

Well Name: DAKOTA 32 STATE FED COM	Well Location: T19S / R28E / SEC 32 / SESE / 32.6132177 / -104.1915973	County or Parish/State: EDDY / NM
Well Number: 203H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM4986	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: PERMIAN RESOURCES OPERATING LLC	

Notice of Intent

Sundry ID: 2878799

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 10/15/2025

Time Sundry Submitted: 01:45

Date proposed operation will begin: 11/23/2025

Procedure Description: Permian Resources Operating LLC requests permission to make the following changes to the original APD: FTP, LTP, BHL, and Variances. Original APD ID: 10400098078 Well Name/Number: No Change API# 30-015-57166 (NMOCD is having us put the UL on the C102 even though it is considered a LOT that is why both are shown on the plat; they show both) FTP Change: From: I, 32, 19S, 28E; 2310' FSL, 100' FEL To: I, 32, 19S, 28E; 2304' FSL, 100' FEL LTP Change: From: Lot 3, 31, 19S, 28E; 2310' FSL, 100' FWL From: Lot 3, 31, 19S, 28E; 2175' FSL, 100' FWL BHL Change: From: Lot 3, 31, 19S, 28E; 2310' FSL, 10' FWL From: Lot 3, 31, 19S, 28E; 2175' FSL, 100' FWL Updated Drilling Program reflecting casing / cement / mud circulation depth changes. We are including Drilling variances within the Sundry. Attachments: 1. Updated C102 2. Drilling Plan 3. WBD 4. Bushmaster Spec Sheet 5. Directional Plan 6. Anticollision Report 7. Variances a. Batch b. BOP Break c. FH d. OCV

NOI Attachments

Procedure Description

Dakota_203H_BLM_Attachments_20251028155342.pdf

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Well Location: T19S / R28E / SEC 32 / SESE / 32.6132177 / -104.1915973

County or Parish/State: EDDY / NM

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Allottee or Tribe Name:

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Unit or CA Name:

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US Well Number:

Operator: PERMIAN RESOURCES OPERATING LLC

Conditions of Approval

Additional

Sec_32_19S_28E_NMP_Sundry_2878799_Dakota_32_State_Fed_Com_203H_COAs_20260109132012.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: JENNIFER ELROD

Signed on: OCT 28, 2025 03:53 PM

Name: PERMIAN RESOURCES OPERATING LLC

Title: Staff Regulatory Analyst

Street Address: 911 REGIONAL PARK DR

City: HOUSTON **State:** TX

Phone: (940) 452-6214

Email address: JELROD@NTGLOBAL.COM

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: CWALLS@BLM.GOV

Disposition: Approved

Disposition Date: 01/12/2026

Signature: Chris Walls

Form 3160-5
(October 2024)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.	NMNM4986
6. If Indian, Allottee or Tribe Name	

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. DAKOTA 32 STATE FED COM/203H
2. Name of Operator PERMIAN RESOURCES OPERATING LLC		9. API Well No.
3a. Address 300 N MARIENFELD ST SUITE 1000, MIDLAND	3b. Phone No. (include area code) (432) 695-4222	10. Field and Pool or Exploratory Area WINCHESTER/(WOLFCAMP) GAS
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 32/T19S/R28E/NMP		11. Country or Parish, State EDDY/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Permian Resources Operating LLC requests permission to make the following changes to the original APD: FTP, LTP, BHL, and Variances.

Original APD ID: 10400098078
Well Name/Number: No Change
API# 30-015-57166

(NMOCD is having us put the UL on the C102 even though it is considered a LOT that is why both are shown on the plat; they show both)

FTP Change:
From: I, 32, 19S, 28E; 2310 FSL, 100 FEL
To: I, 32, 19S, 28E; 2304 FSL, 100 FEL

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) JENNIFER ELROD / Ph: (940) 452-6214	Title Staff Regulatory Analyst
Signature (Electronic Submission)	Date 10/28/2025

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 01/12/2026
Conditions of approval, if any, are attached. Approval of this notice 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.	Office CARLSBAD	

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.

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

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

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Additional Information

Additional Remarks

LTP Change:

From: Lot 3, 31, 19S, 28E; 2310 FSL, 100 FWL

From: Lot 3, 31, 19S, 28E; 2175 FSL, 100 FWL

BHL Change:

From: Lot 3, 31, 19S, 28E; 2310 FSL, 10 FWL

From: Lot 3, 31, 19S, 28E; 2175 FSL, 100 FWL

Updated Drilling Program reflecting casing / cement / mud circulation depth changes. We are including Drilling variances within the Sundry.

Attachments:

1. Updated C102
2. Drilling Plan
3. WBD
4. Bushmaster Spec Sheet
5. Directional Plan
6. Anticollision Report
7. Variances
 - a. Batch
 - b. BOP Break
 - c. FH
 - d. OCV

Location of Well

0. SHL: SESE / 1208 FSL / 300 FEL / TWSP: 19S / RANGE: 28E / SECTION: 32 / LAT: 32.6132177 / LONG: -104.1915973 (TVD: 0 feet, MD: 0 feet)

PPP: NESE / 2310 FSL / 100 FEL / TWSP: 19S / RANGE: 28E / SECTION: 32 / LAT: 32.6162507 / LONG: -104.1907098 (TVD: 8294 feet, MD: 8409 feet)

BHL: NWSW / 2310 FSL / 10 FWL / TWSP: 19S / RANGE: 28E / SECTION: 31 / LAT: 32.6161255 / LONG: -104.2241071 (TVD: 8771 feet, MD: 18964 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Permian Resources Operating LLC
WELL NAME & NO.: Dakota 32 State Fed Com 203H
LOCATION: Sec 32-19S-28E-NMP
COUNTY: <input style="width: 150px;" type="text" value="Eddy County, New Mexico"/>

*Changes approved through engineering via **Sundry 2878799** on 1/9/2026. Any previous COAs not addressed within the updated COAs still apply.*

H₂S <input style="width: 100%;" type="text" value="Present"/>	Cave / Karst <input style="width: 100%;" type="text" value="Medium"/>	Waste Prevention Rule <input style="width: 100%;" type="text" value="APD Submitted Prior to 06/10/24"/>
Potash <input style="width: 100%;" type="text" value="None"/>	R-111-Q Design <input style="width: 100%;" type="text"/>	
Wellhead <input style="width: 100%;" type="text" value="Multibowl"/> <input checked="" type="checkbox"/> Flex Hose <input checked="" type="checkbox"/> Break Testing	Casing <input style="width: 100%;" type="text" value="3-String Well"/> <input type="checkbox"/> Liner <input type="checkbox"/> Fluid Filled <input type="checkbox"/> Casing Clearance	
	Cementing <input checked="" type="checkbox"/> DV Tool <input checked="" type="checkbox"/> Bradenhead <input checked="" type="checkbox"/> Echometer <input checked="" type="checkbox"/> Offline Cement <input type="checkbox"/> Open Annulus <input type="checkbox"/> Pilot Hole	
Special Requirements <input type="checkbox"/> Capitan Reef <input type="checkbox"/> Water Disposal <input checked="" type="checkbox"/> COM <input type="checkbox"/> Unit		

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated 500 feet prior to drilling into the **Cherry Canyon** formation(s). As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **350** feet (a minimum of **70'** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. **Set depth adjusted per BLM geologist.**

- a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic-type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater (including lead cement.)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing (**set at 2700' per BLM geologist**) is **cement to surface**. If cement does not circulate, see B.1.a, c-d above.
- **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst, Capitan Reef, or potash features.

DV Tool: The operator has proposed utilize a DV tool. Operator may adjust depth of DV tool if it remains below the Salado and cement volumes are adjusted accordingly. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. **First Stage:** Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. **Second Stage:** Cement to meet requirements listed for this casing string. If cement does not circulate, contact the appropriate BLM office.

Bradenhead Squeeze: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon**.
- b. **Second stage:** Operator to squeeze and top-out. Cement to meet requirements listed for this casing string. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to pump down **Surface X Intermediate 1** annulus. Submit results to the BLM. If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

- Operator shall run a CBL from TD of the **Intermediate 1** casing to tieback requirements listed above after the second stage BH to verify TOC.
- **Operator shall run Echo-meter to verify Cement Slurry/Fluid top in the annulus.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

- Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.
 - No displacement fluid/wash out shall be utilized at the top of the cement slurry during second stage bradenhead when running Echo-meter if cement is required to surface.
 - Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is at least **200 feet** into previous casing string. Operator shall provide method of verification.
- If cement does not circulate to surface on the previous casing, this string must come to surface.
 - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry** due to the presence of cave/karst, Capitan Reef, or potash features.

C. PRESSURE CONTROL

1. 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 **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.
2. 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).
3. Break testing has been approved for this well ONLY on those intervals utilizing a 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.**) If in the event break testing is not utilized, then a full BOPE test would be conducted.
 - a. Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation. **BOPE Break Testing is NOT permitted to drill the**

production hole section.

- b. While in transfer between wells, BOPE shall be secured by the hydraulic carrier or cradle.
- c. A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- d. As a minimum, a full BOPE test shall be performed at 21-day intervals.
- e. In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**. Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.

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.

Offline Cementing

Offline cementing has been approved for **all hole sections, excluding production**. Contact the BLM prior to the commencement of any offline cementing procedure.

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 Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220;
[BLM NM CFO DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822

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

A. CASING

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

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

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible

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

open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
		Submittal Type: <input type="checkbox"/> Initial Submittal <input checked="" type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

WELL LOCATION INFORMATION

API Number 015-57166	Pool Code 97011	Pool Name FADEAWAY RIDGE; WOLFCAMP
Property Code 335770	Property Name DAKOTA 32 STATE FED COM	
OGRID No. 372165	Operator Name PERMIAN RESOURCES OPERATING, LLC	Well Number 203H
Ground Level Elevation 3,340'		
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	32	19S	28E		1,208' FSL	300' FEL	32.613218°	-104.191597°	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	31	19S	28E	LOT 3	2,175' FSL	100' FWL	32.615755°	-104.223901°	EDDY

Dedicated Acres 645.91	Infill or Defining Well Infill	Defining Well API 015-57167	Overlapping Spacing Unit (Y/N) N	Consolidation Code F,C
Order Numbers. Pending, R-23980(F)			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	32	19S	28E		1,208' FSL	300' FEL	32.613218°	-104.191597°	EDDY


First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	32	19S	28E		2,304' FSL	100' FEL	32.616234°	-104.190711°	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	31	19S	28E	LOT 3	2,175' FSL	100' FWL	32.615755°	-104.223901°	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation:
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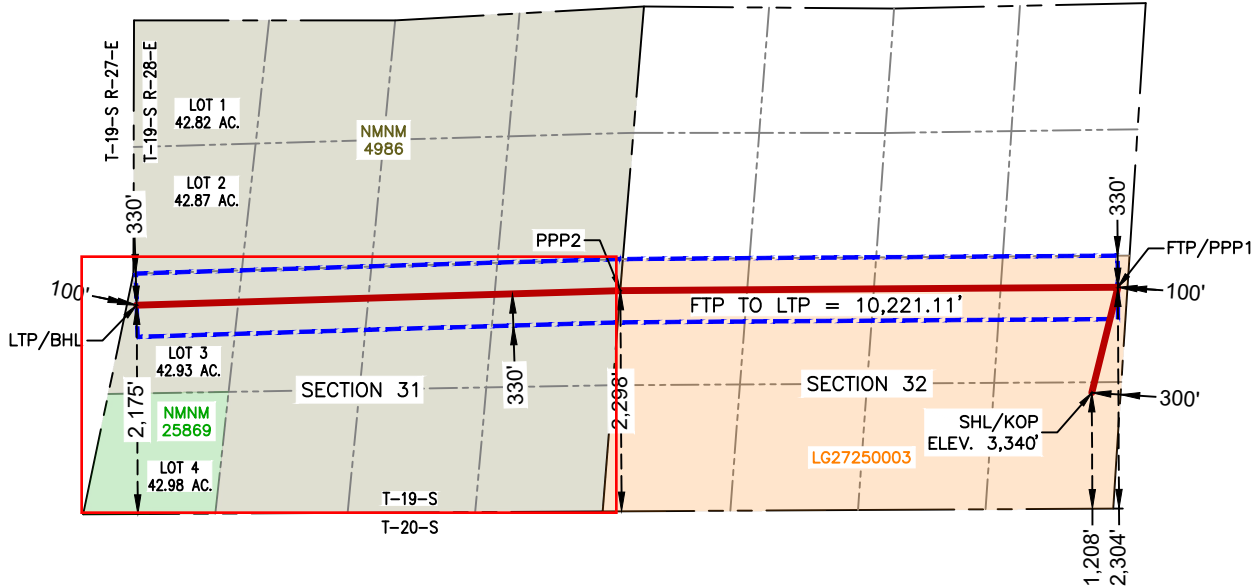
<p>OPERATOR CERTIFICATIONS</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including 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.</p> <p>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.</p> <p style="text-align: right;"><i>Jennifer Elrod</i> 10/2/2025</p>	<p>SURVEYOR CERTIFICATIONS</p> <p>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.</p> <div style="text-align: center;">  <p>Date: 9/15/2025</p> </div>		
Signature _____ Date _____	Signature and Seal of Professional Surveyor _____		
Printed Name Jennifer Elrod	Certificate Number 12177	Date of Survey 9/15/2025	Revision Number 0
Email Address jelrod@ntglobal.com			

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.

ACREAGE DEDICATION PLATS

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DAKOTA 32 STATE FED COM 203H

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& KICK-OFF POINT**
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WELL LOCATION INFORMATION

API Number 015-57166	Pool Code 87760	Pool Name WINCHESTER; WOLFCAMP (GAS)
Property Code 335770	Property Name DAKOTA 32 STATE FED COM	Well Number 203H
OGRID No. 372165	Operator Name PERMIAN RESOURCES OPERATING, LLC	Ground Level Elevation 3,340'
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

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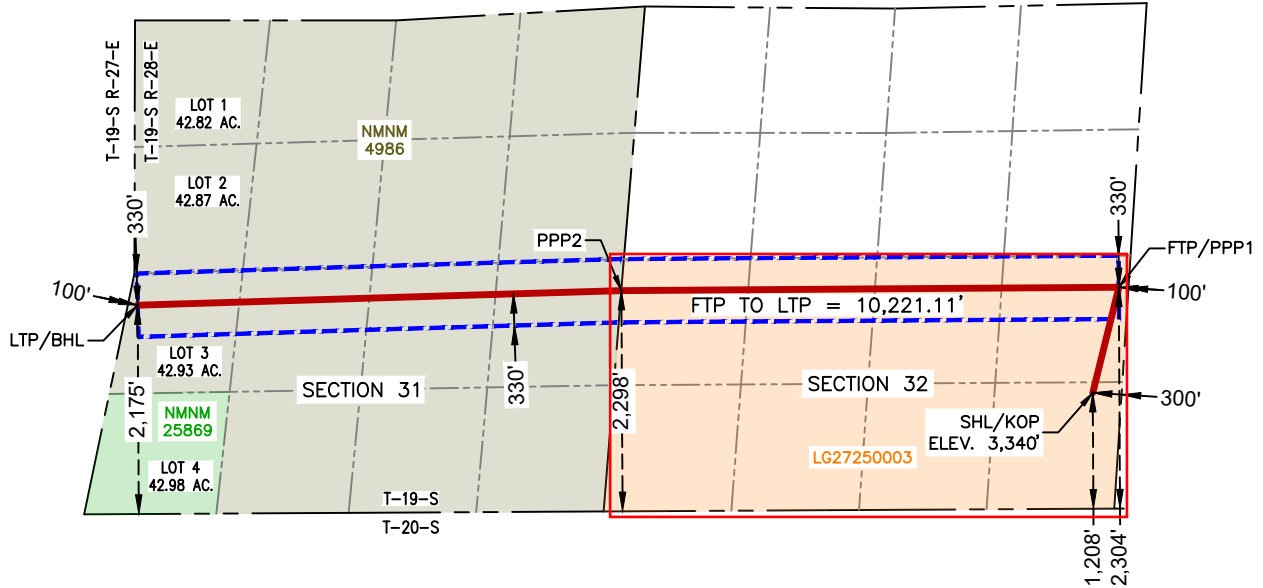
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Permian Resources - Dakota 32 State Fed Com 203H

1. Geologic Formations

Formation	Elevation	TVD	Target
Rustler	3090	280	No
Tansill	2680	690	No
Yates	2555	815	No
Queen	1765	1605	No
Cherry Canyon	538	2832	No
Brushy Canyon	357	3013	No
Bone Spring Lime	-478	3848	No
1st Bone Spring	-2538	5908	No
2nd Bone Spring	-3637	7007	No
3rd Bone Spring Carb	-4127	7497	No
3rd Bone Spring Sand	-4872	8242	No

2. Blowout Prevention

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
12.25	13-5/8"	5M	Annular	x	2500 psi
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		
8.75	13-5/8"	5M	Annular	x	2500 psi
			Blind Ram	x	5000 psi
			Pipe Ram	x	
			Double Ram		
			Other*		

Equipment: BOPE with working pressure ratings in excess of anticipated maximum surface pressure will be utilized for well control from drill out of surface casing to TMD. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested. All BOPE connections shall be flanged, welded or clamped. All choke lines shall be straight unless targeted with running tees or tee blocks are used, and choke lines shall be anchored to prevent whip and reduce vibrations. All valves in the choke line & the choke manifold shall be full opening as to not cause restrictions and to allow for straight fluid paths to minimize potential erosion. All gauges utilized in the well control system shall be of a type designed for drilling fluid service. A top drive inside BOP valve will be utilized at all times. Subs equipped with full opening valves sized to fit the drill pipe and collars will be available on the rig floor in the open position. The key to operate said valve equipped subs will be on the rig floor at all times. The accumulator system will have sufficient capacity to open the HCR and close all three sets of rams plus the annular preventer while retaining at least 300 psi above precharge on the closing manifold (accumulator system shall be capable of doing so without using the closing unit pumps). The fluid reservoir capacity will be double the usable fluid volume of the accumulator system capacity, and the fluid level will be maintained at the manufacturer's recommended level. Prior to connecting the closing unit to the BOP stack, an accumulator precharge pressure test shall be performed to ensure the precharge pressure is within 100 psi of the desired precharge pressure (only nitrogen gas will be used to precharge). Two independent power sources will be made available at all times to power the closing unit pumps so that the pumps can automatically start when the closing valve manifold pressure has decreased to the preset level. Closing unit pumps will be sized to allow opening of HCR and closing of annular preventer on 5" drill pipe achieving at least 200 psi above precharge pressure with the accumulator system isolated from service in less than two minutes. A valve shall be installed in the closing line as close to the annular preventer as possible to act as a locking device; the valve shall be maintained in the open position and shall be closed only when the power source for the accumulator system is inoperative. Remote controls capable of opening and closing all preventers & the HCR shall be readily accessible to the driller; master controls with the same capability will be operable at the accumulator. The wellhead will be a multibowl speed head allowing for hangoff of intermediate casing & isolation of the 133/8 x 95/8 annulus without breaking the connection between the BOP & wellhead to install an additional casing head. A wear bushing will be installed & inspected frequently to guard against internal wear to wellhead. VBRs (variablebore rams) will be run in upper rambody of BOP stack to provide redundancy to annular preventer while RIH w/ production casing;

Requesting Variance? YES

Variance request: Flex hose and offline cement variances, see attachments in section 8.

