

Form 3160-3  
(June 2015)FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input checked="" 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 checked="" type="checkbox"/> Multiple Zone		5. Lease Serial No. <b>NMNM65441</b> 6. If Indian, Allottee or Tribe Name  7. If Unit or CA Agreement, Name and No.  8. Lease Name and Well No. <b>GOLIATH 24 FED COM</b>  503H 9. API Well No. <b>30-025-55539</b>
2. Name of Operator <b>MARATHON OIL PERMIAN LLC</b> 3a. Address <b>990 TOWN &amp; COUNTRY BLVD, HOUSTON, TX 77024</b> 3b. Phone No. (include area code) <b>(713) 296-2113</b>		10. Field and Pool, or Exploratory <b>WC-025 G-08 S263412K/BONE SPRING</b> 11. Sec., T. R. M. or Blk. and Survey or Area <b>SEC 24/T26S/R34E/NMP</b>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <b>NENW / 269 FNL / 1494 FWL / LAT 32.0353818 / LONG -103.4273383</b> At proposed prod. zone <b>LOT 3 / 100 FSL / 2200 FWL / LAT 32.0005611 / LONG -103.4250477</b>		12. County or Parish <b>LEA</b> 13. State <b>NM</b>
14. Distance in miles and direction from nearest town or post office* <b>29 miles</b>		15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <b>534 feet</b> 16. No of acres in lease  17. Spacing Unit dedicated to this well <b>790.0</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. <b>25 feet</b> 19. Proposed Depth <b>11250 feet / 23950 feet</b> 20. BLM/BIA Bond No. in file <b>FED: NMB001555</b>		21. Elevations (Show whether DF, KDB, RT, GL, etc.) <b>3222 feet</b> 22. Approximate date work will start* <b>07/31/2026</b> 23. Estimated duration <b>29 days</b>
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.<br>2. A Drilling Plan.<br>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).<br>5. Operator certification.<br>6. Such other site specific information and/or plans as may be requested by the BLM. |
|---|---|

25. Signature (Electronic Submission)  Title <b>regulatory Compliance Representative</b>	Name (Printed/Typed) <b>ADRIAN COVARRUBIAS / Ph: (713) 929-6600</b>	Date <b>09/20/2023</b>
Approved by (Signature) (Electronic Submission)  Title <b>Assistant Field Manager Lands &amp; Minerals</b>	Name (Printed/Typed) <b>CODY LAYTON / Ph: (575) 234-5959</b>  Office <b>Carlsbad Field Office</b>	Date <b>07/25/2025</b>

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)



## Additional Operator Remarks

### Location of Well

0. SHL: NENW / 269 FNL / 1494 FWL / TWSP: 26S / RANGE: 34E / SECTION: 24 / LAT: 32.0353818 / LONG: -103.4273383 ( TVD: 0 feet, MD: 0 feet )

PPP: NENW / 100 FNL / 2200 FWL / TWSP: 26S / RANGE: 34E / SECTION: 24 / LAT: 32.035841 / LONG: -103.4250591 ( TVD: 10677 feet, MD: 10739 feet )

BHL: LOT 3 / 100 FSL / 2200 FWL / TWSP: 26S / RANGE: 34E / SECTION: 36 / LAT: 32.0005611 / LONG: -103.4250477 ( TVD: 11250 feet, MD: 23950 feet )

### BLM Point of Contact

Name: PAMELLA HERNANDEZ

Title: LIE

Phone: (575) 234-5954

Email: PHERNANDEZ@BLM.GOV

CONFIDENTIAL

**PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Marathon Oil Permian LLC
LEASE NO.:	NMNM 065441
COUNTY:	Lea County

**Wells:**

*Well Pad 1 (Goliath 24 Fed Com West)*

Phase 1: (10 wells)

**Goliath 24 Fed Com 301H**

Surface Hole Location: 269' FNL & 1394' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL & 440' FWL, Section 36, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 302H**

Surface Hole Location: 269' FNL & 1444' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL & 1320' FWL, Section 36, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 303H**

Surface Hole Location: 268' FNL & 1259' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 501H**

Surface Hole Location: 268' FNL & 1209' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 502H**

Surface Hole Location: 268' FNL & 1234' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 503H**

Surface Hole Location: 268' FNL & 1284' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 601H**

Surface Hole Location: 269' FNL & 1369' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL & 330' FWL, Section 36, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 602H**

Surface Hole Location: 269' FNL & 1469' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL & 1650' FWL, Section 36, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 701H**

Surface Hole Location: 269' FNL & 1419' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL & 990' FWL, Section 36, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 702H**

Surface Hole Location: 270' FNL & 1494' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL & 2309' FWL, Section 36, T. 26 S., R. 34 E.

## Phase 2: Future Wells (6)

**Goliath 24 Fed Com 101H**

Surface Hole Location: 163' FNL &amp; 1104' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 102H**

Surface Hole Location: 163' FNL &amp; 1154' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 103H**

Surface Hole Location: 163' FNL &amp; 1204' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 801H**

Surface Hole Location: 163' FNL &amp; 1129' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 802H**

Surface Hole Location: 163' FNL &amp; 1179' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 803H**

Surface Hole Location: 163' FNL &amp; 1229' FWL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: To Be Determined

*Well Pad 2 (Goliath 24 Fed Com East)*

## Phase 1: (10 wells)

**Goliath 24 Fed Com 304H**

Surface Hole Location: 267' FNL &amp; 1271' FEL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL &amp; 2200' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 305H**

Surface Hole Location: 268' FNL &amp; 1221' FEL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL &amp; 1320' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 306H**

Surface Hole Location: 268' FNL &amp; 1171' FEL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL &amp; 440' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 504H**

Surface Hole Location: 267' FNL &amp; 1246' FEL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL &amp; 2200' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 505H**

Surface Hole Location: 268' FNL &amp; 1196' FEL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL &amp; 1320' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 506H**

Surface Hole Location: 268' FNL &amp; 1146' FEL, Section 24, T. 26 S., R. 34 E.

Bottom Hole Location: 100' FSL &amp; 440' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 603H**

Surface Hole Location: 266' FNL & 1431' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: 100' FSL & 2309' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 604H**

Surface Hole Location: 267' FNL & 1381' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: 100' FSL & 990' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 703H**

Surface Hole Location: 267' FNL & 1406' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: 100' FSL & 1650' FEL, Section 24, T. 26 S., R. 34 E.

**Goliath 24 Fed Com 704H**

Surface Hole Location: 267' FNL & 1356' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: 100' FSL & 330' FEL, Section 24, T. 26 S., R. 34 E.

Phase 2: Future Wells (6)

**Goliath 24 Fed Com 104H**

Surface Hole Location: 534' FNL & 1536' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 105H**

Surface Hole Location: 534' FNL & 1486' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 106H**

Surface Hole Location: 534' FNL & 1436' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 804H**

Surface Hole Location: 534' FNL & 1511' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 805H**

Surface Hole Location: 534' FNL & 1461' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: To Be Determined

**Goliath 24 Fed Com 806H**

Surface Hole Location: 534' FNL & 1411' FEL, Section 24, T. 26 S., R. 34 E.  
Bottom Hole Location: To Be Determined

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

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- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
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## **I. GENERAL PROVISIONS**

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

## **II. PERMIT EXPIRATION**

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

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

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

OR

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

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 6 for more information.

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

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

Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or

any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

#### **IV. NOXIOUS WEEDS**

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

#### **V. SPECIAL REQUIREMENT(S)**

##### **Watershed:**

##### **TANK BATTERY:**

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

##### **BURIED/SURFACE LINE(S):**

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

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

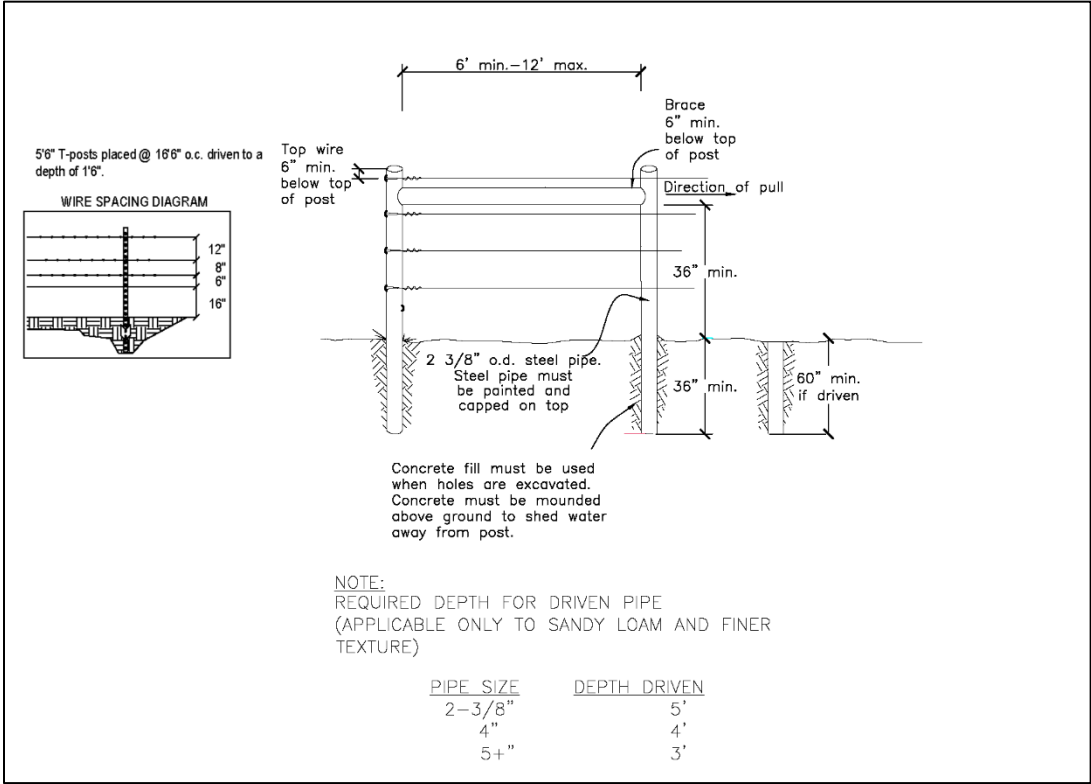
##### **ELECTRIC LINE(S):**

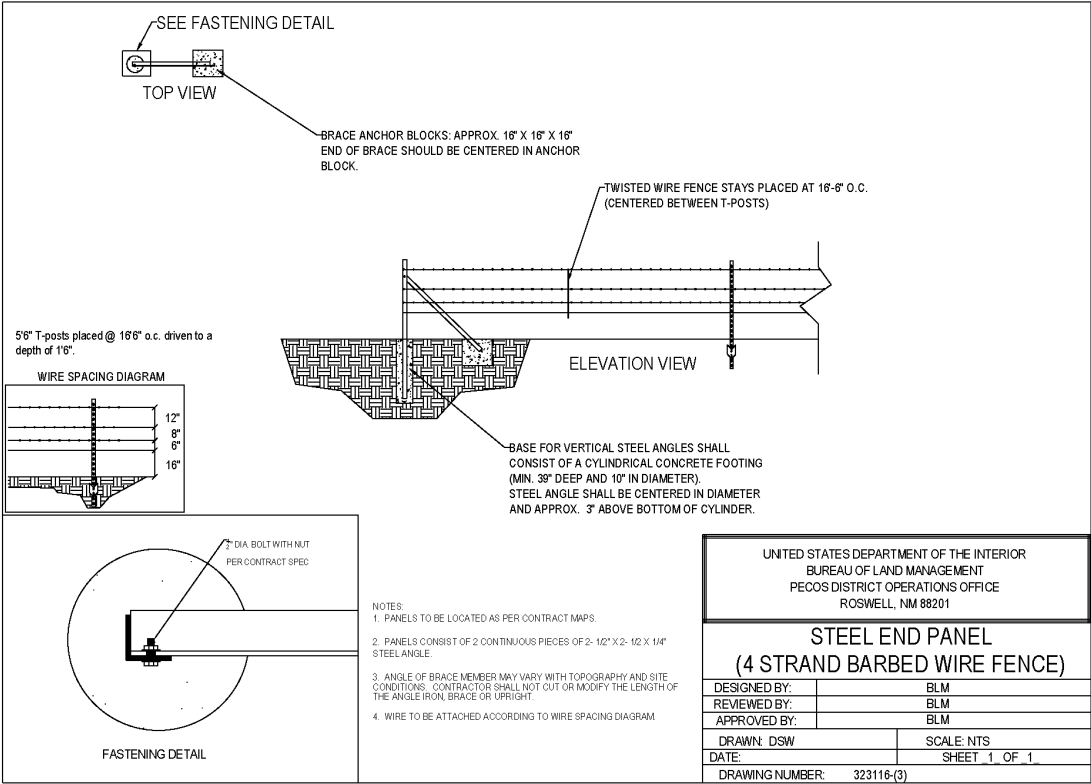
Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains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

**Range:**

**Fence Requirement**

Where entry granted across a fence line, the fence must be H-braced or angle iron 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 consult the private surface landowner or the grazing allotment holder prior to cutting any fence(s).





**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.

**Special Status Species – Lesser Prairie Chicken**

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

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

**Timing Limitation Exceptions:**

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The

red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

**Ground-level Abandoned Well Marker to avoid raptor perching:**

Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

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

### **B. TOPSOIL**

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

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

### **C. CLOSED LOOP SYSTEM**

Tanks are required for drilling operations: No Pits.

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

### **D. FEDERAL MINERAL MATERIALS PIT**

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

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

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

### **F. EXCLOSURE FENCING (CELLARS & PITS)**

#### **Exclosure Fencing**

The operator will install and maintain 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 pit 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.)

## **G. ON LEASE ACCESS ROADS**

### **Road Width**

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

### **Surfacing**

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

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

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

### **Crowning**

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

### **Ditching**

Ditching shall be required on both sides of the road.

### **Turnouts**

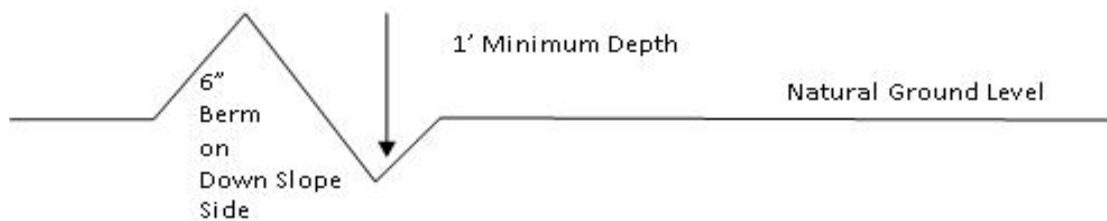
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### **Drainage**

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

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

## **Cross Section of a Typical Lead-off Ditch**



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

#### **Formula for Spacing Interval of Lead-off Ditches**

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

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

#### **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

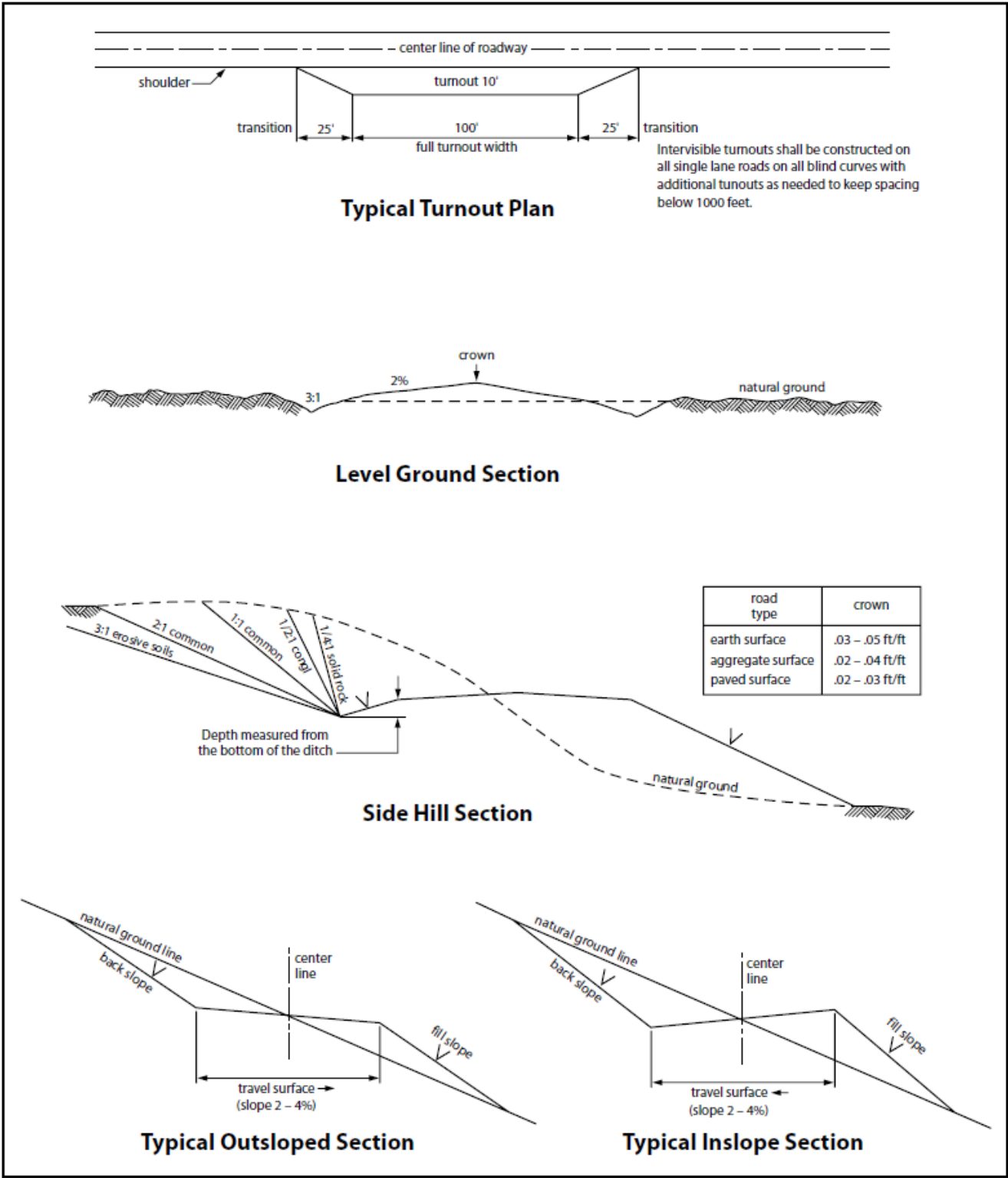


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

## VII. PRODUCTION (POST DRILLING)

### A. WELL STRUCTURES & FACILITIES

#### Placement of Production Facilities

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

#### Exclosure Netting (Open-top Tanks)

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

#### Chemical and Fuel Secondary Containment and Exclosure Screening

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

#### Open-Vent Exhaust Stack Exclosures

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

#### Containment Structures

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

#### Painting Requirement

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

### B. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage

channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.

- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, siting valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

#### BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

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

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way

holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

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

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

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

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

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

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

☐ Seed Mixture 1

☒ Seed Mixture 2

☐ Seed Mixture 2/LPC

☐ Seed Mixture 3

☐ Seed Mixture 4

☐ Seed Mixture Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

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

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

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

OR

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

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 17 for more information.

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

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

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

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

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

- a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.

- b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

21. Special Stipulations:

**C. ELECTRIC LINES**

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
- No further construction will be done until clearance has been issued by the Authorized Officer.
- Special restoration stipulations or realignment may be required.

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

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

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

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006 . The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

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

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

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

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

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

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

OR

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

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 11 for more information.

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

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

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

13. Special Stipulations:

For reclamation remove poles, lines, transformer, etc. and dispose of properly.

Fill in any holes from the poles removed.

## **VIII. INTERIM RECLAMATION**

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

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

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

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

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

## **IX. FINAL ABANDONMENT & RECLAMATION**

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

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

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

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

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

**Seed Mixture 2, for Sandy Sites**

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

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

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

**Species**

	<u>lb/acre</u>
Sand dropseed ( <i>Sporobolus cryptandrus</i> )	1.0
Sand love grass ( <i>Eragrostis trichodes</i> )	1.0
Plains bristlegrass ( <i>Setaria macrostachya</i> )	2.0

\*Pounds of pure live seed:

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

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	Marathon Oil Permian LLC
<b>WELL NAME &amp; NO.:</b>	Goliath 24 Fed Com 503H
<b>LOCATION:</b>	Sec 24-26S-34E-NMP
<b>COUNTY:</b>	Lea County, New Mexico <span style="float: right;">▼</span>

COA

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

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H<sub>2</sub>S) monitors shall be installed prior to drilling out the surface shoe. If H<sub>2</sub>S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1042** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

**C. PRESSURE CONTROL**

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi**. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

**D. SPECIAL REQUIREMENT (S)****Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

## GENERAL REQUIREMENTS

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

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

### Contact Lea County Petroleum Engineering Inspection Staff:

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

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



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

# Operator Certification Data Report

07/29/2025

## Operator

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

**NAME:** ADRIAN COVARRUBIAS

**Signed on:** 05/19/2025

**Title:** regulatory Compliance Representative

**Street Address:** 990 TOWN & COUNTRY BLVD

**City:** HOUSTON

**State:** TX

**Zip:** 77024

**Phone:** (713)296-3368

**Email address:** ADRIAN.COVARRUBIAS@CONOCOPHILLIPS.COM

## Field

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**



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

## Application Data

07/29/2025

APD ID: 10400094588

Submission Date: 09/20/2023

Operator Name: MARATHON OIL PERMIAN LLC

Well Name: GOLIATH 24 FED COM

Well Number: 503H

Well Type: OIL WELL

Well Work Type: Drill

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

### Section 1 - General

APD ID: 10400094588

Tie to previous NOS? N

Submission Date: 09/20/2023

BLM Office: Carlsbad

User: ADRIAN COVARRUBIAS

Title: regulatory Compliance  
Representative

Federal/Indian APD: FED

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

Lease number: NMNM65441

Lease Acres:

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO

APD Operator: MARATHON OIL PERMIAN LLC

Operator letter of

### Operator Info

Operator Organization Name: MARATHON OIL PERMIAN LLC

Operator Address: 990 TOWN &amp; COUNTRY BLVD

Zip: 77024

Operator PO Box:

Operator City: HOUSTON

State: TX

Operator Phone: (713)929-6600

Operator Internet Address:

### Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: GOLIATH 24 FED COM

Well Number: 503H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: WC-025 G-08  
S263412K

Pool Name: BONE SPRING

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Is the proposed well in an area containing other mineral resources?** NATURAL GAS,OIL**Is the proposed well in a Helium production area?** N **Use Existing Well Pad?** N **New surface disturbance?****Type of Well Pad:** MULTIPLE WELL**Multiple Well Pad Name:** Goliath  
24 Fed W**Number:** 1**Well Class:** HORIZONTAL**Number of Legs:** 1**Well Work Type:** Drill**Well Type:** OIL WELL**Describe Well Type:****Well sub-Type:** INFILL**Describe sub-type:****Distance to town:** 29 Miles**Distance to nearest well:** 25 FT**Distance to lease line:** 534 FT**Reservoir well spacing assigned acres Measurement:** 790 Acres**Well plat:** A2\_Goliath\_24\_Fed\_Com\_503H\_C102\_20230919114004.pdf

A2\_Goliath\_24\_Fed\_Com\_503H\_PAY.GOV\_RECEIPT\_20230920073343.pdf

**Well work start Date:** 07/31/2026**Duration:** 29 DAYS**Section 3 - Well Location Table****Survey Type:** RECTANGULAR**Describe Survey Type:****Datum:** NAD83**Vertical Datum:** NAVD88**Survey number:** 21653**Reference Datum:** GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	269	FNL	1494	FWL	26S	34E	24	Aliquot NENW	32.0353818	-103.4273383	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 65441	3222			Y
KOP Leg #1	100	FNL	2200	FWL	26S	34E	24	Aliquot NENW	32.035841	-103.4250591	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 65441	-7455	10739	10677	Y

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	100	FNL	2200	FWL	26S	34E	24	Aliquot NENW	32.035841	- 103.4250591	LEA	NEW MEXICO	NEW MEXICO	F	NMNM 65441	- 7455	10739	10677	Y
EXIT Leg #1	100	FSL	2200	FWL	26S	34E	36	Lot 3	32.0005611	- 103.4250477	LEA	NEW MEXICO	NEW MEXICO	S	STATE	- 8028	23950	11250	Y
BHL Leg #1	100	FSL	2200	FWL	26S	34E	36	Lot 3	32.0005611	- 103.4250477	LEA	NEW MEXICO	NEW MEXICO	S	STATE	- 8028	23950	11250	Y

Santa Fe Main Office Phone: (505) 476-3441 General Information Phone: (505) 629-6116  Online Phone Directory Visit: <a href="https://www.emnrd.nm.gov/ocd/contact-us/">https://www.emnrd.nm.gov/ocd/contact-us/</a>	State of New Mexico Energy, Minerals & Natural Resources Department <b>OIL CONSERVATION DIVISION</b>	<div style="text-align: right;"> <b>C-102</b>            Revised July 9, 2024            Submit Electronically            via OCD Permitting         </div> <div>           Submittal Type:           <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> <input checked="" type="checkbox"/> Initial Submittal  <input type="checkbox"/> Amended Report  <input type="checkbox"/> As Drilled           </div> </div>
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**WELL LOCATION INFORMATION**

API Number 30-025- <b>55539</b>	Pool Code 96672	Pool Name WC-025 G-08 S263412K; BONE SPRING
Property Code 335353	Property Name GOLIATH 24 FEDERAL COM	Well Number 503H
OGRID No. 372098	Operator Name MARATHON OIL PERMIAN LLC	Ground Level Elevation 3222'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

**Surface Location**

UL C	Section 24	Township 26S	Range 34E	Lot	Ft. from N/S 269' NORTH	Ft. from E/W 1494' WEST	Latitude 32.03538180N	Longitude 103.42733838W	County LEA
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**Bottom Hole Location**

UL L 3	Section 36	Township 26S	Range 34E	Lot 3	Ft. from N/S 100' SOUTH	Ft. from E/W 2200' WEST	Latitude 32.00056116N	Longitude 103.42504772W	County LEA
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Dedicated Acres 789.94	Infill or Defining Well INFILL	Defining Well API 30-025-52751	Overlapping Spacing Unit (Y/N) Y	Consolidation Code C
Order Numbers. N/A			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

**Kick Off Point (KOP)**

UL C	Section 24	Township 26S	Range 34E	Lot	Ft. from N/S 100' NORTH	Ft. from E/W 2200' WEST	Latitude 32.03584105N	Longitude 103.42505915W	County LEA
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**First Take Point (FTP)**

UL C	Section 24	Township 26S	Range 34E	Lot	Ft. from N/S 100' NORTH	Ft. from E/W 2200' WEST	Latitude 32.03584105N	Longitude 103.42505915W	County LEA
---------	---------------	-----------------	--------------	-----	----------------------------	----------------------------	--------------------------	----------------------------	---------------

**Last Take Point (LTP)**

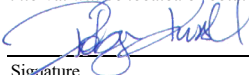
UL L 3	Section 36	Township 26S	Range 34E	Lot 3	Ft. from N/S 100' SOUTH	Ft. from E/W 2200' WEST	Latitude 32.00056116N	Longitude 103.42504772W	County LEA
-----------	---------------	-----------------	--------------	----------	----------------------------	----------------------------	--------------------------	----------------------------	---------------

Unitized Area or Area of Uniform Interest COM	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3222'
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**OPERATOR CERTIFICATIONS**

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

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



09/30/2025

Signature

Date

Robyn Russell

Printed Name

Robyn.M.Russell@conocophillips.com

Email Address

**SURVEYOR CERTIFICATIONS**

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

Signature and Seal of Professional Surveyor

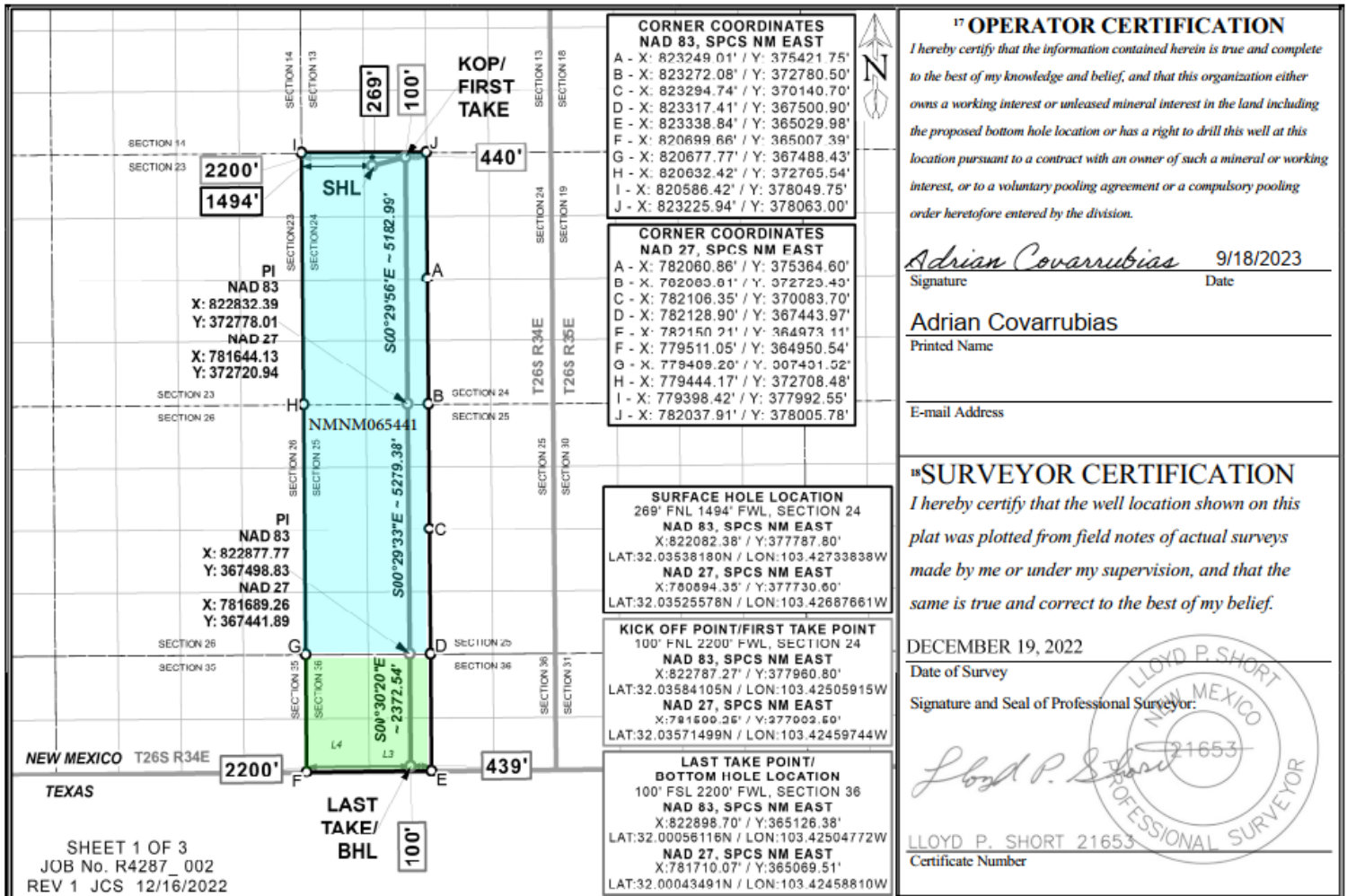
Certificate Number

Date of Survey

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

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.





## Receipt

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### Tracking Information

Pay.gov Tracking ID: 277TFT2Q

Agency Tracking ID: 76501503632

Form Name: Bureau of Land Management (BLM) Application for Permit to Drill (APD) Fee

Application Name: BLM Oil and Gas Online Payment

### Payment Information

Payment Type: Debit or credit card

Payment Amount: \$11,805.00

Transaction Date: 09/20/2023 09:30:22 AM EDT

Payment Date: 09/20/2023

Company: MARATHON OIL PERMIAN LLC

APD IDs: 10400094588

Lease Numbers: NMNM65441

Well Numbers: 503H

Note: You will need your Pay.gov Tracking ID to complete your APD transaction in AFMSS II. Please ensure you write this number down upon completion of payment.

