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

Sundry Print Report

06/17/2024

Well Name: REDTAIL FEDERAL COM

Well Location: T23S / R32E / SEC 2 / LOT 2 / 32.34037 / -103.643372

County or Parish/State: LEA / NM

Well Number: 602H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM77062

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002552783

Operator: COG OPERATING LLC

Notice of Intent

Sundry ID: 2788749

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 05/07/2024

Time Sundry Submitted: 10:01

Date proposed operation will begin: 05/07/2024

Procedure Description: COG Operating LLC, respectfully requests approval for the following changes to the original approved APD. BHL Change: From: 50' FSL & 990' FEL Section 11. T23S. R32E. To: 50' FSL & 1460' FEL Section 14. T23S. R32E. C102 Attached. Formation: Red Tank; Bone Spring. Dedicated Acres Change: From: 639.23. To: 619.23. Formation: Diamondtail; Bone Spring. Dedicated Acres: 640. C102s Attached. Drilling Changes: Redtail Federal Com 602H BHL will change to 27,666ft MD. Directional Plan and AC Report attached. Break Test: COG Operating LLC, requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM. Bradenhead: COG Operating requests permission to do a Bradenhead Cement job for the associated well to this sundry. This previously approved procedure is detailed as attached. COG Operating also requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM.

NOI Attachments

Procedure Description

REDTAIL_FED_COM_602H_Updated_C102_Redtank_BS_20240507095859.pdf

COP_BOP_Break_Testing_Documentation_6_07_23_20240507095901.pdf

REDTAIL_FEDERAL_COM_602H_PWP2_WP_20240507095859.pdf

REDTAIL_FEDERAL_COM_602H_PWP2_PLAN_RPT_20240507095859.pdf

COP_Offline_Bradenhead_Intermediate_Documentation_3_11_23__Rev2_20240507095900.pdf

Well Name: REDTAIL FEDERAL COM | **Well Location:** T23S / R32E / SEC 2 / LOT 2 / 32.34037 / -103.643372 | **County or Parish/State:** LEA / NM

Well Number: 602H | **Type of Well:** OIL WELL | **Allottee or Tribe Name:**

Lease Number: NMNM77062 | **Unit or CA Name:** | **Unit or CA Number:**

US Well Number: 3002552783 | **Operator:** COG OPERATING LLC

REDTAIL_FEDERAL_COM_602H_PWP2_AC_RPT_20240507095859.pdf

REDTAIL_FED_COM_602H_Updated_C102_Diamondtail_BS_20240507095855.pdf

Conditions of Approval

Additional

REDTAIL_FEDERAL_COM_602H___COA_20240611135628.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: MAYTE REYES **Signed on:** MAY 07, 2024 09:23 AM

Name: COG OPERATING LLC

Title: Regulatory Analyst

Street Address: 925 N ELDRIDGE PARKWAY

City: HOUSTON **State:** TX

Phone: (281) 293-1000

Email address: MAYTE.X.REYES@CONOCOPHILLIPS.COM

Field

Representative Name: Gerald Herrera

Street Address: 2208 West Main Street

City: Artesia **State:** NM **Zip:** 88210

Phone: (575)748-6940

Email address: gerald.a.herrera@conocophillips.com

BLM Point of Contact

BLM POC Name: KEITH P IMMATTY **BLM POC Title:** ENGINEER

BLM POC Phone: 5759884722 **BLM POC Email Address:** KIMMATTY@BLM.GOV

Disposition: Approved **Disposition Date:** 06/11/2024

Signature: Keith Immatty

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM77062

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No. REDTAIL FEDERAL COM/602H

2. Name of Operator COG OPERATING LLC

9. API Well No. 3002552783

3a. Address 600 West Illinois Ave, Midland, TX 79701

3b. Phone No. *(include area code)* (432) 683-7443

10. Field and Pool or Exploratory Area RED TANK/BONE SPRING

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SEC 2/T23S/R32E/NMP

11. Country or Parish, State LEA/NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 perfonned 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 detennined that the site is ready for final inspection.)

COG Operating LLC, respectfully requests approval for the following changes to the original approved APD.

BHL Change:
From: 50' FSL & 990' FEL Section 11. T23S. R32E.
To: 50' FSL & 1460' FEL Section 14. T23S. R32E.
C102 Attached.

Formation: Red Tank; Bone Spring. Dedicated Acres Change: From: 639.23. To: 619.23.
Formation: Diamondtail; Bone Spring. Dedicated Acres: 640.
C102s Attached.

Drilling Changes:
Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* MAYTE REYES / Ph: (281) 293-1000

Title Regulatory Analyst

Signature (Electronic Submission)

Date 05/07/2024

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by KEITH P IMMATTY / Ph: (575) 988-4722 / Approved

Title ENGINEER

Date 06/11/2024

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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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

Redtail Federal Com 602H BHL will change to 27,666ft MD.

Directional Plan and AC Report attached.

Break Test:

COG Operating LLC, requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM.

Bradenhead:

COG Operating requests permission to do a Bradenhead Cement job for the associated well to this sundry. This previously approved procedure is detailed as attached. COG Operating also requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM.

Location of Well

0. SHL: LOT 2 / 220 FNL / 2005 FEL / TWSP: 23S / RANGE: 32E / SECTION: 2 / LAT: 32.34037 / LONG: -103.643372 (TVD: 0 feet, MD: 0 feet)

PPP: LOT 1 / 100 FNL / 990 FEL / TWSP: 23S / RANGE: 32E / SECTION: 2 / LAT: 32.340711 / LONG: -103.640084 (TVD: 12018 feet, MD: 12165 feet)

PPP: NENE / 1 FNL / 990 FEL / TWSP: 23S / RANGE: 32E / SECTION: 11 / LAT: 32.326508 / LONG: -103.640098 (TVD: 12140 feet, MD: 17400 feet)

BHL: SESE / 50 FSL / 990 FEL / TWSP: 23S / RANGE: 32E / SECTION: 11 / LAT: 32.312121 / LONG: -103.640112 (TVD: 12140 feet, MD: 22486 feet)

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-52783	17644	Diamondtail; Bone Spring

Property Code	Property Name	Well Number
329921	REDTAIL FEDERAL COM	602H
OGRID No.	**Operator Name**	**Elevation**
229137	COG OPERATING LLC	3735.8'

Surface Location

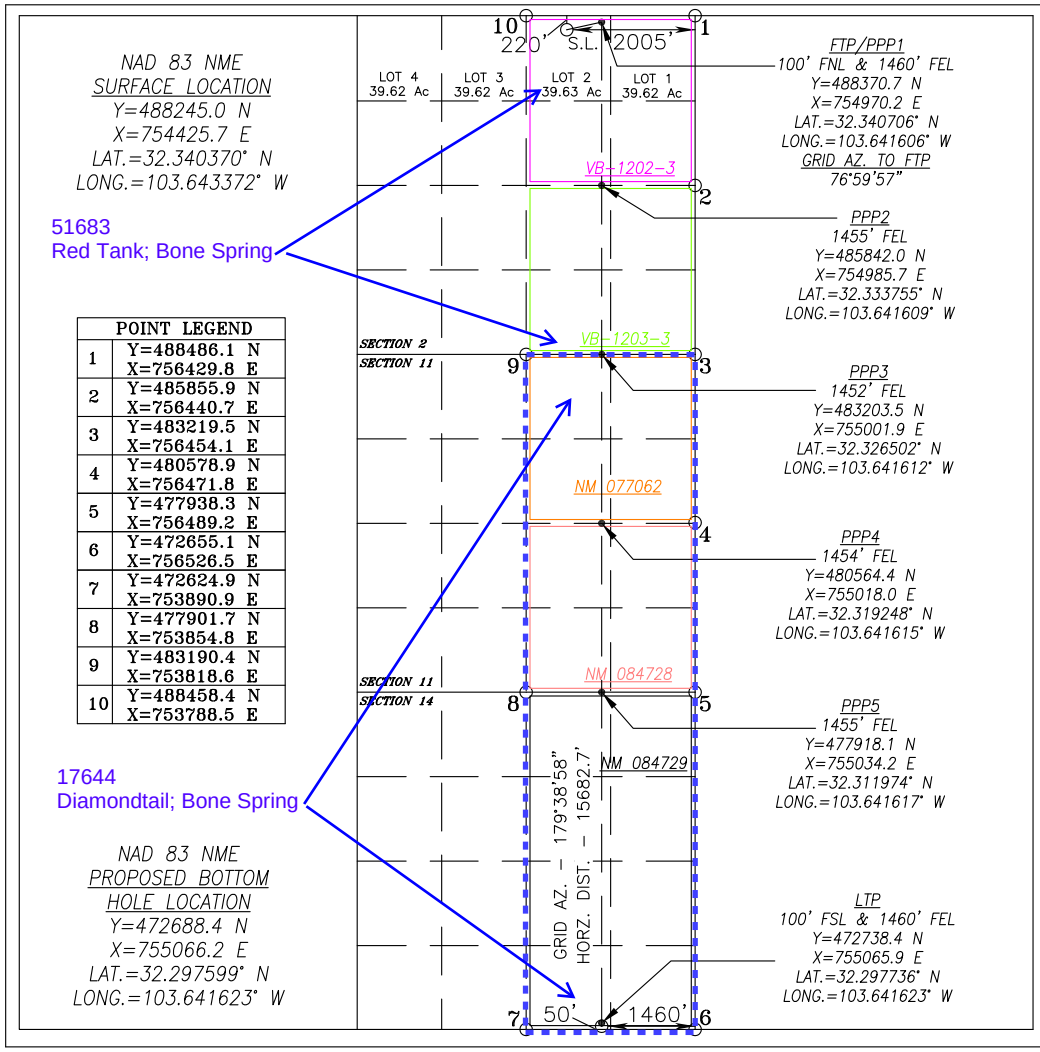
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	2	23-S	32-E		220	NORTH	2005	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	14	23-S	32-E		50	SOUTH	1460	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

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



OPERATOR CERTIFICATION

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

Mayte Reyes 2/8/2024
Signature Date

Mayte Reyes
Printed Name

mayte.x.reyes@cop.com
E-mail Address

SURVEYOR CERTIFICATION

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

APRIL 20, 2023
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 2/6/24
Certificate No. CHAD HARCROW 17777
W.O. #24-91 DRAWN BY: WN

DISTRICT I
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State of New Mexico
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1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-52783	51683	Red Tank; Bone Spring

Property Code	Property Name	Well Number
329921	REDTAIL FEDERAL COM	602H

OGRID No.	Operator Name	Elevation
229137	COG OPERATING LLC	3735.8'

