
10,400.00	8,862.19	10,203.35	8,446.24	39.25	39.97	-55.85	-2,542.09	2,034.22	740.86	666.33	74.53	9.940	
10,500.00	8,862.18	10,303.35	8,446.03	39.66	40.36	-55.83	-2,642.09	2,034.37	740.95	665.45	75.50	9.814	
10,600.00	8,862.18	10,403.35	8,445.82	40.07	40.76	-55.82	-2,742.09	2,034.52	741.04	664.56	76.48	9.689	
10,700.00	8,862.18	10,503.35	8,445.61	40.49	41.17	-55.80	-2,842.09	2,034.67	741.13	663.64	77.49	9.564	
10,800.00	8,862.18	10,603.35	8,445.40	40.93	41.59	-55.79	-2,942.09	2,034.82	741.22	662.71	78.51	9.441	
10,900.00	8,862.18	10,703.35	8,445.19	41.37	42.03	-55.77	-3,042.08	2,034.97	741.30	661.76	79.55	9.319	
11,000.00	8,862.17	10,803.35	8,444.98	41.82	42.46	-55.76	-3,142.08	2,035.13	741.39	660.79	80.60	9.198	
11,100.00	8,862.17	10,903.35	8,444.77	42.28	42.91	-55.74	-3,242.08	2,035.28	741.48	659.81	81.67	9.079	
11,200.00	8,862.17	11,003.35	8,444.56	42.75	43.37	-55.73	-3,342.08	2,035.43	741.57	658.82	82.75	8.961	
11,300.00	8,862.17	11,103.35	8,444.35	43.22	43.83	-55.71	-3,442.08	2,035.58	741.66	657.81	83.85	8.845	
11,400.00	8,862.17	11,203.35	8,444.14	43.71	44.31	-55.70	-3,542.08	2,035.73	741.75	656.78	84.97	8.730	
11,500.00	8,862.16	11,303.35	8,443.93	44.20	44.79	-55.68	-3,642.08	2,035.88	741.84	655.74	86.09	8.617	
11,600.00	8,862.16	11,403.35	8,443.72	44.70	45.27	-55.67	-3,742.08	2,036.04	741.92	654.69	87.23	8.505	
11,700.00	8,862.16	11,503.35	8,443.51	45.20	45.77	-55.65	-3,842.08	2,036.19	742.01	653.63	88.38	8.396	
11,800.00	8,862.16	11,603.35	8,443.30	45.72	46.27	-55.64	-3,942.08	2,036.34	742.10	652.56	89.55	8.287	
11,900.00	8,862.16	11,703.34	8,443.09	46.24	46.78	-55.62	-4,042.08	2,036.49	742.19	651.47	90.72	8.181	
12,000.00	8,862.15	11,803.34	8,442.88	46.76	47.29	-55.61	-4,142.08	2,036.64	742.28	650.37	91.90	8.077	
12,100.00	8,862.15	11,903.34	8,442.67	47.29	47.82	-55.59	-4,242.08	2,036.79	742.37	649.27	93.10	7.974	
12,200.00	8,862.15	12,003.34	8,442.46	47.83	48.34	-55.58	-4,342.08	2,036.94	742.46	648.15	94.31	7.873	
12,300.00	8,862.15	12,103.34	8,442.25	48.38	48.88	-55.56	-4,442.08	2,037.10	742.55	647.02	95.52	7.774	
12,400.00	8,862.15	12,203.34	8,442.04	48.93	49.42	-55.55	-4,542.08	2,037.25	742.63	645.89	96.75	7.676	
12,500.00	8,862.14	12,303.34	8,441.83	49.48	49.96	-55.53	-4,642.08	2,037.40	742.72	644.74	97.98	7.580	
12,600.00	8,862.14	12,403.34	8,441.62	50.04	50.52	-55.52	-4,742.08	2,037.55	742.81	643.59	99.22	7.486	
12,700.00	8,862.14	12,503.34	8,441.41	50.61	51.07	-55.51	-4,842.07	2,037.70	742.90	642.43	100.48	7.394	
12,800.00	8,862.14	12,603.34	8,441.20	51.18	51.63	-55.49	-4,942.07	2,037.85	742.99	641.26	101.74	7.303	
12,900.00	8,862.14	12,703.34	8,440.99	51.76	52.20	-55.48	-5,042.07	2,038.00	743.08	640.08	103.00	7.214	
13,000.00	8,862.13	12,803.34	8,440.78	52.34	52.77	-55.46	-5,142.07	2,038.16	743.17	638.89	104.28	7.127	
13,100.00	8,862.13	12,903.34	8,440.57	52.92	53.35	-55.45	-5,242.07	2,038.31	743.26	637.70	105.56	7.041	
13,200.00	8,862.13	13,003.34	8,440.36	53.51	53.93	-55.43	-5,342.07	2,038.46	743.35	636.50	106.85	6.957	
13,300.00	8,862.13	13,103.34	8,440.15	54.10	54.51	-55.42	-5,442.07	2,038.61	743.44	635.30	108.14	6.875	
13,400.00	8,862.12	13,203.34	8,439.94	54.70	55.10	-55.40	-5,542.07	2,038.76	743.53	634.08	109.45	6.794	
13,500.00	8,862.12	13,303.34	8,439.73	55.30	55.70	-55.39	-5,642.07	2,038.91	743.62	632.86	110.75	6.714	
13,600.00	8,862.12	13,403.34	8,439.52	55.91	56.30	-55.37	-5,742.07	2,039.07	743.71	631.64	112.07	6.636	
13,700.00	8,862.12	13,503.34	8,439.31	56.52	56.90	-55.36	-5,842.07	2,039.22	743.80	630.41	113.39	6.560	
13,800.00	8,862.12	13,603.34	8,439.10	57.13	57.50	-55.34	-5,942.07	2,039.37	743.89	629.17	114.71	6.485	
13,900.00	8,862.11	13,703.34	8,438.89	57.75	58.11	-55.33	-6,042.07	2,039.52	743.98	627.93	116.04	6.411	
14,000.00	8,862.11	13,803.34	8,438.68	58.37	58.72	-55.31	-6,142.07	2,039.67	744.07	626.69	117.38	6.339	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
14,100.00	8,862.11	13,903.34	8,438.47	58.99	59.34	-55.30	-6,242.07	2,039.82	744.16	625.43	118.72	6.268	
14,200.00	8,862.11	14,003.34	8,438.26	59.62	59.96	-55.28	-6,342.07	2,039.97	744.25	624.18	120.07	6.199	
14,300.00	8,862.11	14,103.34	8,438.05	60.25	60.58	-55.27	-6,442.07	2,040.13	744.34	622.92	121.42	6.130	
14,400.00	8,862.10	14,203.34	8,437.84	60.88	61.21	-55.25	-6,542.07	2,040.28	744.43	621.65	122.77	6.063	
14,500.00	8,862.10	14,303.34	8,437.63	61.52	61.84	-55.24	-6,642.06	2,040.43	744.52	620.38	124.13	5.998	
14,600.00	8,862.10	14,403.34	8,437.42	62.16	62.47	-55.23	-6,742.06	2,040.58	744.61	619.11	125.50	5.933	
14,700.00	8,862.10	14,503.34	8,437.21	62.80	63.10	-55.21	-6,842.06	2,040.73	744.70	617.83	126.87	5.870	
14,800.00	8,862.10	14,603.34	8,437.00	63.44	63.74	-55.20	-6,942.06	2,040.88	744.79	616.55	128.24	5.808	
14,900.00	8,862.09	14,703.34	8,436.79	64.09	64.38	-55.18	-7,042.06	2,041.03	744.88	615.26	129.62	5.747	
15,000.00	8,862.09	14,803.34	8,436.58	64.74	65.02	-55.17	-7,142.06	2,041.19	744.97	613.97	131.00	5.687	
15,100.00	8,862.09	14,903.34	8,436.37	65.39	65.67	-55.15	-7,242.06	2,041.34	745.06	612.68	132.38	5.628	
15,200.00	8,862.09	15,003.34	8,436.16	66.05	66.32	-55.14	-7,342.06	2,041.49	745.15	611.38	133.77	5.570	
15,300.00	8,862.09	15,103.34	8,435.94	66.70	66.97	-55.12	-7,442.06	2,041.64	745.24	610.08	135.16	5.514	
15,400.00	8,862.08	15,203.34	8,435.73	67.36	67.62	-55.11	-7,542.06	2,041.79	745.33	608.78	136.55	5.458	
15,500.00	8,862.08	15,303.34	8,435.52	68.02	68.28	-55.09	-7,642.06	2,041.94	745.42	607.47	137.95	5.404	
15,600.00	8,862.08	15,403.34	8,435.31	68.69	68.93	-55.08	-7,742.06	2,042.10	745.51	606.16	139.35	5.350	
15,700.00	8,862.08	15,503.34	8,435.10	69.35	69.59	-55.06	-7,842.06	2,042.25	745.60	604.85	140.75	5.297	
15,800.00	8,862.08	15,603.34	8,434.89	70.02	70.25	-55.05	-7,942.06	2,042.40	745.69	603.53	142.16	5.245	
15,900.00	8,862.07	15,703.34	8,434.68	70.69	70.92	-55.03	-8,042.06	2,042.55	745.78	602.21	143.57	5.195	
16,000.00	8,862.07	15,803.34	8,434.47	71.36	71.58	-55.02	-8,142.06	2,042.70	745.87	600.89	144.98	5.145	
16,100.00	8,862.07	15,903.34	8,434.26	72.03	72.25	-55.01	-8,242.06	2,042.85	745.96	599.57	146.40	5.095	
16,200.00	8,862.07	16,003.34	8,434.05	72.71	72.92	-54.99	-8,342.06	2,043.00	746.05	598.24	147.81	5.047	
16,300.00	8,862.07	16,103.34	8,433.84	73.38	73.59	-54.98	-8,442.05	2,043.16	746.14	596.91	149.23	5.000	
16,400.00	8,862.06	16,203.34	8,433.63	74.06	74.26	-54.96	-8,542.05	2,043.31	746.24	595.58	150.66	4.953	
16,500.00	8,862.06	16,303.33	8,433.42	74.74	74.94	-54.95	-8,642.05	2,043.46	746.33	594.25	152.08	4.907	
16,600.00	8,862.06	16,403.33	8,433.21	75.42	75.62	-54.93	-8,742.05	2,043.61	746.42	592.91	153.51	4.862	
16,700.00	8,862.06	16,503.33	8,433.00	76.10	76.29	-54.92	-8,842.05	2,043.76	746.51	591.57	154.94	4.818	
16,800.00	8,862.06	16,603.33	8,432.79	76.79	76.97	-54.90	-8,942.05	2,043.91	746.60	590.23	156.37	4.775	
16,900.00	8,862.05	16,703.33	8,432.58	77.47	77.65	-54.89	-9,042.05	2,044.07	746.69	588.89	157.80	4.732	
17,000.00	8,862.05	16,803.33	8,432.37	78.16	78.34	-54.87	-9,142.05	2,044.22	746.78	587.54	159.24	4.690	
17,100.00	8,862.05	16,903.33	8,432.16	78.85	79.02	-54.86	-9,242.05	2,044.37	746.87	586.20	160.68	4.648	
17,200.00	8,862.05	17,003.33	8,431.95	79.54	79.71	-54.84	-9,342.05	2,044.52	746.96	584.85	162.12	4.608	
17,300.00	8,862.05	17,103.33	8,431.74	80.23	80.39	-54.83	-9,442.05	2,044.67	747.06	583.50	163.56	4.568	
17,400.00	8,862.04	17,203.33	8,431.53	80.92	81.08	-54.82	-9,542.05	2,044.82	747.15	582.15	165.00	4.528	
17,500.00	8,862.04	17,303.33	8,431.32	81.62	81.77	-54.80	-9,642.05	2,044.97	747.24	580.79	166.45	4.489	
17,600.00	8,862.04	17,403.33	8,431.11	82.31	82.46	-54.79	-9,742.05	2,045.13	747.33	579.44	167.89	4.451	
17,700.00	8,862.04	17,503.33	8,430.90	83.01	83.16	-54.77	-9,842.05	2,045.28	747.42	578.08	169.34	4.414	
17,800.00	8,862.04	17,603.33	8,430.69	83.71	83.85	-54.76	-9,942.05	2,045.43	747.51	576.72	170.79	4.377	
17,900.00	8,862.03	17,703.33	8,430.48	84.41	84.54	-54.74	-10,042.05	2,045.58	747.61	575.36	172.25	4.340	
18,000.00	8,862.03	17,803.33	8,430.27	85.11	85.24	-54.73	-10,142.05	2,045.73	747.70	574.00	173.70	4.304	
18,100.00	8,862.03	17,903.33	8,430.06	85.81	85.94	-54.71	-10,242.04	2,045.88	747.79	572.63	175.16	4.269	
18,200.00	8,862.03	18,003.33	8,429.85	86.51	86.64	-54.70	-10,342.04	2,046.03	747.88	571.27	176.61	4.235	
18,300.00	8,862.03	18,103.33	8,429.64	87.21	87.34	-54.68	-10,442.04	2,046.19	747.97	569.90	178.07	4.200	
18,400.00	8,862.02	18,203.33	8,429.43	87.92	88.04	-54.67	-10,542.04	2,046.34	748.06	568.53	179.53	4.167	
18,500.00	8,862.02	18,303.33	8,429.22	88.62	88.74	-54.66	-10,642.04	2,046.49	748.16	567.16	180.99	4.134	
18,600.00	8,862.02	18,403.33	8,429.01	89.33	89.44	-54.64	-10,742.04	2,046.64	748.25	565.79	182.46	4.101	
18,700.00	8,862.02	18,503.33	8,428.80	90.03	90.14	-54.63	-10,842.04	2,046.79	748.34	564.42	183.92	4.069	
18,800.00	8,862.02	18,603.33	8,428.59	90.74	90.85	-54.61	-10,942.04	2,046.94	748.43	563.05	185.39	4.037	
18,900.00	8,862.01	18,703.33	8,428.38	91.45	91.55	-54.60	-11,042.04	2,047.10	748.53	561.67	186.85	4.006	
19,000.00	8,862.01	18,803.33	8,428.17	92.16	92.26	-54.58	-11,142.04	2,047.25	748.62	560.29	188.32	3.975	
19,100.00	8,862.01	18,903.33	8,427.96	92.87	92.97	-54.57	-11,242.04	2,047.40	748.71	558.92	189.79	3.945	
19,200.00	8,862.01	19,003.33	8,427.75	93.58	93.68	-54.55	-11,342.04	2,047.55	748.80	557.54	191.26	3.915	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 6H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,300.00	8,862.01	19,103.33	8,427.54	94.30	94.38	-54.54	-11,442.04	2,047.70	748.89	556.16	192.73	3.886	
19,400.00	8,862.00	19,203.33	8,427.33	95.01	95.09	-54.52	-11,542.04	2,047.85	748.99	554.78	194.21	3.857	
19,500.00	8,862.00	19,303.33	8,427.12	95.72	95.81	-54.51	-11,642.04	2,048.00	749.08	553.40	195.68	3.828	
19,547.53	8,862.00	19,350.85	8,427.02	96.06	96.14	-54.50	-11,689.56	2,048.08	749.12	552.74	196.38	3.815	
19,548.26	8,862.00	19,351.58	8,427.02	96.14	96.15	-54.50	-11,690.29	2,048.08	749.12	552.73	196.39	3.814	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1 — **Offset Site Error:** 0.00 usft

Survey Program: 0-MWD+IFR1+MS — **Rule Assigned:** — **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	0.00	0.00	0.00	91.10	-1.53	79.97	79.98				
100.00	100.00	100.00	100.00	0.28	0.28	91.10	-1.53	79.97	79.98	79.43	0.55	144.887	
200.00	200.00	200.00	200.00	0.63	0.63	91.10	-1.53	79.97	79.98	78.72	1.27	63.030	
300.00	300.00	300.00	300.00	0.99	0.99	91.10	-1.53	79.97	79.98	78.00	1.99	40.276	
400.00	400.00	400.00	400.00	1.35	1.35	91.10	-1.53	79.97	79.98	77.28	2.70	29.592	
500.00	500.00	500.00	500.00	1.71	1.71	91.10	-1.53	79.97	79.98	76.56	3.42	23.389	
600.00	600.00	600.00	600.00	2.07	2.07	91.10	-1.53	79.97	79.98	75.85	4.14	19.335	
700.00	700.00	700.00	700.00	2.43	2.43	91.10	-1.53	79.97	79.98	75.13	4.85	16.479	
800.00	800.00	800.00	800.00	2.79	2.79	91.10	-1.53	79.97	79.98	74.41	5.57	14.358	
900.00	900.00	900.00	900.00	3.14	3.14	91.10	-1.53	79.97	79.98	73.70	6.29	12.721	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.10	-1.53	79.97	79.98	72.98	7.00	11.419	CC, ES
1,100.00	1,099.98	1,097.81	1,097.79	3.84	3.84	-69.31	-2.56	81.29	80.72	73.04	7.68	10.511	
1,200.00	1,199.84	1,195.56	1,195.41	4.17	4.17	-70.48	-5.64	85.23	82.96	74.64	8.33	9.964	
1,300.00	1,299.45	1,293.22	1,292.71	4.51	4.50	-72.29	-10.76	91.78	86.77	77.79	8.98	9.666	
1,350.00	1,349.13	1,342.00	1,341.18	4.68	4.67	-73.37	-14.08	96.04	89.29	79.99	9.30	9.597	
1,400.00	1,398.73	1,390.76	1,389.54	4.85	4.83	-68.01	-17.91	100.94	91.93	82.30	9.63	9.546	
1,500.00	1,497.69	1,488.29	1,485.93	5.19	5.17	-59.31	-27.09	112.68	96.64	86.35	10.29	9.391	
1,600.00	1,596.25	1,585.81	1,581.74	5.54	5.51	-52.61	-38.28	127.00	100.49	89.54	10.95	9.175	
1,670.62	1,665.55	1,654.66	1,648.98	5.78	5.76	-48.64	-47.38	138.66	102.68	91.25	11.42	8.989	
1,700.00	1,694.31	1,683.29	1,676.83	5.89	5.86	-48.48	-51.46	143.88	103.60	91.98	11.62	8.917	
1,800.00	1,792.23	1,782.76	1,773.36	6.24	6.22	-47.56	-66.25	162.80	107.48	95.16	12.32	8.722	
1,900.00	1,890.14	1,882.67	1,870.30	6.61	6.58	-46.68	-81.13	181.85	111.43	98.39	13.04	8.543	
2,000.00	1,988.06	1,982.58	1,967.24	6.97	6.95	-45.86	-96.01	200.90	115.41	101.64	13.77	8.380	
2,100.00	2,085.97	2,082.49	2,064.18	7.34	7.32	-45.10	-110.89	219.94	119.41	104.90	14.51	8.231	
2,200.00	2,183.89	2,182.40	2,161.12	7.70	7.70	-44.38	-125.77	238.99	123.42	108.17	15.25	8.095	
2,300.00	2,281.80	2,282.30	2,258.06	8.07	8.07	-43.71	-140.65	258.04	127.46	111.46	15.99	7.970	
2,400.00	2,379.72	2,382.21	2,355.00	8.45	8.45	-43.08	-155.53	277.08	131.51	114.77	16.74	7.856	
2,500.00	2,477.64	2,482.12	2,451.94	8.82	8.83	-42.49	-170.41	296.13	135.57	118.08	17.49	7.750	
2,600.00	2,575.55	2,582.03	2,548.88	9.19	9.22	-41.94	-185.29	315.17	139.65	121.40	18.25	7.653	
2,700.00	2,673.47	2,681.94	2,645.82	9.57	9.60	-41.41	-200.17	334.22	143.74	124.74	19.01	7.563	
2,800.00	2,771.38	2,781.84	2,742.76	9.95	9.98	-40.92	-215.05	353.27	147.85	128.08	19.77	7.480	
2,900.00	2,869.30	2,881.75	2,839.70	10.32	10.37	-40.45	-229.93	372.31	151.96	131.43	20.53	7.402	
3,000.00	2,967.21	2,981.66	2,936.64	10.70	10.76	-40.01	-244.81	391.36	156.08	134.79	21.29	7.330	
3,100.00	3,065.13	3,081.57	3,033.58	11.08	11.14	-39.59	-259.69	410.40	160.21	138.16	22.06	7.263	
3,200.00	3,163.05	3,181.48	3,130.52	11.46	11.53	-39.19	-274.57	429.45	164.35	141.53	22.83	7.200	
3,300.00	3,260.96	3,281.38	3,227.46	11.84	11.92	-38.81	-289.45	448.50	168.50	144.91	23.60	7.141	
3,400.00	3,358.88	3,381.29	3,324.40	12.22	12.31	-38.44	-304.34	467.54	172.66	148.29	24.37	7.086	
3,500.00	3,456.79	3,481.20	3,421.34	12.60	12.70	-38.10	-319.22	486.59	176.82	151.68	25.14	7.034	
3,600.00	3,554.71	3,581.11	3,518.28	12.98	13.09	-37.77	-334.10	505.64	180.98	155.08	25.91	6.985	
3,700.00	3,652.62	3,681.01	3,615.22	13.36	13.48	-37.46	-348.98	524.68	185.16	158.48	26.68	6.939	
3,800.00	3,750.54	3,780.92	3,712.17	13.75	13.87	-37.16	-363.86	543.73	189.34	161.88	27.46	6.896	
3,900.00	3,848.45	3,880.83	3,809.11	14.13	14.27	-36.87	-378.74	562.77	193.52	165.29	28.23	6.855	
4,000.00	3,946.37	3,980.74	3,906.05	14.51	14.66	-36.59	-393.62	581.82	197.71	168.70	29.01	6.816	
4,100.00	4,044.29	4,080.65	4,002.99	14.89	15.05	-36.33	-408.50	600.87	201.90	172.12	29.78	6.779	
4,200.00	4,142.20	4,180.55	4,099.93	15.28	15.45	-36.08	-423.38	619.91	206.10	175.54	30.56	6.744	
4,300.00	4,240.12	4,280.46	4,196.87	15.66	15.84	-35.83	-438.26	638.96	210.30	178.96	31.34	6.711	
4,400.00	4,338.03	4,380.37	4,293.81	16.05	16.23	-35.60	-453.14	658.00	214.50	182.38	32.11	6.679	
4,500.00	4,435.95	4,480.28	4,390.75	16.43	16.63	-35.38	-468.02	677.05	218.71	185.81	32.89	6.649	
4,600.00	4,533.86	4,580.19	4,487.69	16.81	17.02	-35.16	-482.90	696.10	222.92	189.24	33.67	6.620	
4,700.00	4,631.78	4,680.09	4,584.63	17.20	17.42	-34.95	-497.78	715.14	227.13	192.68	34.45	6.593	
4,800.00	4,729.69	4,780.00	4,681.57	17.58	17.81	-34.75	-512.66	734.19	231.35	196.12	35.23	6.567	
4,900.00	4,827.61	4,879.91	4,778.51	17.97	18.20	-34.56	-527.54	753.24	235.57	199.55	36.01	6.542	

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

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Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
5,000.00	4,925.53	4,979.82	4,875.45	18.35	18.60	-34.37	-542.42	772.28	239.79	203.00	36.79	6.518	
5,100.00	5,023.44	5,079.72	4,972.39	18.74	18.99	-34.19	-557.30	791.33	244.01	206.44	37.57	6.495	
5,200.00	5,121.36	5,179.63	5,069.33	19.12	19.39	-34.02	-572.18	810.37	248.24	209.88	38.35	6.472	
5,300.00	5,219.27	5,279.54	5,166.27	19.51	19.79	-33.85	-587.06	829.42	252.47	213.33	39.13	6.451	
5,400.00	5,317.19	5,379.45	5,263.21	19.89	20.18	-33.69	-601.94	848.47	256.70	216.78	39.92	6.431	
5,500.00	5,415.10	5,479.36	5,360.15	20.28	20.58	-33.53	-616.83	867.51	260.93	220.23	40.70	6.411	
5,600.00	5,513.02	5,579.26	5,457.09	20.66	20.97	-33.38	-631.71	886.56	265.16	223.68	41.48	6.393	
5,700.00	5,610.93	5,679.17	5,554.03	21.05	21.37	-33.23	-646.59	905.60	269.40	227.14	42.26	6.375	
5,800.00	5,708.85	5,779.08	5,650.97	21.43	21.77	-33.09	-661.47	924.65	273.64	230.59	43.04	6.357	
5,900.00	5,806.77	5,878.99	5,747.91	21.82	22.16	-32.95	-676.35	943.70	277.88	234.05	43.83	6.340	
6,000.00	5,904.68	5,978.90	5,844.85	22.21	22.56	-32.82	-691.23	962.74	282.12	237.51	44.61	6.324	
6,100.00	6,002.60	6,078.80	5,941.79	22.59	22.95	-32.69	-706.11	981.79	286.36	240.97	45.39	6.309	
6,200.00	6,100.51	6,178.71	6,038.73	22.98	23.35	-32.56	-720.99	1,000.84	290.61	244.43	46.18	6.294	
6,300.00	6,198.43	6,278.62	6,135.67	23.36	23.75	-32.44	-735.87	1,019.88	294.85	247.89	46.96	6.279	
6,400.00	6,296.34	6,378.53	6,232.61	23.75	24.14	-32.32	-750.75	1,038.93	299.10	251.36	47.74	6.265	
6,500.00	6,394.26	6,478.43	6,329.55	24.14	24.54	-32.20	-765.63	1,057.97	303.35	254.82	48.53	6.251	
6,600.00	6,492.17	6,578.34	6,426.49	24.52	24.94	-32.09	-780.51	1,077.02	307.60	258.29	49.31	6.238	
6,700.00	6,590.09	6,678.25	6,523.43	24.91	25.33	-31.98	-795.39	1,096.07	311.85	261.75	50.09	6.225	
6,800.00	6,688.01	6,778.16	6,620.37	25.29	25.73	-31.87	-810.27	1,115.11	316.10	265.22	50.88	6.213	
6,900.00	6,785.92	6,878.07	6,717.31	25.68	26.13	-31.77	-825.15	1,134.16	320.35	268.69	51.66	6.201	
7,000.00	6,883.84	6,977.97	6,814.25	26.07	26.53	-31.67	-840.03	1,153.20	324.61	272.16	52.45	6.189	
7,100.00	6,981.75	7,077.88	6,911.19	26.45	26.92	-31.57	-854.91	1,172.25	328.86	275.63	53.23	6.178	
7,200.00	7,079.67	7,177.79	7,008.13	26.84	27.32	-31.47	-869.79	1,191.30	333.12	279.10	54.01	6.167	
7,300.00	7,177.58	7,277.70	7,105.07	27.23	27.72	-31.38	-884.67	1,210.34	337.37	282.57	54.80	6.157	SF
7,400.00	7,275.50	7,350.00	7,174.84	27.61	28.01	-31.20	-896.31	1,225.24	344.04	288.90	55.14	6.240	
7,500.00	7,373.41	7,417.35	7,237.48	28.00	28.30	-30.49	-911.47	1,244.64	360.16	305.08	55.08	6.538	
7,600.00	7,471.33	7,477.80	7,290.91	28.39	28.57	-29.45	-928.85	1,266.88	386.01	331.49	54.52	7.080	
7,700.00	7,569.25	7,534.13	7,337.76	28.77	28.83	-28.21	-948.08	1,291.49	421.01	367.43	53.58	7.857	
7,764.22	7,632.13	7,567.86	7,364.27	29.02	29.00	-27.39	-960.91	1,307.92	447.98	395.15	52.83	8.480	
7,800.00	7,667.21	7,585.72	7,377.79	29.16	29.08	-27.10	-968.09	1,317.11	464.60	412.23	52.37	8.871	
7,900.00	7,765.68	7,631.58	7,410.79	29.54	29.31	-26.37	-987.68	1,342.19	517.77	466.77	51.01	10.151	
8,000.00	7,864.70	7,671.45	7,437.35	29.91	29.51	-25.81	-1,005.99	1,365.62	579.77	530.16	49.61	11.686	
8,100.00	7,964.15	7,700.00	7,455.05	30.28	29.65	-25.70	-1,019.78	1,383.27	649.29	601.29	48.00	13.527	
8,200.00	8,063.90	7,734.66	7,475.02	30.63	29.82	-25.46	-1,037.22	1,405.59	724.92	677.86	47.06	15.404	
8,300.00	8,163.83	7,750.00	7,483.30	30.98	29.90	-26.08	-1,045.17	1,415.76	805.83	760.22	45.61	17.670	
8,350.17	8,214.00	7,769.77	7,493.46	31.14	30.00	106.19	-1,055.61	1,429.13	847.86	802.33	45.52	18.624	
8,400.00	8,263.77	7,780.31	7,498.63	31.31	30.05	-36.10	-1,061.26	1,436.36	889.56	844.50	45.06	19.741	
8,450.00	8,313.33	7,800.00	7,507.84	31.49	30.15	-31.91	-1,071.97	1,450.08	930.08	885.17	44.91	20.709	
8,500.00	8,362.13	7,800.00	7,507.84	31.69	30.15	-28.82	-1,071.97	1,450.08	968.79	924.83	43.96	22.039	
8,550.00	8,409.80	7,815.97	7,514.87	31.89	30.23	-26.21	-1,080.80	1,461.38	1,005.76	962.17	43.59	23.073	
8,600.00	8,455.99	7,828.90	7,520.27	32.09	30.30	-24.13	-1,088.04	1,470.64	1,040.79	997.70	43.08	24.159	
8,650.00	8,500.33	7,850.00	7,528.50	32.31	30.41	-22.48	-1,100.00	1,485.94	1,073.80	1,030.96	42.84	25.065	
8,700.00	8,542.50	7,850.00	7,528.50	32.53	30.41	-21.04	-1,100.00	1,485.94	1,104.50	1,062.65	41.85	26.393	
8,750.00	8,582.16	7,869.91	7,535.60	32.75	30.51	-19.97	-1,111.44	1,500.59	1,132.87	1,091.34	41.54	27.274	
8,800.00	8,619.02	7,900.00	7,545.11	32.97	30.66	-19.22	-1,129.02	1,523.09	1,159.21	1,117.66	41.55	27.900	
8,850.00	8,652.80	7,900.00	7,545.11	33.19	30.66	-18.38	-1,129.02	1,523.09	1,182.42	1,141.84	40.58	29.139	
8,900.00	8,683.24	7,919.09	7,550.36	33.42	30.75	-17.87	-1,140.32	1,537.56	1,203.44	1,163.21	40.24	29.910	
8,950.00	8,710.11	7,919.09	7,550.36	33.64	30.75	-17.27	-1,140.32	1,537.56	1,221.87	1,182.54	39.33	31.071	
9,000.00	8,733.20	7,955.03	7,559.11	33.86	30.93	-17.21	-1,161.78	1,565.03	1,237.11	1,197.59	39.52	31.301	
9,050.00	8,752.35	7,977.74	7,564.08	34.08	31.05	-17.12	-1,175.42	1,582.48	1,249.52	1,210.18	39.34	31.762	
9,100.00	8,767.39	8,000.00	7,568.52	34.29	31.16	-17.14	-1,188.85	1,599.67	1,258.91	1,219.74	39.17	32.137	
9,100.17	8,767.43	8,000.00	7,568.52	34.29	31.16	-17.14	-1,188.85	1,599.67	1,258.94	1,219.77	39.17	32.140	

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Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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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
9,200.00	8,791.66	8,045.43	7,576.27	34.71	31.39	-18.09	-1,216.41	1,634.95	1,276.43	1,237.37	39.05	32.685	
9,300.00	8,812.57	8,100.00	7,583.22	35.13	31.66	-19.01	-1,249.73	1,677.59	1,297.67	1,258.18	39.49	32.864	
9,400.00	8,829.97	8,129.55	7,585.91	35.54	31.81	-19.18	-1,267.85	1,700.78	1,322.35	1,282.70	39.64	33.357	
9,500.00	8,843.72	8,168.29	7,588.28	35.95	32.01	-19.26	-1,291.65	1,731.25	1,350.77	1,310.38	40.39	33.441	
9,600.00	8,853.72	8,200.00	7,589.24	36.33	32.17	-18.86	-1,311.16	1,756.23	1,382.82	1,341.48	41.35	33.445	
9,700.00	8,859.89	8,259.35	7,589.40	36.70	32.47	-18.96	-1,347.71	1,803.00	1,418.06	1,374.93	43.13	32.881	
9,800.00	8,862.18	8,324.59	7,589.40	37.05	32.80	-19.07	-1,387.87	1,854.40	1,455.28	1,410.04	45.24	32.165	
9,809.00	8,862.20	8,330.17	7,589.40	37.08	32.83	-19.06	-1,391.30	1,858.80	1,458.73	1,413.29	45.44	32.103	
9,900.00	8,862.20	8,386.33	7,589.40	37.39	33.13	-20.82	-1,425.88	1,903.05	1,495.02	1,447.62	47.40	31.540	
10,000.00	8,862.19	8,451.29	7,589.40	37.74	33.49	-22.80	-1,465.88	1,954.24	1,537.75	1,488.19	49.57	31.025	
10,100.00	8,862.19	8,573.40	7,589.40	38.10	34.18	-26.28	-1,544.44	2,047.70	1,581.93	1,529.35	52.57	30.089	
10,200.00	8,862.19	8,715.70	7,589.40	38.48	35.02	-29.85	-1,643.29	2,150.01	1,625.62	1,569.93	55.69	29.190	
10,300.00	8,862.19	8,881.61	7,589.40	38.86	36.01	-33.42	-1,767.77	2,259.61	1,667.48	1,608.56	58.91	28.304	
10,400.00	8,862.19	9,074.33	7,589.40	39.25	37.17	-36.82	-1,923.65	2,372.80	1,705.97	1,643.77	62.20	27.427	
10,500.00	8,862.18	9,295.97	7,589.39	39.66	38.49	-39.85	-2,115.94	2,482.78	1,739.37	1,673.91	65.47	26.568	
10,600.00	8,862.18	9,546.22	7,589.39	40.07	39.90	-42.31	-2,346.65	2,579.24	1,765.83	1,697.26	68.57	25.753	
10,700.00	8,862.18	9,774.50	7,589.38	40.49	41.10	-43.75	-2,566.60	2,639.77	1,783.43	1,712.43	71.00	25.120	
10,800.00	8,862.18	10,110.98	7,589.37	40.93	42.67	-44.70	-2,900.00	2,681.45	1,791.22	1,717.70	73.52	24.362	
10,900.00	8,862.18	10,252.34	7,589.36	41.37	43.27	-44.73	-3,041.35	2,682.76	1,791.48	1,716.68	74.80	23.950	
11,000.00	8,862.17	10,352.34	7,589.36	41.82	43.69	-44.73	-3,141.35	2,682.95	1,791.49	1,715.55	75.94	23.592	
11,100.00	8,862.17	10,452.34	7,589.35	42.28	44.12	-44.73	-3,241.35	2,683.15	1,791.50	1,714.41	77.08	23.241	
11,200.00	8,862.17	10,552.34	7,589.35	42.75	44.57	-44.73	-3,341.35	2,683.35	1,791.51	1,713.26	78.25	22.895	
11,300.00	8,862.17	10,652.34	7,589.34	43.22	45.02	-44.73	-3,441.35	2,683.55	1,791.52	1,712.09	79.42	22.557	
11,400.00	8,862.17	10,752.34	7,589.34	43.71	45.47	-44.73	-3,541.35	2,683.74	1,791.53	1,710.91	80.61	22.224	
11,500.00	8,862.16	10,852.34	7,589.34	44.20	45.94	-44.73	-3,641.35	2,683.94	1,791.53	1,709.72	81.81	21.898	
11,600.00	8,862.16	10,952.34	7,589.33	44.70	46.41	-44.73	-3,741.35	2,684.14	1,791.54	1,708.52	83.03	21.578	
11,700.00	8,862.16	11,052.34	7,589.33	45.20	46.89	-44.73	-3,841.35	2,684.34	1,791.55	1,707.30	84.25	21.265	
11,800.00	8,862.16	11,152.34	7,589.32	45.72	47.38	-44.73	-3,941.35	2,684.53	1,791.56	1,706.08	85.48	20.958	
11,900.00	8,862.16	11,252.34	7,589.32	46.24	47.87	-44.73	-4,041.35	2,684.73	1,791.57	1,704.84	86.73	20.657	
12,000.00	8,862.15	11,352.34	7,589.32	46.76	48.37	-44.73	-4,141.35	2,684.93	1,791.58	1,703.60	87.98	20.363	
12,100.00	8,862.15	11,452.34	7,589.31	47.29	48.88	-44.73	-4,241.35	2,685.12	1,791.59	1,702.35	89.25	20.075	
12,200.00	8,862.15	11,552.34	7,589.31	47.83	49.39	-44.73	-4,341.35	2,685.32	1,791.60	1,701.08	90.52	19.793	
12,300.00	8,862.15	11,652.34	7,589.30	48.38	49.91	-44.73	-4,441.35	2,685.52	1,791.61	1,699.81	91.80	19.517	
12,400.00	8,862.15	11,752.34	7,589.30	48.93	50.44	-44.73	-4,541.34	2,685.72	1,791.62	1,698.53	93.09	19.246	
12,500.00	8,862.14	11,852.34	7,589.29	49.48	50.97	-44.73	-4,641.34	2,685.91	1,791.63	1,697.24	94.39	18.982	
12,600.00	8,862.14	11,952.34	7,589.29	50.04	51.51	-44.73	-4,741.34	2,686.11	1,791.64	1,695.95	95.69	18.723	
12,700.00	8,862.14	12,052.34	7,589.29	50.61	52.05	-44.73	-4,841.34	2,686.31	1,791.65	1,694.64	97.00	18.470	
12,800.00	8,862.14	12,152.34	7,589.28	51.18	52.60	-44.73	-4,941.34	2,686.51	1,791.66	1,693.33	98.32	18.222	
12,900.00	8,862.14	12,252.34	7,589.28	51.76	53.16	-44.73	-5,041.34	2,686.70	1,791.66	1,692.02	99.65	17.980	
13,000.00	8,862.13	12,352.34	7,589.27	52.34	53.71	-44.73	-5,141.34	2,686.90	1,791.67	1,690.70	100.98	17.743	
13,100.00	8,862.13	12,452.34	7,589.27	52.92	54.28	-44.73	-5,241.34	2,687.10	1,791.68	1,689.37	102.32	17.511	
13,200.00	8,862.13	12,552.34	7,589.27	53.51	54.85	-44.73	-5,341.34	2,687.30	1,791.69	1,688.03	103.66	17.284	
13,300.00	8,862.13	12,652.34	7,589.26	54.10	55.42	-44.73	-5,441.34	2,687.49	1,791.70	1,686.69	105.01	17.062	
13,400.00	8,862.12	12,752.34	7,589.26	54.70	56.00	-44.73	-5,541.34	2,687.69	1,791.71	1,685.34	106.37	16.845	
13,500.00	8,862.12	12,852.34	7,589.25	55.30	56.58	-44.73	-5,641.34	2,687.89	1,791.72	1,683.99	107.73	16.632	
13,600.00	8,862.12	12,952.34	7,589.25	55.91	57.17	-44.73	-5,741.34	2,688.09	1,791.73	1,682.64	109.09	16.424	
13,700.00	8,862.12	13,052.34	7,589.24	56.52	57.76	-44.73	-5,841.34	2,688.28	1,791.74	1,681.27	110.46	16.220	
13,800.00	8,862.12	13,152.34	7,589.24	57.13	58.35	-44.73	-5,941.34	2,688.48	1,791.75	1,679.91	111.84	16.021	
13,900.00	8,862.11	13,252.34	7,589.24	57.75	58.95	-44.73	-6,041.34	2,688.68	1,791.76	1,678.54	113.22	15.825	
14,000.00	8,862.11	13,352.34	7,589.23	58.37	59.55	-44.73	-6,141.34	2,688.88	1,791.77	1,677.16	114.60	15.634	
14,100.00	8,862.11	13,452.34	7,589.23	58.99	60.16	-44.73	-6,241.34	2,689.07	1,791.78	1,675.78	115.99	15.447	
14,200.00	8,862.11	13,552.34	7,589.22	59.62	60.77	-44.73	-6,341.34	2,689.27	1,791.79	1,674.40	117.39	15.264	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
14,300.00	8,862.11	13,652.34	7,589.22	60.25	61.38	-44.73	-6,441.34	2,689.47	1,791.80	1,673.01	118.78	15.085	
14,400.00	8,862.10	13,752.34	7,589.22	60.88	62.00	-44.73	-6,541.34	2,689.66	1,791.80	1,671.62	120.18	14.909	
14,500.00	8,862.10	13,852.34	7,589.21	61.52	62.62	-44.73	-6,641.34	2,689.86	1,791.81	1,670.23	121.59	14.737	
14,600.00	8,862.10	13,952.34	7,589.21	62.16	63.24	-44.73	-6,741.34	2,690.06	1,791.82	1,668.83	123.00	14.568	
14,700.00	8,862.10	14,052.34	7,589.20	62.80	63.87	-44.73	-6,841.34	2,690.26	1,791.83	1,667.43	124.41	14.403	
14,800.00	8,862.10	14,152.34	7,589.20	63.44	64.50	-44.73	-6,941.34	2,690.45	1,791.84	1,666.02	125.82	14.241	
14,900.00	8,862.09	14,252.34	7,589.19	64.09	65.13	-44.73	-7,041.34	2,690.65	1,791.85	1,664.61	127.24	14.083	
15,000.00	8,862.09	14,352.34	7,589.19	64.74	65.77	-44.73	-7,141.34	2,690.85	1,791.86	1,663.20	128.66	13.927	
15,100.00	8,862.09	14,452.34	7,589.19	65.39	66.40	-44.73	-7,241.34	2,691.05	1,791.87	1,661.79	130.08	13.775	
15,200.00	8,862.09	14,552.34	7,589.18	66.05	67.04	-44.73	-7,341.34	2,691.24	1,791.88	1,660.37	131.51	13.625	
15,300.00	8,862.09	14,652.34	7,589.18	66.70	67.69	-44.73	-7,441.34	2,691.44	1,791.89	1,658.95	132.94	13.479	
15,400.00	8,862.08	14,752.34	7,589.17	67.36	68.33	-44.73	-7,541.34	2,691.64	1,791.90	1,657.53	134.37	13.335	
15,500.00	8,862.08	14,852.34	7,589.17	68.02	68.98	-44.74	-7,641.34	2,691.84	1,791.91	1,656.10	135.81	13.195	
15,600.00	8,862.08	14,952.34	7,589.17	68.69	69.63	-44.74	-7,741.34	2,692.03	1,791.92	1,654.67	137.24	13.056	
15,700.00	8,862.08	15,052.34	7,589.16	69.35	70.28	-44.74	-7,841.34	2,692.23	1,791.93	1,653.24	138.68	12.921	
15,800.00	8,862.08	15,152.34	7,589.16	70.02	70.94	-44.74	-7,941.34	2,692.43	1,791.94	1,651.81	140.13	12.788	
15,900.00	8,862.07	15,252.34	7,589.15	70.69	71.59	-44.74	-8,041.34	2,692.63	1,791.94	1,650.37	141.57	12.658	
16,000.00	8,862.07	15,352.34	7,589.15	71.36	72.25	-44.74	-8,141.34	2,692.82	1,791.95	1,648.94	143.02	12.530	
16,100.00	8,862.07	15,452.34	7,589.14	72.03	72.91	-44.74	-8,241.34	2,693.02	1,791.96	1,647.50	144.47	12.404	
16,200.00	8,862.07	15,552.34	7,589.14	72.71	73.58	-44.74	-8,341.34	2,693.22	1,791.97	1,646.05	145.92	12.281	
16,300.00	8,862.07	15,652.34	7,589.14	73.38	74.24	-44.74	-8,441.34	2,693.42	1,791.98	1,644.61	147.37	12.160	
16,400.00	8,862.06	15,752.34	7,589.13	74.06	74.91	-44.74	-8,541.34	2,693.61	1,791.99	1,643.17	148.83	12.041	
16,500.00	8,862.06	15,852.34	7,589.13	74.74	75.58	-44.74	-8,641.34	2,693.81	1,792.00	1,641.72	150.28	11.924	
16,600.00	8,862.06	15,952.34	7,589.12	75.42	76.25	-44.74	-8,741.34	2,694.01	1,792.01	1,640.27	151.74	11.810	
16,700.00	8,862.06	16,052.34	7,589.12	76.10	76.92	-44.74	-8,841.34	2,694.20	1,792.02	1,638.82	153.20	11.697	
16,800.00	8,862.06	16,152.34	7,589.12	76.79	77.59	-44.74	-8,941.34	2,694.40	1,792.03	1,637.36	154.67	11.587	
16,900.00	8,862.05	16,252.34	7,589.11	77.47	78.27	-44.74	-9,041.34	2,694.60	1,792.04	1,635.91	156.13	11.478	
17,000.00	8,862.05	16,352.34	7,589.11	78.16	78.95	-44.74	-9,141.34	2,694.80	1,792.05	1,634.45	157.60	11.371	
17,100.00	8,862.05	16,452.34	7,589.10	78.85	79.63	-44.74	-9,241.34	2,694.99	1,792.06	1,632.99	159.06	11.266	
17,200.00	8,862.05	16,552.34	7,589.10	79.54	80.31	-44.74	-9,341.34	2,695.19	1,792.07	1,631.53	160.53	11.163	
17,300.00	8,862.05	16,652.34	7,589.09	80.23	80.99	-44.74	-9,441.34	2,695.39	1,792.08	1,630.07	162.00	11.062	
17,400.00	8,862.04	16,752.34	7,589.09	80.92	81.67	-44.74	-9,541.34	2,695.59	1,792.08	1,628.61	163.47	10.962	
17,500.00	8,862.04	16,852.34	7,589.09	81.62	82.36	-44.74	-9,641.34	2,695.78	1,792.09	1,627.15	164.95	10.865	
17,600.00	8,862.04	16,952.34	7,589.08	82.31	83.04	-44.74	-9,741.33	2,695.98	1,792.10	1,625.68	166.42	10.768	
17,700.00	8,862.04	17,052.34	7,589.08	83.01	83.73	-44.74	-9,841.33	2,696.18	1,792.11	1,624.21	167.90	10.674	
17,800.00	8,862.04	17,152.34	7,589.07	83.71	84.42	-44.74	-9,941.33	2,696.38	1,792.12	1,622.74	169.38	10.581	
17,900.00	8,862.03	17,252.34	7,589.07	84.41	85.11	-44.74	-10,041.33	2,696.57	1,792.13	1,621.27	170.86	10.489	
18,000.00	8,862.03	17,352.34	7,589.07	85.11	85.80	-44.74	-10,141.33	2,696.77	1,792.14	1,619.80	172.34	10.399	
18,100.00	8,862.03	17,452.34	7,589.06	85.81	86.50	-44.74	-10,241.33	2,696.97	1,792.15	1,618.33	173.82	10.310	
18,200.00	8,862.03	17,552.34	7,589.06	86.51	87.19	-44.74	-10,341.33	2,697.17	1,792.16	1,616.86	175.30	10.223	
18,300.00	8,862.03	17,652.34	7,589.05	87.21	87.89	-44.74	-10,441.33	2,697.36	1,792.17	1,615.38	176.79	10.138	
18,400.00	8,862.02	17,752.34	7,589.05	87.92	88.58	-44.74	-10,541.33	2,697.56	1,792.18	1,613.91	178.27	10.053	
18,500.00	8,862.02	17,852.34	7,589.04	88.62	89.28	-44.74	-10,641.33	2,697.76	1,792.19	1,612.43	179.76	9.970	
18,600.00	8,862.02	17,952.34	7,589.04	89.33	89.98	-44.74	-10,741.33	2,697.96	1,792.20	1,610.95	181.24	9.888	
18,700.00	8,862.02	18,052.34	7,589.04	90.03	90.68	-44.74	-10,841.33	2,698.15	1,792.21	1,609.47	182.73	9.808	
18,800.00	8,862.02	18,152.34	7,589.03	90.74	91.38	-44.74	-10,941.33	2,698.35	1,792.21	1,607.99	184.22	9.729	
18,900.00	8,862.01	18,252.34	7,589.03	91.45	92.08	-44.74	-11,041.33	2,698.55	1,792.22	1,606.51	185.71	9.651	
19,000.00	8,862.01	18,352.34	7,589.02	92.16	92.78	-44.74	-11,141.33	2,698.75	1,792.23	1,605.03	187.20	9.574	
19,100.00	8,862.01	18,452.34	7,589.02	92.87	93.49	-44.74	-11,241.33	2,698.94	1,792.24	1,603.55	188.70	9.498	
19,200.00	8,862.01	18,552.34	7,589.02	93.58	94.19	-44.74	-11,341.33	2,699.14	1,792.25	1,602.06	190.19	9.423	
19,300.00	8,862.01	18,652.34	7,589.01	94.30	94.90	-44.74	-11,441.33	2,699.34	1,792.26	1,600.58	191.68	9.350	
19,400.00	8,862.00	18,752.34	7,589.01	95.01	95.60	-44.74	-11,541.33	2,699.53	1,792.27	1,599.09	193.18	9.278	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 7H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,500.00	8,862.00	18,852.34	7,589.00	95.72	96.31	-44.74	-11,641.33	2,699.73	1,792.28	1,597.60	194.68	9.206	
19,547.53	8,862.00	18,899.87	7,589.00	96.06	96.65	-44.74	-11,688.86	2,699.83	1,792.28	1,596.90	195.39	9.173	
19,548.26	8,862.00	18,900.60	7,589.00	96.14	96.65	-44.74	-11,689.59	2,699.83	1,792.28	1,596.89	195.40	9.173	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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	0.00	0.00	0.00	91.09	-1.14	59.98	59.99				
100.00	100.00	100.00	100.00	0.28	0.28	91.09	-1.14	59.98	59.99	59.44	0.55	108.670	
200.00	200.00	200.00	200.00	0.63	0.63	91.09	-1.14	59.98	59.99	58.72	1.27	47.274	
300.00	300.00	300.00	300.00	0.99	0.99	91.09	-1.14	59.98	59.99	58.00	1.99	30.208	
400.00	400.00	400.00	400.00	1.35	1.35	91.09	-1.14	59.98	59.99	57.29	2.70	22.195	
500.00	500.00	500.00	500.00	1.71	1.71	91.09	-1.14	59.98	59.99	56.57	3.42	17.542	
600.00	600.00	600.00	600.00	2.07	2.07	91.09	-1.14	59.98	59.99	55.85	4.14	14.502	
700.00	700.00	700.00	700.00	2.43	2.43	91.09	-1.14	59.98	59.99	55.14	4.85	12.360	
800.00	800.00	800.00	800.00	2.79	2.79	91.09	-1.14	59.98	59.99	54.42	5.57	10.769	
900.00	900.00	900.00	900.00	3.14	3.14	91.09	-1.14	59.98	59.99	53.70	6.29	9.541	
1,000.00	1,000.00	1,000.00	1,000.00	3.50	3.50	91.09	-1.14	59.98	59.99	52.99	7.00	8.565	
1,100.00	1,099.98	1,099.98	1,099.98	3.84	3.86	-70.49	-1.14	59.98	59.39	51.68	7.70	7.709	
1,200.00	1,199.84	1,199.84	1,199.84	4.17	4.22	-75.41	-1.14	59.98	57.85	49.46	8.39	6.896	
1,261.69	1,261.33	1,260.40	1,260.40	4.38	4.43	-79.77	-1.46	60.53	57.29	48.49	8.80	6.509	CC
1,300.00	1,299.45	1,298.03	1,298.01	4.51	4.56	-82.72	-1.98	61.43	57.52	48.46	9.06	6.350	ES
1,350.00	1,349.13	1,347.14	1,347.08	4.68	4.72	-86.71	-3.03	63.25	58.52	49.13	9.39	6.234	
1,400.00	1,398.73	1,396.29	1,396.13	4.85	4.89	-84.16	-4.50	65.80	59.99	50.27	9.72	6.172	
1,500.00	1,497.69	1,494.74	1,494.22	5.19	5.22	-80.77	-8.71	73.10	63.05	52.66	10.39	6.068	
1,600.00	1,596.25	1,593.41	1,592.18	5.54	5.56	-79.02	-14.63	83.34	65.96	54.89	11.07	5.958	
1,670.62	1,665.55	1,663.21	1,661.20	5.78	5.80	-78.42	-19.82	92.34	67.78	56.22	11.56	5.863	
1,700.00	1,694.31	1,692.28	1,689.86	5.89	5.90	-79.57	-22.24	96.52	68.56	56.80	11.76	5.828	
1,800.00	1,792.23	1,791.30	1,787.11	6.24	6.25	-81.65	-31.54	112.64	72.15	59.68	12.46	5.788	
1,900.00	1,890.14	1,891.07	1,884.64	6.61	6.60	-81.88	-42.10	130.83	76.54	63.37	13.18	5.808	
2,000.00	1,988.06	1,990.98	1,982.29	6.97	6.96	-82.05	-52.70	149.09	80.96	67.06	13.90	5.824	
2,100.00	2,085.97	2,090.88	2,079.93	7.34	7.32	-82.20	-63.30	167.36	85.37	70.74	14.63	5.836	
2,200.00	2,183.89	2,190.78	2,177.58	7.70	7.68	-82.33	-73.90	185.62	89.78	74.42	15.36	5.845	
2,300.00	2,281.80	2,290.68	2,275.22	8.07	8.05	-82.45	-84.51	203.89	94.20	78.10	16.10	5.852	
2,400.00	2,379.72	2,390.59	2,372.87	8.45	8.42	-82.56	-95.11	222.15	98.61	81.77	16.84	5.856	
2,500.00	2,477.64	2,490.49	2,470.51	8.82	8.79	-82.66	-105.71	240.41	103.03	85.45	17.58	5.860	
2,600.00	2,575.55	2,590.39	2,568.16	9.19	9.16	-82.75	-116.31	258.68	107.44	89.11	18.33	5.862	
2,700.00	2,673.47	2,690.29	2,665.80	9.57	9.53	-82.84	-126.91	276.94	111.86	92.78	19.08	5.863	
2,800.00	2,771.38	2,790.19	2,763.45	9.95	9.91	-82.91	-137.52	295.21	116.27	96.44	19.83	5.864	
2,900.00	2,869.30	2,890.10	2,861.09	10.32	10.28	-82.99	-148.12	313.47	120.69	100.11	20.58	5.864	
3,000.00	2,967.21	2,990.00	2,958.73	10.70	10.66	-83.06	-158.72	331.73	125.11	103.77	21.34	5.863	
3,100.00	3,065.13	3,089.90	3,056.38	11.08	11.03	-83.12	-169.32	350.00	129.52	107.43	22.09	5.862	
3,200.00	3,163.05	3,189.80	3,154.02	11.46	11.41	-83.18	-179.93	368.26	133.94	111.09	22.85	5.861	
3,300.00	3,260.96	3,289.71	3,251.67	11.84	11.79	-83.23	-190.53	386.53	138.35	114.74	23.61	5.860	
3,400.00	3,358.88	3,389.61	3,349.31	12.22	12.17	-83.28	-201.13	404.79	142.77	118.40	24.37	5.858	
3,500.00	3,456.79	3,489.51	3,446.96	12.60	12.55	-83.33	-211.73	423.05	147.19	122.05	25.13	5.856	
3,600.00	3,554.71	3,589.41	3,544.60	12.98	12.93	-83.38	-222.34	441.32	151.60	125.71	25.90	5.854	
3,700.00	3,652.62	3,689.32	3,642.25	13.36	13.31	-83.42	-232.94	459.58	156.02	129.36	26.66	5.852	
3,800.00	3,750.54	3,789.22	3,739.89	13.75	13.69	-83.46	-243.54	477.84	160.44	133.01	27.42	5.850	
3,900.00	3,848.45	3,889.12	3,837.54	14.13	14.07	-83.50	-254.14	496.11	164.86	136.67	28.19	5.848	
4,000.00	3,946.37	3,989.02	3,935.18	14.51	14.46	-83.54	-264.75	514.37	169.27	140.32	28.95	5.846	
4,100.00	4,044.29	4,088.93	4,032.83	14.89	14.84	-83.57	-275.35	532.64	173.69	143.97	29.72	5.844	
4,200.00	4,142.20	4,188.83	4,130.47	15.28	15.22	-83.61	-285.95	550.90	178.11	147.62	30.49	5.842	
4,300.00	4,240.12	4,288.73	4,228.12	15.66	15.61	-83.64	-296.55	569.16	182.52	151.27	31.25	5.840	
4,400.00	4,338.03	4,388.63	4,325.76	16.05	15.99	-83.67	-307.16	587.43	186.94	154.92	32.02	5.838	
4,500.00	4,435.95	4,488.53	4,423.41	16.43	16.37	-83.69	-317.76	605.69	191.36	158.57	32.79	5.836	
4,600.00	4,533.86	4,588.44	4,521.05	16.81	16.76	-83.72	-328.36	623.96	195.78	162.22	33.56	5.834	
4,700.00	4,631.78	4,688.34	4,618.70	17.20	17.14	-83.75	-338.96	642.22	200.19	165.86	34.33	5.832	
4,800.00	4,729.69	4,788.24	4,716.34	17.58	17.53	-83.77	-349.57	660.48	204.61	169.51	35.10	5.830	