### Account Information

Cardholder Name: Adrian Covarrubias

Card Type: Visa

Card Number: \*\*\*\*\*4229



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

# Drilling Plan Data Report

07/29/2025

APD ID: 10400094588

Submission Date: 09/20/2023

Highlighted data  
reflects the most  
recent changes

Operator Name: MARATHON OIL PERMIAN LLC

Well Name: GOLIATH 24 FED COM

Well Number: 503H

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
16094699	PERMIAN	3222	0	0	ANHYDRITE	NONE	N
16094674	RUSTLER	2205	1017	1017	ANHYDRITE	OTHER : BRINE	N
16094695	SALADO	1794	1428	1428	ANHYDRITE, SALT	OTHER : BRINE	N
16094676	CASTILE	-458	3680	3680	ANHYDRITE, SALT	OTHER : BRINE	N
16094679	BASE OF SALT	-2139	5361	5361	ANHYDRITE, SALT	OTHER : BRINE	N
16094680	LAMAR	-2139	5361	5361	SANDSTONE, SHALE	NONE	N
16094684	BELL CANYON	-2163	5385	5385	SANDSTONE	OIL	N
16094687	CHERRY CANYON	-3476	6698	6698	SANDSTONE	OIL	N
16094688	BRUSHY CANYON	-4662	7884	7884	SANDSTONE	OIL	N
16094689	BONE SPRING LIME	-6146	9368	9368	LIMESTONE	NONE	N
16094696	UPPER AVALON SHALE	-6177	9399	9399	SHALE	OIL	Y
16094690	BONE SPRING 1ST	-7445	10667	10667	SANDSTONE	OIL	Y
16094691	BONE SPRING 2ND	-7597	10819	10819	LIMESTONE, SHALE	NONE	N
16094697	BONE SPRING 2ND	-7966	11188	11188	SANDSTONE	OIL	Y
16094698	BONE SPRING 3RD	-8433	11655	11655	LIMESTONE	OIL	Y
16094692	BONE SPRING 3RD	-9011	12233	12233	SANDSTONE	OIL	Y
16094693	WOLFCAMP	-9432	12654	12654	OTHER, SANDSTONE, SHALE : CARBONATES	NATURAL GAS, OIL	Y

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Section 2 - Blowout Prevention****Pressure Rating (PSI):** 10M**Rating Depth:** 10000

**Equipment:** 13 5/8 BOP Annular (5,000 psi WP) and BOP Stack (10,000 psi WP) will be installed and tested before drilling all holes.

**Requesting Variance?** YES

**Variance request:** A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart. Marathon requests a 5M annular variance for the 10M BOP system. Please see attached procedure.

**Testing Procedure:** BOP/BOPE will be tested to 250 psi low and 100% WP for Annular and 5,000 psi for BOP Stack. Testing will be conducted by an independent service company per 43 CFR 3162 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the Equipment Description above. If the system is upgraded all the components installed will be functional and tested. Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock, full opening safety valve / inside BOP and choke lines and choke manifold. See attached schematics. Formation integrity test will be performed per 43 CFR 3162. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. A multibowl wellhead is being used. The BOP will be tested per 43 CFR 3162 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. See attached schematic.

**Choke Diagram Attachment:**

D2\_Goliath\_24\_Fed\_Com\_10M\_Choke\_Manifold\_20230906070923.pdf

**BOP Diagram Attachment:**

D2\_Goliath\_24\_Fed\_Com\_10M\_BOP\_diagram\_20230906070943.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	1042	0	1042	3222	2180	1042	J-55	54.5	BUTT	5.22	1.81	BUOY	4.52	BUOY	4.52
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	10639	0	10577	2901	-7355	10639	P-110	40	BUTT	1.2	1.42	BUOY	2.44	BUOY	2.44
3	PRODUCTION	8.75	5.5	NEW	NON API	N	0	23950	0	11250	2915	-8028	23950	P-110	23	OTHER - TLW	2.53	1.26	BUOY	2.22	BUOY	2.22

**Casing Attachments**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Casing Attachments****Casing ID:** 1      **String**      SURFACE**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

D3\_PRODUCTION\_STRING\_5.500\_23.00\_Benteler\_P110\_CY\_TLW\_CDS\_20230919140817.pdf

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

D3\_GOLIATH\_24\_FED\_COM\_503H\_CASING\_ASSUMPTIONS\_20230919140846.pdf

**Casing ID:** 3      **String**      PRODUCTION**Inspection Document:****Spec Document:**

D3\_PRODUCTION\_STRING\_5.500\_23.00\_Benteler\_P110\_CY\_TLW\_CDS\_\_1\_\_20230906071820.pdf

**Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

D3\_GOLIATH\_24\_FED\_COM\_503H\_CASING\_ASSUMPTIONS\_20230919140919.pdf

**Section 4 - Cement**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	NA, tail only.	NA, tail only.
PRODUCTION	Tail		1033 9	2395 0	2599	1.68	13	4366	25	Class H	Retarder, Extender, Fluid Loss, Suspension Agent.
SURFACE	Lead		0	742	327	2.12	12.5	693	25	Class C	Extender, Accelerator, LCM
SURFACE	Tail		742	1042	197	1.32	14.8	260	25	CLASS C	Accelerator
INTERMEDIATE	Lead		0	1013 9	1850	2.18	12.4	4034	25	CLASS C	Extender, Accelerator, LCM
INTERMEDIATE	Tail		1013 9	1063 9	147	1.33	14.8	196	25	CLASS C	Retarder

### 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:** The necessary mud products for additional weight and fluid loss control will be on location at all times.**Describe the mud monitoring system utilized:** Losses or gains in the mud system will be monitored visually/manually as well as with an electronic PVT.

### 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	1042	WATER-BASED MUD	8.4	8.8							
1042	1063 9	OTHER : BRINE or OBM	9.2	10.2							

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H

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
1063 9	2395 0	OIL-BASED MUD	10.5	12.5							

### Section 6 - Test, Logging, Coring

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

GR from TD to Surface (horizontal well - vertical portion of well).

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

GAMMA RAY LOG,COMPENSATED NEUTRON LOG,DIRECTIONAL SURVEY,

**Coring operation description for the well:**

Run gamma-ray (GR), corrected neutron log (CNL) or analogous to surface for future development of the area, one per shared well pad not to exceed 200 radial distance.

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 7313

**Anticipated Surface Pressure:** 4837

**Anticipated Bottom Hole Temperature(F):** 195

**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**

D7\_Goliath\_24\_Fed\_Com\_503H\_\_\_H2S\_Plan\_20230919141333.pdf

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Section 8 - Other Information****Proposed horizontal/directional/multi-lateral plan submission:**

D8\_Goliath\_24\_Fed\_Com\_503H\_\_\_Dir\_Plan\_20230919141356.pdf

**Other proposed operations facets description:****Other proposed operations facets attachment:**

D8\_GOLIATH\_24\_FED\_COM\_503H\_Drill\_Plan\_20230919141407.pdf

D8\_Goliath\_24\_Fed\_Com\_Rig\_Layout\_20230919141427.pdf

**Other Variance request(s)?:** Y**Other Variance attachment:**

D8\_Goliath\_24\_Fed\_Com\_Variance\_Request\_20230906075953.pdf

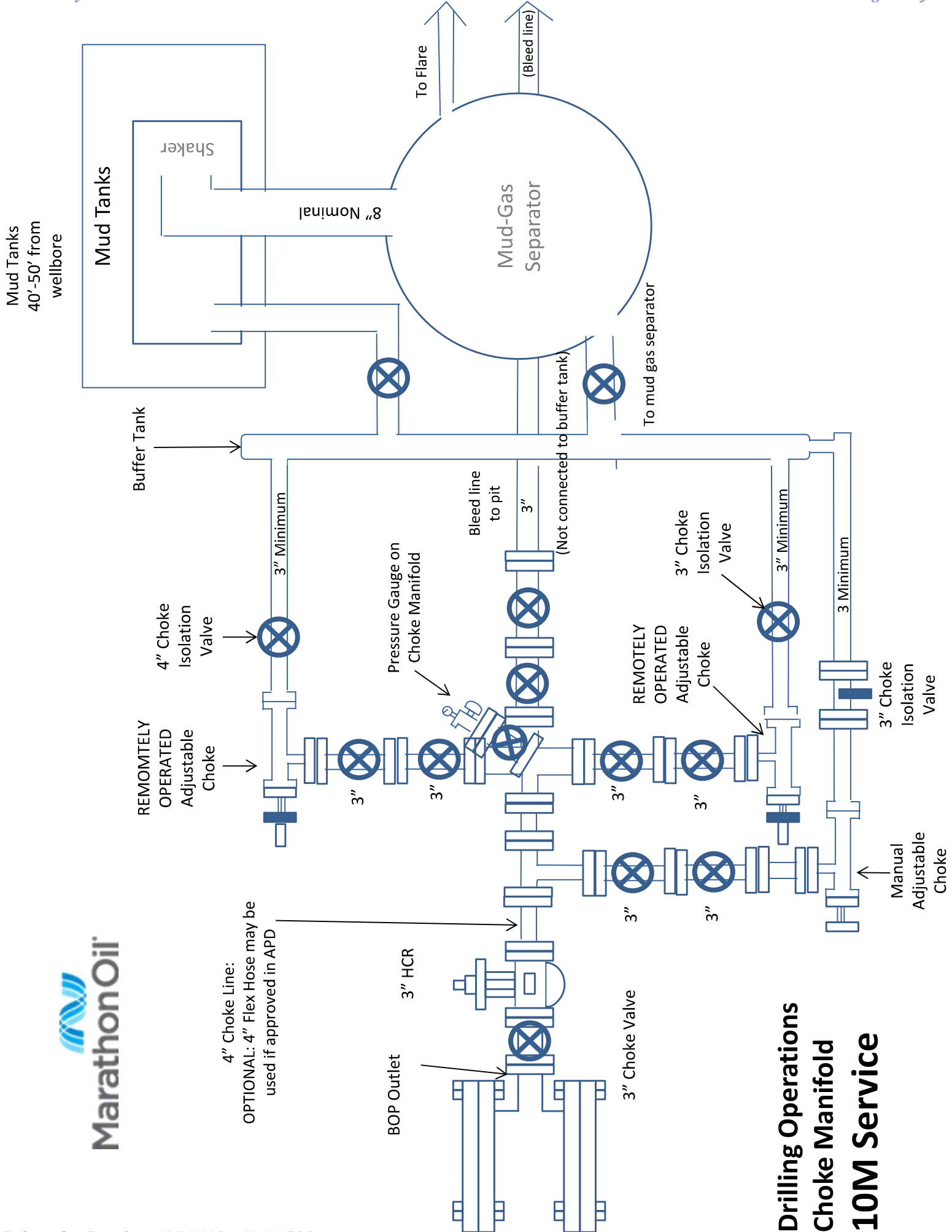
D8\_Goliath\_24\_Fed\_Com\_Well\_Control\_Plan\_20230906075953.pdf

D8\_Goliath\_24\_Fed\_Com\_Wellhead\_Diagram\_20230906075952.pdf

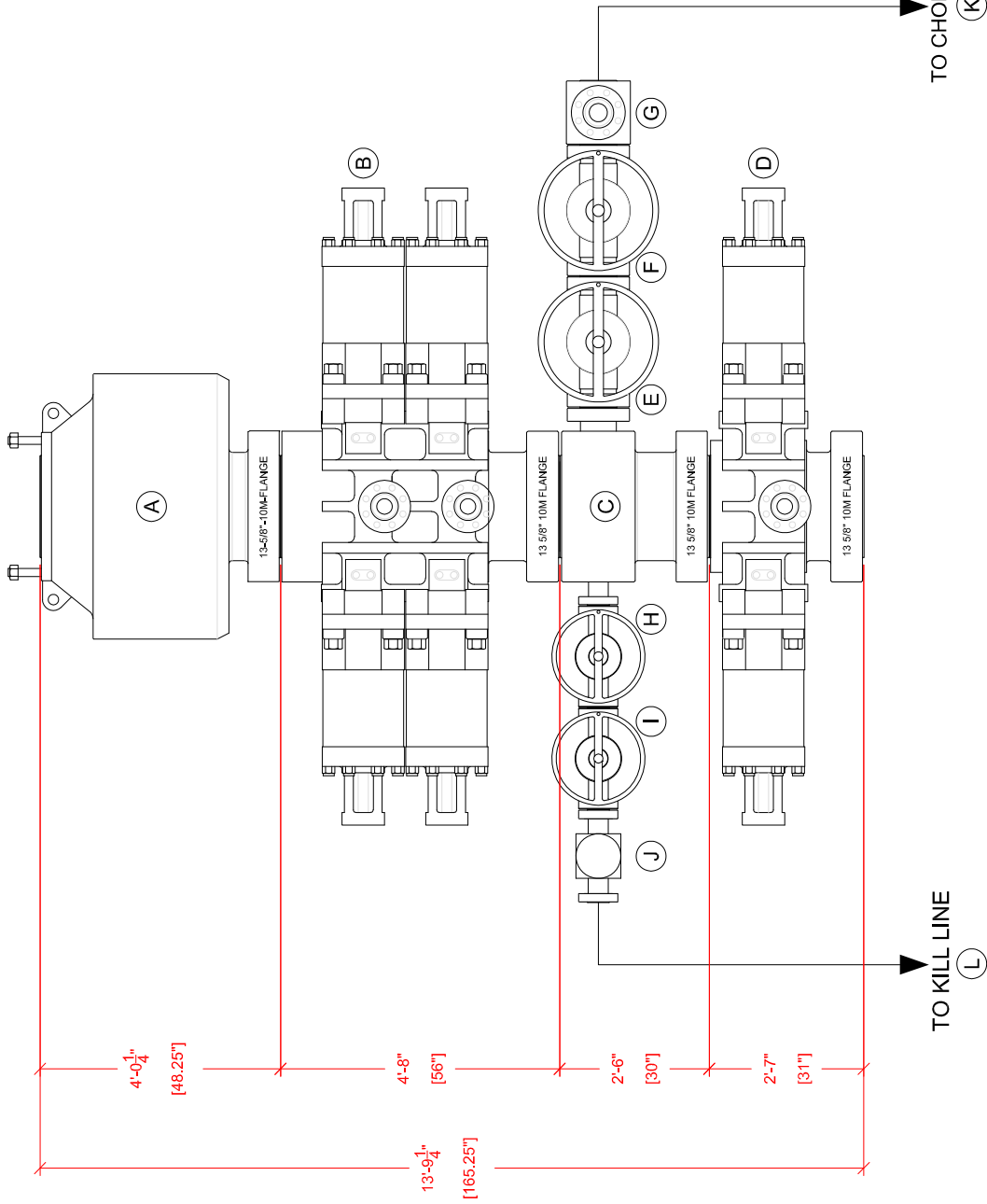
D8\_PRODUCTION\_STRING\_5.500\_23.00\_Benteler\_P110\_CY\_TLW\_CDS\_\_1\_\_20230906075952.pdf

D8\_GOLIATH\_24\_FED\_COM\_NGMP\_20230919141448.pdf

D8\_MRO\_Flex\_Hose\_20250102153351\_20250605120445\_20250611153210.pdf



BOP INFORMATION			
ITEM	DESCRIPTION	MAKE	MODEL
A	ANNULAR BOP	CAMERON	13 5/8" 5M T90
B	DOUBLE RAM BOP	CAMERON	13 5/8" 10M U
C	MUD CROSS	CAMERON	13 5/8" 10M
D	SINGLE RAM BOP	CAMERON	13 5/8" 10M U
E	WING VALVE	CAMERON	4 1/2" 10M FLS MANUAL
F	HCR VALVE	CAMERON	4 1/2" 10M HCR
G	CHOKE BLOCK	CAMERON	4 1/2" 10M
H	KILL VALVE	CAMERON	2 1/2" 10M FLS MANUAL
I	KILL VALVE	CAMERON	2 1/2" 10M FLS MANUAL
J	CHECK VALVE	CAMERON	2 1/2" 10M "R" CHECK
K	CHOKE LINE	GATES	4 1/2" 10M FR
L	KILL LINE	GATES	2 1/2" 10M FR
M			



**Cactus** Drilling Co., L.L.C.  
Oklahoma City, OK, U.S.A.  
Tel: 405-577-5347 Fax: 405-577-5906

TITLE:  
**RIG 170  
BOP STACK-UP**

FILE:  
R-170\_BOP\_MARATHON.dwg

DWG BY:  
IJA

CHK BY:  
JJA

APP BY:  
JJA

DATE:  
7/13/2021

CUSTOMER INFO:  
TOLERANCE UNLESS OTHERWISE SPECIFIED  
DIMENSIONS IN INCHES

DECIMAL  
CONCENTRICITY  
XXX  
X.XXX  
ANGLES ± .5 DEGREES

1 F.I.R.  
.06 F.I.R.  
.010 F.I.R.

CHK BY:  
JJA

APP BY:  
JJA

ACAD FILE: CAC170-A-005-00-RO

BY:  
JJA

REVISION:  
JJA

DATE:  
7/13/2021

SCALE: NTS

SIZE:  
B

Released to Filing: 12/8/2025 1:38:31 PM



# TEC-LOCK WEDGE

5.500" 23 LB/FT (.415"Wall)

BENTELER P110 CY

## Pipe Body Data

Nominal OD:	5.500	in
Nominal Wall:	.415	in
Nominal Weight:	23.00	lb/ft
Plain End Weight:	22.56	lb/ft
Material Grade:	P110 CY	
Mill/Specification:	BENTELER	
Yield Strength:	125,000	psi
Tensile Strength:	130,000	psi
Nominal ID:	4.670	in
API Drift Diameter:	4.545	in
Special Drift Diameter:	None	in
RBW:	87.5 %	
Body Yield:	829,000	lbf
Burst:	16,510	psi
Collapse:	16,910	psi

## Connection Data

Standard OD:	5.950	in
Pin Bored ID:	4.670	in
Critical Section Area:	6.457	in <sup>2</sup>
Tensile Efficiency:	97.4 %	
Compressive Efficiency:	100 %	
Longitudinal Yield Strength:	807,000	lbf
Compressive Limit:	829,000	lbf
Internal Pressure Rating:	16,510	psi
External Pressure Rating:	16,910	psi
Maximum Bend:	101.5	°/100ft

## Operational Data

Minimum Makeup Torque:	16,400	ft*lbf
Optimum Makeup Torque:	20,500	ft*lbf
Maximum Makeup Torque:	44,300	ft*lbf
Minimum Yield:	49,200	ft*lbf
Makeup Loss:	5.97	in

**Notes** Operational Torque is equivalent to the Maximum Make-Up Torque





# TEC-LOCK WEDGE

5.500" 23 LB/FT (.415"Wall)

BENTELER P110 CY

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Optimum Makeup Torque:	20,500	ft*lbf
Maximum Makeup Torque:	44,300	ft*lbf
Minimum Yield:	49,200	ft*lbf
Makeup Loss:	5.97	in

**Notes** Operational Torque is equivalent to the Maximum Make-Up Torque

Generated on Mar 12, 2019





### Goliath 24 Federal Com #503

String Type	Hole Size	Casing Size	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Weight (lbs/ft)	Grade	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	1042	0	1042	3222	2180	54.5	J55	BTC	5.22	1.81	BUOY	4.52	BUOY	4.52
Intermediate	12.25	9.625	0	10639	0	10577	3222	-7355	40	P110HC	BTC	1.20	1.42	BUOY	2.44	BUOY	2.44
Production	8.75	5.5	0	23950	0	11250	3222	-8028	23	P110HC	TLW	2.53	1.26	BUOY	2.22	BUOY	2.22
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h												Safety Factors will Meet or Exceed					



### Goliath 24 Federal Com #503

String Type	Hole Size	Casing Size	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Weight (lbs/ft)	Grade	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	1042	0	1042	3222	2180	54.5	J55	BTC	5.22	1.81	BUOY	4.52	BUOY	4.52
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Production	8.75	5.5	0	23950	0	11250	3222	-8028	23	P110HC	TLW	2.53	1.26	BUOY	2.22	BUOY	2.22
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h												Safety Factors will Meet or Exceed					

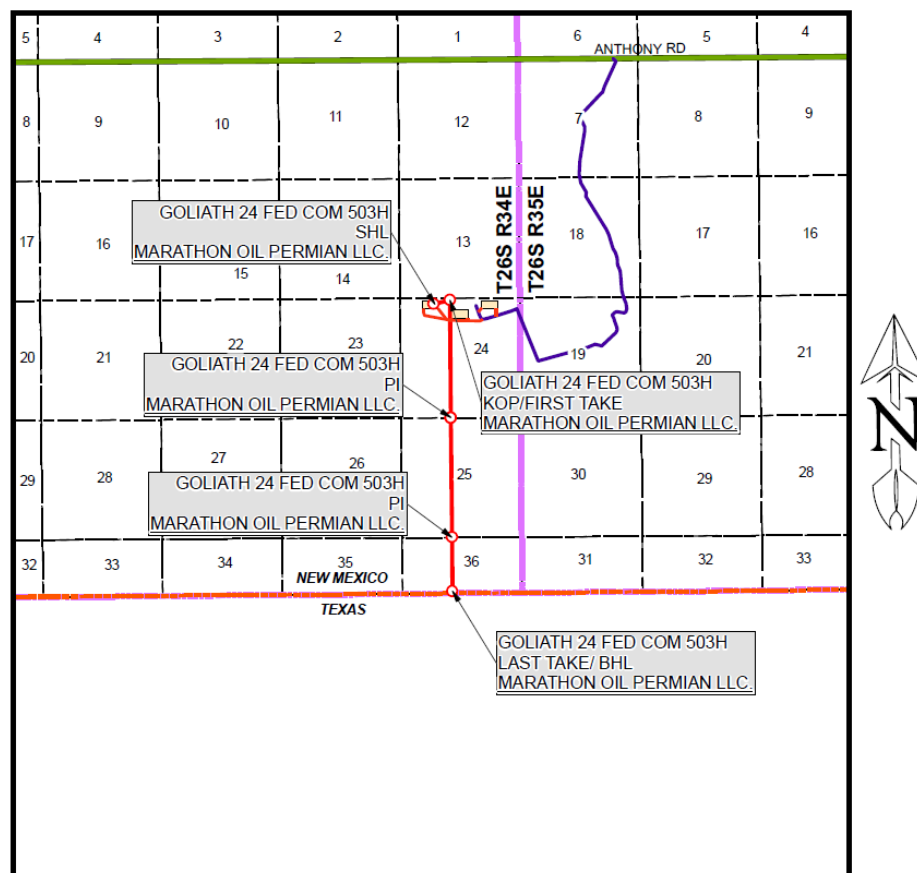


**Hydrogen Sulfide (H<sub>2</sub>S)  
Contingency Plan**

**Goliath 24 Fed Com #503H  
269' FNL & 1494' FWL Sec. 24 T-26S R-34E  
LAT = 32.03538180 N (NAD83)  
LONG = -103.42733838 W  
Lea County NM**

## Marathon Oil Permian, LLC Goliath 24 Fed Com #503H

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



### Escape

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

**Assumed 100 ppm ROE = 3000'**

**100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.**

### **Emergency Procedures**

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H<sub>2</sub>S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - Detection of H<sub>2</sub>S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

### **Ignition of Gas Source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H<sub>2</sub> S and SO<sub>2</sub>

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

### **Contacting Authorities**

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

## **Marathon Oil Permian, LLC**

### **Hydrogen Sulfide Drilling Operation Plan**

#### **I. HYDROGEN SULFIDE (H<sub>2</sub>S) 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:

- The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S)
- The proper use and maintenance of personal protective equipment and life support systems.
- The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- The proper techniques for first aid and rescue procedures.

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

- The effects of H<sub>2</sub>S metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan.
- There will be weekly H<sub>2</sub>S and well control drills for all personnel in each crew.

#### **II. HYDROGEN SULFIDE TRAINING**

Note: All H<sub>2</sub>S 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 reasonably expected to contain H<sub>2</sub>S.

- Well Control Equipment
  - Flare line
  - Choke manifold - Remotely Operated
  - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit

- Auxiliary equipment may include if applicable: annular preventer and rotating head.
  - Mud/Gas Separator
- Protective equipment for essential personnel:
  - 30-minute SCBA units located at briefing areas, as indicated on well site diagram, with escape units available in the top doghouse. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.
  - Fire extinguishers are located at various locations around the rig. First Aid supplies are located in the top doghouse and the rig manger's office.
- H2S detection and monitoring equipment:
  - Portable H2S monitors positioned on location for best coverage and response. These units have warning lights which activate when H2S levels reach 10 ppm and audible sirens which activate at 15 ppm.Sensor locations:
  - Bell nipple
  - Rig floor
  - Cellar
  - Possum Belly/Shale shaker
  - Choke manifold
- Visual warning systems:
  - Wind direction indicators as shown on well site diagram
  - Caution/Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate.
- Mud program:
  - 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.

- Metallurgy:
  - All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H2S trim.
  - All elastomers used for packing and seals shall be H2S trim.
- Communication:
  - Company personnel have/use cellular telephones in the field.
  - Land line (telephone) communications at Office
- Well testing:
  - Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety 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.
  - There will be no drill stem testing.

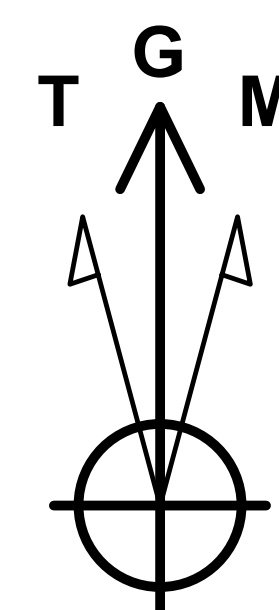
**EMERGENCY & MEDICAL FACILITIES**

<b>Marathon Oil Corporation Emergency Numbers</b>			
Anders Storaune	Drilling Manager	<a href="mailto:astoraune@marathonoil.com">astoraune@marathonoil.com</a>	713-296-2985
Allen Livingston	Drilling Superintendent	<a href="mailto:alivingston@marathonoil.com">alivingston@marathonoil.com</a>	832-680-2348
Joshua Love	Drilling Superintendent	<a href="mailto:jlove@marathonoil.com">jlove@marathonoil.com</a>	405-657-6126
Steve Donley	Drilling Engineer	<a href="mailto:sdonley@marathonoil.com">sdonley@marathonoil.com</a>	405-593-4331
Court Nelson	Drilling Engineer	<a href="mailto:cnelson1@marathonoil.com">cnelson1@marathonoil.com</a>	406-565-0604
Scott Schmidt	Drilling Engineer	<a href="mailto:sschmidt1@marathonoil.com">sschmidt1@marathonoil.com</a>	405-249-6843
John Burt	HES Supervisor	<a href="mailto:jburt@marathonoil.com">jburt@marathonoil.com</a>	713-296-2903
Unit Rig 409	Company Man	<a href="mailto:unit409@marathonoil.com">unit409@marathonoil.com</a>	
Precision Rig 580	Company Man	<a href="mailto:precision580@marathonoil.com">precision580@marathonoil.com</a>	
Cactus Rig 169	Company Man	<a href="mailto:cactus169@marathonoil.com">cactus169@marathonoil.com</a>	
Cactus Rig 170	Company Man	<a href="mailto:cactus170@marathonoil.com">cactus170@marathonoil.com</a>	
Cactus Rig 171	Company Man	<a href="mailto:cactus171@marathonoil.com">cactus171@marathonoil.com</a>	

<b>Emergency Services Area Numbers: Or Call 911</b>			
Sheriff (Eddy County, NM)	575-887-7551	New Mexico Poison Control	800-222-1222
Sheriff (Lea County, NM)	575-396-3611	Border Patrol (Las Cruces, NM)	575-528-6600
New Mexico State Police	575-392-5580/5588	Energy Minerals & Natural Resources Dept.	575-748-1283
Carlsbad Medical Center	575-887-4100	Environmental Health Dept.	505-476-8600
Lea Regional Medical Center	575-492-5000	OSHA (Santa Fe, NM)	505-827-2855
Police (Carlsbad, NM)	575-885-2111		
Police (Hobbs, NM)	575-392-9265		
Fire (Carlsbad, NM)	575-885-3124		
Fire (Hobbs, NM)	575-397-9308		
Ambulance Service	911	TOTAL SAFETY H2S - SAFETY SERVICES For Life Flight 1 <sup>st</sup> dial 911, nearest helicopter will be determined	432-561-5049

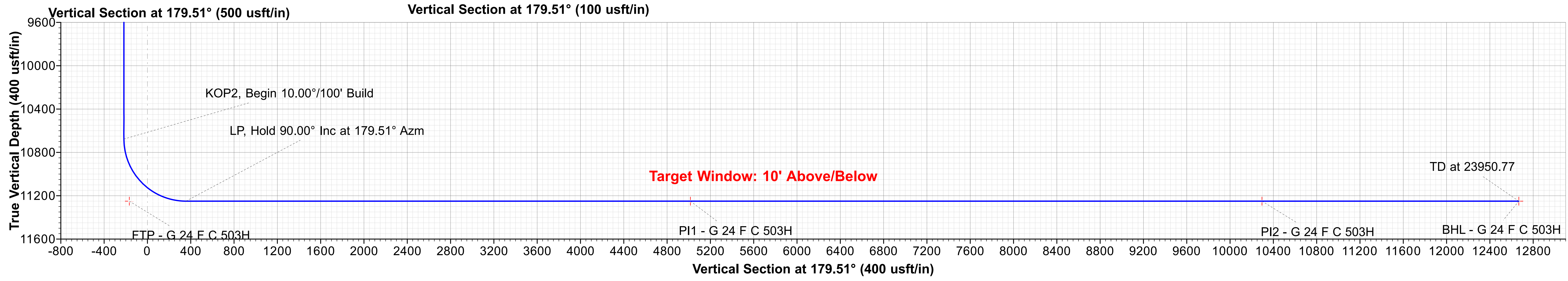
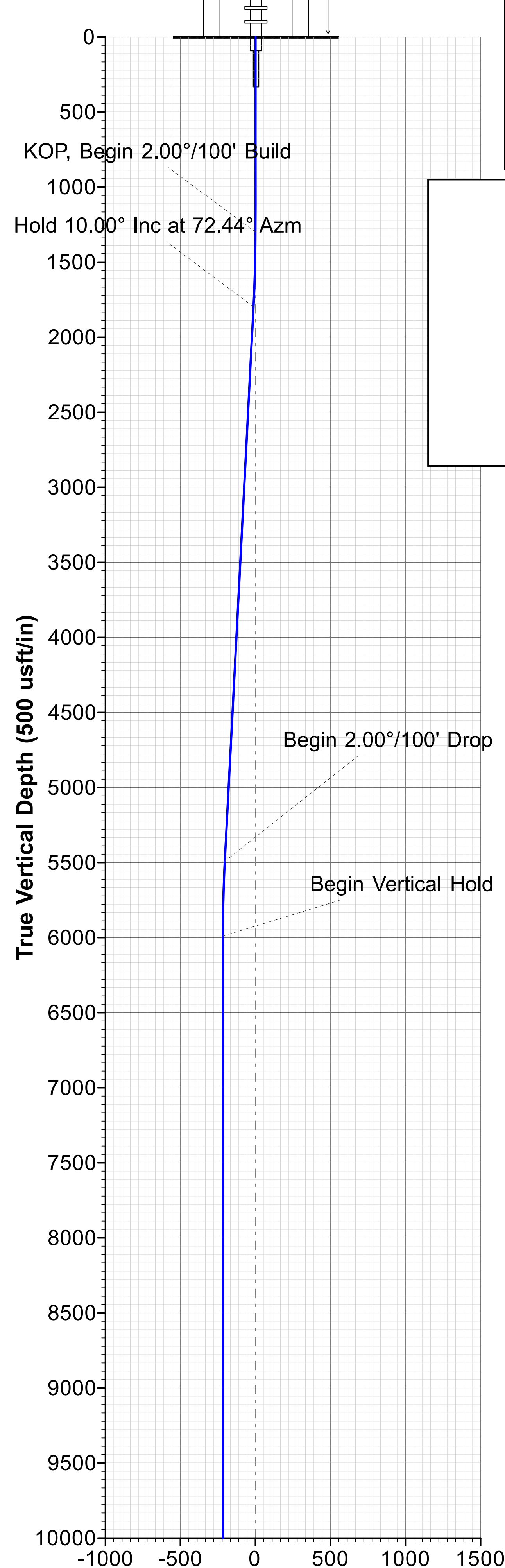
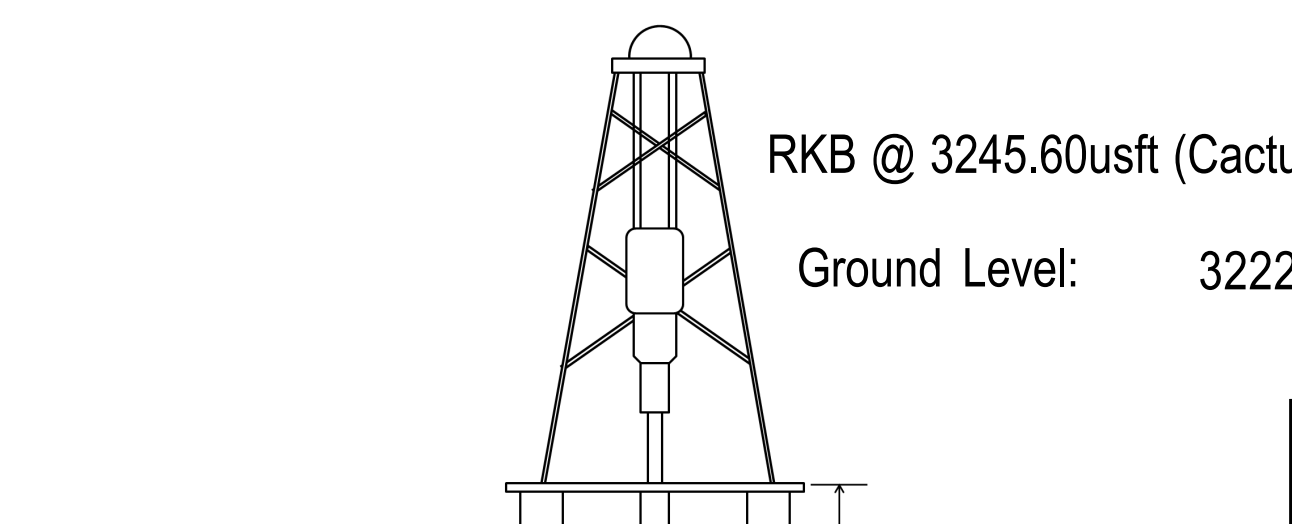


