AFMSS

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

Application for Permit to Drill

APD Package Report

Date Printed:

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

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

- Application Report
- Application Attachments
  -- Well Plat: 3 file(s)

- Drilling Plan Report
- Drilling Plan Attachments
  -- Blowout Prevention Choke Diagram Attachment: 1 file(s)
  -- Blowout Prevention BOP Diagram Attachment: 2 file(s)
  -- Casing Taperd String Specs: 2 file(s)
  -- Casing Design Assumptions and Worksheet(s): 8 file(s)
  -- Hydrogen sulfide drilling operations plan: 2 file(s)
  -- Proposed horizontal/directional/multi-lateral plan submission: 3 file(s)
  -- Other Facets: 3 file(s)
  -- Other Variances: 2 file(s)

- SUPO Report
- SUPO Attachments
  -- Existing Road Map: 1 file(s)
  -- New Road Map: 1 file(s)
  -- New road access plan attachment: 1 file(s)
  -- Attach Well map: 1 file(s)
  -- Production Facilities map: 1 file(s)
  -- Water source and transportation map: 1 file(s)
  -- Construction Materials source location attachment: 1 file(s)
  -- Well Site Layout Diagram: 3 file(s)
  -- Recontouring attachment: 1 file(s)
  -- Other SUPO Attachment: 3 file(s)

- PWD Report

- PWD Attachments
  -- None

- Bond Report
- Bond Attachments
  -- None

Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

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

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

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

8. Lease Name and Well No.

2. Name of Operator

9. API Well No. 30-015-54136

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

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

At surface

At proposed prod. zone

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

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

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

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

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

24. Attachments

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

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

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

Title

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

Title	Office

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

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

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 08/17/2023

INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

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

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

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

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

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

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

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

Approval Date: 08/17/2023

Additional Operator Remarks

Location of Well

0. SHL: SESE / 215 FSL / 570 FEL / TWSP: 17S / RANGE: 28E / SECTION: 15 / LAT: 32.8277854 / LONG: -104.1570504 (TVD: 0 feet, MD: 0 feet)

PPP: NENE / 1 FNL / 375 FEL / TWSP: 17S / RANGE: 28E / SECTION: 22 / LAT: 32.827208 / LONG: -104.156387 (TVD: 4490 feet, MD: 4975 feet)

PPP: NENE / 100 FNL / 375 FEL / TWSP: 17S / RANGE: 28E / SECTION: 22 / LAT: 32.8269232 / LONG: -104.1563907 (TVD: 4500 feet, MD: 5077 feet)

BHL: SESE / 50 FSL / 375 FEL / TWSP: 17S / RANGE: 28E / SECTION: 22 / LAT: 32.8129352 / LONG: -104.1565642 (TVD: 4440 feet, MD: 10171 feet)

BLM Point of Contact

Name: Candy Vigil
Title: LIE
Phone: (575) 234-5982
Email: cvigil@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Spur Energy Partners LLC
LEASE NO.:	NMNM 0080268
COUNTY:	Eddy

Wells:

Mayaro 22 State Com East Well Pad

Mayaro 22 State Com 10H
Surface Hole Location: 283' FSL & 2438' FEL, Section 15, T. 17 S., R. 28 E.
Bottom Hole Location: 1152' FSL & 2247' FEL, Section 22, T. 17 S, R 28 E.

Mayaro 22 State Com 70H
Surface Hole Location: 263' FSL & 2438' FEL, Section 15, T. 17 S., R. 28 E.
Bottom Hole Location: 1125' FSL & 1823' FEL, Section 22, T. 17 S, R 28 E.

Mayaro 22 State Com West Well Pad

Mayaro 22 State Com 11H
Surface Hole Location: 235' FSL & 570' FEL, Section 15, T. 17 S., R. 28 E.
Bottom Hole Location: 50' FSL & 923' FEL, Section 22, T. 17 S, R 28 E.

Mayaro 22 State Com 71H
Surface Hole Location: 215' FSL & 570' FEL, Section 15, T. 17 S., R. 28 E.
Bottom Hole Location: 50' FSL & 375' FEL, Section 22, T. 17 S, R 28 E.

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

Approval Date: 08/17/2023

Electric Lines
☒ **Interim Reclamation**
☒ **Final Abandonment & Reclamation**

Approval Date: 08/17/2023

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area 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 to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder 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 holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. 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 the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

Approval Date: 08/17/2023

Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area 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 to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder 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 holder.

IV. 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 and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

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

TANK BATTERY:
Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank or 24 hour production, whichever is greater. Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

SURFACE PIPELINE(S):
When crossing ephemeral drainages the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present.

The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

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

Range:

Cattleguards
Where a permanent cattlegaurd 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.

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).

Figure 1. Pipe H-brace specifications

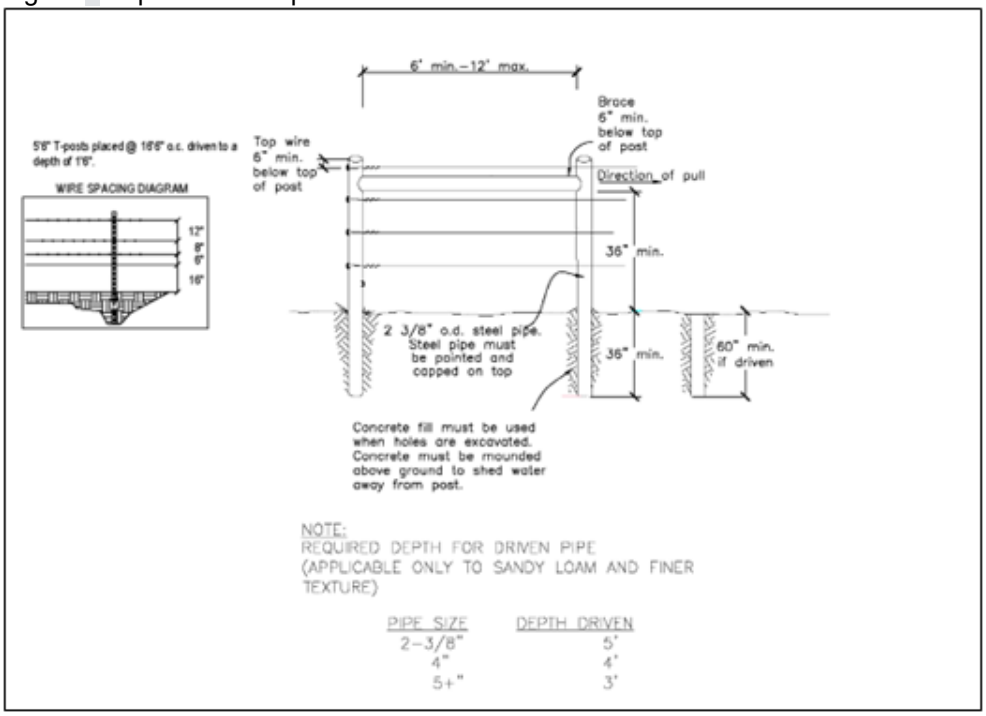
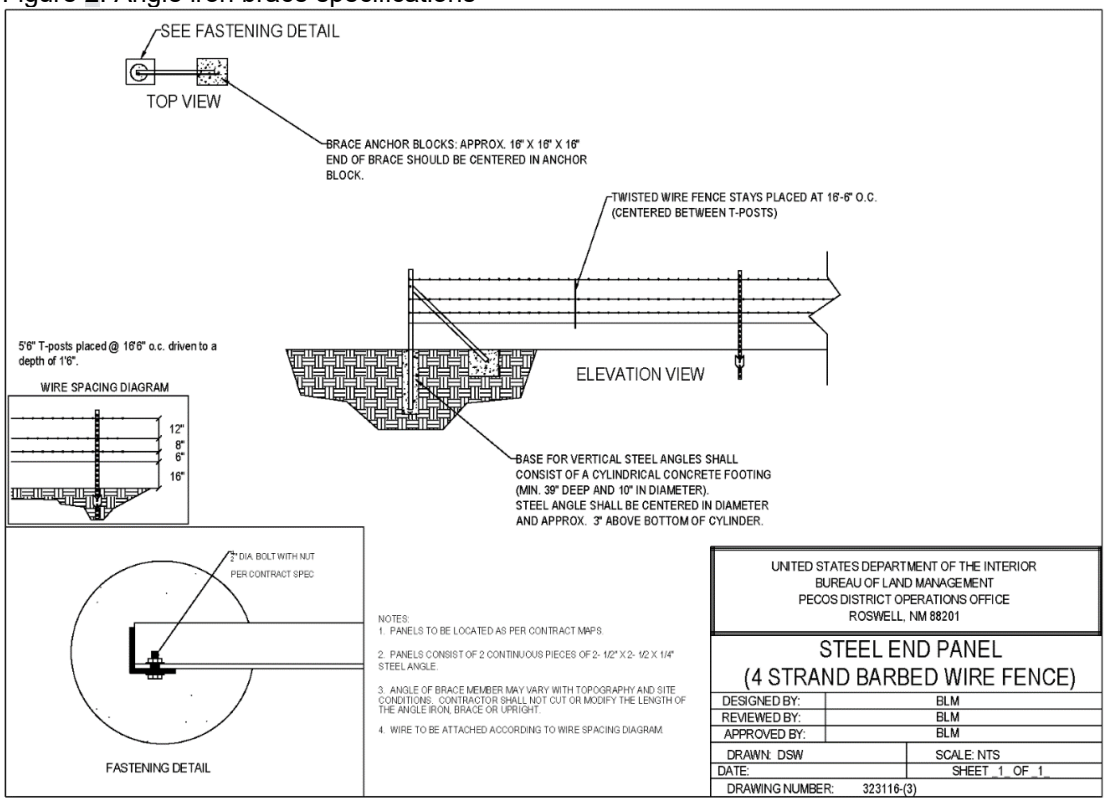


Figure 2. Angle iron brace specifications



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.

VRM IV:

Short-term mitigation measures include painting all above-ground structures that are not subject to safety requirements (including meter housing) Shale Green, which is a flat non-reflective paint color listed in the BLM Standard Environmental Color Chart (CC-001: June 2013). Long-term mitigation measures include the removal of wells and associated infrastructure following abandonment (end of cost-effective production). Previously impacted areas will be reclaimed by removing structures and caliche pads, returning disturbed areas to natural grade, and revegetating with an approved BLM seed mixture; thereby eliminating visual impacts.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 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 Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. 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 (below six inches) 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.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS 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.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
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 pit 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.)

G. ON LEASE ACCESS ROADS

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 thirty (30) feet.

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

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

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

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.

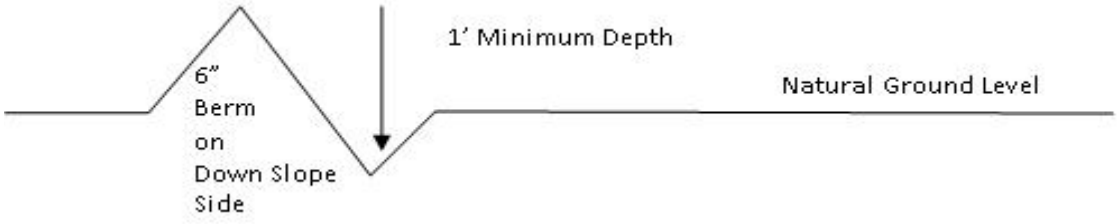
Ditching
Ditching shall be required on both sides of the road.

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.

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

Cattle guards

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route 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 cattle guards that are in place and are utilized during lease operations.

Fence Requirement
Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

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: 08/17/2023

Construction Steps

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

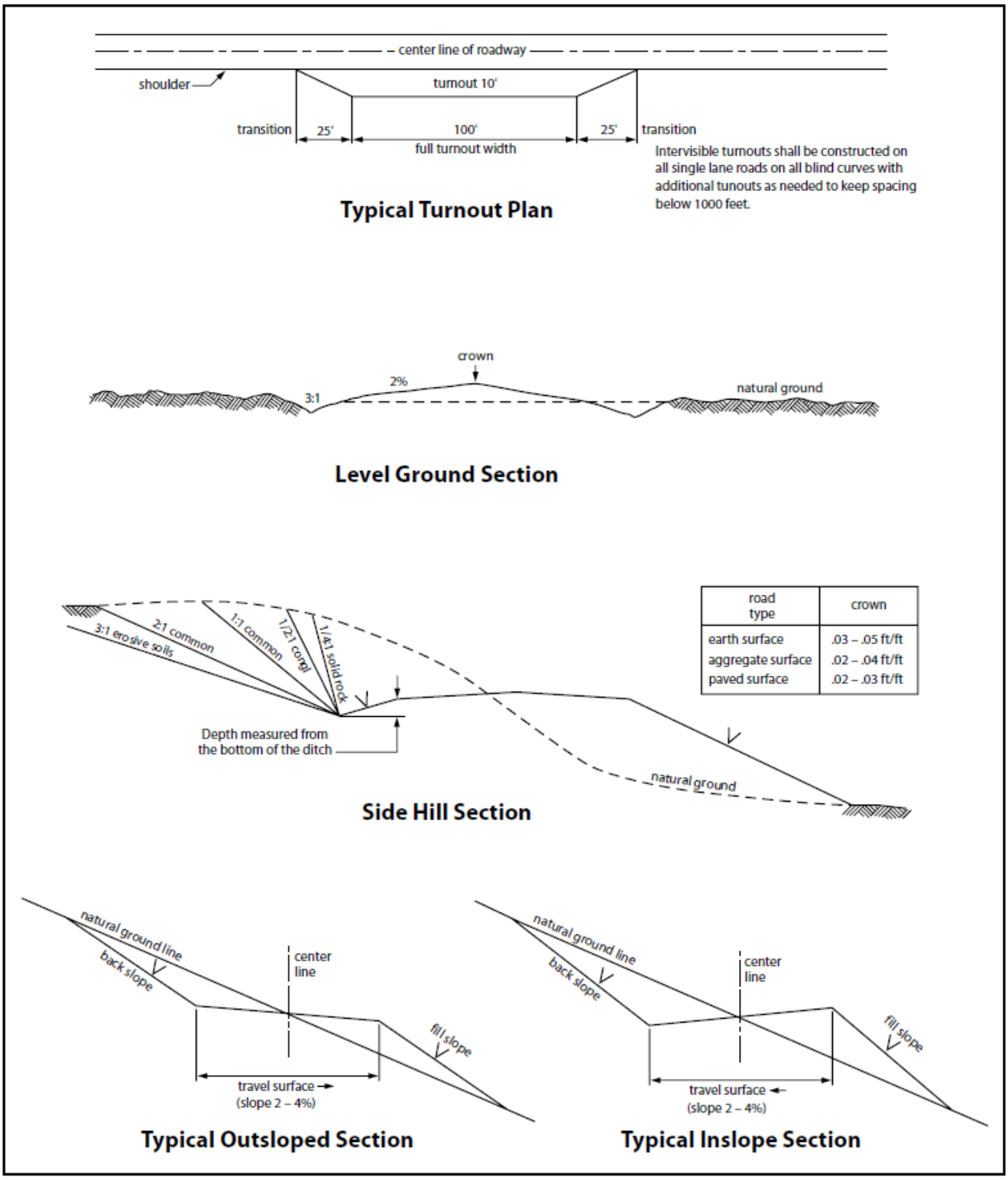


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

Approval Date: 08/17/2023

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

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

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

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

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

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

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

B. PIPELINES

- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval**

prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

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

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

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

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

4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;

b. Activities of other parties including, but not limited to:
   (1) Land clearing
   (2) Earth-disturbing and earth-moving work
   (3) Blasting
   (4) Vandalism and sabotage;

c. Acts of God.

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

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of **30** feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

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

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

9. The pipeline shall be buried with a minimum of 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

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

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

15. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area 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 to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder 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 holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. 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 the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 16 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

16. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

17. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area 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 to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder 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 holder.

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

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

C. ELECTRIC LINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
- No further construction will be done until clearance has been issued by the Authorized Officer.
- Special restoration stipulations or realignment may be required.

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

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

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

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

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume

the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

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

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area 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 to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder 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 holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. 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 the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 11 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

11. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

12. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area 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 to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder 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 holder.

13. Special Stipulations:
For reclamation remove poles, lines, transformer, etc. and dispose of properly.
Fill in any holes from the poles removed.

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should 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 should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. 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 below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

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 should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

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Seed Mixture 2, for Sandy Sites

The holder 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 will be planted 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 have a tendency to drop the bottom of the drill and are planted first). The holder 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 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.

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

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

*Pounds of pure live seed:

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

Approval Date: 08/17/2023

Seed Mixture 3, for Shallow Sites

The holder 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 will be planted 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 have a tendency to drop the bottom of the drill and are planted first). The holder 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 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.

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

Species	lb/acre
Plains Bristlegrass (*Setaria macrostachya*)	1.0
Green Sprangletop (*Leptochloa dubia*)	2.0
Sideoats Grama (*Bouteloua curtipendula)*	5.0

*Pounds of pure live seed:

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

Pecos District

Application for Permit to Drill

Conditions of Approval

Geology Concerns

Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst	☐ Medium	☐ High	☐ Critical
H2S	☒ None	☐ Below 100 PPM	☐ Above 100 PPM
Other	☐ 4 String Area	☐ Capitan Reef	☐ SWD Well

Note: The geology of the area where the well is being drilled determines the COAs that apply, not the above table.

Additional Engineering Requirements

Surface casing must be set at: 175 feet

Intermediate casing must be set at: 1,230 feet

General Requirements

1. Changes to the approved APD casing program need prior approval.

2. The Bureau of Land Management (BLM) will be notified in advance for a representative to witness:
   a. Well spudding (minimum of 24 hours notice)
   b. Setting and/or cementing of all casing strings (minimum of 4 hours notice)
   c. BOPE tests (minimum of 4 hours notice)

   Eddy County
   620 East Greene Street, Carlsbad, NM 88220
   (575) 361-2822
   BLM_NM_CFO_DrillingNotifications@BLM.GOV

   Lea County
   414 West Taylor, Hobbs, NM 88240
   (575) 689-5981

3. The initial wellhead installed on the well will remain on the well with spools used as needed.

4. 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:
    i. 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 a Spudder Rig:
    i. Notify the BLM when moving in and removing the Spudder Rig.
    ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    iii. BOP/BOPE test to be conducted per 43 CFR 3172.6 as soon as 2nd Rig is rigged up on well.

5. Floor controls are required for 3M or greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller, and will always be operational during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table or the area immediately above the substructure on which the draw works are located (this does not include the doghouse or stairway area).

6. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

Pressure Control

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.6 and API STD 53 Sec. 5.3.

2. 5M or higher systems require 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.

3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    a. 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.
    b. The results of the test shall be reported to the appropriate BLM office.
    c. 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.

d. 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.
e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.6(b)(9).
f. 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 when specified), 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).
g. 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 plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time.
h. The tests shall be done by an independent service company utilizing a test plug, not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

4. If the operator has proposed using a 5,000 (5M) Annular on a 10M BOP:
    a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi.

5. 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 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.

6. If a variance is approved for break testing the BOPE, the following requirements apply:
   a. BOPE break testing is only approved for a BOP rated at 5M or less.
   b. Approval is only for the intermediate hole sections, so long as those sections do not go deeper than the Bone Springs formation.
   c. The Annular Preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.
   d. A full BOP test shall be performed every 21 days (at a minimum).
   e. A full BOP test is required prior to drilling the first intermediate hole section (if applicable). If any subsequent intermediate hole interval is deeper than the first, a full BOP test shall be required (a maximum 200 foot difference in true vertical depth (TVD) is allowed).
   f. BOPE break testing is not permitted for drilling the production hole section.
   g. While in transfer, the BOP shall be secured by the hydraulic carrier or cradle.
   h. If any repairs or replacements of the BOPE is required, the BOPE shall be tested as required by 43 CFR 3172.
   i. Pressure tests shall be performed on any BOPE components that have been disconnected. A low pressure (250-300 psi) and a high pressure (BOP max pressure rating) test are required.
   j. If a testing plug is used, pressure shall be maintained for at least 10 minutes. If there is any bleed off in pressure, the test shall be considered to have failed.
   k. If no testing plug is used, pressure shall be maintained for at least 30 minutes. If there is a decline in pressure of more than 10 percent, the test shall be considered to have failed.
   l. The appropriate Bureau of Land Management (BLM) office shall be notified a minimum of 4 hours before testing occurs.
   m. Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
   n. If break testing is not used, then a full BOPE test shall be conducted.

7. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply:
   a. The flex line must meet the requirements of API 16C.

b. Check condition of flexible line from BOP to choke manifold (replace if exterior is damaged or if line fails test).
c. Line is to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements.
d. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating.
e. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, shall be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

Casing and Cement

1. 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.).

2. On any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. The 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.

3. 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.

4. The surface casing shall be set at a minimum of 25 feet into the Rustler Anhydrite and 80 feet above the salt and cemented to the surface.
    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of 8 hours (or 24 hours in the Potash Area) 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.

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

6. Intermediate casing must be cemented to surface. For medium/high cave/karst, potash, and Capitan Reef, wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

7. The production cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.

8. Production liner cement should tie-back at least 100 feet into previous casing string. Operator shall provide verification of cement top.

9. In WIPP Areas, cement must come to surface on the first three casing strings.

10. If cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

11. No pea gravel permitted for remedial cement or fall back remedial cement without prior authorization from a BLM petroleum engineer.

12. 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.

13. DV tools:
    a. First stage to DV tool (The DV tool may be cancelled if cement circulates to surface on the first stage):
        i. Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
    b. Second stage above DV tool:
        i. For intermediate casing, cement to surface.
        ii. For production casing, cement should tie-back at least 200 feet (500 feet in Secretary Potash, surface in R-111-P potash) into previous casing string. Operator shall provide method of verification.
        iii. If cement does not circulate, contact the appropriate BLM office.

14. Potash Areas:
    a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
    b. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:
        i. Cement reaches a minimum compressive strength of 500 psi for all cement blends
        ii. Until cement has been in place at least 24 hours.
    c. WOC time will be recorded in the driller's log.
    d. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
    e. In R111 Potash Areas, if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing salt string must come to surface.
    f. In Secretary Potash 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.

15. Wait on cement (WOC) for Water Basin:
    a. After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met:
        i. Cement reaches a minimum compressive strength of 500 psi at the shoe
        ii. Until cement has been in place at least 8 hours.
    b. WOC time will be recorded in the driller's log.

16. Medium/High/Critical Cave/Karst Areas:
    a. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
    b. In Critical Cave/Karst Areas cement must come to surface on the first three casing strings.
    c. In Medium and High Cave/Karst Areas, if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
    d. In Critical Cave/Karst Areas, if cement does not circulate to surface on the first three casing strings, the cement on the 4th casing string must come to surface.

Drilling Mud

1. 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.

Waste Material and Fluids

1. 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

 Approval Date: 08/17/2023

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

Special Requirements

1. Communitization Agreement
    a. The operator will submit a Communitization Agreement to the Santa Fe Office (301 Dinosaur Trail, Santa Fe, NM 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.
    b. 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.
        i. The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
        ii. 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.
    c. In addition, the well sign shall include the surface and bottom hole lease numbers.
        i. When the Communitization Agreement number is known, it shall also be on the sign.

2. Unit Wells
    a. The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers.
        i. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.
    b. Commercial Well Determination
        i. A commercial well determination shall be submitted after production has been established for at least six months (this is not necessary for secondary recovery unit wells).

3. Hydrogen Sulfide (H2S)
    a. If H2S is encountered, provide measured values and formations to the BLM.
    b. An H2S area must meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items.

c. An H2S Drilling Plan shall be activated 500 feet prior to drilling into any formation designated as having H2S.
d. Hydrogen Sulfide 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 3176 requirements, which includes equipment and personnel/public protection items.

4. Capitan Reef
    a. If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following (Use this for 3 string wells in the Capitan Reef, if it is a 4 string well ensure fresh water based mud is used across the Capitan interval):
        i. Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
        ii. Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports.
        iii. The daily drilling report should show mud volume per shift/tour.
        iv. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval.
        v. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

5. Salt Water Disposal Wells
    a. The operator shall supply the BLM with a copy of a mudlog over the permitted disposal interval and estimated in situ water salinity based on open-hole logs.
    b. If hydrocarbons are encountered while drilling, the operator shall notify the BLM.
    c. The operator shall provide to the BLM a summary of formation depth picks based on mudlog and geophysical logs along with a copy of the mudlog and open-hole logs from total depth to top of Devonian.
    d. An NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:
        i. Properly evaluate the injection zone utilizing open-hole logs, swab testing and/or any other method to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation shall be reviewed by the BLM prior to injection commencing.
        ii. Restrict the injection fluid to the approved formation.
        iii. If a step rate test will be run, an NOI sundry shall be submitted to the BLM for approval.

e. If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

6. WIPP Requirements
   a. If the proposed surface well or bottom hole is located within 330 feet of the WIPP Land Withdrawal Area boundary:
      i. Daily drilling reports, logs, and deviation survey information are required to be submitted to the Bureau of Land Management Engineering Department and the U.S. Department of Energy (per requirements of the Joint Powers Agreement) until a total vertical depth of 7,000 feet is reached. These reports will have at a minimum the rate of penetration and a clearly marked section showing the deviation for each 500-foot interval. Operator may be required to do more frequent deviation surveys based on the daily information submitted and may be required to take other corrective measures.
      ii. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed.
      iii. Upon completion of the well, the operator shall submit a complete directional survey.
      iv. Any future entry into the well for purposes of completing additional drilling will require supplemental information.
   b. Required information shall be emailed to OilGasReports@wipp.ws.
      i. Attached files must not be greater than 20 MB.
      ii. Call WIPP Tech Support at 575-234-7422, during the hours of 7:00am to 4:30pm, if there are any issues sending to this address.

 Approval Date: 08/17/2023

AFMSS

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

Operator Certification Data Report

08/24/2023

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: SARAH CHAPMAN **Signed on:** 07/11/2023

Title: Regulatory Directory

Street Address: 9655 KATY FREEWAY, SUITE 500

City: Houston **State:** TX **Zip:** 77024

Phone: (832)930-8613

Email address: SCHAPMAN@SPUREPLLC.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
08/24/2023

APD ID: 10400087469
Submission Date: 08/18/2022
Operator Name: SPUR ENERGY PARTNERS LLC
Well Name: MAYARO 22 STATE COM
Well Number: 71H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - General

APD ID: 10400087469
Tie to previous NOS? N
Submission Date: 08/18/2022
BLM Office: Carlsbad
User: SARAH CHAPMAN
Title: Regulatory Directory
Federal/Indian APD: FED
Is the first lease penetrated for production Federal or Indian? FED
Lease number: NMNM080268
Lease Acres:
Surface access agreement in place?
Allotted?
Reservation:
Agreement in place? NO
Federal or Indian agreement:
Agreement number:
Agreement name:
Keep application confidential? N
Permitting Agent? NO
APD Operator: SPUR ENERGY PARTNERS LLC
Operator letter of

Operator Info

Operator Organization Name: SPUR ENERGY PARTNERS LLC
Operator Address: 9655 KATY FREEWAY, SUITE 500
Zip: 77024
Operator PO Box:
Operator City: Houston
State: TX
Operator Phone: (832)930-8548
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: MAYARO 22 STATE COM
Well Number: 71H
Well API Number:
Field/Pool or Exploratory? Field and Pool
Field Name: EMPIRE
Pool Name: GLORIETA-YESO

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

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:** MAYARO 22 EAST STATE COM **Number:** 11H, 71H

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

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: **Distance to nearest well:** 20 FT **Distance to lease line:** 0 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Mayaro22StateCom71H_SitePlan_20220817120332.pdf

Mayaro22StateCom71H_Supplemental_20220817120333.pdf

Mayaro22StateCom71H_C_102_20220817120333.pdf

Well work start Date: 04/29/2023 **Duration:** 10 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number: 19680 **Reference Datum:** GROUND LEVEL

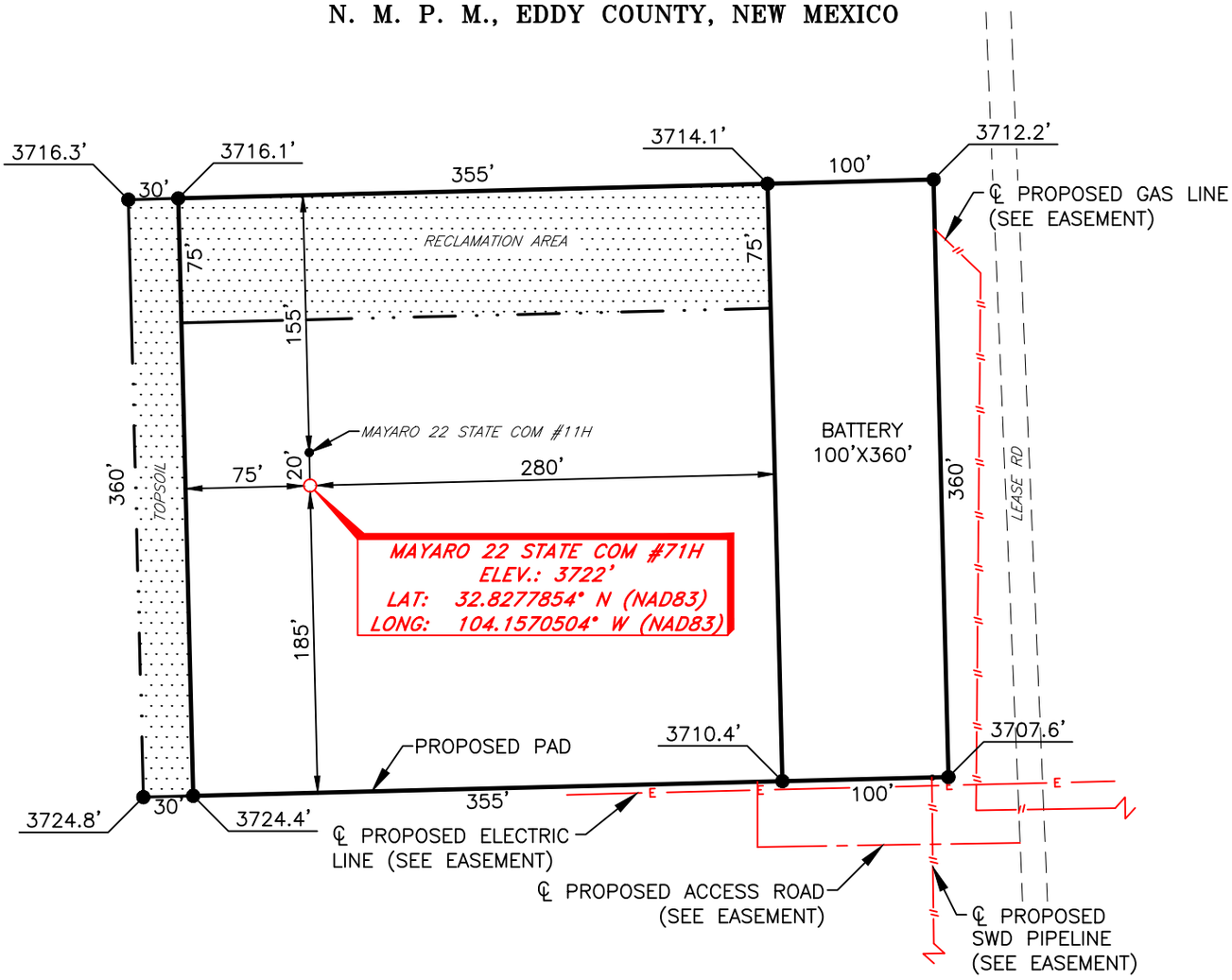
Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	215	FSL	570	FEL	17S	28E	15	Aliquot SESE	32.8277854	-104.1570504	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 080268	3722	0	0	N
KOP Leg #1	822	FSL	401	FEL	17S	28E	15	Aliquot SESE	32.8294535	-104.1564974	EDDY	NEW MEXICO	NEW MEXICO	F	NMNM 080268	439	3354	3283	N

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

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	1	FNL	375	FEL	17S	28E	22	Aliquot NENE	32.827208	-104.156387	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-768	4975	4490	Y
PPP Leg #1-2	100	FNL	375	FEL	17S	28E	22	Aliquot NENE	32.8269232	-104.1563907	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-778	5077	4500	Y
EXIT Leg #1	100	FSL	375	FEL	17S	28E	22	Aliquot SESE	32.8130725	-104.1565577	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-719	10100	4441	Y
BHL Leg #1	50	FSL	375	FEL	17S	28E	22	Aliquot SESE	32.8129352	-104.1565642	EDDY	NEW MEXICO	NEW MEXICO	S	STATE	-718	10171	4440	Y

SPUR ENERGY PARTNERS LLC.
MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.);

Go North on CR #209 approx. 1.3 miles to a lease road on the left;

Turn left and go Northwest approx. 0.8 miles to a proposed road on the left;

Turn left and go West approx. 158 feet road turns right;

Turn right and continue North approx. 220 feet to location on the left.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID – NM EAST DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS22060699
DWG. NO.: 22060699–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 100'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

Intent ☐ As Drilled ☐

API #

Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-015-54136	96210	EMPIRE; GLORIETA-YESO

4 Property Code	5 Property Name	6 Well Number
325868	MAYARO 22 STATE COM	71H

7 OGRID NO.	8 Operator Name	9 Elevation
328947	SPUR ENERGY PARTNERS LLC.	3722'

10 Surface Location

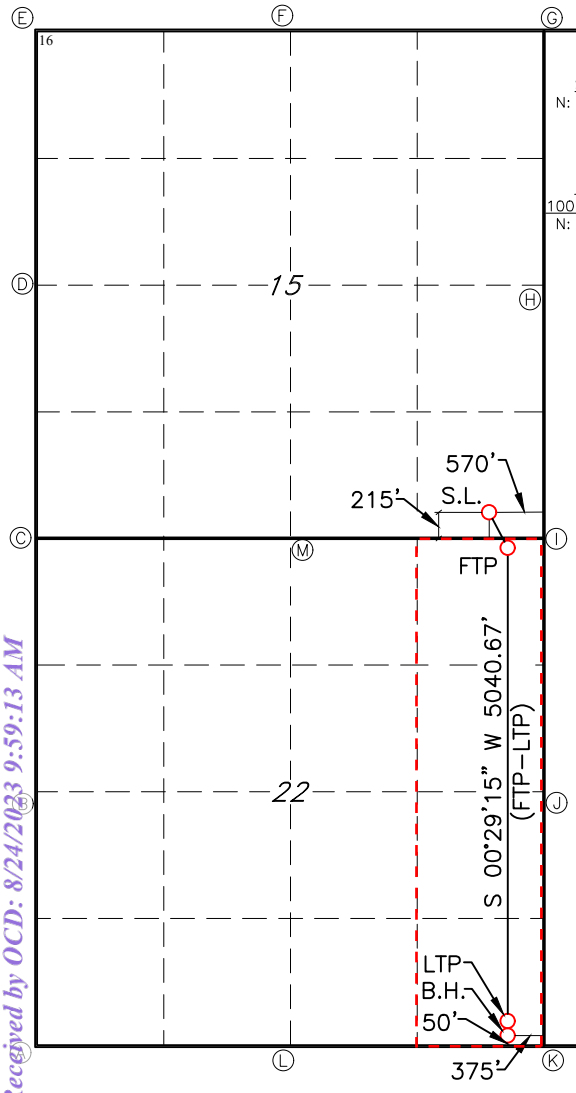
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet From the	East/West line	County
P	15	17S	28E		215	SOUTH	570	EAST	EDDY

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	22	17S	28E		50	SOUTH	375	EAST	EDDY

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
160			

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.



GEODETIC DATA
NAD 83 GRID – NM EAST

SURFACE LOCATION (SL)
N: 664926.4 – E: 595486.5
LAT: 32.8277854° N
LON: 104.1570504° W

LAST TAKE POINT (LTP)
100' FSL & 375' FEL (SEC22)
N: 659573.8 – E: 595646.8
LAT: 32.8130725° N
LON: 104.1565577° W

FIRST TAKE POINT (FTP)
100' FNL & 375' FEL (SEC22)
N: 664613.0 – E: 595689.7
LAT: 32.8269232° N
LON: 104.1563907° W

BOTTOM HOLE (BH)
N: 659523.9 – E: 595644.9
LAT: 32.8129352° N
LON: 104.1565642° W

CORNER DATA
NAD 83 GRID – NM EAST

A: FOUND BRASS CAP "1941"
N: 659457.7 – E: 590794.9

B: FOUND BRASS CAP "1941"
N: 662066.7 – E: 590825.9

C: FOUND BRASS CAP "1941"
N: 664676.8 – E: 590857.1

D: FOUND BRASS CAP "1941"
N: 667324.8 – E: 590770.1

E: CALCULATED CORNER
N: 669970.6 – E: 590686.3

F: FOUND BRASS CAP "1941"
N: 670001.6 – E: 593305.7

G: FOUND BRASS CAP "1941"
N: 670028.0 – E: 595911.3

H: FOUND BRASS CAP "1941"
N: 667371.0 – E: 595986.7

I: FOUND BRASS CAP "1941"
N: 664715.7 – E: 596062.5

J: FOUND BRASS CAP "1941"
N: 662071.0 – E: 596116.8

K: FOUND BRASS CAP "1941"
N: 659475.1 – E: 596017.9

L: FOUND BRASS CAP "1941"
N: 659466.8 – E: 593406.4

M: FOUND BRASS CAP "1941"
N: 664696.3 – E: 593458.5

17 OPERATOR CERTIFICATION

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

Sarah Chapman 08/16/2022
Signature Date

SARAH CHAPMAN
Printed Name

SCHAPMAN@SPURENERGY.COM
E-mail Address

18 SURVEYOR CERTIFICATION

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

06/08/2022
Date of Survey

Signature and Seal of Professional Surveyor:

ROBERT M. HOWETT
NEW MEXICO
19680
PROFESSIONAL SURVEYOR

19680
Certificate Number

Job No: LS22060699

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

Drilling Plan Data Report
08/24/2023

APD ID: 10400087469
Submission Date: 08/18/2022
Operator Name: SPUR ENERGY PARTNERS LLC
Well Name: MAYARO 22 STATE COM
Well Number: 71H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
11975306	QUATERNARY	3722	0	0	DOLOMITE, OTHER : CALICHE	USEABLE WATER	N
11975314	TOP SALT	3372	350	350	ANHYDRITE	OTHER : SALT	N
11975315	TANSILL	3162	560	560	DOLOMITE, SANDSTONE	NONE	N
11975316	YATES	3057	665	665	DOLOMITE, LIMESTONE, SHALE, SILTSTONE	NONE	N
11975317	SEVEN RIVERS	2802	920	920	DOLOMITE, LIMESTONE	CO2, NATURAL GAS	N
11975318	QUEEN	2237	1485	1485	ANHYDRITE, DOLOMITE, SANDSTONE	NATURAL GAS, OIL	N
11975307	GRAYBURG	1822	1900	1900	ANHYDRITE	NATURAL GAS, OIL	N
11975308	SAN ANDRES	1197	2525	2525	DOLOMITE, LIMESTONE	NATURAL GAS, OIL	N
11975310	GLORIETA	97	3625	3750	DOLOMITE, SANDSTONE	NATURAL GAS, OIL	N
11975311	PADDOCK	17	3705	3920	DOLOMITE, LIMESTONE	NATURAL GAS, OIL	Y
11975312	BLINEBRY	-438	4160	4200	DOLOMITE, LIMESTONE	NATURAL GAS, OIL	N
11975313	TUBB	-1313	5035	5200	DOLOMITE, LIMESTONE	OIL	N

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M
Rating Depth: 5000

Equipment: A 3000psi 5000' rated BOP stack consisting of an annular preventer and double (blind & pipe) ram will be used below surface casing to TD. See attached BOP and choke manifold diagrams.
Requesting Variance? YES

Variance request: Spur Energy Partners LLC requests permission to adjust the BOP break testing requirements as per the verbal agreement reached over the phone between SPUR/BLM on September 7, 2020. A separate sundry will be sent prior to spud that reflects the pad-based break testing plan. Spur requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

the APD and be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no bends).

Testing Procedure: BOP break test under the following conditions: After a full BOP test is conducted When skidding to drill the production section, where the surface casing point is shallower than the 3 Bone Spring or 10,000 TVD. When skidding to drill a production section that does not penetrate the 3rd Bone Spring or deeper. If the kill line is broken prior to skid, four tests will be performed. 1) The void between the wellhead and the spool (this consists of two tests) 2) The spool between the kill lines and the choke manifold (this consists of two tests) If the kill line is not broken prior to skid, two tests will be performed. 1) The void between the wellhead and the pipe rams

Choke Diagram Attachment:

Mayaro22StateCom71H_13.625ChokeBOPDiagramUpdate_20220817120933.pdf

BOP Diagram Attachment:

Mayaro22StateCom71H_13.625ChokeBOPDiagramUpdate_20220817121012.pdf

Mayaro22StateCom71H_FlexHoseCert_20220817121012.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	275	0	275	3453	3178	275	J-55	54.5	BUTT	1.125	1.2	DRY	1.4	DRY	1.4
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	1350	0	1230	3453	2223	1350	J-55	36	BUTT	1.125	1.2	DRY	1.4	DRY	1.4
3	PRODUCTION	8.75	7.0	NEW	API	Y	0	4850	0	4458	3453	-1005	4850	L-80	32	OTHER - BK-HT	1.125	1.2	DRY	1.4	DRY	1.4
4	PRODUCTION	8.75	5.5	NEW	API	Y	4850	10171	4458	4440	-1005	-987	5321	L-80	20	OTHER - BK-HT	1.125	1.2	DRY	1.4	DRY	1.4

Casing Attachments

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Mayaro22StateCom71H_CasingAssumptionsSheet_20220817121344.pdf

Mayaro22StateCom71H_csg13.375_54.50_J55_20220817121344.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Mayaro22StateCom71H_CasingAssumptionsSheet_20220817121607.pdf

Mayaro22StateCom71H_csg9.625_36_J55_20220817121607.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Mayaro22StateCom71H_csg5.5_BKHT_20_HCL80_20220817121449.pdf

Casing Design Assumptions and Worksheet(s):

Mayaro22StateCom71H_CasingAssumptionsSheet_20220817121459.pdf

Mayaro22StateCom71H_csg7_BKHT_32_HCL80_20220817121459.pdf

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Casing Attachments

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Mayaro22StateCom71H_csg7_BKHT_32_HCL80_20220817121530.pdf

Casing Design Assumptions and Worksheet(s):

Mayaro22StateCom71H_CasingAssumptionsSheet_20220817121538.pdf

Mayaro22StateCom71H_csg5.5_BKHT_20_HCL80_20220817121538.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead		0	275	55	1.84	12.2	101	100	CLASS C PREMIUM CEMENT	6% bentonite + 0.5% thixotropic agent + ¼ #/sk cello flake
INTERMEDIATE	Tail		275	1350	393	2.32	13.2	912	165	CLASS C PREMIUM CEMENT	6% bentonite + 0.5% thixotropic agent + ¼ #/sk cello flake
SURFACE	Lead		0	275	207	2.32	13.2	480	165	CLASS C PREMIUM PLUS	6% bentonite + 0.5% thixotropic agent + ¼ #/sk cello flake
PRODUCTION	Lead		0	3850	468	2.54	11.8	1189	0	CLASS C PREMIUM PLUS	5% salt + 6% bentonite + 0.1% retarder + ¼ #/sk cello flake
PRODUCTION	Tail		3850	10171	1244	1.81	13.2	2252	50	CLASS C PREMIUM PLUS	0.3% fluid loss + 0.1% dispersant + 0.1% free water control + 0.4% defoamer + 0.1% retarder + ¼ #/sk cello flake

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: Same type mud will be used for both casing strings. Necessary mud products (e. g., barite, bentonite, gypsum, lime, soda ash, caustic soda, nut plug, cedar bark fiber, cotton seed hulls, drilling paper, saltwater clay, CaCl2) will be on site to handle any abnormal hole condition that may be encountered while drilling. High viscosity sweeps will be pumped as needed to clean the hole.

Describe the mud monitoring system utilized: Mud system will be monitored visually and electronically with a Pason PVT system or its equivalent.

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
1350	10171	OTHER : BRINE	10	10.5							
0	275	WATER-BASED MUD	8.6	8.9							
275	1350	OTHER : BRINE	10	10.5							

Section 6 - Test, Logging, Coring

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

A mud logger will be used from surface casing point to TD. A gamma ray log will be run from TD to the surface casing point. No other logs are planned at this time.

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

MUD LOG/GEOLOGICAL LITHOLOGY LOG,GAMMA RAY LOG,

Coring operation description for the well:

No core or drill stem test is planned.

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 1801 **Anticipated Surface Pressure:** 810

Anticipated Bottom Hole Temperature(F): 112

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

Mayaro22StateCom71H_EmergencyContactList_20220817121802.pdf

Mayaro22StateCom71H_H2S_20220817121802.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Mayaro22StateCom71H_DirectPlan_20220817121905.pdf

Mayaro22StateCom71H_DirectPlot_20220817121905.pdf

Mayaro22StateCom71H_AC_20220817121905.pdf

Other proposed operations facets description:

Spur Energy Partners LLC requests the option to contract a Surface Rig to drill, set surface/intermediate casing, and cement for this well. If the timing between rigs is such that Spur Energy Partners LLC would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.

Spur requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no bends).

Other proposed operations facets attachment:

Mayaro22StateCom71H_SpudderRig_20220817121922.pdf

Mayaro22StateCom71H_DrillPlan_20220817121922.pdf

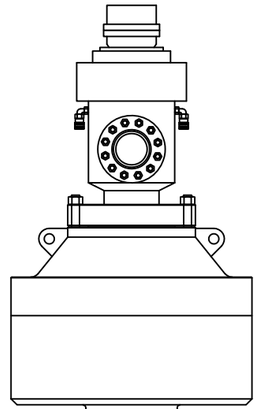
Mayaro22StateCom11H71H_NGMP_20220818142203.pdf

Other Variance attachment:

Mayaro22StateCom71H_13.625ChokeBOPDiagramUpdate_20220817121931.pdf

Mayaro22StateCom71H_FlexHoseCert_20220817121931.pdf

ANNULAR
13 5/8" 5,000 psi SHAFFER STYLE



DOUBLE GATE
13 5/8" 5,000 psi SHAFFER LWS STYLE

PIPE RAM

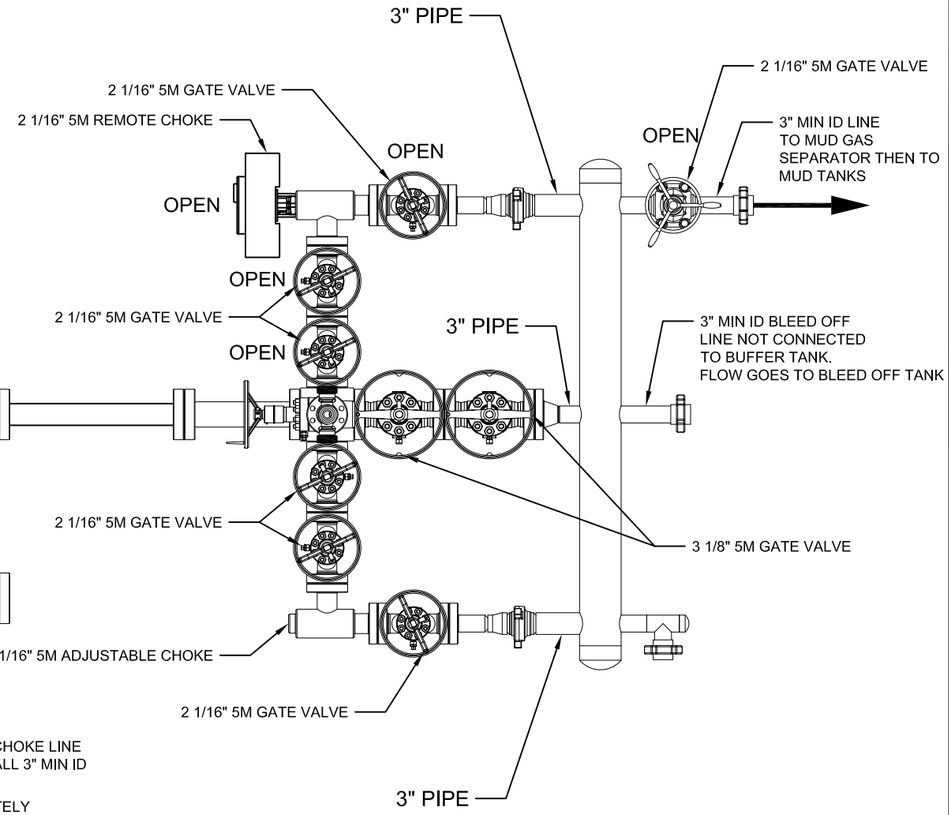
BLIND RAM

MUD CROSS
13 5/8" 5,000 psi, 3 1/8" 5M OUTLETS

CHOKE LINE
ALL 3" MIN ID

3 1/8" 5M REMOTELY
OPERATED VALVE

3 1/8" 5M GATE VALVE



Notes
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No.	Revision	Date

AKITA DRILLING LTD.
2302 8th Street, Nisku Alberta
T9E 7Z2 Tel: (780) 955-6700

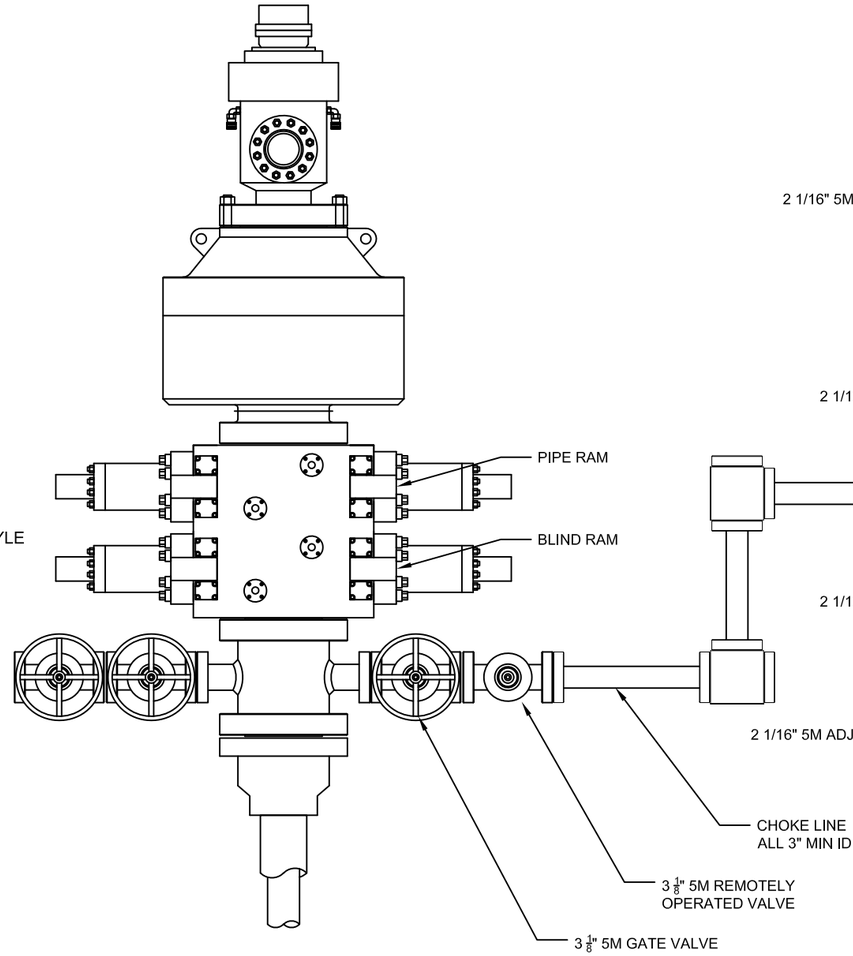
Date	Scale
5-6-2021	NTS
Dwn / Chk'd By: BG	File Name: R57 13 5M dou..
Project: R57	

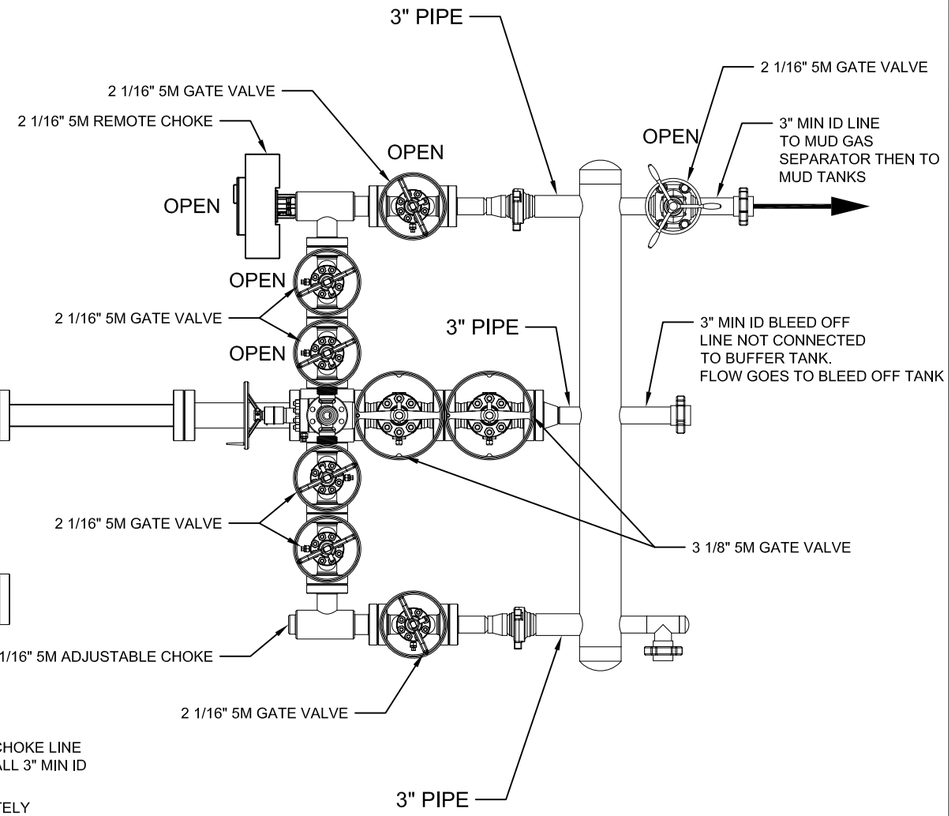
RIG 57 BOP SCHEMATIC

ANNULAR
13 5/8" 5,000 psi SHAFFER STYLE

DOUBLE GATE
13 5/8" 5,000 psi SHAFFER LWS STYLE

MUD CROSS
13 5/8" 5,000 psi, 3 1/8" 5M OUTLETS





Notes
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No.	Revision	Date

AKITA DRILLING LTD.
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Date	Scale
5-6-2021	NTS
Dwn / Chk'd By: BG	File Name: R57 13 5M dou..
Project: R57	

RIG 57 BOP SCHEMATIC

POWERING PROGRESS™

MTR DATA BOOK

CL2013

CUSTOMER: GATES CANADA INC
DATE: 12/19/2017
Purchase Order: D235455 (PO 45750)
Sales Order #: 509128
Product Description: 5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill Gates Hose Assembly c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached

Hose S/N: H-121917-14
PART NUMBER: FR5K3.517.0CK31/85KFLG S/C

CONTENTS INCLUDED

GMCO FITTINGS

17-309-1	INSERT STEM
15-095-1A	FERRULE

3 1/8 in. 5K FIXED FLANGE X 3 1/8 in. 5K FLOAT FLANGE

V4131	FIXED FLANGE
V5054	FLOAT FLANGE

WELDING SPECIFICATIONS
Certification and Procedure for welding

NDE RESULTS
1622371-03/1622371-01 Ultrasonic Test Results and Imaging

Safey Clamps
34145/34144

TEST CHART
Chart Recording of Hydrostatic Test

TEST CERTIFICATE
Document Product Details & Positive Results of Hydrostatic Testing

CERTIFICATE OF CONFORMANCE
A Declaration of the conformity with the type approval

IMAGES
Images of the product prior to shipping.

PACKING LIST
Details of Shipping Contents, Dimensions and Weights

BLACK GOLD®

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

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

PRESSURE TEST CERTIFICATE

Customer:	GATES CANADA INC	Test Date:	12/19/2017
Customer Ref.:	D235455 (PO 45750)	Hose Serial No.:	H-121917-14
Invoice No.:	509128	Created By:	Cristian Rivera

Product Description:	5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached

End Fitting 1:	3 1/8 in. 5K FIXED FLG	End Fitting 2:	3 1/8 in. 5K FLOAT FLG
Oracle Star No.:	68903550-9725917	Assembly Code:	15M5019042016H-121917-14
CUSTOMER P/N:	FR5K3.517.0CK31/85KFLG S/C	Test Pressure:	7,500 psi.
		Working Pressure:	5,000 psi.

Gates Engineering & Services North America certifies that:

The following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies) or GTS-04-048 (15K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements. This hose assembly was pressure tested using equipment and instrumentation that has been calibrated in accordance with the requirements set-forth in the GESNA management system.

Quality:	QUALITY	Production:	PRODUCTION
Date :	8/5/2021	Date :	8/5/2021
Signature :		Signature :	

F-PRD-005B

Revision 6_05032021

BLACK GOLD®

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

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

CERTIFICATE OF CONFORMANCE

This is to certify that all parts and materials included in this shipment have manufactured and/or processed in accordance with various Gates and API assembly and test specifications. Records of required tests are on-file and subject to examination. Test reports and subsequent test graphs have been made available with this shipment. Additional supporting documentation related to materials, welding, weld inspections, and heat-treatment activities are available upon request.

CUSTOMER:	GATES CANADA INC
CUSTOMER P.O.#:	D235455 (PO 45750)
PART DESCRIPTION:	FR5K3.517.0CK31/85KFLG S/C
PART DESCRIPTION:	5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached
SALES ORDER #:	509128
QUANTITY:	1
SERIAL #:	H-121917-14

SIGNATURE: J Rivera

TITLE: QUALITY ASSURANCE

DATE: 8/5/2021

Gates E&S

North America

7603 Prairie Oak dr.

Houston,TX

Hydrostatic Test

Customer= GATES CANADA

Date of test= 12/19/17

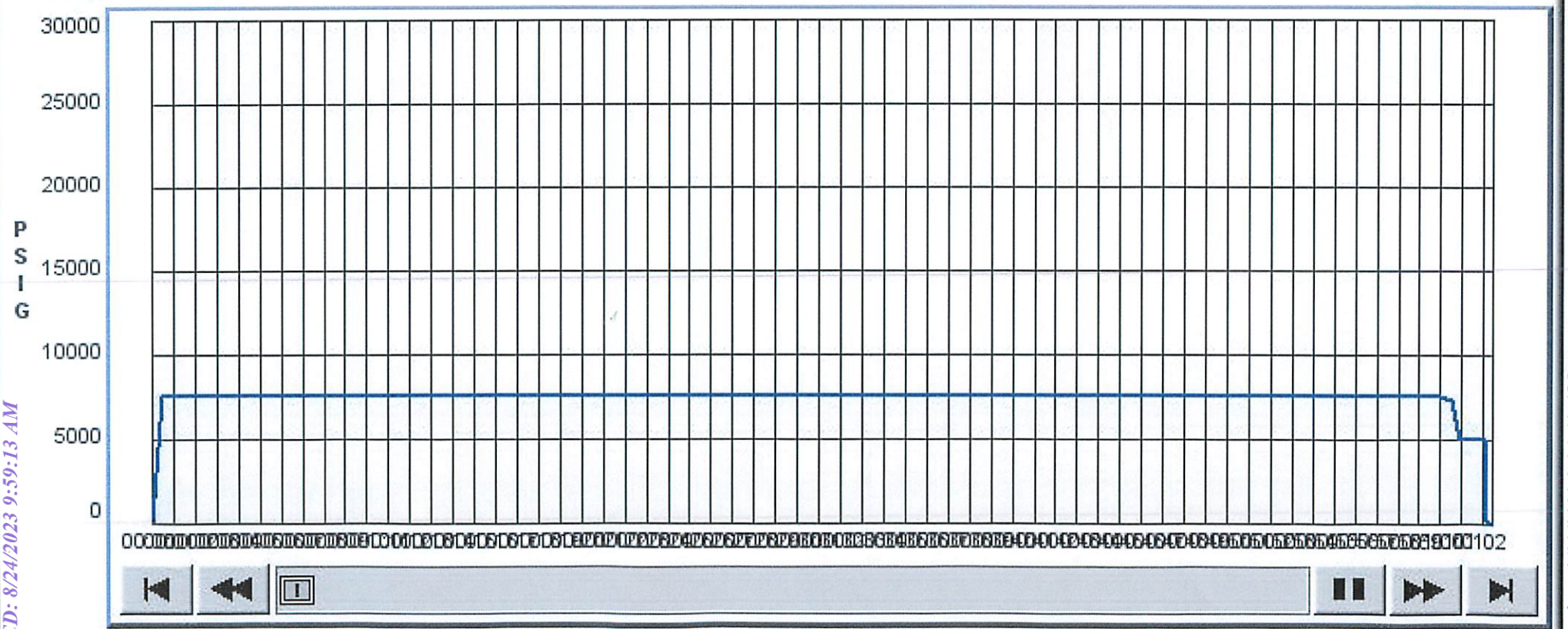
Serial # = H-121917-13,-14

Description = 3.5 5K 3 1/8 FLG 5K

Technician= CHRIS OLIVO

12/19/2017 16:53:26

17:55:52



Edwards Fabrication

1385 Hwy. 35 Bypass S.
P.O. Box 2350
Rockport, TX 78381

O: (361) 790-7910
F: (361) 790-7927

tedwards@edwardsfabrication.com
www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
Gates E & S North America
134 44th Street
Corpus Christi, TX 78405

Purchase Order: 1592198/0

Certificate Number				Date of Examination
34145				04/27/17
ID#	**Part Number**	**Description**	**SWL***	**Proofload**
34145	E3.5S	3.5" E Safety Clamp	6016 lbs.	12031 lbs.

The Safety Clamp unit identified on this certificate has been load tested completely assembled; including the clamp body, (2) 3/4" shackles, 5/8" x 48" wire rope sling and anchor tab. Thus, all components are tested at the "Proof" load. Do not disassemble. Do not interchange any part or parts of this tested unit with parts of other Safety Clamp units. DO NOT WELD, CUT, ADD-TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.

Cutting/Removing either one or both stainless steel Tamper-proof hardware cables renders this Test Certificate VOID.

** Safe Work Load*

THIS PRODUCT IS MANUFACTURED IN THE U.S.A.

We hereby verify that the above information is correct
as contained in the records of Edwards Fabrication L.L.C.

ISO 9001:2008
BUREAU VERITAS
Certification

Edwards Fabrication L.L.C. is certified as having a Quality Management System.

Thomas F. Edwards
President
Edwards Fabrication L.L.C.

Edwards Fabrication...

1385 Hwy. 35 Bypass S.
P.O. Box 2350
Rockport, TX 78381

O: (361) 790-7910
F: (361) 790-7927

tedwards@edwardsfabrication.com
www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
Gates E & S North America
134 44th Street
Corpus Christi, TX 78405

Purchase Order: 1592198/0

Certificate Number				Date of Examination
34144				04/27/17
ID#	**Part Number**	**Description**	**SWL***	**Proofload**
34144	E3.5S	3.5" E Safety Clamp	6014 lbs.	12027 lbs.

The Safety Clamp unit identified on this certificate has been load tested completely assembled; including the clamp body, (2) 3/4" shackles, 5/8" x 48" wire rope sling and anchor tab. Thus, all components are tested at the "Proof" load. Do not disassemble. Do not interchange any part or parts of this tested unit with parts of other Safety Clamp units. DO NOT WELD, CUT, ADD-TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.

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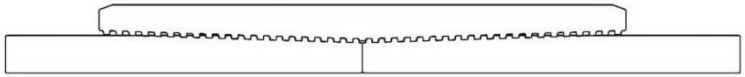
ISO 9001:2008
BUREAU VERITAS
Certification

Edwards Fabrication L.L.C. is certified as having a Quality Management System.

Thomas F. Edwards
President
Edwards Fabrication L.L.C.

PRECISION

Keeping You Connected.



SEMI PREMIUMCONNECTIONS FIELD TESTED. FIELD PROVEN.

Precision Connections BK-HT

5.5 in. 20 lb/ft HC-L80 with 6.3 in. Coupling OD

Pipe Body

Nominal OD	5.500	inches
Nominal Weight	20.00	lb/ft
Wall Thickness	0.361	inches
Plain End Weight	19.81	lb/ft
Drift	4.653	inches
Nominal ID	4.778	inches
Grade	HC-L80	
Min Yield	80,000	lbf/in²
Min Tensile	95,000	lbf/in²
Critical Section Area	5.828	in²
Pipe Body Yield Strength	466	kips
Min Internal Yield Pressure	9,190	psi
Collapse Pressure	9,490	psi

Connection

Coupling OD	6.300	inches
Coupling Length	8.250	inches
Make Up Loss	4.125	inches
Critical Section Area	8.456	in²
Internal Pressure Rating	100%	
External Pressure Rating	100%	
Tension Efficiency	100%	
Connection Strength	466	kips
Compression Efficiency	100%	
Uniaxial Bend Rating	58.2	° / 100 ft
Min Make Up Torque	6,050	ft-lbs
Yield Torque	23,250	ft-lbs

v1.2 7/26/2018

PRECISION

Keeping You Connected.

SEMI PREMIUMCONNECTIONS

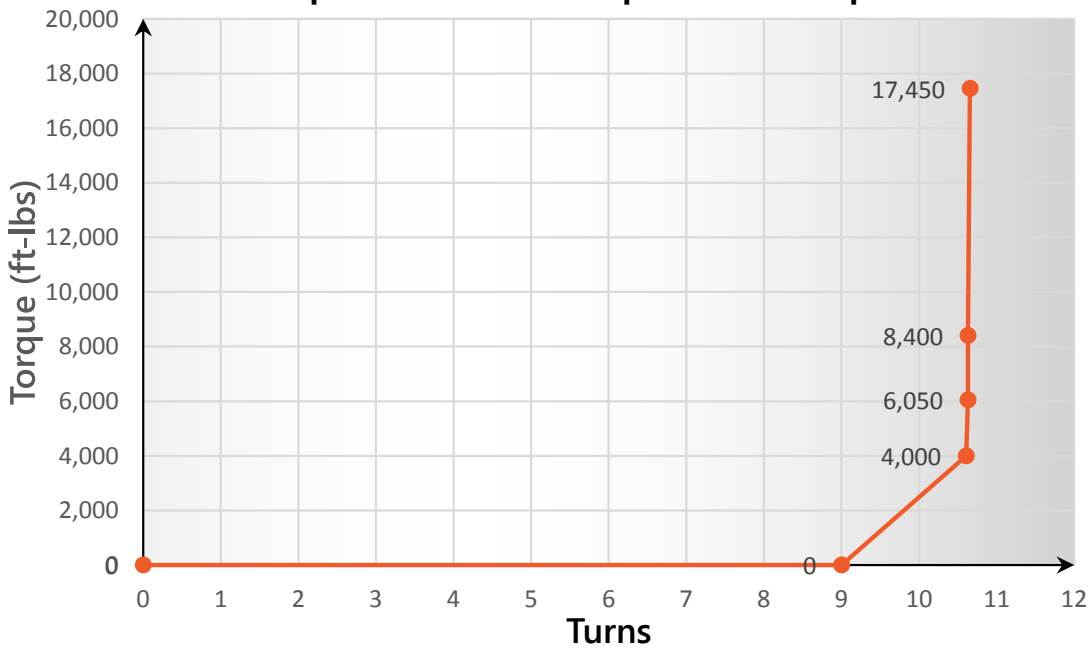
FIELD TESTED. FIELD PROVEN.

Torque Data Sheet - Precision Connections BK-HT

5.5 in. 20 lb/ft HC-L80 with 6.3 in. Coupling OD

Min Make Up Torque	6,050	ft-lbs	Max Operating Torque	19,800	ft-lbs
Max Make Up Torque	17,450	ft-lbs	Yield Torque	23,250	ft-lbs
Optimum Torque	8,400	ft-lbs			

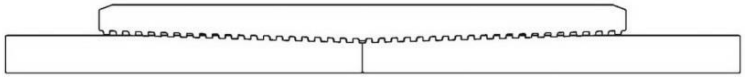
Representative Torque Turn Graph



v1.2 7/26/2018

PRECISION

Keeping You Connected.



SEMI PREMIUMCONNECTIONS FIELD TESTED. FIELD PROVEN.

Precision Connections BK-HT

7 in. 32 lb/ft HC-L80 with 7.875 in. Coupling OD

Pipe Body

Nominal OD	7.000	inches
Nominal Weight	32.00	lb/ft
Wall Thickness	0.453	inches
Plain End Weight	31.67	lb/ft
Drift	6.000	inches
Nominal ID	6.094	inches
Grade	HC-L80	
Min Yield	80,000	lbf/in²
Min Tensile	95,000	lbf/in²
Critical Section Area	9.317	in²
Pipe Body Yield Strength	745	kips
Min Internal Yield Pressure	9,060	psi
Collapse Pressure	9,290	psi

Connection

Coupling OD	7.875	inches
Coupling Length	9.000	inches
Make Up Loss	4.500	inches
Critical Section Area	11.859	in²
Internal Pressure Rating	100%	
External Pressure Rating	100%	
Tension Efficiency	100%	
Connection Strength	745	kips
Compression Efficiency	100%	
Uniaxial Bend Rating	46.5	° / 100 ft
Min Make Up Torque	9,250	ft-lbs
Yield Torque	35,650	ft-lbs

v1.2 7/26/2018

PRECISION

Keeping You Connected.

SEMI PREMIUMCONNECTIONS

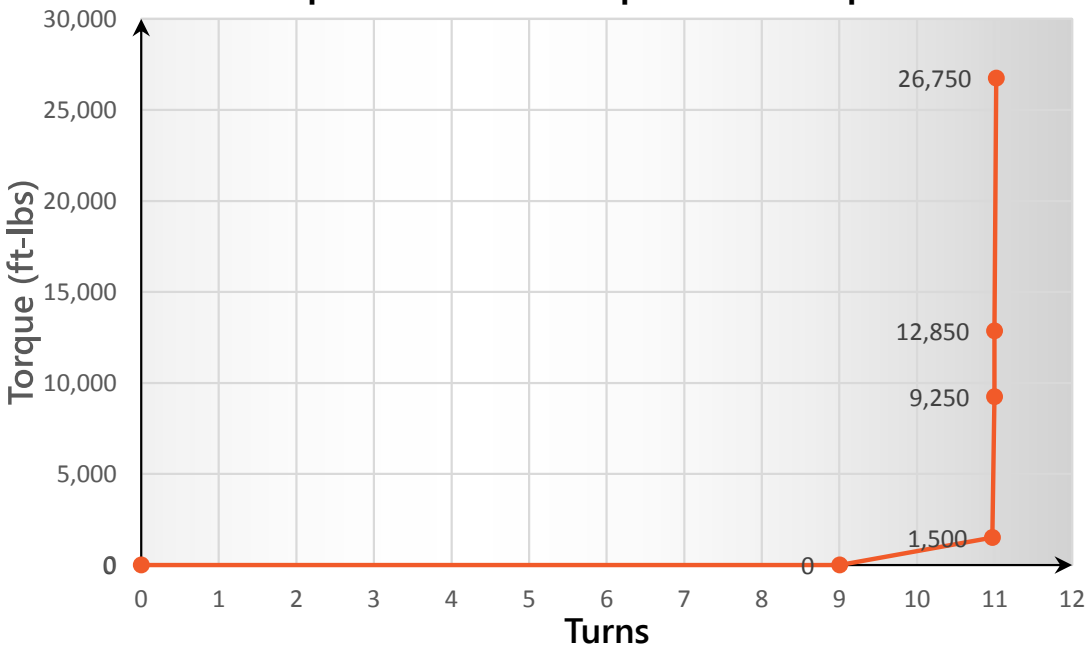
FIELD TESTED. FIELD PROVEN.

Torque Data Sheet - Precision Connections BK-HT

7 in. 32 lb/ft HC-L80 with 7.875 in. Coupling OD

Min Make Up Torque	9,250	ft-lbs	Max Operating Torque	30,300	ft-lbs
Max Make Up Torque	26,750	ft-lbs	Yield Torque	35,650	ft-lbs
Optimum Torque	12,850	ft-lbs			

Representative Torque Turn Graph



v1.2 7/26/2018

Casing Design Criteria and Load Case Assumptions

1. Collapse: DF_C=1.125
    a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
    b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and minimum mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft)
2. Burst: DF_B=1.125
    a. Pressure Test: psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
    b. Injection Down Casing: psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
3. Tensile: DF_T=1.4
    a. Overpull: An overpull force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.5 ppg).

Surface Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
9-5/8”	36	J-55	BTC	8.921	8.765	2,020	3,520	639	0.0773
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.30**	Lost Circulation		Mud		*None*		
Burst	1.125	**1.46**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.8**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***40,798 lbs (assuming 8.4 ppg fluid and 1,300’ casing-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
7”	32	HCL-80	BK-HT	6.094	6.000	11,890	12,460	1025	0.0361
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.75**	Lost Circulation		Mud		*None*		
Burst	1.125	**2.47**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.29**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***90,662 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
5-1/2”	20	L-80	BK-HT	4.778	4.653	9,490	9,190	466	0.0222

Safety Factors					
	API Rec. SF	**ACTUAL SF**	Case	External Fluids	Internal Fluids
Collapse	1.125	**3.75**	Lost Circulation	Mud	*None*
Burst	1.125	**2.47**	Plug Bump	Green Cement + 2ksi surf pressure	Displacement Fluid/Mud
Tension	1.4	**2.29**	100 klbs Overpull	Mud	Mud

Buoyed Casing Weight: ***56,664 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

U. S. Steel Tubular Products

13.375 54.5/0.38 J55

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MECHANICAL PROPERTIES	Pipe	BTC	LTC	STC	
Minimum Yield Strength	55,000	--	--	--	psi
Maximum Yield Strength	80,000	--	--	--	psi
Minimum Tensile Strength	75,000	--	--	--	psi
DIMENSIONS	**Pipe**	**BTC**	**LTC**	**STC**	
Outside Diameter	13.375	14.375	--	14.375	in.
Wall Thickness	0.380	--	--	--	in.
Inside Diameter	12.615	12.615	--	12.615	in.
Standard Drift	12.459	12.459	--	12.459	in.
Alternate Drift	--	--	--	--	in.
Nominal Linear Weight, T&C	54.50	--	--	--	lbs/ft
Plain End Weight	52.79	--	--	--	lbs/ft
PERFORMANCE	**Pipe**	**BTC**	**LTC**	**STC**	
Minimum Collapse Pressure	1,130	1,130	--	1,130	psi
Minimum Internal Yield Pressure	2,740	2,740	--	2,740	psi
Minimum Pipe Body Yield Strength	853,000.00	--	--	--	lbs
Joint Strength	--	909	--	514	1000 lbs
Reference Length	--	11,125	--	6,290	ft
MAKE-UP DATA	**Pipe**	**BTC**	**LTC**	**STC**	
Make-Up Loss	--	4.81	--	3.50	in.
Minimum Make-Up Torque	--	--	--	3,860	ft-lbs
Maximum Make-Up Torque	--	--	--	6,430	ft-lbs

U. S. Steel Tubular Products
10343 Sam Houston Park Dr., #120
Houston, TX 77064

1-877-893-9461
connections@uss.com
www.usstubular.com

Casing Design Criteria and Load Case Assumptions

1. Collapse: DF_C=1.125
    a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
    b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and minimum mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft)
2. Burst: DF_B=1.125
    a. Pressure Test: psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
    b. Injection Down Casing: psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
3. Tensile: DF_T=1.4
    a. Overpull: An overpull force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.5 ppg).

