

Form 3160-3
(October 2024)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-015-58012
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.



(Continued on page 2)

*(Instructions on page 2)

INSTRUCTIONS

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

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

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

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

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

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

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

NOTICES

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

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

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

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

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

The Paperwork Reduction Act of 1995 requires us to inform you that:

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

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

Additional Operator Remarks

Location of Well

0. SHL: TR M / 595 FSL / 825 FWL / TWSP: 18S / RANGE: 27E / SECTION: 5 / LAT: 32.771183 / LONG: -104.306465 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 340 FSL / 1346 FWL / TWSP: 18S / RANGE: 27E / SECTION: 6 / LAT: 32.770678 / LONG: -104.322101 (TVD: 2600 feet, MD: 6950 feet)

PPP: SESE / 340 FSL / 100 FEL / TWSP: 18S / RANGE: 27E / SECTION: 6 / LAT: 32.77049 / LONG: -104.309466 (TVD: 2600 feet, MD: 3075 feet)

PPP: SWSE / 340 FSL / 1328 FEL / TWSP: 18S / RANGE: 27E / SECTION: 6 / LAT: 32.770549 / LONG: -104.313461 (TVD: 2600 feet, MD: 4300 feet)

PPP: SWSE / 340 FSL / 2655 FEL / TWSP: 18S / RANGE: 27E / SECTION: 6 / LAT: 32.770614 / LONG: -104.317782 (TVD: 2600 feet, MD: 5650 feet)

BHL: LOT 7 / 340 FSL / 1 FWL / TWSP: 18S / RANGE: 27E / SECTION: 6 / LAT: 32.770743 / LONG: -104.326476 (TVD: 2600 feet, MD: 8304 feet)

BLM Point of Contact

Name: JANET D ESTES

Title: ADJUDICATOR

Phone: (575) 234-6233

Email: JESTES@BLM.GOV

CONFIDENTIAL

**PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	RILEY PERMIAN OPERATING COMPANY LLC
LEASE NO.:	NMNM7711
COUNTY:	Eddy County, New Mexico

Wells:

MALCO B 6 FED COM 8H

TABLE OF CONTENTS

- 1. GENERAL PROVISIONS 4
 - 1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES 4
 - 1.2. RANGELAND RESOURCES 4
 - 1.2.1. Cattleguards 4
 - 1.2.2. Fence Requirement 5
 - 1.2.3. Livestock Watering Requirement 5
 - 1.3. NOXIOUS WEEDS..... 5
 - 1.3.1 African Rue (*Peganum harmala*) 5
 - 1.4. LIGHT POLLUTION 5
 - 1.4.1. Downfacing..... 5
 - 1.4.2. Shielding..... 5
 - 1.4.3. Lighting Color..... 6
- 2. SPECIAL REQUIREMENTS 6
 - 2.1. CAVE/KARST..... 6
 - 2.1.1. General Construction 6
 - 2.1.2. Pad Construction 6
 - 2.1.3. Plugging and Abandonment Mitigation..... 6
 - 2.3 SPECIAL STATUS PLANT SPECIES..... 7
 - 2.4 VISUAL RESOURCE MANAGEMENT..... 7
 - 2.5.1 VRM IV 7
- 3. CONSTRUCTION REQUIREMENTS 7
 - 3.1 CONSTRCUTION NOTIFICATION 7
 - 3.2 TOPSOIL..... 7
 - 3.3 CLOSED LOOP SYSTEM 7
 - 3.4 FEDERAL MINERAL PIT..... 7
 - 3.5 WELL PAD & SURFACING 7
 - 3.6 EXCLOSURE FENCING (CELLARS & PITS)..... 7
 - 3.7 ON LEASE ACESS ROAD 8
 - 3.7.1 Road Width 8
 - 3.7.2 Surfacing 8
 - 3.7.3 Crowning..... 8
 - 3.7.4 Ditching 8
 - 3.7.5 Turnouts 8
 - 3.7.6 Drainage..... 8

3.7.7 Public Access..... 9

5. PRODUCTION (POST DRILLING)..... 11

5.1 WELL STRUCTURES & FACILITIES..... 11

5.1.1 Placement of Production Facilities 11

5.1.2 Exclosure Netting (Open-top Tanks) 11

5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening 11

5.1.4. Open-Vent Exhaust Stack Exclosures 11

5.1.5. Containment Structures 11

6. RECLAMATION 11

6.1 ROAD AND SITE RECLAMATION 12

6.2 EROSION CONTROL 12

6.3 INTERIM RECLAMATION 12

6.4 FINAL ABANDONMENT & RECLAMATION..... 12

6.5 SEEDING TECHNIQUES..... 13

6.6 SOIL SPECIFIC SEED MIXTURE 13

1. GENERAL PROVISIONS

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

1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

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

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

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

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

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

1.2. RANGELAND RESOURCES

1.2.1. Cattleguards

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

1.2.2. Fence Requirement

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

1.2.3. Livestock Watering Requirement

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

1.3. NOXIOUS WEEDS

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

1.3.1 African Rue (*Peganum harmala*)

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

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

1.4. LIGHT POLLUTION

1.4.1. Downfacing

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

1.4.2. Shielding

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

1.4.3. Lighting Color

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

2. SPECIAL REQUIREMENTS

2.1. CAVE/KARST

2.1.1. General Construction

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

2.1.2. Pad Construction

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

2.1.3. Plugging and Abandonment Mitigation

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

2.3 SPECIAL STATUS PLANT SPECIES

2.4 VISUAL RESOURCE MANAGEMENT

2.5.1 VRM IV

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

3. CONSTRUCTION REQUIREMENTS

3.1 CONSTRUCTION NOTIFICATION

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

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

3.2 TOPSOIL

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

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

3.3 CLOSED LOOP SYSTEM

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

3.4 FEDERAL MINERAL PIT

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

3.5 WELL PAD & SURFACING

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

3.6 EXCLOSURE FENCING (CELLARS & PITS)

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

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

3.7 ON LEASE ACCESS ROAD

3.7.1 Road Width

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

3.7.2 Surfacing

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

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

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

3.7.3 Crowning

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

3.7.4 Ditching

Ditching shall be required on both sides of the road.

3.7.5 Turnouts

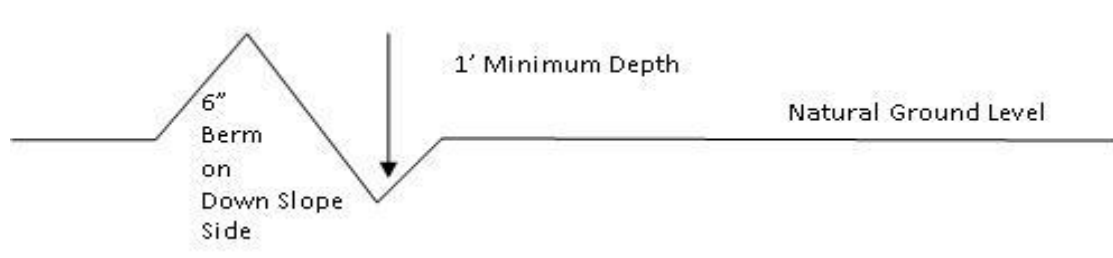
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