Project: Lea County, NM (NAD27 NME)  
Site: Goliath 24 Fed Com West  
Well: Goliath 24 Fed Com 503H  
Wellbore: OH  
Design: Plan 1 01-19-23  
Rig: Cactus 169



Azimuths to Grid North  
True North: -0.48°  
Magnetic North: 5.73°

Magnetic Field  
Strength: 47294.8nT  
Dip Angle: 59.58°  
Date: 2/28/2023  
Model: MVHD

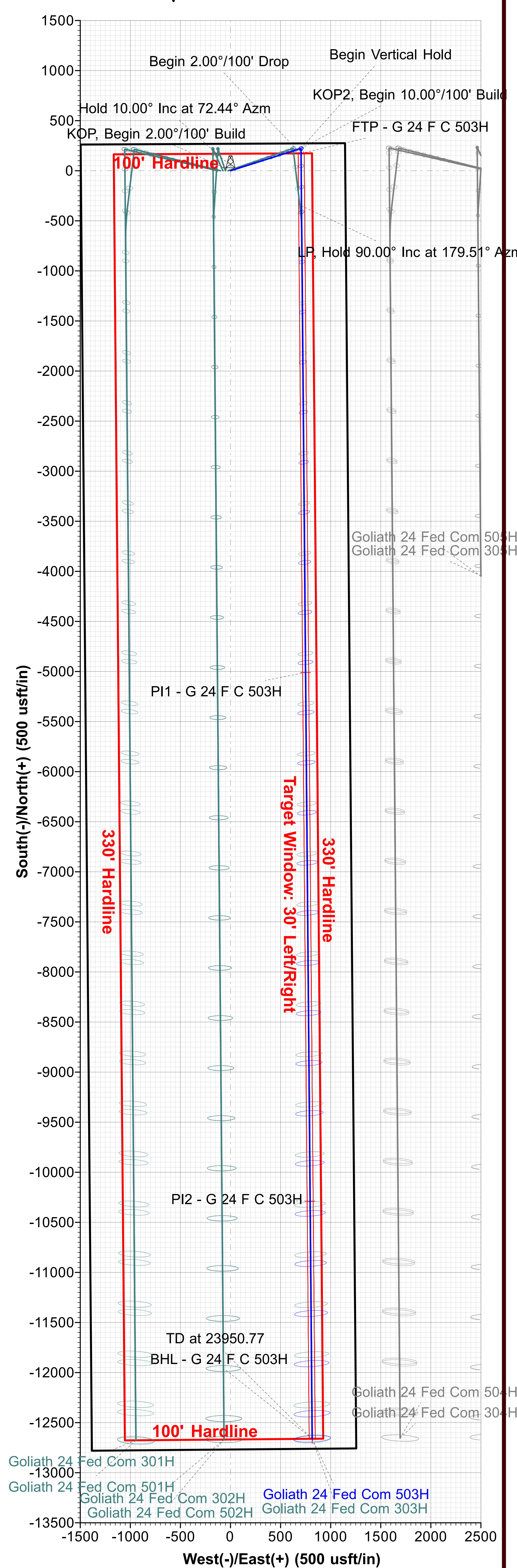


WELL DETAILS						
				3222.00		
	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
	0.00	0.00	377730.60	780894.35	32° 2' 6.920808 N	103° 25' 36.755857 W

DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude
BHL - G 24 F C 503H	11250.00	-12661.09	815.72	365069.51	781710.07	32° 0' 1.565676 N
FTP - G 24 F C 503H	11250.00	172.99	704.90	377903.59	781599.25	32° 2' 8.573964 N
PI1 - G 24 F C 503H	11250.00	-5009.66	749.78	372720.94	781644.13	32° 1' 17.285634 N
PI2 - G 24 F C 503H	11250.00	-10288.71	794.91	367441.89	781689.26	32° 0' 25.043218 N

SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00		
2	1300.00	0.00	0.00	1300.00	0.00	0.00	0.00	0.000	0.00		KOP, Begin 2.00°/100' Build
3	1800.25	10.00	72.44	1797.71	13.15	41.53	2.00	72.436	-12.79		Hold 10.00° Inc at 72.44° Azm
4	5551.88	10.00	72.44	5492.29	209.84	662.93	0.00	0.000	-204.16		Begin 2.00°/100' Drop
5	6052.13	0.00	0.00	5990.00	222.98	704.47	2.00	180.000	-216.95		Begin Vertical Hold
6	10739.17	0.00	0.00	10677.04	222.98	704.47	0.00	0.000	-216.95		KOP2, Begin 10.00°/100' Build
7	11639.17	90.00	179.51	11250.00	-349.95	709.41	10.00	179.505	356.01		LP, Hold 90.00° Inc at 179.51° Azm
8	23950.77	90.00	179.51	11250.00	-12661.09	815.72	0.00	0.000	12667.60	BHL - G 24 F C 503H	TD at 23950.77

Map System: US State Plane 1927 (Exact solution)  
Datum: NAD 1927 (NADCON CONUS)  
Ellipsoid: Clarke 1866  
Zone Name: New Mexico East 3001  
Local Origin: Well Goliath 24 Fed Com 503H, Grid North  
Latitude: 32° 2' 6.920808 N  
Longitude: 103° 25' 36.755857 W  
Grid East: 780894.35  
Grid North: 377730.60  
Scale Factor: 1.000  
Geomagnetic Model: MVHD  
Sample Date: 28-Feb-23  
Magnetic Declination: 6.216°  
Dip Angle from Horizontal: 59.580°  
Magnetic Field Strength: 47294.77583859nT  
To convert a Magnetic Direction to a Grid Direction, Add 5.735°  
To convert a Magnetic Direction to a True Direction, Add 6.216° East  
To convert a True Direction to a Grid Direction, Subtract 0.481°





# **Marathon Oil Permian LLC**

**Lea County, NM (NAD27 NME)**

**Goliath 24 Fed Com West**

**Goliath 24 Fed Com 503H**

**OH**

**Plan: Plan 1 01-19-23**

## **Standard Planning Report**

**19 January, 2023**





## Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Goliath 24 Fed Com 503H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>MD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Site:</b>	Goliath 24 Fed Com West	<b>North Reference:</b>	Grid
<b>Well:</b>	Goliath 24 Fed Com 503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 01-19-23		

<b>Project</b>	Lea County, NM (NAD27 NME)		
<b>Map System:</b>	US State Plane 1927 (Exact solution)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	New Mexico East 3001		

Site		Goliath 24 Fed Com West			
Site Position:		Northing:	377,730.72 usft	Latitude:	32° 2' 6.932364 N
From:	Map	Easting:	780,769.35 usft	Longitude:	103° 25' 38.207784 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.481

Well	Goliath 24 Fed Com 503H					
Well Position	+N/-S	-0.12 usft	Northing:	377,730.60 usft	Latitude:	32° 2' 6.920808 N
	+E/-W	124.99 usft	Easting:	780,894.35 usft	Longitude:	103° 25' 36.755858 W
Position Uncertainty		1.00 usft	Wellhead Elevation:		Ground Level:	3,222.00 usft

<b>Wellbore</b>	OH				
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	2/28/2023	6.216	59.580	47,294.77583860

<b>Design</b>	Plan 1 01-19-23				
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<b>Audit Notes:</b>					
<b>Version:</b>		<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	179.51	

<b>Plan Survey Tool Program</b>	<b>Date</b>	1/18/2023			
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	23,950.77	Plan 1 01-19-23 (OH)	MWD+HRGM	
				OWSG MWD + HRGM	

<b>Plan Sections</b>											
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		
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.000		
1,800.25	10.00	72.44	1,797.71	13.15	41.53	2.00	2.00	0.00	72.436		
5,551.88	10.00	72.44	5,492.29	209.84	662.93	0.00	0.00	0.00	0.000		
6,052.13	0.00	0.00	5,990.00	222.98	704.47	2.00	-2.00	0.00	180.000		
10,739.17	0.00	0.00	10,677.04	222.98	704.47	0.00	0.00	0.00	0.000		
11,639.17	90.00	179.51	11,250.00	-349.95	709.41	10.00	10.00	0.00	179.505		
23,950.77	90.00	179.51	11,250.00	-12,661.09	815.72	0.00	0.00	0.00	0.000	BHL - G 24 F C 503	



## Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Goliath 24 Fed Com 503H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>MD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Site:</b>	Goliath 24 Fed Com West	<b>North Reference:</b>	Grid
<b>Well:</b>	Goliath 24 Fed Com 503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 01-19-23		

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
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>KOP, Begin 2.00°/100' Build</b>									
1,400.00	2.00	72.44	1,399.98	0.53	1.66	-0.51	2.00	2.00	0.00
1,500.00	4.00	72.44	1,499.84	2.11	6.65	-2.05	2.00	2.00	0.00
1,600.00	6.00	72.44	1,599.45	4.74	14.96	-4.61	2.00	2.00	0.00
1,700.00	8.00	72.44	1,698.70	8.41	26.58	-8.19	2.00	2.00	0.00
1,800.00	10.00	72.44	1,797.47	13.13	41.49	-12.78	2.00	2.00	0.00
1,800.25	10.00	72.44	1,797.71	13.15	41.53	-12.79	2.00	2.00	0.00
<b>Hold 10.00° Inc at 72.44° Azm</b>									
1,900.00	10.00	72.44	1,895.94	18.38	58.06	-17.88	0.00	0.00	0.00
2,000.00	10.00	72.44	1,994.42	23.62	74.62	-22.98	0.00	0.00	0.00
2,100.00	10.00	72.44	2,092.90	28.86	91.18	-28.08	0.00	0.00	0.00
2,200.00	10.00	72.44	2,191.38	34.11	107.75	-33.18	0.00	0.00	0.00
2,300.00	10.00	72.44	2,289.86	39.35	124.31	-38.28	0.00	0.00	0.00
2,400.00	10.00	72.44	2,388.34	44.59	140.87	-43.38	0.00	0.00	0.00
2,500.00	10.00	72.44	2,486.82	49.83	157.44	-48.49	0.00	0.00	0.00
2,600.00	10.00	72.44	2,585.30	55.08	174.00	-53.59	0.00	0.00	0.00
2,700.00	10.00	72.44	2,683.78	60.32	190.56	-58.69	0.00	0.00	0.00
2,800.00	10.00	72.44	2,782.26	65.56	207.13	-63.79	0.00	0.00	0.00
2,900.00	10.00	72.44	2,880.74	70.80	223.69	-68.89	0.00	0.00	0.00
3,000.00	10.00	72.44	2,979.22	76.05	240.25	-73.99	0.00	0.00	0.00
3,100.00	10.00	72.44	3,077.70	81.29	256.82	-79.09	0.00	0.00	0.00
3,200.00	10.00	72.44	3,176.18	86.53	273.38	-84.19	0.00	0.00	0.00
3,300.00	10.00	72.44	3,274.65	91.78	289.94	-89.29	0.00	0.00	0.00
3,400.00	10.00	72.44	3,373.13	97.02	306.51	-94.39	0.00	0.00	0.00
3,500.00	10.00	72.44	3,471.61	102.26	323.07	-99.49	0.00	0.00	0.00
3,600.00	10.00	72.44	3,570.09	107.50	339.63	-104.60	0.00	0.00	0.00
3,700.00	10.00	72.44	3,668.57	112.75	356.20	-109.70	0.00	0.00	0.00
3,800.00	10.00	72.44	3,767.05	117.99	372.76	-114.80	0.00	0.00	0.00
3,900.00	10.00	72.44	3,865.53	123.23	389.32	-119.90	0.00	0.00	0.00
4,000.00	10.00	72.44	3,964.01	128.48	405.89	-125.00	0.00	0.00	0.00
4,100.00	10.00	72.44	4,062.49	133.72	422.45	-130.10	0.00	0.00	0.00
4,200.00	10.00	72.44	4,160.97	138.96	439.02	-135.20	0.00	0.00	0.00
4,300.00	10.00	72.44	4,259.45	144.20	455.58	-140.30	0.00	0.00	0.00
4,400.00	10.00	72.44	4,357.93	149.45	472.14	-145.40	0.00	0.00	0.00
4,500.00	10.00	72.44	4,456.41	154.69	488.71	-150.50	0.00	0.00	0.00
4,600.00	10.00	72.44	4,554.89	159.93	505.27	-155.61	0.00	0.00	0.00
4,700.00	10.00	72.44	4,653.36	165.17	521.83	-160.71	0.00	0.00	0.00
4,800.00	10.00	72.44	4,751.84	170.42	538.40	-165.81	0.00	0.00	0.00
4,900.00	10.00	72.44	4,850.32	175.66	554.96	-170.91	0.00	0.00	0.00
5,000.00	10.00	72.44	4,948.80	180.90	571.52	-176.01	0.00	0.00	0.00
5,100.00	10.00	72.44	5,047.28	186.15	588.09	-181.11	0.00	0.00	0.00
5,200.00	10.00	72.44	5,145.76	191.39	604.65	-186.21	0.00	0.00	0.00
5,300.00	10.00	72.44	5,244.24	196.63	621.21	-191.31	0.00	0.00	0.00
5,400.00	10.00	72.44	5,342.72	201.87	637.78	-196.41	0.00	0.00	0.00
5,500.00	10.00	72.44	5,441.20	207.12	654.34	-201.51	0.00	0.00	0.00
5,551.88	10.00	72.44	5,492.29	209.84	662.93	-204.16	0.00	0.00	0.00
<b>Begin 2.00°/100' Drop</b>									
5,600.00	9.04	72.44	5,539.75	212.24	670.52	-206.50	2.00	-2.00	0.00
5,700.00	7.04	72.44	5,638.76	216.46	683.86	-210.61	2.00	-2.00	0.00
5,800.00	5.04	72.44	5,738.20	219.64	693.90	-213.70	2.00	-2.00	0.00
5,900.00	3.04	72.44	5,837.94	221.77	700.62	-215.77	2.00	-2.00	0.00



## Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Goliath 24 Fed Com 503H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>MD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Site:</b>	Goliath 24 Fed Com West	<b>North Reference:</b>	Grid
<b>Well:</b>	Goliath 24 Fed Com 503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 01-19-23		

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)
6,000.00	1.04	72.44	5,937.87	222.84	704.02	-216.81	2.00	-2.00	0.00
6,052.13	0.00	0.00	5,990.00	222.98	704.47	-216.95	2.00	-2.00	0.00
<b>Begin Vertical Hold</b>									
10,739.17	0.00	0.00	10,677.04	222.98	704.47	-216.95	0.00	0.00	0.00
<b>KOP2, Begin 10.00°/100' Build</b>									
10,800.00	6.08	179.51	10,737.76	219.76	704.50	-213.73	10.00	10.00	0.00
10,900.00	16.08	179.51	10,835.77	200.56	704.66	-194.53	10.00	10.00	0.00
11,000.00	26.08	179.51	10,928.96	164.64	704.97	-158.60	10.00	10.00	0.00
11,100.00	36.08	179.51	11,014.49	113.08	705.42	-107.04	10.00	10.00	0.00
11,200.00	46.08	179.51	11,089.77	47.45	705.98	-41.41	10.00	10.00	0.00
11,300.00	56.08	179.51	11,152.51	-30.26	706.65	36.30	10.00	10.00	0.00
11,400.00	66.08	179.51	11,200.80	-117.68	707.41	123.72	10.00	10.00	0.00
11,500.00	76.08	179.51	11,233.18	-212.15	708.22	218.20	10.00	10.00	0.00
11,600.00	86.08	179.51	11,248.66	-310.81	709.08	316.87	10.00	10.00	0.00
11,639.17	90.00	179.51	11,250.00	-349.95	709.41	356.01	10.00	10.00	0.00
<b>LP, Hold 90.00° Inc at 179.51° Azm</b>									
11,700.00	90.00	179.51	11,250.00	-410.78	709.94	416.84	0.00	0.00	0.00
11,800.00	90.00	179.51	11,250.00	-510.78	710.80	516.84	0.00	0.00	0.00
11,900.00	90.00	179.51	11,250.00	-610.77	711.67	616.84	0.00	0.00	0.00
12,000.00	90.00	179.51	11,250.00	-710.77	712.53	716.84	0.00	0.00	0.00
12,100.00	90.00	179.51	11,250.00	-810.76	713.39	816.84	0.00	0.00	0.00
12,200.00	90.00	179.51	11,250.00	-910.76	714.26	916.84	0.00	0.00	0.00
12,300.00	90.00	179.51	11,250.00	-1,010.76	715.12	1,016.84	0.00	0.00	0.00
12,400.00	90.00	179.51	11,250.00	-1,110.75	715.98	1,116.84	0.00	0.00	0.00
12,500.00	90.00	179.51	11,250.00	-1,210.75	716.85	1,216.84	0.00	0.00	0.00
12,600.00	90.00	179.51	11,250.00	-1,310.75	717.71	1,316.84	0.00	0.00	0.00
12,700.00	90.00	179.51	11,250.00	-1,410.74	718.57	1,416.84	0.00	0.00	0.00
12,800.00	90.00	179.51	11,250.00	-1,510.74	719.44	1,516.84	0.00	0.00	0.00
12,900.00	90.00	179.51	11,250.00	-1,610.73	720.30	1,616.84	0.00	0.00	0.00
13,000.00	90.00	179.51	11,250.00	-1,710.73	721.16	1,716.84	0.00	0.00	0.00
13,100.00	90.00	179.51	11,250.00	-1,810.73	722.03	1,816.84	0.00	0.00	0.00
13,200.00	90.00	179.51	11,250.00	-1,910.72	722.89	1,916.84	0.00	0.00	0.00
13,300.00	90.00	179.51	11,250.00	-2,010.72	723.76	2,016.84	0.00	0.00	0.00
13,400.00	90.00	179.51	11,250.00	-2,110.72	724.62	2,116.84	0.00	0.00	0.00
13,500.00	90.00	179.51	11,250.00	-2,210.71	725.48	2,216.84	0.00	0.00	0.00
13,600.00	90.00	179.51	11,250.00	-2,310.71	726.35	2,316.84	0.00	0.00	0.00
13,700.00	90.00	179.51	11,250.00	-2,410.70	727.21	2,416.84	0.00	0.00	0.00
13,800.00	90.00	179.51	11,250.00	-2,510.70	728.07	2,516.84	0.00	0.00	0.00
13,900.00	90.00	179.51	11,250.00	-2,610.70	728.94	2,616.84	0.00	0.00	0.00
14,000.00	90.00	179.51	11,250.00	-2,710.69	729.80	2,716.84	0.00	0.00	0.00
14,100.00	90.00	179.51	11,250.00	-2,810.69	730.66	2,816.84	0.00	0.00	0.00
14,200.00	90.00	179.51	11,250.00	-2,910.69	731.53	2,916.84	0.00	0.00	0.00
14,300.00	90.00	179.51	11,250.00	-3,010.68	732.39	3,016.84	0.00	0.00	0.00
14,400.00	90.00	179.51	11,250.00	-3,110.68	733.25	3,116.84	0.00	0.00	0.00
14,500.00	90.00	179.51	11,250.00	-3,210.67	734.12	3,216.84	0.00	0.00	0.00
14,600.00	90.00	179.51	11,250.00	-3,310.67	734.98	3,316.84	0.00	0.00	0.00
14,700.00	90.00	179.51	11,250.00	-3,410.67	735.84	3,416.84	0.00	0.00	0.00
14,800.00	90.00	179.51	11,250.00	-3,510.66	736.71	3,516.84	0.00	0.00	0.00
14,900.00	90.00	179.51	11,250.00	-3,610.66	737.57	3,616.84	0.00	0.00	0.00
15,000.00	90.00	179.51	11,250.00	-3,710.66	738.43	3,716.84	0.00	0.00	0.00
15,100.00	90.00	179.51	11,250.00	-3,810.65	739.30	3,816.84	0.00	0.00	0.00
15,200.00	90.00	179.51	11,250.00	-3,910.65	740.16	3,916.84	0.00	0.00	0.00
15,300.00	90.00	179.51	11,250.00	-4,010.64	741.02	4,016.84	0.00	0.00	0.00



## Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Goliath 24 Fed Com 503H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>MD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Site:</b>	Goliath 24 Fed Com West	<b>North Reference:</b>	Grid
<b>Well:</b>	Goliath 24 Fed Com 503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 01-19-23		

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)
15,400.00	90.00	179.51	11,250.00	-4,110.64	741.89	4,116.84	0.00	0.00	0.00
15,500.00	90.00	179.51	11,250.00	-4,210.64	742.75	4,216.84	0.00	0.00	0.00
15,600.00	90.00	179.51	11,250.00	-4,310.63	743.61	4,316.84	0.00	0.00	0.00
15,700.00	90.00	179.51	11,250.00	-4,410.63	744.48	4,416.84	0.00	0.00	0.00
15,800.00	90.00	179.51	11,250.00	-4,510.63	745.34	4,516.84	0.00	0.00	0.00
15,900.00	90.00	179.51	11,250.00	-4,610.62	746.20	4,616.84	0.00	0.00	0.00
16,000.00	90.00	179.51	11,250.00	-4,710.62	747.07	4,716.84	0.00	0.00	0.00
16,100.00	90.00	179.51	11,250.00	-4,810.62	747.93	4,816.84	0.00	0.00	0.00
16,200.00	90.00	179.51	11,250.00	-4,910.61	748.80	4,916.84	0.00	0.00	0.00
16,300.00	90.00	179.51	11,250.00	-5,010.61	749.66	5,016.84	0.00	0.00	0.00
16,400.00	90.00	179.51	11,250.00	-5,110.60	750.52	5,116.84	0.00	0.00	0.00
16,500.00	90.00	179.51	11,250.00	-5,210.60	751.39	5,216.84	0.00	0.00	0.00
16,600.00	90.00	179.51	11,250.00	-5,310.60	752.25	5,316.84	0.00	0.00	0.00
16,700.00	90.00	179.51	11,250.00	-5,410.59	753.11	5,416.84	0.00	0.00	0.00
16,800.00	90.00	179.51	11,250.00	-5,510.59	753.98	5,516.84	0.00	0.00	0.00
16,900.00	90.00	179.51	11,250.00	-5,610.59	754.84	5,616.84	0.00	0.00	0.00
17,000.00	90.00	179.51	11,250.00	-5,710.58	755.70	5,716.84	0.00	0.00	0.00
17,100.00	90.00	179.51	11,250.00	-5,810.58	756.57	5,816.84	0.00	0.00	0.00
17,200.00	90.00	179.51	11,250.00	-5,910.57	757.43	5,916.84	0.00	0.00	0.00
17,300.00	90.00	179.51	11,250.00	-6,010.57	758.29	6,016.84	0.00	0.00	0.00
17,400.00	90.00	179.51	11,250.00	-6,110.57	759.16	6,116.84	0.00	0.00	0.00
17,500.00	90.00	179.51	11,250.00	-6,210.56	760.02	6,216.84	0.00	0.00	0.00
17,600.00	90.00	179.51	11,250.00	-6,310.56	760.88	6,316.84	0.00	0.00	0.00
17,700.00	90.00	179.51	11,250.00	-6,410.56	761.75	6,416.84	0.00	0.00	0.00
17,800.00	90.00	179.51	11,250.00	-6,510.55	762.61	6,516.84	0.00	0.00	0.00
17,900.00	90.00	179.51	11,250.00	-6,610.55	763.47	6,616.84	0.00	0.00	0.00
18,000.00	90.00	179.51	11,250.00	-6,710.54	764.34	6,716.84	0.00	0.00	0.00
18,100.00	90.00	179.51	11,250.00	-6,810.54	765.20	6,816.84	0.00	0.00	0.00
18,200.00	90.00	179.51	11,250.00	-6,910.54	766.06	6,916.84	0.00	0.00	0.00
18,300.00	90.00	179.51	11,250.00	-7,010.53	766.93	7,016.84	0.00	0.00	0.00
18,400.00	90.00	179.51	11,250.00	-7,110.53	767.79	7,116.84	0.00	0.00	0.00
18,500.00	90.00	179.51	11,250.00	-7,210.53	768.65	7,216.84	0.00	0.00	0.00
18,600.00	90.00	179.51	11,250.00	-7,310.52	769.52	7,316.84	0.00	0.00	0.00
18,700.00	90.00	179.51	11,250.00	-7,410.52	770.38	7,416.84	0.00	0.00	0.00
18,800.00	90.00	179.51	11,250.00	-7,510.51	771.25	7,516.84	0.00	0.00	0.00
18,900.00	90.00	179.51	11,250.00	-7,610.51	772.11	7,616.84	0.00	0.00	0.00
19,000.00	90.00	179.51	11,250.00	-7,710.51	772.97	7,716.84	0.00	0.00	0.00
19,100.00	90.00	179.51	11,250.00	-7,810.50	773.84	7,816.84	0.00	0.00	0.00
19,200.00	90.00	179.51	11,250.00	-7,910.50	774.70	7,916.84	0.00	0.00	0.00
19,300.00	90.00	179.51	11,250.00	-8,010.50	775.56	8,016.84	0.00	0.00	0.00
19,400.00	90.00	179.51	11,250.00	-8,110.49	776.43	8,116.84	0.00	0.00	0.00
19,500.00	90.00	179.51	11,250.00	-8,210.49	777.29	8,216.84	0.00	0.00	0.00
19,600.00	90.00	179.51	11,250.00	-8,310.48	778.15	8,316.84	0.00	0.00	0.00
19,700.00	90.00	179.51	11,250.00	-8,410.48	779.02	8,416.84	0.00	0.00	0.00
19,800.00	90.00	179.51	11,250.00	-8,510.48	779.88	8,516.84	0.00	0.00	0.00
19,900.00	90.00	179.51	11,250.00	-8,610.47	780.74	8,616.84	0.00	0.00	0.00
20,000.00	90.00	179.51	11,250.00	-8,710.47	781.61	8,716.84	0.00	0.00	0.00
20,100.00	90.00	179.51	11,250.00	-8,810.47	782.47	8,816.84	0.00	0.00	0.00
20,200.00	90.00	179.51	11,250.00	-8,910.46	783.33	8,916.84	0.00	0.00	0.00
20,300.00	90.00	179.51	11,250.00	-9,010.46	784.20	9,016.84	0.00	0.00	0.00
20,400.00	90.00	179.51	11,250.00	-9,110.45	785.06	9,116.84	0.00	0.00	0.00
20,500.00	90.00	179.51	11,250.00	-9,210.45	785.92	9,216.84	0.00	0.00	0.00
20,600.00	90.00	179.51	11,250.00	-9,310.45	786.79	9,316.84	0.00	0.00	0.00
20,700.00	90.00	179.51	11,250.00	-9,410.44	787.65	9,416.84	0.00	0.00	0.00



## Planning Report



<b>Database:</b>	USA Compass	<b>Local Co-ordinate Reference:</b>	Well Goliath 24 Fed Com 503H
<b>Company:</b>	Marathon Oil Permian LLC	<b>TVD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Project:</b>	Lea County, NM (NAD27 NME)	<b>MD Reference:</b>	RKB @ 3245.60usft (Cactus 169)
<b>Site:</b>	Goliath 24 Fed Com West	<b>North Reference:</b>	Grid
<b>Well:</b>	Goliath 24 Fed Com 503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 01-19-23		

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)
20,800.00	90.00	179.51	11,250.00	-9,510.44	788.51	9,516.84	0.00	0.00	0.00
20,900.00	90.00	179.51	11,250.00	-9,610.44	789.38	9,616.84	0.00	0.00	0.00
21,000.00	90.00	179.51	11,250.00	-9,710.43	790.24	9,716.84	0.00	0.00	0.00
21,100.00	90.00	179.51	11,250.00	-9,810.43	791.10	9,816.84	0.00	0.00	0.00
21,200.00	90.00	179.51	11,250.00	-9,910.43	791.97	9,916.84	0.00	0.00	0.00
21,300.00	90.00	179.51	11,250.00	-10,010.42	792.83	10,016.84	0.00	0.00	0.00
21,400.00	90.00	179.51	11,250.00	-10,110.42	793.70	10,116.84	0.00	0.00	0.00
21,500.00	90.00	179.51	11,250.00	-10,210.41	794.56	10,216.84	0.00	0.00	0.00
21,600.00	90.00	179.51	11,250.00	-10,310.41	795.42	10,316.84	0.00	0.00	0.00
21,700.00	90.00	179.51	11,250.00	-10,410.41	796.29	10,416.84	0.00	0.00	0.00
21,800.00	90.00	179.51	11,250.00	-10,510.40	797.15	10,516.84	0.00	0.00	0.00
21,900.00	90.00	179.51	11,250.00	-10,610.40	798.01	10,616.84	0.00	0.00	0.00
22,000.00	90.00	179.51	11,250.00	-10,710.40	798.88	10,716.84	0.00	0.00	0.00
22,100.00	90.00	179.51	11,250.00	-10,810.39	799.74	10,816.84	0.00	0.00	0.00
22,200.00	90.00	179.51	11,250.00	-10,910.39	800.60	10,916.84	0.00	0.00	0.00
22,300.00	90.00	179.51	11,250.00	-11,010.38	801.47	11,016.84	0.00	0.00	0.00
22,400.00	90.00	179.51	11,250.00	-11,110.38	802.33	11,116.84	0.00	0.00	0.00
22,500.00	90.00	179.51	11,250.00	-11,210.38	803.19	11,216.84	0.00	0.00	0.00
22,600.00	90.00	179.51	11,250.00	-11,310.37	804.06	11,316.84	0.00	0.00	0.00
22,700.00	90.00	179.51	11,250.00	-11,410.37	804.92	11,416.84	0.00	0.00	0.00
22,800.00	90.00	179.51	11,250.00	-11,510.37	805.78	11,516.84	0.00	0.00	0.00
22,900.00	90.00	179.51	11,250.00	-11,610.36	806.65	11,616.84	0.00	0.00	0.00
23,000.00	90.00	179.51	11,250.00	-11,710.36	807.51	11,716.84	0.00	0.00	0.00
23,100.00	90.00	179.51	11,250.00	-11,810.35	808.37	11,816.84	0.00	0.00	0.00
23,200.00	90.00	179.51	11,250.00	-11,910.35	809.24	11,916.84	0.00	0.00	0.00
23,300.00	90.00	179.51	11,250.00	-12,010.35	810.10	12,016.84	0.00	0.00	0.00
23,400.00	90.00	179.51	11,250.00	-12,110.34	810.96	12,116.84	0.00	0.00	0.00
23,500.00	90.00	179.51	11,250.00	-12,210.34	811.83	12,216.84	0.00	0.00	0.00
23,600.00	90.00	179.51	11,250.00	-12,310.34	812.69	12,316.84	0.00	0.00	0.00
23,700.00	90.00	179.51	11,250.00	-12,410.33	813.55	12,416.84	0.00	0.00	0.00
23,800.00	90.00	179.51	11,250.00	-12,510.33	814.42	12,516.84	0.00	0.00	0.00
23,900.00	90.00	179.51	11,250.00	-12,610.32	815.28	12,616.84	0.00	0.00	0.00
23,950.77	90.00	179.51	11,250.00	-12,661.09	815.72	12,667.60	0.00	0.00	0.00
TD at 23950.77									



## Planning Report



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<b>Well:</b>	Goliath 24 Fed Com 503H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan 1 01-19-23		

## Design Targets

Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PI1 - G 24 F C 503H	0.00	0.00	11,250.00	-5,009.66	749.78	372,720.94	781,644.13	32° 1' 17.285635 N	3° 25' 28.535874 W
- plan misses target center by 0.13usft at 16299.05usft MD (11250.00 TVD, -5009.66 N, 749.65 E)									
- Point									
PI2 - G 24 F C 503H	0.00	0.00	11,250.00	-10,288.71	794.91	367,441.89	781,689.26	32° 0' 25.043218 N	3° 25' 28.527289 W
- plan misses target center by 0.32usft at 21578.30usft MD (11250.00 TVD, -10288.71 N, 795.23 E)									
- Point									
FTP - G 24 F C 503H	0.00	0.00	11,250.00	172.99	704.90	377,903.59	781,599.25	32° 2' 8.573964 N	3° 25' 28.550784 W
- plan misses target center by 203.28usft at 11202.98usft MD (11091.83 TVD, 45.29 N, 706.00 E)									
- Point									
BHL - G 24 F C 503H	0.00	0.00	11,250.00	-12,661.09	815.72	365,069.51	781,710.07	32° 0' 1.565676 N	3° 25' 28.517223 W
- plan hits target center									
- Point									

## Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
1,300.00	1,300.00	0.00	0.00	KOP, Begin 2.00°/100' Build
1,800.25	1,797.71	13.15	41.53	Hold 10.00° Inc at 72.44° Azm
5,551.88	5,492.29	209.84	662.93	Begin 2.00°/100' Drop
6,052.13	5,990.00	222.98	704.47	Begin Vertical Hold
10,739.17	10,677.04	222.98	704.47	KOP2, Begin 10.00°/100' Build
11,639.17	11,250.00	-349.95	709.41	LP, Hold 90.00° Inc at 179.51° Azm
23,950.77	11,250.00	-12,661.09	815.72	TD at 23950.77

MARATHON OIL PERMIAN, LLC.  
**DRILLING AND OPERATIONS PLAN**



WELL NAME &amp; NUMBER:

**GOLIATH 24 FED COM 503H**

LOCATION:

SECTION **24** TOWNSHIP **26S** RANGE **34E**  
**LEA** COUNTY, **NEW MEXICO**

**Section 1:****GEOLOGICAL FORMATIONS**

Name of Surface Formation: Permian  
 Elevation: 3222 feet

**Estimated Tops of Important Geological Markers:**

Formation	TVD (ft)	MD (ft)	Elevation (ft SS)	Lithologies	Mineral Resources	Producing Formation?
Rustler	1017	1017	2171	Anhydrite	Brine	No
Salado	1428	1428	1720	Salt/Anhydrite	Brine	No
Castile	3680	3680	-354	Salt/Anhydrite	Brine	No
Base of Salt (BX)	5361	5361	-2121	Salt/Anhydrite	Brine	No
Lamar	5361	5361	-2121	Sandstone/Shale	None	No
Bell Canyon	5385	5385	-2146	Sandstone	Oil	No
Cherry Canyon	6698	6698	-3446	Sandstone	Oil	No
Brushy Canyon	7884	7884	-4609	Sandstone	Oil	No
Bone Spring Lime	9368	9368	-6055	Limestone	None	No
Upper Avalon Shale	9399	9399	-6093	Shale	Oil	Yes
1st Bone Spring Sand	10667	10667	-7390	Sandstone	Oil	Yes
2nd Bone Spring Carbonate	10819	10819	-7593	Limestone/Shale	None	No
2nd Bone Spring Sand	11188	11188	-7904	Sandstone	Oil	Yes
3rd Bone Spring Carbonate	11655	11655	-8373	Limestone	Oil	No
3rd Bone Spring Sand	12233	12233	-8964	Sandstone	Oil	Yes
Wolfcamp	12654	12654	-9368	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp A	12801	12801	-9493	Sandstone/Shale/Carbonates	Natural Gas / Oil	Yes
Wolfcamp B	13106	13106	-9822	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp C	13428	13428	-10140	Sandstone/Shale/Carbonates	Natural Gas / Oil	No
Wolfcamp D	13756	13756	-10531	Sandstone/Shale/Carbonates	Natural Gas / Oil	No

**Section 2:****BLOWOUT PREVENTER TESTING PROCEDURE**

Pressure Rating (PSI): 10M  
 Rating Depth: 10000  
 Equipment: 13 5/8 BOP Annular (5,000 psi WP) and BOP Stack (10,000 psi WP) will be installed and tested before drilling all holes.

