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

Sundry Print Report

05/02/2024

Well Name: WINDWARD FEDERAL

Well Location: T24S / R32E / SEC 30 / NENE / 32.193747 / -103.709164

County or Parish/State: LEA / NM

Well Number: 701H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM120908

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550379

Operator: COG PRODUCTION LLC

Notice of Intent

Sundry ID: 2786897

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/25/2024

Time Sundry Submitted: 09:01

Date proposed operation will begin: 04/25/2024

Procedure Description: COG Production requests a change to our approved APD for this well to reflect a change in dedicated acres and surface casing. Additionally, we request the addition of a contingency 4-string casing design be added to the drill plan in the event water flows are encountered during drilling. Change dedicated acres to 1331.72. Change surface casing FROM: 14.75 inch hole, 10.75 inch, 45.5#, J55, BTC Change surface casing TO: 17.50 inch hole, 13.375 inch, 54.5#, J55, BTC, 0 – 930 ft. Also, COG Production requests a variance to allow for break testing as attached. Detailed contingency casing plan and procedure attached.

NOI Attachments

Procedure Description

COP_BOP_Break_Testing_Documentation_6_07_23_20240430130547.pdf

4_string_contingency_casing_specs_20240430130528.pdf

WINDWARD_FED_COM_701H_PWP1_WP_20240425090028.pdf

3_string_casing_specs_20240425090022.pdf

WINDWARD_FED_701H_C102_NAD83_signed_4_25_24_20240425090022.pdf

Windward_Fed_Com_701H_BHL_and_Casing_Sundry_20240425090022.pdf

WINDWARD_FED_COM_701H_PWP1_AC_RPT_20240425090022.pdf

WINDWARD_FED_COM_701H_PWP1_PLAN_RPT_20240425090022.pdf

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Unit or CA Number:

US Well Number: 3002550379

Operator: COG PRODUCTION LLC

Conditions of Approval

Additional

WINDWARD_FED_COM_701H___SUNDRY_COA_20240501101603.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: STAN WAGNER

Signed on: APR 30, 2024 01:05 PM

Name: COG PRODUCTION LLC

Title: Regulatory Advisor

Street Address: 600 WEST ILLINOIS AVE

City: MIDLAND **State:** TX

Phone: (432) 253-9685

Email address: STAN.S.WAGNER@CONOCOPHILLIPS.COM

Field

Representative Name:

Street Address:

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

Phone:

Email address:

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: 05/01/2024

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.

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.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*

11. Country or Parish, State

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.)

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

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

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

Location of Well

0. SHL: NENE / 685 FNL / 1215 FEL / TWSP: 24S / RANGE: 32E / SECTION: 30 / LAT: 32.193747 / LONG: -103.709164 (TVD: 0 feet, MD: 0 feet)

PPP: NENE / 100 FNL / 330 FEL / TWSP: 24S / RANGE: 32E / SECTION: 30 / LAT: 32.195366 / LONG: -103.706301 (TVD: 11892 feet, MD: 11934 feet)

BHL: SESE / 50 FSL / 330 FEL / TWSP: 24S / RANGE: 32E / SECTION: 31 / LAT: 32.166758 / LONG: -103.706251 (TVD: 12068 feet, MD: 22034 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG PRODUCTION LLC
WELL NAME & NO.:	WINDWARD FED COM 701H
SURFACE HOLE FOOTAGE:	685'/N & 1215'/E
BOTTOM HOLE FOOTAGE	50'/S & 330'/E
LOCATION:	Section 30, T.24 S., R.32 E.
COUNTY:	Lea County, New Mexico

COA

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

Drill plan change addressed in this COA. All previous COAs still apply

A. CASING

Primary Casing Design:

1. The **10-3/4** inch surface casing shall be set at approximately **930** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The **7-5/8** inch intermediate casing shall be set at approximately **11,500** feet. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

Option 2:

Operator has proposed a DV tool ~50' above the Lamar Lime top. The DV tool may be cancelled if cement circulates to surface on the first stage.

a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.

3. The **5-1/2** inch production casing shall be set at approximately **22,272** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

Alternate Casing Design(Contingency:)

1. The **13-3/8** inch surface casing shall be set at approximately **930** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature

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

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The **9-5/8** inch intermediate casing shall be set at approximately **4,530** feet. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

3. The **7-5/8** inch intermediate liner shall be set at approximately **11,500** feet tying back in a minimum of 200' into the 9-5/8" casing. The minimum required fill of cement behind the **7-5/8** inch intermediate liner top is:

Option 1 (Single Stage):

- Cement to liner top. Verify excess circulated to surface.