3.7.6 Drainage

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

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

Cross Section of a Typical Lead-off Ditch



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

Formula for Spacing Interval of Lead-off Ditches

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

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

3.7.7 Public Access

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

Construction Steps

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes

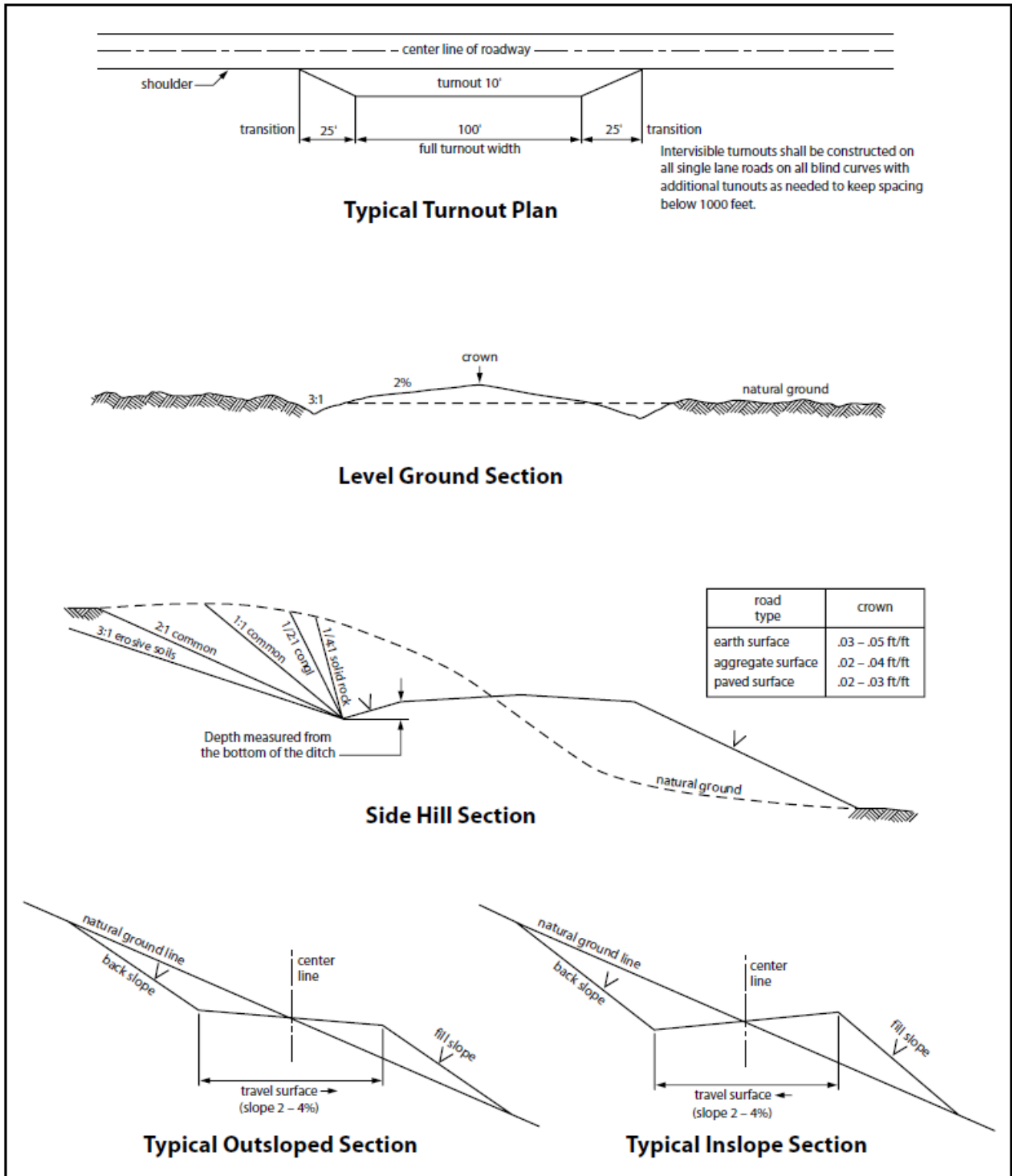


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

5. PRODUCTION (POST DRILLING)

5.1 WELL STRUCTURES & FACILITIES

5.1.1 Placement of Production Facilities

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

5.1.2 Exclosure Netting (Open-top Tanks)

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

5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening

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

5.1.4. Open-Vent Exhaust Stack Exclosures

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

5.1.5. Containment Structures

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

6. RECLAMATION

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

6.1 ROAD AND SITE RECLAMATION

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

6.2 EROSION CONTROL

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

6.3 INTERIM RECLAMATION

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

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

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

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

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

6.4 FINAL ABANDONMENT & RECLAMATION

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

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

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

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

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

6.5 SEEDING TECHNIQUES

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

6.6 SOIL SPECIFIC SEED MIXTURE

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

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

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

Seed Mixture 2, for Sandy Site

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

<u>Species</u>	<u>lb/acre</u>
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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	RILEY PERMIAN OPERATING COMPANY LLC
WELL NAME & NO.:	MALCO B 6 FED COM 8H
LOCATION:	Section 5, T.18 S., R.27 E., NMP
COUNTY:	Eddy County, New Mexico

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Wellhead Variance	<input type="radio"/> Diverter		
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Cementing	<input type="checkbox"/> Contingency Cement Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> Primary Cement Squeeze
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry		
Special Requirements Variance	<input type="checkbox"/> Break Testing	<input type="checkbox"/> Offline Cementing	<input type="checkbox"/> Casing Clearance

A. HYDROGEN SULFIDE

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

B. CASING

Primary Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **375 feet** (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall

be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The **9-5/8** inch intermediate casing shall be set at approximately **1621 feet per BLM Geologist**. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
- ❖ In 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.
3. The minimum required fill of cement behind the **7 X 5.5 inch** production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR part 3170 must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

BLM_NM_CFO_DrillingNotifications@BLM.GOV

(575) 361-2822

Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under

pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails

test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and

audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

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

JS 1/13/2026



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

Drilling Plan Data Report

01/26/2026

APD ID: 10400102082

Submission Date: 02/14/2025

Highlighted data reflects the most recent changes

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: MALCO B 6 FED COM

Well Number: 8H

Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
17285793	QUATERNARY	3457	0	0	ALLUVIUM	NONE	N
17285788	QUEEN	2792	665	665	SILTSTONE	NATURAL GAS, OIL	N
17285789	GRAYBURG	2376	1081	1086	DOLOMITE, SILTSTONE	NATURAL GAS, OIL	N
17285790	SAN ANDRES	2123	1334	1340	DOLOMITE	NATURAL GAS, OIL	Y
17285791	GLORIETA	856	2601	3074	SILTSTONE	NATURAL GAS, OIL	Y
17285787	YESO	736	2721	4343	DOLOMITE	NATURAL GAS, OIL	Y
17285792		0					

Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M

Rating Depth: 4200

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

Requesting Variance? YES

Variance request: A variance is requested to use a Multi Bowl Wellhead System and Flex Hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test will be kept on the rig.

Testing Procedure: All BOPs and accessory equipment will be tested to 2000 psi before drilling out of intermediate casing. 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 (Exhibit 10) will include a Kelly cock and floor safety valve and choke lines and choke manifold with a minimum 2000 psi WP rating.

Choke Diagram Attachment:

H3_051622_1_Choke_Hose_5Yr_Cert__May_16_22__202206281108_20250210112822.pdf

BOP_Choke_Diagram_20250210112731.pdf

BOP Diagram Attachment:

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: MALCO B 6 FED COM

Well Number: 8H

H3_051622_1_Choke_Hose_5Yr_Cert__May_16_22__202206281108_20250210112822.pdf

BOP_Choke_Diagram_20250210112731.pdf

BOP_Choke_Diagram_20250210112745.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	375	0	375	3457	3082	375	J-55	48	ST&C	4.125	13.211	DRY	3.75	DRY	3.75
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	1230	0	1225	3457	2232	1230	J-55	36	LT&C	3.096	5.396	DRY	3.297	DRY	3.297
3	PRODUCTION	8.75	7.0	NEW	API	Y	0	2869	0	2621	3457	836	2869	HCL-80	32	BUTT	8.294	6.747	DRY	2.736	DRY	2.736
4	PRODUCTION	8.75	5.5	NEW	API	Y	0	8304	0	2600	3457	857	8304	HCL-80	20	BUTT	8.546	7.228	DRY	1.711	DRY	1.711

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Malco_B_6_Fed_Com_8H__Casing_Assumptions__RevA__29Oct24_20250210112919.pdf

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: MALCO B 6 FED COM

Well Number: 8H

Casing Attachments

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Malco_B_6_Fed_Com_8H__Casing_Assumptions__RevA__29Oct24_20250210112952.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

7.0_32.00_HCL_80_BTC_20250210113633.pdf

Casing Design Assumptions and Worksheet(s):

Malco_B_6_Fed_Com_8H__Casing_Assumptions__RevA__29Oct24_20250210113228.pdf

Casing ID: 4 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

5_inchStringSpec.pdf_20250210113658.pdf

Casing Design Assumptions and Worksheet(s):

Malco_B_6_Fed_Com_8H__Casing_Assumptions__RevA__29Oct24_20250210113741.pdf

Section 4 - Cement

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: MALCO B 6 FED COM

Well Number: 8H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	375	392	1.33	14.8	521	100	Class C HSR	Accelerator: A-2; Foam Preventer: FP-28L; Anti Static Additive: Static Free

INTERMEDIATE	Lead		0	861	221	1.65	12.8	364.0 5	35	Class C HSR	Extender: Fly Ash (OTX 1); Accelerator: A-2; Accelerator: A-5; Extender – Viscosifier: Bentonite; Foam Preventer: FP-28L; Retarder: R-7C
INTERMEDIATE	Tail		861		117	1.33	14.8	156.0 3	35	Class C HSR	Accelerator: A-2; Fluid Loss: FL-66; Foam Preventer: FP-28L
PRODUCTION	Lead		0	2275	192	2.49	11.5	478.8 1	40	Class C HSR	Cement – Extender: Fly Ash (OTX 1); Accelerator: A-30; Thixotropic: ATHX-1102; Extender – Viscosifier: Bentonite; Fluid Loss: FL-66; Foam Preventer: FP-28L; Retarder: R-7C; Anti-Static: Static Free
PRODUCTION	Tail		2275	8304	1587	1.29	13.7	2047	40	Class C HSR	Cement – Extender: Fly Ash (OTX 1); Cement – Extender: AEXT-1012; Viscosifier: ASA-301; Bond Enhancer: BA-90; Bond Enhancer: EC-1; Dispersant: CD-32A; Fluid Loss: FL-66; Foam Preventer: FP-28L; Retarder: R-7C

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: MALCO B 6 FED COM

Well Number: 8H

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

Describe what will be on location to control well or mitigate other conditions: A. Kelly cock will be kept in the drill string at all times. B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

Describe the mud monitoring system utilized: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	375	WATER-BASED MUD	62.8	68.8							
1230	8304	OTHER : Cut Brine	65.8	68.8							
375	1230	SALT SATURATED	74.8	76.3							

Section 6 - Test, Logging, Coring

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

- A. The logging program will consist of GR log from intermediate shoe to TD
- B. Drill Stem test is not anticipated.
- C. No conventional coring is anticipated.
- D. Further testing procedures will be determined at TD.
- E. Mud logs will be taken from surface casing point to TD.

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

GAMMA RAY LOG, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No conventional coring is anticipated.

Operator Name: RILEY PERMIAN OPERATING COMPANY LLC

Well Name: MALCO B 6 FED COM

Well Number: 8H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 1253

Anticipated Surface Pressure: 680

Anticipated Bottom Hole Temperature(F): 120

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

Malco_B_6_Fed_Com_8H_H2S_Plan_20250210114556.pdf

Malco_B_6_Fed_Com_8H_H2S_Plan_20250915101307.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Malco_B_6_Fed_Com_8H__Well_Plan_v1_20250210114636.pdf

Malco_B_6_Fed_Com_8H__Well_Plan_v1_20250915101233.pdf

Registration__9960__20250915104029.pdf

5_inchStringSpec.pdf_20250915103646.pdf

7.0_32.00_HCL_80_BTC_20250915103655.pdf

BOP_Choke_Diagram_20250915103707.pdf

H3_051622_1_Choke_Hose_5Yr_Cert__May_16_22__202206281108_20250915103722.pdf

Malco_B_6_Fed_Com_8H__Casing_Assumptions__RevA__29Oct24_20250915103736.pdf

NGMPForm_Malco_09242025_Signed_20250925084501.pdf

Malco8H_GasPlot_20251118121910.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Malco_B_6_Fed_Com_8H__Drilling_Program__Ascent__RevA_20250210114657.pdf

BLM_WasteMinimizationPlan_12112024_20250210114814.pdf

Malco_B_6_Fed_Com_8H__Drilling_Program__Ascent__RevA_20250915101250.pdf

BLM_WasteMinimizationPlan_12112024_20251118120725.pdf

Other Variance request(s)?: N

Other Variance attachment:

DRILLING PROGRAM



Riley Exploration-Permian, LLC

Malco Dos South Pad

Malco B 6 Fed Com 8H

Lot M Section 5, Township 18 South, Range 27 East, 6th P.M.

Eddy County, New Mexico

Lease Number: NMNM 007711, NMLC 0055383A

Parcel 4-158-103-263-260

Owner: Bureau of Land Management

Land code: Exempt Agricultural Land

1. Geologic Name of Surface Formation

Quaternary

Estimated Tops of Important Geologic Markers:

Formation	Elevation	TVD	TMD	Lithology	Mineral Resources	Producing Formation?
Quaternary	3457	0	0	Alluvium	None	No
Queen	2792	665	665	Siltstone	Oil/Gas	No
Grayburg	2376	1081	1086	Dolomite/Siltstone	Oil/Gas	No
San Andreas	2123	1334	1340	Dolomite	Oil/Gas	Yes
Glorieta	856	2601	3074	Siltstone	Oil/Gas	Yes
Yeso/Paddock	736	2721	4343	Dolomite	Oil/Gas	Yes

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Setting 13 3/8" casing to 375' and circulating cement back to surface will protect the surface fresh water sand. Salt section and shallower zones above TD, which contain commercial quantities of oil and/or gas, will have cement circulated across them by cementing 5 1/2" production casing, sufficient cement will be pumped to circulate back to surface.