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

Anticollision Report

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Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
4,900.00	4,827.61	4,888.14	4,813.99	17.97	17.91	-83.80	-360.17	678.75	209.03	173.16	35.87	5.828	
5,000.00	4,925.53	4,988.05	4,911.63	18.35	18.30	-83.82	-370.77	697.01	213.45	176.81	36.64	5.826	
5,100.00	5,023.44	5,087.95	5,009.27	18.74	18.68	-83.84	-381.37	715.27	217.86	180.45	37.41	5.824	
5,200.00	5,121.36	5,187.85	5,106.92	19.12	19.07	-83.86	-391.97	733.54	222.28	184.10	38.18	5.822	
5,300.00	5,219.27	5,287.75	5,204.56	19.51	19.45	-83.88	-402.58	751.80	226.70	187.75	38.95	5.820	
5,400.00	5,317.19	5,387.66	5,302.21	19.89	19.84	-83.90	-413.18	770.07	231.12	191.39	39.72	5.818	
5,500.00	5,415.10	5,487.56	5,399.85	20.28	20.22	-83.92	-423.78	788.33	235.53	195.04	40.49	5.816	
5,600.00	5,513.02	5,587.46	5,497.50	20.66	20.61	-83.94	-434.38	806.59	239.95	198.69	41.27	5.815	
5,700.00	5,610.93	5,687.36	5,595.14	21.05	21.00	-83.96	-444.99	824.86	244.37	202.33	42.04	5.813	
5,800.00	5,708.85	5,787.27	5,692.79	21.43	21.38	-83.97	-455.59	843.12	248.79	205.98	42.81	5.811	
5,900.00	5,806.77	5,887.17	5,790.43	21.82	21.77	-83.99	-466.19	861.39	253.21	209.62	43.58	5.810	
6,000.00	5,904.68	5,987.07	5,888.08	22.21	22.16	-84.01	-476.79	879.65	257.62	213.27	44.36	5.808	
6,100.00	6,002.60	6,086.97	5,985.72	22.59	22.54	-84.02	-487.40	897.91	262.04	216.91	45.13	5.807	
6,200.00	6,100.51	6,186.87	6,083.37	22.98	22.93	-84.04	-498.00	916.18	266.46	220.56	45.90	5.805	
6,300.00	6,198.43	6,286.78	6,181.01	23.36	23.32	-84.05	-508.60	934.44	270.88	224.20	46.67	5.804	
6,400.00	6,296.34	6,386.68	6,278.66	23.75	23.70	-84.06	-519.20	952.70	275.30	227.85	47.45	5.802	
6,500.00	6,394.26	6,486.58	6,376.30	24.14	24.09	-84.08	-529.81	970.97	279.71	231.49	48.22	5.801	
6,600.00	6,492.17	6,586.48	6,473.95	24.52	24.48	-84.09	-540.41	989.23	284.13	235.14	49.00	5.799	
6,700.00	6,590.09	6,686.39	6,571.59	24.91	24.86	-84.10	-551.01	1,007.50	288.55	238.78	49.77	5.798	
6,800.00	6,688.01	6,786.29	6,669.24	25.29	25.25	-84.11	-561.61	1,025.76	292.97	242.42	50.54	5.796	
6,900.00	6,785.92	6,886.19	6,766.88	25.68	25.64	-84.13	-572.22	1,044.02	297.39	246.07	51.32	5.795	
7,000.00	6,883.84	6,986.09	6,864.53	26.07	26.03	-84.14	-582.82	1,062.29	301.80	249.71	52.09	5.794	
7,100.00	6,981.75	7,086.00	6,962.17	26.45	26.41	-84.15	-593.42	1,080.55	306.22	253.36	52.86	5.793	
7,200.00	7,079.67	7,185.90	7,059.81	26.84	26.80	-84.16	-604.02	1,098.82	310.64	257.00	53.64	5.791	
7,300.00	7,177.58	7,285.80	7,157.46	27.23	27.19	-84.17	-614.63	1,117.08	315.06	260.64	54.41	5.790	
7,400.00	7,275.50	7,387.86	7,257.36	27.61	27.58	-84.30	-625.10	1,135.13	319.27	264.06	55.20	5.784	
7,500.00	7,373.41	7,491.14	7,359.10	28.00	27.97	-85.02	-634.00	1,150.46	322.50	266.51	55.98	5.761	
7,600.00	7,471.33	7,594.08	7,461.08	28.39	28.36	-86.35	-641.04	1,162.58	324.79	268.05	56.75	5.724	
7,700.00	7,569.25	7,696.42	7,562.89	28.77	28.73	-88.27	-646.21	1,171.48	326.40	268.91	57.49	5.678	
7,764.22	7,632.13	7,761.71	7,628.02	29.02	28.96	-89.81	-648.55	1,175.51	327.21	269.26	57.95	5.646	
7,800.00	7,667.21	7,797.94	7,664.19	29.16	29.08	-90.73	-649.52	1,177.19	327.64	269.43	58.21	5.628	
7,900.00	7,765.68	7,898.88	7,765.08	29.54	29.43	-93.31	-651.03	1,179.80	328.79	269.87	58.92	5.580	
8,000.00	7,864.70	7,998.50	7,864.70	29.91	29.75	-95.70	-651.14	1,179.98	329.92	270.33	59.59	5.537	
8,100.00	7,964.15	8,097.95	7,964.15	30.28	30.07	-97.51	-651.14	1,179.98	331.13	270.88	60.25	5.496	
8,200.00	8,063.90	8,197.70	8,063.90	30.63	30.39	-98.73	-651.14	1,179.98	332.12	271.20	60.92	5.452	
8,300.00	8,163.83	8,297.63	8,163.83	30.98	30.71	-99.33	-651.14	1,179.98	332.67	271.09	61.58	5.403	
8,350.17	8,214.00	8,347.80	8,214.00	31.14	30.87	32.75	-651.14	1,179.98	332.74	270.84	61.90	5.375	
8,400.00	8,263.77	8,397.57	8,263.77	31.31	31.03	-114.91	-651.14	1,179.98	333.65	271.42	62.23	5.362	SF
8,450.00	8,313.33	8,451.61	8,317.80	31.49	31.20	-115.70	-651.49	1,180.27	336.33	273.75	62.58	5.374	
8,500.00	8,362.13	8,513.76	8,379.65	31.69	31.43	-116.54	-656.03	1,183.94	339.55	276.60	62.95	5.394	
8,550.00	8,409.80	8,576.82	8,441.38	31.89	31.66	-117.11	-665.92	1,191.95	342.89	279.62	63.27	5.419	
8,600.00	8,455.99	8,640.61	8,502.02	32.09	31.92	-117.40	-681.22	1,204.34	346.26	282.73	63.53	5.450	
8,650.00	8,500.33	8,704.94	8,560.57	32.31	32.18	-117.41	-701.86	1,221.05	349.60	285.87	63.73	5.486	
8,700.00	8,542.50	8,769.58	8,616.04	32.53	32.45	-117.13	-727.60	1,241.90	352.85	288.98	63.87	5.525	
8,750.00	8,582.16	8,834.30	8,667.49	32.75	32.73	-116.59	-758.08	1,266.58	356.00	292.01	63.99	5.564	
8,800.00	8,619.02	8,898.87	8,714.08	32.97	33.01	-115.78	-792.78	1,294.68	359.03	294.92	64.11	5.600	
8,850.00	8,652.80	8,963.07	8,755.14	33.19	33.29	-114.73	-831.10	1,325.71	361.96	297.69	64.28	5.631	
8,900.00	8,683.24	9,026.68	8,790.13	33.42	33.57	-113.46	-872.35	1,359.11	364.82	300.30	64.52	5.654	
8,950.00	8,710.11	9,089.53	8,818.72	33.64	33.84	-111.98	-915.82	1,394.32	367.64	302.78	64.86	5.668	
9,000.00	8,733.20	9,151.46	8,840.73	33.86	34.10	-110.33	-960.79	1,430.73	370.47	305.15	65.32	5.672	
9,050.00	8,752.35	9,208.94	8,855.85	34.08	34.33	-108.68	-1,003.87	1,465.61	373.49	307.59	65.90	5.668	
9,100.00	8,767.39	9,263.36	8,867.29	34.29	34.55	-107.31	-1,045.21	1,499.09	377.27	310.81	66.47	5.676	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

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
9,100.17	8,767.43	9,263.54	8,867.32	34.29	34.55	-107.31	-1,045.35	1,499.21	377.29	310.82	66.47	5.676	
9,200.00	8,791.66	9,370.73	8,882.39	34.71	34.98	-106.13	-1,127.80	1,565.97	388.94	321.24	67.70	5.745	
9,300.00	8,812.57	9,474.23	8,887.47	35.13	35.40	-103.77	-1,208.11	1,631.00	407.86	338.74	69.12	5.901	
9,400.00	8,829.97	9,568.08	8,887.48	35.54	35.77	-101.23	-1,281.04	1,690.06	435.39	364.94	70.45	6.180	
9,500.00	8,843.72	9,659.41	8,887.48	35.95	36.16	-98.95	-1,352.02	1,747.54	471.86	400.31	71.56	6.594	
9,600.00	8,853.72	9,747.82	8,887.48	36.33	36.55	-96.89	-1,420.73	1,803.18	516.50	444.00	72.50	7.124	
9,700.00	8,859.89	9,832.65	8,887.48	36.70	36.93	-94.98	-1,486.65	1,856.56	568.60	495.27	73.33	7.754	
9,800.00	8,862.18	9,913.25	8,887.48	37.05	37.31	-93.11	-1,549.29	1,907.28	627.54	553.48	74.07	8.473	
9,809.00	8,862.20	9,920.27	8,887.48	37.08	37.35	-92.94	-1,554.74	1,911.70	633.16	559.03	74.13	8.541	
9,900.00	8,862.20	9,991.10	8,887.48	37.39	37.69	-92.70	-1,609.79	1,956.28	690.26	615.49	74.77	9.232	
10,000.00	8,862.19	10,068.93	8,887.48	37.74	38.08	-92.47	-1,670.27	2,005.26	753.01	677.53	75.48	9.976	
10,100.00	8,862.19	10,151.92	8,887.48	38.10	38.51	-92.27	-1,734.81	2,057.44	815.72	739.48	76.24	10.700	
10,200.00	8,862.19	10,264.64	8,887.48	38.48	39.10	-92.05	-1,824.21	2,126.07	876.45	799.27	77.18	11.356	
10,300.00	8,862.19	10,384.26	8,887.48	38.86	39.74	-91.87	-1,921.97	2,195.00	933.91	855.75	78.16	11.948	
10,400.00	8,862.19	10,510.99	8,887.48	39.25	40.43	-91.72	-2,028.57	2,263.50	987.81	908.64	79.17	12.477	
10,500.00	8,862.18	10,644.93	8,887.48	39.66	41.17	-91.59	-2,144.42	2,330.70	1,037.82	957.62	80.20	12.941	
10,600.00	8,862.18	10,786.08	8,887.47	40.07	41.94	-91.49	-2,269.77	2,395.58	1,083.62	1,002.40	81.22	13.341	
10,700.00	8,862.18	10,934.30	8,887.47	40.49	42.75	-91.40	-2,404.66	2,456.97	1,124.88	1,042.65	82.23	13.680	
10,800.00	8,862.18	11,089.28	8,887.47	40.93	43.59	-91.33	-2,548.90	2,513.62	1,161.27	1,078.08	83.19	13.960	
10,900.00	8,862.18	11,250.54	8,887.46	41.37	44.45	-91.27	-2,702.00	2,564.18	1,192.46	1,108.38	84.08	14.183	
11,000.00	8,862.17	11,417.37	8,887.46	41.82	45.31	-91.22	-2,863.12	2,607.35	1,218.16	1,133.29	84.87	14.353	
11,100.00	8,862.17	11,588.89	8,887.45	42.28	46.18	-91.19	-3,031.11	2,641.87	1,238.11	1,152.56	85.55	14.473	
11,200.00	8,862.17	11,764.02	8,887.44	42.75	47.03	-91.16	-3,204.45	2,666.68	1,252.10	1,166.02	86.08	14.545	
11,300.00	8,862.17	11,941.55	8,887.44	43.22	47.86	-91.15	-3,381.36	2,680.98	1,259.97	1,173.52	86.46	14.573	
11,400.00	8,862.17	12,101.77	8,887.43	43.71	48.58	-91.15	-3,541.52	2,684.55	1,261.81	1,174.95	86.85	14.528	
11,500.00	8,862.16	12,201.77	8,887.42	44.20	49.02	-91.15	-3,641.52	2,684.74	1,261.81	1,173.99	87.82	14.368	
11,600.00	8,862.16	12,301.77	8,887.42	44.70	49.47	-91.15	-3,741.52	2,684.93	1,261.81	1,173.00	88.80	14.209	
11,700.00	8,862.16	12,401.77	8,887.41	45.20	49.93	-91.15	-3,841.52	2,685.11	1,261.81	1,172.01	89.80	14.051	
11,800.00	8,862.16	12,501.77	8,887.41	45.72	50.40	-91.15	-3,941.52	2,685.30	1,261.81	1,171.00	90.81	13.894	
11,900.00	8,862.16	12,601.77	8,887.40	46.24	50.87	-91.15	-4,041.52	2,685.49	1,261.81	1,169.97	91.84	13.739	
12,000.00	8,862.15	12,701.77	8,887.40	46.76	51.35	-91.15	-4,141.52	2,685.68	1,261.81	1,168.93	92.88	13.585	
12,100.00	8,862.15	12,801.77	8,887.39	47.29	51.83	-91.15	-4,241.52	2,685.86	1,261.81	1,167.88	93.94	13.433	
12,200.00	8,862.15	12,901.77	8,887.39	47.83	52.32	-91.15	-4,341.52	2,686.05	1,261.81	1,166.81	95.00	13.282	
12,300.00	8,862.15	13,001.77	8,887.38	48.38	52.82	-91.15	-4,441.52	2,686.24	1,261.82	1,165.73	96.08	13.133	
12,400.00	8,862.15	13,101.77	8,887.37	48.93	53.32	-91.15	-4,541.52	2,686.43	1,261.82	1,164.64	97.17	12.985	
12,500.00	8,862.14	13,201.77	8,887.37	49.48	53.83	-91.15	-4,641.52	2,686.61	1,261.82	1,163.54	98.28	12.839	
12,600.00	8,862.14	13,301.77	8,887.36	50.04	54.35	-91.15	-4,741.52	2,686.80	1,261.82	1,162.43	99.39	12.695	
12,700.00	8,862.14	13,401.77	8,887.36	50.61	54.87	-91.15	-4,841.52	2,686.99	1,261.82	1,161.30	100.52	12.553	
12,800.00	8,862.14	13,501.77	8,887.35	51.18	55.39	-91.15	-4,941.52	2,687.18	1,261.82	1,160.17	101.65	12.413	
12,900.00	8,862.14	13,601.77	8,887.35	51.76	55.92	-91.14	-5,041.52	2,687.36	1,261.82	1,159.02	102.80	12.275	
13,000.00	8,862.13	13,701.77	8,887.34	52.34	56.46	-91.14	-5,141.52	2,687.55	1,261.82	1,157.87	103.96	12.138	
13,100.00	8,862.13	13,801.77	8,887.34	52.92	57.00	-91.14	-5,241.52	2,687.74	1,261.82	1,156.70	105.12	12.003	
13,200.00	8,862.13	13,901.77	8,887.33	53.51	57.55	-91.14	-5,341.52	2,687.93	1,261.83	1,155.53	106.30	11.871	
13,300.00	8,862.13	14,001.77	8,887.33	54.10	58.10	-91.14	-5,441.52	2,688.11	1,261.83	1,154.35	107.48	11.740	
13,400.00	8,862.12	14,101.77	8,887.32	54.70	58.65	-91.14	-5,541.52	2,688.30	1,261.83	1,153.16	108.67	11.611	
13,500.00	8,862.12	14,201.77	8,887.32	55.30	59.21	-91.14	-5,641.52	2,688.49	1,261.83	1,151.96	109.87	11.484	
13,600.00	8,862.12	14,301.77	8,887.31	55.91	59.78	-91.14	-5,741.52	2,688.68	1,261.83	1,150.75	111.08	11.359	
13,700.00	8,862.12	14,401.77	8,887.31	56.52	60.35	-91.14	-5,841.52	2,688.86	1,261.83	1,149.53	112.30	11.236	
13,800.00	8,862.12	14,501.77	8,887.30	57.13	60.92	-91.14	-5,941.52	2,689.05	1,261.83	1,148.31	113.52	11.115	
13,900.00	8,862.11	14,601.77	8,887.30	57.75	61.50	-91.14	-6,041.52	2,689.24	1,261.83	1,147.08	114.76	10.996	
14,000.00	8,862.11	14,701.77	8,887.29	58.37	62.08	-91.14	-6,141.52	2,689.43	1,261.84	1,145.84	115.99	10.878	
14,100.00	8,862.11	14,801.77	8,887.29	58.99	62.66	-91.14	-6,241.52	2,689.61	1,261.84	1,144.60	117.24	10.763	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Offset Well Error: 0.00 usft

Rule Assigned:

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
14,200.00	8,862.11	14,901.77	8,887.28	59.62	63.25	-91.14	-6,341.52	2,689.80	1,261.84	1,143.35	118.49	10.649	
14,300.00	8,862.11	15,001.77	8,887.28	60.25	63.84	-91.14	-6,441.52	2,689.99	1,261.84	1,142.09	119.75	10.537	
14,400.00	8,862.10	15,101.77	8,887.27	60.88	64.44	-91.14	-6,541.52	2,690.18	1,261.84	1,140.82	121.02	10.427	
14,500.00	8,862.10	15,201.77	8,887.26	61.52	65.04	-91.14	-6,641.52	2,690.36	1,261.84	1,139.55	122.29	10.319	
14,600.00	8,862.10	15,301.77	8,887.26	62.16	65.64	-91.14	-6,741.52	2,690.55	1,261.84	1,138.28	123.56	10.212	
14,700.00	8,862.10	15,401.77	8,887.25	62.80	66.25	-91.14	-6,841.52	2,690.74	1,261.84	1,137.00	124.85	10.107	
14,800.00	8,862.10	15,501.77	8,887.25	63.44	66.86	-91.14	-6,941.52	2,690.93	1,261.84	1,135.71	126.13	10.004	
14,900.00	8,862.09	15,601.77	8,887.24	64.09	67.47	-91.14	-7,041.52	2,691.11	1,261.85	1,134.42	127.43	9.903	
15,000.00	8,862.09	15,701.77	8,887.24	64.74	68.08	-91.14	-7,141.52	2,691.30	1,261.85	1,133.12	128.73	9.803	
15,100.00	8,862.09	15,801.77	8,887.23	65.39	68.70	-91.14	-7,241.52	2,691.49	1,261.85	1,131.82	130.03	9.704	
15,200.00	8,862.09	15,901.77	8,887.23	66.05	69.32	-91.14	-7,341.52	2,691.68	1,261.85	1,130.51	131.34	9.608	
15,300.00	8,862.09	16,001.77	8,887.22	66.70	69.95	-91.14	-7,441.52	2,691.86	1,261.85	1,129.20	132.65	9.513	
15,400.00	8,862.08	16,101.77	8,887.22	67.36	70.57	-91.14	-7,541.52	2,692.05	1,261.85	1,127.88	133.97	9.419	
15,500.00	8,862.08	16,201.77	8,887.21	68.02	71.20	-91.14	-7,641.52	2,692.24	1,261.85	1,126.56	135.29	9.327	
15,600.00	8,862.08	16,301.77	8,887.21	68.69	71.84	-91.14	-7,741.52	2,692.43	1,261.85	1,125.24	136.62	9.236	
15,700.00	8,862.08	16,401.77	8,887.20	69.35	72.47	-91.14	-7,841.52	2,692.61	1,261.85	1,123.91	137.95	9.147	
15,800.00	8,862.08	16,501.77	8,887.20	70.02	73.11	-91.14	-7,941.52	2,692.80	1,261.86	1,122.57	139.28	9.060	
15,900.00	8,862.07	16,601.77	8,887.19	70.69	73.75	-91.14	-8,041.52	2,692.99	1,261.86	1,121.24	140.62	8.973	
16,000.00	8,862.07	16,701.77	8,887.19	71.36	74.39	-91.14	-8,141.52	2,693.18	1,261.86	1,119.89	141.96	8.889	
16,100.00	8,862.07	16,801.77	8,887.18	72.03	75.03	-91.14	-8,241.52	2,693.36	1,261.86	1,118.55	143.31	8.805	
16,200.00	8,862.07	16,901.77	8,887.18	72.71	75.68	-91.14	-8,341.52	2,693.55	1,261.86	1,117.20	144.66	8.723	
16,300.00	8,862.07	17,001.77	8,887.17	73.38	76.33	-91.14	-8,441.52	2,693.74	1,261.86	1,115.85	146.01	8.642	
16,400.00	8,862.06	17,101.77	8,887.17	74.06	76.98	-91.14	-8,541.52	2,693.93	1,261.86	1,114.49	147.37	8.563	
16,500.00	8,862.06	17,201.77	8,887.16	74.74	77.63	-91.14	-8,641.52	2,694.11	1,261.86	1,113.13	148.73	8.484	
16,600.00	8,862.06	17,301.77	8,887.16	75.42	78.29	-91.14	-8,741.52	2,694.30	1,261.86	1,111.77	150.09	8.407	
16,700.00	8,862.06	17,401.77	8,887.15	76.10	78.94	-91.14	-8,841.52	2,694.49	1,261.87	1,110.40	151.46	8.331	
16,800.00	8,862.06	17,501.77	8,887.14	76.79	79.60	-91.14	-8,941.52	2,694.68	1,261.87	1,109.04	152.83	8.257	
16,900.00	8,862.05	17,601.77	8,887.14	77.47	80.26	-91.14	-9,041.51	2,694.86	1,261.87	1,107.66	154.20	8.183	
17,000.00	8,862.05	17,701.77	8,887.13	78.16	80.93	-91.14	-9,141.51	2,695.05	1,261.87	1,106.29	155.58	8.111	
17,100.00	8,862.05	17,801.77	8,887.13	78.85	81.59	-91.14	-9,241.51	2,695.24	1,261.87	1,104.91	156.96	8.040	
17,200.00	8,862.05	17,901.77	8,887.12	79.54	82.26	-91.14	-9,341.51	2,695.43	1,261.87	1,103.53	158.34	7.969	
17,300.00	8,862.05	18,001.77	8,887.12	80.23	82.92	-91.14	-9,441.51	2,695.61	1,261.87	1,102.15	159.72	7.900	
17,400.00	8,862.04	18,101.77	8,887.11	80.92	83.59	-91.14	-9,541.51	2,695.80	1,261.87	1,100.76	161.11	7.832	
17,500.00	8,862.04	18,201.77	8,887.11	81.62	84.26	-91.14	-9,641.51	2,695.99	1,261.87	1,099.37	162.50	7.765	
17,600.00	8,862.04	18,301.77	8,887.10	82.31	84.94	-91.14	-9,741.51	2,696.18	1,261.88	1,097.98	163.89	7.699	
17,700.00	8,862.04	18,401.77	8,887.10	83.01	85.61	-91.14	-9,841.51	2,696.36	1,261.88	1,096.59	165.29	7.634	
17,800.00	8,862.04	18,501.77	8,887.09	83.71	86.29	-91.14	-9,941.51	2,696.55	1,261.88	1,095.20	166.68	7.571	
17,900.00	8,862.03	18,601.77	8,887.09	84.41	86.96	-91.14	-10,041.51	2,696.74	1,261.88	1,093.80	168.08	7.508	
18,000.00	8,862.03	18,701.77	8,887.08	85.11	87.64	-91.14	-10,141.51	2,696.93	1,261.88	1,092.40	169.48	7.445	
18,100.00	8,862.03	18,801.77	8,887.08	85.81	88.32	-91.14	-10,241.51	2,697.11	1,261.88	1,091.00	170.89	7.384	
18,200.00	8,862.03	18,901.77	8,887.07	86.51	89.00	-91.14	-10,341.51	2,697.30	1,261.88	1,089.59	172.29	7.324	
18,300.00	8,862.03	19,001.77	8,887.07	87.21	89.69	-91.14	-10,441.51	2,697.49	1,261.88	1,088.18	173.70	7.265	
18,400.00	8,862.02	19,101.77	8,887.06	87.92	90.37	-91.14	-10,541.51	2,697.68	1,261.88	1,086.78	175.11	7.206	
18,500.00	8,862.02	19,201.77	8,887.06	88.62	91.05	-91.14	-10,641.51	2,697.86	1,261.89	1,085.36	176.52	7.149	
18,600.00	8,862.02	19,301.77	8,887.05	89.33	91.74	-91.14	-10,741.51	2,698.05	1,261.89	1,083.95	177.93	7.092	
18,700.00	8,862.02	19,401.77	8,887.05	90.03	92.43	-91.14	-10,841.51	2,698.24	1,261.89	1,082.54	179.35	7.036	
18,800.00	8,862.02	19,501.77	8,887.04	90.74	93.12	-91.14	-10,941.51	2,698.43	1,261.89	1,081.12	180.77	6.981	
18,900.00	8,862.01	19,601.77	8,887.03	91.45	93.81	-91.14	-11,041.51	2,698.61	1,261.89	1,079.70	182.19	6.926	
19,000.00	8,862.01	19,701.77	8,887.03	92.16	94.50	-91.14	-11,141.51	2,698.80	1,261.89	1,078.28	183.61	6.873	
19,100.00	8,862.01	19,801.77	8,887.02	92.87	95.19	-91.14	-11,241.51	2,698.99	1,261.89	1,076.86	185.03	6.820	
19,200.00	8,862.01	19,901.77	8,887.02	93.58	95.89	-91.14	-11,341.51	2,699.18	1,261.89	1,075.44	186.45	6.768	
19,300.00	8,862.01	20,001.77	8,887.01	94.30	96.58	-91.14	-11,441.51	2,699.36	1,261.89	1,074.01	187.88	6.716	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Federal Com - Riverbend 12-13 Federal Com 8H - OH - Plan 1

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IFR1+MS

Rule Assigned:

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
19,400.00	8,862.00	20,101.77	8,887.01	95.01	97.28	-91.14	-11,541.51	2,699.55	1,261.90	1,072.59	189.31	6.666	
19,500.00	8,862.00	20,201.77	8,887.00	95.72	97.97	-91.14	-11,641.51	2,699.74	1,261.90	1,071.16	190.74	6.616	
19,547.53	8,862.00	20,249.29	8,887.00	96.06	98.30	-91.14	-11,689.04	2,699.83	1,261.90	1,070.48	191.42	6.592	
19,548.26	8,862.00	20,250.02	8,887.00	96.14	98.31	-91.14	-11,689.77	2,699.83	1,261.90	1,070.47	191.43	6.592	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD

Offset Well Error: 0.50 usft

Rule Assigned:

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	0.00	0.00	0.71	-169.82	-6,151.50	-1,104.92	6,250.14				
100.00	100.00	45.02	45.02	0.28	0.71	-169.82	-6,151.52	-1,104.94	6,249.97	6,248.98	0.99	6,339.045	
200.00	200.00	139.91	139.91	0.63	0.76	-169.82	-6,151.65	-1,105.15	6,250.14	6,248.74	1.40	4,479.641	
300.00	300.00	251.54	251.53	0.99	0.98	-169.80	-6,151.52	-1,106.53	6,250.25	6,248.28	1.97	3,171.630	
400.00	400.00	365.63	365.60	1.35	1.29	-169.78	-6,150.96	-1,108.78	6,250.11	6,247.47	2.64	2,365.217	
500.00	500.00	452.72	452.67	1.71	1.56	-169.76	-6,150.47	-1,110.55	6,249.92	6,246.66	3.27	1,912.903	
600.00	600.00	576.18	576.10	2.07	1.95	-169.75	-6,149.82	-1,112.62	6,249.71	6,245.69	4.02	1,554.526	
700.00	700.00	770.40	770.30	2.43	2.59	-169.73	-6,146.95	-1,113.60	6,248.15	6,243.13	5.02	1,244.910	
800.00	800.00	876.01	875.88	2.79	2.95	-169.72	-6,144.74	-1,113.94	6,246.14	6,240.41	5.73	1,089.529	
900.00	900.00	1,022.66	1,022.48	3.14	3.45	-169.71	-6,140.98	-1,115.04	6,243.74	6,237.15	6.59	947.354	
1,000.00	1,000.00	1,100.00	1,099.78	3.50	3.72	-169.69	-6,138.68	-1,116.20	6,241.11	6,233.90	7.22	864.951	
1,100.00	1,099.98	1,159.77	1,159.52	3.84	3.93	30.36	-6,137.16	-1,117.39	6,237.49	6,229.73	7.76	803.342	
1,200.00	1,199.84	1,200.00	1,199.73	4.17	4.07	30.44	-6,136.40	-1,118.32	6,231.64	6,223.40	8.23	756.818	
1,300.00	1,299.45	1,261.86	1,261.57	4.51	4.28	30.56	-6,135.68	-1,119.86	6,223.51	6,214.73	8.78	708.607	
1,350.00	1,349.13	1,300.00	1,299.69	4.68	4.41	30.64	-6,135.55	-1,120.85	6,218.67	6,209.59	9.08	684.531	
1,400.00	1,398.73	1,300.00	1,299.69	4.85	4.41	37.15	-6,135.55	-1,120.85	6,213.61	6,204.36	9.25	671.517	
1,500.00	1,497.69	1,383.09	1,382.75	5.19	4.70	47.48	-6,135.77	-1,123.13	6,203.83	6,193.95	9.88	627.795	
1,600.00	1,596.25	1,454.15	1,453.78	5.54	4.94	54.97	-6,136.31	-1,125.21	6,194.53	6,184.06	10.47	591.388	
1,670.62	1,665.55	1,500.00	1,499.60	5.78	5.10	59.04	-6,136.80	-1,126.65	6,188.22	6,177.34	10.88	568.710	
1,700.00	1,694.31	1,529.70	1,529.28	5.89	5.21	59.10	-6,137.17	-1,127.62	6,185.65	6,174.56	11.09	557.867	
1,800.00	1,792.23	1,612.24	1,611.77	6.24	5.49	59.26	-6,138.33	-1,130.34	6,177.11	6,165.38	11.73	526.589	
1,900.00	1,890.14	1,700.00	1,699.47	6.61	5.80	59.42	-6,139.72	-1,133.40	6,168.84	6,156.45	12.39	497.700	
2,000.00	1,988.06	1,786.48	1,785.88	6.97	6.10	59.59	-6,141.27	-1,136.26	6,160.81	6,147.75	13.06	471.844	
2,100.00	2,085.97	1,893.37	1,892.73	7.34	6.48	59.78	-6,143.42	-1,138.75	6,152.86	6,139.07	13.79	446.145	
2,200.00	2,183.89	2,022.65	2,021.98	7.70	6.92	60.00	-6,145.99	-1,139.69	6,144.63	6,130.03	14.60	420.751	
2,300.00	2,281.80	2,142.01	2,141.31	8.07	7.33	60.18	-6,148.10	-1,139.16	6,136.00	6,120.61	15.38	398.840	
2,400.00	2,379.72	2,268.98	2,268.23	8.45	7.77	60.37	-6,150.40	-1,136.35	6,127.11	6,110.91	16.19	378.333	
2,500.00	2,477.64	2,355.91	2,355.08	8.82	8.07	60.48	-6,152.02	-1,132.94	6,117.94	6,101.07	16.87	362.642	
2,600.00	2,575.55	2,441.47	2,440.52	9.19	8.37	60.58	-6,154.13	-1,128.83	6,109.18	6,091.64	17.54	348.216	
2,700.00	2,673.47	2,554.70	2,553.63	9.57	8.77	60.72	-6,156.58	-1,124.57	6,100.39	6,082.07	18.31	333.113	
2,800.00	2,771.38	2,667.69	2,666.58	9.95	9.17	60.88	-6,158.32	-1,122.07	6,091.35	6,072.27	19.08	319.265	
2,900.00	2,869.30	2,785.29	2,784.16	10.32	9.57	61.06	-6,159.68	-1,120.13	6,082.12	6,062.26	19.86	306.237	
3,000.00	2,967.21	2,884.46	2,883.31	10.70	9.92	61.21	-6,160.63	-1,118.50	6,072.73	6,052.15	20.58	295.078	
3,100.00	3,065.13	2,983.03	2,981.87	11.08	10.26	61.36	-6,161.56	-1,116.98	6,063.39	6,042.09	21.30	284.692	
3,200.00	3,163.05	3,088.05	3,086.88	11.46	10.63	61.53	-6,162.39	-1,115.79	6,054.04	6,032.01	22.04	274.705	
3,300.00	3,260.96	3,192.46	3,191.28	11.84	10.99	61.70	-6,163.03	-1,114.88	6,044.63	6,021.85	22.78	265.383	
3,400.00	3,358.88	3,275.96	3,274.77	12.22	11.28	61.83	-6,163.60	-1,114.11	6,035.31	6,011.87	23.45	257.417	
3,500.00	3,456.79	3,354.22	3,353.02	12.60	11.55	61.95	-6,164.36	-1,113.40	6,026.33	6,002.24	24.10	250.084	
3,600.00	3,554.71	3,442.44	3,441.24	12.98	11.86	62.10	-6,165.46	-1,112.82	6,017.71	5,992.92	24.78	242.814	
3,700.00	3,652.62	3,547.68	3,546.47	13.36	12.23	62.27	-6,166.61	-1,112.59	6,009.10	5,983.57	25.53	235.399	
3,800.00	3,750.54	3,650.05	3,648.84	13.75	12.58	62.45	-6,167.59	-1,112.49	6,000.43	5,974.17	26.26	228.482	
3,900.00	3,848.45	3,744.24	3,743.02	14.13	12.91	62.61	-6,168.47	-1,112.42	5,991.81	5,964.84	26.97	222.167	
4,000.00	3,946.37	3,837.64	3,836.42	14.51	13.24	62.77	-6,169.42	-1,112.50	5,983.35	5,955.67	27.68	216.198	
4,100.00	4,044.29	3,938.70	3,937.47	14.89	13.59	62.94	-6,170.42	-1,112.65	5,974.93	5,946.53	28.41	210.332	
4,200.00	4,142.20	4,037.39	4,036.16	15.28	13.93	63.12	-6,171.30	-1,112.97	5,966.53	5,937.40	29.13	204.815	
4,300.00	4,240.12	4,132.81	4,131.57	15.66	14.26	63.28	-6,172.16	-1,113.39	5,958.21	5,928.36	29.84	199.640	
4,400.00	4,338.03	4,228.80	4,227.56	16.05	14.60	63.46	-6,173.01	-1,113.96	5,949.98	5,919.42	30.56	194.695	
4,500.00	4,435.95	4,320.52	4,319.27	16.43	14.92	63.62	-6,173.83	-1,114.68	5,941.85	5,910.59	31.26	190.065	
4,600.00	4,533.86	4,400.00	4,398.74	16.81	15.20	63.77	-6,174.69	-1,115.32	5,933.99	5,902.06	31.92	185.885	
4,700.00	4,631.78	4,489.77	4,488.50	17.20	15.51	63.93	-6,175.88	-1,116.03	5,926.39	5,893.78	32.62	181.687	
4,800.00	4,729.69	4,581.22	4,579.94	17.58	15.83	64.09	-6,177.24	-1,116.77	5,919.02	5,885.70	33.32	177.640	
4,900.00	4,827.61	4,676.30	4,675.00	17.97	16.16	64.26	-6,178.74	-1,117.53	5,911.77	5,877.74	34.03	173.699	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD

Rule Assigned:

Offset Well Error: 0.50 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
5,000.00	4,925.53	4,759.78	4,758.47	18.35	16.45	64.41	-6,180.18	-1,118.10	5,904.70	5,869.99	34.71	170.117	
5,100.00	5,023.44	4,840.60	4,839.27	18.74	16.74	64.56	-6,181.87	-1,118.50	5,897.99	5,862.61	35.38	166.723	
5,200.00	5,121.36	4,926.76	4,925.41	19.12	17.04	64.71	-6,183.92	-1,118.93	5,891.59	5,855.52	36.06	163.381	
5,300.00	5,219.27	5,021.78	5,020.39	19.51	17.37	64.88	-6,186.28	-1,119.38	5,885.33	5,848.56	36.78	160.035	
5,400.00	5,317.19	5,120.68	5,119.26	19.89	17.71	65.05	-6,188.84	-1,119.80	5,879.23	5,841.72	37.50	156.763	
5,500.00	5,415.10	5,244.91	5,243.46	20.28	18.15	65.27	-6,191.60	-1,120.15	5,872.76	5,834.44	38.32	153.261	
5,600.00	5,513.02	5,340.85	5,339.38	20.66	18.48	65.44	-6,193.66	-1,120.40	5,866.30	5,827.26	39.04	150.273	
5,700.00	5,610.93	5,436.35	5,434.85	21.05	18.82	65.61	-6,195.69	-1,120.67	5,859.89	5,820.13	39.75	147.400	
5,800.00	5,708.85	5,526.15	5,524.64	21.43	19.13	65.77	-6,197.67	-1,121.12	5,853.67	5,813.21	40.45	144.702	
5,900.00	5,806.77	5,622.02	5,620.48	21.82	19.47	65.94	-6,199.90	-1,121.50	5,847.58	5,806.40	41.17	142.027	
6,000.00	5,904.68	5,718.79	5,717.22	22.21	19.81	66.12	-6,202.18	-1,121.89	5,841.58	5,799.69	41.89	139.436	
6,100.00	6,002.60	5,839.85	5,838.24	22.59	20.23	66.33	-6,204.93	-1,122.33	5,835.57	5,792.87	42.70	136.667	
6,200.00	6,100.51	5,960.49	5,958.86	22.98	20.65	66.55	-6,207.04	-1,122.23	5,828.95	5,785.44	43.50	133.993	
6,300.00	6,198.43	6,062.89	6,061.25	23.36	21.01	66.73	-6,208.82	-1,122.07	5,822.37	5,778.13	44.24	131.599	
6,400.00	6,296.34	6,165.43	6,163.78	23.75	21.37	66.91	-6,210.44	-1,121.91	5,815.70	5,770.72	44.99	129.280	
6,500.00	6,394.26	6,264.01	6,262.35	24.14	21.71	67.09	-6,211.99	-1,121.74	5,809.08	5,763.36	45.71	127.074	
6,600.00	6,492.17	6,360.93	6,359.25	24.52	22.05	67.26	-6,213.52	-1,121.57	5,802.51	5,756.07	46.44	124.953	
6,700.00	6,590.09	6,506.80	6,505.11	24.91	22.56	67.53	-6,215.20	-1,121.86	5,795.78	5,748.46	47.32	122.473	
6,800.00	6,688.01	6,606.64	6,604.94	25.29	22.91	67.73	-6,215.36	-1,123.26	5,788.54	5,740.48	48.06	120.455	
6,900.00	6,785.92	6,690.85	6,689.10	25.68	23.20	67.91	-6,214.99	-1,126.06	5,781.45	5,732.71	48.74	118.625	
7,000.00	6,883.84	6,839.01	6,837.05	26.07	23.72	68.26	-6,212.85	-1,133.68	5,774.12	5,724.49	49.63	116.343	
7,100.00	6,981.75	6,984.55	6,982.48	26.45	24.23	68.59	-6,210.37	-1,138.74	5,766.13	5,715.62	50.51	114.160	
7,200.00	7,079.67	7,098.90	7,096.76	26.84	24.63	68.84	-6,208.01	-1,141.71	5,757.57	5,706.28	51.29	112.262	
7,300.00	7,177.58	7,239.01	7,236.83	27.23	25.12	69.13	-6,205.11	-1,143.13	5,748.52	5,696.38	52.14	110.247	
7,400.00	7,275.50	7,343.95	7,341.76	27.61	25.48	69.34	-6,202.98	-1,142.93	5,739.19	5,686.30	52.89	108.517	
7,500.00	7,373.41	7,447.35	7,445.13	28.00	25.84	69.54	-6,200.83	-1,142.66	5,729.85	5,676.22	53.63	106.844	
7,600.00	7,471.33	7,527.94	7,525.70	28.39	26.12	69.70	-6,199.19	-1,142.21	5,720.55	5,666.25	54.30	105.351	
7,700.00	7,569.25	7,600.00	7,597.76	28.77	26.37	69.83	-6,198.39	-1,141.66	5,711.98	5,657.03	54.94	103.959	
7,764.22	7,632.13	7,642.41	7,640.16	29.02	26.51	69.91	-6,198.14	-1,141.23	5,706.75	5,651.41	55.35	103.109	
7,800.00	7,667.21	7,688.58	7,686.32	29.16	26.68	69.94	-6,197.84	-1,140.61	5,703.89	5,648.25	55.64	102.514	
7,900.00	7,765.68	7,690.00	7,687.75	29.54	26.68	69.82	-6,197.83	-1,140.59	5,697.47	5,641.42	56.05	101.645	
8,000.00	7,864.70	7,690.00	7,687.75	29.91	26.68	69.76	-6,197.83	-1,140.59	5,694.01	5,637.57	56.44	100.886	
8,066.99	7,931.28	7,690.00	7,687.75	30.16	26.68	69.74	-6,197.83	-1,140.59	5,693.34	5,636.66	56.69	100.436	
8,100.00	7,964.15	7,690.00	7,687.75	30.28	26.68	69.75	-6,197.83	-1,140.59	5,693.50	5,636.70	56.81	100.228	
8,200.00	8,063.90	7,745.00	7,742.65	30.63	26.78	69.81	-6,200.55	-1,140.50	5,695.56	5,638.31	57.25	99.483	
8,300.00	8,163.83	7,745.00	7,742.65	30.98	26.78	69.89	-6,200.55	-1,140.50	5,700.01	5,642.43	57.58	98.997	
8,350.17	8,214.00	7,745.00	7,742.65	31.14	26.78	-157.89	-6,200.55	-1,140.50	5,703.36	5,645.63	57.73	98.798	
8,400.00	8,263.77	7,745.00	7,742.65	31.31	26.78	54.49	-6,200.55	-1,140.50	5,706.01	5,648.13	57.88	98.590	
8,450.00	8,313.33	7,745.00	7,742.65	31.49	26.78	54.44	-6,200.55	-1,140.50	5,706.58	5,648.55	58.04	98.326	
8,500.00	8,362.13	7,745.00	7,742.65	31.69	26.78	54.57	-6,200.55	-1,140.50	5,705.06	5,646.85	58.20	98.018	
8,550.00	8,409.80	7,745.00	7,742.65	31.89	26.78	54.86	-6,200.55	-1,140.50	5,701.45	5,643.07	58.38	97.668	
8,600.00	8,455.99	7,745.00	7,742.65	32.09	26.78	55.33	-6,200.55	-1,140.50	5,695.77	5,637.22	58.55	97.279	
8,650.00	8,500.33	7,745.00	7,742.65	32.31	26.78	55.98	-6,200.55	-1,140.50	5,688.06	5,629.33	58.73	96.854	
8,700.00	8,542.50	7,745.00	7,742.65	32.53	26.78	56.80	-6,200.55	-1,140.50	5,678.38	5,619.47	58.91	96.396	
8,750.00	8,582.16	7,745.00	7,742.65	32.75	26.78	57.80	-6,200.55	-1,140.50	5,666.79	5,607.70	59.09	95.908	
8,800.00	8,619.02	7,760.54	7,758.06	32.97	26.78	59.09	-6,202.51	-1,140.78	5,653.01	5,593.73	59.28	95.362	
8,850.00	8,652.80	7,777.00	7,774.28	33.19	26.78	60.59	-6,205.27	-1,141.26	5,638.01	5,578.53	59.47	94.799	
8,900.00	8,683.24	7,777.00	7,774.28	33.42	26.78	62.18	-6,205.27	-1,141.26	5,620.99	5,561.34	59.65	94.231	
8,950.00	8,710.11	7,777.00	7,774.28	33.64	26.78	63.95	-6,205.27	-1,141.26	5,602.45	5,542.63	59.83	93.645	
9,000.00	8,733.20	7,777.00	7,774.28	33.86	26.78	65.92	-6,205.27	-1,141.26	5,582.53	5,522.53	60.00	93.042	
9,050.00	8,752.35	7,777.00	7,774.28	34.08	26.78	68.07	-6,205.27	-1,141.26	5,561.36	5,501.19	60.17	92.426	
9,100.00	8,767.39	7,777.00	7,774.28	34.29	26.78	70.40	-6,205.27	-1,141.26	5,539.09	5,478.75	60.34	91.800	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD

Rule Assigned:

Offset Well Error: 0.50 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
9,100.17	8,767.43	7,777.00	7,774.28	34.29	26.78	70.41	-6,205.27	-1,141.26	5,539.01	5,478.67	60.34	91.798	
9,200.00	8,791.66	7,777.00	7,774.28	34.71	26.78	69.38	-6,205.27	-1,141.26	5,490.42	5,429.75	60.67	90.500	
9,300.00	8,812.57	7,777.00	7,774.28	35.13	26.78	68.56	-6,205.27	-1,141.26	5,435.62	5,374.64	60.99	89.129	
9,400.00	8,829.97	7,777.00	7,774.28	35.54	26.78	67.95	-6,205.27	-1,141.26	5,374.94	5,313.66	61.29	87.699	
9,500.00	8,843.72	7,777.00	7,774.28	35.95	26.78	67.56	-6,205.27	-1,141.26	5,308.65	5,247.08	61.57	86.219	
9,600.00	8,853.72	7,777.00	7,774.28	36.33	26.78	67.41	-6,205.27	-1,141.26	5,237.03	5,175.20	61.83	84.698	
9,700.00	8,859.89	7,777.00	7,774.28	36.70	26.78	67.53	-6,205.27	-1,141.26	5,160.44	5,098.37	62.07	83.141	
9,800.00	8,862.18	7,777.00	7,774.28	37.05	26.78	67.93	-6,205.27	-1,141.26	5,079.24	5,016.96	62.28	81.558	
9,809.00	8,862.20	7,777.00	7,774.28	37.08	26.78	67.98	-6,205.27	-1,141.26	5,071.72	5,009.42	62.30	81.412	
9,900.00	8,862.20	7,777.00	7,774.28	37.39	26.78	67.98	-6,205.27	-1,141.26	4,995.75	4,933.27	62.48	79.962	
10,000.00	8,862.19	7,777.00	7,774.28	37.74	26.78	67.98	-6,205.27	-1,141.26	4,912.86	4,850.18	62.68	78.381	
10,100.00	8,862.19	7,777.00	7,774.28	38.10	26.78	67.98	-6,205.27	-1,141.26	4,830.62	4,767.73	62.89	76.808	
10,200.00	8,862.19	7,791.72	7,788.67	38.48	26.79	68.27	-6,208.33	-1,141.87	4,748.75	4,685.61	63.14	75.207	
10,300.00	8,862.19	7,793.44	7,790.34	38.86	26.79	68.30	-6,208.72	-1,141.95	4,667.83	4,604.45	63.38	73.647	
10,400.00	8,862.19	7,808.00	7,804.41	39.25	26.79	68.58	-6,212.35	-1,142.75	4,587.89	4,524.23	63.66	72.074	
10,500.00	8,862.18	7,808.00	7,804.41	39.66	26.79	68.58	-6,212.35	-1,142.75	4,508.43	4,444.52	63.91	70.538	
10,600.00	8,862.18	7,808.00	7,804.41	40.07	26.79	68.58	-6,212.35	-1,142.75	4,429.81	4,365.63	64.19	69.015	
10,700.00	8,862.18	7,808.00	7,804.41	40.49	26.79	68.58	-6,212.35	-1,142.75	4,352.07	4,287.60	64.47	67.506	
10,800.00	8,862.18	7,808.00	7,804.41	40.93	26.79	68.58	-6,212.35	-1,142.75	4,275.25	4,210.48	64.77	66.010	
10,900.00	8,862.18	7,808.00	7,804.41	41.37	26.79	68.58	-6,212.35	-1,142.75	4,199.41	4,134.33	65.08	64.530	
11,000.00	8,862.17	7,808.00	7,804.41	41.82	26.79	68.58	-6,212.35	-1,142.75	4,124.59	4,059.19	65.40	63.067	
11,100.00	8,862.17	7,808.00	7,804.41	42.28	26.79	68.58	-6,212.35	-1,142.75	4,050.87	3,985.13	65.74	61.622	
11,200.00	8,862.17	7,808.00	7,804.41	42.75	26.79	68.58	-6,212.35	-1,142.75	3,978.29	3,912.20	66.09	60.195	
11,300.00	8,862.17	7,808.00	7,804.41	43.22	26.79	68.58	-6,212.35	-1,142.75	3,906.93	3,840.47	66.46	58.789	
11,400.00	8,862.17	7,808.00	7,804.41	43.71	26.79	68.58	-6,212.35	-1,142.75	3,836.84	3,770.00	66.84	57.406	
11,500.00	8,862.16	7,808.00	7,804.41	44.20	26.79	68.58	-6,212.35	-1,142.75	3,768.10	3,700.87	67.23	56.046	
11,600.00	8,862.16	7,823.24	7,818.98	44.70	26.79	68.87	-6,216.70	-1,143.79	3,700.47	3,632.78	67.69	54.666	
11,700.00	8,862.16	7,840.00	7,834.78	45.20	26.80	69.18	-6,222.12	-1,145.18	3,634.78	3,566.61	68.17	53.317	
11,800.00	8,862.16	7,840.00	7,834.78	45.72	26.80	69.18	-6,222.12	-1,145.18	3,570.29	3,501.67	68.62	52.032	
11,900.00	8,862.16	7,840.00	7,834.78	46.24	26.80	69.18	-6,222.12	-1,145.18	3,507.46	3,438.38	69.08	50.777	
12,000.00	8,862.15	7,840.00	7,834.78	46.76	26.80	69.18	-6,222.12	-1,145.18	3,446.39	3,376.84	69.55	49.555	
12,100.00	8,862.15	7,840.00	7,834.78	47.29	26.80	69.18	-6,222.12	-1,145.18	3,387.16	3,317.13	70.03	48.366	
12,200.00	8,862.15	7,840.00	7,834.78	47.83	26.80	69.18	-6,222.12	-1,145.18	3,329.89	3,259.37	70.53	47.214	
12,300.00	8,862.15	7,840.00	7,834.78	48.38	26.80	69.18	-6,222.12	-1,145.18	3,274.68	3,203.64	71.03	46.100	
12,400.00	8,862.15	7,857.43	7,850.97	48.93	26.80	69.51	-6,228.37	-1,146.85	3,221.33	3,149.71	71.63	44.973	
12,500.00	8,862.14	7,872.00	7,864.32	49.48	26.80	69.78	-6,233.99	-1,148.37	3,170.36	3,098.14	72.22	43.898	
12,600.00	8,862.14	7,872.00	7,864.32	50.04	26.80	69.78	-6,233.99	-1,148.37	3,121.56	3,048.80	72.76	42.903	
12,700.00	8,862.14	7,872.00	7,864.32	50.61	26.80	69.78	-6,233.99	-1,148.37	3,075.23	3,001.93	73.30	41.955	
12,800.00	8,862.14	7,886.28	7,877.26	51.18	26.81	70.05	-6,239.80	-1,149.99	3,031.33	2,957.41	73.91	41.011	
12,900.00	8,862.14	7,904.00	7,893.15	51.76	26.81	70.38	-6,247.32	-1,152.23	2,990.12	2,915.57	74.55	40.107	
13,000.00	8,862.13	7,904.00	7,893.15	52.34	26.81	70.38	-6,247.32	-1,152.23	2,951.46	2,876.36	75.10	39.301	
13,100.00	8,862.13	7,922.18	7,909.30	52.92	26.82	70.71	-6,255.29	-1,154.68	2,915.59	2,839.84	75.74	38.494	
13,200.00	8,862.13	7,935.00	7,920.63	53.51	26.82	70.95	-6,261.03	-1,156.44	2,882.45	2,806.10	76.35	37.753	
13,300.00	8,862.13	7,951.46	7,935.09	54.10	26.82	71.25	-6,268.54	-1,158.81	2,852.20	2,775.22	76.98	37.053	
13,400.00	8,862.12	7,967.00	7,948.61	54.70	26.83	71.54	-6,275.81	-1,161.21	2,824.98	2,747.40	77.59	36.411	
13,500.00	8,862.12	7,967.00	7,948.61	55.30	26.83	71.54	-6,275.81	-1,161.21	2,800.91	2,722.83	78.08	35.873	
13,600.00	8,862.12	7,985.39	7,964.39	55.91	26.83	71.87	-6,284.74	-1,164.28	2,779.95	2,701.28	78.68	35.334	
13,700.00	8,862.12	7,999.00	7,975.87	56.52	26.84	72.12	-6,291.61	-1,166.74	2,762.32	2,683.10	79.22	34.868	
13,800.00	8,862.12	7,999.00	7,975.87	57.13	26.84	72.12	-6,291.61	-1,166.74	2,748.06	2,668.42	79.64	34.506	
13,900.00	8,862.11	8,016.28	7,990.20	57.75	26.84	72.43	-6,300.66	-1,170.13	2,737.09	2,656.93	80.16	34.145	
14,000.00	8,862.11	8,031.00	8,002.16	58.37	26.85	72.69	-6,308.62	-1,173.32	2,729.62	2,648.99	80.63	33.853	
14,100.00	8,862.11	8,031.00	8,002.16	58.99	26.85	72.69	-6,308.62	-1,173.32	2,725.59	2,644.64	80.95	33.671	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy — **Offset Site Error:** 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD — **Rule Assigned:** — **Offset Well Error:** 0.50 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
14,167.52	8,862.11	8,044.64	8,013.02	59.42	26.86	72.92	-6,316.24	-1,176.49	2,724.77	2,643.51	81.26	33.533	CC, ES
14,200.00	8,862.11	8,048.34	8,015.92	59.62	26.86	72.99	-6,318.36	-1,177.39	2,724.95	2,643.58	81.37	33.486	
14,300.00	8,862.11	8,062.00	8,026.47	60.25	26.87	73.22	-6,326.32	-1,180.84	2,727.78	2,646.04	81.74	33.373	
14,400.00	8,862.10	8,062.00	8,026.47	60.88	26.87	73.22	-6,326.32	-1,180.84	2,734.09	2,652.16	81.93	33.370	
14,500.00	8,862.10	8,094.00	8,050.23	61.52	26.90	73.75	-6,345.80	-1,189.77	2,743.65	2,661.25	82.40	33.298	
14,600.00	8,862.10	8,094.00	8,050.23	62.16	26.90	73.75	-6,345.80	-1,189.77	2,756.48	2,673.97	82.51	33.407	
14,700.00	8,862.10	8,126.00	8,072.66	62.80	26.94	74.26	-6,366.29	-1,199.80	2,772.67	2,689.75	82.92	33.437	
14,800.00	8,862.10	8,126.00	8,072.66	63.44	26.94	74.26	-6,366.29	-1,199.80	2,791.81	2,708.85	82.96	33.652	
14,900.00	8,862.09	8,158.00	8,093.58	64.09	26.99	74.75	-6,387.85	-1,210.79	2,814.13	2,730.81	83.32	33.777	
15,000.00	8,862.09	8,158.00	8,093.58	64.74	26.99	74.75	-6,387.85	-1,210.79	2,839.28	2,755.99	83.28	34.092	
15,100.00	8,862.09	8,176.22	8,104.76	65.39	27.03	75.01	-6,400.55	-1,217.55	2,867.39	2,783.96	83.43	34.369	
15,200.00	8,862.09	8,189.00	8,112.28	66.05	27.05	75.19	-6,409.58	-1,222.57	2,898.38	2,814.90	83.48	34.718	
15,300.00	8,862.09	8,221.00	8,130.08	66.70	27.13	75.62	-6,432.68	-1,235.75	2,932.01	2,848.25	83.75	35.007	
15,400.00	8,862.08	8,243.40	8,141.77	67.36	27.18	75.91	-6,449.23	-1,245.29	2,967.92	2,884.03	83.89	35.378	
15,500.00	8,862.08	9,098.41	8,276.14	68.02	32.45	79.54	-7,237.54	-1,477.46	2,985.04	2,889.48	95.56	31.239	
15,600.00	8,862.08	9,192.10	8,280.65	68.69	33.31	79.67	-7,330.08	-1,491.37	2,998.99	2,901.90	97.08	30.891	
15,700.00	8,862.08	9,398.70	8,287.90	69.35	35.37	79.90	-7,534.91	-1,517.12	3,010.44	2,910.12	100.32	30.009	
15,800.00	8,862.08	9,531.17	8,290.85	70.02	36.78	80.00	-7,666.67	-1,530.52	3,020.15	2,917.61	102.54	29.453	
15,900.00	8,862.07	9,578.00	8,291.87	70.69	37.29	80.03	-7,713.24	-1,535.30	3,030.22	2,926.69	103.53	29.270	
16,000.00	8,862.07	9,641.00	8,293.74	71.36	38.00	80.09	-7,775.77	-1,542.76	3,041.69	2,936.92	104.76	29.034	
16,100.00	8,862.07	9,742.96	8,296.81	72.03	39.19	80.19	-7,876.80	-1,556.11	3,054.28	2,947.63	106.65	28.638	
16,200.00	8,862.07	9,874.53	8,299.99	72.71	40.76	80.30	-8,007.40	-1,571.77	3,065.73	2,956.68	109.05	28.112	
16,300.00	8,862.07	9,975.41	8,301.26	73.38	42.00	80.36	-8,107.62	-1,583.19	3,076.87	2,965.89	110.98	27.724	
16,400.00	8,862.06	10,091.20	8,301.22	74.06	43.46	80.40	-8,222.74	-1,595.66	3,087.68	2,974.50	113.18	27.281	
16,500.00	8,862.06	10,169.83	8,300.56	74.74	44.46	80.42	-8,300.92	-1,603.94	3,098.43	2,983.65	114.78	26.995	
16,600.00	8,862.06	10,215.00	8,300.19	75.42	45.05	80.43	-8,345.78	-1,609.27	3,110.47	2,994.67	115.80	26.860	
16,700.00	8,862.06	10,278.00	8,300.13	76.10	45.88	80.45	-8,408.20	-1,617.82	3,124.04	3,006.91	117.14	26.670	
16,800.00	8,862.06	10,351.03	8,300.44	76.79	46.85	80.49	-8,480.42	-1,628.63	3,138.71	3,020.06	118.66	26.451	
16,900.00	8,862.05	10,765.59	8,303.98	77.47	52.49	80.69	-8,892.17	-1,672.62	3,150.96	3,024.78	126.18	24.971	
17,000.00	8,862.05	10,826.26	8,302.40	78.16	53.33	80.67	-8,952.75	-1,675.55	3,156.43	3,028.82	127.61	24.735	
17,100.00	8,862.05	10,873.82	8,301.83	78.85	54.00	80.67	-9,000.20	-1,678.76	3,163.48	3,034.68	128.81	24.560	
17,200.00	8,862.05	10,925.85	8,302.19	79.54	54.73	80.69	-9,052.02	-1,683.36	3,172.20	3,042.13	130.07	24.388	
17,300.00	8,862.05	11,051.15	8,302.80	80.23	56.51	80.74	-9,176.80	-1,694.67	3,181.23	3,048.59	132.63	23.985	
17,400.00	8,862.04	11,107.00	8,302.39	80.92	57.30	80.74	-9,232.44	-1,699.51	3,190.26	3,056.29	133.96	23.814	
17,500.00	8,862.04	11,171.00	8,301.88	81.62	58.22	80.75	-9,296.12	-1,705.86	3,200.51	3,065.08	135.43	23.632	
17,600.00	8,862.04	11,235.43	8,301.89	82.31	59.16	80.77	-9,360.11	-1,713.33	3,212.12	3,075.22	136.90	23.463	
17,700.00	8,862.04	11,349.65	8,301.76	83.01	60.82	80.81	-9,473.52	-1,726.96	3,224.12	3,084.79	139.33	23.140	
17,800.00	8,862.04	11,410.32	8,301.19	83.71	61.71	80.82	-9,533.75	-1,734.19	3,236.28	3,095.55	140.73	22.996	
17,900.00	8,862.03	11,489.00	8,301.00	84.41	62.87	80.85	-9,611.79	-1,744.23	3,249.17	3,106.69	142.48	22.804	
18,000.00	8,862.03	11,552.00	8,300.78	85.11	63.81	80.87	-9,674.20	-1,752.78	3,262.95	3,119.04	143.92	22.673	
18,100.00	8,862.03	11,615.00	8,300.56	85.81	64.74	80.89	-9,736.44	-1,762.59	3,278.38	3,133.04	145.34	22.556	
18,200.00	8,862.03	12,044.83	8,307.64	86.51	71.17	81.14	-10,163.46	-1,806.86	3,286.63	3,132.79	153.84	21.364	
18,300.00	8,862.03	12,107.91	8,306.63	87.21	72.12	81.13	-10,226.43	-1,810.43	3,292.73	3,137.33	155.40	21.189	
18,400.00	8,862.02	12,173.62	8,304.57	87.92	73.10	81.11	-10,291.95	-1,814.89	3,300.09	3,143.10	156.98	21.022	
18,500.00	8,862.02	12,229.53	8,302.38	88.62	73.95	81.08	-10,347.65	-1,819.20	3,308.52	3,150.15	158.38	20.890	
18,600.00	8,862.02	12,286.42	8,299.92	89.33	74.81	81.06	-10,404.25	-1,824.36	3,318.33	3,158.56	159.76	20.770	
18,700.00	8,862.02	12,358.74	8,298.53	90.03	75.91	81.05	-10,476.15	-1,832.02	3,329.24	3,167.79	161.44	20.622	
18,800.00	8,862.02	12,482.41	8,301.84	90.74	77.80	81.15	-10,599.00	-1,845.78	3,339.98	3,175.82	164.16	20.345	
18,900.00	8,862.01	12,568.00	8,303.11	91.45	79.12	81.19	-10,684.07	-1,855.08	3,350.68	3,184.55	166.13	20.169	
19,000.00	8,862.01	12,683.67	8,303.66	92.16	80.90	81.24	-10,799.03	-1,867.87	3,361.78	3,193.09	168.69	19.929	
19,100.00	8,862.01	12,888.90	8,305.81	92.87	84.06	81.32	-11,003.41	-1,886.16	3,370.57	3,197.64	172.94	19.490	
19,200.00	8,862.01	13,007.03	8,304.95	93.58	85.88	81.33	-11,121.24	-1,894.51	3,377.89	3,202.38	175.51	19.246	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Malaga 13 DM Fed Com 1H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 100-GYRO-NS, 7745-OWSG (Rev2) MWD

Rule Assigned:

Offset Well Error: 0.50 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
19,300.00	8,862.01	13,105.24	8,306.36	94.30	87.40	81.37	-11,219.22	-1,901.03	3,384.44	3,206.69	177.75	19.041	
19,400.00	8,862.00	13,212.14	8,306.17	95.01	89.06	81.39	-11,325.87	-1,908.41	3,391.50	3,211.37	180.13	18.828	
19,500.00	8,862.00	13,305.00	8,304.53	95.72	90.49	81.37	-11,418.53	-1,914.15	3,398.06	3,215.80	182.26	18.644	
19,547.53	8,862.00	13,305.00	8,304.53	96.06	90.49	81.37	-11,418.53	-1,914.15	3,401.63	3,219.17	182.46	18.643	SF
19,548.26	8,862.00	13,305.00	8,304.53	96.14	90.49	81.37	-11,418.53	-1,914.15	3,401.69	3,219.28	182.41	18.648	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

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	0.00	0.00	0.50	30.39	3,823.84	2,242.71	4,433.05				
100.00	100.00	54.40	54.40	0.28	0.51	30.39	3,824.01	2,242.72	4,433.23	4,432.45	0.78	5,674.535	
200.00	200.00	142.91	142.90	0.63	0.59	30.39	3,824.82	2,242.82	4,434.06	4,432.83	1.22	3,627.819	
300.00	300.00	246.59	246.58	0.99	0.84	30.38	3,825.57	2,243.07	4,434.81	4,432.97	1.84	2,414.869	
400.00	400.00	384.28	384.27	1.35	1.26	30.39	3,826.11	2,243.70	4,435.46	4,432.85	2.62	1,695.318	
498.67	498.67	478.69	478.67	1.71	1.57	30.40	3,825.61	2,244.04	4,435.20	4,431.93	3.28	1,354.104	
500.00	500.00	479.66	479.64	1.71	1.57	30.40	3,825.61	2,244.05	4,435.20	4,431.92	3.28	1,350.830	
600.00	600.00	562.08	562.07	2.07	1.85	30.40	3,825.70	2,244.31	4,435.45	4,431.53	3.92	1,131.511	
700.00	700.00	657.57	657.55	2.43	2.18	30.40	3,826.14	2,244.48	4,435.94	4,431.33	4.61	962.758	
800.00	800.00	750.13	750.11	2.79	2.50	30.39	3,826.69	2,244.57	4,436.50	4,431.21	5.29	839.034	
900.00	900.00	846.34	846.32	3.14	2.84	30.39	3,827.51	2,244.57	4,437.24	4,431.26	5.98	741.744	
1,000.00	1,000.00	935.39	935.36	3.50	3.15	30.38	3,828.42	2,244.54	4,438.10	4,431.45	6.65	667.090	
1,100.00	1,099.98	1,040.85	1,040.82	3.84	3.52	-129.62	3,829.83	2,244.22	4,440.22	4,432.85	7.36	602.913	
1,200.00	1,199.84	1,146.24	1,146.20	4.17	3.89	-129.62	3,831.06	2,243.86	4,444.39	4,436.33	8.06	551.099	
1,300.00	1,299.45	1,289.39	1,289.35	4.51	4.39	-129.67	3,831.93	2,243.05	4,450.19	4,441.30	8.90	500.237	
1,350.00	1,349.13	1,346.68	1,346.63	4.68	4.59	-129.68	3,831.98	2,242.57	4,453.64	4,444.38	9.26	480.876	
1,400.00	1,398.73	1,396.92	1,396.86	4.85	4.76	-123.28	3,831.97	2,242.18	4,457.22	4,447.61	9.60	464.182	
1,500.00	1,497.69	1,488.13	1,488.08	5.19	5.07	-113.27	3,832.05	2,241.44	4,463.63	4,453.37	10.26	435.099	
1,600.00	1,596.25	1,615.91	1,615.82	5.54	5.52	-106.28	3,832.80	2,238.52	4,468.68	4,457.63	11.05	404.329	
1,670.62	1,665.55	1,682.17	1,682.01	5.78	5.75	-102.55	3,833.75	2,235.70	4,471.49	4,459.96	11.53	387.705	
1,700.00	1,694.31	1,706.95	1,706.75	5.89	5.84	-102.63	3,834.16	2,234.57	4,472.59	4,460.86	11.72	381.470	
1,800.00	1,792.23	1,797.31	1,797.03	6.24	6.16	-102.91	3,835.58	2,230.93	4,476.56	4,464.16	12.40	360.981	
1,900.00	1,890.14	1,886.59	1,886.25	6.61	6.47	-103.17	3,836.71	2,227.88	4,480.69	4,467.61	13.08	342.625	
2,000.00	1,988.06	1,943.00	1,942.63	6.97	6.67	-103.34	3,837.64	2,226.00	4,485.41	4,471.77	13.64	328.848	
2,100.00	2,085.97	2,032.00	2,031.57	7.34	6.99	-103.61	3,839.62	2,223.46	4,490.86	4,476.54	14.32	313.565	
2,200.00	2,183.89	2,104.48	2,104.01	7.70	7.25	-103.81	3,841.39	2,222.05	4,496.97	4,482.03	14.95	300.870	
2,300.00	2,281.80	2,186.35	2,185.82	8.07	7.54	-104.06	3,843.77	2,220.16	4,503.49	4,487.88	15.61	288.553	
2,400.00	2,379.72	2,293.15	2,292.37	8.45	7.93	-104.41	3,848.60	2,214.72	4,510.29	4,493.92	16.36	275.656	
2,500.00	2,477.64	2,383.47	2,382.50	8.82	8.25	-104.71	3,852.37	2,210.45	4,517.09	4,500.03	17.06	264.811	
2,600.00	2,575.55	2,478.00	2,476.97	9.19	8.59	-104.98	3,855.18	2,208.37	4,524.08	4,506.31	17.77	254.607	
2,700.00	2,673.47	2,562.92	2,561.77	9.57	8.90	-105.24	3,858.36	2,205.46	4,531.35	4,512.90	18.45	245.647	
2,800.00	2,771.38	2,655.18	2,653.70	9.95	9.23	-105.56	3,863.46	2,199.49	4,538.99	4,519.84	19.15	236.967	
2,900.00	2,869.30	2,761.56	2,759.61	10.32	9.62	-105.95	3,869.68	2,191.64	4,546.71	4,526.79	19.92	228.266	
3,000.00	2,967.21	2,840.00	2,837.68	10.70	9.91	-106.23	3,874.29	2,185.59	4,554.53	4,533.96	20.58	221.330	
3,100.00	3,065.13	2,890.79	2,888.17	11.08	10.10	-106.42	3,877.79	2,181.40	4,563.23	4,542.10	21.13	215.933	
3,200.00	3,163.05	2,929.00	2,926.09	11.46	10.24	-106.57	3,881.02	2,178.02	4,573.23	4,551.59	21.64	211.376	
3,300.00	3,260.96	3,019.00	3,015.16	11.84	10.57	-106.94	3,890.02	2,168.76	4,584.14	4,561.80	22.35	205.153	
3,400.00	3,358.88	3,102.90	3,097.99	12.22	10.89	-107.30	3,899.13	2,159.02	4,595.53	4,572.49	23.03	199.515	
3,500.00	3,456.79	3,198.00	3,191.91	12.60	11.25	-107.70	3,909.19	2,147.93	4,606.90	4,583.13	23.77	193.817	
3,600.00	3,554.71	3,262.62	3,255.64	12.98	11.50	-107.98	3,916.34	2,140.11	4,618.85	4,594.47	24.38	189.438	
3,700.00	3,652.62	3,311.84	3,304.07	13.36	11.69	-108.20	3,922.50	2,133.71	4,631.93	4,607.00	24.93	185.803	
3,800.00	3,750.54	3,376.00	3,366.99	13.75	11.95	-108.49	3,931.47	2,125.03	4,646.25	4,620.71	25.54	181.923	
3,900.00	3,848.45	3,454.03	3,443.42	14.13	12.26	-108.85	3,942.89	2,114.15	4,661.32	4,635.11	26.21	177.832	
4,000.00	3,946.37	3,578.14	3,565.06	14.51	12.75	-109.41	3,960.35	2,096.85	4,676.26	4,649.17	27.09	172.623	
4,100.00	4,044.29	12,524.48	8,407.11	14.89	67.96	-77.05	-352.47	2,017.90	4,670.70	4,621.85	48.85	95.617	
4,200.00	4,142.20	12,538.08	8,407.33	15.28	68.13	-76.50	-366.08	2,017.65	4,573.77	4,524.51	49.27	92.835	
4,300.00	4,240.12	12,551.71	8,407.54	15.66	68.31	-75.95	-379.70	2,017.41	4,476.94	4,427.24	49.70	90.082	
4,400.00	4,338.03	12,565.37	8,407.75	16.05	68.49	-75.38	-393.35	2,017.19	4,380.20	4,330.05	50.14	87.356	
4,500.00	4,435.95	12,581.30	8,408.00	16.43	68.69	-74.72	-409.28	2,016.94	4,283.55	4,232.94	50.62	84.629	
4,600.00	4,533.86	12,599.21	8,408.26	16.81	68.93	-73.95	-427.18	2,016.67	4,187.01	4,135.89	51.12	81.907	
4,700.00	4,631.78	12,616.89	8,408.50	17.20	69.16	-73.18	-444.87	2,016.42	4,090.56	4,038.93	51.63	79.221	
4,800.00	4,729.69	12,634.36	8,408.72	17.58	69.38	-72.41	-462.33	2,016.18	3,994.23	3,942.07	52.16	76.571	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

Rule Assigned:

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
4,900.00	4,827.61	12,651.61	8,408.92	17.97	69.61	-71.63	-479.58	2,015.96	3,898.02	3,845.31	52.71	73.955	
5,000.00	4,925.53	12,668.81	8,409.10	18.35	69.83	-70.85	-496.77	2,015.74	3,801.93	3,748.66	53.27	71.372	
5,100.00	5,023.44	12,686.01	8,409.27	18.74	70.05	-70.04	-513.97	2,015.53	3,705.99	3,652.14	53.85	68.821	
5,200.00	5,121.36	12,703.04	8,409.43	19.12	70.28	-69.24	-531.00	2,015.31	3,610.19	3,555.75	54.45	66.304	
5,300.00	5,219.27	12,719.90	8,409.57	19.51	70.50	-68.43	-547.86	2,015.09	3,514.57	3,459.50	55.07	63.821	
5,400.00	5,317.19	12,736.61	8,409.70	19.89	70.71	-67.62	-564.56	2,014.86	3,419.12	3,363.41	55.71	61.372	
5,500.00	5,415.10	12,753.19	8,409.82	20.28	70.93	-66.80	-581.14	2,014.63	3,323.87	3,267.49	56.38	58.957	
5,600.00	5,513.02	12,769.76	8,409.92	20.66	71.15	-65.96	-597.72	2,014.42	3,228.84	3,171.76	57.07	56.573	
5,700.00	5,610.93	12,786.03	8,409.99	21.05	71.36	-65.14	-613.98	2,014.23	3,134.04	3,076.24	57.80	54.225	
5,800.00	5,708.85	12,801.98	8,410.04	21.43	71.57	-64.31	-629.94	2,014.08	3,039.50	2,980.95	58.55	51.912	
5,900.00	5,806.77	12,817.65	8,410.06	21.82	71.77	-63.49	-645.60	2,013.95	2,945.25	2,885.91	59.34	49.633	
6,000.00	5,904.68	12,833.02	8,410.05	22.21	71.97	-62.68	-660.97	2,013.85	2,851.31	2,791.15	60.17	47.390	
6,100.00	6,002.60	12,846.73	8,410.03	22.59	72.15	-61.94	-674.68	2,013.77	2,757.73	2,696.71	61.02	45.191	
6,200.00	6,100.51	12,859.24	8,410.01	22.98	72.32	-61.27	-687.19	2,013.71	2,664.56	2,602.64	61.92	43.033	
6,300.00	6,198.43	12,871.80	8,410.00	23.36	72.48	-60.58	-699.75	2,013.65	2,571.83	2,508.96	62.87	40.909	
6,400.00	6,296.34	12,884.41	8,409.98	23.75	72.65	-59.89	-712.36	2,013.59	2,479.59	2,415.72	63.87	38.820	
6,500.00	6,394.26	12,897.07	8,409.97	24.14	72.81	-59.18	-725.02	2,013.54	2,387.91	2,322.97	64.94	36.768	
6,600.00	6,492.17	12,909.79	8,409.97	24.52	72.98	-58.47	-737.74	2,013.49	2,296.85	2,230.76	66.09	34.754	
6,700.00	6,590.09	12,922.56	8,409.97	24.91	73.15	-57.75	-750.51	2,013.44	2,206.49	2,139.18	67.31	32.781	
6,800.00	6,688.01	12,935.97	8,409.96	25.29	73.33	-56.99	-763.92	2,013.40	2,116.91	2,048.28	68.63	30.847	
6,900.00	6,785.92	12,949.89	8,409.95	25.68	73.51	-56.19	-777.84	2,013.36	2,028.21	1,958.17	70.04	28.956	
7,000.00	6,883.84	12,963.67	8,409.93	26.07	73.69	-55.40	-791.62	2,013.33	1,940.52	1,868.95	71.57	27.114	
7,100.00	6,981.75	12,977.31	8,409.90	26.45	73.87	-54.61	-805.26	2,013.32	1,853.97	1,780.76	73.21	25.324	
7,200.00	7,079.67	12,990.82	8,409.85	26.84	74.05	-53.82	-818.77	2,013.32	1,768.74	1,693.75	74.98	23.588	
7,300.00	7,177.58	13,004.19	8,409.80	27.23	74.22	-53.03	-832.14	2,013.32	1,685.02	1,608.13	76.90	21.913	
7,400.00	7,275.50	13,017.44	8,409.73	27.61	74.40	-52.24	-845.38	2,013.34	1,603.07	1,524.11	78.96	20.301	
7,500.00	7,373.41	13,028.76	8,409.68	28.00	74.55	-51.57	-856.71	2,013.37	1,523.17	1,441.99	81.18	18.764	
7,600.00	7,471.33	13,040.07	8,409.62	28.39	74.70	-50.89	-868.02	2,013.41	1,445.66	1,362.10	83.56	17.301	
7,700.00	7,569.25	13,051.46	8,409.57	28.77	74.85	-50.21	-879.41	2,013.47	1,370.96	1,284.85	86.11	15.921	
7,764.22	7,632.13	13,058.82	8,409.53	29.02	74.95	-49.77	-886.77	2,013.52	1,324.69	1,236.85	87.84	15.081	
7,800.00	7,667.21	13,062.80	8,409.52	29.16	75.00	-49.00	-890.75	2,013.55	1,299.66	1,210.83	88.83	14.631	
7,900.00	7,765.68	13,072.62	8,409.47	29.54	75.13	-47.10	-900.57	2,013.64	1,233.64	1,141.92	91.72	13.450	
8,000.00	7,864.70	13,080.46	8,409.44	29.91	75.23	-45.57	-908.41	2,013.71	1,174.31	1,079.59	94.72	12.398	
8,100.00	7,964.15	13,086.29	8,409.42	30.28	75.31	-44.38	-914.24	2,013.78	1,122.85	1,025.12	97.73	11.490	
8,200.00	8,063.90	13,090.09	8,409.40	30.63	75.36	-43.52	-918.04	2,013.82	1,080.49	979.90	100.59	10.742	
8,300.00	8,163.83	13,091.84	8,409.40	30.98	75.38	-42.95	-919.78	2,013.84	1,048.42	945.29	103.12	10.167	
8,350.17	8,214.00	13,091.93	8,409.40	31.14	75.39	89.37	-919.88	2,013.84	1,036.53	932.33	104.20	9.947	
8,400.00	8,263.77	13,093.38	8,409.39	31.31	75.40	-58.85	-921.32	2,013.86	1,026.21	921.06	105.15	9.759	
8,450.00	8,313.33	13,098.06	8,409.37	31.49	75.47	-59.48	-926.01	2,013.92	1,015.97	909.97	106.00	9.585	
8,500.00	8,362.13	13,108.00	8,409.34	31.69	75.60	-59.80	-935.95	2,014.05	1,005.87	899.11	106.75	9.422	
8,550.00	8,409.80	13,117.04	8,409.31	31.89	75.72	-60.17	-944.98	2,014.18	995.90	888.58	107.32	9.280	
8,600.00	8,455.99	13,131.27	8,409.28	32.09	75.91	-60.26	-959.21	2,014.41	986.03	878.24	107.80	9.147	
8,650.00	8,500.33	13,148.62	8,409.26	32.31	76.14	-60.18	-976.56	2,014.73	976.19	868.05	108.15	9.027	
8,700.00	8,542.50	13,169.00	8,409.27	32.53	76.41	-59.98	-996.93	2,015.15	966.27	857.89	108.39	8.915	
8,750.00	8,582.16	13,192.29	8,409.32	32.75	76.72	-59.67	-1,020.22	2,015.71	956.14	847.62	108.52	8.810	
8,800.00	8,619.02	13,217.47	8,409.42	32.97	77.05	-59.35	-1,045.39	2,016.41	945.65	837.09	108.56	8.711	
8,850.00	8,652.80	13,246.49	8,409.56	33.19	77.44	-58.95	-1,074.39	2,017.34	934.65	826.10	108.55	8.610	
8,900.00	8,683.24	13,280.74	8,409.74	33.42	77.90	-58.44	-1,108.62	2,018.48	922.86	814.32	108.54	8.502	
8,950.00	8,710.11	13,295.00	8,409.82	33.64	78.09	-58.93	-1,122.88	2,018.95	910.31	802.22	108.10	8.421	
9,000.00	8,733.20	13,295.00	8,409.82	33.86	78.09	-60.02	-1,122.88	2,018.95	898.05	790.79	107.26	8.372	
9,050.00	8,752.35	13,295.00	8,409.82	34.08	78.09	-61.07	-1,122.88	2,018.95	886.30	780.02	106.28	8.339	
9,100.00	8,767.39	13,295.00	8,409.82	34.29	78.09	-62.08	-1,122.88	2,018.95	875.16	770.00	105.16	8.322	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