Surface Location

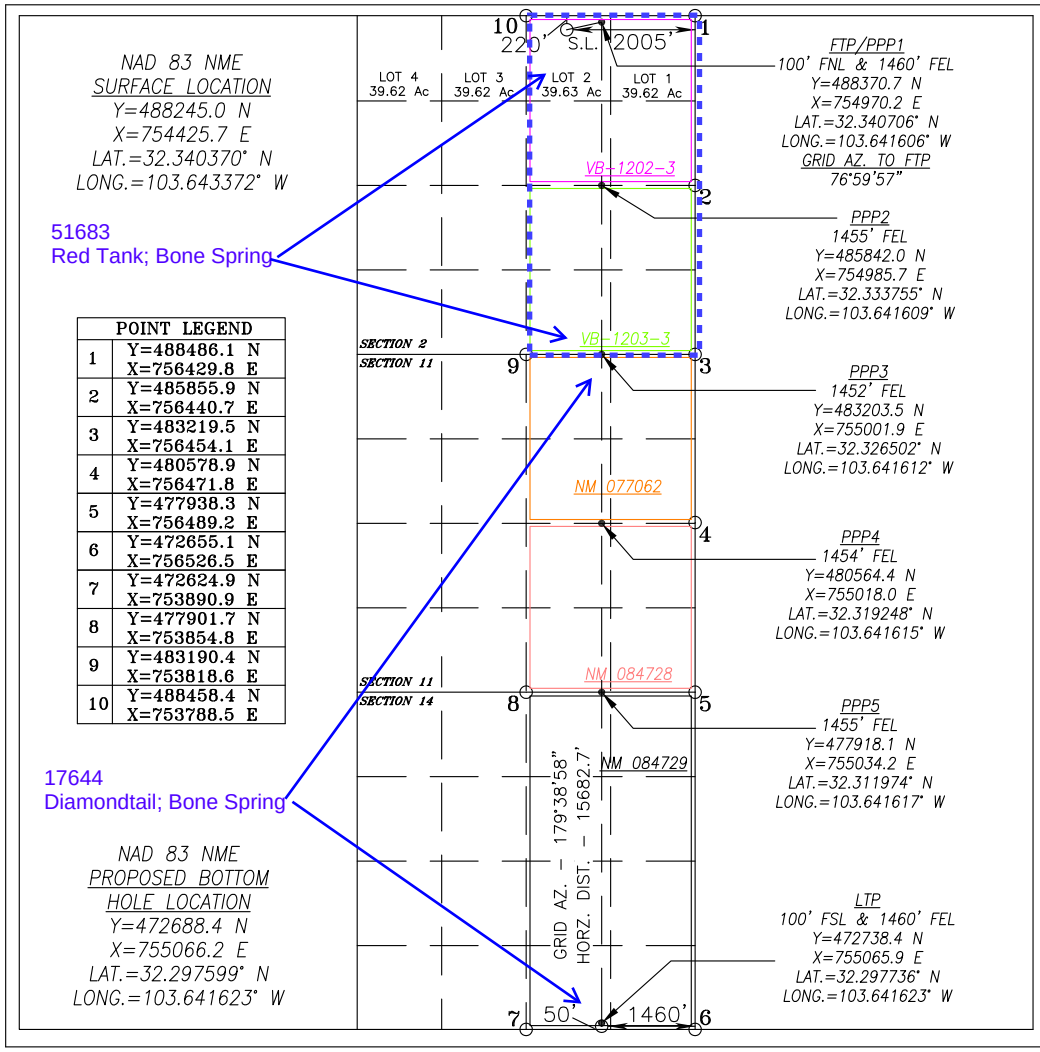
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	2	23-S	32-E		220	NORTH	2005	EAST	LEA

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	14	23-S	32-E		50	SOUTH	1460	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
319.23			

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



OPERATOR CERTIFICATION

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

Mayte Reyes 2/8/2024
Signature Date

Mayte Reyes
Printed Name

mayte.x.reyes@cop.com
E-mail Address

SURVEYOR CERTIFICATION

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

APRIL 20, 2023
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW NEW MEXICO 17777 LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 2/6/24

Certificate No. CHAD HARCROW 17777

W.O. #24-91 DRAWN BY: WN

BOPE Break Testing Variance

Initial and 21 Day Testing of 10K BOP's:

Component	High Test Pressure	Low Test Pressure	Duration
Annular Preventer	5,000 psig	250 psig	10 min
Rams	5,000 psig	250 psig	10 min
Manifold	5,000 psig	250 psig	10 min
Wellhead	1,500 psig	-	10 min
Upper / Lower / Kelly Valves	5,000 psig	250 psig	10 min
TIW safety valves / Dart	5,000 psig	250 psig	10 min
Standpipe and mud line to pumps	5,000 psig	250 psig	10 min
Surface Casing (with 8.4 ppg fluid)	1,500 psig	-	30 min

*Equipment satisfies 10M BOPE but break test variance applies to 5M system

COG Production LLC formally requests variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow break/shell testing of blowout preventor (BOP) and blowout prevention equipment (BOPE) during batch drilling operations of the intermediate hole section. This variance only applies to 5M BOPE or less formation.

Initial testing of the BOP will be conducted, verifying all components of BOP, BOPE, and choke manifold meet the minimum and maximum anticipated surface pressure (MASP) in accordance with API RP 53 and Onshore Order No. 2, reference table above. Once initial test pressures are achieved, shell testing of the BOP and choke manifold would be conducted within the time limit from initial test to the congruent 21-day test. A complete pressure test of the BOPE components will be completed no later than 21 days following the completion of the initial pressure test or latest complete BOP pressure test date succeeding the initial test, per API RP 53 (6.5.3.4.1 (d)).

BOP and BOPE Testing

- Minimum of Class 3 stack arrangement with one set of blind/blind shear rams and pipe rams shall be installed for a 5K pressure rated system per API RP 53 (6.1.2.9)
    - Classification - COP minimum of Class 3 arrangement apply for all Delaware Basin area wells.
    - Arrangement - Annular preventer, upper pipe rams, blind rams, mud cross, lower pipe rams
- Complete BOP and BOPE test performed at initial installation on well pad.
    - Initial test performed on well with deepest planned intermediate hole section (allowable 200' TVD variance between intermediate hole sections)
    - Annular preventer tested to 100 percent of MASP, or 70 percent of rated working pressure (RWP), whichever is greater.
    - Notify BLM 4 Hrs. prior to testing
- Complete BOP and BOPE test every 21 days in accordance with API RP 53 (6.5.3.4.1 (d)).
- BOP/BOPE shell test (inclusive of manifold shell test) performed during batch drilling operations during rig transition between wells (within the 21-day time limit per API RP 53).
- Function test BOP elements per API RP 53 (6.5.3.1).
    - Required on (1) initial installation of stack, (2) every 7 days, (3) after repair/replacement of any control components
    - Alternate between drillers panel and remote panel

Securing the Wellhead

- Prior to moving rig off check for flow
    - Ensure floats are holding, casing is full of kill mud and backside is static.
- Secure the well with sleeve/plug with BPV
- Disconnect BOP from the wellhead and walk with the rig to another well on the pad.
    - Utilizing BOP wrangler/cradle, maintaining control and upright position of the BOP during movement
- Once BOP is separated from wellhead the Temporary Abandonment (TA) cap will be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- Test TA cap to 5,000 psi for 10 min.

COG Production LLC believes that the combination of drilling fluid inside the casing, abandonment plug with BPV, casing and annular valves and the TA cap provide multiple barriers to ensure complete closure of the wellbore prior to skidding/walking the rig.

Break Testing

- Skid rig over the next well on pad and center over wellhead, N/U BOP with the use of the BOP quick connect.
- Shell test the BOP and choke manifold to 5,000 psig and 250 psig. Hold each test for 10 minutes.
    - In accordance with API RP 53 (6.5.3.4.1(b)) BOP shell test will satisfy pressure test of quick connect seals
    - Notify BLM 4 hours prior to testing
- RWP of BOP quick connect is 10K (Certificate of Conformance attached)

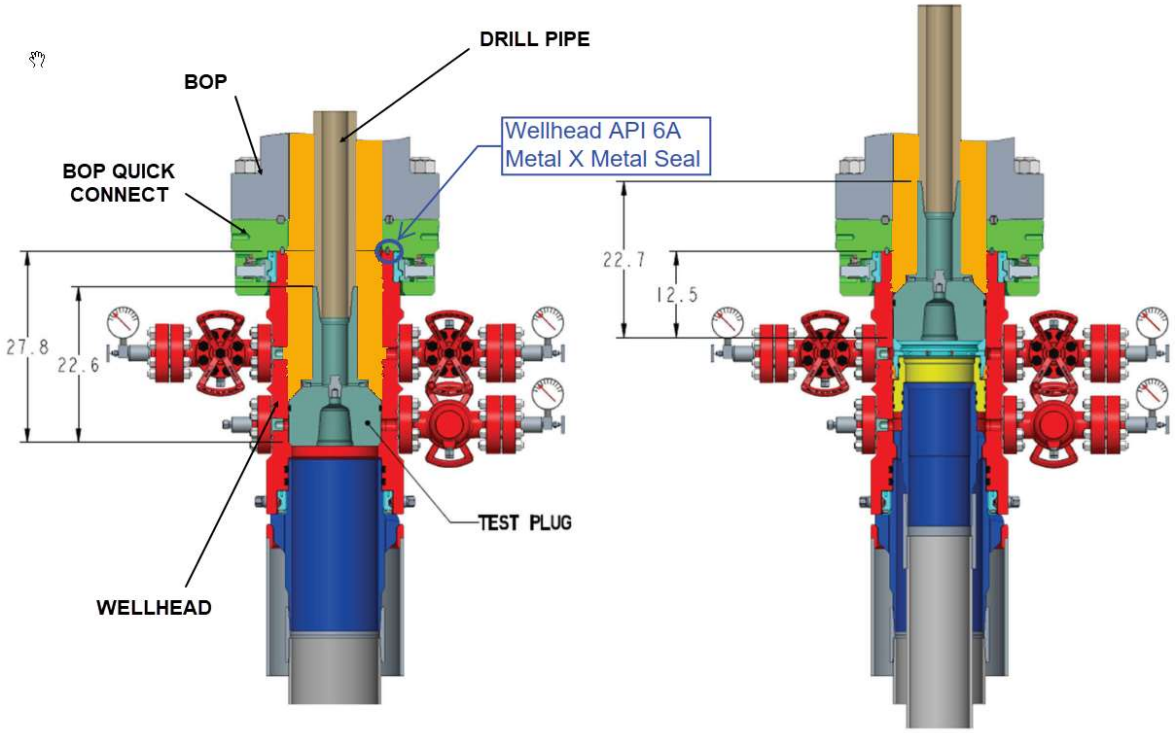


Figure 1: Test plug installed (The orange sections above indicate the areas exposed to the pressure test)

Example Well Control Plan Content

A. Well Control Component Table

This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the BOP nippled up to the wellhead.

Intermediate hole section, 5M requirement

Component	RWP
Pack-off	10M
Casing Wellhead Valves	10M
Annular Wellhead Valves	5M
TA Plug	10M
Float Valves	5M
2” 1502 Lo-Torque Valves	10M

B. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while circulating.

General Procedure

1. Sound alarm (alert crew).
2. Shut down pumps.
3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
4. Confirm shut in.
5. Notify tool pusher/company representative.
6. Read and record the following:
    a. SICP (Shut in Casing Pressure) and AP (Annular Pressure)
    b. Pit gain
    c. Time
    d. Regroup and identify forward plan to continue circulating out kick via rig choke and mud/gas separator. Circulate and adjust mud density as needed to control well.

Casing Program:

Depth	No. Sacks	Wt. ppg	Yld Ft3/sk	Slurry Description
11,945' 9-7/8"	465	15.6	1.196	1st Stage: Halliburton Halcem (TOC @ Brushy Canyon)
	1000	14.8	1.519	2nd Stage (Bradenhead squeeze): Halliburton Thixotropic Halcem + 5% Cal-Seal 60, .6% HR-800 + 10% Salt + 3% Microbond
	400	14.8	1.332	Top out Slurry: Halliburton Halcem (TOC @ surface)

COG Production LLC requests variance from minimum standards to pump a two stage cement job on the 7-5/8'' intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a 1000 sack bradenhead squeeze with planned cement from the Brushy Canyon to surface. After the bradenhead squeeze, 50 sacks of the 14.8 ppg top out slurry will be pumped followed by shutting down and waiting on cement (WOC) 2 hours. After 2 hours, if necessary, a top out consisting of 350 sacks of Halliburton's Halcem at 14.8 ppg (1.332 yld) will be executed as a contingency. When washing valves, 2 bbls of water will be utilized. If the valves still contain cement, washing will occur in 1 bbl increments up to a maximum of 5 bbls.