2. Blowout Prevention

Pressure Rating (PSI): 2M Rating Depth: 4200

Equipment

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

Variance Requested? Yes.

A variance is requested to use a Multi Bowl Wellhead System and Flex Hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test will be kept on the rig.

Testing

All BOP's and accessory equipment will be tested to 2000 psi before drilling out of intermediate casing. 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 (Exhibit 10) will include a Kelly cock and floor safety valve and choke lines and choke manifold with a minimum 2000 psi WP rating.

3. Casing Program:

Casing	Hole Size	Depth		Casing						Safety Factors					
		MD	TVD	OD	Wt.	Grade	Connection	Cond.	Tapered	Collapse	Type	Burst	Type	Tension	Type
Surface	17 1/2	375'	375'	13.375	48#	J55	STC	New	No	4.1249	Dry	13.2107	Dry	3.7498	BW + 100k
Intermediate	12 1/4	1,230'	1,225'	9.625	36#	J55	LTC	New	No	3.0963	Dry	5.3955	Dry	3.2973	BW + 100k
Production	8 3/4	2,869'	2,621'	7.000	32#	HCL-80	BTC	New	Yes	8.2942	Dry	6.7470	Dry	2.7355	BW + 100k
Production	8 3/4	8,304'	2,600'	5.500	20#	HCL-80	BTC	New		8.5461	Dry	7.2276	Dry	1.7111	BW + 100k

4. Cement Program:

Surface Cement		
Tail		
Cement	Class C HSR	100%
Accelerator	A-2	0.250% BWOB
Foam Preventer	FP-28L	0.003 gal/sk
Anti Static Additive	Static Free	0.005 lb/sk
Weight (ppg)		14.8
Yield (ft3/sk)		1.33
Sacks		392
Cement Volume (ft3)		520.99
Water Required (gal/sk)		6.30
Excess		100%
Slurry Top (ft)		Surface

Intermediate Cement					
Lead			Tail		
Cement	Class C HSR	65%	Cement	Class C HSR	100%
Cement - Extender	Fly Ash (OTX 1)	35%	Accelerator	A-2	0.250% BWOB
Accelerator	A-2	1.000 %BWOB	Fluid Loss	FL-66	0.200% BWOB
Accelerator	A-5	3.000 % BWOW	Foam Preventer	FP-28L	0.005 gal/sk
Extender - Viscosifier	Bentonite	3.000% BWOB			
Foam Preventer	FP-28L	0.005 gal/sk			
Retarder	R-7C	0.100% BWOB			
Weight (ppg)		12.8	Weight (ppg)		14.8
Yield (ft3/sk)		1.65	Yield (ft3/sk)		1.33
Sacks		221	Sacks		117
Cement Volume (ft3)		364.05	Cement Volume (ft3)		156.03
Water Required (gal/sk)		8.40	Water Required (gal/sk)		6.30
Excess		35%	Excess		35%
Slurry Top (ft)		Surface	Slurry Top (ft)		861

Production Cement					
Lead			Tail		
Cement	Class C HSR	65%	Cement	Class C HSR	60%
Cement - Extender	Fly Ash (OTX 1)	35%	Cement - Extender	Fly Ash (OTX-1)	35%
Accelerator	A-30	2.000% BWOB	Cement - Extender	AEXT-1012	5%
Thixotropic	ATHX-1102	0.900% BWOB	Viscosifier	ASA-301	0.100 % BWOB
Extender - Viscosifier	Bentonite	3.000% BWOB	Bond Enhancer	BA-90	0.500% BWOB
Fluid Loss	FL-66	0.200% BWOB	Bond Enhancer	EC-1	1.000% BWOB
Foam Preventer	FP-28L	0.005 gal/sk	Dispersant	CD-32A	0.100% BWOB
Retarder	R-7C	0.150% BWOB	Fluid Loss	FL-66	0.600% BWOB
Anti-Static	Static Free	0.005% BWOB	Foam Preventer	FP-28L	0.005 gal/sk
			Retarder	R-7C	0.400% BWOB
Weight (ppg)		11.5	Weight (ppg)		13.7
Yield (ft3/sk)		2.49	Yield (ft3/sk)		1.29
Sacks		192	Sacks		1587
Cement Volume (ft3)		478.81	Cement Volume (ft3)		2047.08
Water Required (gal/sk)		14.60	Water Required (gal/sk)		5.80
Excess		40%	Excess		40%
Slurry Top (ft)		Surface	Slurry Top (ft)		2275

5. Types and Characteristics of the Proposed Mud System:

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:

- A. Kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

Describe what will be on location to control well or mitigate other conditions:

The well will be drilled to TD with a combination of fresh and cut brine mud system. The applicable depths and properties of this system are as follows:

Surface									
Depth (MD)	Type	MW (lb/ft3)			Gel Strength (#/100ft3)	PV (cP)	Salinity (ppm)	pH	Filtrate
0' - 375'	Freshwater	62.8	-	68.8	8-15	8-10	<2000	8.0-9.0	NC
Intermediate									
Depth (MD)	Type	MW (lb/ft3)			Gel Strength (#/100ft3)	PV (cP)	Salinity (ppm)	pH	Filtrate
375' - 1,230'	Brine	74.8	-	76.3	NA	NA	120,000-170,000	9.0-10.5	NC
Production									
Depth (MD)	Type	MW (lb/ft3)			Gel Strength (#/100ft3)	PV (cP)	Salinity (ppm)	pH	Filtrate
1,230' - TD	Cut Brine	65.8	-	68.8	NA	NA	30,000-60,000	9.0-10.5	NC

Describe the mud monitoring system utilized:

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

6. Logging, Testing and Coring Program:

- A. The logging program will consist of GR log from intermediate shoe to TD
- B. Drill Stem test is not anticipated.
- C. No conventional coring is anticipated.
- D. Further testing procedures will be determined at TD.
- E. Mud logs will be taken from surface casing point to TD.

7. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. **The estimated bottom hole at TD is 120 degrees and estimated maximum bottom hole pressure is 1253 psig (0.052*3150'TVD*9.2ppg) less than 2900 Bottom Hole Pressure.**

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

8. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is **June 1, 2025**. Once commenced, the drilling operation should be finished in approximately 20 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made to install permanent facilities.

NOTES REGARDING THE BLOWOUT PREVENTERS

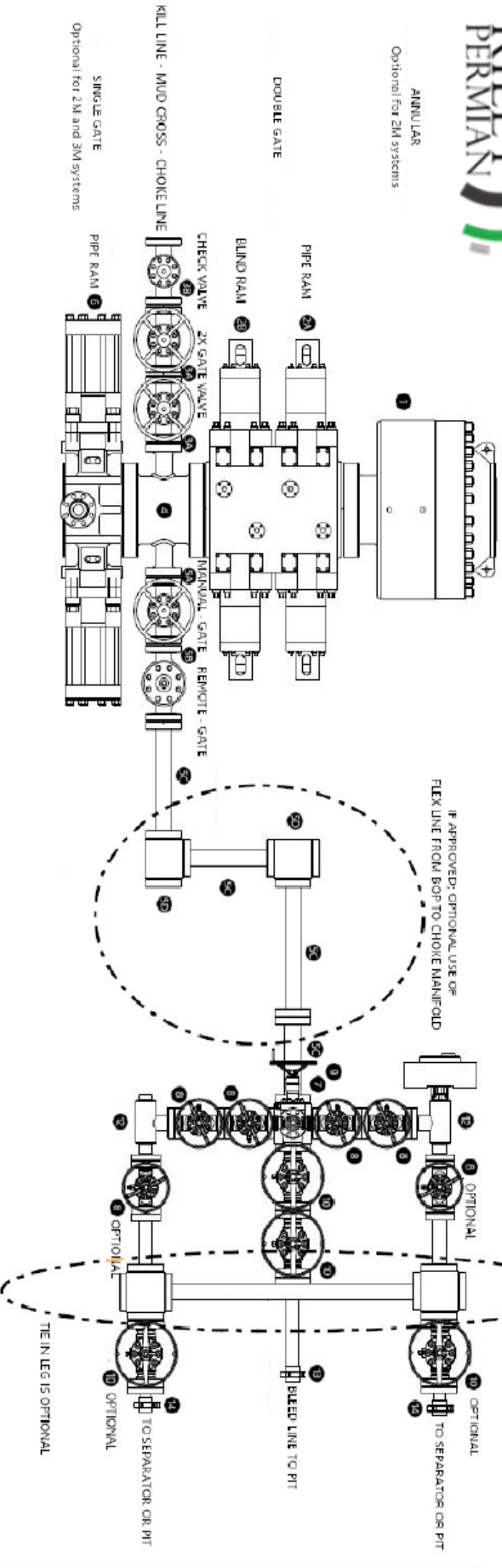
Malco B 6 Fed Com 8H

Eddy County, New Mexico

1. Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum I.D. equal to preventer bore.
2. Wear ring to be properly installed in head.
3. Blow out preventer and all fittings must be in good condition, 2000 psi WP minimum.
4. All fittings to be flanged.
5. Safety valve must be available on rig floor at all times with proper connections, valve to be full 2000 psi WP minimum.
6. All choke and fill lines to be securely anchored especially ends of choke lines.
7. Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
8. Kelly cock on Kelly.
9. Extension wrenches and hands wheels to be properly installed.
10. Blow out preventer control to be located as close to driller's position as feasible.
11. Blow out preventer closing equipment to include minimum 40-gallon accumulator, two independent sources of pump power on each closing unit installation all API specifications.