Rule Assigned:

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
9,100.17	8,767.43	13,295.00	8,409.82	34.29	78.09	-62.08	-1,122.88	2,018.95	875.12	769.97	105.15	8.322	SF
9,200.00	8,791.66	13,295.00	8,409.82	34.71	78.09	-63.74	-1,122.88	2,018.95	861.93	759.49	102.43	8.415	ES
9,227.33	8,797.72	13,295.00	8,409.82	34.83	78.09	-64.05	-1,122.88	2,018.95	861.28	759.70	101.58	8.479	CC
9,300.00	8,812.57	13,295.00	8,409.82	35.13	78.09	-64.57	-1,122.88	2,018.95	865.83	766.70	99.13	8.735	
9,400.00	8,829.97	13,295.00	8,409.82	35.54	78.09	-64.56	-1,122.88	2,018.95	886.62	791.09	95.52	9.282	
9,500.00	8,843.72	13,295.00	8,409.82	35.95	78.09	-63.65	-1,122.88	2,018.95	923.00	831.05	91.95	10.038	
9,600.00	8,853.72	13,295.00	8,409.82	36.33	78.09	-61.79	-1,122.88	2,018.95	972.97	884.28	88.69	10.971	
9,700.00	8,859.89	13,295.00	8,409.82	36.70	78.09	-58.85	-1,122.88	2,018.95	1,034.21	948.30	85.90	12.039	
9,800.00	8,862.18	13,295.00	8,409.82	37.05	78.09	-54.68	-1,122.88	2,018.95	1,104.43	1,020.76	83.67	13.200	
9,809.00	8,862.20	13,295.00	8,409.82	37.08	78.09	-54.24	-1,122.88	2,018.95	1,111.11	1,027.62	83.49	13.308	
9,900.00	8,862.20	13,295.00	8,409.82	37.39	78.09	-54.24	-1,122.88	2,018.95	1,180.56	1,098.73	81.83	14.427	
10,000.00	8,862.19	13,295.00	8,409.82	37.74	78.09	-54.24	-1,122.88	2,018.95	1,260.04	1,179.85	80.19	15.713	
10,100.00	8,862.19	13,295.00	8,409.82	38.10	78.09	-54.24	-1,122.88	2,018.95	1,342.26	1,263.53	78.74	17.048	
10,200.00	8,862.19	13,295.00	8,409.82	38.48	78.09	-54.24	-1,122.88	2,018.95	1,426.76	1,349.31	77.46	18.420	
10,300.00	8,862.19	13,295.00	8,409.82	38.86	78.09	-54.24	-1,122.88	2,018.95	1,513.15	1,436.82	76.33	19.824	
10,400.00	8,862.19	13,295.00	8,409.82	39.25	78.09	-54.24	-1,122.88	2,018.95	1,601.13	1,525.78	75.34	21.251	
10,500.00	8,862.18	13,295.00	8,409.82	39.66	78.09	-54.24	-1,122.88	2,018.95	1,690.44	1,615.96	74.47	22.698	
10,600.00	8,862.18	13,295.00	8,409.82	40.07	78.09	-54.24	-1,122.88	2,018.95	1,780.89	1,707.17	73.71	24.160	
10,700.00	8,862.18	13,295.00	8,409.82	40.49	78.09	-54.24	-1,122.88	2,018.95	1,872.31	1,799.26	73.04	25.633	
10,800.00	8,862.18	13,295.00	8,409.82	40.93	78.09	-54.24	-1,122.88	2,018.95	1,964.56	1,892.11	72.45	27.115	
10,900.00	8,862.18	13,295.00	8,409.82	41.37	78.09	-54.24	-1,122.88	2,018.95	2,057.54	1,985.61	71.93	28.603	
11,000.00	8,862.17	13,295.00	8,409.82	41.82	78.09	-54.24	-1,122.88	2,018.95	2,151.16	2,079.68	71.47	30.097	
11,100.00	8,862.17	13,295.00	8,409.82	42.28	78.09	-54.24	-1,122.88	2,018.95	2,245.32	2,174.25	71.07	31.594	
11,200.00	8,862.17	13,295.00	8,409.82	42.75	78.09	-54.24	-1,122.88	2,018.95	2,339.96	2,269.25	70.71	33.093	
11,300.00	8,862.17	13,295.00	8,409.82	43.22	78.09	-54.24	-1,122.88	2,018.95	2,435.04	2,364.65	70.39	34.594	
11,400.00	8,862.17	13,295.00	8,409.82	43.71	78.09	-54.24	-1,122.88	2,018.95	2,530.49	2,460.38	70.11	36.095	
11,500.00	8,862.16	13,295.00	8,409.82	44.20	78.09	-54.24	-1,122.88	2,018.95	2,626.28	2,556.43	69.86	37.596	
11,600.00	8,862.16	13,295.00	8,409.82	44.70	78.09	-54.24	-1,122.88	2,018.95	2,722.38	2,652.75	69.63	39.097	
11,700.00	8,862.16	13,295.00	8,409.82	45.20	78.09	-54.24	-1,122.88	2,018.95	2,818.74	2,749.31	69.43	40.597	
11,800.00	8,862.16	13,295.00	8,409.82	45.72	78.09	-54.24	-1,122.88	2,018.95	2,915.35	2,846.10	69.26	42.095	
11,900.00	8,862.16	13,295.00	8,409.82	46.24	78.09	-54.24	-1,122.88	2,018.95	3,012.19	2,943.09	69.10	43.592	
12,000.00	8,862.15	13,295.00	8,409.82	46.76	78.09	-54.24	-1,122.88	2,018.95	3,109.22	3,040.26	68.96	45.087	
12,100.00	8,862.15	13,295.00	8,409.82	47.29	78.09	-54.24	-1,122.88	2,018.95	3,206.44	3,137.60	68.84	46.580	
12,200.00	8,862.15	13,295.00	8,409.82	47.83	78.09	-54.24	-1,122.88	2,018.95	3,303.82	3,235.09	68.73	48.071	
12,300.00	8,862.15	13,295.00	8,409.82	48.38	78.09	-54.24	-1,122.88	2,018.95	3,401.35	3,332.72	68.63	49.560	
12,400.00	8,862.15	13,295.00	8,409.82	48.93	78.09	-54.24	-1,122.88	2,018.95	3,499.02	3,430.48	68.55	51.046	
12,500.00	8,862.14	13,295.00	8,409.82	49.48	78.09	-54.24	-1,122.88	2,018.95	3,596.82	3,528.35	68.47	52.530	
12,600.00	8,862.14	13,295.00	8,409.82	50.04	78.09	-54.24	-1,122.88	2,018.95	3,694.74	3,626.33	68.41	54.011	
12,700.00	8,862.14	13,295.00	8,409.82	50.61	78.09	-54.24	-1,122.88	2,018.95	3,792.77	3,724.42	68.35	55.489	
12,800.00	8,862.14	13,295.00	8,409.82	51.18	78.09	-54.24	-1,122.88	2,018.95	3,890.90	3,822.59	68.30	56.965	
12,900.00	8,862.14	13,295.00	8,409.82	51.76	78.09	-54.24	-1,122.88	2,018.95	3,989.12	3,920.85	68.26	58.438	
13,000.00	8,862.13	13,295.00	8,409.82	52.34	78.09	-54.24	-1,122.88	2,018.95	4,087.42	4,019.19	68.23	59.908	
13,100.00	8,862.13	13,295.00	8,409.82	52.92	78.09	-54.24	-1,122.88	2,018.95	4,185.81	4,117.61	68.20	61.374	
13,200.00	8,862.13	13,295.00	8,409.82	53.51	78.09	-54.24	-1,122.88	2,018.95	4,284.27	4,216.09	68.18	62.838	
13,300.00	8,862.13	13,295.00	8,409.82	54.10	78.09	-54.24	-1,122.88	2,018.95	4,382.80	4,314.64	68.16	64.299	
13,400.00	8,862.12	13,295.00	8,409.82	54.70	78.09	-54.24	-1,122.88	2,018.95	4,481.40	4,413.25	68.15	65.757	
13,500.00	8,862.12	13,295.00	8,409.82	55.30	78.09	-54.24	-1,122.88	2,018.95	4,580.06	4,511.91	68.14	67.211	
13,600.00	8,862.12	13,295.00	8,409.82	55.91	78.09	-54.24	-1,122.88	2,018.95	4,678.77	4,610.63	68.14	68.663	
13,700.00	8,862.12	13,295.00	8,409.82	56.52	78.09	-54.24	-1,122.88	2,018.95	4,777.54	4,709.40	68.14	70.111	
13,800.00	8,862.12	13,295.00	8,409.82	57.13	78.09	-54.24	-1,122.88	2,018.95	4,876.36	4,808.21	68.15	71.556	
13,900.00	8,862.11	13,295.00	8,409.82	57.75	78.09	-54.24	-1,122.88	2,018.95	4,975.22	4,907.07	68.16	72.997	
14,000.00	8,862.11	13,295.00	8,409.82	58.37	78.09	-54.24	-1,122.88	2,018.95	5,074.13	5,005.96	68.17	74.436	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 SB Fee 5H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 89-MWD+HRGM

Rule Assigned:

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
14,100.00	8,862.11	13,295.00	8,409.82	58.99	78.09	-54.24	-1,122.88	2,018.95	5,173.08	5,104.90	68.18	75.871	
14,200.00	8,862.11	13,295.00	8,409.82	59.62	78.09	-54.24	-1,122.88	2,018.95	5,272.07	5,203.87	68.20	77.302	
14,300.00	8,862.11	13,295.00	8,409.82	60.25	78.09	-54.24	-1,122.88	2,018.95	5,371.10	5,302.88	68.22	78.730	
14,400.00	8,862.10	13,295.00	8,409.82	60.88	78.09	-54.24	-1,122.88	2,018.95	5,470.17	5,401.92	68.24	80.155	
14,500.00	8,862.10	13,295.00	8,409.82	61.52	78.09	-54.24	-1,122.88	2,018.95	5,569.26	5,500.99	68.27	81.577	
14,600.00	8,862.10	13,295.00	8,409.82	62.16	78.09	-54.24	-1,122.88	2,018.95	5,668.39	5,600.09	68.30	82.994	
14,700.00	8,862.10	13,295.00	8,409.82	62.80	78.09	-54.24	-1,122.88	2,018.95	5,767.55	5,699.22	68.33	84.409	
14,800.00	8,862.10	13,295.00	8,409.82	63.44	78.09	-54.24	-1,122.88	2,018.95	5,866.74	5,798.38	68.36	85.819	
14,900.00	8,862.09	13,295.00	8,409.82	64.09	78.09	-54.24	-1,122.88	2,018.95	5,965.95	5,897.56	68.40	87.227	
15,000.00	8,862.09	13,295.00	8,409.82	64.74	78.09	-54.24	-1,122.88	2,018.95	6,065.19	5,996.76	68.43	88.630	
15,100.00	8,862.09	13,295.00	8,409.82	65.39	78.09	-54.24	-1,122.88	2,018.95	6,164.46	6,095.99	68.47	90.030	
15,200.00	8,862.09	13,295.00	8,409.82	66.05	78.09	-54.24	-1,122.88	2,018.95	6,263.75	6,195.24	68.51	91.427	
15,300.00	8,862.09	13,295.00	8,409.82	66.70	78.09	-54.24	-1,122.88	2,018.95	6,363.06	6,294.51	68.55	92.819	
15,400.00	8,862.08	13,295.00	8,409.82	67.36	78.09	-54.24	-1,122.88	2,018.95	6,462.39	6,393.79	68.60	94.208	
15,500.00	8,862.08	13,295.00	8,409.82	68.02	78.09	-54.24	-1,122.88	2,018.95	6,561.74	6,493.10	68.64	95.594	
15,600.00	8,862.08	13,295.00	8,409.82	68.69	78.09	-54.24	-1,122.88	2,018.95	6,661.11	6,592.43	68.69	96.975	
15,700.00	8,862.08	13,295.00	8,409.82	69.35	78.09	-54.24	-1,122.88	2,018.95	6,760.51	6,691.77	68.74	98.353	
15,800.00	8,862.08	13,295.00	8,409.82	70.02	78.09	-54.24	-1,122.88	2,018.95	6,859.91	6,791.13	68.79	99.727	
15,900.00	8,862.07	13,295.00	8,409.82	70.69	78.09	-54.24	-1,122.88	2,018.95	6,959.34	6,890.50	68.84	101.097	
16,000.00	8,862.07	13,295.00	8,409.82	71.36	78.09	-54.24	-1,122.88	2,018.95	7,058.78	6,989.89	68.89	102.464	
16,100.00	8,862.07	13,295.00	8,409.82	72.03	78.09	-54.24	-1,122.88	2,018.95	7,158.24	7,089.29	68.94	103.826	
16,200.00	8,862.07	13,295.00	8,409.82	72.71	78.09	-54.24	-1,122.88	2,018.95	7,257.71	7,188.71	69.00	105.185	
16,300.00	8,862.07	13,295.00	8,409.82	73.38	78.09	-54.24	-1,122.88	2,018.95	7,357.19	7,288.14	69.06	106.540	
16,400.00	8,862.06	13,295.00	8,409.82	74.06	78.09	-54.24	-1,122.88	2,018.95	7,456.69	7,387.58	69.11	107.891	
16,500.00	8,862.06	13,295.00	8,409.82	74.74	78.09	-54.24	-1,122.88	2,018.95	7,556.21	7,487.03	69.17	109.238	
16,600.00	8,862.06	13,295.00	8,409.82	75.42	78.09	-54.24	-1,122.88	2,018.95	7,655.73	7,586.50	69.23	110.581	
16,700.00	8,862.06	13,295.00	8,409.82	76.10	78.09	-54.24	-1,122.88	2,018.95	7,755.27	7,685.98	69.29	111.920	
16,800.00	8,862.06	13,295.00	8,409.82	76.79	78.09	-54.24	-1,122.88	2,018.95	7,854.82	7,785.46	69.35	113.255	
16,900.00	8,862.05	13,295.00	8,409.82	77.47	78.09	-54.24	-1,122.88	2,018.95	7,954.38	7,884.96	69.42	114.587	
17,000.00	8,862.05	13,295.00	8,409.82	78.16	78.09	-54.24	-1,122.88	2,018.95	8,053.95	7,984.47	69.48	115.914	
17,100.00	8,862.05	13,295.00	8,409.82	78.85	78.09	-54.24	-1,122.88	2,018.95	8,153.53	8,083.99	69.55	117.237	
17,200.00	8,862.05	13,295.00	8,409.82	79.54	78.09	-54.24	-1,122.88	2,018.95	8,253.13	8,183.51	69.61	118.556	
17,300.00	8,862.05	13,295.00	8,409.82	80.23	78.09	-54.24	-1,122.88	2,018.95	8,352.73	8,283.05	69.68	119.871	
17,400.00	8,862.04	13,295.00	8,409.82	80.92	78.09	-54.24	-1,122.88	2,018.95	8,452.34	8,382.59	69.75	121.182	
17,500.00	8,862.04	13,295.00	8,409.82	81.62	78.09	-54.24	-1,122.88	2,018.95	8,551.96	8,482.14	69.82	122.489	
17,600.00	8,862.04	13,295.00	8,409.82	82.31	78.09	-54.24	-1,122.88	2,018.95	8,651.59	8,581.70	69.89	123.792	
17,700.00	8,862.04	13,295.00	8,409.82	83.01	78.09	-54.24	-1,122.88	2,018.95	8,751.23	8,681.27	69.96	125.091	
17,800.00	8,862.04	13,295.00	8,409.82	83.71	78.09	-54.24	-1,122.88	2,018.95	8,850.87	8,780.84	70.03	126.386	
17,900.00	8,862.03	13,295.00	8,409.82	84.41	78.09	-54.24	-1,122.88	2,018.95	8,950.53	8,880.42	70.10	127.676	
18,000.00	8,862.03	13,295.00	8,409.82	85.11	78.09	-54.24	-1,122.88	2,018.95	9,050.19	8,980.01	70.18	128.963	
18,100.00	8,862.03	13,295.00	8,409.82	85.81	78.09	-54.24	-1,122.88	2,018.95	9,149.86	9,079.61	70.25	130.245	
18,200.00	8,862.03	13,295.00	8,409.82	86.51	78.09	-54.24	-1,122.88	2,018.95	9,249.53	9,179.21	70.33	131.523	
18,300.00	8,862.03	13,295.00	8,409.82	87.21	78.09	-54.24	-1,122.88	2,018.95	9,349.22	9,278.81	70.40	132.797	
18,400.00	8,862.02	13,295.00	8,409.82	87.92	78.09	-54.24	-1,122.88	2,018.95	9,448.91	9,378.43	70.48	134.067	
18,500.00	8,862.02	13,295.00	8,409.82	88.62	78.09	-54.24	-1,122.88	2,018.95	9,548.60	9,478.05	70.56	135.332	
18,600.00	8,862.02	13,295.00	8,409.82	89.33	78.09	-54.24	-1,122.88	2,018.95	9,648.31	9,577.67	70.64	136.594	
18,700.00	8,862.02	13,295.00	8,409.82	90.03	78.09	-54.24	-1,122.88	2,018.95	9,748.01	9,677.30	70.71	137.851	
18,800.00	8,862.02	13,295.00	8,409.82	90.74	78.09	-54.24	-1,122.88	2,018.95	9,847.73	9,776.93	70.79	139.104	
18,900.00	8,862.01	13,295.00	8,409.82	91.45	78.09	-54.24	-1,122.88	2,018.95	9,947.45	9,876.57	70.87	140.353	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM

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	0.00	0.00	0.50	30.06	3,823.84	2,212.70	4,417.94				
100.00	100.00	54.79	54.78	0.28	0.51	30.06	3,823.98	2,212.78	4,418.14	4,417.35	0.78	5,642.686	
200.00	200.00	145.00	144.99	0.63	0.55	30.06	3,824.84	2,213.25	4,419.18	4,418.00	1.18	3,747.128	
300.00	300.00	261.83	261.82	0.99	0.80	30.06	3,825.50	2,213.86	4,419.95	4,418.16	1.80	2,459.217	
400.00	400.00	334.00	333.99	1.35	1.02	30.06	3,826.01	2,214.30	4,420.82	4,418.45	2.37	1,865.803	
500.00	500.00	437.06	437.04	1.71	1.35	30.06	3,826.92	2,215.22	4,422.04	4,418.97	3.06	1,444.408	
600.00	600.00	540.43	540.41	2.07	1.70	30.07	3,827.48	2,215.90	4,422.83	4,419.06	3.77	1,173.412	
700.00	700.00	620.78	620.75	2.43	1.98	30.07	3,828.40	2,216.25	4,424.03	4,419.62	4.40	1,004.731	
800.00	800.00	721.59	721.55	2.79	2.32	30.06	3,829.91	2,216.37	4,425.38	4,420.28	5.11	866.069	
900.00	900.00	814.28	814.22	3.14	2.65	30.05	3,831.27	2,216.54	4,426.75	4,420.96	5.79	764.409	
1,000.00	1,000.00	909.53	909.46	3.50	2.98	30.04	3,833.14	2,216.49	4,428.42	4,421.94	6.48	683.134	
1,100.00	1,099.98	1,040.64	1,040.53	3.84	3.44	-129.98	3,836.01	2,214.89	4,430.84	4,423.56	7.28	608.611	
1,200.00	1,199.84	1,166.44	1,166.20	4.17	3.87	-130.06	3,839.25	2,210.46	4,434.64	4,426.59	8.05	551.225	
1,300.00	1,299.45	1,255.83	1,255.48	4.51	4.18	-130.10	3,841.91	2,206.84	4,440.83	4,432.14	8.69	510.960	
1,350.00	1,349.13	1,330.45	1,330.02	4.68	4.45	-130.17	3,843.82	2,203.92	4,444.63	4,435.51	9.12	487.277	
1,400.00	1,398.73	1,406.78	1,406.27	4.85	4.71	-123.84	3,845.25	2,200.95	4,448.30	4,438.75	9.56	465.441	
1,500.00	1,497.69	1,487.23	1,486.66	5.19	5.00	-113.84	3,846.56	2,197.99	4,454.78	4,444.60	10.18	437.517	
1,600.00	1,596.25	1,639.07	1,638.35	5.54	5.53	-106.94	3,848.93	2,191.59	4,460.00	4,448.94	11.06	403.119	
1,670.62	1,665.55	1,711.29	1,710.45	5.78	5.79	-103.25	3,849.83	2,187.63	4,462.46	4,450.90	11.57	385.771	
1,700.00	1,694.31	1,732.57	1,731.70	5.89	5.86	-103.32	3,850.15	2,186.46	4,463.46	4,451.71	11.75	379.957	
1,800.00	1,792.23	1,805.89	1,804.91	6.24	6.12	-103.55	3,851.40	2,182.65	4,467.27	4,454.91	12.37	361.263	
1,900.00	1,890.14	1,897.70	1,896.61	6.61	6.45	-103.84	3,853.05	2,178.61	4,471.65	4,458.60	13.05	342.573	
2,000.00	1,988.06	2,053.68	2,052.51	6.97	7.00	-104.29	3,853.52	2,173.87	4,475.54	4,461.58	13.96	320.555	
2,100.00	2,085.97	2,170.72	2,169.51	7.34	7.40	-104.60	3,851.83	2,171.59	4,478.46	4,463.73	14.73	304.061	
2,200.00	2,183.89	2,286.85	2,285.57	7.70	7.80	-104.92	3,850.62	2,167.87	4,481.30	4,465.80	15.50	289.119	
2,300.00	2,281.80	2,407.99	2,406.63	8.07	8.22	-105.26	3,848.44	2,164.03	4,483.58	4,467.29	16.29	275.253	
2,400.00	2,379.72	2,479.00	2,477.61	8.45	8.47	-105.44	3,846.81	2,162.55	4,486.04	4,469.13	16.91	265.360	
2,500.00	2,477.64	2,568.00	2,566.58	8.82	8.78	-105.68	3,845.27	2,160.72	4,489.07	4,471.49	17.59	255.263	
2,600.00	2,575.55	2,649.61	2,648.14	9.19	9.07	-105.91	3,844.70	2,157.97	4,492.54	4,474.29	18.25	246.186	
2,700.00	2,673.47	2,739.47	2,737.94	9.57	9.39	-106.17	3,844.37	2,154.66	4,496.28	4,477.34	18.94	237.376	
2,800.00	2,771.38	2,827.20	2,825.56	9.95	9.70	-106.44	3,844.69	2,150.47	4,500.31	4,480.68	19.63	229.250	
2,900.00	2,869.30	2,897.26	2,895.43	10.32	9.96	-106.67	3,846.02	2,145.46	4,504.84	4,484.58	20.26	222.325	
3,000.00	2,967.21	2,963.28	2,961.09	10.70	10.20	-106.92	3,848.54	2,139.09	4,510.17	4,489.29	20.88	215.999	
3,100.00	3,065.13	3,028.00	3,025.23	11.08	10.44	-107.19	3,852.18	2,131.31	4,516.33	4,494.84	21.49	210.128	
3,200.00	3,163.05	3,109.00	3,105.11	11.46	10.74	-107.55	3,858.40	2,119.41	4,523.41	4,501.24	22.17	204.055	
3,300.00	3,260.96	3,174.65	3,169.59	11.84	10.99	-107.86	3,864.29	2,108.58	4,531.15	4,508.35	22.79	198.814	
3,400.00	3,358.88	3,267.24	3,260.42	12.22	11.35	-108.31	3,872.84	2,092.75	4,539.28	4,515.75	23.52	192.958	
3,500.00	3,456.79	3,382.41	3,373.30	12.60	11.80	-108.86	3,883.43	2,072.53	4,547.53	4,523.17	24.36	186.713	
3,600.00	3,554.71	3,484.99	3,473.80	12.98	12.21	-109.36	3,892.58	2,054.11	4,555.73	4,530.58	25.14	181.193	
3,700.00	3,652.62	3,592.37	3,579.03	13.36	12.64	-109.88	3,901.83	2,034.87	4,564.00	4,538.05	25.95	175.864	
3,800.00	3,750.54	3,701.00	3,685.66	13.75	13.08	-110.39	3,910.48	2,016.03	4,572.20	4,545.44	26.77	170.804	
3,900.00	3,848.45	3,787.89	3,770.94	14.13	13.43	-110.80	3,917.32	2,000.81	4,580.59	4,553.09	27.50	166.585	
4,000.00	3,946.37	3,888.93	3,869.96	14.51	13.85	-111.28	3,925.63	1,982.48	4,589.40	4,561.11	28.29	162.228	
4,100.00	4,044.29	3,998.92	3,977.55	14.89	14.31	-111.82	3,934.59	1,961.49	4,598.14	4,569.01	29.13	157.855	
4,200.00	4,142.20	4,106.49	4,082.66	15.28	14.76	-112.35	3,943.19	1,940.27	4,606.88	4,576.93	29.96	153.771	
4,300.00	4,240.12	4,212.80	4,186.47	15.66	15.22	-112.87	3,951.46	1,918.89	4,615.66	4,584.87	30.80	149.877	
4,400.00	4,338.03	4,319.15	4,290.28	16.05	15.67	-113.39	3,959.46	1,897.22	4,624.48	4,592.85	31.63	146.195	
4,500.00	4,435.95	4,425.41	4,393.96	16.43	16.13	-113.92	3,967.19	1,875.31	4,633.34	4,600.87	32.47	142.704	
4,600.00	4,533.86	4,575.80	4,540.88	16.81	16.78	-114.65	3,976.86	1,844.67	4,641.91	4,608.41	33.50	138.557	
4,700.00	4,631.78	4,886.95	4,847.21	17.20	18.07	-115.99	3,985.02	1,791.36	4,649.03	4,613.86	35.17	132.198	
4,800.00	4,729.69	4,933.19	4,893.03	17.58	18.25	-116.16	3,984.59	1,785.12	4,653.47	4,617.74	35.73	130.225	
4,900.00	4,827.61	4,985.00	4,944.44	17.97	18.45	-116.35	3,984.77	1,778.77	4,659.34	4,623.03	36.32	128.294	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM

Rule Assigned:

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
5,000.00	4,925.53	4,985.00	4,944.44	18.35	18.45	-116.35	3,984.77	1,778.77	4,666.62	4,629.93	36.69	127.190	
5,100.00	5,023.44	5,046.11	5,005.17	18.74	18.68	-116.57	3,985.92	1,772.08	4,675.02	4,637.72	37.30	125.348	
5,200.00	5,121.36	5,083.73	5,042.59	19.12	18.83	-116.70	3,987.16	1,768.37	4,684.92	4,647.11	37.80	123.927	
5,300.00	5,219.27	5,164.00	5,122.46	19.51	19.13	-116.97	3,991.12	1,761.51	4,696.65	4,658.17	38.48	122.044	
5,400.00	5,317.19	5,164.00	5,122.46	19.89	19.13	-116.97	3,991.12	1,761.51	4,708.74	4,669.92	38.82	121.291	
5,500.00	5,415.10	14,208.00	9,899.30	20.28	72.46	-103.19	-506.88	1,691.72	4,630.79	4,579.05	51.74	89.497	
5,600.00	5,513.02	14,208.00	9,899.30	20.66	72.46	-103.19	-506.88	1,691.72	4,532.33	4,480.34	51.98	87.188	
5,700.00	5,610.93	14,208.00	9,899.30	21.05	72.46	-103.19	-506.88	1,691.72	4,433.93	4,381.70	52.23	84.892	
5,800.00	5,708.85	14,242.82	9,899.81	21.43	72.90	-101.91	-541.68	1,692.70	4,335.55	4,282.81	52.74	82.207	
5,900.00	5,806.77	14,275.31	9,900.01	21.82	73.31	-100.59	-574.14	1,694.17	4,237.12	4,183.87	53.24	79.583	
6,000.00	5,904.68	14,305.42	9,899.95	22.21	73.69	-99.25	-604.19	1,696.02	4,138.65	4,084.91	53.74	77.018	
6,100.00	6,002.60	14,329.17	9,899.77	22.59	74.00	-98.11	-627.88	1,697.70	4,040.17	3,985.97	54.19	74.553	
6,200.00	6,100.51	14,352.29	9,899.52	22.98	74.29	-96.93	-650.94	1,699.41	3,941.68	3,887.02	54.65	72.124	
6,300.00	6,198.43	14,374.49	9,899.21	23.36	74.57	-95.73	-673.07	1,701.15	3,843.18	3,788.07	55.11	69.734	
6,400.00	6,296.34	14,395.81	9,898.84	23.75	74.85	-94.51	-694.31	1,702.89	3,744.70	3,689.12	55.58	67.380	
6,500.00	6,394.26	14,416.31	9,898.42	24.14	75.11	-93.28	-714.73	1,704.63	3,646.21	3,590.17	56.04	65.061	
6,600.00	6,492.17	14,397.00	9,898.81	24.52	74.86	-94.44	-695.50	1,702.99	3,547.88	3,491.68	56.20	63.130	
6,700.00	6,590.09	14,397.00	9,898.81	24.91	74.86	-94.44	-695.50	1,702.99	3,449.62	3,393.10	56.52	61.032	
6,800.00	6,688.01	14,421.98	9,898.44	25.29	75.18	-92.94	-720.38	1,705.07	3,351.26	3,294.21	57.05	58.738	
6,900.00	6,785.92	14,593.00	9,893.67	25.68	77.38	-80.17	-890.91	1,715.56	3,253.07	3,194.29	58.78	55.344	
7,000.00	6,883.84	14,593.00	9,893.67	26.07	77.38	-80.17	-890.91	1,715.56	3,154.38	3,095.25	59.14	53.342	
7,100.00	6,981.75	14,593.00	9,893.67	26.45	77.38	-80.17	-890.91	1,715.56	3,055.78	2,996.28	59.51	51.353	
7,200.00	7,079.67	14,593.00	9,893.67	26.84	77.38	-80.17	-890.91	1,715.56	2,957.27	2,897.38	59.89	49.378	
7,300.00	7,177.58	14,593.00	9,893.67	27.23	77.38	-80.17	-890.91	1,715.56	2,858.87	2,798.58	60.29	47.417	
7,400.00	7,275.50	14,593.00	9,893.67	27.61	77.38	-80.17	-890.91	1,715.56	2,760.58	2,699.87	60.71	45.471	
7,500.00	7,373.41	14,593.00	9,893.67	28.00	77.38	-80.17	-890.91	1,715.56	2,662.42	2,601.27	61.15	43.539	
7,600.00	7,471.33	14,593.00	9,893.67	28.39	77.38	-80.17	-890.91	1,715.56	2,564.40	2,502.79	61.61	41.622	
7,700.00	7,569.25	14,593.00	9,893.67	28.77	77.38	-80.17	-890.91	1,715.56	2,466.54	2,404.45	62.10	39.721	
7,764.22	7,632.13	14,593.00	9,893.67	29.02	77.38	-80.17	-890.91	1,715.56	2,403.79	2,341.37	62.42	38.508	
7,800.00	7,667.21	14,593.00	9,893.67	29.16	77.38	-77.03	-890.91	1,715.56	2,368.87	2,306.26	62.61	37.834	
7,900.00	7,765.68	14,593.00	9,893.67	29.54	77.38	-68.95	-890.91	1,715.56	2,271.56	2,208.37	63.19	35.945	
8,000.00	7,864.70	14,593.00	9,893.67	29.91	77.38	-61.98	-890.91	1,715.56	2,174.81	2,110.94	63.86	34.054	
8,100.00	7,964.15	14,593.00	9,893.67	30.28	77.38	-56.10	-890.91	1,715.56	2,078.82	2,014.18	64.63	32.163	
8,200.00	8,063.90	14,593.00	9,893.67	30.63	77.38	-51.20	-890.91	1,715.56	1,983.82	1,918.30	65.52	30.278	
8,300.00	8,163.83	14,593.00	9,893.67	30.98	77.38	-47.13	-890.91	1,715.56	1,890.11	1,823.56	66.55	28.402	
8,350.17	8,214.00	14,593.00	9,893.67	31.14	77.38	86.79	-890.91	1,715.56	1,843.67	1,776.55	67.12	27.468	
8,400.00	8,263.77	14,593.00	9,893.67	31.31	77.38	-71.82	-890.91	1,715.56	1,797.50	1,729.79	67.71	26.548	
8,450.00	8,313.33	14,593.00	9,893.67	31.49	77.38	-84.45	-890.91	1,715.56	1,750.86	1,682.59	68.27	25.645	
8,500.00	8,362.13	14,593.00	9,893.67	31.69	77.38	-97.29	-890.91	1,715.56	1,704.25	1,635.45	68.80	24.771	
8,550.00	8,409.80	14,593.00	9,893.67	31.89	77.38	-109.04	-890.91	1,715.56	1,658.06	1,588.77	69.29	23.931	
8,600.00	8,455.99	14,593.00	9,893.67	32.09	77.38	-118.92	-890.91	1,715.56	1,612.67	1,542.96	69.72	23.132	
8,650.00	8,500.33	14,593.00	9,893.67	32.31	77.38	-126.82	-890.91	1,715.56	1,568.52	1,498.44	70.08	22.380	
8,700.00	8,542.50	14,593.00	9,893.67	32.53	77.38	-133.00	-890.91	1,715.56	1,526.07	1,455.69	70.38	21.682	
8,750.00	8,582.16	14,593.00	9,893.67	32.75	77.38	-137.77	-890.91	1,715.56	1,485.80	1,415.19	70.61	21.043	
8,800.00	8,619.02	14,593.00	9,893.67	32.97	77.38	-141.47	-890.91	1,715.56	1,448.21	1,377.46	70.75	20.469	
8,850.00	8,652.80	14,593.00	9,893.67	33.19	77.38	-144.34	-890.91	1,715.56	1,413.80	1,342.99	70.81	19.965	
8,900.00	8,683.24	14,593.00	9,893.67	33.42	77.38	-146.55	-890.91	1,715.56	1,383.10	1,312.30	70.80	19.536	
8,950.00	8,710.11	14,593.00	9,893.67	33.64	77.38	-148.24	-890.91	1,715.56	1,356.59	1,285.89	70.70	19.188	
9,000.00	8,733.20	14,593.00	9,893.67	33.86	77.38	-149.50	-890.91	1,715.56	1,334.72	1,264.19	70.53	18.924	
9,050.00	8,752.35	14,593.00	9,893.67	34.08	77.38	-150.39	-890.91	1,715.56	1,317.91	1,247.61	70.30	18.748	
9,100.00	8,767.39	14,593.00	9,893.67	34.29	77.38	-150.97	-890.91	1,715.56	1,306.47	1,236.46	70.01	18.662	
9,100.17	8,767.43	14,593.00	9,893.67	34.29	77.38	-150.97	-890.91	1,715.56	1,306.44	1,236.43	70.01	18.661	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM

Rule Assigned:

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
9,200.00	8,791.66	14,593.00	9,893.67	34.71	77.38	-151.80	-890.91	1,715.56	1,296.30	1,226.77	69.53	18.644	SF
9,220.28	8,796.18	14,593.00	9,893.67	34.80	77.38	-152.01	-890.91	1,715.56	1,296.00	1,226.54	69.47	18.657	CC, ES
9,300.00	8,812.57	14,593.00	9,893.67	35.13	77.38	-152.92	-890.91	1,715.56	1,300.61	1,231.30	69.31	18.766	
9,400.00	8,829.97	14,593.00	9,893.67	35.54	77.38	-154.32	-890.91	1,715.56	1,319.23	1,249.94	69.29	19.038	
9,500.00	8,843.72	14,593.00	9,893.67	35.95	77.38	-156.04	-890.91	1,715.56	1,351.43	1,282.00	69.43	19.464	
9,600.00	8,853.72	14,593.00	9,893.67	36.33	77.38	-158.13	-890.91	1,715.56	1,396.03	1,326.36	69.67	20.037	
9,700.00	8,859.89	14,593.00	9,893.67	36.70	77.38	-160.70	-890.91	1,715.56	1,451.58	1,381.61	69.97	20.747	
9,800.00	8,862.18	14,593.00	9,893.67	37.05	77.38	-163.87	-890.91	1,715.56	1,516.46	1,446.18	70.28	21.577	
9,809.00	8,862.20	14,593.00	9,893.67	37.08	77.38	-164.19	-890.91	1,715.56	1,522.70	1,452.39	70.31	21.657	
9,900.00	8,862.20	14,593.00	9,893.67	37.39	77.38	-164.19	-890.91	1,715.56	1,587.48	1,516.90	70.58	22.492	
10,000.00	8,862.19	14,593.00	9,893.67	37.74	77.38	-164.19	-890.91	1,715.56	1,661.50	1,590.67	70.83	23.456	
10,100.00	8,862.19	14,593.00	9,893.67	38.10	77.38	-164.19	-890.91	1,715.56	1,738.13	1,667.07	71.05	24.462	
10,200.00	8,862.19	14,593.00	9,893.67	38.48	77.38	-164.19	-890.91	1,715.56	1,817.02	1,745.78	71.24	25.504	
10,300.00	8,862.19	14,593.00	9,893.67	38.86	77.38	-164.19	-890.91	1,715.56	1,897.91	1,826.50	71.41	26.576	
10,400.00	8,862.19	14,593.00	9,893.67	39.25	77.38	-164.19	-890.91	1,715.56	1,980.54	1,908.98	71.57	27.675	
10,500.00	8,862.18	14,593.00	9,893.67	39.66	77.38	-164.19	-890.91	1,715.56	2,064.71	1,993.01	71.70	28.796	
10,600.00	8,862.18	14,593.00	9,893.67	40.07	77.38	-164.19	-890.91	1,715.56	2,150.24	2,078.41	71.83	29.937	
10,700.00	8,862.18	14,593.00	9,893.67	40.49	77.38	-164.19	-890.91	1,715.56	2,236.97	2,165.03	71.94	31.094	
10,800.00	8,862.18	14,593.00	9,893.67	40.93	77.38	-164.19	-890.91	1,715.56	2,324.76	2,252.71	72.05	32.267	
10,900.00	8,862.18	14,593.00	9,893.67	41.37	77.38	-164.19	-890.91	1,715.56	2,413.50	2,341.36	72.15	33.452	
11,000.00	8,862.17	14,593.00	9,893.67	41.82	77.38	-164.19	-890.91	1,715.56	2,503.10	2,430.86	72.24	34.649	
11,100.00	8,862.17	14,593.00	9,893.67	42.28	77.38	-164.19	-890.91	1,715.56	2,593.45	2,521.12	72.33	35.856	
11,200.00	8,862.17	14,593.00	9,893.67	42.75	77.38	-164.19	-890.91	1,715.56	2,684.49	2,612.07	72.41	37.071	
11,300.00	8,862.17	14,593.00	9,893.67	43.22	77.38	-164.19	-890.91	1,715.56	2,776.14	2,703.65	72.50	38.294	
11,400.00	8,862.17	14,593.00	9,893.67	43.71	77.38	-164.19	-890.91	1,715.56	2,868.35	2,795.78	72.57	39.523	
11,500.00	8,862.16	14,593.00	9,893.67	44.20	77.38	-164.19	-890.91	1,715.56	2,961.07	2,888.42	72.65	40.759	
11,600.00	8,862.16	14,593.00	9,893.67	44.70	77.38	-164.19	-890.91	1,715.56	3,054.25	2,981.53	72.72	41.999	
11,700.00	8,862.16	14,593.00	9,893.67	45.20	77.38	-164.19	-890.91	1,715.56	3,147.85	3,075.05	72.79	43.244	
11,800.00	8,862.16	14,593.00	9,893.67	45.72	77.38	-164.19	-890.91	1,715.56	3,241.82	3,168.96	72.86	44.493	
11,900.00	8,862.16	14,593.00	9,893.67	46.24	77.38	-164.19	-890.91	1,715.56	3,336.15	3,263.22	72.93	45.745	
12,000.00	8,862.15	14,593.00	9,893.67	46.76	77.38	-164.19	-890.91	1,715.56	3,430.80	3,357.81	73.00	46.999	
12,100.00	8,862.15	14,593.00	9,893.67	47.29	77.38	-164.19	-890.91	1,715.56	3,525.75	3,452.68	73.06	48.257	
12,200.00	8,862.15	14,593.00	9,893.67	47.83	77.38	-164.19	-890.91	1,715.56	3,620.96	3,547.84	73.13	49.516	
12,300.00	8,862.15	14,593.00	9,893.67	48.38	77.38	-164.19	-890.91	1,715.56	3,716.43	3,643.24	73.19	50.777	
12,400.00	8,862.15	14,593.00	9,893.67	48.93	77.38	-164.19	-890.91	1,715.56	3,812.13	3,738.88	73.25	52.040	
12,500.00	8,862.14	14,593.00	9,893.67	49.48	77.38	-164.19	-890.91	1,715.56	3,908.05	3,834.73	73.32	53.304	
12,600.00	8,862.14	14,593.00	9,893.67	50.04	77.38	-164.19	-890.91	1,715.56	4,004.17	3,930.79	73.38	54.568	
12,700.00	8,862.14	14,593.00	9,893.67	50.61	77.38	-164.19	-890.91	1,715.56	4,100.47	4,027.03	73.44	55.834	
12,800.00	8,862.14	14,593.00	9,893.67	51.18	77.38	-164.19	-890.91	1,715.56	4,196.94	4,123.44	73.50	57.100	
12,900.00	8,862.14	14,593.00	9,893.67	51.76	77.38	-164.19	-890.91	1,715.56	4,293.58	4,220.02	73.56	58.366	
13,000.00	8,862.13	14,593.00	9,893.67	52.34	77.38	-164.19	-890.91	1,715.56	4,390.37	4,316.74	73.62	59.632	
13,100.00	8,862.13	14,593.00	9,893.67	52.92	77.38	-164.19	-890.91	1,715.56	4,487.29	4,413.61	73.69	60.898	
13,200.00	8,862.13	14,593.00	9,893.67	53.51	77.38	-164.19	-890.91	1,715.56	4,584.35	4,510.61	73.75	62.164	
13,300.00	8,862.13	14,593.00	9,893.67	54.10	77.38	-164.19	-890.91	1,715.56	4,681.54	4,607.73	73.81	63.429	
13,400.00	8,862.12	14,593.00	9,893.67	54.70	77.38	-164.19	-890.91	1,715.56	4,778.84	4,704.97	73.87	64.694	
13,500.00	8,862.12	14,593.00	9,893.67	55.30	77.38	-164.19	-890.91	1,715.56	4,876.24	4,802.32	73.93	65.958	
13,600.00	8,862.12	14,593.00	9,893.67	55.91	77.38	-164.19	-890.91	1,715.56	4,973.76	4,899.77	73.99	67.221	
13,700.00	8,862.12	14,593.00	9,893.67	56.52	77.38	-164.19	-890.91	1,715.56	5,071.37	4,997.31	74.05	68.484	
13,800.00	8,862.12	14,593.00	9,893.67	57.13	77.38	-164.19	-890.91	1,715.56	5,169.07	5,094.95	74.11	69.745	
13,900.00	8,862.11	14,593.00	9,893.67	57.75	77.38	-164.19	-890.91	1,715.56	5,266.85	5,192.68	74.18	71.005	
14,000.00	8,862.11	14,593.00	9,893.67	58.37	77.38	-164.19	-890.91	1,715.56	5,364.72	5,290.48	74.24	72.264	
14,100.00	8,862.11	14,593.00	9,893.67	58.99	77.38	-164.19	-890.91	1,715.56	5,462.66	5,388.37	74.30	73.522	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WA Fee 4 - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 145-MWD+HRGM