COG Production will run a cement bond log (CBL) after the cement job is performed to evaluate the quality of the cement job.

Wellhead & Offline Cementing:

COG Production LLC respectfully requests a variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow a testing schedule of the blow out preventer (BOP) and blow out prevention equipment (BOPE) along with Batch Drilling & Offline cement operations to include the following:

- Full BOPE test at first installation on the pad.
- Full BOPE test every 21 days per Onshore Order No. 2.
- Function test BOP elements per Onshore Order No. 2.
- After the well section is secured, the BOP will be disconnected from the wellhead and walked with the rig to another well on the pad.
- TA cap will also be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- See attached "Offline Cement Intermediate Operational Procedure"

COG Production LLC believes that the combination of drilling fluid inside the casing, the abandonment plug with BPV, casing and annular valves and the TA cap provide multiple barriers to ensure complete closure of the wellbore prior to skidding/walking the rig.

Bradenhead Cementing Procedure for Intermediate Casing

1. R/U cement head and test lines
2. Pump first stage conventionally down the 7-5/8" intermediate casing
    a. 15.6 ppg slurry with TOC @ the Brushy Canyon
3. Displace with drilling fluid and bump plug
4. Bump at 500 psi over FCP, hold 5 mins.
5. Bleed back to cement truck to check floats
6. Rig up on 10-3/4" x 7-5/8" annulus by lining up to pump down both valves.
7. Establish injection rate and displace annulus with FW
8. Pump bradenhead squeeze with 14.8 ppg thixotropic slurry
    a. Limit pressure to 1500 psi (10-3/4" surf csg test)
9. After pumping 14.8 ppg thixotropic slurry, pump 50 sacks of 14.8 ppg top out slurry to flush valves of thixotropic cement.
10. WOC 2 hours
11. Top out with 350 sacks of 14.8 ppg top out slurry. If more cement is necessary, note in report and notify BLM.
12. Displace cement with fresh water and clear valves. Start with 2 bbls of fresh water. If more water is necessary, 1 bbl increments will be used to a maximum of 5 bbls.
13. Shut down and monitor the shut-in pressure on the 10-3/4" x 7-5/8" annulus.

Summarized Operational Procedure for Intermediate Casing

1. Run casing as per normal operations.
    a. Float equipment is equipped with two back pressure valves rated to a minimum of 5,000 psi.
2. Land intermediate casing on mandrel hanger through BOP.
    a. If casing is unable to be landed with a mandrel hanger, then the **casing will be cemented online**.
    b. If time from landing mandrel hanger to skidding/walking rig off well exceeds 8 hours, BLM will be notified.
3. Break circulation and confirm no restrictions.
    a. Ensure no blockage of float equipment and appropriate annular returns.
    b. Perform flow check to confirm well is static.
4. Set pack-off
    a. If utilizing a fluted/ported mandrel hanger, ensure well is static on the annulus and inside the casing by ensuring pipe is full of drilling fluid, remove landing joint, and set annular packoff through BOP. Pressure test to 5,000 psi for 10 min.
    b. If utilizing a solid mandrel hanger, ensure well is static on the annulus and inside the casing by ensuring pipe is full of drilling fluid. Pressure test seals to 5,000 psi for 10 min. Remove landing joint through BOP.
5. After confirmation of both annular barriers and the two casing barriers, install TA plug/BPV and pressure test to 5,000 psi for 10 min. Notify the BLM with intent to proceed with nipple down and offline cementing.

a. Minimum 4 hrs notice.

6. With the well secured and BLM notified, nipple down BOP and secure on BOP handler.
   a. **Note, if any of the barriers fail to test, the BOP stack will not be nippled down until after the cement job has concluded and tail cement has reached 500 psi**
7. Skid/Walk rig off current well.
8. Confirm well is static before removing TA Plug.
   a. Cementing operations will not proceed until well is under control. (If well is not static, notify BLM and proceed to kill)
   b. Casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing, if needed.
   c. Well control plan can be seen in Section B, Well Control Procedures.
   d. If need be, rig can be moved back over well and BOP nippled back up for any further remediation.
9. Rig up return lines to take returns from wellhead to pits and rig choke.
   a. Test all connections and lines from wellhead to choke manifold to 5,000 psi high for 10 min.
   b. If either test fails, perform corrections and retest before proceeding.
   c. Return line schematics can be seen in Figure 2.
10. Remove TA Plug/BPV from the casing.
11. Install offline cement tool.
    a. Current offline cement tool schematics can be seen in Figure 1 (Streamflo)
12. Rig up cement head and cementing lines.
    a. Pressure test cement lines against cement head to 80% of casing burst for 10 min.
13. Break circulation on well to confirm no restrictions.
    a. If gas is present on circulation, well will be shut in and returns rerouted through gas buster.
    b. Max anticipated time before circulating with cement truck is 6 hrs.
14. Pump cement job as per plan.
    a. At plug bump, test casing to 0.22 psi/ft or 1500 psi, whichever is greater.
    b. If plug does not bump on calculated displacement, shut down and wait 8 hrs or 500 psi compressive strength, whichever is greater before testing casing.
15. Confirm well is static and floats are holding after cement job.
    a. With floats holding and backside static:
       i. Remove cement head.
    b. If floats are leaking:
       i. Shut-in well and WOC (Wait on Cement) until tail slurry reaches 500 psi compressive strength and the casing is static prior to removing cement head.
    c. If there is flow on the backside:
       i. Shut in well and WOC until tail slurry reaches 500 psi compressive strength. Ensure that the casing is static prior to removing cement head.
16. Remove offline cement tool.
17. Install night cap with pressure gauge for monitoring.
18. Test night cap to 5,000 psi for 10 min.

Example Well Control Plan Content

A. Well Control Component Table

The table below, which covers the cementing of the **5M MASP (Maximum Allowable Surface Pressure) portion of the well**, outlines the well control component rating in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the BOP nippled up to the wellhead.

Intermediate hole section, 5M requirement

Component	RWP
Pack-off	10M
Casing Wellhead Valves	10M
Annular Wellhead Valves	5M
TA Plug	10M
Float Valves	5M
2” 1502 Lo-Torque Valves	10M

B. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while circulating and cementing through the Offline Cement Adapter.

General Procedure While Circulating

1. Sound alarm (alert crew).
2. Shut down pumps.
3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
4. Confirm shut-in.
5. Notify tool pusher/company representative.
6. Read and record the following:
    a. SICP (Shut in Casing Pressure) and AP (Annular Pressure)
    b. Pit gain
    c. Time
    d. Regroup and identify forward plan to continue circulating out kick via rig choke and mud/gas separator. Circulate and adjust mud density as needed to control well.

General Procedure While Cementing

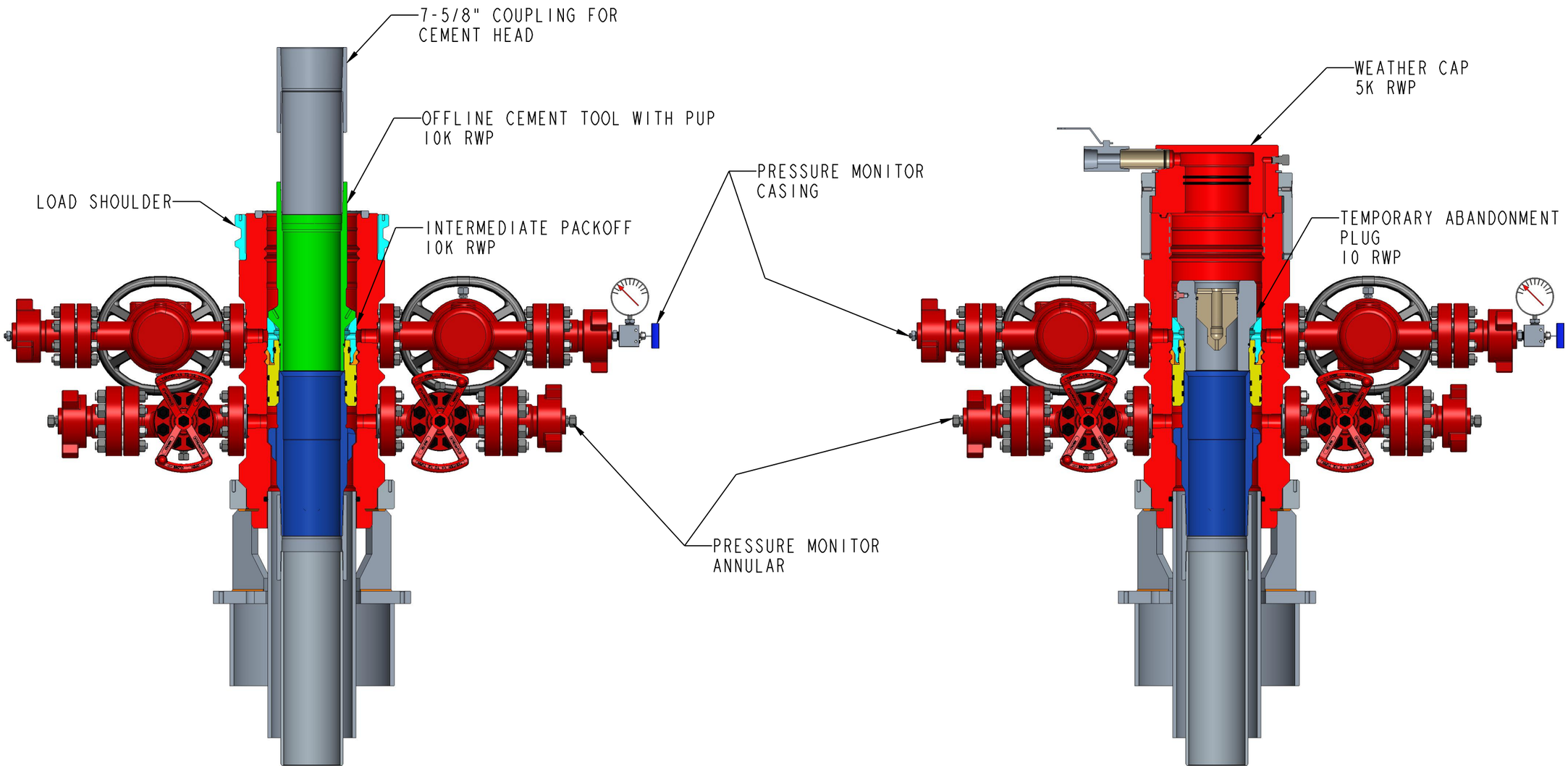
1. Sound alarm (alert crew).
2. Shut down pumps.
3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
4. Confirm shut-in.
5. Notify tool pusher/company representative.
6. Open rig choke and begin pumping again taking returns through choke manifold and mud/gas separator.