4. The **5-1/2** inch production casing shall be set at approximately **22,272** feet. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

Casing Clearance:
THE 5.5" W441 CASING NEEDS TO TIE BACK A MINIMUM OF 200' INTO THE 7.625" W513 TO MEET BLM CLEARANCE REQUIREMENT

Break Testing:
Approved for the intermediate interval. Procedure attached in sundry.

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system)
BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 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)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- 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.
- 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).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Operator shall clean up cycles until wellbore is clear of cuttings and any large debris, ensure cutting sizes are adequate "coffee ground or less" before cementing.

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)

- If well located in Eddy County
  EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
  BLM_NM_CFO_DrillingNotifications@BLM.GOV
  (575) 361-2822

- If well located in Lea County
  Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
  (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
b. When the operator proposes to set surface casing with Spudder Rig
   - Notify the BLM when moving in and removing the Spudder Rig.
   - 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.
   - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 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. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

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, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity 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-P 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 part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

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:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. 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).

    b. 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.)

    c. 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 part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever

is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. 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.

e. The results of the test shall be reported to the appropriate BLM office.

f. 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.

g. 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.

h. 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 part 3170 Subpart 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.

KPI 4/29/2024

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)

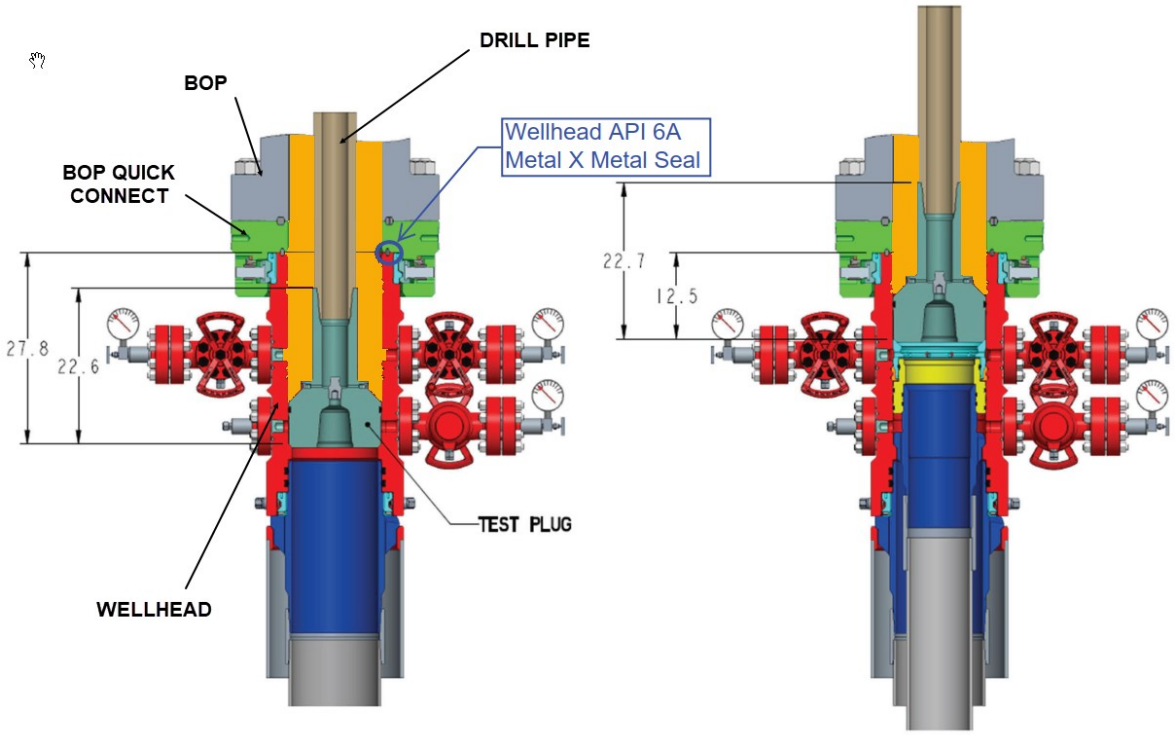


Figure 1: Test plug installed (The orange sections above indicate the areas exposed to the pressure test)

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.