Rule Assigned:

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
14,200.00	8,862.11	14,593.00	9,893.67	59.62	77.38	-164.19	-890.91	1,715.56	5,560.68	5,486.32	74.36	74.778	
14,300.00	8,862.11	14,593.00	9,893.67	60.25	77.38	-164.19	-890.91	1,715.56	5,658.77	5,584.35	74.43	76.033	
14,400.00	8,862.10	14,593.00	9,893.67	60.88	77.38	-164.19	-890.91	1,715.56	5,756.92	5,682.44	74.49	77.286	
14,500.00	8,862.10	14,593.00	9,893.67	61.52	77.38	-164.19	-890.91	1,715.56	5,855.14	5,780.59	74.55	78.538	
14,600.00	8,862.10	14,593.00	9,893.67	62.16	77.38	-164.19	-890.91	1,715.56	5,953.42	5,878.80	74.62	79.787	
14,700.00	8,862.10	14,593.00	9,893.67	62.80	77.38	-164.19	-890.91	1,715.56	6,051.75	5,977.07	74.68	81.035	
14,800.00	8,862.10	14,593.00	9,893.67	63.44	77.38	-164.19	-890.91	1,715.56	6,150.13	6,075.39	74.74	82.282	
14,900.00	8,862.09	14,593.00	9,893.67	64.09	77.38	-164.19	-890.91	1,715.56	6,248.57	6,173.76	74.81	83.526	
15,000.00	8,862.09	14,593.00	9,893.67	64.74	77.38	-164.19	-890.91	1,715.56	6,347.06	6,272.18	74.88	84.768	
15,100.00	8,862.09	14,593.00	9,893.67	65.39	77.38	-164.19	-890.91	1,715.56	6,445.59	6,370.65	74.94	86.008	
15,200.00	8,862.09	14,593.00	9,893.67	66.05	77.38	-164.19	-890.91	1,715.56	6,544.17	6,469.16	75.01	87.246	
15,300.00	8,862.09	14,593.00	9,893.67	66.70	77.38	-164.19	-890.91	1,715.56	6,642.79	6,567.71	75.07	88.482	
15,400.00	8,862.08	14,593.00	9,893.67	67.36	77.38	-164.19	-890.91	1,715.56	6,741.45	6,666.30	75.14	89.716	
15,500.00	8,862.08	14,593.00	9,893.67	68.02	77.38	-164.19	-890.91	1,715.56	6,840.14	6,764.93	75.21	90.948	
15,600.00	8,862.08	14,593.00	9,893.67	68.69	77.38	-164.19	-890.91	1,715.56	6,938.88	6,863.60	75.28	92.177	
15,700.00	8,862.08	14,593.00	9,893.67	69.35	77.38	-164.19	-890.91	1,715.56	7,037.65	6,962.31	75.35	93.404	
15,800.00	8,862.08	14,593.00	9,893.67	70.02	77.38	-164.19	-890.91	1,715.56	7,136.46	7,061.04	75.42	94.628	
15,900.00	8,862.07	14,593.00	9,893.67	70.69	77.38	-164.19	-890.91	1,715.56	7,235.30	7,159.81	75.49	95.850	
16,000.00	8,862.07	14,593.00	9,893.67	71.36	77.38	-164.19	-890.91	1,715.56	7,334.17	7,258.61	75.56	97.070	
16,100.00	8,862.07	14,593.00	9,893.67	72.03	77.38	-164.19	-890.91	1,715.56	7,433.07	7,357.44	75.63	98.287	
16,200.00	8,862.07	14,593.00	9,893.67	72.71	77.38	-164.19	-890.91	1,715.56	7,532.00	7,456.30	75.70	99.502	
16,300.00	8,862.07	14,593.00	9,893.67	73.38	77.38	-164.19	-890.91	1,715.56	7,630.96	7,555.19	75.77	100.714	
16,400.00	8,862.06	14,593.00	9,893.67	74.06	77.38	-164.19	-890.91	1,715.56	7,729.94	7,654.10	75.84	101.923	
16,500.00	8,862.06	14,593.00	9,893.67	74.74	77.38	-164.19	-890.91	1,715.56	7,828.95	7,753.04	75.91	103.130	
16,600.00	8,862.06	14,593.00	9,893.67	75.42	77.38	-164.19	-890.91	1,715.56	7,927.99	7,852.00	75.99	104.334	
16,700.00	8,862.06	14,593.00	9,893.67	76.10	77.38	-164.19	-890.91	1,715.56	8,027.05	7,950.99	76.06	105.536	
16,800.00	8,862.06	14,593.00	9,893.67	76.79	77.38	-164.19	-890.91	1,715.56	8,126.13	8,049.99	76.13	106.734	
16,900.00	8,862.05	14,593.00	9,893.67	77.47	77.38	-164.19	-890.91	1,715.56	8,225.23	8,149.02	76.21	107.930	
17,000.00	8,862.05	14,593.00	9,893.67	78.16	77.38	-164.19	-890.91	1,715.56	8,324.36	8,248.07	76.28	109.123	
17,100.00	8,862.05	14,593.00	9,893.67	78.85	77.38	-164.19	-890.91	1,715.56	8,423.50	8,347.14	76.36	110.314	
17,200.00	8,862.05	14,593.00	9,893.67	79.54	77.38	-164.19	-890.91	1,715.56	8,522.67	8,446.23	76.44	111.501	
17,300.00	8,862.05	14,593.00	9,893.67	80.23	77.38	-164.19	-890.91	1,715.56	8,621.86	8,545.34	76.51	112.686	
17,400.00	8,862.04	14,593.00	9,893.67	80.92	77.38	-164.19	-890.91	1,715.56	8,721.06	8,644.47	76.59	113.867	
17,500.00	8,862.04	14,593.00	9,893.67	81.62	77.38	-164.19	-890.91	1,715.56	8,820.28	8,743.62	76.67	115.046	
17,600.00	8,862.04	14,593.00	9,893.67	82.31	77.38	-164.19	-890.91	1,715.56	8,919.52	8,842.78	76.75	116.222	
17,700.00	8,862.04	14,593.00	9,893.67	83.01	77.38	-164.19	-890.91	1,715.56	9,018.78	8,941.95	76.82	117.394	
17,800.00	8,862.04	14,593.00	9,893.67	83.71	77.38	-164.19	-890.91	1,715.56	9,118.05	9,041.15	76.90	118.564	
17,900.00	8,862.03	14,593.00	9,893.67	84.41	77.38	-164.19	-890.91	1,715.56	9,217.34	9,140.36	76.98	119.731	
18,000.00	8,862.03	14,593.00	9,893.67	85.11	77.38	-164.19	-890.91	1,715.56	9,316.64	9,239.58	77.06	120.895	
18,100.00	8,862.03	14,593.00	9,893.67	85.81	77.38	-164.19	-890.91	1,715.56	9,415.96	9,338.82	77.14	122.056	
18,200.00	8,862.03	14,593.00	9,893.67	86.51	77.38	-164.19	-890.91	1,715.56	9,515.29	9,438.07	77.23	123.213	
18,300.00	8,862.03	14,593.00	9,893.67	87.21	77.38	-164.19	-890.91	1,715.56	9,614.64	9,537.33	77.31	124.368	
18,400.00	8,862.02	14,593.00	9,893.67	87.92	77.38	-164.19	-890.91	1,715.56	9,714.00	9,636.61	77.39	125.519	
18,500.00	8,862.02	14,593.00	9,893.67	88.62	77.38	-164.19	-890.91	1,715.56	9,813.37	9,735.90	77.47	126.668	
18,600.00	8,862.02	14,593.00	9,893.67	89.33	77.38	-164.19	-890.91	1,715.56	9,912.76	9,835.20	77.56	127.813	

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 55-MWD+HRGM

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	0.00	0.00	0.50	30.73	3,823.84	2,272.70	4,448.30				
100.00	100.00	55.00	54.99	0.28	0.51	30.73	3,823.61	2,273.39	4,448.47	4,447.69	0.78	5,708.770	
200.00	200.00	119.93	119.91	0.63	0.58	30.74	3,823.89	2,274.12	4,449.42	4,448.21	1.21	3,677.194	
300.00	300.00	262.35	262.29	0.99	0.93	30.70	3,826.56	2,272.12	4,450.33	4,448.41	1.92	2,315.502	
400.00	400.00	334.00	333.94	1.35	1.15	30.69	3,827.41	2,271.79	4,451.09	4,448.58	2.50	1,777.625	
500.00	500.00	566.13	566.03	1.71	1.93	30.66	3,827.64	2,268.98	4,450.45	4,446.82	3.63	1,224.571	
600.00	600.00	662.29	662.17	2.07	2.25	30.64	3,826.80	2,266.70	4,448.50	4,444.18	4.32	1,029.688	
700.00	700.00	729.66	729.52	2.43	2.49	30.63	3,826.32	2,265.43	4,446.95	4,442.04	4.91	905.557	
800.00	800.00	781.00	780.86	2.79	2.66	30.62	3,826.14	2,265.02	4,446.31	4,440.86	5.45	816.325	
821.51	821.51	800.69	800.55	2.86	2.73	30.62	3,826.13	2,264.98	4,446.28	4,440.69	5.59	795.260	
900.00	900.00	845.99	845.85	3.14	2.89	30.62	3,826.27	2,265.09	4,446.59	4,440.56	6.03	737.791	
1,000.00	1,000.00	938.31	938.16	3.50	3.20	30.63	3,827.07	2,265.62	4,447.61	4,440.91	6.70	663.661	
1,100.00	1,099.98	1,059.62	1,059.47	3.84	3.62	-129.37	3,827.95	2,265.81	4,449.43	4,441.96	7.46	596.325	
1,200.00	1,199.84	1,124.79	1,124.64	4.17	3.84	-129.33	3,828.18	2,266.57	4,453.63	4,445.62	8.01	555.839	
1,300.00	1,299.45	1,188.73	1,188.55	4.51	4.06	-129.26	3,828.50	2,268.06	4,460.78	4,452.22	8.56	520.823	
1,350.00	1,349.13	1,219.06	1,218.87	4.68	4.16	-129.22	3,828.79	2,268.92	4,465.50	4,456.67	8.84	505.281	
1,400.00	1,398.73	1,246.00	1,245.80	4.85	4.26	-122.74	3,829.13	2,269.74	4,470.58	4,461.48	9.10	491.367	
1,500.00	1,497.69	1,314.56	1,314.30	5.19	4.49	-112.61	3,830.27	2,272.21	4,480.47	4,470.80	9.68	463.097	
1,600.00	1,596.25	1,386.64	1,386.30	5.54	4.75	-105.35	3,831.72	2,275.42	4,489.96	4,479.69	10.27	437.196	
1,670.62	1,665.55	1,452.11	1,451.66	5.78	4.97	-101.49	3,833.05	2,278.83	4,496.28	4,485.54	10.75	418.442	
1,700.00	1,694.31	1,491.39	1,490.89	5.89	5.11	-101.57	3,833.79	2,280.85	4,498.75	4,487.77	10.99	409.458	
1,800.00	1,792.23	1,615.92	1,615.27	6.24	5.55	-101.84	3,835.91	2,286.59	4,506.79	4,495.01	11.78	382.463	
1,900.00	1,890.14	1,734.69	1,733.94	6.61	5.97	-102.11	3,837.88	2,290.89	4,514.38	4,501.81	12.56	359.320	
2,000.00	1,988.06	1,825.72	1,824.91	6.97	6.29	-102.32	3,839.43	2,293.66	4,521.81	4,508.56	13.25	341.323	
2,100.00	2,085.97	1,901.21	1,900.33	7.34	6.56	-102.48	3,840.80	2,296.51	4,529.74	4,515.86	13.88	326.392	
2,200.00	2,183.89	1,986.09	1,985.11	7.70	6.86	-102.66	3,842.37	2,300.48	4,538.19	4,523.65	14.54	312.018	
2,300.00	2,281.80	2,100.06	2,098.89	8.07	7.27	-102.89	3,843.65	2,307.03	4,546.58	4,531.26	15.32	296.769	
2,400.00	2,379.72	2,222.66	2,221.24	8.45	7.71	-103.11	3,843.94	2,314.71	4,554.48	4,538.35	16.13	282.366	
2,500.00	2,477.64	2,318.00	2,316.40	8.82	8.05	-103.28	3,843.98	2,320.54	4,562.21	4,545.37	16.84	270.897	
2,600.00	2,575.55	2,388.65	2,386.88	9.19	8.30	-103.41	3,844.11	2,325.48	4,570.51	4,553.05	17.46	261.717	
2,700.00	2,673.47	2,470.89	2,468.86	9.57	8.60	-103.54	3,844.26	2,331.99	4,579.28	4,561.15	18.13	252.572	
2,800.00	2,771.38	2,551.20	2,548.92	9.95	8.89	-103.67	3,844.76	2,338.27	4,588.44	4,569.65	18.79	244.179	
2,900.00	2,869.30	2,660.10	2,657.59	10.32	9.29	-103.88	3,846.49	2,345.17	4,597.80	4,578.24	19.56	235.055	
3,000.00	2,967.21	2,730.49	2,727.84	10.70	9.54	-104.01	3,847.58	2,349.54	4,607.17	4,586.99	20.18	228.252	
3,100.00	3,065.13	2,754.00	2,751.28	11.08	9.63	-104.05	3,848.03	2,351.18	4,617.71	4,597.08	20.63	223.867	
3,200.00	3,163.05	2,804.47	2,801.57	11.46	9.81	-104.14	3,849.48	2,355.28	4,629.43	4,608.25	21.17	218.659	
3,300.00	3,260.96	2,843.00	2,839.87	11.84	9.96	-104.20	3,851.14	2,359.01	4,642.72	4,621.06	21.67	214.281	
3,400.00	3,358.88	2,843.00	2,839.87	12.22	9.96	-104.20	3,851.14	2,359.01	4,657.64	4,635.64	22.00	211.713	
3,500.00	3,456.79	2,897.57	2,894.01	12.60	10.16	-104.29	3,854.39	2,365.13	4,673.62	4,651.07	22.55	207.229	
3,600.00	3,554.71	2,932.00	2,928.06	12.98	10.29	-104.34	3,857.02	2,369.45	4,691.26	4,668.24	23.02	203.806	
3,700.00	3,652.62	2,968.49	2,964.08	13.36	10.43	-104.39	3,860.16	2,374.39	4,710.21	4,686.72	23.49	200.528	
3,800.00	3,750.54	3,022.00	3,016.77	13.75	10.63	-104.46	3,865.21	2,382.21	4,730.38	4,706.35	24.03	196.851	
3,900.00	3,848.45	3,069.88	3,063.82	14.13	10.82	-104.52	3,870.03	2,389.67	4,751.51	4,726.97	24.55	193.579	
4,000.00	3,946.37	3,146.97	3,139.47	14.51	11.11	-104.62	3,877.99	2,402.21	4,773.32	4,748.13	25.19	189.486	
4,100.00	4,044.29	3,251.37	3,241.91	14.89	11.52	-104.74	3,888.93	2,419.04	4,795.25	4,769.28	25.96	184.705	
4,200.00	4,142.20	3,367.88	3,356.35	15.28	11.98	-104.89	3,900.99	2,437.30	4,816.88	4,790.09	26.79	179.806	
4,300.00	4,240.12	3,462.70	3,449.55	15.66	12.36	-105.01	3,910.81	2,451.73	4,838.33	4,810.81	27.52	175.815	
4,400.00	4,338.03	3,640.65	3,624.85	16.05	13.07	-105.25	3,928.23	2,476.84	4,858.68	4,830.05	28.63	169.719	
4,500.00	4,435.95	3,712.50	3,695.72	16.43	13.35	-105.35	3,934.96	2,486.55	4,878.65	4,849.40	29.26	166.758	
4,600.00	4,533.86	3,765.21	3,747.58	16.81	13.56	-105.42	3,940.10	2,494.45	4,899.56	4,869.76	29.80	164.434	
4,700.00	4,631.78	3,826.00	3,807.26	17.20	13.81	-105.49	3,946.43	2,504.12	4,921.39	4,891.01	30.37	162.030	
4,800.00	4,729.69	3,897.72	3,877.57	17.58	14.11	-105.57	3,954.17	2,515.97	4,943.86	4,912.86	31.00	159.469	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 55-MWD+HRGM

Rule Assigned:

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
4,900.00	4,827.61	3,983.43	3,961.57	17.97	14.46	-105.66	3,963.57	2,530.23	4,966.59	4,934.89	31.70	156.688	
5,000.00	4,925.53	4,087.08	4,063.17	18.35	14.89	-105.78	3,975.25	2,547.04	4,989.43	4,956.95	32.48	153.621	
5,100.00	5,023.44	4,514.37	4,484.58	18.74	16.62	-106.29	4,009.88	2,607.91	5,007.57	4,972.82	34.75	144.115	
5,200.00	5,121.36	4,603.35	4,572.69	19.12	16.98	-106.40	4,014.93	2,619.21	5,023.99	4,988.53	35.46	141.674	
5,300.00	5,219.27	13,968.89	9,757.25	19.51	70.59	-72.72	-370.57	2,691.64	5,024.79	4,970.47	54.32	92.495	
5,400.00	5,317.19	13,988.40	9,757.66	19.89	70.84	-72.12	-390.05	2,692.45	4,930.24	4,875.33	54.90	89.796	
5,500.00	5,415.10	14,007.74	9,758.05	20.28	71.08	-71.52	-409.37	2,693.26	4,835.83	4,780.33	55.50	87.134	
5,600.00	5,513.02	14,026.92	9,758.42	20.66	71.32	-70.92	-428.53	2,694.07	4,741.59	4,685.48	56.11	84.510	
5,700.00	5,610.93	14,038.51	9,758.63	21.05	71.47	-70.55	-440.11	2,694.58	4,647.54	4,590.87	56.67	82.005	
5,800.00	5,708.85	14,052.06	9,758.88	21.43	71.65	-70.12	-453.65	2,695.20	4,553.69	4,496.42	57.27	79.508	
5,900.00	5,806.77	14,065.59	9,759.12	21.82	71.82	-69.68	-467.16	2,695.86	4,460.07	4,402.18	57.89	77.042	
6,000.00	5,904.68	14,079.09	9,759.35	22.21	71.99	-69.25	-480.64	2,696.54	4,366.67	4,308.14	58.53	74.606	
6,100.00	6,002.60	14,160.77	9,760.14	22.59	73.03	-66.53	-562.22	2,700.46	4,273.35	4,213.62	59.73	71.544	
6,200.00	6,100.51	14,238.98	9,760.15	22.98	74.04	-63.83	-640.36	2,703.37	4,180.20	4,119.28	60.93	68.611	
6,300.00	6,198.43	14,249.84	9,760.09	23.36	74.17	-63.45	-651.22	2,703.69	4,087.13	4,025.52	61.61	66.337	
6,400.00	6,296.34	14,260.79	9,760.03	23.75	74.31	-63.06	-662.16	2,704.03	3,994.36	3,932.04	62.32	64.091	
6,500.00	6,394.26	14,271.81	9,759.98	24.14	74.46	-62.67	-673.17	2,704.37	3,901.91	3,838.85	63.06	61.874	
6,600.00	6,492.17	14,282.91	9,759.93	24.52	74.60	-62.27	-684.27	2,704.72	3,809.80	3,745.97	63.83	59.687	
6,700.00	6,590.09	14,302.00	9,759.86	24.91	74.84	-61.58	-703.35	2,705.34	3,718.06	3,653.37	64.69	57.472	
6,800.00	6,688.01	14,302.00	9,759.86	25.29	74.84	-61.58	-703.35	2,705.34	3,626.70	3,561.27	65.44	55.424	
6,900.00	6,785.92	14,302.00	9,759.86	25.68	74.84	-61.58	-703.35	2,705.34	3,535.81	3,469.60	66.21	53.402	
7,000.00	6,883.84	14,302.00	9,759.86	26.07	74.84	-61.58	-703.35	2,705.34	3,445.43	3,378.40	67.02	51.406	
7,100.00	6,981.75	14,325.94	9,759.83	26.45	75.15	-60.71	-727.28	2,706.20	3,355.42	3,287.35	68.07	49.291	
7,200.00	7,079.67	14,333.55	9,759.84	26.84	75.25	-60.43	-734.88	2,706.49	3,266.05	3,197.01	69.03	47.312	
7,300.00	7,177.58	14,341.34	9,759.86	27.23	75.35	-60.15	-742.66	2,706.81	3,177.27	3,107.23	70.04	45.366	
7,400.00	7,275.50	14,349.31	9,759.90	27.61	75.45	-59.86	-750.62	2,707.14	3,089.14	3,018.05	71.09	43.453	
7,500.00	7,373.41	14,357.46	9,759.95	28.00	75.56	-59.56	-758.77	2,707.50	3,001.72	2,929.52	72.20	41.576	
7,600.00	7,471.33	14,365.80	9,760.01	28.39	75.67	-59.25	-767.10	2,707.87	2,915.06	2,841.70	73.36	39.734	
7,700.00	7,569.25	14,374.34	9,760.09	28.77	75.78	-58.93	-775.63	2,708.28	2,829.24	2,754.65	74.59	37.930	
7,764.22	7,632.13	14,396.00	9,760.35	29.02	76.06	-58.12	-797.26	2,709.36	2,774.68	2,699.13	75.55	36.726	
7,800.00	7,667.21	14,396.00	9,760.35	29.16	76.06	-57.17	-797.26	2,709.36	2,744.44	2,668.45	76.00	36.113	
7,900.00	7,765.68	14,396.00	9,760.35	29.54	76.06	-54.70	-797.26	2,709.36	2,661.40	2,584.09	77.31	34.424	
8,000.00	7,864.70	14,396.00	9,760.35	29.91	76.06	-52.50	-797.26	2,709.36	2,580.76	2,502.02	78.74	32.777	
8,100.00	7,964.15	14,396.00	9,760.35	30.28	76.06	-50.55	-797.26	2,709.36	2,502.84	2,422.57	80.27	31.179	
8,200.00	8,063.90	14,406.45	9,760.50	30.63	76.19	-48.47	-807.70	2,709.92	2,427.98	2,345.96	82.02	29.602	
8,300.00	8,163.83	14,408.90	9,760.54	30.98	76.22	-46.88	-810.14	2,710.06	2,356.63	2,272.82	83.81	28.120	
8,350.17	8,214.00	14,409.57	9,760.55	31.14	76.23	85.98	-810.81	2,710.09	2,322.27	2,237.54	84.73	27.407	
8,400.00	8,263.77	14,411.22	9,760.58	31.31	76.25	-65.54	-812.45	2,710.19	2,288.22	2,202.55	85.67	26.708	
8,450.00	8,313.33	14,415.20	9,760.64	31.49	76.31	-69.91	-816.43	2,710.41	2,253.31	2,166.67	86.64	26.008	
8,500.00	8,362.13	14,421.54	9,760.75	31.69	76.39	-74.47	-822.76	2,710.78	2,217.88	2,130.27	87.61	25.315	
8,550.00	8,409.80	14,430.21	9,760.91	31.89	76.50	-79.15	-831.42	2,711.29	2,182.14	2,093.56	88.58	24.635	
8,600.00	8,455.99	14,446.00	9,761.22	32.09	76.71	-83.71	-847.17	2,712.28	2,146.33	2,056.74	89.59	23.958	
8,650.00	8,500.33	14,459.46	9,761.50	32.31	76.88	-88.40	-860.60	2,713.15	2,110.61	2,020.08	90.53	23.313	
8,700.00	8,542.50	14,483.84	9,762.01	32.53	77.20	-92.74	-884.92	2,714.72	2,075.16	1,983.62	91.54	22.669	
8,750.00	8,582.16	14,503.00	9,762.41	32.75	77.45	-97.14	-904.04	2,715.96	2,040.15	1,947.71	92.45	22.068	
8,800.00	8,619.02	14,503.00	9,762.41	32.97	77.45	-101.73	-904.04	2,715.96	2,006.09	1,913.00	93.09	21.550	
8,850.00	8,652.80	14,503.00	9,762.41	33.19	77.45	-105.93	-904.04	2,715.96	1,973.37	1,879.72	93.65	21.071	
8,900.00	8,683.24	14,503.00	9,762.41	33.42	77.45	-109.70	-904.04	2,715.96	1,942.33	1,848.20	94.13	20.634	
8,950.00	8,710.11	14,503.00	9,762.41	33.64	77.45	-113.03	-904.04	2,715.96	1,913.28	1,818.76	94.52	20.242	
9,000.00	8,733.20	14,503.00	9,762.41	33.86	77.45	-115.91	-904.04	2,715.96	1,886.54	1,791.74	94.80	19.900	
9,050.00	8,752.35	14,503.00	9,762.41	34.08	77.45	-118.36	-904.04	2,715.96	1,862.43	1,767.45	94.98	19.609	
9,100.00	8,767.39	14,503.00	9,762.41	34.29	77.45	-120.40	-904.04	2,715.96	1,841.22	1,746.18	95.04	19.373	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy — **Offset Site Error:** 0.50 usft

Survey Program: 55-MWD+HRGM — **Rule Assigned:** — **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
9,100.17	8,767.43	14,503.00	9,762.41	34.29	77.45	-120.41	-904.04	2,715.96	1,841.15	1,746.11	95.04	19.372	
9,200.00	8,791.66	14,503.00	9,762.41	34.71	77.45	-121.31	-904.04	2,715.96	1,808.34	1,713.31	95.03	19.029	
9,300.00	8,812.57	14,503.00	9,762.41	35.13	77.45	-122.15	-904.04	2,715.96	1,788.91	1,693.95	94.96	18.839	
9,387.86	8,828.05	14,503.00	9,762.41	35.49	77.45	-122.83	-904.04	2,715.96	1,783.42	1,688.58	94.84	18.805	CC, ES, SF
9,400.00	8,829.97	14,503.00	9,762.41	35.54	77.45	-122.92	-904.04	2,715.96	1,783.52	1,688.71	94.82	18.810	
9,500.00	8,843.72	14,503.00	9,762.41	35.95	77.45	-123.61	-904.04	2,715.96	1,792.35	1,697.76	94.59	18.948	
9,600.00	8,853.72	14,503.00	9,762.41	36.33	77.45	-124.22	-904.04	2,715.96	1,815.11	1,720.82	94.29	19.250	
9,700.00	8,859.89	14,503.00	9,762.41	36.70	77.45	-124.78	-904.04	2,715.96	1,851.13	1,757.21	93.93	19.708	
9,800.00	8,862.18	14,503.00	9,762.41	37.05	77.45	-125.29	-904.04	2,715.96	1,899.39	1,805.87	93.52	20.310	
9,809.00	8,862.20	14,503.00	9,762.41	37.08	77.45	-125.34	-904.04	2,715.96	1,904.29	1,810.80	93.48	20.370	
9,900.00	8,862.20	14,503.00	9,762.41	37.39	77.45	-125.34	-904.04	2,715.96	1,955.77	1,862.68	93.09	21.010	
10,000.00	8,862.19	14,503.00	9,762.41	37.74	77.45	-125.34	-904.04	2,715.96	2,015.57	1,922.95	92.62	21.762	
10,100.00	8,862.19	14,503.00	9,762.41	38.10	77.45	-125.34	-904.04	2,715.96	2,078.47	1,986.34	92.13	22.561	
10,200.00	8,862.19	14,503.00	9,762.41	38.48	77.45	-125.34	-904.04	2,715.96	2,144.18	2,052.56	91.62	23.402	
10,300.00	8,862.19	14,503.00	9,762.41	38.86	77.45	-125.34	-904.04	2,715.96	2,212.47	2,121.35	91.11	24.283	
10,400.00	8,862.19	14,503.00	9,762.41	39.25	77.45	-125.34	-904.04	2,715.96	2,283.09	2,192.49	90.60	25.199	
10,500.00	8,862.18	14,503.00	9,762.41	39.66	77.45	-125.34	-904.04	2,715.96	2,355.84	2,265.75	90.10	26.148	
10,600.00	8,862.18	14,503.00	9,762.41	40.07	77.45	-125.34	-904.04	2,715.96	2,430.53	2,340.93	89.60	27.126	
10,700.00	8,862.18	14,503.00	9,762.41	40.49	77.45	-125.34	-904.04	2,715.96	2,506.99	2,417.87	89.12	28.130	
10,800.00	8,862.18	14,503.00	9,762.41	40.93	77.45	-125.34	-904.04	2,715.96	2,585.05	2,496.39	88.65	29.159	
10,900.00	8,862.18	14,503.00	9,762.41	41.37	77.45	-125.34	-904.04	2,715.96	2,664.58	2,576.37	88.20	30.210	
11,000.00	8,862.17	14,503.00	9,762.41	41.82	77.45	-125.34	-904.04	2,715.96	2,745.44	2,657.67	87.77	31.280	
11,100.00	8,862.17	14,503.00	9,762.41	42.28	77.45	-125.34	-904.04	2,715.96	2,827.53	2,740.18	87.35	32.369	
11,200.00	8,862.17	14,503.00	9,762.41	42.75	77.45	-125.34	-904.04	2,715.96	2,910.74	2,823.79	86.96	33.473	
11,300.00	8,862.17	14,503.00	9,762.41	43.22	77.45	-125.34	-904.04	2,715.96	2,994.98	2,908.40	86.58	34.592	
11,400.00	8,862.17	14,503.00	9,762.41	43.71	77.45	-125.34	-904.04	2,715.96	3,080.17	2,993.94	86.22	35.724	
11,500.00	8,862.16	14,503.00	9,762.41	44.20	77.45	-125.34	-904.04	2,715.96	3,166.21	3,080.33	85.88	36.868	
11,600.00	8,862.16	14,503.00	9,762.41	44.70	77.45	-125.34	-904.04	2,715.96	3,253.06	3,167.50	85.56	38.022	
11,700.00	8,862.16	14,503.00	9,762.41	45.20	77.45	-125.34	-904.04	2,715.96	3,340.64	3,255.39	85.25	39.186	
11,800.00	8,862.16	14,503.00	9,762.41	45.72	77.45	-125.34	-904.04	2,715.96	3,428.90	3,343.94	84.96	40.359	
11,900.00	8,862.16	14,503.00	9,762.41	46.24	77.45	-125.34	-904.04	2,715.96	3,517.79	3,433.11	84.69	41.539	
12,000.00	8,862.15	14,503.00	9,762.41	46.76	77.45	-125.34	-904.04	2,715.96	3,607.27	3,522.84	84.43	42.726	
12,100.00	8,862.15	14,503.00	9,762.41	47.29	77.45	-125.34	-904.04	2,715.96	3,697.28	3,613.09	84.18	43.919	
12,200.00	8,862.15	14,503.00	9,762.41	47.83	77.45	-125.34	-904.04	2,715.96	3,787.79	3,703.84	83.95	45.117	
12,300.00	8,862.15	14,503.00	9,762.41	48.38	77.45	-125.34	-904.04	2,715.96	3,878.77	3,795.03	83.74	46.321	
12,400.00	8,862.15	14,503.00	9,762.41	48.93	77.45	-125.34	-904.04	2,715.96	3,970.18	3,886.65	83.53	47.529	
12,500.00	8,862.14	14,503.00	9,762.41	49.48	77.45	-125.34	-904.04	2,715.96	4,062.00	3,978.66	83.34	48.740	
12,600.00	8,862.14	14,503.00	9,762.41	50.04	77.45	-125.34	-904.04	2,715.96	4,154.19	4,071.03	83.16	49.955	
12,700.00	8,862.14	14,503.00	9,762.41	50.61	77.45	-125.34	-904.04	2,715.96	4,246.74	4,163.75	82.99	51.173	
12,800.00	8,862.14	14,503.00	9,762.41	51.18	77.45	-125.34	-904.04	2,715.96	4,339.62	4,256.79	82.83	52.393	
12,900.00	8,862.14	14,503.00	9,762.41	51.76	77.45	-125.34	-904.04	2,715.96	4,432.81	4,350.13	82.68	53.616	
13,000.00	8,862.13	14,503.00	9,762.41	52.34	77.45	-125.34	-904.04	2,715.96	4,526.29	4,443.75	82.54	54.840	
13,100.00	8,862.13	14,503.00	9,762.41	52.92	77.45	-125.34	-904.04	2,715.96	4,620.04	4,537.64	82.40	56.066	
13,200.00	8,862.13	14,503.00	9,762.41	53.51	77.45	-125.34	-904.04	2,715.96	4,714.05	4,631.77	82.28	57.293	
13,300.00	8,862.13	14,503.00	9,762.41	54.10	77.45	-125.34	-904.04	2,715.96	4,808.30	4,726.14	82.16	58.522	
13,400.00	8,862.12	14,503.00	9,762.41	54.70	77.45	-125.34	-904.04	2,715.96	4,902.78	4,820.73	82.05	59.751	
13,500.00	8,862.12	14,503.00	9,762.41	55.30	77.45	-125.34	-904.04	2,715.96	4,997.47	4,915.52	81.95	60.980	
13,600.00	8,862.12	14,503.00	9,762.41	55.91	77.45	-125.34	-904.04	2,715.96	5,092.37	5,010.51	81.86	62.210	
13,700.00	8,862.12	14,503.00	9,762.41	56.52	77.45	-125.34	-904.04	2,715.96	5,187.46	5,105.69	81.77	63.440	
13,800.00	8,862.12	14,503.00	9,762.41	57.13	77.45	-125.34	-904.04	2,715.96	5,282.73	5,201.04	81.69	64.670	
13,900.00	8,862.11	14,503.00	9,762.41	57.75	77.45	-125.34	-904.04	2,715.96	5,378.17	5,296.56	81.61	65.900	
14,000.00	8,862.11	14,503.00	9,762.41	58.37	77.45	-125.34	-904.04	2,715.96	5,473.77	5,392.23	81.54	67.130	

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

Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Offset Design: Riverbend 12-13 Offsets - Whistle Pig 1 WXY Fee 9H - OH - Svy

Offset Site Error: 0.50 usft

Survey Program: 55-MWD+HRGM **Rule Assigned:** **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
14,100.00	8,862.11	14,503.00	9,762.41	58.99	77.45	-125.34	-904.04	2,715.96	5,569.53	5,488.06	81.48	68.359	
14,200.00	8,862.11	14,503.00	9,762.41	59.62	77.45	-125.34	-904.04	2,715.96	5,665.44	5,584.02	81.42	69.587	
14,300.00	8,862.11	14,503.00	9,762.41	60.25	77.45	-125.34	-904.04	2,715.96	5,761.48	5,680.12	81.36	70.815	
14,400.00	8,862.10	14,503.00	9,762.41	60.88	77.45	-125.34	-904.04	2,715.96	5,857.66	5,776.35	81.31	72.042	
14,500.00	8,862.10	14,503.00	9,762.41	61.52	77.45	-125.34	-904.04	2,715.96	5,953.96	5,872.70	81.26	73.268	
14,600.00	8,862.10	14,503.00	9,762.41	62.16	77.45	-125.34	-904.04	2,715.96	6,050.38	5,969.16	81.22	74.493	
14,700.00	8,862.10	14,503.00	9,762.41	62.80	77.45	-125.34	-904.04	2,715.96	6,146.92	6,065.74	81.18	75.716	
14,800.00	8,862.10	14,503.00	9,762.41	63.44	77.45	-125.34	-904.04	2,715.96	6,243.57	6,162.42	81.15	76.939	
14,900.00	8,862.09	14,503.00	9,762.41	64.09	77.45	-125.34	-904.04	2,715.96	6,340.32	6,259.20	81.12	78.160	
15,000.00	8,862.09	14,503.00	9,762.41	64.74	77.45	-125.34	-904.04	2,715.96	6,437.17	6,356.07	81.09	79.380	
15,100.00	8,862.09	14,503.00	9,762.41	65.39	77.45	-125.34	-904.04	2,715.96	6,534.11	6,453.04	81.07	80.598	
15,200.00	8,862.09	14,503.00	9,762.41	66.05	77.45	-125.34	-904.04	2,715.96	6,631.15	6,550.09	81.05	81.815	
15,300.00	8,862.09	14,503.00	9,762.41	66.70	77.45	-125.34	-904.04	2,715.96	6,728.27	6,647.23	81.03	83.030	
15,400.00	8,862.08	14,503.00	9,762.41	67.36	77.45	-125.34	-904.04	2,715.96	6,825.47	6,744.45	81.02	84.243	
15,500.00	8,862.08	14,503.00	9,762.41	68.02	77.45	-125.34	-904.04	2,715.96	6,922.76	6,841.75	81.01	85.454	
15,600.00	8,862.08	14,503.00	9,762.41	68.69	77.45	-125.34	-904.04	2,715.96	7,020.12	6,939.11	81.00	86.664	
15,700.00	8,862.08	14,503.00	9,762.41	69.35	77.45	-125.34	-904.04	2,715.96	7,117.55	7,036.55	81.00	87.872	
15,800.00	8,862.08	14,503.00	9,762.41	70.02	77.45	-125.34	-904.04	2,715.96	7,215.06	7,134.06	81.00	89.078	
15,900.00	8,862.07	14,503.00	9,762.41	70.69	77.45	-125.34	-904.04	2,715.96	7,312.63	7,231.63	81.00	90.282	
16,000.00	8,862.07	14,503.00	9,762.41	71.36	77.45	-125.34	-904.04	2,715.96	7,410.26	7,329.26	81.00	91.484	
16,100.00	8,862.07	14,503.00	9,762.41	72.03	77.45	-125.34	-904.04	2,715.96	7,507.96	7,426.96	81.01	92.683	
16,200.00	8,862.07	14,503.00	9,762.41	72.71	77.45	-125.34	-904.04	2,715.96	7,605.72	7,524.71	81.01	93.881	
16,300.00	8,862.07	14,503.00	9,762.41	73.38	77.45	-125.34	-904.04	2,715.96	7,703.54	7,622.51	81.02	95.076	
16,400.00	8,862.06	14,503.00	9,762.41	74.06	77.45	-125.34	-904.04	2,715.96	7,801.41	7,720.37	81.04	96.269	
16,500.00	8,862.06	14,503.00	9,762.41	74.74	77.45	-125.34	-904.04	2,715.96	7,899.33	7,818.28	81.05	97.460	
16,600.00	8,862.06	14,503.00	9,762.41	75.42	77.45	-125.34	-904.04	2,715.96	7,997.31	7,916.24	81.07	98.649	
16,700.00	8,862.06	14,503.00	9,762.41	76.10	77.45	-125.34	-904.04	2,715.96	8,095.34	8,014.25	81.09	99.835	
16,800.00	8,862.06	14,503.00	9,762.41	76.79	77.45	-125.34	-904.04	2,715.96	8,193.41	8,112.30	81.11	101.019	
16,900.00	8,862.05	14,503.00	9,762.41	77.47	77.45	-125.34	-904.04	2,715.96	8,291.53	8,210.40	81.13	102.200	
17,000.00	8,862.05	14,503.00	9,762.41	78.16	77.45	-125.34	-904.04	2,715.96	8,389.69	8,308.54	81.15	103.379	
17,100.00	8,862.05	14,503.00	9,762.41	78.85	77.45	-125.34	-904.04	2,715.96	8,487.90	8,406.72	81.18	104.556	
17,200.00	8,862.05	14,503.00	9,762.41	79.54	77.45	-125.34	-904.04	2,715.96	8,586.15	8,504.94	81.21	105.730	
17,300.00	8,862.05	14,503.00	9,762.41	80.23	77.45	-125.34	-904.04	2,715.96	8,684.43	8,603.20	81.24	106.901	
17,400.00	8,862.04	14,503.00	9,762.41	80.92	77.45	-125.34	-904.04	2,715.96	8,782.76	8,701.49	81.27	108.070	
17,500.00	8,862.04	14,503.00	9,762.41	81.62	77.45	-125.34	-904.04	2,715.96	8,881.13	8,799.82	81.30	109.237	
17,600.00	8,862.04	14,503.00	9,762.41	82.31	77.45	-125.34	-904.04	2,715.96	8,979.53	8,898.19	81.34	110.400	
17,700.00	8,862.04	14,503.00	9,762.41	83.01	77.45	-125.34	-904.04	2,715.96	9,077.96	8,996.59	81.37	111.561	
17,800.00	8,862.04	14,503.00	9,762.41	83.71	77.45	-125.34	-904.04	2,715.96	9,176.43	9,095.02	81.41	112.720	
17,900.00	8,862.03	14,503.00	9,762.41	84.41	77.45	-125.34	-904.04	2,715.96	9,274.93	9,193.48	81.45	113.875	
18,000.00	8,862.03	14,503.00	9,762.41	85.11	77.45	-125.34	-904.04	2,715.96	9,373.47	9,291.98	81.49	115.028	
18,100.00	8,862.03	14,503.00	9,762.41	85.81	77.45	-125.34	-904.04	2,715.96	9,472.03	9,390.50	81.53	116.178	
18,200.00	8,862.03	14,503.00	9,762.41	86.51	77.45	-125.34	-904.04	2,715.96	9,570.62	9,489.05	81.57	117.326	
18,300.00	8,862.03	14,503.00	9,762.41	87.21	77.45	-125.34	-904.04	2,715.96	9,669.25	9,587.63	81.62	118.471	
18,400.00	8,862.02	14,503.00	9,762.41	87.92	77.45	-125.34	-904.04	2,715.96	9,767.90	9,686.23	81.66	119.612	
18,500.00	8,862.02	14,503.00	9,762.41	88.62	77.45	-125.34	-904.04	2,715.96	9,866.58	9,784.87	81.71	120.751	
18,600.00	8,862.02	14,503.00	9,762.41	89.33	77.45	-125.34	-904.04	2,715.96	9,965.28	9,883.52	81.76	121.887	