Riley Permian
Exhibit 10
Minimum BOP and Choke Requirements
3M and 5M Systems



BOP - Minimum Requirements

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

Choke Manifold - Minimum Requirements

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

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

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



H3-8915

5/16/2022 7:15:04 AM

TEST REPORT

CUSTOMER

Company:



Production description:

Sales order #:

523868

Customer reference:

TEST OBJECT

Serial number:

H3-051622-1

Lot number:

L42089010720

Description:

Hose ID:

3.5 5K MS C&K

Part number:

47741108

TEST INFORMATION

Test procedure:

GTS-04-052

Test pressure:

7500.00 psi

Test pressure hold:

3600.00 sec

Work pressure:

5000.00 psi

Work pressure hold:

900.00 sec

Length difference:

0.00 %

Length difference:

0.00 inch

Fitting 1:

3.5 x 3 1/8 5k

Part number:

Description:

3.5 x 3 1/8 5k

Fitting 2:

3.5 x 3 1/8 5k

Part number:

Description:

3.5 x 3 1/8 5k

Visual check:

Pressure test result:

PASS

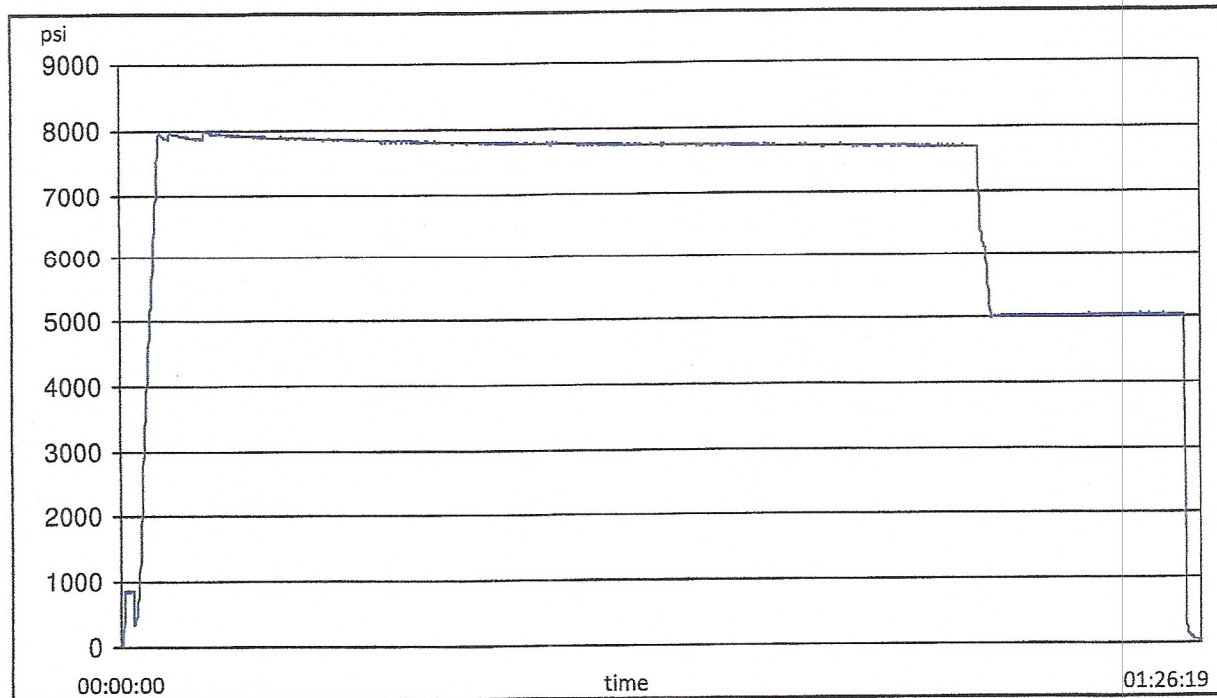
Length measurement result:

Length:

23 feet

Test operator:

Martin





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/ollandgas

PRESSURE TEST CERTIFICATE

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

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

End Fitting 1:	3 1/8" 5K FIXED	End Fitting 2:	3 1/8" 5K FLOAT
Oracle Star No.:	68503550-10095959	Assembly Code:	L42089 010720
CUSTOMER P/N:	FR3.523.0CK3185KFIXXFLTLG RFS LE	Test Pressure:	7,500 PSI.
		Working Pressure:	5,000 PSI.

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

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

F-PRD-005B

Revision 7_03012022

Riley Permian Operating Company, LLC
Onshore Order #6
Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE TRAINING

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

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

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

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

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

II. H₂S SAFETY EQUIPMENT AND SYSTEMS

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

1. Well Control Equipment:

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

2. Protective equipment for essential personnel:

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

3. H2S detection and monitoring equipment:

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

4. Visual warning systems:

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

5. Mud program:

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

6. Metallurgy:

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

7. Communication:

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

8. Well testing:

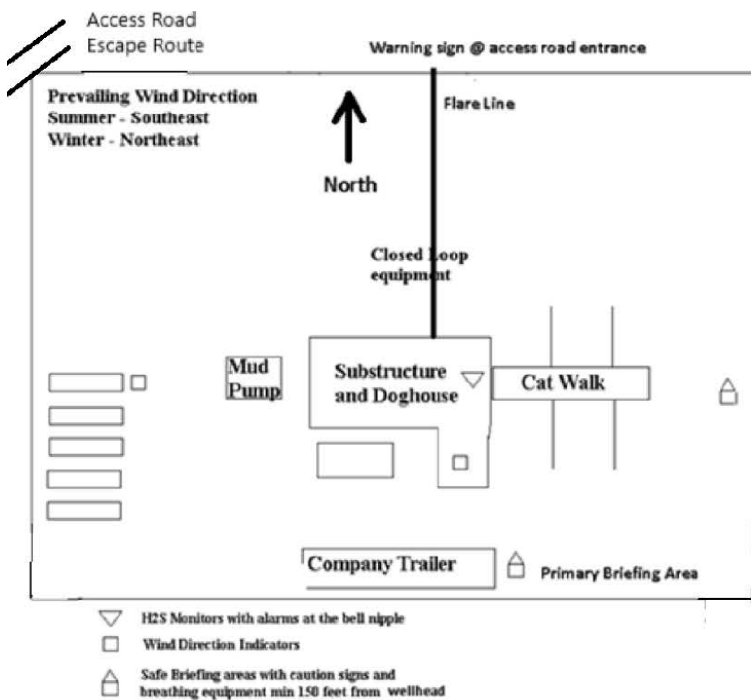
- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H2S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

WARNING

**YOU ARE ENTERING AN H2S AREA
AUTHORIZED PERSONNEL ONLY**

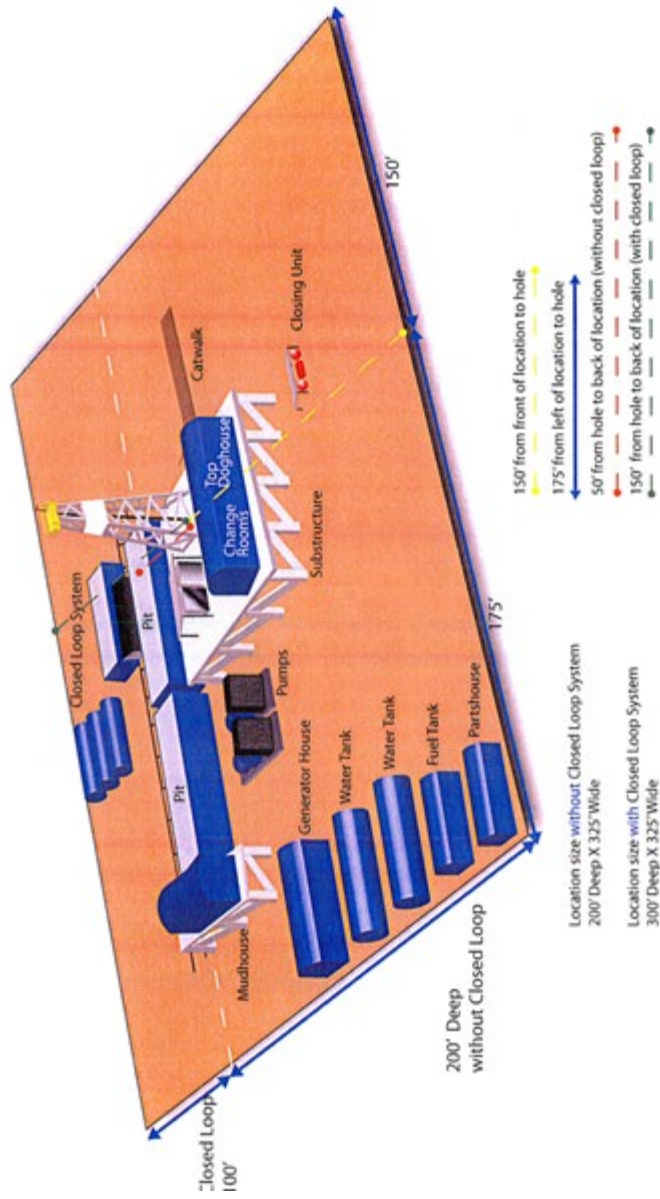
1. BEARDS OR CONTACT LENSES NOT ALLOWED
2. HARD HATS REQUIRED
3. SMOKING IN DESIGNATED AREAS ONLY
4. BE WIND CONSCIOUS AT ALL TIMES
5. CHECK WITH RILEY PERMIAN OPERATING COMPANY MAN AT OFFICE

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



DRILLING LOCATION H2S SAFTY EQUIPMENT
Exhibit # 8

Location Layout



EMERGENCY CONTACT LIST – EDDY COUNTY

Artesia	Cellular	Office
Spence Laird.....	575-703-7382.....	405-420-8415
Steve Forister.....	505-400-4571.....	405-666-0113
Vince Salvo.....	281-386-8417	
Richard McKay.....	432-934-7586	

Agency Call List (575)

Artesia

State Police.....	746-2703
City Police.....	746-2703
Sheriff’s Office.....	746-9888
Ambulance.....	911
Fire Department.....	746-2701
LEPC (Local Emergency Planning Committee.....)	746-2122
NMOCD.....	748-1283

Carlsbad

State Police.....	885-3137
City Police.....	885-2111
Sheriff’s Office.....	887-7551
Ambulance.....	911
Fire Department.....	885-2111
LEPC (Local Emergency Planning Committee.....)	887-3798
Bureau of Land Management.....	887-6544
New Mexico Emergency Response Commission.....	(505)476-9690
24 Hour.....	(505)827-9126

Emergency Services

- Boots & Coots IWC.....1-800-256-9688 or (281)931-8884
- Cudd pressure Control.....(915)699-0139 or (915)563-3356
- Halliburton.....746-2757
- Par Five.....748-9539

- Flight For Life-Lubbock, TX.....(806)743-9911
- Aerocare-Lubbock, TX.....(806)747-8923
- Med Flight Air Amb-Albuquerque, NM.....(505)842-4433
- Lifeguard Air Med Svc. Albuquerque, NM.....(505)272-3115