7. Continue to place cement until plug bumps.
8. At plug bump close rig choke and cement head.
9. Read and record the following
    a. SICP and AP
    b. Pit gain
    c. Time
    d. Shut-in annulus valves on wellhead

General Procedure After Cementing

1. Sound alarm (alert crew).
2. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
3. Confirm shut-in.
4. Notify tool pusher/company representative.
5. Read and record the following:
    a. SICP and AP
    b. Pit gain
    c. Time
    d. Shut-in annulus valves on wellhead

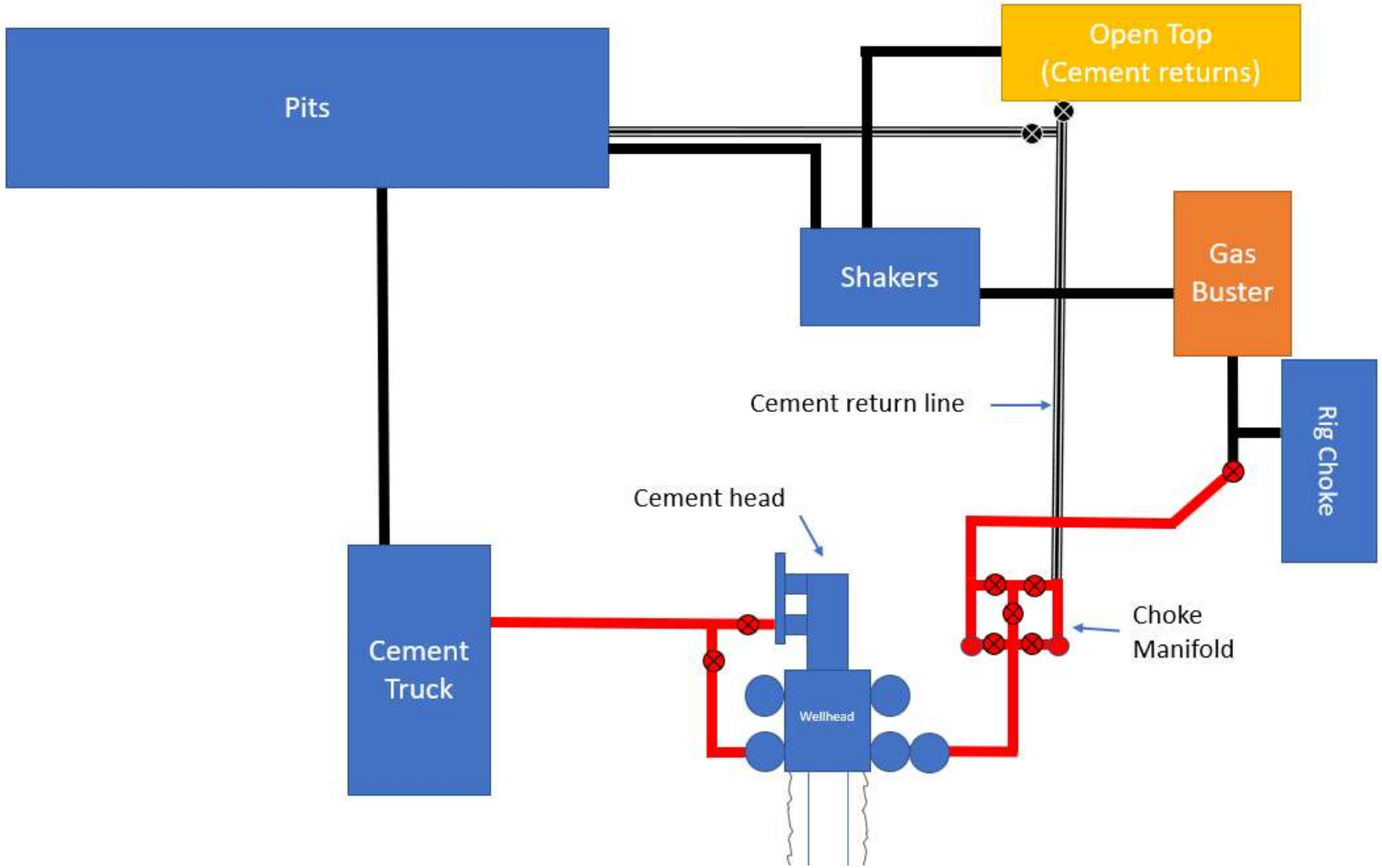
Figure 1: Offline Cement Tool Schematics



CONOCOPHILLIPS COMPANY 7-5/8" OFFLINE CEMENT AND ABANDAMENT PLUG LAYOUT DMLX WELLHEAD ASSEMBLY	DWN.	CWB	03-09-23	Stream Flo Worldwide Expertise - Global Strength	DRAWING No. WH-24621
	CHK.				
	APPR.				
		BY	DATE		

XX-XXXX XX-XXXX	Commonspace		WH-24621	WH-24621

Figure 2: Back Yard Rig Up



*All lines rated to 10M working pressure

**Cement head rated to 7.5M working pressure

DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST
REDTAIL FED COM PROJECT
REDTAIL FEDERAL COM 602H
300255278300
OWB

Plan: PWP2

Standard Planning Report

23 April, 2024

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well REDTAIL FEDERAL COM 602H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=27 @ 3762.8usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=27 @ 3762.8usft
Site:	REDTAIL FED COM PROJECT	**North Reference:**	Grid
Well:	REDTAIL FEDERAL COM 602H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Project LEA COUNTY SOUTHEAST

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site REDTAIL FED COM PROJECT

Site Position:		**Northing:**	483,131.39 usft	**Latitude:**	32° 19' 34.919 N
From:	Map	**Easting:**	712,636.84 usft	**Longitude:**	103° 38' 41.834 W
Position Uncertainty:	3.0 usft	**Slot Radius:**	13-3/16 "		

Well REDTAIL FEDERAL COM 602H

Well Position	**+N/-S**	0.0 usft	**Northing:**	488,185.00 usft	**Latitude:**	32° 20' 24.889 N
	+E/-W	0.0 usft	**Easting:**	713,242.80 usft	**Longitude:**	103° 38' 34.393 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,735.8 usft
Grid Convergence:		0.37 °				

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2023	6/1/2024	6.37	59.96	47,459.83134179

Design PWP2

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	177.64

Plan Survey Tool Program **Date** 4/23/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	1,500.0	PWP2 (OWB)	r.5 SDI_KPR_WL_NS-CT SDI Keeper Wireline Gyrocomp	
2	1,500.0	11,764.2	PWP2 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St	
3	11,764.2	27,666.6	PWP2 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St	

ConocoPhillips
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Wellbore:	OWB		
Design:	PWP2		

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,920.5	8.41	72.04	1,919.0	9.5	29.3	2.00	2.00	0.00	72.04	
5,198.8	8.41	72.04	5,162.1	157.3	485.4	0.00	0.00	0.00	0.00	
6,039.8	0.00	0.00	6,000.0	176.3	544.0	1.00	-1.00	0.00	180.00	
11,606.8	0.00	0.00	11,567.0	176.3	544.0	0.00	0.00	0.00	0.00	
12,506.8	90.00	179.65	12,140.0	-396.6	547.5	10.00	10.00	19.96	179.65	
27,666.6	90.00	179.65	12,140.0	-15,556.2	640.1	0.00	0.00	0.00	0.00	

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Wellbore:	OWB		
Design:	PWP2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
1,600.0	2.00	72.04	1,600.0	0.5	1.7	-0.5	2.00	2.00	0.00
1,700.0	4.00	72.04	1,699.8	2.2	6.6	-1.9	2.00	2.00	0.00
1,800.0	6.00	72.04	1,799.5	4.8	14.9	-4.2	2.00	2.00	0.00
1,900.0	8.00	72.04	1,898.7	8.6	26.5	-7.5	2.00	2.00	0.00
1,920.5	8.41	72.04	1,919.0	9.5	29.3	-8.3	2.00	2.00	0.00
Start 3278.3 hold at 1920.5 MD									
2,000.0	8.41	72.04	1,997.6	13.1	40.4	-11.4	0.00	0.00	0.00
2,100.0	8.41	72.04	2,096.6	17.6	54.3	-15.3	0.00	0.00	0.00
2,200.0	8.41	72.04	2,195.5	22.1	68.2	-19.3	0.00	0.00	0.00
2,300.0	8.41	72.04	2,294.4	26.6	82.1	-23.2	0.00	0.00	0.00
2,400.0	8.41	72.04	2,393.3	31.1	96.0	-27.1	0.00	0.00	0.00
2,500.0	8.41	72.04	2,492.3	35.6	109.9	-31.1	0.00	0.00	0.00
2,600.0	8.41	72.04	2,591.2	40.1	123.8	-35.0	0.00	0.00	0.00
2,700.0	8.41	72.04	2,690.1	44.6	137.8	-38.9	0.00	0.00	0.00
2,800.0	8.41	72.04	2,789.0	49.2	151.7	-42.9	0.00	0.00	0.00
2,900.0	8.41	72.04	2,888.0	53.7	165.6	-46.8	0.00	0.00	0.00
3,000.0	8.41	72.04	2,986.9	58.2	179.5	-50.7	0.00	0.00	0.00
3,100.0	8.41	72.04	3,085.8	62.7	193.4	-54.7	0.00	0.00	0.00
3,200.0	8.41	72.04	3,184.7	67.2	207.3	-58.6	0.00	0.00	0.00
3,300.0	8.41	72.04	3,283.7	71.7	221.2	-62.5	0.00	0.00	0.00
3,400.0	8.41	72.04	3,382.6	76.2	235.1	-66.5	0.00	0.00	0.00
3,500.0	8.41	72.04	3,481.5	80.7	249.1	-70.4	0.00	0.00	0.00
3,600.0	8.41	72.04	3,580.4	85.2	263.0	-74.3	0.00	0.00	0.00
3,700.0	8.41	72.04	3,679.4	89.7	276.9	-78.3	0.00	0.00	0.00
3,800.0	8.41	72.04	3,778.3	94.2	290.8	-82.2	0.00	0.00	0.00
3,900.0	8.41	72.04	3,877.2	98.7	304.7	-86.1	0.00	0.00	0.00
4,000.0	8.41	72.04	3,976.1	103.3	318.6	-90.1	0.00	0.00	0.00
4,100.0	8.41	72.04	4,075.1	107.8	332.5	-94.0	0.00	0.00	0.00
4,200.0	8.41	72.04	4,174.0	112.3	346.4	-97.9	0.00	0.00	0.00
4,300.0	8.41	72.04	4,272.9	116.8	360.3	-101.9	0.00	0.00	0.00
4,400.0	8.41	72.04	4,371.8	121.3	374.3	-105.8	0.00	0.00	0.00
4,500.0	8.41	72.04	4,470.8	125.8	388.2	-109.7	0.00	0.00	0.00
4,600.0	8.41	72.04	4,569.7	130.3	402.1	-113.7	0.00	0.00	0.00
4,700.0	8.41	72.04	4,668.6	134.8	416.0	-117.6	0.00	0.00	0.00
4,800.0	8.41	72.04	4,767.5	139.3	429.9	-121.5	0.00	0.00	0.00
4,900.0	8.41	72.04	4,866.5	143.8	443.8	-125.5	0.00	0.00	0.00
5,000.0	8.41	72.04	4,965.4	148.3	457.7	-129.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