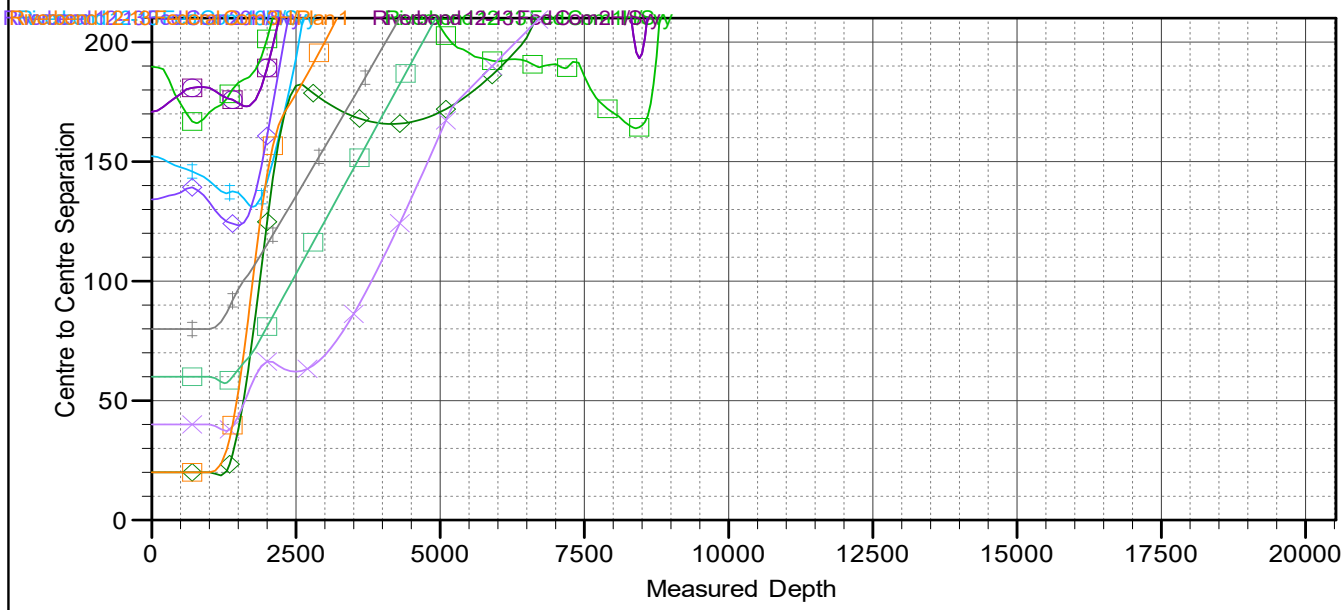
Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 2934' GL + 23 @ 2957.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Riverbend 12-13 Federal Com 5H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.16°

Ladder Plot



LEGEND

- Riverbend 12-13 Fed Com 1H, OH, Svy V0
- Riverbend 12-13 Fed Com 31H, OH, Svy V0
- Riverbend 12-13 Fed Com 30H, OH, Svy V0
- Riverbend 12-13 Fed Com 19H, OH, Svy V0
- Riverbend 12-13 Fed Com 2H, OH, Svy V0
- Riverbend 12-13 Fed Com 2H, ST01, ST01 Svy V0
- Riverbend 12-13 Fed Com 20H, OH, Svy V0
- Riverbend 12-13 Fed Com 29H, OH, Svy V0
- Whistle Pig 1 SB Fee 5H, OH, Svy V0
- Whistle Pig 1 WA Fee 4, OH, Svy V0
- Malaga 13 DM Fed Com 1H, OH, Svy V0
- Whistle Pig 1 WXY Fee 9H, OH, Svy V0
- Riverbend 12-13 Federal Com 4H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 6H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 3H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 7H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 8H, OH, Plan 1 V0

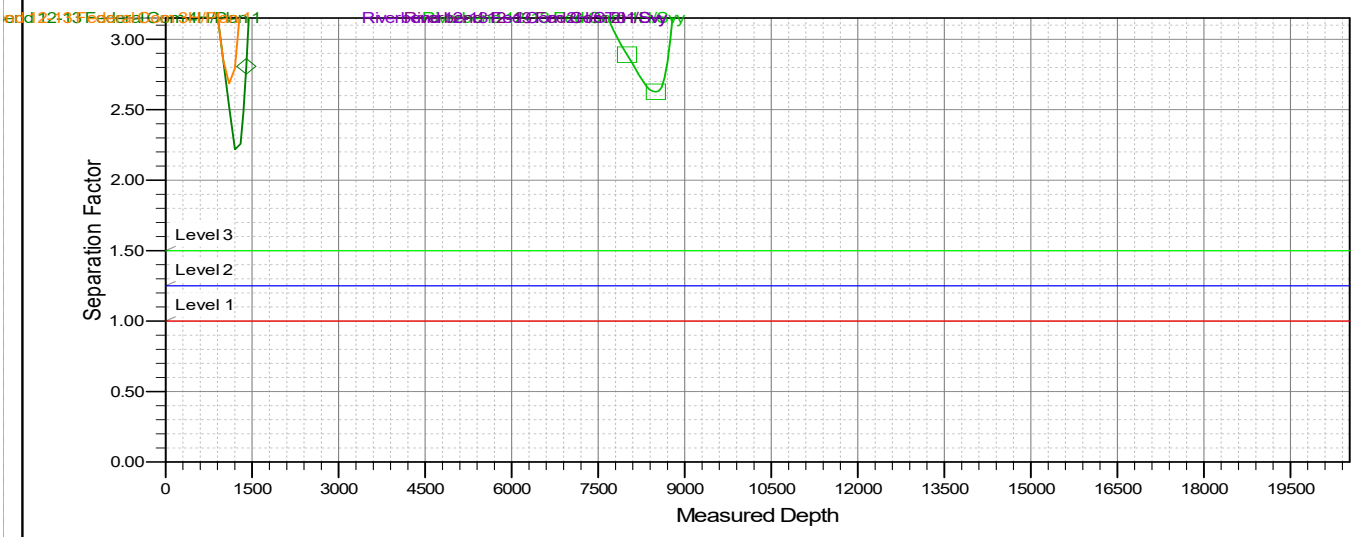
Anticollision Report

Company:	Coterra Energy	**Local Co-ordinate Reference:**	Well Riverbend 12-13 Federal Com 5H
Project:	Eddy County, NM (NAD 83)	**TVD Reference:**	2934' GL + 23 @ 2957.00usft
Reference Site:	Riverbend 12-13 Federal Com	**MD Reference:**	2934' GL + 23 @ 2957.00usft
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	Riverbend 12-13 Federal Com 5H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	.Total Directional Production DB
Reference Design:	Plan 1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 2934' GL + 23 @ 2957.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: Riverbend 12-13 Federal Com 5H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.16°

Separation Factor Plot



LEGEND

- Riverbend 12-13 Fed Com 1H, OH, Svy V0
- Riverbend 12-13 Fed Com 31H, OH, Svy V0
- Riverbend 12-13 Fed Com 30H, OH, Svy V0
- Riverbend 12-13 Fed Com 19H, OH, Svy V0
- Riverbend 12-13 Fed Com 2H, OH, Svy V0
- Riverbend 12-13 Fed Com 2H, ST01, ST01 Svy V0
- Riverbend 12-13 Fed Com 20H, OH, Svy V0
- Riverbend 12-13 Fed Com 29H, OH, Svy V0
- Whistle Pig 1 SB Fee 5H, OH, Svy V0
- Whistle Pig 1 WA Fee 4, OH, Svy V0
- Malaga 13 DM Fed Com 1H, OH, Svy V0
- Whistle Pig 1 WXY Fee 9H, OH, Svy V0
- Riverbend 12-13 Federal Com 4H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 6H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 3H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 7H, OH, Plan 1 V0
- Riverbend 12-13 Federal Com 8H, OH, Plan 1 V0

1. Geological Formations

TVD of target 8,862
MD at TD 19,548

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Rustler	407	N/A	
Top Salt	1952	N/A	
Base Salt/Lamar	2679	N/A	
Top Delaware Sands/Bell Canyon	2806	N/A	
Cherry Canyon	3619	N/A	
Brushy Canyon	4817	N/A	
Lower Brushy Canyon	5766	N/A	
Bone Spring Lime	6411	N/A	
1st Bone Spring Sand	7361	Hydrocarbons	
2nd Bone Spring Sand	8048	Hydrocarbons	
3rd Bone Spring Carb	8432	Hydrocarbons	
3rd Bone Spring Carb - Harkey	8782	Hydrocarbons	
3rd Bone Spring Carb - Harkey - Target	8862	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Setting Depth TVD	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	1190	1190	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.44	3.36	5.64
12 1/4	0	2500	2477	9-5/8"	36.00	J-55	LT&C	1.57	2.73	5.08
8 3/4	0	8350								
8 3/4	8350	9809	8862	7"	26.00	P-110	BT&C	1.42	2.28	62.35
6	8350	19548	8862	4-1/2"	11.60	HCP-110	BT&C	2.02	2.45	61.79
					BLM Minimum Safety Factor			1.125	1	1.6 Dry 1.8 Wet

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

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

3. Cementing Program

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	577	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	154	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	441	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	146	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	377	10.30	3.64	22.18	12	Lead: Tuned Light + LCM
	242	14.80	1.36	6.57	9.5	Tail: Class C + Retarder
Completion System	813	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	45
Intermediate	0	59
Production	2200	25
Completion System	8500	10

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

4. Pressure Control Equipment

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

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	10M	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		
8 3/4	13 5/8	10M	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		
6	13 5/8	10M	Annular	X	100% of working pressure
			Blind Ram		10M
			Pipe Ram	X	
			Double Ram	X	
			Other		

	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.	
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?

5. Mud Program

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 1190'	Fresh Water	7.83 - 8.33	28	N/C
1190' to 2500'	Brine Water	9.50 - 10.00	30-32	N/C
2500' to 9809'	Cut Brine or OBM	9.00 - 9.50	27-70	N/C
9809' to 19548'	OBM	9.00 - 9.50	50-70	N/C

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

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

6. Logging and Testing Procedures

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

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	4377 psi
Abnormal Temperature	No

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

8. Other Facets of Operation

9. Wellhead

10M
1. The multi-bowl wellhead will be installed by a vendor representative. A copy of the installation instructions has been sent to the BLM field office.
2. A packoff will be installed after running and cementing the production casing. This packoff will be tested to 10K psi.

BOPE Additional Information & Testing
1. After running the first string of casing, a 10M BOP/BOPE system with 10M annular will be installed. BOPs will be tested according to Onshore Order #2. BOPE will be tested to full rated pressure (10K for all BOPE). For the low test, the system will be tested to 250 psi.
2. All BOP equipment will be tested utilizing a conventional test plug.
3. A remote kill line is included in the BOPE system
4. All casing strings will be tested per Onshore Order #2, to 0.22 psi/ft or 1,500 psi, whichever is greater, not to exceed 70% of casing burst.
5. If well conditions dictate, conventional slips will be set and BOPE will be tested to appropriate pressures based on permitted pressure requirements.

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

Well Control Plan

Warning Signs of a Kick

If a kick is ever suspected, perform flow check.

While Drilling:

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

While Tripping:

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

While Out of the Hole:

1. Flow
2. Pit gain

Well Control Procedures with Diverter

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

If rotating head is installed:

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

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

If rotating head is not installed:

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

Well Control Procedures

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

General Well Control

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

Hard Shut-In

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

Flow Check when on Bottom

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

Shutting in while Drilling

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

Flow Check while Tripping

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

Shutting in while Tripping

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

Shutting in while Out of Hole

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

Information to Record while Shut-In

1. Shut in drill pipe pressure every 5 minutes

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

H2S with Annular Diverter:

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

H2S with BOP's:

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

Procedure for Closing Blind Rams

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

Procedure for Opening Blind Rams

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

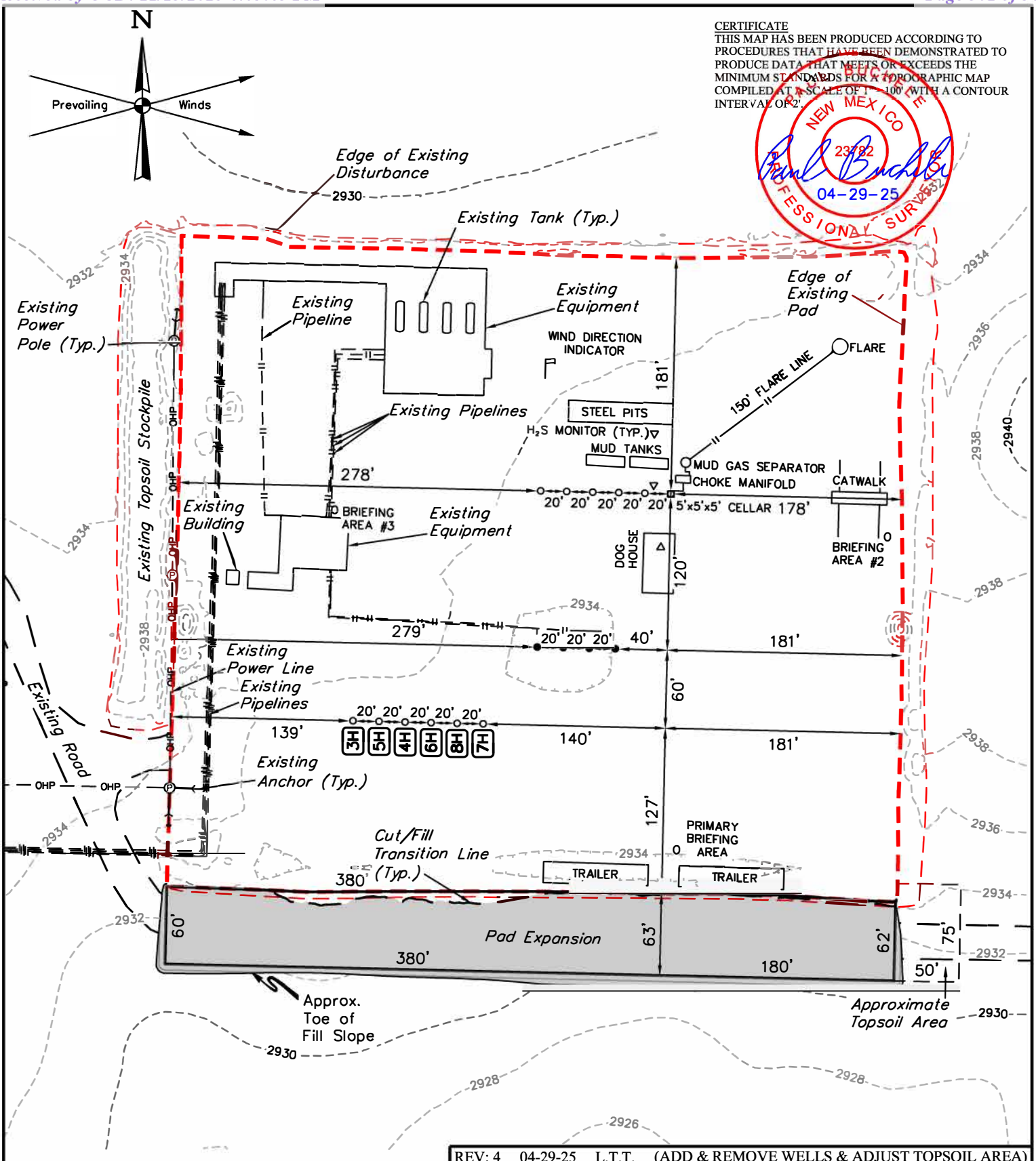
- Confirm that no flow is discharging into the trip tank or possum bellies of the shale shaker (wherever the separator is discharging into).
- Remove hole cover.
- Confirm that the inner bushing are locked into the master bushings if applicable.
- Clear all personnel from the rig floor.
- Remove sign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

BOP Drills

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

Choke Manifold Freeze Prevention

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



CERTIFICATE
THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1" = 100' WITH A CONTOUR INTERVAL OF 2'.

STATE OF NEW MEXICO 23782 PROFESSIONAL SURVEYOR
04-29-25

REV: 4 04-29-25 L.T.T. (ADD & REMOVE WELLS & ADJUST TOPSOIL AREA)

NOTES:

- Contours shown at 2' intervals.
- May have different number of Pump Houses and Combination Buildings.

CIMAREX ENERGY CO.

RIVERBEND 12-13 FEDERAL COM W2E2
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	C.D.	03-22-17	1" = 100'
TYPICAL RIG LAYOUT			EXHIBIT K

UINTAH ENGINEERING & LAND SURVEYING

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Cimarex Energy Co. of Colorado **OGRID:** 162683 **Date:** 7/10/2025

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Riverbend 12-13 Fed Com 5H		Sec 1 T25S, R28E	1147 FSL/2302 FWL	1550	3100	4106

IV. Central Delivery Point Name: Riverbend CTB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Riverbend 12-13 Fed Com 5H		5/4/2027	9/14/2027	11/16/2027	1/15/2028	1/15/2028

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature:	Shelly Bowen
Printed Name:	Shelly Bowen
Title:	Sr. Regulatory Analyst
E-mail Address:	shelly.bowen@coterra.com
Date:	5/14/2025
Phone:	432/6201644

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

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

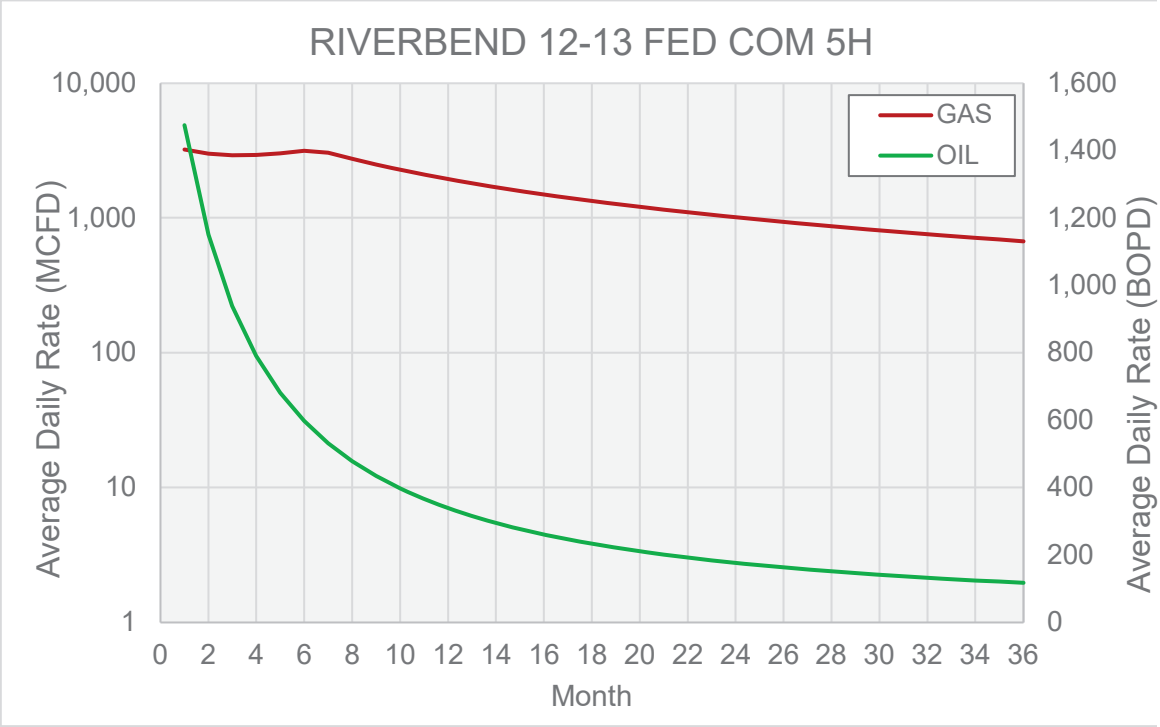
From State of New Mexico, Natural Gas Management Plan

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

XEC Standard Response

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

RIVERBEND 12-13 FED COM 5H	RIVERBEND 12-13 FED COM 5H
GAS MCFD	OIL BOPD
3,225	1,475
2,994	1,150
2,911	938
2,921	790
3,000	681
3,135	597
3,040	531
2,734	478
2,482	434
2,271	397
2,091	366
1,937	339
1,803	315
1,686	295
1,582	277
1,490	260
1,407	246
1,333	233
1,266	221
1,205	211
1,149	201
1,098	192
1,051	184
1,008	176
968	169
931	163
897	157
865	151
835	146
807	141
780	136
756	132
732	128
710	124
690	121
670	117


RIVERBEND 12-13 FED COM 5H
GAS
OIL
Average Daily Rate (MCFD)
Average Daily Rate (BOPD)
Month
10,000
1,000
100
10
1
1,600
1,400
1,200
1,000
800
600
400
200
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

Cimarex
VII. Operational Practices

Cimarex values the sustainable development of New Mexico's natural resources. Venting and flaring of natural gas is a source of waste in the industry, and Cimarex will ensure that its values are aligned with those of NMOCD. As such, Cimarex plans to take pointed steps to ensure compliance with Subsection A through F of 19.15.27.8 NMAC.

Specifically, below are the steps Cimarex will plan to follow under routine well commissioning and operations.

1. Capture or combust natural gas during drilling operations where technically feasible, using the best industry practices and control technologies.
    a. All flares during these operations will be a minimum of 100ft away from the nearest surface-hole location.
2. All gas present during post-completion drill-out and flow back will be routed through separation equipment, and, if technically feasible, flare unsellable vapors rather than vent. Lastly, formal sales separator commissioning to process well-stream fluids and send gas to a gas flow line/collection system or use the gas for on-site fuel or beneficial usage, gas as soon as is safe and technically feasible.
3. Cimarex will ensure the flare or combustion equipment is properly sized to handle expected flow rates, ensure this equipment is equipped with an automatic or continuous ignition source, and ensure this equipment is designed for proper combustion efficiency.
4. If Cimarex must flare because gas is not meeting pipeline specifications, Cimarex will limit flaring to <60 days, analyze gas composition at least twice per week, and route gas into a gathering pipeline as soon as pipeline specifications are met.
5. Under routine production operations, Cimarex will not flare/vent unless:
    a. Venting or flaring occurs due to an emergency or equipment malfunction.
    b. Venting or flaring occurs as a result of unloading practices, and an operator is onsite (or within 30 minutes of drive time and posts contact information at the wellsite) until the end of unloading practice.
    c. The venting or flaring occurs during automated plungerlift operations, in which case the Cimarex operator will work to optimize the plungerlift system to minimize venting/flaring.
    d. The venting or flaring occurs during downhole well maintenance, in which case Cimarex will work to minimize venting or flaring operations to the extent that it does not pose a risk to safe operations.
    e. The well is an exploratory well, the division has approved the well as an exploratory well, venting or flaring is limited to 12 months, as approved by the division, and venting/flaring does not cause Cimarex to breach its State-wide 98% gas capture requirement.
    f. Venting or flaring occurs because the stock tanks or other low-pressure vessels are being gauged, sampled, or liquids are being loaded out.
    g. The venting or flaring occurs because pressurized vessels are being maintained and are being blown-down or depressurized.
    h. Venting or flaring occurs as a result of normal dehydration unit operations.

i. Venting or flaring occurs as a result of bradenhead testing.
j. Venting or flaring occurs as a result of normal compressor operations, including general compressor operations, compressor engines and turbines.
k. Venting or flaring occurs as a result of a packer leakage test.
l. Venting or flaring occurs as a result of a production test lasting less than 24 hours unless otherwise approved by the division.
m. Venting or flaring occurs as a result of new equipment commissioning and is necessary to purge impurities from the pipeline or production equipment.

6. Cimarex will maintain its equipment in accordance with its Operations and Maintenance Program, to ensure venting or flaring events are minimized and that equipment is properly functioning.
7. Cimarex will install automatic tank gauging equipment on all production facilities constructed after May 25, 2021, to ensure minimal emissions from tank gauging practices.
8. By November 25, 2022, all Cimarex facilities equipped with flares or combustors will be equipped with continuous pilots or automatic igniters, and technology to ensure proper function, i.e. thermocouple, fire-eye, etc…
9. Cimarex will perform AVO (audio, visual, olfactory) facility inspections in accordance with NMOCD requirements. Specifically, Cimarex will:
    a. Perform weekly inspections during the first year of production, and so long as production is greater than 60 MCFD.
    b. If production is less than 60 MCFD, Cimarex will perform weekly AVO inspections when an operator is present on location, and inspections at least once per calendar month with at least 20 calendar days between inspections.
10. Cimarex will measure or estimate the volume of vented, flared or beneficially used natural gas, regardless of the reason or authorization for such venting or flaring.
11. On all facilities constructed after May 25, 2021, Cimarex will install metering where feasible and in accordance with available technology and best engineering practices, in an effort to measure how much gas could have been vented or flared.
    a. In areas where metering is not technically feasible, such as low-pressure/low volume venting or flaring applications, engineering estimates will be used such that the methodology could be independently verified.
12. Cimarex will fulfill the division's requirements for reporting and filing of venting or flaring that exceeds 50 MCF in volume or last eight hours or more cumulatively within any 24-hour period.

VIII. Best Management Practices to minimize venting during active and planned maintenance

Cimarex strives to ensure minimal venting occurs during active and planned maintenance activities. Below is a description of common maintenance practices, and the steps Cimarex takes to limit venting exposure.

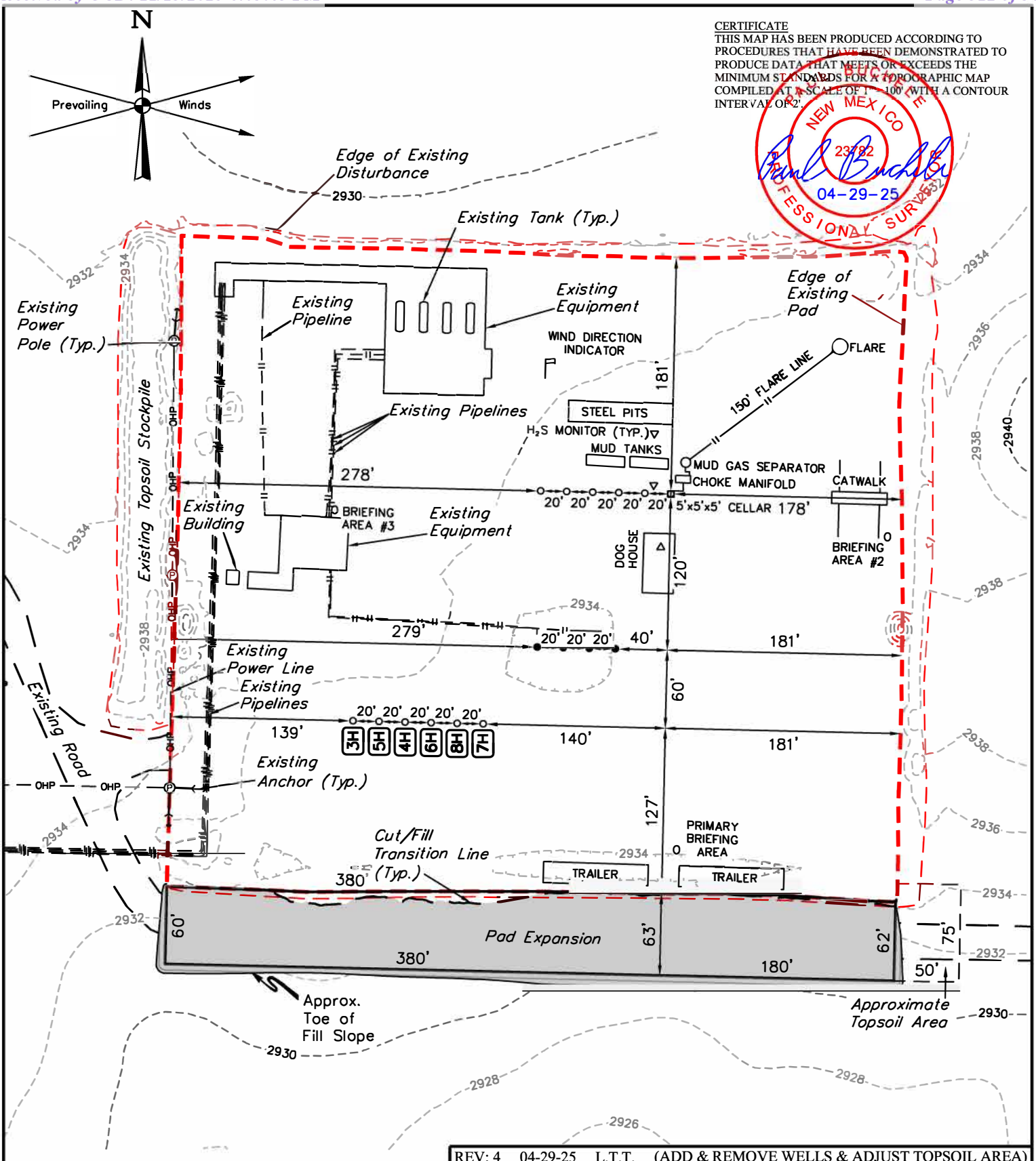
- **Workovers:**
  - Always strive to kill well when performing downhole maintenance.
  - If vapors or trapped pressure is present and must be relieved then:
    - Initial blowdown to production facility:
      - Route vapors to LP flare if possible/applicable
    - Blowdown to portable gas buster tank: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

- **Stock tank servicing:**
  - Minimize time spent with thief hatches open.
  - When cleaning or servicing via manway, suck tank bottoms to ensure minimal volatiles exposed to atmosphere.
    - Connect vacuum truck to low pressure flare while cleaning bottoms to limit venting.
  - Isolate the vent lines and overflows on the tank being serviced from other tanks.

- **Pressure vessel/compressor servicing and associated blowdowns:**
  - Route to flare where possible.
  - Blow vessel down to minimum available pressure via pipeline, prior to venting vessel.
  - Preemptively changing anodes to reduce failures and extended corrosion related servicing.
  - When cleaning or servicing via manway, suck vessel bottoms to ensure minimal volatiles exposed to atmosphere.

- **Flare/combustor maintenance:**
  - Minimize downtime by coordinating with vendor and Cimarex staff travel logistics.
  - Utilizing preventative and predictive maintenance programs to replace high wear components before failure.
  - Because the flare/combustor is the primary equipment used to limit venting practices, ensure flare/combustor is properly maintained and fully operational at all times via routine maintenance, temperature telemetry, onsite visual inspections.

The Cimarex expectation is to limit all venting exposure. Equipment that may not be listed on this document is still expected to be maintained and associated venting during such maintenance minimized.



REV: 4 04-29-25 L.T.T. (ADD & REMOVE WELLS & ADJUST TOPSOIL AREA)

NOTES:

- Contours shown at 2' intervals.
- May have different number of Pump Houses and Combination Buildings.

CIMAREX ENERGY CO.

RIVERBEND 12-13 FEDERAL COM W2E2
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
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SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	C.D.	03-22-17	1" = 100'
TYPICAL RIG LAYOUT			EXHIBIT K

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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

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Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Cimarex Energy Co. of Colorado **OGRID:** 162683 **Date:** 7/10/2025

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Riverbend 12-13 Fed Com 5H		Sec 1 T25S, R28E	1147 FSL/2302 FWL	1550	3100	4106

IV. Central Delivery Point Name: Riverbend CTB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Riverbend 12-13 Fed Com 5H		5/4/2027	9/14/2027	11/16/2027	1/15/2028	1/15/2028

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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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:

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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:	Shelly Bowen
Printed Name:	Shelly Bowen
Title:	Sr. Regulatory Analyst
E-mail Address:	shelly.bowen@coterra.com
Date:	5/14/2025
Phone:	432/6201644

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

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

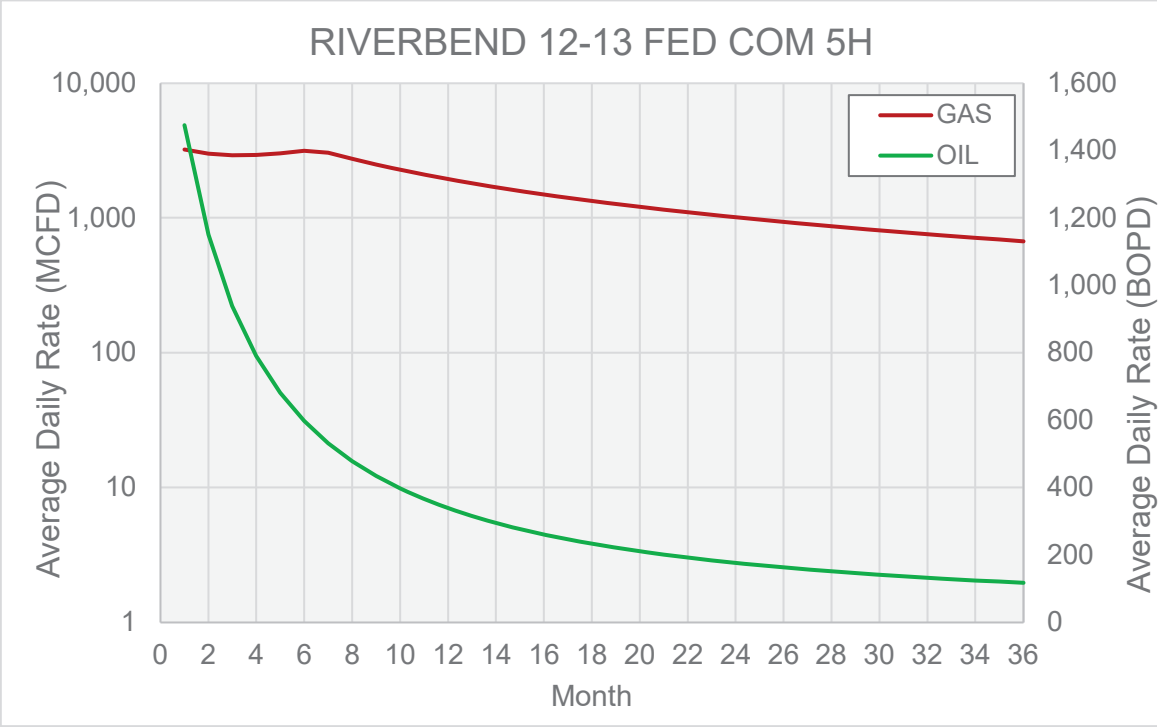
From State of New Mexico, Natural Gas Management Plan

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

XEC Standard Response

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

RIVERBEND 12-13 FED COM 5H	RIVERBEND 12-13 FED COM 5H
GAS MCFD	OIL BOPD
3,225	1,475
2,994	1,150
2,911	938
2,921	790
3,000	681
3,135	597
3,040	531
2,734	478
2,482	434
2,271	397
2,091	366
1,937	339
1,803	315
1,686	295
1,582	277
1,490	260
1,407	246
1,333	233
1,266	221
1,205	211
1,149	201
1,098	192
1,051	184
1,008	176
968	169
931	163
897	157
865	151
835	146
807	141
780	136
756	132
732	128
710	124
690	121
670	117


RIVERBEND 12-13 FED COM 5H
GAS
OIL
Average Daily Rate (MCFD)
Average Daily Rate (BOPD)
Month
10,000
1,000
100
10
1
1,600
1,400
1,200
1,000
800
600
400
200
0
0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36

Cimarex
VII. Operational Practices

Cimarex values the sustainable development of New Mexico's natural resources. Venting and flaring of natural gas is a source of waste in the industry, and Cimarex will ensure that its values are aligned with those of NMOCD. As such, Cimarex plans to take pointed steps to ensure compliance with Subsection A through F of 19.15.27.8 NMAC.

Specifically, below are the steps Cimarex will plan to follow under routine well commissioning and operations.

1. Capture or combust natural gas during drilling operations where technically feasible, using the best industry practices and control technologies.
    a. All flares during these operations will be a minimum of 100ft away from the nearest surface-hole location.
2. All gas present during post-completion drill-out and flow back will be routed through separation equipment, and, if technically feasible, flare unsellable vapors rather than vent. Lastly, formal sales separator commissioning to process well-stream fluids and send gas to a gas flow line/collection system or use the gas for on-site fuel or beneficial usage, gas as soon as is safe and technically feasible.
3. Cimarex will ensure the flare or combustion equipment is properly sized to handle expected flow rates, ensure this equipment is equipped with an automatic or continuous ignition source, and ensure this equipment is designed for proper combustion efficiency.
4. If Cimarex must flare because gas is not meeting pipeline specifications, Cimarex will limit flaring to <60 days, analyze gas composition at least twice per week, and route gas into a gathering pipeline as soon as pipeline specifications are met.
5. Under routine production operations, Cimarex will not flare/vent unless:
    a. Venting or flaring occurs due to an emergency or equipment malfunction.
    b. Venting or flaring occurs as a result of unloading practices, and an operator is onsite (or within 30 minutes of drive time and posts contact information at the wellsite) until the end of unloading practice.
    c. The venting or flaring occurs during automated plungerlift operations, in which case the Cimarex operator will work to optimize the plungerlift system to minimize venting/flaring.
    d. The venting or flaring occurs during downhole well maintenance, in which case Cimarex will work to minimize venting or flaring operations to the extent that it does not pose a risk to safe operations.
    e. The well is an exploratory well, the division has approved the well as an exploratory well, venting or flaring is limited to 12 months, as approved by the division, and venting/flaring does not cause Cimarex to breach its State-wide 98% gas capture requirement.
    f. Venting or flaring occurs because the stock tanks or other low-pressure vessels are being gauged, sampled, or liquids are being loaded out.
    g. The venting or flaring occurs because pressurized vessels are being maintained and are being blown-down or depressurized.
    h. Venting or flaring occurs as a result of normal dehydration unit operations.

i. Venting or flaring occurs as a result of bradenhead testing.
j. Venting or flaring occurs as a result of normal compressor operations, including general compressor operations, compressor engines and turbines.
k. Venting or flaring occurs as a result of a packer leakage test.
l. Venting or flaring occurs as a result of a production test lasting less than 24 hours unless otherwise approved by the division.
m. Venting or flaring occurs as a result of new equipment commissioning and is necessary to purge impurities from the pipeline or production equipment.

6. Cimarex will maintain its equipment in accordance with its Operations and Maintenance Program, to ensure venting or flaring events are minimized and that equipment is properly functioning.
7. Cimarex will install automatic tank gauging equipment on all production facilities constructed after May 25, 2021, to ensure minimal emissions from tank gauging practices.
8. By November 25, 2022, all Cimarex facilities equipped with flares or combustors will be equipped with continuous pilots or automatic igniters, and technology to ensure proper function, i.e. thermocouple, fire-eye, etc…
9. Cimarex will perform AVO (audio, visual, olfactory) facility inspections in accordance with NMOCD requirements. Specifically, Cimarex will:
    a. Perform weekly inspections during the first year of production, and so long as production is greater than 60 MCFD.
    b. If production is less than 60 MCFD, Cimarex will perform weekly AVO inspections when an operator is present on location, and inspections at least once per calendar month with at least 20 calendar days between inspections.
10. Cimarex will measure or estimate the volume of vented, flared or beneficially used natural gas, regardless of the reason or authorization for such venting or flaring.
11. On all facilities constructed after May 25, 2021, Cimarex will install metering where feasible and in accordance with available technology and best engineering practices, in an effort to measure how much gas could have been vented or flared.
    a. In areas where metering is not technically feasible, such as low-pressure/low volume venting or flaring applications, engineering estimates will be used such that the methodology could be independently verified.
12. Cimarex will fulfill the division's requirements for reporting and filing of venting or flaring that exceeds 50 MCF in volume or last eight hours or more cumulatively within any 24-hour period.

VIII. Best Management Practices to minimize venting during active and planned maintenance

Cimarex strives to ensure minimal venting occurs during active and planned maintenance activities. Below is a description of common maintenance practices, and the steps Cimarex takes to limit venting exposure.

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

- **Stock tank servicing:**
  - Minimize time spent with thief hatches open.
  - When cleaning or servicing via manway, suck tank bottoms to ensure minimal volatiles exposed to atmosphere.
    - Connect vacuum truck to low pressure flare while cleaning bottoms to limit venting.
  - Isolate the vent lines and overflows on the tank being serviced from other tanks.

- **Pressure vessel/compressor servicing and associated blowdowns:**
  - Route to flare where possible.
  - Blow vessel down to minimum available pressure via pipeline, prior to venting vessel.
  - Preemptively changing anodes to reduce failures and extended corrosion related servicing.
  - When cleaning or servicing via manway, suck vessel bottoms to ensure minimal volatiles exposed to atmosphere.

- **Flare/combustor maintenance:**
  - Minimize downtime by coordinating with vendor and Cimarex staff travel logistics.
  - Utilizing preventative and predictive maintenance programs to replace high wear components before failure.
  - Because the flare/combustor is the primary equipment used to limit venting practices, ensure flare/combustor is properly maintained and fully operational at all times via routine maintenance, temperature telemetry, onsite visual inspections.

The Cimarex expectation is to limit all venting exposure. Equipment that may not be listed on this document is still expected to be maintained and associated venting during such maintenance minimized.

Standard New Mexico Variances

Variance Request #1: Skid Rig after Cementing Surface Casing

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

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

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

Variance Request #4: Utilize Co-Flex Choke Line

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

AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

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

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

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

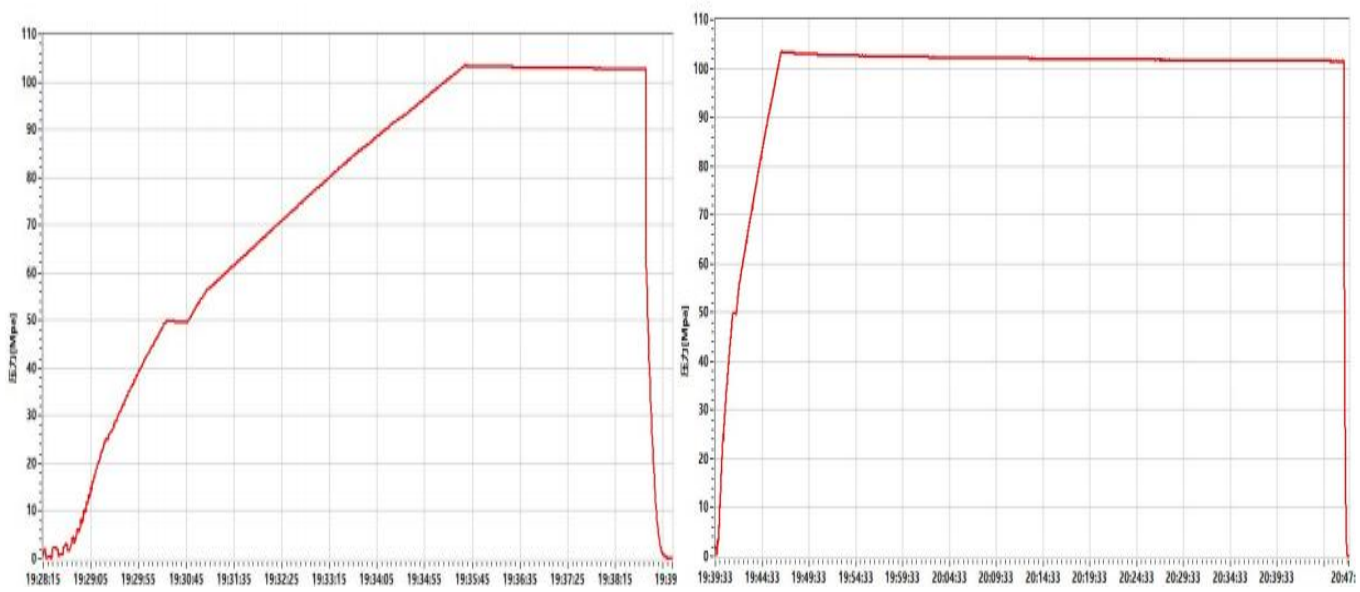
AustinHOSE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

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

Graph of pressure testing：



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

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

AustinHOSE

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

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

Serial Number：VTC-7660257

customer number：PO890145-001

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

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

QC Manager： Jane C Date:Sep 3, 2024

16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE

Standard New Mexico Variances

Variance Request #1: Skid Rig after Cementing Surface Casing

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

AustinHOSE

CERTIFICATE OF QUALITY

LTYY/QR-5.7.1-19B №: LT2024-156-001

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

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

Approver	Jane C	Auditor	Alice D	Inspector	Leo W

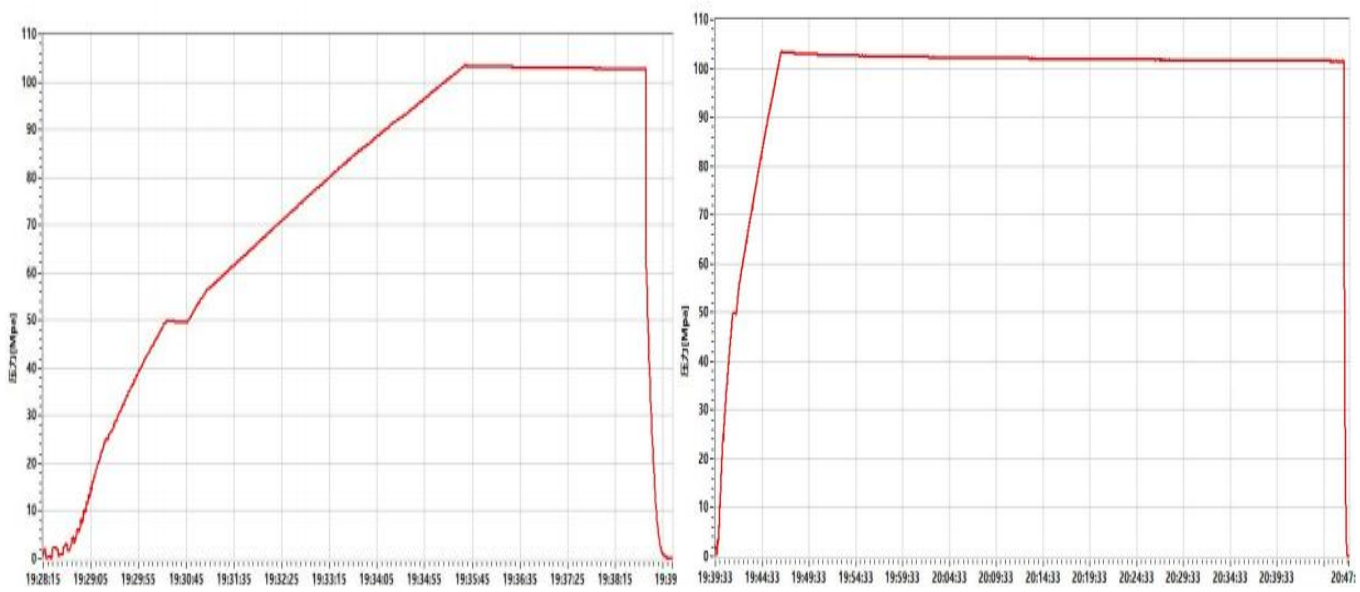
LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD LETONE

HYDROSTATIC TESTING REPORT

LTYY/QR-5.7.1-28 №: 24090301

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

Graph of pressure testing：



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

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

AustinHOSE

CERTIFICATE OF CONFORMANCE

№:LT24090307

Product Name：Choke And Kill Hose

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

Serial Number：VTC-7660257

customer number：PO890145-001

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

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

QC Manager： Jane C Date:Sep 3, 2024

16C-0403

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD	LETONE

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

SUPO Data Report
10/16/2025

APD ID: 10400105546 **Submission Date:** 08/07/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

RIVERBEND_12_13_FED_COM_W2E2_road_access_20250602121115.pdf
RIVERBEND_12_13_FED_COM_W2E2_road_access_20250925101833.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT **Row(s) Exist?** YES

ROW ID(s)

ID: 140042

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Existing Well map Attachment:

RIVERBEND_12_13_FED_COM_W2E2_one_mile_radius_map_20250602121144.pdf
RIVERBEND_12_13_FED_COM_W2E2_one_mile_radius_map_20250925101851.pdf

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: An existing battery will be utilized.