Testing Procedure: The BOP test shall be performed before drilling out of the surface casing shoe and will occur at a minimum: a. when initially installed b. whenever any seal subject to test pressure is broken c. following related repairs d. at 30 day intervals e. checked daily as to mechanical operating conditions. The ram type preventer(s) will be tested using a test plug to 250 psi (low) and 5,000 psi (high) (casinghead WP) with a test plug upon its installation onto the 13 surface casing. If a test plug is not used, the ram type preventer(s) shall be tested to 70% of the minimum internal yield pressure of the casing. The annular type preventer(s) shall be tested to 3500 psi. Pressure will be maintained for at least 10 minutes or until provisions of the test are met, whichever is longer. A Sundry Notice (Form 3160 5), along with a copy of the BOP test report, shall be submitted to the local BLM office within 5 working days following the test. If the bleed line is connected into the buffer tank (header), all BOP equipment including the buffer tank and associated valves will be rated at the required BOP pressure. The BLM office will be provided with a minimum of four (4) hours notice of BOP testing to allow witnessing. The BOP Configuration, choke manifold layout, and accumulator system, will be in compliance with Onshore Order 2 for a 5,000 psi system. A remote accumulator and a multi-bowl system will be used, please see attachment in section 8 for multi-bowl procedure. Pressures, capacities, and specific placement and use of the manual and/or hydraulic controls, accumulator controls, bleed lines, etc., will be identified at the time of the BLM 'witnessed BOP test. Any remote controls will be capable of both opening and closing all preventers and shall be readily accessible.

Choke Diagram Attachment: 5 M Choe Manifold
BOP Diagram Attachment: BOP Schematic

3. Casing

String	Hole Size	Casing Size	Top	Bottom	Top TVD	Bottom TVD	Length	Grade	Weight	Connection	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
Surface	17.5	13.375	0	305	0	305	305	J55	54.5	BTC	7.50	4.41	Dry	7.79	Dry	7.31
Intermediate	12.25	9.625	0	2882	0	2882	2882	J55	36	BTC	3.31	1.76	Dry	3.50	Dry	3.09
Production	8.75	5.5	0	9157	0	8770	9157	P110RY	17	Bushmast	1.64	1.71	Dry	2.19	Dry	2.19
Production	8.5	5.5	9157	18901	8770	8770	9744	P110RY	17	Bushmast	1.64	1.71	Dry	2.19	Dry	2.19
BLM Min Safety Factor											1.125	1	1.6	1.6		

Non API casing spec sheets and casing design assumptions attached.

4. Cement

String	Lead/Tail	Top MD	Bottom MD	Quantity (sx)	Yield	Density	Cu Ft	Excess %	Cement Type	Additives
Surface	Lead	0	240	190	1.88	12.9	340	100%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Surface	Tail	240	305	60	1.34	14.8	70	50%	Class C	Accelerator
Intermediate	Lead	840	2300	370	1.88	12.9	690	50%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Intermediate	Tail	2300	2882	210	1.34	14.8	280	50%	Class C	Retarder
DV Stage Tool Depth		840								
Intermediate 2nd Stage	Lead	0	340	70	1.88	12.9	130	50%	Class C	EconoCem-HLC + 5% Salt + 5% Kol-Seal
Intermediate 2nd Stage	Tail	340	840	160	1.33	14.8	200	25%	Class C	Salt
Production	Lead	2382	8407	870	2.41	11.5	2090	40%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder
Production	Tail	8407	18901	1760	1.73	12.5	3030	25%	Class H	POZ, Extender, Fluid Loss, Dispersant, Retarder

Bradenhead Variance Procedure Intermediate Casing

Permian Resources requests to pump a two-stage cement job on the 2nd intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Cherry Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + Bentonite Gel (2.30 yld, 12.9 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

Permian Resources will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program. Permian Resources will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

Permian Resources requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the surface casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

Permian Resources requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

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: Sufficient quantities of mud materials will be on the well site at all times for the purpose of assuring well control and maintaining wellbore integrity. Surface interval will employ fresh water mud. The intermediate hole will utilize a saturated brine fluid to inhibit salt washout. The production hole will employ brine based and oil base fluid to inhibit formation reactivity and of the appropriate density to maintain well control.

Describe the mud monitoring system utilized: Centrifuge separation system. Open tank monitoring with EDR will be used for drilling fluids and return volumes. Open tank monitoring will be used for cement and cuttings return volumes. Mud properties will be monitored at least every 24 hours using industry accepted

Cuttings Volume: 9080 Cu Ft

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight	Max Weight
0	305	Spud Mud	8.6	9.5
305	2882	Salt Saturated	10	10
2882	9157	Water Based Mud	9	10
9157	18901	OBM	9	10

6. Test, Logging, Coring

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

Will utilize MWD/LWD (Gamma Ray logging) from intermediate hole to TD of the well.

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

DIRECTIONAL SURVEY, GAMMA RAY LOG,

Coring operation description for the well:

N/A

7. Pressure

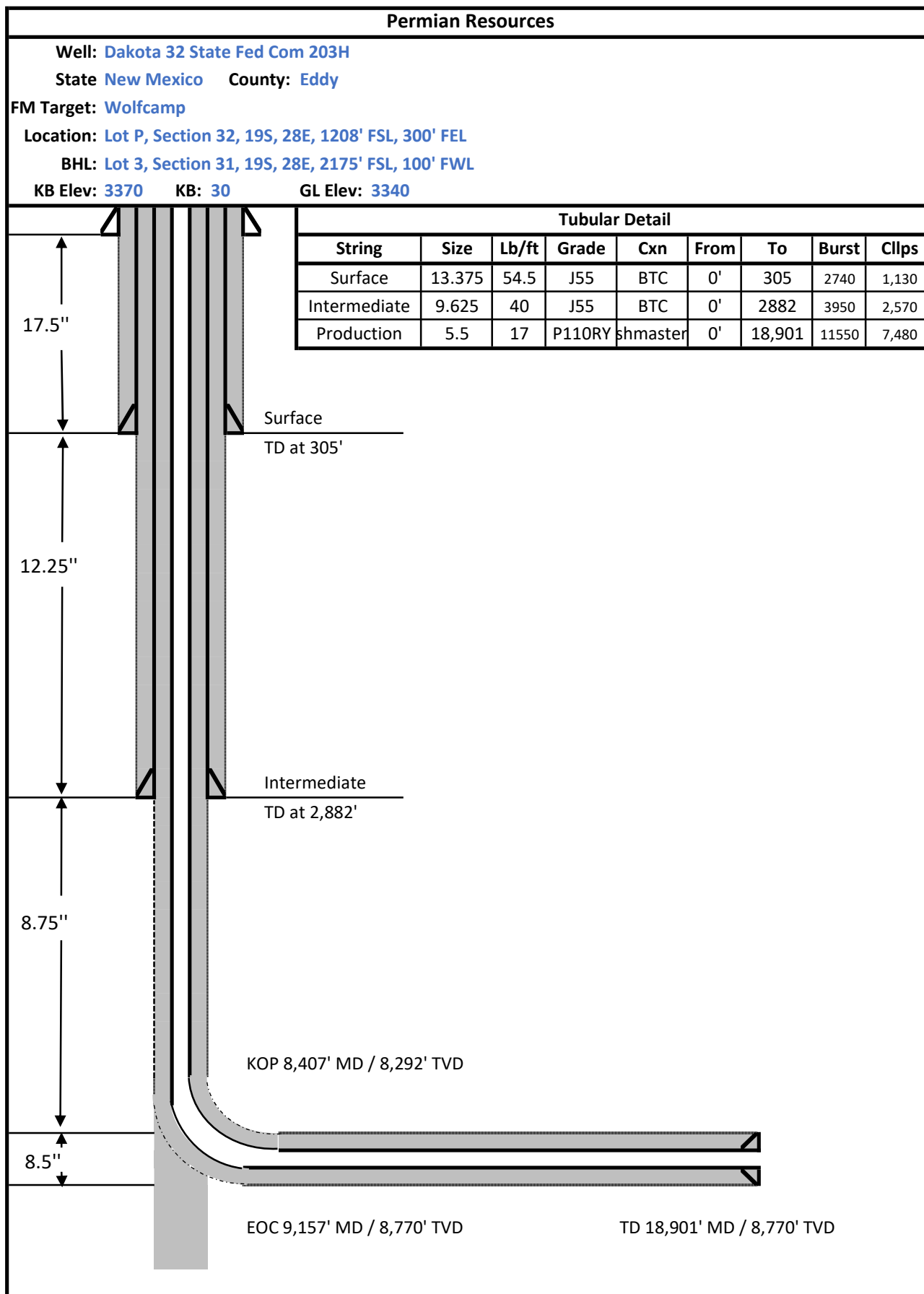
Anticipated Bottom Hole Pressure	4570	psi
Anticipated Surface Pressure	2631	psi
Anticipated Bottom Hole Temperature	144	°F
Anticipated Abnormal pressure, temp, or geo hazards	No	

8. Waste Management

Waste Type:	Drilling
Waste content description:	Fresh water based drilling fluid
Amount of waste:	1500 bbls
Waste disposal frequency:	Weekly (after drilling all surfaces)
Safe containment description:	Steel tanks with plastic-lined containment berms
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Grey Water & Human Waste
Waste content description:	Grey Water/Human Waste
Amount of waste:	5000 gallons
Waste disposal frequency:	Weekly
Safe containment description:	Approved waste storage tanks with containment
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Garbage
Waste content description:	General trash/garbage
Amount of waste:	5000 lbs
Waste disposal frequency:	Weekly
Safe containment description:	Enclosed trash trailer
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Drilling
Waste content description:	Drill Cuttings
Amount of waste:	9080 Cu Ft
Waste disposal frequency:	Per well
Safe containment description:	Steel tanks
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial
Waste Type:	Drilling
Waste content description:	Brine water based drilling fluid
Amount of waste:	1500 bbls
Waste disposal frequency:	Monthly
Safe containment description:	Steel tanks with plastic-lined containment berms
Waste disposal type:	Haul to commercial facility
Disposal location ownership:	Commercial

9. Other Information

Well Plan and AC Report: attached
 Batching Drilling Procedure: attached
 WBD: attached
 Flex Hose Specs: attached
 Offline Cementing Procedure Attached:





Connection Data Sheet

Issued on: May. 09, 2025

5.500" 17.00# P-110 RY (SeAH) Bushmaster® SP SC6.050

Pipe Body Data	
Nominal OD	5.500 in.
Wall Thickness	0.304 in.
Weight	17.00 lb/ft
PE Weight	16.89 lb/ft
Nominal ID	4.892 in.
Drift	4.767 in.
Minimum Yield Strength	110,000 psi
Minimum Tensile Strength	125,000 psi
Remaining Body Wall (RBW)	95.0% Rating

Connection Data	
Connection OD	6.050 in.
Connection ID	4.892 in.
Make-Up Loss	4.209 in.
Tension Efficiency	100.0% Rating
Compression Efficiency	100.0% Rating
Yield Strength in Tension	546,000 lbs
Yield Strength in Compression	546,000 lbs
MIYP (Burst)	11,550 psi
Collapse	7,480 psi
Uniaxial Bending	91.7 °/100ft.

Make-up Torque		
Max. Operating Torque	-	37,300 ft. lbs
Maximum Make-up	-	17,900 ft. lbs
Optimum Make-Up	-	16,300 ft. lbs
Minimum Make-Up	-	14,700 ft. lbs

Buck-on Torque		
Maximum Make-Up	-	19,900 ft. lbs
Optimum Make-Up	-	18,100 ft. lbs
Minimum Make-Up	-	16,300 ft. lbs



For technical support please email support@fermata-tech.com or call (281) 941-5257.

This document is for general information only. It is not intended to be used or relied upon as a recommendation or professional advice for any specific application and is subject to change without notice. Anyone who uses this material does so at their own right and assumes any and all liability resulting from such use.

Connection performance values pertain to structural capacity.

Project: (SP) EDDY
 Site: DAKOTA 32 PROJECT
 Well: DAKOTA 32 ST FED COM 203H
 Wellbore: OWB
 Design: PWP0

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
3	2600.0	12.00	13.83	2595.6	60.8	15.0	2.00	13.83	-9.4	Start 4865.4 hold at 2600.0 MD
4	7465.4	12.00	13.83	7354.7	1043.0	256.8	0.00	0.00	-160.6	Start Drop -2.00
5	8065.4	0.00	0.00	7950.3	1103.8	271.8	2.00	180.00	-169.9	Start 342.2 hold at 8065.4 MD
6	8407.6	0.00	0.00	8292.5	1103.8	271.8	0.00	0.00	-169.9	Start DLS 12.00 TFO 269.54
7	9157.6	90.00	269.54	8770.0	1100.0	-205.7	12.00	269.54	305.2	Start 4704.0 hold at 9157.6 MD
8	13861.6	90.00	269.54	8770.0	1062.6	-4909.5	0.00	0.00	4986.0	Start DLS 2.00 TFO -89.98
9	13925.2	90.00	268.27	8770.0	1061.4	-4973.1	2.00	-89.98	5049.2	Start 4976.5 hold at 13925.2 MD
10	18901.7	90.00	268.27	8770.0	911.4	-9947.3	0.00	0.00	9989.0	TD at 18901.7

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP-DAKOTA 32 ST FED COM 203H	8770.0	1097.5	271.4	587946.00	585250.44 32° 36' 58.441 N	104° 11' 26.560 W	
LTP/BHL-DAKOTA 32 ST FED COM 203H	8770.0	911.4	-9947.3	587759.86	575031.72 32° 36' 56.719 N	104° 13' 26.042 W	
PP2-DAKOTA 32 ST FED COM 203H	8770.0	1062.6	-4909.5	587911.10	580069.57 32° 36' 58.160 N	104° 12' 27.136 W	