Company: Riley Permian Operating Co., LLC
 Well: Malco B 6 Fed Com 8H
 County: Eddy County, New Mexico (NAD 83)
 Rig: Akita 523
 Wellbore: Wellbore #1
 Design: Design #1
 Date: 9:01, October 24 2024

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.00	KOP, 1.50°/100' Build
1166.67	10.00	215.75	1163.29	-47.10	-33.90	1.50	215.750	33.08	Hold 10.00° Inc; 215.75° Azm
1896.68	10.00	215.75	1882.21	-149.98	-107.97	0.00	0.000	105.33	Begin 8.00°/100' Build & Turn
2569.29	60.00	265.04	2421.81	-228.40	-458.38	8.00	54.431	454.33	Hold 60.00° Inc; 265.04° Azm
2769.29	60.00	265.04	2521.81	-243.38	-630.94	0.00	0.000	626.60	Begin 10.00°/100' Build & Turn
3074.61	90.00	271.00	2600.00	-252.35	-922.22	10.00	11.796	917.67	Begin 90.00° Lateral
8204.97	90.00	271.00	2600.00	-162.74	-6051.79	0.00	0.000	6048.03	LTP - 8204.97' MD
8303.97	90.00	271.00	2600.00	-161.01	-6150.78	0.00	0.000	6147.03	PBHL - 8303.97' MD

WELL DETAILS: Malco B 6 Fed Com 8H

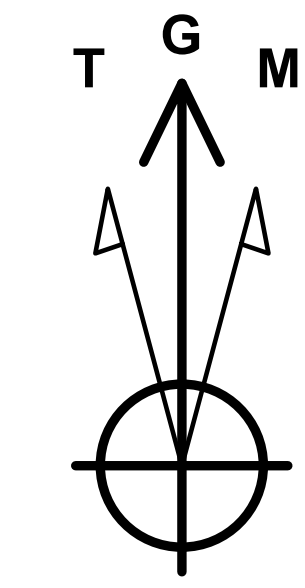
+N/-S	+E/-W	GL @ 3457.00 Northing	Well @ 3477.00usft (Akita 523) Easting	Latitude	Longitude
0.00	0.00	644289.30	549595.93	32.771183	-104.306465

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP v1-Malco B 6 Fed Com 8H	2600.00	-252.27	-922.44	644037.03	548673.49	32.770490	-104.309466
LMP v1-Malco B 6 Fed Com 8H	2600.00	-162.74	-6051.79	644126.56	543544.14	32.770738	-104.326154
PBHL v1-Malco B 6 Fed Com 8H	2600.00	-161.01	-6150.78	644128.29	543445.15	32.770743	-104.326476

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

To convert a Magnetic Direction to a Grid Direction, Add 6.685°
 To convert a Magnetic Direction to a True Direction, Add 6.700° East
 To convert a True Direction to a Grid Direction, Subtract 0.015°