Tenaris

API BTC

Coupling	Pipe Body
Grade: **J55 (Casing)**	Grade: **J55 (Casing)**
Body: **Bright Green**	1st Band: **Bright Green**
1st Band: **White**	2nd Band: **-**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**

Outside Diameter	13.375 in.	**Wall Thickness**	0.380 in.	**Grade**	J55 (Casing)
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry				Performance	
Nominal OD	13.375 in.	**Drift**	12.459 in.	**SMYS**	55,000 psi
Wall Thickness	0.380 in.	**Plain End Weight**	52.79 lb/ft	**Min UTS**	75,000 psi
Nominal Weight	54.500 lb/ft	**OD Tolerance**	API	**Body Yield Strength**	853 x1000 lb
Nominal ID	12.615 in.			**Min. Internal Yield Pressure**	2730 psi
				Collapse Pressure	1130 psi
				Max. Allowed Bending	19 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	**Joint Strength**	909 x1000 lb
Connection OD	14.375 in.	**Coupling Face Load**	766 x1000 lb
Hand Tight Stand Off	1 in.	**Internal Pressure Capacity**	2730 psi

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.

Tenaris

API BTC

Coupling	Pipe Body
Grade: **L80-IC**	Grade: **L80-IC**
Body: **Red**	1st Band: **Red**
1st Band: **Brown**	2nd Band: **Brown**
2nd Band: **-**	3rd Band: **Pale Green**
3rd Band: **-**	4th Band: **-**

Outside Diameter	9.625 in.	**Wall Thickness**	0.395 in.	**Grade**	L80-IC
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry				Performance	
Nominal OD	9.625 in.	**Drift**	8.679 in.	**SMYS**	80,000 psi
Wall Thickness	0.395 in.	**Plain End Weight**	38.97 lb/ft	**Min UTS**	95,000 psi
Nominal Weight	40 lb/ft	**OD Tolerance**	API	**Body Yield Strength**	916 x1000 lb
Nominal ID	8.835 in.			**Min. Internal Yield Pressure**	5750 psi
				Collapse Pressure	3870 psi
				Max. Allowed Bending	38 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	**Joint Strength**	947 x1000 lb
Connection OD	10.625 in.	**Coupling Face Load**	837 x1000 lb
Hand Tight Stand Off	1 in.	**Internal Pressure Capacity**	5750 psi

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.

Tenaris

Wedge 513®

Coupling	Pipe Body
Grade: **P110-ICY**	Grade: **P110-ICY**
Body: **White**	1st Band: **White**
1st Band: **Pale Green**	2nd Band: **Pale Green**
2nd Band: **-**	3rd Band: **Pale Green**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	7.625 in.	**Wall Thickness**	0.375 in.	**Grade**	P110-ICY
Min. Wall Thickness	90.00 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	**Wall Thickness**	0.375 in.	**Body Yield Strength**	1068 x1000 lb
Nominal Weight	29.70 lb/ft	**Plain End Weight**	29.06 lb/ft	**Min. Internal Yield Pressure**	11,070 psi
Drift	6.750 in.	**OD Tolerance**	API	**SMYS**	125,000 psi
Nominal ID	6.875 in.			**Collapse Pressure**	7360 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	**Tension Efficiency**	60 %	**Minimum**	9000 ft-lb
Connection ID	6.800 in.	**Joint Yield Strength**	641 x1000 lb	**Optimum**	10,800 ft-lb
Make-up Loss	4.420 in.	**Internal Pressure Capacity**	11,070 psi	**Maximum**	15,800 ft-lb
Threads per inch	3.29	**Compression Efficiency**	75.20 %		
Connection OD Option	Regular	**Compression Strength**	803 x1000 lb	**Operation Limit Torques**	
		Max. Allowable Bending	45 °/100 ft	**Operating Torque**	53,000 ft-lb
		External Pressure Capacity	7360 psi	**Yield Torque**	79,000 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 523® - 7.625 in. - 0.375 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the lastest performance data, always visit our website: www.tenaris.com