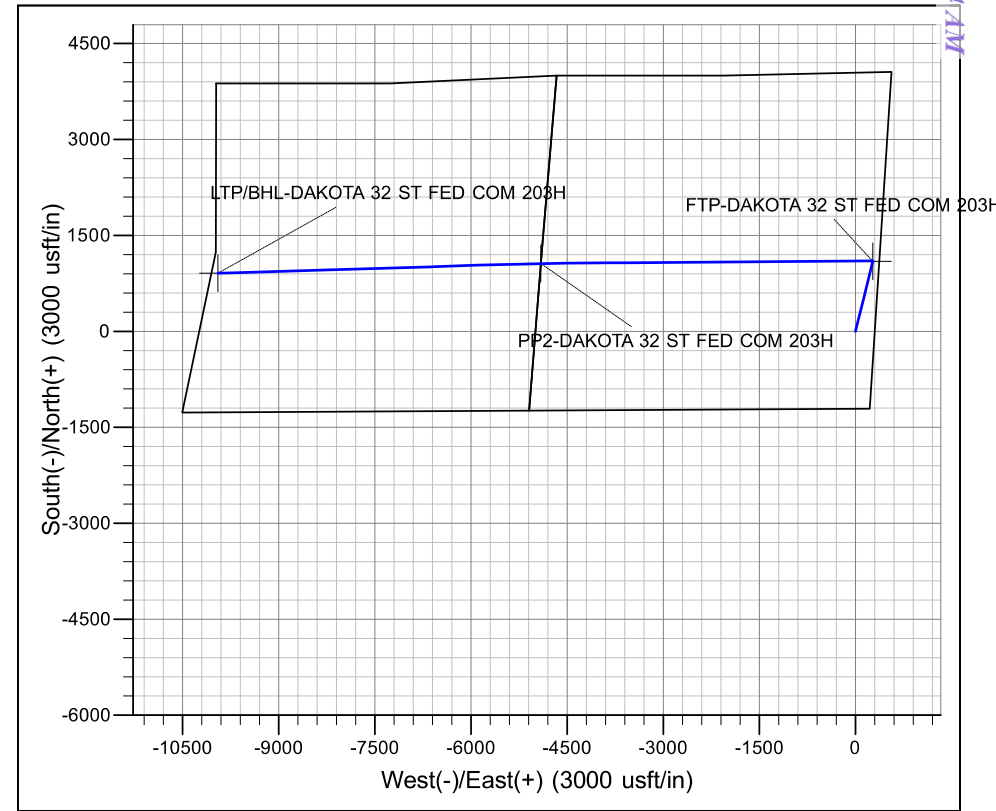
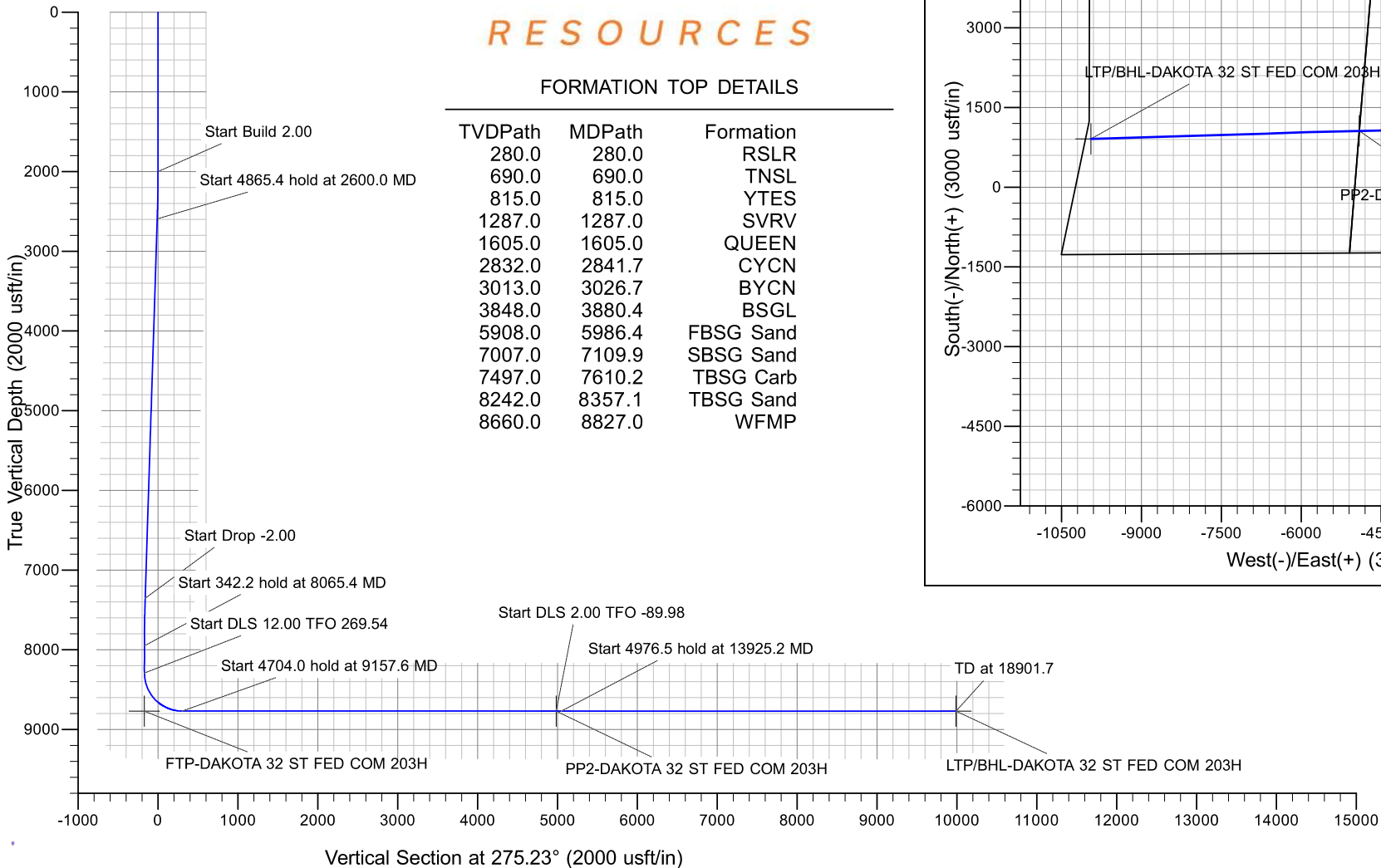
WELL DETAILS: DAKOTA 32 ST FED COM 203H

Northing	Easting	Latitude	Longitude
586848.47	584979.06	32° 36' 47.584 N	104° 11' 29.750 W

PERMIAN RESOURCES

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
280.0	280.0	RSLR
690.0	690.0	TNSL
815.0	815.0	YTES
1287.0	1287.0	SVRV
1605.0	1605.0	QUEEN
2832.0	2841.7	CYCN
3013.0	3026.7	BYCN
3848.0	3880.4	BSGL
5908.0	5986.4	FBSG Sand
7007.0	7109.9	SBSG Sand
7497.0	7610.2	TBSG Carb
8242.0	8357.1	TBSG Sand
8660.0	8827.0	WFMP



NEW MEXICO

**(SP) EDDY
DAKOTA 32 PROJECT
DAKOTA 32 ST FED COM 203H**

OWB

Plan: PWP0

Standard Planning Report - Geographic

24 September, 2025

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project	(SP) EDDY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	DAKOTA 32 PROJECT				
Site Position:		Northing:	586,848.47 usft	Latitude:	32° 36' 47.584 N
From:	Map	Easting:	584,979.06 usft	Longitude:	104° 11' 29.750 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	DAKOTA 32 ST FED COM 203H					
Well Position	+N/-S	0.0 usft	Northing:	586,848.47 usft	Latitude:	32° 36' 47.584 N
	+E/-W	0.0 usft	Easting:	584,979.06 usft	Longitude:	104° 11' 29.750 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,340.0 usft
Grid Convergence:	0.08 °					

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	8.06	60.49	48,958.55396949

Design	PWP0			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	275.23

Plan Survey Tool Program	Date	9/24/2025		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	18,901.7 PWP0 (OWB)	MWD	OWSG_Rev2_ MWD - Star

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,600.0	12.00	13.83	2,595.6	60.8	15.0	2.00	2.00	0.00	13.83	
7,465.4	12.00	13.83	7,354.7	1,043.0	256.8	0.00	0.00	0.00	0.00	
8,065.4	0.00	0.00	7,950.3	1,103.8	271.8	2.00	-2.00	0.00	180.00	
8,407.6	0.00	0.00	8,292.5	1,103.8	271.8	0.00	0.00	0.00	0.00	
9,157.6	90.00	269.54	8,770.0	1,100.0	-205.7	12.00	12.00	-12.06	269.54	
13,861.6	90.00	269.54	8,770.0	1,062.6	-4,909.5	0.00	0.00	0.00	0.00	PP2-DAKOTA 32 S'
13,925.2	90.00	268.27	8,770.0	1,061.4	-4,973.1	2.00	0.00	-2.00	-89.98	
18,901.7	90.00	268.27	8,770.0	911.4	-9,947.3	0.00	0.00	0.00	0.00	LTP/BHL-DAKOTA

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA 32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWPO		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
100.0	0.00	0.00	100.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
200.0	0.00	0.00	200.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
300.0	0.00	0.00	300.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
400.0	0.00	0.00	400.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
500.0	0.00	0.00	500.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
600.0	0.00	0.00	600.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
700.0	0.00	0.00	700.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
800.0	0.00	0.00	800.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
900.0	0.00	0.00	900.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	586,848.47	584,979.06	32° 36' 47.584 N	104° 11' 29.750 W
Start Build 2.00									
2,100.0	2.00	13.83	2,100.0	1.7	0.4	586,850.17	584,979.48	32° 36' 47.600 N	104° 11' 29.745 W
2,200.0	4.00	13.83	2,199.8	6.8	1.7	586,855.25	584,980.73	32° 36' 47.651 N	104° 11' 29.731 W
2,300.0	6.00	13.83	2,299.5	15.2	3.8	586,863.71	584,982.82	32° 36' 47.734 N	104° 11' 29.706 W
2,400.0	8.00	13.83	2,398.7	27.1	6.7	586,875.54	584,985.73	32° 36' 47.851 N	104° 11' 29.672 W
2,500.0	10.00	13.83	2,497.5	42.3	10.4	586,890.73	584,989.47	32° 36' 48.002 N	104° 11' 29.628 W
2,600.0	12.00	13.83	2,595.6	60.8	15.0	586,909.26	584,994.03	32° 36' 48.185 N	104° 11' 29.574 W
Start 4865.4 hold at 2600.0 MD									
2,700.0	12.00	13.83	2,693.4	81.0	19.9	586,929.45	584,999.00	32° 36' 48.385 N	104° 11' 29.516 W
2,800.0	12.00	13.83	2,791.3	101.2	24.9	586,949.64	585,003.97	32° 36' 48.584 N	104° 11' 29.458 W
2,900.0	12.00	13.83	2,889.1	121.4	29.9	586,969.82	585,008.94	32° 36' 48.784 N	104° 11' 29.399 W
3,000.0	12.00	13.83	2,986.9	141.5	34.9	586,990.01	585,013.91	32° 36' 48.984 N	104° 11' 29.341 W
3,100.0	12.00	13.83	3,084.7	161.7	39.8	587,010.20	585,018.89	32° 36' 49.184 N	104° 11' 29.282 W
3,200.0	12.00	13.83	3,182.5	181.9	44.8	587,030.39	585,023.86	32° 36' 49.383 N	104° 11' 29.224 W
3,300.0	12.00	13.83	3,280.3	202.1	49.8	587,050.58	585,028.83	32° 36' 49.583 N	104° 11' 29.165 W
3,400.0	12.00	13.83	3,378.1	222.3	54.7	587,070.77	585,033.80	32° 36' 49.783 N	104° 11' 29.107 W
3,500.0	12.00	13.83	3,476.0	242.5	59.7	587,090.95	585,038.77	32° 36' 49.982 N	104° 11' 29.048 W
3,600.0	12.00	13.83	3,573.8	262.7	64.7	587,111.14	585,043.74	32° 36' 50.182 N	104° 11' 28.990 W
3,700.0	12.00	13.83	3,671.6	282.9	69.6	587,131.33	585,048.71	32° 36' 50.382 N	104° 11' 28.932 W
3,800.0	12.00	13.83	3,769.4	303.0	74.6	587,151.52	585,053.68	32° 36' 50.581 N	104° 11' 28.873 W
3,900.0	12.00	13.83	3,867.2	323.2	79.6	587,171.71	585,058.65	32° 36' 50.781 N	104° 11' 28.815 W
4,000.0	12.00	13.83	3,965.0	343.4	84.6	587,191.89	585,063.62	32° 36' 50.981 N	104° 11' 28.756 W
4,100.0	12.00	13.83	4,062.8	363.6	89.5	587,212.08	585,068.59	32° 36' 51.181 N	104° 11' 28.698 W
4,200.0	12.00	13.83	4,160.7	383.8	94.5	587,232.27	585,073.57	32° 36' 51.380 N	104° 11' 28.639 W
4,300.0	12.00	13.83	4,258.5	404.0	99.5	587,252.46	585,078.54	32° 36' 51.580 N	104° 11' 28.581 W
4,400.0	12.00	13.83	4,356.3	424.2	104.4	587,272.65	585,083.51	32° 36' 51.780 N	104° 11' 28.523 W
4,500.0	12.00	13.83	4,454.1	444.4	109.4	587,292.84	585,088.48	32° 36' 51.979 N	104° 11' 28.464 W
4,600.0	12.00	13.83	4,551.9	464.6	114.4	587,313.02	585,093.45	32° 36' 52.179 N	104° 11' 28.406 W
4,700.0	12.00	13.83	4,649.7	484.7	119.4	587,333.21	585,098.42	32° 36' 52.379 N	104° 11' 28.347 W
4,800.0	12.00	13.83	4,747.5	504.9	124.3	587,353.40	585,103.39	32° 36' 52.579 N	104° 11' 28.289 W
4,900.0	12.00	13.83	4,845.4	525.1	129.3	587,373.59	585,108.36	32° 36' 52.778 N	104° 11' 28.230 W
5,000.0	12.00	13.83	4,943.2	545.3	134.3	587,393.78	585,113.33	32° 36' 52.978 N	104° 11' 28.172 W
5,100.0	12.00	13.83	5,041.0	565.5	139.2	587,413.96	585,118.30	32° 36' 53.178 N	104° 11' 28.114 W