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Wellbore:	OWB		
Design:	PWP2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	8.41	72.04	5,064.3	152.9	471.6	-133.3	0.00	0.00	0.00
5,198.8	8.41	72.04	5,162.1	157.3	485.4	-137.2	0.00	0.00	0.00
Start Drop -1.00									
5,200.0	8.40	72.04	5,163.2	157.4	485.6	-137.3	1.00	-1.00	0.00
5,300.0	7.40	72.04	5,262.3	161.6	498.6	-141.0	1.00	-1.00	0.00
5,400.0	6.40	72.04	5,361.6	165.3	510.1	-144.2	1.00	-1.00	0.00
5,500.0	5.40	72.04	5,461.0	168.5	519.8	-147.0	1.00	-1.00	0.00
5,600.0	4.40	72.04	5,560.7	171.1	528.0	-149.2	1.00	-1.00	0.00
5,700.0	3.40	72.04	5,660.4	173.2	534.4	-151.1	1.00	-1.00	0.00
5,800.0	2.40	72.04	5,760.3	174.8	539.2	-152.4	1.00	-1.00	0.00
5,900.0	1.40	72.04	5,860.2	175.8	542.4	-153.3	1.00	-1.00	0.00
6,000.0	0.40	72.04	5,960.2	176.3	543.9	-153.7	1.00	-1.00	0.00
6,039.8	0.00	0.00	6,000.0	176.3	544.0	-153.8	1.00	-1.00	0.00
Start 5567.0 hold at 6039.8 MD - REDTAIL 602 TGT BOX 80X50									
6,100.0	0.00	0.00	6,060.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,200.0	0.00	0.00	6,160.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,300.0	0.00	0.00	6,260.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,400.0	0.00	0.00	6,360.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,500.0	0.00	0.00	6,460.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,600.0	0.00	0.00	6,560.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,700.0	0.00	0.00	6,660.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,800.0	0.00	0.00	6,760.2	176.3	544.0	-153.8	0.00	0.00	0.00
6,900.0	0.00	0.00	6,860.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,000.0	0.00	0.00	6,960.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,100.0	0.00	0.00	7,060.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,200.0	0.00	0.00	7,160.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,300.0	0.00	0.00	7,260.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,400.0	0.00	0.00	7,360.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,500.0	0.00	0.00	7,460.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,600.0	0.00	0.00	7,560.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,700.0	0.00	0.00	7,660.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,760.2	176.3	544.0	-153.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,860.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,960.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,100.0	0.00	0.00	8,060.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,200.0	0.00	0.00	8,160.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,300.0	0.00	0.00	8,260.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,360.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,460.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,600.0	0.00	0.00	8,560.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,700.0	0.00	0.00	8,660.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,800.0	0.00	0.00	8,760.2	176.3	544.0	-153.8	0.00	0.00	0.00
8,900.0	0.00	0.00	8,860.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,000.0	0.00	0.00	8,960.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,100.0	0.00	0.00	9,060.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,200.0	0.00	0.00	9,160.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,300.0	0.00	0.00	9,260.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,400.0	0.00	0.00	9,360.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,500.0	0.00	0.00	9,460.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,600.0	0.00	0.00	9,560.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,700.0	0.00	0.00	9,660.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,800.0	0.00	0.00	9,760.2	176.3	544.0	-153.8	0.00	0.00	0.00
9,900.0	0.00	0.00	9,860.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,000.0	0.00	0.00	9,960.2	176.3	544.0	-153.8	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well REDTAIL FEDERAL COM 602H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=27 @ 3762.8usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=27 @ 3762.8usft
Site:	REDTAIL FED COM PROJECT	**North Reference:**	Grid
Well:	REDTAIL FEDERAL COM 602H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,100.0	0.00	0.00	10,060.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,200.0	0.00	0.00	10,160.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,300.0	0.00	0.00	10,260.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,400.0	0.00	0.00	10,360.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,500.0	0.00	0.00	10,460.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,600.0	0.00	0.00	10,560.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,700.0	0.00	0.00	10,660.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,800.0	0.00	0.00	10,760.2	176.3	544.0	-153.8	0.00	0.00	0.00
10,900.0	0.00	0.00	10,860.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,000.0	0.00	0.00	10,960.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,100.0	0.00	0.00	11,060.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,200.0	0.00	0.00	11,160.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,300.0	0.00	0.00	11,260.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,400.0	0.00	0.00	11,360.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,500.0	0.00	0.00	11,460.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,600.0	0.00	0.00	11,560.2	176.3	544.0	-153.8	0.00	0.00	0.00
11,606.8	0.00	0.00	11,567.0	176.3	544.0	-153.8	0.00	0.00	0.00
Start DLS 10.00 TFO 179.65									
11,700.0	9.32	179.65	11,659.8	168.7	544.0	-146.2	10.00	10.00	0.00
11,800.0	19.32	179.65	11,756.6	144.0	544.2	-121.5	10.00	10.00	0.00
11,900.0	29.32	179.65	11,847.6	102.9	544.4	-80.4	10.00	10.00	0.00
12,000.0	39.32	179.65	11,930.1	46.6	544.8	-24.1	10.00	10.00	0.00
12,095.0	48.82	179.65	11,998.2	-19.4	545.2	41.8	10.00	10.00	0.00
FTP (REDTAIL FED COM 602H)									
12,100.0	49.32	179.65	12,001.5	-23.2	545.2	45.6	10.00	10.00	0.00
12,200.0	59.32	179.65	12,059.8	-104.3	545.7	126.7	10.00	10.00	0.00
12,300.0	69.32	179.65	12,103.1	-194.3	546.3	216.6	10.00	10.00	0.00
12,400.0	79.32	179.65	12,130.0	-290.5	546.9	312.7	10.00	10.00	0.00
12,500.0	89.32	179.65	12,139.9	-389.9	547.5	412.1	10.00	10.00	0.00
12,506.8	90.00	179.65	12,140.0	-396.6	547.5	418.8	10.00	10.00	0.00
Start 15159.8 hold at 12506.8 MD									
12,600.0	90.00	179.65	12,140.0	-489.9	548.1	512.0	0.00	0.00	0.00
12,700.0	90.00	179.65	12,140.0	-589.9	548.7	611.9	0.00	0.00	0.00
12,800.0	90.00	179.65	12,140.0	-689.9	549.3	711.9	0.00	0.00	0.00
12,900.0	90.00	179.65	12,140.0	-789.9	549.9	811.8	0.00	0.00	0.00
13,000.0	90.00	179.65	12,140.0	-889.9	550.5	911.7	0.00	0.00	0.00
13,100.0	90.00	179.65	12,140.0	-989.9	551.1	1,011.7	0.00	0.00	0.00
13,200.0	90.00	179.65	12,140.0	-1,089.9	551.7	1,111.6	0.00	0.00	0.00
13,300.0	90.00	179.65	12,140.0	-1,189.9	552.3	1,211.6	0.00	0.00	0.00
13,400.0	90.00	179.65	12,140.0	-1,289.9	553.0	1,311.5	0.00	0.00	0.00
13,500.0	90.00	179.65	12,140.0	-1,389.9	553.6	1,411.4	0.00	0.00	0.00
13,600.0	90.00	179.65	12,140.0	-1,489.9	554.2	1,511.4	0.00	0.00	0.00
13,700.0	90.00	179.65	12,140.0	-1,589.9	554.8	1,611.3	0.00	0.00	0.00
13,800.0	90.00	179.65	12,140.0	-1,689.9	555.4	1,711.3	0.00	0.00	0.00
13,900.0	90.00	179.65	12,140.0	-1,789.8	556.0	1,811.2	0.00	0.00	0.00
14,000.0	90.00	179.65	12,140.0	-1,889.8	556.6	1,911.1	0.00	0.00	0.00
14,100.0	90.00	179.65	12,140.0	-1,989.8	557.2	2,011.1	0.00	0.00	0.00
14,200.0	90.00	179.65	12,140.0	-2,089.8	557.8	2,111.0	0.00	0.00	0.00
14,300.0	90.00	179.65	12,140.0	-2,189.8	558.5	2,210.9	0.00	0.00	0.00
14,400.0	90.00	179.65	12,140.0	-2,289.8	559.1	2,310.9	0.00	0.00	0.00
14,500.0	90.00	179.65	12,140.0	-2,389.8	559.7	2,410.8	0.00	0.00	0.00
14,600.0	90.00	179.65	12,140.0	-2,489.8	560.3	2,510.8	0.00	0.00	0.00
14,700.0	90.00	179.65	12,140.0	-2,589.8	560.9	2,610.7	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well REDTAIL FEDERAL COM 602H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=27 @ 3762.8usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=27 @ 3762.8usft
Site:	REDTAIL FED COM PROJECT	**North Reference:**	Grid
Well:	REDTAIL FEDERAL COM 602H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,800.0	90.00	179.65	12,140.0	-2,689.8	561.5	2,710.6	0.00	0.00	0.00
14,900.0	90.00	179.65	12,140.0	-2,789.8	562.1	2,810.6	0.00	0.00	0.00
15,000.0	90.00	179.65	12,140.0	-2,889.8	562.7	2,910.5	0.00	0.00	0.00
15,100.0	90.00	179.65	12,140.0	-2,989.8	563.3	3,010.5	0.00	0.00	0.00
15,200.0	90.00	179.65	12,140.0	-3,089.8	564.0	3,110.4	0.00	0.00	0.00
15,300.0	90.00	179.65	12,140.0	-3,189.8	564.6	3,210.3	0.00	0.00	0.00
15,400.0	90.00	179.65	12,140.0	-3,289.8	565.2	3,310.3	0.00	0.00	0.00
15,500.0	90.00	179.65	12,140.0	-3,389.8	565.8	3,410.2	0.00	0.00	0.00
15,600.0	90.00	179.65	12,140.0	-3,489.8	566.4	3,510.2	0.00	0.00	0.00
15,700.0	90.00	179.65	12,140.0	-3,589.8	567.0	3,610.1	0.00	0.00	0.00
15,800.0	90.00	179.65	12,140.0	-3,689.8	567.6	3,710.0	0.00	0.00	0.00
15,900.0	90.00	179.65	12,140.0	-3,789.8	568.2	3,810.0	0.00	0.00	0.00
16,000.0	90.00	179.65	12,140.0	-3,889.8	568.8	3,909.9	0.00	0.00	0.00
16,100.0	90.00	179.65	12,140.0	-3,989.8	569.4	4,009.8	0.00	0.00	0.00
16,200.0	90.00	179.65	12,140.0	-4,089.8	570.1	4,109.8	0.00	0.00	0.00
16,300.0	90.00	179.65	12,140.0	-4,189.8	570.7	4,209.7	0.00	0.00	0.00
16,400.0	90.00	179.65	12,140.0	-4,289.8	571.3	4,309.7	0.00	0.00	0.00
16,500.0	90.00	179.65	12,140.0	-4,389.8	571.9	4,409.6	0.00	0.00	0.00
16,600.0	90.00	179.65	12,140.0	-4,489.8	572.5	4,509.5	0.00	0.00	0.00
16,700.0	90.00	179.65	12,140.0	-4,589.8	573.1	4,609.5	0.00	0.00	0.00
16,800.0	90.00	179.65	12,140.0	-4,689.8	573.7	4,709.4	0.00	0.00	0.00
16,900.0	90.00	179.65	12,140.0	-4,789.8	574.3	4,809.4	0.00	0.00	0.00
17,000.0	90.00	179.65	12,140.0	-4,889.8	574.9	4,909.3	0.00	0.00	0.00
17,100.0	90.00	179.65	12,140.0	-4,989.8	575.6	5,009.2	0.00	0.00	0.00
17,200.0	90.00	179.65	12,140.0	-5,089.8	576.2	5,109.2	0.00	0.00	0.00
17,300.0	90.00	179.65	12,140.0	-5,189.8	576.8	5,209.1	0.00	0.00	0.00
17,400.0	90.00	179.65	12,140.0	-5,289.8	577.4	5,309.0	0.00	0.00	0.00
17,500.0	90.00	179.65	12,140.0	-5,389.8	578.0	5,409.0	0.00	0.00	0.00
17,600.0	90.00	179.65	12,140.0	-5,489.8	578.6	5,508.9	0.00	0.00	0.00
17,700.0	90.00	179.65	12,140.0	-5,589.8	579.2	5,608.9	0.00	0.00	0.00
17,800.0	90.00	179.65	12,140.0	-5,689.8	579.8	5,708.8	0.00	0.00	0.00
17,900.0	90.00	179.65	12,140.0	-5,789.8	580.4	5,808.7	0.00	0.00	0.00
18,000.0	90.00	179.65	12,140.0	-5,889.8	581.1	5,908.7	0.00	0.00	0.00
18,100.0	90.00	179.65	12,140.0	-5,989.8	581.7	6,008.6	0.00	0.00	0.00
18,200.0	90.00	179.65	12,140.0	-6,089.8	582.3	6,108.6	0.00	0.00	0.00
18,300.0	90.00	179.65	12,140.0	-6,189.8	582.9	6,208.5	0.00	0.00	0.00
18,400.0	90.00	179.65	12,140.0	-6,289.8	583.5	6,308.4	0.00	0.00	0.00
18,500.0	90.00	179.65	12,140.0	-6,389.8	584.1	6,408.4	0.00	0.00	0.00
18,600.0	90.00	179.65	12,140.0	-6,489.8	584.7	6,508.3	0.00	0.00	0.00
18,700.0	90.00	179.65	12,140.0	-6,589.8	585.3	6,608.3	0.00	0.00	0.00
18,800.0	90.00	179.65	12,140.0	-6,689.8	585.9	6,708.2	0.00	0.00	0.00
18,900.0	90.00	179.65	12,140.0	-6,789.8	586.6	6,808.1	0.00	0.00	0.00
19,000.0	90.00	179.65	12,140.0	-6,889.8	587.2	6,908.1	0.00	0.00	0.00
19,100.0	90.00	179.65	12,140.0	-6,989.8	587.8	7,008.0	0.00	0.00	0.00
19,200.0	90.00	179.65	12,140.0	-7,089.7	588.4	7,107.9	0.00	0.00	0.00
19,300.0	90.00	179.65	12,140.0	-7,189.7	589.0	7,207.9	0.00	0.00	0.00
19,400.0	90.00	179.65	12,140.0	-7,289.7	589.6	7,307.8	0.00	0.00	0.00
19,500.0	90.00	179.65	12,140.0	-7,389.7	590.2	7,407.8	0.00	0.00	0.00
19,600.0	90.00	179.65	12,140.0	-7,489.7	590.8	7,507.7	0.00	0.00	0.00
19,700.0	90.00	179.65	12,140.0	-7,589.7	591.4	7,607.6	0.00	0.00	0.00
19,800.0	90.00	179.65	12,140.0	-7,689.7	592.0	7,707.6	0.00	0.00	0.00
19,900.0	90.00	179.65	12,140.0	-7,789.7	592.7	7,807.5	0.00	0.00	0.00
20,000.0	90.00	179.65	12,140.0	-7,889.7	593.3	7,907.5	0.00	0.00	0.00
20,100.0	90.00	179.65	12,140.0	-7,989.7	593.9	8,007.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well REDTAIL FEDERAL COM 602H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=27 @ 3762.8usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=27 @ 3762.8usft
Site:	REDTAIL FED COM PROJECT	**North Reference:**	Grid
Well:	REDTAIL FEDERAL COM 602H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,200.0	90.00	179.65	12,140.0	-8,089.7	594.5	8,107.3	0.00	0.00	0.00
20,300.0	90.00	179.65	12,140.0	-8,189.7	595.1	8,207.3	0.00	0.00	0.00
20,400.0	90.00	179.65	12,140.0	-8,289.7	595.7	8,307.2	0.00	0.00	0.00
20,500.0	90.00	179.65	12,140.0	-8,389.7	596.3	8,407.1	0.00	0.00	0.00
20,600.0	90.00	179.65	12,140.0	-8,489.7	596.9	8,507.1	0.00	0.00	0.00
20,700.0	90.00	179.65	12,140.0	-8,589.7	597.5	8,607.0	0.00	0.00	0.00
20,800.0	90.00	179.65	12,140.0	-8,689.7	598.2	8,707.0	0.00	0.00	0.00
20,900.0	90.00	179.65	12,140.0	-8,789.7	598.8	8,806.9	0.00	0.00	0.00
21,000.0	90.00	179.65	12,140.0	-8,889.7	599.4	8,906.8	0.00	0.00	0.00
21,100.0	90.00	179.65	12,140.0	-8,989.7	600.0	9,006.8	0.00	0.00	0.00
21,200.0	90.00	179.65	12,140.0	-9,089.7	600.6	9,106.7	0.00	0.00	0.00
21,300.0	90.00	179.65	12,140.0	-9,189.7	601.2	9,206.7	0.00	0.00	0.00
21,400.0	90.00	179.65	12,140.0	-9,289.7	601.8	9,306.6	0.00	0.00	0.00
21,500.0	90.00	179.65	12,140.0	-9,389.7	602.4	9,406.5	0.00	0.00	0.00
21,600.0	90.00	179.65	12,140.0	-9,489.7	603.0	9,506.5	0.00	0.00	0.00
21,700.0	90.00	179.65	12,140.0	-9,589.7	603.7	9,606.4	0.00	0.00	0.00
21,800.0	90.00	179.65	12,140.0	-9,689.7	604.3	9,706.4	0.00	0.00	0.00
21,900.0	90.00	179.65	12,140.0	-9,789.7	604.9	9,806.3	0.00	0.00	0.00
22,000.0	90.00	179.65	12,140.0	-9,889.7	605.5	9,906.2	0.00	0.00	0.00
22,100.0	90.00	179.65	12,140.0	-9,989.7	606.1	10,006.2	0.00	0.00	0.00
22,200.0	90.00	179.65	12,140.0	-10,089.7	606.7	10,106.1	0.00	0.00	0.00
22,300.0	90.00	179.65	12,140.0	-10,189.7	607.3	10,206.0	0.00	0.00	0.00
22,400.0	90.00	179.65	12,140.0	-10,289.7	607.9	10,306.0	0.00	0.00	0.00
22,500.0	90.00	179.65	12,140.0	-10,389.7	608.5	10,405.9	0.00	0.00	0.00
22,600.0	90.00	179.65	12,140.0	-10,489.7	609.2	10,505.9	0.00	0.00	0.00
22,700.0	90.00	179.65	12,140.0	-10,589.7	609.8	10,605.8	0.00	0.00	0.00
22,800.0	90.00	179.65	12,140.0	-10,689.7	610.4	10,705.7	0.00	0.00	0.00
22,900.0	90.00	179.65	12,140.0	-10,789.7	611.0	10,805.7	0.00	0.00	0.00
23,000.0	90.00	179.65	12,140.0	-10,889.7	611.6	10,905.6	0.00	0.00	0.00
23,100.0	90.00	179.65	12,140.0	-10,989.7	612.2	11,005.6	0.00	0.00	0.00
23,200.0	90.00	179.65	12,140.0	-11,089.7	612.8	11,105.5	0.00	0.00	0.00
23,300.0	90.00	179.65	12,140.0	-11,189.7	613.4	11,205.4	0.00	0.00	0.00
23,400.0	90.00	179.65	12,140.0	-11,289.7	614.0	11,305.4	0.00	0.00	0.00
23,500.0	90.00	179.65	12,140.0	-11,389.7	614.6	11,405.3	0.00	0.00	0.00
23,600.0	90.00	179.65	12,140.0	-11,489.7	615.3	11,505.2	0.00	0.00	0.00
23,700.0	90.00	179.65	12,140.0	-11,589.7	615.9	11,605.2	0.00	0.00	0.00
23,800.0	90.00	179.65	12,140.0	-11,689.7	616.5	11,705.1	0.00	0.00	0.00
23,900.0	90.00	179.65	12,140.0	-11,789.7	617.1	11,805.1	0.00	0.00	0.00
24,000.0	90.00	179.65	12,140.0	-11,889.7	617.7	11,905.0	0.00	0.00	0.00
24,100.0	90.00	179.65	12,140.0	-11,989.7	618.3	12,004.9	0.00	0.00	0.00
24,200.0	90.00	179.65	12,140.0	-12,089.7	618.9	12,104.9	0.00	0.00	0.00
24,300.0	90.00	179.65	12,140.0	-12,189.7	619.5	12,204.8	0.00	0.00	0.00
24,400.0	90.00	179.65	12,140.0	-12,289.7	620.1	12,304.8	0.00	0.00	0.00
24,500.0	90.00	179.65	12,140.0	-12,389.7	620.8	12,404.7	0.00	0.00	0.00
24,600.0	90.00	179.65	12,140.0	-12,489.6	621.4	12,504.6	0.00	0.00	0.00
24,700.0	90.00	179.65	12,140.0	-12,589.6	622.0	12,604.6	0.00	0.00	0.00
24,800.0	90.00	179.65	12,140.0	-12,689.6	622.6	12,704.5	0.00	0.00	0.00
24,900.0	90.00	179.65	12,140.0	-12,789.6	623.2	12,804.5	0.00	0.00	0.00
25,000.0	90.00	179.65	12,140.0	-12,889.6	623.8	12,904.4	0.00	0.00	0.00
25,100.0	90.00	179.65	12,140.0	-12,989.6	624.4	13,004.3	0.00	0.00	0.00
25,200.0	90.00	179.65	12,140.0	-13,089.6	625.0	13,104.3	0.00	0.00	0.00
25,300.0	90.00	179.65	12,140.0	-13,189.6	625.6	13,204.2	0.00	0.00	0.00
25,400.0	90.00	179.65	12,140.0	-13,289.6	626.3	13,304.1	0.00	0.00	0.00
25,500.0	90.00	179.65	12,140.0	-13,389.6	626.9	13,404.1	0.00	0.00	0.00