Surface Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
9-5/8”	36	J-55	BTC	8.921	8.765	2,020	3,520	639	0.0773
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.30**	Lost Circulation		Mud		*None*		
Burst	1.125	**1.46**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.8**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***40,798 lbs (assuming 8.4 ppg fluid and 1,300’ casing-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
7”	32	HCL-80	BK-HT	6.094	6.000	11,890	12,460	1025	0.0361
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.75**	Lost Circulation		Mud		*None*		
Burst	1.125	**2.47**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.29**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***90,662 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
5-1/2”	20	L-80	BK-HT	4.778	4.653	9,490	9,190	466	0.0222

Safety Factors					
	API Rec. SF	**ACTUAL SF**	Case	External Fluids	Internal Fluids
Collapse	1.125	**3.75**	Lost Circulation	Mud	*None*
Burst	1.125	**2.47**	Plug Bump	Green Cement + 2ksi surf pressure	Displacement Fluid/Mud
Tension	1.4	**2.29**	100 klbs Overpull	Mud	Mud

Buoyed Casing Weight: ***56,664 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

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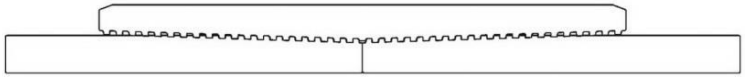

SEMI PREMIUMCONNECTIONS FIELD TESTED. FIELD PROVEN.

Precision Connections BK-HT

7 in. 32 lb/ft HC-L80 with 7.875 in. Coupling OD

Pipe Body

Nominal OD	7.000	inches
Nominal Weight	32.00	lb/ft
Wall Thickness	0.453	inches
Plain End Weight	31.67	lb/ft
Drift	6.000	inches
Nominal ID	6.094	inches
Grade	HC-L80	
Min Yield	80,000	lbf/in²
Min Tensile	95,000	lbf/in²
Critical Section Area	9.317	in²
Pipe Body Yield Strength	745	kips
Min Internal Yield Pressure	9,060	psi
Collapse Pressure	9,290	psi

Connection

Coupling OD	7.875	inches
Coupling Length	9.000	inches
Make Up Loss	4.500	inches
Critical Section Area	11.859	in²
Internal Pressure Rating	100%	
External Pressure Rating	100%	
Tension Efficiency	100%	
Connection Strength	745	kips
Compression Efficiency	100%	
Uniaxial Bend Rating	46.5	° / 100 ft
Min Make Up Torque	9,250	ft-lbs
Yield Torque	35,650	ft-lbs

v1.2 7/26/2018

PRECISION

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SEMI PREMIUMCONNECTIONS

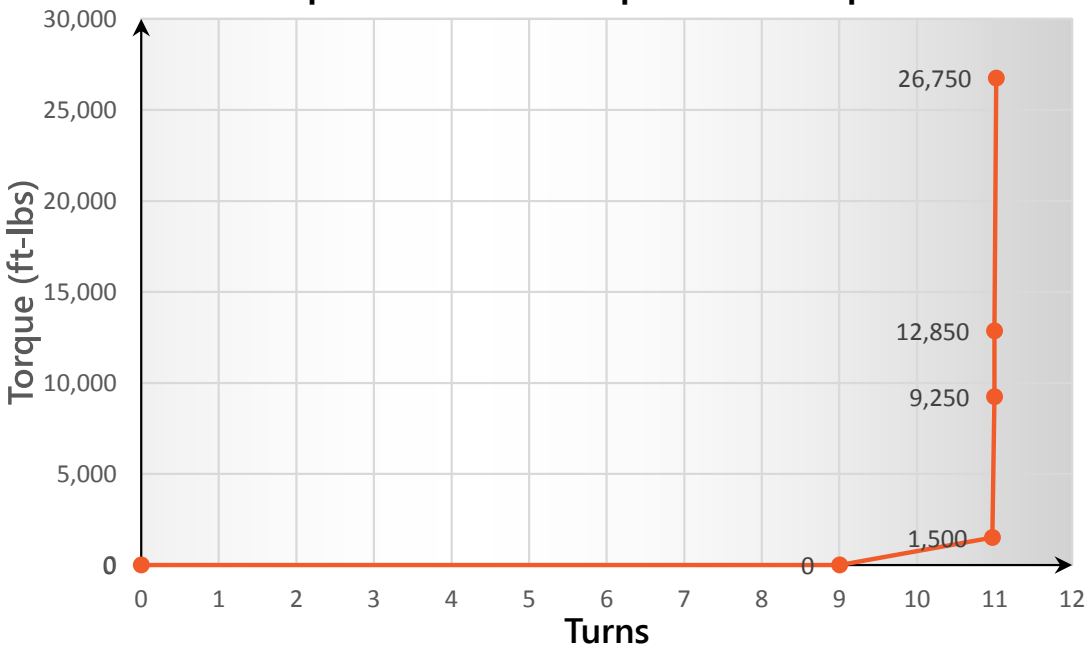
FIELD TESTED. FIELD PROVEN.

Torque Data Sheet - Precision Connections BK-HT

7 in. 32 lb/ft HC-L80 with 7.875 in. Coupling OD

Min Make Up Torque	9,250	ft-lbs	Max Operating Torque	30,300	ft-lbs
Max Make Up Torque	26,750	ft-lbs	Yield Torque	35,650	ft-lbs
Optimum Torque	12,850	ft-lbs			

Representative Torque Turn Graph



v1.2 7/26/2018

Casing Design Criteria and Load Case Assumptions

1. Collapse: DF_C=1.125
    a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
    b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and minimum mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft)
2. Burst: DF_B=1.125
    a. Pressure Test: psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
    b. Injection Down Casing: psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
3. Tensile: DF_T=1.4
    a. Overpull: An overpull force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.5 ppg).

Surface Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
9-5/8”	36	J-55	BTC	8.921	8.765	2,020	3,520	639	0.0773
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.30**	Lost Circulation		Mud		*None*		
Burst	1.125	**1.46**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.8**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***40,798 lbs (assuming 8.4 ppg fluid and 1,300’ casing-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
7”	32	HCL-80	BK-HT	6.094	6.000	11,890	12,460	1025	0.0361
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.75**	Lost Circulation		Mud		*None*		
Burst	1.125	**2.47**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.29**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***90,662 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
5-1/2”	20	L-80	BK-HT	4.778	4.653	9,490	9,190	466	0.0222

Safety Factors					
	API Rec. SF	**ACTUAL SF**	Case	External Fluids	Internal Fluids
Collapse	1.125	**3.75**	Lost Circulation	Mud	*None*
Burst	1.125	**2.47**	Plug Bump	Green Cement + 2ksi surf pressure	Displacement Fluid/Mud
Tension	1.4	**2.29**	100 klbs Overpull	Mud	Mud

Buoyed Casing Weight: ***56,664 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

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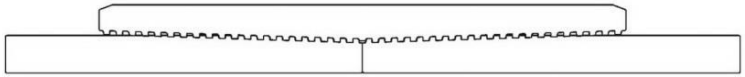


SEMI PREMIUMCONNECTIONS FIELD TESTED. FIELD PROVEN.

Precision Connections BK-HT

5.5 in. 20 lb/ft HC-L80 with 6.3 in. Coupling OD

Pipe Body

Nominal OD	5.500	inches
Nominal Weight	20.00	lb/ft
Wall Thickness	0.361	inches
Plain End Weight	19.81	lb/ft
Drift	4.653	inches
Nominal ID	4.778	inches
Grade	HC-L80	
Min Yield	80,000	lbf/in²
Min Tensile	95,000	lbf/in²
Critical Section Area	5.828	in²
Pipe Body Yield Strength	466	kips
Min Internal Yield Pressure	9,190	psi
Collapse Pressure	9,490	psi

Connection

Coupling OD	6.300	inches
Coupling Length	8.250	inches
Make Up Loss	4.125	inches
Critical Section Area	8.456	in²
Internal Pressure Rating	100%	
External Pressure Rating	100%	
Tension Efficiency	100%	
Connection Strength	466	kips
Compression Efficiency	100%	
Uniaxial Bend Rating	58.2	° / 100 ft
Min Make Up Torque	6,050	ft-lbs
Yield Torque	23,250	ft-lbs

v1.2 7/26/2018

PRECISION

Keeping You Connected.

SEMI PREMIUMCONNECTIONS

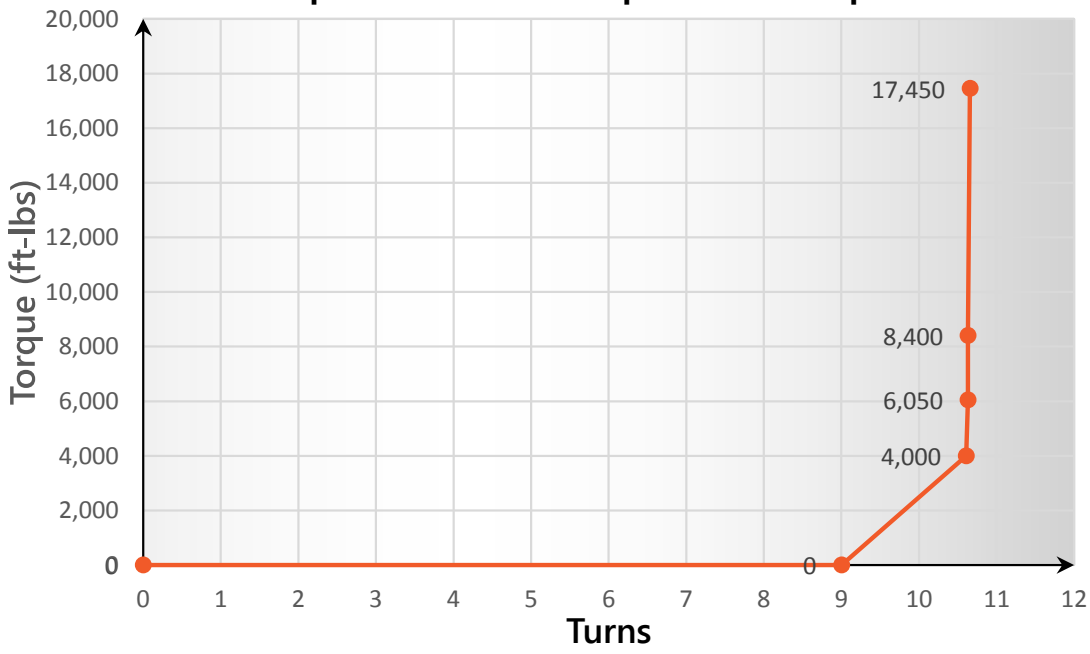
FIELD TESTED. FIELD PROVEN.

Torque Data Sheet - Precision Connections BK-HT

5.5 in. 20 lb/ft HC-L80 with 6.3 in. Coupling OD

Min Make Up Torque	6,050	ft-lbs	Max Operating Torque	19,800	ft-lbs
Max Make Up Torque	17,450	ft-lbs	Yield Torque	23,250	ft-lbs
Optimum Torque	8,400	ft-lbs			

Representative Torque Turn Graph



v1.2 7/26/2018

Casing Design Criteria and Load Case Assumptions

1. Collapse: DF_C=1.125
    a. Full Internal Evacuation: Collapse force equal to the mud gradient in which the casing will be run (0.65 psi/ft). The effects of axial load on collapse will be considered.
    b. Cementing: Collapse force equal to the gradient of planned cement slurries to planned depths and minimum mud gradient in which the casing will be run above that (0.65 psi/ft) and an internal force equal to mud gradient of displacement fluid (0.43 psi/ft)
2. Burst: DF_B=1.125
    a. Pressure Test: psi casing test with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
    b. Injection Down Casing: psi surface injection pressure plus an internal pressure gradient of 0.65 psi/ft with an external force equal to the mud gradient in which the casing will be run (0.65 psi/ft), which is a more conservative backup force than pore pressure.
3. Tensile: DF_T=1.4
    a. Overpull: An overpull force of 100,000 lbs is applied at the shoe along with the weight of the casing string utilizing the effects of buoyancy (8.5 ppg).

Surface Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
9-5/8”	36	J-55	BTC	8.921	8.765	2,020	3,520	639	0.0773
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.30**	Lost Circulation		Mud		*None*		
Burst	1.125	**1.46**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.8**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***40,798 lbs (assuming 8.4 ppg fluid and 1,300’ casing-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
7”	32	HCL-80	BK-HT	6.094	6.000	11,890	12,460	1025	0.0361
Safety Factors									
	API Rec. SF	**ACTUAL SF**	Case		External Fluids		Internal Fluids		
Collapse	1.125	**3.75**	Lost Circulation		Mud		*None*		
Burst	1.125	**2.47**	Plug Bump		Green Cement + 2ksi surf pressure		Displacement Fluid/Mud		
Tension	1.4	**2.29**	100 klbs Overpull		Mud		Mud		

Buoyed Casing Weight: ***90,662 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

Production Casing Program									
Casing Size (in)	**Weight (ppf)**	**Grade**	**Connection**	**ID**	**ID (drift)**	**Collapse (psi)**	**Burst (psi)**	**Tension (1,000 lbs)**	**Capacity (bbl/ft)**
5-1/2”	20	L-80	BK-HT	4.778	4.653	9,490	9,190	466	0.0222

Safety Factors					
	API Rec. SF	**ACTUAL SF**	Case	External Fluids	Internal Fluids
Collapse	1.125	**3.75**	Lost Circulation	Mud	*None*
Burst	1.125	**2.47**	Plug Bump	Green Cement + 2ksi surf pressure	Displacement Fluid/Mud
Tension	1.4	**2.29**	100 klbs Overpull	Mud	Mud

Buoyed Casing Weight: ***56,664 lbs (assuming 8.4 ppg fluid and 3,250’ TVD-worst case scenario)***

U. S. Steel Tubular Products

9.625 36/0.352 J55

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MECHANICAL PROPERTIES	Pipe	BTC	LTC	STC	
Minimum Yield Strength	55,000	--	--	--	psi
Maximum Yield Strength	80,000	--	--	--	psi
Minimum Tensile Strength	75,000	--	--	--	psi
DIMENSIONS	**Pipe**	**BTC**	**LTC**	**STC**	
Outside Diameter	9.625	10.625	10.625	10.625	in.
Wall Thickness	0.352	--	--	--	in.
Inside Diameter	8.921	8.921	8.921	8.921	in.
Standard Drift	8.765	8.765	8.765	8.765	in.
Alternate Drift	--	--	--	--	in.
Nominal Linear Weight, T&C	36.00	--	--	--	lbs/ft
Plain End Weight	34.89	--	--	--	lbs/ft
PERFORMANCE	**Pipe**	**BTC**	**LTC**	**STC**	
Minimum Collapse Pressure	2,020	2,020	2,020	2,020	psi
Minimum Internal Yield Pressure	3,520	3,520	3,520	3,520	psi
Minimum Pipe Body Yield Strength	564,000	--	--	--	lbs
Joint Strength	--	639	453	394	lbs
Reference Length	--	11,835	8,389	7,288	ft
MAKE-UP DATA	**Pipe**	**BTC**	**LTC**	**STC**	
Make-Up Loss	--	4.81	4.75	3.38	in.
Minimum Make-Up Torque	--	--	3,400	2,960	ft-lbs
Maximum Make-Up Torque	--	--	5,660	4,930	ft-lbs

U. S. Steel Tubular Products
10343 Sam Houston Park Dr., #120
Houston, TX 77064

1-877-893-9461
connections@uss.com
www.usstubular.com

Spur Energy Partners LLC Emergency Contact List			
Person	**Location**	**Office Phone**	**Cell Phone**
Drilling and Completions Department			
Drilling Manager - Chris Hollis	Houston	832-930-8629	713-380-7754
Completions Manager - Theresa Voss	Houston	832-930-8614	832-849-8635
VP of Operations - Seth Ireland	Houston	832-930-8527	940-704-6375
Senior VP of Operations - John Nabors	Houston	832-930-8526	281-904-8811
Executive VP of Operations - Todd Mucha	Houston	832-930-8515	281-795-2286
HES/Environmental and Regulatory Department			
EHS Manager - Braidy Moulder	Artestia	575-616-5400	713-264-2517
Superintendent - Jerry Mathews	Artestia	575-616-5400	575-748-5234
Asst. Superintendent - Kenny Kidd	Artestia	575-616-5400	575-703-5851
Regulatory Director - Sarah Chapman	Houston	832-930-8613	281-642-5503
Regulatory Agencies			
Burea of Land Management	Carlsbad	575-886-6544	
Burea of Land Management	Hobbs	575-393-3612	
Burea of Land Management	Roswell	575-622-5335	
Burea of Land Management	Santa Fe	505-954-2000	
DOT Judicial Pipelnes - Incident Reporting NM Public Regulation Commission	Santa Fe	505-827-3549 505-490-2375	
EPA Hotline	Dallas	214-665-6444	
Federal OSHA, Area Office	Lubbock	806-472-7681	
National Response Center	Washington, D.C.	800-424-8803	
National Infrastructure Coordinator Center	Washington, D.C.	202-282-2901	
New Mexico Air Qulaity Bureau	Santa Fe	505-827-1494	
New Mexico Oil Conservation Division	Artestia	575-748-1283	After Hours 575-370-7545
New Mexico Oil Conservation Division	Hobbs	575-393-6161	
New Mexico Oil Conservation Division	Santa Fe	505-476-3770	
New Mexico OCD Environmental Bureau	Santa Fe	505-827-7152 505-476-3470	
New Mexico Environmental Department	Hobbs	575-827-9329	
NM State Emergency Response Center	Santa Fe	505-476-9600	
Medical Facilities			
Artesia General Hospital	Artesia	575-748-3333	
Covenant Medical Center	Lubbock	806-725-1011	
Covenant Medical Center Lakeside	Lubbock	806-725-6000	
Guadalupe County Hospital	Carlsbad	575-887-6633	
Lea Regional Hospital	Hobbs	575-492-5000	
Medical Center Hospital	Odessa	432-640-4000	
Midland Memorial Hospital	Midland	432-685-1111	
Nor-Lea General Hospital	Lovington	575-396-6611	
Odessa Regional Hospital	Odessa	432-334-8200	
Union County General Hospital	Clayton	575-374-2585	
University Medical Center	Lubbock	806-725-8200	
Law Enforcement - Sheriff			
Ector County Sheriff's Department	Odessa	432-335-3050	
Ector County Sheriff's Department	Artesia	575-746-2704	

Ector County Sheriff's Department	Carlsbad	575-887-7551	
Lea County Sherrif's Department	Eunice	575-384-2020	
Lea County Sherrif's Department	Hobbs	575-393-2515	
Lea County Sherrif's Department	Lovington	575-396-3611	
Lubbock County Sheriff's Department	Abernathy	806-296-2724	
Midland County Sheriff's Department	Midland	432-688-1277	
Union County Sheriff's Department	Clayton	575-374-2583	
Law Enforcement - Police			
Abernathy Police Department	Abernathy	806-298-2545	
Artesia City Police	Artesia	575-746-2704	
Carslbad City Police	Carlsbad	575-885-2111	
Clayton City Police	Clayton	575-374-2504	
Eunice City Police	Eunice	575-394-2112	
Hobbs City Police	Hobbs	575-397-9265 575-393-2677	
Jal City Police	Jal	575-395-2501	
Lovington City Police	Lovington	575-396-2811	
Midland City Police	Midland	432-685-7113	
Odessa City Police	Odessa	432-335-3378	
Law Enforcement - FBI			
FBI	Albuquerque	505-224-2000	
FBI	Midland	432-570-0255	
Law Enforcement - DPS (911)			
NM State Police	Artesia	575-746-2704	
NM State Police	Carlsbad	575-885-3137	
NM State Police	Eunice	575-392-5588	
NM State Police	Hobbs	575-392-5588	
NM State Police	Clayton	575-374-2473	
Firefighting and Rescue (911)			
Abernathy	Abernathy	806-298-2022	
Amistad/Rosebud	Amistad/Rosebud	575-633-9113	
Artesia	Artesia	575-746-5751	
Carslbad	Carlsbad	575-885-3125	
Clayton	Clayton	575-374-2435	
Eunice	Eunice	575-394-2111	
Hobbs	Hobbs	575-397-9308	
Jal	Jal	575-395-2221	
Lovington	Lovington	575-396-2359	
Maljamar	Maljamar	575-676-4100	
Midland	Midland	432-685-7346	
Nara Visa	Nara Visa	575-461-3300	
Odessa	Odessa	432-335-4659	
Tucumcari	Tucumcari	911	
West Odessa	Odessa	432-381-3033	

Ambulance (911)			
Abernathy Ambulance	Abernathy	806-298-2241	
Amistad/Rosebud	Amistad/Rosebud	575-633-9113	
Artesia Ambulance	Artesia	575-746-2701	
Carslbad Ambulance	Carlsbad	575-885-2111	
Clayton Ambulance	Clayton	575-374-2501	
Eunice Ambulance	Eunice	575-394-3258	
Hobbs Ambulance	Hobbs	575-397-9308	
Jal Ambulance	Jal	575-395-3501	
Lovington Ambulance	Lovington	575-396-2811	
Midland Ambulance	Midland	432-685-7499	
Nara Visa Ambulance	Nara Visa	575-461-3300	
Odessa Ambulance	Odessa	432-335-3378	
Tucumcari Ambulance	Tucumcari	911	
Medical Air Ambulance Service			
AEROCARE - Methodist Hospital	Lubbock	800-627-2376	
Southwest MediVac	Hobbs	800-242-6199	
Odessa Care Star	Odessa	888-624-3571	

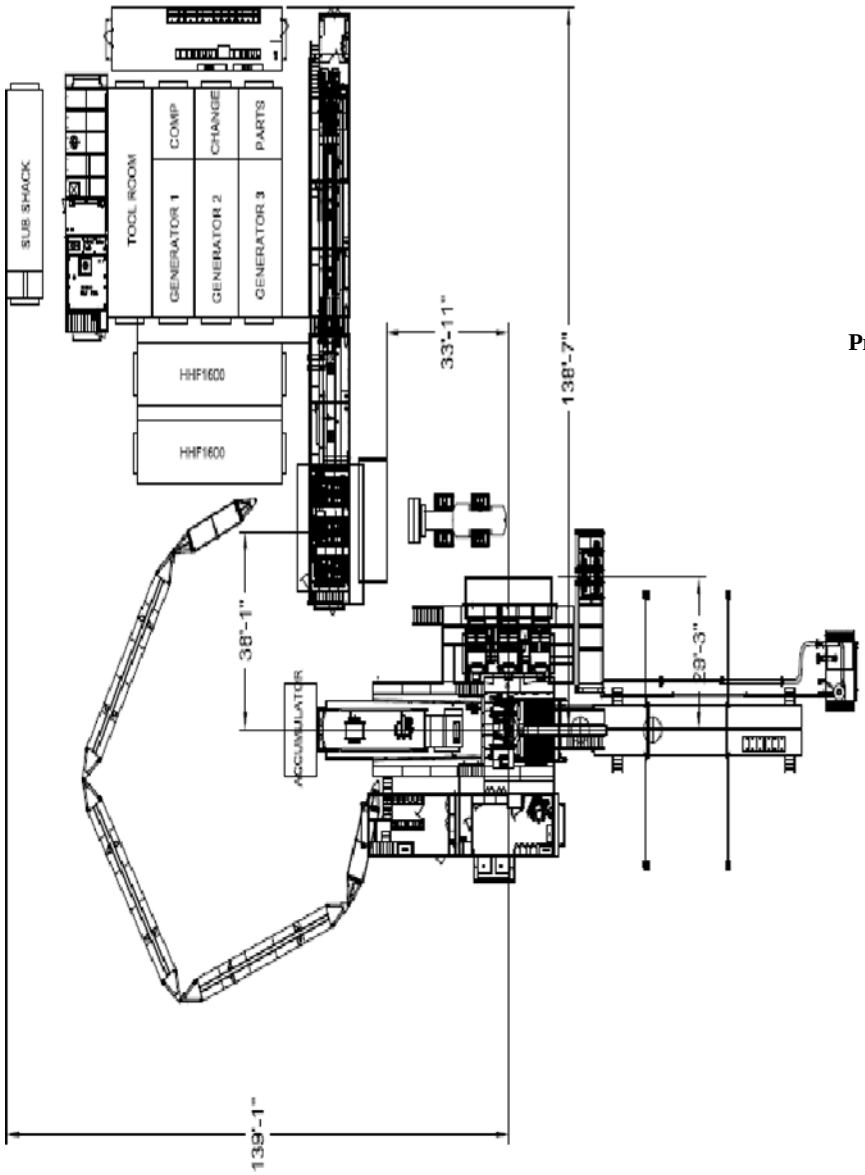
Permian Drilling
Hydrogen Sulfide Drilling Operations Plan
Mayaro 22 State Com 71H

Open drill site. No homes or buildings are near the proposed location.

1. Escape

   Personnel shall escape upwind of wellbore in the event of an emergency gas release. Escape can take place through the lease road on the Southeast side of the location. Personnel need to move to a safe distance and block the entrance to location. If the primary route is not an option due to the wind direction, then a secondary egress route should be taken.

Secondary Briefing Area



Primary Briefing Area

Exit to road. Caution sign placed here.

N

Secondary Egress

WIND: Prevailing winds are from the Southwest

Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME)
MAYARO 22 STATE COM
71H

Wellbore #1

Plan: PERMIT PLAN #2

Standard Planning Report

04 August, 2022

Planning Report

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well 71H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site:	MAYARO 22 STATE COM	**North Reference:**	Grid
Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT PLAN #2		

Project Eddy County, NM (NAD 83 - NME)

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

Site MAYARO 22 STATE COM

Site Position:		**Northing:**	664,946.30 usft	**Latitude:**	32.8278403
From:	Map	**Easting:**	595,486.00 usft	**Longitude:**	-104.1570519
Position Uncertainty:	0.00 usft	**Slot Radius:**	13.200 in	**Grid Convergence:**	0.096 °

Well 71H

Well Position	**+N/-S**	-19.90 usft	**Northing:**	664,926.40 usft	**Latitude:**	32.8277856
	+E/-W	0.50 usft	**Easting:**	595,486.50 usft	**Longitude:**	-104.1570504
Position Uncertainty		0.00 usft	**Wellhead Elevation:**		**Ground Level:**	3,722.00 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	07/19/22	6.738	60.325	47,673.54873391

Design PERMIT PLAN #2

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	180.50

Plan Survey Tool Program **Date** 08/04/22

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	10,170.37	PERMIT PLAN #2 (Wellbore #1)	MWD+IFR1+SAG+FDIR OWSG MWD + IFR1 + Sag	

Planning Report

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well 71H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site:	MAYARO 22 STATE COM	**North Reference:**	Grid
Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT PLAN #2		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.000	
969.63	13.39	15.54	963.55	75.06	20.88	2.00	2.00	0.00	15.543	
3,353.85	13.39	15.54	3,282.93	607.10	168.85	0.00	0.00	0.00	0.000	
4,570.21	60.00	180.50	4,323.28	153.02	207.31	6.00	3.83	13.56	166.409	
4,770.21	60.00	180.50	4,423.28	-20.18	205.78	0.00	0.00	0.00	0.000	
5,076.96	90.68	180.50	4,500.00	-313.40	203.20	10.00	10.00	0.00	0.000	3. MAYARO 71H FT
7,400.00	90.68	180.50	4,472.61	-2,636.19	182.75	0.00	0.00	0.00	0.000	
7,664.26	90.68	185.79	4,469.49	-2,899.94	168.25	2.00	0.00	2.00	89.919	
8,164.26	90.68	185.79	4,463.55	-3,397.36	117.81	0.00	0.00	0.00	0.000	
8,548.46	90.67	178.11	4,459.01	-3,781.02	104.76	2.00	0.00	-2.00	-90.018	
10,170.94	90.67	178.11	4,440.00	-5,402.50	158.40	0.00	0.00	0.00	0.000	5. MAYARO 71H BH

SPUR ENERGY PARTNERS

Planning Report

WELLBENDERS DIRECTIONAL SERVICES

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well 71H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site:	MAYARO 22 STATE COM	**North Reference:**	Grid
Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT PLAN #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	2.00	15.54	399.98	1.68	0.47	-1.69	2.00	2.00	0.00
500.00	4.00	15.54	499.84	6.72	1.87	-6.74	2.00	2.00	0.00
600.00	6.00	15.54	599.45	15.12	4.21	-15.16	2.00	2.00	0.00
700.00	8.00	15.54	698.70	26.86	7.47	-26.92	2.00	2.00	0.00
800.00	10.00	15.54	797.47	41.93	11.66	-42.03	2.00	2.00	0.00
900.00	12.00	15.54	895.62	60.31	16.77	-60.46	2.00	2.00	0.00
969.63	13.39	15.54	963.55	75.06	20.88	-75.24	2.00	2.00	0.00
1,000.00	13.39	15.54	993.09	81.83	22.76	-82.03	0.00	0.00	0.00
1,100.00	13.39	15.54	1,090.37	104.15	28.97	-104.40	0.00	0.00	0.00
1,200.00	13.39	15.54	1,187.65	126.46	35.17	-126.77	0.00	0.00	0.00
1,300.00	13.39	15.54	1,284.93	148.78	41.38	-149.14	0.00	0.00	0.00
1,400.00	13.39	15.54	1,382.22	171.10	47.59	-171.50	0.00	0.00	0.00
1,500.00	13.39	15.54	1,479.50	193.41	53.79	-193.87	0.00	0.00	0.00
1,600.00	13.39	15.54	1,576.78	215.73	60.00	-216.24	0.00	0.00	0.00
1,700.00	13.39	15.54	1,674.06	238.04	66.21	-238.61	0.00	0.00	0.00
1,800.00	13.39	15.54	1,771.34	260.36	72.41	-260.98	0.00	0.00	0.00
1,900.00	13.39	15.54	1,868.62	282.67	78.62	-283.35	0.00	0.00	0.00
2,000.00	13.39	15.54	1,965.90	304.99	84.82	-305.72	0.00	0.00	0.00
2,100.00	13.39	15.54	2,063.18	327.30	91.03	-328.08	0.00	0.00	0.00
2,200.00	13.39	15.54	2,160.46	349.62	97.24	-350.45	0.00	0.00	0.00
2,300.00	13.39	15.54	2,257.74	371.93	103.44	-372.82	0.00	0.00	0.00
2,400.00	13.39	15.54	2,355.02	394.25	109.65	-395.19	0.00	0.00	0.00
2,500.00	13.39	15.54	2,452.30	416.56	115.86	-417.56	0.00	0.00	0.00
2,600.00	13.39	15.54	2,549.58	438.88	122.06	-439.93	0.00	0.00	0.00
2,700.00	13.39	15.54	2,646.86	461.19	128.27	-462.30	0.00	0.00	0.00
2,800.00	13.39	15.54	2,744.14	483.51	134.48	-484.66	0.00	0.00	0.00
2,900.00	13.39	15.54	2,841.42	505.82	140.68	-507.03	0.00	0.00	0.00
3,000.00	13.39	15.54	2,938.70	528.14	146.89	-529.40	0.00	0.00	0.00
3,100.00	13.39	15.54	3,035.98	550.45	153.10	-551.77	0.00	0.00	0.00
3,200.00	13.39	15.54	3,133.27	572.77	159.30	-574.14	0.00	0.00	0.00
3,300.00	13.39	15.54	3,230.55	595.09	165.51	-596.51	0.00	0.00	0.00
3,353.85	13.39	15.54	3,282.93	607.10	168.85	-608.55	0.00	0.00	0.00
3,400.00	10.72	19.04	3,328.06	616.31	171.68	-617.79	6.00	-5.79	7.58
3,450.00	7.90	25.44	3,377.40	623.81	174.68	-625.31	6.00	-5.64	12.79
3,500.00	5.28	38.45	3,427.07	628.72	177.58	-630.24	6.00	-5.24	26.03
3,550.00	3.37	70.28	3,476.93	631.01	180.40	-632.56	6.00	-3.83	63.65
3,600.00	3.57	121.45	3,526.85	630.70	183.11	-632.27	6.00	0.41	102.35
3,650.00	5.67	149.02	3,576.69	627.77	185.71	-629.36	6.00	4.20	55.13
3,700.00	8.34	160.48	3,626.31	622.23	188.19	-623.85	6.00	5.34	22.92
3,750.00	11.18	166.29	3,675.59	614.10	190.55	-615.74	6.00	5.67	11.63
3,800.00	14.08	169.76	3,724.37	603.40	192.78	-605.06	6.00	5.81	6.93
3,850.00	17.02	172.05	3,772.54	590.17	194.88	-591.85	6.00	5.87	4.59
3,900.00	19.97	173.68	3,819.95	574.43	196.83	-576.13	6.00	5.91	3.27
3,950.00	22.94	174.91	3,866.48	556.23	198.64	-557.95	6.00	5.93	2.45
4,000.00	25.91	175.87	3,912.00	535.63	200.29	-537.35	6.00	5.95	1.92
4,050.00	28.89	176.64	3,956.38	512.66	201.78	-514.41	6.00	5.96	1.55
4,100.00	31.88	177.28	3,999.51	487.41	203.12	-489.17	6.00	5.97	1.28
4,150.00	34.86	177.82	4,041.26	459.94	204.29	-461.71	6.00	5.97	1.08
4,200.00	37.85	178.29	4,081.53	430.32	205.29	-432.10	6.00	5.97	0.93
4,250.00	40.84	178.69	4,120.19	398.64	206.13	-400.42	6.00	5.98	0.81

SPUR ENERGY PARTNERS

Planning Report

WELLBENDERS DIRECTIONAL SERVICES LTD

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well 71H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site:	MAYARO 22 STATE COM	**North Reference:**	Grid
Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT PLAN #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,300.00	43.83	179.05	4,157.15	364.98	206.79	-366.77	6.00	5.98	0.72
4,350.00	46.82	179.38	4,192.30	329.43	207.27	-331.23	6.00	5.98	0.65
4,400.00	49.81	179.67	4,225.55	292.10	207.58	-293.90	6.00	5.98	0.59
4,450.00	52.80	179.94	4,256.80	253.08	207.71	-254.88	6.00	5.99	0.54
4,500.00	55.80	180.18	4,285.98	212.48	207.67	-214.28	6.00	5.99	0.50
4,550.00	58.79	180.42	4,312.99	170.41	207.45	-172.21	6.00	5.99	0.46
4,570.21	60.00	180.50	4,323.28	153.02	207.31	-154.82	6.00	5.99	0.44
4,600.00	60.00	180.50	4,338.18	127.22	207.08	-129.02	0.00	0.00	0.00
4,700.00	60.00	180.50	4,388.18	40.62	206.32	-42.42	0.00	0.00	0.00
4,770.21	60.00	180.50	4,423.28	-20.18	205.78	18.38	0.00	0.00	0.00
4,800.00	62.98	180.50	4,437.50	-46.36	205.55	44.56	10.00	10.00	0.00
4,850.00	67.98	180.50	4,458.24	-91.83	205.15	90.04	10.00	10.00	0.00
4,900.00	72.98	180.50	4,474.94	-138.94	204.74	137.15	10.00	10.00	0.00
4,950.00	77.98	180.50	4,487.48	-187.33	204.31	185.54	10.00	10.00	0.00
5,000.00	82.98	180.50	4,495.74	-236.62	203.88	234.83	10.00	10.00	0.00
5,050.00	87.98	180.50	4,499.68	-286.45	203.44	284.66	10.00	10.00	0.00
5,076.96	90.68	180.50	4,500.00	-313.40	203.20	311.61	10.00	10.00	0.00
5,100.00	90.68	180.50	4,499.73	-336.44	203.00	334.65	0.00	0.00	0.00
5,200.00	90.68	180.50	4,498.55	-436.43	202.12	434.65	0.00	0.00	0.00
5,300.00	90.68	180.50	4,497.37	-536.42	201.24	534.64	0.00	0.00	0.00
5,400.00	90.68	180.50	4,496.19	-636.41	200.36	634.63	0.00	0.00	0.00
5,500.00	90.68	180.50	4,495.01	-736.39	199.48	734.63	0.00	0.00	0.00
5,600.00	90.68	180.50	4,493.83	-836.38	198.60	834.62	0.00	0.00	0.00
5,700.00	90.68	180.50	4,492.66	-936.37	197.72	934.61	0.00	0.00	0.00
5,800.00	90.68	180.50	4,491.48	-1,036.36	196.84	1,034.60	0.00	0.00	0.00
5,900.00	90.68	180.50	4,490.30	-1,136.35	195.96	1,134.60	0.00	0.00	0.00
6,000.00	90.68	180.50	4,489.12	-1,236.34	195.08	1,234.59	0.00	0.00	0.00
6,100.00	90.68	180.50	4,487.94	-1,336.33	194.20	1,334.58	0.00	0.00	0.00
6,200.00	90.68	180.50	4,486.76	-1,436.32	193.31	1,434.58	0.00	0.00	0.00
6,300.00	90.68	180.50	4,485.58	-1,536.31	192.43	1,534.57	0.00	0.00	0.00
6,400.00	90.68	180.50	4,484.40	-1,636.30	191.55	1,634.56	0.00	0.00	0.00
6,500.00	90.68	180.50	4,483.22	-1,736.29	190.67	1,734.56	0.00	0.00	0.00
6,600.00	90.68	180.50	4,482.05	-1,836.28	189.79	1,834.55	0.00	0.00	0.00
6,700.00	90.68	180.50	4,480.87	-1,936.26	188.91	1,934.54	0.00	0.00	0.00
6,800.00	90.68	180.50	4,479.69	-2,036.25	188.03	2,034.54	0.00	0.00	0.00
6,900.00	90.68	180.50	4,478.51	-2,136.24	187.15	2,134.53	0.00	0.00	0.00
7,000.00	90.68	180.50	4,477.33	-2,236.23	186.27	2,234.52	0.00	0.00	0.00
7,100.00	90.68	180.50	4,476.15	-2,336.22	185.39	2,334.51	0.00	0.00	0.00
7,200.00	90.68	180.50	4,474.97	-2,436.21	184.51	2,434.51	0.00	0.00	0.00
7,300.00	90.68	180.50	4,473.79	-2,536.20	183.63	2,534.50	0.00	0.00	0.00
7,400.00	90.68	180.50	4,472.61	-2,636.19	182.75	2,634.49	0.00	0.00	0.00
7,500.00	90.68	182.50	4,471.43	-2,736.14	180.13	2,734.47	2.00	0.00	2.00
7,600.00	90.68	184.50	4,470.25	-2,835.94	174.01	2,834.32	2.00	0.00	2.00
7,664.26	90.68	185.79	4,469.49	-2,899.94	168.25	2,898.36	2.00	0.00	2.00
7,700.00	90.68	185.79	4,469.06	-2,935.49	164.65	2,933.95	0.00	0.00	0.00
7,800.00	90.68	185.79	4,467.88	-3,034.98	154.56	3,033.51	0.00	0.00	0.00
7,900.00	90.68	185.79	4,466.69	-3,134.46	144.47	3,133.08	0.00	0.00	0.00
8,000.00	90.68	185.79	4,465.50	-3,233.94	134.38	3,232.65	0.00	0.00	0.00
8,100.00	90.68	185.79	4,464.32	-3,333.42	124.29	3,332.21	0.00	0.00	0.00
8,164.26	90.68	185.79	4,463.55	-3,397.36	117.81	3,396.20	0.00	0.00	0.00
8,200.00	90.68	185.08	4,463.13	-3,432.93	114.43	3,431.80	2.00	0.00	-2.00
8,300.00	90.68	183.08	4,461.94	-3,532.66	107.32	3,531.59	2.00	0.00	-2.00
8,400.00	90.68	181.07	4,460.76	-3,632.59	103.70	3,631.54	2.00	0.00	-2.00
8,500.00	90.67	179.07	4,459.58	-3,732.57	103.57	3,731.53	2.00	0.00	-2.00

Planning Report

Database:	WBDS_SQL_2	**Local Co-ordinate Reference:**	Well 71H
Company:	Spur Energy Partners, LLC	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Project:	Eddy County, NM (NAD 83 - NME)	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site:	MAYARO 22 STATE COM	**North Reference:**	Grid
Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	PERMIT PLAN #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,548.46	90.67	178.11	4,459.01	-3,781.02	104.76	3,779.96	2.00	0.00	-2.00
8,600.00	90.67	178.11	4,458.41	-3,832.52	106.47	3,831.45	0.00	0.00	0.00
8,700.00	90.67	178.11	4,457.24	-3,932.46	109.77	3,931.36	0.00	0.00	0.00
8,800.00	90.67	178.11	4,456.07	-4,032.40	113.08	4,031.26	0.00	0.00	0.00
8,900.00	90.67	178.11	4,454.89	-4,132.34	116.39	4,131.17	0.00	0.00	0.00
9,000.00	90.67	178.11	4,453.72	-4,232.28	119.69	4,231.07	0.00	0.00	0.00
9,100.00	90.67	178.11	4,452.55	-4,332.22	123.00	4,330.98	0.00	0.00	0.00
9,200.00	90.67	178.11	4,451.38	-4,432.16	126.30	4,430.88	0.00	0.00	0.00
9,300.00	90.67	178.11	4,450.21	-4,532.09	129.61	4,530.79	0.00	0.00	0.00
9,400.00	90.67	178.11	4,449.04	-4,632.03	132.91	4,630.70	0.00	0.00	0.00
9,500.00	90.67	178.11	4,447.86	-4,731.97	136.22	4,730.60	0.00	0.00	0.00
9,600.00	90.67	178.11	4,446.69	-4,831.91	139.53	4,830.51	0.00	0.00	0.00
9,700.00	90.67	178.11	4,445.52	-4,931.85	142.83	4,930.41	0.00	0.00	0.00
9,800.00	90.67	178.11	4,444.35	-5,031.79	146.14	5,030.32	0.00	0.00	0.00
9,900.00	90.67	178.11	4,443.18	-5,131.72	149.44	5,130.23	0.00	0.00	0.00
10,000.00	90.67	178.11	4,442.00	-5,231.66	152.75	5,230.13	0.00	0.00	0.00
10,100.00	90.67	178.11	4,440.83	-5,331.60	156.05	5,330.04	0.00	0.00	0.00
10,170.94	90.67	178.11	4,440.00	-5,402.50	158.40	5,400.91	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
1. MAYARO 71H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	664,926.40	595,486.50	32.8277856	-104.1570504
2. MAYARO 71H KOP - plan hits target center - Point	0.00	0.00	3,282.93	607.10	168.85	665,533.51	595,655.35	32.8294535	-104.1564974
5. MAYARO 71H BHL - plan hits target center - Point	0.00	0.01	4,440.00	-5,402.50	158.40	659,523.90	595,644.90	32.8129353	-104.1565641
4. MAYARO 71H LTP: - plan misses target center by 21.01usft at 10100.00usft MD (4440.83 TVD, -5331.60 N, 156.05 E) - Point	0.00	0.00	4,440.59	-5,352.60	156.75	659,573.80	595,643.25	32.8130725	-104.1565692
3. MAYARO 71H FTP - plan hits target center - Point	0.00	0.00	4,500.00	-313.40	203.20	664,613.00	595,689.70	32.8269232	-104.1563906

Company: Spur Energy Partners, LLC
Project: Eddy County, NM (NAD 83 - NME)
Site: MAYARO 22 STATE COM
Well: 71H
Wellbore: Wellbore #1
Rig: AKITA 57
Design: PERMIT PLAN #2 / 18:02, August 04 2022

PROJECT DETAILS: Eddy County, NM (NAD 83 - NME)

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

WELLBENDERS DIRECTIONAL SERVICES LLC

WELL DETAILS: 71H

RKB = 20' @ 3742.00usft (AKITA 57)
3722.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	664926.40	595486.50	32.8277855	-104.1570504

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00
3	969.63	13.39	15.54	963.55	75.06	20.88	2.00	-75.24
4	3353.85	13.39	15.54	3282.93	607.10	168.85	0.00	-608.55
5	4570.21	60.00	180.50	4323.28	153.02	207.31	6.00	-154.82
6	4770.21	60.00	180.50	4423.28	-20.18	205.78	0.00	18.38
7	5076.96	90.68	180.50	4500.00	-313.40	203.20	10.00	311.61
8	7400.00	90.68	180.50	4472.61	-2636.19	182.75	0.00	2634.49
9	7664.26	90.68	185.79	4469.49	-2899.94	168.25	2.00	2898.36
10	8164.26	90.68	185.79	4463.55	-3397.36	117.81	0.00	3396.20
11	8548.46	90.67	178.11	4459.01	-3781.02	104.76	2.00	3779.96
12	10170.94	90.67	178.11	4440.00	-5402.50	158.40	0.00	5400.91

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
1. MAYARO 71H SHL: 215' FSL, 570' FEL	0.00	0.00	0.00	664926.40	595486.50	32.8277855	-104.1570504
2. MAYARO 71H KOP @ 3353.85' MD	3282.93	607.10	168.85	665533.50	595655.35	32.8294535	-104.1564974
5. MAYARO 71H BHL: 50' FSL, 375' FEL	4440.00	-5402.50	158.40	659523.90	595644.90	32.8129353	-104.1565641
4. MAYARO 71H LTP: 100' FSL, 375' FEL	4440.59	-5352.60	156.75	659573.80	595643.25	32.8130725	-104.1565692
3. MAYARO 71H FTP: 100' FNL, 375' FEL	4500.00	-313.40	203.20	664613.00	595689.70	32.8269232	-104.1563906

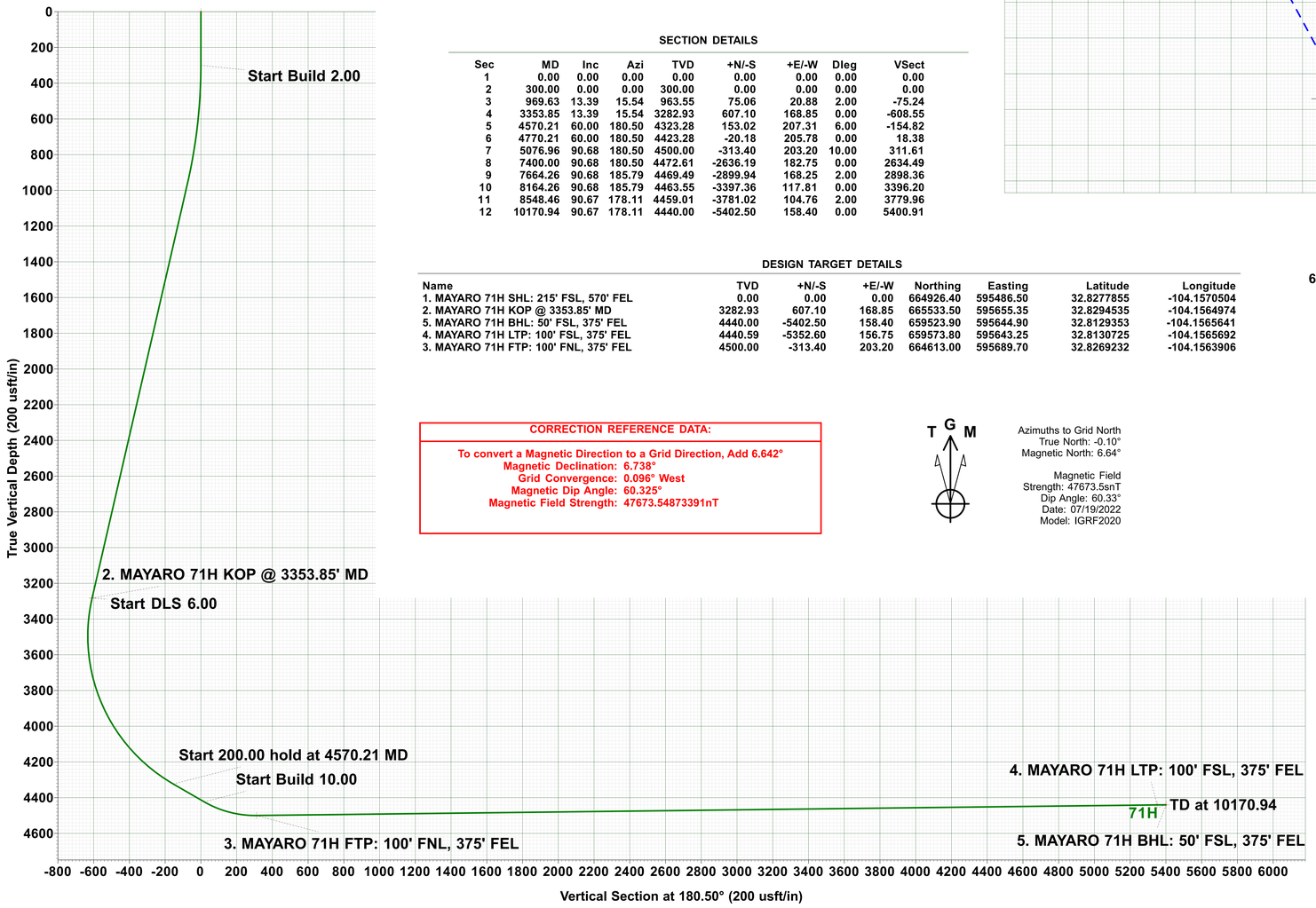
CORRECTION REFERENCE DATA:

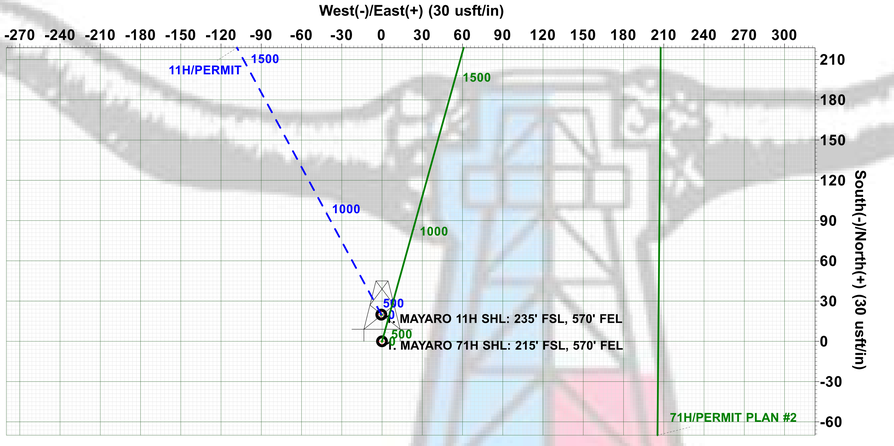
To convert a Magnetic Direction to a Grid Direction, Add 6.642°
Magnetic Declination: 6.738°
Grid Convergence: 0.096° West
Magnetic Dip Angle: 60.325°
Magnetic Field Strength: 47673.54873391nT

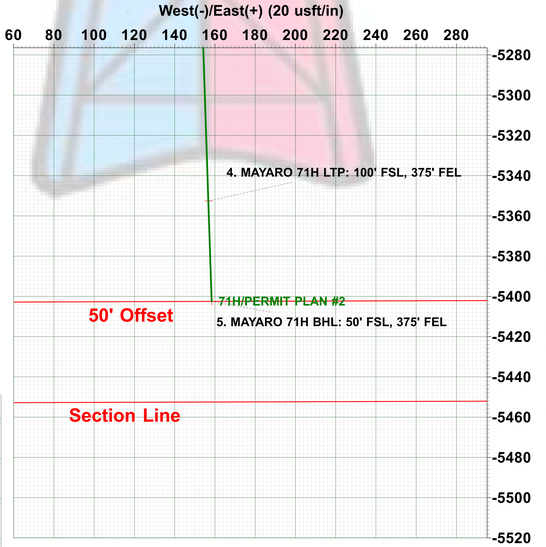
T G M

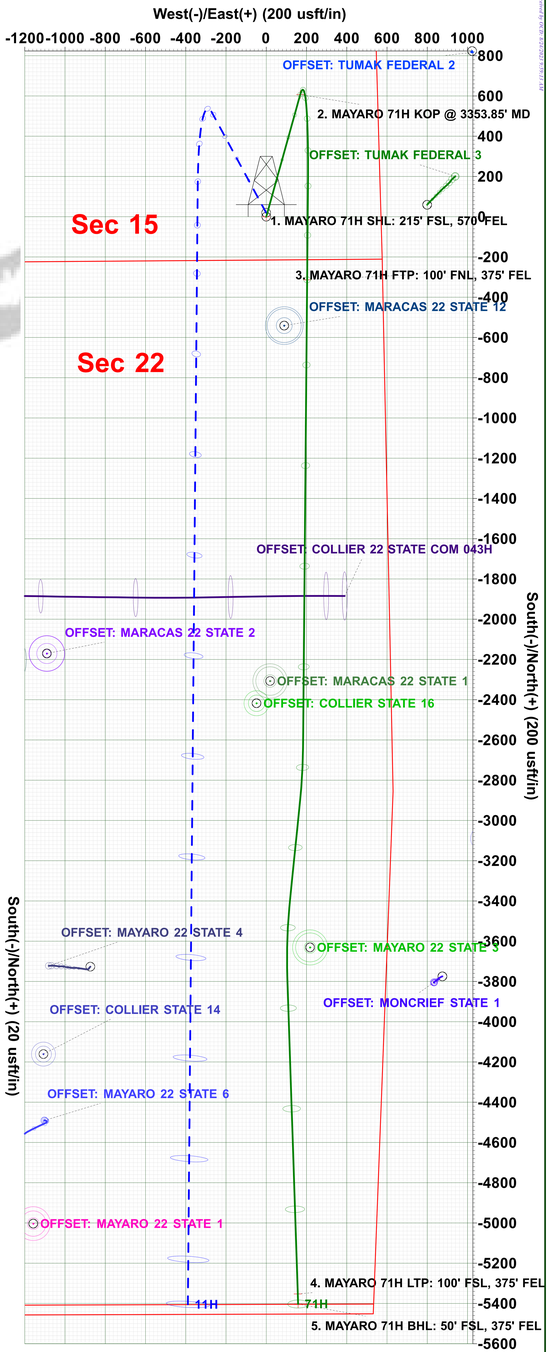
Azimuths to Grid North
True North: -0.10°
Magnetic North: 6.64°

Magnetic Field
Strength: 47673.5snT
Dip Angle: 60.33°
Date: 07/19/2022
Model: IGRF2020









Disclaimer:
All Plan Details, boundary lines and offset well location/ survey data is provided by customer and subject to customer approval.

Plan: PERMIT PLAN #2 (71H/Wellbore #1) AKITA 57

Created By: Derek Stephens Date: 18:02, August 04 2022

Spur Energy Partners, LLC

Eddy County, NM (NAD 83 - NME)
MAYARO 22 STATE COM
71H

Wellbore #1
PERMIT PLAN #2

Anticollision Report

04 August, 2022

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Reference PERMIT PLAN #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 50.00usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 2,000.00 us	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 08/04/22

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	10,170.37	PERMIT PLAN #2 (Wellbore #1)	MWD+IFR1+SAG+FDIR	OWSG MWD + IFR1 + Sag + FDIR Correction

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
MAYARO 22 STATE COM						
11H - Wellbore #1 - PERMIT	420.68	419.91	19.82	17.23	7.669	CC
11H - Wellbore #1 - PERMIT	500.00	498.64	20.09	16.94	6.381	ES
11H - Wellbore #1 - PERMIT	600.00	597.70	22.10	18.24	5.729	SF
OFFSET: BLACK CAT FEDERAL 1 - Wellbore #1 - Wellb						Out of range
OFFSET: BLACK CAT FEDERAL 2 - Wellbore #1 - Wellb						Out of range
OFFSET: COLLIER 22 STATE COM 043H - Wellbore #1	6,662.57	7,600.42	1,188.15	1,138.94	24.144	CC, ES
OFFSET: COLLIER 22 STATE COM 043H - Wellbore #1	7,600.00	7,580.66	1,513.08	1,418.48	15.996	SF
OFFSET: COLLIER STATE 14 - Wellbore #1 - Wellbore	8,896.88	3,537.00	1,441.04	1,353.38	16.439	CC
OFFSET: COLLIER STATE 14 - Wellbore #1 - Wellbore	8,900.00	3,537.00	1,441.05	1,353.36	16.434	ES
OFFSET: COLLIER STATE 14 - Wellbore #1 - Wellbore	9,050.00	3,537.00	1,449.16	1,360.25	16.301	SF
OFFSET: COLLIER STATE 15 - Wellbore #1 - Wellbore						Out of range
OFFSET: COLLIER STATE 16 - Wellbore #1 - Wellbore	7,192.07	3,565.00	789.44	752.15	21.169	CC
OFFSET: COLLIER STATE 16 - Wellbore #1 - Wellbore	7,200.00	3,565.00	789.48	752.11	21.126	ES
OFFSET: COLLIER STATE 16 - Wellbore #1 - Wellbore	7,750.00	3,565.00	961.60	903.31	16.494	SF
OFFSET: DINAH `23` FEDERAL COM 1 - Wellbore #1 -	9,116.42	4,310.17	1,031.07	972.72	17.669	CC, ES
OFFSET: DINAH `23` FEDERAL COM 1 - Wellbore #1 -	9,200.00	4,308.67	1,034.45	975.62	17.584	SF
OFFSET: LUCAS STOR JZ ST CM 1 - Wellbore #1 - We	6,869.88	4,450.15	1,233.76	1,071.79	7.617	CC, ES
OFFSET: LUCAS STOR JZ ST CM 1 - Wellbore #1 - We	6,950.00	4,449.20	1,236.36	1,073.85	7.608	SF
OFFSET: LUCAS STORE `KT` STATE COM 1 - Wellbore	6,979.40	4,341.30	1,606.01	1,489.25	13.755	CC, ES
OFFSET: LUCAS STORE `KT` STATE COM 1 - Wellbore	7,100.00	4,340.63	1,610.53	1,493.05	13.709	SF
OFFSET: MALCO 23 FEDERAL COM 013H - Wellbore #						Out of range
OFFSET: MARACAS 22 STATE 1 - Wellbore #1 - Wellbo	7,071.58	4,341.69	166.57	63.46	1.615	CC, ES, SF
OFFSET: MARACAS 22 STATE 12 - Wellbore #1 - Wellb	5,305.44	4,476.76	111.87	8.40	1.081	SF = 1.25, CC, ES, SF
OFFSET: MARACAS 22 STATE 2 - Wellbore #1 - Wellbo	6,944.87	4,321.20	1,276.85	1,172.54	12.241	CC
OFFSET: MARACAS 22 STATE 2 - Wellbore #1 - Wellbo	6,950.00	4,321.15	1,276.86	1,172.52	12.237	ES
OFFSET: MARACAS 22 STATE 2 - Wellbore #1 - Wellbo	7,050.00	4,319.99	1,281.17	1,176.28	12.214	SF
OFFSET: MAYARO 22 STATE 1 - Wellbore #1 - Wellbore	9,728.27	4,334.29	1,301.95	1,179.01	10.590	CC
OFFSET: MAYARO 22 STATE 1 - Wellbore #1 - Wellbore	9,750.00	4,334.04	1,302.13	1,179.01	10.576	ES
OFFSET: MAYARO 22 STATE 1 - Wellbore #1 - Wellbore	9,800.00	4,333.45	1,303.92	1,180.43	10.558	SF
OFFSET: MAYARO 22 STATE 3 - Wellbore #1 - Wellbore	8,395.60	4,320.97	113.99	0.05	1.000	SF = 1.25, CC, ES, SF
OFFSET: MAYARO 22 STATE 4 - Wellbore #1 - Wellbore	8,479.96	4,268.27	1,151.00	1,098.64	21.983	CC, ES
OFFSET: MAYARO 22 STATE 4 - Wellbore #1 - Wellbore	8,600.00	4,265.81	1,159.28	1,106.14	21.815	SF
OFFSET: MAYARO 22 STATE 5 - Wellbore #1 - Wellbore	9,201.92	4,341.07	1,862.10	1,802.75	31.374	CC, ES
OFFSET: MAYARO 22 STATE 5 - Wellbore #1 - Wellbore	9,500.00	4,335.68	1,885.80	1,824.52	30.777	SF
OFFSET: MAYARO 22 STATE 6 - Wellbore #1 - Wellbore	9,217.40	4,311.79	1,225.78	1,167.12	20.899	CC, ES
OFFSET: MAYARO 22 STATE 6 - Wellbore #1 - Wellbore	9,350.00	4,309.34	1,232.93	1,173.26	20.664	SF
OFFSET: MAYARO 22 STATE 7 - Wellbore #1 - Wellbore	9,825.64	4,339.48	1,892.20	1,826.27	28.698	CC

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

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
MAYARO 22 STATE COM						
OFFSET: MAYARO 22 STATE 7 - Wellbore #1 - Wellbore	9,850.00	4,339.15	1,892.36	1,826.19	28.599	ES
OFFSET: MAYARO 22 STATE 7 - Wellbore #1 - Wellbore	10,170.94	4,334.92	1,923.45	1,854.81	28.022	SF
OFFSET: MONCRIEF STATE 1 - Wellbore #1 - Wellbore	8,597.47	4,302.57	728.72	674.53	13.448	CC
OFFSET: MONCRIEF STATE 1 - Wellbore #1 - Wellbore	8,600.00	4,302.54	728.72	674.52	13.444	ES
OFFSET: MONCRIEF STATE 1 - Wellbore #1 - Wellbore	8,650.00	4,301.87	730.61	676.16	13.418	SF
OFFSET: MONCRIEF STATE 2 - Wellbore #1 - Wellbore	7,764.23	4,025.00	977.51	881.51	10.182	CC, ES
OFFSET: MONCRIEF STATE 2 - Wellbore #1 - Wellbore	7,850.00	4,025.00	981.27	884.39	10.129	SF
OFFSET: MONCRIEF STATE 3 - Wellbore #1 - Wellbore	7,737.00	4,347.69	1,331.08	1,283.59	28.029	CC
OFFSET: MONCRIEF STATE 3 - Wellbore #1 - Wellbore	7,750.00	4,347.54	1,331.14	1,283.53	27.956	ES
OFFSET: MONCRIEF STATE 3 - Wellbore #1 - Wellbore	7,950.00	4,345.17	1,348.01	1,298.74	27.360	SF
OFFSET: MONCRIEF STATE 4 - Wellbore #1 - Wellbore	8,469.60	4,346.49	1,437.10	1,383.71	26.915	CC
OFFSET: MONCRIEF STATE 4 - Wellbore #1 - Wellbore	8,500.00	4,346.53	1,437.26	1,383.63	26.799	ES
OFFSET: MONCRIEF STATE 4 - Wellbore #1 - Wellbore	8,700.00	4,346.82	1,450.25	1,395.42	26.451	SF
OFFSET: SRC STATE 1 - Wellbore #1 - Wellbore #1						Out of range
OFFSET: TUMAK FEDERAL 2 - Wellbore #1 - Wellbore	3,339.79	3,129.07	1,089.65	1,066.41	46.887	CC
OFFSET: TUMAK FEDERAL 2 - Wellbore #1 - Wellbore	3,350.00	3,138.98	1,089.65	1,066.34	46.736	ES
OFFSET: TUMAK FEDERAL 2 - Wellbore #1 - Wellbore	4,100.00	3,870.47	1,158.42	1,130.25	41.128	SF
OFFSET: TUMAK FEDERAL 3 - Wellbore #1 - Wellbore	4,532.35	4,245.30	700.75	670.44	23.124	CC, ES
OFFSET: TUMAK FEDERAL 3 - Wellbore #1 - Wellbore	4,600.00	4,277.66	703.31	672.75	23.020	SF
OFFSET: VERMEJO SWD 1 - Wellbore #1 - Wellbore #1						Out of range