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWPO		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,200.0	12.00	13.83	5,138.8	585.7	144.2	587,434.15	585,123.27	32° 36' 53.377 N	104° 11' 28.055 W
5,300.0	12.00	13.83	5,236.6	605.9	149.2	587,454.34	585,128.25	32° 36' 53.577 N	104° 11' 27.997 W
5,400.0	12.00	13.83	5,334.4	626.1	154.2	587,474.53	585,133.22	32° 36' 53.777 N	104° 11' 27.938 W
5,500.0	12.00	13.83	5,432.3	646.2	159.1	587,494.72	585,138.19	32° 36' 53.976 N	104° 11' 27.880 W
5,600.0	12.00	13.83	5,530.1	666.4	164.1	587,514.91	585,143.16	32° 36' 54.176 N	104° 11' 27.821 W
5,700.0	12.00	13.83	5,627.9	686.6	169.1	587,535.09	585,148.13	32° 36' 54.376 N	104° 11' 27.763 W
5,800.0	12.00	13.83	5,725.7	706.8	174.0	587,555.28	585,153.10	32° 36' 54.576 N	104° 11' 27.704 W
5,900.0	12.00	13.83	5,823.5	727.0	179.0	587,575.47	585,158.07	32° 36' 54.775 N	104° 11' 27.646 W
6,000.0	12.00	13.83	5,921.3	747.2	184.0	587,595.66	585,163.04	32° 36' 54.975 N	104° 11' 27.588 W
6,100.0	12.00	13.83	6,019.1	767.4	188.9	587,615.85	585,168.01	32° 36' 55.175 N	104° 11' 27.529 W
6,200.0	12.00	13.83	6,117.0	787.6	193.9	587,636.03	585,172.98	32° 36' 55.374 N	104° 11' 27.471 W
6,300.0	12.00	13.83	6,214.8	807.7	198.9	587,656.22	585,177.95	32° 36' 55.574 N	104° 11' 27.412 W
6,400.0	12.00	13.83	6,312.6	827.9	203.9	587,676.41	585,182.93	32° 36' 55.774 N	104° 11' 27.354 W
6,500.0	12.00	13.83	6,410.4	848.1	208.8	587,696.60	585,187.90	32° 36' 55.973 N	104° 11' 27.295 W
6,600.0	12.00	13.83	6,508.2	868.3	213.8	587,716.79	585,192.87	32° 36' 56.173 N	104° 11' 27.237 W
6,700.0	12.00	13.83	6,606.0	888.5	218.8	587,736.98	585,197.84	32° 36' 56.373 N	104° 11' 27.179 W
6,800.0	12.00	13.83	6,703.8	908.7	223.7	587,757.16	585,202.81	32° 36' 56.573 N	104° 11' 27.120 W
6,900.0	12.00	13.83	6,801.7	928.9	228.7	587,777.35	585,207.78	32° 36' 56.772 N	104° 11' 27.062 W
7,000.0	12.00	13.83	6,899.5	949.1	233.7	587,797.54	585,212.75	32° 36' 56.972 N	104° 11' 27.003 W
7,100.0	12.00	13.83	6,997.3	969.3	238.7	587,817.73	585,217.72	32° 36' 57.172 N	104° 11' 26.945 W
7,200.0	12.00	13.83	7,095.1	989.4	243.6	587,837.92	585,222.69	32° 36' 57.371 N	104° 11' 26.886 W
7,300.0	12.00	13.83	7,192.9	1,009.6	248.6	587,858.10	585,227.66	32° 36' 57.571 N	104° 11' 26.828 W
7,400.0	12.00	13.83	7,290.7	1,029.8	253.6	587,878.29	585,232.63	32° 36' 57.771 N	104° 11' 26.769 W
7,465.4	12.00	13.83	7,354.7	1,043.0	256.8	587,891.50	585,235.89	32° 36' 57.901 N	104° 11' 26.731 W
Start Drop -2.00									
7,500.0	11.31	13.83	7,388.6	1,049.8	258.5	587,898.28	585,237.56	32° 36' 57.969 N	104° 11' 26.712 W
7,600.0	9.31	13.83	7,487.0	1,067.2	262.8	587,915.66	585,241.83	32° 36' 58.140 N	104° 11' 26.661 W
7,700.0	7.31	13.83	7,585.9	1,081.2	266.2	587,929.69	585,245.29	32° 36' 58.279 N	104° 11' 26.621 W
7,800.0	5.31	13.83	7,685.3	1,091.9	268.9	587,940.35	585,247.92	32° 36' 58.385 N	104° 11' 26.590 W
7,900.0	3.31	13.83	7,785.0	1,099.2	270.6	587,947.65	585,249.71	32° 36' 58.457 N	104° 11' 26.569 W
8,000.0	1.31	13.83	7,884.9	1,103.1	271.6	587,951.56	585,250.67	32° 36' 58.496 N	104° 11' 26.557 W
8,065.4	0.00	0.00	7,950.3	1,103.8	271.8	587,952.28	585,250.85	32° 36' 58.503 N	104° 11' 26.555 W
Start 342.2 hold at 8065.4 MD									
8,100.0	0.00	0.00	7,984.9	1,103.8	271.8	587,952.28	585,250.85	32° 36' 58.503 N	104° 11' 26.555 W
8,200.0	0.00	0.00	8,084.9	1,103.8	271.8	587,952.28	585,250.85	32° 36' 58.503 N	104° 11' 26.555 W
8,300.0	0.00	0.00	8,184.9	1,103.8	271.8	587,952.28	585,250.85	32° 36' 58.503 N	104° 11' 26.555 W
8,407.6	0.00	0.00	8,292.5	1,103.8	271.8	587,952.28	585,250.85	32° 36' 58.503 N	104° 11' 26.555 W
Start DLS 12.00 TFO 269.54									
8,425.0	2.09	269.54	8,309.9	1,103.8	271.5	587,952.28	585,250.54	32° 36' 58.503 N	104° 11' 26.559 W
8,450.0	5.09	269.54	8,334.9	1,103.8	269.9	587,952.27	585,248.97	32° 36' 58.503 N	104° 11' 26.577 W
8,475.0	8.09	269.54	8,359.7	1,103.8	267.0	587,952.25	585,246.10	32° 36' 58.502 N	104° 11' 26.611 W
8,500.0	11.09	269.54	8,384.3	1,103.7	262.9	587,952.21	585,241.94	32° 36' 58.502 N	104° 11' 26.660 W
8,525.0	14.09	269.54	8,408.7	1,103.7	257.4	587,952.17	585,236.49	32° 36' 58.502 N	104° 11' 26.723 W
8,550.0	17.09	269.54	8,432.8	1,103.6	250.7	587,952.12	585,229.77	32° 36' 58.501 N	104° 11' 26.802 W
8,575.0	20.09	269.54	8,456.5	1,103.6	242.7	587,952.05	585,221.80	32° 36' 58.501 N	104° 11' 26.895 W
8,600.0	23.09	269.54	8,479.8	1,103.5	233.5	587,951.98	585,212.60	32° 36' 58.500 N	104° 11' 27.003 W
8,625.0	26.09	269.54	8,502.5	1,103.4	223.1	587,951.90	585,202.20	32° 36' 58.500 N	104° 11' 27.124 W
8,650.0	29.09	269.54	8,524.6	1,103.3	211.6	587,951.80	585,190.62	32° 36' 58.499 N	104° 11' 27.260 W
8,675.0	32.09	269.54	8,546.2	1,103.2	198.8	587,951.70	585,177.90	32° 36' 58.498 N	104° 11' 27.408 W
8,700.0	35.09	269.54	8,567.0	1,103.1	185.0	587,951.59	585,164.07	32° 36' 58.497 N	104° 11' 27.570 W
8,725.0	38.09	269.54	8,587.1	1,103.0	170.1	587,951.47	585,149.17	32° 36' 58.496 N	104° 11' 27.744 W
8,750.0	41.09	269.54	8,606.3	1,102.9	154.2	587,951.35	585,133.24	32° 36' 58.495 N	104° 11' 27.930 W
8,775.0	44.09	269.54	8,624.7	1,102.7	137.3	587,951.21	585,116.32	32° 36' 58.494 N	104° 11' 28.128 W
8,800.0	47.09	269.54	8,642.2	1,102.6	119.4	587,951.07	585,098.47	32° 36' 58.493 N	104° 11' 28.337 W

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWPO		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,825.0	50.09	269.54	8,658.7	1,102.4	100.7	587,950.92	585,079.72	32° 36' 58.492 N	104° 11' 28.556 W	
8,850.0	53.09	269.54	8,674.3	1,102.3	81.1	587,950.77	585,060.13	32° 36' 58.490 N	104° 11' 28.785 W	
8,875.0	56.09	269.54	8,688.8	1,102.1	60.7	587,950.61	585,039.76	32° 36' 58.489 N	104° 11' 29.023 W	
8,900.0	59.09	269.54	8,702.2	1,102.0	39.6	587,950.44	585,018.66	32° 36' 58.488 N	104° 11' 29.270 W	
8,925.0	62.09	269.54	8,714.4	1,101.8	17.8	587,950.26	584,996.88	32° 36' 58.486 N	104° 11' 29.525 W	
8,950.0	65.09	269.54	8,725.6	1,101.6	-4.6	587,950.09	584,974.49	32° 36' 58.485 N	104° 11' 29.787 W	
8,975.0	68.09	269.54	8,735.5	1,101.4	-27.5	587,949.90	584,951.56	32° 36' 58.483 N	104° 11' 30.055 W	
9,000.0	71.09	269.54	8,744.2	1,101.2	-50.9	587,949.72	584,928.13	32° 36' 58.482 N	104° 11' 30.329 W	
9,025.0	74.09	269.54	8,751.7	1,101.1	-74.8	587,949.53	584,904.28	32° 36' 58.480 N	104° 11' 30.608 W	
9,050.0	77.09	269.54	8,757.9	1,100.9	-99.0	587,949.34	584,880.07	32° 36' 58.478 N	104° 11' 30.891 W	
9,075.0	80.09	269.54	8,762.8	1,100.7	-123.5	587,949.14	584,855.56	32° 36' 58.477 N	104° 11' 31.177 W	
9,100.0	83.09	269.54	8,766.5	1,100.5	-148.2	587,948.94	584,830.84	32° 36' 58.475 N	104° 11' 31.466 W	
9,125.0	86.09	269.54	8,768.9	1,100.3	-173.1	587,948.75	584,805.95	32° 36' 58.474 N	104° 11' 31.757 W	
9,150.0	89.09	269.54	8,769.9	1,100.1	-198.1	587,948.55	584,780.98	32° 36' 58.472 N	104° 11' 32.049 W	
9,157.6	90.00	269.54	8,770.0	1,100.0	-205.7	587,948.49	584,773.41	32° 36' 58.471 N	104° 11' 32.138 W	
Start 4704.0 hold at 9157.6 MD										
9,200.0	90.00	269.54	8,770.0	1,099.7	-248.1	587,948.15	584,730.98	32° 36' 58.469 N	104° 11' 32.634 W	
9,300.0	90.00	269.54	8,770.0	1,098.9	-348.1	587,947.36	584,630.98	32° 36' 58.462 N	104° 11' 33.803 W	
9,400.0	90.00	269.54	8,770.0	1,098.1	-448.1	587,946.56	584,530.99	32° 36' 58.456 N	104° 11' 34.972 W	
9,500.0	90.00	269.54	8,770.0	1,097.3	-548.1	587,945.77	584,430.99	32° 36' 58.449 N	104° 11' 36.141 W	
9,600.0	90.00	269.54	8,770.0	1,096.5	-648.1	587,944.97	584,330.99	32° 36' 58.442 N	104° 11' 37.311 W	
9,700.0	90.00	269.54	8,770.0	1,095.7	-748.1	587,944.18	584,230.99	32° 36' 58.436 N	104° 11' 38.480 W	
9,800.0	90.00	269.54	8,770.0	1,094.9	-848.1	587,943.38	584,131.00	32° 36' 58.429 N	104° 11' 39.649 W	
9,900.0	90.00	269.54	8,770.0	1,094.1	-948.1	587,942.59	584,031.00	32° 36' 58.423 N	104° 11' 40.818 W	
10,000.0	90.00	269.54	8,770.0	1,093.3	-1,048.1	587,941.79	583,931.00	32° 36' 58.416 N	104° 11' 41.987 W	
10,100.0	90.00	269.54	8,770.0	1,092.5	-1,148.1	587,941.00	583,831.01	32° 36' 58.410 N	104° 11' 43.157 W	
10,200.0	90.00	269.54	8,770.0	1,091.7	-1,248.1	587,940.20	583,731.01	32° 36' 58.403 N	104° 11' 44.326 W	
10,300.0	90.00	269.54	8,770.0	1,090.9	-1,348.0	587,939.41	583,631.01	32° 36' 58.396 N	104° 11' 45.495 W	
10,400.0	90.00	269.54	8,770.0	1,090.1	-1,448.0	587,938.61	583,531.02	32° 36' 58.390 N	104° 11' 46.664 W	
10,500.0	90.00	269.54	8,770.0	1,089.3	-1,548.0	587,937.82	583,431.02	32° 36' 58.383 N	104° 11' 47.833 W	
10,600.0	90.00	269.54	8,770.0	1,088.6	-1,648.0	587,937.02	583,331.02	32° 36' 58.377 N	104° 11' 49.003 W	
10,700.0	90.00	269.54	8,770.0	1,087.8	-1,748.0	587,936.23	583,231.03	32° 36' 58.370 N	104° 11' 50.172 W	
10,800.0	90.00	269.54	8,770.0	1,087.0	-1,848.0	587,935.44	583,131.03	32° 36' 58.363 N	104° 11' 51.341 W	
10,900.0	90.00	269.54	8,770.0	1,086.2	-1,948.0	587,934.64	583,031.03	32° 36' 58.357 N	104° 11' 52.510 W	
11,000.0	90.00	269.54	8,770.0	1,085.4	-2,048.0	587,933.85	582,931.04	32° 36' 58.350 N	104° 11' 53.679 W	
11,100.0	90.00	269.54	8,770.0	1,084.6	-2,148.0	587,933.05	582,831.04	32° 36' 58.344 N	104° 11' 54.849 W	
11,200.0	90.00	269.54	8,770.0	1,083.8	-2,248.0	587,932.26	582,731.04	32° 36' 58.337 N	104° 11' 56.018 W	
11,300.0	90.00	269.54	8,770.0	1,083.0	-2,348.0	587,931.46	582,631.05	32° 36' 58.330 N	104° 11' 57.187 W	
11,400.0	90.00	269.54	8,770.0	1,082.2	-2,448.0	587,930.67	582,531.05	32° 36' 58.324 N	104° 11' 58.356 W	
11,500.0	90.00	269.54	8,770.0	1,081.4	-2,548.0	587,929.87	582,431.05	32° 36' 58.317 N	104° 11' 59.525 W	
11,600.0	90.00	269.54	8,770.0	1,080.6	-2,648.0	587,929.08	582,331.05	32° 36' 58.311 N	104° 12' 0.694 W	
11,700.0	90.00	269.54	8,770.0	1,079.8	-2,748.0	587,928.28	582,231.06	32° 36' 58.304 N	104° 12' 1.864 W	
11,800.0	90.00	269.54	8,770.0	1,079.0	-2,848.0	587,927.49	582,131.06	32° 36' 58.297 N	104° 12' 3.033 W	
11,900.0	90.00	269.54	8,770.0	1,078.2	-2,948.0	587,926.69	582,031.06	32° 36' 58.291 N	104° 12' 4.202 W	
12,000.0	90.00	269.54	8,770.0	1,077.4	-3,048.0	587,925.90	581,931.07	32° 36' 58.284 N	104° 12' 5.371 W	
12,100.0	90.00	269.54	8,770.0	1,076.6	-3,148.0	587,925.10	581,831.07	32° 36' 58.277 N	104° 12' 6.540 W	
12,200.0	90.00	269.54	8,770.0	1,075.8	-3,248.0	587,924.31	581,731.07	32° 36' 58.271 N	104° 12' 7.710 W	
12,300.0	90.00	269.54	8,770.0	1,075.0	-3,348.0	587,923.51	581,631.08	32° 36' 58.264 N	104° 12' 8.879 W	
12,400.0	90.00	269.54	8,770.0	1,074.2	-3,448.0	587,922.72	581,531.08	32° 36' 58.257 N	104° 12' 10.048 W	
12,500.0	90.00	269.54	8,770.0	1,073.5	-3,548.0	587,921.92	581,431.08	32° 36' 58.251 N	104° 12' 11.217 W	
12,600.0	90.00	269.54	8,770.0	1,072.7	-3,648.0	587,921.13	581,331.09	32° 36' 58.244 N	104° 12' 12.386 W	
12,700.0	90.00	269.54	8,770.0	1,071.9	-3,748.0	587,920.33	581,231.09	32° 36' 58.238 N	104° 12' 13.556 W	
12,800.0	90.00	269.54	8,770.0	1,071.1	-3,848.0	587,919.54	581,131.09	32° 36' 58.231 N	104° 12' 14.725 W	
12,900.0	90.00	269.54	8,770.0	1,070.3	-3,948.0	587,918.75	581,031.10	32° 36' 58.224 N	104° 12' 15.894 W	