Requesting Variance? Yes  
 Variance Request: A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

**Testing Procedure:** BOP/BOPE will be tested to 250 psi low and a high of 100% WP for the Annular and 5,000psi for the BOP Stacking before drilling the intermediate hole, 10,000psi for the BOP Stacking before drilling the production hole. Testing will be conducted by an independent service company per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the Equipment Description above. If the system is upgraded all the components installed will be functional and tested.

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

Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i. A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. See attached schematic.

Marathon Oil Permian LLC.

Drilling &amp; Operations Plan - Page 2 of 4

**Section 3:****CASING PROGRAM**

String Type	Hole Size	Casing Size	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Weight (lbs/ft)	Grade	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	1042	0	1042	3222	2180	54.5	J55	BTC	5.22	1.81	BUOY	4.52	BUOY	4.52
Intermediate	12.25	9.625	0	10639	0	10577	3222	-7355	40	P110HC	BTC	1.20	1.42	BUOY	2.44	BUOY	2.44
Production	8.75	5.5	0	23950	0	11250	3222	-8028	23	P110HC	TLW	2.53	1.26	BUOY	2.22	BUOY	2.22
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h												Safety Factors will Meet or Exceed					

Casing Condition: New

Casing Standard: API

Tapered String? No

Yes or No

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

**Section 4:****CEMENT PROGRAM**

String Type	Lead/Tail	Top MD	Bottom MD	Quantity (sks)	Yield (ft³/sks)	Density (ppg)	Slurry Volume (ft³)	Excess (%)	Cement Type	Additives
Surface	Lead	0	742	327	2.12	12.5	693	25	Class C	Extender, Accelerator, LCM
Surface	Tail	742	1042	197	1.32	14.8	260	25	Class C	Accelerator
Intermediate	Lead	0	10139	1850	2.18	12.4	4034	25	Class C	Extender, Accelerator, LCM
Intermediate	Tail	10139	10639	147	1.33	14.8	196	25	Class C	Retarder
Production	Tail	10339	23950	2599	1.68	13	4366	25	Class H	Retarder, Extender, Fluid Loss, Suspension Agent

Stage tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. Stage tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Pilot Hole? No

Plugging Procedure for Pilot Hole: N/A

Pilot Hole Depth: N/A

KOP Depth: N/A

Plug Top	Plug Bottom	Excess (%)	Quantity (sx)	Density (ppg)	Yield (ft³/sks)	Water gal/sk	Slurry Description and Cement Type

Marathon Oil Permian LLC.

Drilling &amp; Operations Plan - Page 3 of 4

**Section 5:****CIRCULATING MEDIUM**

**Mud System Type:** Closed  
**Will an air or gas system be used?** No

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

The necessary mud products for additional weight and fluid loss control will be on location at all times.

**Describe the mud monitoring system utilized:**

Losses or gains in the mud system will be monitored visually/manually as well as with an electronic PVT.

**Circulating Medium Table:**

Top Depth	Bottom Depth	Mud Type	Min. Weight (ppg)	Max Weight (ppg)
0	1042	Water Based Mud	8.4	8.8
1042	10639	Brine or Oil Based Mud	9.2	10.2
10639	23950	Oil Based Mud	10.5	12.5

**Section 6:****TESTING, LOGGING, CORING****List of production tests including testing procedures, equipment and safety measures:**

GR from TD to surface (horizontal well - vertical portion of hole)

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

GR while drilling from Intermediate casing shoe to TD.

**Coring operation description for the well:**

Run gamma-ray (GR) and corrected neutron log (CNL) or analogous to surface for future development of the area, one per shared well pad not to exceed 200' radial distance.

**Section 7:****ANTICIPATED PRESSURE**

**Anticipated Bottom Hole Pressure:** 7313 PSI  
**Anticipated Bottom Hole Temperature:** 195 °F  
**Anticipated Abnormal Pressure?** No  
**Anticipated Abnormal Temperature?** No

**Potential Hazards:**

H2S detection equipment will be in operation after drilling out the surface casing shoe until the production casing has been cemented. Breathing equipment will be on location from drilling out the surface shoe until production casing is cemented. If H2S is encountered the operator will comply with Onshore Order #6. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. See attached H2S Contingency Plan.

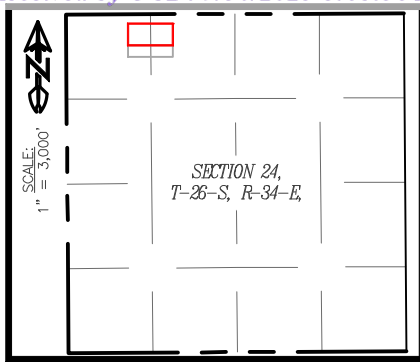
**Section 8:****OTHER INFORMATION****Auxiliary Well Control and Monitoring Equipment:**

A Kelly cock will be in the drill string at all times. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor unobstructed and readily accessible at all times.

Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached. If Hydrogen Sulfide is encountered, measured amounts and formations will be reported to the BLM.

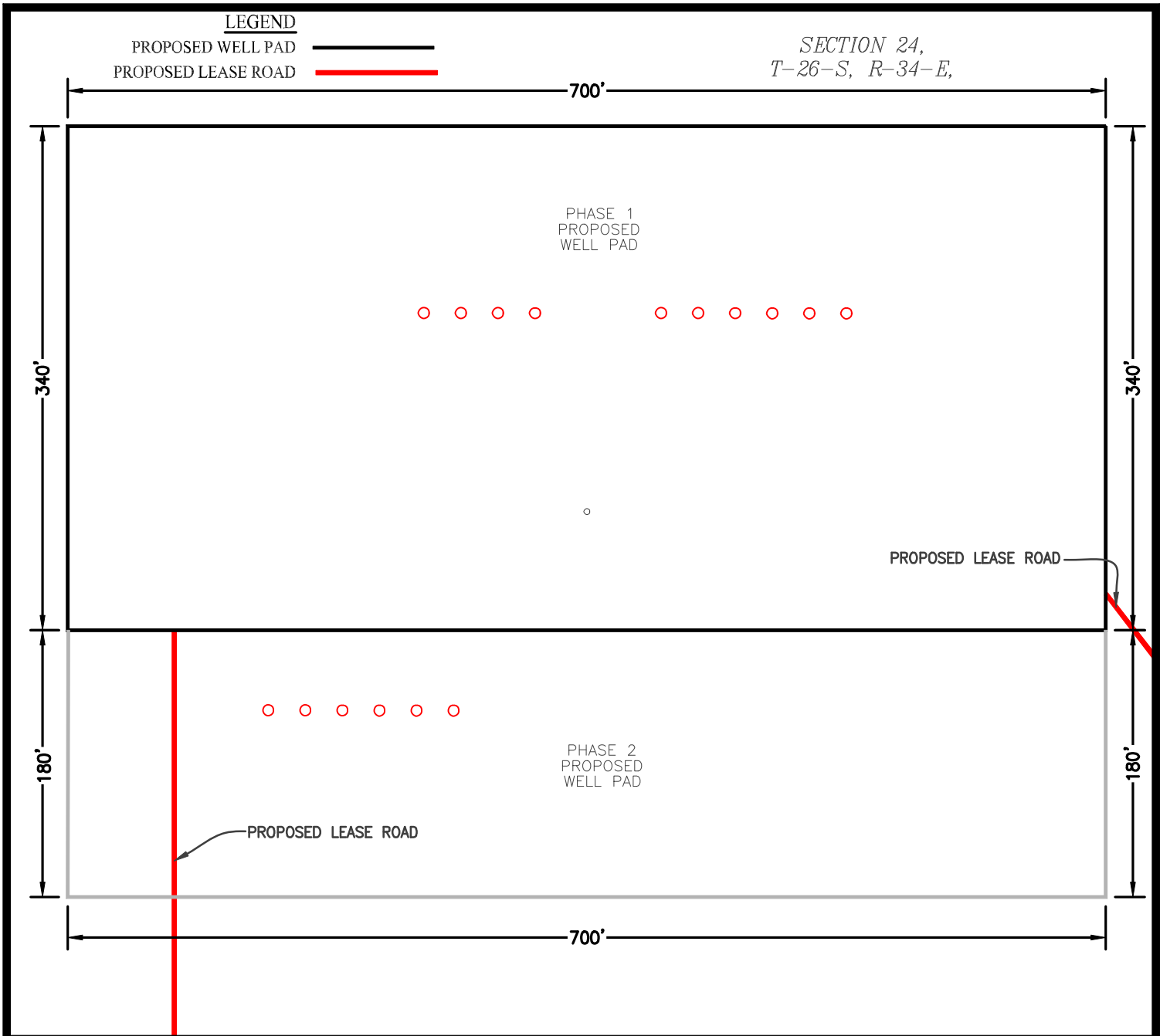
**Anticipated Starting Date and Duration of Operations:**

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as possible after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 30 days.

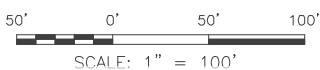


# RIG LAYOUT

GOLIATH 24 FED COM (WEST)  
 SEC. 24 TWP. 26-S RGE. 34-E  
 SURVEY: N.M.P.M.  
 COUNTY: LEA  
 OPERATOR: MARATHON OIL PERMIAN LLC  
 U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.

**NOTE:**

THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM STATE OF NEW MEXICO OIL CONSERVATION DIVISION FORM C-102 INCLUDED IN THIS SUBMITTAL.



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02-20-2023



5	02/17/2023	ANC
REV.	DATE	BY

SHEET 5 OF 6

PREPARED BY:  
 R-SQUARED GLOBAL, LLC  
 510 TRENTON ST.  
 WEST MONROE, LA 71291  
 318-323-6000 OFFICE  
 JOB No. R4287\_002

## Batch Drilling Plan

- Marathon Oil Permian LLC. respectfully requests the option to “batch” drill sections of a well with intentions of returning to the well for later completion.
- When it is determined that the use of a “batch” drilling process to increase overall efficiency and reduce rig time on location, the following steps will be utilized to ensure compliant well control before releasing drilling rig during the batch process.
- Succeeding a successful cement job, fluid levels will be monitored in both the annulus and casing string to be verified static.
- A mandrel hanger packoff will be ran and installed in the multi-bowl wellhead isolating and creating a barrier on the annulus. This packoff will be tested to 5,000 PSI validating the seals.
- At this point the well is secure and the drilling adapter will be removed from the wellhead.
- A 13-5/8” 5M temporary abandonment cap will be installed on the wellhead by stud and nut flange. The seals of the TA cap will then be pressure tested to 5,000 PSI.
- The drilling rig will skid to the next well on the pad to continue the batch drilling process.
- When returning to the well with the TA cap, the TA cap will be removed and the BOP will be nipped up on the wellhead.
- A BOP test will then be conducted according to Onshore Order #2 and drilling operations will resume on the subject well.

## Request for Surface Rig

- Marathon Oil Permian LLC. Requests the option to contract a surface rig to drill, set surface casing and cement on the subject well. If the timing between rigs is such that Marathon Oil Permian LLC. would not be able to preset the surface section, the primary drilling rig will drill the well in its entirety per the APD.

## 1. DRILLING WELL CONTROL PLAN

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### 1.1 WELL CONTROL - CERTIFICATIONS

#### Required IADC/IWCF Well Control Certifications Supervisor Level:

Any personnel who supervises or operates the BOP must possess a valid current IADC training certification and photo identification. This would include the onsite drilling supervisor, tool pusher/rig manager, driller, and any personnel that will be acting in these capacities. Another example of this may be a wireline or snubbing crew rigged up on the rig to assist the rig, the operator of each system must also have a valid control certification for their level of operation.

BLM recognizes IADC training as the industry approved accredited training. Online self-certifications will not be acceptable. Enforcement actions for the lack of a valid Supervisory Level certificate shall be prompt action to correct the deficiency. **Enforcement actions include but are not limited to immediate replacement of personnel lacking certifications, drilling operations being shut down or installment of a 10M annular.**

IADC Driller Level for all Drillers and general knowledge for the Assistant Driller, Derrick Hands, Floor Hands and Motor Hands is recognized by the BLM; however, a Driller Level certification will need to be presented only if acting in a temporary Driller Level certification capacity.

#### **Well Control-Position/Roles**

IADC Well control training and certification is targeted toward each role, e.g., Supervisor Level toward those who direct, Driller Level to those who act, Introductory to those who need to know.

- **Supervisor Level**
  - Specifies and has oversight that the correct actions are carried out
  - Role is to supervise well control equipment, training, testing, and well control events
  - Directs the testing of BOP and other well control equipment
  - Regularly direct well control crew drills
  - Land based rigs – usually runs the choke during a well kill operation
  - Due to role on the rig, training and certification is targeted more toward management of well control and managing an influx out of the well
- **Driller Level**
  - Performs an action to prevent or respond to well control accident
  - Role is to monitor the well via electronic devices while drilling and detect unplanned influxes
  - Assist with the testing of BOP and other well control equipment
  - Regularly assist with well control crew drills
  - When influx is detected, responsible to close the BOP
  - Due to role on the rig, training and certification is targeted more toward monitoring and shutting the well in (closing the BOP) when an influx is detected

**(Well Control-Positions/Roles Continued)**

- **Derrick Hand, Assistant Driller Introductory Level**
  - Role is to assist Driller with kick detection by physically monitoring the well at the mixing pits/tanks
  - Regularly record mud weights/viscosity for analysis by the Supervisor level and mud engineer so pre-influx signs can be detected
  - Mix required kill fluids as directed by Supervisor or Driller
  - Due to role on the rig, training and certification is targeted more toward monitoring for influxes, either via mud samples or visual signs on the pits/tanks
- **Motorman, Floor Hand Introductory Level**
  - Role is to assist the Supervisor, Driller, or Derrick Hand with detecting influxes
  - Be certain all valves are aligned for proper well control as directed by Supervisor
  - Perform Supervisor or Driller assigned tasks during a well control event
  - Due to role on the rig, training and certification is targeted more toward monitoring for influxes

**1.2 WELL CONTROL-COMPONENT AND PREVENTER COMPATIBILITY CHECKLIST**

The table below, which covers the drilling and casing of the 10M Stack portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

- Example 6-1/8" Production hole section, 10M requirement

Component	OD	Preventer	RWP
Drill pipe	4"	Upper and Lower 3.5-5.5" VBRs	10M
HWDP	4"	Upper and Lower 3.5-5.5" VBRs	10M
Drill collars and MWD tools	4.75-5"	Upper and Lower 3.5-5.5" VBRs	10M
Mud Motor	4.75-5.25"	Upper and Lower 3.5-5.5" VBRs	10M
Production casing	4.5"	Upper and Lower 3.5-5.5" VBRs	10M
ALL	0-13-5/8"	Annular	5M
Open-hole	-	Blind Rams	10M

- VBR = Variable Bore Ram. Compatible range listed in chart.

**1.3 WELL CONTROL-BOP TESTING**

BOP Test will be completed per Onshore Oil and Gas Order #2 Well Control requirements. The 5M Annular Preventer on a required 10M BOP stack will be tested to 70 % of rated working

pressure including a 10 minute low pressure test. Pressure shall be maintained at least 10 minutes.

## 1.4 WELL CONTROL - DRILLS

The following drills are conducted and recorded in the Daily Drilling Report and the Contractor's reporting system while engaged in drilling operations:

Type	Frequency	Objective	Comments
Shallow gas kick drill - drilling	Once per well with crew on tour	Response training to a shallow gas influx	To be done prior to drilling surface hole if shallow gas is noted
Kick drill - drilling	Once per week per crew	Response training to an influx while drilling (bit on bottom)	Only one kick drill per week per crew is required, alternating between drilling and tripping.
Kick drill - tripping	Once per week per crew	Response training to an influx while tripping (bit off bottom). Practice stabbing TIW valve	

## 1.5 WELL CONTROL – MONITORING

- Drilling operations which utilize static fluid levels in the wellbore as the active barrier element, a means of accurately monitoring fill-up and displacement volumes during trips are available to the driller and operator. A recirculating trip tank is installed and equipped with a volume indicator easily read from the driller's / operator's position. This data is recorded on a calibrated chart recorder or digitally. The actual volumes are compared to the calculated volumes.
- The On-Site Supervisor ensures hole-filling and pit monitoring procedures are established and documented for every rig operation.
- The well is kept full of fluid with a known density and monitored at all times even when out of the hole.
- Flow checks are a minimum of 15 minutes.
- A flow check is made:
  - In the event of a drilling break.
  - After indications of down hole gains or losses.
  - Prior to all trips out of the hole.
  - After pulling into the casing shoe.
  - Before the BHA enters the BOP stack.
  - If trip displacement is incorrect.

### Well Control-Monitoring (Continued)

- Prior to dropping a survey instrument.
- Prior to dropping a core ball.

- After a well kill operation.
- When the mud density is reduced in the well.
- Flow checks may be made at any time at the sole discretion of the driller or his designate. The Onsite Supervisor ensures that personnel are aware of this authority and the authority to close the well in immediately without further consultation.
- Record slow circulating rates ( SCR ) after each crew change, bit trip, and 500' of new hole drilled and after any variance greater than 0.2 ppg in MW. Slow pump rate recordings should include return flow percent, TVD, MD & pressure. SCR's will be done on all pumps at 30, 40 & 50 SPM. Pressures will be recorded at the choke panel. SCR will be recorded in the IADC daily report and ORB Wellview daily report
- Drilling blind (i.e. without returns) is permissible only in known lithology where the absence of hydrocarbons has been predetermined and written approval of the Drilling Manager.
- All open hole logs to be run with pack-off or lubricator.
- The Drilling Contractor has a fully working pit level totalizer / monitoring system with read out for the driller and an audible alarm set to 10 BBL gain / loss volume. Systems are selectable to enable monitoring of all pits in use. Pit volumes are monitored at all times, especially when transferring fluids. Both systems data is recorded on a calibrated chart recorder or electronically.
- The Drilling Contractor has a fully working return mud flow indicator with drillers display and an audible alarm, and is adjustable to record any variance in return volumes.

## 1.6 WELL CONTROL – SHUT IN

- The “hard shut in” method (i.e. against a closed choke using either an annular or ram type preventer) is the Company standard.
- The HCR(s) or failsafe valves are left closed during drilling to prevent any erosion and buildup of solids. The adjustable choke should also be left closed.
- The rig specific shut in procedure, the BOP configuration along with space-out position for the tool joints is posted in the Driller's control cabin or doghouse.
- No well kill operation commences until there is a plan agreed by the Superintendent, On-Site Supervisor and the Drilling Manager.
- During a well kill by circulation, constant bottom hole pressure is maintained throughout.
- Kill sheets are maintained by the Driller and posted in the Driller's control cabin or doghouse. The sheet is updated at a minimum every 500 feet.

## 2. SHUT-IN PROCEDURES:

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### 2.1 PROCEDURE WHILE DRILLING

- Sound alarm (alert crew)

- Space out drill string – Stop rotating, pick the drill string up off bottom, and space out to ensure no tool joint is located in the BOP element selected for initial closure.
- Shut down pumps (stop pumps and observe well.)
- Shut-in Well - If flow is suspected or confirmed, close uppermost applicable BOP element. (HCR and choke will already be in the closed position.)
  - **Note:** Either the uppermost pipe ram or annular preventer can be used.
- Confirm shut-in
- Notify toolpusher/company representative
- Gather all relevant data required:
  - SIDPP and SICP
  - Hole Depth and Hole TVD
  - Pit gain
  - Time
  - Kick Volume
  - Pipe depth
  - MW in, MW out
  - SPR's (Slow Pump Rate's)
- Regroup and identify forward plan (let well stabilize, update kill sheet, inventory mud additives and mud volumes on location)
- Company Representative, Drilling Superintendent, Drilling Engineer and Drilling Manager will discuss well control kill method to be utilized. A verbal Risk Assessment and preferred kill method will be finalized. Initial Risk Assessment will be finalized within 1 hour of initial shut in.
- No well kill operation commences until there is a plan agreed by the Superintendent, On-Site Supervisor and the Drilling Contractor PIC.
- Recheck all pressures and fluid volume on accumulator unit
- If pressure has built or is anticipated during the kill to reach 1,000 psi or greater, the annular preventer will not be used as the primary pressure control device and operations will swap to the upper BOP pipe ram.

## 2.2 PROCEDURE WHILE TRIPPING

- Sound alarm (alert crew)
- Stab full opening safety valve in the drill string and close.
- Space out drill string (ensure no tool joint is located in the BOP element selected for initial closure).
- Shut down pumps (stop pumps and observe well.)
- Shut-in Well - If flow is suspected or confirmed, close uppermost applicable BOP element. (HCR and choke will already be in the closed position.)
  - **Note:** Either the uppermost pipe ram or annular preventer can be used.
- Confirm shut-in
- Notify tool pusher/company representative
- Gather all relevant data required:
  - SIDPP and SICP
  - Hole Depth and Hole TVD
  - Pit gain

### Procedure While Tripping (Continued)

- Time
- Kick Volume
- Pipe depth

- MW in, MW out
  - SPR's (Slow Pump Rate's)
- Regroup and identify forward plan (let well stabilize, update kill sheet, inventory mud additives and mud volumes on location)
- Company Representative, Drilling Superintendent, Drilling Engineer and Drilling Manager will discuss well control kill method to be utilized. A verbal Risk Assessment and preferred kill method will be finalized. Initial Risk Assessment will be finalized within 1 hour of initial shut in.
- No well kill operation commences until there is a plan agreed by the Superintendent, On-Site Supervisor and the Drilling Contractor PIC.
- Recheck all pressures and fluid volume on accumulator unit
- If pressure has built or is anticipated during the kill to reach 1,000 psi or greater, the annular preventer will not be used as the primary pressure control device and operations will swap to the upper BOP pipe ram.

## 2.3 PROCEDURE WHILE RUNNING CASING

- Sound alarm (alert crew)
- Stab crossover and full opening safety valve and close
- Space out casing (ensure no coupling is located in the BOP element selected for initial closure).
- Shut down pumps (stop pumps and observe well.)
- Shut-in Well - If flow is suspected or confirmed, close uppermost applicable BOP element. (HCR and choke will already be in the closed position.)
  - **Note:** Either the uppermost pipe ram or annular preventer can be used.
- Confirm shut-in
- Notify tool pusher/company representative
- Gather all relevant data required:
  - SIDPP and SICP
  - Hole Depth and Hole TVD
  - Pit gain
  - Time
  - Kick Volume
  - Pipe depth
  - MW in, MW out
  - SPR's (Slow Pump Rate's)
- Regroup and identify forward plan (let well stabilize, update kill sheet, inventory mud additives and mud volumes on location)
- Company Representative, Drilling Superintendent, Drilling Engineer and Drilling Manager will discuss well control kill method to be utilized. A verbal Risk Assessment and preferred kill method will be finalized. Initial Risk Assessment will be finalized within 1 hour of initial shut in.
- No well kill operation commences until there is a plan agreed by the Superintendent, On-Site Supervisor and the Drilling Contractor PIC.
- Recheck all pressures and fluid volume on accumulator unit
- If pressure has built or is anticipated during the kill to reach 1,000 psi or greater, the annular preventer will not be used as the primary pressure control device and operations will swap to the upper BOP pipe ram.

## 2.4 PROCEDURE WITH NO PIPE IN HOLE (OPEN HOLE)

- Sound alarm (alert crew)
- Shut-in with blind rams or BSR. (HCR and choke will already be in the closed position.)
- Confirm shut-in

- Notify toolpusher/company representative
- Gather all relevant data required:
  - Shut-In Pressure
  - Hole Depth and Hole TVD
  - Pit gain
  - Time
  - Kick Volume
  - MW in, MW out
  - SPR's (Slow Pump Rate's)
- Regroup and identify forward plan (let well stabilize, update kill sheet, inventory mud additives and mud volumes on location)
- Company Representative, Drilling Superintendent, Drilling Engineer and Drilling Manager will discuss well control kill method to be utilized. A verbal Risk Assessment and preferred kill method will be finalized. Initial Risk Assessment will be finalized within 1 hour of initial shut in.
- No well kill operation commences until there is a plan agreed by the Superintendent, On-Site Supervisor and the Drilling Contractor PIC.
- Recheck all pressures and fluid volume on accumulator unit.