Offset Design MAYARO 22 STATE COM - 11H - Wellbore #1 - PERMIT

Offset Site Error: 0.00 usft

Survey Program: 0-MWD+IGRF

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	-1.439	19.90	-0.50	19.91				
50.00	50.00	50.00	50.00	0.05	0.07	-1.439	19.90	-0.50	19.91	19.78	0.13	158.660	
100.00	100.00	100.00	100.00	0.14	0.14	-1.439	19.90	-0.50	19.91	19.62	0.29	69.414	
150.00	150.00	150.00	150.00	0.32	0.32	-1.439	19.90	-0.50	19.91	19.26	0.65	30.851	
200.00	200.00	200.00	200.00	0.50	0.50	-1.439	19.90	-0.50	19.91	18.90	1.00	19.832	
250.00	250.00	250.00	250.00	0.68	0.68	-1.439	19.90	-0.50	19.91	18.54	1.36	14.613	
300.00	300.00	300.00	300.00	0.86	0.86	-1.439	19.90	-0.50	19.91	18.19	1.72	11.569	
350.00	350.00	349.69	349.69	1.04	1.04	-17.910	20.28	-0.70	19.88	17.80	2.08	9.562	
400.00	399.98	399.37	399.35	1.22	1.22	-20.707	21.42	-1.32	19.83	17.39	2.44	8.140	
420.68	420.65	419.91	419.88	1.29	1.29	-22.412	22.11	-1.69	19.82	17.23	2.58	7.669	CC
450.00	449.93	449.02	448.95	1.40	1.40	-25.374	23.31	-2.34	19.84	17.05	2.79	7.102	
500.00	499.84	498.64	498.48	1.58	1.58	-31.819	25.95	-3.77	20.09	16.94	3.15	6.381	ES
550.00	549.68	548.20	547.89	1.76	1.76	-39.729	29.35	-5.61	20.77	17.26	3.50	5.926	
600.00	599.45	597.70	597.17	1.95	1.94	-48.504	33.49	-7.85	22.10	18.24	3.86	5.729	SF
650.00	649.13	647.13	646.28	2.13	2.13	-57.364	38.38	-10.49	24.25	20.04	4.21	5.755	
700.00	698.70	696.48	695.21	2.31	2.33	-65.603	43.99	-13.53	27.33	22.76	4.57	5.980	
750.00	748.15	745.72	743.92	2.49	2.53	-72.796	50.34	-16.96	31.35	26.42	4.94	6.350	
800.00	797.47	794.86	792.40	2.67	2.74	-78.821	57.40	-20.78	36.30	30.99	5.31	6.838	
850.00	846.63	843.87	840.61	2.85	2.96	-83.754	65.17	-24.99	42.11	36.42	5.69	7.397	
900.00	895.62	892.75	888.53	3.03	3.18	-87.751	73.65	-29.57	48.74	42.66	6.08	8.016	
950.00	944.44	941.49	936.15	3.21	3.41	-90.984	82.81	-34.52	56.14	49.66	6.48	8.660	
1,000.00	993.09	990.09	983.44	3.39	3.65	-93.566	92.66	-39.85	64.27	57.38	6.89	9.331	
1,050.00	1,041.73	1,038.95	1,030.81	3.57	3.90	-95.225	103.17	-45.54	72.94	65.64	7.30	9.986	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - 11H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,100.00	1,090.37	1,088.14	1,078.49	3.76	4.16	-96.484	113.84	-51.31	81.73	74.00	7.73	10.576	
1,150.00	1,139.01	1,137.34	1,126.16	3.94	4.42	-97.499	124.52	-57.08	90.54	82.38	8.16	11.099	
1,200.00	1,187.65	1,186.53	1,173.84	4.13	4.68	-98.334	135.19	-62.85	99.38	90.79	8.59	11.571	
1,250.00	1,236.29	1,235.73	1,221.51	4.32	4.95	-99.032	145.86	-68.62	108.23	99.20	9.02	11.993	
1,300.00	1,284.93	1,284.92	1,269.18	4.51	5.22	-99.624	156.53	-74.39	117.10	107.63	9.46	12.377	
1,350.00	1,333.58	1,334.12	1,316.86	4.70	5.49	-100.134	167.20	-80.16	125.97	116.07	9.90	12.724	
1,400.00	1,382.22	1,383.31	1,364.53	4.88	5.76	-100.576	177.87	-85.94	134.86	124.52	10.34	13.042	
1,450.00	1,430.86	1,432.50	1,412.21	5.07	6.03	-100.963	188.54	-91.71	143.75	132.97	10.78	13.331	
1,500.00	1,479.50	1,481.70	1,459.88	5.26	6.31	-101.306	199.22	-97.48	152.65	141.42	11.23	13.597	
1,550.00	1,528.14	1,530.89	1,507.56	5.45	6.58	-101.610	209.89	-103.25	161.55	149.88	11.67	13.841	
1,600.00	1,576.78	1,580.09	1,555.23	5.64	6.86	-101.883	220.56	-109.02	170.46	158.34	12.12	14.067	
1,650.00	1,625.42	1,629.28	1,602.91	5.83	7.14	-102.129	231.23	-114.79	179.37	166.80	12.56	14.276	
1,700.00	1,674.06	1,678.48	1,650.58	6.02	7.41	-102.351	241.90	-120.56	188.28	175.27	13.01	14.470	
1,750.00	1,722.70	1,727.67	1,698.26	6.21	7.69	-102.554	252.57	-126.34	197.19	183.73	13.46	14.650	
1,800.00	1,771.34	1,776.86	1,745.93	6.40	7.97	-102.738	263.25	-132.11	206.11	192.20	13.91	14.818	
1,850.00	1,819.98	1,826.06	1,793.61	6.59	8.25	-102.908	273.92	-137.88	215.03	200.67	14.36	14.975	
1,900.00	1,868.62	1,875.25	1,841.28	6.78	8.53	-103.064	284.59	-143.65	223.95	209.14	14.81	15.122	
1,950.00	1,917.26	1,924.45	1,888.96	6.97	8.81	-103.208	295.26	-149.42	232.87	217.61	15.26	15.260	
2,000.00	1,965.90	1,973.64	1,936.63	7.16	9.09	-103.341	305.93	-155.19	241.80	226.09	15.71	15.390	
2,050.00	2,014.54	2,022.84	1,984.31	7.35	9.37	-103.465	316.60	-160.96	250.72	234.56	16.16	15.512	
2,100.00	2,063.18	2,072.03	2,031.98	7.54	9.65	-103.581	327.28	-166.74	259.65	243.03	16.61	15.627	
2,150.00	2,111.82	2,121.22	2,079.65	7.73	9.93	-103.689	337.95	-172.51	268.58	251.51	17.07	15.736	
2,200.00	2,160.46	2,170.42	2,127.33	7.92	10.22	-103.789	348.62	-178.28	277.50	259.98	17.52	15.839	
2,250.00	2,209.10	2,219.61	2,175.00	8.11	10.50	-103.884	359.29	-184.05	286.43	268.46	17.97	15.937	
2,300.00	2,257.74	2,268.81	2,222.68	8.30	10.78	-103.973	369.96	-189.82	295.36	276.93	18.43	16.029	
2,350.00	2,306.38	2,318.00	2,270.35	8.50	11.06	-104.056	380.63	-195.59	304.29	285.41	18.88	16.117	
2,400.00	2,355.02	2,367.19	2,318.03	8.69	11.34	-104.135	391.30	-201.36	313.22	293.89	19.33	16.201	
2,450.00	2,403.66	2,416.39	2,365.70	8.88	11.63	-104.210	401.98	-207.14	322.15	302.36	19.79	16.281	
2,500.00	2,452.30	2,465.58	2,413.38	9.07	11.91	-104.280	412.65	-212.91	331.08	310.84	20.24	16.356	
2,550.00	2,500.94	2,514.78	2,461.05	9.26	12.19	-104.347	423.32	-218.68	340.02	319.32	20.70	16.429	
2,600.00	2,549.58	2,563.97	2,508.73	9.45	12.47	-104.410	433.99	-224.45	348.95	327.80	21.15	16.498	
2,650.00	2,598.22	2,613.17	2,556.40	9.64	12.76	-104.470	444.66	-230.22	357.88	336.28	21.61	16.564	
2,700.00	2,646.86	2,662.36	2,604.08	9.83	13.04	-104.528	455.33	-235.99	366.81	344.75	22.06	16.628	
2,750.00	2,695.50	2,711.55	2,651.75	10.02	13.32	-104.582	466.01	-241.76	375.75	353.23	22.52	16.688	
2,800.00	2,744.14	2,760.75	2,699.43	10.22	13.61	-104.634	476.68	-247.54	384.68	361.71	22.97	16.747	
2,850.00	2,792.78	2,809.94	2,747.10	10.41	13.89	-104.684	487.35	-253.31	393.62	370.19	23.43	16.803	
2,900.00	2,841.42	2,859.14	2,794.78	10.60	14.17	-104.731	498.02	-259.08	402.55	378.67	23.88	16.856	
2,950.00	2,890.06	2,908.33	2,842.45	10.79	14.46	-104.776	508.69	-264.85	411.48	387.15	24.34	16.908	
3,000.00	2,938.70	2,957.57	2,890.17	10.98	14.74	-104.821	519.37	-270.63	420.42	395.63	24.79	16.958	
3,050.00	2,987.34	3,007.61	2,939.03	11.17	15.01	-105.108	528.45	-276.44	429.30	404.06	25.24	17.006	
3,100.00	3,035.98	3,057.20	2,987.94	11.36	15.23	-105.810	534.26	-282.09	438.12	412.45	25.67	17.067	
3,150.00	3,084.63	3,105.94	3,036.30	11.55	15.42	-106.877	536.85	-287.49	447.00	420.93	26.07	17.147	
3,200.00	3,133.27	3,153.46	3,083.54	11.75	15.56	-108.253	536.39	-292.62	456.10	429.67	26.43	17.257	
3,250.00	3,181.91	3,199.47	3,129.17	11.94	15.66	-109.879	533.13	-297.41	465.61	438.86	26.75	17.405	
3,300.00	3,230.55	3,243.71	3,172.80	12.13	15.73	-111.691	527.40	-301.85	475.76	448.73	27.03	17.602	
3,350.00	3,279.19	3,286.00	3,214.16	12.32	15.77	-113.631	519.56	-305.94	486.76	459.50	27.26	17.856	
3,400.00	3,328.06	3,326.70	3,253.50	12.51	15.80	-119.655	509.86	-309.70	498.62	471.18	27.44	18.172	
3,450.00	3,377.40	3,366.44	3,291.38	12.69	15.80	-128.532	498.38	-313.20	511.04	483.48	27.56	18.542	
3,500.00	3,427.07	3,405.29	3,327.80	12.87	15.80	-143.930	485.26	-316.46	523.94	496.31	27.63	18.962	
3,550.00	3,476.93	3,443.32	3,362.76	13.04	15.77	-178.039	470.63	-319.48	537.25	509.60	27.65	19.433	
3,600.00	3,526.85	3,480.58	3,396.30	13.20	15.74	128.604	454.63	-322.27	550.86	523.25	27.61	19.952	
3,650.00	3,576.69	3,517.14	3,428.41	13.36	15.69	98.956	437.35	-324.83	564.71	537.18	27.53	20.515	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - 11H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
3,700.00	3,626.31	3,553.05	3,459.12	13.50	15.64	85.511	418.91	-327.18	578.71	551.30	27.41	21.116	
3,750.00	3,675.59	3,588.34	3,488.45	13.64	15.59	77.812	399.39	-329.32	592.78	565.53	27.25	21.755	
3,800.00	3,724.37	3,623.08	3,516.41	13.77	15.52	72.562	378.88	-331.26	606.86	579.80	27.06	22.426	
3,850.00	3,772.54	3,657.28	3,543.01	13.90	15.46	68.578	357.45	-333.00	620.88	594.03	26.85	23.126	
3,900.00	3,819.95	3,691.00	3,568.29	14.02	15.39	65.346	335.19	-334.54	634.77	608.15	26.61	23.851	
3,950.00	3,866.48	3,724.26	3,592.25	14.14	15.32	62.611	312.16	-335.91	648.47	622.11	26.36	24.597	
4,000.00	3,912.00	3,757.10	3,614.90	14.25	15.25	60.231	288.42	-337.09	661.93	635.83	26.10	25.359	
4,050.00	3,956.38	3,789.55	3,636.27	14.36	15.19	58.121	264.04	-338.10	675.10	649.27	25.83	26.132	
4,100.00	3,999.51	3,821.62	3,656.38	14.46	15.12	56.225	239.06	-338.94	687.93	662.37	25.56	26.910	
4,150.00	4,041.26	3,850.00	3,673.28	14.56	15.06	54.576	216.28	-339.55	700.39	675.13	25.26	27.730	
4,200.00	4,081.53	3,884.76	3,692.82	14.66	14.99	52.938	187.54	-340.13	712.40	687.36	25.03	28.458	
4,250.00	4,120.19	3,915.86	3,709.20	14.75	14.93	51.501	161.11	-340.48	723.96	699.18	24.78	29.215	
4,300.00	4,157.15	3,959.11	3,730.86	14.85	14.86	50.003	123.67	-340.81	734.72	710.03	24.69	29.758	
4,350.00	4,192.30	4,007.46	3,755.04	14.95	14.80	48.698	81.80	-341.18	743.85	719.16	24.70	30.120	
4,400.00	4,225.55	4,056.42	3,779.52	15.04	14.79	47.658	39.41	-341.56	751.23	726.45	24.78	30.320	
4,450.00	4,256.80	4,105.83	3,804.23	15.14	14.86	46.868	-3.39	-341.93	756.78	731.87	24.91	30.385	
4,500.00	4,285.98	4,140.49	3,821.35	15.24	14.99	46.363	-33.51	-342.20	760.75	735.84	24.92	30.532	
4,550.00	4,312.99	4,166.32	3,833.10	15.35	15.12	45.962	-56.52	-342.40	764.28	739.42	24.86	30.745	
4,600.00	4,338.18	4,200.00	3,846.85	15.45	15.32	45.671	-87.25	-342.67	767.87	742.97	24.90	30.835	
4,650.00	4,363.18	4,217.50	3,853.27	15.58	15.45	45.534	-103.53	-342.82	772.72	747.92	24.80	31.155	
4,700.00	4,388.18	4,250.00	3,863.87	15.71	15.68	45.206	-134.25	-343.09	779.30	754.46	24.85	31.363	
4,750.00	4,413.18	4,267.22	3,868.78	15.85	15.82	44.996	-150.75	-343.23	787.32	762.55	24.77	31.785	
4,800.00	4,437.50	4,300.00	3,876.73	15.99	16.09	44.187	-182.55	-343.51	796.54	771.70	24.84	32.065	
4,850.00	4,458.24	4,315.61	3,879.88	16.14	16.23	43.479	-197.84	-343.65	804.31	779.48	24.83	32.395	
4,900.00	4,474.94	4,350.00	3,885.34	16.28	16.54	42.764	-231.78	-343.95	810.75	785.72	25.02	32.402	
4,950.00	4,487.48	4,364.02	3,886.97	16.43	16.68	42.375	-245.70	-344.07	815.31	790.17	25.14	32.436	
5,000.00	4,495.74	4,388.23	3,889.00	16.57	16.91	42.075	-269.83	-344.28	818.36	792.97	25.39	32.234	
5,050.00	4,499.68	4,412.45	3,890.00	16.70	17.15	41.939	-294.02	-344.49	819.75	794.05	25.71	31.889	
5,100.00	4,499.73	4,437.46	3,889.97	16.84	17.41	41.933	-319.03	-344.71	819.82	793.73	26.09	31.427	
5,150.00	4,499.14	4,487.45	3,888.94	16.99	17.95	41.913	-369.01	-345.15	820.14	793.52	26.63	30.803	
5,200.00	4,498.55	4,537.45	3,887.90	17.14	18.53	41.892	-419.00	-345.59	820.47	793.28	27.19	30.175	
5,250.00	4,497.96	4,587.45	3,886.87	17.32	19.12	41.871	-468.98	-346.03	820.80	793.02	27.78	29.547	
5,300.00	4,497.37	4,637.45	3,885.84	17.49	19.75	41.851	-518.97	-346.47	821.13	792.74	28.39	28.919	
5,350.00	4,496.78	4,687.45	3,884.81	17.68	20.39	41.830	-568.95	-346.91	821.46	792.43	29.03	28.295	
5,400.00	4,496.19	4,737.44	3,883.78	17.86	21.06	41.810	-618.94	-347.35	821.79	792.10	29.69	27.678	
5,450.00	4,495.60	4,787.44	3,882.75	18.07	21.75	41.789	-668.93	-347.80	822.12	791.75	30.37	27.069	
5,500.00	4,495.01	4,837.44	3,881.71	18.28	22.46	41.769	-718.91	-348.24	822.45	791.38	31.07	26.472	
5,550.00	4,494.42	4,887.44	3,880.68	18.50	23.18	41.748	-768.90	-348.68	822.78	791.00	31.79	25.886	
5,600.00	4,493.83	4,937.44	3,879.65	18.72	23.92	41.728	-818.88	-349.12	823.11	790.60	32.52	25.314	
5,650.00	4,493.24	4,987.43	3,878.62	18.95	24.67	41.707	-868.87	-349.56	823.44	790.18	33.26	24.756	
5,700.00	4,492.66	5,037.43	3,877.59	19.19	25.44	41.687	-918.85	-350.00	823.77	789.75	34.02	24.213	
5,750.00	4,492.07	5,087.43	3,876.56	19.44	26.21	41.666	-968.84	-350.44	824.11	789.31	34.80	23.684	
5,800.00	4,491.48	5,137.43	3,875.52	19.68	27.00	41.646	-1,018.82	-350.88	824.44	788.86	35.58	23.171	
5,850.00	4,490.89	5,187.43	3,874.49	19.95	27.80	41.625	-1,068.81	-351.32	824.77	788.39	36.38	22.673	
5,900.00	4,490.30	5,237.42	3,873.46	20.21	28.61	41.605	-1,118.79	-351.76	825.10	787.91	37.18	22.190	
5,950.00	4,489.71	5,287.42	3,872.43	20.48	29.43	41.585	-1,168.78	-352.20	825.43	787.43	38.00	21.722	
6,000.00	4,489.12	5,337.42	3,871.40	20.75	30.25	41.564	-1,218.77	-352.64	825.76	786.94	38.82	21.269	
6,050.00	4,488.53	5,387.42	3,870.36	21.03	31.08	41.544	-1,268.75	-353.08	826.09	786.43	39.66	20.830	
6,100.00	4,487.94	5,437.42	3,869.33	21.32	31.92	41.524	-1,318.74	-353.52	826.42	785.92	40.50	20.406	
6,150.00	4,487.35	5,487.41	3,868.30	21.61	32.77	41.503	-1,368.72	-353.96	826.75	785.40	41.35	19.995	
6,200.00	4,486.76	5,537.41	3,867.27	21.90	33.62	41.483	-1,418.71	-354.40	827.09	784.88	42.20	19.597	
6,250.00	4,486.17	5,587.41	3,866.24	22.20	34.47	41.463	-1,468.69	-354.84	827.42	784.35	43.07	19.212	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - 11H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,300.00	4,485.58	5,637.41	3,865.21	22.51	35.33	41.442	-1,518.68	-355.28	827.75	783.81	43.93	18.841	
6,350.00	4,484.99	5,687.41	3,864.17	22.82	36.20	41.422	-1,568.66	-355.72	828.08	783.27	44.81	18.480	
6,400.00	4,484.40	5,737.40	3,863.14	23.13	37.07	41.402	-1,618.65	-356.16	828.41	782.72	45.69	18.132	
6,450.00	4,483.81	5,787.40	3,862.11	23.44	37.94	41.382	-1,668.64	-356.60	828.74	782.17	46.57	17.794	
6,500.00	4,483.22	5,837.40	3,861.08	23.76	38.82	41.362	-1,718.62	-357.04	829.08	781.61	47.46	17.468	
6,550.00	4,482.63	5,887.40	3,860.05	24.09	39.70	41.341	-1,768.61	-357.48	829.41	781.05	48.36	17.152	
6,600.00	4,482.05	5,937.40	3,859.02	24.41	40.59	41.321	-1,818.59	-357.92	829.74	780.49	49.25	16.846	
6,650.00	4,481.46	5,987.39	3,857.98	24.74	41.47	41.301	-1,868.58	-358.36	830.07	779.92	50.16	16.550	
6,700.00	4,480.87	6,037.39	3,856.95	25.07	42.37	41.281	-1,918.56	-358.80	830.41	779.34	51.06	16.263	
6,750.00	4,480.28	6,087.39	3,855.92	25.41	43.26	41.261	-1,968.55	-359.24	830.74	778.77	51.97	15.984	
6,800.00	4,479.69	6,137.39	3,854.89	25.75	44.16	41.241	-2,018.53	-359.68	831.07	778.19	52.88	15.715	
6,850.00	4,479.10	6,187.39	3,853.86	26.09	45.05	41.221	-2,068.52	-360.12	831.40	777.60	53.80	15.454	
6,900.00	4,478.51	6,237.38	3,852.82	26.43	45.95	41.200	-2,118.50	-360.56	831.74	777.02	54.72	15.200	
6,950.00	4,477.92	6,287.38	3,851.79	26.78	46.86	41.180	-2,168.49	-361.00	832.07	776.43	55.64	14.954	
7,000.00	4,477.33	6,337.38	3,850.76	27.13	47.76	41.160	-2,218.48	-361.44	832.40	775.84	56.56	14.716	
7,050.00	4,476.74	6,387.38	3,849.73	27.48	48.67	41.140	-2,268.46	-361.88	832.74	775.25	57.49	14.485	
7,100.00	4,476.15	6,437.38	3,848.70	27.84	49.58	41.120	-2,318.45	-362.32	833.07	774.65	58.42	14.260	
7,150.00	4,475.56	6,487.37	3,847.67	28.19	50.49	41.100	-2,368.43	-362.76	833.40	774.05	59.35	14.042	
7,200.00	4,474.97	6,537.37	3,846.63	28.55	51.40	41.080	-2,418.42	-363.20	833.74	773.45	60.28	13.830	
7,250.00	4,474.38	6,587.37	3,845.60	28.91	52.32	41.060	-2,468.40	-363.64	834.07	772.85	61.22	13.624	
7,300.00	4,473.79	6,637.37	3,844.57	29.27	53.23	41.040	-2,518.39	-364.08	834.41	772.25	62.16	13.424	
7,350.00	4,473.20	6,687.37	3,843.54	29.64	54.15	41.021	-2,568.37	-364.52	834.74	771.64	63.10	13.230	
7,400.00	4,472.61	6,737.37	3,842.51	30.00	55.07	41.001	-2,618.36	-364.96	835.07	771.04	64.04	13.041	
7,450.00	4,472.02	6,787.36	3,841.47	30.37	55.99	40.971	-2,668.34	-365.40	835.12	770.16	64.96	12.856	
7,500.00	4,471.43	6,837.34	3,840.44	30.74	56.91	40.887	-2,718.31	-365.84	834.60	768.75	65.85	12.674	
7,550.00	4,470.84	6,887.29	3,839.41	31.11	57.83	40.749	-2,768.25	-366.28	833.50	766.80	66.70	12.495	
7,600.00	4,470.25	6,937.20	3,838.38	31.47	58.75	40.557	-2,818.14	-366.72	831.85	764.33	67.52	12.320	
7,650.00	4,469.66	6,987.04	3,837.35	31.84	59.67	40.310	-2,867.97	-367.16	829.63	761.34	68.29	12.149	
7,700.00	4,469.06	7,036.83	3,836.33	32.21	60.59	40.042	-2,917.75	-367.60	827.02	757.99	69.03	11.981	
7,750.00	4,468.47	7,086.61	3,835.30	32.58	61.51	39.778	-2,967.52	-368.04	824.39	754.63	69.76	11.818	
7,800.00	4,467.88	7,136.40	3,834.27	32.95	62.44	39.512	-3,017.29	-368.48	821.79	751.30	70.48	11.660	
7,850.00	4,467.28	7,186.18	3,833.24	33.33	63.36	39.245	-3,067.06	-368.92	819.20	748.00	71.20	11.506	
7,900.00	4,466.69	7,235.97	3,832.22	33.70	64.28	38.976	-3,116.84	-369.35	816.63	744.72	71.91	11.357	
7,950.00	4,466.10	7,285.75	3,831.19	34.08	65.21	38.705	-3,166.61	-369.79	814.08	741.46	72.61	11.212	
8,000.00	4,465.50	7,335.54	3,830.16	34.46	66.14	38.433	-3,216.38	-370.23	811.54	738.24	73.31	11.071	
8,050.00	4,464.91	7,385.33	3,829.13	34.83	67.06	38.159	-3,266.16	-370.67	809.03	735.03	73.99	10.934	
8,100.00	4,464.32	7,435.11	3,828.11	35.21	67.99	37.883	-3,315.93	-371.11	806.53	731.86	74.67	10.801	
8,150.00	4,463.72	7,484.90	3,827.08	35.59	68.92	37.606	-3,365.70	-371.55	804.05	728.71	75.35	10.671	
8,200.00	4,463.13	7,534.70	3,826.05	35.97	69.85	37.356	-3,415.50	-371.98	801.73	725.70	76.02	10.546	
8,250.00	4,462.54	7,584.57	3,825.02	36.36	70.78	37.153	-3,465.35	-372.42	799.93	723.18	76.74	10.423	
8,300.00	4,461.94	7,634.50	3,823.99	36.75	71.71	36.989	-3,515.27	-372.86	798.66	721.16	77.51	10.305	
8,350.00	4,461.35	7,684.46	3,822.96	37.14	72.65	36.866	-3,565.22	-373.30	797.93	719.61	78.32	10.189	
8,394.67	4,460.82	7,729.12	3,822.04	37.48	73.48	36.792	-3,609.87	-373.70	797.72	718.64	79.08	10.088	
8,400.00	4,460.76	7,734.45	3,821.93	37.53	73.58	36.785	-3,615.20	-373.74	797.72	718.55	79.17	10.076	
8,450.00	4,460.17	7,784.45	3,820.90	37.92	74.52	36.746	-3,665.18	-374.18	798.04	717.96	80.08	9.965	
8,500.00	4,459.58	7,834.44	3,819.87	38.31	75.45	36.748	-3,715.16	-374.62	798.88	717.84	81.04	9.857	
8,550.00	4,459.00	7,884.41	3,818.84	38.71	76.39	36.793	-3,765.11	-375.06	800.25	718.19	82.06	9.752	
8,600.00	4,458.41	7,934.36	3,817.80	39.10	77.33	36.894	-3,815.06	-375.50	801.86	718.76	83.10	9.649	
8,650.00	4,457.82	7,984.32	3,816.77	39.50	78.27	36.994	-3,865.00	-375.94	803.47	719.33	84.15	9.549	
8,700.00	4,457.24	8,034.27	3,815.74	39.89	79.20	37.094	-3,914.94	-376.38	805.09	719.90	85.19	9.450	
8,750.00	4,456.65	8,084.23	3,814.71	40.29	80.14	37.193	-3,964.88	-376.82	806.71	720.47	86.24	9.354	
8,800.00	4,456.07	8,134.18	3,813.68	40.69	81.08	37.292	-4,014.82	-377.26	808.33	721.04	87.30	9.260	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - 11H - Wellbore #1 - PERMIT — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,850.00	4,455.48	8,184.14	3,812.65	41.09	82.02	37.391	-4,064.76	-377.70	809.96	721.61	88.35	9.167	
8,900.00	4,454.89	8,234.09	3,811.62	41.49	82.96	37.489	-4,114.71	-378.14	811.59	722.17	89.41	9.077	
8,950.00	4,454.31	8,284.04	3,810.59	41.89	83.90	37.587	-4,164.65	-378.58	813.22	722.74	90.47	8.988	
9,000.00	4,453.72	8,334.00	3,809.56	42.30	84.84	37.684	-4,214.59	-379.02	814.85	723.31	91.54	8.902	
9,050.00	4,453.14	8,383.95	3,808.53	42.70	85.78	37.781	-4,264.53	-379.46	816.48	723.88	92.60	8.817	
9,100.00	4,452.55	8,433.91	3,807.50	43.10	86.72	37.878	-4,314.47	-379.90	818.12	724.45	93.67	8.734	
9,150.00	4,451.97	8,483.86	3,806.47	43.51	87.66	37.974	-4,364.41	-380.34	819.76	725.01	94.75	8.652	
9,200.00	4,451.38	8,533.81	3,805.43	43.91	88.60	38.070	-4,414.36	-380.78	821.40	725.58	95.82	8.572	
9,250.00	4,450.79	8,583.77	3,804.40	44.31	89.54	38.165	-4,464.30	-381.22	823.04	726.15	96.90	8.494	
9,300.00	4,450.21	8,633.72	3,803.37	44.72	90.48	38.260	-4,514.24	-381.66	824.69	726.71	97.98	8.417	
9,350.00	4,449.62	8,683.68	3,802.34	45.13	91.43	38.355	-4,564.18	-382.10	826.34	727.28	99.06	8.342	
9,400.00	4,449.04	8,733.63	3,801.31	45.53	92.37	38.449	-4,614.12	-382.54	827.99	727.85	100.14	8.268	
9,450.00	4,448.45	8,783.59	3,800.28	45.94	93.31	38.543	-4,664.06	-382.98	829.64	728.41	101.23	8.196	
9,500.00	4,447.86	8,833.54	3,799.25	46.35	94.26	38.637	-4,714.01	-383.42	831.29	728.98	102.32	8.125	
9,550.00	4,447.28	8,883.49	3,798.22	46.76	95.20	38.730	-4,763.95	-383.86	832.95	729.54	103.41	8.055	
9,600.00	4,446.69	8,933.45	3,797.19	47.16	96.14	38.823	-4,813.89	-384.30	834.61	730.11	104.50	7.987	
9,650.00	4,446.11	8,983.40	3,796.16	47.57	97.09	38.916	-4,863.83	-384.74	836.27	730.68	105.60	7.920	
9,700.00	4,445.52	9,033.36	3,795.13	47.98	98.03	39.008	-4,913.77	-385.18	837.94	731.24	106.69	7.854	
9,750.00	4,444.93	9,083.31	3,794.09	48.39	98.97	39.100	-4,963.71	-385.62	839.60	731.81	107.79	7.789	
9,800.00	4,444.35	9,133.26	3,793.06	48.80	99.92	39.191	-5,013.66	-386.06	841.27	732.37	108.90	7.725	
9,850.00	4,443.76	9,183.22	3,792.03	49.21	100.86	39.282	-5,063.60	-386.50	842.94	732.94	110.00	7.663	
9,900.00	4,443.18	9,233.17	3,791.00	49.62	101.81	39.373	-5,113.54	-386.94	844.61	733.50	111.11	7.602	
9,950.00	4,442.59	9,283.13	3,789.97	50.04	102.75	39.463	-5,163.48	-387.38	846.28	734.07	112.22	7.542	
10,000.00	4,442.00	9,333.08	3,788.94	50.45	103.70	39.553	-5,213.42	-387.82	847.96	734.64	113.33	7.482	
10,050.00	4,441.42	9,383.04	3,787.91	50.86	104.65	39.642	-5,263.36	-388.26	849.64	735.20	114.44	7.424	
10,100.00	4,440.83	9,432.99	3,786.88	51.27	105.59	39.732	-5,313.31	-388.70	851.32	735.77	115.55	7.367	
10,150.00	4,440.25	9,482.94	3,785.85	51.74	106.54	39.821	-5,363.25	-389.14	853.00	736.38	116.63	7.314	
10,170.94	4,440.00	9,503.87	3,785.42	51.93	106.93	39.858	-5,384.16	-389.32	853.71	736.63	117.08	7.292	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: COLLIER 22 STATE COM 043H - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 25-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,499.73	7,620.31	3,293.13	16.84	115.39	0.497	-1,884.49	179.07	1,962.88	1,857.13	105.75	18.561	
5,150.00	4,499.14	7,619.69	3,293.14	16.99	115.37	0.527	-1,884.49	178.45	1,923.33	1,818.67	104.66	18.377	
5,200.00	4,498.55	7,619.07	3,293.16	17.14	115.36	0.557	-1,884.49	177.83	1,884.26	1,780.76	103.50	18.205	
5,250.00	4,497.96	7,618.45	3,293.17	17.32	115.34	0.586	-1,884.49	177.21	1,845.73	1,743.45	102.28	18.045	
5,300.00	4,497.37	7,617.83	3,293.19	17.49	115.33	0.616	-1,884.50	176.58	1,807.76	1,706.76	100.99	17.900	
5,350.00	4,496.78	7,617.20	3,293.21	17.68	115.31	0.647	-1,884.50	175.96	1,770.38	1,670.75	99.63	17.769	
5,400.00	4,496.19	7,616.58	3,293.22	17.86	115.30	0.677	-1,884.50	175.34	1,733.64	1,635.45	98.19	17.655	
5,450.00	4,495.60	7,615.95	3,293.24	18.07	115.28	0.707	-1,884.50	174.71	1,697.58	1,600.90	96.68	17.559	
5,500.00	4,495.01	7,615.32	3,293.25	18.28	115.27	0.737	-1,884.51	174.08	1,662.24	1,567.16	95.08	17.483	
5,550.00	4,494.42	7,614.70	3,293.27	18.50	115.25	0.767	-1,884.51	173.46	1,627.67	1,534.28	93.39	17.429	
5,600.00	4,493.83	7,614.07	3,293.28	18.72	115.24	0.798	-1,884.51	172.83	1,593.91	1,502.30	91.61	17.399	
5,650.00	4,493.24	7,613.44	3,293.30	18.95	115.22	0.828	-1,884.51	172.20	1,561.03	1,471.29	89.74	17.394	
5,700.00	4,492.66	7,612.81	3,293.32	19.19	115.21	0.859	-1,884.52	171.57	1,529.08	1,441.30	87.78	17.420	
5,750.00	4,492.07	7,612.17	3,293.33	19.44	115.19	0.889	-1,884.52	170.93	1,498.11	1,412.39	85.72	17.477	
5,800.00	4,491.48	7,611.54	3,293.35	19.68	115.18	0.920	-1,884.52	170.30	1,468.19	1,384.63	83.56	17.570	
5,850.00	4,490.89	7,610.90	3,293.36	19.95	115.16	0.950	-1,884.53	169.66	1,439.39	1,358.08	81.32	17.701	
5,900.00	4,490.30	7,610.27	3,293.38	20.21	115.14	0.981	-1,884.53	169.03	1,411.77	1,332.80	78.98	17.876	
5,950.00	4,489.71	7,609.63	3,293.39	20.48	115.13	1.012	-1,884.53	168.39	1,385.41	1,308.86	76.55	18.097	
6,000.00	4,489.12	7,608.99	3,293.41	20.75	115.11	1.042	-1,884.53	167.75	1,360.37	1,286.32	74.05	18.370	
6,050.00	4,488.53	7,608.35	3,293.43	21.03	115.10	1.073	-1,884.54	167.11	1,336.74	1,265.25	71.49	18.698	
6,100.00	4,487.94	7,607.71	3,293.44	21.32	115.08	1.104	-1,884.54	166.47	1,314.58	1,245.70	68.88	19.084	
6,150.00	4,487.35	7,607.07	3,293.46	21.61	115.07	1.135	-1,884.54	165.83	1,293.98	1,227.73	66.25	19.531	
6,200.00	4,486.76	7,606.43	3,293.48	21.90	115.05	1.166	-1,884.54	165.19	1,275.00	1,211.38	63.62	20.040	
6,250.00	4,486.17	7,605.78	3,293.49	22.20	115.03	1.197	-1,884.55	164.54	1,257.73	1,196.69	61.03	20.607	
6,300.00	4,485.58	7,605.14	3,293.51	22.51	115.02	1.228	-1,884.55	163.90	1,242.23	1,183.69	58.53	21.223	
6,350.00	4,484.99	7,604.49	3,293.52	22.82	115.00	1.260	-1,884.55	163.25	1,228.57	1,172.39	56.17	21.871	
6,400.00	4,484.40	7,603.84	3,293.54	23.13	114.99	1.291	-1,884.55	162.60	1,216.81	1,162.79	54.02	22.524	
6,450.00	4,483.81	7,603.19	3,293.56	23.44	114.97	1.322	-1,884.56	161.95	1,207.01	1,154.85	52.16	23.143	
6,500.00	4,483.22	7,602.54	3,293.57	23.76	114.96	1.353	-1,884.56	161.30	1,199.22	1,148.56	50.65	23.675	
6,550.00	4,482.63	7,601.89	3,293.59	24.09	114.94	1.385	-1,884.56	160.65	1,193.47	1,143.86	49.60	24.060	
6,600.00	4,482.05	7,601.24	3,293.61	24.41	114.92	1.416	-1,884.57	160.00	1,189.79	1,140.72	49.07	24.246	
6,650.00	4,481.46	7,600.58	3,293.62	24.74	114.91	1.448	-1,884.57	159.35	1,188.21	1,139.10	49.11	24.195	
6,662.57	4,481.31	7,600.42	3,293.63	24.83	114.90	1.456	-1,884.57	159.18	1,188.15	1,138.94	49.21	24.144	CC, ES
6,700.00	4,480.87	7,599.93	3,293.64	25.07	114.89	1.479	-1,884.57	158.69	1,188.74	1,139.01	49.73	23.904	
6,750.00	4,480.28	7,599.27	3,293.66	25.41	114.88	1.511	-1,884.57	158.03	1,191.36	1,140.45	50.91	23.401	
6,800.00	4,479.69	7,598.61	3,293.67	25.75	114.86	1.543	-1,884.58	157.38	1,196.07	1,143.48	52.59	22.743	
6,850.00	4,479.10	7,597.95	3,293.69	26.09	114.84	1.575	-1,884.58	156.72	1,202.84	1,148.14	54.70	21.991	
6,900.00	4,478.51	7,597.29	3,293.71	26.43	114.83	1.606	-1,884.58	156.06	1,211.63	1,154.50	57.14	21.206	
6,950.00	4,477.92	7,596.63	3,293.72	26.78	114.81	1.638	-1,884.59	155.40	1,222.41	1,162.59	59.82	20.434	
7,000.00	4,477.33	7,595.97	3,293.74	27.13	114.79	1.670	-1,884.59	154.74	1,235.13	1,172.45	62.68	19.706	
7,050.00	4,476.74	7,595.31	3,293.76	27.48	114.78	1.702	-1,884.59	154.07	1,249.71	1,184.08	65.63	19.041	
7,100.00	4,476.15	7,594.64	3,293.77	27.84	114.76	1.734	-1,884.59	153.41	1,266.10	1,197.47	68.63	18.448	
7,150.00	4,475.56	7,593.97	3,293.79	28.19	114.75	1.766	-1,884.60	152.74	1,284.23	1,212.60	71.62	17.930	
7,200.00	4,474.97	7,593.31	3,293.81	28.55	114.73	1.799	-1,884.60	152.07	1,304.02	1,229.45	74.58	17.485	
7,250.00	4,474.38	7,592.64	3,293.82	28.91	114.71	1.831	-1,884.60	151.40	1,325.41	1,247.94	77.47	17.109	
7,300.00	4,473.79	7,591.97	3,293.84	29.27	114.70	1.863	-1,884.61	150.73	1,348.31	1,268.04	80.27	16.797	
7,350.00	4,473.20	7,591.30	3,293.86	29.64	114.68	1.896	-1,884.61	150.06	1,372.65	1,289.68	82.97	16.544	
7,400.00	4,472.61	7,590.62	3,293.87	30.00	114.66	1.928	-1,884.61	149.39	1,398.36	1,312.80	85.56	16.344	
7,450.00	4,472.02	7,589.50	3,293.90	30.37	114.64	2.635	-1,884.62	148.27	1,425.34	1,337.32	88.02	16.193	
7,500.00	4,471.43	7,587.46	3,293.96	30.74	114.59	3.425	-1,884.63	146.23	1,453.51	1,363.16	90.35	16.088	
7,550.00	4,470.84	7,584.52	3,294.03	31.11	114.51	4.299	-1,884.64	143.29	1,482.78	1,390.24	92.54	16.023	
7,600.00	4,470.25	7,580.66	3,294.13	31.47	114.42	5.255	-1,884.66	139.43	1,513.08	1,418.48	94.59	15.996	SF

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: COLLIER 22 STATE COM 043H - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 25-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,650.00	4,469.66	7,575.90	3,294.25	31.84	114.30	6.290	-1,884.68	134.67	1,544.32	1,447.82	96.51	16.002	
7,700.00	4,469.06	7,570.45	3,294.39	32.21	114.17	6.786	-1,884.71	129.22	1,576.47	1,478.18	98.29	16.039	
7,750.00	4,468.47	7,564.95	3,294.53	32.58	114.04	7.047	-1,884.73	123.72	1,609.51	1,509.54	99.97	16.101	
7,800.00	4,467.88	7,559.44	3,294.68	32.95	113.90	7.308	-1,884.76	118.22	1,643.38	1,541.85	101.53	16.186	
7,850.00	4,467.28	7,553.92	3,294.82	33.33	113.77	7.570	-1,884.79	112.70	1,678.05	1,575.05	103.00	16.292	
7,900.00	4,466.69	7,548.62	3,294.96	33.70	113.64	7.820	-1,884.82	107.41	1,713.46	1,609.09	104.37	16.417	
7,950.00	4,466.10	7,543.86	3,295.08	34.08	113.52	8.046	-1,884.84	102.64	1,749.56	1,643.90	105.66	16.558	
8,000.00	4,465.50	7,539.04	3,295.20	34.46	113.40	8.273	-1,884.88	97.82	1,786.32	1,679.45	106.87	16.715	
8,050.00	4,464.91	7,534.16	3,295.31	34.83	113.28	8.503	-1,884.91	92.95	1,823.69	1,715.70	107.99	16.887	
8,100.00	4,464.32	7,529.23	3,295.42	35.21	113.16	8.736	-1,884.95	88.01	1,861.65	1,752.61	109.04	17.073	
8,150.00	4,463.72	7,524.23	3,295.52	35.59	113.04	8.971	-1,884.99	83.02	1,900.15	1,790.13	110.02	17.271	
8,200.00	4,463.13	7,519.38	3,295.61	35.97	112.92	8.304	-1,885.03	78.17	1,939.17	1,828.24	110.93	17.481	
8,250.00	4,462.54	7,515.25	3,295.69	36.36	112.82	7.203	-1,885.07	74.04	1,978.76	1,866.96	111.80	17.699	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: COLLIER STATE 14 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 520-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,600.00	4,470.25	3,537.00	3,694.21	31.47	59.62	57.095	-4,160.77	-1,107.20	1,999.73	1,921.42	78.31	25.537	
7,650.00	4,469.66	3,537.00	3,694.21	31.84	59.62	56.548	-4,160.77	-1,107.20	1,964.02	1,885.46	78.55	25.003	
7,700.00	4,469.06	3,537.00	3,694.21	32.21	59.62	56.392	-4,160.77	-1,107.20	1,928.55	1,849.75	78.80	24.475	
7,750.00	4,468.47	3,537.00	3,694.21	32.58	59.62	56.392	-4,160.77	-1,107.20	1,893.71	1,814.67	79.05	23.957	
7,800.00	4,467.88	3,537.00	3,694.21	32.95	59.62	56.392	-4,160.77	-1,107.20	1,859.57	1,780.27	79.30	23.449	
7,850.00	4,467.28	3,537.00	3,694.21	33.33	59.62	56.392	-4,160.77	-1,107.20	1,826.16	1,746.59	79.57	22.950	
7,900.00	4,466.69	3,537.00	3,694.21	33.70	59.62	56.392	-4,160.77	-1,107.20	1,793.52	1,713.68	79.85	22.462	
7,950.00	4,466.10	3,537.00	3,694.21	34.08	59.62	56.392	-4,160.77	-1,107.20	1,761.70	1,681.57	80.13	21.986	
8,000.00	4,465.50	3,537.00	3,694.21	34.46	59.62	56.392	-4,160.77	-1,107.20	1,730.73	1,650.31	80.42	21.521	
8,050.00	4,464.91	3,537.00	3,694.21	34.83	59.62	56.392	-4,160.77	-1,107.20	1,700.67	1,619.96	80.72	21.069	
8,100.00	4,464.32	3,537.00	3,694.21	35.21	59.62	56.392	-4,160.77	-1,107.20	1,671.57	1,590.55	81.02	20.631	
8,150.00	4,463.72	3,537.00	3,694.21	35.59	59.62	56.392	-4,160.77	-1,107.20	1,643.47	1,562.14	81.33	20.206	
8,200.00	4,463.13	3,537.00	3,694.21	35.97	59.62	56.632	-4,160.77	-1,107.20	1,616.59	1,534.94	81.65	19.798	
8,250.00	4,462.54	3,537.00	3,694.21	36.36	59.62	56.939	-4,160.77	-1,107.20	1,591.44	1,509.44	82.00	19.408	
8,300.00	4,461.94	3,537.00	3,694.21	36.75	59.62	57.213	-4,160.77	-1,107.20	1,568.12	1,485.76	82.36	19.040	
8,350.00	4,461.35	3,537.00	3,694.21	37.14	59.62	57.456	-4,160.77	-1,107.20	1,546.74	1,463.99	82.75	18.692	
8,400.00	4,460.76	3,537.00	3,694.21	37.53	59.62	57.669	-4,160.77	-1,107.20	1,527.37	1,444.22	83.15	18.368	
8,450.00	4,460.17	3,537.00	3,694.21	37.92	59.62	57.853	-4,160.77	-1,107.20	1,510.11	1,426.53	83.58	18.068	
8,500.00	4,459.58	3,537.00	3,694.21	38.31	59.62	58.009	-4,160.77	-1,107.20	1,495.03	1,411.01	84.02	17.793	
8,550.00	4,459.00	3,537.00	3,694.21	38.71	59.62	58.134	-4,160.77	-1,107.20	1,482.21	1,397.72	84.49	17.544	
8,600.00	4,458.41	3,537.00	3,694.21	39.10	59.62	58.134	-4,160.77	-1,107.20	1,471.31	1,386.35	84.96	17.318	
8,650.00	4,457.82	3,537.00	3,694.21	39.50	59.62	58.134	-4,160.77	-1,107.20	1,462.04	1,376.61	85.43	17.114	
8,700.00	4,457.24	3,537.00	3,694.21	39.89	59.62	58.134	-4,160.77	-1,107.20	1,454.43	1,368.54	85.89	16.933	
8,750.00	4,456.65	3,537.00	3,694.21	40.29	59.62	58.134	-4,160.77	-1,107.20	1,448.51	1,362.15	86.36	16.774	
8,800.00	4,456.07	3,537.00	3,694.21	40.69	59.62	58.134	-4,160.77	-1,107.20	1,444.30	1,357.49	86.81	16.638	
8,850.00	4,455.48	3,537.00	3,694.21	41.09	59.62	58.134	-4,160.77	-1,107.20	1,441.81	1,354.55	87.25	16.524	
8,896.88	4,454.93	3,537.00	3,694.21	41.47	59.62	58.134	-4,160.77	-1,107.20	1,441.04	1,353.38	87.66	16.439	CC
8,900.00	4,454.89	3,537.00	3,694.21	41.49	59.62	58.134	-4,160.77	-1,107.20	1,441.05	1,353.36	87.69	16.434	ES
8,950.00	4,454.31	3,537.00	3,694.21	41.89	59.62	58.134	-4,160.77	-1,107.20	1,442.02	1,353.92	88.11	16.367	
9,000.00	4,453.72	3,537.00	3,694.21	42.30	59.62	58.134	-4,160.77	-1,107.20	1,444.73	1,356.22	88.51	16.322	
9,050.00	4,453.14	3,537.00	3,694.21	42.70	59.62	58.134	-4,160.77	-1,107.20	1,449.16	1,360.25	88.90	16.301	SF
9,100.00	4,452.55	3,537.00	3,694.21	43.10	59.62	58.134	-4,160.77	-1,107.20	1,455.29	1,366.02	89.27	16.302	
9,150.00	4,451.97	3,537.00	3,694.21	43.51	59.62	58.134	-4,160.77	-1,107.20	1,463.11	1,373.48	89.63	16.325	
9,200.00	4,451.38	3,537.00	3,694.21	43.91	59.62	58.134	-4,160.77	-1,107.20	1,472.58	1,382.62	89.96	16.370	
9,250.00	4,450.79	3,537.00	3,694.21	44.31	59.62	58.134	-4,160.77	-1,107.20	1,483.68	1,393.41	90.27	16.437	
9,300.00	4,450.21	3,537.00	3,694.21	44.72	59.62	58.134	-4,160.77	-1,107.20	1,496.37	1,405.81	90.55	16.525	
9,350.00	4,449.62	3,537.00	3,694.21	45.13	59.62	58.134	-4,160.77	-1,107.20	1,510.60	1,419.79	90.82	16.633	
9,400.00	4,449.04	3,537.00	3,694.21	45.53	59.62	58.134	-4,160.77	-1,107.20	1,526.35	1,435.29	91.06	16.762	
9,450.00	4,448.45	3,537.00	3,694.21	45.94	59.62	58.134	-4,160.77	-1,107.20	1,543.55	1,452.27	91.28	16.911	
9,500.00	4,447.86	3,537.00	3,694.21	46.35	59.62	58.134	-4,160.77	-1,107.20	1,562.17	1,470.69	91.47	17.078	
9,550.00	4,447.28	3,537.00	3,694.21	46.76	59.62	58.134	-4,160.77	-1,107.20	1,582.14	1,490.50	91.65	17.264	
9,600.00	4,446.69	3,537.00	3,694.21	47.16	59.62	58.134	-4,160.77	-1,107.20	1,603.43	1,511.63	91.80	17.467	
9,650.00	4,446.11	3,537.00	3,694.21	47.57	59.62	58.134	-4,160.77	-1,107.20	1,625.98	1,534.05	91.92	17.688	
9,700.00	4,445.52	3,537.00	3,694.21	47.98	59.62	58.134	-4,160.77	-1,107.20	1,649.73	1,557.70	92.03	17.925	
9,750.00	4,444.93	3,537.00	3,694.21	48.39	59.62	58.134	-4,160.77	-1,107.20	1,674.64	1,582.52	92.12	18.179	
9,800.00	4,444.35	3,537.00	3,694.21	48.80	59.62	58.134	-4,160.77	-1,107.20	1,700.66	1,608.47	92.19	18.447	
9,850.00	4,443.76	3,537.00	3,694.21	49.21	59.62	58.134	-4,160.77	-1,107.20	1,727.73	1,635.48	92.25	18.730	
9,900.00	4,443.18	3,537.00	3,694.21	49.62	59.62	58.134	-4,160.77	-1,107.20	1,755.81	1,663.53	92.28	19.027	
9,950.00	4,442.59	3,537.00	3,694.21	50.04	59.62	58.134	-4,160.77	-1,107.20	1,784.85	1,692.54	92.30	19.337	
10,000.00	4,442.00	3,537.00	3,694.21	50.45	59.62	58.134	-4,160.77	-1,107.20	1,814.80	1,722.48	92.31	19.659	
10,050.00	4,441.42	3,537.00	3,694.21	50.86	59.62	58.134	-4,160.77	-1,107.20	1,845.62	1,753.31	92.31	19.994	
10,100.00	4,440.83	3,537.00	3,694.21	51.27	59.62	58.134	-4,160.77	-1,107.20	1,877.26	1,784.97	92.29	20.341	

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

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: COLLIER STATE 14 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 520-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,150.00	4,440.25	3,537.00	3,694.21	51.74	59.62	58.134	-4,160.77	-1,107.20	1,909.69	1,817.25	92.44	20.658	
10,170.94	4,440.00	3,537.00	3,694.21	51.93	59.62	58.134	-4,160.77	-1,107.20	1,923.50	1,830.91	92.59	20.774	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: COLLIER STATE 16 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 522-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,400.00	4,496.19	3,565.00	3,720.81	17.86	62.21	17.158	-2,417.34	-48.22	1,958.25	1,887.18	71.07	27.553	
5,450.00	4,495.60	3,565.00	3,720.81	18.07	62.21	17.158	-2,417.34	-48.22	1,912.60	1,841.80	70.80	27.015	
5,500.00	4,495.01	3,565.00	3,720.81	18.28	62.21	17.158	-2,417.34	-48.22	1,867.17	1,796.67	70.50	26.483	
5,550.00	4,494.42	3,565.00	3,720.81	18.50	62.21	17.158	-2,417.34	-48.22	1,821.98	1,751.79	70.19	25.958	
5,600.00	4,493.83	3,565.00	3,720.81	18.72	62.21	17.158	-2,417.34	-48.22	1,777.05	1,707.19	69.86	25.439	
5,650.00	4,493.24	3,565.00	3,720.81	18.95	62.21	17.158	-2,417.34	-48.22	1,732.40	1,662.90	69.50	24.927	
5,700.00	4,492.66	3,565.00	3,720.81	19.19	62.21	17.158	-2,417.34	-48.22	1,688.04	1,618.93	69.12	24.423	
5,750.00	4,492.07	3,565.00	3,720.81	19.44	62.21	17.158	-2,417.34	-48.22	1,644.01	1,575.31	68.71	23.928	
5,800.00	4,491.48	3,565.00	3,720.81	19.68	62.21	17.158	-2,417.34	-48.22	1,600.34	1,532.07	68.26	23.443	
5,850.00	4,490.89	3,565.00	3,720.81	19.95	62.21	17.158	-2,417.34	-48.22	1,557.04	1,489.25	67.79	22.968	
5,900.00	4,490.30	3,565.00	3,720.81	20.21	62.21	17.158	-2,417.34	-48.22	1,514.15	1,446.87	67.28	22.505	
5,950.00	4,489.71	3,565.00	3,720.81	20.48	62.21	17.158	-2,417.34	-48.22	1,471.72	1,404.99	66.73	22.055	
6,000.00	4,489.12	3,565.00	3,720.81	20.75	62.21	17.158	-2,417.34	-48.22	1,429.77	1,363.63	66.14	21.618	
6,050.00	4,488.53	3,565.00	3,720.81	21.03	62.21	17.158	-2,417.34	-48.22	1,388.36	1,322.86	65.50	21.198	
6,100.00	4,487.94	3,565.00	3,720.81	21.32	62.21	17.158	-2,417.34	-48.22	1,347.53	1,282.73	64.80	20.794	
6,150.00	4,487.35	3,565.00	3,720.81	21.61	62.21	17.158	-2,417.34	-48.22	1,307.34	1,243.28	64.05	20.410	
6,200.00	4,486.76	3,565.00	3,720.81	21.90	62.21	17.158	-2,417.34	-48.22	1,267.84	1,204.60	63.24	20.047	
6,250.00	4,486.17	3,565.00	3,720.81	22.20	62.21	17.158	-2,417.34	-48.22	1,229.11	1,166.75	62.36	19.709	
6,300.00	4,485.58	3,565.00	3,720.81	22.51	62.21	17.158	-2,417.34	-48.22	1,191.22	1,129.81	61.41	19.397	
6,350.00	4,484.99	3,565.00	3,720.81	22.82	62.21	17.158	-2,417.34	-48.22	1,154.25	1,093.87	60.38	19.116	
6,400.00	4,484.40	3,565.00	3,720.81	23.13	62.21	17.158	-2,417.34	-48.22	1,118.30	1,059.03	59.27	18.869	
6,450.00	4,483.81	3,565.00	3,720.81	23.44	62.21	17.158	-2,417.34	-48.22	1,083.46	1,025.40	58.06	18.660	
6,500.00	4,483.22	3,565.00	3,720.81	23.76	62.21	17.158	-2,417.34	-48.22	1,049.85	993.08	56.76	18.495	
6,550.00	4,482.63	3,565.00	3,720.81	24.09	62.21	17.158	-2,417.34	-48.22	1,017.58	962.21	55.37	18.379	
6,600.00	4,482.05	3,565.00	3,720.81	24.41	62.21	17.158	-2,417.34	-48.22	986.79	932.93	53.87	18.320	
6,650.00	4,481.46	3,565.00	3,720.81	24.74	62.21	17.158	-2,417.34	-48.22	957.63	905.36	52.27	18.322	
6,700.00	4,480.87	3,565.00	3,720.81	25.07	62.21	17.158	-2,417.34	-48.22	930.24	879.67	50.57	18.394	
6,750.00	4,480.28	3,565.00	3,720.81	25.41	62.21	17.158	-2,417.34	-48.22	904.79	855.99	48.79	18.543	
6,800.00	4,479.69	3,565.00	3,720.81	25.75	62.21	17.158	-2,417.34	-48.22	881.44	834.49	46.95	18.773	
6,850.00	4,479.10	3,565.00	3,720.81	26.09	62.21	17.158	-2,417.34	-48.22	860.36	815.29	45.08	19.087	
6,900.00	4,478.51	3,565.00	3,720.81	26.43	62.21	17.158	-2,417.34	-48.22	841.74	798.53	43.21	19.480	
6,950.00	4,477.92	3,565.00	3,720.81	26.78	62.21	17.158	-2,417.34	-48.22	825.72	784.30	41.42	19.933	
7,000.00	4,477.33	3,565.00	3,720.81	27.13	62.21	17.158	-2,417.34	-48.22	812.47	772.66	39.80	20.412	
7,050.00	4,476.74	3,565.00	3,720.81	27.48	62.21	17.158	-2,417.34	-48.22	802.12	763.66	38.46	20.853	
7,100.00	4,476.15	3,565.00	3,720.81	27.84	62.21	17.158	-2,417.34	-48.22	794.79	757.25	37.54	21.174	
7,150.00	4,475.56	3,565.00	3,720.81	28.19	62.21	17.158	-2,417.34	-48.22	790.56	753.42	37.14	21.284	
7,192.07	4,475.07	3,565.00	3,720.81	28.49	62.21	17.158	-2,417.34	-48.22	789.44	752.15	37.29	21.169	CC
7,200.00	4,474.97	3,565.00	3,720.81	28.55	62.21	17.158	-2,417.34	-48.22	789.48	752.11	37.37	21.126	ES
7,250.00	4,474.38	3,565.00	3,720.81	28.91	62.21	17.158	-2,417.34	-48.22	791.56	753.34	38.23	20.708	
7,300.00	4,473.79	3,565.00	3,720.81	29.27	62.21	17.158	-2,417.34	-48.22	796.78	757.15	39.63	20.103	
7,350.00	4,473.20	3,565.00	3,720.81	29.64	62.21	17.158	-2,417.34	-48.22	805.08	763.61	41.47	19.412	
7,400.00	4,472.61	3,565.00	3,720.81	30.00	62.21	17.158	-2,417.34	-48.22	816.36	772.76	43.60	18.724	
7,450.00	4,472.02	3,565.00	3,720.81	30.37	62.21	17.449	-2,417.34	-48.22	830.38	784.52	45.86	18.106	
7,500.00	4,471.43	3,565.00	3,720.81	30.74	62.21	17.794	-2,417.34	-48.22	846.88	798.74	48.15	17.590	
7,550.00	4,470.84	3,565.00	3,720.81	31.11	62.21	18.192	-2,417.34	-48.22	865.71	815.32	50.39	17.181	
7,600.00	4,470.25	3,565.00	3,720.81	31.47	62.21	18.643	-2,417.34	-48.22	886.72	834.18	52.54	16.876	
7,650.00	4,469.66	3,565.00	3,720.81	31.84	62.21	19.146	-2,417.34	-48.22	909.75	855.16	54.59	16.666	
7,700.00	4,469.06	3,565.00	3,720.81	32.21	62.21	19.299	-2,417.34	-48.22	934.70	878.20	56.50	16.543	
7,750.00	4,468.47	3,565.00	3,720.81	32.58	62.21	19.299	-2,417.34	-48.22	961.60	903.31	58.30	16.494	SF
7,800.00	4,467.88	3,565.00	3,720.81	32.95	62.21	19.299	-2,417.34	-48.22	990.30	930.33	59.97	16.513	
7,850.00	4,467.28	3,565.00	3,720.81	33.33	62.21	19.299	-2,417.34	-48.22	1,020.64	959.13	61.51	16.592	
7,900.00	4,466.69	3,565.00	3,720.81	33.70	62.21	19.299	-2,417.34	-48.22	1,052.48	989.55	62.93	16.724	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: COLLIER STATE 16 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 522-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,950.00	4,466.10	3,565.00	3,720.81	34.08	62.21	19.299	-2,417.34	-48.22	1,085.69	1,021.46	64.23	16.903	
8,000.00	4,465.50	3,565.00	3,720.81	34.46	62.21	19.299	-2,417.34	-48.22	1,120.15	1,054.74	65.42	17.123	
8,050.00	4,464.91	3,565.00	3,720.81	34.83	62.21	19.299	-2,417.34	-48.22	1,155.75	1,089.25	66.50	17.380	
8,100.00	4,464.32	3,565.00	3,720.81	35.21	62.21	19.299	-2,417.34	-48.22	1,192.38	1,124.89	67.49	17.668	
8,150.00	4,463.72	3,565.00	3,720.81	35.59	62.21	19.299	-2,417.34	-48.22	1,229.95	1,161.57	68.39	17.986	
8,200.00	4,463.13	3,565.00	3,720.81	35.97	62.21	18.468	-2,417.34	-48.22	1,268.43	1,199.22	69.21	18.328	
8,250.00	4,462.54	3,565.00	3,720.81	36.36	62.21	17.237	-2,417.34	-48.22	1,307.84	1,237.89	69.96	18.695	
8,300.00	4,461.94	3,565.00	3,720.81	36.75	62.21	15.923	-2,417.34	-48.22	1,348.12	1,277.47	70.65	19.082	
8,350.00	4,461.35	3,565.00	3,720.81	37.14	62.21	14.524	-2,417.34	-48.22	1,389.15	1,317.87	71.28	19.488	
8,400.00	4,460.76	3,565.00	3,720.81	37.53	62.21	13.041	-2,417.34	-48.22	1,430.88	1,359.02	71.86	19.911	
8,450.00	4,460.17	3,565.00	3,720.81	37.92	62.21	11.473	-2,417.34	-48.22	1,473.23	1,400.83	72.40	20.349	
8,500.00	4,459.58	3,565.00	3,720.81	38.31	62.21	9.819	-2,417.34	-48.22	1,516.13	1,443.24	72.89	20.800	
8,550.00	4,459.00	3,565.00	3,720.81	38.71	62.21	8.136	-2,417.34	-48.22	1,559.53	1,486.19	73.34	21.264	
8,600.00	4,458.41	3,565.00	3,720.81	39.10	62.21	8.136	-2,417.34	-48.22	1,603.35	1,529.59	73.76	21.738	
8,650.00	4,457.82	3,565.00	3,720.81	39.50	62.21	8.136	-2,417.34	-48.22	1,647.51	1,573.37	74.14	22.222	
8,700.00	4,457.24	3,565.00	3,720.81	39.89	62.21	8.136	-2,417.34	-48.22	1,692.01	1,617.51	74.49	22.714	
8,750.00	4,456.65	3,565.00	3,720.81	40.29	62.21	8.136	-2,417.34	-48.22	1,736.80	1,661.98	74.82	23.214	
8,800.00	4,456.07	3,565.00	3,720.81	40.69	62.21	8.136	-2,417.34	-48.22	1,781.86	1,706.75	75.12	23.722	
8,850.00	4,455.48	3,565.00	3,720.81	41.09	62.21	8.136	-2,417.34	-48.22	1,827.19	1,751.79	75.39	24.235	
8,900.00	4,454.89	3,565.00	3,720.81	41.49	62.21	8.136	-2,417.34	-48.22	1,872.75	1,797.10	75.65	24.755	
8,950.00	4,454.31	3,565.00	3,720.81	41.89	62.21	8.136	-2,417.34	-48.22	1,918.53	1,842.64	75.89	25.280	
9,000.00	4,453.72	3,565.00	3,720.81	42.30	62.21	8.136	-2,417.34	-48.22	1,964.52	1,888.41	76.11	25.811	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: DINAH `23` FEDERAL COM 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,350.00	4,473.20	4,342.21	4,479.84	29.64	15.26	-91.563	-4,314.26	1,154.19	1,982.20	1,947.64	34.55	57.365	
7,400.00	4,472.61	4,341.32	4,478.95	30.00	15.25	-91.511	-4,314.27	1,154.18	1,938.99	1,904.12	34.87	55.609	
7,450.00	4,472.02	4,340.42	4,478.05	30.37	15.25	-91.408	-4,314.28	1,154.18	1,896.34	1,861.13	35.21	53.859	
7,500.00	4,471.43	4,339.52	4,477.15	30.74	15.25	-91.312	-4,314.28	1,154.17	1,854.54	1,818.96	35.58	52.125	
7,550.00	4,470.84	4,338.62	4,476.25	31.11	15.24	-91.221	-4,314.29	1,154.17	1,813.66	1,777.67	35.99	50.400	
7,600.00	4,470.25	4,337.71	4,475.34	31.47	15.24	-91.135	-4,314.29	1,154.16	1,773.76	1,737.34	36.42	48.700	
7,650.00	4,469.66	4,336.79	4,474.42	31.84	15.24	-91.052	-4,314.30	1,154.16	1,734.94	1,698.05	36.90	47.018	
7,700.00	4,469.06	4,335.88	4,473.51	32.21	15.24	-90.996	-4,314.31	1,154.15	1,697.14	1,659.73	37.41	45.363	
7,750.00	4,468.47	4,334.96	4,472.59	32.58	15.23	-90.949	-4,314.31	1,154.15	1,660.00	1,622.04	37.96	43.730	
7,800.00	4,467.88	4,334.04	4,471.67	32.95	15.23	-90.903	-4,314.32	1,154.15	1,623.55	1,585.01	38.54	42.130	
7,850.00	4,467.28	4,333.12	4,470.75	33.33	15.23	-90.856	-4,314.33	1,154.14	1,587.84	1,548.69	39.15	40.561	
7,900.00	4,466.69	4,332.20	4,469.83	33.70	15.22	-90.809	-4,314.33	1,154.14	1,552.91	1,513.12	39.79	39.031	
7,950.00	4,466.10	4,331.28	4,468.91	34.08	15.22	-90.762	-4,314.34	1,154.13	1,518.83	1,478.37	40.46	37.538	
8,000.00	4,465.50	4,330.36	4,467.99	34.46	15.22	-90.715	-4,314.34	1,154.13	1,485.65	1,444.48	41.17	36.090	
8,050.00	4,464.91	4,329.44	4,467.07	34.83	15.21	-90.668	-4,314.35	1,154.12	1,453.43	1,411.53	41.90	34.686	
8,100.00	4,464.32	4,328.52	4,466.15	35.21	15.21	-90.621	-4,314.36	1,154.12	1,422.24	1,379.57	42.67	33.332	
8,150.00	4,463.72	4,327.59	4,465.22	35.59	15.21	-90.574	-4,314.36	1,154.11	1,392.15	1,348.68	43.46	32.030	
8,200.00	4,463.13	4,326.67	4,464.30	35.97	15.20	-90.540	-4,314.37	1,154.11	1,363.04	1,318.75	44.28	30.779	
8,250.00	4,462.54	4,325.75	4,463.38	36.36	15.20	-90.510	-4,314.38	1,154.10	1,334.47	1,289.35	45.12	29.575	
8,300.00	4,461.94	4,324.84	4,462.47	36.75	15.20	-90.480	-4,314.38	1,154.10	1,306.46	1,260.48	45.97	28.417	
8,350.00	4,461.35	4,323.93	4,461.56	37.14	15.19	-90.448	-4,314.39	1,154.10	1,279.04	1,232.20	46.84	27.308	
8,400.00	4,460.76	4,323.02	4,460.65	37.53	15.19	-90.415	-4,314.40	1,154.09	1,252.27	1,204.56	47.71	26.247	
8,450.00	4,460.17	4,322.12	4,459.75	37.92	15.19	-90.382	-4,314.40	1,154.09	1,226.20	1,177.61	48.59	25.237	
8,500.00	4,459.58	4,321.22	4,458.85	38.31	15.19	-90.347	-4,314.41	1,154.08	1,200.88	1,151.41	49.47	24.276	
8,550.00	4,459.00	4,320.33	4,457.96	38.71	15.18	-90.311	-4,314.41	1,154.08	1,176.36	1,126.02	50.35	23.365	
8,600.00	4,458.41	4,319.43	4,457.07	39.10	15.18	-90.261	-4,314.42	1,154.08	1,153.13	1,101.91	51.22	22.513	
8,650.00	4,457.82	4,318.54	4,456.17	39.50	15.18	-90.212	-4,314.43	1,154.07	1,131.63	1,079.54	52.09	21.724	
8,700.00	4,457.24	4,317.65	4,455.28	39.89	15.17	-90.162	-4,314.43	1,154.07	1,111.96	1,059.01	52.95	21.002	
8,750.00	4,456.65	4,316.75	4,454.38	40.29	15.17	-90.113	-4,314.44	1,154.06	1,094.22	1,040.44	53.78	20.346	
8,800.00	4,456.07	4,315.86	4,453.49	40.69	15.17	-90.063	-4,314.45	1,154.06	1,078.52	1,023.93	54.58	19.759	
8,850.00	4,455.48	4,314.96	4,452.59	41.09	15.16	-90.013	-4,314.45	1,154.06	1,064.92	1,009.58	55.35	19.241	
8,900.00	4,454.89	4,314.07	4,451.70	41.49	15.16	-89.963	-4,314.46	1,154.05	1,053.53	997.47	56.06	18.793	
8,950.00	4,454.31	4,313.17	4,450.80	41.89	15.16	-89.913	-4,314.46	1,154.05	1,044.41	987.70	56.71	18.416	
9,000.00	4,453.72	4,312.27	4,449.90	42.30	15.16	-89.863	-4,314.47	1,154.04	1,037.62	980.32	57.30	18.110	
9,050.00	4,453.14	4,311.37	4,449.00	42.70	15.15	-89.813	-4,314.48	1,154.04	1,033.21	975.40	57.81	17.874	
9,100.00	4,452.55	4,310.47	4,448.10	43.10	15.15	-89.763	-4,314.48	1,154.04	1,031.20	972.97	58.23	17.708	
9,116.42	4,452.36	4,310.17	4,447.81	43.23	15.15	-89.747	-4,314.49	1,154.04	1,031.07	972.72	58.36	17.669	CC, ES
9,150.00	4,451.97	4,309.57	4,447.20	43.51	15.15	-89.713	-4,314.49	1,154.03	1,031.62	973.04	58.58	17.612	
9,200.00	4,451.38	4,308.67	4,446.30	43.91	15.14	-89.663	-4,314.50	1,154.03	1,034.45	975.62	58.83	17.584	SF
9,250.00	4,450.79	4,307.77	4,445.40	44.31	15.14	-89.613	-4,314.50	1,154.03	1,039.69	980.69	58.99	17.624	
9,300.00	4,450.21	4,306.86	4,444.49	44.72	15.14	-89.563	-4,314.51	1,154.02	1,047.28	988.21	59.07	17.729	
9,350.00	4,449.62	4,305.96	4,443.59	45.13	15.13	-89.513	-4,314.51	1,154.02	1,057.19	998.12	59.07	17.898	
9,400.00	4,449.04	4,305.05	4,442.69	45.53	15.13	-89.462	-4,314.52	1,154.01	1,069.35	1,010.36	58.98	18.131	
9,450.00	4,448.45	4,304.15	4,441.78	45.94	15.13	-89.412	-4,314.53	1,154.01	1,083.67	1,024.85	58.82	18.423	
9,500.00	4,447.86	4,303.24	4,440.87	46.35	15.12	-89.362	-4,314.53	1,154.01	1,100.09	1,041.49	58.60	18.774	
9,550.00	4,447.28	4,302.33	4,439.97	46.76	15.12	-89.311	-4,314.54	1,154.00	1,118.50	1,060.18	58.31	19.181	
9,600.00	4,446.69	4,301.43	4,439.06	47.16	15.12	-89.261	-4,314.55	1,154.00	1,138.81	1,080.83	57.98	19.642	
9,650.00	4,446.11	4,300.52	4,438.15	47.57	15.12	-89.210	-4,314.55	1,154.00	1,160.91	1,103.31	57.60	20.155	
9,700.00	4,445.52	4,299.61	4,437.24	47.98	15.11	-89.160	-4,314.56	1,153.99	1,184.72	1,127.53	57.18	20.717	
9,750.00	4,444.93	4,298.70	4,436.33	48.39	15.11	-89.109	-4,314.57	1,153.99	1,210.12	1,153.38	56.74	21.327	
9,800.00	4,444.35	4,297.79	4,435.42	48.80	15.11	-89.059	-4,314.57	1,153.99	1,237.03	1,180.75	56.28	21.981	
9,850.00	4,443.76	4,296.87	4,434.51	49.21	15.10	-89.008	-4,314.58	1,153.98	1,265.33	1,209.54	55.79	22.678	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: DINAH `23` FEDERAL COM 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,900.00	4,443.18	4,295.96	4,433.59	49.62	15.10	-88.957	-4,314.59	1,153.98	1,294.95	1,239.65	55.30	23.416	
9,950.00	4,442.59	4,295.05	4,432.68	50.04	15.10	-88.907	-4,314.59	1,153.98	1,325.79	1,270.99	54.80	24.192	
10,000.00	4,442.00	4,294.13	4,431.76	50.45	15.09	-88.856	-4,314.60	1,153.97	1,357.78	1,303.48	54.30	25.004	
10,050.00	4,441.42	4,293.22	4,430.85	50.86	15.09	-88.805	-4,314.61	1,153.97	1,390.82	1,337.02	53.80	25.851	
10,100.00	4,440.83	4,292.30	4,429.93	51.27	15.09	-88.754	-4,314.61	1,153.97	1,424.86	1,371.55	53.30	26.730	
10,150.00	4,440.25	4,291.38	4,429.01	51.74	15.08	-88.703	-4,314.62	1,153.96	1,459.81	1,406.42	53.39	27.342	
10,170.94	4,440.00	4,291.00	4,428.63	51.93	15.08	-88.682	-4,314.62	1,153.96	1,474.70	1,421.23	53.47	27.580	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: LUCAS STOR JZ ST CM 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 445-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,300.00	4,497.37	4,468.66	4,497.37	17.49	136.38	-90.859	-2,116.99	1,421.13	1,996.59	1,844.39	152.19	13.119	
5,350.00	4,496.78	4,468.07	4,496.78	17.68	136.36	-90.832	-2,116.99	1,421.13	1,957.52	1,805.24	152.28	12.855	
5,400.00	4,496.19	4,467.48	4,496.19	17.86	136.34	-90.805	-2,116.99	1,421.13	1,918.96	1,766.58	152.38	12.593	
5,450.00	4,495.60	4,466.89	4,495.60	18.07	136.32	-90.777	-2,116.99	1,421.13	1,880.94	1,728.45	152.49	12.335	
5,500.00	4,495.01	4,466.30	4,495.01	18.28	136.30	-90.750	-2,116.99	1,421.13	1,843.50	1,690.88	152.62	12.079	
5,550.00	4,494.42	4,465.71	4,494.42	18.50	136.28	-90.722	-2,116.99	1,421.13	1,806.66	1,653.90	152.76	11.827	
5,600.00	4,493.83	4,465.12	4,493.83	18.72	136.26	-90.695	-2,116.99	1,421.13	1,770.46	1,617.55	152.91	11.578	
5,650.00	4,493.24	4,464.53	4,493.24	18.95	136.24	-90.668	-2,116.99	1,421.13	1,734.96	1,581.87	153.09	11.333	
5,700.00	4,492.66	4,463.94	4,492.66	19.19	136.22	-90.640	-2,116.99	1,421.13	1,700.18	1,546.90	153.28	11.092	
5,750.00	4,492.07	4,463.35	4,492.07	19.44	136.20	-90.613	-2,116.99	1,421.13	1,666.17	1,512.68	153.49	10.855	
5,800.00	4,491.48	4,462.76	4,491.48	19.68	136.18	-90.586	-2,116.99	1,421.13	1,632.99	1,479.27	153.72	10.623	
5,850.00	4,490.89	4,462.17	4,490.89	19.95	136.16	-90.558	-2,116.99	1,421.13	1,600.68	1,446.71	153.97	10.396	
5,900.00	4,490.30	4,461.58	4,490.30	20.21	136.14	-90.531	-2,116.99	1,421.13	1,569.30	1,415.07	154.23	10.175	
5,950.00	4,489.71	4,460.99	4,489.71	20.48	136.12	-90.504	-2,116.99	1,421.13	1,538.91	1,384.38	154.52	9.959	
6,000.00	4,489.12	4,460.40	4,489.12	20.75	136.10	-90.476	-2,116.99	1,421.13	1,509.55	1,354.72	154.83	9.750	
6,050.00	4,488.53	4,459.81	4,488.53	21.03	136.08	-90.449	-2,116.99	1,421.13	1,481.31	1,326.15	155.16	9.547	
6,100.00	4,487.94	4,459.22	4,487.94	21.32	136.06	-90.421	-2,116.99	1,421.13	1,454.24	1,298.73	155.51	9.351	
6,150.00	4,487.35	4,458.64	4,487.35	21.61	136.04	-90.394	-2,116.99	1,421.13	1,428.40	1,272.52	155.88	9.163	
6,200.00	4,486.76	4,458.05	4,486.76	21.90	136.02	-90.367	-2,116.99	1,421.13	1,403.87	1,247.60	156.26	8.984	
6,250.00	4,486.17	4,457.46	4,486.17	22.20	136.00	-90.339	-2,116.99	1,421.13	1,380.71	1,224.04	156.67	8.813	
6,300.00	4,485.58	4,456.87	4,485.58	22.51	135.98	-90.312	-2,116.99	1,421.13	1,359.00	1,201.92	157.08	8.651	
6,350.00	4,484.99	4,456.28	4,484.99	22.82	135.96	-90.285	-2,116.99	1,421.13	1,338.81	1,181.29	157.52	8.500	
6,400.00	4,484.40	4,455.69	4,484.40	23.13	135.94	-90.257	-2,116.99	1,421.13	1,320.20	1,162.24	157.95	8.358	
6,450.00	4,483.81	4,455.10	4,483.81	23.44	135.92	-90.230	-2,116.99	1,421.13	1,303.24	1,144.84	158.40	8.227	
6,500.00	4,483.22	4,454.51	4,483.22	23.76	135.90	-90.202	-2,116.99	1,421.13	1,288.01	1,129.15	158.85	8.108	
6,550.00	4,482.63	4,453.92	4,482.63	24.09	135.88	-90.175	-2,116.99	1,421.13	1,274.55	1,115.24	159.31	8.001	
6,600.00	4,482.05	4,453.33	4,482.05	24.41	135.86	-90.148	-2,116.99	1,421.13	1,262.93	1,103.18	159.75	7.906	
6,650.00	4,481.46	4,452.74	4,481.46	24.74	135.84	-90.120	-2,116.99	1,421.13	1,253.20	1,093.00	160.20	7.823	
6,700.00	4,480.87	4,452.15	4,480.87	25.07	135.82	-90.093	-2,116.99	1,421.13	1,245.40	1,084.77	160.63	7.753	
6,750.00	4,480.28	4,451.56	4,480.28	25.41	135.80	-90.066	-2,116.99	1,421.13	1,239.57	1,078.53	161.04	7.697	
6,800.00	4,479.69	4,450.97	4,479.69	25.75	135.78	-90.038	-2,116.99	1,421.13	1,235.74	1,074.29	161.44	7.654	
6,850.00	4,479.10	4,450.38	4,479.10	26.09	135.77	-90.011	-2,116.99	1,421.13	1,233.92	1,072.10	161.82	7.625	
6,869.88	4,478.86	4,450.15	4,478.86	26.23	135.76	-90.000	-2,116.99	1,421.13	1,233.76	1,071.79	161.97	7.617	CC, ES
6,900.00	4,478.51	4,449.79	4,478.51	26.43	135.75	-89.984	-2,116.99	1,421.13	1,234.13	1,071.95	162.17	7.610	
6,950.00	4,477.92	4,449.20	4,477.92	26.78	135.73	-89.956	-2,116.99	1,421.13	1,236.36	1,073.85	162.50	7.608	SF
7,000.00	4,477.33	4,448.61	4,477.33	27.13	135.71	-89.929	-2,116.99	1,421.13	1,240.60	1,077.80	162.80	7.620	
7,050.00	4,476.74	4,448.03	4,476.74	27.48	135.69	-89.901	-2,116.99	1,421.13	1,246.84	1,083.77	163.07	7.646	
7,100.00	4,476.15	4,447.44	4,476.15	27.84	135.67	-89.874	-2,116.99	1,421.13	1,255.03	1,091.73	163.31	7.685	
7,150.00	4,475.56	4,446.85	4,475.56	28.19	135.65	-89.847	-2,116.99	1,421.13	1,265.15	1,101.64	163.51	7.737	
7,200.00	4,474.97	4,446.26	4,474.97	28.55	135.63	-89.819	-2,116.99	1,421.13	1,277.15	1,113.47	163.69	7.802	
7,250.00	4,474.38	4,445.67	4,474.38	28.91	135.61	-89.792	-2,116.99	1,421.13	1,290.98	1,127.15	163.83	7.880	
7,300.00	4,473.79	4,445.08	4,473.79	29.27	135.59	-89.765	-2,116.99	1,421.13	1,306.57	1,142.63	163.95	7.969	
7,350.00	4,473.20	4,444.49	4,473.20	29.64	135.57	-89.737	-2,116.99	1,421.13	1,323.87	1,159.84	164.03	8.071	
7,400.00	4,472.61	4,443.90	4,472.61	30.00	135.55	-89.710	-2,116.99	1,421.13	1,342.81	1,178.72	164.09	8.183	
7,450.00	4,472.02	4,443.31	4,472.02	30.37	135.53	-89.667	-2,116.99	1,421.13	1,363.72	1,199.59	164.13	8.309	
7,500.00	4,471.43	4,442.72	4,471.43	30.74	135.51	-89.624	-2,116.99	1,421.13	1,386.88	1,222.74	164.14	8.449	
7,550.00	4,470.84	4,442.13	4,470.84	31.11	135.49	-89.579	-2,116.99	1,421.13	1,412.19	1,248.06	164.13	8.604	
7,600.00	4,470.25	4,441.53	4,470.25	31.47	135.47	-89.534	-2,116.99	1,421.13	1,439.51	1,275.41	164.10	8.772	
7,650.00	4,469.66	4,440.94	4,469.66	31.84	135.45	-89.486	-2,116.99	1,421.13	1,468.74	1,304.67	164.06	8.952	
7,700.00	4,469.06	4,440.35	4,469.06	32.21	135.43	-89.452	-2,116.99	1,421.13	1,499.57	1,335.56	164.01	9.143	
7,750.00	4,468.47	4,439.75	4,468.47	32.58	135.41	-89.423	-2,116.99	1,421.13	1,531.44	1,367.50	163.94	9.342	
7,800.00	4,467.88	4,439.16	4,467.88	32.95	135.39	-89.394	-2,116.99	1,421.13	1,564.26	1,400.40	163.86	9.546	