Production Facilities map:

RB_12_13__PLOT_PLAN_Rev.3_20250827121625.pdf
RB_12_13__PLOT_PLAN_Rev.3_20250925101906.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: MUNICIPAL

Water source use type: SURFACE CASING
INTERMEDIATE/PRODUCTION CASING

Source latitude: **Source longitude:**

Source datum:

City: Carlsbad

Water source permit type: WATER RIGHT

Permit Number:

Water source transport method: TRUCKING

Source land ownership: FEDERAL

Source transportation land ownership: FEDERAL

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

Source volume (gal): 210000

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Water source and transportation

Riverbend_12_13_Fed_Com_W2E2_Drilling_Water_Source_Route_20250827131734.pdf
Riverbend_12_13_Fed_Com_W2E2_Drilling_Water_Source_Route_20250925101925.pdf

Water source comments:

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: NO

Construction Materials description:

Construction Materials source location

Section 7 - Methods for Handling

Waste type: SEWAGE

Waste content description: Human Waste

Amount of waste: 300 gallons

Waste disposal frequency : Weekly

Safe containment description: Waste will be properly contained and disposed of properly at a state approved disposal facility.

Safe containmant attachment:

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

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

Disposal location description: A licensed 3rd party contractor will be used to haul and dispose human waste.

Waste type: DRILLING

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

Waste disposal frequency : Weekly

Safe containment description: N/A

Safe containmant attachment:

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

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

Waste type: GARBAGE

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

Amount of waste: 32500 pounds

Waste disposal frequency : Weekly

Safe containment description: N/A

Safe containmant attachment:

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

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

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

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:

RIVERBEND_12_13_FED_COM_W2E2_location_layout_plat_20250602121317.pdf
RIVERBEND_12_13_FED_COM_W2E2_location_layout_plat_20250925101957.pdf

Comments:

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: Riverbend 12-13 Fed Com

Multiple Well Pad Number: 5H

Recontouring

RIVERBEND_12_13_FED_COM_W2E2_reclamation_plat_20250807091445.pdf
RIVERBEND_12_13_FED_COM_W2E2_reclamation_plat_20250925102013.pdf

Drainage/Erosion control construction: To control and prevent potentially contaminated precipitation from leaving the pad site, a perimeter berm and settlement pond will be installed. Contaminated water will be removed from pond, stored in waste tanks, and disposed of at a state approved facility. Standing water or puddles will not be allowed. Drainage ditches would be established and maintained on the pad and along access roads to divert water away from operations. Natural drainage areas disturbed during construction would be re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be obliterated, re-contoured to near original condition prior to construction. Erosion Control Best

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be obliterated, re-contoured, and reclaimed to near original condition to re-establish natural drainage.

Drainage/Erosion control reclamation: All disturbed and re-contoured areas would be reseeded according to specifications. Approved seed mixtures would be certified weed free and consist of grasses, forbs, or shrubs similar to the surrounding area. Compacted soil areas may need to be obliterated and reclaimed to near natural conditions by re-contouring all slopes to facilitate and re-establish natural drainage.

Well pad proposed disturbance (acres): 8.112	**Well pad interim reclamation (acres):** 2.589	**Well pad long term disturbance (acres):** 5.523
Road proposed disturbance (acres):	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 0
Powerline proposed disturbance (acres): 0	**Powerline interim reclamation (acres):** 0	**Powerline long term disturbance (acres):** 0
Pipeline proposed disturbance (acres): 0	**Pipeline interim reclamation (acres):** 0	**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: 8.112	**Total interim reclamation:** 2.589	**Total long term disturbance:** 5.523

Disturbance Comments:

Reconstruction method: After well plugging, all disturbed areas would be returned to the original contour or a contour that blends with the surrounding landform including roads unless the surface owner requests that they be left intact. In consultation with the surface owners it will be determined if any gravel or similar materials used to reinforce an area are to be removed, buried, or left in place during final reclamation. Salvaged topsoil, if any, would be re-spread evenly over the surfaces to be re-vegetated. As necessary, the soil surface would be prepared to provide a seedbed for re-establishment of desirable vegetation. Site preparation may include gouging, scarifying, dozer track-walking, mulching, or fertilizing. Reclamation, Re-vegetation, and Drainage: All disturbed and re-contoured areas would be reseeded using techniques outlined under Phase I and II of this plan or as specified by the land owner. Approved seed mixtures would be certified weed free and consist of grasses, forbs, or shrubs similar to the surrounding area. Compacted soil areas may need to be obliterated and reclaimed to near natural conditions by re-contouring all slopes to facilitate and re-establish natural drainage.

Topsoil redistribution: The original stock piled topsoil, if any, will be spread evenly over the areas being reclaimed and the original landform will be restored for all disturbed areas including well pad, production facilities, roads, pipelines, and power line corridors as close as possible to the original topography. The location will then be seeded.

Soil treatment: The soil surface would be prepared to provide a seedbed for reestablishment of desirable vegetation. Establish control of erosion and invasion of non-native plants to reestablish plant community.
Existing Vegetation at the well pad: N/A

Existing Vegetation at the well pad

Existing Vegetation Community at the road: N/A

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: N/A

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: N/A

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation

Operator Contact/Responsible Official

First Name: **Last Name:**

Phone: **Email:**

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Existing invasive species treatment

Weed treatment plan description: N/A

Weed treatment plan

Monitoring plan description: N/A

Monitoring plan

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Success standards: N/A

Pit closure description: N/A

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:**

Section 12 - Other

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

ROW Type(s):

ROW

SUPO Additional Information: Onsite conducted on August 5, 2024 with Brendan Harris & Brandon Carico,

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Ellen Trout. Casey Jones, Shelly Bowen onsite for Coterra.

Use a previously conducted onsite? N

Previous Onsite information:

Other SUPO

BEGINNING AT THE INTERSECTION OF HIGHWAY 285 AND AN EXISTING ROAD TO THE EAST (LOCATED AT NAD 83 LATITUDE 32.1664° AND LONGITUDE -104.0717°), PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN EASTERLY, THEN SOUTHERLY, THEN EASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE EXISTING LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF HIGHWAY 285 AND AN EXISTING ROAD TO THE EAST (LOCATED AT NAD 83 LATITUDE 32.1664° AND LONGITUDE -104.0717°) TO THE EXISTING WELL LOCATION IS APPROXIMATELY 2.4 MILES.

REV: 4	08-16-24	D.J.S.	(PAD EXPANSION)

CIMAREX ENERGY CO.

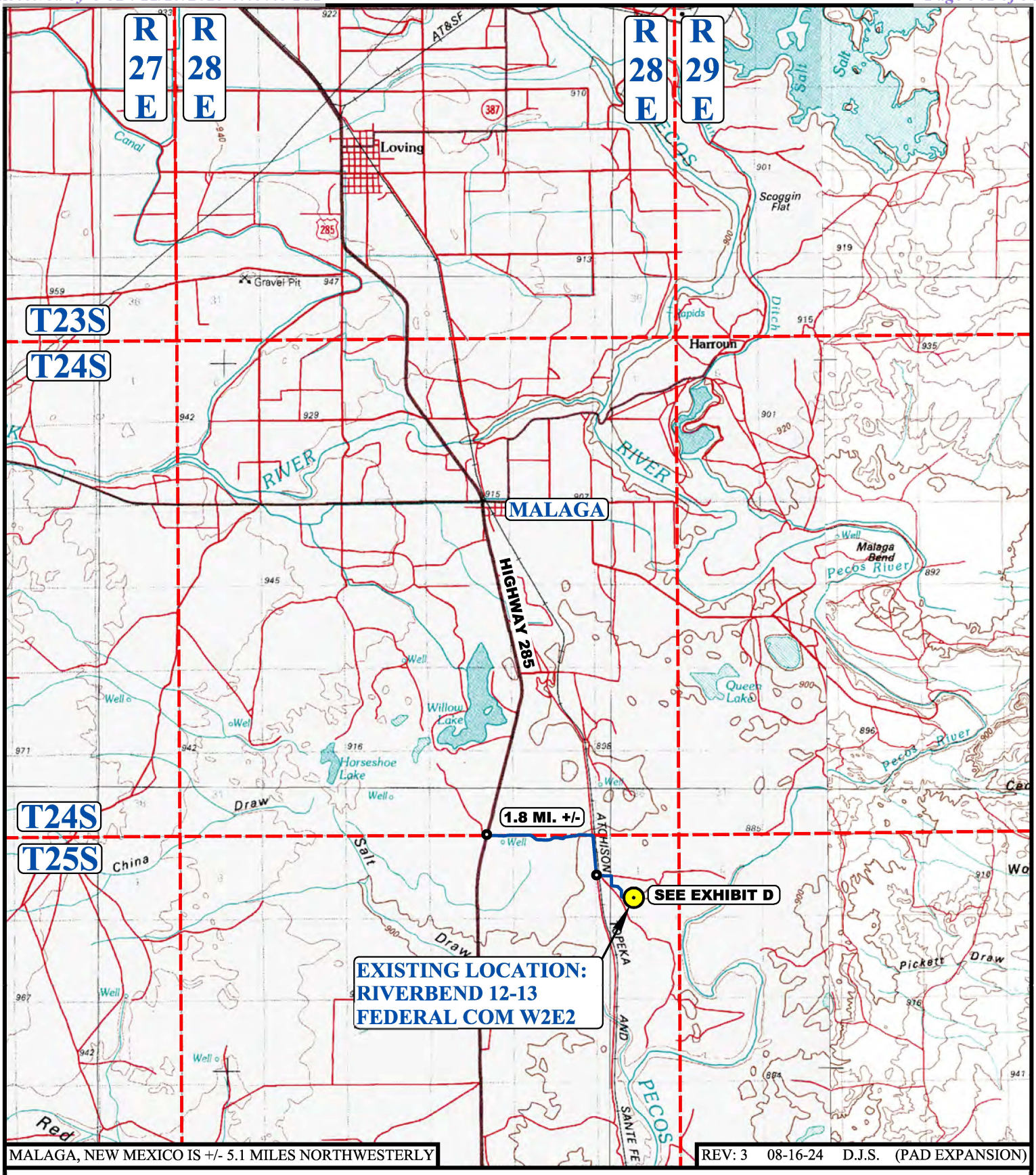
RIVERBEND 12-13 FEDERAL COM W2E2
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

UINTAH ENGINEERING & LAND SURVEYING

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

SURVEYED BY	A.H.	08-12-24	
DRAWN BY	B.R.	03-16-17	

ROAD DESCRIPTION **EXHIBIT A**



MALAGA, NEW MEXICO IS +/- 5.1 MILES NORTHWESTERLY

REV: 3 08-16-24 D.J.S. (PAD EXPANSION)

LEGEND:

⊙ **EXISTING LOCATION**

N

CIMAREX ENERGY CO.

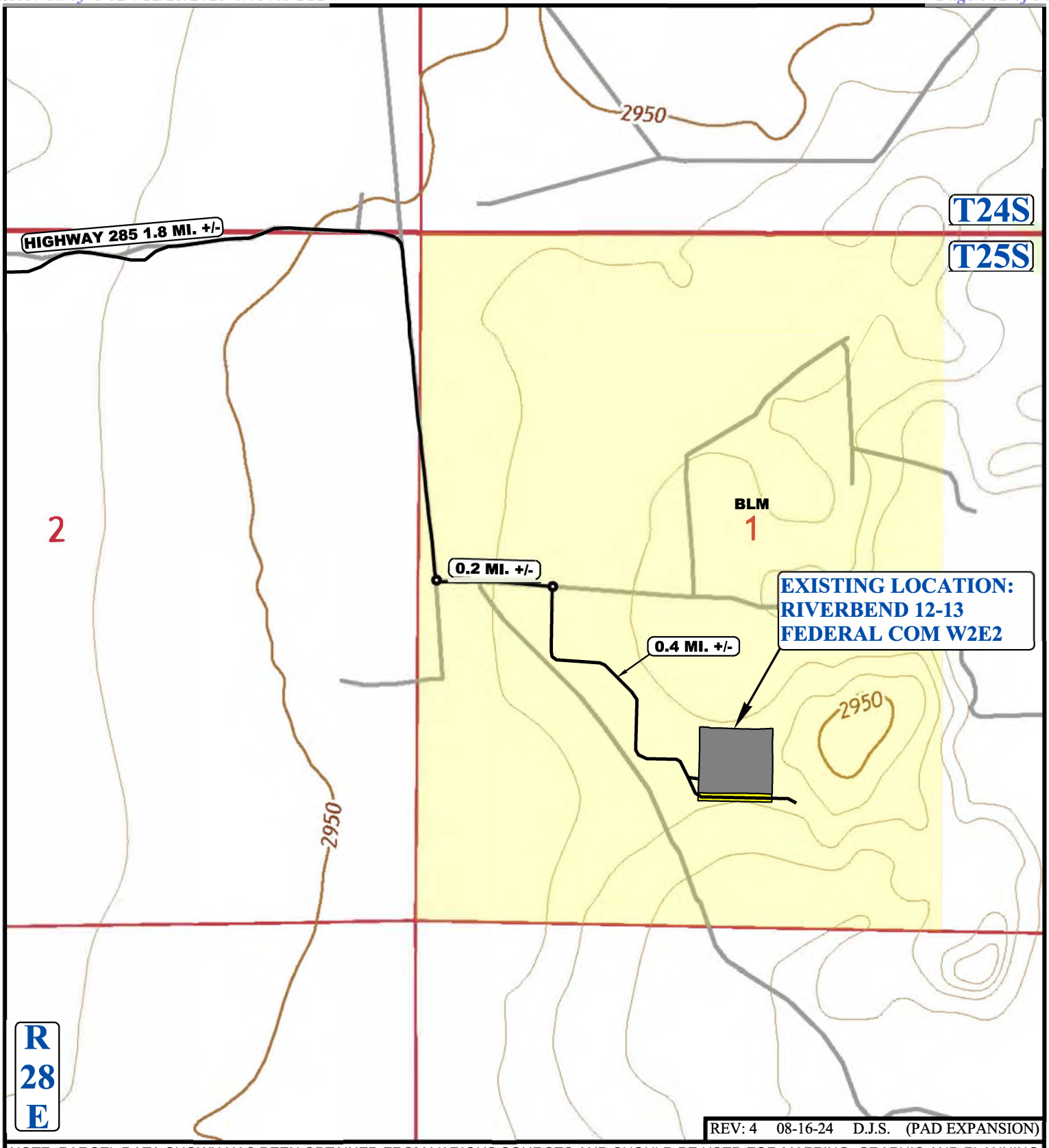
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EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	B.R.	03-16-17	1 : 100,000

PUBLIC ACCESS ROAD MAP **EXHIBIT B**

UINTAH ENGINEERING & LAND SURVEYING

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



REV: 4 08-16-24 D.J.S. (PAD EXPANSION)

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

LEGEND:

EXISTING ROAD

N

CIMAREX ENERGY CO.

RIVERBEND 12-13 FEDERAL COM W2E2
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	B.R.	03-16-17	1 : 12,000

NEW ROAD MAP **EXHIBIT D**

UINTAH ENGINEERING & LAND SURVEYING

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

BEGINNING AT THE INTERSECTION OF HIGHWAY 285 AND AN EXISTING ROAD TO THE EAST (LOCATED AT NAD 83 LATITUDE 32.1664° AND LONGITUDE -104.0717°), PROCEED IN AN EASTERLY, THEN SOUTHERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY DIRECTION APPROXIMATELY 0.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH; TURN RIGHT AND PROCEED IN A SOUTHERLY, THEN EASTERLY, THEN SOUTHERLY, THEN EASTERLY DIRECTION APPROXIMATELY 0.4 MILES TO THE EXISTING LOCATION.

TOTAL DISTANCE FROM THE INTERSECTION OF HIGHWAY 285 AND AN EXISTING ROAD TO THE EAST (LOCATED AT NAD 83 LATITUDE 32.1664° AND LONGITUDE -104.0717°) TO THE EXISTING WELL LOCATION IS APPROXIMATELY 2.4 MILES.

REV: 4 08-16-24 D.J.S. (PAD EXPANSION)

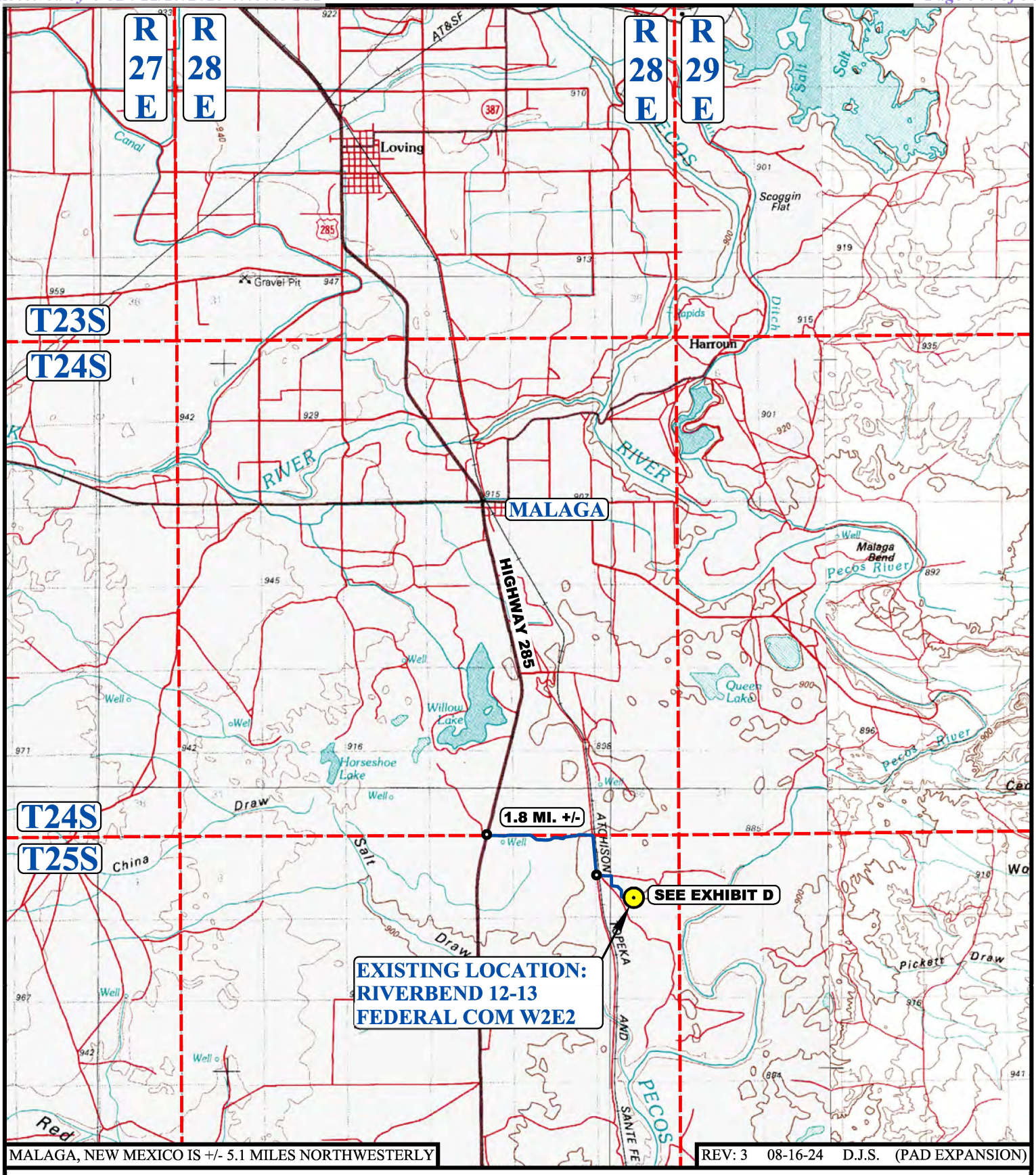
CIMAREX ENERGY CO.

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E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

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

SURVEYED BY	A.H.	08-12-24	
DRAWN BY	B.R.	03-16-17	

ROAD DESCRIPTION **EXHIBIT A**



MALAGA, NEW MEXICO IS +/- 5.1 MILES NORTHWESTERLY

REV: 3 08-16-24 D.J.S. (PAD EXPANSION)

LEGEND:

⊙ **EXISTING LOCATION**

N

CIMAREX ENERGY CO.

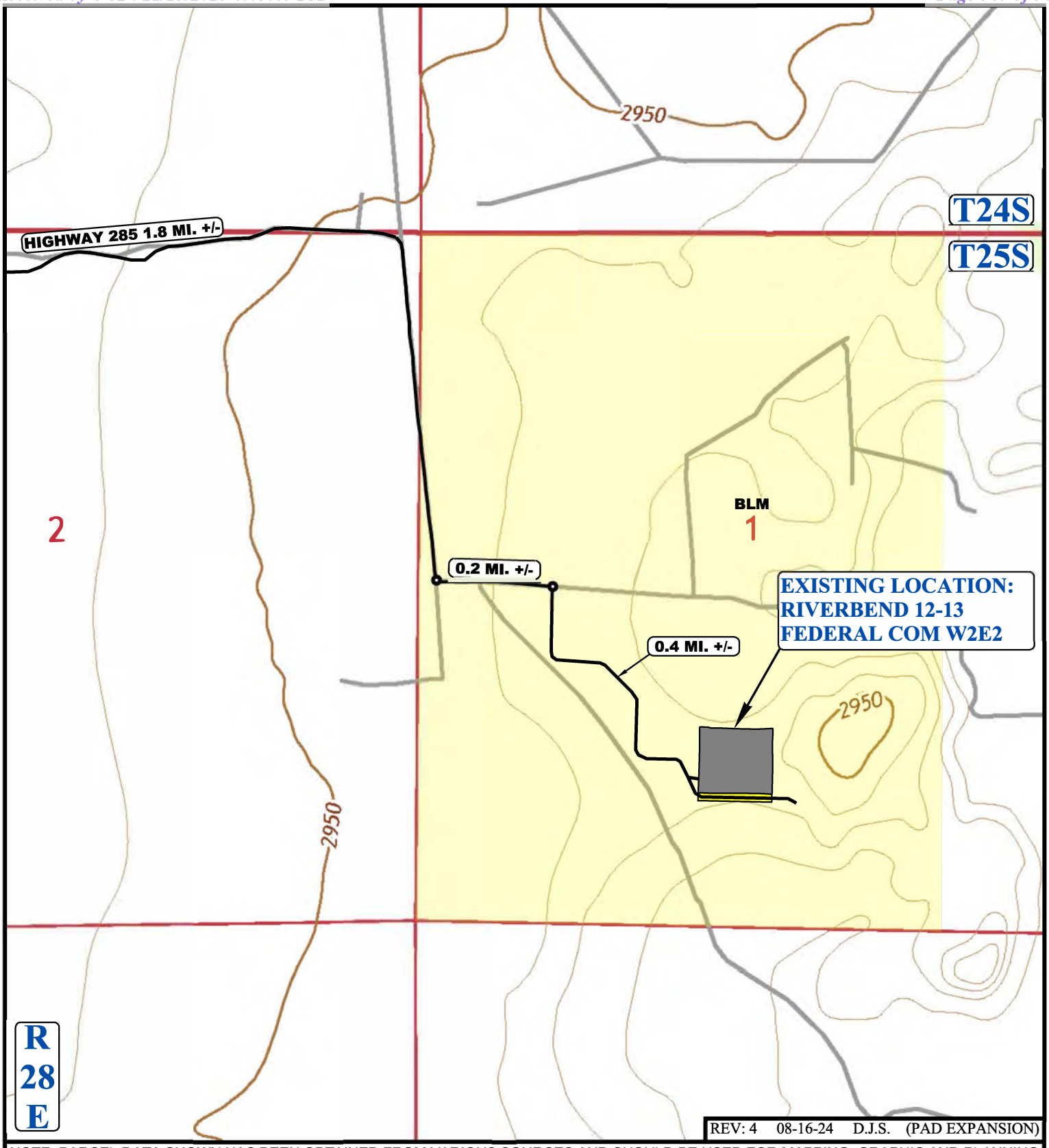
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E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	B.R.	03-16-17	1 : 100,000

PUBLIC ACCESS ROAD MAP | **EXHIBIT B**

UINTAH ENGINEERING & LAND SURVEYING

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



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LEGEND:

EXISTING ROAD

N

CIMAREX ENERGY CO.

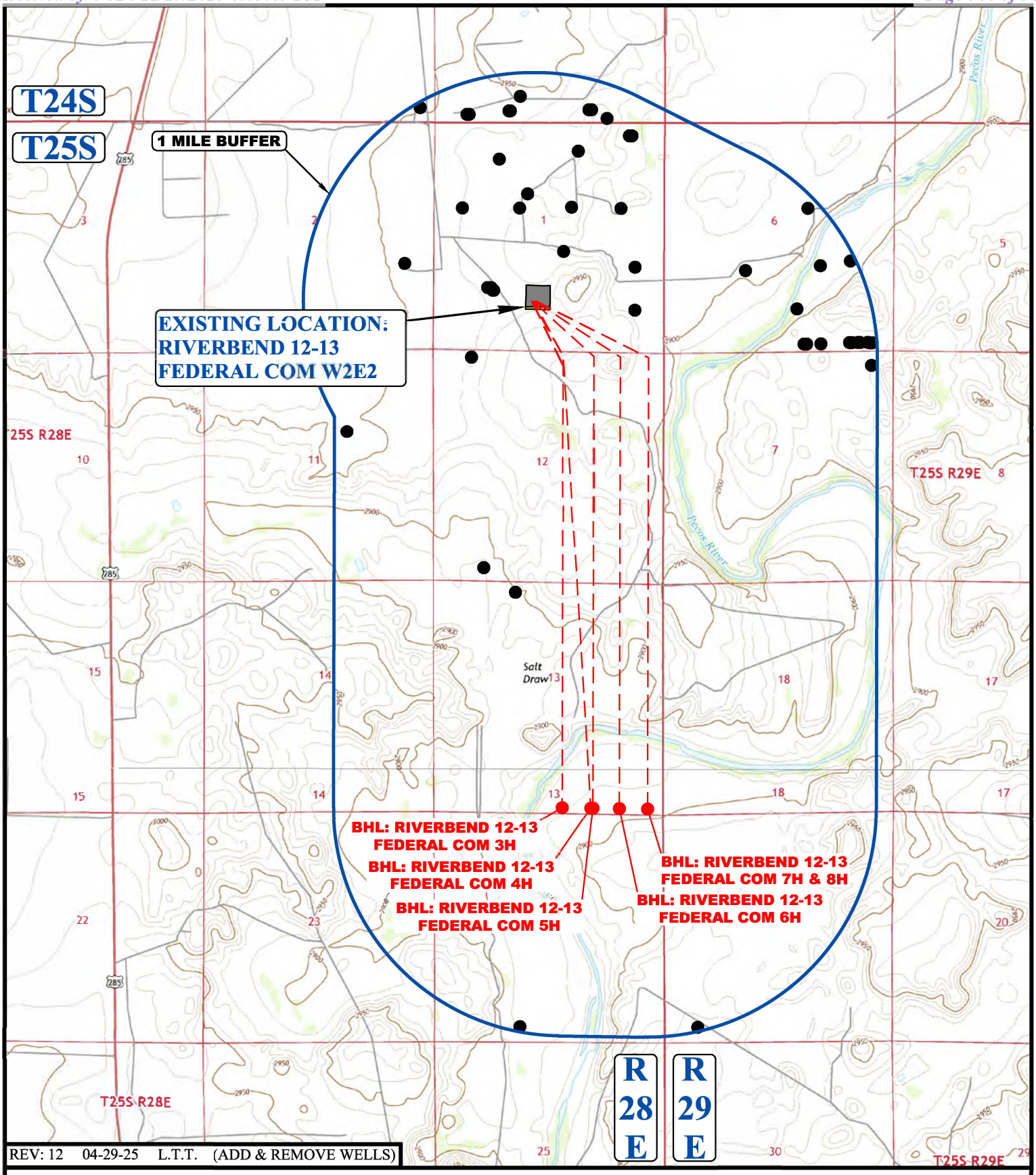
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E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	B.R.	03-16-17	1 : 12,000

NEW ROAD MAP **EXHIBIT D**

UINTAH ENGINEERING & LAND SURVEYING

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



REV: 12 04-29-25 L.T.T. (ADD & REMOVE WELLS)

LEGEND:

● EXISTING WELLS

N

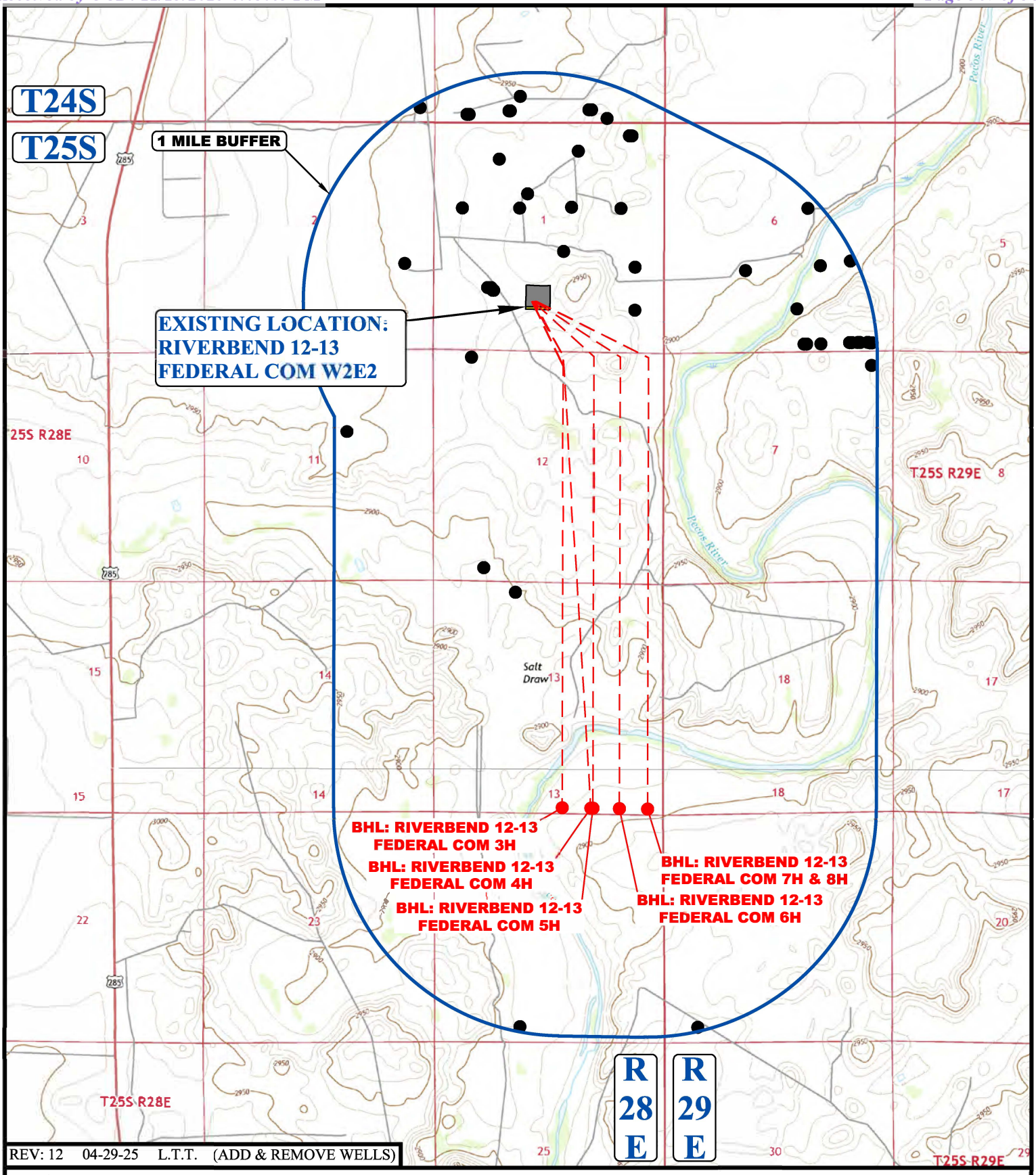
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EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	B.R.	03-16-17	1 : 36,000
ONE MILE RADIUS PLAT			EXHIBIT E

UINTAH ENGINEERING & LAND SURVEYING

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



REV: 12 04-29-25 L.T.T. (ADD & REMOVE WELLS)

LEGEND:

● EXISTING WELLS

N

CIMAREX ENERGY CO.

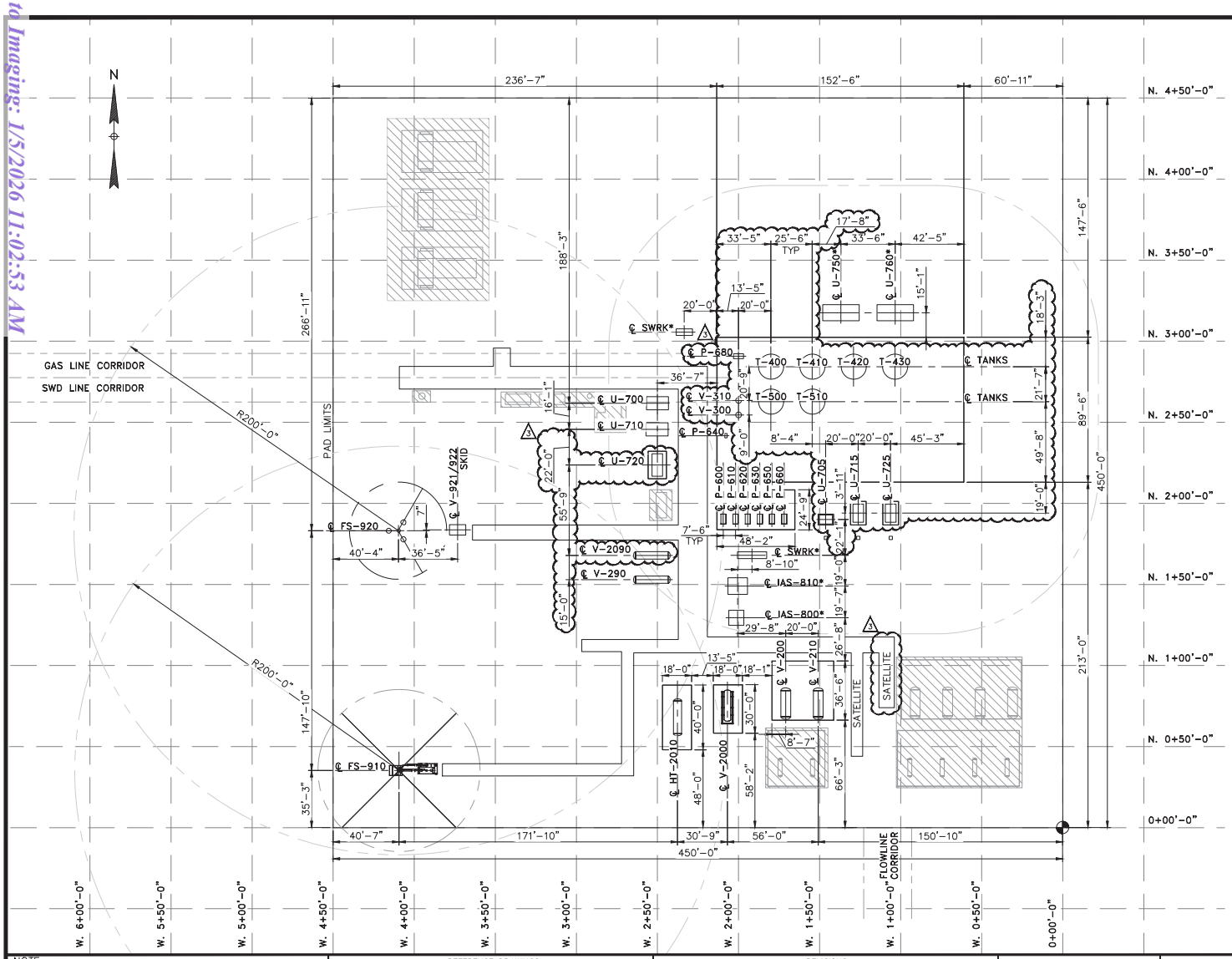
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EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	B.R.	03-16-17	1 : 36,000
ONE MILE RADIUS PLAT			EXHIBIT E

UINTAH ENGINEERING & LAND SURVEYING

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

Released to Imaging: 1/5/2026 11:02:53 AM
Received by OCD: 11/13/2025 4:03:45 PM



EQUIPMENT		
TAG	DESCRIPTION	HP
V-200	HZ 3PH TEST SEPERATOR 72" OD x 16' S/S	
V-210	HZ 3PH TEST SEPERATOR 72" OD x 16' S/S	
V-290	2PH HZ LP SCRUBBER 54" OD x 20'-0"	
V-2090	2PH HZ LP SCRUBBER 54" OD x 20'-0"	
V-2000	HZ HEATER TREATER 48" OD x 16' S/S	
HT-2010	HZ HEATER TREATER 60" OD x 20' S/S	
V-300	VAPOR RECOVERY TOWER 36" OD x 40' S/S	
V-310	VAPOR RECOVERY TOWER 36" OD x 40' S/S	
T-400 THRU T-430	1000 BBL OIL TANK 15'-6" x 30'-0" HT	
T-500 THRU T-510	1000 BBL WATER TANK 15'-6" x 30'-0" HT	
P-600	WATER TRANSFER PUMP	25
P-610	WATER TRANSFER PUMP	25
P-620	WATER TRANSFER PUMP	25
P-630	WATER TRANSFER PUMP	25
P-640	RECIRCULATION PUMP	3
P-650	WATER TRANSFER PUMP	100
P-660	WATER TRANSFER PUMP	100
P-680	PCP RECIRCULATION PUMP	2
U-700	VAPOR RECOVERY UNIT (G17)	160
U-705	VAPER RECOVERY UNIT (HY-BON NK100)	30
U-710	VAPOR RECOVERY UNIT (G17)	160
U-715	VAPOR RECOVERY UNIT (FLOGISTIX FX10V75)	75
U-720	VAPOR RECOVERY UNIT (FLOGISTIX FX12V125)	125
U-725	VAPOR RECOVERY UNIT (FLOGISTIX FX10V75)	75
U-750	MPLX LACT WITH BOOSTER PUMP	160
U-760	MPLX LACT WITH BOOSTER PUMP	170
IAS-800	AIR COMPRESSOR	(2) 7.5
IAS-810	AIR COMPRESSOR	(2) 7.5
FS-910	HERO 12" DUAL 10 MMCFD FLARE	18
V-911/912	DUAL SCRUBBER SKID	3
FS-920	TRIPOD 3.0/1.5 MMCFD DUAL FLARE STACK	18
V-921/922	DUAL SCUBBER SKID	3

ISSUED
SEPTEMBER 08, 2023
FOR CONSTRUCTION

LEGEND
FUTURE

NOTE:
LP B2P8; SWEET; OFF PAD
* FIELD VERIFY LOCATION PRIOR TO CONSTUCTION

REFERENCE DRAWINGS	
NO.	TITLE

REVISIONS					
NO.	DATE	DESCRIPTION	BY	CHK.	APP.
0	04/26/18	ISSUED FOR CONSTRUCTION	MJR	NR	
1	07/15/19	IFC-3S PROJ: 9216 5 WELL ADD ON	CJ	LL	
2	09/08/23	ISSUED AS-BUILT	NR	JM	
3	09/08/23	IFC 3S PROJ 23129	NR	JM	

3S Services, LLC
ENGINEERING & DESIGN
Ph: 432-687-5611 Midland, Texas 79705
WWW.3SENGINEERINGDESIGN.COM
TBPE FIRM REG. #13809
NM FIRM REG. #4545320
OKLA FIRM REG. #3712353615

NOTICE
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ENGINEERING RECORD		
	BY	DATE
DRN:	JV	02/21/18
DES:	NR	
CHK:		
APP:		
AFE No.		
FACILITY ENGR.	C. CUMBIE	
PROJ. ENGR:	J. MCNEELY	
SCALE:	NONE	

COTERRA

RIVERBEND 12-13 W2 BATTERY

PLOT PLAN

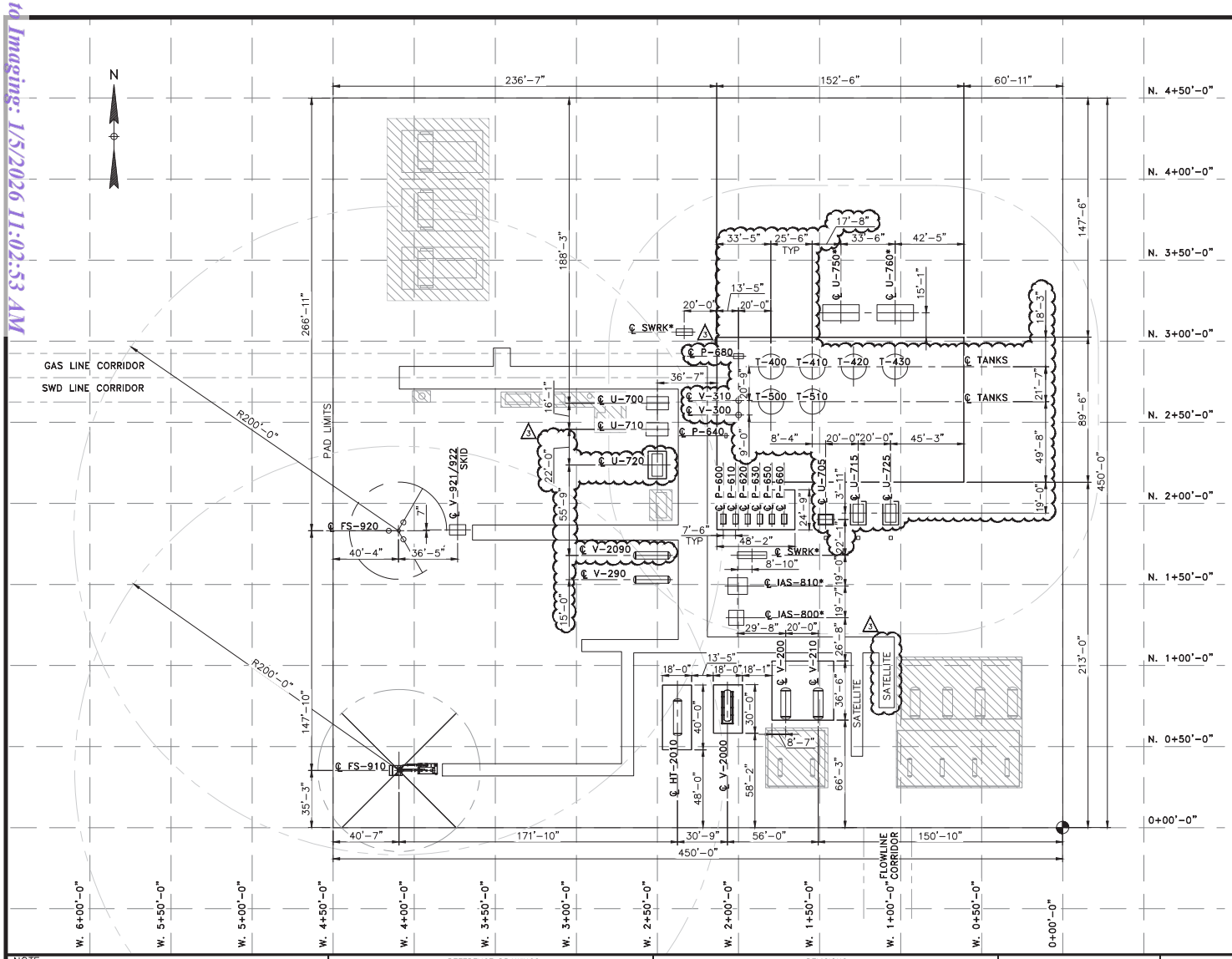
EDDY COUNTY NM

PLOT SCALE NONE | DWG. NO. D-8102-20-100 | REV. 3

CAD NO.