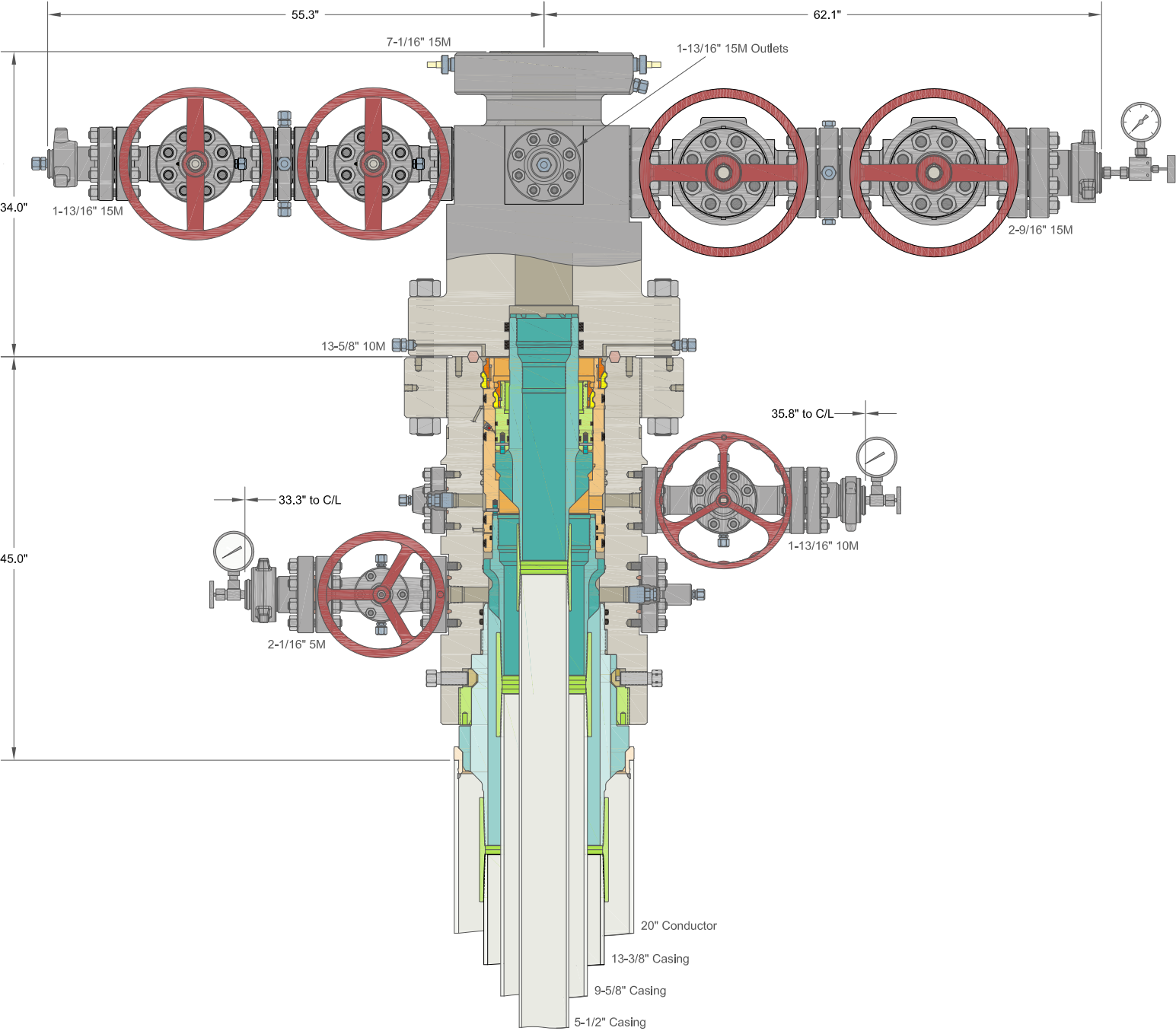
## 2.5 PROCEDURE WHILE PULLING BHA THRU STACK

- PRIOR to pulling last joint of drill pipe thru the stack.
- Perform flow check, if flowing.
- Sound alarm (alert crew).
- Stab full opening safety valve and close
- Space out drill string with tool joint just beneath the upper pipe ram.
- Shut-in using upper pipe ram. (HCR and choke will already be in the closed position).
- Confirm shut-in.
- Notify toolpusher/company representative
- Read and record the following:
  - SIDPP and SICP
  - Pit gain
  - Time
- Regroup and identify forward plan
- **With BHA in the stack and compatible ram preventer and pipe combo immediately available.**
  - Sound alarm (alert crew)
  - Stab crossover and full opening safety valve and close
  - Space out drill string with upset just beneath the compatible pipe ram.
  - Shut-in using compatible pipe ram. (HCR and choke will already be in the closed position.)
  - Confirm shut-in
  - Notify toolpusher/company representative
  - Read and record the following:
    - SIDPP and SICP
    - Pit gain

### Procedures While Pulling BHA thru Stack (Continued)

- Time
- Regroup and identify forward plan

- **With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.**
  - Sound alarm (alert crew)
  - If possible to pick up high enough, pull string clear of the stack and follow “Open Hole” scenario.
  - If impossible to pick up high enough to pull the string clear of the stack:
  - Stab crossover, make up one joint/stand of drill pipe, and full opening safety valve and close
  - Space out drill string with tool joint just beneath the upper pipe ram.
  - Shut-in using upper pipe ram. (HCR and choke will already be in the closed position.)
  - Confirm shut-in
  - Notify toolpusher/company representative
  - Read and record the following:
    - SIDPP and SICP
    - Pit gain
    - Time



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ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

MARATHON OIL & GAS

20" x 13-3/8" x 9-5/8" x 5-1/2" MBU-3T-CFL-R-DBLO System  
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head  
And 9-5/8" & 5-1/2" Mandrel Casing Hangers

DRAWN	DLE	20OCT21
APPRV		
DRAWING NO.	HBE0000621	



# TEC-LOCK WEDGE

5.500" 23 LB/FT (.415"Wall)  
BENTELER P110 CY

## Pipe Body Data

Nominal OD:	5.500	in
Nominal Wall:	.415	in
Nominal Weight:	23.00	lb/ft
Plain End Weight:	22.56	lb/ft
Material Grade:	P110 CY	
Mill/Specification:	BENTELER	
Yield Strength:	125,000	psi
Tensile Strength:	130,000	psi
Nominal ID:	4.670	in
API Drift Diameter:	4.545	in
Special Drift Diameter:	None	in
RBW:	87.5 %	
Body Yield:	829,000	lbf
Burst:	16,510	psi
Collapse:	16,910	psi

## Connection Data

Standard OD:	5.950	in
Pin Bored ID:	4.670	in
Critical Section Area:	6.457	in <sup>2</sup>
Tensile Efficiency:	97.4 %	
Compressive Efficiency:	100 %	
Longitudinal Yield Strength:	807,000	lbf
Compressive Limit:	829,000	lbf
Internal Pressure Rating:	16,510	psi
External Pressure Rating:	16,910	psi
Maximum Bend:	101.5	°/100ft

## Operational Data

Minimum Makeup Torque:	16,400	ft*lbf
Optimum Makeup Torque:	20,500	ft*lbf
Maximum Makeup Torque:	44,300	ft*lbf
Minimum Yield:	49,200	ft*lbf
Makeup Loss:	5.97	in

**Notes** Operational Torque is equivalent to the Maximum Make-Up Torque



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:** Marathon Oil Permian LLC **OGRID:** 972098 **Date:** 2 / 21 / 2023

**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
Please see attached						

**IV. Central Delivery Point Name:** Goliath 24 Federal Com CTB [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Please see attached						

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

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

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

## III. Wells

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Goliath 24 Fed Com 101H		D-24-26S-34E	535' FNL 1101 FWL	2300	3400	3500
Goliath 24 Fed Com 301H		C-24-26S-34E	269 FNL 1394 FWL	2300	3400	3500
Goliath 24 Fed Com 302H		C-24-26S-34E	269 FNL 1419 FWL	2300	3400	3500
Goliath 24 Fed Com 303H		C-24-26S-34E	269 FNL 1259 FWL	2300	3400	3500
Goliath 24 Fed Com 501H		C-24-26S-34E	269 FNL 1209 FWL	1500	4200	2300
Goliath 24 Fed Com 502H		C-24-26S-34E	269 FNL 1234 FWL	1500	4200	2300
Goliath 24 Fed Com 503H		C-24-26S-34E	269 FNL 1284 FWL	1500	4200	2300
Goliath 24 Fed Com 601H		D-24-26S-34E	269 FNL 1369 FWL	1400	2400	4100
Goliath 24 Fed Com 602H		D-24-26S-34E	269 FNL 1469 FWL	1400	2400	4100
Goliath 24 Fed Com 701H		D-24-26S-34E	269 FNL 1419 FWL	1400	2400	4100
Goliath 24 Fed Com 702H		D-24-26S-34E	270 FNL 1494 FWL	1400	2400	4100

## V. Anticipated Schedule

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Goliath 24 Fed Com 101H		8/1/2026	9/1/2026	10/1/2026	11/1/2026	11/1/2026
Goliath 24 Fed Com 301H		12/8/2023	4/30/2024	8/24/2024	10/23/2024	10/23/2024
Goliath 24 Fed Com 302H		8/1/2026	9/1/2026	10/1/2026	11/1/2026	11/1/2026
Goliath 24 Fed Com 303H		8/1/2026	9/1/2026	10/1/2026	11/1/2026	11/1/2026
Goliath 24 Fed Com 501H		4/19/2026	5/14/2026	11/5/2026	12/13/2026	12/13/2026
Goliath 24 Fed Com 502H		4/16/2026	6/6/2026	10/28/2026	12/13/2026	12/13/2026
Goliath 24 Fed Com 503H		8/1/2026	9/1/2026	10/1/2026	11/1/2026	11/1/2026
Goliath 24 Fed Com 601H		12/5/2023	4/6/2024	9/14/2024	10/23/2024	10/23/2024
Goliath 24 Fed Com 602H		12/11/2023	1/17/2024	9/25/2024	10/23/2024	10/23/2024
Goliath 24 Fed Com 701H		12/3/2023	3/11/2024	9/4/2024	10/23/2024	10/23/2024
Goliath 24 Fed Com 702H		11/30/2023	2/13/2024	8/13/2024	10/23/2024	10/23/2024

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

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

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

**IX. Anticipated Natural Gas Production:**

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

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

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

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

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

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

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

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

### **Section 3 - Certifications**

**Effective May 25, 2021**

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

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

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

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

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

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

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

### **Section 4 - Notices**

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

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

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

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

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

Signature:	<i>Nicole Lee</i>
Printed Name:	Nicole Lee
Title:	Regulatory Compliance Representative
E-mail Address:	njlee@marathonoil.com
Date:	2/21/2023
Phone:	713-296-2169
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

**APPENDIX**

## Section 1 - Parts VI, VII, and VIII

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

- Separation equipment is sized to allow for retention time and velocity to adequately separate oil, gas, and water at anticipated peak rates.
- All central tank battery equipment is designed to efficiently capture the remaining gas from the liquid phase.
- Valves and meters are designed to service without flow interruption or venting of gas.

**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.

◆ **19.15.27.8 (A) – Venting and Flaring Of Natural Gas**

- Marathon Oil Permian's field operations are designed with the goal of minimizing flaring and preventing venting of natural gas. If capturing the gas is not possible then the gas is combusted/flared using properly sized flares or combustors in accordance with state air permit rules.

◆ **19.15.27.8 (B) – Venting and Flaring During Drilling Operations**

- A properly-sized flare stack will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared. Venting will only occur if there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety, public health, or the environment.

◆ **19.15.27.8 (C) – Venting and Flaring During Completion or Recompletion Operations**

- During all phases of flowback, wells will flow through a sand separator, or other appropriate flowback separation equipment, and the well stream will be directed to a central tank battery (CTB) through properly sized flowlines.
- The CTB will have properly sized separation equipment for maximum anticipated flow rates.
- Multiple stages of separation will be used to separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks equipped with a closed loop system that will recover any residual gas from the tanks and route such gas to a sales outlet.

◆ **19.15.27.8 (D) – Venting and Flaring During Production Operations**

- During production, the well stream will be routed to the CTB where multiple stages of separation will separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks equipped with a closed loop system that will recover any residual gas from the tanks and route such gas to a sales outlet, minimizing tank emissions.
- Flares are equipped with auto-ignition systems and continuous pilot operations.
- Automatic gauging equipment is installed on all tanks.

◆ **19.15.27.8 (E) – Performance Standards**

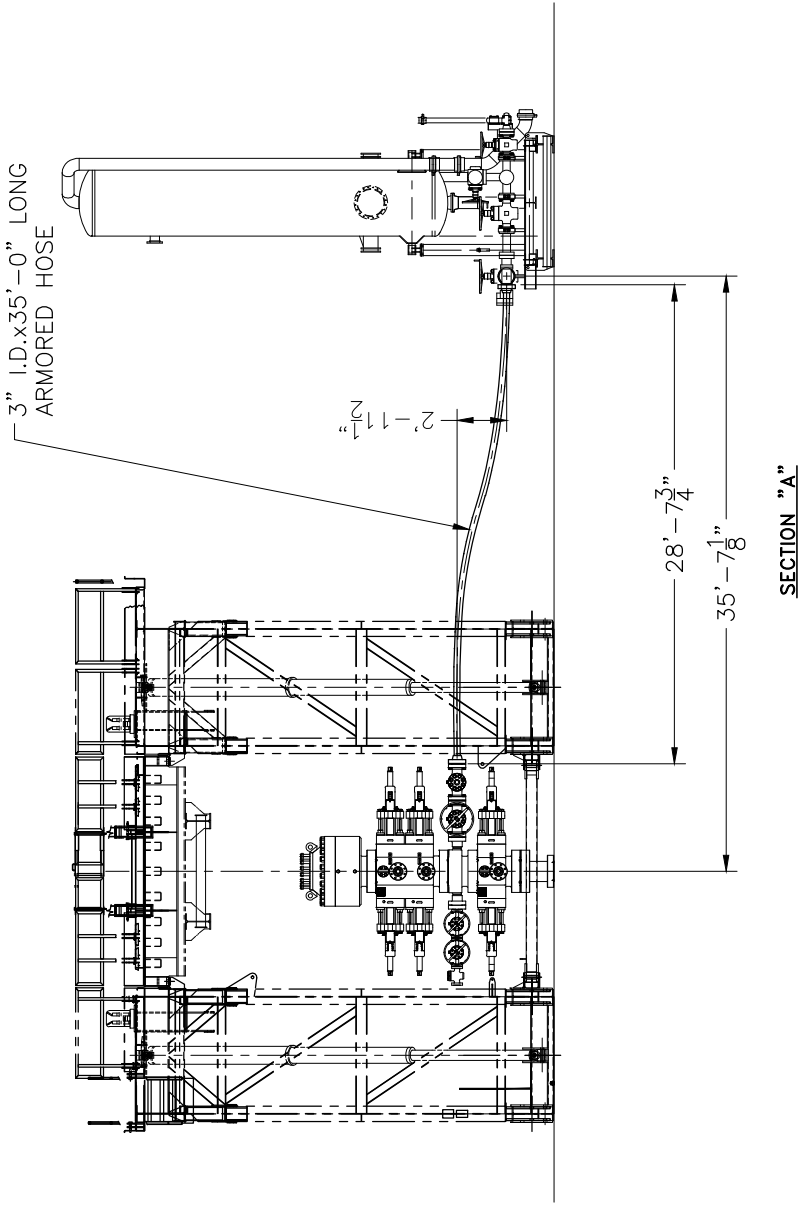
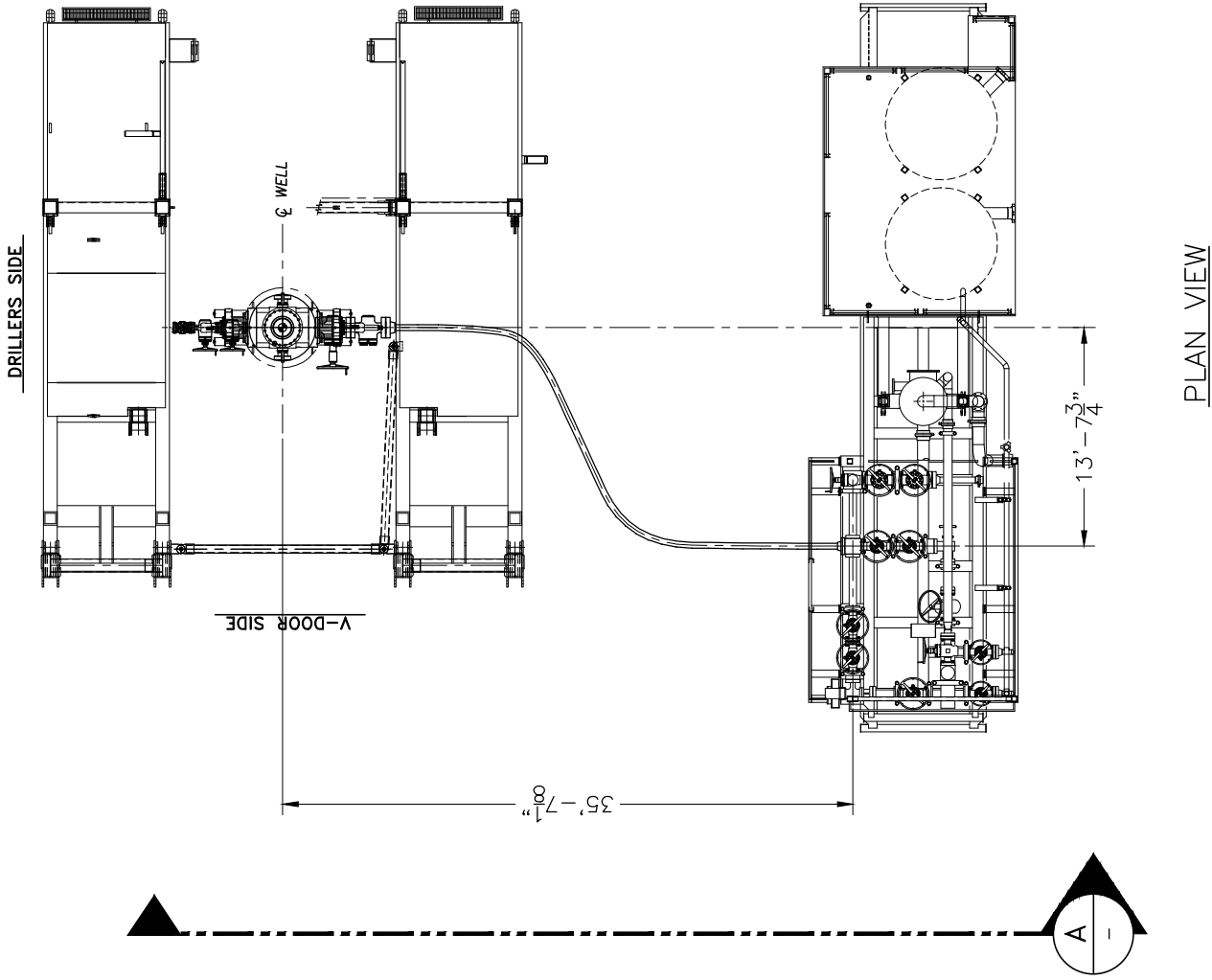
- Production equipment will be designed to handle maximum anticipated rates and pressure.
- Automatic gauging equipment is installed on all tanks to minimize venting.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Flares are equipped with continuous pilots and auto-ignitors along with remote monitoring of the pilot status.
- Weekly AVOs and monthly LDAR inspections will be performed on all wells and facilities that produce more than 60 MCFD.
- Gas/H<sub>2</sub>S detectors will be installed throughout the facilities and wellheads to detect leaks and enable timely repairs.

**◆ 19.15.27.8 (F) – Measurement or Estimation of Vented and Flared Natural Gas**


- All high pressure flared gas is measured by equipment conforming to API 14.10.
- No meter bypasses are installed.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated through flare flow curves with the assistance of air emissions consultants, as necessary.

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

- Marathon Oil Permian will use best management practices to vent as minimally as possible during well intervention operations and downhole well maintenance.
- All natural gas is routed into the gas gathering system and directed to one of Marathon Oil Permian's multiple gas sales outlets.
- All venting events will be recorded and all start-up, shutdown, maintenance logs will be kept for control equipment.
- All control equipment will be maintained to provide highest run-time possible.
- All procedures are drafted to keep venting and flaring to the absolute minimum.



ISSUED FOR  
FABRICATION  
December-19-2007  
DRAFTSMAN  
ENGINEER

		HELMERICH & PAYNE INTERNATIONAL DRILLING CO.	
ENGINEERING APPROVAL		TITLE:	
DATE		CHOKE LINE SYSTEM FLEXRIG3	
		CUSTOMER:	
		PROJECT:	
		DRAWN: JBG	
		DATE: 4-10-07	
		DWG. NO.:	
		210-P1-07	
		REV:	
		A	
		SHEET: 2 of 3	
		SCALE: 3/16"=1'	
		BY	
		DESCRIPTION	
		REMOVED SHEET TOTAL CALLOUT	
		JAV	
		DATE	
		12/18/07	
		REV	
		A	

PROPRIETARY

THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED  
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IZED OFFICER OF HELMERICH & PAYNE INT'L DRILLING CO.

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

HYDROSTATIC TESTING REPORT

LTTY/QR-5.7.1-28

No: 230826004

Product Name	Choke And Kill Hose	Standard	API Spec 16C 3 <sup>rd</sup> edition
Product Specification	3"×10000psi×35ft (10.67m)	Serial Number	7660134
Inspection Equipment	MTU-BS-1600-3200-E	Test medium	Water
Inspection Department	Q.C. Department	Inspection Date	2023.08.17

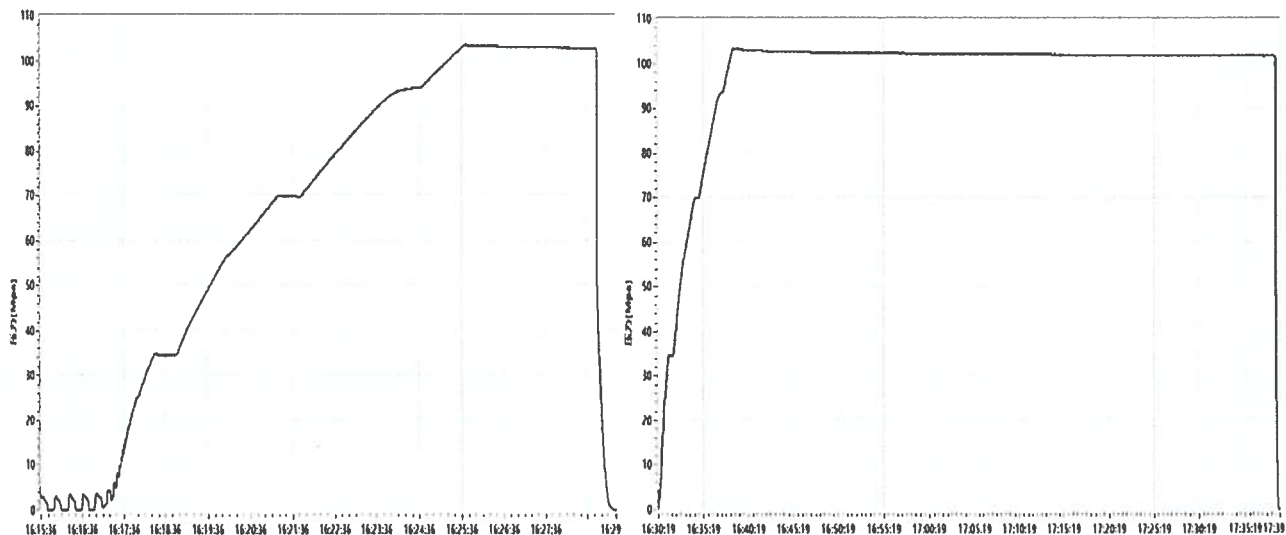
Rate of length change

Standard requirements	At working pressure ,the rate of length change should not more than $\pm 2\%$
Testing result	10000psi (69.0MPa) ,Rate of length change 0.9%

Hydrostatic testing

Standard requirements	At 1.5 times working pressure, the initial pressure-holding period of not less than three minutes, the second pressure-holding period of not less than one hour, no leaks.
Testing result	15000psi (103.5MPa), 3 min for the first time, 60 min for the second time, no leakage

Graph of pressure testing:



Conclusion	The inspected items meet standard requirements of API Spec 16C 3 <sup>rd</sup> edition				
Approver	Jiaolong Chen	Auditor	Huiling Dong	Inspector	Zhanheng Wang

LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD

CERTIFICATE OF QUALITY

LTTY/QR-5.7.1-19B

№: LT2023-126-001

Customer Name	Austin Hose		
Product Name	Choke And Kill Hose		
Product Specification	3"×10000psi×35ft (10.67m)	Quantity	12PCS
Serial Number	7660131~7660142	FSL	FSL3
Temperature Range	-29℃ ~+121℃	Standard	API Spec 16C 3 <sup>rd</sup> edition
Inspection Department	Q.C. Department	Inspection date	2023.08.26

Inspection Items			Inspection results		
Appearance Checking			In accordance with API Spec 16C 3 <sup>rd</sup> edition		
Size and Lengths			In accordance with API Spec 16C 3 <sup>rd</sup> edition		
Dimensions and Tolerances			In accordance with API Spec 16C 3 <sup>rd</sup> edition		
End Connections: 4-1/16"×10000psi Integral flange for sour gas service			In accordance with API Spec 6A 21 <sup>st</sup> edition		
End Connections: 4-1/16"×10000psi Integral flange for sour gas service			In accordance with API Spec 17D 3 <sup>rd</sup> edition		
Hydrostatic Testing			In accordance with API Spec 16C 3 <sup>rd</sup> edition		
product Marking			In accordance with API Spec 16C 3 <sup>rd</sup> edition		
Inspection conclusion		The inspected items meet standard requirements of API Spec 16C 3 <sup>rd</sup> edition			
Remarks					
Approver	Jiaolong Chen	Auditor	Huiling Dong	Inspector	Zhansheng Wang

**LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD****CERTIFICATE OF CONFORMANCE****№:LT230826013**

Product Name: Choke And Kill Hose

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

Serial Number: 7660131~7660142

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

The Choke And Kill Hose assembly was produced by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD . in Aug 2023, and inspected by LUOHE LETONE HYDRAULICS TECHNOLOGY CO.,LTD. according to API Spec 16C 3<sup>rd</sup> edition on Aug 26, 2023. The overall condition is good. This is to certify that the Choke And Kill Hose complies with all current standards and specifications for API Spec 16C 3<sup>rd</sup> edition .

QC Manager:

*Jiaolong Chen*

Date:Aug 26, 2023



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

# SUPO Data Report

07/29/2025

APD ID: 10400094588

Submission Date: 09/20/2023

Operator Name: MARATHON OIL PERMIAN LLC

Well Name: GOLIATH 24 FED COM

Well Number: 503H

Well Type: OIL WELL

Well Work Type: Drill

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

## Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

S1\_Goliath\_24\_Fed\_Com\_Public\_Access\_20230906085421.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

**ROW ID(s)**

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

## Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

S2\_Goliath\_24\_Fed\_Com\_New\_Road\_20230906085626.pdf

New road type: LOCAL

Length: 4240.68

Feet

Width (ft.): 30

Max slope (%): 2

Max grade (%): 0.64

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Road will be crowned to allow proper water drainage and BMP will be used to control erosion.

New road access plan or profile prepared? N

New road access plan

Operator Name: MARATHON OIL PERMIAN LLC

Well Name: GOLIATH 24 FED COM

Well Number: 503H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Strip a minimum of 6" topsoil and temporarily pile while road is being constructed. After the road has been constructed, the topsoil will be spread and seeded along the road ditch in Marathon's Approved ROW.

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: OTHER

Other Description: Crowning & Ditching

Drainage Control comments: The access road driving surface will be crowned with a max grade of 0.64% and ditching along side the road will be created to direct and control storm water. The road shall conform to cross section and plans for typical road construction found in the BLM Gold Book.

Road Drainage Control Structures (DCS) description: NA

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Existing Well map Attachment:

S3\_Goliath\_24\_Fed\_One\_Mile\_Radius\_20230920070944.pdf

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Production Facility - 6.98 acres, 400' X 760'. OHP: 2827.61', 3-phase, 12.47kV, approximately 9 poles 1 - 6" Buried, Flexsteel flowline, max psi 1500# - Oil, Gas & Water from well to battery Flowlines corridor to accommodate 16 wells: 100' width. West Pad: 1.49 acres, East pad: 1.60 acres.

Operator Name: MARATHON OIL PERMIAN LLC

Well Name: GOLIATH 24 FED COM

Well Number: 503H

Production Facilities map:

- S4\_Goliath\_24\_Fed\_Com\_Flowline\_20230906095514.pdf
- S4\_Goliath\_24\_Fed\_OHP\_20230906095515.pdf
- S4\_Goliath\_24\_Fed\_CTB\_Facility\_Layout\_20230920071231.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: GW WELL

Water source use type:

DUST CONTROL

SURFACE CASING

INTERMEDIATE/PRODUCTION CASING

STIMULATION

Source latitude: 32.0244

Source longitude: -103.40523

Source datum: NAD83

City:

Water source permit type:

PRIVATE CONTRACT

Water source transport method:

TRUCKING

Source land ownership: PRIVATE

Source transportation land ownership: PRIVATE

Water source volume (barrels): 147500

Source volume (acre-feet): 19.01173171

Source volume (gal): 6195000

Water source and transportation

- S5\_Goliath\_24\_Fed\_Com\_Water\_Supply\_20230906103216.pdf

Water source comments:

New water well? N

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Well depth (ft):****Well casing type:****Well casing outside diameter (in.):****Well casing inside diameter (in.):****New water well casing?****Used casing source:****Drilling method:****Drill material:****Grout material:****Grout depth:****Casing length (ft.):****Casing top depth (ft.):****Well Production type:****Completion Method:****Water well additional information:****State appropriation permit:****Additional information attachment:**

### Section 6 - Construction Materials

**Using any construction materials:** YES**Construction Materials description:** See attachment.**Construction Materials source location**

S6\_Goliath\_24\_Fed\_Caliche\_Sources\_20230906103149.pdf

### Section 7 - Methods for Handling

**Waste type:** GARBAGE**Waste content description:** Garbage and Trash (solid waste).**Amount of waste:** 1200 pounds**Waste disposal frequency :** Weekly**Safe containment description:** All garbage will be stored in secure containers with lids.**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY**Disposal location ownership:** COMMERCIAL**Disposal type description:****Disposal location description:** All garbage will be collected and disposed of properly at a State approved disposal facility.**Waste type:** DRILLING**Waste content description:** Drilling fluids and produced oil and water from the well during drilling operations. Closed Loop System will be used.**Amount of waste:** 1000 barrels**Waste disposal frequency :** Daily**Safe containment description:** Lined Steel Tanks**Safe containmant attachment:**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL**Disposal type description:****Disposal location description:** Waste will be stored safely and disposed of properly in an NMOCD approved disposal facility.**Waste type:** SEWAGE**Waste content description:** Human waste and grey water.**Amount of waste:** 600 barrels**Waste disposal frequency :** Weekly**Safe containment description:** Portable toilets and sewage tanks.**Safe containmant attachment:****Waste disposal type:** HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL**Disposal type description:****Disposal location description:** All sewage waste will be managed by a third party and disposed of properly at a state approved disposal facility.

### Reserve Pit

**Reserve Pit being used?** NO**Temporary disposal of produced water into reserve pit?** NO**Reserve pit length (ft.)** **Reserve pit width (ft.)****Reserve pit depth (ft.)** **Reserve pit volume (cu. yd.)****Is at least 50% of the reserve pit in cut?****Reserve pit liner****Reserve pit liner specifications and installation description**

### Cuttings Area

**Cuttings Area being used?** NO**Are you storing cuttings on location?** N**Description of cuttings location****Cuttings area length (ft.)** **Cuttings area width (ft.)****Cuttings area depth (ft.)** **Cuttings area volume (cu. yd.)****Is at least 50% of the cuttings area in cut?****Cuttings area liner****Cuttings area liner specifications and installation description**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H

## Section 8 - Ancillary

**Are you requesting any Ancillary Facilities?:** N**Ancillary Facilities****Comments:**

## Section 9 - Well Site

**Well Site Layout Diagram:**

S9\_GOLIATH\_24\_Fed\_Com\_Well\_List\_W\_Pad\_20230920071853.pdf

S9\_Goliath\_24\_Fed\_Contour\_and\_Elevation\_Plat\_20230920071904.pdf

S9\_Goliath\_24\_Fed\_Pad\_Diagram\_20230920071911.pdf

**Comments:** Proposed well pad dimensions for the proposed well pad area are 520 'X 700'. Topsoil will be stored on the Northwest (340'X30') side of the pad.

## Section 10 - Plans for Surface

**Type of disturbance:** New Surface Disturbance**Multiple Well Pad Name:** Goliath 24 Fed W**Multiple Well Pad Number:** 1**Recontouring**

S10\_Goliath\_24\_Fed\_Contour\_and\_Elevation\_Plat\_20230920072107.pdf

S10\_Goliath\_24\_Interim\_Reclamation\_20230920072107.pdf

**Drainage/Erosion control construction:** To control and prevent potentially contaminated precipitation from leaving the pad site, a perimeter berm and settlement pond will be installed. Contaminated water will be removed from pond, stored in waste tanks, and disposed of at a state approved facility. Standing water or puddles will not be allowed. Drainage ditches would be established and maintained on the pad and along access roads to divert water away from operations. Natural drainage areas disturbed during construction would be re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be obliterated, re-contoured to near original condition prior to construction. Erosion Control Best Management Practices would be used where necessary and consist of seeding, fiber rolls, water bars, silt fences, and temporary diversion dikes. Areas disturbed during construction that are no longer needed for operations would be obliterated, re-contoured, and reclaimed to near original condition to re-establish natural drainage.

**Drainage/Erosion control reclamation:** Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards. All disturbed and re-contoured areas would be reseeded according to specifications. Approved seed mixtures would be certified weed free and consist of grasses, forbs, or shrubs similar to the surrounding area. Compacted soil areas may need to be obliterated and reclaimed to near natural conditions by re-contouring all slopes to facilitate and re-establish natural drainage.

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H

<b>Well pad proposed disturbance (acres):</b> 8.35	<b>Well pad interim reclamation (acres):</b> 0.85	<b>Well pad long term disturbance (acres):</b> 7.5
<b>Road proposed disturbance (acres):</b> 3.12	<b>Road interim reclamation (acres):</b> 0	<b>Road long term disturbance (acres):</b> 3.12
<b>Powerline proposed disturbance (acres):</b> 1.94	<b>Powerline interim reclamation (acres):</b> 0	<b>Powerline long term disturbance (acres):</b> 1.94
<b>Pipeline proposed disturbance (acres):</b> 3.09	<b>Pipeline interim reclamation (acres):</b> 0	<b>Pipeline long term disturbance (acres):</b> 3.09
<b>Other proposed disturbance (acres):</b> 0	<b>Other interim reclamation (acres):</b> 0	<b>Other long term disturbance (acres):</b> 0
<b>Total proposed disturbance:</b> 16.5	<b>Total interim reclamation:</b> 0.85	<b>Total long term disturbance:</b> 15.65

**Disturbance Comments:** The pad will be reclaimed after Phase II completed on the drill pad.

**Reconstruction method:** The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil; control erosion; and minimize habitat and forage loss, visual impact, and weed infestation, during the life of the well or facilities. Earthwork for interim and final reclamation must be completed within 6 months of well completion or well plugging (weather permitting). Written permission from the BLM is required if more time is needed. Reclamation will be performed using the following procedures: INTERIM RECLAMATION Earthwork for interim reclamation must be completed within 6 months of well completion. The well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production. A plan, that was previously submitted to the BLM, shows where interim reclamation will be completed to allow for safe operations, protection of the environment outside of drilled well, and following best management practices found in the BLM Gold Book. In areas planned for interim reclamation, all the surface material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads. They will then be re-contoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling but will be re-contoured to the above ratios during interim reclamation. Topsoil will be evenly re-spread and re-vegetated over the entire disturbed area not needed for all weather operations, including cuts & fills. To seed the area, the proper BLM seed mixture (free of noxious weeds) will be used. Proper erosion control methods will be applied to the area to mitigate runoff, and siltation of the surrounding area. The interim reclamation will be monitored periodically to ensure that vegetation has been reestablished. FINAL RECLAMATION Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment. All surface material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads. All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be re-contoured to the contour existing prior to initial construction or a contour that blends in distinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to re-contouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. After all the disturbed areas have been properly prepared, the areas will be seeded with the proper BLM seed mixture free of noxious weeds. Proper erosion control methods will be used on the entire area to mitigate runoff and siltation. .