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

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: LUCAS STOR JZ ST CM 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 445-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,850.00	4,467.28	4,438.57	4,467.28	33.33	135.37	-89.365	-2,116.99	1,421.13	1,597.97	1,434.19	163.78	9.757	
7,900.00	4,466.69	4,437.97	4,466.69	33.70	135.35	-89.335	-2,116.99	1,421.13	1,632.51	1,468.83	163.68	9.974	
7,950.00	4,466.10	4,437.38	4,466.10	34.08	135.33	-89.306	-2,116.99	1,421.13	1,667.84	1,504.26	163.59	10.195	
8,000.00	4,465.50	4,436.79	4,465.50	34.46	135.31	-89.277	-2,116.99	1,421.13	1,703.91	1,540.42	163.48	10.422	
8,050.00	4,464.91	4,436.19	4,464.91	34.83	135.29	-89.248	-2,116.99	1,421.13	1,740.66	1,577.28	163.38	10.654	
8,100.00	4,464.32	4,435.60	4,464.32	35.21	135.27	-89.219	-2,116.99	1,421.13	1,778.06	1,614.79	163.27	10.890	
8,150.00	4,463.72	4,435.01	4,463.72	35.59	135.25	-89.190	-2,116.99	1,421.13	1,816.06	1,652.90	163.16	11.130	
8,200.00	4,463.13	4,434.41	4,463.13	35.97	135.23	-89.182	-2,116.99	1,421.13	1,854.50	1,691.45	163.05	11.374	
8,250.00	4,462.54	4,433.82	4,462.54	36.36	135.21	-89.183	-2,116.99	1,421.13	1,892.95	1,730.01	162.94	11.618	
8,300.00	4,461.94	4,433.23	4,461.94	36.75	135.19	-89.185	-2,116.99	1,421.13	1,931.38	1,768.56	162.82	11.862	
8,350.00	4,461.35	4,432.64	4,461.35	37.14	135.17	-89.188	-2,116.99	1,421.13	1,969.78	1,807.08	162.70	12.107	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: LUCAS STORE `KT` STATE COM 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 170-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,800.00	4,491.48	4,347.46	4,483.83	19.68	89.92	90.223	-2,201.54	-1,419.49	1,992.54	1,884.18	108.35	18.389	
5,850.00	4,490.89	4,347.22	4,483.59	19.95	89.91	90.215	-2,201.53	-1,419.49	1,963.35	1,854.72	108.63	18.074	
5,900.00	4,490.30	4,346.97	4,483.34	20.21	89.91	90.206	-2,201.53	-1,419.49	1,935.03	1,826.11	108.92	17.766	
5,950.00	4,489.71	4,346.72	4,483.09	20.48	89.90	90.197	-2,201.53	-1,419.49	1,907.59	1,798.37	109.22	17.466	
6,000.00	4,489.12	4,346.47	4,482.84	20.75	89.90	90.188	-2,201.53	-1,419.49	1,881.08	1,771.55	109.53	17.174	
6,050.00	4,488.53	4,346.22	4,482.59	21.03	89.89	90.179	-2,201.53	-1,419.49	1,855.54	1,745.68	109.86	16.890	
6,100.00	4,487.94	4,345.97	4,482.34	21.32	89.89	90.170	-2,201.53	-1,419.49	1,831.00	1,720.81	110.19	16.616	
6,150.00	4,487.35	4,345.72	4,482.09	21.61	89.88	90.161	-2,201.52	-1,419.49	1,807.52	1,696.98	110.54	16.351	
6,200.00	4,486.76	4,345.46	4,481.83	21.90	89.88	90.152	-2,201.52	-1,419.49	1,785.13	1,674.23	110.90	16.097	
6,250.00	4,486.17	4,345.21	4,481.57	22.20	89.87	90.143	-2,201.52	-1,419.49	1,763.88	1,652.61	111.27	15.852	
6,300.00	4,485.58	4,344.95	4,481.32	22.51	89.87	90.134	-2,201.52	-1,419.49	1,743.80	1,632.15	111.65	15.619	
6,350.00	4,484.99	4,344.69	4,481.06	22.82	89.86	90.124	-2,201.52	-1,419.49	1,724.93	1,612.90	112.03	15.397	
6,400.00	4,484.40	4,344.43	4,480.80	23.13	89.86	90.115	-2,201.52	-1,419.49	1,707.32	1,594.90	112.42	15.187	
6,450.00	4,483.81	4,344.17	4,480.54	23.44	89.85	90.106	-2,201.51	-1,419.49	1,691.01	1,578.20	112.81	14.990	
6,500.00	4,483.22	4,343.90	4,480.27	23.76	89.84	90.096	-2,201.51	-1,419.49	1,676.03	1,562.82	113.21	14.805	
6,550.00	4,482.63	4,343.64	4,480.01	24.09	89.84	90.087	-2,201.51	-1,419.49	1,662.42	1,548.81	113.60	14.634	
6,600.00	4,482.05	4,343.37	4,479.74	24.41	89.83	90.077	-2,201.51	-1,419.49	1,650.21	1,536.21	114.00	14.476	
6,650.00	4,481.46	4,343.10	4,479.47	24.74	89.83	90.068	-2,201.51	-1,419.49	1,639.44	1,525.05	114.39	14.332	
6,700.00	4,480.87	4,342.83	4,479.20	25.07	89.82	90.058	-2,201.51	-1,419.49	1,630.13	1,515.35	114.77	14.203	
6,750.00	4,480.28	4,342.56	4,478.93	25.41	89.82	90.049	-2,201.50	-1,419.49	1,622.31	1,507.15	115.16	14.088	
6,800.00	4,479.69	4,342.29	4,478.66	25.75	89.81	90.039	-2,201.50	-1,419.49	1,616.00	1,500.47	115.52	13.988	
6,850.00	4,479.10	4,342.02	4,478.39	26.09	89.81	90.029	-2,201.50	-1,419.49	1,611.21	1,495.32	115.89	13.903	
6,900.00	4,478.51	4,341.74	4,478.11	26.43	89.80	90.019	-2,201.50	-1,419.49	1,607.97	1,491.73	116.23	13.834	
6,950.00	4,477.92	4,341.47	4,477.84	26.78	89.79	90.009	-2,201.50	-1,419.49	1,606.28	1,489.71	116.57	13.779	
6,979.40	4,477.57	4,341.30	4,477.67	26.99	89.79	90.004	-2,201.50	-1,419.49	1,606.01	1,489.25	116.76	13.755	CC, ES
7,000.00	4,477.33	4,341.19	4,477.56	27.13	89.79	89.999	-2,201.50	-1,419.49	1,606.14	1,489.25	116.89	13.741	
7,050.00	4,476.74	4,340.91	4,477.28	27.48	89.78	89.989	-2,201.49	-1,419.49	1,607.56	1,490.36	117.19	13.717	
7,100.00	4,476.15	4,340.63	4,477.00	27.84	89.78	89.979	-2,201.49	-1,419.49	1,610.53	1,493.05	117.48	13.709	SF
7,150.00	4,475.56	4,340.34	4,476.71	28.19	89.77	89.969	-2,201.49	-1,419.49	1,615.04	1,497.30	117.75	13.716	
7,200.00	4,474.97	4,340.06	4,476.43	28.55	89.77	89.959	-2,201.49	-1,419.49	1,621.09	1,503.09	117.99	13.739	
7,250.00	4,474.38	4,339.77	4,476.14	28.91	89.76	89.949	-2,201.49	-1,419.49	1,628.64	1,510.42	118.22	13.776	
7,300.00	4,473.79	4,339.49	4,475.85	29.27	89.75	89.939	-2,201.48	-1,419.49	1,637.69	1,519.26	118.43	13.828	
7,350.00	4,473.20	4,339.20	4,475.57	29.64	89.75	89.928	-2,201.48	-1,419.49	1,648.21	1,529.59	118.62	13.895	
7,400.00	4,472.61	4,338.90	4,475.27	30.00	89.74	89.918	-2,201.48	-1,419.49	1,660.17	1,541.38	118.79	13.976	
7,450.00	4,472.02	4,338.61	4,474.98	30.37	89.74	89.919	-2,201.48	-1,419.49	1,673.11	1,554.18	118.94	14.067	
7,500.00	4,471.43	4,338.31	4,474.68	30.74	89.73	89.921	-2,201.48	-1,419.49	1,686.61	1,567.54	119.07	14.165	
7,550.00	4,470.84	4,338.02	4,474.39	31.11	89.72	89.922	-2,201.48	-1,419.49	1,700.64	1,581.46	119.18	14.270	
7,600.00	4,470.25	4,337.71	4,474.08	31.47	89.72	89.924	-2,201.47	-1,419.49	1,715.17	1,595.91	119.27	14.381	
7,650.00	4,469.66	4,337.41	4,473.78	31.84	89.71	89.925	-2,201.47	-1,419.49	1,730.21	1,610.87	119.34	14.498	
7,700.00	4,469.06	4,337.10	4,473.47	32.21	89.71	89.918	-2,201.47	-1,419.49	1,745.94	1,626.54	119.39	14.624	
7,750.00	4,468.47	4,336.79	4,473.16	32.58	89.70	89.907	-2,201.47	-1,419.49	1,762.91	1,643.47	119.43	14.761	
7,800.00	4,467.88	4,336.48	4,472.85	32.95	89.69	89.896	-2,201.47	-1,419.49	1,781.12	1,661.66	119.46	14.910	
7,850.00	4,467.28	4,336.17	4,472.54	33.33	89.69	89.886	-2,201.46	-1,419.49	1,800.54	1,681.07	119.47	15.071	
7,900.00	4,466.69	4,335.85	4,472.22	33.70	89.68	89.875	-2,201.46	-1,419.49	1,821.12	1,701.66	119.46	15.244	
7,950.00	4,466.10	4,335.54	4,471.91	34.08	89.67	89.864	-2,201.46	-1,419.49	1,842.83	1,723.39	119.45	15.428	
8,000.00	4,465.50	4,335.22	4,471.59	34.46	89.67	89.853	-2,201.46	-1,419.49	1,865.63	1,746.22	119.42	15.623	
8,050.00	4,464.91	4,334.90	4,471.27	34.83	89.66	89.842	-2,201.46	-1,419.49	1,889.48	1,770.10	119.38	15.828	
8,100.00	4,464.32	4,334.58	4,470.95	35.21	89.65	89.830	-2,201.46	-1,419.49	1,914.33	1,795.01	119.33	16.043	
8,150.00	4,463.72	4,334.25	4,470.62	35.59	89.65	89.819	-2,201.45	-1,419.49	1,940.16	1,820.89	119.27	16.268	
8,200.00	4,463.13	4,333.93	4,470.30	35.97	89.64	89.798	-2,201.45	-1,419.49	1,967.10	1,847.91	119.20	16.503	
8,250.00	4,462.54	4,333.60	4,469.97	36.36	89.63	89.772	-2,201.45	-1,419.49	1,995.62	1,876.50	119.13	16.752	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MARACAS 22 STATE 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 532-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,499.73	4,363.55	4,498.34	16.84	75.89	97.473	-2,306.35	19.08	1,978.48	1,887.61	90.87	21.772	
5,150.00	4,499.14	4,363.01	4,497.80	16.99	75.88	97.292	-2,306.35	19.08	1,928.66	1,837.79	90.87	21.224	
5,200.00	4,498.55	4,362.48	4,497.27	17.14	75.87	97.111	-2,306.35	19.08	1,878.86	1,787.99	90.87	20.676	
5,250.00	4,497.96	4,361.94	4,496.73	17.32	75.86	96.929	-2,306.35	19.08	1,829.06	1,738.19	90.87	20.128	
5,300.00	4,497.37	4,361.40	4,496.19	17.49	75.85	96.746	-2,306.35	19.08	1,779.28	1,688.41	90.87	19.580	
5,350.00	4,496.78	4,360.86	4,495.65	17.68	75.84	96.564	-2,306.35	19.08	1,729.51	1,638.64	90.87	19.032	
5,400.00	4,496.19	4,360.32	4,495.11	17.86	75.83	96.380	-2,306.35	19.08	1,679.75	1,588.88	90.87	18.484	
5,450.00	4,495.60	4,359.78	4,494.57	18.07	75.82	96.196	-2,306.35	19.08	1,630.01	1,539.13	90.88	17.936	
5,500.00	4,495.01	4,359.24	4,494.03	18.28	75.81	96.012	-2,306.35	19.08	1,580.28	1,489.40	90.88	17.388	
5,550.00	4,494.42	4,358.70	4,493.49	18.50	75.80	95.827	-2,306.35	19.08	1,530.57	1,439.68	90.89	16.840	
5,600.00	4,493.83	4,358.15	4,492.94	18.72	75.79	95.642	-2,306.35	19.08	1,480.88	1,389.99	90.90	16.292	
5,650.00	4,493.24	4,357.61	4,492.40	18.95	75.78	95.456	-2,306.35	19.08	1,431.22	1,340.31	90.91	15.744	
5,700.00	4,492.66	4,357.06	4,491.85	19.19	75.77	95.270	-2,306.35	19.08	1,381.57	1,290.65	90.92	15.196	
5,750.00	4,492.07	4,356.51	4,491.31	19.44	75.76	95.084	-2,306.35	19.08	1,331.95	1,241.02	90.93	14.648	
5,800.00	4,491.48	4,355.97	4,490.76	19.68	75.75	94.897	-2,306.34	19.08	1,282.36	1,191.42	90.95	14.100	
5,850.00	4,490.89	4,355.42	4,490.21	19.95	75.74	94.709	-2,306.34	19.08	1,232.81	1,141.84	90.96	13.553	
5,900.00	4,490.30	4,354.87	4,489.66	20.21	75.73	94.521	-2,306.34	19.08	1,183.29	1,092.30	90.99	13.005	
5,950.00	4,489.71	4,354.32	4,489.11	20.48	75.72	94.333	-2,306.34	19.08	1,133.81	1,042.80	91.01	12.458	
6,000.00	4,489.12	4,353.77	4,488.56	20.75	75.71	94.144	-2,306.34	19.08	1,084.38	993.34	91.04	11.911	
6,050.00	4,488.53	4,353.21	4,488.00	21.03	75.70	93.955	-2,306.34	19.08	1,035.01	943.93	91.07	11.365	
6,100.00	4,487.94	4,352.66	4,487.45	21.32	75.69	93.766	-2,306.34	19.08	985.69	894.58	91.11	10.819	
6,150.00	4,487.35	4,352.10	4,486.90	21.61	75.68	93.576	-2,306.34	19.08	936.45	845.30	91.16	10.273	
6,200.00	4,486.76	4,351.55	4,486.34	21.90	75.67	93.385	-2,306.34	19.08	887.30	796.09	91.21	9.728	
6,250.00	4,486.17	4,350.99	4,485.78	22.20	75.66	93.194	-2,306.34	19.08	838.24	746.97	91.28	9.183	
6,300.00	4,485.58	4,350.43	4,485.22	22.51	75.65	93.003	-2,306.34	19.08	789.31	697.95	91.36	8.640	
6,350.00	4,484.99	4,349.87	4,484.67	22.82	75.64	92.811	-2,306.34	19.08	740.51	649.06	91.45	8.097	
6,400.00	4,484.40	4,349.32	4,484.11	23.13	75.63	92.619	-2,306.34	19.08	691.89	600.32	91.56	7.556	
6,450.00	4,483.81	4,348.75	4,483.54	23.44	75.62	92.426	-2,306.34	19.08	643.47	551.77	91.70	7.017	
6,500.00	4,483.22	4,348.19	4,482.98	23.76	75.61	92.233	-2,306.34	19.08	595.32	503.44	91.88	6.479	
6,550.00	4,482.63	4,347.63	4,482.42	24.09	75.60	92.040	-2,306.34	19.08	547.50	455.40	92.10	5.945	
6,600.00	4,482.05	4,347.07	4,481.86	24.41	75.59	91.846	-2,306.34	19.08	500.10	407.73	92.38	5.414	
6,650.00	4,481.46	4,346.50	4,481.29	24.74	75.58	91.652	-2,306.34	19.08	453.27	360.53	92.74	4.887	
6,700.00	4,480.87	4,345.93	4,480.72	25.07	75.57	91.458	-2,306.34	19.08	407.18	313.97	93.22	4.368	
6,750.00	4,480.28	4,345.37	4,480.16	25.41	75.56	91.263	-2,306.34	19.08	362.14	268.29	93.85	3.859	
6,800.00	4,479.69	4,344.80	4,479.59	25.75	75.55	91.067	-2,306.34	19.08	318.58	223.87	94.71	3.364	
6,850.00	4,479.10	4,344.23	4,479.02	26.09	75.54	90.871	-2,306.34	19.08	277.19	181.32	95.87	2.891	
6,900.00	4,478.51	4,343.66	4,478.45	26.43	75.53	90.675	-2,306.34	19.08	239.13	141.70	97.42	2.455	
6,950.00	4,477.92	4,343.09	4,477.88	26.78	75.52	90.479	-2,306.34	19.08	206.22	106.85	99.37	2.075	
7,000.00	4,477.33	4,342.52	4,477.31	27.13	75.51	90.282	-2,306.34	19.08	181.30	79.85	101.45	1.787	
7,050.00	4,476.74	4,341.94	4,476.73	27.48	75.50	90.085	-2,306.34	19.08	167.96	65.05	102.91	1.632	
7,071.58	4,476.49	4,341.69	4,476.48	27.64	75.49	89.999	-2,306.34	19.08	166.57	63.46	103.11	1.615	CC, ES, SF
7,100.00	4,476.15	4,341.37	4,476.16	27.84	75.49	89.887	-2,306.34	19.08	168.98	66.09	102.89	1.642	
7,150.00	4,475.56	4,340.79	4,475.58	28.19	75.47	89.689	-2,306.34	19.08	184.10	82.67	101.43	1.815	
7,200.00	4,474.97	4,340.21	4,475.01	28.55	75.46	89.491	-2,306.34	19.08	210.32	110.89	99.43	2.115	
7,250.00	4,474.38	4,339.64	4,474.43	28.91	75.45	89.292	-2,306.34	19.08	244.08	146.50	97.58	2.501	
7,300.00	4,473.79	4,339.06	4,473.85	29.27	75.44	89.093	-2,306.34	19.08	282.69	186.59	96.10	2.942	
7,350.00	4,473.20	4,338.48	4,473.27	29.64	75.43	88.894	-2,306.34	19.08	324.43	229.45	94.98	3.416	
7,400.00	4,472.61	4,337.90	4,472.69	30.00	75.42	88.694	-2,306.34	19.08	368.23	274.08	94.15	3.911	
7,450.00	4,472.02	4,337.31	4,472.11	30.37	75.41	88.556	-2,306.34	19.08	413.26	319.74	93.51	4.419	
7,500.00	4,471.43	4,336.73	4,471.52	30.74	75.40	88.435	-2,306.34	19.08	458.99	365.97	93.01	4.935	
7,550.00	4,470.84	4,336.14	4,470.93	31.11	75.39	88.330	-2,306.34	19.08	505.21	412.60	92.62	5.455	
7,600.00	4,470.25	4,335.55	4,470.35	31.47	75.38	88.241	-2,306.34	19.08	551.80	459.51	92.29	5.979	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MARACAS 22 STATE 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 532-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,650.00	4,469.66	4,334.96	4,469.76	31.84	75.37	88.168	-2,306.34	19.08	598.66	506.63	92.03	6.505	
7,700.00	4,469.06	4,334.37	4,469.16	32.21	75.36	88.033	-2,306.34	19.08	645.78	553.96	91.81	7.034	
7,750.00	4,468.47	4,333.78	4,468.57	32.58	75.35	87.870	-2,306.34	19.08	693.29	601.65	91.64	7.565	
7,800.00	4,467.88	4,333.19	4,467.98	32.95	75.34	87.707	-2,306.34	19.08	741.13	649.62	91.51	8.099	
7,850.00	4,467.28	4,332.59	4,467.38	33.33	75.33	87.544	-2,306.34	19.08	789.23	697.83	91.40	8.635	
7,900.00	4,466.69	4,332.00	4,466.79	33.70	75.31	87.380	-2,306.34	19.08	837.56	746.25	91.31	9.172	
7,950.00	4,466.10	4,331.40	4,466.19	34.08	75.30	87.216	-2,306.34	19.08	886.07	794.83	91.24	9.711	
8,000.00	4,465.50	4,330.80	4,465.59	34.46	75.29	87.052	-2,306.34	19.08	934.74	843.56	91.19	10.251	
8,050.00	4,464.91	4,330.20	4,464.99	34.83	75.28	86.888	-2,306.34	19.08	983.55	892.40	91.14	10.791	
8,100.00	4,464.32	4,329.60	4,464.39	35.21	75.27	86.723	-2,306.34	19.08	1,032.46	941.36	91.10	11.333	
8,150.00	4,463.72	4,329.00	4,463.79	35.59	75.26	86.558	-2,306.34	19.08	1,081.48	990.40	91.07	11.875	
8,200.00	4,463.13	4,328.40	4,463.19	35.97	75.25	86.134	-2,306.34	19.08	1,130.62	1,039.57	91.05	12.417	
8,250.00	4,462.54	4,327.79	4,462.58	36.36	75.24	85.489	-2,306.34	19.08	1,179.97	1,088.94	91.04	12.962	
8,300.00	4,461.94	4,327.19	4,461.98	36.75	75.23	84.652	-2,306.34	19.08	1,229.50	1,138.47	91.03	13.507	
8,350.00	4,461.35	4,326.58	4,461.38	37.14	75.22	83.516	-2,306.34	19.08	1,279.17	1,188.15	91.02	14.053	
8,400.00	4,460.76	4,325.98	4,460.77	37.53	75.20	81.880	-2,306.34	19.08	1,328.95	1,237.93	91.02	14.600	
8,450.00	4,460.17	4,325.38	4,460.17	37.92	75.19	79.321	-2,306.85	19.08	1,378.30	1,287.28	91.02	15.142	
8,500.00	4,459.58	4,324.79	4,459.58	38.31	75.18	74.741	-2,306.85	19.08	1,428.23	1,337.20	91.03	15.690	
8,550.00	4,459.00	4,324.20	4,459.00	38.71	75.17	64.859	-2,306.85	19.08	1,478.19	1,387.16	91.04	16.237	
8,600.00	4,458.41	4,323.62	4,458.41	39.10	75.16	64.118	-2,306.85	19.08	1,528.18	1,437.13	91.04	16.785	
8,650.00	4,457.82	4,323.03	4,457.82	39.50	75.15	63.387	-2,306.85	19.08	1,578.16	1,487.10	91.05	17.332	
8,700.00	4,457.24	4,322.45	4,457.24	39.89	75.14	62.664	-2,306.85	19.08	1,628.14	1,537.08	91.06	17.879	
8,750.00	4,456.65	4,321.86	4,456.65	40.29	75.13	61.951	-2,306.85	19.08	1,678.12	1,587.05	91.07	18.426	
8,800.00	4,456.07	4,321.27	4,456.07	40.69	75.12	61.247	-2,306.85	19.08	1,728.11	1,637.03	91.08	18.973	
8,850.00	4,455.48	4,320.69	4,455.48	41.09	75.11	60.552	-2,306.85	19.08	1,778.10	1,687.00	91.09	19.520	
8,900.00	4,454.89	4,320.10	4,454.89	41.49	75.10	59.867	-2,306.85	19.08	1,828.08	1,736.98	91.10	20.066	
8,950.00	4,454.31	4,319.52	4,454.31	41.89	75.09	59.191	-2,306.85	19.08	1,878.07	1,786.96	91.11	20.613	
9,000.00	4,453.72	4,318.93	4,453.72	42.30	75.08	58.525	-2,306.85	19.08	1,928.06	1,836.93	91.12	21.159	
9,050.00	4,453.14	4,318.34	4,453.14	42.70	75.06	57.868	-2,306.85	19.08	1,978.04	1,886.91	91.14	21.704	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MARACAS 22 STATE 12 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 369-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	21.00	0.00	0.00	0.29	170.623	-540.87	89.32	548.20				
50.00	50.00	29.00	50.00	0.05	0.41	170.623	-540.87	89.32	548.20	547.74	0.46	1,191.017	
100.00	100.00	79.00	100.00	0.14	1.11	170.623	-540.87	89.32	548.20	546.95	1.25	438.410	
150.00	150.00	129.00	150.00	0.32	1.81	170.623	-540.87	89.32	548.20	546.07	2.13	257.347	
200.00	200.00	179.00	200.00	0.50	2.51	170.623	-540.87	89.32	548.20	545.19	3.01	182.128	
250.00	250.00	229.00	250.00	0.68	3.21	170.623	-540.87	89.32	548.20	544.31	3.89	140.935	
300.00	300.00	279.00	300.00	0.86	3.91	170.623	-540.87	89.32	548.20	543.43	4.77	114.939	
350.00	350.00	329.00	350.00	1.04	4.61	155.096	-540.87	89.32	548.59	542.94	5.65	97.104	
400.00	399.98	379.04	399.98	1.22	5.42	155.143	-540.87	89.32	549.78	543.14	6.64	82.821	
450.00	449.93	428.99	449.93	1.40	6.66	155.222	-540.87	89.32	551.76	543.70	8.06	68.488	
500.00	499.84	478.90	499.84	1.58	7.89	155.331	-540.87	89.32	554.53	545.06	9.47	58.536	
550.00	549.68	526.38	547.30	1.76	9.07	155.446	-539.97	89.32	557.22	546.39	10.83	51.445	
600.00	599.45	572.88	593.80	1.95	10.22	155.602	-540.31	89.32	561.94	549.78	12.17	46.193	
650.00	649.13	628.27	649.13	2.13	11.54	155.829	-540.87	89.32	567.63	553.96	13.67	41.523	
700.00	698.70	677.84	698.70	2.31	12.58	156.046	-540.87	89.32	573.60	558.71	14.89	38.517	
750.00	748.15	727.29	748.15	2.49	13.62	156.287	-540.87	89.32	580.37	564.26	16.11	36.023	
800.00	797.47	776.61	797.47	2.67	14.66	156.549	-540.87	89.32	587.95	570.62	17.33	33.932	
850.00	846.63	825.77	846.63	2.85	15.69	156.830	-540.87	89.32	596.34	577.80	18.54	32.165	
900.00	895.62	874.53	895.38	3.03	16.71	157.111	-539.68	89.32	604.36	584.62	19.74	30.610	
950.00	944.44	922.23	943.07	3.21	17.71	157.415	-539.74	89.32	614.44	593.52	20.93	29.362	
1,000.00	993.09	969.73	990.57	3.39	18.71	157.779	-539.89	89.32	625.28	603.18	22.10	28.288	
1,050.00	1,041.73	1,017.18	1,038.01	3.57	19.71	158.165	-540.13	89.32	636.30	613.03	23.27	27.339	
1,100.00	1,090.37	1,064.59	1,085.42	3.76	20.70	158.539	-540.45	89.32	647.44	622.99	24.44	26.486	
1,150.00	1,139.01	1,118.23	1,139.01	3.94	21.82	158.947	-540.87	89.32	658.67	632.93	25.74	25.593	
1,200.00	1,187.65	1,166.87	1,187.65	4.13	22.74	159.302	-540.87	89.32	669.53	642.70	26.83	24.953	
1,250.00	1,236.29	1,215.51	1,236.29	4.32	23.66	159.645	-540.87	89.32	680.41	652.48	27.93	24.363	
1,300.00	1,284.93	1,264.15	1,284.93	4.51	24.58	159.978	-540.87	89.32	691.31	662.29	29.02	23.819	
1,350.00	1,333.58	1,312.79	1,333.58	4.70	25.50	160.301	-540.87	89.32	702.24	672.12	30.12	23.315	
1,400.00	1,382.22	1,361.16	1,381.93	4.88	26.41	160.607	-539.94	89.32	712.26	681.05	31.21	22.821	
1,450.00	1,430.86	1,408.66	1,429.43	5.07	27.31	160.904	-540.00	89.32	723.29	691.00	32.29	22.402	
1,500.00	1,479.50	1,456.13	1,476.90	5.26	28.21	161.193	-540.13	89.32	734.41	701.05	33.36	22.015	
1,550.00	1,528.14	1,503.57	1,524.34	5.45	29.11	161.473	-540.34	89.32	745.62	711.19	34.43	21.654	
1,600.00	1,576.78	1,550.97	1,571.74	5.64	30.00	161.745	-540.62	89.32	756.93	721.42	35.51	21.319	
1,650.00	1,625.42	1,604.67	1,625.42	5.83	31.02	162.043	-540.87	89.32	768.20	731.50	36.70	20.932	
1,700.00	1,674.06	1,653.31	1,674.06	6.02	31.93	162.305	-540.87	89.32	779.25	741.46	37.79	20.620	
1,750.00	1,722.70	1,701.95	1,722.70	6.21	32.84	162.560	-540.87	89.32	790.32	751.44	38.88	20.325	
1,800.00	1,771.34	1,750.59	1,771.34	6.40	33.76	162.807	-540.87	89.32	801.40	761.43	39.98	20.047	
1,850.00	1,819.98	1,799.23	1,819.98	6.59	34.67	163.048	-540.87	89.32	812.50	771.43	41.07	19.785	
1,900.00	1,868.62	1,847.48	1,868.22	6.78	35.58	163.280	-540.36	89.32	823.10	780.95	42.15	19.527	
1,950.00	1,917.26	1,895.37	1,916.12	6.97	36.48	163.505	-540.41	89.32	834.27	791.04	43.23	19.299	
2,000.00	1,965.90	1,943.25	1,963.99	7.16	37.38	163.724	-540.49	89.32	845.49	801.19	44.31	19.083	
2,050.00	2,014.54	1,991.11	2,011.85	7.35	38.28	163.938	-540.62	89.32	856.77	811.39	45.38	18.879	
2,100.00	2,063.18	2,038.95	2,059.69	7.54	39.18	164.145	-540.79	89.32	868.11	821.65	46.46	18.686	
2,150.00	2,111.82	2,091.10	2,111.82	7.73	40.20	164.366	-540.87	89.32	879.34	831.68	47.66	18.451	
2,200.00	2,160.46	2,139.74	2,160.46	7.92	41.17	164.566	-540.87	89.32	890.52	841.72	48.81	18.246	
2,250.00	2,209.10	2,188.38	2,209.10	8.11	42.14	164.762	-540.87	89.32	901.71	851.76	49.95	18.051	
2,300.00	2,257.74	2,237.02	2,257.74	8.30	43.11	164.953	-540.87	89.32	912.91	861.81	51.10	17.865	
2,350.00	2,306.38	2,285.67	2,306.38	8.50	44.08	165.139	-540.87	89.32	924.12	871.87	52.25	17.687	
2,400.00	2,355.02	2,333.23	2,353.94	8.69	45.02	165.317	-540.07	89.32	934.54	881.16	53.37	17.510	
2,450.00	2,403.66	2,380.54	2,401.25	8.88	45.97	165.490	-540.15	89.32	945.85	891.36	54.49	17.358	
2,500.00	2,452.30	2,427.83	2,448.54	9.07	46.91	165.658	-540.31	89.32	957.25	901.64	55.61	17.214	
2,550.00	2,500.94	2,475.09	2,495.79	9.26	47.85	165.823	-540.53	89.32	968.71	911.99	56.73	17.077	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MARACAS 22 STATE 12 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 369-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,600.00	2,549.58	2,522.31	2,543.01	9.45	48.79	165.983	-540.81	89.32	980.26	922.42	57.84	16.947	
2,650.00	2,598.22	2,577.55	2,598.22	9.64	49.89	166.167	-540.87	89.32	991.55	932.42	59.13	16.769	
2,700.00	2,646.86	2,626.19	2,646.86	9.83	50.86	166.325	-540.87	89.32	1,002.82	942.54	60.28	16.636	
2,750.00	2,695.50	2,674.83	2,695.50	10.02	51.83	166.479	-540.87	89.32	1,014.09	952.67	61.43	16.509	
2,800.00	2,744.14	2,723.47	2,744.14	10.22	52.80	166.630	-540.87	89.32	1,025.37	962.80	62.58	16.386	
2,850.00	2,792.78	2,771.98	2,792.64	10.41	53.77	166.780	-540.04	89.32	1,035.84	972.11	63.72	16.256	
2,900.00	2,841.42	2,819.16	2,839.83	10.60	54.71	166.920	-540.08	89.32	1,047.17	982.33	64.84	16.150	
2,950.00	2,890.06	2,866.32	2,886.98	10.79	55.65	167.057	-540.19	89.32	1,058.58	992.62	65.96	16.050	
3,000.00	2,938.70	2,913.45	2,934.11	10.98	56.59	167.191	-540.36	89.32	1,070.06	1,002.99	67.07	15.954	
3,050.00	2,987.34	2,960.55	2,981.21	11.17	57.53	167.322	-540.59	89.32	1,081.61	1,013.43	68.19	15.863	
3,100.00	3,035.98	3,015.36	3,035.98	11.36	58.62	167.472	-540.87	89.32	1,093.19	1,023.73	69.46	15.739	
3,150.00	3,084.63	3,064.00	3,084.63	11.55	59.54	167.602	-540.87	89.32	1,104.51	1,033.95	70.56	15.654	
3,200.00	3,133.27	3,112.64	3,133.27	11.75	60.46	167.729	-540.87	89.32	1,115.84	1,044.18	71.66	15.571	
3,250.00	3,181.91	3,161.28	3,181.91	11.94	61.39	167.854	-540.87	89.32	1,127.17	1,054.41	72.76	15.491	
3,300.00	3,230.55	3,209.92	3,230.55	12.13	62.31	167.977	-540.87	89.32	1,138.51	1,064.64	73.86	15.413	
3,350.00	3,279.19	3,257.96	3,278.57	12.32	63.22	168.098	-540.05	89.32	1,149.03	1,074.08	74.95	15.330	
3,400.00	3,328.06	3,305.21	3,325.83	12.51	64.12	164.773	-540.11	89.32	1,159.35	1,083.33	76.03	15.250	
3,450.00	3,377.40	3,352.90	3,373.51	12.69	65.03	158.561	-540.23	89.32	1,167.18	1,090.07	77.10	15.138	
3,500.00	3,427.07	3,400.90	3,421.51	12.87	65.94	145.736	-540.43	89.32	1,172.49	1,094.30	78.19	14.996	
3,550.00	3,476.93	3,449.09	3,469.70	13.04	66.86	114.110	-540.69	89.32	1,175.26	1,095.99	79.27	14.826	
3,600.00	3,526.85	3,506.26	3,526.85	13.20	67.93	63.170	-540.87	89.32	1,175.32	1,094.79	80.53	14.595	
3,650.00	3,576.69	3,556.10	3,576.69	13.36	68.87	35.831	-540.87	89.32	1,172.60	1,090.98	81.62	14.366	
3,700.00	3,626.31	3,605.72	3,626.31	13.50	69.80	24.609	-540.87	89.32	1,167.29	1,084.59	82.70	14.114	
3,750.00	3,675.59	3,654.99	3,675.59	13.64	70.72	19.051	-540.87	89.32	1,159.40	1,075.62	83.78	13.839	
3,800.00	3,724.37	3,703.78	3,724.37	13.77	71.63	15.863	-540.87	89.32	1,148.94	1,064.11	84.83	13.543	
3,850.00	3,772.54	3,751.13	3,771.72	13.90	72.52	13.867	-540.37	89.32	1,135.46	1,049.60	85.86	13.225	
3,900.00	3,819.95	3,797.59	3,818.18	14.02	73.39	12.553	-540.42	89.32	1,120.03	1,033.16	86.86	12.894	
3,950.00	3,866.48	3,843.23	3,863.82	14.14	74.24	11.674	-540.51	89.32	1,102.18	1,014.34	87.85	12.547	
4,000.00	3,912.00	3,887.91	3,908.50	14.25	75.08	11.097	-540.64	89.32	1,081.98	993.17	88.81	12.184	
4,050.00	3,956.38	3,931.53	3,952.11	14.36	75.90	10.745	-540.80	89.32	1,059.46	969.72	89.74	11.806	
4,100.00	3,999.51	3,978.94	3,999.51	14.46	76.79	10.607	-540.87	89.32	1,034.56	943.81	90.75	11.400	
4,150.00	4,041.26	4,020.70	4,041.26	14.56	77.57	10.604	-540.87	89.32	1,007.39	915.76	91.64	10.993	
4,200.00	4,081.53	4,060.96	4,081.53	14.66	78.33	10.748	-540.87	89.32	978.09	885.60	92.49	10.575	
4,250.00	4,120.19	4,099.62	4,120.19	14.75	79.05	11.038	-540.87	89.32	946.74	853.44	93.31	10.147	
4,300.00	4,157.15	4,136.58	4,157.15	14.85	79.74	11.481	-540.87	89.32	913.43	819.35	94.08	9.709	
4,350.00	4,192.30	4,171.66	4,192.22	14.95	80.40	12.102	-540.20	89.32	877.59	782.77	94.82	9.255	
4,400.00	4,225.55	4,204.16	4,224.72	15.04	81.01	12.902	-540.21	89.32	840.67	745.17	95.50	8.803	
4,450.00	4,256.80	4,234.79	4,255.35	15.14	81.59	13.934	-540.26	89.32	802.12	705.98	96.14	8.343	
4,500.00	4,285.98	4,263.44	4,284.00	15.24	82.12	15.256	-540.32	89.32	762.05	665.31	96.73	7.878	
4,550.00	4,312.99	4,290.04	4,310.60	15.35	82.62	16.944	-540.40	89.32	720.56	623.28	97.28	7.407	
4,600.00	4,338.18	4,314.92	4,335.47	15.45	83.09	18.380	-540.49	89.32	678.02	580.22	97.80	6.933	
4,650.00	4,363.18	4,339.67	4,360.22	15.58	83.56	19.535	-540.60	89.32	635.46	537.16	98.30	6.464	
4,700.00	4,388.18	4,364.48	4,385.03	15.71	84.02	20.840	-540.73	89.32	593.01	494.20	98.81	6.001	
4,750.00	4,413.18	4,392.63	4,413.18	15.85	84.54	22.537	-540.87	89.32	550.68	451.28	99.40	5.540	
4,800.00	4,437.50	4,416.96	4,437.50	15.99	84.96	26.425	-540.87	89.32	507.99	408.12	99.87	5.087	
4,850.00	4,458.24	4,437.70	4,458.24	16.14	85.31	33.544	-540.87	89.32	463.74	363.46	100.28	4.624	
4,900.00	4,474.94	4,454.40	4,474.94	16.28	85.60	43.487	-540.87	89.32	418.17	317.55	100.63	4.156	
4,950.00	4,487.48	4,466.93	4,487.48	16.43	85.81	56.575	-540.87	89.32	371.77	270.86	100.91	3.684	
5,000.00	4,495.74	4,475.20	4,495.74	16.57	85.95	71.557	-540.87	89.32	325.10	223.96	101.14	3.214	
5,050.00	4,499.68	4,479.14	4,499.68	16.70	86.02	85.398	-540.87	89.32	278.84	177.52	101.32	2.752	
5,100.00	4,499.73	4,479.19	4,499.73	16.84	86.02	91.240	-540.87	89.32	233.91	132.41	101.51	2.304	
5,150.00	4,499.14	4,478.60	4,499.14	16.99	86.01	90.938	-540.87	89.32	191.50	89.71	101.80	1.881	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MARACAS 22 STATE 12 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 369-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	4,498.55	4,478.01	4,498.55	17.14	86.00	90.637	-540.87	89.32	153.73	51.45	102.28	1.503	
5,250.00	4,497.96	4,477.42	4,497.96	17.32	85.99	90.335	-540.87	89.32	124.85	21.89	102.97	1.213	SF = 1.25
5,300.00	4,497.37	4,476.83	4,497.37	17.49	85.98	90.033	-540.87	89.32	112.01	8.54	103.47	1.083	SF = 1.25
5,305.44	4,497.31	4,476.76	4,497.31	17.51	85.98	90.000	-540.87	89.32	111.87	8.40	103.48	1.081	SF = 1.25, CC, ES, SF
5,350.00	4,496.78	4,476.24	4,496.78	17.68	85.97	89.731	-540.87	89.32	120.42	17.24	103.18	1.167	SF = 1.25
5,400.00	4,496.19	4,475.65	4,496.19	17.86	85.96	89.429	-540.87	89.32	146.48	43.99	102.49	1.429	SF = 1.50
5,450.00	4,495.60	4,475.06	4,495.60	18.07	85.95	89.127	-540.87	89.32	182.79	80.84	101.95	1.793	
5,500.00	4,495.01	4,474.47	4,495.01	18.28	85.94	88.826	-540.87	89.32	224.42	122.82	101.60	2.209	
5,550.00	4,494.42	4,473.88	4,494.42	18.50	85.93	88.524	-540.87	89.32	268.92	167.53	101.39	2.652	
5,600.00	4,493.83	4,473.29	4,493.83	18.72	85.92	88.222	-540.87	89.32	315.07	213.82	101.25	3.112	
5,650.00	4,493.24	4,472.70	4,493.24	18.95	85.91	87.921	-540.87	89.32	362.24	261.09	101.16	3.581	
5,700.00	4,492.66	4,472.11	4,492.66	19.19	85.90	87.619	-540.87	89.32	410.09	308.99	101.09	4.057	
5,750.00	4,492.07	4,471.52	4,492.07	19.44	85.89	87.318	-540.87	89.32	458.39	357.34	101.05	4.536	
5,800.00	4,491.48	4,470.93	4,491.48	19.68	85.88	87.017	-540.87	89.32	507.02	406.01	101.01	5.020	
5,850.00	4,490.89	4,470.35	4,490.89	19.95	85.87	86.716	-540.87	89.32	555.90	454.91	100.98	5.505	
5,900.00	4,490.30	4,469.76	4,490.30	20.21	85.86	86.415	-540.87	89.32	604.95	503.99	100.96	5.992	
5,950.00	4,489.71	4,469.17	4,489.71	20.48	85.85	86.115	-540.87	89.32	654.15	553.21	100.94	6.480	
6,000.00	4,489.12	4,468.58	4,489.12	20.75	85.84	85.814	-540.87	89.32	703.47	602.54	100.93	6.970	
6,050.00	4,488.53	4,467.99	4,488.53	21.03	85.83	85.514	-540.87	89.32	752.87	651.95	100.92	7.460	
6,100.00	4,487.94	4,467.40	4,487.94	21.32	85.82	85.214	-540.87	89.32	802.34	701.44	100.91	7.951	
6,150.00	4,487.35	4,466.81	4,487.35	21.61	85.81	84.915	-540.87	89.32	851.88	750.98	100.90	8.443	
6,200.00	4,486.76	4,466.22	4,486.76	21.90	85.80	84.615	-540.87	89.32	901.47	800.58	100.89	8.935	
6,250.00	4,486.17	4,465.63	4,486.17	22.20	85.79	84.316	-540.87	89.32	951.10	850.21	100.88	9.428	
6,300.00	4,485.58	4,465.04	4,485.58	22.51	85.78	84.018	-540.87	89.32	1,000.76	899.89	100.88	9.920	
6,350.00	4,484.99	4,464.45	4,484.99	22.82	85.77	83.719	-540.87	89.32	1,050.46	949.59	100.87	10.414	
6,400.00	4,484.40	4,463.86	4,484.40	23.13	85.76	83.421	-540.87	89.32	1,100.19	999.32	100.87	10.907	
6,450.00	4,483.81	4,463.27	4,483.81	23.44	85.75	83.123	-540.87	89.32	1,149.94	1,049.07	100.87	11.400	
6,500.00	4,483.22	4,462.68	4,483.22	23.76	85.74	82.826	-540.87	89.32	1,199.71	1,098.84	100.87	11.894	
6,550.00	4,482.63	4,462.09	4,482.63	24.09	85.73	82.529	-540.87	89.32	1,249.49	1,148.63	100.87	12.388	
6,600.00	4,482.05	4,461.50	4,482.05	24.41	85.72	82.233	-540.87	89.32	1,299.30	1,198.43	100.86	12.882	
6,650.00	4,481.46	4,460.91	4,481.46	24.74	85.71	81.936	-540.87	89.32	1,349.11	1,248.25	100.86	13.376	
6,700.00	4,480.87	4,460.32	4,480.87	25.07	85.70	81.641	-540.87	89.32	1,398.94	1,298.08	100.86	13.870	
6,750.00	4,480.28	4,459.74	4,480.28	25.41	85.69	81.345	-540.87	89.32	1,448.79	1,347.92	100.86	14.364	
6,800.00	4,479.69	4,459.15	4,479.69	25.75	85.68	81.051	-540.87	89.32	1,498.64	1,397.77	100.86	14.858	
6,850.00	4,479.10	4,458.56	4,479.10	26.09	85.67	80.756	-540.87	89.32	1,548.50	1,447.63	100.87	15.352	
6,900.00	4,478.51	4,457.97	4,478.51	26.43	85.66	80.463	-540.87	89.32	1,598.37	1,497.50	100.87	15.846	
6,950.00	4,477.92	4,457.38	4,477.92	26.78	85.65	80.169	-540.87	89.32	1,648.25	1,547.38	100.87	16.340	
7,000.00	4,477.33	4,456.79	4,477.33	27.13	85.64	79.876	-540.87	89.32	1,698.13	1,597.26	100.87	16.835	
7,050.00	4,476.74	4,456.20	4,476.74	27.48	85.63	79.584	-540.87	89.32	1,748.02	1,647.15	100.87	17.329	
7,100.00	4,476.15	4,455.61	4,476.15	27.84	85.62	79.292	-540.87	89.32	1,797.92	1,697.04	100.88	17.823	
7,150.00	4,475.56	4,455.02	4,475.56	28.19	85.61	79.001	-540.87	89.32	1,847.82	1,746.94	100.88	18.317	
7,200.00	4,474.97	4,454.43	4,474.97	28.55	85.60	78.711	-540.87	89.32	1,897.73	1,796.85	100.88	18.811	
7,250.00	4,474.38	4,453.84	4,474.38	28.91	85.59	78.421	-540.87	89.32	1,947.64	1,846.75	100.89	19.305	
7,300.00	4,473.79	4,453.25	4,473.79	29.27	85.58	78.131	-540.87	89.32	1,997.56	1,896.67	100.89	19.799	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MARACAS 22 STATE 2 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 209-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,450.00	4,495.60	4,338.15	4,494.93	18.07	77.90	90.760	-2,169.87	-1,090.04	1,965.88	1,871.43	94.44	20.815	
5,500.00	4,495.01	4,337.59	4,494.37	18.28	77.89	90.735	-2,169.87	-1,090.04	1,928.14	1,833.53	94.60	20.382	
5,550.00	4,494.42	4,337.04	4,493.81	18.50	77.87	90.710	-2,169.87	-1,090.04	1,890.96	1,796.19	94.77	19.952	
5,600.00	4,493.83	4,336.48	4,493.25	18.72	77.86	90.685	-2,169.87	-1,090.04	1,854.39	1,759.43	94.96	19.528	
5,650.00	4,493.24	4,335.92	4,492.70	18.95	77.85	90.660	-2,169.87	-1,090.04	1,818.46	1,723.30	95.16	19.109	
5,700.00	4,492.66	4,335.36	4,492.14	19.19	77.84	90.635	-2,169.87	-1,090.04	1,783.21	1,687.83	95.38	18.697	
5,750.00	4,492.07	4,334.80	4,491.58	19.44	77.83	90.610	-2,169.87	-1,090.04	1,748.67	1,653.06	95.61	18.290	
5,800.00	4,491.48	4,334.24	4,491.01	19.68	77.82	90.585	-2,169.87	-1,090.04	1,714.90	1,619.05	95.85	17.891	
5,850.00	4,490.89	4,333.67	4,490.45	19.95	77.81	90.560	-2,169.87	-1,090.04	1,681.94	1,585.82	96.12	17.498	
5,900.00	4,490.30	4,333.11	4,489.89	20.21	77.80	90.534	-2,169.87	-1,090.04	1,649.83	1,553.43	96.40	17.115	
5,950.00	4,489.71	4,332.55	4,489.33	20.48	77.79	90.509	-2,169.87	-1,090.04	1,618.63	1,521.94	96.70	16.739	
6,000.00	4,489.12	4,331.99	4,488.76	20.75	77.78	90.484	-2,169.87	-1,090.04	1,588.39	1,491.39	97.01	16.374	
6,050.00	4,488.53	4,331.42	4,488.20	21.03	77.77	90.458	-2,169.87	-1,090.04	1,559.17	1,461.84	97.34	16.018	
6,100.00	4,487.94	4,330.86	4,487.63	21.32	77.76	90.433	-2,169.87	-1,090.04	1,531.03	1,433.35	97.68	15.674	
6,150.00	4,487.35	4,330.29	4,487.07	21.61	77.75	90.408	-2,169.87	-1,090.04	1,504.02	1,405.97	98.04	15.340	
6,200.00	4,486.76	4,329.72	4,486.50	21.90	77.74	90.382	-2,169.87	-1,090.04	1,478.21	1,379.79	98.42	15.020	
6,250.00	4,486.17	4,329.16	4,485.93	22.20	77.73	90.357	-2,169.87	-1,090.04	1,453.66	1,354.85	98.81	14.712	
6,300.00	4,485.58	4,328.59	4,485.37	22.51	77.72	90.331	-2,169.87	-1,090.04	1,430.43	1,331.23	99.20	14.419	
6,350.00	4,484.99	4,328.02	4,484.80	22.82	77.71	90.306	-2,169.87	-1,090.04	1,408.60	1,308.99	99.61	14.141	
6,400.00	4,484.40	4,327.45	4,484.23	23.13	77.70	90.280	-2,169.87	-1,090.04	1,388.23	1,288.20	100.03	13.878	
6,450.00	4,483.81	4,326.88	4,483.66	23.44	77.69	90.255	-2,169.87	-1,090.04	1,369.38	1,268.93	100.45	13.632	
6,500.00	4,483.22	4,326.31	4,483.09	23.76	77.68	90.229	-2,169.87	-1,090.04	1,352.12	1,251.24	100.88	13.404	
6,550.00	4,482.63	4,325.74	4,482.52	24.09	77.67	90.204	-2,169.87	-1,090.04	1,336.50	1,235.20	101.30	13.193	
6,600.00	4,482.05	4,325.17	4,481.95	24.41	77.66	90.178	-2,169.87	-1,090.04	1,322.59	1,220.87	101.73	13.002	
6,650.00	4,481.46	4,324.60	4,481.37	24.74	77.64	90.152	-2,169.87	-1,090.04	1,310.45	1,208.30	102.14	12.829	
6,700.00	4,480.87	4,324.02	4,480.80	25.07	77.63	90.126	-2,169.87	-1,090.04	1,300.11	1,197.56	102.55	12.678	
6,750.00	4,480.28	4,323.45	4,480.23	25.41	77.62	90.101	-2,169.87	-1,090.04	1,291.63	1,188.68	102.95	12.547	
6,800.00	4,479.69	4,322.87	4,479.65	25.75	77.61	90.075	-2,169.87	-1,090.04	1,285.04	1,181.71	103.33	12.437	
6,850.00	4,479.10	4,322.30	4,479.08	26.09	77.60	90.049	-2,169.87	-1,090.04	1,280.37	1,176.68	103.69	12.348	
6,900.00	4,478.51	4,321.72	4,478.50	26.43	77.59	90.023	-2,169.86	-1,090.04	1,277.64	1,173.61	104.02	12.282	
6,944.87	4,477.98	4,321.20	4,477.98	26.75	77.58	90.000	-2,169.86	-1,090.04	1,276.85	1,172.54	104.31	12.241 CC	
6,950.00	4,477.92	4,321.15	4,477.92	26.78	77.58	89.997	-2,169.86	-1,090.04	1,276.86	1,172.52	104.34	12.237 ES	
7,000.00	4,477.33	4,320.57	4,477.35	27.13	77.57	89.972	-2,169.86	-1,090.04	1,278.04	1,173.41	104.63	12.215	
7,050.00	4,476.74	4,319.99	4,476.77	27.48	77.56	89.946	-2,169.86	-1,090.04	1,281.17	1,176.28	104.89	12.214 SF	
7,100.00	4,476.15	4,319.41	4,476.19	27.84	77.55	89.920	-2,169.86	-1,090.04	1,286.24	1,181.11	105.12	12.235	
7,150.00	4,475.56	4,318.83	4,475.61	28.19	77.54	89.894	-2,169.86	-1,090.04	1,293.22	1,187.89	105.33	12.278	
7,200.00	4,474.97	4,318.25	4,475.03	28.55	77.53	89.868	-2,169.86	-1,090.04	1,302.08	1,196.59	105.50	12.342	
7,250.00	4,474.38	4,317.67	4,474.45	28.91	77.52	89.842	-2,169.86	-1,090.04	1,312.80	1,207.15	105.64	12.427	
7,300.00	4,473.79	4,317.09	4,473.87	29.27	77.51	89.815	-2,169.86	-1,090.04	1,325.31	1,219.55	105.76	12.532	
7,350.00	4,473.20	4,316.51	4,473.29	29.64	77.50	89.789	-2,169.86	-1,090.04	1,339.57	1,233.73	105.85	12.656	
7,400.00	4,472.61	4,315.93	4,472.70	30.00	77.48	89.763	-2,169.86	-1,090.04	1,355.53	1,249.63	105.90	12.800	
7,450.00	4,472.02	4,315.34	4,472.12	30.37	77.47	89.750	-2,169.86	-1,090.04	1,372.72	1,266.78	105.94	12.958	
7,500.00	4,471.43	4,314.76	4,471.53	30.74	77.46	89.737	-2,169.86	-1,090.04	1,390.68	1,284.74	105.95	13.126	
7,550.00	4,470.84	4,314.17	4,470.94	31.11	77.45	89.724	-2,169.86	-1,090.04	1,409.39	1,303.46	105.93	13.304	
7,600.00	4,470.25	4,313.58	4,470.36	31.47	77.44	89.712	-2,169.86	-1,090.04	1,428.81	1,322.91	105.90	13.493	
7,650.00	4,469.66	4,312.99	4,469.77	31.84	77.43	89.701	-2,169.86	-1,090.04	1,448.90	1,343.06	105.84	13.690	
7,700.00	4,469.06	4,312.40	4,469.17	32.21	77.42	89.679	-2,169.86	-1,090.04	1,469.84	1,364.08	105.76	13.898	
7,750.00	4,468.47	4,311.81	4,468.58	32.58	77.41	89.653	-2,169.86	-1,090.04	1,492.12	1,386.45	105.67	14.120	
7,800.00	4,467.88	4,311.21	4,467.99	32.95	77.40	89.628	-2,169.86	-1,090.04	1,515.73	1,410.16	105.57	14.358	
7,850.00	4,467.28	4,310.62	4,467.40	33.33	77.39	89.602	-2,169.86	-1,090.04	1,540.60	1,435.15	105.45	14.609	
7,900.00	4,466.69	4,310.03	4,466.80	33.70	77.38	89.577	-2,169.86	-1,090.04	1,566.67	1,461.35	105.32	14.875	
7,950.00	4,466.10	4,309.43	4,466.21	34.08	77.36	89.551	-2,169.86	-1,090.04	1,593.88	1,488.70	105.19	15.152	

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

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MARACAS 22 STATE 2 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 209-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,000.00	4,465.50	4,308.84	4,465.61	34.46	77.35	89.525	-2,169.86	-1,090.04	1,622.18	1,517.14	105.04	15.443	
8,050.00	4,464.91	4,308.24	4,465.02	34.83	77.34	89.499	-2,169.86	-1,090.04	1,651.51	1,546.61	104.90	15.744	
8,100.00	4,464.32	4,307.64	4,464.42	35.21	77.33	89.474	-2,169.86	-1,090.04	1,681.81	1,577.07	104.74	16.057	
8,150.00	4,463.72	4,307.05	4,463.82	35.59	77.32	89.448	-2,169.86	-1,090.04	1,713.04	1,608.45	104.58	16.380	
8,200.00	4,463.13	4,306.45	4,463.22	35.97	77.31	89.407	-2,169.86	-1,090.04	1,745.30	1,640.88	104.42	16.714	
8,250.00	4,462.54	4,305.85	4,462.63	36.36	77.30	89.360	-2,169.86	-1,090.04	1,779.01	1,674.75	104.26	17.063	
8,300.00	4,461.94	4,305.25	4,462.03	36.75	77.29	89.311	-2,169.86	-1,090.04	1,814.09	1,709.98	104.11	17.425	
8,350.00	4,461.35	4,304.65	4,461.43	37.14	77.28	89.259	-2,169.86	-1,090.04	1,850.45	1,746.49	103.96	17.800	
8,400.00	4,460.76	4,304.05	4,460.83	37.53	77.27	89.206	-2,169.86	-1,090.04	1,888.01	1,784.20	103.81	18.187	
8,450.00	4,460.17	4,303.46	4,460.23	37.92	77.25	89.150	-2,169.86	-1,090.04	1,926.69	1,823.03	103.67	18.585	
8,500.00	4,459.58	4,302.86	4,459.64	38.31	77.24	89.091	-2,169.86	-1,090.04	1,966.41	1,862.88	103.53	18.993	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 1 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.00 usft

Survey Program: 388-INC-ONLY

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,250.00	4,462.54	4,351.64	4,462.54	36.36	75.06	90.943	-5,003.14	-1,157.47	1,979.68	1,878.27	101.41	19.522	
8,300.00	4,461.94	4,351.05	4,461.94	36.75	75.05	90.880	-5,003.14	-1,157.47	1,939.59	1,837.67	101.92	19.031	
8,350.00	4,461.35	4,350.45	4,461.35	37.14	75.04	90.820	-5,003.14	-1,157.47	1,900.51	1,798.04	102.47	18.548	
8,400.00	4,460.76	4,349.86	4,460.76	37.53	75.02	90.763	-5,003.14	-1,157.47	1,862.52	1,759.47	103.05	18.075	
8,450.00	4,460.17	4,349.27	4,460.17	37.92	75.01	90.709	-5,003.14	-1,157.47	1,825.70	1,722.03	103.67	17.611	
8,500.00	4,459.58	4,348.69	4,459.58	38.31	75.00	90.657	-5,003.14	-1,157.47	1,790.13	1,685.81	104.32	17.161	
8,550.00	4,459.00	4,348.10	4,459.00	38.71	74.99	90.608	-5,003.14	-1,157.47	1,755.90	1,650.90	105.00	16.722	
8,600.00	4,458.41	4,347.51	4,458.41	39.10	74.98	90.582	-5,003.14	-1,157.47	1,722.75	1,617.03	105.72	16.295	
8,650.00	4,457.82	4,346.93	4,457.82	39.50	74.97	90.556	-5,003.14	-1,157.47	1,690.43	1,583.97	106.46	15.878	
8,700.00	4,457.24	4,346.34	4,457.24	39.89	74.96	90.530	-5,003.14	-1,157.47	1,658.99	1,551.77	107.23	15.472	
8,750.00	4,456.65	4,345.75	4,456.65	40.29	74.95	90.504	-5,003.14	-1,157.47	1,628.48	1,520.47	108.01	15.077	
8,800.00	4,456.07	4,345.17	4,456.07	40.69	74.94	90.479	-5,003.14	-1,157.47	1,598.95	1,490.13	108.82	14.694	
8,850.00	4,455.48	4,344.58	4,455.48	41.09	74.93	90.453	-5,003.14	-1,157.47	1,570.45	1,460.81	109.64	14.324	
8,900.00	4,454.89	4,344.00	4,454.89	41.49	74.92	90.427	-5,003.14	-1,157.47	1,543.05	1,432.58	110.47	13.968	
8,950.00	4,454.31	4,343.41	4,454.31	41.89	74.90	90.401	-5,003.14	-1,157.47	1,516.80	1,405.48	111.32	13.625	
9,000.00	4,453.72	4,342.82	4,453.72	42.30	74.89	90.376	-5,003.14	-1,157.47	1,491.77	1,379.59	112.18	13.298	
9,050.00	4,453.14	4,342.24	4,453.14	42.70	74.88	90.350	-5,003.14	-1,157.47	1,468.01	1,354.96	113.05	12.986	
9,100.00	4,452.55	4,341.65	4,452.55	43.10	74.87	90.324	-5,003.14	-1,157.47	1,445.59	1,331.68	113.91	12.690	
9,150.00	4,451.97	4,341.07	4,451.97	43.51	74.86	90.298	-5,003.14	-1,157.47	1,424.58	1,309.80	114.78	12.411	
9,200.00	4,451.38	4,340.48	4,451.38	43.91	74.85	90.272	-5,003.14	-1,157.47	1,405.03	1,289.39	115.64	12.150	
9,250.00	4,450.79	4,339.89	4,450.79	44.31	74.84	90.247	-5,003.14	-1,157.47	1,387.00	1,270.52	116.49	11.907	
9,300.00	4,450.21	4,339.31	4,450.21	44.72	74.83	90.221	-5,003.14	-1,157.47	1,370.57	1,253.25	117.32	11.683	
9,350.00	4,449.62	4,338.72	4,449.62	45.13	74.82	90.195	-5,003.14	-1,157.47	1,355.78	1,237.65	118.13	11.477	
9,400.00	4,449.04	4,338.14	4,449.04	45.53	74.81	90.169	-5,003.14	-1,157.47	1,342.69	1,223.78	118.90	11.292	
9,450.00	4,448.45	4,337.55	4,448.45	45.94	74.80	90.144	-5,003.14	-1,157.47	1,331.35	1,211.70	119.65	11.127	
9,500.00	4,447.86	4,336.96	4,447.86	46.35	74.78	90.118	-5,003.14	-1,157.47	1,321.80	1,201.45	120.36	10.982	
9,550.00	4,447.28	4,336.38	4,447.28	46.76	74.77	90.092	-5,003.14	-1,157.47	1,314.09	1,193.08	121.02	10.859	
9,600.00	4,446.69	4,335.79	4,446.69	47.16	74.76	90.066	-5,003.14	-1,157.47	1,308.25	1,186.62	121.63	10.756	
9,650.00	4,446.11	4,335.21	4,446.11	47.57	74.75	90.040	-5,003.14	-1,157.47	1,304.30	1,182.11	122.19	10.675	
9,700.00	4,445.52	4,334.62	4,445.52	47.98	74.74	90.015	-5,003.14	-1,157.47	1,302.25	1,179.57	122.68	10.615	
9,728.27	4,445.19	4,334.29	4,445.19	48.21	74.73	90.000	-5,003.14	-1,157.47	1,301.95	1,179.01	122.94	10.590	CC
9,750.00	4,444.93	4,334.04	4,444.93	48.39	74.73	89.989	-5,003.14	-1,157.47	1,302.13	1,179.01	123.12	10.576	ES
9,800.00	4,444.35	4,333.45	4,444.35	48.80	74.72	89.963	-5,003.14	-1,157.47	1,303.92	1,180.43	123.50	10.558	SF
9,850.00	4,443.76	4,332.86	4,443.76	49.21	74.71	89.937	-5,003.14	-1,157.47	1,307.63	1,183.82	123.81	10.562	
9,900.00	4,443.18	4,332.28	4,443.18	49.62	74.70	89.911	-5,003.14	-1,157.47	1,313.22	1,189.17	124.05	10.586	
9,950.00	4,442.59	4,331.69	4,442.59	50.04	74.69	89.886	-5,003.14	-1,157.47	1,320.69	1,196.46	124.23	10.631	
10,000.00	4,442.00	4,331.11	4,442.00	50.45	74.68	89.860	-5,003.14	-1,157.47	1,330.00	1,205.65	124.35	10.696	
10,050.00	4,441.42	4,330.52	4,441.42	50.86	74.66	89.834	-5,003.14	-1,157.47	1,341.11	1,216.70	124.40	10.780	
10,100.00	4,440.83	4,329.93	4,440.83	51.27	74.65	89.808	-5,003.14	-1,157.47	1,353.97	1,229.57	124.40	10.884	
10,150.00	4,440.25	4,329.35	4,440.25	51.74	74.64	89.783	-5,003.14	-1,157.47	1,368.54	1,244.07	124.47	10.995	
10,170.94	4,440.00	4,329.10	4,440.00	51.93	74.64	89.772	-5,003.14	-1,157.47	1,375.14	1,250.64	124.50	11.045	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 3 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 269-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,400.00	4,484.40	4,344.20	4,484.04	23.13	76.86	-117.877	-3,630.50	217.76	1,994.38	1,902.41	91.96	21.687	
6,450.00	4,483.81	4,343.62	4,483.47	23.44	76.85	-117.284	-3,630.50	217.76	1,944.39	1,852.43	91.96	21.143	
6,500.00	4,483.22	4,343.05	4,482.89	23.76	76.84	-116.685	-3,630.50	217.76	1,894.41	1,802.45	91.96	20.600	
6,550.00	4,482.63	4,342.47	4,482.32	24.09	76.83	-116.079	-3,630.50	217.76	1,844.43	1,752.46	91.96	20.056	
6,600.00	4,482.05	4,341.89	4,481.74	24.41	76.82	-115.466	-3,630.50	217.76	1,794.44	1,702.48	91.96	19.513	
6,650.00	4,481.46	4,341.31	4,481.16	24.74	76.81	-114.847	-3,630.50	217.76	1,744.46	1,652.50	91.96	18.969	
6,700.00	4,480.87	4,340.74	4,480.58	25.07	76.80	-114.222	-3,630.50	217.76	1,694.48	1,602.52	91.96	18.425	
6,750.00	4,480.28	4,340.16	4,480.01	25.41	76.79	-113.590	-3,630.50	217.76	1,644.50	1,552.54	91.97	17.882	
6,800.00	4,479.69	4,339.58	4,479.43	25.75	76.78	-112.951	-3,630.50	217.76	1,594.52	1,502.56	91.97	17.338	
6,850.00	4,479.10	4,339.00	4,478.85	26.09	76.77	-112.307	-3,630.50	217.76	1,544.55	1,452.58	91.97	16.794	
6,900.00	4,478.51	4,338.43	4,478.27	26.43	76.76	-111.656	-3,630.50	217.76	1,494.57	1,402.60	91.97	16.251	
6,950.00	4,477.92	4,337.85	4,477.69	26.78	76.75	-110.999	-3,630.50	217.76	1,444.60	1,352.62	91.97	15.707	
7,000.00	4,477.33	4,337.27	4,477.12	27.13	76.74	-110.335	-3,630.50	217.76	1,394.62	1,302.65	91.97	15.163	
7,050.00	4,476.74	4,336.69	4,476.54	27.48	76.73	-109.666	-3,630.50	217.76	1,344.65	1,252.68	91.98	14.619	
7,100.00	4,476.15	4,336.11	4,475.96	27.84	76.73	-108.991	-3,630.50	217.76	1,294.68	1,202.70	91.98	14.076	
7,150.00	4,475.56	4,335.53	4,475.38	28.19	76.72	-108.310	-3,630.50	217.76	1,244.72	1,152.73	91.98	13.532	
7,200.00	4,474.97	4,334.95	4,474.80	28.55	76.71	-107.624	-3,630.50	217.76	1,194.75	1,102.77	91.99	12.988	
7,250.00	4,474.38	4,334.37	4,474.22	28.91	76.70	-106.932	-3,630.50	217.76	1,144.79	1,052.80	91.99	12.445	
7,300.00	4,473.79	4,333.79	4,473.64	29.27	76.69	-106.234	-3,630.50	217.76	1,094.83	1,002.84	92.00	11.901	
7,350.00	4,473.20	4,333.21	4,473.06	29.64	76.68	-105.532	-3,630.50	217.76	1,044.88	952.88	92.00	11.357	
7,400.00	4,472.61	4,332.63	4,472.48	30.00	76.67	-104.824	-3,630.50	217.76	994.93	902.92	92.01	10.814	
7,450.00	4,472.02	4,332.05	4,471.90	30.37	76.66	-100.288	-3,630.50	217.76	945.00	852.99	92.01	10.270	
7,500.00	4,471.43	4,331.47	4,471.31	30.74	76.65	-97.748	-3,630.50	217.76	895.15	803.13	92.02	9.728	
7,550.00	4,470.84	4,330.88	4,470.73	31.11	76.64	-96.121	-3,630.50	217.76	845.39	753.36	92.03	9.186	
7,600.00	4,470.25	4,330.30	4,470.15	31.47	76.63	-94.986	-3,630.50	217.76	795.76	703.71	92.05	8.645	
7,650.00	4,469.66	4,329.72	4,469.56	31.84	76.62	-94.145	-3,630.50	217.76	746.30	654.23	92.07	8.106	
7,700.00	4,469.06	4,329.13	4,468.98	32.21	76.61	-93.749	-3,630.50	217.76	697.03	604.92	92.11	7.568	
7,750.00	4,468.47	4,328.54	4,468.39	32.58	76.59	-93.477	-3,630.50	217.76	647.88	555.71	92.17	7.030	
7,800.00	4,467.88	4,327.96	4,467.80	32.95	76.58	-93.205	-3,630.50	217.76	598.87	506.62	92.25	6.492	
7,850.00	4,467.28	4,327.37	4,467.22	33.33	76.57	-92.932	-3,630.50	217.76	550.03	457.66	92.37	5.955	
7,900.00	4,466.69	4,326.79	4,466.63	33.70	76.56	-92.660	-3,630.50	217.76	501.42	408.89	92.54	5.419	
7,950.00	4,466.10	4,326.20	4,466.04	34.08	76.55	-92.387	-3,630.50	217.76	453.12	360.33	92.79	4.883	
8,000.00	4,465.50	4,325.61	4,465.46	34.46	76.54	-92.114	-3,630.50	217.76	405.23	312.06	93.16	4.350	
8,050.00	4,464.91	4,325.02	4,464.87	34.83	76.53	-91.841	-3,630.50	217.76	357.91	264.19	93.72	3.819	
8,100.00	4,464.32	4,324.44	4,464.28	35.21	76.52	-91.567	-3,630.50	217.76	311.43	216.85	94.58	3.293	
8,150.00	4,463.72	4,323.85	4,463.70	35.59	76.51	-91.294	-3,630.50	217.76	266.23	170.31	95.92	2.776	
8,200.00	4,463.13	4,323.26	4,463.11	35.97	76.50	-91.050	-3,630.50	217.76	222.96	124.96	98.00	2.275	
8,250.00	4,462.54	4,322.67	4,462.52	36.36	76.49	-90.800	-3,630.50	217.76	182.60	81.43	101.17	1.805	
8,300.00	4,461.94	4,322.09	4,461.93	36.75	76.48	-90.534	-3,630.50	217.76	147.54	41.78	105.76	1.395	SF = 1.50
8,350.00	4,461.35	4,321.50	4,461.35	37.14	76.47	-90.257	-3,630.50	217.76	122.44	11.31	111.13	1.102	SF = 1.25
8,395.60	4,460.81	4,320.97	4,460.81	37.49	76.46	-90.000	-3,630.50	217.76	113.99	0.05	113.95	1.000	SF = 1.25, CC, ES, SF
8,400.00	4,460.76	4,320.91	4,460.76	37.53	76.46	-89.975	-3,630.50	217.76	114.08	0.09	113.99	1.001	SF = 1.25
8,450.00	4,460.17	4,320.33	4,460.18	37.92	76.45	-89.694	-3,630.50	217.76	125.84	14.20	111.65	1.127	SF = 1.25
8,500.00	4,459.58	4,319.75	4,459.59	38.31	76.44	-89.422	-3,630.50	217.76	153.16	46.19	106.97	1.432	SF = 1.50
8,550.00	4,459.00	4,319.16	4,459.01	38.71	76.43	-89.162	-3,630.50	217.76	189.41	86.54	102.87	1.841	
8,600.00	4,458.41	4,318.58	4,458.43	39.10	76.42	-88.880	-3,630.50	217.76	230.65	130.71	99.94	2.308	
8,650.00	4,457.82	4,318.00	4,457.85	39.50	76.41	-88.597	-3,630.50	217.76	274.81	176.86	97.95	2.806	
8,700.00	4,457.24	4,317.42	4,457.26	39.89	76.40	-88.314	-3,630.50	217.76	320.69	224.10	96.60	3.320	
8,750.00	4,456.65	4,316.83	4,456.68	40.29	76.39	-88.031	-3,630.50	217.76	367.65	271.99	95.65	3.844	
8,800.00	4,456.07	4,316.25	4,456.10	40.69	76.38	-87.748	-3,630.50	217.76	415.31	320.33	94.98	4.373	
8,850.00	4,455.48	4,315.67	4,455.51	41.09	76.37	-87.465	-3,630.50	217.76	463.47	368.98	94.48	4.905	
8,900.00	4,454.89	4,315.08	4,454.93	41.49	76.36	-87.183	-3,630.50	217.76	511.98	417.86	94.12	5.440	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 3 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 269-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,950.00	4,454.31	4,314.50	4,454.35	41.89	76.35	-86.900	-3,630.50	217.76	560.75	466.91	93.84	5.976	
9,000.00	4,453.72	4,313.92	4,453.76	42.30	76.34	-86.617	-3,630.50	217.76	609.72	516.10	93.62	6.513	
9,050.00	4,453.14	4,313.33	4,453.18	42.70	76.33	-86.334	-3,630.50	217.76	658.84	565.39	93.45	7.050	
9,100.00	4,452.55	4,312.75	4,452.60	43.10	76.32	-86.052	-3,630.50	217.76	708.09	614.77	93.31	7.588	
9,150.00	4,451.97	4,312.16	4,452.01	43.51	76.31	-85.769	-3,630.50	217.76	757.43	664.23	93.21	8.126	
9,200.00	4,451.38	4,311.58	4,451.43	43.91	76.30	-85.487	-3,630.50	217.76	806.86	713.74	93.12	8.665	
9,250.00	4,450.79	4,311.00	4,450.84	44.31	76.29	-85.205	-3,630.50	217.76	856.35	763.30	93.05	9.203	
9,300.00	4,450.21	4,310.41	4,450.26	44.72	76.28	-84.922	-3,630.50	217.76	905.90	812.90	92.99	9.741	
9,350.00	4,449.62	4,309.82	4,449.67	45.13	76.27	-84.640	-3,630.50	217.76	955.49	862.54	92.95	10.280	
9,400.00	4,449.04	4,309.24	4,449.09	45.53	76.26	-84.358	-3,630.50	217.76	1,005.12	912.21	92.91	10.818	
9,450.00	4,448.45	4,308.65	4,448.50	45.94	76.25	-84.077	-3,630.50	217.76	1,054.79	961.91	92.88	11.356	
9,500.00	4,447.86	4,308.07	4,447.91	46.35	76.24	-83.795	-3,630.50	217.76	1,104.49	1,011.63	92.86	11.894	
9,550.00	4,447.28	4,307.48	4,447.33	46.76	76.23	-83.514	-3,630.50	217.76	1,154.21	1,061.37	92.84	12.432	
9,600.00	4,446.69	4,306.90	4,446.74	47.16	76.22	-83.233	-3,630.50	217.76	1,203.96	1,111.13	92.82	12.970	
9,650.00	4,446.11	4,306.31	4,446.16	47.57	76.21	-82.952	-3,630.50	217.76	1,253.72	1,160.91	92.81	13.508	
9,700.00	4,445.52	4,305.72	4,445.57	47.98	76.20	-82.671	-3,630.50	217.76	1,303.51	1,210.70	92.81	14.045	
9,750.00	4,444.93	4,305.13	4,444.98	48.39	76.19	-82.391	-3,630.50	217.76	1,353.31	1,260.50	92.80	14.583	
9,800.00	4,444.35	4,304.55	4,444.39	48.80	76.18	-82.111	-3,630.50	217.76	1,403.12	1,310.32	92.80	15.120	
9,850.00	4,443.76	4,303.96	4,443.81	49.21	76.17	-81.831	-3,630.50	217.76	1,452.94	1,360.14	92.80	15.657	
9,900.00	4,443.18	4,303.37	4,443.22	49.62	76.16	-81.551	-3,630.50	217.76	1,502.78	1,409.98	92.80	16.194	
9,950.00	4,442.59	4,302.78	4,442.63	50.04	76.15	-81.272	-3,630.50	217.76	1,552.63	1,459.82	92.80	16.730	
10,000.00	4,442.00	4,302.20	4,442.04	50.45	76.14	-80.993	-3,630.50	217.76	1,602.49	1,509.68	92.81	17.266	
10,050.00	4,441.42	4,301.61	4,441.45	50.86	76.13	-80.714	-3,630.50	217.76	1,652.35	1,559.53	92.82	17.803	
10,100.00	4,440.83	4,301.02	4,440.87	51.27	76.12	-80.436	-3,630.50	217.76	1,702.22	1,609.40	92.82	18.338	
10,150.00	4,440.25	4,300.43	4,440.28	51.74	76.11	-80.158	-3,630.50	217.76	1,752.10	1,656.95	95.15	18.414	
10,170.94	4,440.00	4,300.18	4,440.03	51.93	76.11	-80.042	-3,630.50	217.76	1,773.00	1,676.87	96.13	18.444	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 4 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 547-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,950.00	4,477.92	4,294.10	4,429.71	26.78	14.58	88.594	-3,722.22	-1,047.53	1,971.02	1,935.62	35.39	55.689	
7,000.00	4,477.33	4,293.13	4,428.74	27.13	14.58	88.548	-3,722.22	-1,047.48	1,932.01	1,896.25	35.76	54.024	
7,050.00	4,476.74	4,292.16	4,427.78	27.48	14.58	88.503	-3,722.23	-1,047.44	1,893.53	1,857.38	36.15	52.378	
7,100.00	4,476.15	4,291.19	4,426.81	27.84	14.57	88.457	-3,722.24	-1,047.39	1,855.59	1,819.03	36.56	50.757	
7,150.00	4,475.56	4,290.22	4,425.84	28.19	14.57	88.412	-3,722.24	-1,047.34	1,818.24	1,781.25	36.99	49.160	
7,200.00	4,474.97	4,289.25	4,424.88	28.55	14.56	88.366	-3,722.25	-1,047.30	1,781.51	1,744.07	37.43	47.591	
7,250.00	4,474.38	4,288.29	4,423.91	28.91	14.56	88.321	-3,722.26	-1,047.25	1,745.43	1,707.53	37.90	46.049	
7,300.00	4,473.79	4,287.32	4,422.95	29.27	14.56	88.276	-3,722.26	-1,047.20	1,710.06	1,671.66	38.39	44.541	
7,350.00	4,473.20	4,286.36	4,421.99	29.64	14.55	88.231	-3,722.27	-1,047.16	1,675.43	1,636.52	38.90	43.065	
7,400.00	4,472.61	4,285.40	4,421.02	30.00	14.55	88.186	-3,722.28	-1,047.11	1,641.59	1,602.15	39.44	41.627	
7,450.00	4,472.02	4,284.46	4,420.09	30.37	14.55	88.125	-3,722.29	-1,047.06	1,608.26	1,568.28	39.98	40.224	
7,500.00	4,471.43	4,283.56	4,419.19	30.74	14.54	88.066	-3,722.29	-1,047.02	1,575.15	1,534.61	40.54	38.850	
7,550.00	4,470.84	4,282.71	4,418.34	31.11	14.54	88.007	-3,722.30	-1,046.98	1,542.29	1,501.17	41.12	37.511	
7,600.00	4,470.25	4,281.90	4,417.53	31.47	14.54	87.949	-3,722.30	-1,046.94	1,509.68	1,467.98	41.70	36.203	
7,650.00	4,469.66	4,281.13	4,416.77	31.84	14.54	87.892	-3,722.31	-1,046.90	1,477.38	1,435.09	42.29	34.933	
7,700.00	4,469.06	4,280.40	4,416.04	32.21	14.53	87.849	-3,722.31	-1,046.87	1,445.57	1,402.67	42.89	33.700	
7,750.00	4,468.47	4,279.67	4,415.31	32.58	14.53	87.812	-3,722.32	-1,046.83	1,414.78	1,371.27	43.51	32.514	
7,800.00	4,467.88	4,278.95	4,414.58	32.95	14.53	87.775	-3,722.33	-1,046.80	1,385.11	1,340.97	44.15	31.375	
7,850.00	4,467.28	4,278.22	4,413.86	33.33	14.52	87.738	-3,722.33	-1,046.76	1,356.64	1,311.85	44.79	30.287	
7,900.00	4,466.69	4,277.49	4,413.13	33.70	14.52	87.702	-3,722.34	-1,046.73	1,329.44	1,283.99	45.45	29.251	
7,950.00	4,466.10	4,276.77	4,412.41	34.08	14.52	87.665	-3,722.34	-1,046.69	1,303.59	1,257.48	46.11	28.269	
8,000.00	4,465.50	4,276.04	4,411.68	34.46	14.52	87.628	-3,722.35	-1,046.66	1,279.18	1,232.39	46.78	27.344	
8,050.00	4,464.91	4,275.32	4,410.96	34.83	14.51	87.591	-3,722.35	-1,046.62	1,256.27	1,208.83	47.45	26.477	
8,100.00	4,464.32	4,274.60	4,410.24	35.21	14.51	87.554	-3,722.36	-1,046.59	1,234.97	1,186.86	48.11	25.670	
8,150.00	4,463.72	4,273.87	4,409.52	35.59	14.51	87.518	-3,722.36	-1,046.55	1,215.36	1,166.60	48.76	24.926	
8,200.00	4,463.13	4,273.14	4,408.79	35.97	14.51	87.483	-3,722.37	-1,046.52	1,197.72	1,148.32	49.39	24.250	
8,250.00	4,462.54	4,272.37	4,408.01	36.36	14.50	87.446	-3,722.37	-1,046.48	1,182.73	1,132.72	50.01	23.652	
8,300.00	4,461.94	4,271.55	4,407.20	36.75	14.50	87.404	-3,722.38	-1,046.44	1,170.54	1,119.95	50.59	23.137	
8,350.00	4,461.35	4,270.70	4,406.34	37.14	14.50	87.358	-3,722.38	-1,046.40	1,161.23	1,110.09	51.14	22.705	
8,400.00	4,460.76	4,269.80	4,405.44	37.53	14.49	87.307	-3,722.39	-1,046.35	1,154.88	1,103.23	51.65	22.360	
8,450.00	4,460.17	4,268.86	4,404.51	37.92	14.49	87.252	-3,722.40	-1,046.31	1,151.55	1,099.44	52.11	22.098	
8,479.96	4,459.82	4,268.27	4,403.92	38.15	14.49	87.216	-3,722.40	-1,046.28	1,151.00	1,098.64	52.36	21.983	CC, ES
8,500.00	4,459.58	4,267.88	4,403.52	38.31	14.49	87.191	-3,722.40	-1,046.26	1,151.24	1,098.73	52.51	21.923	
8,550.00	4,459.00	4,266.85	4,402.50	38.71	14.48	87.127	-3,722.41	-1,046.21	1,153.98	1,101.12	52.86	21.832	
8,600.00	4,458.41	4,265.81	4,401.46	39.10	14.48	87.075	-3,722.42	-1,046.16	1,159.28	1,106.14	53.14	21.815	SF
8,650.00	4,457.82	4,264.77	4,400.42	39.50	14.48	87.023	-3,722.43	-1,046.11	1,166.69	1,113.33	53.36	21.863	
8,700.00	4,457.24	4,263.73	4,399.39	39.89	14.47	86.971	-3,722.43	-1,046.06	1,176.18	1,122.66	53.53	21.974	
8,750.00	4,456.65	4,262.69	4,398.35	40.29	14.47	86.919	-3,722.44	-1,046.01	1,187.71	1,134.08	53.63	22.145	
8,800.00	4,456.07	4,261.66	4,397.31	40.69	14.46	86.868	-3,722.45	-1,045.96	1,201.20	1,147.52	53.68	22.376	
8,850.00	4,455.48	4,260.62	4,396.28	41.09	14.46	86.816	-3,722.46	-1,045.91	1,216.61	1,162.93	53.68	22.664	
8,900.00	4,454.89	4,259.58	4,395.24	41.49	14.46	86.764	-3,722.46	-1,045.86	1,233.84	1,180.21	53.63	23.007	
8,950.00	4,454.31	4,258.55	4,394.21	41.89	14.45	86.713	-3,722.47	-1,045.81	1,252.84	1,199.30	53.53	23.403	
9,000.00	4,453.72	4,257.51	4,393.18	42.30	14.45	86.661	-3,722.48	-1,045.76	1,273.51	1,220.11	53.40	23.849	
9,050.00	4,453.14	4,256.48	4,392.14	42.70	14.44	86.610	-3,722.48	-1,045.71	1,295.79	1,242.56	53.23	24.343	
9,100.00	4,452.55	4,255.45	4,391.11	43.10	14.44	86.559	-3,722.49	-1,045.65	1,319.58	1,266.55	53.03	24.884	
9,150.00	4,451.97	4,254.42	4,390.08	43.51	14.44	86.507	-3,722.50	-1,045.60	1,344.81	1,292.01	52.80	25.468	
9,200.00	4,451.38	4,253.39	4,389.05	43.91	14.43	86.456	-3,722.51	-1,045.55	1,371.40	1,318.84	52.56	26.094	
9,250.00	4,450.79	4,252.36	4,388.03	44.31	14.43	86.405	-3,722.51	-1,045.50	1,399.27	1,346.98	52.29	26.760	
9,300.00	4,450.21	4,251.33	4,387.00	44.72	14.43	86.353	-3,722.52	-1,045.45	1,428.35	1,376.34	52.01	27.464	
9,350.00	4,449.62	4,250.30	4,385.97	45.13	14.42	86.302	-3,722.53	-1,045.40	1,458.56	1,406.84	51.72	28.203	
9,400.00	4,449.04	4,249.27	4,384.95	45.53	14.42	86.251	-3,722.53	-1,045.35	1,489.83	1,438.42	51.42	28.977	
9,450.00	4,448.45	4,248.25	4,383.92	45.94	14.41	86.200	-3,722.54	-1,045.30	1,522.11	1,471.00	51.11	29.782	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 4 - Wellbore #1 - Wellbore #1