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well REDTAIL FEDERAL COM 602H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=27 @ 3762.8usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=27 @ 3762.8usft
Site:	REDTAIL FED COM PROJECT	**North Reference:**	Grid
Well:	REDTAIL FEDERAL COM 602H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
25,600.0	90.00	179.65	12,140.0	-13,489.6	627.5	13,504.0	0.00	0.00	0.00
25,700.0	90.00	179.65	12,140.0	-13,589.6	628.1	13,604.0	0.00	0.00	0.00
25,800.0	90.00	179.65	12,140.0	-13,689.6	628.7	13,703.9	0.00	0.00	0.00
25,900.0	90.00	179.65	12,140.0	-13,789.6	629.3	13,803.8	0.00	0.00	0.00
26,000.0	90.00	179.65	12,140.0	-13,889.6	629.9	13,903.8	0.00	0.00	0.00
26,100.0	90.00	179.65	12,140.0	-13,989.6	630.5	14,003.7	0.00	0.00	0.00
26,200.0	90.00	179.65	12,140.0	-14,089.6	631.1	14,103.7	0.00	0.00	0.00
26,300.0	90.00	179.65	12,140.0	-14,189.6	631.8	14,203.6	0.00	0.00	0.00
26,400.0	90.00	179.65	12,140.0	-14,289.6	632.4	14,303.5	0.00	0.00	0.00
26,500.0	90.00	179.65	12,140.0	-14,389.6	633.0	14,403.5	0.00	0.00	0.00
26,600.0	90.00	179.65	12,140.0	-14,489.6	633.6	14,503.4	0.00	0.00	0.00
26,700.0	90.00	179.65	12,140.0	-14,589.6	634.2	14,603.3	0.00	0.00	0.00
26,800.0	90.00	179.65	12,140.0	-14,689.6	634.8	14,703.3	0.00	0.00	0.00
26,900.0	90.00	179.65	12,140.0	-14,789.6	635.4	14,803.2	0.00	0.00	0.00
27,000.0	90.00	179.65	12,140.0	-14,889.6	636.0	14,903.2	0.00	0.00	0.00
27,100.0	90.00	179.65	12,140.0	-14,989.6	636.6	15,003.1	0.00	0.00	0.00
27,200.0	90.00	179.65	12,140.0	-15,089.6	637.2	15,103.0	0.00	0.00	0.00
27,300.0	90.00	179.65	12,140.0	-15,189.6	637.9	15,203.0	0.00	0.00	0.00
27,400.0	90.00	179.65	12,140.0	-15,289.6	638.5	15,302.9	0.00	0.00	0.00
27,500.0	90.00	179.65	12,140.0	-15,389.6	639.1	15,402.9	0.00	0.00	0.00
27,600.0	90.00	179.65	12,140.0	-15,489.6	639.7	15,502.8	0.00	0.00	0.00
LTP (REDTAIL FED COM 602H)									
27,666.6	90.00	179.65	12,140.0	-15,556.2	640.1	15,569.4	0.00	0.00	0.00
TD at 27666.6 - PBHL (REDTAIL FED COM 602H)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
REDTAIL 602 TGT BOX - plan hits target center - Rectangle (sides W80.0 H50.0 D5,650.0)	0.00	0.00	6,000.0	176.3	544.0	488,361.30	713,786.80	32° 20' 26.599 N	103° 38' 28.039 W
LTP (REDTAIL FED COI - plan misses target center by 16.6usft at 27600.0usft MD (12140.0 TVD, -15489.6 N, 639.7 E) - Circle (radius 50.0)	90.00	179.68	12,140.0	-15,506.2	639.8	472,678.80	713,882.60	32° 17' 51.406 N	103° 38' 28.103 W
PBHL (REDTAIL FED C - plan hits target center - Rectangle (sides W100.0 H15,680.0 D20.0)	0.00	359.65	12,140.0	-15,556.2	640.1	472,628.80	713,882.90	32° 17' 50.911 N	103° 38' 28.104 W
FTP (REDTAIL FED COI - plan misses target center by 202.9usft at 12095.0usft MD (11998.2 TVD, -19.4 N, 545.2 E) - Circle (radius 50.0)	0.00	0.00	12,140.0	125.8	544.5	488,310.80	713,787.30	32° 20' 26.099 N	103° 38' 28.037 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
27,666.7	12,140.0	5-1/2" Production Casing	5-1/2	6-3/4