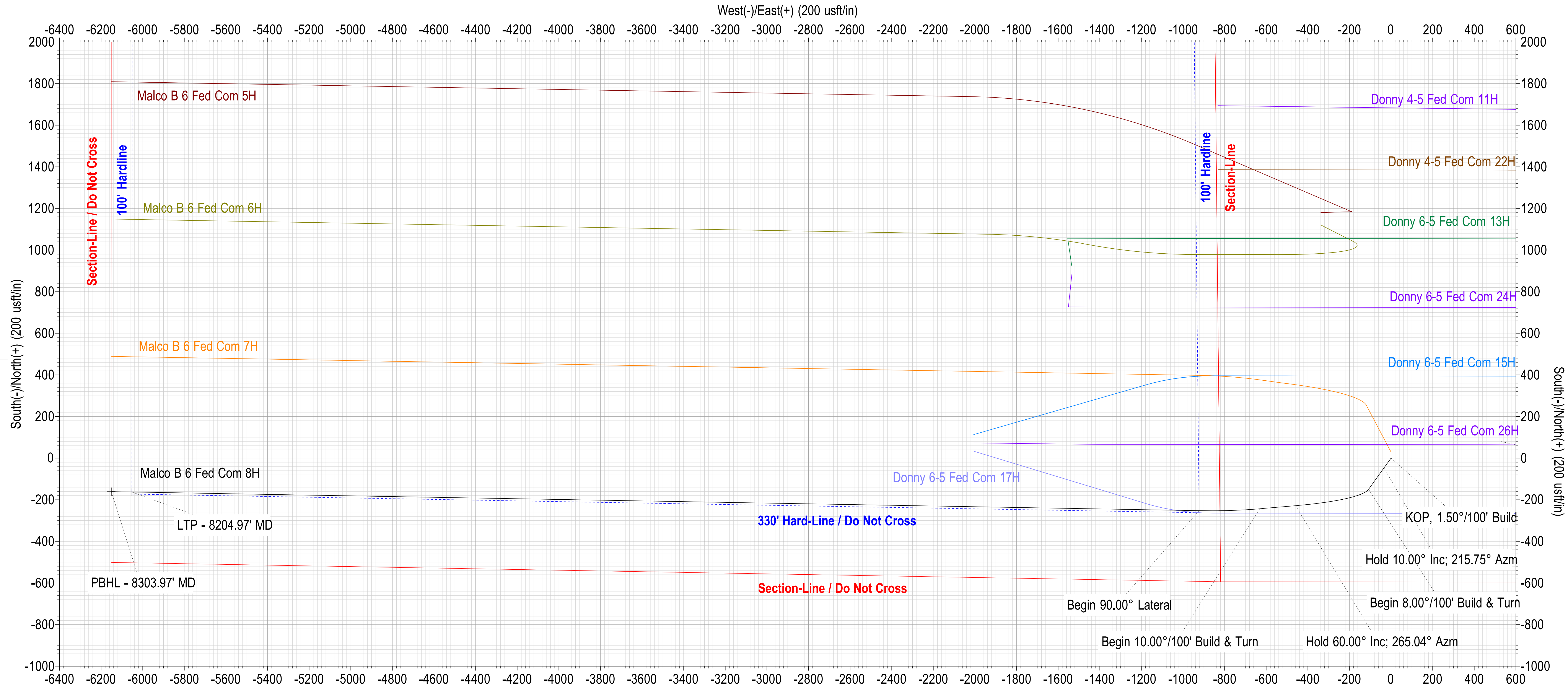


Azimuths to Grid North
 True North: -0.01°
 Magnetic North: 6.69°

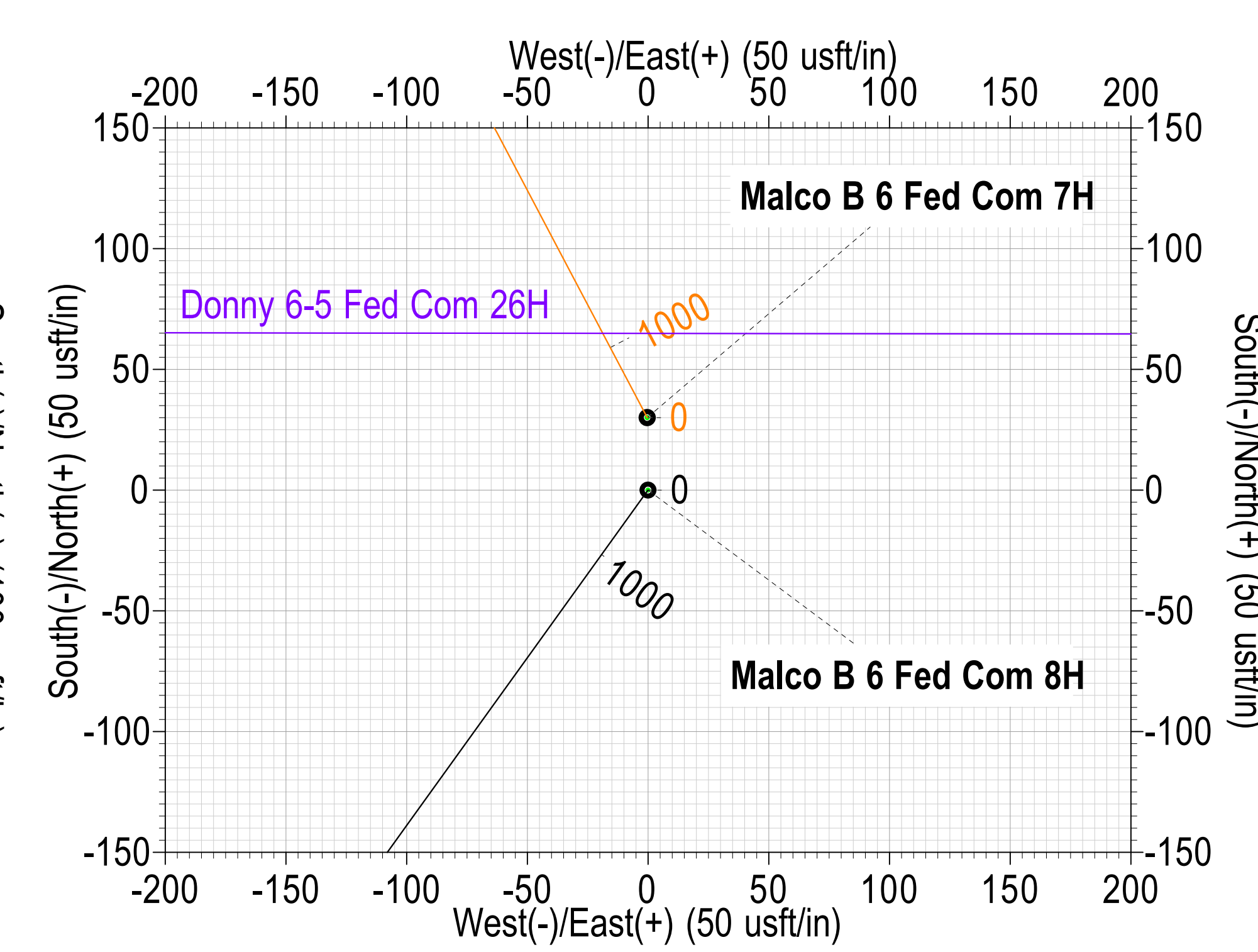
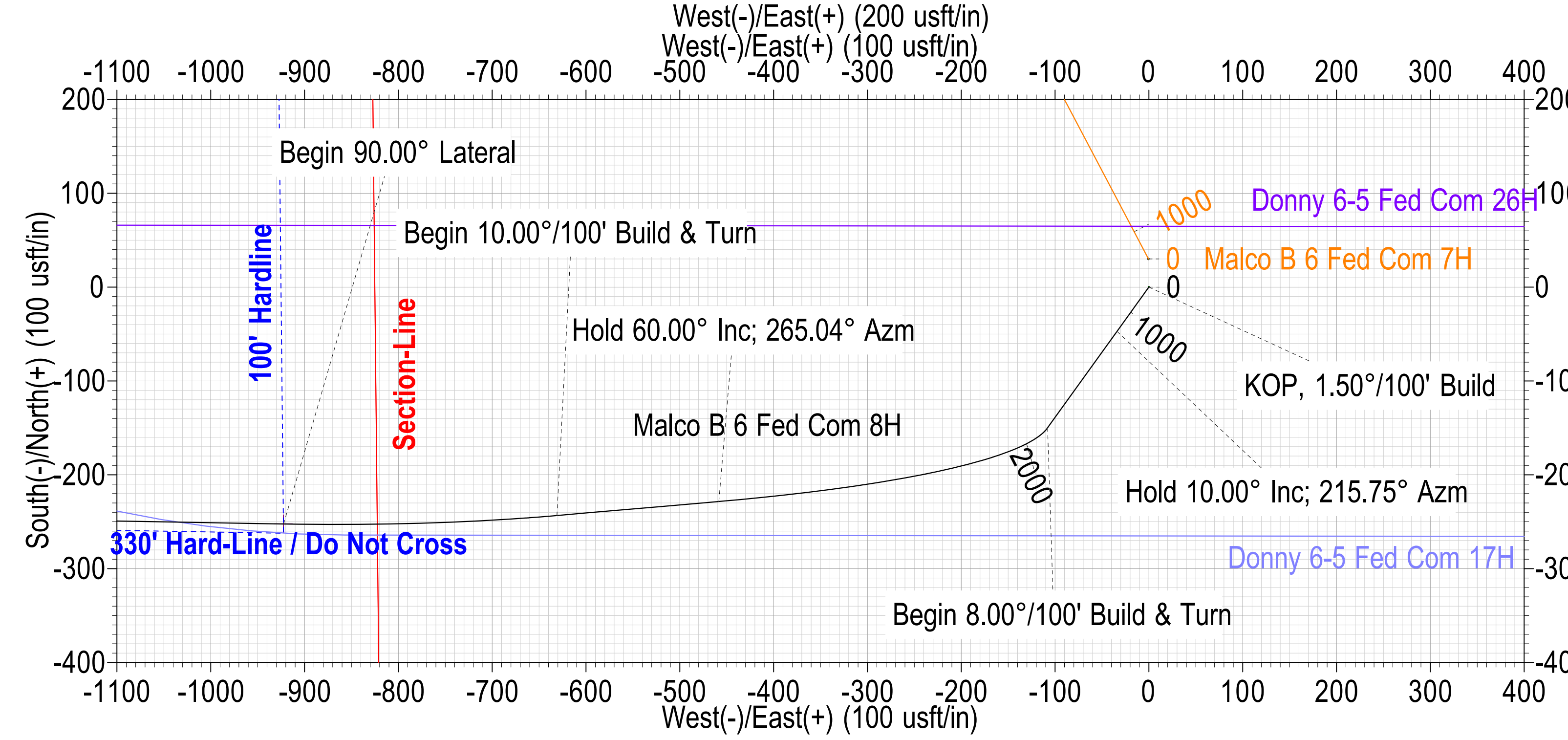
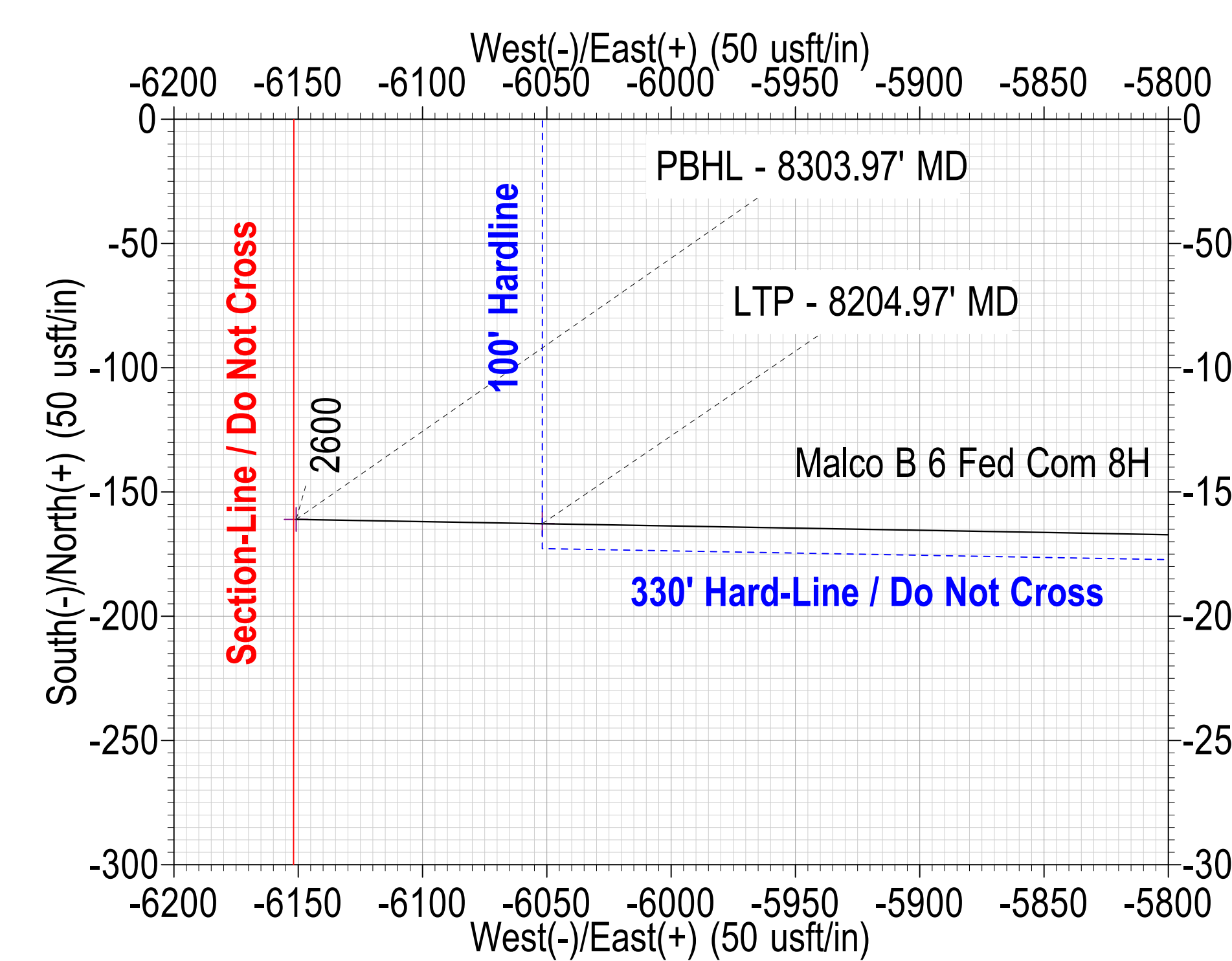
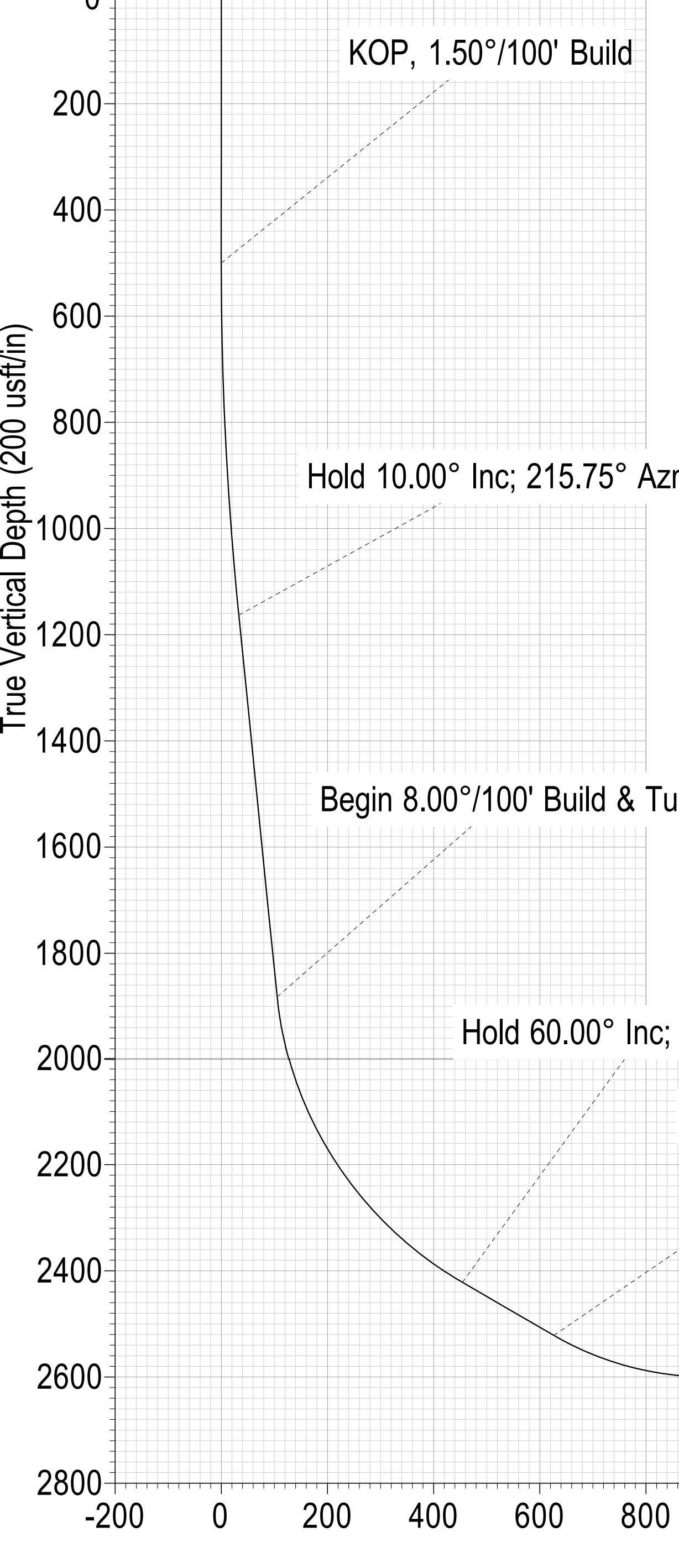
Magnetic Field
 Strength: 47370.6nT
 Dip Angle: 60.32°
 Date: 10/22/2024
 Model: HDGM2024