**Topsoil redistribution:** The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation. After all the disturbed areas have been properly prepared, the areas will be seeded with the proper BLM seed mixture free of noxious weeds.

**Soil treatment:** Topsoil will be stockpiled until interim reclamation. Topsoil and subsoil (fill) will be piled separately and applied in the interim and final reclamations as detailed in Reconstruction Method.

**Existing Vegetation at the well pad:** Yucca, cholla, mesquite, prickly pear, and various forbs and grasses.

**Existing Vegetation at the well pad**

**Existing Vegetation Community at the road:** Yucca, cholla, mesquite, prickly pear, and various forbs and grasses.

**Existing Vegetation Community at the road**

Operator Name: MARATHON OIL PERMIAN LLC

Well Name: GOLIATH 24 FED COM

Well Number: 503H

Existing Vegetation Community at the pipeline: Yucca, cholla, mesquite, prickly pear, and various forbs and grasses.

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: N/A

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed type: OTHER

Seed source:

Seed name: Various BLM Mixes

Source name:

Source name:

Source address:

Source phone:

Seed cultivar: Broadcast and/or Drill

Seed use location: NEW ACCESS ROAD,WELL PAD

PLS pounds per acre: 16

Proposed seeding season: AUTUMN

Seed Summary	
Seed Type	Pounds/Acre
OTHER	16

Total pounds/Acre: 16

Seed reclamation

Operator Contact/Responsible Official

First Name:

Last Name:

Phone:

Email:

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Seedbed prep:****Seed BMP:****Seed method:****Existing invasive species?** N**Existing invasive species treatment description:****Existing invasive species treatment****Weed treatment plan description:** Marathon Oil will control weeds per Federal, County and State regulations by contracting a certified third party sprayer.**Weed treatment plan****Monitoring plan description:** Monitor & Maintain all disturbed areas per Gold Book Standards.**Monitoring plan****Success standards:** Marathon Oil will monitor all disturbed areas monthly for noxious weeds & erosion through routine inspections. All necessary maintenance will be taken care of promptly.**Pit closure description:** N/A**Pit closure attachment:**

## Section 11 - Surface

**Disturbance type:** NEW ACCESS ROAD**Describe:****Surface Owner:** BUREAU OF LAND MANAGEMENT**Other surface owner description:****BIA Local Office:****BOR Local Office:****COE Local Office:****DOD Local Office:****NPS Local Office:****State Local Office:****Military Local Office:****USFWS Local Office:****Other Local Office:****USFS Region:****USFS Forest/Grassland:****USFS Ranger District:**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Disturbance type:** WELL PAD**Describe:****Surface Owner:** BUREAU OF LAND MANAGEMENT**Other surface owner description:****BIA Local Office:****BOR Local Office:****COE Local Office:****DOD Local Office:****NPS Local Office:****State Local Office:****Military Local Office:****USFWS Local Office:****Other Local Office:****USFS Region:****USFS Forest/Grassland:****USFS Ranger District:****Disturbance type:** EXISTING ACCESS ROAD**Describe:****Surface Owner:** BUREAU OF LAND MANAGEMENT**Other surface owner description:****BIA Local Office:****BOR Local Office:****COE Local Office:****DOD Local Office:****NPS Local Office:****State Local Office:****Military Local Office:****USFWS Local Office:****Other Local Office:****USFS Region:****USFS Forest/Grassland:****USFS Ranger District:**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Disturbance type:** PIPELINE**Describe:****Surface Owner:** BUREAU OF LAND MANAGEMENT**Other surface owner description:****BIA Local Office:****BOR Local Office:****COE Local Office:****DOD Local Office:****NPS Local Office:****State Local Office:****Military Local Office:****USFWS Local Office:****Other Local Office:****USFS Region:****USFS Forest/Grassland:****USFS Ranger District:****Disturbance type:** OTHER**Describe:** Power - OHP**Surface Owner:** BUREAU OF LAND MANAGEMENT**Other surface owner description:****BIA Local Office:****BOR Local Office:****COE Local Office:****DOD Local Office:****NPS Local Office:****State Local Office:****Military Local Office:****USFWS Local Office:****Other Local Office:****USFS Region:****USFS Forest/Grassland:****USFS Ranger District:**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Disturbance type:** OTHER**Describe:** Production Facility Pad**Surface Owner:** BUREAU OF LAND MANAGEMENT**Other surface owner description:****BIA Local Office:****BOR Local Office:****COE Local Office:****DOD Local Office:****NPS Local Office:****State Local Office:****Military Local Office:****USFWS Local Office:****Other Local Office:****USFS Region:****USFS Forest/Grassland:****USFS Ranger District:**

## Section 12 - Other

**Right of Way needed?** Y**Use APD as ROW?** Y**ROW Type(s):** 281001 ROW - ROADS,285003 ROW – POWER TRANS,288100 ROW – O&G Pipeline**ROW****SUPO Additional Information:****Use a previously conducted onsite?** N**Previous Onsite information:****Other SUPO**



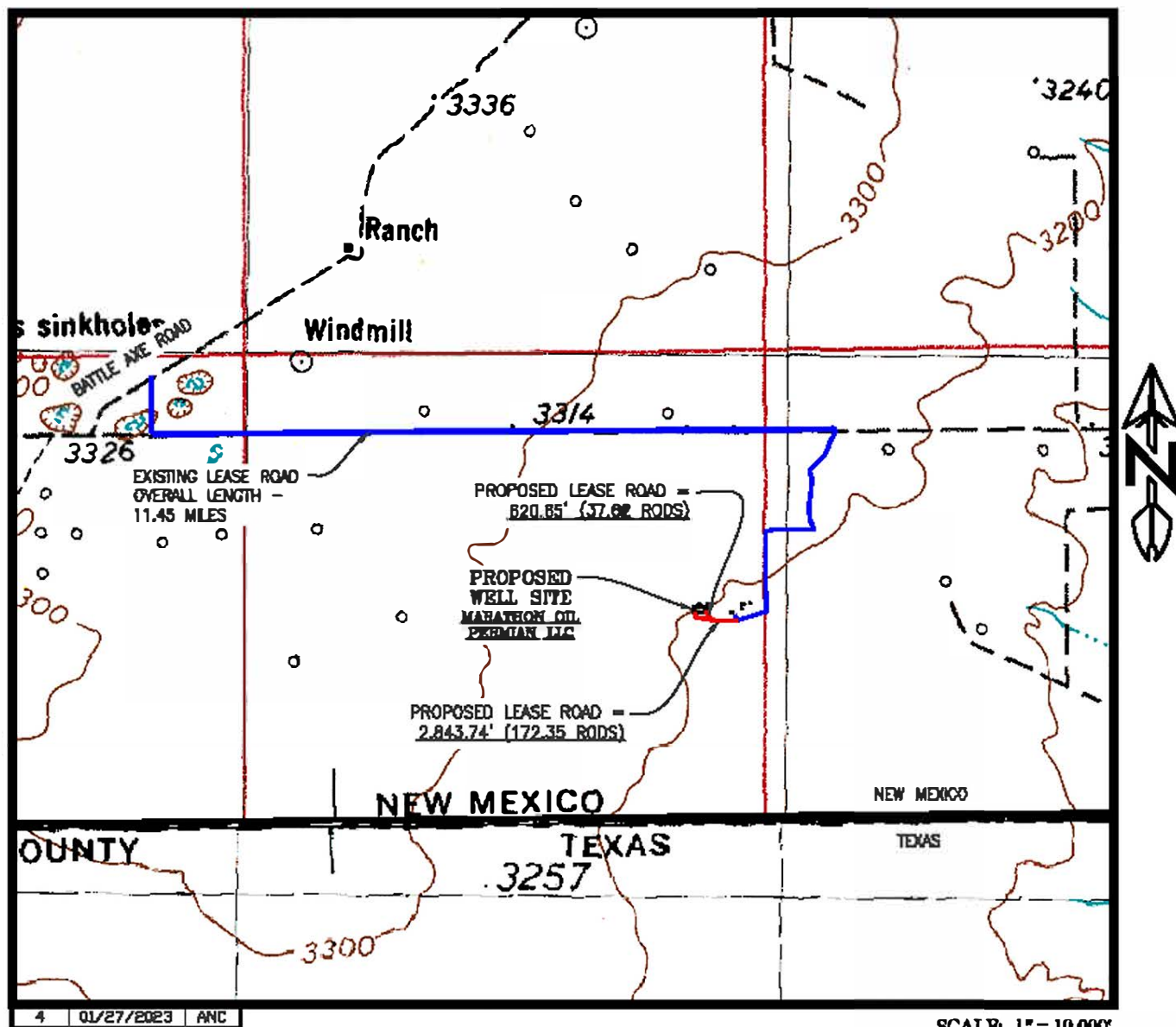
# DRIVING DIRECTIONS

GOLIATH 24 FED COM  
SEC. 24 TWP. 26-S RGE. 34-E  
SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.



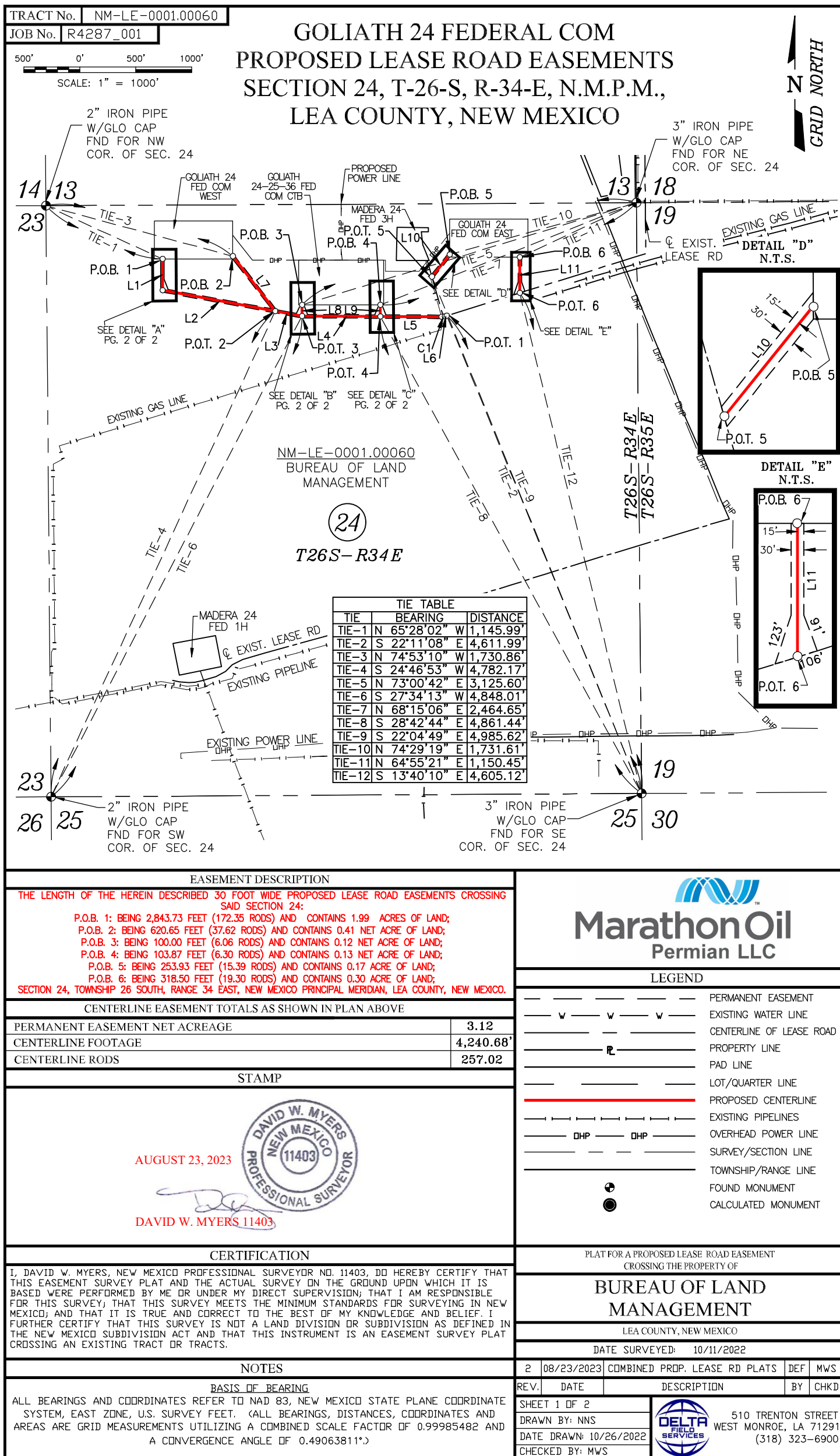
SCALE: 1" = 10,000'  
CONTOUR INTERVAL = 100'

FROM THE INTERSECTION OF NW COUNTY RD AND US 180 W/US 62 W IN HOBBS COUNTY, NEW MEXICO, HEAD WEST 5.0 MILES TO NM 8 S. TURN LEFT ONTO NM 8 S HEADING SOUTH FOR 15.7 MILES TO NM 176 W. TURN RIGHT ONTO NM 176 W HEADING WEST 2.0 MILES TO WEAVER ROAD. TURN LEFT ONTO WEAVER ROAD HEADING SOUTH FOR 5.0 MILES TO DELAWARE BASIN RD. TURN RIGHT ONTO DELAWARE BASIN RD HEADING WEST AND SOUTH 24.6 MILES TO NM 128 E. TURN LEFT ONTO NM 128 E HEADING SOUTH FOR 0.2 MILE AND CONTINUING ON NM 128 E FOR 6.6 MILES TO BATTLE AXE ROAD. TRAVEL SOUTH ON BATTLE AXE ROAD FOR 0.7 MILE, TURN LEFT AT THE INTERSECTION AND TRAVEL 7.8 MILES EAST TO A SOUTHWARD BEND IN THE ROAD. CONTINUE SOUTHWARD 1.3 MILES TO AN INTERSECTION. TURN RIGHT AND TRAVEL WEST ON THE LEASE ROAD FOR 0.6 MILE. AT THE INTERSECTION TURN LEFT AND TRAVEL SOUTH FOR 0.9 MILE THEN SOUTHWEST FOR ANOTHER 0.2 MILE TO THE PROPOSED LEASE ROAD OF THE PROPOSED EAST GOLIATH 24 FED COM WELL PAD. TRAVEL 319 FEET TO ENTER SAID PROPOSED PAD AT THE SOUTHEAST CORNER OF PAD.

SHEET 4 OF 6

PREPARED BY  
B. J. GILBERT, JR.  
554 THOMAS ST.  
WEST HAVEN, CT 06611  
860-466-0000  
FAX 860-466-0000

5	02/17/2023	ANC
REV	DATE	BY



TRACT No. NM-LE-0001.00060

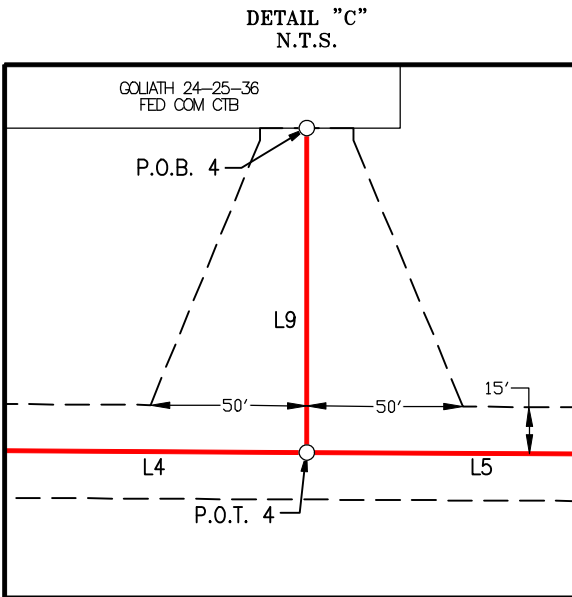
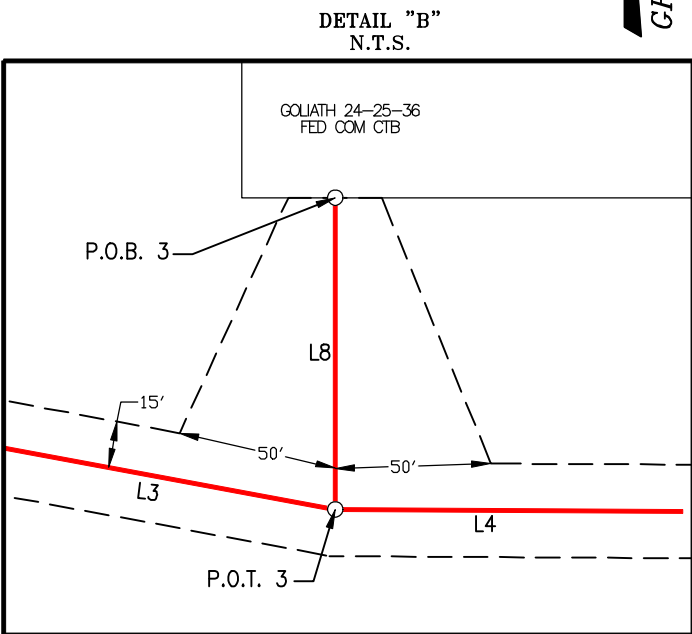
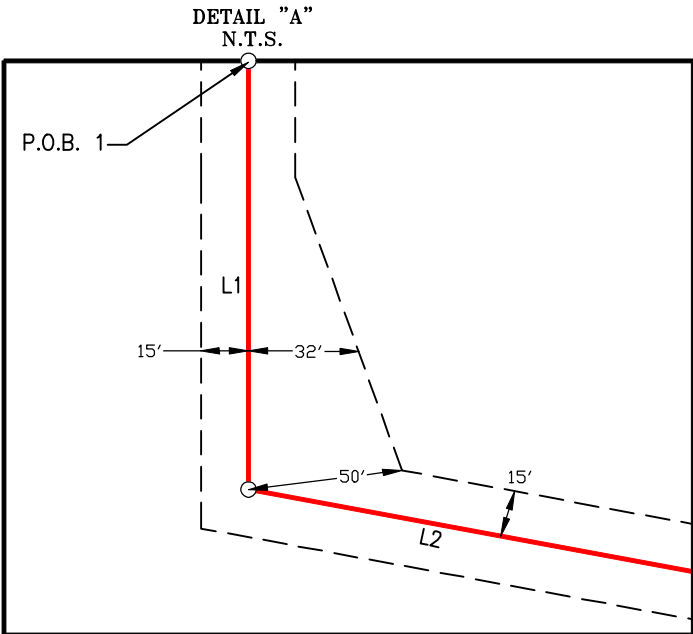
JOB No. R4287\_001

GOLIATH 24 FEDERAL COM

PROPOSED LEASE ROAD EASEMENTS

SECTION 24, T-26-S, R-34-E, N.M.P.M.,

LEA COUNTY, NEW MEXICO



GOLIATH 24 FEDERAL COM LEASE ROAD EASEMENT ALL IN SECTION 24, T-26-S, R-34-E					
LINE	BEARING		DISTANCE		
P.O.B. 1 TO P.O.T. 1					
L1	SOUTH		280.00'		
L2	S 79°30'46"	E	1,025.07'		
L3	S 79°30'46"	E	243.41'		
L4	S 89°41'01"	E	700.01'		
L5	S 89°41'01"	E	546.58'		
CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	100.00'	30.84'	30.72'	N 81°28'53" E	17°40'12"
L6	N 72°38'47" E		17.82'		
ACREAGE	FOOTAGE		RODS		
1.99	2,843.73'		172.35		
P.O.B. 2 TO P.O.T. 2					
L7	S 37°41'39"	E	620.65'		
NET AC.	FOOTAGE		RODS		
0.41	620.65'		37.62		
P.O.B. 3 TO P.O.T. 3					
L8	SOUTH		100.00'		
NET AC.	FOOTAGE		RODS		
0.12	100.00'		6.06		
P.O.B. 4 TO P.O.T. 4					
L9	SOUTH		103.87'		
NET AC.	FOOTAGE		RODS		
0.13	103.87'		6.30		
P.O.B. 5 TO P.O.T. 5					
L10	S 38°51'19"	W	253.93'		
ACREAGE	FOOTAGE		RODS		
0.17	253.93'		15.39		
P.O.B. 6 TO P.O.T. 6					
L11	SOUTH		318.50'		
ACREAGE	FOOTAGE		RODS		
0.30	318.50'		19.30		

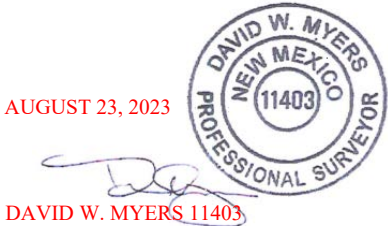
Marathon Oil

Permian LLC

LEGEND

—	PERMANENT EASEMENT
— w — w — w —	EXISTING WATER LINE
—	CENTERLINE OF LEASE ROAD
— R —	PROPERTY LINE
—	PAD LINE
—	LOT/QUARTER LINE
—	PROPOSED CENTERLINE
— + — + — + — + —	EXISTING PIPELINES
— OHP — OHP —	OVERHEAD POWER LINE
—	SURVEY/SECTION LINE
—	TOWNSHIP/RANGE LINE
+	FOUND MONUMENT
●	CALCULATED MONUMENT

STAMP



CERTIFICATION

I, DAVID W. MYERS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 11403, DO HEREBY CERTIFY THAT THIS EASEMENT SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS INSTRUMENT IS AN EASEMENT SURVEY PLAT CROSSING AN EXISTING TRACT OR TRACTS.

NOTES

BASIS OF BEARING  
ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS, DISTANCES, COORDINATES AND AREAS ARE GRID MEASUREMENTS UTILIZING A COMBINED SCALE FACTOR OF 0.99985482 AND A CONVERGENCE ANGLE OF 0.49063811°.)

PLAT FOR A PROPOSED LEASE ROAD EASEMENT  
CROSSING THE PROPERTY OF

BUREAU OF LAND  
MANAGEMENT

LEA COUNTY, NEW MEXICO

DATE SURVEYED: 10/11/2022

2	08/23/2023	COMBINED PRDP. LEASE RD PLATS	DEF	MWS
REV.	DATE	DESCRIPTION	BY	CHK
SHEET 2 OF 2			510 TRENTON STREET	
DRAWN BY: NNS			WEST MONROE, LA 71291	
DATE DRAWN: 10/26/2022			(318) 323-6900	
CHECKED BY: MWS				

## ONE-MILE RADIUS MAP

GOLIATH 24 FEDERAL COM (WEST)

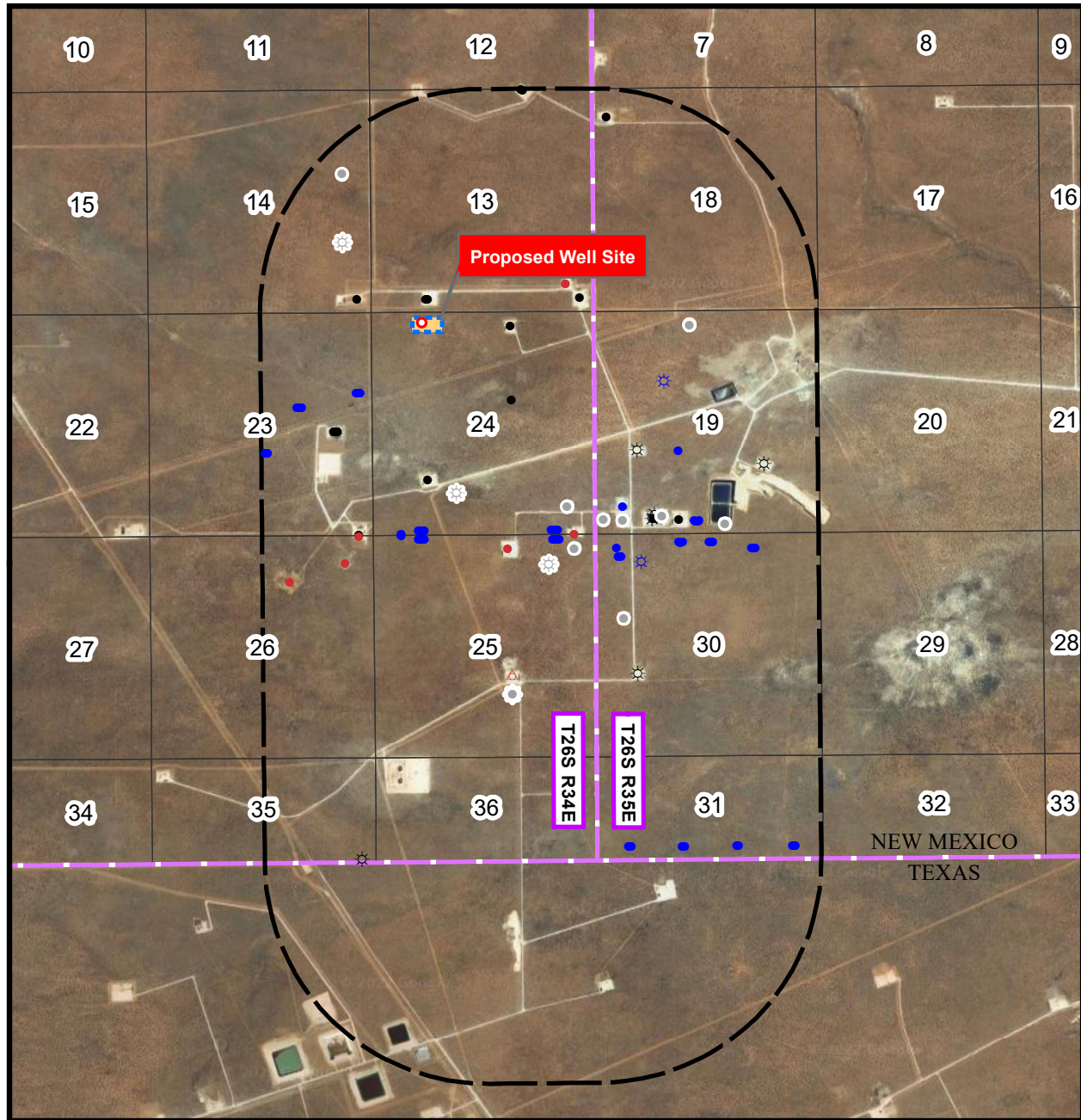
SEC. 24, TWP. 26-S RGE. 34-E

SURVEY: N.M.P.M.

COUNTY: LEA

MARATHON OIL PERMIAN, LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, NM, TX.



REV 3 SPT 01/04/2023

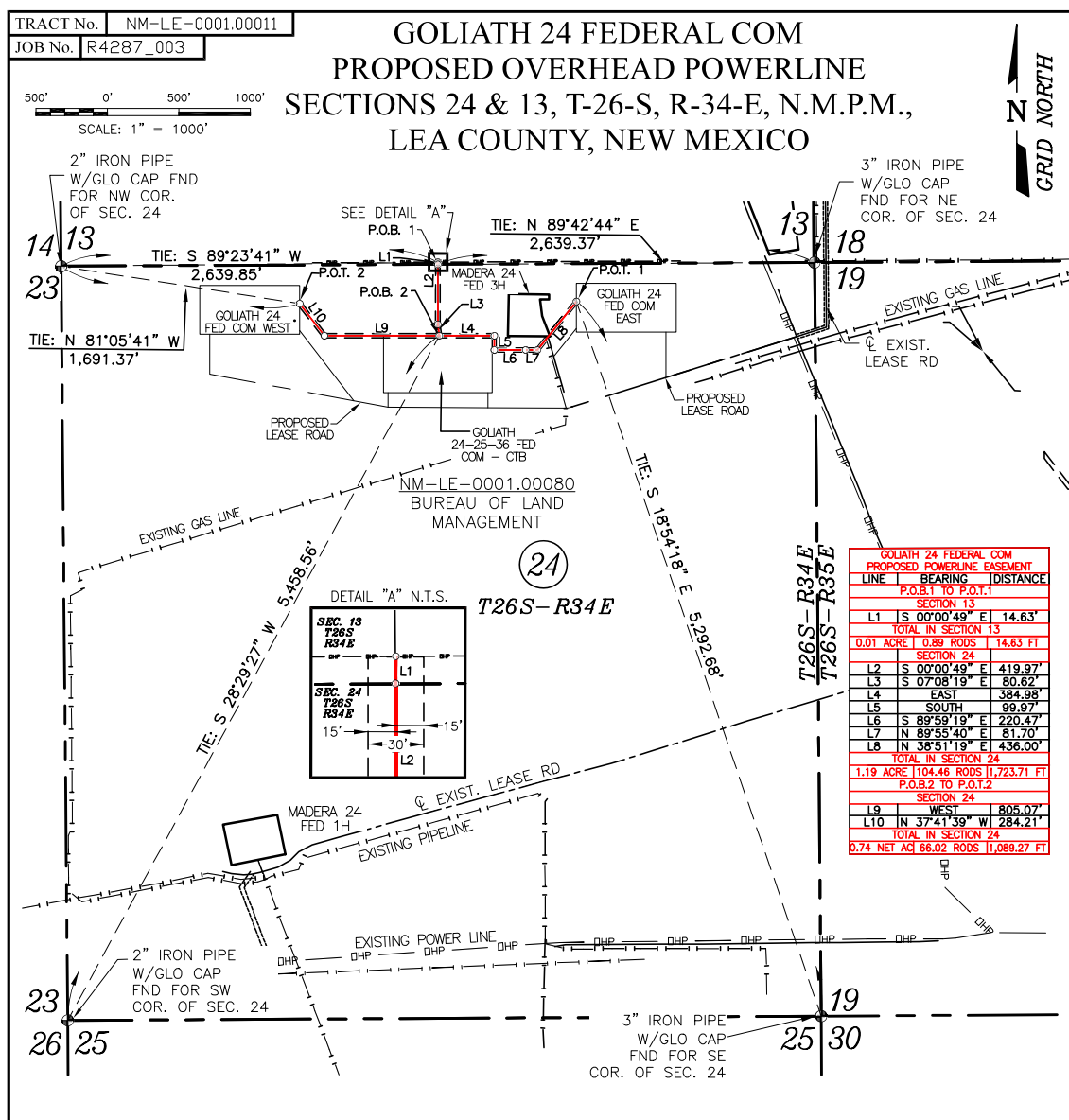
1" = 3,917'

Proposed Well Pad		Gas, Active	Salt Water Injection, Cancelled	Salt Water Injection, New
Arch Survey Limits		Gas, Cancelled	Injection, Abandoned	Salt Water Injection, Plugged
Section Line		Gas, New	Oil, Active	Water, Active
CO2 Active	Gas, Plugged	Gas, Abandoned	Oil, Cancelled	Water, Plugged
CO2 Cancelled	Injection, Active	Injection, New	Oil, New	
CO2, Plugged	Injection, Plugged	Oil, Plugged	Oil, Abandoned	
		Salt Water Injection, Active		



SHEET 1 OF 6  
 PREPARED BY:  
 R-SQUARED GLOBAL, LLC  
 510 TRENTON ST.  
 WEST MONROE, LA 71291  
 318-323-6900 OFFICE JOB  
 No. R4287\_002





EASEMENT DESCRIPTION	
<p>THE LENGTH OF THE HEREIN DESCRIBED 30 FOOT WIDE PROPOSED OVERHEAD POWERLINE EASEMENT CROSSING SAID SECTIONS 13 &amp; 24: P.O.B. 1: SECTION 13, BEING 14.63 FEET (0.89 RODS) AND CONTAINS 0.01 ACRE OF LAND; SECTION 24, BEING 1,723.71 FEET (104.46 RODS) AND CONTAINS 1.19 ACRE OF LAND; P.O.B. 2: SECTION 24, BEING 1,089.27 FEET (66.02 RODS) AND CONTAINS 0.74 NET ACRE OF LAND; SECTIONS 13 &amp; 24, TOWNSHIP 26 SOUTH, RANGE 34 EAST, NEW MEXICO PRINCIPAL MERIDIAN, EDDY COUNTY, NEW MEXICO.</p>	
CENTERLINE EASEMENT TOTALS AS SHOWN IN PLAN ABOVE	
PERMANENT EASEMENT NET ACREAGE	1.94
CENTERLINE FOOTAGE	2,827.61'
CENTERLINE RODS	171.37
STAMP	
<p>JANUARY 9, 2023</p> <p>DAVID W. MYERS 11403</p>	
CERTIFICATION	
<p>I, DAVID W. MYERS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 11403, DO HEREBY CERTIFY THAT THIS EASEMENT SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO SUBDIVISION ACT AND THAT THIS INSTRUMENT IS AN EASEMENT SURVEY PLAT CROSSING AN EXISTING TRACT OR TRACTS.</p>	
NOTES	
<p>BASIS OF BEARING ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS, DISTANCES, COORDINATES AND AREAS ARE GRID MEASUREMENTS UTILIZING A COMBINED SCALE FACTOR OF 0.99985482 CONVERGENCE ANGLE OF 0.49063811".)</p>	
LEGEND	
<p>PERMANENT EASEMENT</p> <p>EXISTING WATER LINE</p> <p>CENTERLINE OF LEASE ROAD</p> <p>PROPERTY LINE</p> <p>PAD LINE</p> <p>LOT/QUARTER LINE</p> <p>PROPOSED CENTERLINE</p> <p>EXISTING PIPELINES</p> <p>OVERHEAD POWER LINE</p> <p>SURVEY/SECTION LINE</p> <p>TOWNSHIP/RANGE LINE</p> <p>FOUND MONUMENT</p> <p>CALCULATED MONUMENT</p>	
PLAT FOR A PROPOSED OVERHEAD POWERLINE EASEMENT CROSSING THE PROPERTY OF	
BUREAU OF LAND MANAGEMENT	
LEA COUNTY, NEW MEXICO	
DATE SURVEYED: 10/11/2022	
REV.	DATE
DESCRIPTION	
BY	
CHKD	
SHEET 1 OF 1	
DRAWN BY: NNS	
DATE DRAWN: 10/31/2022	
CHECKED BY: MWS	
<p>510 TRENTON STREET WEST MONROE, LA 71291 (318) 323-6900 FAX (318) 362-0064</p>	

[illegible]

## FACILITY LAYOUT

GOLIATH 24 FED COM (WEST)

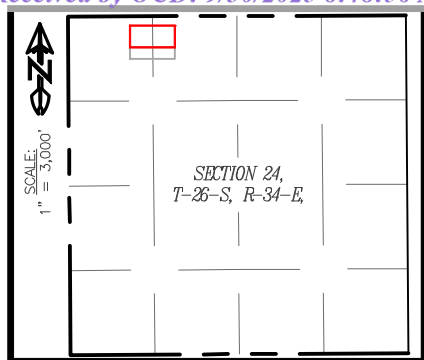
SEC. 24 TWP. 26-S RGE. 34-E

SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.