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well REDTAIL FEDERAL COM 602H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=27 @ 3762.8usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=27 @ 3762.8usft
Site:	REDTAIL FED COM PROJECT	**North Reference:**	Grid
Well:	REDTAIL FEDERAL COM 602H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP2		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,500.0	1,500.0	0.0	0.0	Start Build 2.00
1,920.5	1,919.0	9.5	29.3	Start 3278.3 hold at 1920.5 MD
5,198.8	5,162.1	157.3	485.4	Start Drop -1.00
6,039.8	6,000.0	176.3	544.0	Start 5567.0 hold at 6039.8 MD
11,606.8	11,567.0	176.3	544.0	Start DLS 10.00 TFO 179.65
12,506.8	12,140.0	-396.6	547.5	Start 15159.8 hold at 12506.8 MD
27,666.6	12,140.0	-15,556.2	640.1	TD at 27666.6

ConocoPhillips

Project:	LEA COUNTY SOUTHEAST
Site:	REDTAIL FED COM PROJECT
Well:	REDTAIL FEDERAL COM 602H
Wellbore:	OWB
Design:	PWP2
GL:	3735.8
KB=27 @ 3762.8usft	

Azimuths to Grid North
True North: -0.37°
Magnetic North: 6.00°

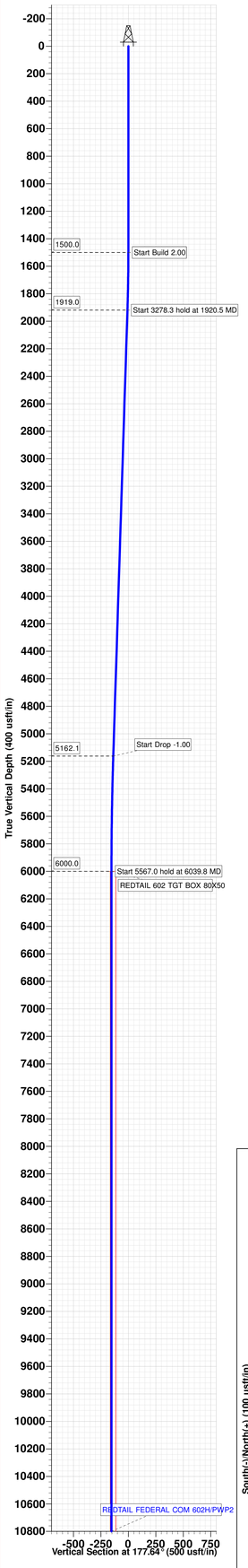
Magnetic Field
Strength: 47459.8nT
Dip Angle: 59.96°
Date: 6/1/2024
Model: BGGM2023

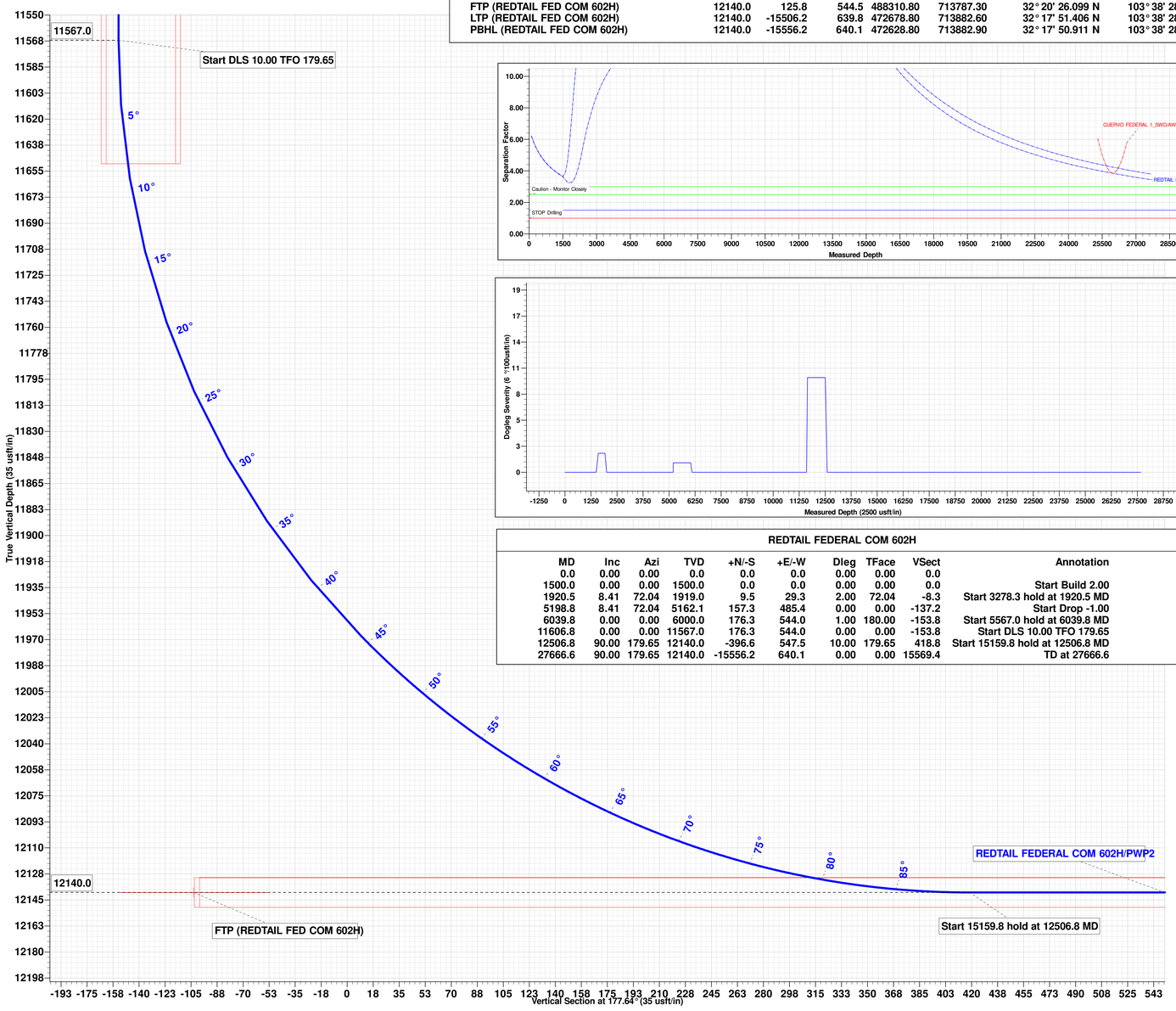
WELL DETAILS: REDTAIL FEDERAL COM 602H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	488185.00	713242.80	32° 20' 24.889 N	103° 38' 34.393 W

DESIGN TARGET DETAILS

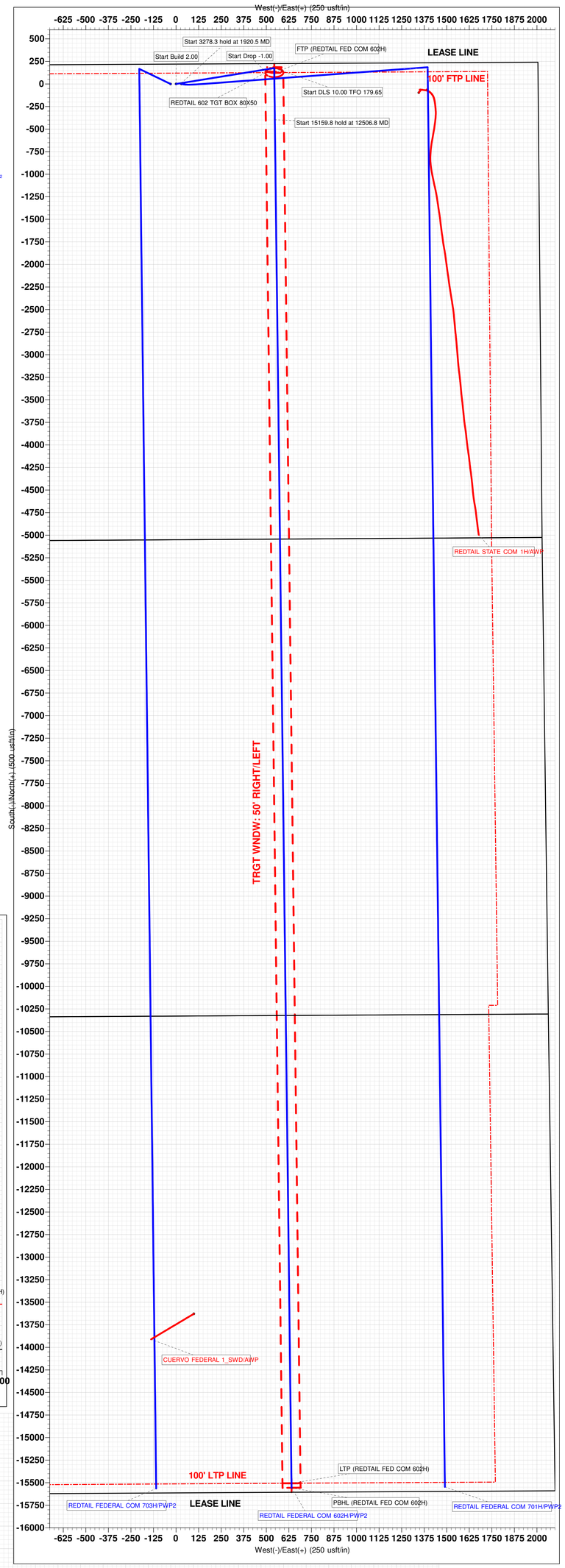
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
REDTAIL 602 TGT BOX 80X50	6000.0	176.3	544.0	488361.30	713786.80	32° 20' 26.599 N	103° 38' 28.039 W
FTP (REDTAIL FED COM 602H)	12140.0	125.8	544.5	488310.80	713787.30	32° 20' 26.099 N	103° 38' 28.037 W
LTP (REDTAIL FED COM 602H)	12140.0	-15506.2	639.8	472678.80	713882.60	32° 17' 51.406 N	103° 38' 28.103 W
PBHL (REDTAIL FED COM 602H)	12140.0	-15556.2	640.1	472628.80	713882.90	32° 17' 50.911 N	103° 38' 28.104 W