SURVEY PROGRAM

Depth From	Depth To	Survey/Plan	Tool
0.00	8303.97	Design #1 (Wellbore #1)	MWD+HRGM



Vertical Section at 271.00° (200 usft/in)





Riley Permian Operating Co., LLC

Eddy County, New Mexico (NAD 83)

Malco B 6 Fed Com (5H, 6H, 7H, 8H)

Malco B 6 Fed Com 8H

Wellbore #1

Plan: Design #1

Standard Planning Report

22 October, 2024





MS Directional
Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well Malco B 6 Fed Com 8H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	Well @ 3477.00usft (Akita 523)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	Well @ 3477.00usft (Akita 523)
Site:	Malco B 6 Fed Com (5H, 6H, 7H, 8H)	North Reference:	Grid
Well:	Malco B 6 Fed Com 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County, New Mexico (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Malco B 6 Fed Com (5H, 6H, 7H, 8H)				
Site Position:		Northing:	645,409.58 usft	Latitude:	32.774262
From:	Map	Easting:	549,259.37 usft	Longitude:	-104.307559
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	Malco B 6 Fed Com 8H					
Well Position	+N/-S	0.00 usft	Northing:	644,289.30 usft	Latitude:	32.771183
	+E/-W	0.00 usft	Easting:	549,595.93 usft	Longitude:	-104.306465
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,457.00 usft
Grid Convergence:	0.015 °					

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2024	10/22/2024	6.700	60.317	47,370.600

Design	Design #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	271.00	

Plan Survey Tool Program	Date	10/22/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	8,303.97 Design #1 (Wellbore #1)	MWD+HRGM	OWSG MWD + HRGM	



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well Malco B 6 Fed Com 8H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	Well @ 3477.00usft (Akita 523)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	Well @ 3477.00usft (Akita 523)
Site:	Malco B 6 Fed Com (5H, 6H, 7H, 8H)	North Reference:	Grid
Well:	Malco B 6 Fed Com 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,166.67	10.00	215.75	1,163.29	-47.10	-33.90	1.50	1.50	0.00	215.750	
1,896.68	10.00	215.75	1,882.21	-149.98	-107.97	0.00	0.00	0.00	0.000	
2,569.29	60.00	265.04	2,421.81	-228.40	-458.38	8.00	7.43	7.33	54.431	
2,769.29	60.00	265.04	2,521.81	-243.38	-630.94	0.00	0.00	0.00	0.000	
3,074.61	90.00	271.00	2,600.00	-252.35	-922.22	10.00	9.83	1.95	11.796	
8,204.97	90.00	271.00	2,600.00	-162.74	-6,051.79	0.00	0.00	0.00	0.000	LMP v1-Malco B 6 I
8,303.97	90.00	271.00	2,600.00	-161.01	-6,150.78	0.00	0.00	0.00	0.000	PBHL v1-Malco B 6

MS Directional
Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well Malco B 6 Fed Com 8H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	Well @ 3477.00usft (Akita 523)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	Well @ 3477.00usft (Akita 523)
Site:	Malco B 6 Fed Com (5H, 6H, 7H, 8H)	North Reference:	Grid
Well:	Malco B 6 Fed Com 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP, 1.50°/100' Build									
600.00	1.50	215.75	599.99	-1.06	-0.76	0.75	1.50	1.50	0.00
700.00	3.00	215.75	699.91	-4.25	-3.06	2.98	1.50	1.50	0.00
800.00	4.50	215.75	799.69	-9.56	-6.88	6.71	1.50	1.50	0.00
900.00	6.00	215.75	899.27	-16.98	-12.23	11.93	1.50	1.50	0.00
1,000.00	7.50	215.75	998.57	-26.52	-19.09	18.63	1.50	1.50	0.00
1,100.00	9.00	215.75	1,097.54	-38.17	-27.48	26.81	1.50	1.50	0.00
1,166.67	10.00	215.75	1,163.29	-47.10	-33.90	33.08	1.50	1.50	0.00
Hold 10.00° Inc; 215.75° Azm									
1,200.00	10.00	215.75	1,196.11	-51.79	-37.29	36.38	0.00	0.00	0.00
1,300.00	10.00	215.75	1,294.59	-65.89	-47.43	46.27	0.00	0.00	0.00
1,400.00	10.00	215.75	1,393.08	-79.98	-57.58	56.17	0.00	0.00	0.00
1,500.00	10.00	215.75	1,491.56	-94.07	-67.72	66.07	0.00	0.00	0.00
1,600.00	10.00	215.75	1,590.04	-108.16	-77.87	75.97	0.00	0.00	0.00
1,700.00	10.00	215.75	1,688.52	-122.26	-88.01	85.87	0.00	0.00	0.00
1,800.00	10.00	215.75	1,787.00	-136.35	-98.16	95.76	0.00	0.00	0.00
1,896.68	10.00	215.75	1,882.21	-149.98	-107.97	105.33	0.00	0.00	0.00
Begin 8.00°/100' Build & Turn									
1,900.00	10.16	216.97	1,885.48	-150.44	-108.31	105.67	8.00	4.72	36.90
1,950.00	12.95	231.41	1,934.47	-157.46	-115.34	112.58	8.00	5.59	28.88
2,000.00	16.25	240.45	1,982.86	-164.41	-125.81	122.93	8.00	6.60	18.08
2,050.00	19.80	246.42	2,030.40	-171.25	-139.67	136.66	8.00	7.11	11.93
2,100.00	23.49	250.60	2,076.87	-177.95	-156.84	153.71	8.00	7.39	8.37
2,150.00	27.27	253.70	2,122.03	-184.48	-177.24	173.99	8.00	7.55	6.18
2,200.00	31.10	256.08	2,165.68	-190.80	-200.78	197.42	8.00	7.66	4.77
2,250.00	34.96	257.99	2,207.59	-196.89	-227.33	223.86	8.00	7.73	3.82
2,300.00	38.85	259.56	2,247.57	-202.71	-256.78	253.20	8.00	7.77	3.14
2,350.00	42.75	260.89	2,285.41	-208.25	-288.97	285.29	8.00	7.81	2.65
2,400.00	46.67	262.03	2,320.94	-213.46	-323.75	319.98	8.00	7.84	2.29
2,450.00	50.60	263.03	2,353.97	-218.32	-360.95	357.09	8.00	7.86	2.01
2,500.00	54.54	263.93	2,384.36	-222.82	-400.39	396.44	8.00	7.87	1.79
2,550.00	58.48	264.74	2,411.95	-226.93	-441.88	437.85	8.00	7.88	1.63
2,569.29	60.00	265.04	2,421.81	-228.40	-458.38	454.33	8.00	7.89	1.53
Hold 60.00° Inc; 265.04° Azm									
2,600.00	60.00	265.04	2,437.17	-230.70	-484.88	480.78	0.00	0.00	0.00
2,700.00	60.00	265.04	2,487.17	-238.19	-571.16	566.92	0.00	0.00	0.00
2,769.29	60.00	265.04	2,521.81	-243.38	-630.94	626.60	0.00	0.00	0.00
Begin 10.00°/100' Build & Turn									
2,800.00	63.01	265.74	2,536.46	-245.54	-657.84	653.46	10.00	9.79	2.29
2,850.00	67.91	266.82	2,557.22	-248.49	-703.22	698.77	10.00	9.81	2.14
2,900.00	72.82	267.81	2,574.02	-250.68	-750.24	745.75	10.00	9.82	2.00
2,950.00	77.74	268.76	2,586.72	-252.13	-798.57	794.04	10.00	9.83	1.89
3,000.00	82.66	269.67	2,595.23	-252.80	-847.82	843.27	10.00	9.84	1.82
3,050.00	87.58	270.57	2,599.48	-252.69	-897.62	893.07	10.00	9.84	1.78
3,074.61	90.00	271.00	2,600.00	-252.35	-922.22	917.67	10.00	9.84	1.77
Begin 90.00° Lateral									
3,100.00	90.00	271.00	2,600.00	-251.91	-947.60	943.06	0.00	0.00	0.00