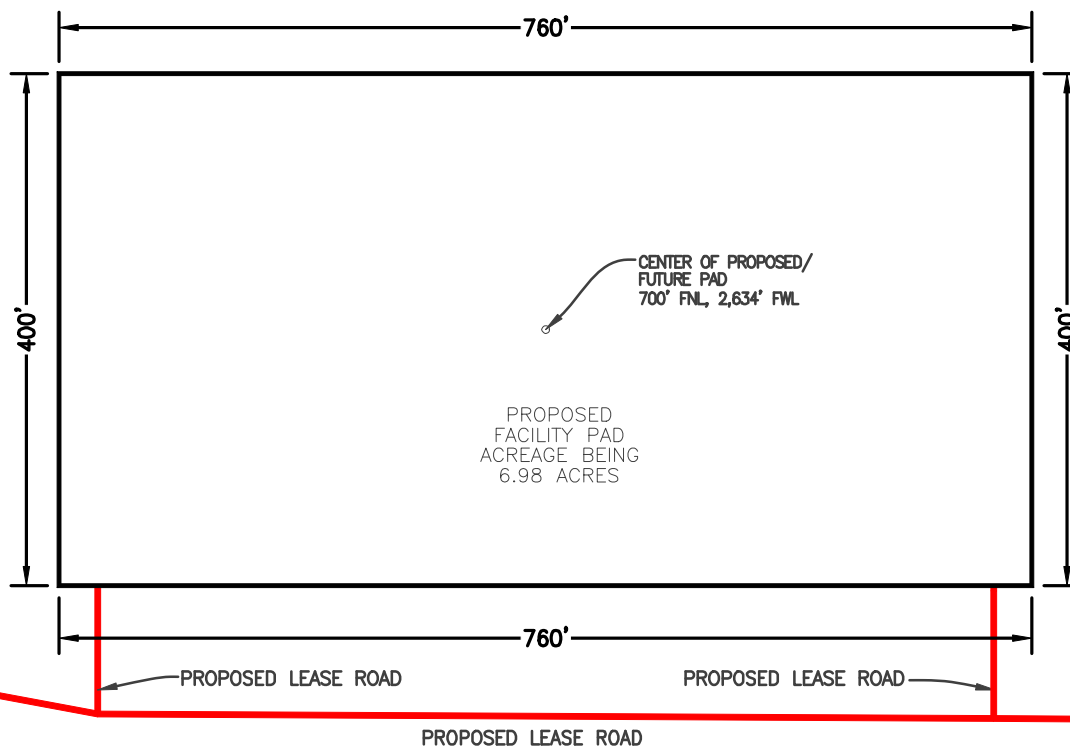


### LEGEND

PROPOSED WELL PAD

PROPOSED LEASE ROAD


SECTION 24,  
T-26-S, R-34-E.



NOTE:

THIS IS NOT A BOUNDARY SURVEY, APPARENT  
PROPERTY CORNERS AND PROPERTY LINES ARE  
SHOWN FOR INFORMATION ONLY. BOUNDARY DATA  
SHOWN IS FROM STATE OF NEW MEXICO OIL  
CONSERVATION DIVISION FORM C-102 INCLUDED  
IN THIS SUBMITTAL.

75' 0' 75' 150'



SCALE: 1" = 150'

Released to Imaging: 12/8/2025 1:38:31 PM

02-20-2023



5	02/17/2023	ANC
REV.	DATE	BY

SHEET 6 OF 6

**PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON ST.  
WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R4287\_002**

# WELL PAD CROSS SECTIONS

GOLIATH 24-25-36 FED COM CTB

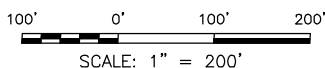
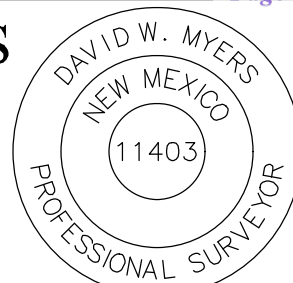
SEC. 24, TWP. 26-S RGE. 34-E

SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: MARATHON OIL PERMIAN LLC

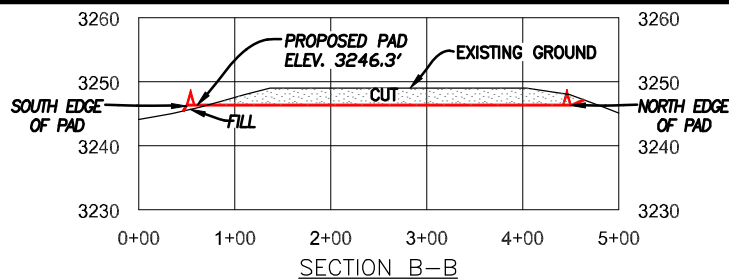
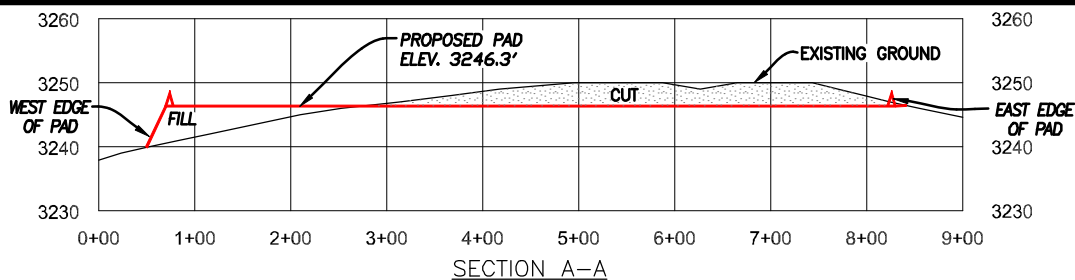
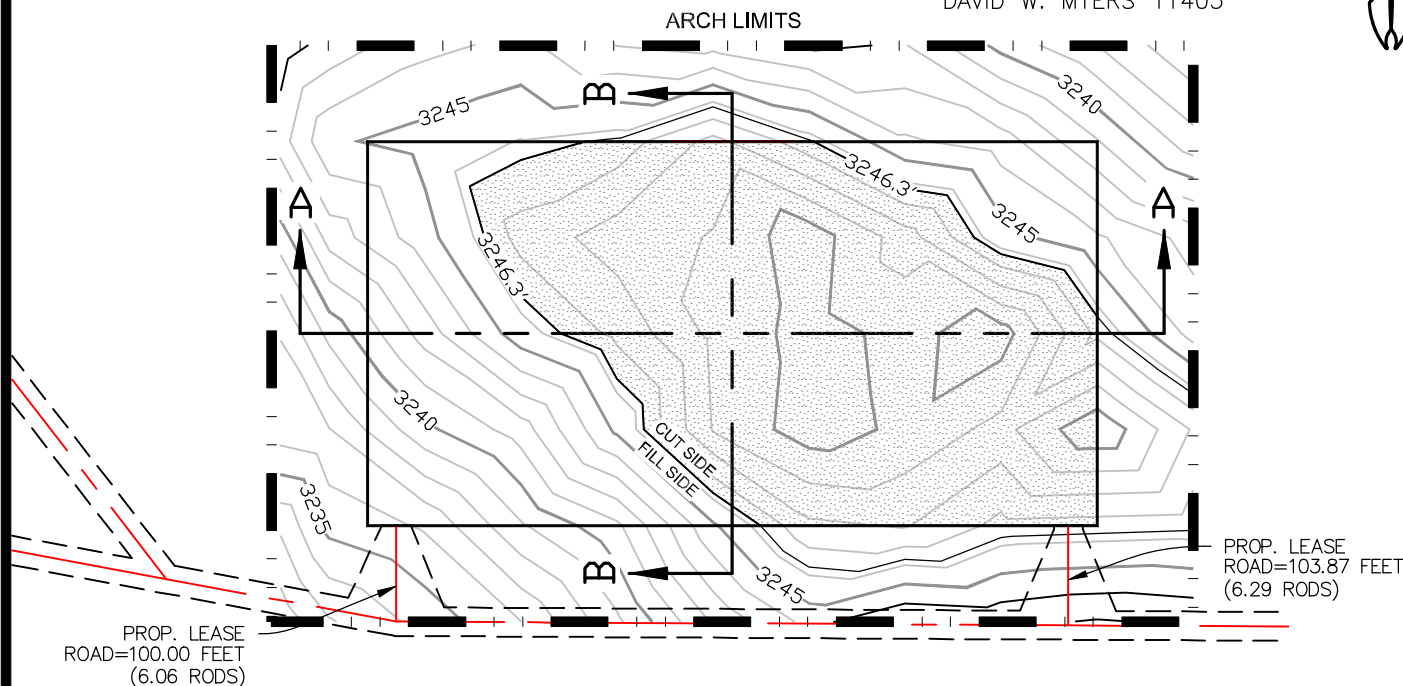
U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.



I HEREBY CERTIFY THAT THE DIMENSIONS, EXISTING ELEVATIONS AND AREAS SHOWN HEREIN ARE BASED ON RECENT GROUND SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION RELATIVE TO ENGINEERING DESIGN DATA PROVIDED PREVIOUSLY BY OTHERS. NO WARRANTY IS EXPRESSED HEREIN REGARDING THE ENGINEERING DESIGN DATA PROVIDED.

JANUARY 5, 2023

DAVID W. MYERS 11403



REV 0 12/02/2022 ANC

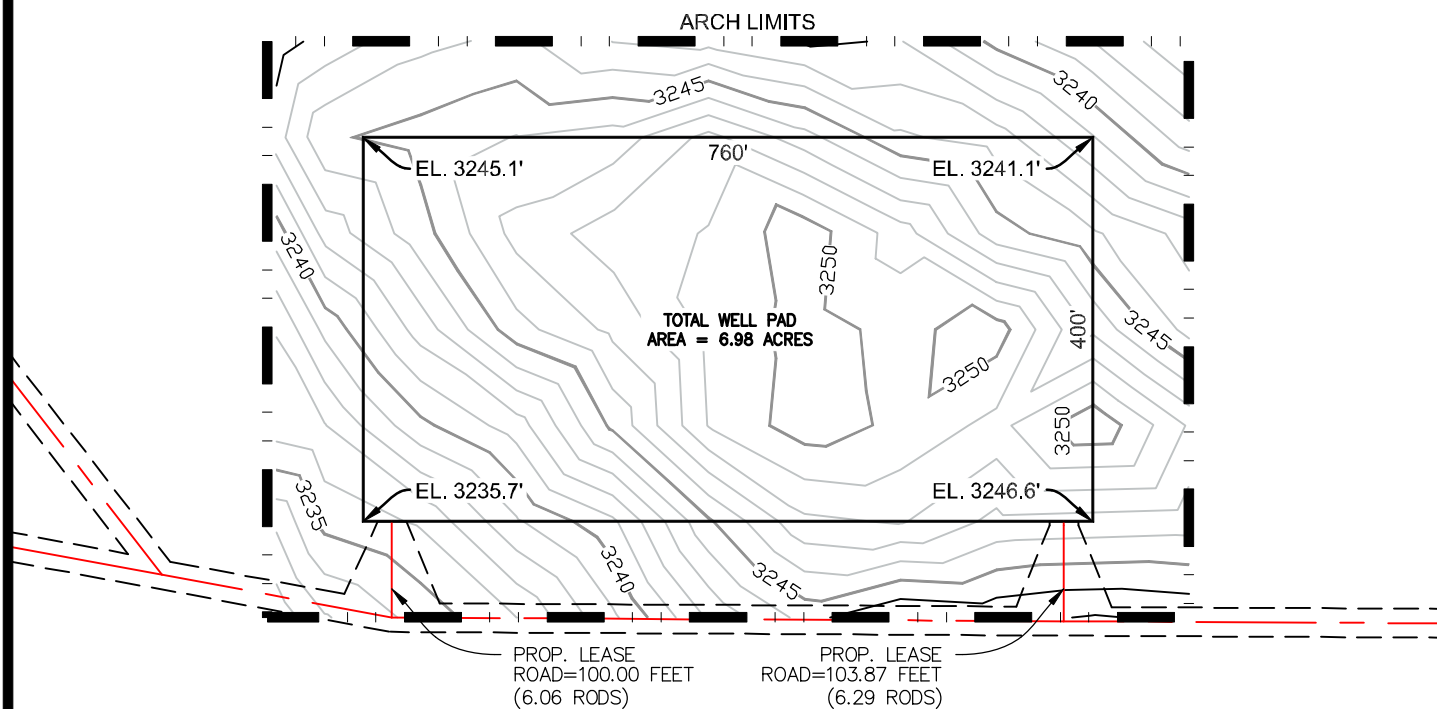
PROPOSED PAD SURFACE	—	SALT WATER DISPOSAL	— SWD —
ARCH SURVEY LIMITS	—     —	PROPERTY LINE	— P —
PROPOSED LEASE ROAD	—	PROPOSED 1' CONTOUR LINES	—
EXIST. 1' CONTOUR LINES	—	PROPOSED 5' CONTOUR LINES	—
EXIST. 5' CONTOUR LINES	—	EROSION CONTROL FENCE	— ECF —
WATER LINE	— w —	STORM WATER CONTROL DIVERSION	— + + —

HORIZONTAL: 1" = 200'  
VERTICAL: 1" = 30'

SHEET 3 OF 5  
PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON STREET, WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R4287\_003

DAVID W. MYERS  
NEW MEXICO  
11403  
PROFESSIONAL SURVEYOR

I HEREBY CERTIFY THAT THE DIMENSIONS, EXISTING ELEVATIONS AND AREAS SHOWN HEREIN ARE BASED ON RECENT GROUND SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION RELATIVE TO ENGINEERING DESIGN DATA PROVIDED PREVIOUSLY BY OTHERS. NO WARRANTY IS EXPRESSED HEREIN REGARDING THE ENGINEERING DESIGN DATA PROVIDED.



REV 0	12/02/2022	ANC
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PROPOSED PAD SURFACE —————

ARCH SURVEY LIMITS ■ | | ■

PROPOSED LEASE ROAD —————


EXIST. 1' CONTOUR LINES —————


EXIST. 5' CONTOUR LINES —————


WATER LINE ————— W —————

PIPELINE ——— | ——— | ——— | ———

SALT WATER DISPOSAL ——— SWD ———

PROPERTY LINE ———  ———

PROPOSED 1' CONTOUR LINES ———  ———

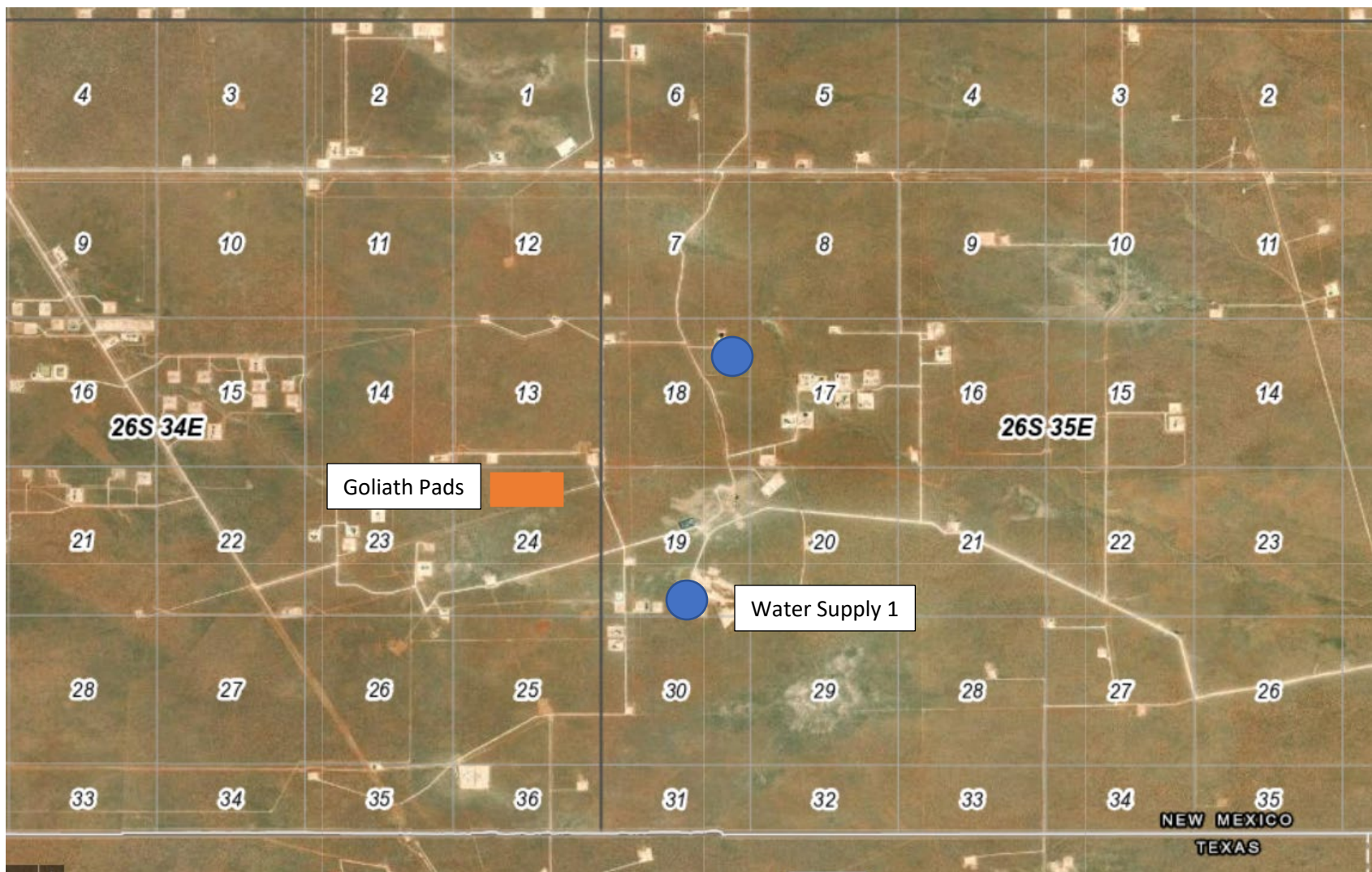
PROPOSED 5' CONTOUR LINES ———  ———

EROSION CONTROL FENCE ——— ECF ———

OVERHEAD POWER ——— OHP ———

FENCE ——— x ——— x ———

SHEET 1 OF 5  
PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON STREET, WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R4287\_003



### Construction Material Goliath 24 Fed Com East , West , Drilling & Facilities Pads ,

- Caliche will be used to construct well pad and roads. Material will be purchased from the nearest federal, state, or private permitted pit.
- Source 1 - Caliche will be used to construct well pad and roads. Material will be purchased from private land owner Brad Beckham ( 575-390-2076 ) caliche pit located in NENW, SEC 19 , T26S , R35E , Lea County , NM.GPS Lat. 32. 0224475 N , Long. -103.40438 W ; Price is \$6.00 per yard.
- Source 2 - Caliche will be used to construct well pad and roads. Material will be purchased from BLM , caliche pit located in SESW, Sec 7 , T26S , R34E, Lea County, NM. GpsLat. 32.059006 N ; Long -104.504418 W ; Price is \$4.75 per yard .
- The proposed source of construction material will be located and purchased by construction contractor.

**Goliath 24 Fed**  
**Goliath 24 Fed Com West Pad**  
**Well Information**

**PHASE I**

**Goliath 24 Fed Com #301H**

SHL: 269' FNL & 1394' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 440' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #302H**

SHL: 269' FNL & 1444' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 1320' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #303H**

SHL: 269' FNL & 1469' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 2200' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #501H**

SHL: 269' FNL & 1394' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 440' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #502H**

SHL: 269' FNL & 1444' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 1320' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #503H**

SHL: 269' FNL & 1494' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 2200' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #601H**

SHL: 269' FNL & 1369' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 330' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #602H**

SHL: 269' FNL & 1469' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 1650' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #701H**

SHL: 269' FNL & 1419' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 990' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com #702H**

SHL: 270' FNL & 1494' FWL	T26S, R34E, Sec. 24
BHL: 100' FSL & 2309' FWL	T26S, R34E, Sec. 36

**Goliath 24 Fed Com West Pad  
Well Information****PHASE II****Goliath 24 Fed Com#101H**

SHL: 163' FNL & 1104' FWL	T26S, R34E, Sec. 24
BHL: TBD	T26S, R34E, Sec. 36

**Goliath 24 Fed Com#801H**

SHL: 163' FNL & 1129' FWL	T26S, R34E, Sec. 24
BHL: TBD	T26S, R34E, Sec. 36

**Goliath 24 Fed Com#102H**

SHL: 163' FNL & 1154' FWL	T26S, R34E, Sec. 24
BHL: TBD	T26S, R34E, Sec. 36

**Goliath 24 Fed Com#802H**

SHL: 163' FNL & 1179' FWL	T26S, R34E, Sec. 24
BHL: TBD	T26S, R34E, Sec. 36

**Goliath 24 Fed Com#103H**

SHL: 163' FNL & 1204' FWL	T26S, R34E, Sec. 24
BHL: TBD	T26S, R34E, Sec. 36

**Goliath 24 Fed Com#803H**

SHL: 163' FNL & 1229' FWL	T26S, R34E, Sec. 24
BHL: TBD	T26S, R34E, Sec. 36

## WELL PAD EXISTING TOPO

GOLIATH 24 FEDERAL COM (WEST)

SEC. 24, TWP. 26-S RGE. 34-E

SURVEY: N.M.P.M.

COUNTY: LEA

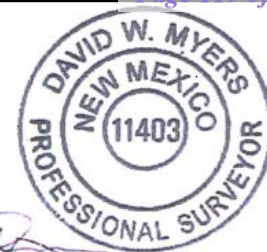
02-20-2023

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.

100' 0' 100' 200'

SCALE: 1" = 200'



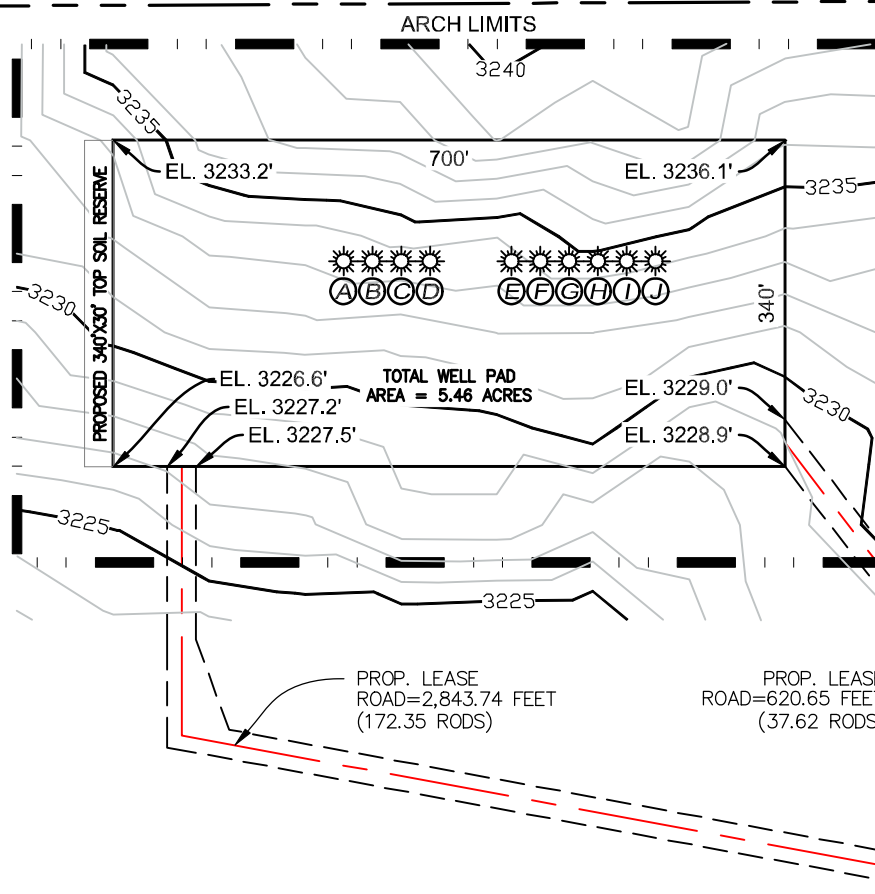
- A. GOLIATH 24 FED COM 501H
- B. GOLIATH 24 FED COM 502H
- C. GOLIATH 24 FED COM 303H
- D. GOLIATH 24 FED COM 503H
- E. GOLIATH 24 FED COM 601H
- F. GOLIATH 24 FED COM 301H
- G. GOLIATH 24 FED COM 701H
- H. GOLIATH 24 FED COM 302H
- I. GOLIATH 24 FED COM 602H
- J. GOLIATH 24 FED COM 702H

I HEREBY CERTIFY THAT THE DIMENSIONS, EXISTING ELEVATIONS AND AREAS SHOWN HEREIN ARE BASED ON RECENT GROUND SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION RELATIVE TO ENGINEERING DESIGN DATA PROVIDED PREVIOUSLY BY OTHERS. NO WARRANTY IS EXPRESSED HEREIN REGARDING THE ENGINEERING DESIGN DATA PROVIDED.



SECTION 13,  
T-26-S, R-34-E

SECTION 24,  
T-26-S, R-34-E



REV 1 02/17/2023 DEF

## LEGEND

PROPOSED PAD SURFACE ———  
 ARCH SURVEY LIMITS ——— | ———  
 PROPOSED LEASE ROAD ———  
 EXIST. 1' CONTOUR LINES ———  
 EXIST. 5' CONTOUR LINES ———  
 WATER LINE ——— w ———

PIPELINE ——— | ——— | ———  
 SALT WATER DISPOSAL ——— SWD ———  
 PROPERTY LINE ——— P ———  
 PROPOSED 1' CONTOUR LINES ———  
 PROPOSED 5' CONTOUR LINES ———  
 EROSION CONTROL FENCE ——— ECF ———  
 OVERHEAD POWER ——— OHP ———  
 FENCE ——— x ——— x ———

SHEET 1 OF 6  
 PREPARED BY:  
 R-SQUARED GLOBAL, LLC  
 510 TRENTON STREET, WEST MONROE, LA 71291  
 318-323-6900 OFFICE  
 JOB No. R4287\_002

# WELL PAD CONTOURS

GOLIATH 24 FEDERAL COM (WEST)

SEC. 24, TWP. 26-S RGE. 34-E

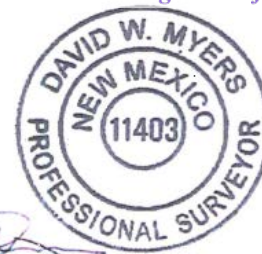
SURVEY: N.M.P.M.

COUNTY: LEA

02-20-2023

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.



100' 0' 100' 200'

SCALE: 1" = 200'

- A. GOLIATH 24 FED COM 501H
- B. GOLIATH 24 FED COM 502H
- C. GOLIATH 24 FED COM 303H
- D. GOLIATH 24 FED COM 503H
- E. GOLIATH 24 FED COM 601H
- F. GOLIATH 24 FED COM 301H
- G. GOLIATH 24 FED COM 701H
- H. GOLIATH 24 FED COM 302H
- I. GOLIATH 24 FED COM 602H
- J. GOLIATH 24 FED COM 702H

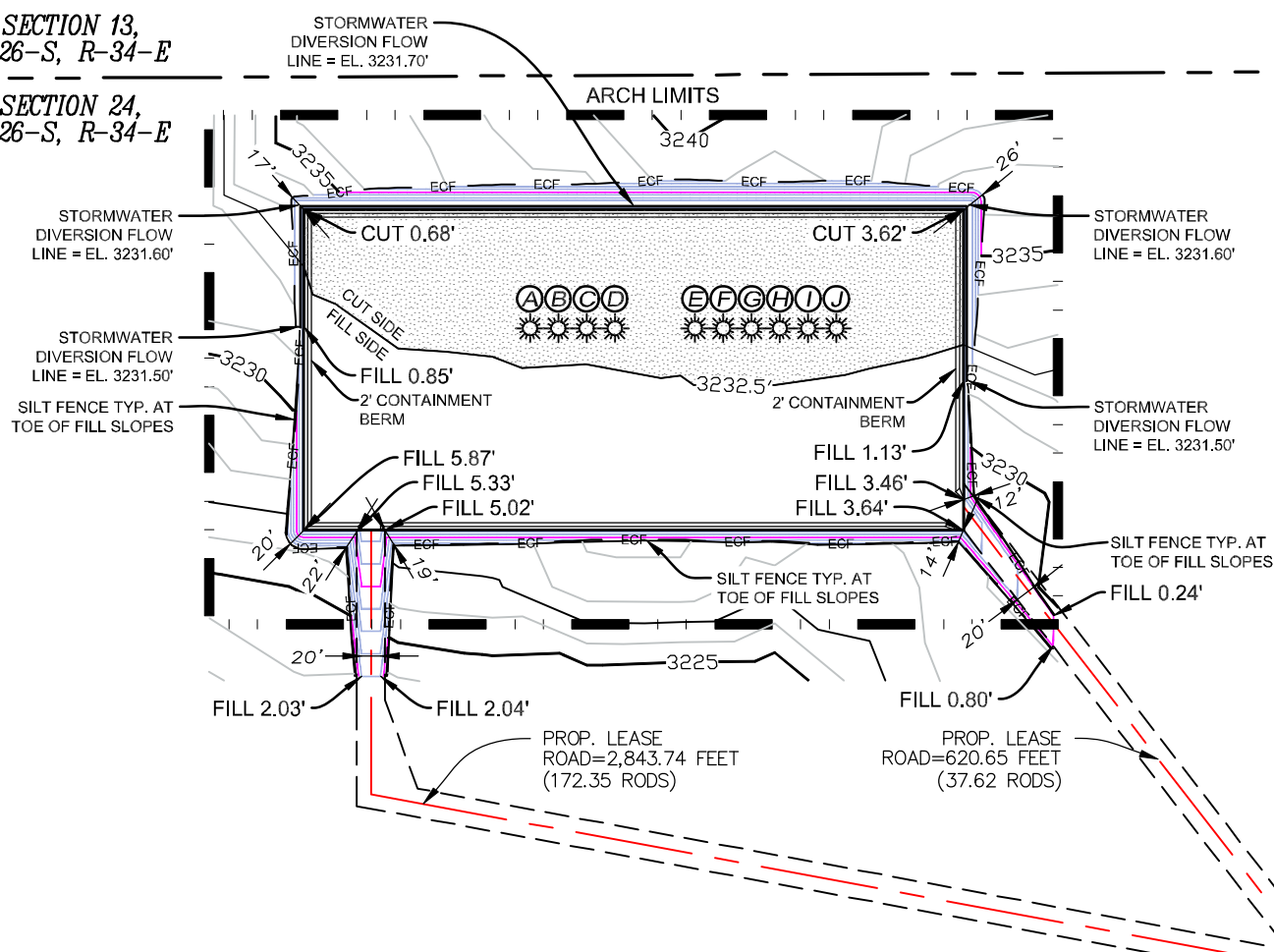
TOTAL CUT VOLUME: 12,943.42 cu yd

TOTAL FILL VOLUME: 12,728.18 cu yd

PROPOSED SHORT-TERM

DISTURBANCE AREA = 6.53 ACRES

I HEREBY CERTIFY THAT THE DIMENSIONS, EXISTING ELEVATIONS AND AREAS SHOWN HEREIN ARE BASED ON RECENT GROUND SURVEYS PERFORMED BY ME OR UNDER MY SUPERVISION RELATIVE TO ENGINEERING DESIGN DATA PROVIDED PREVIOUSLY BY OTHERS. NO WARRANTY IS EXPRESSED HEREIN REGARDING THE ENGINEERING DESIGN DATA PROVIDED.