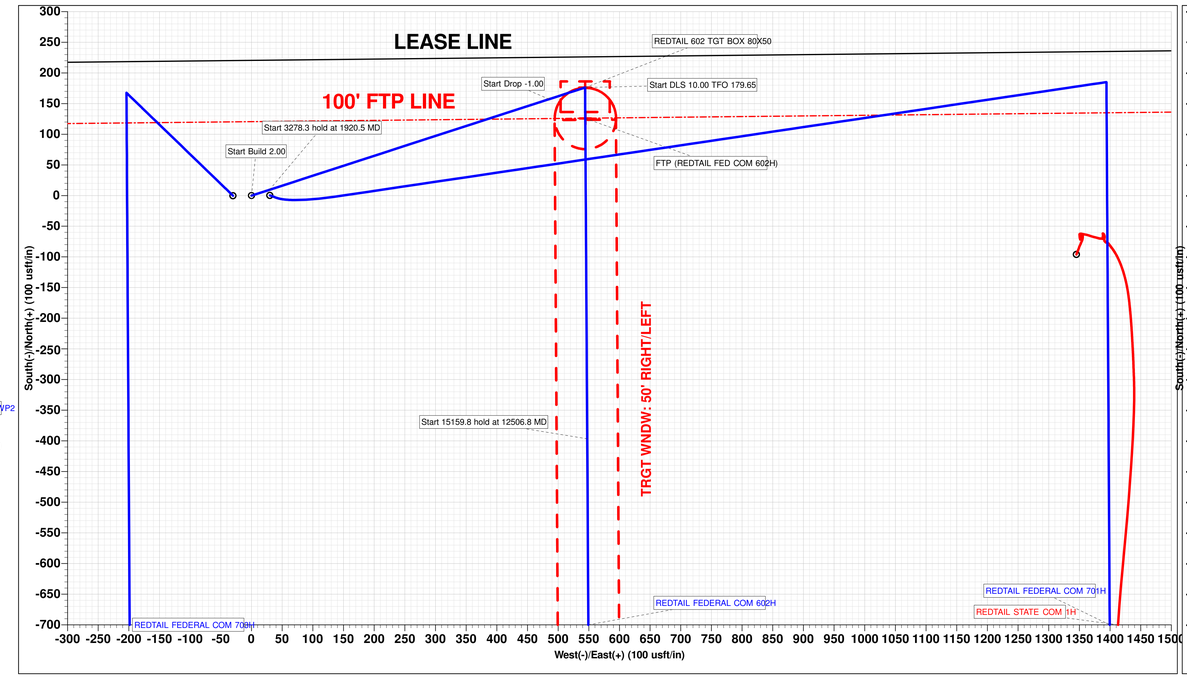


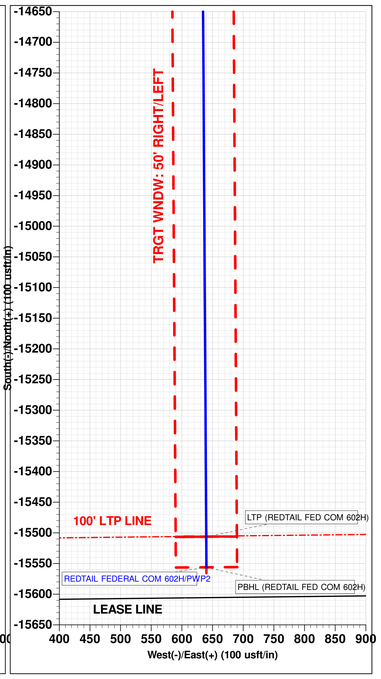


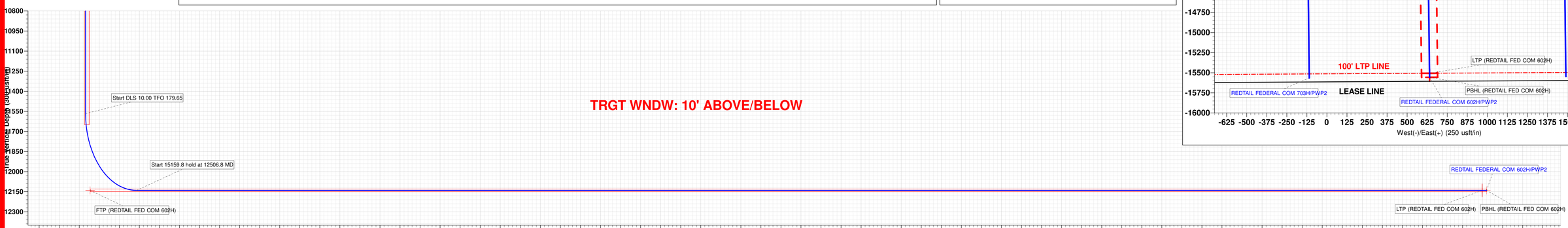
REDTAIL FEDERAL COM 602H

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1920.5	8.41	72.04	1919.0	9.5	29.3	2.00	72.04	-8.3	Start 3278.3 hold at 1920.5 MD
5198.8	8.41	72.04	5162.1	157.3	485.4	0.00	0.00	-137.2	Start Drop -1.00
6039.8	0.00	0.00	6000.0	176.3	544.0	1.00	180.00	-153.8	Start 5567.0 hold at 6039.8 MD
11606.8	0.00	0.00	11567.0	176.3	544.0	0.00	0.00	-153.8	Start DLS 10.00 TFO 179.65
12506.8	90.00	179.65	12140.0	-396.6	547.5	10.00	179.65	418.8	Start 15159.8 hold at 12506.8 MD
27666.6	90.00	179.65	12140.0	-15556.2	640.1	0.00	0.00	15569.4	TD at 27666.6









Well Name: REDTAIL FEDERAL COM

Well Location: T23S / R32E / SEC 2 / LOT 2 / 32.34037 / -103.643372

County or Parish/State: LEA / NM

Well Number: 602H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM77062

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002552783

Operator: COG OPERATING LLC

Notice of Intent

Sundry ID: 2788749

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 05/07/2024

Time Sundry Submitted: 10:01

Date proposed operation will begin: 05/07/2024

Procedure Description: COG Operating LLC, respectfully requests approval for the following changes to the original approved APD. BHL Change: From: 50' FSL & 990' FEL Section 11. T23S. R32E. To: 50' FSL & 1460' FEL Section 14. T23S. R32E. C102 Attached. Formation: Red Tank; Bone Spring. Dedicated Acres Change: From: 639.23. To: 619.23. Formation: Diamondtail; Bone Spring. Dedicated Acres: 640. C102s Attached. Drilling Changes: Redtail Federal Com 602H BHL will change to 27,666ft MD. Directional Plan and AC Report attached. Break Test: COG Operating LLC, requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM. Bradenhead: COG Operating requests permission to do a Bradenhead Cement job for the associated well to this sundry. This previously approved procedure is detailed as attached. COG Operating also requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM.

NOI Attachments

Procedure Description

REDTAIL_FED_COM_602H_Updated_C102_Redtank_BS_20240507095859.pdf

COP_BOP_Break_Testing_Documentation_6_07_23_20240507095901.pdf

REDTAIL_FEDERAL_COM_602H_PWP2_WP_20240507095859.pdf

REDTAIL_FEDERAL_COM_602H_PWP2_PLAN_RPT_20240507095859.pdf

COP_Offline_Bradenhead_Intermediate_Documentation_3_11_23__Rev2_20240507095900.pdf

Well Name: REDTAIL FEDERAL COM | **Well Location:** T23S / R32E / SEC 2 / LOT 2 / 32.34037 / -103.643372 | **County or Parish/State:** LEA / NM

Well Number: 602H | **Type of Well:** OIL WELL | **Allottee or Tribe Name:**

Lease Number: NMNM77062 | **Unit or CA Name:** | **Unit or CA Number:**

US Well Number: 3002552783 | **Operator:** COG OPERATING LLC

REDTAIL_FEDERAL_COM_602H_PWP2_AC_RPT_20240507095859.pdf

REDTAIL_FED_COM_602H_Updated_C102_Diamondtail_BS_20240507095855.pdf

Conditions of Approval

Additional

REDTAIL_FEDERAL_COM_602H___COA_20240611135628.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: MAYTE REYES **Signed on:** MAY 07, 2024 09:23 AM

Name: COG OPERATING LLC

Title: Regulatory Analyst

Street Address: 925 N ELDRIDGE PARKWAY

City: HOUSTON **State:** TX

Phone: (281) 293-1000

Email address: MAYTE.X.REYES@CONOCOPHILLIPS.COM

Field

Representative Name: Gerald Herrera

Street Address: 2208 West Main Street

City: Artesia **State:** NM **Zip:** 88210

Phone: (575)748-6940

Email address: gerald.a.herrera@conocophillips.com

BLM Point of Contact

BLM POC Name: KEITH P IMMATTY **BLM POC Title:** ENGINEER

BLM POC Phone: 5759884722 **BLM POC Email Address:** KIMMATTY@BLM.GOV

Disposition: Approved **Disposition Date:** 06/11/2024

Signature: Keith Immatty

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM77062

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No. REDTAIL FEDERAL COM/602H

2. Name of Operator COG OPERATING LLC

9. API Well No. 3002552783

3a. Address 600 West Illinois Ave, Midland, TX 79701

3b. Phone No. *(include area code)* (432) 683-7443

10. Field and Pool or Exploratory Area RED TANK/BONE SPRING

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SEC 2/T23S/R32E/NMP

11. Country or Parish, State LEA/NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 perfonned 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 detennined that the site is ready for final inspection.)

COG Operating LLC, respectfully requests approval for the following changes to the original approved APD.

BHL Change:
From: 50' FSL & 990' FEL Section 11. T23S. R32E.
To: 50' FSL & 1460' FEL Section 14. T23S. R32E.
C102 Attached.

Formation: Red Tank; Bone Spring. Dedicated Acres Change: From: 639.23. To: 619.23.
Formation: Diamondtail; Bone Spring. Dedicated Acres: 640.
C102s Attached.

Drilling Changes:
Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* MAYTE REYES / Ph: (281) 293-1000

Title Regulatory Analyst

Signature (Electronic Submission)

Date 05/07/2024

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by KEITH P IMMATTY / Ph: (575) 988-4722 / Approved

Title ENGINEER

Date 06/11/2024

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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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

Redtail Federal Com 602H BHL will change to 27,666ft MD.

Directional Plan and AC Report attached.

Break Test:

COG Operating LLC, requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM.

Bradenhead:

COG Operating requests permission to do a Bradenhead Cement job for the associated well to this sundry. This previously approved procedure is detailed as attached. COG Operating also requests a variance to allow for break testing of the BOPE during batch drilling operations. Break testing will be conducted in accordance with the COP BOPE Break Testing Variance (attached) that has been approved by the BLM.

Location of Well

0. SHL: LOT 2 / 220 FNL / 2005 FEL / TWSP: 23S / RANGE: 32E / SECTION: 2 / LAT: 32.34037 / LONG: -103.643372 (TVD: 0 feet, MD: 0 feet)

PPP: LOT 1 / 100 FNL / 990 FEL / TWSP: 23S / RANGE: 32E / SECTION: 2 / LAT: 32.340711 / LONG: -103.640084 (TVD: 12018 feet, MD: 12165 feet)

PPP: NENE / 1 FNL / 990 FEL / TWSP: 23S / RANGE: 32E / SECTION: 11 / LAT: 32.326508 / LONG: -103.640098 (TVD: 12140 feet, MD: 17400 feet)

BHL: SESE / 50 FSL / 990 FEL / TWSP: 23S / RANGE: 32E / SECTION: 11 / LAT: 32.312121 / LONG: -103.640112 (TVD: 12140 feet, MD: 22486 feet)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 359207
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	ALL PREVIOUS COA'S APPLY.	6/28/2024