MS Directional
Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well Malco B 6 Fed Com 8H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	Well @ 3477.00usft (Akita 523)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	Well @ 3477.00usft (Akita 523)
Site:	Malco B 6 Fed Com (5H, 6H, 7H, 8H)	North Reference:	Grid
Well:	Malco B 6 Fed Com 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,200.00	90.00	271.00	2,600.00	-250.16	-1,047.59	1,043.06	0.00	0.00	0.00	
3,300.00	90.00	271.00	2,600.00	-248.42	-1,147.57	1,143.06	0.00	0.00	0.00	
3,400.00	90.00	271.00	2,600.00	-246.67	-1,247.56	1,243.06	0.00	0.00	0.00	
3,500.00	90.00	271.00	2,600.00	-244.92	-1,347.54	1,343.06	0.00	0.00	0.00	
3,600.00	90.00	271.00	2,600.00	-243.18	-1,447.53	1,443.06	0.00	0.00	0.00	
3,700.00	90.00	271.00	2,600.00	-241.43	-1,547.51	1,543.06	0.00	0.00	0.00	
3,800.00	90.00	271.00	2,600.00	-239.68	-1,647.50	1,643.06	0.00	0.00	0.00	
3,900.00	90.00	271.00	2,600.00	-237.94	-1,747.48	1,743.06	0.00	0.00	0.00	
4,000.00	90.00	271.00	2,600.00	-236.19	-1,847.47	1,843.06	0.00	0.00	0.00	
4,100.00	90.00	271.00	2,600.00	-234.44	-1,947.45	1,943.06	0.00	0.00	0.00	
4,200.00	90.00	271.00	2,600.00	-232.70	-2,047.44	2,043.06	0.00	0.00	0.00	
4,300.00	90.00	271.00	2,600.00	-230.95	-2,147.42	2,143.06	0.00	0.00	0.00	
4,400.00	90.00	271.00	2,600.00	-229.20	-2,247.41	2,243.06	0.00	0.00	0.00	
4,500.00	90.00	271.00	2,600.00	-227.46	-2,347.39	2,343.06	0.00	0.00	0.00	
4,600.00	90.00	271.00	2,600.00	-225.71	-2,447.38	2,443.06	0.00	0.00	0.00	
4,700.00	90.00	271.00	2,600.00	-223.96	-2,547.36	2,543.06	0.00	0.00	0.00	
4,800.00	90.00	271.00	2,600.00	-222.21	-2,647.34	2,643.06	0.00	0.00	0.00	
4,900.00	90.00	271.00	2,600.00	-220.47	-2,747.33	2,743.06	0.00	0.00	0.00	
5,000.00	90.00	271.00	2,600.00	-218.72	-2,847.31	2,843.06	0.00	0.00	0.00	
5,100.00	90.00	271.00	2,600.00	-216.97	-2,947.30	2,943.06	0.00	0.00	0.00	
5,200.00	90.00	271.00	2,600.00	-215.23	-3,047.28	3,043.06	0.00	0.00	0.00	
5,300.00	90.00	271.00	2,600.00	-213.48	-3,147.27	3,143.06	0.00	0.00	0.00	
5,400.00	90.00	271.00	2,600.00	-211.73	-3,247.25	3,243.06	0.00	0.00	0.00	
5,500.00	90.00	271.00	2,600.00	-209.99	-3,347.24	3,343.06	0.00	0.00	0.00	
5,600.00	90.00	271.00	2,600.00	-208.24	-3,447.22	3,443.06	0.00	0.00	0.00	
5,700.00	90.00	271.00	2,600.00	-206.49	-3,547.21	3,543.06	0.00	0.00	0.00	
5,800.00	90.00	271.00	2,600.00	-204.75	-3,647.19	3,643.06	0.00	0.00	0.00	
5,900.00	90.00	271.00	2,600.00	-203.00	-3,747.18	3,743.06	0.00	0.00	0.00	
6,000.00	90.00	271.00	2,600.00	-201.25	-3,847.16	3,843.06	0.00	0.00	0.00	
6,100.00	90.00	271.00	2,600.00	-199.51	-3,947.15	3,943.06	0.00	0.00	0.00	
6,200.00	90.00	271.00	2,600.00	-197.76	-4,047.13	4,043.06	0.00	0.00	0.00	
6,300.00	90.00	271.00	2,600.00	-196.01	-4,147.12	4,143.06	0.00	0.00	0.00	
6,400.00	90.00	271.00	2,600.00	-194.27	-4,247.10	4,243.06	0.00	0.00	0.00	
6,500.00	90.00	271.00	2,600.00	-192.52	-4,347.09	4,343.06	0.00	0.00	0.00	
6,600.00	90.00	271.00	2,600.00	-190.77	-4,447.07	4,443.06	0.00	0.00	0.00	
6,700.00	90.00	271.00	2,600.00	-189.02	-4,547.06	4,543.06	0.00	0.00	0.00	
6,800.00	90.00	271.00	2,600.00	-187.28	-4,647.04	4,643.06	0.00	0.00	0.00	
6,900.00	90.00	271.00	2,600.00	-185.53	-4,747.02	4,743.06	0.00	0.00	0.00	
7,000.00	90.00	271.00	2,600.00	-183.78	-4,847.01	4,843.06	0.00	0.00	0.00	
7,100.00	90.00	271.00	2,600.00	-182.04	-4,946.99	4,943.06	0.00	0.00	0.00	
7,200.00	90.00	271.00	2,600.00	-180.29	-5,046.98	5,043.06	0.00	0.00	0.00	
7,300.00	90.00	271.00	2,600.00	-178.54	-5,146.96	5,143.06	0.00	0.00	0.00	
7,400.00	90.00	271.00	2,600.00	-176.80	-5,246.95	5,243.06	0.00	0.00	0.00	
7,500.00	90.00	271.00	2,600.00	-175.05	-5,346.93	5,343.06	0.00	0.00	0.00	
7,600.00	90.00	271.00	2,600.00	-173.30	-5,446.92	5,443.06	0.00	0.00	0.00	
7,700.00	90.00	271.00	2,600.00	-171.56	-5,546.90	5,543.06	0.00	0.00	0.00	
7,800.00	90.00	271.00	2,600.00	-169.81	-5,646.89	5,643.06	0.00	0.00	0.00	
7,900.00	90.00	271.00	2,600.00	-168.06	-5,746.87	5,743.06	0.00	0.00	0.00	
8,000.00	90.00	271.00	2,600.00	-166.32	-5,846.86	5,843.06	0.00	0.00	0.00	
8,100.00	90.00	271.00	2,600.00	-164.57	-5,946.84	5,943.06	0.00	0.00	0.00	
8,204.97	90.00	271.00	2,600.00	-162.74	-6,051.79	6,048.03	0.00	0.00	0.00	
LTP - 8204.97' MD										
8,303.97	90.00	271.00	2,600.00	-161.01	-6,150.78	6,147.03	0.00	0.00	0.00	
PBHL - 8303.97' MD										

MS Directional
Planning Report



Database:	EDM 5000.15 Conroe DB	Local Co-ordinate Reference:	Well Malco B 6 Fed Com 8H
Company:	Riley Permian Operating Co., LLC	TVD Reference:	Well @ 3477.00usft (Akita 523)
Project:	Eddy County, New Mexico (NAD 83)	MD Reference:	Well @ 3477.00usft (Akita 523)
Site:	Malco B 6 Fed Com (5H, 6H, 7H, 8H)	North Reference:	Grid
Well:	Malco B 6 Fed Com 8H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL v1-Malco B 6 F - plan hits target center - Point	0.00	0.00	2,600.00	-161.01	-6,150.78	644,128.30	543,445.15	32.770743	-104.326476
FTP v1-Malco B 6 Fe - plan misses target center by 0.08usft at 3074.83usft MD (2600.00 TVD, -252.35 N, -922.44 E) - Point	0.00	0.00	2,600.00	-252.27	-922.44	644,037.03	548,673.49	32.770490	-104.309466
LMP v1-Malco B 6 Fe - plan hits target center - Point	0.00	0.00	2,600.00	-162.74	-6,051.79	644,126.57	543,544.14	32.770738	-104.326154

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
500.00	500.00	0.00	0.00	KOP, 1.50°/100' Build	
1,166.67	1,163.29	-47.10	-33.90	Hold 10.00° Inc; 215.75° Azm	
1,896.68	1,882.21	-149.98	-107.97	Begin 8.00°/100' Build & Turn	
2,569.29	2,421.81	-228.40	-458.38	Hold 60.00° Inc; 265.04° Azm	
2,769.29	2,521.81	-243.38	-630.94	Begin 10.00°/100' Build & Turn	
3,074.61	2,600.00	-252.35	-922.22	Begin 90.00° Lateral	
8,204.97	2,600.00	-162.74	-6,051.79	LTP - 8204.97' MD	
8,303.97	2,600.00	-161.01	-6,150.78	PBHL - 8303.97' MD	

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Riley Permian Operating Company, LLC **OGRID:** 372290 **Date:** 09/24 /2025

II. Type: Original Amendment due to 19.15.27.9.D(6)(a) NMAC 19.15.27.9.D(6)(b) NMAC Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Malco B 6 Fed Com 7H	30-015-49914	SWSW - Sec. 5 - 18S 27E	625' FSL 825' FWL	450	700	4,000
Malco B 6 Fed Com 8H	TBD	M - Sec. 5 - 18S 27E	595' FSL 825' FWL	450	700	4,000

IV. Central Delivery Point Name: Malco Dos South Pad Production Facility [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Malco B 6 Fed Com 7H	30-015-49914	3/1/2026	3/8/2026	6/1/2026	7/1/2026	7/1/2026
Malco B 6 Fed Com 8H	TBD	3/1/2026	3/8/2026	6/1/2026	7/1/2026	7/1/2026

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:	
Printed Name:	Alex Rizzo
Title:	Senior Regulatory Specialist
E-mail Address:	Alex.rizzo@rileypermian.com
Date:	9/25/25
Phone:	918-839-2995
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. Riley Permian Operating Company LLC (“Riley”) will take the following actions to comply with the regulations listed in 19.15.27.8:

- A. Riley will maximize the recovery of natural gas by minimizing waste, as defined by 19.15.2 NMAC, of natural gas through venting and flaring. Spur will ensure that our wells will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.
- B. All drilling operations will be equipped with a rig flare at least 100 feet from the nearest surface hole location. Rig flare will be utilized to combust any natural gas that is brought to surface during normal operations. In the case of emergency, flaring volumes will be reported appropriately.
- C. During completion operations any natural gas brought to surface will be flared. Immediately following completion operations, wells will flow to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. If natural gas does not meet gathering pipeline specifications, Riley will flare for 60 days or until natural gas meets the pipeline specifications. Riley will ensure flare is properly sized and is equipped with an automatic igniter or continuous pilot. Gas samples will be taken twice per week and natural gas will be routed into a gathering system as soon as the pipeline specifications are met.
- D. Natural gas will not be flared with the exception of 19.15.27.8(D)(1-4). If there is no adequate takeaway for the separator gas, wells will be shut-in until that natural gas gathering system is available with exception of emergency or malfunction situations. Volumes will be reported appropriately.
- E. Riley will comply with performance standards pursuant to 19.15.27.8(E)(1-8). All equipment will be designed and sized to handle maximum pressures to minimize waste. Storage tanks constructed after May 25, 2021 will be equipped with an automatic gauging system that reduces venting of natural gas. Flare stacks installed or replaced after May 25, 2021 will be equipped with an automatic igniter or continuous pilot. Riley will conduct AVO inspections as described in 19.15.27.8(E)(5)(a) with frequencies specified in 19.15.27.8(E)(5)(b) and (c). All emergencies or malfunctions will be resolved as quickly and safely as possible to minimize waste.
- F. The volume of natural gas that is vented or flared as the result of an emergency or malfunction during drilling and/or completion operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared, or beneficially used during production operations will be measured and reported accordingly. Riley will install equipment to measure the volume of natural gas flared from existing piping or a flowline piped from equipment such as high-pressure separators, heater treaters, or VRUs associated with a well of facility associated with a well authorized by an APD after May 25, 2021 that has an average daily production of less than 60,000 cubic feet of natural gas.



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

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

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

General Information
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 546453

ACKNOWLEDGMENTS

Operator: RILEY PERMIAN OPERATING COMPANY, LLC 29 E Reno Avenue Oklahoma City, OK 73104	OGRID: 372290
	Action Number: 546453
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

<input checked="" type="checkbox"/>	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
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Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

CONDITIONS

Action 546453

CONDITIONS

Operator: RILEY PERMIAN OPERATING COMPANY, LLC 29 E Reno Avenue Oklahoma City, OK 73104	OGRID: 372290
	Action Number: 546453
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ascentrepx	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/26/2026
ascentrepx	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	1/26/2026
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	4/1/2026
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	4/1/2026
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	4/1/2026
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	4/1/2026
ward.rikala	If the method of isolation was not by circulation, a CBL must be performed; if strata isolation is not achieved, then remediation will be required before further operations.	4/1/2026