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWPO		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
13,000.0	90.00	269.54	8,770.0	1,069.5	-4,048.0	587,917.95	580,931.10	32° 36' 58.218 N	104° 12' 17.063 W	
13,100.0	90.00	269.54	8,770.0	1,068.7	-4,148.0	587,917.16	580,831.10	32° 36' 58.211 N	104° 12' 18.232 W	
13,200.0	90.00	269.54	8,770.0	1,067.9	-4,248.0	587,916.36	580,731.11	32° 36' 58.204 N	104° 12' 19.402 W	
13,300.0	90.00	269.54	8,770.0	1,067.1	-4,348.0	587,915.57	580,631.11	32° 36' 58.198 N	104° 12' 20.571 W	
13,400.0	90.00	269.54	8,770.0	1,066.3	-4,448.0	587,914.77	580,531.11	32° 36' 58.191 N	104° 12' 21.740 W	
13,500.0	90.00	269.54	8,770.0	1,065.5	-4,547.9	587,913.98	580,431.11	32° 36' 58.184 N	104° 12' 22.909 W	
13,600.0	90.00	269.54	8,770.0	1,064.7	-4,647.9	587,913.18	580,331.12	32° 36' 58.177 N	104° 12' 24.078 W	
13,700.0	90.00	269.54	8,770.0	1,063.9	-4,747.9	587,912.39	580,231.12	32° 36' 58.171 N	104° 12' 25.248 W	
13,800.0	90.00	269.54	8,770.0	1,063.1	-4,847.9	587,911.59	580,131.12	32° 36' 58.164 N	104° 12' 26.417 W	
13,861.6	90.00	269.54	8,770.0	1,062.6	-4,909.5	587,911.10	580,069.57	32° 36' 58.160 N	104° 12' 27.136 W	
Start DLS 2.00 TFO -89.98										
13,900.0	90.00	268.78	8,770.0	1,062.1	-4,947.9	587,910.54	580,031.13	32° 36' 58.155 N	104° 12' 27.586 W	
13,925.2	90.00	268.27	8,770.0	1,061.4	-4,973.1	587,909.89	580,005.98	32° 36' 58.149 N	104° 12' 27.880 W	
Start 4976.5 hold at 13925.2 MD										
14,000.0	90.00	268.27	8,770.0	1,059.2	-5,047.9	587,907.64	579,931.17	32° 36' 58.127 N	104° 12' 28.755 W	
14,100.0	90.00	268.27	8,770.0	1,056.1	-5,147.8	587,904.62	579,831.22	32° 36' 58.099 N	104° 12' 29.923 W	
14,200.0	90.00	268.27	8,770.0	1,053.1	-5,247.8	587,901.61	579,731.26	32° 36' 58.070 N	104° 12' 31.092 W	
14,300.0	90.00	268.27	8,770.0	1,050.1	-5,347.8	587,898.59	579,631.31	32° 36' 58.041 N	104° 12' 32.261 W	
14,400.0	90.00	268.27	8,770.0	1,047.1	-5,447.7	587,895.58	579,531.35	32° 36' 58.013 N	104° 12' 33.430 W	
14,500.0	90.00	268.27	8,770.0	1,044.1	-5,547.7	587,892.56	579,431.40	32° 36' 57.984 N	104° 12' 34.598 W	
14,600.0	90.00	268.27	8,770.0	1,041.1	-5,647.6	587,889.55	579,331.45	32° 36' 57.955 N	104° 12' 35.767 W	
14,700.0	90.00	268.27	8,770.0	1,038.1	-5,747.6	587,886.53	579,231.49	32° 36' 57.927 N	104° 12' 36.936 W	
14,800.0	90.00	268.27	8,770.0	1,035.0	-5,847.5	587,883.52	579,131.54	32° 36' 57.898 N	104° 12' 38.104 W	
14,900.0	90.00	268.27	8,770.0	1,032.0	-5,947.5	587,880.50	579,031.58	32° 36' 57.869 N	104° 12' 39.273 W	
15,000.0	90.00	268.27	8,770.0	1,029.0	-6,047.4	587,877.49	578,931.63	32° 36' 57.840 N	104° 12' 40.442 W	
15,100.0	90.00	268.27	8,770.0	1,026.0	-6,147.4	587,874.47	578,831.67	32° 36' 57.812 N	104° 12' 41.611 W	
15,200.0	90.00	268.27	8,770.0	1,023.0	-6,247.3	587,871.46	578,731.72	32° 36' 57.783 N	104° 12' 42.779 W	
15,300.0	90.00	268.27	8,770.0	1,020.0	-6,347.3	587,868.44	578,631.76	32° 36' 57.754 N	104° 12' 43.948 W	
15,400.0	90.00	268.27	8,770.0	1,017.0	-6,447.3	587,865.43	578,531.81	32° 36' 57.726 N	104° 12' 45.117 W	
15,500.0	90.00	268.27	8,770.0	1,013.9	-6,547.2	587,862.41	578,431.85	32° 36' 57.697 N	104° 12' 46.286 W	
15,600.0	90.00	268.27	8,770.0	1,010.9	-6,647.2	587,859.40	578,331.90	32° 36' 57.668 N	104° 12' 47.454 W	
15,700.0	90.00	268.27	8,770.0	1,007.9	-6,747.1	587,856.39	578,231.95	32° 36' 57.640 N	104° 12' 48.623 W	
15,800.0	90.00	268.27	8,770.0	1,004.9	-6,847.1	587,853.37	578,131.99	32° 36' 57.611 N	104° 12' 49.792 W	
15,900.0	90.00	268.27	8,770.0	1,001.9	-6,947.0	587,850.36	578,032.04	32° 36' 57.582 N	104° 12' 50.960 W	
16,000.0	90.00	268.27	8,770.0	998.9	-7,047.0	587,847.34	577,932.08	32° 36' 57.553 N	104° 12' 52.129 W	
16,100.0	90.00	268.27	8,770.0	995.9	-7,146.9	587,844.33	577,832.13	32° 36' 57.525 N	104° 12' 53.298 W	
16,200.0	90.00	268.27	8,770.0	992.8	-7,246.9	587,841.31	577,732.17	32° 36' 57.496 N	104° 12' 54.467 W	
16,300.0	90.00	268.27	8,770.0	989.8	-7,346.8	587,838.30	577,632.22	32° 36' 57.467 N	104° 12' 55.635 W	
16,400.0	90.00	268.27	8,770.0	986.8	-7,446.8	587,835.28	577,532.26	32° 36' 57.438 N	104° 12' 56.804 W	
16,500.0	90.00	268.27	8,770.0	983.8	-7,546.8	587,832.27	577,432.31	32° 36' 57.410 N	104° 12' 57.973 W	
16,600.0	90.00	268.27	8,770.0	980.8	-7,646.7	587,829.25	577,332.35	32° 36' 57.381 N	104° 12' 59.142 W	
16,700.0	90.00	268.27	8,770.0	977.8	-7,746.7	587,826.24	577,232.40	32° 36' 57.352 N	104° 13' 0.310 W	
16,800.0	90.00	268.27	8,770.0	974.7	-7,846.6	587,823.22	577,132.45	32° 36' 57.323 N	104° 13' 1.479 W	
16,900.0	90.00	268.27	8,770.0	971.7	-7,946.6	587,820.21	577,032.49	32° 36' 57.295 N	104° 13' 2.648 W	
17,000.0	90.00	268.27	8,770.0	968.7	-8,046.5	587,817.19	576,932.54	32° 36' 57.266 N	104° 13' 3.816 W	
17,100.0	90.00	268.27	8,770.0	965.7	-8,146.5	587,814.18	576,832.58	32° 36' 57.237 N	104° 13' 4.985 W	
17,200.0	90.00	268.27	8,770.0	962.7	-8,246.4	587,811.16	576,732.63	32° 36' 57.208 N	104° 13' 6.154 W	
17,300.0	90.00	268.27	8,770.0	959.7	-8,346.4	587,808.15	576,632.67	32° 36' 57.180 N	104° 13' 7.323 W	
17,400.0	90.00	268.27	8,770.0	956.7	-8,446.3	587,805.13	576,532.72	32° 36' 57.151 N	104° 13' 8.491 W	
17,500.0	90.00	268.27	8,770.0	953.6	-8,546.3	587,802.12	576,432.76	32° 36' 57.122 N	104° 13' 9.660 W	
17,600.0	90.00	268.27	8,770.0	950.6	-8,646.3	587,799.11	576,332.81	32° 36' 57.093 N	104° 13' 10.829 W	
17,700.0	90.00	268.27	8,770.0	947.6	-8,746.2	587,796.09	576,232.85	32° 36' 57.065 N	104° 13' 11.998 W	
17,800.0	90.00	268.27	8,770.0	944.6	-8,846.2	587,793.08	576,132.90	32° 36' 57.036 N	104° 13' 13.166 W	
17,900.0	90.00	268.27	8,770.0	941.6	-8,946.1	587,790.06	576,032.95	32° 36' 57.007 N	104° 13' 14.335 W	

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWPO		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
18,000.0	90.00	268.27	8,770.0	938.6	-9,046.1	587,787.05	575,932.99	32° 36' 56.978 N	104° 13' 15.504 W	
18,100.0	90.00	268.27	8,770.0	935.6	-9,146.0	587,784.03	575,833.04	32° 36' 56.949 N	104° 13' 16.672 W	
18,200.0	90.00	268.27	8,770.0	932.5	-9,246.0	587,781.02	575,733.08	32° 36' 56.921 N	104° 13' 17.841 W	
18,300.0	90.00	268.27	8,770.0	929.5	-9,345.9	587,778.00	575,633.13	32° 36' 56.892 N	104° 13' 19.010 W	
18,400.0	90.00	268.27	8,770.0	926.5	-9,445.9	587,774.99	575,533.17	32° 36' 56.863 N	104° 13' 20.179 W	
18,500.0	90.00	268.27	8,770.0	923.5	-9,545.8	587,771.97	575,433.22	32° 36' 56.834 N	104° 13' 21.347 W	
18,600.0	90.00	268.27	8,770.0	920.5	-9,645.8	587,768.96	575,333.26	32° 36' 56.805 N	104° 13' 22.516 W	
18,700.0	90.00	268.27	8,770.0	917.5	-9,745.8	587,765.94	575,233.31	32° 36' 56.777 N	104° 13' 23.685 W	
18,800.0	90.00	268.27	8,770.0	914.5	-9,845.7	587,762.93	575,133.35	32° 36' 56.748 N	104° 13' 24.853 W	
18,901.7	90.00	268.27	8,770.0	911.4	-9,947.3	587,759.86	575,031.72	32° 36' 56.719 N	104° 13' 26.042 W	
TD at 18901.7										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
LTP/BHL-DAKOTA 32 - hit/miss target - Shape - Point	0.00	0.00	8,770.0	911.4	-9,947.3	587,759.86	575,031.72	32° 36' 56.719 N	104° 13' 26.042 W	
FTP-DAKOTA 32 ST F - plan misses target center by 197.6usft at 8780.9usft MD (8628.9 TVD, 1102.7 N, 133.1 E) - Point	0.00	0.00	8,770.0	1,097.5	271.4	587,946.00	585,250.44	32° 36' 58.441 N	104° 11' 26.560 W	
PP2-DAKOTA 32 ST F - plan hits target center - Point	0.00	0.00	8,770.0	1,062.6	-4,909.5	587,911.10	580,069.57	32° 36' 58.160 N	104° 12' 27.136 W	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
280.0	280.0	RSLR				
690.0	690.0	TNSL				
815.0	815.0	YTES				
1,287.0	1,287.0	SVRV				
1,605.0	1,605.0	QUEEN				
2,841.7	2,832.0	CYCN				
3,026.7	3,013.0	BYCN				
3,880.4	3,848.0	BSGL				
5,986.4	5,908.0	FBSG Sand				
7,109.9	7,007.0	SBSG Sand				
7,610.2	7,497.0	TBSG Carb				
8,357.1	8,242.0	TBSG Sand				
8,827.0	8,660.0	WFMP				

Planning Report - Geographic

Database:	Compass_17	Local Co-ordinate Reference:	Well DAKOTA32 ST FED COM 203H
Company:	NEW MEXICO	TVD Reference:	KB @ 3370.0usft
Project:	(SP) EDDY	MD Reference:	KB @ 3370.0usft
Site:	DAKOTA 32 PROJECT	North Reference:	Grid
Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
2,000.0	2,000.0	0.0	0.0	Start Build 2.00	
2,600.0	2,595.6	60.8	15.0	Start 4865.4 hold at 2600.0 MD	
7,465.4	7,354.7	1,043.0	256.8	Start Drop -2.00	
8,065.4	7,950.3	1,103.8	271.8	Start 342.2 hold at 8065.4 MD	
8,407.6	8,292.5	1,103.8	271.8	Start DLS 12.00 TFO 269.54	
9,157.6	8,770.0	1,100.0	-205.7	Start 4704.0 hold at 9157.6 MD	
13,861.6	8,770.0	1,062.6	-4,909.5	Start DLS 2.00 TFO -89.98	
13,925.2	8,770.0	1,061.4	-4,973.1	Start 4976.5 hold at 13925.2 MD	
18,901.7	8,770.0	911.4	-9,947.3	TD at 18901.7	

NEW MEXICO

(SP) EDDY

DAKOTA 32 PROJECT

DAKOTA 32 ST FED COM 203H

OWB

PWP0

Anticollision Report

24 September, 2025

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well DAKOTA 32 ST FED COM 203H
Project:	(SP) EDDY	TVD Reference:	KB @ 3370.0usft
Reference Site:	DAKOTA 32 PROJECT	MD Reference:	KB @ 3370.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass_17
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,000.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	9/24/2025		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	18,901.7	PWP0 (OWB)	MWD	OWSG_Rev2_ MWD - Standard

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Summary						
Offset Well - Wellbore - Design						
DAKOTA 32 PROJECT						
DAKOTA 32 ST FED COM 204H - OWB - PWP0	2,000.0	2,000.0	33.0	18.9	2.336	CC, ES, SF
SHAMROCK 34 FED COM						
SHAMROCK 34 FED COM 122H - OWB - FINAL	7,400.0	17,635.0	767.5	500.8	2.878	SF
SHAMROCK 34 FED COM 122H - OWB - FINAL	7,465.4	17,635.0	763.0	498.4	2.884	ES
SHAMROCK 34 FED COM 122H - OWB - FINAL	7,481.4	17,635.0	762.8	499.0	2.892	CC
SHAMROCK 34 FED COM 132H - OWB - FINAL	8,531.7	18,822.0	754.9	482.9	2.775	CC, ES
SHAMROCK 34 FED COM 132H - OWB - FINAL	8,550.0	18,822.0	755.2	483.1	2.775	SF

Offset Design: DAKOTA 32 PROJECT - DAKOTA 32 ST FED COM 204H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-176.12	-32.9	-2.2	33.0					
100.0	100.0	100.0	100.0	0.3	0.3	-176.12	-32.9	-2.2	33.0	32.5	0.50	65.746		
200.0	200.0	200.0	200.0	0.6	0.6	-176.12	-32.9	-2.2	33.0	31.8	1.22	27.072		
300.0	300.0	300.0	300.0	1.0	1.0	-176.12	-32.9	-2.2	33.0	31.1	1.94	17.045		
400.0	400.0	400.0	400.0	1.3	1.3	-176.12	-32.9	-2.2	33.0	30.3	2.65	12.438		
500.0	500.0	500.0	500.0	1.7	1.7	-176.12	-32.9	-2.2	33.0	29.6	3.37	9.792		
600.0	600.0	600.0	600.0	2.0	2.0	-176.12	-32.9	-2.2	33.0	28.9	4.09	8.074		
700.0	700.0	700.0	700.0	2.4	2.4	-176.12	-32.9	-2.2	33.0	28.2	4.80	6.869		
800.0	800.0	800.0	800.0	2.8	2.8	-176.12	-32.9	-2.2	33.0	27.5	5.52	5.977		
900.0	900.0	900.0	900.0	3.1	3.1	-176.12	-32.9	-2.2	33.0	26.8	6.24	5.290		
1,000.0	1,000.0	1,000.0	1,000.0	3.5	3.5	-176.12	-32.9	-2.2	33.0	26.0	6.95	4.745		
1,100.0	1,100.0	1,100.0	1,100.0	3.8	3.8	-176.12	-32.9	-2.2	33.0	25.3	7.67	4.301		
1,200.0	1,200.0	1,200.0	1,200.0	4.2	4.2	-176.12	-32.9	-2.2	33.0	24.6	8.39	3.934		
1,300.0	1,300.0	1,300.0	1,300.0	4.6	4.6	-176.12	-32.9	-2.2	33.0	23.9	9.11	3.624		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	-176.12	-32.9	-2.2	33.0	23.2	9.82	3.359		
1,500.0	1,500.0	1,500.0	1,500.0	5.3	5.3	-176.12	-32.9	-2.2	33.0	22.5	10.54	3.131		
1,600.0	1,600.0	1,600.0	1,600.0	5.6	5.6	-176.12	-32.9	-2.2	33.0	21.7	11.26	2.931		
1,700.0	1,700.0	1,700.0	1,700.0	6.0	6.0	-176.12	-32.9	-2.2	33.0	21.0	11.97	2.756		
1,800.0	1,800.0	1,800.0	1,800.0	6.3	6.3	-176.12	-32.9	-2.2	33.0	20.3	12.69	2.600		
1,900.0	1,900.0	1,900.0	1,900.0	6.7	6.7	-176.12	-32.9	-2.2	33.0	19.6	13.41	2.461		