Q:\01_Coterra\23129 - Riverbend 12-13 1H,2H,19H, 20H Add-on\2. Eng., Design\2.3 Piping, Mech\2.3.2 Plot Plans\D-8102-20-100.dwg 20230908.085959

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ISSUED

SEPTEMBER 08, 2023

FOR CONSTRUCTION

LEGEND

FUTURE

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NO.	TITLE

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	BY	DATE
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DES:	NR	
CHK:		
APP:		
AFE No.		
FACILITY ENGR.	C. CUMBIE	
PROJ. ENGR:	J. MCNEELY	
SCALE:	NONE	

COTERRA

RIVERBEND 12-13 W2 BATTERY

PLOT PLAN

EDDY COUNTY

PLOT SCALE NONE

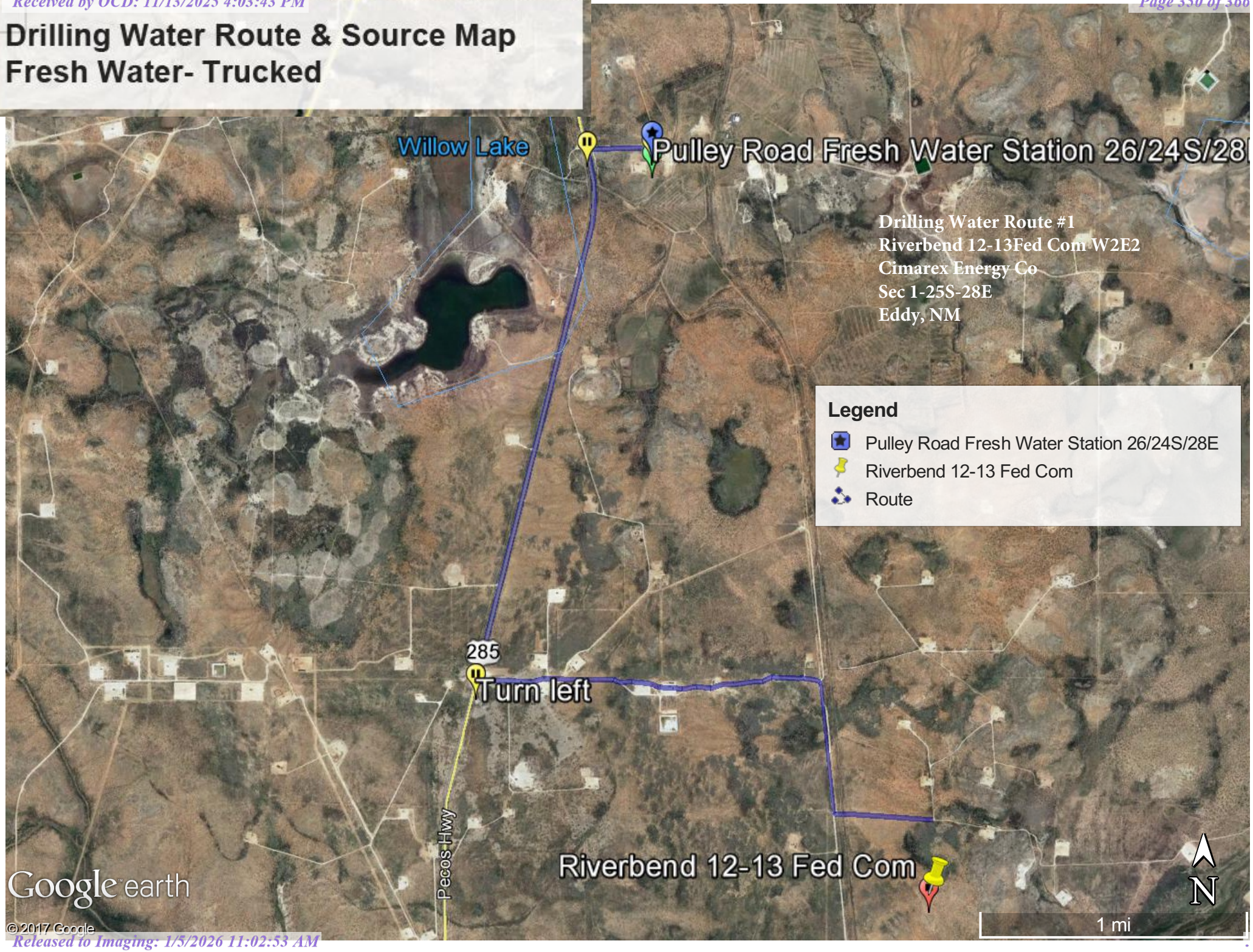
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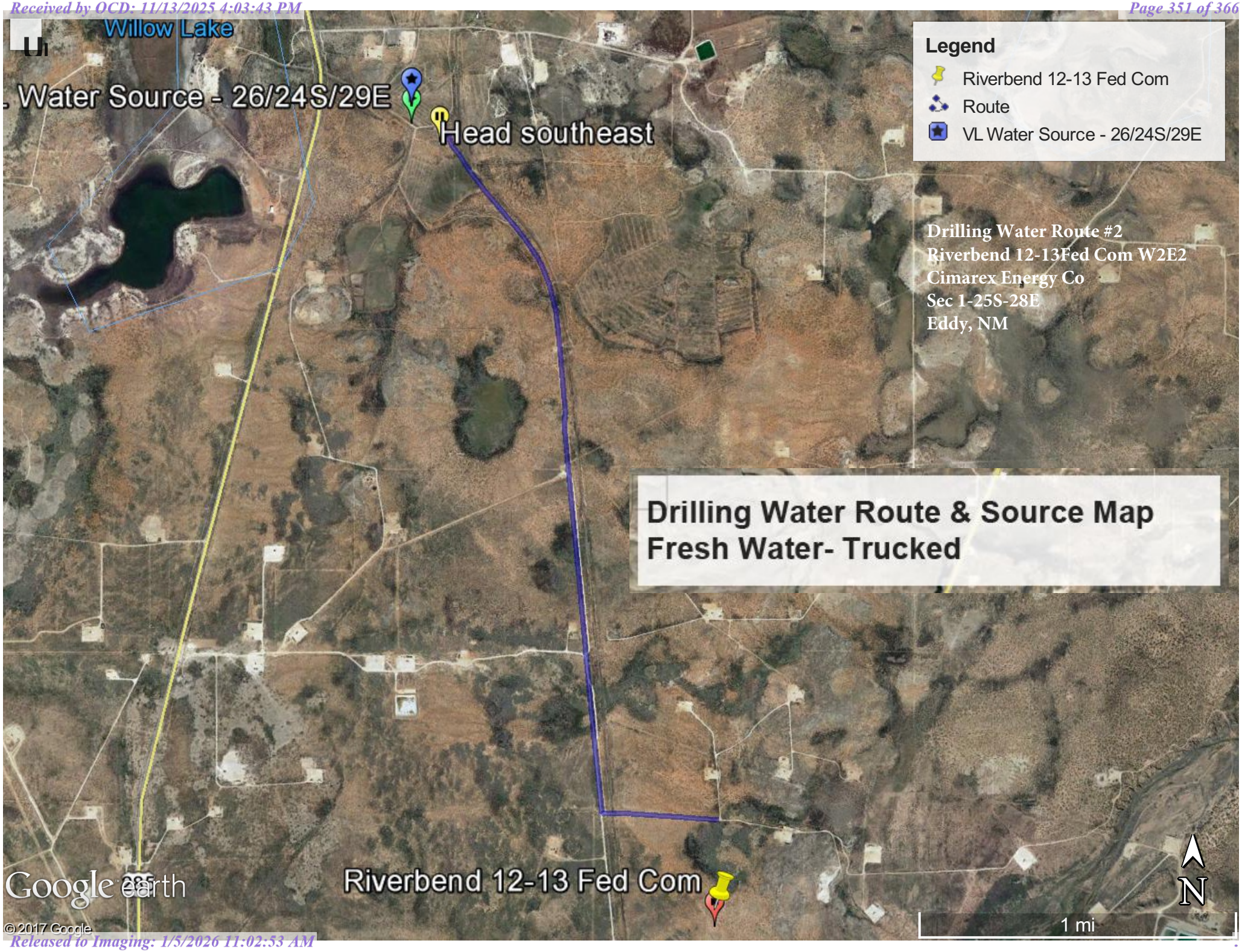
CAD NO.

REV. 3

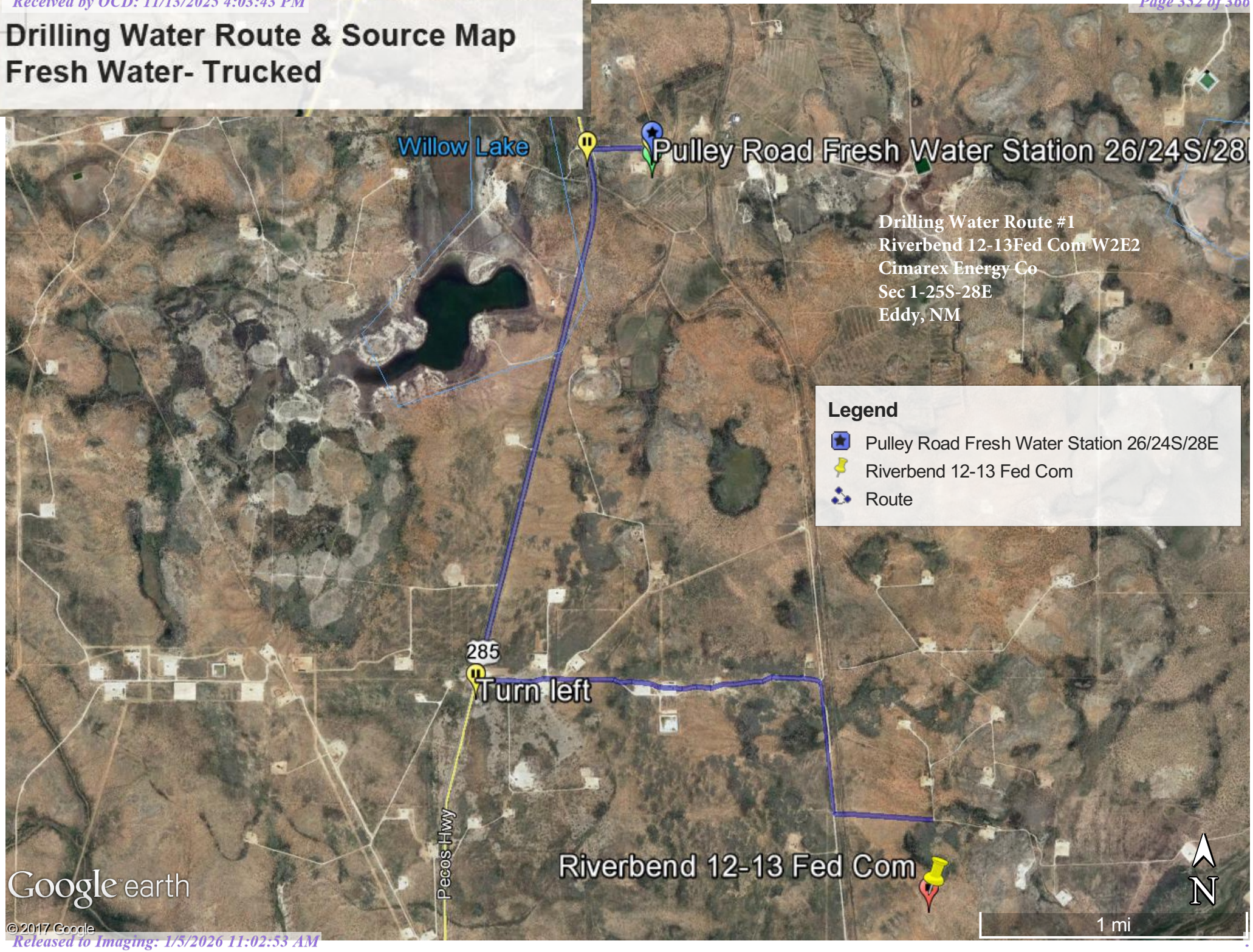
Q:\01_Coterra\23129 - Riverbend 12-13 1H,2H,19H, 20H Add-on\2. Eng., Design\2.3 Piping, Mech\2.3.2 Plot Plans\D-8102-20-100.dwg 20230908.085959

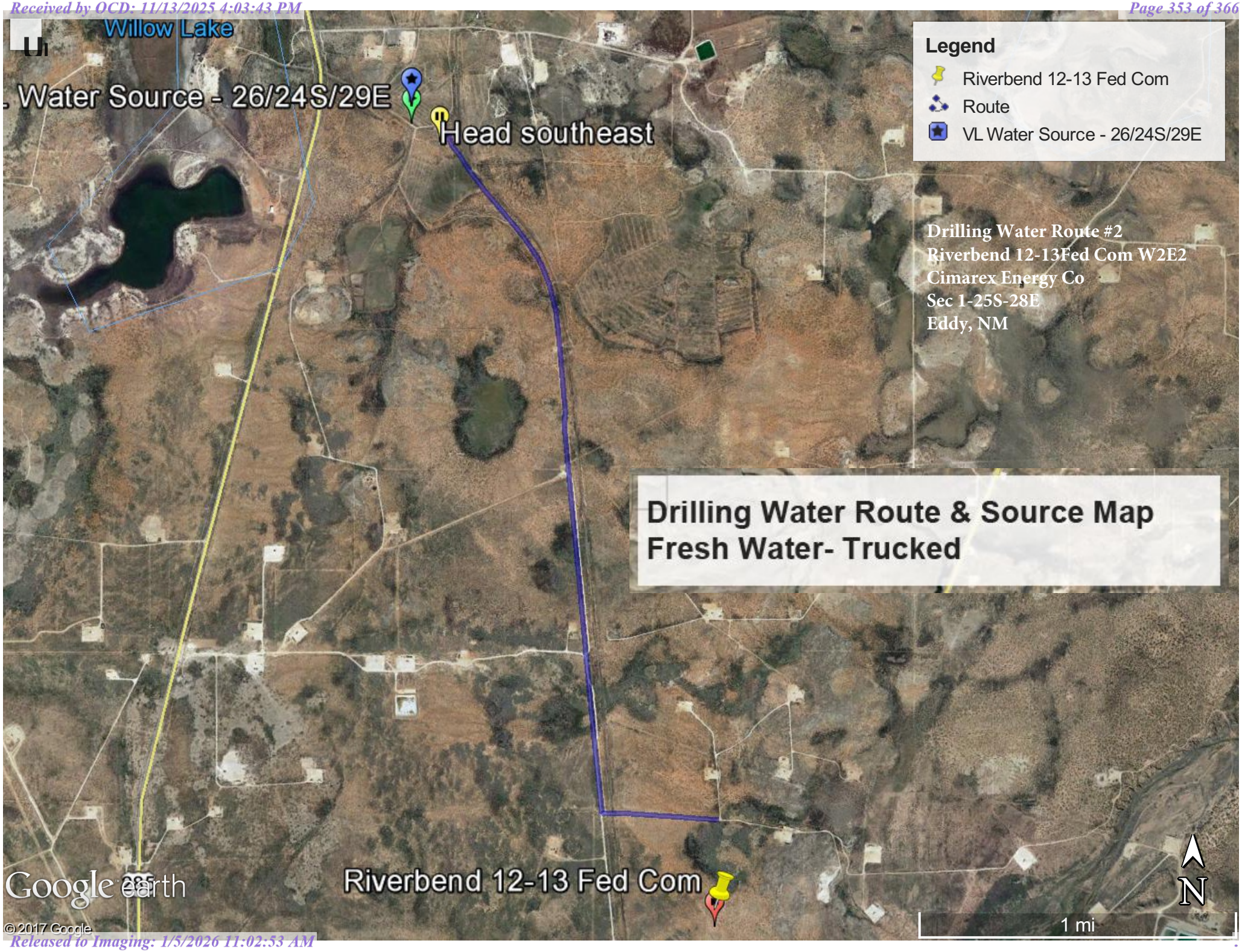
Drilling Water Route & Source Map
Fresh Water- Trucked




Willow Lake
Water Source - 26/24S/29E
Head southeast
Legend
Riverbend 12-13 Fed Com
Route
VL Water Source - 26/24S/29E
Drilling Water Route #2
Riverbend 12-13Fed Com W2E2
Cimarex Energy Co
Sec 1-25S-28E
Eddy, NM
Drilling Water Route & Source Map
Fresh Water- Trucked
Riverbend 12-13 Fed Com
Google earth
© 2017 Google
N
1 mi

Drilling Water Route & Source Map
Fresh Water- Trucked

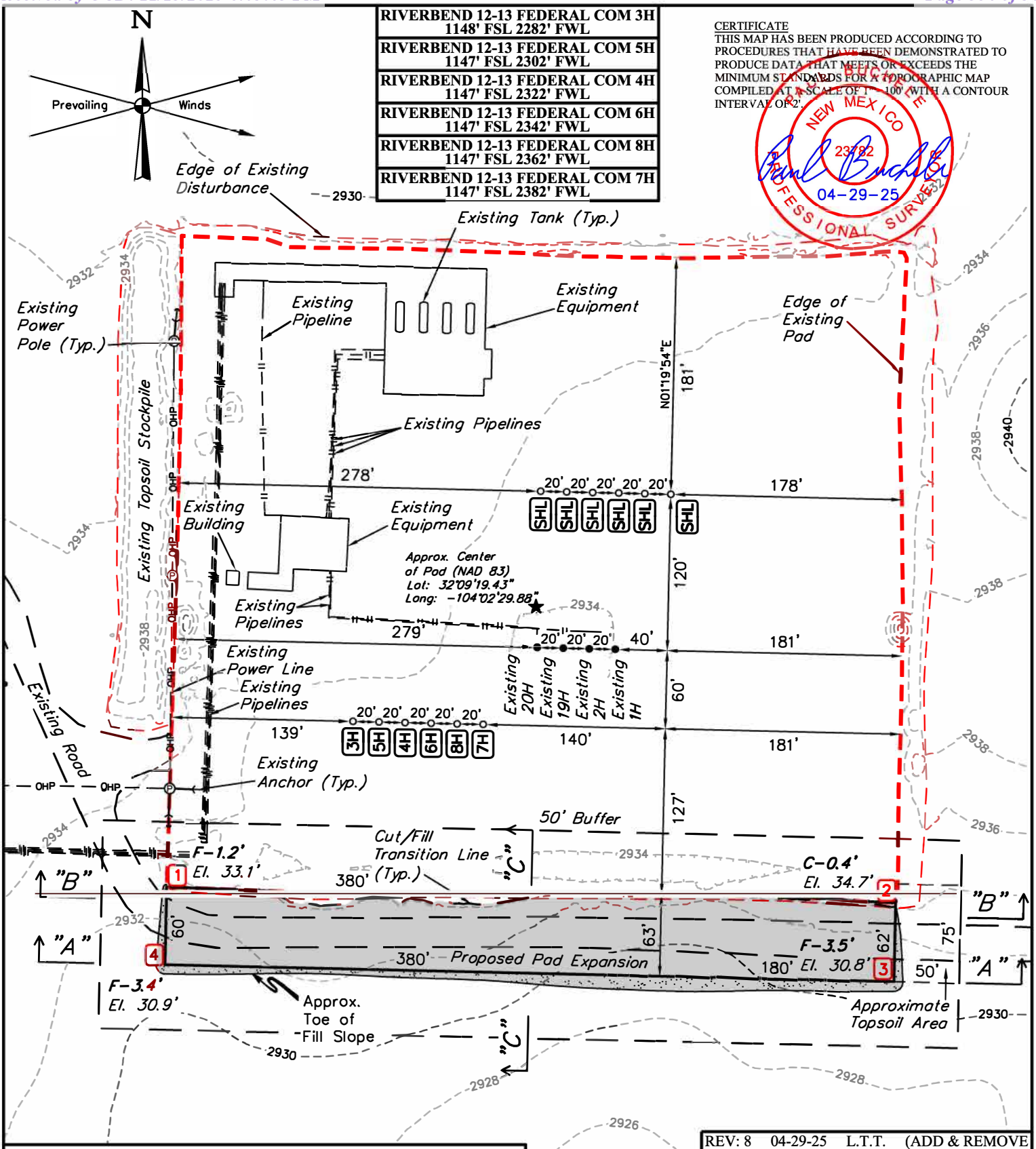



Willow Lake
Water Source - 26/24S/29E
Head southeast
Legend
Riverbend 12-13 Fed Com
Route
VL Water Source - 26/24S/29E
Drilling Water Route #2
Riverbend 12-13Fed Com W2E2
Cimarex Energy Co
Sec 1-25S-28E
Eddy, NM
Drilling Water Route & Source Map
Fresh Water- Trucked
Riverbend 12-13 Fed Com
Google earth
© 2017 Google
N
1 mi

RIVERBEND 12-13 FEDERAL COM 3H 1148' FSL 2282' FWL
RIVERBEND 12-13 FEDERAL COM 5H 1147' FSL 2302' FWL
RIVERBEND 12-13 FEDERAL COM 4H 1147' FSL 2322' FWL
RIVERBEND 12-13 FEDERAL COM 6H 1147' FSL 2342' FWL
RIVERBEND 12-13 FEDERAL COM 8H 1147' FSL 2362' FWL
RIVERBEND 12-13 FEDERAL COM 7H 1147' FSL 2382' FWL

CERTIFICATE
THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1" = 100' WITH A CONTOUR INTERVAL OF 2'.

STATE OF NEW MEXICO 23782 Paul Buchli 04-29-25 PROFESSIONAL SURVEYOR



PAD EXPANSION FINISHED GRADE ELEVATION = **2934.3'**

REV: 8 04-29-25 L.T.T. (ADD & REMOVE WELLS & ADJUST TOPSOIL AREA)

NOTES:

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

CIMAREX ENERGY CO.

RIVERBEND 12-13 FEDERAL COM W2E2
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	C.D.	03-22-17	1" = 100'
LOCATION LAYOUT			EXHIBIT J

UINTAH ENGINEERING & LAND SURVEYING

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

RIVERBEND 12-13 FEDERAL COM 3H 1148' FSL 2282' FWL
RIVERBEND 12-13 FEDERAL COM 5H 1147' FSL 2302' FWL
RIVERBEND 12-13 FEDERAL COM 4H 1147' FSL 2322' FWL
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STATE OF NEW MEXICO 23782 Paul Buchli 04-29-25 PROFESSIONAL SURVEYOR

N

Prevailing Winds

Edge of Existing Disturbance

Existing Tank (Typ.)

Existing Power Pole (Typ.)

Existing Pipeline

Existing Equipment

Edge of Existing Pad

Existing Topsoil Stockpile

Existing Pipelines

Existing Building

Existing Equipment

Approx. Center of Pad (NAD 83)
Lat: 32°09'19.43"
Long: -104°02'29.88"

Existing Pipelines

Existing Power Line

Existing Pipelines

Existing Road

Existing Anchor (Typ.)

50' Buffer

Cut/Fill Transition Line (Typ.)

F-1.2' El. 33.1'

C-0.4' El. 34.7'

F-3.5' El. 30.8'

F-3.4' El. 30.9'

Approx. Toe of Fill Slope

380' Proposed Pad Expansion

Approximate Topsoil Area

N01°19'54"E

181'

278'

178'

120'

279'

40'

181'

60'

139'

140'

181'

127'

380'

180'

50'

75'

63'

62'

60'

20' 20' 20' 20' 20'

SHL SHL SHL SHL SHL SHL

Existing 20H Existing 19H Existing 2H Existing 1H

3H 5H 4H 6H 8H 7H

2930 2932 2934 2936 2938 2940 2928 2926

PAD EXPANSION FINISHED GRADE ELEVATION = **2934.3'**

REV: 8 04-29-25 L.T.T. (ADD & REMOVE WELLS & ADJUST TOPSOIL AREA)

NOTES:

- Contours shown at 2' intervals.
- Cut/Fill Slopes 2:1 (Typ.)
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- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

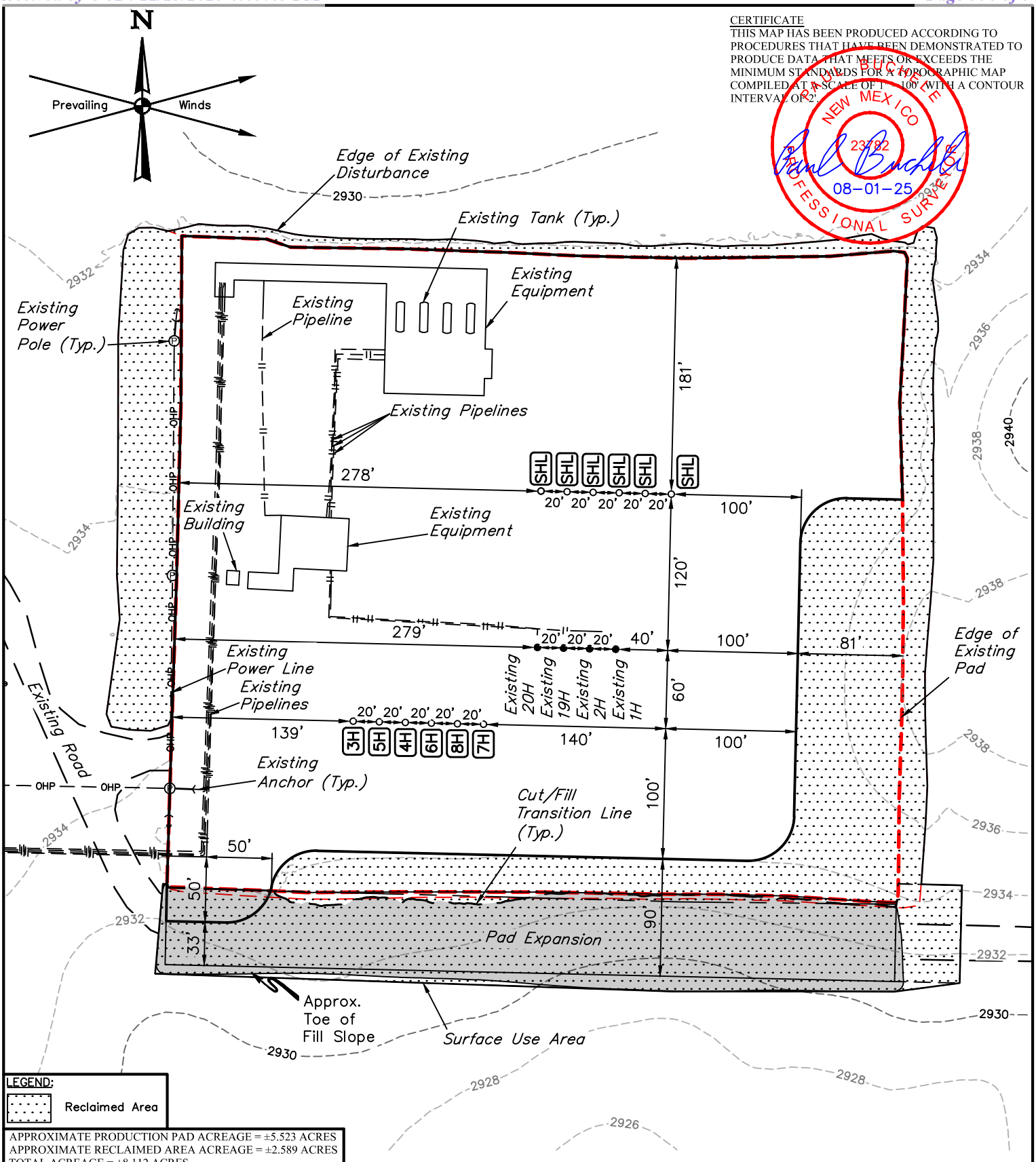
CIMAREX ENERGY CO.

RIVERBEND 12-13 FEDERAL COM W2E2
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	C.D.	03-22-17	1" = 100'
LOCATION LAYOUT			EXHIBIT J

UINTAH ENGINEERING & LAND SURVEYING

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



CERTIFICATE

THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1" = 100' WITH A CONTOUR INTERVAL OF 2'.

BUCKLE NEW MEXICO 23782 PROFESSIONAL SURVEYOR 08-01-25

LEGEND:

Reclaimed Area

APPROXIMATE PRODUCTION PAD ACREAGE = ±5.523 ACRES
APPROXIMATE RECLAIMED AREA ACREAGE = ±2.589 ACRES
TOTAL ACREAGE = ±8.112 ACRES

NOTES:

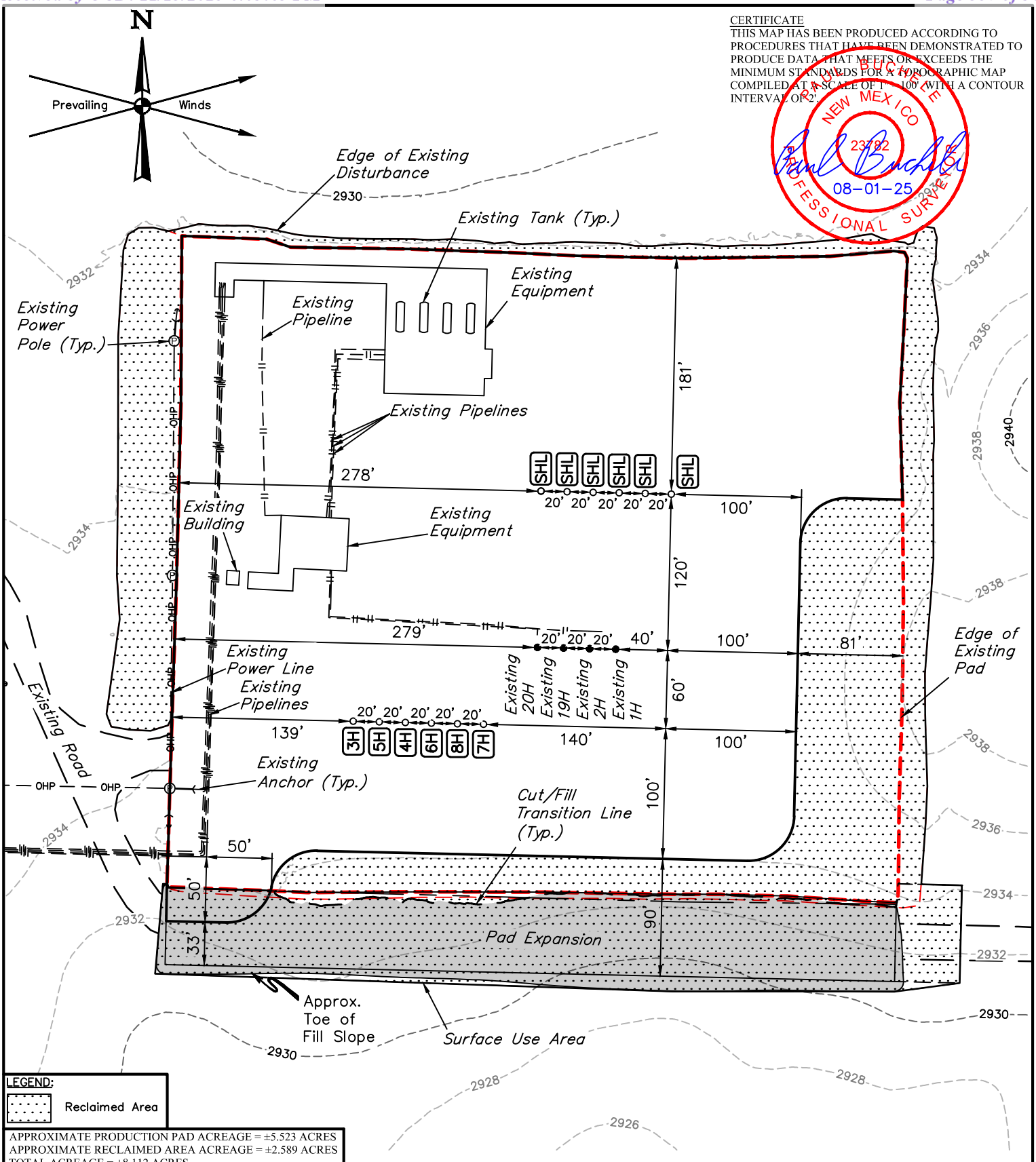
- Contours shown at 2' intervals.

CIMAREX ENERGY CO.

RIVERBEND 12-13 FEDERAL COM E2W2-E
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	N.R.	08-01-25	1" = 100'
RECLAMATION LAYOUT			EXHIBIT P

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



CERTIFICATE

THIS MAP HAS BEEN PRODUCED ACCORDING TO PROCEDURES THAT HAVE BEEN DEMONSTRATED TO PRODUCE DATA THAT MEETS OR EXCEEDS THE MINIMUM STANDARDS FOR A TOPOGRAPHIC MAP COMPILED AT A SCALE OF 1" = 100' WITH A CONTOUR INTERVAL OF 2'.

BUCKLE NEW MEXICO 23782 PROFESSIONAL SURVEYOR 08-01-25

LEGEND:

Reclaimed Area

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APPROXIMATE RECLAIMED AREA ACREAGE = ±2.589 ACRES
TOTAL ACREAGE = ±8.112 ACRES

NOTES:

- Contours shown at 2' intervals.

CIMAREX ENERGY CO.

RIVERBEND 12-13 FEDERAL COM E2W2-E
1238' FSL 2421' FEL (APPROX. CENTER OF PAD)
E 1/2 SW 1/4, SECTION 1, T25S, R28E, N.M.P.M.
EDDY COUNTY, NEW MEXICO

SURVEYED BY	A.H.	08-12-24	SCALE
DRAWN BY	N.R.	08-01-25	1" = 100'
RECLAMATION LAYOUT			EXHIBIT P

UINTAH ENGINEERING & LAND SURVEYING

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

AFMSS

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

PWD Data Report

10/16/2025

APD ID: 10400105546 **Submission Date:** 08/07/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Section 1 - General

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

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

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

Other PWD Surface Owner Description:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Lined pit Monitor description:

Lined pit Monitor

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

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

Other PWD Surface Owner Description:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

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

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Precipitated Solids Permit

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

TDS lab results:

Geologic and hydrologic

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

State

Unlined Produced Water Pit Estimated

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

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information

Section 4 -

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

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

Other PWD Surface Owner Description:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

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

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

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection

Underground Injection Control (UIC) Permit?

UIC Permit

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

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

Other PWD Surface Owner Description :

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

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

PWD Surface Owner Description:

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements

AFMSS

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

Bond Info Data

10/16/2025

APD ID: 10400105546 **Submission Date:** 08/07/2025

Operator Name: CIMAREX ENERGY COMPANY OF COLORADO

Well Name: RIVERBEND 12-13 FEDERAL COM **Well Number:** 5H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond

Federal/Indian APD: FED

BLM Bond number: NMB001188

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024

Submittal Type: ☑ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015-57614	96217	WILLOW LAKE; BONE SPRING, SOUTHEAST

Property Code	Property Name	Well Number
338169	RIVERBEND 12-13 FEDERAL COM	5H

OGRID No.	Operator Name	Ground Level Elevation
162683	CIMAREX ENERGY CO. OF COLORADO	2934.1'

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

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
N	1	25S	28E		1147 SOUTH	2302 WEST	32.155153°	-104.042021°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
O	13	25S	28E		100 SOUTH	1600 EAST	32.123003°	-104.037478°	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
640	Defining Well	Riverbend 12-13 Fed Com 5H	No	C

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

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
B	12	25S	28E		100 NORTH	1600 EAST	32.151650°	-104.037448°	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
B	12	25S	28E		100 NORTH	1600 EAST	32.151650°	-104.037448°	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD 83)	Longitude (NAD 83)	County
O	13	25S	28E		100 SOUTH	1600 EAST	32.123003°	-104.037478°	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation:
N/A	☑ Horizontal ☐ Vertical	2934.1'

OPERATOR CERTIFICATIONS

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

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

Crystal Denson 11/5/2025
Signature Date

Crystal Denson
Printed Name

Crystal. Denson@coterra.com
Email Address

SURVEYOR CERTIFICATIONS

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

PAUL BUCHELE NEW MEXICO 23782 04-29-25 PROFESSIONAL SURVEYOR

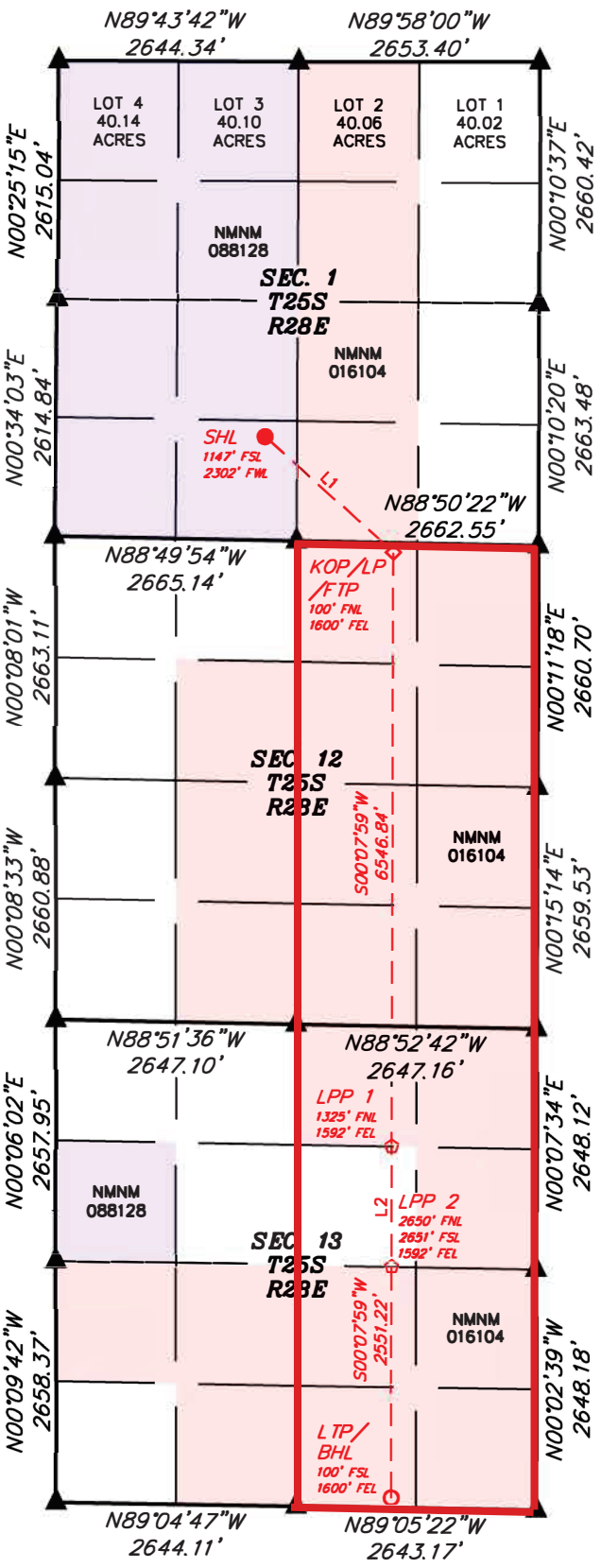
Signature and Seal of Professional Surveyor

23782 August 12, 2024
Certificate Number Date of Survey

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

Released to Imaging: 1/5/2026 11:02:53 AM

Property Name	Well Number	Drawn By	Revised By
RIVERBEND 12-13 FEDERAL COM	5H	L.T.T. 04-29-25	



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

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'18.55" (32.155153°)
LONGITUDE = -104°02'31.28" (-104.042021°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'18.11" (32.155030°)
LONGITUDE = -104°02'29.52" (-104.041533°)
STATE PLANE NAD 83 (N.M. EAST)
N: 420301.82' E: 631488.49'
STATE PLANE NAD 27 (N.M. EAST)
N: 420243.53' E: 590304.31'

NAD 83 (KOP/LP/FTP)
LATITUDE = 32°09'05.94" (32.151650°)
LONGITUDE = -104°02'14.81" (-104.037448°)
NAD 27 (KOP/LP/FTP)
LATITUDE = 32°09'05.50" (32.151527°)
LONGITUDE = -104°02'13.05" (-104.036960°)
STATE PLANE NAD 83 (N.M. EAST)
N: 419031.62' E: 632907.32'
STATE PLANE NAD 27 (N.M. EAST)
N: 418973.34' E: 591723.07'

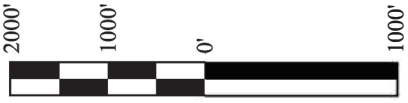
NAD 83 (LPP 1)
LATITUDE = 32°08'01.17" (32.133658°)
LONGITUDE = -104°02'14.88" (-104.037467°)
NAD 27 (LPP 1)
LATITUDE = 32°08'00.72" (32.133534°)
LONGITUDE = -104°02'13.12" (-104.036979°)
STATE PLANE NAD 83 (N.M. EAST)
N: 412486.20' E: 632919.48'
STATE PLANE NAD 27 (N.M. EAST)
N: 412428.06' E: 591735.08'

NAD 83 (LPP 2)
LATITUDE = 32°07'48.05" (32.130015°)
LONGITUDE = -104°02'14.89" (-104.037471°)
NAD 27 (LPP 2)
LATITUDE = 32°07'47.61" (32.129892°)
LONGITUDE = -104°02'13.14" (-104.036983°)
STATE PLANE NAD 83 (N.M. EAST)
N: 411161.09' E: 632921.93'
STATE PLANE NAD 27 (N.M. EAST)
N: 411102.97' E: 591737.51'

NAD 83 (LTP/BHL)
LATITUDE = 32°07'22.81" (32.123003°)
LONGITUDE = -104°02'14.92" (-104.037478°)
NAD 27 (LTP/BHL)
LATITUDE = 32°07'22.37" (32.122880°)
LONGITUDE = -104°02'13.17" (-104.036990°)
STATE PLANE NAD 83 (N.M. EAST)
N: 408610.42' E: 632926.67'
STATE PLANE NAD 27 (N.M. EAST)
N: 408552.35' E: 591742.18'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S47°55'27"E	1904.74'
L2	S00°07'59"W	1325.40'

NOTE:
- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)
- Colored areas within section lines represent Federal oil & gas leases.



Sheet 2 of 2

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: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd Midland, TX 79706	OGRID: 162683
	Action Number: 526482
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

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

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd Midland, TX 79706	OGRID: 162683
	Action Number: 526482
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
amydoebele2024	Cement is required to circulate on both surface and intermediate1 strings of casing.	11/13/2025
amydoebele2024	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	11/13/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	1/5/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	1/5/2026
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.	1/5/2026
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.	1/5/2026
ward.rikala	Surface casing is to be set in the Rustler and above any salt. Casing shall be cemented to surface.	1/5/2026