Offset Site Error: 0.00 usft

Survey Program: 547-MWD

Offset Well Error: 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,500.00	4,447.86	4,247.22	4,382.90	46.35	14.41	86.149	-3,722.55	-1,045.25	1,555.32	1,504.53	50.80	30.618	
9,550.00	4,447.28	4,246.20	4,381.87	46.76	14.41	86.098	-3,722.56	-1,045.20	1,589.41	1,538.93	50.49	31.482	
9,600.00	4,446.69	4,245.18	4,380.85	47.16	14.40	86.047	-3,722.56	-1,045.15	1,624.33	1,574.16	50.17	32.374	
9,650.00	4,446.11	4,244.15	4,379.83	47.57	14.40	85.996	-3,722.57	-1,045.10	1,660.02	1,610.15	49.86	33.292	
9,700.00	4,445.52	4,243.13	4,378.81	47.98	14.40	85.945	-3,722.58	-1,045.05	1,696.42	1,646.87	49.55	34.233	
9,750.00	4,444.93	4,242.11	4,377.79	48.39	14.39	85.894	-3,722.58	-1,045.00	1,733.51	1,684.26	49.25	35.198	
9,800.00	4,444.35	4,241.09	4,376.77	48.80	14.39	85.844	-3,722.59	-1,044.95	1,771.23	1,722.28	48.95	36.184	
9,850.00	4,443.76	4,240.07	4,375.76	49.21	14.38	85.793	-3,722.60	-1,044.90	1,809.54	1,760.89	48.66	37.191	
9,900.00	4,443.18	4,239.06	4,374.74	49.62	14.38	85.742	-3,722.60	-1,044.85	1,848.42	1,800.05	48.37	38.217	
9,950.00	4,442.59	4,238.04	4,373.72	50.04	14.38	85.692	-3,722.61	-1,044.80	1,887.81	1,839.73	48.08	39.261	
10,000.00	4,442.00	4,237.02	4,372.71	50.45	14.37	85.641	-3,722.62	-1,044.75	1,927.70	1,879.89	47.81	40.322	
10,050.00	4,441.42	4,236.01	4,371.70	50.86	14.37	85.590	-3,722.62	-1,044.70	1,968.05	1,920.51	47.54	41.399	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 5 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 132-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,500.00	4,459.58	4,354.30	4,479.00	38.31	16.34	90.868	-4,495.72	-1,734.55	1,990.34	1,938.54	51.80	38.426	
8,550.00	4,459.00	4,353.33	4,478.03	38.71	16.34	90.821	-4,495.73	-1,734.56	1,972.88	1,920.47	52.41	37.644	
8,600.00	4,458.41	4,352.36	4,477.07	39.10	16.33	90.791	-4,495.74	-1,734.56	1,956.94	1,903.92	53.02	36.911	
8,650.00	4,457.82	4,351.41	4,476.11	39.50	16.33	90.762	-4,495.74	-1,734.57	1,942.14	1,888.52	53.62	36.218	
8,700.00	4,457.24	4,350.45	4,475.15	39.89	16.33	90.732	-4,495.75	-1,734.58	1,928.53	1,874.31	54.22	35.569	
8,750.00	4,456.65	4,349.50	4,474.20	40.29	16.32	90.703	-4,495.75	-1,734.59	1,916.13	1,861.33	54.81	34.962	
8,800.00	4,456.07	4,348.55	4,473.26	40.69	16.32	90.674	-4,495.76	-1,734.59	1,904.97	1,849.58	55.38	34.397	
8,850.00	4,455.48	4,347.61	4,472.31	41.09	16.32	90.645	-4,495.76	-1,734.60	1,895.05	1,839.11	55.94	33.875	
8,900.00	4,454.89	4,346.67	4,471.37	41.49	16.31	90.616	-4,495.77	-1,734.61	1,886.41	1,829.92	56.49	33.395	
8,950.00	4,454.31	4,345.73	4,470.44	41.89	16.31	90.587	-4,495.78	-1,734.62	1,879.05	1,822.04	57.02	32.957	
9,000.00	4,453.72	4,344.80	4,469.50	42.30	16.31	90.558	-4,495.78	-1,734.62	1,873.01	1,815.49	57.52	32.561	
9,050.00	4,453.14	4,343.87	4,468.57	42.70	16.31	90.530	-4,495.79	-1,734.63	1,868.28	1,810.27	58.01	32.206	
9,100.00	4,452.55	4,342.95	4,467.65	43.10	16.30	90.501	-4,495.79	-1,734.64	1,864.88	1,806.41	58.48	31.891	
9,150.00	4,451.97	4,342.02	4,466.73	43.51	16.30	90.473	-4,495.80	-1,734.64	1,862.82	1,803.90	58.92	31.617	
9,200.00	4,451.38	4,341.11	4,465.81	43.91	16.30	90.445	-4,495.80	-1,734.65	1,862.10	1,802.76	59.34	31.383	
9,201.92	4,451.36	4,341.07	4,465.77	43.92	16.30	90.444	-4,495.80	-1,734.65	1,862.10	1,802.75	59.35	31.374	CC, ES
9,250.00	4,450.79	4,340.19	4,464.90	44.31	16.29	90.417	-4,495.81	-1,734.66	1,862.72	1,802.99	59.73	31.187	
9,300.00	4,450.21	4,339.28	4,463.98	44.72	16.29	90.389	-4,495.81	-1,734.66	1,864.68	1,804.59	60.09	31.031	
9,350.00	4,449.62	4,338.37	4,463.08	45.13	16.29	90.361	-4,495.82	-1,734.67	1,867.97	1,807.54	60.43	30.912	
9,400.00	4,449.04	4,337.47	4,462.17	45.53	16.29	90.333	-4,495.82	-1,734.68	1,872.60	1,811.86	60.74	30.831	
9,450.00	4,448.45	4,336.57	4,461.27	45.94	16.28	90.305	-4,495.83	-1,734.68	1,878.54	1,817.52	61.02	30.786	
9,500.00	4,447.86	4,335.68	4,460.38	46.35	16.28	90.278	-4,495.83	-1,734.69	1,885.80	1,824.52	61.27	30.777	SF
9,550.00	4,447.28	4,334.79	4,459.49	46.76	16.28	90.250	-4,495.84	-1,734.70	1,894.34	1,832.84	61.50	30.803	
9,600.00	4,446.69	4,333.90	4,458.61	47.16	16.27	90.223	-4,495.84	-1,734.70	1,904.16	1,842.46	61.70	30.864	
9,650.00	4,446.11	4,333.02	4,457.72	47.57	16.27	90.196	-4,495.85	-1,734.71	1,915.23	1,853.37	61.87	30.958	
9,700.00	4,445.52	4,332.13	4,456.83	47.98	16.27	90.169	-4,495.85	-1,734.72	1,927.54	1,865.53	62.01	31.085	
9,750.00	4,444.93	4,331.24	4,455.94	48.39	16.27	90.141	-4,495.86	-1,734.72	1,941.06	1,878.93	62.13	31.244	
9,800.00	4,444.35	4,330.35	4,455.05	48.80	16.26	90.114	-4,495.86	-1,734.73	1,955.76	1,893.54	62.22	31.434	
9,850.00	4,443.76	4,329.46	4,454.16	49.21	16.26	90.086	-4,495.87	-1,734.74	1,971.62	1,909.33	62.29	31.654	
9,900.00	4,443.18	4,328.56	4,453.27	49.62	16.26	90.059	-4,495.87	-1,734.74	1,988.61	1,926.28	62.33	31.904	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 6 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 496-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,750.00	4,468.47	4,338.14	4,469.63	32.58	15.33	91.065	-4,489.83	-1,098.36	1,961.20	1,922.15	39.05	50.229	
7,800.00	4,467.88	4,337.27	4,468.76	32.95	15.32	91.019	-4,489.84	-1,098.36	1,920.00	1,880.53	39.48	48.638	
7,850.00	4,467.28	4,336.40	4,467.89	33.33	15.32	90.974	-4,489.84	-1,098.35	1,879.24	1,839.32	39.92	47.069	
7,900.00	4,466.69	4,335.53	4,467.02	33.70	15.32	90.929	-4,489.85	-1,098.35	1,838.93	1,798.54	40.40	45.523	
7,950.00	4,466.10	4,334.66	4,466.15	34.08	15.31	90.883	-4,489.85	-1,098.34	1,799.11	1,758.22	40.89	44.001	
8,000.00	4,465.50	4,333.79	4,465.28	34.46	15.31	90.838	-4,489.85	-1,098.34	1,759.81	1,718.40	41.40	42.505	
8,050.00	4,464.91	4,332.91	4,464.41	34.83	15.31	90.793	-4,489.86	-1,098.33	1,721.06	1,679.12	41.94	41.037	
8,100.00	4,464.32	4,332.04	4,463.54	35.21	15.31	90.747	-4,489.86	-1,098.33	1,682.90	1,640.40	42.50	39.597	
8,150.00	4,463.72	4,331.17	4,462.67	35.59	15.30	90.702	-4,489.87	-1,098.32	1,645.38	1,602.30	43.08	38.190	
8,200.00	4,463.13	4,330.30	4,461.80	35.97	15.30	90.639	-4,489.87	-1,098.32	1,608.69	1,565.00	43.69	36.817	
8,250.00	4,462.54	4,329.42	4,460.92	36.36	15.30	90.571	-4,489.88	-1,098.31	1,573.33	1,528.99	44.34	35.482	
8,300.00	4,461.94	4,328.54	4,460.03	36.75	15.29	90.506	-4,489.88	-1,098.31	1,539.42	1,494.40	45.02	34.194	
8,350.00	4,461.35	4,327.65	4,459.15	37.14	15.29	90.442	-4,489.89	-1,098.30	1,507.08	1,461.34	45.74	32.951	
8,400.00	4,460.76	4,326.75	4,458.25	37.53	15.29	90.380	-4,489.89	-1,098.30	1,476.41	1,429.93	46.48	31.763	
8,450.00	4,460.17	4,325.85	4,457.35	37.92	15.29	90.320	-4,489.90	-1,098.29	1,447.54	1,400.28	47.26	30.629	
8,500.00	4,459.58	4,324.95	4,456.45	38.31	15.28	90.261	-4,489.90	-1,098.29	1,420.57	1,372.51	48.06	29.559	
8,550.00	4,459.00	4,324.04	4,455.54	38.71	15.28	90.204	-4,489.91	-1,098.28	1,395.64	1,346.76	48.88	28.552	
8,600.00	4,458.41	4,323.13	4,454.63	39.10	15.28	90.161	-4,489.91	-1,098.28	1,372.44	1,322.72	49.72	27.606	
8,650.00	4,457.82	4,322.22	4,453.71	39.50	15.27	90.119	-4,489.92	-1,098.27	1,350.69	1,300.13	50.56	26.716	
8,700.00	4,457.24	4,321.30	4,452.80	39.89	15.27	90.076	-4,489.92	-1,098.27	1,330.47	1,279.07	51.40	25.887	
8,750.00	4,456.65	4,320.39	4,451.89	40.29	15.27	90.033	-4,489.92	-1,098.26	1,311.84	1,259.61	52.23	25.117	
8,800.00	4,456.07	4,319.47	4,450.97	40.69	15.27	89.990	-4,489.93	-1,098.26	1,294.87	1,241.82	53.05	24.408	
8,850.00	4,455.48	4,318.56	4,450.05	41.09	15.26	89.948	-4,489.93	-1,098.25	1,279.63	1,225.78	53.86	23.761	
8,900.00	4,454.89	4,317.64	4,449.14	41.49	15.26	89.905	-4,489.94	-1,098.24	1,266.19	1,211.55	54.64	23.175	
8,950.00	4,454.31	4,316.72	4,448.22	41.89	15.26	89.862	-4,489.94	-1,098.24	1,254.59	1,199.21	55.39	22.652	
9,000.00	4,453.72	4,315.80	4,447.30	42.30	15.25	89.819	-4,489.95	-1,098.23	1,244.90	1,188.80	56.10	22.190	
9,050.00	4,453.14	4,314.88	4,446.38	42.70	15.25	89.776	-4,489.95	-1,098.23	1,237.15	1,180.38	56.77	21.791	
9,100.00	4,452.55	4,313.96	4,445.46	43.10	15.25	89.733	-4,489.96	-1,098.22	1,231.38	1,173.99	57.40	21.453	
9,150.00	4,451.97	4,313.04	4,444.53	43.51	15.24	89.690	-4,489.96	-1,098.21	1,227.63	1,169.66	57.97	21.176	
9,200.00	4,451.38	4,312.11	4,443.61	43.91	15.24	89.646	-4,489.97	-1,098.21	1,225.90	1,167.41	58.49	20.960	
9,217.40	4,451.18	4,311.79	4,443.29	44.05	15.24	89.631	-4,489.97	-1,098.21	1,225.78	1,167.12	58.65	20.899	CC, ES
9,250.00	4,450.79	4,311.19	4,442.69	44.31	15.24	89.603	-4,489.97	-1,098.20	1,226.21	1,167.27	58.94	20.803	
9,300.00	4,450.21	4,310.26	4,441.76	44.72	15.24	89.560	-4,489.98	-1,098.20	1,228.56	1,169.22	59.34	20.705	
9,350.00	4,449.62	4,309.34	4,440.83	45.13	15.23	89.517	-4,489.98	-1,098.19	1,232.93	1,173.26	59.66	20.664	SF
9,400.00	4,449.04	4,308.41	4,439.91	45.53	15.23	89.473	-4,489.99	-1,098.18	1,239.30	1,179.37	59.93	20.680	
9,450.00	4,448.45	4,307.48	4,438.98	45.94	15.23	89.430	-4,489.99	-1,098.18	1,247.64	1,187.52	60.13	20.750	
9,500.00	4,447.86	4,306.55	4,438.05	46.35	15.22	89.386	-4,490.00	-1,098.17	1,257.92	1,197.66	60.26	20.874	
9,550.00	4,447.28	4,305.62	4,437.12	46.76	15.22	89.343	-4,490.00	-1,098.16	1,270.09	1,209.75	60.34	21.050	
9,600.00	4,446.69	4,304.69	4,436.18	47.16	15.22	89.299	-4,490.01	-1,098.16	1,284.08	1,223.73	60.35	21.276	
9,650.00	4,446.11	4,303.75	4,435.25	47.57	15.21	89.256	-4,490.01	-1,098.15	1,299.85	1,239.54	60.32	21.550	
9,700.00	4,445.52	4,302.82	4,434.32	47.98	15.21	89.212	-4,490.02	-1,098.15	1,317.33	1,257.10	60.23	21.872	
9,750.00	4,444.93	4,301.88	4,433.38	48.39	15.21	89.168	-4,490.02	-1,098.14	1,336.45	1,276.36	60.10	22.239	
9,800.00	4,444.35	4,300.95	4,432.45	48.80	15.21	89.125	-4,490.03	-1,098.13	1,357.15	1,297.23	59.92	22.649	
9,850.00	4,443.76	4,300.01	4,431.51	49.21	15.20	89.081	-4,490.03	-1,098.12	1,379.34	1,319.64	59.71	23.101	
9,900.00	4,443.18	4,299.07	4,430.57	49.62	15.20	89.037	-4,490.04	-1,098.12	1,402.97	1,343.51	59.46	23.594	
9,950.00	4,442.59	4,298.13	4,429.63	50.04	15.20	88.993	-4,490.04	-1,098.11	1,427.96	1,368.77	59.19	24.125	
10,000.00	4,442.00	4,297.19	4,428.69	50.45	15.19	88.949	-4,490.05	-1,098.10	1,454.24	1,395.34	58.89	24.692	
10,050.00	4,441.42	4,296.25	4,427.75	50.86	15.19	88.905	-4,490.05	-1,098.10	1,481.73	1,423.16	58.58	25.295	
10,100.00	4,440.83	4,295.31	4,426.81	51.27	15.19	88.861	-4,490.06	-1,098.09	1,510.39	1,452.14	58.24	25.932	
10,150.00	4,440.25	4,294.37	4,425.87	51.74	15.18	88.817	-4,490.07	-1,098.08	1,540.13	1,481.84	58.29	26.423	
10,170.94	4,440.00	4,293.97	4,425.47	51.93	15.18	88.799	-4,490.07	-1,098.08	1,552.90	1,494.56	58.33	26.622	

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

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MAYARO 22 STATE 7 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 132-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,200.00	4,451.38	4,348.14	4,441.57	43.91	17.75	89.925	-5,119.82	-1,744.21	1,992.94	1,935.00	57.94	34.397	
9,250.00	4,450.79	4,347.43	4,440.86	44.31	17.75	89.904	-5,119.82	-1,744.20	1,977.81	1,919.14	58.67	33.710	
9,300.00	4,450.21	4,346.72	4,440.16	44.72	17.75	89.882	-5,119.83	-1,744.20	1,963.84	1,904.45	59.39	33.065	
9,350.00	4,449.62	4,346.02	4,439.45	45.13	17.75	89.861	-5,119.83	-1,744.19	1,951.06	1,890.95	60.11	32.460	
9,400.00	4,449.04	4,345.32	4,438.75	45.53	17.74	89.840	-5,119.83	-1,744.19	1,939.48	1,878.67	60.81	31.897	
9,450.00	4,448.45	4,344.62	4,438.06	45.94	17.74	89.819	-5,119.83	-1,744.19	1,929.12	1,867.63	61.49	31.373	
9,500.00	4,447.86	4,343.93	4,437.36	46.35	17.74	89.798	-5,119.83	-1,744.18	1,920.02	1,857.86	62.16	30.890	
9,550.00	4,447.28	4,343.23	4,436.67	46.76	17.74	89.777	-5,119.83	-1,744.18	1,912.17	1,849.37	62.80	30.446	
9,600.00	4,446.69	4,342.55	4,435.98	47.16	17.74	89.756	-5,119.83	-1,744.17	1,905.61	1,842.18	63.43	30.042	
9,650.00	4,446.11	4,341.86	4,435.30	47.57	17.73	89.735	-5,119.83	-1,744.17	1,900.34	1,836.30	64.03	29.677	
9,700.00	4,445.52	4,341.18	4,434.62	47.98	17.73	89.714	-5,119.84	-1,744.17	1,896.37	1,831.76	64.61	29.351	
9,750.00	4,444.93	4,340.50	4,433.94	48.39	17.73	89.694	-5,119.84	-1,744.16	1,893.71	1,828.56	65.16	29.063	
9,800.00	4,444.35	4,339.82	4,433.26	48.80	17.73	89.673	-5,119.84	-1,744.16	1,892.38	1,826.70	65.68	28.812	
9,825.64	4,444.05	4,339.48	4,432.91	49.01	17.73	89.663	-5,119.84	-1,744.16	1,892.20	1,826.27	65.93	28.698	CC
9,850.00	4,443.76	4,339.15	4,432.59	49.21	17.73	89.653	-5,119.84	-1,744.15	1,892.36	1,826.19	66.17	28.599	ES
9,900.00	4,443.18	4,338.48	4,431.92	49.62	17.72	89.633	-5,119.84	-1,744.15	1,893.66	1,827.04	66.63	28.422	
9,950.00	4,442.59	4,337.81	4,431.25	50.04	17.72	89.612	-5,119.84	-1,744.15	1,896.28	1,829.23	67.05	28.280	
10,000.00	4,442.00	4,337.15	4,430.58	50.45	17.72	89.592	-5,119.84	-1,744.14	1,900.22	1,832.77	67.45	28.174	
10,050.00	4,441.42	4,336.48	4,429.92	50.86	17.72	89.572	-5,119.84	-1,744.14	1,905.46	1,837.65	67.81	28.102	
10,100.00	4,440.83	4,335.83	4,429.27	51.27	17.72	89.552	-5,119.84	-1,744.13	1,911.99	1,843.86	68.13	28.064	
10,150.00	4,440.25	4,335.19	4,428.63	51.74	17.71	89.533	-5,119.85	-1,744.13	1,919.80	1,851.30	68.49	28.029	
10,170.94	4,440.00	4,334.92	4,428.36	51.93	17.71	89.525	-5,119.85	-1,744.13	1,923.45	1,854.81	68.64	28.022	SF

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,700.00	4,480.87	4,327.60	4,484.15	25.07	15.22	-92.184	-3,805.87	834.69	1,977.99	1,946.57	31.43	62.942	
6,750.00	4,480.28	4,326.93	4,483.48	25.41	15.22	-92.126	-3,805.87	834.69	1,930.96	1,899.41	31.54	61.213	
6,800.00	4,479.69	4,326.26	4,482.81	25.75	15.21	-92.069	-3,805.87	834.69	1,884.07	1,852.40	31.67	59.484	
6,850.00	4,479.10	4,325.59	4,482.15	26.09	15.21	-92.011	-3,805.87	834.69	1,837.35	1,805.53	31.82	57.751	
6,900.00	4,478.51	4,324.93	4,481.48	26.43	15.21	-91.953	-3,805.87	834.69	1,790.81	1,758.84	31.97	56.017	
6,950.00	4,477.92	4,324.26	4,480.81	26.78	15.21	-91.895	-3,805.88	834.69	1,744.45	1,712.31	32.14	54.280	
7,000.00	4,477.33	4,323.59	4,480.14	27.13	15.20	-91.838	-3,805.88	834.69	1,698.30	1,665.98	32.32	52.544	
7,050.00	4,476.74	4,322.92	4,479.48	27.48	15.20	-91.780	-3,805.88	834.69	1,652.38	1,619.86	32.52	50.806	
7,100.00	4,476.15	4,322.26	4,478.81	27.84	15.20	-91.722	-3,805.88	834.69	1,606.70	1,573.96	32.74	49.071	
7,150.00	4,475.56	4,321.59	4,478.14	28.19	15.20	-91.665	-3,805.88	834.69	1,561.29	1,528.30	32.98	47.335	
7,200.00	4,474.97	4,320.93	4,477.48	28.55	15.20	-91.607	-3,805.88	834.69	1,516.16	1,482.91	33.25	45.604	
7,250.00	4,474.38	4,320.26	4,476.81	28.91	15.19	-91.550	-3,805.88	834.69	1,471.35	1,437.81	33.53	43.876	
7,300.00	4,473.79	4,319.60	4,476.15	29.27	15.19	-91.492	-3,805.88	834.69	1,426.88	1,393.03	33.85	42.155	
7,350.00	4,473.20	4,318.93	4,475.48	29.64	15.19	-91.435	-3,805.88	834.69	1,382.79	1,348.60	34.19	40.441	
7,400.00	4,472.61	4,318.27	4,474.82	30.00	15.19	-91.378	-3,805.89	834.69	1,339.11	1,304.54	34.57	38.738	
7,450.00	4,472.02	4,317.60	4,474.15	30.37	15.18	-91.272	-3,805.89	834.69	1,296.12	1,261.13	34.99	37.046	
7,500.00	4,471.43	4,316.94	4,473.49	30.74	15.18	-91.174	-3,805.89	834.70	1,254.12	1,218.67	35.45	35.375	
7,550.00	4,470.84	4,316.27	4,472.83	31.11	15.18	-91.082	-3,805.89	834.70	1,213.23	1,177.25	35.98	33.722	
7,600.00	4,470.25	4,315.61	4,472.16	31.47	15.18	-90.995	-3,805.89	834.70	1,173.58	1,137.03	36.56	32.102	
7,650.00	4,469.66	4,314.95	4,471.50	31.84	15.18	-90.913	-3,805.89	834.70	1,135.32	1,098.11	37.20	30.516	
7,700.00	4,469.06	4,314.29	4,470.84	32.21	15.17	-90.854	-3,805.89	834.70	1,098.44	1,060.52	37.91	28.972	
7,750.00	4,468.47	4,313.62	4,470.18	32.58	15.17	-90.804	-3,805.89	834.70	1,062.66	1,023.97	38.68	27.470	
7,800.00	4,467.88	4,312.96	4,469.52	32.95	15.17	-90.754	-3,805.89	834.70	1,028.06	988.55	39.51	26.020	
7,850.00	4,467.28	4,312.30	4,468.85	33.33	15.17	-90.704	-3,805.89	834.70	994.77	954.38	40.40	24.626	
7,900.00	4,466.69	4,311.64	4,468.19	33.70	15.16	-90.654	-3,805.90	834.70	962.94	921.60	41.33	23.296	
7,950.00	4,466.10	4,310.98	4,467.54	34.08	15.16	-90.604	-3,805.90	834.70	932.69	890.36	42.33	22.035	
8,000.00	4,465.50	4,310.33	4,466.88	34.46	15.16	-90.554	-3,805.90	834.70	904.20	860.84	43.36	20.851	
8,050.00	4,464.91	4,309.78	4,466.33	34.83	15.16	-90.512	-3,805.90	834.70	877.64	833.19	44.44	19.747	
8,100.00	4,464.32	4,309.14	4,465.69	35.21	15.16	-90.463	-3,805.90	834.70	853.18	807.63	45.55	18.732	
8,150.00	4,463.72	4,308.49	4,465.04	35.59	15.15	-90.414	-3,805.90	834.70	831.01	784.34	46.67	17.808	
8,200.00	4,463.13	4,307.83	4,464.39	35.97	15.15	-90.375	-3,805.90	834.70	811.11	763.33	47.78	16.976	
8,250.00	4,462.54	4,307.18	4,463.73	36.36	15.15	-90.339	-3,805.90	834.70	793.08	744.21	48.87	16.229	
8,300.00	4,461.94	4,306.52	4,463.07	36.75	15.15	-90.301	-3,805.90	834.70	777.01	727.10	49.91	15.568	
8,350.00	4,461.35	4,305.86	4,462.41	37.14	15.15	-90.263	-3,805.91	834.70	763.03	712.14	50.89	14.993	
8,400.00	4,460.76	4,305.20	4,461.75	37.53	15.14	-90.224	-3,805.91	834.70	751.27	699.48	51.79	14.506	
8,450.00	4,460.17	4,304.54	4,461.09	37.92	15.14	-90.185	-3,805.91	834.70	741.83	689.24	52.59	14.107	
8,500.00	4,459.58	4,303.87	4,460.43	38.31	15.14	-90.145	-3,805.91	834.70	734.80	681.54	53.26	13.796	
8,550.00	4,459.00	4,303.21	4,459.76	38.71	15.14	-90.104	-3,805.91	834.70	730.26	676.46	53.81	13.572	
8,597.47	4,458.44	4,302.57	4,459.13	39.08	15.13	-90.054	-3,805.91	834.71	728.72	674.53	54.19	13.448	CC
8,600.00	4,458.41	4,302.54	4,459.09	39.10	15.13	-90.051	-3,805.91	834.71	728.72	674.52	54.20	13.444	ES
8,650.00	4,457.82	4,301.87	4,458.42	39.50	15.13	-89.999	-3,805.91	834.71	730.61	676.16	54.45	13.418	SF
8,700.00	4,457.24	4,301.20	4,457.75	39.89	15.13	-89.946	-3,805.91	834.71	735.90	681.35	54.54	13.492	
8,750.00	4,456.65	4,300.53	4,457.08	40.29	15.13	-89.893	-3,805.91	834.71	744.51	690.02	54.48	13.665	
8,800.00	4,456.07	4,299.85	4,456.40	40.69	15.13	-89.840	-3,805.91	834.71	756.34	702.05	54.29	13.932	
8,850.00	4,455.48	4,299.17	4,455.73	41.09	15.12	-89.787	-3,805.91	834.71	771.23	717.26	53.97	14.290	
8,900.00	4,454.89	4,298.49	4,455.05	41.49	15.12	-89.733	-3,805.92	834.71	789.01	735.46	53.55	14.734	
8,950.00	4,454.31	4,297.81	4,454.37	41.89	15.12	-89.680	-3,805.92	834.71	809.50	756.45	53.04	15.261	
9,000.00	4,453.72	4,297.13	4,453.68	42.30	15.12	-89.626	-3,805.92	834.71	832.49	780.01	52.47	15.865	
9,050.00	4,453.14	4,296.45	4,453.00	42.70	15.11	-89.572	-3,805.92	834.71	857.78	805.92	51.86	16.541	
9,100.00	4,452.55	4,295.76	4,452.31	43.10	15.11	-89.518	-3,805.92	834.71	885.17	833.96	51.21	17.285	
9,150.00	4,451.97	4,295.07	4,451.62	43.51	15.11	-89.464	-3,805.92	834.71	914.48	863.93	50.55	18.092	
9,200.00	4,451.38	4,294.38	4,450.93	43.91	15.11	-89.410	-3,805.92	834.71	945.52	895.65	49.88	18.957	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 1 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,250.00	4,450.79	4,293.69	4,450.24	44.31	15.10	-89.355	-3,805.92	834.71	978.14	928.93	49.21	19.876	
9,300.00	4,450.21	4,292.99	4,449.54	44.72	15.10	-89.300	-3,805.92	834.71	1,012.17	963.61	48.56	20.844	
9,350.00	4,449.62	4,292.29	4,448.84	45.13	15.10	-89.246	-3,805.93	834.71	1,047.49	999.57	47.92	21.857	
9,400.00	4,449.04	4,291.59	4,448.14	45.53	15.10	-89.191	-3,805.93	834.71	1,083.96	1,036.65	47.31	22.913	
9,450.00	4,448.45	4,290.89	4,447.44	45.94	15.10	-89.136	-3,805.93	834.72	1,121.48	1,074.76	46.72	24.006	
9,500.00	4,447.86	4,290.19	4,446.74	46.35	15.09	-89.080	-3,805.93	834.72	1,159.94	1,113.79	46.15	25.134	
9,550.00	4,447.28	4,289.48	4,446.03	46.76	15.09	-89.025	-3,805.93	834.72	1,199.24	1,153.64	45.61	26.294	
9,600.00	4,446.69	4,288.78	4,445.33	47.16	15.09	-88.969	-3,805.93	834.72	1,239.32	1,194.23	45.09	27.483	
9,650.00	4,446.11	4,288.07	4,444.62	47.57	15.09	-88.913	-3,805.93	834.72	1,280.10	1,235.50	44.60	28.699	
9,700.00	4,445.52	4,287.35	4,443.91	47.98	15.08	-88.857	-3,805.93	834.72	1,321.51	1,277.37	44.14	29.938	
9,750.00	4,444.93	4,286.64	4,443.19	48.39	15.08	-88.801	-3,805.94	834.72	1,363.50	1,319.79	43.70	31.199	
9,800.00	4,444.35	4,285.92	4,442.48	48.80	15.08	-88.745	-3,805.94	834.72	1,406.01	1,362.72	43.29	32.481	
9,850.00	4,443.76	4,285.21	4,441.76	49.21	15.08	-88.689	-3,805.94	834.72	1,448.99	1,406.10	42.90	33.780	
9,900.00	4,443.18	4,284.49	4,441.04	49.62	15.07	-88.632	-3,805.94	834.72	1,492.42	1,449.89	42.52	35.095	
9,950.00	4,442.59	4,283.76	4,440.31	50.04	15.07	-88.575	-3,805.94	834.72	1,536.24	1,494.07	42.17	36.426	
10,000.00	4,442.00	4,283.04	4,439.59	50.45	15.07	-88.518	-3,805.94	834.72	1,580.43	1,538.59	41.84	37.769	
10,050.00	4,441.42	4,282.31	4,438.86	50.86	15.07	-88.461	-3,805.94	834.72	1,624.96	1,583.43	41.53	39.125	
10,100.00	4,440.83	4,281.58	4,438.13	51.27	15.06	-88.404	-3,805.95	834.72	1,669.80	1,628.56	41.24	40.491	
10,150.00	4,440.25	4,280.85	4,437.40	51.74	15.06	-88.346	-3,805.95	834.72	1,714.92	1,672.66	42.26	40.581	
10,170.94	4,440.00	4,280.54	4,437.09	51.93	15.06	-88.322	-3,805.95	834.72	1,733.90	1,691.16	42.74	40.568	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 2 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 540-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,100.00	4,487.94	4,025.00	4,166.92	21.32	67.59	-71.634	-3,089.64	1,083.67	1,992.06	1,909.30	82.76	24.070	
6,150.00	4,487.35	4,025.00	4,166.92	21.61	67.59	-71.634	-3,089.64	1,083.67	1,948.31	1,865.45	82.86	23.513	
6,200.00	4,486.76	4,025.00	4,166.92	21.90	67.59	-71.634	-3,089.64	1,083.67	1,904.86	1,821.89	82.97	22.959	
6,250.00	4,486.17	4,025.00	4,166.92	22.20	67.59	-71.634	-3,089.64	1,083.67	1,861.75	1,778.65	83.09	22.406	
6,300.00	4,485.58	4,025.00	4,166.92	22.51	67.59	-71.634	-3,089.64	1,083.67	1,818.98	1,735.75	83.23	21.856	
6,350.00	4,484.99	4,025.00	4,166.92	22.82	67.59	-71.634	-3,089.64	1,083.67	1,776.59	1,693.22	83.38	21.308	
6,400.00	4,484.40	4,025.00	4,166.92	23.13	67.59	-71.634	-3,089.64	1,083.67	1,734.61	1,651.07	83.54	20.764	
6,450.00	4,483.81	4,025.00	4,166.92	23.44	67.59	-71.634	-3,089.64	1,083.67	1,693.06	1,609.35	83.72	20.223	
6,500.00	4,483.22	4,025.00	4,166.92	23.76	67.59	-71.634	-3,089.64	1,083.67	1,651.99	1,568.07	83.91	19.687	
6,550.00	4,482.63	4,025.00	4,166.92	24.09	67.59	-71.634	-3,089.64	1,083.67	1,611.41	1,527.28	84.13	19.154	
6,600.00	4,482.05	4,025.00	4,166.92	24.41	67.59	-71.634	-3,089.64	1,083.67	1,571.38	1,487.02	84.36	18.626	
6,650.00	4,481.46	4,025.00	4,166.92	24.74	67.59	-71.634	-3,089.64	1,083.67	1,531.94	1,447.32	84.62	18.104	
6,700.00	4,480.87	4,025.00	4,166.92	25.07	67.59	-71.634	-3,089.64	1,083.67	1,493.13	1,408.23	84.90	17.588	
6,750.00	4,480.28	4,025.00	4,166.92	25.41	67.59	-71.634	-3,089.64	1,083.67	1,455.00	1,369.80	85.20	17.078	
6,800.00	4,479.69	4,025.00	4,166.92	25.75	67.59	-71.634	-3,089.64	1,083.67	1,417.61	1,332.09	85.52	16.576	
6,850.00	4,479.10	4,025.00	4,166.92	26.09	67.59	-71.634	-3,089.64	1,083.67	1,381.02	1,295.14	85.87	16.082	
6,900.00	4,478.51	4,025.00	4,166.92	26.43	67.59	-71.634	-3,089.64	1,083.67	1,345.29	1,259.04	86.25	15.598	
6,950.00	4,477.92	4,025.00	4,166.92	26.78	67.59	-71.634	-3,089.64	1,083.67	1,310.49	1,223.84	86.65	15.124	
7,000.00	4,477.33	4,025.00	4,166.92	27.13	67.59	-71.634	-3,089.64	1,083.67	1,276.71	1,189.63	87.08	14.661	
7,050.00	4,476.74	4,025.00	4,166.92	27.48	67.59	-71.634	-3,089.64	1,083.67	1,244.02	1,156.48	87.54	14.211	
7,100.00	4,476.15	4,025.00	4,166.92	27.84	67.59	-71.634	-3,089.64	1,083.67	1,212.50	1,124.48	88.02	13.775	
7,150.00	4,475.56	4,025.00	4,166.92	28.19	67.59	-71.634	-3,089.64	1,083.67	1,182.27	1,093.73	88.54	13.353	
7,200.00	4,474.97	4,025.00	4,166.92	28.55	67.59	-71.634	-3,089.64	1,083.67	1,153.41	1,064.33	89.08	12.949	
7,250.00	4,474.38	4,025.00	4,166.92	28.91	67.59	-71.634	-3,089.64	1,083.67	1,126.03	1,036.39	89.64	12.562	
7,300.00	4,473.79	4,025.00	4,166.92	29.27	67.59	-71.634	-3,089.64	1,083.67	1,100.24	1,010.02	90.22	12.195	
7,350.00	4,473.20	4,025.00	4,166.92	29.64	67.59	-71.634	-3,089.64	1,083.67	1,076.16	985.34	90.82	11.849	
7,400.00	4,472.61	4,025.00	4,166.92	30.00	67.59	-71.634	-3,089.64	1,083.67	1,053.91	962.47	91.44	11.526	
7,450.00	4,472.02	4,025.00	4,166.92	30.37	67.59	-71.759	-3,089.64	1,083.67	1,033.98	941.90	92.07	11.230	
7,500.00	4,471.43	4,025.00	4,166.92	30.74	67.59	-71.861	-3,089.64	1,083.67	1,016.90	924.18	92.72	10.968	
7,550.00	4,470.84	4,025.00	4,166.92	31.11	67.59	-71.941	-3,089.64	1,083.67	1,002.82	909.46	93.37	10.741	
7,600.00	4,470.25	4,025.00	4,166.92	31.47	67.59	-71.998	-3,089.64	1,083.67	991.89	897.87	94.02	10.550	
7,650.00	4,469.66	4,025.00	4,166.92	31.84	67.59	-72.035	-3,089.64	1,083.67	984.20	889.55	94.65	10.398	
7,700.00	4,469.06	4,025.00	4,166.92	32.21	67.59	-72.041	-3,089.64	1,083.67	979.62	884.35	95.27	10.283	
7,750.00	4,468.47	4,025.00	4,166.92	32.58	67.59	-72.041	-3,089.64	1,083.67	977.62	881.77	95.85	10.199	
7,764.23	4,468.30	4,025.00	4,166.92	32.69	67.59	-72.041	-3,089.64	1,083.67	977.51	881.51	96.01	10.182	CC, ES
7,800.00	4,467.88	4,025.00	4,166.92	32.95	67.59	-72.041	-3,089.64	1,083.67	978.17	881.78	96.39	10.148	
7,850.00	4,467.28	4,025.00	4,166.92	33.33	67.59	-72.041	-3,089.64	1,083.67	981.27	884.39	96.88	10.129	SF
7,900.00	4,466.69	4,025.00	4,166.92	33.70	67.59	-72.041	-3,089.64	1,083.67	986.90	889.58	97.32	10.141	
7,950.00	4,466.10	4,025.00	4,166.92	34.08	67.59	-72.041	-3,089.64	1,083.67	995.01	897.30	97.71	10.183	
8,000.00	4,465.50	4,025.00	4,166.92	34.46	67.59	-72.041	-3,089.64	1,083.67	1,005.55	907.50	98.04	10.256	
8,050.00	4,464.91	4,025.00	4,166.92	34.83	67.59	-72.041	-3,089.64	1,083.67	1,018.43	920.11	98.32	10.358	
8,100.00	4,464.32	4,025.00	4,166.92	35.21	67.59	-72.041	-3,089.64	1,083.67	1,033.57	935.03	98.55	10.488	
8,150.00	4,463.72	4,025.00	4,166.92	35.59	67.59	-72.041	-3,089.64	1,083.67	1,050.88	952.16	98.72	10.645	
8,200.00	4,463.13	4,025.00	4,166.92	35.97	67.59	-72.142	-3,089.64	1,083.67	1,070.05	971.21	98.84	10.826	
8,250.00	4,462.54	4,025.00	4,166.92	36.36	67.59	-72.291	-3,089.64	1,083.67	1,090.46	991.55	98.92	11.024	
8,300.00	4,461.94	4,025.00	4,166.92	36.75	67.59	-72.448	-3,089.64	1,083.67	1,112.01	1,013.07	98.94	11.239	
8,350.00	4,461.35	4,025.00	4,166.92	37.14	67.59	-72.612	-3,089.64	1,083.67	1,134.62	1,035.69	98.93	11.469	
8,400.00	4,460.76	4,025.00	4,166.92	37.53	67.59	-72.784	-3,089.64	1,083.67	1,158.22	1,059.35	98.87	11.714	
8,450.00	4,460.17	4,025.00	4,166.92	37.92	67.59	-72.962	-3,089.64	1,083.67	1,182.75	1,083.96	98.78	11.973	
8,500.00	4,459.58	4,025.00	4,166.92	38.31	67.59	-73.147	-3,089.64	1,083.67	1,208.14	1,109.48	98.66	12.245	
8,550.00	4,459.00	4,025.00	4,166.92	38.71	67.59	-73.331	-3,089.64	1,083.67	1,234.34	1,135.83	98.51	12.530	
8,600.00	4,458.41	4,025.00	4,166.92	39.10	67.59	-73.331	-3,089.64	1,083.67	1,261.65	1,163.31	98.34	12.829	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 2 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 540-INC-ONLY — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,650.00	4,457.82	4,025.00	4,166.92	39.50	67.59	-73.331	-3,089.64	1,083.67	1,290.32	1,192.17	98.16	13.145	
8,700.00	4,457.24	4,025.00	4,166.92	39.89	67.59	-73.331	-3,089.64	1,083.67	1,320.27	1,222.31	97.96	13.478	
8,750.00	4,456.65	4,025.00	4,166.92	40.29	67.59	-73.331	-3,089.64	1,083.67	1,351.40	1,253.65	97.75	13.824	
8,800.00	4,456.07	4,025.00	4,166.92	40.69	67.59	-73.331	-3,089.64	1,083.67	1,383.64	1,286.10	97.54	14.185	
8,850.00	4,455.48	4,025.00	4,166.92	41.09	67.59	-73.331	-3,089.64	1,083.67	1,416.91	1,319.58	97.32	14.559	
8,900.00	4,454.89	4,025.00	4,166.92	41.49	67.59	-73.331	-3,089.64	1,083.67	1,451.13	1,354.04	97.10	14.945	
8,950.00	4,454.31	4,025.00	4,166.92	41.89	67.59	-73.331	-3,089.64	1,083.67	1,486.26	1,389.38	96.87	15.342	
9,000.00	4,453.72	4,025.00	4,166.92	42.30	67.59	-73.331	-3,089.64	1,083.67	1,522.21	1,425.56	96.65	15.750	
9,050.00	4,453.14	4,025.00	4,166.92	42.70	67.59	-73.331	-3,089.64	1,083.67	1,558.94	1,462.51	96.43	16.167	
9,100.00	4,452.55	4,025.00	4,166.92	43.10	67.59	-73.331	-3,089.64	1,083.67	1,596.39	1,500.19	96.21	16.593	
9,150.00	4,451.97	4,025.00	4,166.92	43.51	67.59	-73.331	-3,089.64	1,083.67	1,634.52	1,538.53	95.99	17.028	
9,200.00	4,451.38	4,025.00	4,166.92	43.91	67.59	-73.331	-3,089.64	1,083.67	1,673.27	1,577.49	95.78	17.470	
9,250.00	4,450.79	4,025.00	4,166.92	44.31	67.59	-73.331	-3,089.64	1,083.67	1,712.60	1,617.03	95.57	17.920	
9,300.00	4,450.21	4,025.00	4,166.92	44.72	67.59	-73.331	-3,089.64	1,083.67	1,752.47	1,657.11	95.36	18.376	
9,350.00	4,449.62	4,025.00	4,166.92	45.13	67.59	-73.331	-3,089.64	1,083.67	1,792.85	1,697.69	95.17	18.839	
9,400.00	4,449.04	4,025.00	4,166.92	45.53	67.59	-73.331	-3,089.64	1,083.67	1,833.71	1,738.74	94.97	19.308	
9,450.00	4,448.45	4,025.00	4,166.92	45.94	67.59	-73.331	-3,089.64	1,083.67	1,875.01	1,780.23	94.78	19.782	
9,500.00	4,447.86	4,025.00	4,166.92	46.35	67.59	-73.331	-3,089.64	1,083.67	1,916.73	1,822.12	94.60	20.261	
9,550.00	4,447.28	4,025.00	4,166.92	46.76	67.59	-73.331	-3,089.64	1,083.67	1,958.83	1,864.40	94.42	20.745	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 3 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,350.00	4,484.99	4,364.06	4,484.99	22.82	15.56	-90.780	-3,106.59	1,485.20	1,995.91	1,962.21	33.70	59.226	
6,400.00	4,484.40	4,363.47	4,484.40	23.13	15.56	-90.754	-3,106.59	1,485.20	1,958.39	1,924.40	33.98	57.628	
6,450.00	4,483.81	4,362.88	4,483.81	23.44	15.56	-90.728	-3,106.59	1,485.20	1,921.43	1,887.14	34.29	56.038	
6,500.00	4,483.22	4,362.29	4,483.22	23.76	15.56	-90.702	-3,106.59	1,485.20	1,885.08	1,850.47	34.61	54.467	
6,550.00	4,482.63	4,361.71	4,482.63	24.09	15.55	-90.677	-3,106.59	1,485.20	1,849.36	1,814.41	34.95	52.910	
6,600.00	4,482.05	4,361.12	4,482.05	24.41	15.55	-90.651	-3,106.59	1,485.20	1,814.32	1,779.01	35.31	51.376	
6,650.00	4,481.46	4,360.53	4,481.46	24.74	15.55	-90.625	-3,106.59	1,485.20	1,780.00	1,744.30	35.70	49.861	
6,700.00	4,480.87	4,359.94	4,480.87	25.07	15.55	-90.599	-3,106.59	1,485.20	1,746.43	1,710.33	36.10	48.374	
6,750.00	4,480.28	4,359.35	4,480.28	25.41	15.55	-90.573	-3,106.59	1,485.20	1,713.66	1,677.13	36.53	46.912	
6,800.00	4,479.69	4,358.76	4,479.69	25.75	15.54	-90.547	-3,106.59	1,485.20	1,681.74	1,644.77	36.97	45.484	
6,850.00	4,479.10	4,358.17	4,479.10	26.09	15.54	-90.522	-3,106.59	1,485.20	1,650.72	1,613.28	37.44	44.087	
6,900.00	4,478.51	4,357.58	4,478.51	26.43	15.54	-90.496	-3,106.59	1,485.20	1,620.65	1,582.72	37.93	42.729	
6,950.00	4,477.92	4,356.99	4,477.92	26.78	15.54	-90.470	-3,106.59	1,485.20	1,591.58	1,553.14	38.44	41.407	
7,000.00	4,477.33	4,356.40	4,477.33	27.13	15.54	-90.444	-3,106.59	1,485.20	1,563.56	1,524.60	38.96	40.130	
7,050.00	4,476.74	4,355.81	4,476.74	27.48	15.53	-90.418	-3,106.59	1,485.20	1,536.67	1,497.16	39.51	38.896	
7,100.00	4,476.15	4,355.22	4,476.15	27.84	15.53	-90.392	-3,106.59	1,485.20	1,510.95	1,470.88	40.07	37.711	
7,150.00	4,475.56	4,354.63	4,475.56	28.19	15.53	-90.366	-3,106.59	1,485.20	1,486.47	1,445.82	40.64	36.574	
7,200.00	4,474.97	4,354.04	4,474.97	28.55	15.53	-90.341	-3,106.59	1,485.20	1,463.28	1,422.05	41.23	35.491	
7,250.00	4,474.38	4,353.45	4,474.38	28.91	15.53	-90.315	-3,106.59	1,485.20	1,441.46	1,399.63	41.83	34.462	
7,300.00	4,473.79	4,352.86	4,473.79	29.27	15.52	-90.289	-3,106.59	1,485.20	1,421.06	1,378.63	42.43	33.490	
7,350.00	4,473.20	4,352.27	4,473.20	29.64	15.52	-90.263	-3,106.59	1,485.20	1,402.15	1,359.11	43.04	32.576	
7,400.00	4,472.61	4,351.68	4,472.61	30.00	15.52	-90.237	-3,106.59	1,485.20	1,384.79	1,341.14	43.65	31.724	
7,450.00	4,472.02	4,351.09	4,472.02	30.37	15.52	-90.199	-3,106.59	1,485.20	1,369.45	1,325.19	44.26	30.940	
7,500.00	4,471.43	4,350.50	4,471.43	30.74	15.52	-90.161	-3,106.59	1,485.20	1,356.63	1,311.77	44.86	30.239	
7,550.00	4,470.84	4,349.91	4,470.84	31.11	15.51	-90.123	-3,106.59	1,485.20	1,346.40	1,300.94	45.46	29.619	
7,600.00	4,470.25	4,349.32	4,470.25	31.47	15.51	-90.085	-3,106.59	1,485.20	1,338.83	1,292.79	46.03	29.084	
7,650.00	4,469.66	4,348.73	4,469.66	31.84	15.51	-90.048	-3,106.59	1,485.20	1,333.95	1,287.37	46.59	28.633	
7,700.00	4,469.06	4,348.13	4,469.06	32.21	15.51	-90.019	-3,106.59	1,485.20	1,331.59	1,284.48	47.12	28.262	
7,737.00	4,468.62	4,347.69	4,468.62	32.49	15.51	-90.000	-3,106.59	1,485.20	1,331.08	1,283.59	47.49	28.029	CC
7,750.00	4,468.47	4,347.54	4,468.47	32.58	15.51	-89.993	-3,106.59	1,485.20	1,331.14	1,283.53	47.62	27.956	ES
7,800.00	4,467.88	4,346.95	4,467.88	32.95	15.50	-89.968	-3,106.59	1,485.20	1,332.57	1,284.49	48.08	27.714	
7,850.00	4,467.28	4,346.35	4,467.28	33.33	15.50	-89.942	-3,106.59	1,485.20	1,335.87	1,287.35	48.52	27.535	
7,900.00	4,466.69	4,345.76	4,466.69	33.70	15.50	-89.917	-3,106.59	1,485.20	1,341.02	1,292.11	48.91	27.417	
7,950.00	4,466.10	4,345.17	4,466.10	34.08	15.50	-89.891	-3,106.59	1,485.20	1,348.01	1,298.74	49.27	27.360	SF
8,000.00	4,465.50	4,344.57	4,465.50	34.46	15.50	-89.866	-3,106.59	1,485.20	1,356.81	1,307.22	49.59	27.361	
8,050.00	4,464.91	4,343.98	4,464.91	34.83	15.49	-89.840	-3,106.59	1,485.20	1,367.38	1,317.51	49.87	27.418	
8,100.00	4,464.32	4,343.39	4,464.32	35.21	15.49	-89.815	-3,106.59	1,485.20	1,379.68	1,329.57	50.11	27.530	
8,150.00	4,463.72	4,342.79	4,463.72	35.59	15.49	-89.789	-3,106.59	1,485.20	1,393.67	1,343.35	50.32	27.696	
8,200.00	4,463.13	4,342.20	4,463.13	35.97	15.49	-89.773	-3,106.59	1,485.20	1,409.08	1,358.59	50.49	27.908	
8,250.00	4,462.54	4,341.61	4,462.54	36.36	15.49	-89.761	-3,106.59	1,485.20	1,425.30	1,374.67	50.63	28.152	
8,300.00	4,461.94	4,341.01	4,461.94	36.75	15.48	-89.750	-3,106.59	1,485.20	1,442.25	1,391.52	50.73	28.429	
8,350.00	4,461.35	4,340.42	4,461.35	37.14	15.48	-89.739	-3,106.59	1,485.20	1,459.91	1,409.10	50.81	28.734	
8,400.00	4,460.76	4,339.83	4,460.76	37.53	15.48	-89.728	-3,106.59	1,485.20	1,478.25	1,427.39	50.85	29.070	
8,450.00	4,460.17	4,339.24	4,460.17	37.92	15.48	-89.718	-3,106.59	1,485.20	1,497.23	1,446.36	50.87	29.432	
8,500.00	4,459.58	4,338.65	4,459.58	38.31	15.48	-89.708	-3,106.59	1,485.20	1,516.82	1,465.96	50.86	29.823	
8,550.00	4,459.00	4,338.07	4,459.00	38.71	15.47	-89.698	-3,106.59	1,485.20	1,537.01	1,486.18	50.82	30.241	
8,600.00	4,458.41	4,337.48	4,458.41	39.10	15.47	-89.674	-3,106.59	1,485.20	1,558.17	1,507.40	50.77	30.692	
8,650.00	4,457.82	4,336.90	4,457.82	39.50	15.47	-89.650	-3,106.59	1,485.20	1,580.63	1,529.94	50.69	31.182	
8,700.00	4,457.24	4,336.31	4,457.24	39.89	15.47	-89.626	-3,106.59	1,485.20	1,604.33	1,553.73	50.59	31.710	
8,750.00	4,456.65	4,335.72	4,456.65	40.29	15.47	-89.602	-3,106.59	1,485.20	1,629.22	1,578.74	50.48	32.275	
8,800.00	4,456.07	4,335.14	4,456.07	40.69	15.46	-89.579	-3,106.59	1,485.20	1,655.25	1,604.90	50.35	32.874	
8,850.00	4,455.48	4,334.55	4,455.48	41.09	15.46	-89.555	-3,106.59	1,485.20	1,682.36	1,632.15	50.21	33.507	

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

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 3 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,900.00	4,454.89	4,333.97	4,454.89	41.49	15.46	-89.531	-3,106.59	1,485.20	1,710.50	1,660.45	50.06	34.172	
8,950.00	4,454.31	4,333.38	4,454.31	41.89	15.46	-89.507	-3,106.59	1,485.20	1,739.63	1,689.74	49.89	34.867	
9,000.00	4,453.72	4,332.79	4,453.72	42.30	15.46	-89.483	-3,106.59	1,485.20	1,769.69	1,719.97	49.72	35.592	
9,050.00	4,453.14	4,332.21	4,453.14	42.70	15.45	-89.459	-3,106.59	1,485.20	1,800.63	1,751.09	49.54	36.344	
9,100.00	4,452.55	4,331.62	4,452.55	43.10	15.45	-89.435	-3,106.59	1,485.20	1,832.42	1,783.06	49.36	37.122	
9,150.00	4,451.97	4,331.04	4,451.97	43.51	15.45	-89.411	-3,106.59	1,485.20	1,865.01	1,815.83	49.17	37.926	
9,200.00	4,451.38	4,330.45	4,451.38	43.91	15.45	-89.387	-3,106.59	1,485.20	1,898.35	1,849.37	48.98	38.754	
9,250.00	4,450.79	4,329.86	4,450.79	44.31	15.45	-89.363	-3,106.59	1,485.20	1,932.41	1,883.62	48.79	39.605	
9,300.00	4,450.21	4,329.28	4,450.21	44.72	15.45	-89.339	-3,106.59	1,485.20	1,967.15	1,918.56	48.60	40.478	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 4 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,000.00	4,477.33	4,344.81	4,456.16	27.13	15.39	-89.827	-3,694.18	1,540.32	1,989.85	1,953.53	36.31	54.798	
7,050.00	4,476.74	4,344.87	4,456.22	27.48	15.39	-89.830	-3,694.18	1,540.32	1,953.81	1,917.08	36.73	53.189	
7,100.00	4,476.15	4,344.93	4,456.29	27.84	15.39	-89.833	-3,694.18	1,540.32	1,918.40	1,881.23	37.17	51.606	
7,150.00	4,475.56	4,345.00	4,456.35	28.19	15.40	-89.835	-3,694.18	1,540.32	1,883.65	1,846.02	37.64	50.049	
7,200.00	4,474.97	4,345.06	4,456.41	28.55	15.40	-89.838	-3,694.18	1,540.32	1,849.61	1,811.49	38.12	48.524	
7,250.00	4,474.38	4,345.12	4,456.48	28.91	15.40	-89.841	-3,694.18	1,540.32	1,816.30	1,777.67	38.62	47.028	
7,300.00	4,473.79	4,345.19	4,456.54	29.27	15.40	-89.843	-3,694.18	1,540.32	1,783.76	1,744.62	39.14	45.568	
7,350.00	4,473.20	4,345.25	4,456.60	29.64	15.40	-89.846	-3,694.18	1,540.32	1,752.06	1,712.37	39.69	44.143	
7,400.00	4,472.61	4,345.31	4,456.67	30.00	15.40	-89.849	-3,694.18	1,540.32	1,721.22	1,680.96	40.25	42.759	
7,450.00	4,472.02	4,345.38	4,456.73	30.37	15.40	-89.842	-3,694.18	1,540.32	1,691.65	1,650.81	40.84	41.418	
7,500.00	4,471.43	4,345.44	4,456.79	30.74	15.40	-89.836	-3,694.19	1,540.32	1,663.79	1,622.33	41.45	40.137	
7,550.00	4,470.84	4,345.49	4,456.85	31.11	15.40	-89.828	-3,694.19	1,540.32	1,637.72	1,595.63	42.09	38.911	
7,600.00	4,470.25	4,345.55	4,456.90	31.47	15.40	-89.821	-3,694.19	1,540.32	1,613.55	1,570.81	42.74	37.752	
7,650.00	4,469.66	4,345.60	4,456.96	31.84	15.40	-89.813	-3,694.19	1,540.32	1,591.37	1,547.96	43.41	36.657	
7,700.00	4,469.06	4,345.65	4,457.01	32.21	15.40	-89.812	-3,694.19	1,540.32	1,571.06	1,526.97	44.10	35.629	
7,750.00	4,468.47	4,345.70	4,457.06	32.58	15.40	-89.814	-3,694.19	1,540.32	1,552.14	1,507.35	44.79	34.655	
7,800.00	4,467.88	4,345.75	4,457.11	32.95	15.40	-89.816	-3,694.19	1,540.32	1,534.61	1,489.12	45.48	33.741	
7,850.00	4,467.28	4,345.80	4,457.16	33.33	15.40	-89.818	-3,694.19	1,540.32	1,518.52	1,472.34	46.18	32.884	
7,900.00	4,466.69	4,345.86	4,457.21	33.70	15.40	-89.820	-3,694.19	1,540.32	1,503.92	1,457.06	46.87	32.089	
7,950.00	4,466.10	4,345.91	4,457.26	34.08	15.40	-89.822	-3,694.19	1,540.32	1,490.86	1,443.31	47.55	31.352	
8,000.00	4,465.50	4,345.96	4,457.31	34.46	15.40	-89.824	-3,694.19	1,540.32	1,479.38	1,431.15	48.22	30.677	
8,050.00	4,464.91	4,346.01	4,457.36	34.83	15.40	-89.826	-3,694.19	1,540.32	1,469.50	1,420.62	48.88	30.062	
8,100.00	4,464.32	4,346.06	4,457.42	35.21	15.40	-89.828	-3,694.19	1,540.32	1,461.28	1,411.75	49.52	29.508	
8,150.00	4,463.72	4,346.11	4,457.47	35.59	15.40	-89.830	-3,694.19	1,540.32	1,454.72	1,404.58	50.14	29.014	
8,200.00	4,463.13	4,346.16	4,457.52	35.97	15.40	-89.840	-3,694.20	1,540.32	1,449.64	1,398.91	50.73	28.575	
8,250.00	4,462.54	4,346.22	4,457.57	36.36	15.40	-89.854	-3,694.20	1,540.32	1,445.43	1,394.14	51.30	28.178	
8,300.00	4,461.94	4,346.28	4,457.63	36.75	15.40	-89.868	-3,694.20	1,540.32	1,442.08	1,390.25	51.83	27.823	
8,350.00	4,461.35	4,346.34	4,457.69	37.14	15.40	-89.882	-3,694.20	1,540.32	1,439.58	1,387.25	52.33	27.508	
8,400.00	4,460.76	4,346.40	4,457.75	37.53	15.40	-89.896	-3,694.20	1,540.32	1,437.94	1,385.14	52.80	27.233	
8,450.00	4,460.17	4,346.46	4,457.82	37.92	15.40	-89.911	-3,694.20	1,540.32	1,437.17	1,383.93	53.23	26.997	
8,469.60	4,459.94	4,346.49	4,457.84	38.07	15.40	-89.916	-3,694.20	1,540.32	1,437.10	1,383.71	53.39	26.915	CC
8,500.00	4,459.58	4,346.53	4,457.89	38.31	15.40	-89.925	-3,694.20	1,540.32	1,437.26	1,383.63	53.63	26.799	ES
8,550.00	4,459.00	4,346.60	4,457.96	38.71	15.40	-89.939	-3,694.20	1,540.32	1,438.22	1,384.23	53.99	26.639	
8,600.00	4,458.41	4,346.67	4,458.03	39.10	15.40	-89.942	-3,694.20	1,540.32	1,440.51	1,386.20	54.31	26.525	
8,650.00	4,457.82	4,346.75	4,458.10	39.50	15.40	-89.945	-3,694.20	1,540.32	1,444.52	1,389.94	54.59	26.462	
8,700.00	4,457.24	4,346.82	4,458.17	39.89	15.40	-89.948	-3,694.20	1,540.32	1,450.25	1,395.42	54.83	26.451	SF
8,750.00	4,456.65	4,346.89	4,458.25	40.29	15.40	-89.951	-3,694.20	1,540.32	1,457.67	1,402.65	55.03	26.490	
8,800.00	4,456.07	4,346.96	4,458.32	40.69	15.40	-89.954	-3,694.21	1,540.32	1,466.76	1,411.58	55.18	26.579	
8,850.00	4,455.48	4,347.03	4,458.39	41.09	15.40	-89.957	-3,694.21	1,540.32	1,477.49	1,422.19	55.30	26.715	
8,900.00	4,454.89	4,347.11	4,458.46	41.49	15.40	-89.960	-3,694.21	1,540.32	1,489.82	1,434.43	55.39	26.899	
8,950.00	4,454.31	4,347.18	4,458.54	41.89	15.40	-89.963	-3,694.21	1,540.32	1,503.71	1,448.28	55.43	27.127	
9,000.00	4,453.72	4,347.25	4,458.61	42.30	15.40	-89.965	-3,694.21	1,540.32	1,519.12	1,463.68	55.44	27.400	
9,050.00	4,453.14	4,347.33	4,458.68	42.70	15.40	-89.968	-3,694.21	1,540.32	1,536.01	1,480.58	55.42	27.715	
9,100.00	4,452.55	4,347.40	4,458.75	43.10	15.40	-89.971	-3,694.21	1,540.32	1,554.32	1,498.95	55.37	28.072	
9,150.00	4,451.97	4,347.47	4,458.83	43.51	15.40	-89.974	-3,694.21	1,540.32	1,574.00	1,518.71	55.29	28.469	
9,200.00	4,451.38	4,347.54	4,458.90	43.91	15.40	-89.977	-3,694.21	1,540.32	1,595.01	1,539.83	55.18	28.904	
9,250.00	4,450.79	4,347.62	4,458.97	44.31	15.40	-89.980	-3,694.21	1,540.32	1,617.30	1,562.24	55.05	29.376	
9,300.00	4,450.21	4,347.69	4,459.05	44.72	15.40	-89.983	-3,694.22	1,540.32	1,640.80	1,585.90	54.91	29.884	
9,350.00	4,449.62	4,347.77	4,459.12	45.13	15.41	-89.986	-3,694.22	1,540.32	1,665.48	1,610.74	54.74	30.426	
9,400.00	4,449.04	4,347.84	4,459.19	45.53	15.41	-89.989	-3,694.22	1,540.32	1,691.27	1,636.72	54.55	31.002	
9,450.00	4,448.45	4,347.91	4,459.27	45.94	15.41	-89.992	-3,694.22	1,540.32	1,718.13	1,663.78	54.36	31.609	
9,500.00	4,447.86	4,347.99	4,459.34	46.35	15.41	-89.995	-3,694.22	1,540.32	1,746.01	1,691.87	54.15	32.246	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: MONCRIEF STATE 4 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,550.00	4,447.28	4,348.06	4,459.42	46.76	15.41	-89.998	-3,694.22	1,540.32	1,774.86	1,720.94	53.93	32.913	
9,600.00	4,446.69	4,348.14	4,459.49	47.16	15.41	-90.001	-3,694.22	1,540.32	1,804.64	1,750.94	53.70	33.607	
9,650.00	4,446.11	4,348.21	4,459.57	47.57	15.41	-90.004	-3,694.22	1,540.32	1,835.30	1,781.83	53.46	34.328	
9,700.00	4,445.52	4,348.28	4,459.64	47.98	15.41	-90.007	-3,694.22	1,540.32	1,866.79	1,813.56	53.22	35.075	
9,750.00	4,444.93	4,348.36	4,459.71	48.39	15.41	-90.010	-3,694.22	1,540.32	1,899.07	1,846.09	52.98	35.846	
9,800.00	4,444.35	4,348.43	4,459.79	48.80	15.41	-90.013	-3,694.23	1,540.32	1,932.11	1,879.38	52.73	36.641	
9,850.00	4,443.76	4,348.51	4,459.86	49.21	15.41	-90.015	-3,694.23	1,540.32	1,965.87	1,913.39	52.48	37.457	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: TUMAK FEDERAL 2 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 8-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	34.00	0.00	0.00	51.175	823.30	1,023.08	1,313.65				
50.00	50.00	20.28	54.28	0.05	0.06	51.175	823.28	1,023.05	1,313.18	1,313.07	0.11	N/A	
100.00	100.00	83.40	117.40	0.14	0.28	51.175	822.96	1,022.64	1,312.77	1,312.34	0.43	3,044.315	
150.00	150.00	132.81	166.80	0.32	0.46	51.175	822.52	1,022.08	1,312.05	1,311.26	0.79	1,670.987	
200.00	200.00	177.33	211.32	0.50	0.62	51.176	822.20	1,021.73	1,311.51	1,310.39	1.12	1,167.838	
250.00	250.00	225.02	259.00	0.68	0.79	51.178	821.94	1,021.50	1,311.16	1,309.68	1.47	890.172	
300.00	300.00	275.97	309.95	0.86	0.98	51.181	821.66	1,021.25	1,310.79	1,308.96	1.83	714.451	
350.00	350.00	325.52	359.51	1.04	1.15	35.660	821.38	1,020.99	1,310.06	1,307.86	2.19	597.768	
400.00	399.98	373.82	407.80	1.22	1.33	35.712	821.13	1,020.78	1,308.66	1,306.12	2.54	514.363	
450.00	449.93	423.80	457.78	1.40	1.51	35.794	820.91	1,020.60	1,306.61	1,303.71	2.90	449.964	
500.00	499.84	475.74	509.72	1.58	1.69	35.914	820.60	1,020.39	1,303.79	1,300.52	3.27	398.620	
550.00	549.68	526.37	560.35	1.76	1.87	36.066	820.22	1,020.17	1,300.21	1,296.58	3.63	357.903	
600.00	599.45	575.85	609.83	1.95	2.05	36.247	819.86	1,019.94	1,295.93	1,291.94	3.99	324.737	
650.00	649.13	625.36	659.33	2.13	2.23	36.460	819.51	1,019.72	1,290.97	1,286.62	4.35	296.869	
700.00	698.70	674.87	708.85	2.31	2.41	36.706	819.17	1,019.49	1,285.32	1,280.61	4.71	273.090	
750.00	748.15	723.76	757.73	2.49	2.58	36.982	818.85	1,019.26	1,278.99	1,273.93	5.06	252.661	
800.00	797.47	771.98	805.96	2.67	2.75	37.289	818.58	1,019.03	1,272.03	1,266.61	5.42	234.897	
850.00	846.63	819.60	853.57	2.85	2.93	37.626	818.36	1,018.83	1,264.44	1,258.68	5.77	219.291	
900.00	895.62	866.42	900.39	3.03	3.09	37.992	818.20	1,018.68	1,256.28	1,250.16	6.11	205.470	
950.00	944.44	916.85	950.82	3.21	3.27	38.418	818.07	1,018.54	1,247.51	1,241.03	6.48	192.637	
1,000.00	993.09	965.33	999.30	3.39	3.45	38.795	817.83	1,018.34	1,238.11	1,231.28	6.83	181.294	
1,050.00	1,041.73	1,006.81	1,040.78	3.57	3.59	39.088	817.63	1,018.37	1,228.90	1,221.74	7.15	171.819	
1,100.00	1,090.37	1,046.90	1,080.86	3.76	3.73	39.382	817.48	1,018.70	1,220.04	1,212.57	7.47	163.433	
1,150.00	1,139.01	1,086.98	1,120.94	3.94	3.86	39.689	817.33	1,019.36	1,211.57	1,203.79	7.78	155.744	
1,200.00	1,187.65	1,127.35	1,161.30	4.13	4.00	40.009	817.21	1,020.36	1,203.50	1,195.41	8.09	148.693	
1,250.00	1,236.29	1,166.58	1,200.50	4.32	4.13	40.331	817.12	1,021.65	1,195.84	1,187.43	8.41	142.256	
1,300.00	1,284.93	1,205.40	1,239.29	4.51	4.26	40.661	817.07	1,023.29	1,188.63	1,179.91	8.72	136.350	
1,350.00	1,333.58	1,243.56	1,277.40	4.70	4.39	40.999	817.02	1,025.30	1,181.91	1,172.88	9.03	130.916	
1,400.00	1,382.22	1,285.81	1,319.56	4.88	4.53	41.391	816.93	1,027.97	1,175.66	1,166.31	9.35	125.692	
1,450.00	1,430.86	1,333.20	1,366.84	5.07	4.69	41.851	816.58	1,031.25	1,169.61	1,159.91	9.70	120.595	
1,500.00	1,479.50	1,378.49	1,412.00	5.26	4.85	42.311	816.02	1,034.64	1,163.73	1,153.69	10.04	115.926	
1,550.00	1,528.14	1,418.33	1,451.70	5.45	4.99	42.728	815.47	1,037.86	1,158.16	1,147.80	10.36	111.798	
1,600.00	1,576.78	1,457.00	1,490.23	5.64	5.12	43.129	815.25	1,041.23	1,153.14	1,142.47	10.68	108.008	
1,650.00	1,625.42	1,493.86	1,526.92	5.83	5.25	43.510	815.27	1,044.71	1,148.68	1,137.69	10.99	104.551	
1,700.00	1,674.06	1,536.03	1,568.87	6.02	5.40	43.950	815.45	1,049.02	1,144.72	1,133.41	11.32	101.148	
1,750.00	1,722.70	1,586.75	1,619.33	6.21	5.58	44.476	815.82	1,054.15	1,140.90	1,129.22	11.68	97.678	
1,800.00	1,771.34	1,633.89	1,666.24	6.40	5.75	44.960	816.27	1,058.80	1,137.13	1,125.10	12.03	94.521	
1,850.00	1,819.98	1,676.11	1,708.23	6.59	5.90	45.394	816.80	1,063.12	1,133.66	1,121.30	12.36	91.702	
1,900.00	1,868.62	1,720.77	1,752.62	6.78	6.06	45.856	817.48	1,067.92	1,130.57	1,117.86	12.70	88.990	
1,950.00	1,917.26	1,776.72	1,808.26	6.97	6.26	46.449	818.07	1,073.92	1,127.46	1,114.37	13.09	86.119	
2,000.00	1,965.90	1,829.28	1,860.52	7.16	6.46	47.024	818.23	1,079.43	1,124.17	1,110.70	13.47	83.478	
2,050.00	2,014.54	1,877.93	1,908.90	7.35	6.64	47.568	818.19	1,084.58	1,120.94	1,107.12	13.83	81.066	
2,100.00	2,063.18	1,928.69	1,959.37	7.54	6.82	48.146	818.01	1,089.99	1,117.80	1,103.61	14.20	78.733	
2,150.00	2,111.82	1,981.57	2,011.97	7.73	7.02	48.753	817.74	1,095.47	1,114.61	1,100.04	14.58	76.469	
2,200.00	2,160.46	2,025.66	2,055.82	7.92	7.19	49.261	817.49	1,100.00	1,111.48	1,096.56	14.92	74.490	
2,250.00	2,209.10	2,065.80	2,095.71	8.11	7.34	49.730	817.30	1,104.42	1,108.81	1,093.55	15.25	72.704	
2,300.00	2,257.74	2,107.84	2,137.46	8.30	7.49	50.227	817.17	1,109.36	1,106.61	1,091.02	15.59	70.991	
2,350.00	2,306.38	2,154.44	2,183.72	8.50	7.67	50.777	817.14	1,114.96	1,104.69	1,088.75	15.94	69.286	
2,400.00	2,355.02	2,201.64	2,230.58	8.69	7.85	51.330	817.25	1,120.66	1,102.97	1,086.67	16.30	67.659	
2,450.00	2,403.66	2,250.43	2,279.02	8.88	8.04	51.897	817.46	1,126.53	1,101.39	1,084.72	16.67	66.082	
2,500.00	2,452.30	2,299.06	2,327.30	9.07	8.22	52.459	817.77	1,132.34	1,099.92	1,082.89	17.03	64.582	
2,550.00	2,500.94	2,347.23	2,375.12	9.26	8.41	53.013	818.17	1,138.07	1,098.58	1,081.19	17.39	63.158	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: TUMAK FEDERAL 2 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 8-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,600.00	2,549.58	2,395.19	2,422.73	9.45	8.59	53.561	818.65	1,143.79	1,097.37	1,079.62	17.76	61.803	
2,650.00	2,598.22	2,442.58	2,469.78	9.64	8.78	54.104	819.12	1,149.48	1,096.33	1,078.22	18.12	60.519	
2,700.00	2,646.86	2,490.40	2,517.24	9.83	8.96	54.656	819.57	1,155.30	1,095.46	1,076.98	18.48	59.287	
2,750.00	2,695.50	2,539.28	2,565.76	10.02	9.15	55.223	820.01	1,161.27	1,094.71	1,075.86	18.84	58.093	
2,800.00	2,744.14	2,586.53	2,612.65	10.22	9.34	55.772	820.42	1,167.05	1,094.07	1,074.87	19.20	56.972	
2,850.00	2,792.78	2,630.47	2,656.24	10.41	9.51	56.283	820.84	1,172.56	1,093.72	1,074.17	19.55	55.947	
2,879.33	2,821.31	2,656.25	2,681.80	10.52	9.61	56.583	821.11	1,175.88	1,093.66	1,073.91	19.75	55.370	
2,900.00	2,841.42	2,676.80	2,702.18	10.60	9.69	56.822	821.33	1,178.57	1,093.68	1,073.78	19.91	54.944	
2,950.00	2,890.06	2,734.81	2,759.72	10.79	9.92	57.505	821.76	1,185.90	1,093.56	1,073.25	20.31	53.835	
3,000.00	2,938.70	2,793.14	2,817.63	10.98	10.15	58.200	821.88	1,192.84	1,093.14	1,072.42	20.72	52.754	
3,050.00	2,987.34	2,851.88	2,876.02	11.17	10.37	58.896	821.96	1,199.29	1,092.39	1,071.26	21.13	51.698	
3,100.00	3,035.98	2,901.00	2,924.87	11.36	10.56	59.477	822.00	1,204.43	1,091.51	1,070.01	21.50	50.769	
3,150.00	3,084.63	2,948.97	2,972.57	11.55	10.75	60.049	821.96	1,209.50	1,090.77	1,068.91	21.86	49.890	
3,200.00	3,133.27	2,995.70	3,019.04	11.75	10.93	60.610	821.89	1,214.50	1,090.21	1,067.99	22.22	49.057	
3,250.00	3,181.91	3,042.29	3,065.34	11.94	11.11	61.171	821.81	1,219.58	1,089.86	1,067.28	22.58	48.262	
3,300.00	3,230.55	3,090.49	3,113.25	12.13	11.30	61.751	821.75	1,224.89	1,089.69	1,066.74	22.95	47.485	
3,339.79	3,269.25	3,129.07	3,151.60	12.28	11.45	62.214	821.72	1,229.15	1,089.65	1,066.41	23.24	46.887	CC
3,350.00	3,279.19	3,138.98	3,161.44	12.32	11.49	62.333	821.72	1,230.24	1,089.65	1,066.34	23.32	46.736	ES
3,400.00	3,328.06	3,186.23	3,208.40	12.51	11.67	59.445	821.74	1,235.47	1,090.03	1,066.36	23.67	46.042	
3,450.00	3,377.40	3,233.71	3,255.59	12.69	11.86	53.586	821.82	1,240.81	1,091.18	1,067.15	24.03	45.409	
3,500.00	3,427.07	3,283.54	3,305.09	12.87	12.06	41.033	821.89	1,246.46	1,093.01	1,068.62	24.39	44.814	
3,550.00	3,476.93	3,333.90	3,355.13	13.04	12.25	9.579	821.83	1,252.17	1,095.41	1,070.67	24.75	44.268	
3,600.00	3,526.85	3,385.23	3,406.13	13.20	12.46	-41.320	821.64	1,257.96	1,098.34	1,073.24	25.10	43.766	
3,650.00	3,576.69	3,437.40	3,457.97	13.36	12.66	-68.716	821.33	1,263.80	1,101.75	1,076.30	25.44	43.306	
3,700.00	3,626.31	3,497.91	3,518.14	13.50	12.90	-80.179	821.01	1,270.18	1,105.40	1,079.59	25.81	42.823	
3,750.00	3,675.59	3,550.53	3,570.52	13.64	13.10	-86.087	820.87	1,275.28	1,109.24	1,083.09	26.15	42.424	
3,800.00	3,724.37	3,595.18	3,614.95	13.77	13.27	-89.659	820.80	1,279.68	1,113.81	1,087.37	26.44	42.123	
3,850.00	3,772.54	3,641.92	3,661.44	13.90	13.45	-92.152	820.76	1,284.43	1,119.22	1,092.47	26.74	41.853	
3,900.00	3,819.95	3,692.51	3,711.78	14.02	13.65	-94.113	820.66	1,289.51	1,125.29	1,098.24	27.05	41.597	
3,950.00	3,866.48	3,740.05	3,759.08	14.14	13.83	-95.686	820.49	1,294.19	1,132.08	1,104.73	27.35	41.397	
4,000.00	3,912.00	3,784.12	3,802.94	14.25	14.01	-96.974	820.30	1,298.56	1,139.80	1,112.17	27.62	41.260	
4,050.00	3,956.38	3,827.50	3,846.10	14.36	14.17	-98.094	820.09	1,302.93	1,148.56	1,120.66	27.90	41.171	
4,100.00	3,999.51	3,870.47	3,888.85	14.46	14.34	-99.097	819.95	1,307.25	1,158.42	1,130.25	28.17	41.128	SF
4,150.00	4,041.26	3,912.02	3,930.20	14.56	14.50	-99.980	819.87	1,311.42	1,169.46	1,141.03	28.43	41.138	
4,200.00	4,081.53	3,952.99	3,970.96	14.66	14.66	-100.771	819.80	1,315.52	1,181.75	1,153.06	28.69	41.195	
4,250.00	4,120.19	3,992.41	4,010.18	14.75	14.82	-101.446	819.69	1,319.45	1,195.36	1,166.42	28.94	41.307	
4,300.00	4,157.15	4,028.41	4,046.00	14.85	14.96	-101.940	819.56	1,323.05	1,210.39	1,181.21	29.18	41.484	
4,350.00	4,192.30	4,061.65	4,079.07	14.95	15.08	-102.264	819.48	1,326.40	1,226.96	1,197.55	29.41	41.726	
4,400.00	4,225.55	4,092.97	4,110.23	15.04	15.21	-102.433	819.46	1,329.59	1,245.11	1,215.49	29.63	42.028	
4,450.00	4,256.80	4,124.92	4,142.01	15.14	15.33	-102.531	819.46	1,332.85	1,264.87	1,235.03	29.85	42.376	
4,500.00	4,285.98	4,156.02	4,172.96	15.24	15.45	-102.503	819.44	1,335.99	1,286.19	1,256.12	30.07	42.775	
4,550.00	4,312.99	4,184.87	4,201.66	15.35	15.56	-102.284	819.41	1,338.86	1,309.08	1,278.80	30.28	43.234	
4,600.00	4,338.18	4,211.10	4,227.77	15.45	15.67	-102.757	819.38	1,341.43	1,333.43	1,302.95	30.48	43.751	
4,650.00	4,363.18	4,236.38	4,252.93	15.58	15.76	-103.777	819.38	1,343.87	1,358.76	1,328.08	30.68	44.287	
4,700.00	4,388.18	4,261.53	4,277.96	15.71	15.86	-104.780	819.42	1,346.27	1,384.98	1,354.10	30.88	44.854	
4,750.00	4,413.18	4,286.54	4,302.86	15.85	15.96	-105.766	819.50	1,348.62	1,412.04	1,380.96	31.08	45.429	
4,800.00	4,437.50	4,311.25	4,327.46	15.99	16.05	-104.770	819.61	1,350.91	1,440.08	1,408.80	31.28	46.036	
4,850.00	4,458.24	4,332.49	4,348.61	16.14	16.13	-102.080	819.70	1,352.86	1,469.74	1,438.28	31.47	46.710	
4,900.00	4,474.94	4,349.55	4,365.60	16.28	16.20	-98.915	819.77	1,354.43	1,500.95	1,469.33	31.63	47.459	
4,950.00	4,487.48	4,362.30	4,378.29	16.43	16.25	-95.255	819.82	1,355.59	1,533.53	1,501.76	31.76	48.281	
5,000.00	4,495.74	4,370.63	4,386.59	16.57	16.28	-91.104	819.85	1,356.35	1,567.24	1,535.36	31.87	49.171	
5,050.00	4,499.68	4,374.48	4,390.43	16.70	16.30	-86.506	819.86	1,356.70	1,601.83	1,569.87	31.96	50.122	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: TUMAK FEDERAL 2 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