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

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well DAKOTA 32 ST FED COM 203H
Project:	(SP) EDDY	TVD Reference:	KB @ 3370.0usft
Reference Site:	DAKOTA 32 PROJECT	MD Reference:	KB @ 3370.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass_17
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: DAKOTA 32 PROJECT - DAKOTA 32 ST FED COM 204H - OWB - PWPO													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Measured Reference	Vertical	Measured	Vertical	Semi Major Axis		Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
2,000.0	2,000.0	2,000.0	2,000.0	7.1	7.1	-176.12	-32.9	-2.2	33.0	18.9	14.12	2.336	CC, ES, SF	
2,100.0	2,100.0	2,099.3	2,099.3	7.4	7.4	168.13	-33.9	-0.8	35.6	20.8	14.82	2.403		
2,200.0	2,199.8	2,198.2	2,198.0	7.8	7.7	163.80	-36.8	3.4	43.7	28.2	15.50	2.816		
2,300.0	2,299.5	2,296.7	2,296.2	8.1	8.1	159.56	-41.4	10.1	57.1	40.9	16.18	3.529		
2,400.0	2,398.7	2,395.2	2,394.3	8.5	8.4	157.65	-46.3	17.2	74.2	57.4	16.87	4.401		
2,500.0	2,497.5	2,493.1	2,491.8	8.9	8.7	157.24	-51.1	24.2	94.6	77.0	17.56	5.386		
2,600.0	2,595.6	2,590.3	2,588.7	9.2	9.1	157.56	-56.0	31.2	118.1	99.8	18.25	6.469		
2,700.0	2,693.4	2,687.1	2,685.1	9.6	9.4	158.17	-60.7	38.1	143.1	124.2	18.94	7.556		
2,800.0	2,791.3	2,783.9	2,781.5	10.0	9.8	158.60	-65.5	45.0	168.2	148.6	19.63	8.566		
2,900.0	2,889.1	2,880.7	2,878.0	10.4	10.1	158.92	-70.3	52.0	193.3	172.9	20.33	9.506		
3,000.0	2,986.9	2,977.5	2,974.4	10.8	10.5	159.17	-75.1	58.9	218.4	197.3	21.03	10.382		
3,100.0	3,084.7	3,074.3	3,070.8	11.2	10.8	159.36	-79.9	65.9	243.4	221.7	21.74	11.199		
3,200.0	3,182.5	3,171.1	3,167.2	11.6	11.1	159.52	-84.7	72.8	268.5	246.1	22.44	11.964		
3,300.0	3,280.3	3,267.9	3,263.7	12.1	11.5	159.65	-89.5	79.8	293.6	270.5	23.15	12.681		
3,400.0	3,378.1	3,364.7	3,360.1	12.5	11.9	159.76	-94.3	86.7	318.7	294.8	23.87	13.353		
3,500.0	3,476.0	3,461.5	3,456.5	12.9	12.2	159.85	-99.1	93.6	343.8	319.2	24.58	13.986		
3,600.0	3,573.8	3,558.3	3,553.0	13.4	12.6	159.94	-103.9	100.6	368.9	343.6	25.30	14.581		
3,700.0	3,671.6	3,655.1	3,649.4	13.8	12.9	160.01	-108.7	107.5	394.0	368.0	26.02	15.142		
3,800.0	3,769.4	3,751.9	3,745.8	14.2	13.3	160.07	-113.5	114.5	419.1	392.3	26.74	15.673		
3,900.0	3,867.2	3,848.7	3,842.3	14.7	13.6	160.12	-118.2	121.4	444.2	416.7	27.46	16.174		
4,000.0	3,965.0	3,945.5	3,938.7	15.1	14.0	160.17	-123.0	128.4	469.3	441.1	28.19	16.649		
4,100.0	4,062.8	4,042.3	4,035.1	15.6	14.3	160.22	-127.8	135.3	494.3	465.4	28.91	17.099		
4,200.0	4,160.7	4,139.1	4,131.6	16.0	14.7	160.26	-132.6	142.3	519.4	489.8	29.64	17.526		
4,300.0	4,258.5	4,235.9	4,228.0	16.5	15.1	160.30	-137.4	149.2	544.5	514.2	30.37	17.933		
4,400.0	4,356.3	4,332.7	4,324.4	16.9	15.4	160.33	-142.2	156.1	569.6	538.5	31.09	18.319		
4,500.0	4,454.1	4,429.5	4,420.9	17.4	15.8	160.36	-147.0	163.1	594.7	562.9	31.83	18.687		
4,600.0	4,551.9	4,526.3	4,517.3	17.8	16.2	160.39	-151.8	170.0	619.8	587.3	32.56	19.038		
4,700.0	4,649.7	4,623.1	4,613.7	18.3	16.5	160.41	-156.6	177.0	644.9	611.6	33.29	19.373		
4,800.0	4,747.5	4,719.9	4,710.1	18.7	16.9	160.44	-161.4	183.9	670.0	636.0	34.02	19.693		
4,900.0	4,845.4	4,816.7	4,806.6	19.2	17.2	160.46	-166.2	190.9	695.1	660.3	34.76	20.000		
5,000.0	4,943.2	4,913.5	4,903.0	19.6	17.6	160.48	-171.0	197.8	720.2	684.7	35.49	20.293		
5,100.0	5,041.0	5,010.3	4,999.4	20.1	18.0	160.50	-175.8	204.7	745.3	709.1	36.23	20.573		
5,200.0	5,138.8	5,107.1	5,095.9	20.6	18.3	160.52	-180.5	211.7	770.4	733.4	36.96	20.842		
5,300.0	5,236.6	5,203.9	5,192.3	21.0	18.7	160.53	-185.3	218.6	795.5	757.8	37.70	21.101		
5,400.0	5,334.4	5,300.7	5,288.7	21.5	19.1	160.55	-190.1	225.6	820.6	782.1	38.44	21.349		
5,500.0	5,432.3	5,408.9	5,396.6	22.0	19.5	160.60	-195.1	232.8	845.3	806.1	39.26	21.534		
5,600.0	5,530.1	5,529.2	5,516.7	22.4	19.9	160.88	-198.2	237.3	867.8	827.7	40.13	21.624		
5,700.0	5,627.9	5,640.3	5,627.9	22.9	20.3	161.34	-198.7	238.0	888.0	847.1	40.92	21.699		
5,800.0	5,725.7	5,738.1	5,725.7	23.3	20.6	161.76	-198.7	238.0	907.7	866.1	41.63	21.803		
5,900.0	5,823.5	5,835.9	5,823.5	23.8	20.9	162.16	-198.7	238.0	927.6	885.2	42.35	21.904		
6,000.0	5,921.3	5,933.7	5,921.3	24.3	21.3	162.54	-198.7	238.0	947.4	904.3	43.06	22.002		
6,100.0	6,019.1	6,031.6	6,019.1	24.7	21.6	162.91	-198.7	238.0	967.3	923.5	43.77	22.098		
6,200.0	6,117.0	6,129.4	6,117.0	25.2	21.9	163.26	-198.7	238.0	987.2	942.7	44.49	22.192		

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

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well DAKOTA 32 ST FED COM 203H
Project:	(SP) EDDY	TVD Reference:	KB @ 3370.0usft
Reference Site:	DAKOTA 32 PROJECT	MD Reference:	KB @ 3370.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass_17
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: SHAMROCK 34 FED COM - SHAMROCK 34 FED COM 122H - OWB - FINAL													Offset Site Error:	0.0 usft	
Survey Program: 14-MWD													Offset Well Error:		0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
6,900.0	6,801.7	17,635.0	7,185.9	28.5	248.3	1.03	1,768.1	449.4	961.6	720.6	240.97	3.990			
7,000.0	6,899.5	17,635.0	7,185.9	29.0	248.3	1.03	1,768.1	449.4	904.2	654.6	249.57	3.623			
7,100.0	6,997.3	17,635.0	7,185.9	29.4	248.3	1.03	1,768.1	449.4	854.6	597.4	257.28	3.322			
7,200.0	7,095.1	17,635.0	7,185.9	29.9	248.3	1.03	1,768.1	449.4	814.4	551.1	263.31	3.093			
7,300.0	7,192.9	17,635.0	7,185.9	30.4	248.3	1.03	1,768.1	449.4	785.0	518.2	266.72	2.943			
7,400.0	7,290.7	17,635.0	7,185.9	30.9	248.3	1.03	1,768.1	449.4	767.5	500.8	266.69	2.878 SF			
7,465.4	7,354.7	17,635.0	7,185.9	31.2	248.3	1.03	1,768.1	449.4	763.0	498.4	264.55	2.884 ES			
7,481.4	7,370.3	17,635.0	7,185.9	31.2	248.3	1.03	1,768.1	449.4	762.8	499.0	263.77	2.892 CC			
7,500.0	7,388.6	17,635.0	7,185.9	31.3	248.3	1.03	1,768.1	449.4	763.1	500.3	262.73	2.904			
7,600.0	7,487.0	17,635.0	7,185.9	31.8	248.3	1.03	1,768.1	449.4	774.4	519.4	254.99	3.037			
7,700.0	7,585.9	17,635.0	7,185.9	32.2	248.3	1.04	1,768.1	449.4	801.5	557.1	244.36	3.280			
7,800.0	7,685.3	17,635.0	7,185.9	32.6	248.3	1.06	1,768.1	449.4	842.8	610.6	232.14	3.630			
7,900.0	7,785.0	17,635.0	7,185.9	32.9	248.3	1.08	1,768.1	449.4	896.3	676.7	219.61	4.081			
8,000.0	7,884.9	17,635.0	7,185.9	33.3	248.3	1.11	1,768.1	449.4	960.0	752.2	207.73	4.621			

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

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well DAKOTA 32 ST FED COM 203H
Project:	(SP) EDDY	TVD Reference:	KB @ 3370.0usft
Reference Site:	DAKOTA 32 PROJECT	MD Reference:	KB @ 3370.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass_17
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: SHAMROCK 34 FED COM - SHAMROCK 34 FED COM 132H - OWB - FINAL													Offset Site Error:	0.0 usft		
Survey Program: 14-MWD													Rule Assigned:		Offset Well Error:	0.0 usft
Measured Reference Depth (usft)	Vertical Depth (usft)	Measured Offset Depth (usft)	Vertical Offset Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning			
							+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)						
8,000.0	7,884.9	18,822.0	8,438.5	33.3	249.4	-0.06	1,831.1	450.1	950.0	730.2	219.84	4.321				
8,065.4	7,950.3	18,822.0	8,438.5	33.5	249.4	13.78	1,831.1	450.1	910.7	682.8	227.91	3.996				
8,100.0	7,984.9	18,822.0	8,438.5	33.6	249.4	13.78	1,831.1	450.1	891.4	659.2	232.26	3.838				
8,200.0	8,084.9	18,822.0	8,438.5	33.9	249.4	13.78	1,831.1	450.1	841.4	596.7	244.66	3.439				
8,300.0	8,184.9	18,822.0	8,438.5	34.2	249.4	13.78	1,831.1	450.1	800.8	544.6	256.14	3.126				
8,407.6	8,292.5	18,822.0	8,438.5	34.5	249.4	13.78	1,831.1	450.1	769.3	503.0	266.23	2.890				
8,425.0	8,309.9	18,822.0	8,438.5	34.6	249.4	104.67	1,831.1	450.1	765.6	498.0	267.53	2.862				
8,450.0	8,334.9	18,822.0	8,438.5	34.6	249.4	105.19	1,831.1	450.1	761.2	492.0	269.13	2.828				
8,475.0	8,359.7	18,822.0	8,438.5	34.7	249.4	105.57	1,831.1	450.1	757.9	487.5	270.40	2.803				
8,500.0	8,384.3	18,822.0	8,438.5	34.8	249.4	105.81	1,831.1	450.1	755.8	484.5	271.33	2.786				
8,525.0	8,408.7	18,822.0	8,438.5	34.8	249.4	105.92	1,831.1	450.1	754.9	483.0	271.90	2.776				
8,531.7	8,415.3	18,822.0	8,438.5	34.8	249.4	105.92	1,831.1	450.1	754.9	482.9	272.00	2.775	CC, ES			
8,550.0	8,432.8	18,822.0	8,438.5	34.9	249.4	105.89	1,831.1	450.1	755.2	483.1	272.11	2.775	SF			
8,575.0	8,456.5	18,822.0	8,438.5	34.9	249.4	105.72	1,831.1	450.1	756.6	484.7	271.96	2.782				
8,600.0	8,479.8	18,822.0	8,438.5	35.0	249.4	105.41	1,831.1	450.1	759.3	487.8	271.45	2.797				
8,625.0	8,502.5	18,822.0	8,438.5	35.0	249.4	104.97	1,831.1	450.1	763.1	492.5	270.60	2.820				
8,650.0	8,524.6	18,822.0	8,438.5	35.1	249.4	104.39	1,831.1	450.1	768.0	498.5	269.42	2.850				
8,675.0	8,546.2	18,822.0	8,438.5	35.1	249.4	103.67	1,831.1	450.1	774.0	506.0	267.94	2.889				
8,700.0	8,567.0	18,822.0	8,438.5	35.2	249.4	102.81	1,831.1	450.1	781.0	514.8	266.19	2.934				
8,725.0	8,587.1	18,822.0	8,438.5	35.2	249.4	101.81	1,831.1	450.1	789.1	524.9	264.19	2.987				
8,750.0	8,606.3	18,822.0	8,438.5	35.2	249.4	100.67	1,831.1	450.1	798.1	536.1	261.97	3.046				
8,775.0	8,624.7	18,822.0	8,438.5	35.3	249.4	99.40	1,831.1	450.1	808.0	548.4	259.58	3.113				
8,800.0	8,642.2	18,822.0	8,438.5	35.3	249.4	97.99	1,831.1	450.1	818.7	561.7	257.03	3.185				
8,825.0	8,658.7	18,822.0	8,438.5	35.3	249.4	96.44	1,831.1	450.1	830.2	575.9	254.36	3.264				
8,850.0	8,674.3	18,822.0	8,438.5	35.3	249.4	94.77	1,831.1	450.1	842.5	590.9	251.59	3.349				
8,875.0	8,688.8	18,822.0	8,438.5	35.3	249.4	92.97	1,831.1	450.1	855.3	606.6	248.76	3.438				
8,900.0	8,702.2	18,822.0	8,438.5	35.3	249.4	91.06	1,831.1	450.1	868.8	622.9	245.89	3.533				
8,925.0	8,714.4	18,822.0	8,438.5	35.3	249.4	89.03	1,831.1	450.1	882.8	639.8	243.00	3.633				
8,950.0	8,725.6	18,822.0	8,438.5	35.3	249.4	86.91	1,831.1	450.1	897.2	657.1	240.11	3.737				
8,975.0	8,735.5	18,822.0	8,438.5	35.4	249.4	84.70	1,831.1	450.1	912.1	674.8	237.23	3.845				
9,000.0	8,744.2	18,822.0	8,438.5	35.4	249.4	82.42	1,831.1	450.1	927.3	692.9	234.38	3.956				
9,025.0	8,751.7	18,822.0	8,438.5	35.4	249.4	80.09	1,831.1	450.1	942.7	711.2	231.57	4.071				
9,050.0	8,757.9	18,822.0	8,438.5	35.4	249.4	77.71	1,831.1	450.1	958.4	729.6	228.82	4.189				
9,075.0	8,762.8	18,822.0	8,438.5	35.4	249.4	75.31	1,831.1	450.1	974.3	748.2	226.12	4.309				
9,100.0	8,766.5	18,822.0	8,438.5	35.4	249.4	72.91	1,831.1	450.1	990.3	766.8	223.49	4.431				

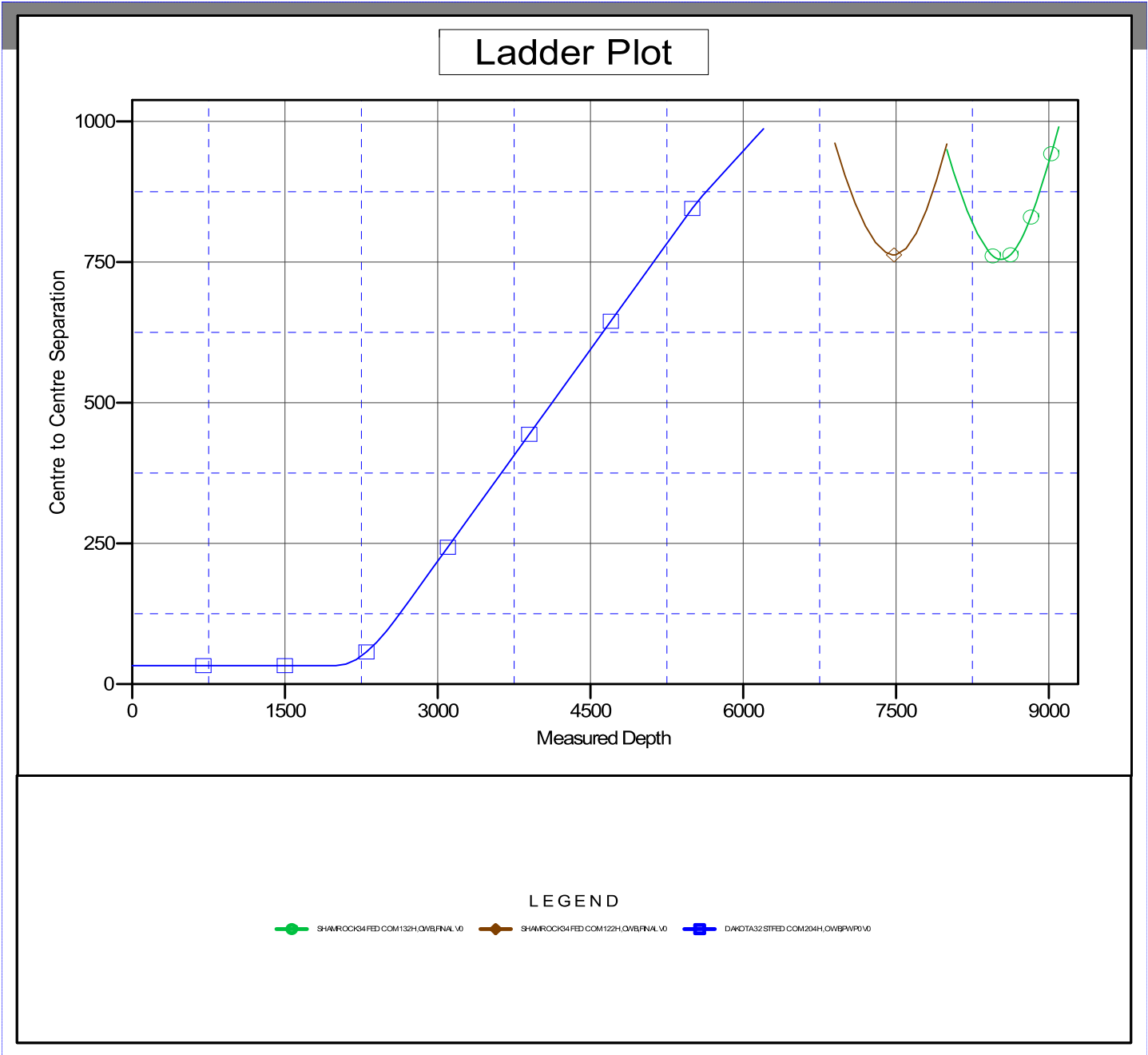
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well DAKOTA 32 ST FED COM 203H
Project:	(SP) EDDY	TVD Reference:	KB @ 3370.0usft
Reference Site:	DAKOTA 32 PROJECT	MD Reference:	KB @ 3370.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass_17
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3370.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: DAKOTA 32 ST FED COM 203H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.08°