Tenaris

TXP® BTC

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.415 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.415 in.	**Body Yield Strength**	729 x1000 lb
Nominal Weight	23.00 lb/ft	**Plain End Weight**	22.56 lb/ft	**Min. Internal Yield Pressure**	14,530 psi
Drift	4.545 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.670 in.			**Collapse Pressure**	14,540 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	6.200 in.	**Tension Efficiency**	100 %	**Minimum**	12,980 ft-lb
Coupling Length	9.450 in.	**Joint Yield Strength**	729 x1000 lb	**Optimum**	14,420 ft-lb
Connection ID	4.658 in.	**Internal Pressure Capacity**	14,530 psi	**Maximum**	15,860 ft-lb
Make-up Loss	4.204 in.	**Compression Efficiency**	100 %		
Threads per inch	5	**Compression Strength**	729 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	92 °/100 ft	**Operating Torque**	24,200 ft-lb
		External Pressure Capacity	14,540 psi	**Yield Torque**	26,900 ft-lb
		Coupling Face Load	302,000 lb		

Notes

This connection is fully interchangeable with:
TXP® BTC - 5.5 in. - 0.275 (15.50) / 0.304 (17.00) / 0.361 (20.00) / 0.476 (26.00) in. (lb/ft)
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version
Datasheet is also valid for Special Bevel option when applicable - except for Coupling Face Load, which will be reduced. Please contact a local Tenaris technical sales representative.
Standard coupling design comes with optimized 20° bevel.

For the lastest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris

TenarisHydril Wedge 441®

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.415 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.415 in.	**Body Yield Strength**	729 x1000 lb
Nominal Weight	23 lb/ft	**Plain End Weight**	22.56 lb/ft	**Min. Internal Yield Pressure**	14,530 psi
Drift	4.545 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.670 in.			**Collapse Pressure**	14,540 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.900 in.	**Tension Efficiency**	90.80 %	**Minimum**	15,000 ft-lb
Coupling Length	8.714 in.	**Joint Yield Strength**	662 x1000 lb	**Optimum**	16,000 ft-lb
Connection ID	4.670 in.	**Internal Pressure Capacity**	14,530 psi	**Maximum**	19,200 ft-lb
Make-up Loss	3.780 in.	**Compression Efficiency**	90.80 %		
Threads per inch	3.40	**Compression Strength**	662 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	82 °/100 ft	**Operating Torque**	33,000 ft-lb
		External Pressure Capacity	14,540 psi	**Yield Torque**	39,000 ft-lb
		Coupling Face Load	172,000 lb	**Buck-On**	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

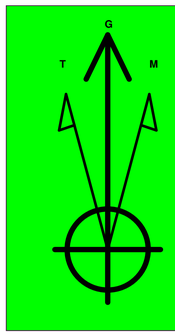
Notes

This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.476 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

ConocoPhillips

Project:	LEA COUNTY SOUTHEAST
Site:	WINDWARD FEDERAL PROJECT
Well:	WINDWARD FEDERAL 701H
Wellbore:	OWB
Design:	PWP1
GL:	3550.0
KB=30 @ 3580.0usft	



Azimuths to Grid North
True North: -0.33°
Magnetic North: 6.35°

Magnetic Field
Strength: 47527.3nT
Dip Angle: 59.87°
Date: 10/27/2020
Model: IGRF2020

WELL DETAILS: WINDWARD FEDERAL 701H

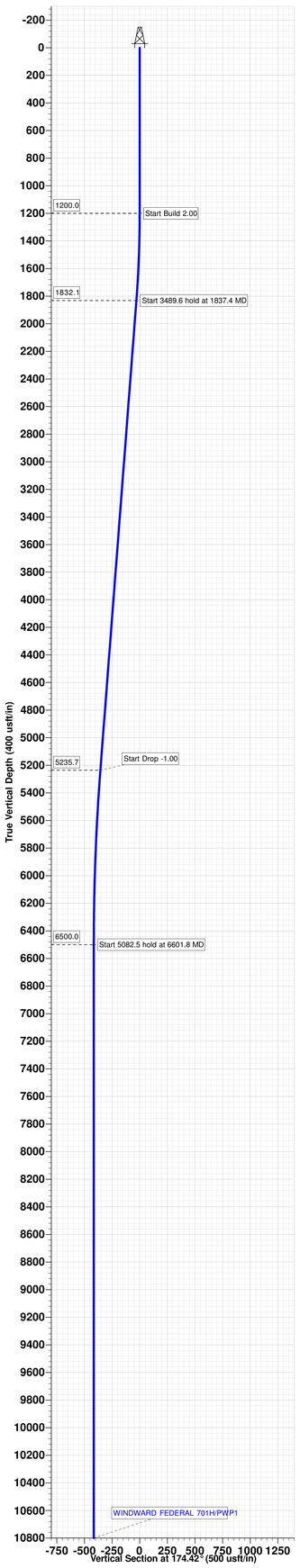
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	434721.40	693231.80	32° 11' 37.044 N	103° 42' 31.260 W