Survey Program: 8-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,499.73	4,374.29	4,390.24	16.84	16.30	-83.849	819.86	1,356.68	1,637.07	1,605.05	32.02	51.122	
5,150.00	4,499.14	4,373.44	4,389.39	16.99	16.29	-83.807	819.86	1,356.60	1,673.02	1,640.94	32.09	52.139	
5,200.00	4,498.55	4,372.59	4,388.55	17.14	16.29	-83.764	819.86	1,356.52	1,709.68	1,677.53	32.15	53.179	
5,250.00	4,497.96	4,371.74	4,387.70	17.32	16.29	-83.722	819.85	1,356.45	1,747.00	1,714.79	32.21	54.231	
5,300.00	4,497.37	4,370.89	4,386.85	17.49	16.28	-83.679	819.85	1,356.37	1,784.94	1,752.66	32.27	55.305	
5,350.00	4,496.78	4,370.03	4,386.00	17.68	16.28	-83.637	819.85	1,356.29	1,823.46	1,791.12	32.34	56.389	
5,400.00	4,496.19	4,369.18	4,385.15	17.86	16.28	-83.594	819.84	1,356.21	1,862.53	1,830.13	32.40	57.492	
5,450.00	4,495.60	4,368.33	4,384.30	18.07	16.27	-83.552	819.84	1,356.14	1,902.10	1,869.65	32.46	58.604	
5,500.00	4,495.01	4,367.47	4,383.45	18.28	16.27	-83.509	819.84	1,356.06	1,942.16	1,909.65	32.51	59.734	
5,550.00	4,494.42	4,366.61	4,382.59	18.50	16.27	-83.466	819.83	1,355.98	1,982.67	1,950.10	32.57	60.872	

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: TUMAK FEDERAL 3 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	40.00	0.00	0.00	85.760	59.28	799.53	802.72				
50.00	50.00	10.29	50.29	0.05	0.02	85.760	59.28	799.53	801.72	801.65	0.07	N/A	
100.00	100.00	61.76	101.76	0.14	0.11	85.758	59.29	799.46	801.66	801.40	0.25	3,153.038	
150.00	150.00	113.03	153.03	0.32	0.23	85.756	59.32	799.30	801.50	800.96	0.55	1,460.750	
200.00	200.00	163.74	203.73	0.50	0.41	85.749	59.39	799.08	801.29	800.38	0.91	880.994	
250.00	250.00	213.53	253.53	0.68	0.58	85.740	59.50	798.83	801.05	799.78	1.27	632.958	
300.00	300.00	261.04	301.04	0.86	0.75	85.742	59.47	798.69	800.90	799.29	1.61	497.596	
350.00	350.00	308.95	348.95	1.04	0.92	70.246	59.24	798.72	800.77	798.81	1.95	409.752	
400.00	399.98	358.67	398.67	1.22	1.09	70.350	59.12	798.80	800.40	798.10	2.30	347.422	
450.00	449.93	408.63	448.62	1.40	1.26	70.499	59.28	798.88	799.76	797.10	2.65	301.257	
500.00	499.84	459.78	499.78	1.58	1.44	70.715	59.47	798.91	798.78	795.77	3.01	265.106	
550.00	549.68	510.86	550.86	1.76	1.62	71.005	59.56	798.87	797.46	794.09	3.37	236.539	
600.00	599.45	560.03	600.02	1.95	1.79	71.353	59.61	798.82	795.86	792.14	3.73	213.618	
650.00	649.13	609.42	649.42	2.13	1.97	71.768	59.64	798.80	794.04	789.95	4.08	194.580	
700.00	698.70	657.05	697.05	2.31	2.13	72.235	59.62	798.85	792.06	787.63	4.42	179.019	
750.00	748.15	705.00	745.00	2.49	2.30	72.771	59.53	799.00	789.97	785.20	4.77	165.583	
800.00	797.47	754.49	794.48	2.67	2.47	73.387	59.46	799.20	787.73	782.61	5.12	153.828	
850.00	846.63	804.27	844.27	2.85	2.64	74.068	59.47	799.38	785.33	779.85	5.47	143.473	
900.00	895.62	859.03	899.02	3.03	2.83	74.877	59.67	799.34	782.57	776.73	5.85	133.830	
950.00	944.44	905.58	945.57	3.21	2.99	75.633	59.92	799.18	779.58	773.39	6.19	125.878	
1,000.00	993.09	950.96	990.96	3.39	3.15	76.395	60.03	799.21	776.76	770.22	6.53	118.862	
1,050.00	1,041.73	996.35	1,036.35	3.57	3.31	77.154	59.99	799.43	774.29	767.41	6.88	112.567	
1,100.00	1,090.37	1,042.63	1,082.62	3.76	3.47	77.918	60.15	799.83	772.16	764.94	7.23	106.872	
1,150.00	1,139.01	1,089.12	1,129.10	3.94	3.63	78.655	60.76	800.41	770.34	762.76	7.57	101.712	
1,200.00	1,187.65	1,133.78	1,173.75	4.13	3.79	79.339	61.69	801.18	768.86	760.95	7.92	97.107	
1,250.00	1,236.29	1,178.63	1,218.56	4.32	3.95	80.008	62.89	802.21	767.79	759.53	8.26	92.919	
1,300.00	1,284.93	1,225.61	1,265.51	4.51	4.12	80.695	64.33	803.51	767.04	758.43	8.62	89.017	
1,350.00	1,333.58	1,272.80	1,312.65	4.70	4.28	81.381	65.83	804.94	766.54	757.57	8.97	85.437	
1,400.00	1,382.22	1,322.59	1,362.40	4.88	4.46	82.101	67.47	806.49	766.20	756.86	9.34	82.056	
1,450.00	1,430.86	1,372.53	1,412.28	5.07	4.64	82.821	69.16	807.99	765.93	756.22	9.70	78.927	
1,500.00	1,479.50	1,420.57	1,460.28	5.26	4.81	83.517	70.75	809.45	765.78	755.72	10.06	76.088	
1,514.94	1,494.03	1,434.96	1,474.64	5.32	4.86	83.726	71.21	809.89	765.78	755.60	10.17	75.281	
1,550.00	1,528.14	1,468.70	1,508.36	5.45	4.98	84.220	72.25	810.94	765.82	755.40	10.43	73.458	
1,600.00	1,576.78	1,516.86	1,556.46	5.64	5.15	84.918	73.81	812.50	766.04	755.25	10.79	71.017	
1,650.00	1,625.42	1,565.76	1,605.30	5.83	5.33	85.615	75.55	814.18	766.43	755.28	11.15	68.730	
1,700.00	1,674.06	1,617.54	1,657.02	6.02	5.51	86.357	77.33	815.83	766.84	755.32	11.53	66.524	
1,750.00	1,722.70	1,669.23	1,708.68	6.21	5.70	87.113	78.94	817.25	767.20	755.30	11.90	64.454	
1,800.00	1,771.34	1,715.14	1,754.54	6.40	5.86	87.783	80.36	818.57	767.75	755.49	12.26	62.636	
1,850.00	1,819.98	1,762.84	1,802.20	6.59	6.04	88.475	81.86	820.07	768.53	755.92	12.62	60.906	
1,900.00	1,868.62	1,813.21	1,852.52	6.78	6.22	89.213	83.33	821.60	769.43	756.44	12.99	59.234	
1,950.00	1,917.26	1,862.57	1,901.85	6.97	6.39	89.949	84.60	822.97	770.37	757.01	13.36	57.674	
2,000.00	1,965.90	1,910.24	1,949.47	7.16	6.57	90.649	85.91	824.38	771.49	757.78	13.72	56.237	
2,050.00	2,014.54	1,957.49	1,996.68	7.35	6.74	91.328	87.38	825.91	772.83	758.75	14.08	54.895	
2,100.00	2,063.18	2,004.01	2,043.14	7.54	6.90	91.976	89.01	827.62	774.43	760.00	14.44	53.647	
2,150.00	2,111.82	2,052.37	2,091.43	7.73	7.08	92.631	90.87	829.60	776.29	761.49	14.80	52.451	
2,200.00	2,160.46	2,103.65	2,142.62	7.92	7.27	93.324	92.85	831.61	778.17	762.99	15.18	51.273	
2,250.00	2,209.10	2,153.73	2,192.63	8.11	7.45	94.004	94.74	833.43	780.05	764.50	15.55	50.168	
2,300.00	2,257.74	2,202.81	2,241.65	8.30	7.62	94.671	96.55	835.19	782.02	766.10	15.92	49.132	
2,350.00	2,306.38	2,253.74	2,292.51	8.50	7.81	95.363	98.39	836.96	784.06	767.77	16.29	48.126	
2,400.00	2,355.02	2,305.74	2,344.46	8.69	8.00	96.073	100.24	838.57	786.05	769.37	16.67	47.150	
2,450.00	2,403.66	2,351.59	2,390.26	8.88	8.16	96.693	101.93	839.98	788.12	771.09	17.03	46.288	
2,500.00	2,452.30	2,396.35	2,434.95	9.07	8.33	97.276	103.72	841.68	790.57	773.19	17.38	45.496	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: TUMAK FEDERAL 3 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

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

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,550.00	2,500.94	2,444.67	2,483.18	9.26	8.50	97.889	105.75	843.77	793.31	775.56	17.74	44.714	
2,600.00	2,549.58	2,494.19	2,532.62	9.45	8.68	98.518	107.77	845.87	796.12	778.01	18.11	43.956	
2,650.00	2,598.22	2,543.81	2,582.16	9.64	8.86	99.147	109.76	847.92	799.01	780.53	18.48	43.231	
2,700.00	2,646.86	2,593.47	2,631.72	9.83	9.05	99.772	111.77	849.95	801.97	783.12	18.85	42.538	
2,750.00	2,695.50	2,644.31	2,682.49	10.02	9.23	100.411	113.80	851.94	804.95	785.73	19.23	41.862	
2,800.00	2,744.14	2,695.19	2,733.30	10.22	9.42	101.058	115.74	853.76	807.93	788.32	19.60	41.212	
2,850.00	2,792.78	2,744.00	2,782.05	10.41	9.59	101.684	117.48	855.40	810.96	790.99	19.97	40.608	
2,900.00	2,841.42	2,792.87	2,830.87	10.60	9.77	102.316	119.09	856.99	814.10	793.77	20.34	40.031	
2,950.00	2,890.06	2,841.04	2,878.99	10.79	9.95	102.938	120.62	858.55	817.38	796.68	20.70	39.488	
3,000.00	2,938.70	2,889.43	2,927.33	10.98	10.12	103.560	122.12	860.16	820.81	799.75	21.06	38.969	
3,050.00	2,987.34	2,938.40	2,976.25	11.17	10.30	104.184	123.62	861.79	824.36	802.93	21.43	38.470	
3,100.00	3,035.98	2,988.14	3,025.94	11.36	10.48	104.813	125.15	863.45	828.01	806.21	21.80	37.985	
3,150.00	3,084.63	3,039.77	3,077.51	11.55	10.67	105.457	126.82	865.09	831.64	809.46	22.18	37.503	
3,200.00	3,133.27	3,090.12	3,127.81	11.75	10.85	106.079	128.54	866.58	835.23	812.69	22.55	37.044	
3,250.00	3,181.91	3,138.88	3,176.53	11.94	11.03	106.678	130.18	868.00	838.91	816.00	22.91	36.615	
3,300.00	3,230.55	3,186.40	3,223.99	12.13	11.20	107.258	131.75	869.40	842.73	819.46	23.27	36.214	
3,350.00	3,279.19	3,232.91	3,270.45	12.32	11.37	107.811	133.35	870.97	846.77	823.14	23.62	35.842	
3,400.00	3,328.06	3,280.94	3,318.42	12.51	11.54	105.051	135.07	872.79	850.43	826.45	23.98	35.458	
3,450.00	3,377.40	3,330.53	3,367.93	12.69	11.72	99.207	136.91	874.74	852.79	828.44	24.35	35.027	
3,500.00	3,427.07	3,379.62	3,416.95	12.87	11.90	86.519	138.80	876.73	853.77	829.07	24.70	34.562	
3,550.00	3,476.93	3,428.37	3,465.62	13.04	12.08	54.804	140.66	878.78	853.42	828.36	25.05	34.067	
3,600.00	3,526.85	3,478.70	3,515.86	13.20	12.27	3.526	142.55	880.93	851.68	826.28	25.40	33.533	
3,650.00	3,576.69	3,529.53	3,566.63	13.36	12.45	-24.364	144.39	882.98	848.49	822.75	25.74	32.965	
3,700.00	3,626.31	3,578.91	3,615.94	13.50	12.63	-36.362	146.13	884.89	843.90	817.83	26.07	32.374	
3,750.00	3,675.59	3,627.65	3,664.61	13.64	12.81	-42.931	147.83	886.79	838.01	811.63	26.39	31.758	
3,800.00	3,724.37	3,677.06	3,713.95	13.77	12.99	-47.383	149.50	888.65	830.88	804.18	26.71	31.113	
3,850.00	3,772.54	3,725.86	3,762.70	13.90	13.17	-50.883	151.05	890.35	822.56	795.55	27.02	30.447	
3,900.00	3,819.95	3,771.53	3,808.33	14.02	13.33	-53.890	152.42	891.91	813.24	785.94	27.31	29.782	
3,950.00	3,866.48	3,816.40	3,853.15	14.14	13.50	-56.696	153.71	893.48	803.13	775.54	27.59	29.110	
4,000.00	3,912.00	3,861.53	3,898.24	14.25	13.66	-59.465	154.95	895.06	792.35	764.48	27.87	28.432	
4,050.00	3,956.38	3,905.57	3,942.24	14.36	13.82	-62.235	156.11	896.56	781.05	752.92	28.14	27.758	
4,100.00	3,999.51	3,950.34	3,986.97	14.46	13.98	-65.122	157.34	898.03	769.42	741.02	28.41	27.085	
4,150.00	4,041.26	3,993.63	4,030.20	14.56	14.14	-68.076	158.77	899.42	757.64	728.98	28.67	26.430	
4,200.00	4,081.53	4,032.42	4,068.95	14.66	14.28	-70.940	160.21	900.64	746.08	717.17	28.90	25.812	
4,250.00	4,120.19	4,068.56	4,105.05	14.75	14.42	-73.740	161.51	901.84	735.17	706.04	29.13	25.237	
4,300.00	4,157.15	4,103.25	4,139.70	14.85	14.54	-76.502	162.71	903.03	725.24	695.89	29.35	24.710	
4,350.00	4,192.30	4,137.88	4,174.28	14.95	14.67	-79.278	163.87	904.22	716.57	687.00	29.57	24.234	
4,400.00	4,225.55	4,170.55	4,206.92	15.04	14.79	-81.925	164.95	905.30	709.46	679.68	29.78	23.823	
4,450.00	4,256.80	4,201.17	4,237.50	15.14	14.90	-84.398	165.95	906.29	704.25	674.27	29.99	23.487	
4,500.00	4,285.98	4,228.58	4,264.89	15.24	15.00	-86.578	166.83	907.17	701.31	671.13	30.18	23.237	
4,532.35	4,303.71	4,245.30	4,281.60	15.31	15.06	-87.861	167.36	907.71	700.75	670.44	30.30	23.124	CC, ES
4,550.00	4,312.99	4,254.04	4,290.32	15.35	15.09	-88.512	167.64	907.99	700.92	670.55	30.37	23.080	
4,600.00	4,338.18	4,277.66	4,313.92	15.45	15.18	-90.217	168.38	908.76	703.31	672.75	30.55	23.020	SF
4,650.00	4,363.18	4,301.49	4,337.73	15.58	15.26	-91.930	169.13	909.54	708.44	677.70	30.75	23.040	
4,700.00	4,388.18	4,325.57	4,361.78	15.71	15.35	-93.654	169.91	910.31	716.25	685.31	30.94	23.149	
4,750.00	4,413.18	4,349.59	4,385.77	15.85	15.44	-95.364	170.70	911.05	726.64	695.50	31.14	23.335	
4,800.00	4,437.50	4,372.82	4,408.99	15.99	15.52	-96.190	171.48	911.75	739.59	708.26	31.33	23.607	
4,850.00	4,458.24	4,392.30	4,428.44	16.14	15.59	-95.968	172.16	912.33	755.43	723.93	31.50	23.984	
4,900.00	4,474.94	4,407.18	4,443.30	16.28	15.65	-95.087	172.67	912.77	774.21	742.58	31.64	24.472	
4,950.00	4,487.48	4,418.02	4,454.13	16.43	15.69	-93.547	173.04	913.09	795.83	764.08	31.75	25.068	
5,000.00	4,495.74	4,424.56	4,460.67	16.57	15.71	-91.303	173.27	913.28	820.06	788.23	31.83	25.766	
5,050.00	4,499.68	4,426.76	4,462.87	16.70	15.72	-88.348	173.34	913.34	846.60	814.72	31.88	26.557	

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

SPUR ENERGY PARTNERS

Anticollision Report

WELLBENDERS DIRECTIONAL SERVICES

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Offset Design MAYARO 22 STATE COM - OFFSET: TUMAK FEDERAL 3 - Wellbore #1 - Wellbore #1 — **Offset Site Error:** 0.00 usft

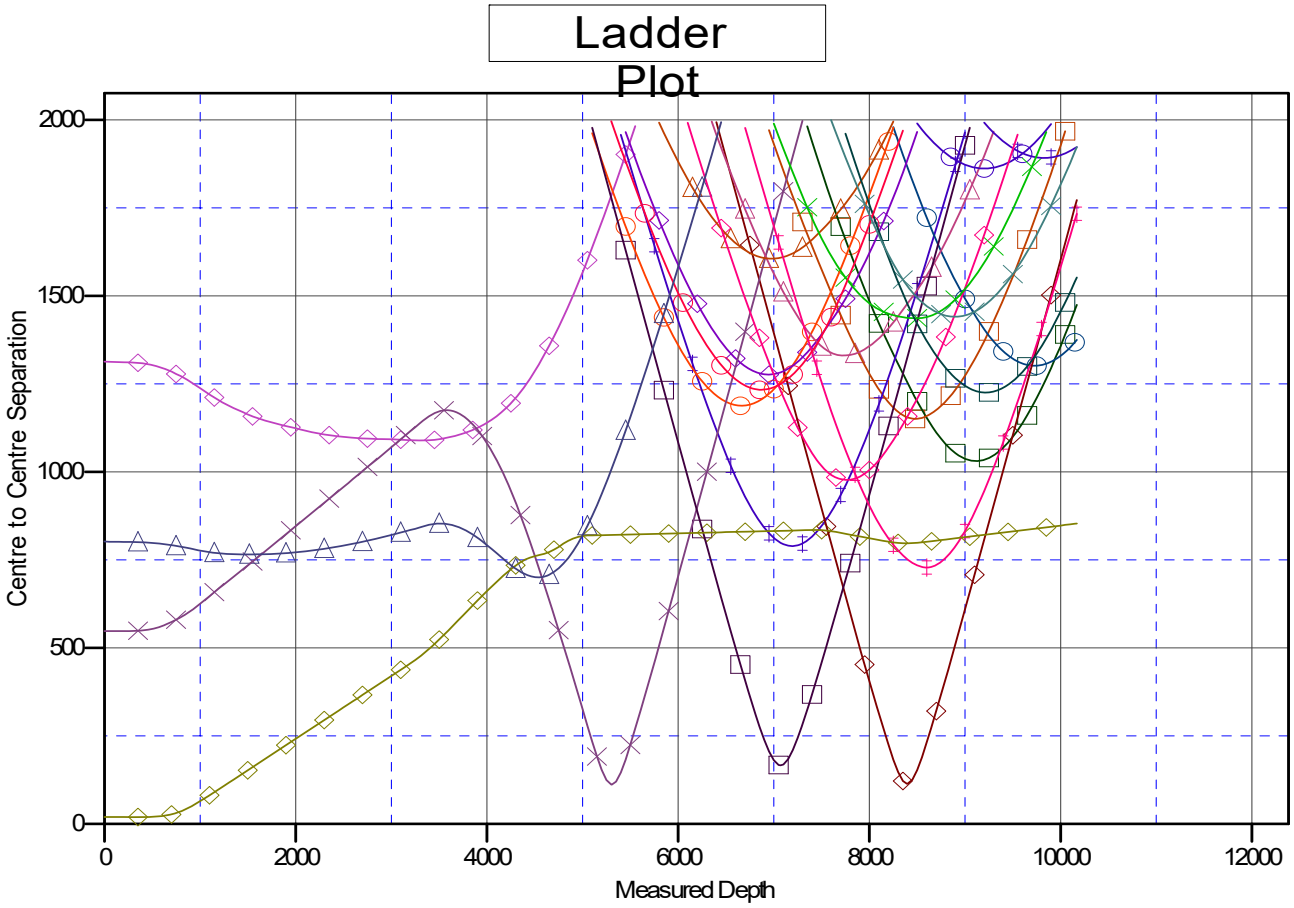
Survey Program: 100-MWD — **Offset Well Error:** 0.00 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.00	4,499.73	4,425.07	4,461.18	16.84	15.71	-86.382	173.29	913.29	875.11	843.21	31.91	27.429	
5,150.00	4,499.14	4,422.75	4,458.86	16.99	15.70	-86.194	173.21	913.23	905.46	873.53	31.93	28.356	
5,200.00	4,498.55	4,420.42	4,456.53	17.14	15.70	-86.006	173.13	913.16	937.50	905.54	31.95	29.340	
5,250.00	4,497.96	4,418.09	4,454.21	17.32	15.69	-85.818	173.04	913.09	971.04	939.06	31.98	30.368	
5,300.00	4,497.37	4,415.77	4,451.88	17.49	15.68	-85.630	172.96	913.02	1,005.95	973.95	31.99	31.443	
5,350.00	4,496.78	4,413.44	4,449.56	17.68	15.67	-85.442	172.88	912.95	1,042.08	1,010.06	32.01	32.552	
5,400.00	4,496.19	4,411.11	4,447.24	17.86	15.66	-85.254	172.80	912.88	1,079.31	1,047.28	32.03	33.701	
5,450.00	4,495.60	4,408.79	4,444.91	18.07	15.65	-85.066	172.72	912.81	1,117.54	1,085.49	32.04	34.877	
5,500.00	4,495.01	4,406.46	4,442.59	18.28	15.65	-84.878	172.64	912.75	1,156.66	1,124.60	32.05	36.085	
5,550.00	4,494.42	4,404.14	4,440.26	18.50	15.64	-84.691	172.56	912.68	1,196.58	1,164.51	32.07	37.315	
5,600.00	4,493.83	4,401.81	4,437.94	18.72	15.63	-84.503	172.48	912.61	1,237.23	1,205.16	32.08	38.571	
5,650.00	4,493.24	4,399.48	4,435.62	18.95	15.62	-84.316	172.40	912.54	1,278.55	1,246.46	32.09	39.846	
5,700.00	4,492.66	4,397.16	4,433.29	19.19	15.61	-84.128	172.32	912.47	1,320.46	1,288.36	32.10	41.142	
5,750.00	4,492.07	4,394.83	4,430.97	19.44	15.60	-83.941	172.24	912.40	1,362.91	1,330.80	32.10	42.452	
5,800.00	4,491.48	4,392.50	4,428.65	19.68	15.59	-83.754	172.16	912.33	1,405.85	1,373.74	32.11	43.781	
5,850.00	4,490.89	4,390.18	4,426.32	19.95	15.59	-83.566	172.08	912.27	1,449.24	1,417.12	32.12	45.121	
5,900.00	4,490.30	4,387.85	4,424.00	20.21	15.58	-83.379	172.00	912.20	1,493.05	1,460.92	32.12	46.476	
5,950.00	4,489.71	4,385.52	4,421.67	20.48	15.57	-83.192	171.92	912.13	1,537.22	1,505.09	32.13	47.841	
6,000.00	4,489.12	4,383.20	4,419.35	20.75	15.56	-83.006	171.84	912.06	1,581.74	1,549.61	32.14	49.219	
6,050.00	4,488.53	4,383.13	4,417.03	21.03	15.56	-82.819	171.76	911.99	1,626.58	1,594.43	32.15	50.592	
6,100.00	4,487.94	4,385.45	4,414.70	21.32	15.57	-82.632	171.68	911.92	1,671.70	1,639.53	32.17	51.961	
6,150.00	4,487.35	4,376.37	4,412.53	21.61	15.54	-82.458	171.61	911.86	1,717.10	1,684.94	32.15	53.403	
6,200.00	4,486.76	4,374.12	4,410.28	21.90	15.53	-82.278	171.53	911.79	1,762.73	1,730.58	32.16	54.814	
6,250.00	4,486.17	4,371.87	4,408.03	22.20	15.52	-82.098	171.45	911.72	1,808.60	1,776.44	32.16	56.231	
6,300.00	4,485.58	4,369.63	4,405.80	22.51	15.51	-81.919	171.38	911.66	1,854.68	1,822.51	32.17	57.655	
6,350.00	4,484.99	4,367.40	4,403.57	22.82	15.50	-81.740	171.30	911.59	1,900.95	1,868.78	32.17	59.083	
6,400.00	4,484.40	4,365.18	4,401.35	23.13	15.50	-81.563	171.22	911.52	1,947.41	1,915.23	32.18	60.519	
6,450.00	4,483.81	4,362.96	4,399.13	23.44	15.49	-81.386	171.15	911.46	1,994.03	1,961.85	32.18	61.957	

Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to RKB = 20' @ 3742.00usft (AKITA 57) Coordinates are relative to: 71H
Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Central Meridian is -104.3333333 Grid Convergence at Surface is: 0.096°

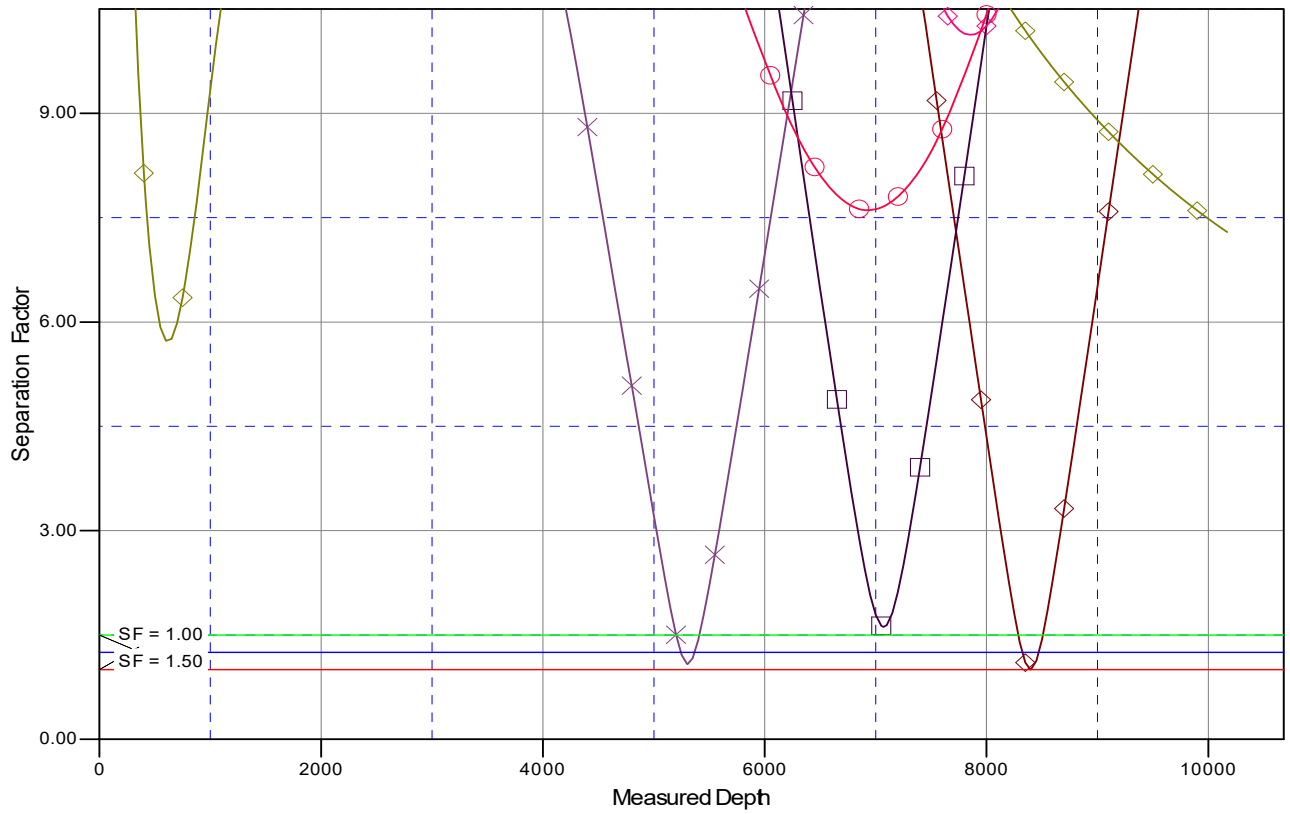


Anticollision Report

Company:	Spur Energy Partners, LLC	**Local Co-ordinate Reference:**	Well 71H
Project:	Eddy County, NM (NAD 83 - NME)	**TVD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Reference Site:	MAYARO 22 STATE COM	**MD Reference:**	RKB = 20' @ 3742.00usft (AKITA 57)
Site Error:	0.00 usft	**North Reference:**	Grid
Reference Well:	71H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	Wellbore #1	**Database:**	WBDS_SQL_2
Reference Design:	PERMIT PLAN #2	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to RKB = 20' @ 3742.00usft (AKITA 57)
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333
Coordinates are relative to: 71H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.096°

Separation Factor Plot



LEGEND

OFFSET: DINAH '23' FEDERAL COM 1, Wellbore #1, Wellbore #1 V0
OFFSET: TUMAK FEDERAL 2, Wellbore #1, Wellbore #1 V0
OFFSET: MAYARO 22 STATE 4, Wellbore #1, Wellbore #1 V0
OFFSET: COLLIER STATE 16, Wellbore #1, Wellbore #1 V0
OFFSET: MAYARO 22 STATE 1, Wellbore #1, Wellbore #1 V0
OFFSET: MAYARO 22 STATE 3, Wellbore #1, Wellbore #1 V0
OFFSET: COLLIER 22 STATE COM 043H, Wellbore #1, Wellbore #1 V0
OFFSET: MARACAS 22 STATE 2, Wellbore #1, Wellbore #1 V0
OFFSET: MARACAS 22 STATE 12, Wellbore #1, Wellbore #1 V0
OFFSET: MONCRIEF STATE 3, Wellbore #1, Wellbore #1 V0
OFFSET: MAYARO 22 STATE 7, Wellbore #1, Wellbore #1 V0
OFFSET: LUCAS STORE 'KT' STATE COM1, Wellbore #1, Wellbore #1 V0
OFFSET: MARACAS 22 STATE 1, Wellbore #1, Wellbore #1 V0
OFFSET: MAYARO 22 STATE 5, Wellbore #1, Wellbore #1 V0
OFFSET: MONCRIEF STATE 2, Wellbore #1, Wellbore #1 V0
OFFSET: MONCRIEF STATE 1, Wellbore #1, Wellbore #1 V0
OFFSET: MONCRIEF STATE 4, Wellbore #1, Wellbore #1 V0
OFFSET: MAYARO 22 STATE 6, Wellbore #1, Wellbore #1 V0
11H, Wellbore #1, PERMIT V0
OFFSET: LUCAS STOR JZ ST CM 1, Wellbore #1, Wellbore #1 V0
OFFSET: COLLIER STATE 14, Wellbore #1, Wellbore #1 V0
OFFSET: TUMAK FEDERAL 3, Wellbore #1, Wellbore #1 V0

TRANSCEND RIG 4	Contractor Specification
Make	Schram
Model	TXD 130
Year of Manufacture	2006
Truck Mounted	YES
Rated Drilling Depth	130,000# hook load
Rated Depth with Tubing	
Derrick Height	69’ 9’’
Derrick Type	Telescoping Hydraulic
Derrick Capacity	130,000#
Elevators	N/A
Drawworks	760 HP Detroit
Wire Diameter	Hydraulic
Workfloor Max Height	8’
Tongs	Hydraulic Iron Roughneck
Slips	Manual Slips
Included Tubing Handling Tools	• 13 3/8’’ handling tools
Included Rod Handling Tools	85jts of 4.5’’ drill pipe
BOP Class Compatibility	
Weight Indicator	Hydraulic
Rig Safety Equipment	Eye wash station, fire extengushers, wind sock
Pad Size Requirements/Limitations	60’ x 60’
Guy Line Spacing	N/A
Other Supplied Rig Equipment 1- F800 pump 1- Pill pit 80bbl 1- 400 bbl mud mix 1- Shaker 150mesh 1- 500 bbl fresh water frac tank	Standard Rig Hand Tools: • (2) 36” pipe wrenches • (2) 24” pipe wrenches • (2) 18” pipe wrenches • (1) 24” crescent wrench • (2) 12” crescent wrenches • (1) 4 lb shop hammer • (1) 12 lb sledge hammer • (1) 4 foot pry bar • Vehicles for Contractor personnel • Air Impact Wrench with Sockets • Mud Scales (as needed)

Spur Energy Partners LLC – Mayaro 22 State Com 71H

1. Geologic Formations

TVD of Target	4,440'
MD at TD	10,171'

Formation	Depth	Lithology	Expected Fluids
Quaternary	0'	Dolomite, other: Caliche	Useable Water
Top Salt	350'	Anhydrite	Other: Salt
Tansill	560'	Sandstone, Dolomite	None
Yates	665'	Dolomite, Limestone, Shale, Siltstone	None
Seven Rivers	920'	Dolomite, Limestone	Natural Gas, Oil
Queen	1485'	Anhydrite, Dolomite, Sandstone	Natural Gas, Oil
Grayburg	1900'	Anhydrite	Natural Gas, Oil
San Andres	2525'	Dolomite	Natural Gas, Oil
Glorieta	3625'	Dolomite, Siltstone	Natural Gas, Oil
Paddock	3705'	Dolomite, Limestone	Natural Gas, Oil
Blinebry	4160'	Dolomite, Limestone	Natural Gas, Oil
Tubb	5035'	Dolomite, Limestone	Natural Gas, Oil

*H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Casing Formation Set Interval	Hole Size (in)	Casing Interval		Csg. Size (in)	Weight	Grade	Conn.	SF	SF Burst	Body SF	Joint SF
		From (ft)	To (ft)		(lbs)			Collapse		Tension	Tension
Quaternary	17.5	0	275	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
Seven Rivers	12.25	0	1350	9.625	36	J-55	BTC	1.125	1.2	1.4	1.4
N/A	8.75	0	4850	7	32	L-80	BK-HT	1.125	1.2	1.4	1.4
Yeso	8.75	4850	10171	5.5	20	L-80	BK-HT	1.125	1.2	1.4	1.4
								SF Values will meet or Exceed			

Spur Energy Partners LLC – Mayaro 22 State Com 71H

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

3. Cementing Program

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface Tail	0	275	165%
Intermediate (Lead)	0	275	100%
Intermediate (Tail)	275	1350	165%
Production (Lead)	0	3850	0%
Production (Tail)	3850	10171	50%

Casing String	# Sks	Wt. (lb/gal)	Yld (ft3/sack)	H20 (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface Tail	207	13.2	2.32	9.92	6:59	Clas C Premium Plus Cement
Intermediate (Lead)	55	12.2	1.84	13.48	8:12	Clas C Premium Plus Cement
Intermediate (Tail)	393	13.2	2.32	9.92	6:59	Clas C Premium Plus Cement
Production (Lead)	468	11.8	2.54	15.29	N/A	Clas C Premium Plus Cement
Production (Tail)	1244	13.2	1.81	9.81	N/A	Clas C Premium Plus Cement

Spur Energy Partners LLC – Mayaro 22 State Com 71H

4. Pressure Control Equipment

Spur Energy Partners LLC variance for flex hose

Spur requests a variance to use a flex line from the BOP to the choke manifold. Documentation will be attached in the APD and be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no bends).

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
12.25" Hole	13-5/8”	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		
8.75" Hole	13-5/8”	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram	✓	
			Double Ram		
			Other*		

Spur Energy Partners LLC will be utilizing a 5M BOP

Condition	Specify what type and where?
BH Pressure at deepest TVD	2083 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	116°F

*Specify if additional ram is utilized.

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

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

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

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

5. BOP Break Testing Request

Spur Energy Partners LLC requests permission to adjust the BOP break testing requirements as follows:

BOP break test under the following conditions:

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

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

1) The void between the wellhead and the spool (this consists of two tests)
2) The spool between the kill lines and the choke manifold (this consists of two tests)

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

1) The void between the wellhead and the pipe rams

6. Mud Program

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

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	275	Water-Based Mud	8.6-8.9	32-36	N/C
275	1350	Brine	10.0-10.5	32-36	N/C
1350	10171	Brine	10.0-10.5	32-36	N/C

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

Spur Energy Partners LLC – Mayaro 22 State Com 71H

7. Logging and Testing Procedures

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

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

8. Drilling Conditions

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

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

Total estimated cuttings volume: 931.4 bbls**.**

Spur Energy Partners LLC – Mayaro 22 State Com 71H

9. Other facets of operation

	Yes/No
Will more than one drilling rig be used for drilling operations? If yes, describe. Spur Energy Partners LLC. requests the option to contract a Surface Rig to drill, set surface/intermediate casing, and cement for this well. If the timing between rigs is such that Spur Energy Partners LLC. would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.	Yes

Attachments
_x__ Directional Plan
_x__ H2S Contingency Plan
_x__ Akita 57 Attachments
_x__ BOP Schematics
_x__ Transcend Spudder Rig Attachments

10. Company Personnel

Name	Title	Office Phone	Mobile Phone
Christopher Hollis	Drilling Manager	832-930-8629	713-380-7754
Johnny Nabors	Senior Vice President Operations	832-930-8502	281-904-8811

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: SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 08 / 18 / 2022

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
MAYARO 22 STATE COM 11H	30-015-	P-15-17S-28E	235' FSL 570' FEL	293 BBL/D	320 MCF/D	2048 BBL/D
MAYARO 22 STATE COM 71H	30-015-	P-15-17S-28E	215' FSL 570' FEL	282 BBL/D	453 MCF/D	1689 BBL/D

IV. Central Delivery Point Name: MAYARO 22 EAST STATE COM TANK BATTERY [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
MAYARO 22 STATE COM 11H	30-015-	04/17/2023	04/24/2023	05/01/2023	05/11/2023	05/11/2023
MAYARO 22 STATE COM 71H	30-015-	04/24/2023	04/30/2023	05/01/2023	05/11/2023	05/11/2023

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:	Sarah Chapman
Printed Name:	SARAH CHAPMAN
Title:	REGULATORY DIRECTOR
E-mail Address:	SCHAPMAN@SPURENERGY.COM
Date:	AUGUST 18, 2022
Phone:	832-930-8613

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

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

Natural Gas Management Plan – Attachment

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

VII. Spur Energy Partners LLC ("Spur") will take the following actions to comply with the regulations listed in 19.15.27.8:

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

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

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

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

E. Spur will comply with performance standards pursuant to 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressures to minimize waste. Storage tanks constructed after May 25, 2021 will be equipped with an automatic gauging system that reduces venting of natural gas. Flare stacks installed or replaced after May 25, 2021 will be equipped with an automatic ignitor or continuous pilot. Spur will conduct AVO inspections as described in 19.15.27.8(E)(5)(a) with frequencies specified in 19.15.27.8(E)(5)(b) and (c). All emergencies or malfunctions will be resolved as quickly and safely as possible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of an emergency or malfunction during drilling and/or completion operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured and reported accordingly. Spur will install equipment to measure the volume of natural gas flared from existing piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or VRUs associated with a well or facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production of less than 60,000 cubic feet of natural gas. If metering is not practicable due to circumstances such as low flow rate or low pressure venting or flaring, Spur will estimate the volume of flared or vented natural gas. Measuring equipment will conform to industry standards and will not be equipped with a manifold

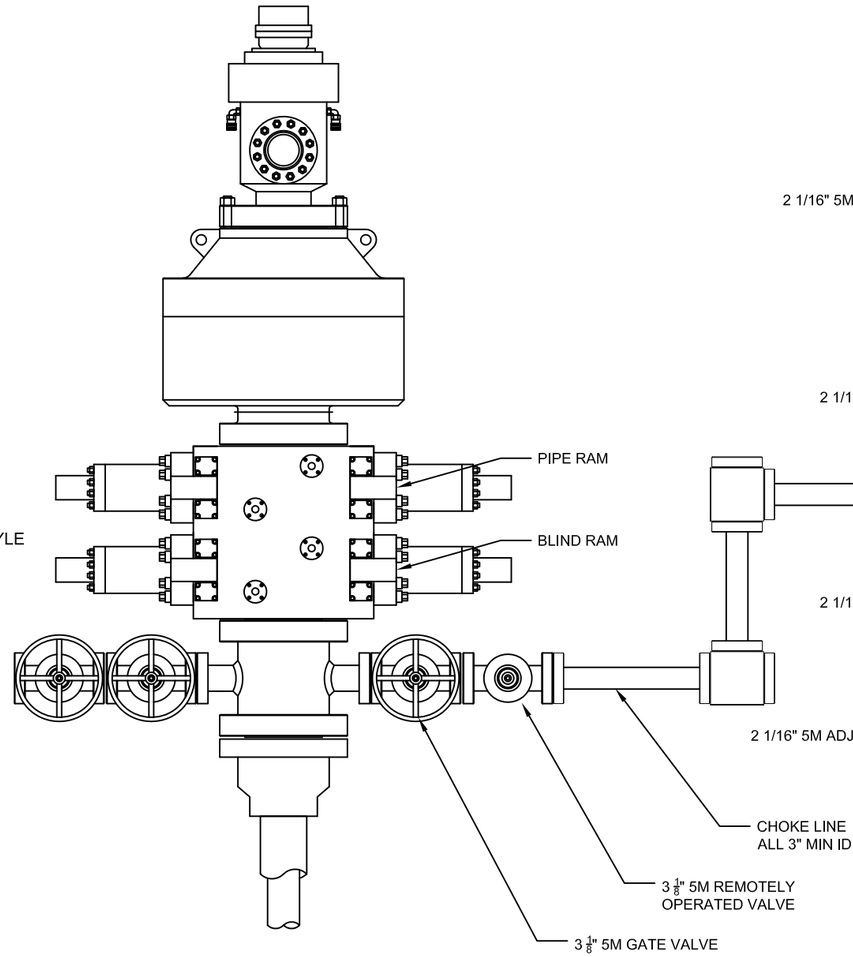
that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing equipment.

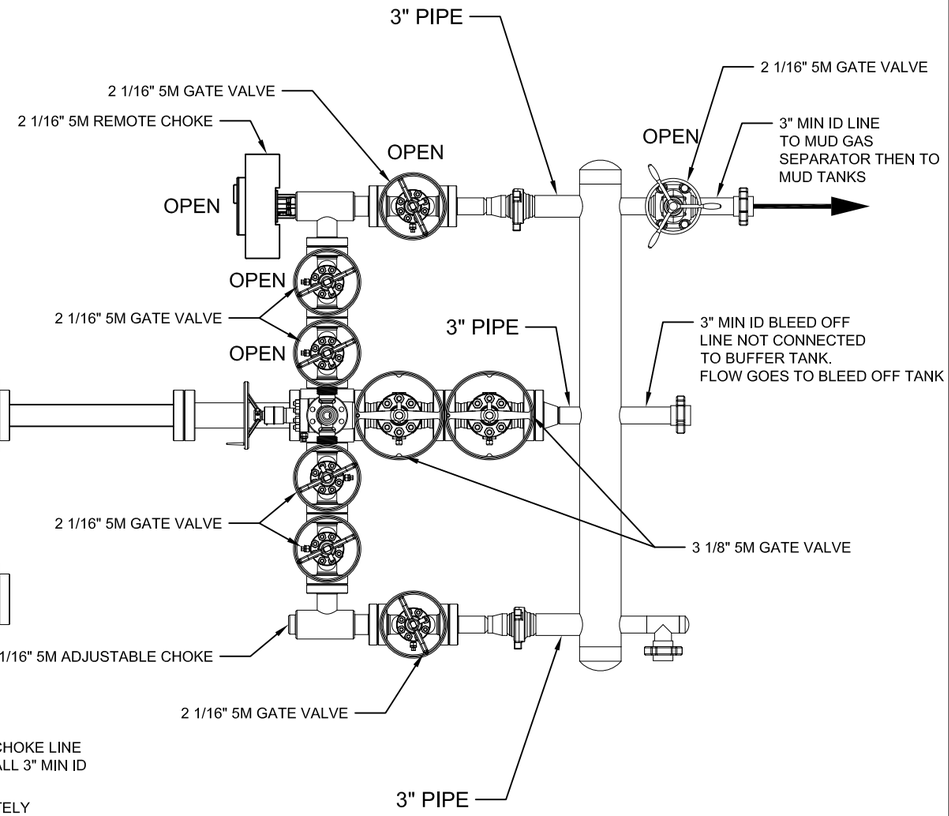
VIII. For maintenance activities involving production equipment and compression, venting be limited to the depressurization of the subject equipment to ensure safe working conditions. For maintenance of production equipment, the associated producing wells will be shut-in to eliminate venting. For maintenance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

ANNULAR
13 5/8" 5,000 psi SHAFFER STYLE

DOUBLE GATE
13 5/8" 5,000 psi SHAFFER LWS STYLE

MUD CROSS
13 5/8" 5,000 psi, 3 1/8" 5M OUTLETS





Notes
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No.	Revision	Date

AKITA DRILLING LTD.
2302 8th Street, Nisku Alberta
T9E 7Z2 Tel: (780) 955-6700

Date	Scale
5-6-2021	NTS
Dwn / Chk'd By: BG	File Name: R57 13 5M dou..
Project: R57	

RIG 57 BOP SCHEMATIC

POWERING PROGRESS™

MTR DATA BOOK

CL2013

CUSTOMER: GATES CANADA INC
DATE: 12/19/2017
Purchase Order: D235455 (PO 45750)
Sales Order #: 509128
Product Description: 5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill Gates Hose Assembly c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached

Hose S/N: H-121917-14
PART NUMBER: FR5K3.517.0CK31/85KFLG S/C

CONTENTS INCLUDED

GMCO FITTINGS

17-309-1	INSERT STEM
15-095-1A	FERRULE

3 1/8 in. 5K FIXED FLANGE X 3 1/8 in. 5K FLOAT FLANGE

V4131	FIXED FLANGE
V5054	FLOAT FLANGE

WELDING SPECIFICATIONS
Certification and Procedure for welding

NDE RESULTS
1622371-03/1622371-01 Ultrasonic Test Results and Imaging

Safey Clamps
34145/34144

TEST CHART
Chart Recording of Hydrostatic Test

TEST CERTIFICATE
Document Product Details & Positive Results of Hydrostatic Testing

CERTIFICATE OF CONFORMANCE
A Declaration of the conformity with the type approval

IMAGES
Images of the product prior to shipping.

PACKING LIST
Details of Shipping Contents, Dimensions and Weights

BLACK GOLD®

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

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

PRESSURE TEST CERTIFICATE

Customer:	GATES CANADA INC	Test Date:	12/19/2017
Customer Ref.:	D235455 (PO 45750)	Hose Serial No.:	H-121917-14
Invoice No.:	509128	Created By:	Cristian Rivera

Product Description:	5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached

End Fitting 1:	3 1/8 in. 5K FIXED FLG	End Fitting 2:	3 1/8 in. 5K FLOAT FLG
Oracle Star No.:	68903550-9725917	Assembly Code:	15M5019042016H-121917-14
CUSTOMER P/N:	FR5K3.517.0CK31/85KFLG S/C	Test Pressure:	7,500 psi.
		Working Pressure:	5,000 psi.

Gates Engineering & Services North America certifies that:

The following hose assembly has successfully passed all pressure testing requirements set forth in Gates specifications: GTS-04-052 (for 5K assemblies) or GTS-04-053 (10K assemblies) or GTS-04-048 (15K assemblies), which include reference to Specification API 16C (2nd Edition); sections 7.5.4, 7.5.9, and 10.8.7. A test graph will accompany this test certificate to illustrate conformity to test requirements. This hose assembly was pressure tested using equipment and instrumentation that has been calibrated in accordance with the requirements set-forth in the GESNA management system.

Quality:	QUALITY	Production:	PRODUCTION
Date :	8/5/2021	Date :	8/5/2021
Signature :		Signature :	

F-PRD-005B

Revision 6_05032021

BLACK GOLD®

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

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

CERTIFICATE OF CONFORMANCE

This is to certify that all parts and materials included in this shipment have manufactured and/or processed in accordance with various Gates and API assembly and test specifications. Records of required tests are on-file and subject to examination. Test reports and subsequent test graphs have been made available with this shipment. Additional supporting documentation related to materials, welding, weld inspections, and heat-treatment activities are available upon request.

CUSTOMER:	GATES CANADA INC
CUSTOMER P.O.#:	D235455 (PO 45750)
PART DESCRIPTION:	FR5K3.517.0CK31/85KFLG S/C
PART DESCRIPTION:	5K 3 1/2 in. 17 FT. Fire Rated Choke & Kill c/w 3 1/8 5K Flange with Safety Clamps & Slings Attached
SALES ORDER #:	509128
QUANTITY:	1
SERIAL #:	H-121917-14

SIGNATURE: O Rivera

TITLE: QUALITY ASSURANCE

DATE: 8/5/2021

Gates E&S

North America

7603 Prairie Oak dr.

Houston,TX

Hydrostatic Test

Customer= GATES CANADA

Date of test= 12/19/17

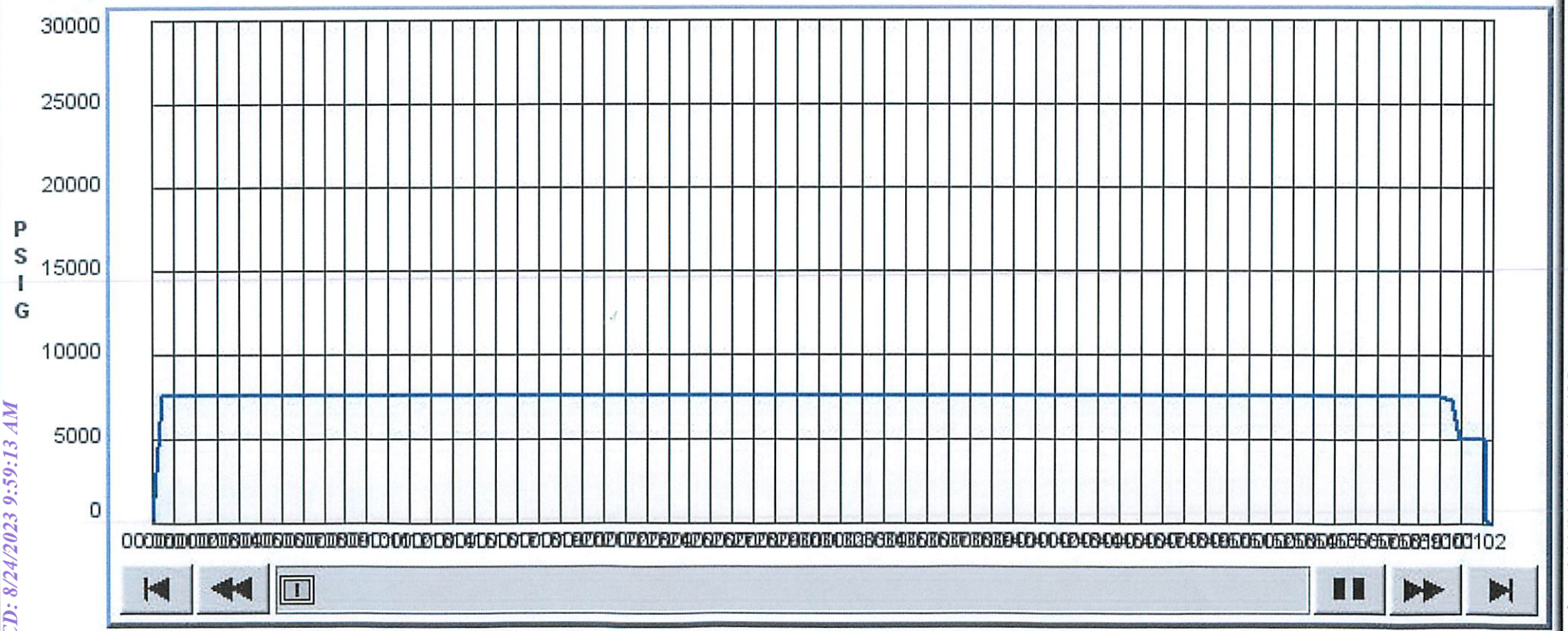
Serial # = H-121917-13,-14

Description = 3.5 5K 3 1/8 FLG 5K

Technician= CHRIS OLIVO

12/19/2017 16:53:26

17:55:52



Edwards Fabrication

1385 Hwy. 35 Bypass S.
P.O. Box 2350
Rockport, TX 78381

O: (361) 790-7910
F: (361) 790-7927

tedwards@edwardsfabrication.com
www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
Gates E & S North America
134 44th Street
Corpus Christi, TX 78405

Purchase Order: 1592198/0

Certificate Number				Date of Examination
34145				04/27/17
ID#	**Part Number**	**Description**	**SWL***	**Proofload**
34145	E3.5S	3.5" E Safety Clamp	6016 lbs.	12031 lbs.

The Safety Clamp unit identified on this certificate has been load tested completely assembled; including the clamp body, (2) 3/4" shackles, 5/8" x 48" wire rope sling and anchor tab. Thus, all components are tested at the "Proof" load. Do not disassemble. Do not interchange any part or parts of this tested unit with parts of other Safety Clamp units. DO NOT WELD, CUT, ADD-TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.

Cutting/Removing either one or both stainless steel Tamper-proof hardware cables renders this Test Certificate VOID.

** Safe Work Load*

THIS PRODUCT IS MANUFACTURED IN THE U.S.A.

We hereby verify that the above information is correct
as contained in the records of Edwards Fabrication L.L.C.

ISO 9001:2008
BUREAU VERITAS
Certification

Edwards Fabrication L.L.C. is certified as having a Quality Management System.

Thomas F. Edwards
President
Edwards Fabrication L.L.C.

Edwards Fabrication...

1385 Hwy. 35 Bypass S.
P.O. Box 2350
Rockport, TX 78381

O: (361) 790-7910
F: (361) 790-7927

tedwards@edwardsfabrication.com
www.edwardsfabrication.com

CERTIFICATE OF TEST

Client:
Gates E & S North America
134 44th Street
Corpus Christi, TX 78405

Purchase Order: 1592198/0

Certificate Number				Date of Examination
34144				04/27/17
ID#	**Part Number**	**Description**	**SWL***	**Proofload**
34144	E3.5S	3.5" E Safety Clamp	6014 lbs.	12027 lbs.

The Safety Clamp unit identified on this certificate has been load tested completely assembled; including the clamp body, (2) 3/4" shackles, 5/8" x 48" wire rope sling and anchor tab. Thus, all components are tested at the "Proof" load. Do not disassemble. Do not interchange any part or parts of this tested unit with parts of other Safety Clamp units. DO NOT WELD, CUT, ADD-TO, TAKE AWAY ANY COMPONENTS OR MAKE ANY MODIFICATION TO THIS CLAMP UNIT. Doing so voids this test certificate.

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ISO 9001:2008
BUREAU VERITAS
Certification

Edwards Fabrication L.L.C. is certified as having a Quality Management System.

Thomas F. Edwards
President
Edwards Fabrication L.L.C.

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

SUPO Data Report
08/24/2023

APD ID: 10400087469
Submission Date: 08/18/2022
Operator Name: SPUR ENERGY PARTNERS LLC
Well Name: MAYARO 22 STATE COM
Well Number: 71H
Well Type: OIL WELL
Well Work Type: Drill

Highlighted data reflects the most recent changes
Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Mayaro22StateCom71H_ExistRoad_20220817122422.pdf

Existing Road Purpose: ACCESS

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Mayaro22StateCom71H_NewRoad_20220817122444.pdf

New road type: RESOURCE

Length: 197.53 Feet **Width (ft.):** 30

Max slope (%): 0 **Max grade (%):** 5

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: Crowned and ditched.

New road access plan or profile prepared? Y

New road access plan

Mayaro22StateCom71H_SitePlan_20220817122454.pdf

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Grader

Access other construction information:

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: Crowned and ditched.

Road Drainage Control Structures (DCS) description: NA

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

Mayaro22StateCom71H_ExistWells_20220817122509.pdf

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: a. In the event the well is found to be productive, Mayaro 22 East State Com Tank Battery would be utilized and the necessary production equipment will be installed at the well site. See proposed facilities layout diagram. b. Each well will have two (2) 4 surface flowlines operating around 80 psi from the well sites to the tank battery. The flowlines for Mayaro 22 East State Com wells will be routed to the Mayaro 22 East State Com tank battery (on lease). The wells will produce into this battery at any given time. c. Gas line will follow a route approved by the BLM. Survey a strip of land 30 feet wide, being 468.85 feet in length, lying in Section 15, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 542.50 feet in length, lying in Section 22, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 706.02 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. d. Electric line will follow a route approved by the BLM. Survey a strip of land 30 feet wide, being 366.83 feet in length, lying in Section 15, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the centerline survey. e. SWD line will follow a route approved by the BLM. Survey a strip of land 30 feet wide, being 36.37 feet in length, lying in Section 15, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 826.56 feet in length, lying in Section 22, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 2021.53 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 1593.58 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 57.70 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. f. See attached for additional information on the Mayaro 22 East State Com Tank Battery.

Production Facilities map:

Mayaro22StateCom71H_FacilityPLEL_20230601082219.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: GW WELL

Water source use type: DUST CONTROL

SURFACE CASING

STIMULATION

Source latitude: **Source longitude:**

Source datum:

Water source permit type: WATER WELL

Water source transport method: TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: PRIVATE

Water source volume (barrels): 9000 **Source volume (acre-feet):** 1.16003787

Source volume (gal): 378000

Water source and transportation

Mayaro22StateCom_FracPond_20230523115744.pdf

Water source comments: Water will be trucked from the existing Halberd Pond owned by Spur in Unit H (SENE) Section 27, Township 17 South, Range 28 East.
New water well? N

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

New Water Well Info

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

Well target aquifer:

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

Aquifer comments:

Aquifer documentation:

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

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

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

Drilling method: **Drill material:**

Grout material: **Grout depth:**

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

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Using any construction materials: YES

Construction Materials description: a. All caliche for the drilling pad and proposed access road will be obtained from an existing BLM/State/Fee approved pit from prevailing deposits found on location. Will use BLM recommended caliche from other locations close by for roads, if available. b. The secondary way obtaining caliche to build locations and roads will be by turning over the location. Amount will vary for each pad. The procedure below has been approved by BLM personnel: i. The top 6 of topsoil is pushed off and stockpiled along the side of location ii. An approximate 360 X 30 area on the western side of the well pad will be used within the proposed well site to remove caliche iii. Subsoil will be removed and piled alongside the 360 X 30 within the pad site iv. When caliche is found, material will be stockpiled within the pad site to build location and road v. Once the well is drilled, the stockpiled topsoil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither the caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the eastern edge of the pad as depicted in our Site Plan

Construction Materials source location

Mayaro_Sierra_Nevada_Caliche_Source_Aerial_Map_5_23_23_20230523115828.pdf

Section 7 - Methods for Handling

Waste type: DRILLING

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

Amount of waste: 931.4 barrels

Waste disposal frequency : Daily

Safe containment description: Steel mud tanks

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Safe containmant attachment:

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

Disposal type description:

Disposal location description: Mud tanks will be hauled to R360's state approved (NM-01-0006) disposal site at Halfway, NM.

Waste type: SEWAGE

Waste content description: Black and grey matter

Amount of waste: 5 barrels

Waste disposal frequency : Daily

Safe containment description: Plastic holding tanks and chemical toilets

Safe containmant attachment:

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

Disposal type description: Public

Disposal location description: Artesia wastewater treatment plant

Waste type: GARBAGE

Waste content description: Trash

Amount of waste: 10 barrels

Waste disposal frequency : Daily

Safe containment description: Portable trash cage

Safe containmant attachment:

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

Disposal type description: Public

Disposal location description: Eddy County landfill

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: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location Steel tank on pad

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?

WCuttings 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:

Mayaro22StateCom71H_SpudderRig_20220817122700.pdf
Mayaro22StateCom71H_SitePlan_20220817122700.pdf
Mayaro22StateCom71H_RigSpecs_20220817122700.pdf

Comments:

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: MAYARO 22 EAST STATE COM

Multiple Well Pad Number: 11H, 71H

Recontouring

Mayaro22StateCom71H_IR_20220817122718.pdf

Drainage/Erosion control construction: Crowned and ditched

Drainage/Erosion control reclamation: Harrowed on the contour

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Well pad proposed disturbance (acres): 3.76	**Well pad interim reclamation (acres):** 0.61	**Well pad long term disturbance (acres):** 3.15
Road proposed disturbance (acres): 0.136	**Road interim reclamation (acres):** 0	**Road long term disturbance (acres):** 0.136
Powerline proposed disturbance (acres): 0.253	**Powerline interim reclamation (acres):** 0.253	**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): 4.31	**Other interim reclamation (acres):** 0	**Other long term disturbance (acres):** 4.31
Total proposed disturbance: 8.459	**Total interim reclamation:** 0.863	**Total long term disturbance:** 7.596

Disturbance Comments:

Reconstruction method: a. After concluding drilling and/or completion operations, if the well is non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM COAs. The original topsoil will again be returned to the pad and contoured, as close as possible to the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation. b. If the well is deemed commercially productive, caliche from the areas of the pad site will not be required for operations will be reclaimed. The original topsoil will be returned to the area of the drill pad not necessary to operate the well. The unused areas of the drill pad will be re-contoured as close as possible to the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation.

Topsoil redistribution: The original topsoil will be returned to the area of the drill pad necessary to operate the wells

Soil treatment: To be determined by BLM.

Existing Vegetation at the well pad: NA

Existing Vegetation at the well pad

Existing Vegetation Community at the road: NA

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: NA

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: NA

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

Will seed be harvested for use in site reclamation?

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

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: To be determined by BLM.

Weed treatment plan

Monitoring plan description: To be determined by BLM.

Monitoring plan

Success standards: To be determined by BLM.

Pit closure description: No pit.

Pit closure attachment:

Section 11 - Surface

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: PRIVATE OWNERSHIP,STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NEW MEXICO STATE LAND OFFICE - SANTA FE

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Surface Agreement was provided to the private surface owner.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: PRIVATE OWNERSHIP,STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NEW MEXICO STATE LAND OFFICE - SANTA FE

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Surface Agreement was provided to the private surface owner.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: OTHER

Describe: GAS LINE

Surface Owner: PRIVATE OWNERSHIP,STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NEW MEXICO STATE LAND OFFICE - SANTA FE

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Surface Agreement was provided to the private surface owner.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Disturbance type: OTHER

Describe: Powerline

Surface Owner: STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NEW MEXICO STATE LAND OFFICE - SANTA FE

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

Disturbance type: OTHER

Describe: SWD

Surface Owner: PRIVATE OWNERSHIP,STATE GOVERNMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office: NEW MEXICO STATE LAND OFFICE - SANTA FE

Military Local Office:

USFWS Local Office:

Other Local Office:

USFS Region:

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

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: AGREEMENT

Surface Access Agreement Need description: Surface Agreement was provided to the private surface owner.

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other

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

ROW Type(s): 281001 ROW - ROADS,288100 ROW – O&G Pipeline,288101 ROW – O&G Facility Sites,288103 ROW – Salt Water Disposal Pipeline/Facility,289001 ROW- O&G Well Pad,FLPMA (Powerline)

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

ROW

SUPO Additional Information: Agreement with lessee in place for NMNM080268. Well pad is Fed surface.