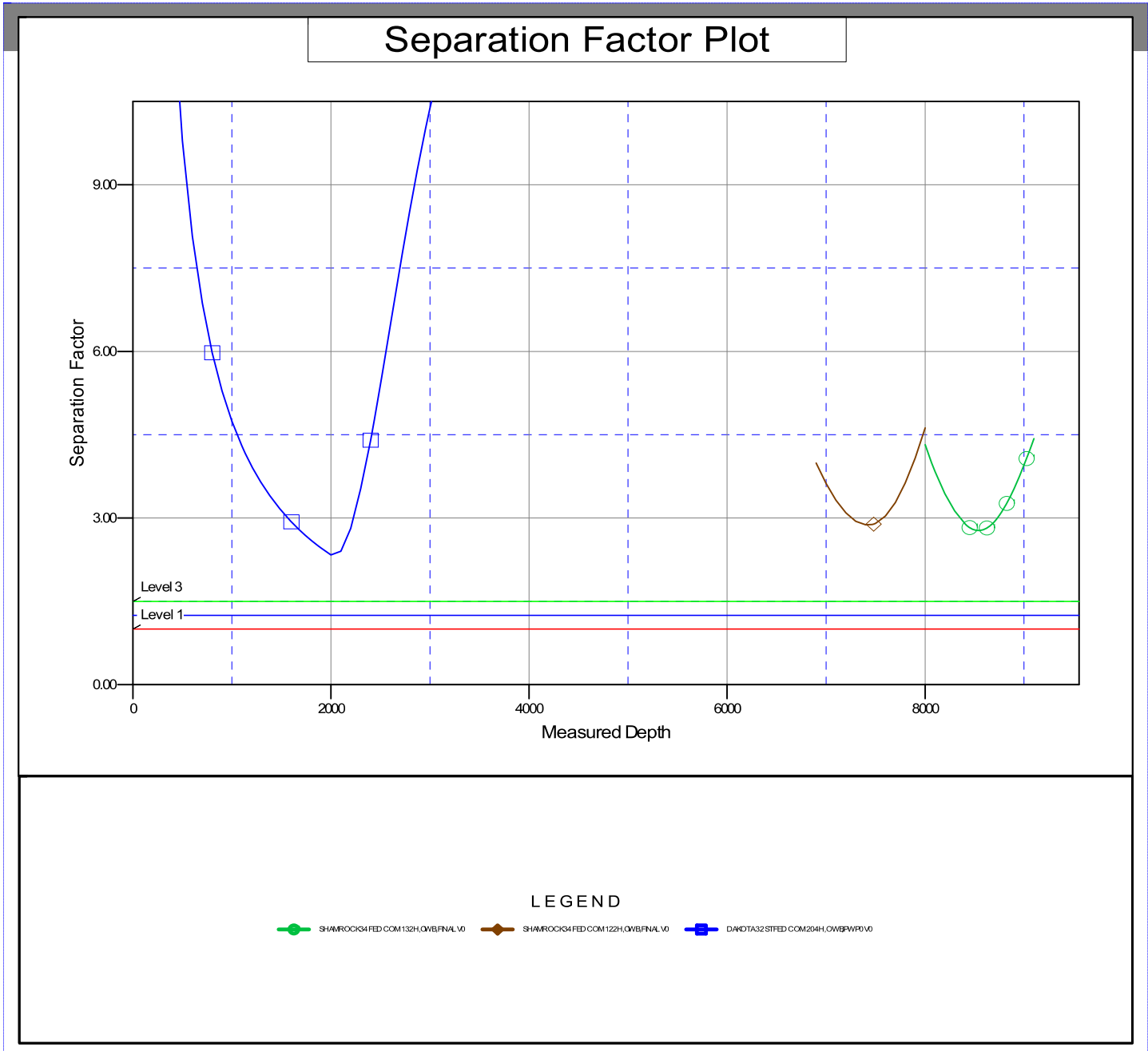


Anticollision Report

Company:	NEW MEXICO	Local Co-ordinate Reference:	Well DAKOTA 32 ST FED COM 203H
Project:	(SP) EDDY	TVD Reference:	KB @ 3370.0usft
Reference Site:	DAKOTA 32 PROJECT	MD Reference:	KB @ 3370.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	DAKOTA 32 ST FED COM 203H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	Compass_17
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3370.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: DAKOTA 32 ST FED COM 203H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.08°



Permian Resources Multi-Well Pad Batch Drilling Procedure

Surface Casing - PR intends to Batch set all surface casing to a depth approved in the APD. Surface Holes will be batch drilled by a rig. Appropriate notifications will be made prior to spudding the well, running and cementing casing and prior to skidding to the rig to the next well on pad.

1. Drill Surface hole to Approved Depth with Rig and perform wellbore cleanup cycles. Trip out and rack back drilling BHA.
2. Run and land planned surface casing see Illustration 1-1 Below to depth approved in APD.
3. Set packoff and test to 5k psi
4. Offline Cement
5. Install wellhead with pressure gauge and nightcap. Nightcap is shown on final wellhead Stack up Illustration #2-2.
6. Skid Rig to adjacent well to drill Surface hole.
7. Surface casing test will be performed by the rig in order to allow ample time for Cement to develop 500psi compressive strength. Casing test to 0.22 psi/ft or 1500 psi whichever is greater - not to exceed 70% casing burst.

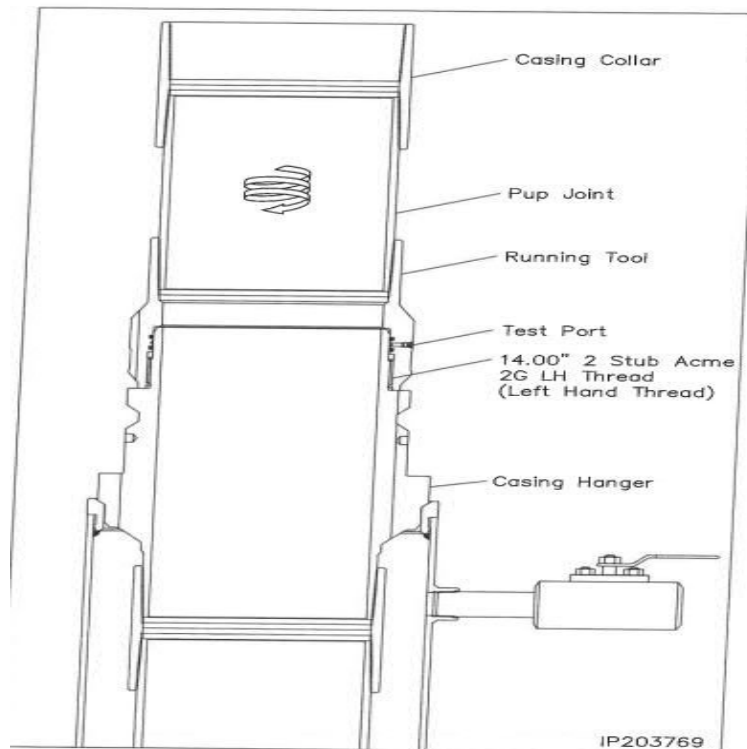


Illustration 1-1

Intermediate Casing – PR intends to Batch set all intermediate casing strings to a depth approved in the APD. Intermediate Holes will be batch drilled by the rig. Appropriate notifications will be made prior to testing BOPE, and prior to running/cementing all casing strings.

1. Rig will remove the nightcap and install and test BOPE.
2. Test Surface casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) - not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
3. Install wear bushing then drill out surface casing shoe-track plus 20' and conduct FIT to minimum of the MW equivalent anticipated to control the formation pressure to the next casing point.
4. Drill Intermediate hole to approved casing point. Trip out of hole with BHA to run Casing.
5. Remove wear bushing then run and land Intermediate Casing with mandrel hanger in wellhead.
6. Cement casing to surface with floats holding.
7. Washout stack then run wash tool in wellhead and wash hanger and pack-off setting area.
8. Install pack-off and test void to 5,000 psi for 15 minutes. Nightcap shown on final wellhead stack up illustration 2-2 on page 3.
9. Test casing per COA WOC timing (.22 psi/ft or 1500 psi whichever is greater) - not to exceed 70% casing burst. Cement must have achieved 500psi compressive strength prior to test.
10. Install nightcap – skid rig to adjacent well to drill Intermediate hole.

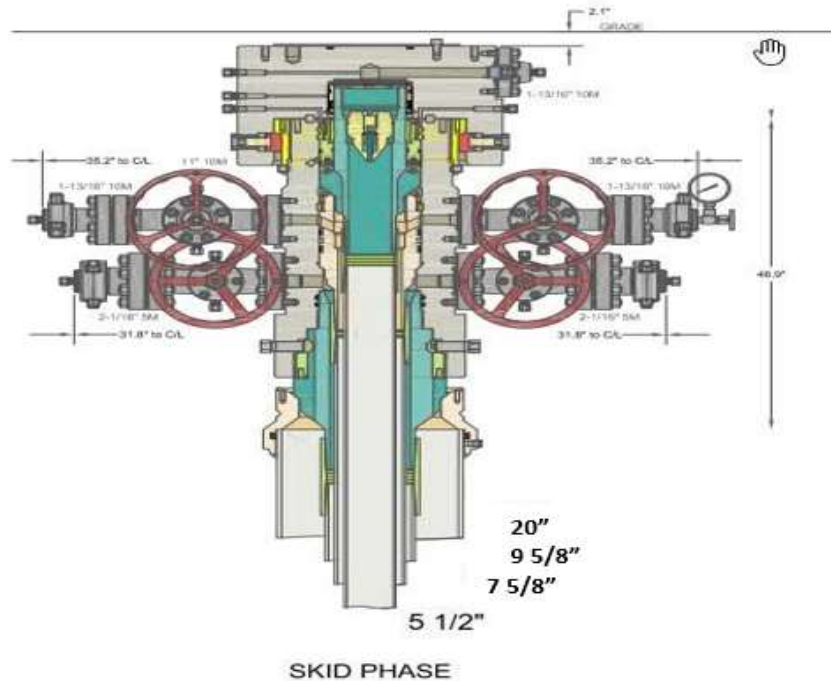


Illustration 2-2

Production Casing – PR intends to Batch set all Production casings with Rig. Appropriate notifications will be made prior Testing BOPE, and prior to running/cementing all casing strings.

1. Drilling Rig will remove the nightcap and install and test BOPE.
2. Install wear bushing then drill Intermediate shoe-track plus 20' and conduct FIT to minimum MW equivalent to control the formation pressure to TD of well.
3. Drill Vertical hole to KOP – Trip out for Curve BHA.
4. Drill Curve, landing in production interval – Trip for Lateral BHA.
5. Drill Lateral / Production hole to Permitted BHL, perform cleanup cycles and trip out to run Production Casing.
6. Remove wear bushing then run Production casing to TD landing casing mandrel in wellhead.
7. Cement Production string with floats holding.
8. Run in with wash tool and wash wellhead area – install pack-off and test void to 5,000psi for 15 minutes.
9. Install BPV in Production mandrel hanger – Nipple down BOPE and install nightcap.
10. Test nightcap void to 5,000 psi for 30 minutes per illustration 2-2
11. Skid rig to adjacent well on pad to drill production hole.

Permian Resources BOP Break Testing Variance Procedure

Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE). Permian Resources requests a variance to ONLY test broken pressure seals on the BOPE and function test BOP when skidding a drilling rig between multiple wells on a pad.

Background

Title 43 CFR 3172, Drilling Operations, Sections 6.b.9.iv states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. 43 CFR 3172.13, Variances from minimum standards states, "An operator may request the authorized officer to approve a variance from any of the minimum standards prescribed in [§§ 3172.6](#) through [3172.12](#). All such requests shall be submitted in writing to the appropriate authorized officer and provide information as to the circumstances which warrant approval of the variance(s) requested and the proposed alternative methods by which the related minimum standard(s) are to be satisfied. The authorized officer, after considering all relevant factors, if appropriate, may approve the requested variance(s) if it is determined that the proposed alternative(s) meet or exceed the objectives of the applicable minimum standard(s)." Permian Resources feels the break testing the BOPE is such a situation. Therefore, as per 43 CFR 3172.13, Permian Resources submits this request for the variance.

Supporting Documentation

The language used in 43 CFR 3172 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time, there have been significant changes in drilling technology. The BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since 43 CFR 3172 was originally released. The Permian Resources drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.

Figure 1: Winch System attached to BOP Stack



Figure 2: BOP Winch System



American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. 43 CFR 3172 recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, Well Control Equipment Systems for Drilling Wells (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component." See Table C.4 below for reference.

62		API STANDARD 53	
Table C.4—Initial Pressure Testing, Surface BOP Stacks			
Component to be Pressure Tested	Pressure Test—Low Pressure ^a psig (MPa)	Pressure Test—High Pressure ^{ac}	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer ^b	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers ^{bc}	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes ^a	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes ^a	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

^a Pressure test evaluation periods shall be a minimum of five minutes. No visible leaks. The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

^b Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program.

^c For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

^d For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually.

^e Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

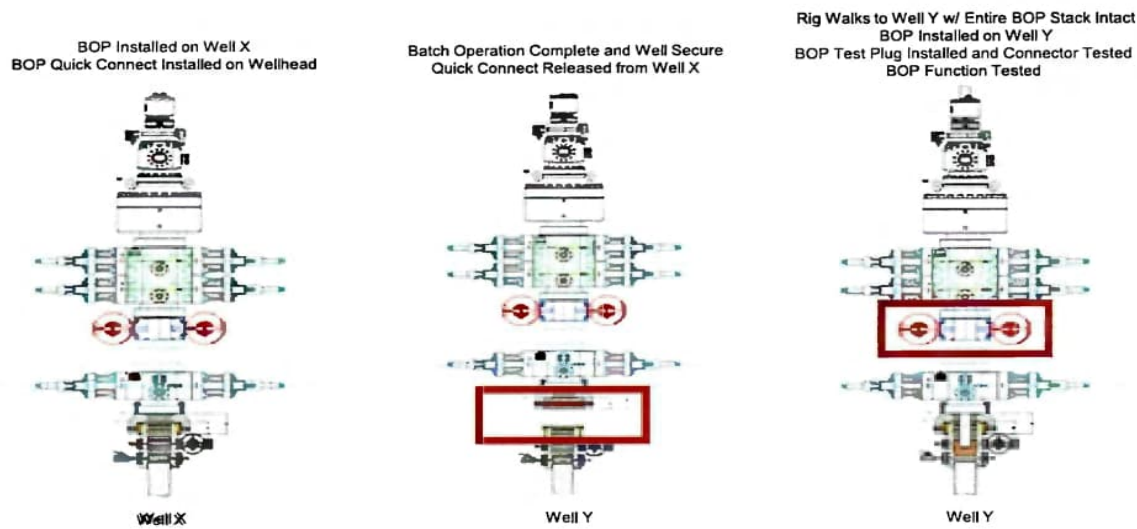
Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

Permian Resources feels break testing and our current procedures meet the intent of 43 CFR 3172 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. Permian Resources internal standards require complete BOPE tests more often than that of 43 CFR 3172 (every 21 days). In addition to function testing the annular, pipe rams and blind rams after each BOP nipple up, Permian Resources performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of 43 CFR 3172.