SECTION 13,  
T-26-S, R-34-ESECTION 24,  
T-26-S, R-34-E

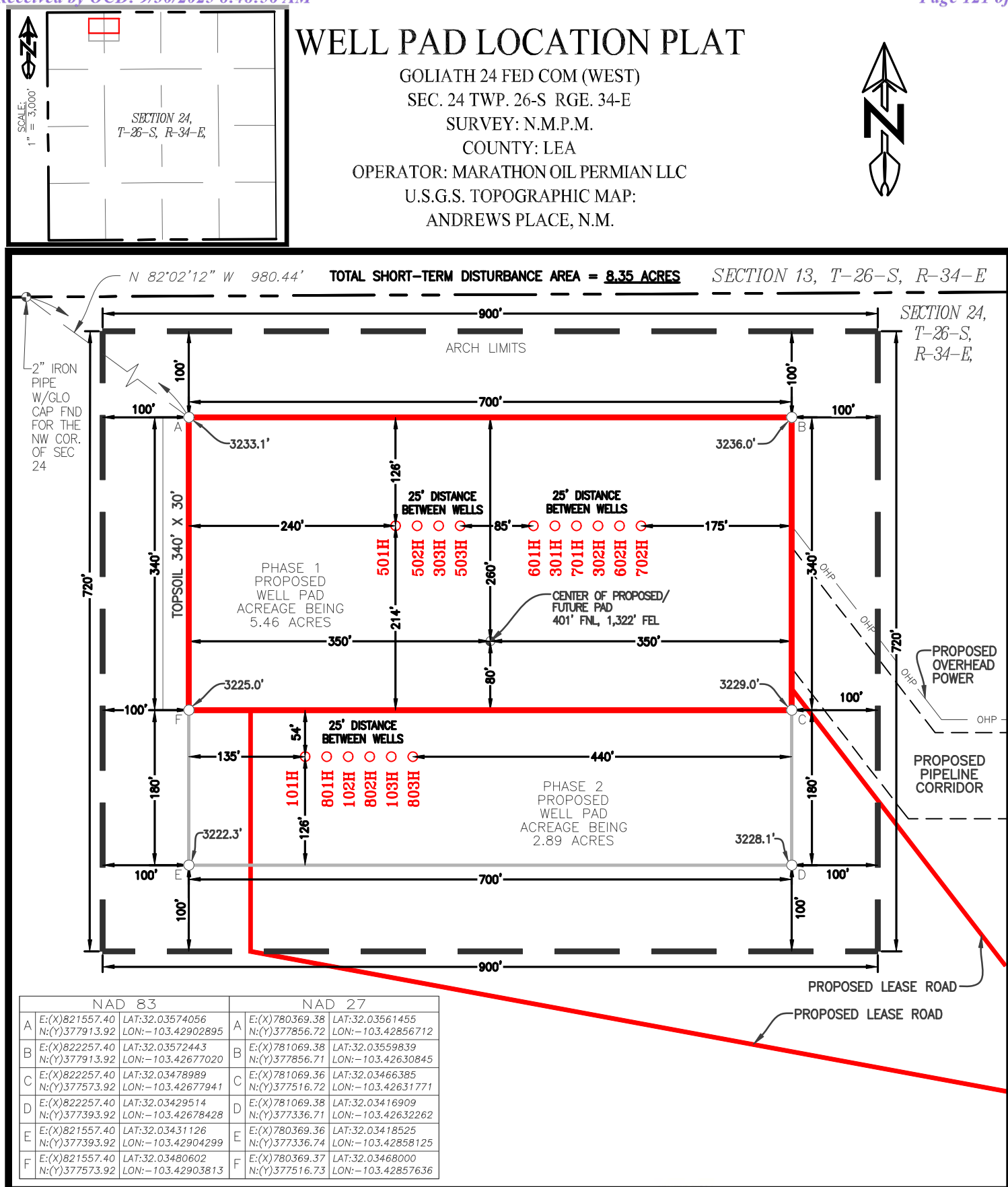
REV 1 02/17/2023 DEF

## LEGEND

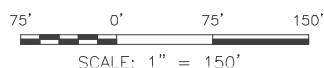
PROPOSED PAD SURFACE	—
ARCH SURVEY LIMITS	—     —
PROPOSED LEASE ROAD	— (red) —
EXIST. 1' CONTOUR LINES	— (light gray) —
EXIST. 5' CONTOUR LINES	— (medium gray) —
WATER LINE	— w —

PIPELINE	— (dashed) —
SALT WATER DISPOSAL	— SWD —
PROPERTY LINE	— P —
PROPOSED 1' CONTOUR LINES	— (light blue) —
PROPOSED 5' CONTOUR LINES	— (magenta) —
EROSION CONTROL FENCE	— ECF —
OVERHEAD POWER	— (thick black) —
FENCE	— (dotted) —

SHEET 2 OF 6  
 PREPARED BY:  
 R-SQUARED GLOBAL, LLC  
 510 TRENTON STREET, WEST MONROE, LA 71291  
 318-323-6900 OFFICE  
 JOB No. R4287\_002

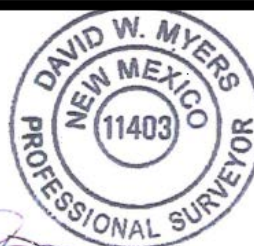


NOTE:  
THIS IS NOT A BOUNDARY SURVEY, APPARENT  
PROPERTY CORNERS AND PROPERTY LINES ARE  
SHOWN FOR INFORMATION ONLY. BOUNDARY DATA  
SHOWN IS FROM STATE OF NEW MEXICO OIL  
CONSERVATION DIVISION FORM C-102 INCLUDED  
IN THIS SUBMITTAL.



Released to Imaging: 12/8/2025 1:38:31 PM

02-20-2023



5	02/17/2023	ANC
REV.	DATE	BY

SHEET 2 OF 6

**PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON ST.  
WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R4287\_002**

# WELL PAD CROSS SECTIONS

GOLIATH 24 FEDERAL COM (WEST)

SEC. 24, TWP. 26-S RGE. 34-E

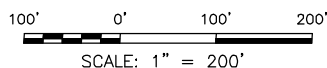
SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.

02-20-2023



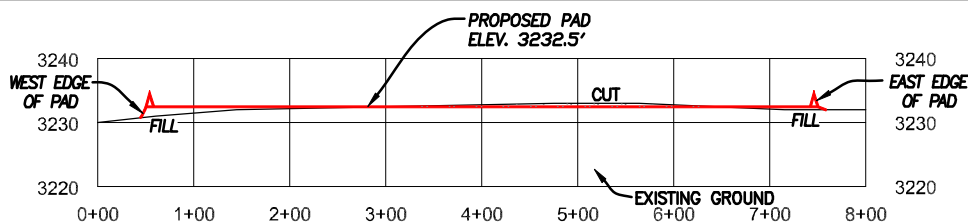
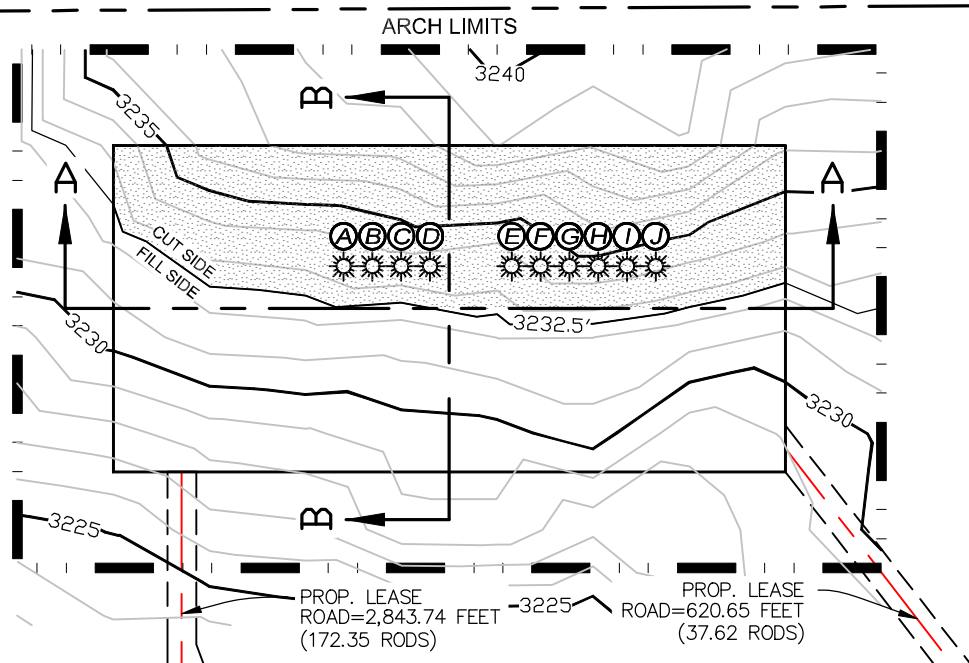
- A. GOLIATH 24 FED COM 501H
- B. GOLIATH 24 FED COM 502H
- C. GOLIATH 24 FED COM 303H
- D. GOLIATH 24 FED COM 503H
- E. GOLIATH 24 FED COM 601H
- F. GOLIATH 24 FED COM 301H
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- H. GOLIATH 24 FED COM 302H
- I. GOLIATH 24 FED COM 602H
- J. GOLIATH 24 FED COM 702H

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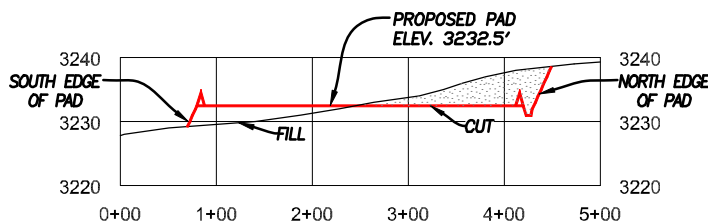


SECTION 13,  
T-26-S, R-34-E

SECTION 24,  
T-26-S, R-34-E



SECTION A-A



SECTION B-B

REV 1 02/17/2023 DEF

PROPOSED PAD SURFACE	—	SALT WATER DISPOSAL	— SWD —
ARCH SURVEY LIMITS	—     —	PROPERTY LINE	— P —
PROPOSED LEASE ROAD	—	PROPOSED 1' CONTOUR LINES	—
EXIST. 1' CONTOUR LINES	—	PROPOSED 5' CONTOUR LINES	—
EXIST. 5' CONTOUR LINES	—	EROSION CONTROL FENCE	— ECF —
WATER LINE	— w —	STORM WATER CONTROL DIVERSION	—    —

HORIZONTAL: 1" = 200'  
VERTICAL: 1" = 30'

SHEET 3 OF 6  
PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON STREET, WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R4287\_002

# WELL PAD EXISTING TOPO

GOLIATH 24 FEDERAL COM (WEST)

SEC. 24, TWP. 26-S RGE. 34-E

SURVEY: N.M.P.M.

COUNTY: LEA

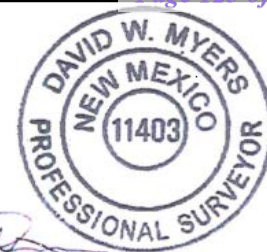
02-20-2023

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.

100' 0' 100' 200'

SCALE: 1" = 200'



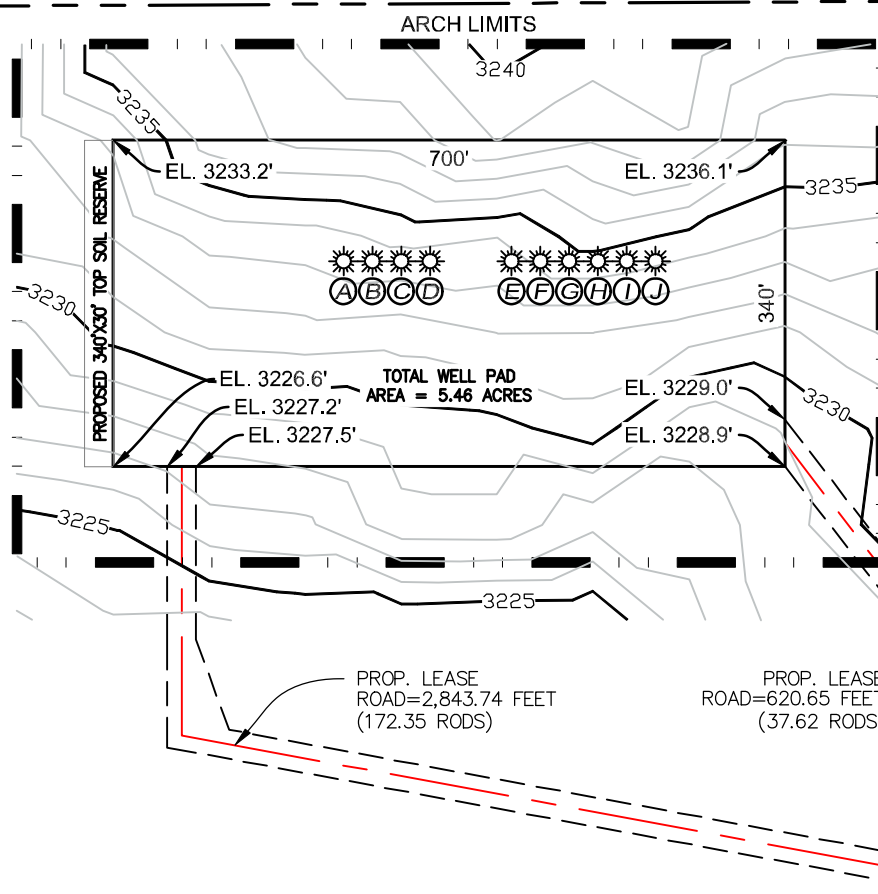
- A. GOLIATH 24 FED COM 501H
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SECTION 13,  
T-26-S, R-34-E

SECTION 24,  
T-26-S, R-34-E



REV 1 02/17/2023 DEF

## LEGEND

PROPOSED PAD SURFACE  
ARCH SURVEY LIMITS  
PROPOSED LEASE ROAD  
EXIST. 1' CONTOUR LINES  
EXIST. 5' CONTOUR LINES  
WATER LINE

PIPELINE  
SALT WATER DISPOSAL  
PROPERTY LINE  
PROPOSED 1' CONTOUR LINES  
PROPOSED 5' CONTOUR LINES  
EROSION CONTROL FENCE  
OVERHEAD POWER  
FENCE

SHEET 1 OF 6  
PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON STREET, WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R4287\_002

# WELL PAD CONTOURS

GOLIATH 24 FEDERAL COM (WEST)

SEC. 24, TWP. 26-S RGE. 34-E

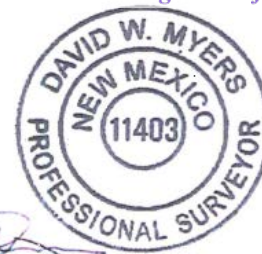
SURVEY: N.M.P.M.

COUNTY: LEA

02-20-2023

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP: ANDREWS PLACE, N.M.



100' 0' 100' 200'

SCALE: 1" = 200'

- A. GOLIATH 24 FED COM 501H
- B. GOLIATH 24 FED COM 502H
- C. GOLIATH 24 FED COM 303H
- D. GOLIATH 24 FED COM 503H
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- G. GOLIATH 24 FED COM 701H
- H. GOLIATH 24 FED COM 302H
- I. GOLIATH 24 FED COM 602H
- J. GOLIATH 24 FED COM 702H

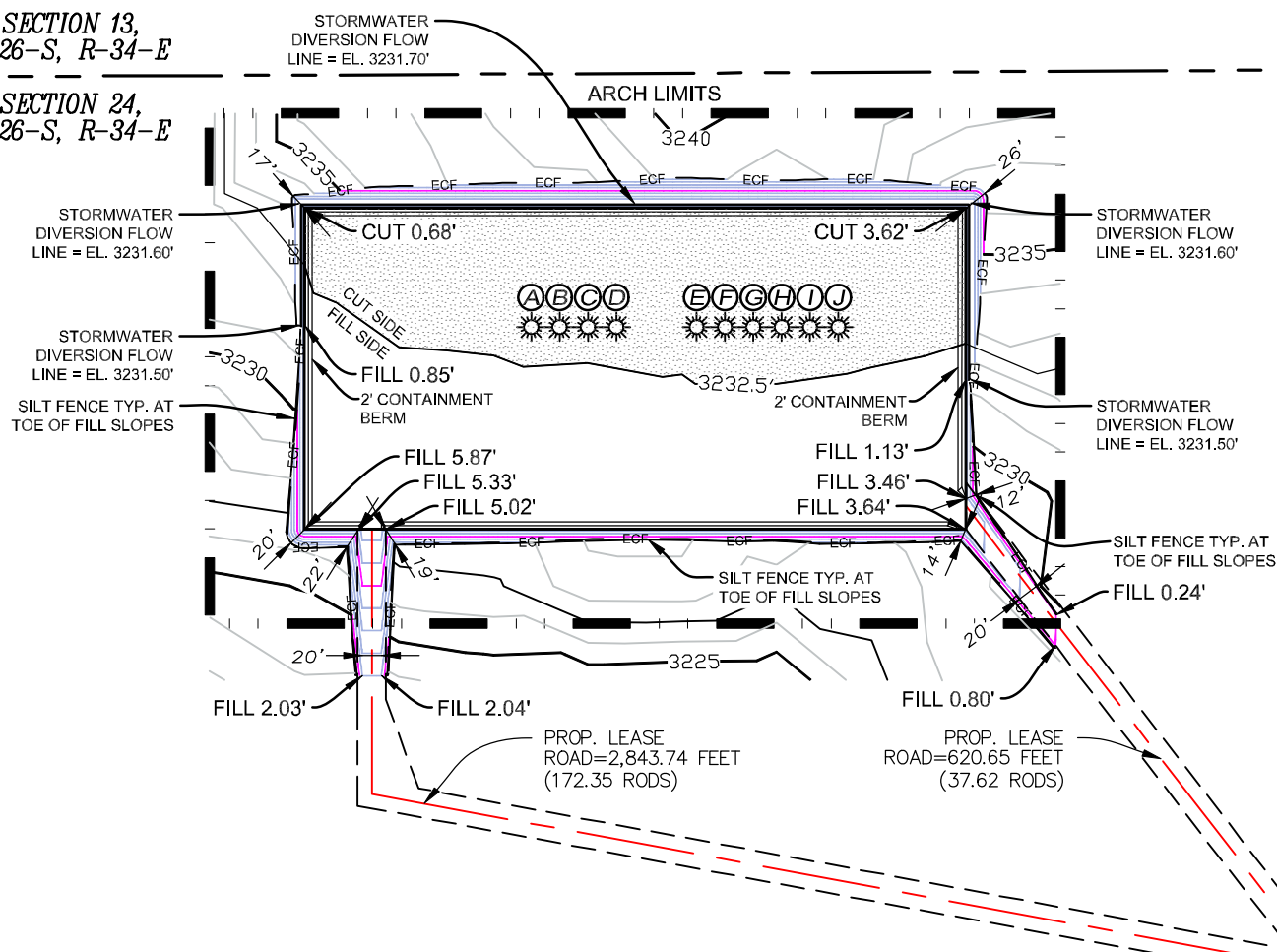
TOTAL CUT VOLUME: 12,943.42 cu yd

TOTAL FILL VOLUME: 12,728.18 cu yd

PROPOSED SHORT-TERM

DISTURBANCE AREA = 6.53 ACRES

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SECTION 13,  
T-26-S, R-34-ESECTION 24,  
T-26-S, R-34-E

REV 1 02/17/2023 DEF

## LEGEND

PROPOSED PAD SURFACE	—
ARCH SURVEY LIMITS	—     —
PROPOSED LEASE ROAD	—
EXIST. 1' CONTOUR LINES	—
EXIST. 5' CONTOUR LINES	—
WATER LINE	— w —

PIPELINE	—     —
SALT WATER DISPOSAL	— SWD —
PROPERTY LINE	— P —
PROPOSED 1' CONTOUR LINES	—
PROPOSED 5' CONTOUR LINES	—
EROSION CONTROL FENCE	— ECF —
OVERHEAD POWER	— + + —
FENCE	— . . —

SHEET 2 OF 6  
PREPARED BY:  
R-SQUARED GLOBAL, LLC  
510 TRENTON STREET, WEST MONROE, LA 71291  
318-323-6900 OFFICE  
JOB No. R4287\_002

## INTERIM RECLAMATION DIAGRAM

GOLIATH 24 FED COM (WEST)

SEC. 24 TWP. 26-S RGE. 34-E

SURVEY: N.M.P.M.

COUNTY: LEA

OPERATOR: MARATHON OIL PERMIAN LLC

U.S.G.S. TOPOGRAPHIC MAP:

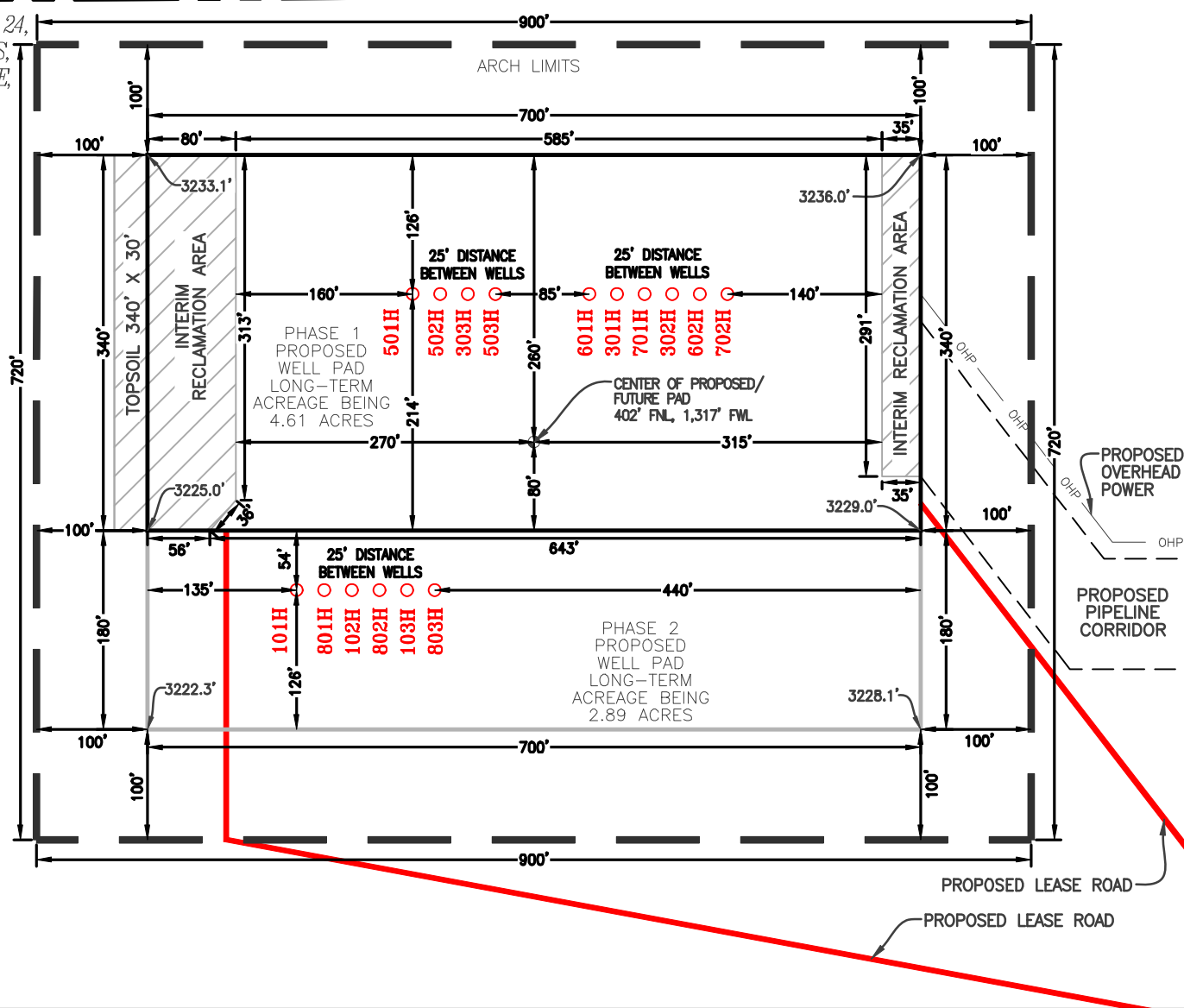
ANDREWS PLACE, N.M.

TOTAL INTERIM RECLAMATION AREA = 1.09 ACRES  
 TOTAL LONG-TERM DISTURBANCE AREA = 7.50 ACRES

SECTION 13,  
 T-26-S, R-34-E,

SECTION 24,  
 T-26-S,  
 R-34-E,

EXISTING OVERHEAD POWERLINE  
 OHP OHP



NOTE:  
 THIS IS NOT A BOUNDARY SURVEY, APPARENT  
 PROPERTY CORNERS AND PROPERTY LINES ARE  
 SHOWN FOR INFORMATION ONLY. BOUNDARY DATA  
 SHOWN IS FROM STATE OF NEW MEXICO OIL  
 CONSERVATION DIVISION FORM C-102 INCLUDED  
 IN THIS SUBMITTAL.

75' 0' 75' 150'  
 SCALE: 1" = 150'

Released to Imaging: 12/8/2025 1:38:31 PM

02-20-2023



5	02/17/2023	ANC
REV.	DATE	BY

SHEET 3 OF 6

PREPARED BY:  
 R-SQUARED GLOBAL, LLC  
 610 TRENTON ST.  
 WEST MONROE, LA 71291  
 318-323-6000 OFFICE  
 JOB No. R4287\_002



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

## PWD Data Report

07/29/2025

**APD ID:** 10400094588

**Submission Date:** 09/20/2023

**Operator Name:** MARATHON OIL PERMIAN LLC

**Well Name:** GOLIATH 24 FED COM

**Well Number:** 503H

**Well Type:** OIL WELL

**Well Work Type:** Drill

### Section 1 - General

Would you like to address long-term produced water disposal? NO

### Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Other PWD Surface Owner Description:**

**Lined pit PWD on or off channel:**

**Lined pit PWD discharge volume (bbl/day):**

**Lined pit**

**Pit liner description:**

**Pit liner manufacturers**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal**

**Lined pit precipitated solids disposal schedule:**

**Lined pit precipitated solids disposal schedule**

**Lined pit reclamation description:**

**Lined pit reclamation**

**Leak detection system description:**

**Leak detection system**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**Lined pit Monitor description:****Lined pit Monitor****Lined pit: do you have a reclamation bond for the pit?****Is the reclamation bond a rider under the BLM bond?****Lined pit bond number:****Lined pit bond amount:****Additional bond information**

### Section 3 - Unlined

**Would you like to utilize Unlined Pit PWD options?** N**Produced Water Disposal (PWD) Location:****PWD disturbance (acres):****PWD surface owner:****Other PWD Surface Owner Description:****Unlined pit PWD on or off channel:****Unlined pit PWD discharge volume (bbl/day):****Unlined pit****Precipitated solids disposal:****Describe precipitated solids disposal:****Precipitated solids disposal****Unlined pit precipitated solids disposal schedule:****Unlined pit precipitated solids disposal schedule****Unlined pit reclamation description:****Unlined pit reclamation****Unlined pit Monitor description:****Unlined pit Monitor****Do you propose to put the produced water to beneficial use?****Beneficial use user****Estimated depth of the shallowest aquifer (feet):****Precipitated Solids Permit****Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?****TDS lab results:****Geologic and hydrologic**

**Operator Name:** MARATHON OIL PERMIAN LLC**Well Name:** GOLIATH 24 FED COM**Well Number:** 503H**State****Unlined Produced Water Pit Estimated****Unlined pit: do you have a reclamation bond for the pit?****Is the reclamation bond a rider under the BLM bond?****Unlined pit bond number:****Unlined pit bond amount:****Additional bond information****Section 4 -****Would you like to utilize Injection PWD options?** N**Produced Water Disposal (PWD) Location:****PWD surface owner:****PWD disturbance (acres):****Other PWD Surface Owner Description:****Injection PWD discharge volume (bbl/day):****Injection well mineral owner:****Injection well type:****Injection well number:****Injection well name:****Assigned injection well API number?****Injection well API number:****Injection well new surface disturbance (acres):****Minerals protection information:****Mineral protection****Underground Injection Control (UIC) Permit?****UIC Permit****Section 5 - Surface****Would you like to utilize Surface Discharge PWD options?** N**Produced Water Disposal (PWD) Location:****PWD surface owner:****PWD disturbance (acres):****Other PWD Surface Owner Description :****Surface discharge PWD discharge volume (bbl/day):****Surface Discharge NPDES Permit?****Surface Discharge NPDES Permit attachment:****Surface Discharge site facilities information:****Surface discharge site facilities map:**

Operator Name: MARATHON OIL PERMIAN LLC

Well Name: GOLIATH 24 FED COM

Well Number: 503H

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

PWD Surface Owner Description:

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements



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

## Bond Info Data

07/29/2025

**APD ID:** 10400094588

**Submission Date:** 09/20/2023

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

**Operator Name:** MARATHON OIL PERMIAN LLC

**Well Name:** GOLIATH 24 FED COM

**Well Number:** 503H

**Well Type:** OIL WELL

**Well Work Type:** Drill

### Bond

**Federal/Indian APD:** FED

**BLM Bond number:** NMB001555

**BIA Bond number:**

**Do you have a reclamation bond?** NO

**Is the reclamation bond a rider under the BLM bond?**

**Is the reclamation bond BLM or Forest Service?**

**BLM reclamation bond number:**

**Forest Service reclamation bond number:**

**Forest Service reclamation bond attachment:**

**Reclamation bond amount:**

**Reclamation bond rider amount:**

**Additional reclamation bond information attachment:**

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 510541

ACKNOWLEDGMENTS

Operator:  MARATHON OIL PERMIAN LLC 600 W Illinois Ave Midland, TX 79701	OGRID:  372098
	Action Number:  510541
	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.
-------------------------------------	--

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

General Information  
Phone: (505) 629-6116

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

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

COMMENTS

Action 510541

COMMENTS

Operator: MARATHON OIL PERMIAN LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 372098
	Action Number: 510541
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

COMMENTS

Created By	Comment	Comment Date
jeffrey.harrison	Infill to 30-025-52751.	12/8/2025

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

General Information  
Phone: (505) 629-6116

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

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

CONDITIONS

Action 510541

**CONDITIONS**

Operator: MARATHON OIL PERMIAN LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 372098
	Action Number: 510541
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
rrussell01	Cement is required to circulate on both surface and intermediate1 strings of casing.	9/30/2025
rrussell01	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	9/30/2025
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	12/8/2025
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	12/8/2025
jeffrey.harrison	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	12/8/2025
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	12/8/2025