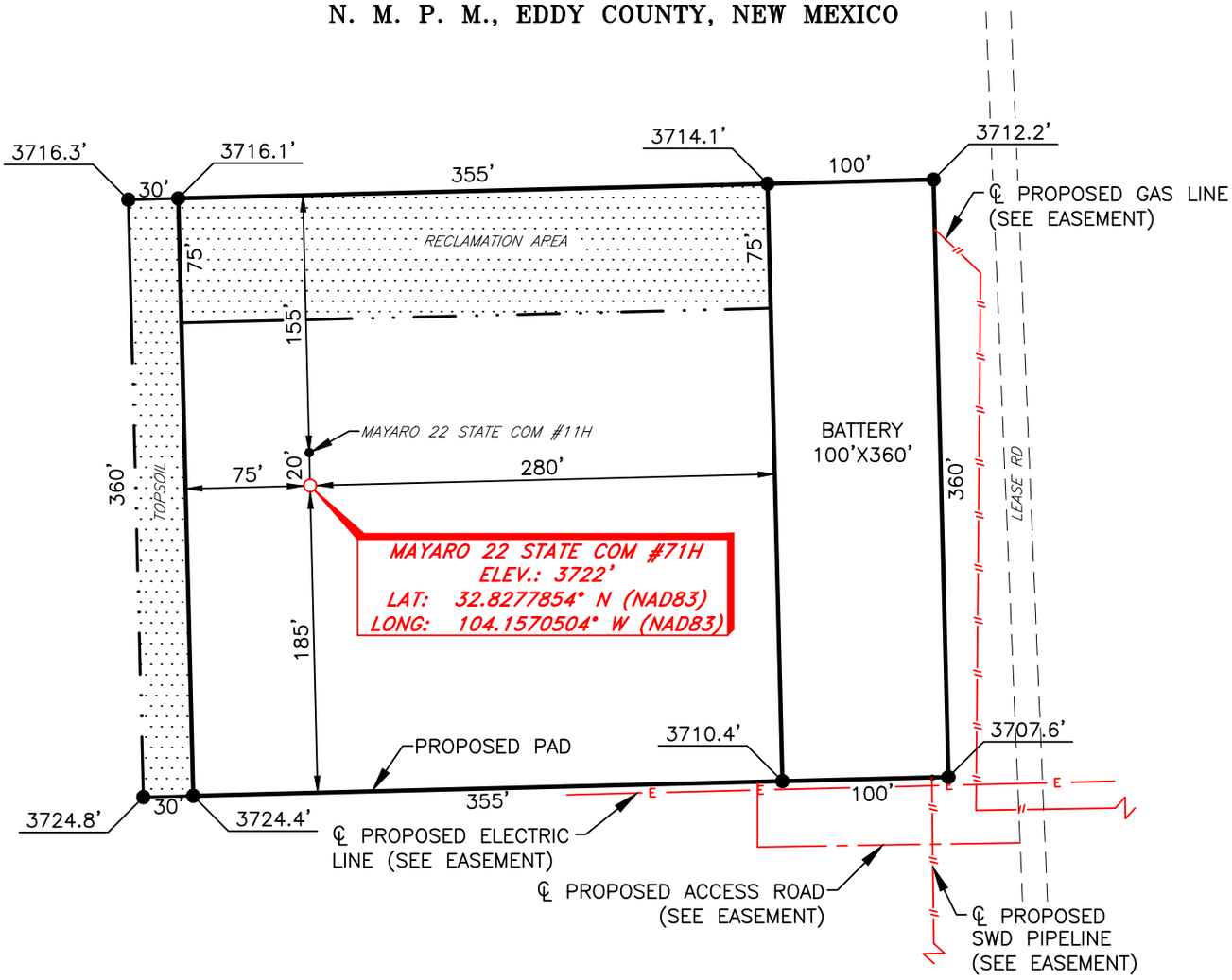
Use a previously conducted onsite? N

Previous Onsite information:

Other SUPO

Mayaro22StateCom71H_LVM_20220817122735.pdf
Mayaro22StateCom11H71H_NGMP_20220818142229.pdf
Mayaro22StateCom71H_SUPO_20230601082524.pdf

SPUR ENERGY PARTNERS LLC.
MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.);

Go North on CR #209 approx. 1.3 miles to a lease road on the left;

Turn left and go Northwest approx. 0.8 miles to a proposed road on the left;

Turn left and go West approx. 158 feet road turns right;

Turn right and continue North approx. 220 feet to location on the left.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID – NM EAST DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

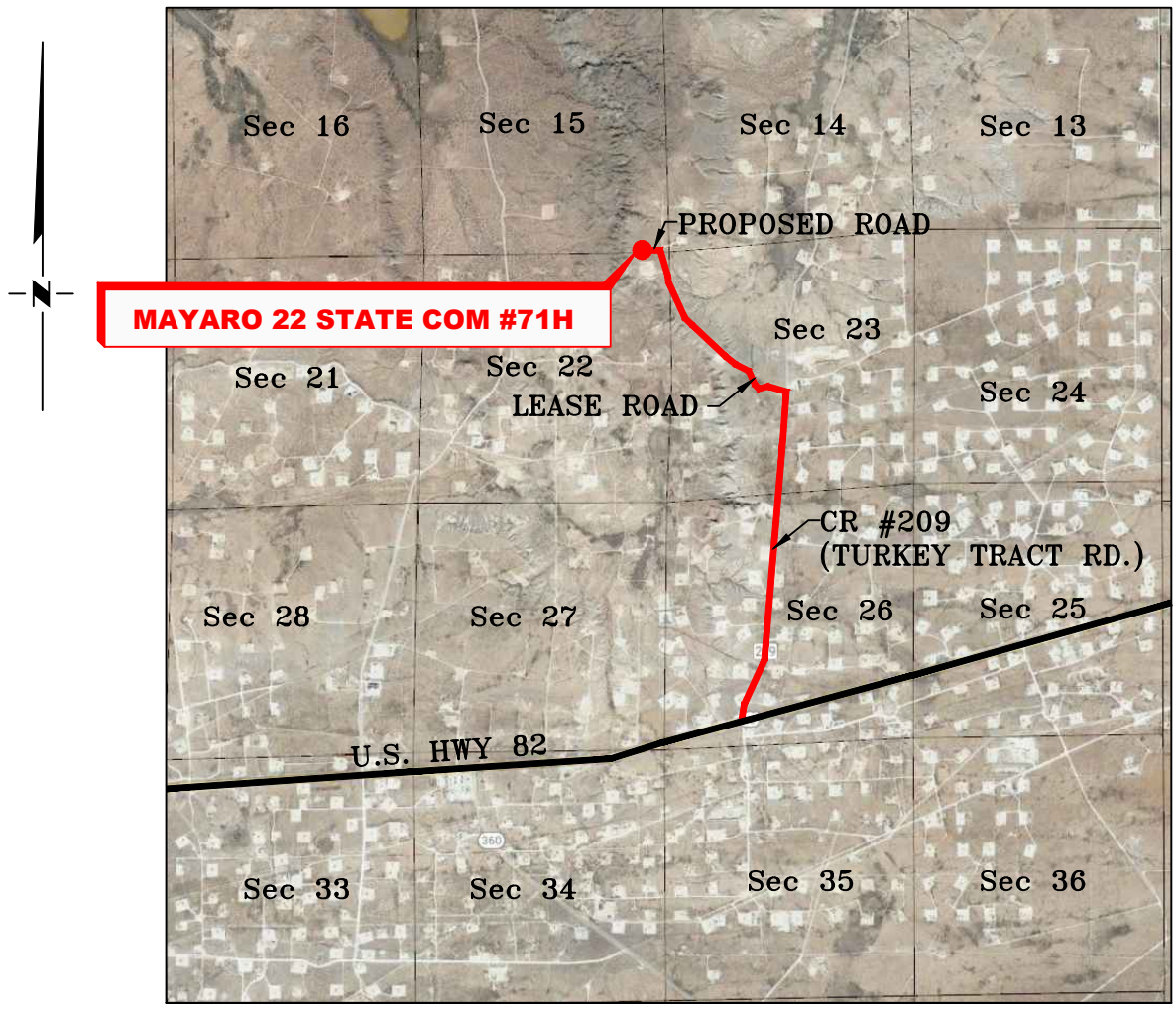
JOB NO.: LS22060699
DWG. NO.: 22060699–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 100'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

VICINITY MAP

NOT TO SCALE



SECTION 15, TWP. 17 SOUTH, RGE. 28 EAST,
N. M. P. M., EDDY CO., NEW MEXICO

OPERATOR: Spur Energy Partners LLC.
LEASE: Mayaro 22 State Com
WELL NO.: 71H

LOCATION: 215' FSL & 570' FEL
ELEVATION: 3722'

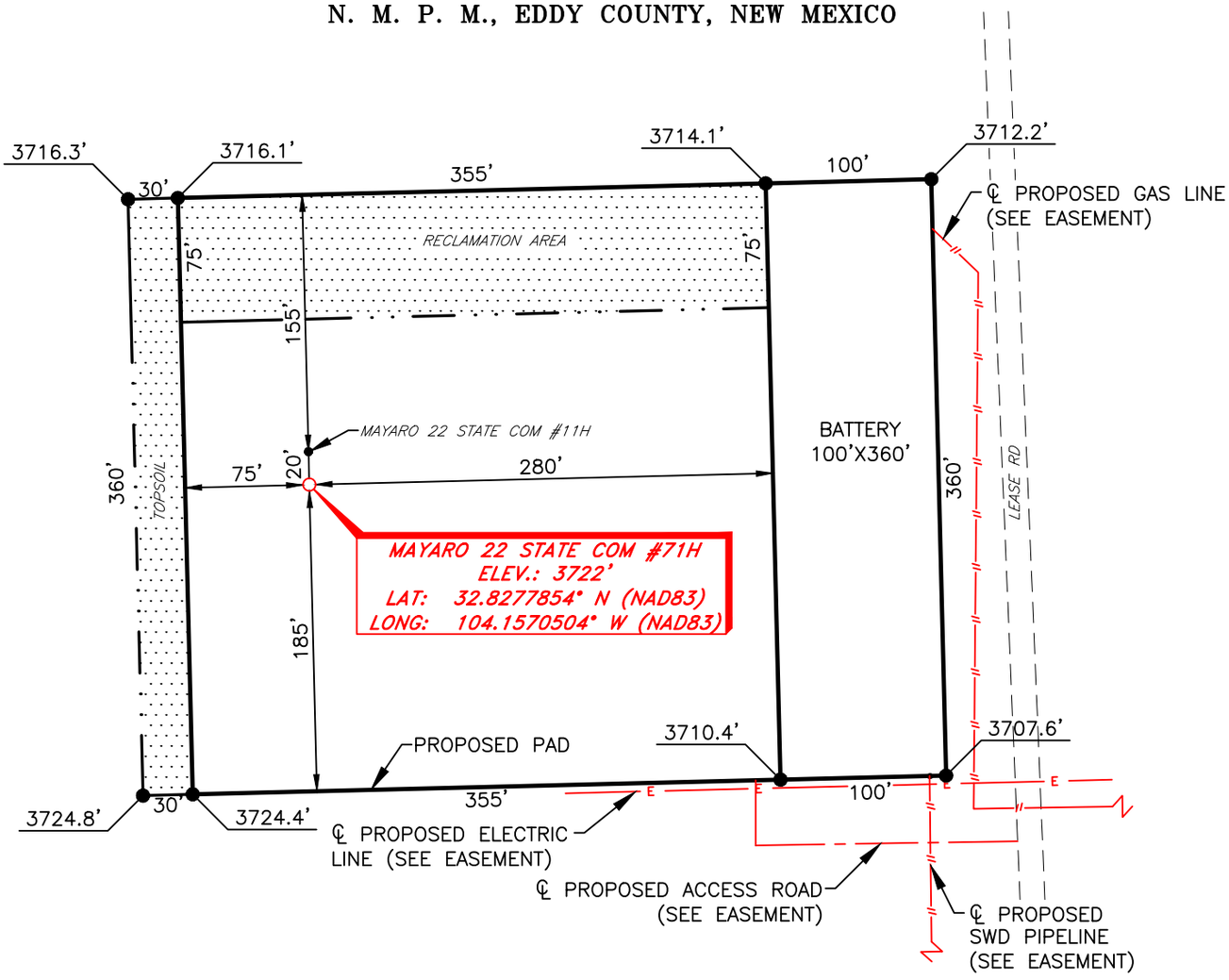
NO.	REVISION	DATE

JOB NO.: LS22060699
DWG. NO.: 22060699-3

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: N. T. S.
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

SPUR ENERGY PARTNERS LLC.
MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.);

Go North on CR #209 approx. 1.3 miles to a lease road on the left;

Turn left and go Northwest approx. 0.8 miles to a proposed road on the left;

Turn left and go West approx. 158 feet road turns right;

Turn right and continue North approx. 220 feet to location on the left.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID – NM EAST DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

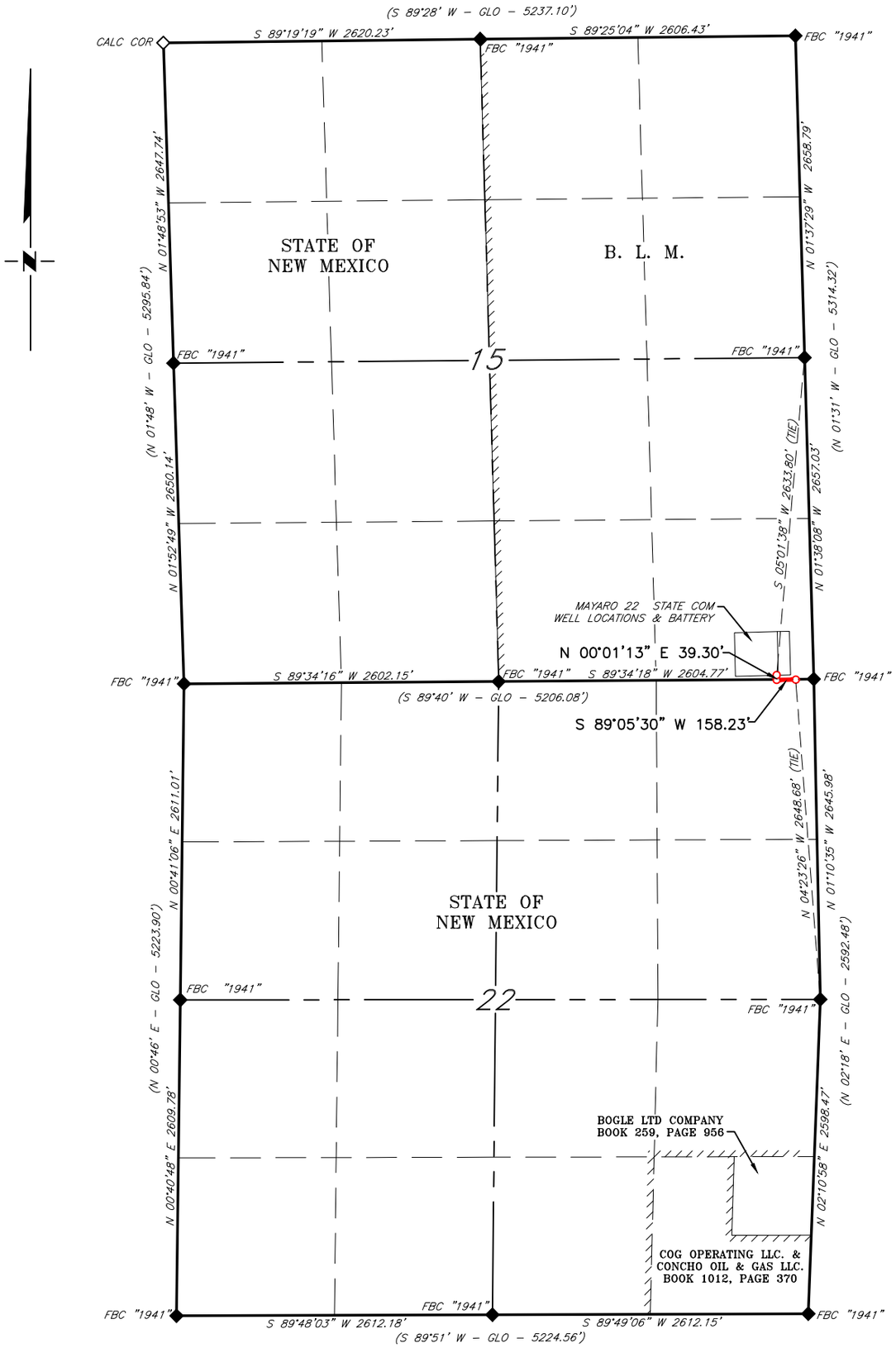
NO.	REVISION	DATE

JOB NO.: LS22060699
DWG. NO.: 22060699–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 100'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

SPUR ENERGY PARTNERS, LLC.
PROPOSED ACCESS ROAD FOR THE MAYARO WELL LOCATIONS
SECTIONS 15 & 22, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



SCALE: 1" = 1200'
0 600' 1200'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

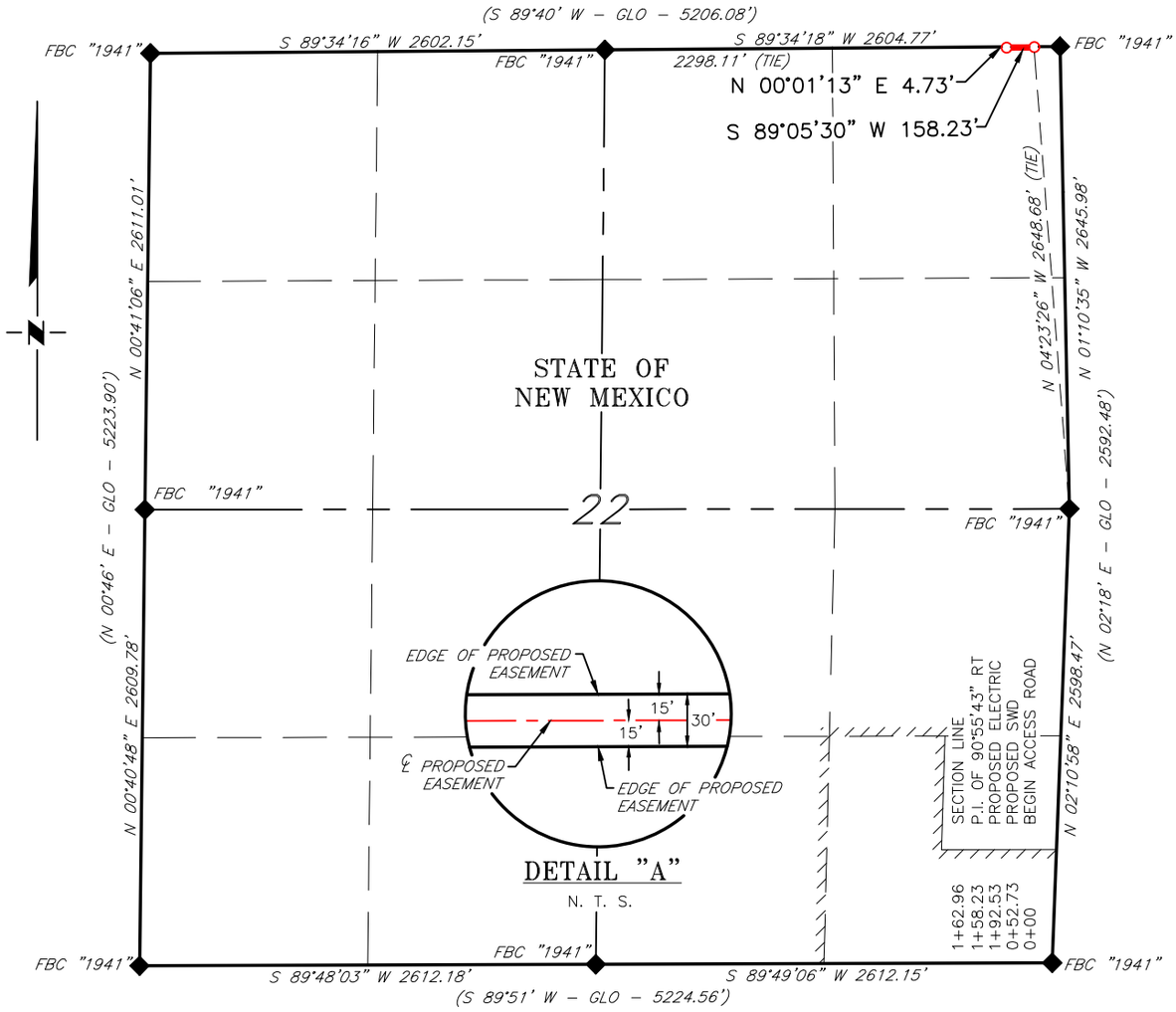
NO.	REVISION	DATE

JOB NO.: LS22060698
DWG. NO.: 22060698–5

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1200'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 3

SPUR ENERGY PARTNERS, LLC.
PROPOSED ACCESS ROAD FOR THE MAYARO WELL LOCATIONS
SECTION 22, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 162.96 feet or 9.876 rods in length, lying in Section 22, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across State of New Mexico land:

BEGINNING at Engr. Sta. 0+00, a point in the Northeast quarter of Section 22, which bears, N 04°23'26" W, 2,648.68 feet from a brass cap, stamped "1941", found for the East quarter corner of Section 22;

Thence S 89°05'30" W, 158.23 feet, to Engr. Sta. 1+58.23, a P. I. of 90°55'43" right;

Thence N 00°01'13" E, 4.73 feet, to Engr. Sta. 1+62.96, a point on the North line of Section 22, which bears, N 89°34'18" E, 2,298.11 feet from a brass cap, stamped "1941", found for the North quarter corner of Section 22.

Said strip of land contains 0.112 acres, more or less, and is allocated by forties as follows:

NE 1/4 NE 1/4	9.876 Rods	0.112 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

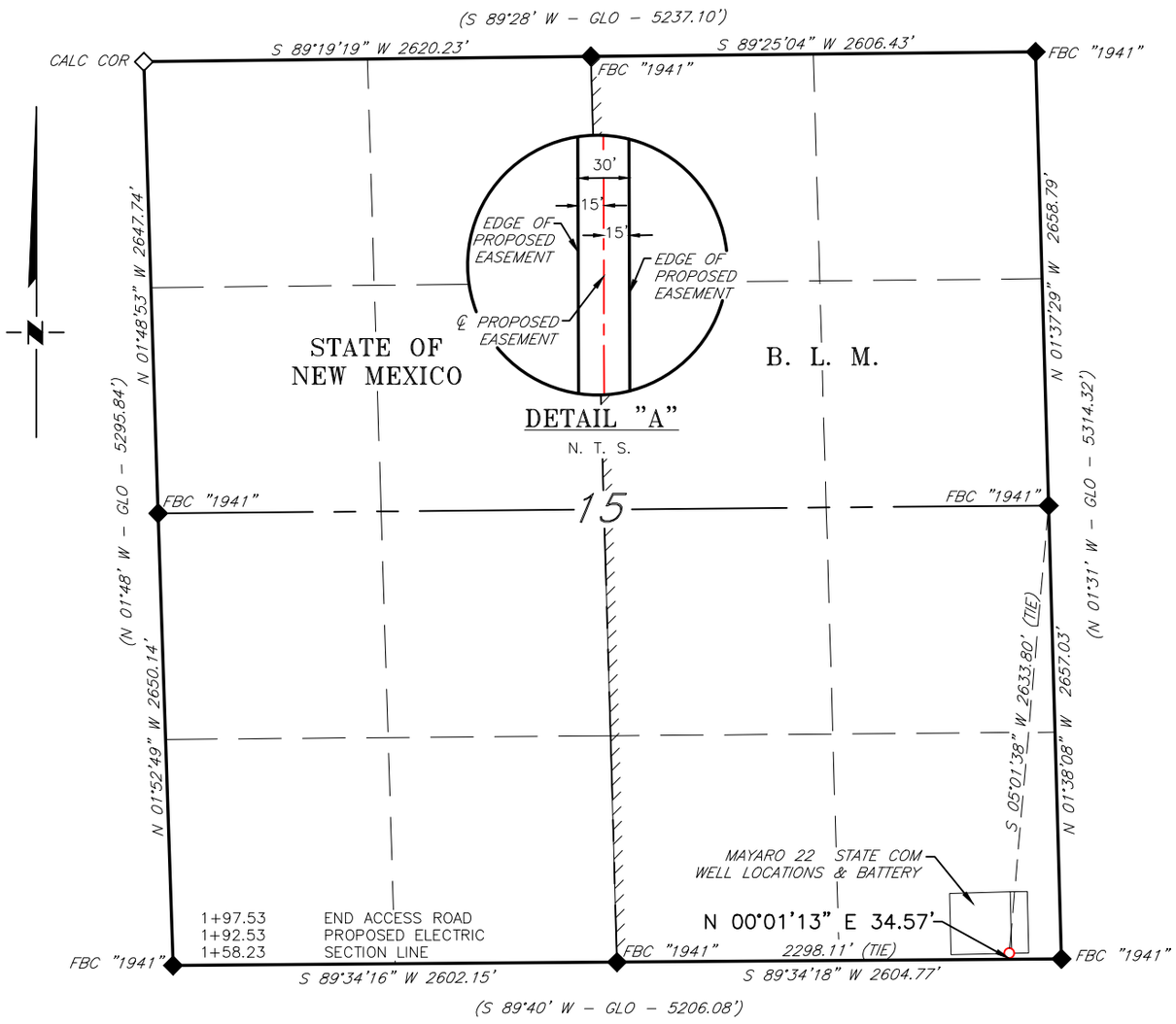
NO.	REVISION	DATE

JOB NO.: LS22060698
DWG. NO.: 22060698–6

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 2 OF 3

SPUR ENERGY PARTNERS, LLC.
PROPOSED ACCESS ROAD FOR THE MAYARO WELL LOCATIONS
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 34.57 feet or 2.095 rods in length, lying in Section 15, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 1+62.96, a point on the South line of Section 15, which bears, N 89°34'18" E, 2,298.11 feet from a brass cap, stamped "1941", found for the South quarter corner of Section 15;

Thence N 00°01'13" E, 34.57 feet, to Engr. Sta. 1+97.53, the End of Survey, a point in the Southeast quarter of Section 15, which bears, S 05°01'38" W, 2,633.80 feet from a brass cap, stamped "1941", found for the East quarter corner of Section 15.

Said strip of land contains 0.024 acres, more or less, and is allocated by forties as follows:

SE 1/4 SE 1/4	2.095 Rods	0.024 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED ACCESS ROAD

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

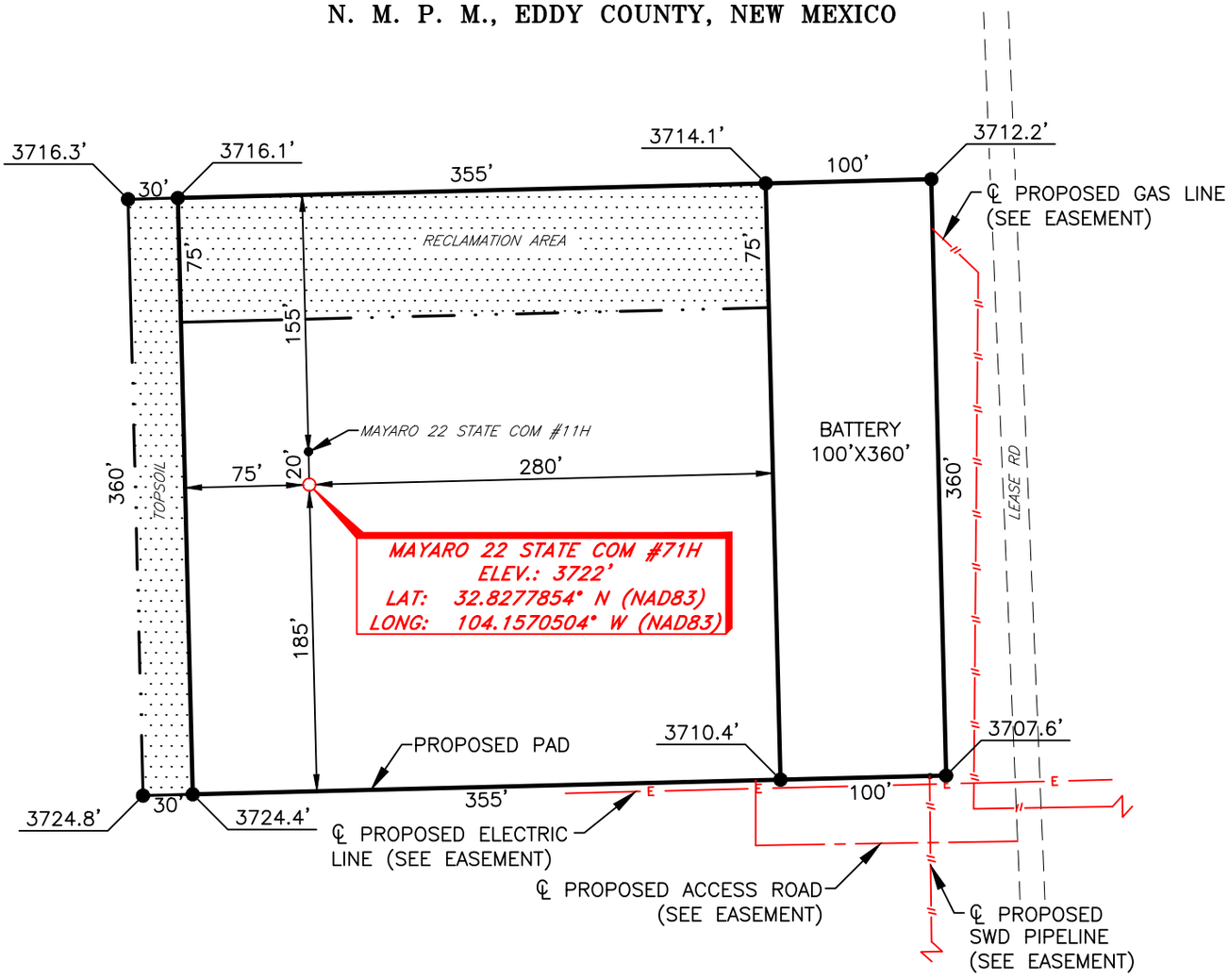
NO.	REVISION	DATE

JOB NO.: LS22060698
DWG. NO.: 22060698–7

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 3 OF 3

SPUR ENERGY PARTNERS LLC.
MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.);

Go North on CR #209 approx. 1.3 miles to a lease road on the left;

Turn left and go Northwest approx. 0.8 miles to a proposed road on the left;

Turn left and go West approx. 158 feet road turns right;

Turn right and continue North approx. 220 feet to location on the left.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID – NM EAST DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett

Robert M. Howett NM PS 19680

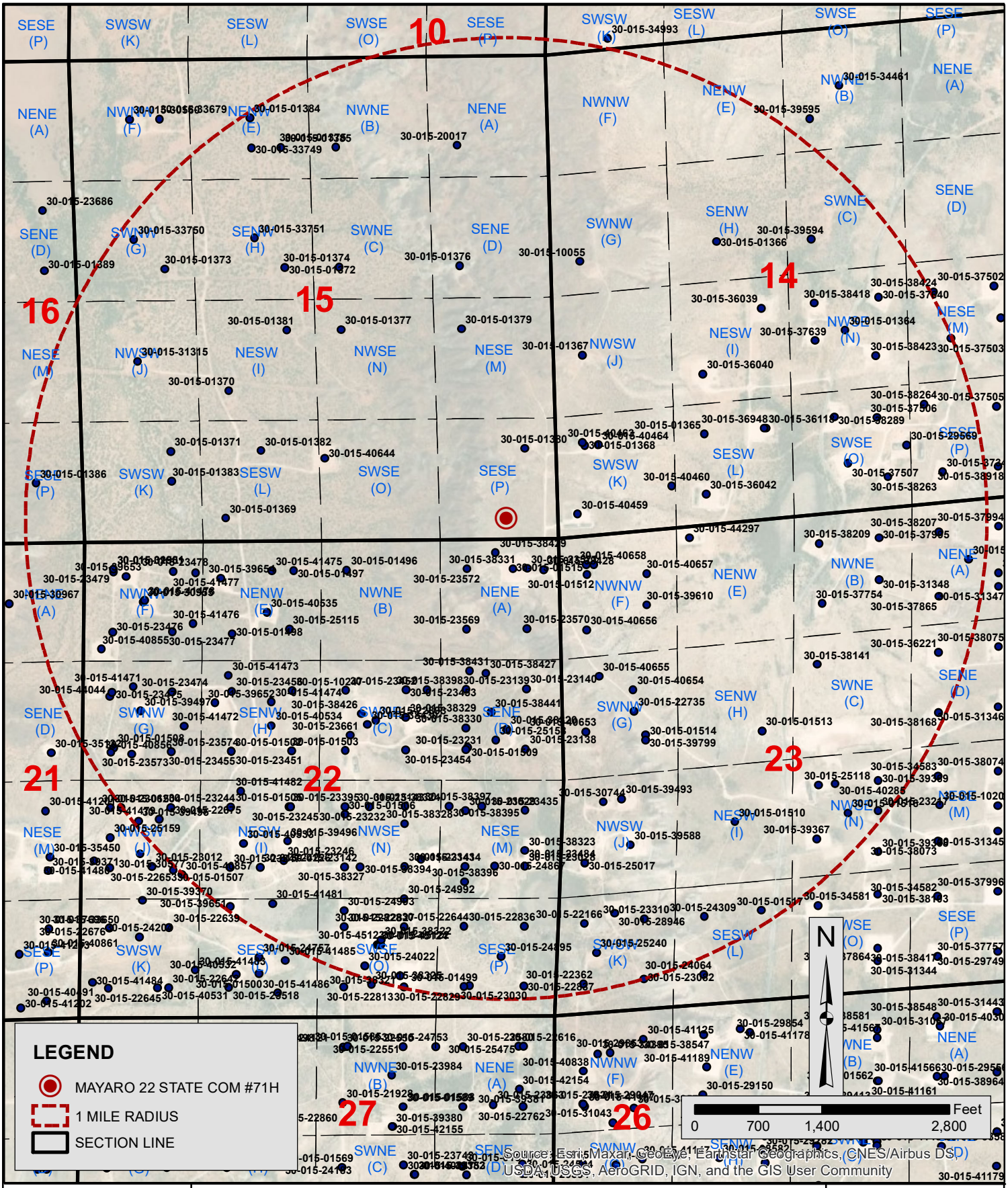
ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS22060699
DWG. NO.: 22060699–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 100'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1



RRC SURVEYING
701 S. Cecil Hobbs, NM 88240
(575) 964-8200

MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
Section 15, Township 17 South, Range 28 East,
N. M. P. M., Eddy County, New Mexico

SPUR ENERGY PARTNERS

Date: 06/08/2022	**ONE MILE RADIUS MAP**		Approved By: RMH
Surveyed By: JF/JM/IW	Job No. LS22060699	Dwg. No. 1-MILE (5,280 Ft.) - RADIUS	Drawn By: RQ

Mayaro 22 State Com 11H and 71H Facility Development

CTB Site:

All wells will have the ability to be routed to the Mayaro 22 East State Com Tank Battery. These wells are co-located with proposed tank battery.

Production Flowlines:

Each well will have two (2) 4" surface flowlines operating around 80 psi from the well sites to the tank battery. The flowlines for the Mayaro Mayaro wells will be routed to the Mayaro 22 East State Com Tank Battery. The wells will produce into this battery at any given time.

Salt Water Disposal:

Produced water will be pumped into three (3) 4" HDPE SDR 7 surface lines operating at 100 psi. The produced water line will also connect to Spur's SWD System to be disposed of at a Spur operated SWD.

Frac Water System:

Water for the Mayaro 11H and 71H will be trucked from the Halberd pond owned by Spur in Unit H (SENE) Section 27, Township 17 South, Range 28 East.

Gas Sales

Gas will be sold via one (1) 4" HDPE SDR 7 surface line operating around 100 psi and tie in to an existing DCP line west of the Mayaro 22 East State Com battery.

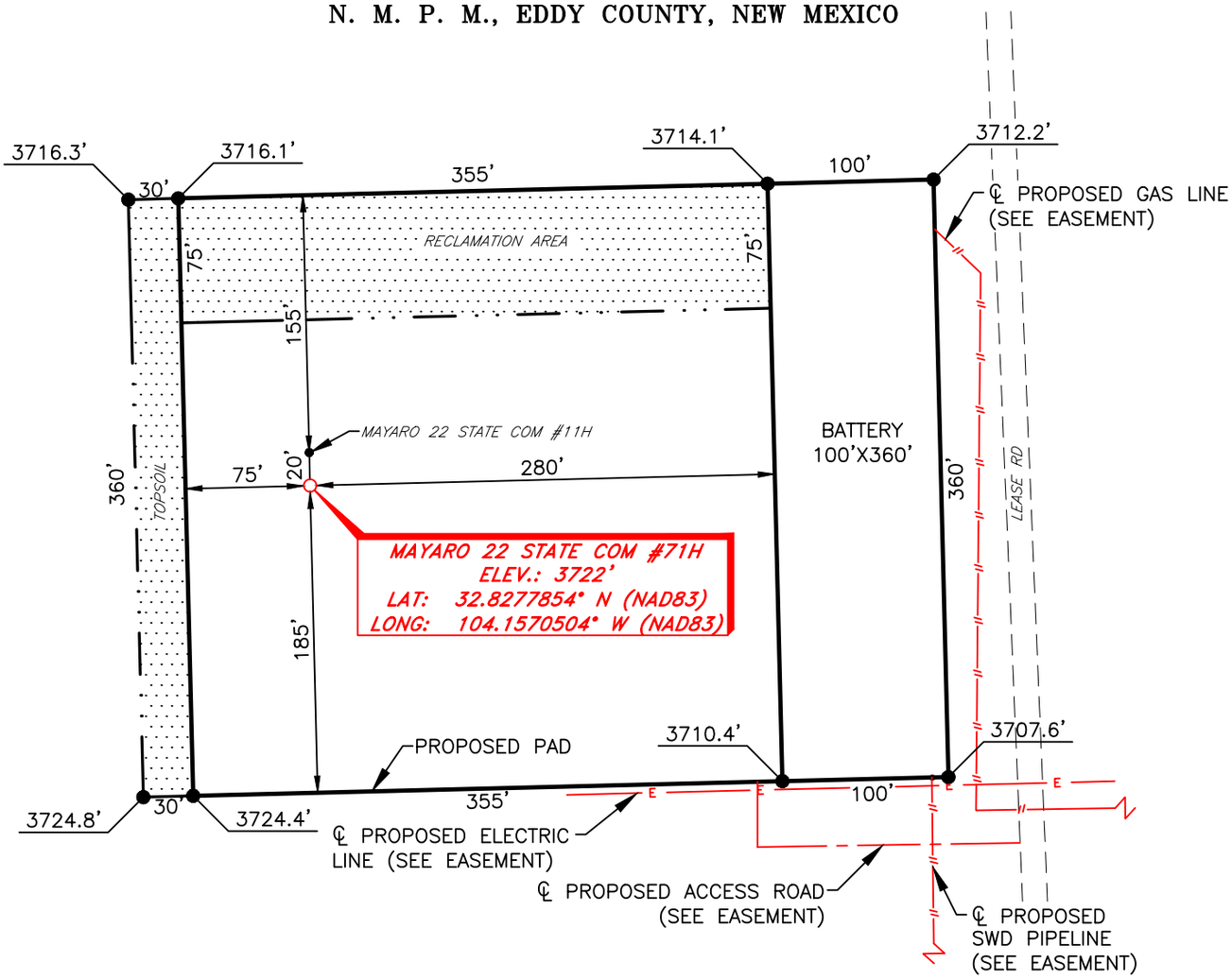
Oil Sales:

Oil will be sold through a LACT and trucked from the Mayaro 22 East State Com battery.

Electrical System:

3-phase electric lines will be constructed from existing CVE lines per the survey plats to the Mayaro 22 East State Com battery.

SPUR ENERGY PARTNERS LLC.
MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.);

Go North on CR #209 approx. 1.3 miles to a lease road on the left;

Turn left and go Northwest approx. 0.8 miles to a proposed road on the left;

Turn left and go West approx. 158 feet road turns right;

Turn right and continue North approx. 220 feet to location on the left.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID – NM EAST DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

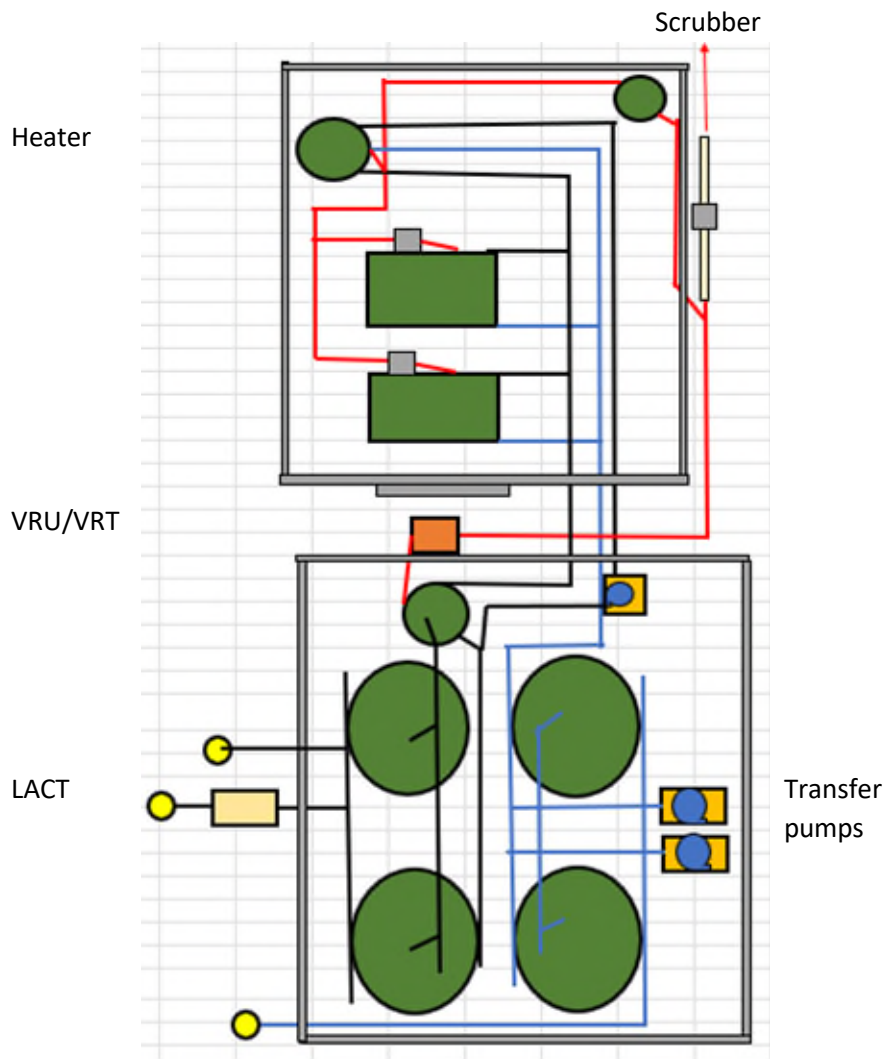
NO.	REVISION	DATE

JOB NO.: LS22060699
DWG. NO.: 22060699–4

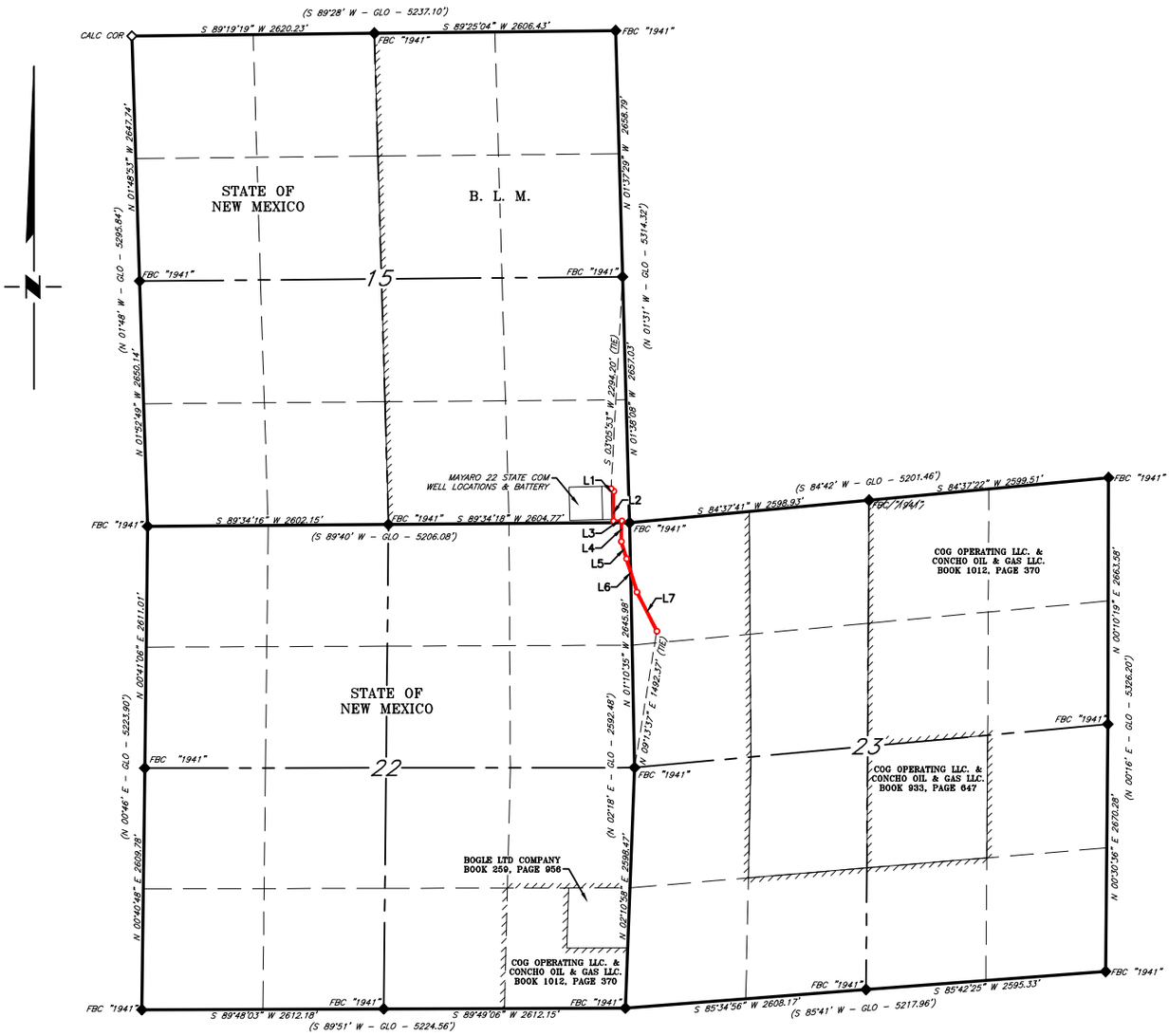
RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 100'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

Mayaro East Facility Diagram



SPUR ENERGY PARTNERS, LLC.
PROPOSED GAS LINE FOR THE MAYARO WELL LOCATIONS
SECTIONS 15, 22 & 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



LINE TABLE		
LINE	BEARING	LENGTH
L1	S 46°21'26" E	38.12'
L2	S 00°29'27" W	323.74'
L3	N 89°05'14" E	89.85'
L4	S 01°21'29" W	220.10'
L5	S 17°11'12" E	195.38'
L6	S 17°33'46" E	378.54'
L7	S 26°43'09" E	471.64'

SCALE: 1" = 1800'
0 900' 1800'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

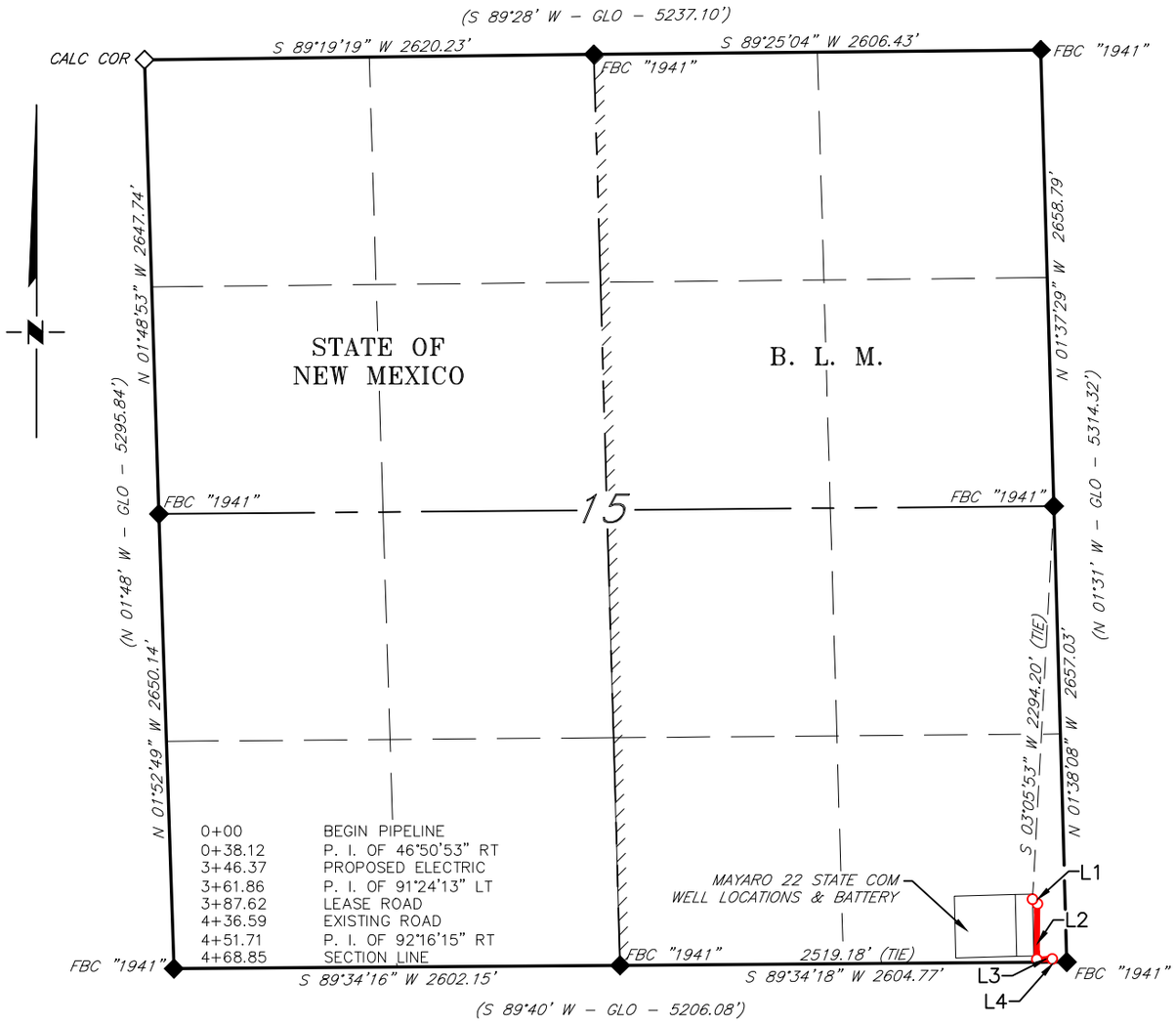
NO.	REVISION	DATE

JOB NO.: LS22060703
DWG. NO.: 22060703–1

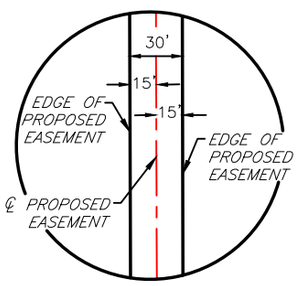
RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1800'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 5

SPUR ENERGY PARTNERS, LLC.
PROPOSED GAS LINE FOR THE MAYARO WELL LOCATIONS
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



LINE TABLE		
LINE	BEARING	LENGTH
L1	S 46°21'26" E	38.12'
L2	S 00°29'27" W	323.74'
L3	N 89°05'14" E	89.85'
L4	S 01°21'29" W	17.14'



DETAIL "A"
N. T. S.

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS22060703
DWG. NO.: 22060703–2

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 2 OF 5

SPUR ENERGY PARTNERS, LLC.
PROPOSED GAS LINE FOR THE MAYARO WELL LOCATIONS
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO

DESCRIPTION

A strip of land 30 feet wide, being 468.85 feet or 28.415 rods in length, lying in Section 15, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Southeast quarter of Section 15, which bears, S 03°05'53" W, 2,294.20 feet from a brass cap, stamped "1941", found for the East quarter corner of Section 15;

Thence S 46°21'26" E, 38.12 feet, to Engr. Sta. 0+38.12, a P. I. of 46°50'53" right;

Thence S 00°29'27" W, 323.74 feet, to Engr. Sta. 3+61.86, a P. I. of 91°24'13" left;

Thence N 89°05'14" E, 89.85 feet, to Engr. Sta. 4+51.71, a P. I. of 92°16'15" right;

Thence S 01°21'29" W, 17.14 feet, to Engr. Sta. 4+68.85, a point on the South line of Section 15, which bears, N 89°34'18" E, 2,519.18 feet from a brass cap, stamped "1941", found for the South quarter corner of Section 15.

Said strip of land contains 0.323 acres, more or less, and is allocated by forties as follows:

SE 1/4 SE 1/4	28.415 Rods	0.323 Acres

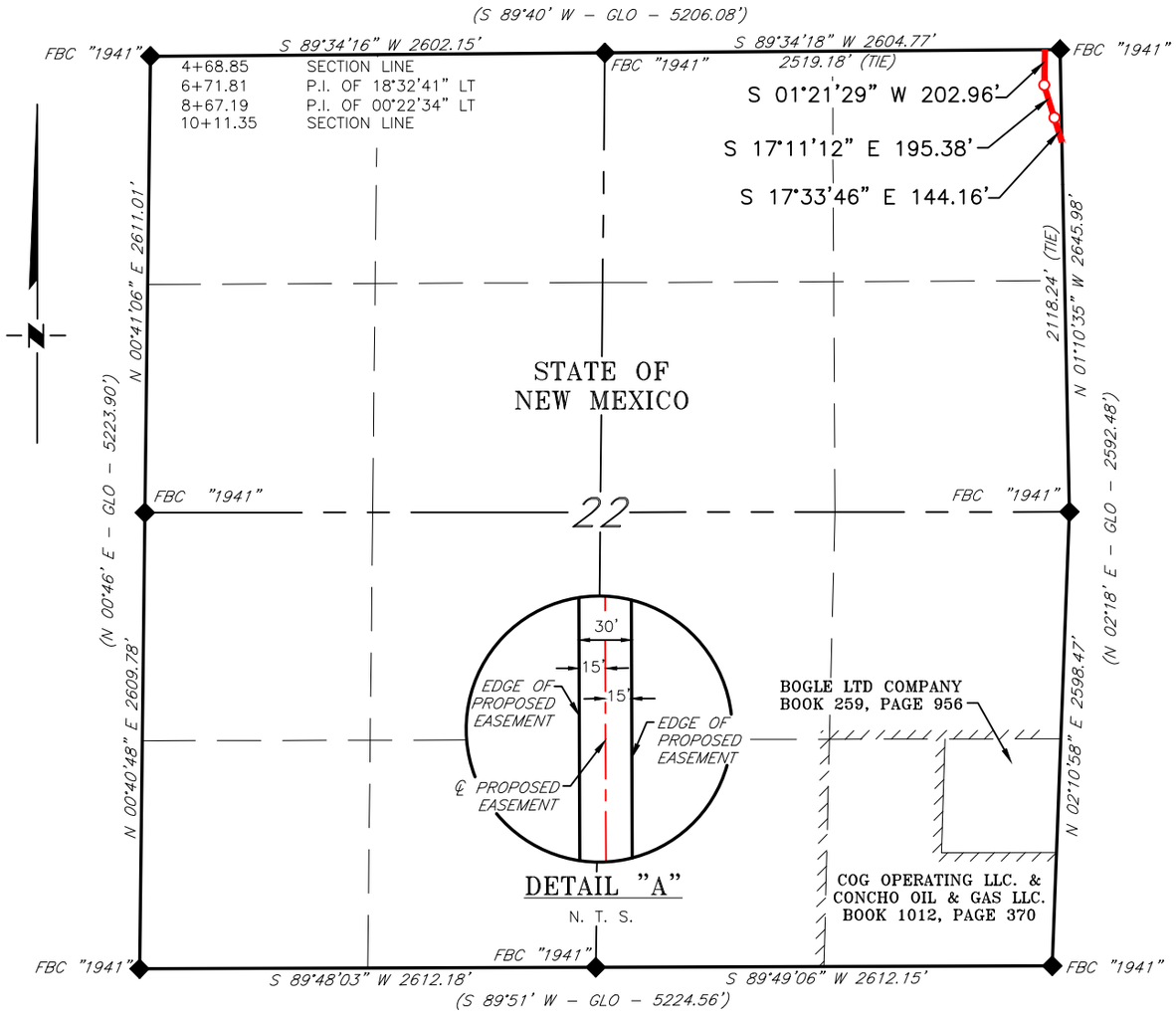
NO.	REVISION	DATE

JOB NO.: LS22060703
DWG. NO.: 22060703–3

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 3 OF 5

SPUR ENERGY PARTNERS, LLC.
PROPOSED GAS LINE FOR THE MAYARO WELL LOCATIONS
SECTION 22, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 542.50 feet or 32.879 rods in length, lying in Section 22, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across State of New Mexico land:

BEGINNING at Engr. Sta. 4+68.85, a point on the North line of Section 22, which bears, N 89°34'18" E, 2,519.18 feet from a brass cap, stamped "1941", found for the North quarter corner of Section 22;

Thence S 01°21'29" W, 202.60 feet, to Engr. Sta. 6+71.81, a P. I. of 18°32'41" left;

Thence S 17°11'12" E, 195.38 feet, to Engr. Sta. 8+67.19, a P. I. of 00°22'34" left;

Thence S 17°33'46" E, 144.16 feet, to Engr. Sta. 10+11.35, a point on the East line of Section 22, which bears, N 01°10'35" W, 2,118.24 feet from a brass cap, stamped "1941", found for the East quarter corner of Section 22.

Said strip of land contains 0.374 acres, more or less, and is allocated by forties as follows:

NE 1/4 NE 1/4	32.879 Rods	0.374 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

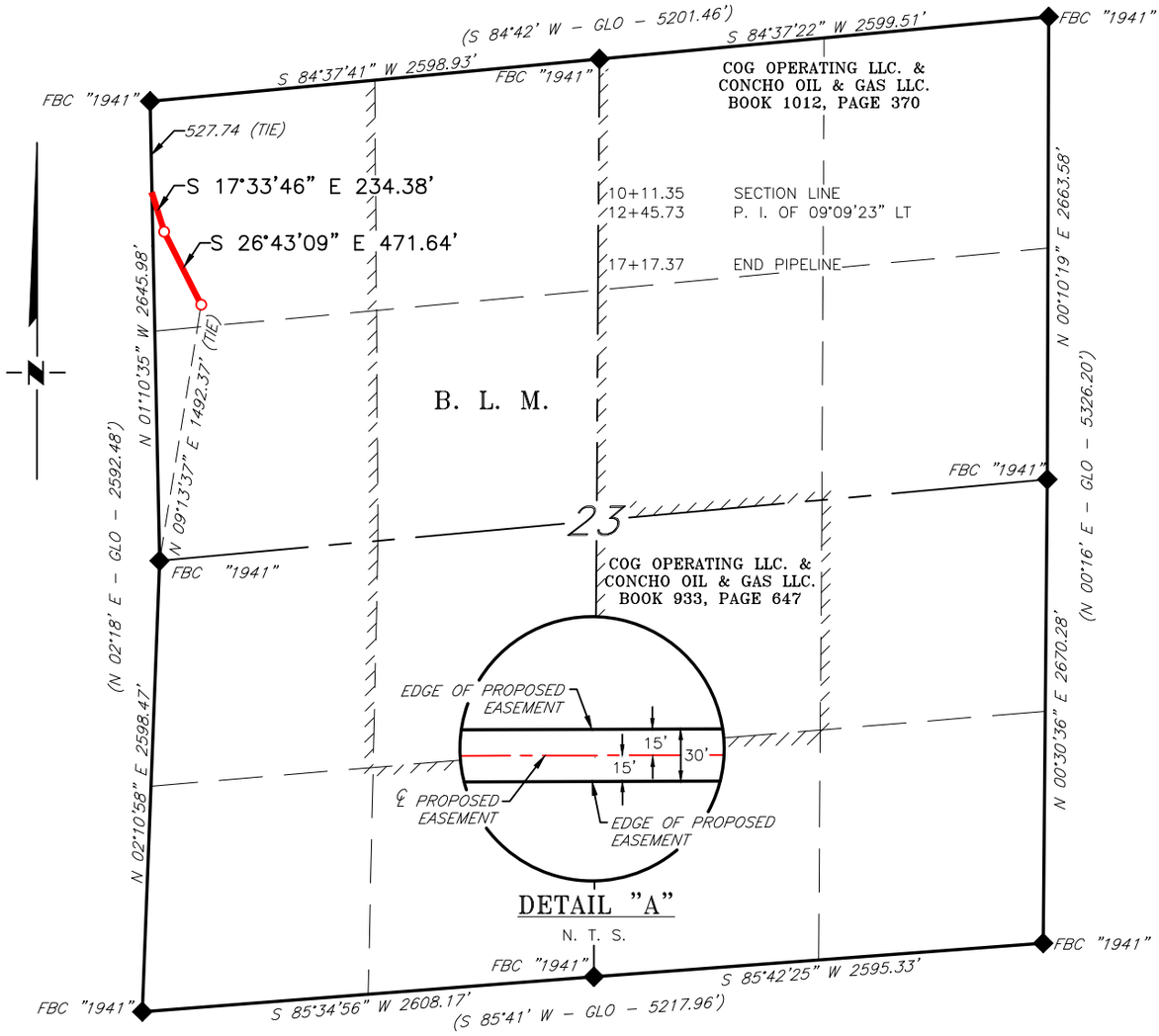
NO.	REVISION	DATE

JOB NO.: LS22060703
DWG. NO.: 22060703–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 4 OF 5

SPUR ENERGY PARTNERS, LLC.
PROPOSED GAS LINE FOR THE MAYARO WELL LOCATIONS
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 706.02 feet or 42.789 rods in length, lying in Section 23, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of COG Operating LLC. & Concho Oil & Gas LLC., according to a deed filed for record in Book 1012, Page 370, of the Deed Records of Eddy County:

BEGINNING at Engr. Sta. 10+11.35, a point on the West line of Section 23, which bears, S 01°10'35" E, 527.24 feet from a brass cap, stamped "1941", found for the Northwest corner of Section 23;

Thence S 17°33'46" E, 234.38 feet, to Engr. Sta. 12+45.73, a P. I. of 09°09'23" left;

Thence S 26°43'09" E, 471.64 feet, to Engr. Sta. 17+17.37, the End of Survey, a point in the Northwest quarter Section 23, which bears, N 09°13'37" E, 1,492.37 feet from a brass cap, stamped "1941", found for the West quarter corner of Section 23.

Said strip of land contains 0.486 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1/4	42.789 Rods	0.486 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

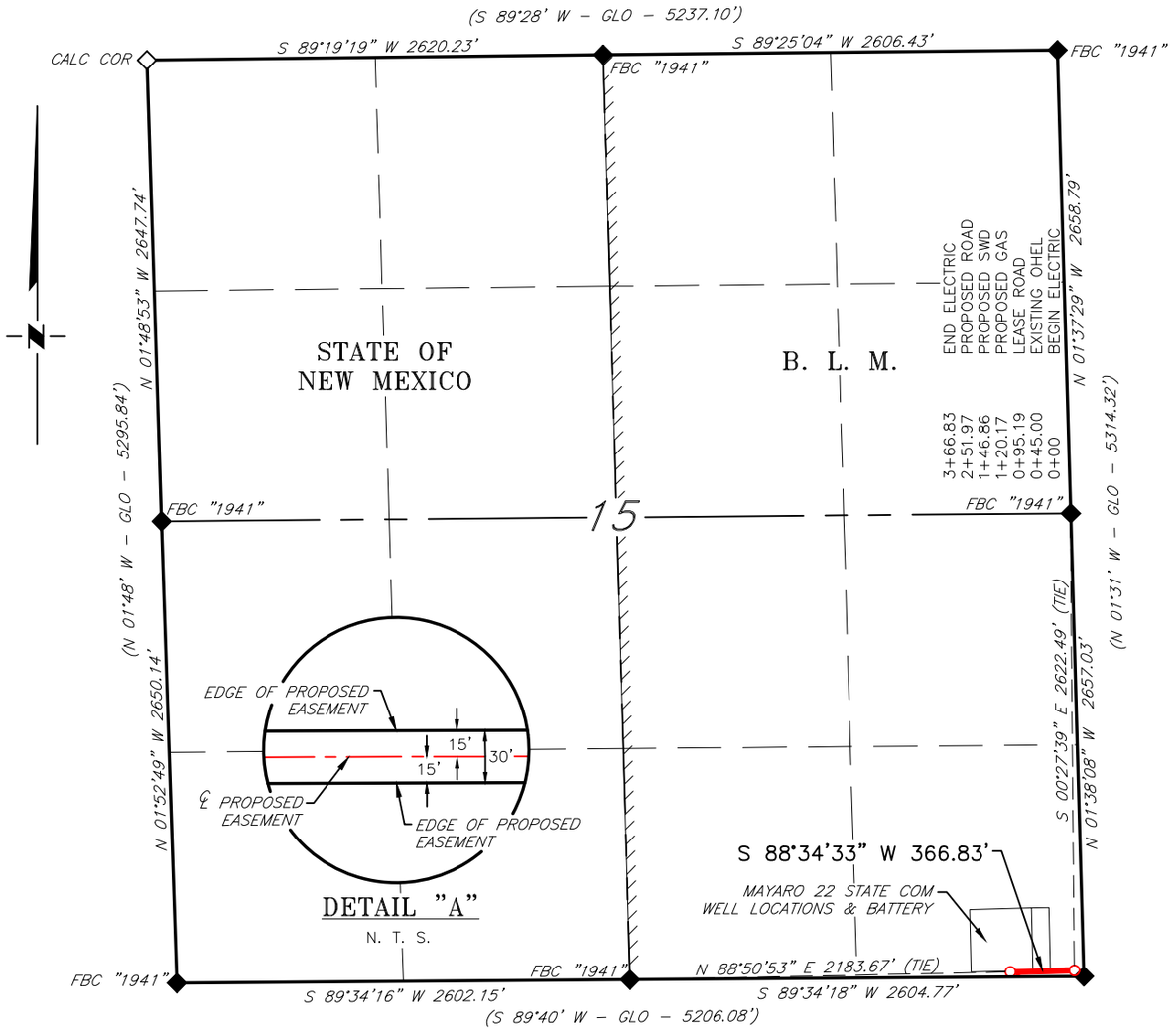
NO.	REVISION	DATE

JOB NO.: LS22060703
DWG. NO.: 22060703–5

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 5 OF 5

SPUR ENERGY PARTNERS, LLC.
PROPOSED ELECTRIC LINE FOR THE MAYARO WELL LOCATIONS
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 366.83 feet or 22.232 rods in length, lying in Section 15, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Southeast quarter of Section 15, which bears, S 00°27'39" E, 2,622.49 feet from a brass cap, stamped "1941", found for the East quarter corner of Section 15;

Thence S 88°34'33" W, 366.83 feet, to Engr. Sta. 3+66.83, the End of Survey, a point in the Southeast quarter of Section 15, which bears, N 88°50'53" E, 2,183.67 feet from a brass cap, stamped "1941", found for the South quarter corner of Section 15.

Said strip of land contains 0.253 acres, more or less, and is allocated by forties as follows:

SE 1/4 SE 1/4	22.232 Rods	0.253 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED ELECTRIC

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

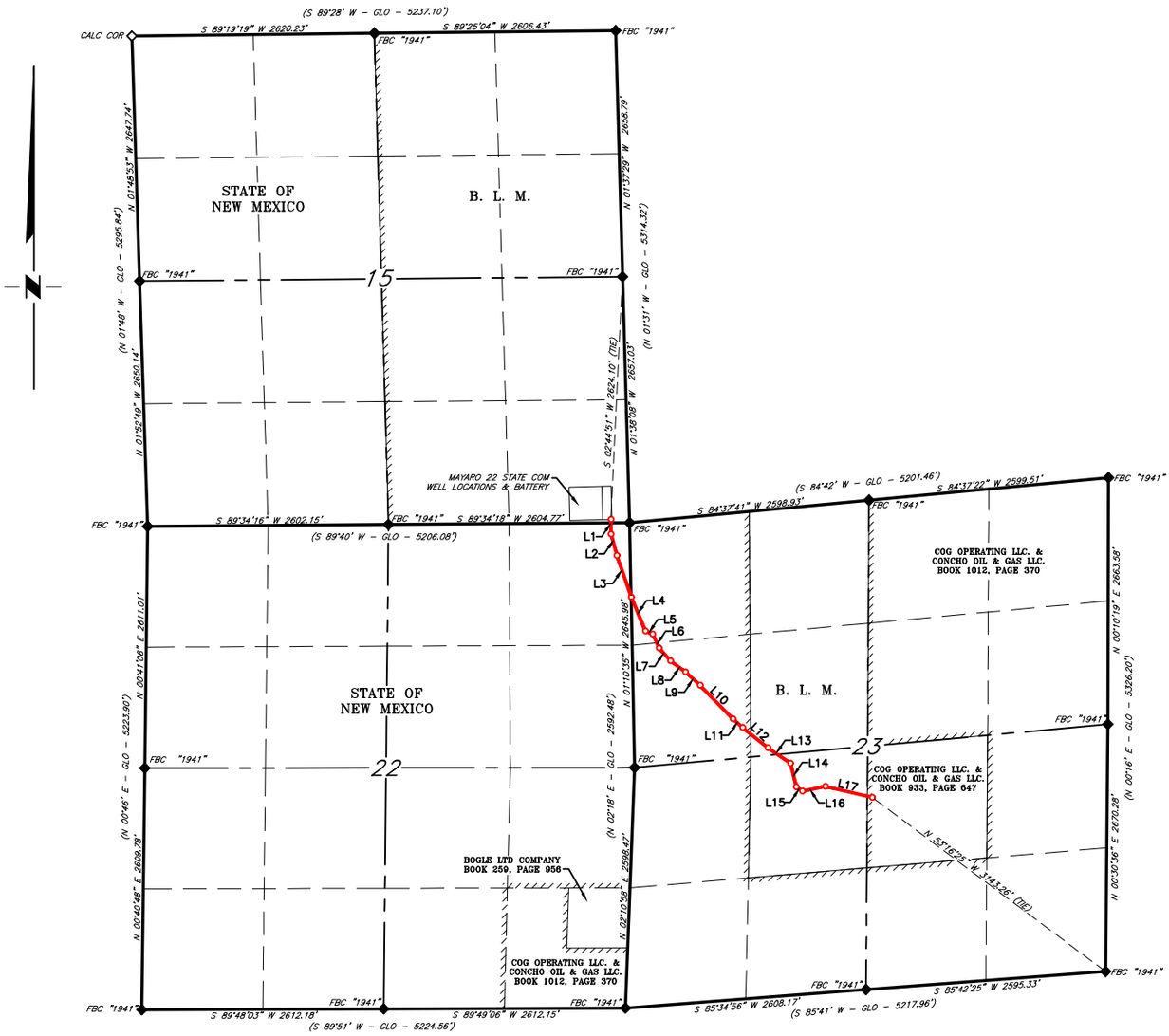
NO.	REVISION	DATE

JOB NO.: LS22060728
DWG. NO.: 22060728–1

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTIONS 15, 22 & 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



LINE TABLE		
LINE	BEARING	LENGTH
L1	S 00°39'41" E	158.25'
L2	S 15°22'29" E	238.92'
L3	S 19°08'44" E	475.80'
L4	S 22°21'15" E	397.69'
L5	S 67°06'50" E	85.33'
L6	S 25°03'07" E	164.82'
L7	S 41°37'58" E	183.29'
L8	S 53°44'54" E	203.21'
L9	S 47°05'35" E	213.48'
L10	S 44°27'51" E	507.06'
L11	S 47°50'41" E	140.96'
L12	S 51°16'45" E	350.18'
L13	S 55°42'52" E	296.41'
L14	S 13°42'19" E	263.80'
L15	S 54°31'14" E	78.65'
L16	N 78°17'47" E	256.03'
L17	S 76°51'32" E	521.86'

SCALE: 1" = 1800'
0 900' 1800'

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

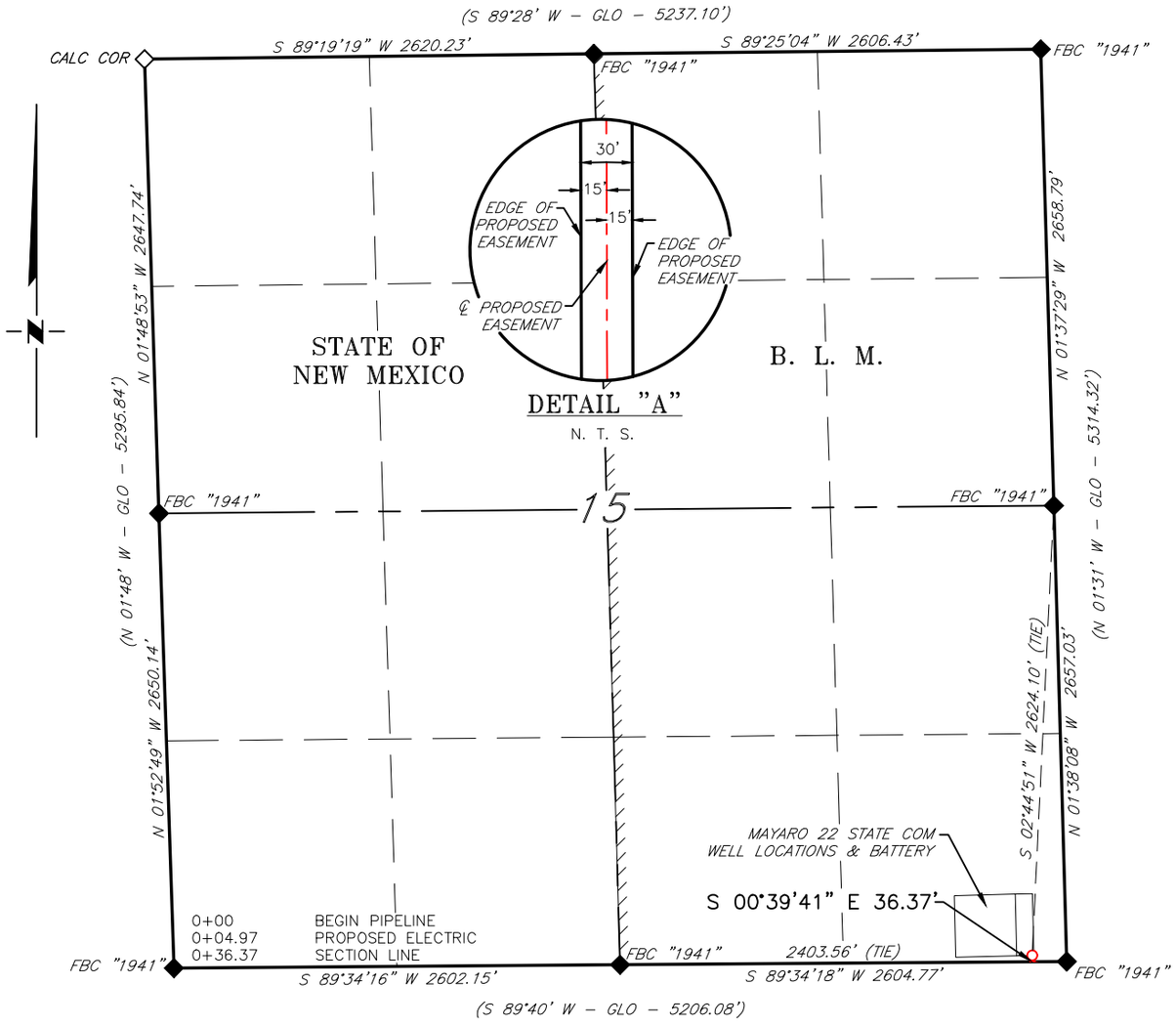
NO.	REVISION	DATE

JOB NO.: LS22060730
DWG. NO.: 22060730–1

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1800'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 8

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 36.37 feet or 2.204 rods in length, lying in Section 15, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 0+00, a point in the Southeast quarter of Section 15, which bears, S 02°44'51" W, 2,624.10 feet from a brass cap, stamped "1941", found for the East quarter corner of Section 15;

Thence S 00°39'41" E, 36.37 feet, to Engr. Sta. 0+36.37, a point on the South line of Section 15, which bears, N 89°34'18" E, 2,403.56 feet from a brass cap, stamped "1941", found for the South quarter corner of Section 15.