Procedures

- 1) Permian Resources will use this document for our break testing plan for New Mexico Delaware Basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
- 2) Permian Resources will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
 - a) A full BOP test will be conducted on the first well on the pad.
 - b) The first intermediate hole section drilled on the pad will be the deepest. All the remaining hole sections will be the same formation depth or shallower.
 - c) A full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
 - d) A full BOP test will be required prior to drilling any production hole.
- 3) After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
 - a) Between the HCV valve and choke line connection
 - b) Between the BOP quick connect and the wellhead
- 4) The BOP is then lifted and removed from the wellhead by a hydraulic system.
- 5) After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
- 6) The connections mentioned in 3a and 3b will then be reconnected.
- 7) Install test plug into the wellhead using test joint or drill pipe.
- 8) A shell test is performed against the upper pipe rams testing the two breaks.
- 9) The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
- 10) Function tests will be performed on the following components: lower pipe rams, blind rams, and annular.
- 11) For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
- 12) A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



Summary

A variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operations, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

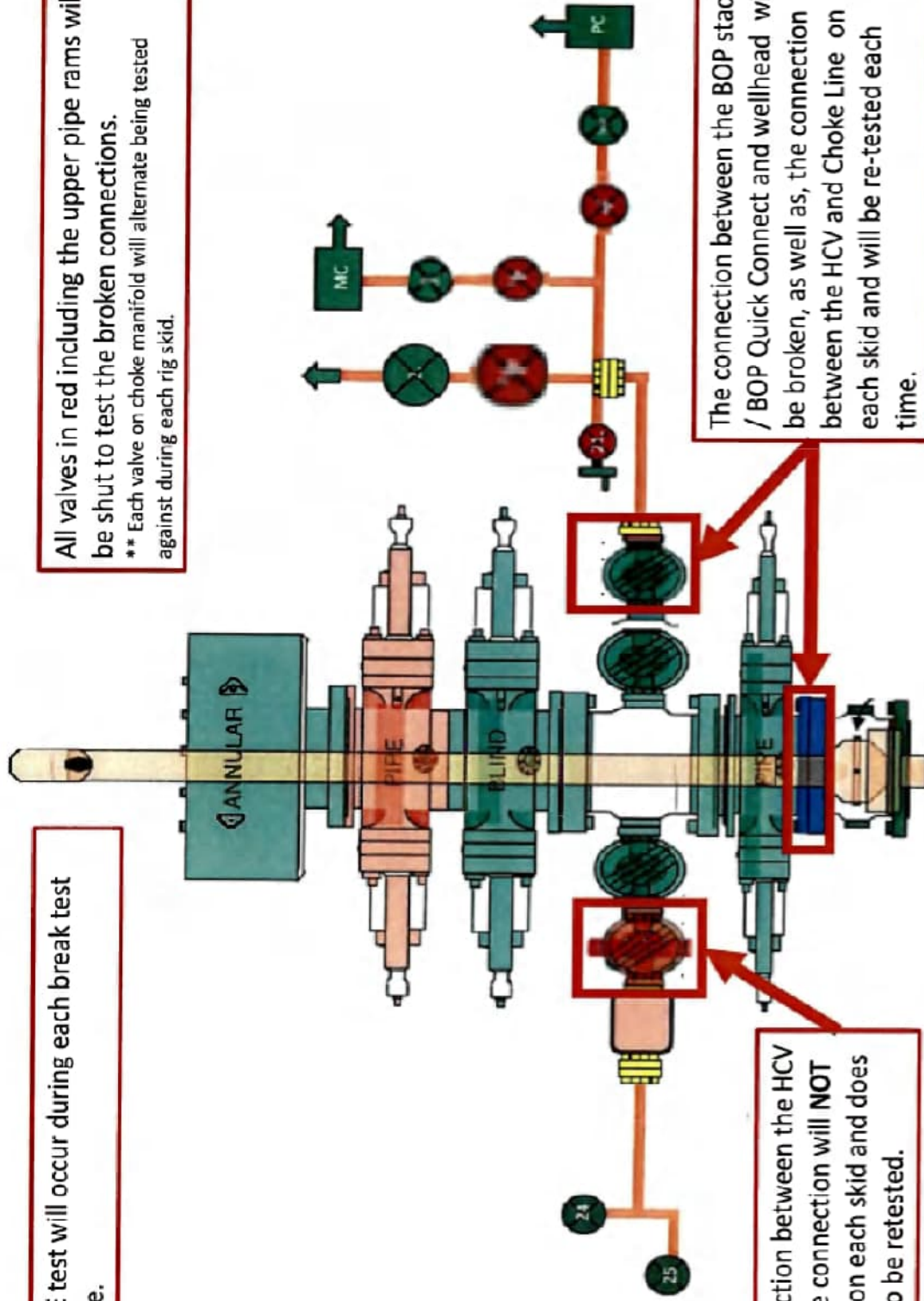
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

Based on public data and the supporting documentation submitted herein to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

- 1) After a full BOP test is conducted on the first well on the pad.
- 2) The first intermediate hole section drilled on the pad will be the deepest. All the remaining hole sections will be the same depth or shallower.
- 3) A full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
- 4) A full BOP test will be required prior to drilling the production hole.

Only **ONE** test will occur during each break test procedure.

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.



The connection between the HCV and kill line connection will **NOT** be broken on each skid and does not need to be retested.

The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.



ContiTech Fluid Technology

ContiTech Oil & Marine Corp. # 11535 Brittonmoore Park Dr., Houston, TX 77041-6916 USA		Packing list / Delivery note	
CONSIGNEE / Ship-to address: HELMERICH & PAYNE INT'L DRILLING CO ATTN: FLEX RIG WHSE - B-BAY 210 MAGNOLIA DRIVE GALENA PARK TX 77547		Document No. 71461553 Document Date 28.01.2022	Customer Number 11697 Customer VAT No. Supplier Number Purchase Order No. 740362040 Purchase Order Date 18.01.2022 Sales Order Number 1388153 Sales Order Date 18.01.2022
Buyer: HELMERICH & PAYNE INT'L DRILLING CO 1437 SOUTH BOULDER 74119 TULSA		Unloading Point RAN-No.	
Conditions Incoterms EXW Houston Ex Works		Page 1 of 2 Weights (Gross / Net) Total Gross Weight 2,507.000 LB Total Net Weight 2,507.000 LB	

Item	Material/Description	Quantity	Net Weight	Gross Weight
20	Buyer: Jack Peebles E-mail: Jackie.Peebles@hpinc.com Tel: 832-782-6000 Rig/Whse: HOW 00RECERTIFY Recert of HP Hoses Serial# 67094 Commodity Code: 3" X 35 FT 10K Choke & Kill Hoses API 16C End 1: 4 - 1/16" 10Kpsi API Spec 6A Type 6BX Flange End 2: 4 - 1/16" 10Kpsi API Spec 6A Type 6BX Flange c/w BX155 ring groove each end Standard: API Spec 16C - Monogrammed Working Pressure: 10,000psi Test Pressure: 15,000psi Inspection & Certification includes: External inspection of the hose & couplings Internal boroscopic inspection of hose liner Hydrostatic pressure test of hose assembly Repair of any external damage to hose body and end connections (limited to minor repairs). Clean & protect end connections Inspection Report Disposal of hose assembly if hose fails inspection and recertification process. Please Flush Hoses before sending them to our Facility.	1 PC	2,507.000 LB	2,507.000 LB

88000240
 (1106-01-0/01)
 2-9-22

ContiTech Rubber Industrial Kft.
 H-6728 Szeged Budapesti út 10.
 P. O. Box 152 Szeged H-6701
 Phone: (62)566-700, Fax: (62)566-713
 Tax Number: 11087209-2-06
 EU Community VAT: HU11087209
 Registration No.: Cg. 0609-002502
 Registry Court: Csongrád Megyei Cégbíróság

COMMERZBANK ZRT. (HUF)
 H-1054 Budapest, Széchenyi rakpart 8.
 H-1245 Budapest P.O. Box 1070
 Account No.: 14220108-26830003
 IBAN: HU83 1422 0108 2683 0003 0000 0000
 SWIFT: COBA HU HXXX

COMMERZBANK AG Hannover (EUR)
 30159 Hannover, Theaterstr. 11-12.
 Account No.: 3 066 156 00
 Sort Code: 250 400 66
 BIC: COBADEFF250
 IBAN: DE41250400660306615600

Record Rotary Hose sleeve number on the CBC Made Hose List!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!



Hydrostatic Test Certificate

ContiTech

Certificate Number H100122		COM Order Reference 1388153		Customer Name & Address	
Customer Purchase Order No: 740362040				HELMERICH & PAYNE DRILLING CO 1434 SOUTH BOULDER AVE TULSA, OK 74119 USA	
Project:					
Test Center Address		Accepted by COM Inspection		Accepted by Client Inspection	
ContiTech Oil & Marine Corp. 11535 Brittmoore Park Drive Houston, TX 77041 USA		Signed: Gerson Mejia-Lazo Date: 02/09/22			

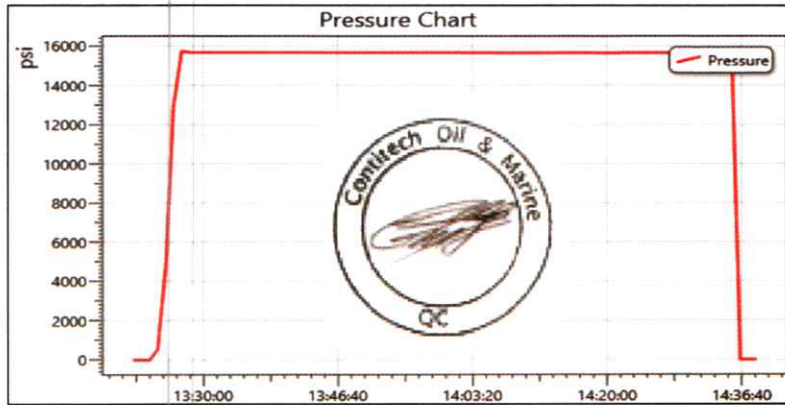
We certify that the goods detailed hereon have been inspected as described below by our Quality Management System, and to the best of our knowledge are found to conform the requirements of the above referenced purchase order as issued to ContiTech Oil & Marine Corporation.

Item	Part No.	Description	Qty	Serial Number	Work. Press. (psi)	Test Press. (psi)	Test Time (minutes)
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20	RECERTIFICATION	3" ID 10K Choke and Kill Hose x 35ft OAL	1	67094	10,000	15,000	60
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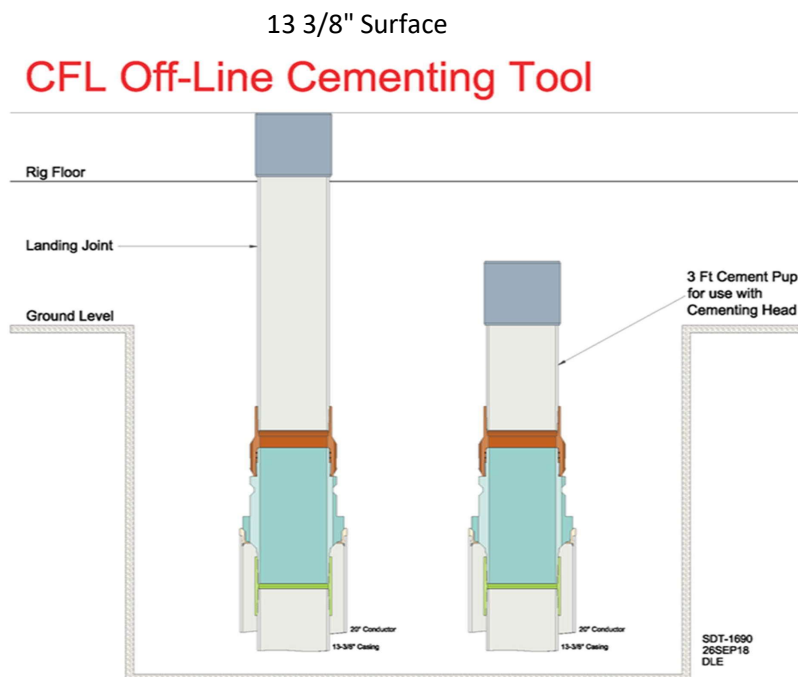
Record Information	
Start Time	1/27/2022 13:21:21
End Time	1/27/2022 14:38:28
Interval	00:01:00
Number	78
MaxValue	15849
MinValue	-3
AvgValue	14240
RecordName	67094-sh
RecordNumber	199

Gauge Information	
Model	ADT680
SN	21817380014
Range	(0-40000)psi
Unit	psi

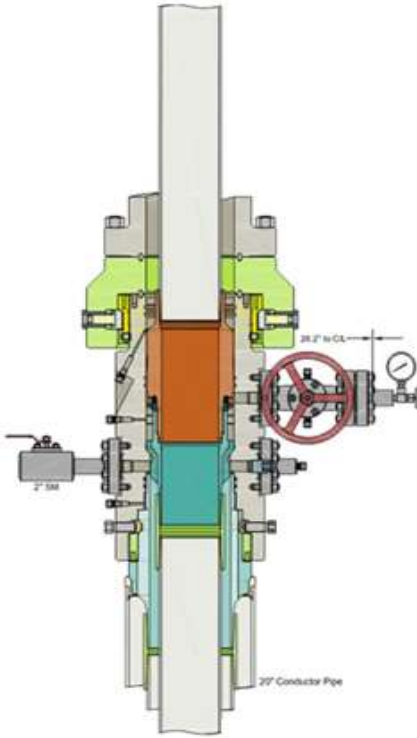


Permian Resources Offline Cementing Procedure Surface & Intermediate Casing

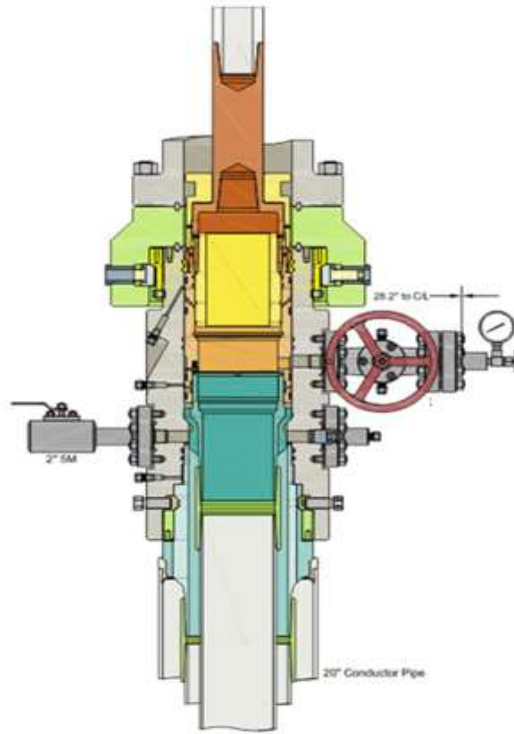
1. Drill hole to Total Depth with Rig and perform wellbore cleanup cycles.
2. Run and casing to Depth.
3. Land casing with mandrel.
4. Circulate 1.5 csg capacity.
5. Flow test – Confirm well is static and floats are holding.
6. Set Annular packoff and pressure test. Test to 5k.
7. Nipple down BOP and install cap flange.
8. Skid rig to next well on pad
9. Remove cap flange (confirm well is static before removal)
 - a) If well is not static use the casing outlet valves to kill well
 - b) Drillers method will be used in well control event
 - c) High pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
 - d) Kill mud will be circulated once influx is circulated out of hole
 - e) Confirm well is static and remove cap flange to start offline cement operations
10. Install offline cement tool.
11. Rig up cementers.
12. Circulate bottoms up with cement truck
13. Commence planned cement job, take returns through the annulus wellhead valve
14. After plug is bumped confirm floats hold and well is static
15. Rig down cementers and equipment
16. Install night cap with pressure gauge to monitor.



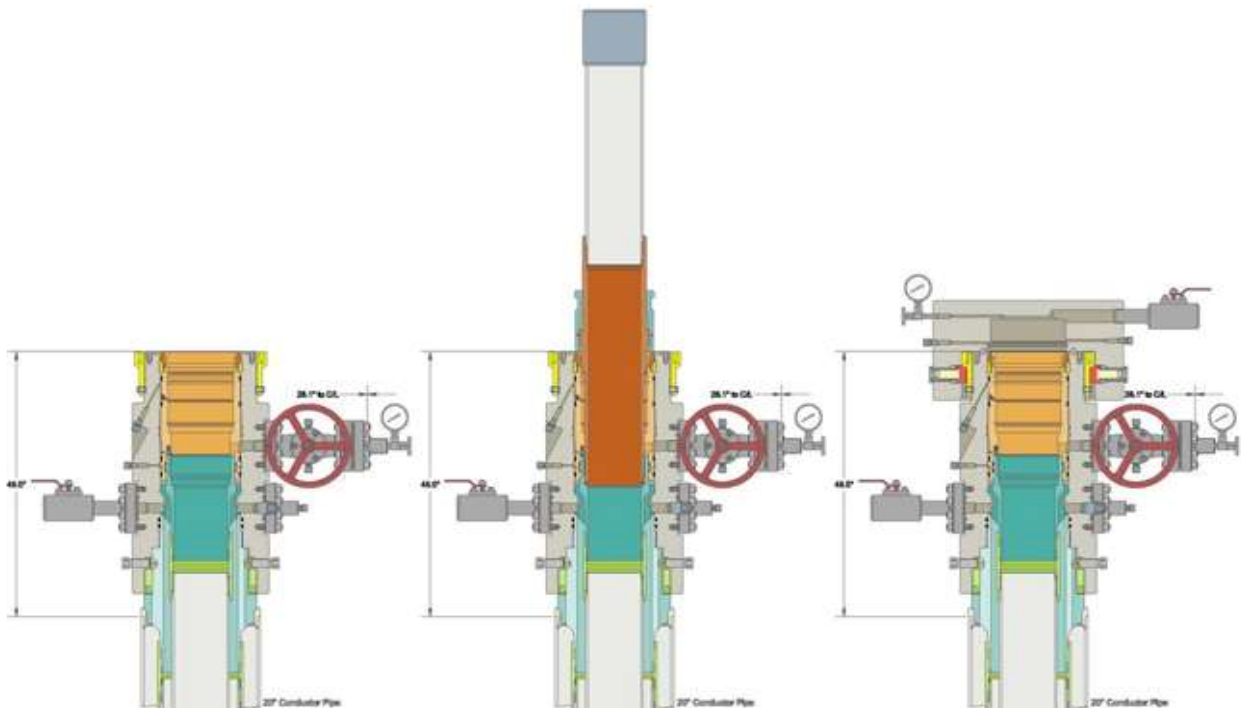
Intermediate



Run 7 5/8" Casing
Land Casing on 7 5/8" Mandrel Hanger
Cement 7 5/8" Casing
Retrieve Running Tool



Run 9 5/8" Packoff
Test Upper and Lower Seals
Engage Lockring
Retrieve Running Tool





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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 542514

CONDITIONS

Operator: Permian Resources Operating, LLC 300 N. Marienfeld St Ste 1000 Midland, TX 79701	OGRID: 372165
	Action Number: 542514
	Action Type: [C-103A] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Work was performed without OCD approval.	4/20/2026