Said strip of land contains 0.025 acres, more or less, and is allocated by forties as follows:

SE 1/4 SE 1/4	2.204 Rods	0.025 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

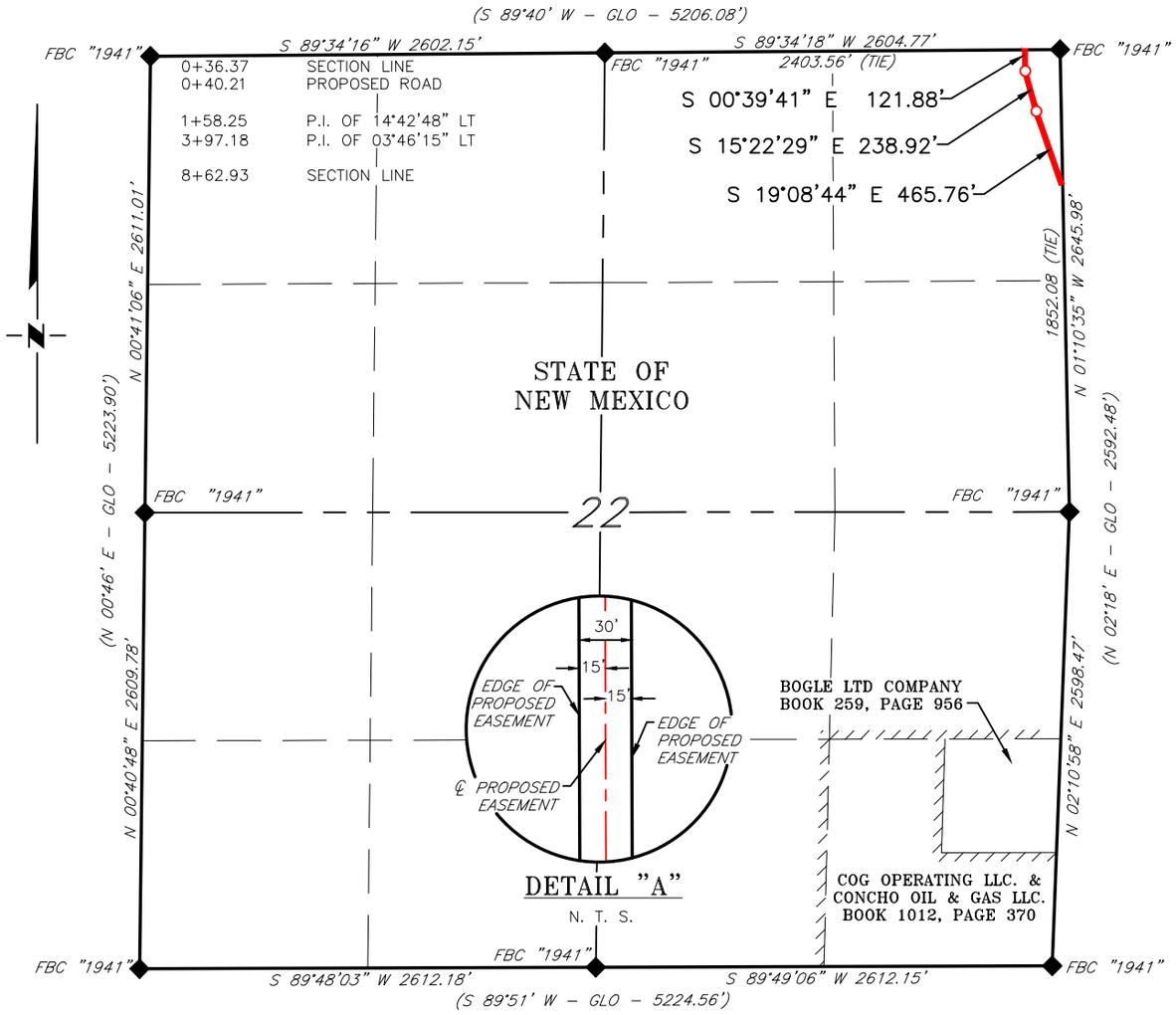
NO.	REVISION	DATE

JOB NO.: LS22060730
DWG. NO.: 22060730–2

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 2 OF 8

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTION 22, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 826.56 feet or 50.094 rods in length, lying in Section 22, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across State of New Mexico land:

BEGINNING at Engr. Sta. 0+36.37, a point on the North line of Section 22, which bears, N 89°34'18" E, 2,403.56 feet from a brass cap, stamped "1941", found for the North quarter corner of Section 22;

Thence S 00°39'41" E, 121.88 feet, to Engr. Sta. 1+58.25, a P. I. of 14°42'48" left;

Thence S 15°22'29" E, 238.92 feet, to Engr. Sta. 3+97.17, a P. I. of 03°46'15" left;

Thence S 19°08'44" E, 465.76 feet, to Engr. Sta. 8+62.93, a point on the East line of Section 22, which bears, N 01°10'35" W, 1,852.08 feet from a brass cap, stamped "1941", found for the East quarter corner of Section 22.

Said strip of land contains 0.569 acres, more or less, and is allocated by forties as follows:

SE 1/4 SE 1/4	50.094 Rods	0.569 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

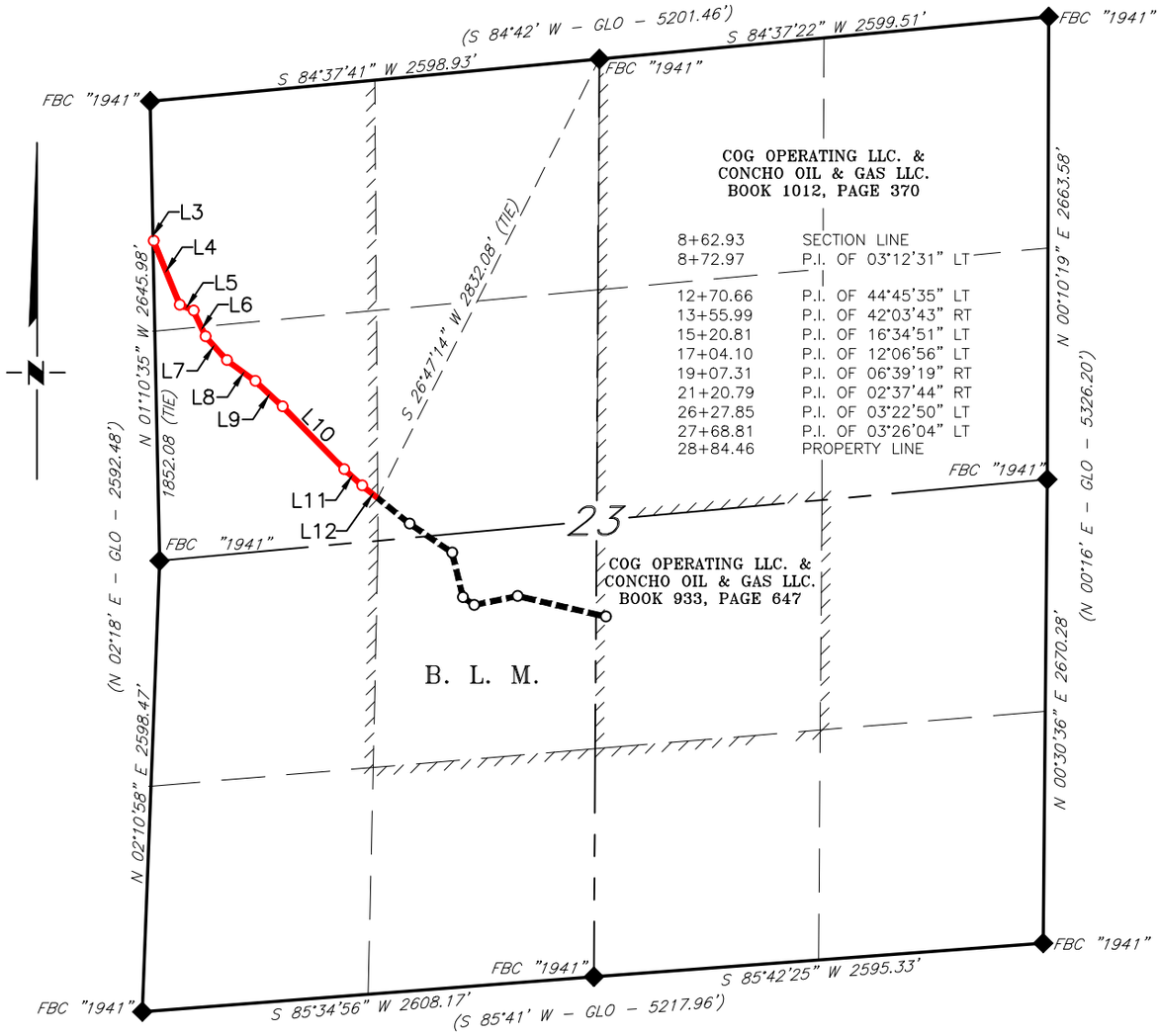
NO.	REVISION	DATE

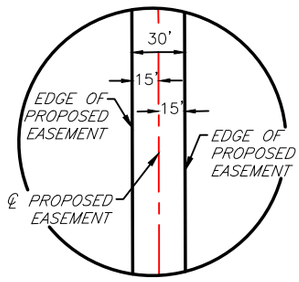
JOB NO.: LS22060730
DWG. NO.: 22060730–3

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 3 OF 8

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO





DETAIL "A"
N. T. S.

LINE TABLE		
LINE	BEARING	LENGTH
L3	S 19°08'44" E	10.04'
L4	S 22°21'15" E	397.69'
L5	S 67°06'50" E	85.33'
L6	S 25°03'07" E	164.82'
L7	S 41°37'58" E	183.29'
L8	S 53°44'54" E	203.21'
L9	S 47°05'35" E	213.48'
L10	S 44°27'51" E	507.06'
L11	S 47°50'41" E	140.96'
L12	S 51°16'45" E	115.65'

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA – GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS22060730
DWG. NO.: 22060730–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 4 OF 8

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO

DESCRIPTION

A strip of land 30 feet wide, being 2,021.53 feet or 122.517 rods in length, lying in Section 23, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of COG Operating LLC. & Concho Oil & Gas LLC., according to a deed filed for record in Book 1012, Page 370, of the Deed Records of Eddy County:

BEGINNING at Engr. Sta. 8+62.93, a point on the West line of Section 23, which bears, N 01°10'35" W, 1,852.08 feet from a brass cap, stamped "1941", found for the West quarter corner of Section 23;

Thence S 19°08'44" E, 10.04 feet, to Engr. Sta. 8+72.97, a P. I. of 03°12'31" left;

Thence S 22°21'15" E, 397.69 feet, to Engr. Sta. 12+70.66, a P. I. of 44°45'35" left;

Thence S 67°06'50" E, 85.33 feet, to Engr. Sta. 13+55.99, a P. I. of 42°03'43" right;

Thence S 25°03'07" E, 164.82 feet, to Engr. Sta. 15+20.81, a P. I. of 16°34'51" left;

Thence S 41°37'58" E, 183.29 feet, to Engr. Sta. 17+04.10, a P. I. of 12°06'56" left;

Thence S 53°44'54" E, 203.21 feet, to Engr. Sta. 19+07.31, a P. I. of 06°39'19" right;

Thence S 47°05'35" E, 213.48 feet, to Engr. Sta. 21+20.79, a P. I. of 02°37'44" right;

Thence S 44°27'51" E, 507.06 feet, to Engr. Sta. 26+27.85, a P. I. of 03°22'50" left;

Thence S 47°50'41" E, 140.96 feet, to Engr. Sta. 27+68.81 a P. I. of 03°26'04" left;

Thence S 51°16'45" E, 115.65 feet, to Engr. Sta. 28+84.46, a point in the Northwest quarter of Section 23, which bears, S 26°47'14" W, 2,832.08 feet from a brass cap, stamped "1941", found for the North quarter corner of Section 23.

Said strip of land contains 1.392 acres, more or less, and is allocated by forties as follows:

NW 1/4 NW 1/4	36.157 Rods	0.411 Acres
SW 1/4 NW 1/4	86.360 Rods	0.981 Acres

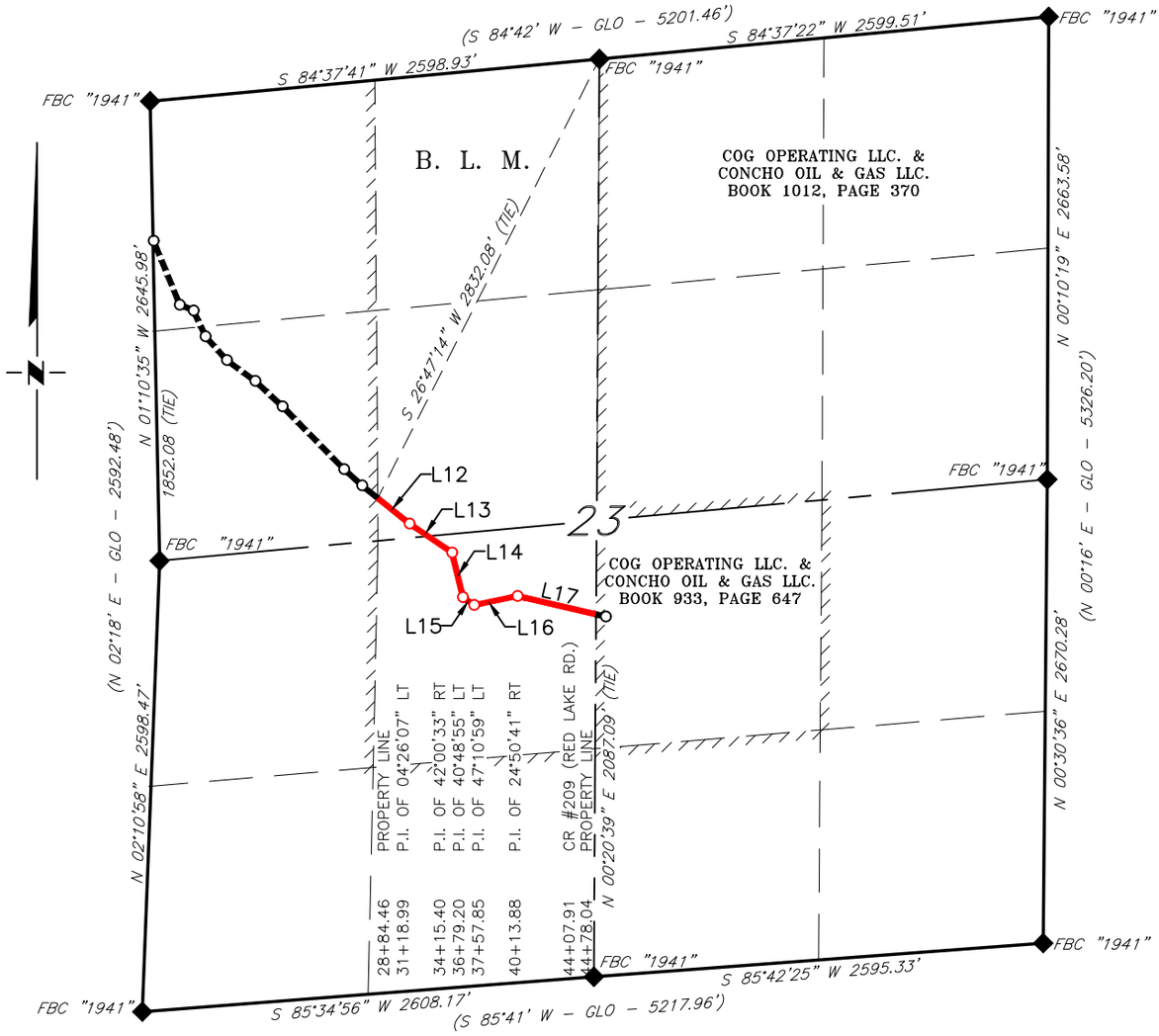
NO.	REVISION	DATE

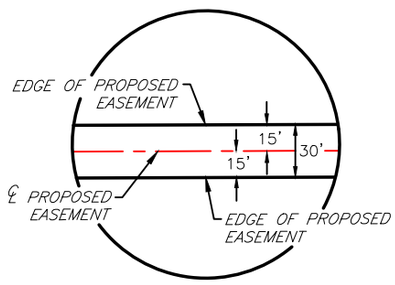
JOB NO.: LS22060730
DWG. NO.: 22060730–5

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 5 OF 8

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO





DETAIL "A"
N. T. S.

LINE TABLE		
LINE	BEARING	LENGTH
L12	S 51°16'45" E	234.53'
L13	S 55°42'52" E	296.41'
L14	S 13°42'19" E	263.80'
L15	S 54°31'14" E	78.65'
L16	N 78°17'47" E	256.03'
L17	S 76°51'32" E	464.16'

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) RECORD DATA - GLO
◆ FOUND MONUMENT AS NOTED
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS22060730
DWG. NO.: 22060730-6

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 6 OF 8

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO

DESCRIPTION

A strip of land 30 feet wide, being 1,593.58 feet or 96.851 rods in length, lying in Section 23, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across B. L. M. land:

BEGINNING at Engr. Sta. 28+84.46, a point in the Northwest quarter of Section 23, which bears, S 26°47'14" W, 2,832.08 feet from a brass cap, stamped "1941", found for the North quarter corner of Section 23;

Thence S 51°16'45" E, 234.53 feet, to Engr. Sta. 31+18.99, a P. I. of 04°26'07" left;

Thence S 55°42'52" E, 296.41 feet, to Engr. Sta. 34+15.40, a P. I. of 42°00'33" right;

Thence S 13°42'19" E, 263.80 feet, to Engr. Sta. 36+79.20, a P. I. of 40°48'55" left;

Thence S 54°31'14" E, 78.65 feet, to Engr. Sta. 37+57.85, a P. I. of 47°10'59" left;

Thence N 78°17'47" E, 256.03 feet, to Engr. Sta. 40+13.88, a P. I. of 24°50'41" right;

Thence S 76°51'32" E, 464.16 feet, to Engr. Sta. 44+78.04, a point on the East line of the West half of Section 23, which bears, N 00°20'39" E, 2,087.09 feet from a brass cap, stamped "1941", found for the South quarter corner of Section 23.

Said strip of land contains 1.098 acres, more or less, and is allocated by forties as follows:

SE 1/4 NW 1/4	21.978 Rods	0.250 Acres
NE 1/4 SW 1/4	74.603 Rods	0.848 Acres

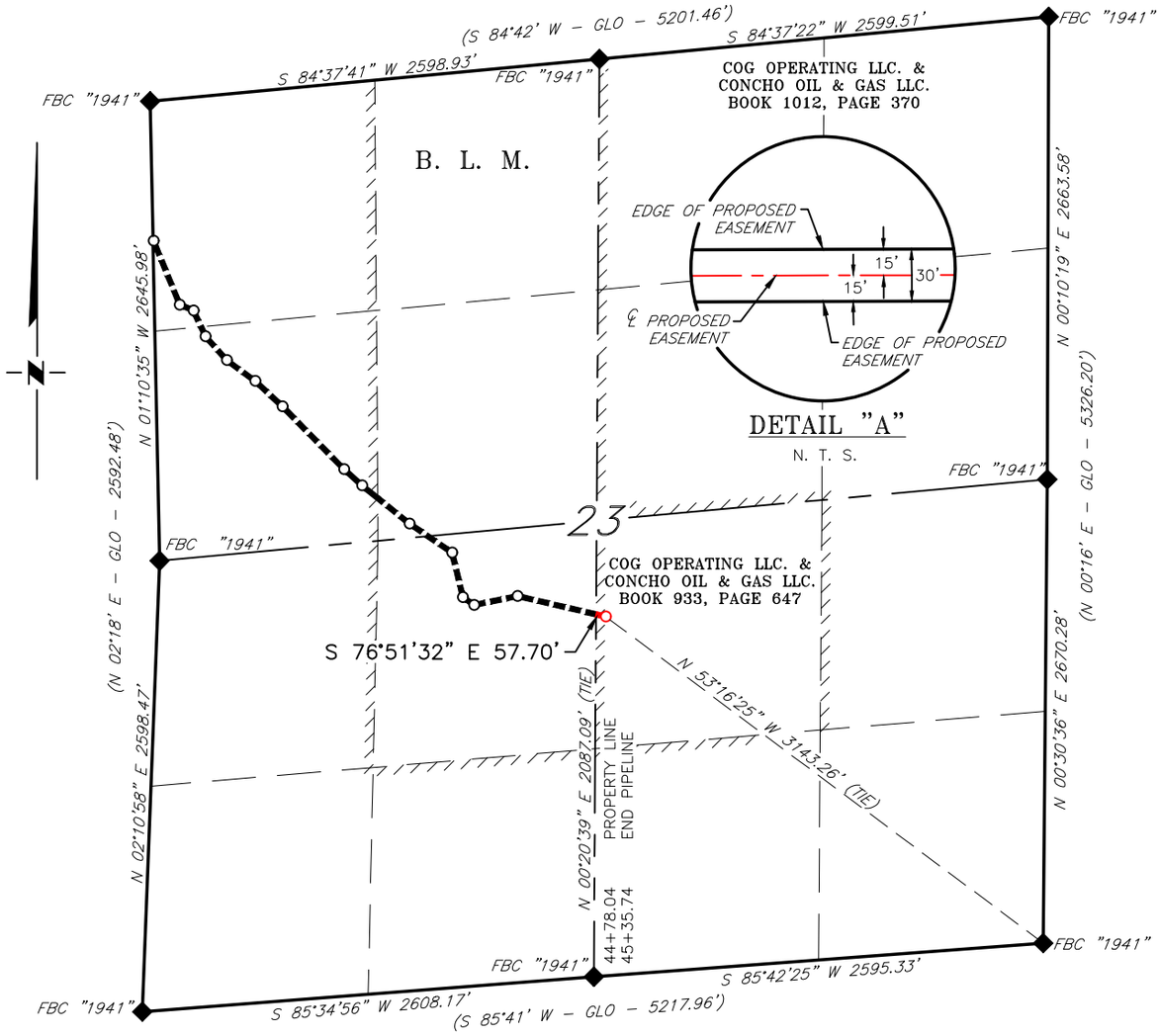
NO.	REVISION	DATE

JOB NO.: LS22060730
DWG. NO.: 22060730–7

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 7 OF 8

SPUR ENERGY PARTNERS, LLC.
PROPOSED SWD PIPELINE FOR THE MAYARO WELL LOCATIONS
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DESCRIPTION

A strip of land 30 feet wide, being 57.70 feet or 3.497 rods in length, lying in Section 23, Township 17 South, Range 28 East, N. M. P. M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the following described survey of a centerline across the lands of COG Operating LLC. & Concho Oil & Gas LLC., according to a deed filed for record in Book 933, Page 647, of the Deed Records of Eddy County:

BEGINNING at Engr. Sta. 44+78.04, a point on the West line of the East half of Section 23, which bears, N 00°20'39" E, 2,087.09 feet from a brass cap, stamped "1941", found for the South quarter corner of Section 23;

Thence S 76°51'32" E, 57.70 feet, to Engr. Sta. 45+35.74, the End of Survey, a point in the Southeast quarter Section 23, which bears, N 53°16'25" W, 3,143.26 feet from a brass cap, stamped "1941", found for the Southeast corner of Section 23.

Said strip of land contains 0.040 acres, more or less, and is allocated by forties as follows:

NW 1/4 SE 1/4	3.497 Rods	0.040 Acres

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

BEARINGS ARE GRID NAD 83 NM EAST
DISTANCES ARE HORIZ. GROUND.

LEGEND
( ) *RECORD DATA – GLO*
◆ *FOUND MONUMENT AS NOTED*
PROPOSED PIPELINE

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this plat from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett
Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

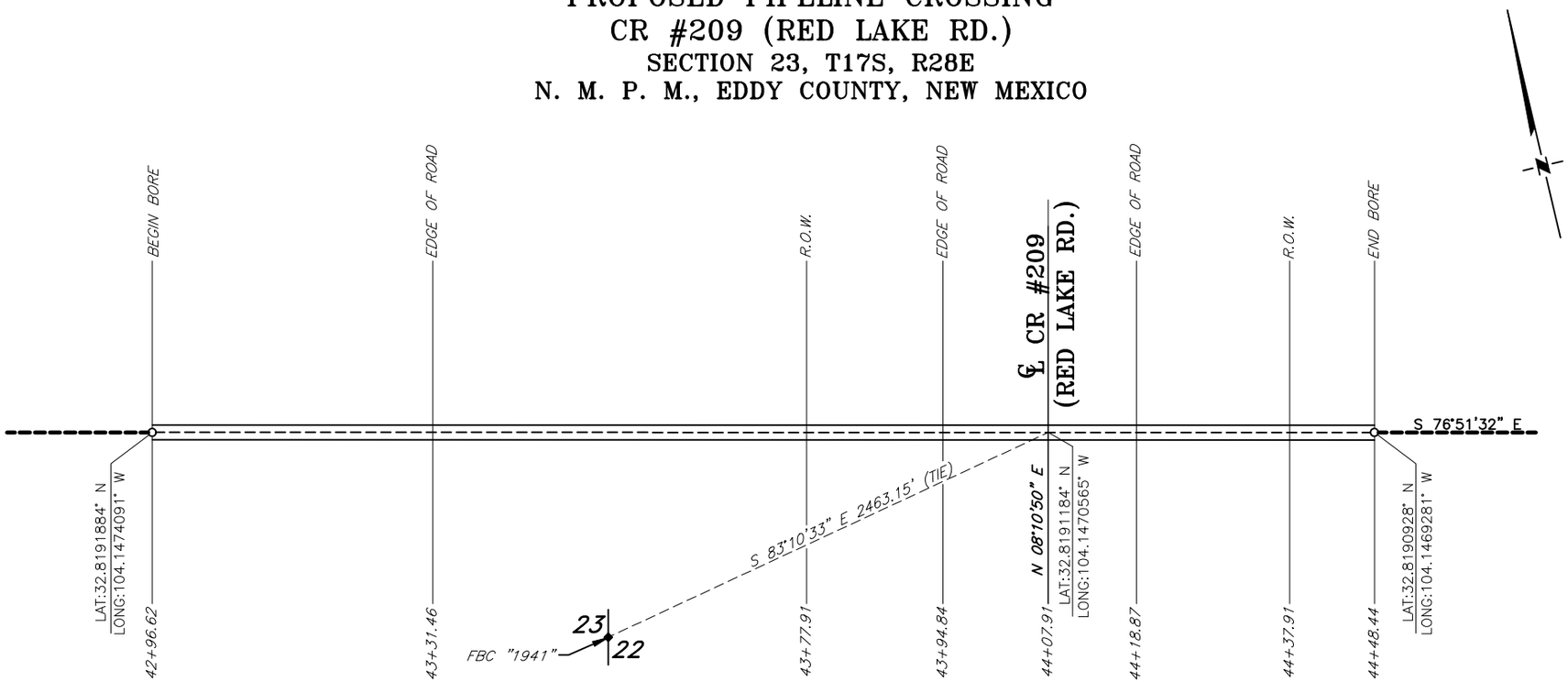
NO.	REVISION	DATE

JOB NO.: LS22060730
DWG. NO.: 22060730–8

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

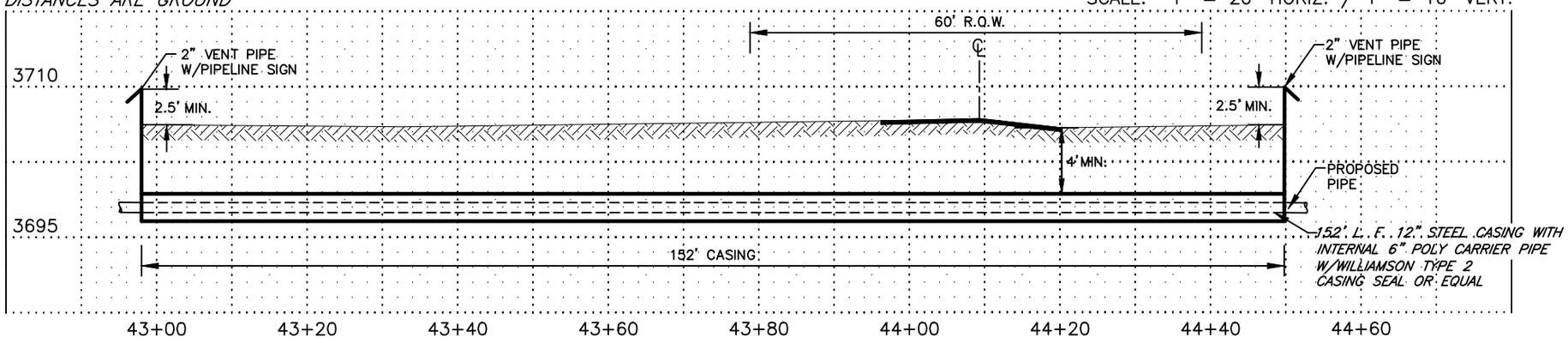
SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 8 OF 8

SPUR ENERGY PATNERS, LLC
PROPOSED PIPELINE CROSSING
CR #209 (RED LAKE RD.)
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



BEARINGS ARE NAD 83 NM EAST ZONE
DISTANCES ARE GROUND

SCALE: 1" = 20' HORIZ. / 1" = 10' VERT.

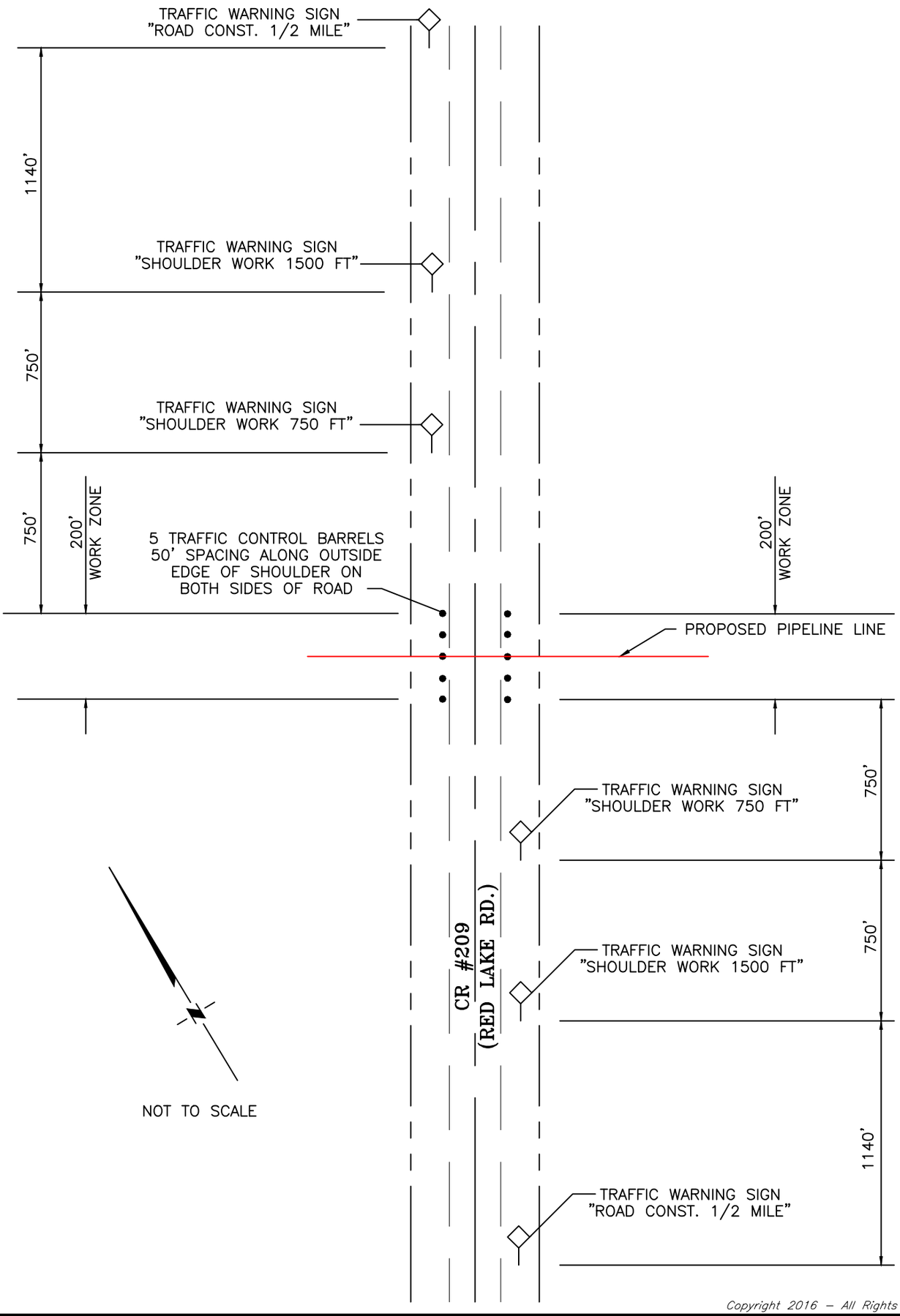


SCALE: 1" = 20'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

NO.	REVISION	DATE
JOB NO.: LS22060730		
DWG. NO.: 22060730		

SPUR ENERGY PARTNERS, LLC.
PROPOSED PIPELINE CROSSING
CR #209 (RED LAKE RD.)
SECTION 23, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



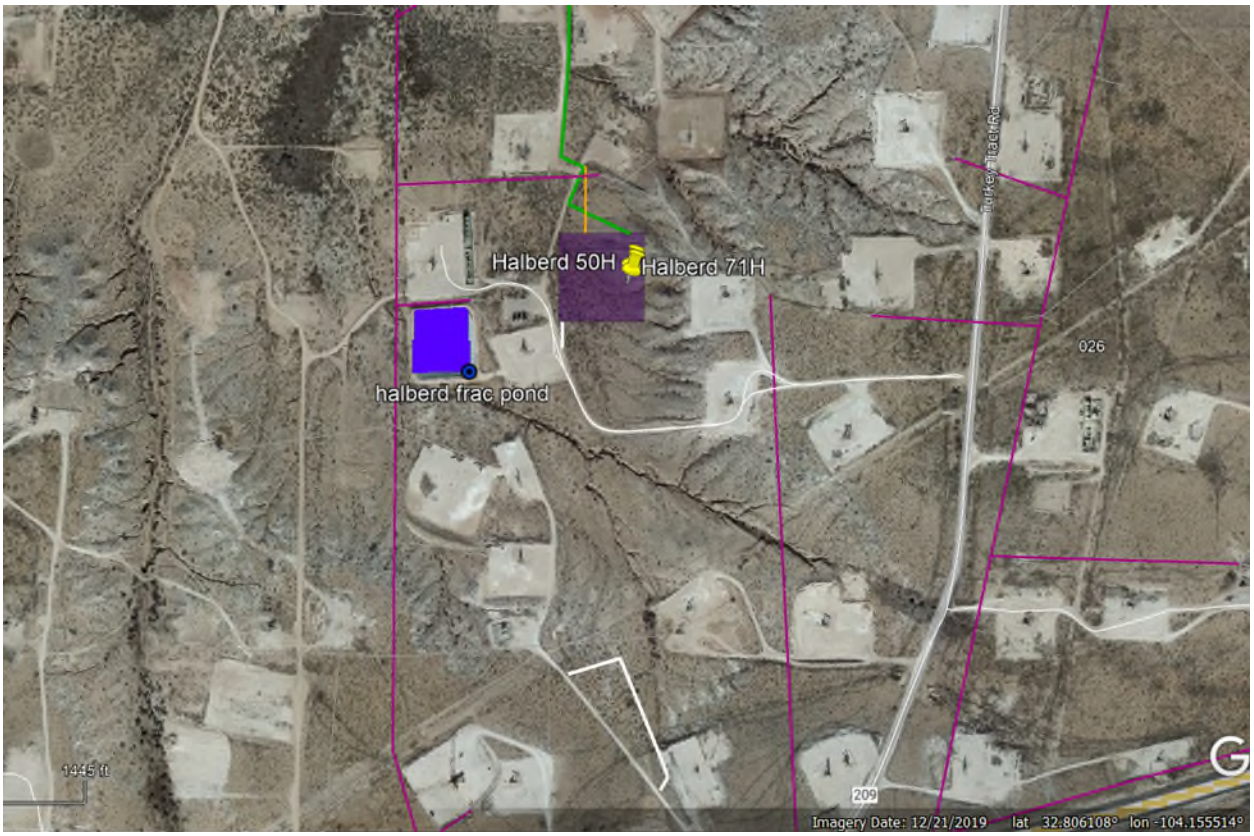
NO.	REVISION	DATE

JOB NO.: LS220060730
DWG. NO.: 220060730–X2

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: NOT TO SCALE
DATE: 06/08/2022
SURVEYED BY: JF/JM/IV
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 2 OF 2

Water will be trucked from the existing Halberd Pond owned by Spur in Unit H (SENE) Section 27, Township 17 South, Range 28 East.



Mayaro & Sierra Nevada Development

aliche Source - Construction Material
2.82147778, -104.14556944
ee Surface
W4/NE4, NW4/SE4 Section 23
ownship 17 South, Range 28 East
ddy County, NM

onoco Phillips - Horse Pasture Caliche Pit

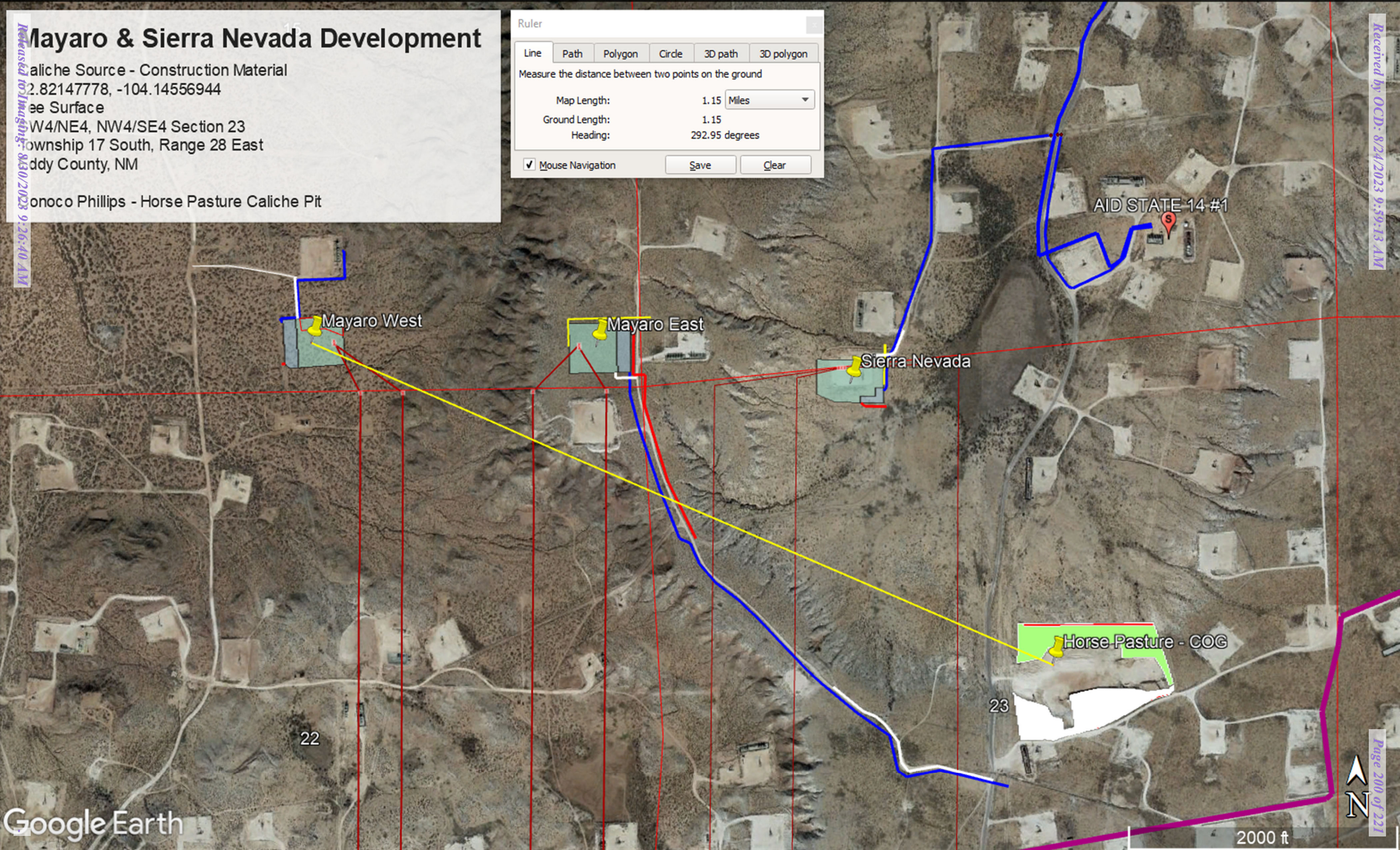
Ruler

Line | Path | Polygon | Circle | 3D path | 3D polygon

Measure the distance between two points on the ground

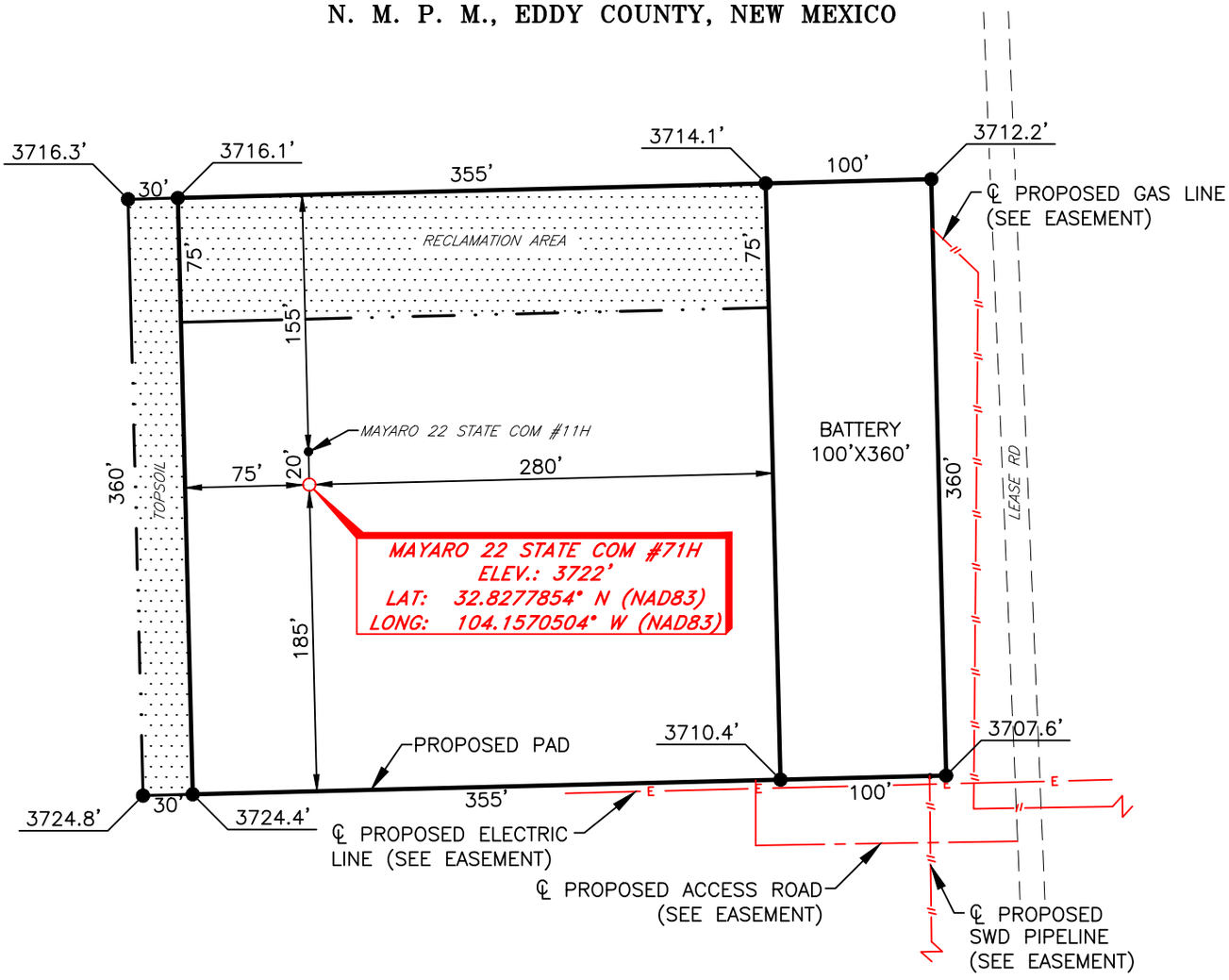
Map Length: 1.15 Miles
Ground Length: 1.15
Heading: 292.95 degrees

Mouse Navigation | Save | Clear



TRANSCEND RIG 4	Contractor Specification
Make	Schram
Model	TXD 130
Year of Manufacture	2006
Truck Mounted	YES
Rated Drilling Depth	130,000# hook load
Rated Depth with Tubing	
Derrick Height	69’ 9’’
Derrick Type	Telescoping Hydraulic
Derrick Capacity	130,000#
Elevators	N/A
Drawworks	760 HP Detroit
Wire Diameter	Hydraulic
Workfloor Max Height	8’
Tongs	Hydraulic Iron Roughneck
Slips	Manual Slips
Included Tubing Handling Tools	• 13 3/8’’ handling tools
Included Rod Handling Tools	85jts of 4.5’’ drill pipe
BOP Class Compatibility	
Weight Indicator	Hydraulic
Rig Safety Equipment	Eye wash station, fire extengushers, wind sock
Pad Size Requirements/Limitations	60’ x 60’
Guy Line Spacing	N/A
Other Supplied Rig Equipment 1- F800 pump 1- Pill pit 80bbl 1- 400 bbl mud mix 1- Shaker 150mesh 1- 500 bbl fresh water frac tank	Standard Rig Hand Tools: • (2) 36” pipe wrenches • (2) 24” pipe wrenches • (2) 18” pipe wrenches • (1) 24” crescent wrench • (2) 12” crescent wrenches • (1) 4 lb shop hammer • (1) 12 lb sledge hammer • (1) 4 foot pry bar • Vehicles for Contractor personnel • Air Impact Wrench with Sockets • Mud Scales (as needed)

SPUR ENERGY PARTNERS LLC.
MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.);

Go North on CR #209 approx. 1.3 miles to a lease road on the left;

Turn left and go Northwest approx. 0.8 miles to a proposed road on the left;

Turn left and go West approx. 158 feet road turns right;

Turn right and continue North approx. 220 feet to location on the left.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID – NM EAST DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

JOB NO.: LS22060699
DWG. NO.: 22060699–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 100'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

RIG # 57 1,150 HP Double Mast Drilling Rig

SUBSTRUCTURE
One Piece Step Down
Floor Height: 18' 9" (on 4' pony sub moving system)
Clear Height (beneath rotary beams): 15' 5"
Rotary Capacity: 400,000 lbf
Max Pipe Setback: 400,000 lbf
Note: All floor heights above are based on the substructure sitting on 6" mats & 4' pony sub moving system

MAST
106' telescoping, Drill Line: 1-1/8"
Static Hook Load: 440,000 lbf
Racking Capacity: 18,000' of 4" DP, 12,500' of 5" DP

DRAWWORKS
TSM 850 425,000lbs w/ 10 Lines
Input Power: 1,150 hp AC traction motor
Main Brake: 1,150 hp AC traction motor (Dynamic)
Aux Parking Brake: Eaton brake & drum / band brake system

TOP DRIVE
Tesco EXI 600 AC 350 Ton: Max speed 220 rpm,
Continuous Drill Torque: 30,000 ft-lbs
Max Torque (Make / Break): 45,000 ft-lbs
600 hp AC induction motor & drive system with PLC
250 Ton 5 x 36" Becket Block Assembly

IRON ROUGHNECK
NOV ST-80C Conn Range: 4 ½" to 8 ½"
Spin Speed: 75 rpm nominal on 5" drill pipe
Spin Torque: 1,750 ft-lbs
Maximum Make-up torque: 60,000 ft-lbs
Maximum Break-out torque: 80,000 ft-lbs

ROTARY TABLE
National 27 ½" 500 Ton with hydraulic drive to position tools only
27 ½" Diameter opening

POWER SYSTEM
VFD, MCC, Eaton Drives, Current Power Systems Controls, three Caterpillar C32 gen sets, 1220 BHP.

MUD PUMP #1
HHF1600 Triplex Rated Power: 1600 hp
Stroke: 12"
Input Power: 1500 hp AC traction motor
Pressure Rating: 5000 psi

MUD PUMP #2
HHF1600 Triplex Rated Power: 1600 hp
Stroke: 12"
Input Power: 1500 hp AC traction motor
Pressure Rating: 5000 psi

MUD TANKS
Two Tank system w/ 1200 bbls total capacity
Shakers: Three MI Swaco Mongoose 4 panel dual motion
Mud Gas Separator: MI Swaco 4' OD x 12' tall
Pill Tank: 54 bbls

MUD SYSTEM
5000 psi Max Pressure
5" Main plumbing and standpipe

SCALPING TANK
Main Tank: 186 bbls capacity
Trip Tank: 24 bbls capacity
Shakers: Three NOV Venom shakers dual motion

BOP (NACE)
11" x 5000 psi WP Spherical Annular
11" x 5000 psi WP Double Ram
11" x 5000 psi WP Single Ram (Optional)

MANIFOLD
3-1/8" 5,000 psi c/w two 3 1/8" manual chokes

ACCUMULATOR
CTI: 160 gal 6 station 3000 psi, c/w N2 Backup & electric triplex pump

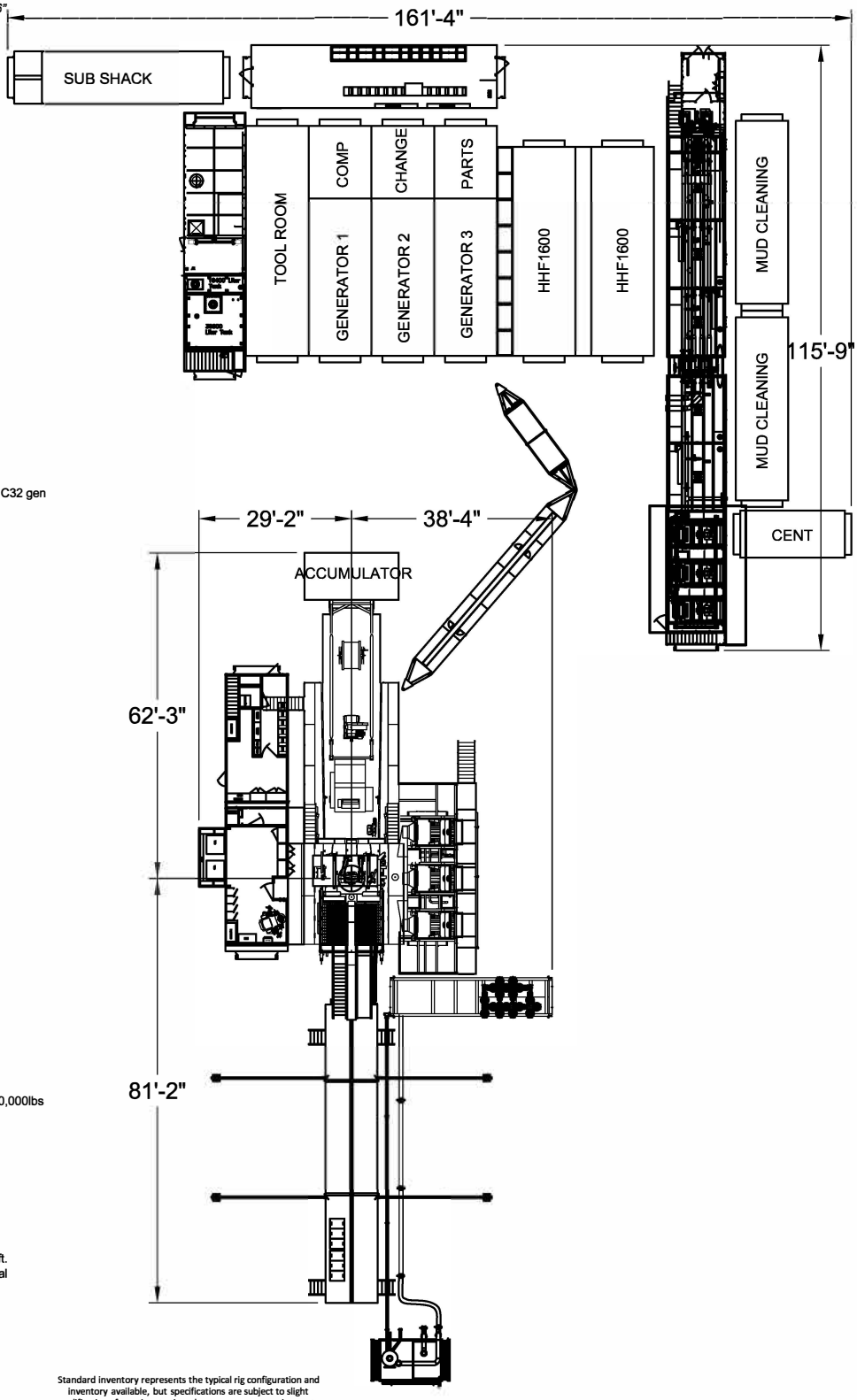
CATWALK
Ja-co Power Catwalk, tubular max length 47' 6", max OD 13 ⅝", max weight 10,000lbs

TUBULARS
Drill Pipe: Supplied as needed, per availability
Drill Collars & heaviwate: Supplied as needed, per availability

MISC.
Water Tank: 409 bbls; Fuel Tank 189 bbls; Screw Compressor
Boiler: 125 hp with Full Winterization

MOVING SYSTEM:
Walking beam hydraulic pony sub moving system for linear motion & side shift. 350' of Utility Suitcase style [50' lengths] connection for hydraulic and electrical supply.

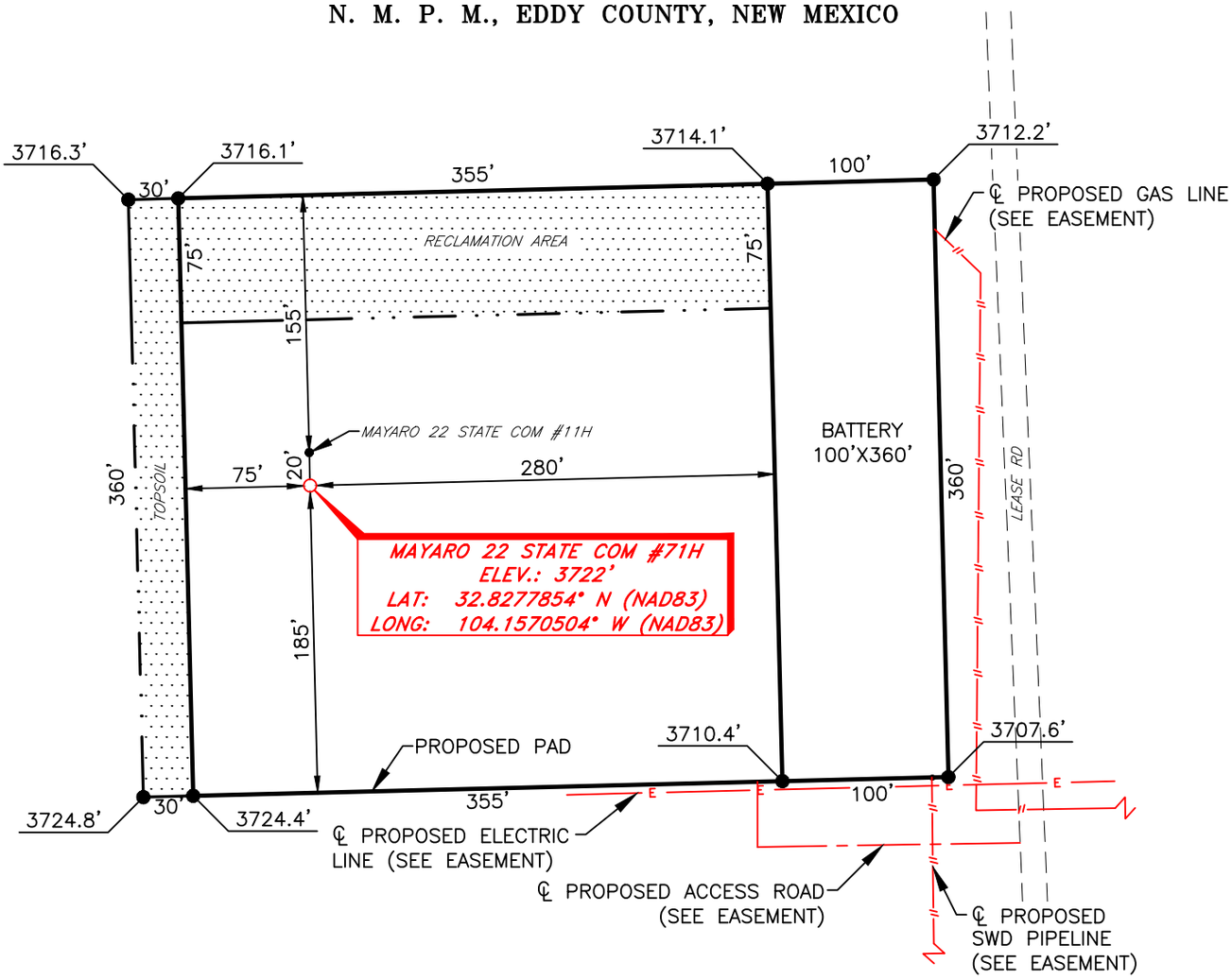
TOOL/ STORAGE/ CAMP
Parts Storage Room and Tool House Room
Rig Manage Trailer: 14' x 44' skid mounted



Standard inventory represents the typical rig configuration and inventory available, but specifications are subject to slight modifications from time to time due to customer requirements.

All ratings quoted herin are manufacturer specifications. AKITA's normal operating parameters are 90% of manufacturer mast ratings and 80% of mud pump manufacturer pressure rating. Operation of rig equipment beyond these parameters requires approval from AKITA field office management.

SPUR ENERGY PARTNERS LLC.
MAYARO 22 STATE COM #71H
(215' FSL & 570' FEL)
SECTION 15, T17S, R28E
N. M. P. M., EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.);

Go North on CR #209 approx. 1.3 miles to a lease road on the left;

Turn left and go Northwest approx. 0.8 miles to a proposed road on the left;

Turn left and go West approx. 158 feet road turns right;

Turn right and continue North approx. 220 feet to location on the left.

SCALE: 1" = 100'
0 50 100

BEARINGS ARE NAD 83 GRID – NM EAST DISTANCES ARE GROUND

I, R. M. Howett, a N. M. Professional Surveyor, hereby certify that I prepared this unclassified survey of a well location from an actual survey made on the ground under my direct supervision, said survey and plat meet the Min. Stds. for Land Surveying in the State of N. M. and are true and correct to the best of my knowledge and belief.

Robert M. Howett

Robert M. Howett NM PS 19680

ROBERT M. HOWETT NEW MEXICO 19680 06/21/22 PROFESSIONAL SURVEYOR

NO.	REVISION	DATE

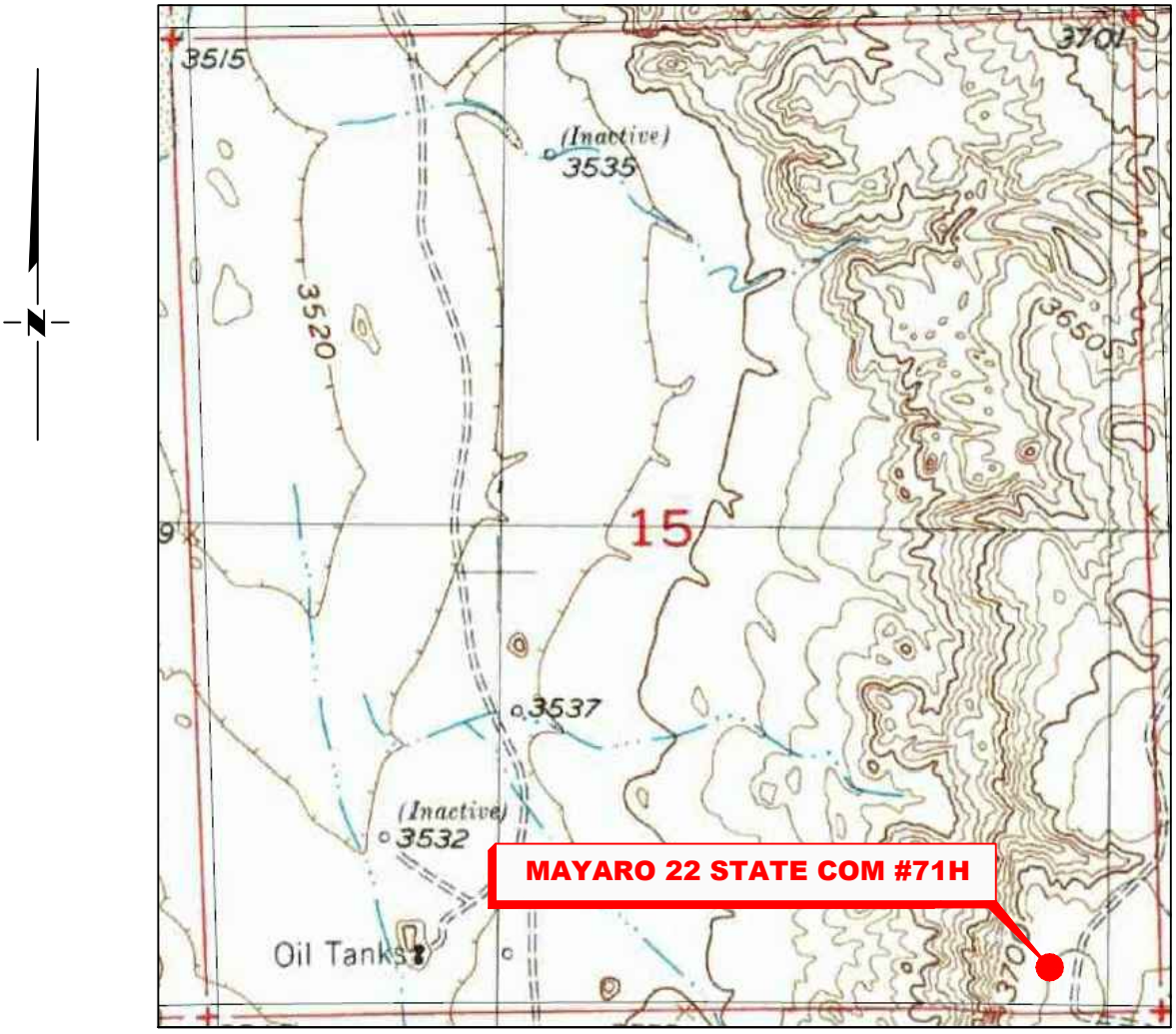
JOB NO.: LS22060699
DWG. NO.: 22060699–4

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964–8200

SCALE: 1" = 100'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

LOCATION VERIFICATION MAP

NOT TO SCALE



SECTION 15, TWP. 17 SOUTH, RGE. 28 EAST,
N. M. P. M., EDDY COUNTY, NEW MEXICO

OPERATOR: Spur Energy Partners LLC.
LEASE: Mayaro 22 State Com
WELL NO.: 71H
ELEVATION: 3722'

LOCATION: 215' FSL & 570' FEL
CONTOUR INTERVAL: 10'
USGS TOPO. SOURCE MAP:
Red Lake, NM (1955)

NO.	REVISION	DATE

JOB NO.: LS22060699
DWG. NO.: 22060699-2

RRC ENERGY SERVICES LLC.
701 S. CECIL ST., HOBBS, NM 88240 (575) 964-8200

SCALE: 1" = 1000'
DATE: 06/08/2022
SURVEYED BY: JF/JM/IW
DRAWN BY: RQ
APPROVED BY: RMH
SHEET: 1 OF 1

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: SPUR ENERGY PARTNERS LLC **OGRID:** 328947 **Date:** 08 / 18 / 2022

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
MAYARO 22 STATE COM 11H	30-015-	P-15-17S-28E	235' FSL 570' FEL	293 BBL/D	320 MCF/D	2048 BBL/D
MAYARO 22 STATE COM 71H	30-015-	P-15-17S-28E	215' FSL 570' FEL	282 BBL/D	453 MCF/D	1689 BBL/D

IV. Central Delivery Point Name: MAYARO 22 EAST STATE COM TANK BATTERY [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
MAYARO 22 STATE COM 11H	30-015-	04/17/2023	04/24/2023	05/01/2023	05/11/2023	05/11/2023
MAYARO 22 STATE COM 71H	30-015-	04/24/2023	04/30/2023	05/01/2023	05/11/2023	05/11/2023

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:	Sarah Chapman
Printed Name:	SARAH CHAPMAN
Title:	REGULATORY DIRECTOR
E-mail Address:	SCHAPMAN@SPURENERGY.COM
Date:	AUGUST 18, 2022
Phone:	832-930-8613

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

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

Natural Gas Management Plan – Attachment

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

VII. Spur Energy Partners LLC ("Spur") will take the following actions to comply with the regulations listed in 19.15.27.8:

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

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

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

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

E. Spur will comply with performance standards pursuant to 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressures to minimize waste. Storage tanks constructed after May 25, 2021 will be equipped with an automatic gauging system that reduces venting of natural gas. Flare stacks installed or replaced after May 25, 2021 will be equipped with an automatic ignitor or continuous pilot. Spur will conduct AVO inspections as described in 19.15.27.8(E)(5)(a) with frequencies specified in 19.15.27.8(E)(5)(b) and (c). All emergencies or malfunctions will be resolved as quickly and safely as possible to minimize waste.

F. The volume of natural gas that is vented or flared as the result of an emergency or malfunction during drilling and/or completion operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared or beneficially used during production operations, will be measured and reported accordingly. Spur will install equipment to measure the volume of natural gas flared from existing piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or VRUs associated with a well or facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production of less than 60,000 cubic feet of natural gas. If metering is not practicable due to circumstances such as low flow rate or low pressure venting or flaring, Spur will estimate the volume of flared or vented natural gas. Measuring equipment will conform to industry standards and will not be equipped with a manifold

that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing equipment.

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

Surface Use Plan of Operations

Operator Name/Number: Spur Energy Partners LLC – 328947

Lease Name/Well Number: Mayaro 22 State Com 71H

Pool Name/Number: Empire; Glorieta-Yeso (96210)

Surface Location: 215' FSL 570' FEL SWSW (P) Sec 15 T17S R28E – NMNM0080268

Bottom Location: 50' FSL 375' FEL SWSW (P) Sec 22 T17S R28E – STATE

1. **Existing Roads**
    a. A copy of the Vicinity Map is attached showing the proposed location. The well location is spotted on the map, which shows the existing road system.
    b. This well was staked by Robert Howett, Certificate No. 19680 on June 8, 2022, certified on August 16, 2022.
    c. Directions to location: From the intersection of U.S. Hwy. 82 and CR #209 (Turkey Tract Rd.); go north on CR #209 approx. 1.3 miles to a lease road on the left; turn left and go northwest approx. 0.8 miles to a proposed road on the left; turn left and do west approx. 158 feet, road turns right; turn right and continue north approx. 220 feet to location on the left.
2. **New or Reconstructed Access Roads**
    a. A new access road will be built as follows: A strip of land 30 feet wide, being 162.96 feet in length, lying in Section 22, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the centerline survey. A strip of land 30 feet wide, being 34.57 feet in length, lying in Section 15, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the centerline survey
    b. The maximum width of the road will be 14'. It will be crowned and made up of 6" compacted caliche. Water will be deflected as necessary, to avoid accumulation and prevent surface erosion.
    c. Surface material will be native caliche obtained from a BLM approved pit nearest proximity to the location. The maximum grade will be 2%.
    d. No cattle guards will be required.
    e. Blade, water, and repair existing caliche roads when necessary.
3. **Location of Existing Wells**
    a. Existing wells within one-mile radius of proposed well are shown on attached plat.
4. **Location of Proposed Facilities**
    a. In the event the well is found to be productive, Mayaro 22 East State Com Tank Battery would be utilized and the necessary production equipment will be installed at the well site. See proposed facilities layout diagram.
    b. Each well will have two (2) 4" surface flowlines operating around 80 psi from the well sites to the tank battery. The flowlines for Mayaro 22 East State Com wells will be routed to the Mayaro 22 East State Com tank battery (on lease). The wells will produce into this battery at any given time.
    c. Gas line will follow a route approved by the BLM. Survey a strip of land 30 feet wide, being 468.85 feet in length, lying in Section 15, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 542.50 feet in length, lying in Section 22, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15

feet right of the centerline survey. Survey a strip of land 30 feet wide, being 706.02 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey.

d. Electric line will follow a route approved by the BLM. Survey a strip of land 30 feet wide, being 366.83 feet in length, lying in Section 15, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, being 15 feet left and 15 feet right of the centerline survey.
e. SWD line will follow a route approved by the BLM. Survey a strip of land 30 feet wide, being 36.37 feet in length, lying in Section 15, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 826.56 feet in length, lying in Section 22, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 2021.53 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 1593.58 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey. Survey a strip of land 30 feet wide, being 57.70 feet in length, lying in Section 23, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico being 15 feet left and 15 feet right of the centerline survey.
f. See attached for additional information on the Mayaro 22 East State Com Tank Battery.

5. Location and types of Water Supply

a. This well will be drilled using a combination of water mud systems. It will be obtained from commercial water stations in the area and will be hauled to location by truck using existing and proposed roads.

6. Construction Materials

a. All caliche for the drilling pad and proposed access road will be obtained from an existing BLM/State/Fee approved pit from prevailing deposits found on location. Will use BLM recommended caliche from other locations close by for roads, if available.
b. The secondary way obtaining caliche to build locations and roads will be by “turning over” the location. Amount will vary for each pad. The procedure below has been approved by BLM personnel:
    i. The top 6” of topsoil is pushed off and stockpiled along the side of location
    ii. An approximate 360’ X 30’ area on the western side of the well pad will be used within the proposed well site to remove caliche
    iii. Subsoil will be removed and piled alongside the 360’ X 30’ within the pad site
    iv. When caliche is found, material will be stockpiled within the pad site to build location and road
    v. Once the well is drilled, the stockpiled topsoil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither the caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the eastern edge of the pad as depicted in our Site Plan

7. Methods of Handling Waste Material

a. A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of drilling fluids and cuttings will be disposed of at an approved facility. Solids and Liquids – R360.

b. All trash, junk and other waste material will be contained in trash cans or bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill.
c. The supplier, including broken sacks, will pick up remaining slats after the completion of the well.
d. A port-a-potty will be provided for the rig crews. The equipment will be properly maintained during the drilling and completion operations and removed when the operations are complete.
e. Disposal of fluids will be transported by the following companies:
    i. Mulholland
    ii. R360
    iii. AR Services

8. Ancillary Facilities: None needed

9. Well-Site Layout

V-Door: South CL Tanks: North Pad: 360' X 455' – 2 well pad

10. Plans for Surface Reclamation

a. After concluding drilling and/or completion operations, if the well is non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM COAs. The original topsoil will again be returned to the pad and contoured, as close as possible to the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation.
b. If the well is deemed commercially productive, caliche from the areas of the pad site will not be required for operations will be reclaimed. The original topsoil will be returned to the area of the drill pad not necessary to operate the well. The unused areas of the drill pad will be re-contoured as close as possible to the original topography, and the area will be seeded with an approved BLM mixture to re-establish vegetation.

11. Surface Ownership

a. The surface is owned by the U.S. Government and is administered to the BLM. The primary uses of the surface are for grazing of livestock and the production of oil and gas. The surface is leased to Key Livestock, LLC, 1012 E. 2nd Street, Roswell, NM 88201. They will be notified of our intention to drill prior to any activity.

12. Other Information

a. The vegetation cover is generally sparse consisting of mesquite, yucca, shinery oak, sandsage and perennial native range grass. The topsoil is sandy in nature. Wildlife in the area is also sparse consisting of deer, coyotes, rabbits, reptiles, dove and quail.
b. There is no permanent or live water in the general proximity of the location.
c. There are no dwellings within one mile of the proposed well site.
d. Cultural Resources Examination – This well will be covered by Rein Archaeology. Payment to be determined by the BLM. This well shares a well pad with the Mayaro 22 State Com 11H well.

13. Bond Information

a. Bond coverage is individual – NMB001783

14. Operator Representatives

Jerry Mathews
Superintendent of Operations
2407 Pecos Avenue
Artesia, NM 88210
Cellular: 575-748-5234

John Nabors
Senior VP of Operations
9655 Katy Freeway, Suite 500
Houston, TX 77024
Cellular: 281-904-8811
Office: 832-930-8526

Nash Bell
VP Land
9655 Katy Freeway, Suite 500
Houston, TX 77024
Cellular: 512-461-1874
Office: 832-930-8582

AFMSS

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

PWD Data Report

08/24/2023

APD ID: 10400087469 **Submission Date:** 08/18/2022

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

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

Section 1 - General

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

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

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

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: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

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:**

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):

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

State

Unlined Produced Water Pit Estimated

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

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

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):**

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):**

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:

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

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

Other PWD discharge volume (bbl/day):

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM **Well Number:** 71H

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

08/24/2023

APD ID: 10400087469

Submission Date: 08/18/2022

Operator Name: SPUR ENERGY PARTNERS LLC

Well Name: MAYARO 22 STATE COM

Well Number: 71H

Well Type: OIL WELL

Well Work Type: Drill

Highlighted data reflects the most recent changes

Show Final Text

Bond

Federal/Indian APD: FED

BLM Bond number: NMB001783

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

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 257168

CONDITIONS

Operator:	OGRID:
Spur Energy Partners LLC 9655 Katy Freeway Houston, TX 77024	328947
	Action Number: 257168
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	8/30/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	8/30/2023
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	8/30/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	8/30/2023
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	8/30/2023