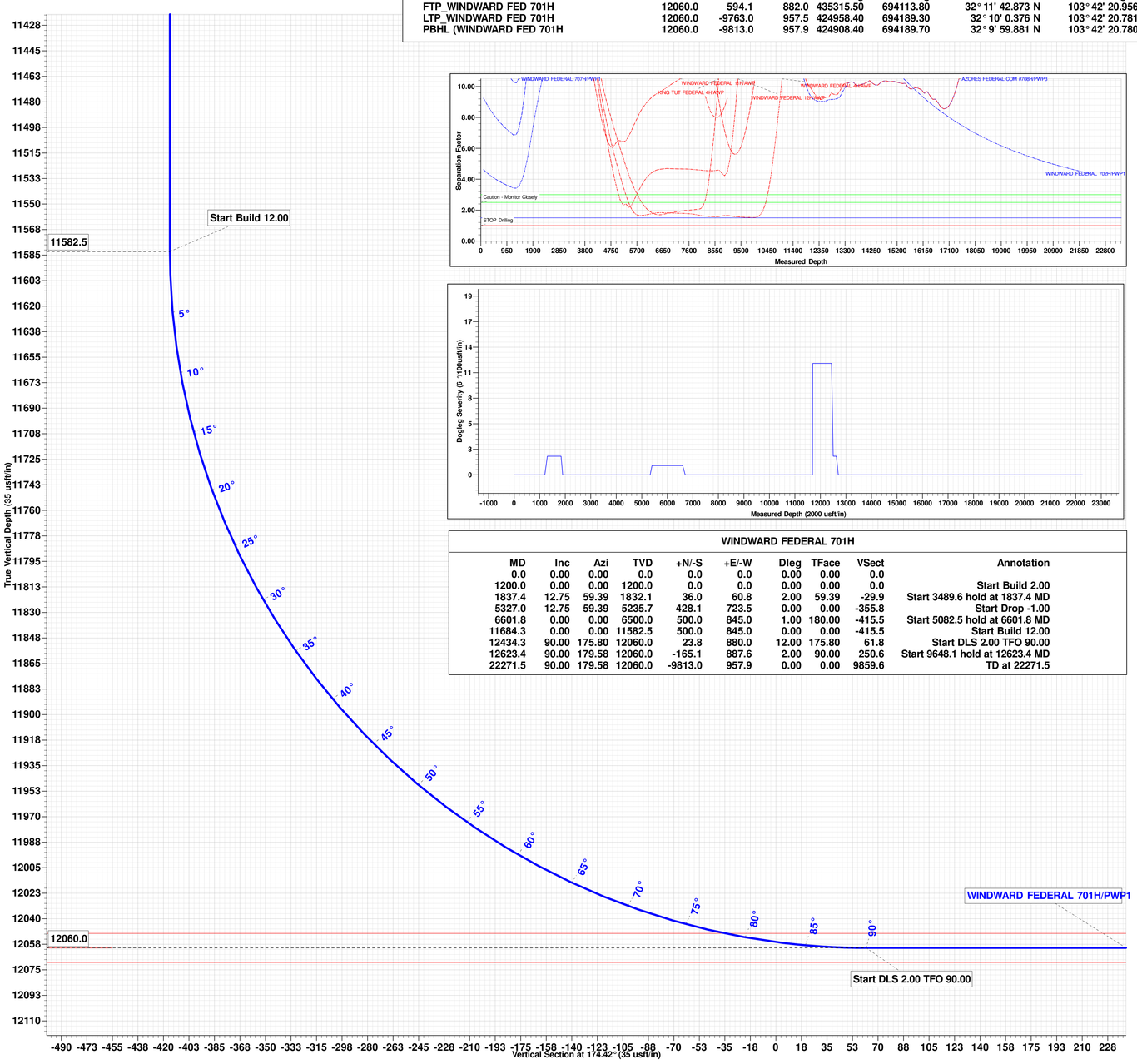
DESIGN TARGET DETAILS

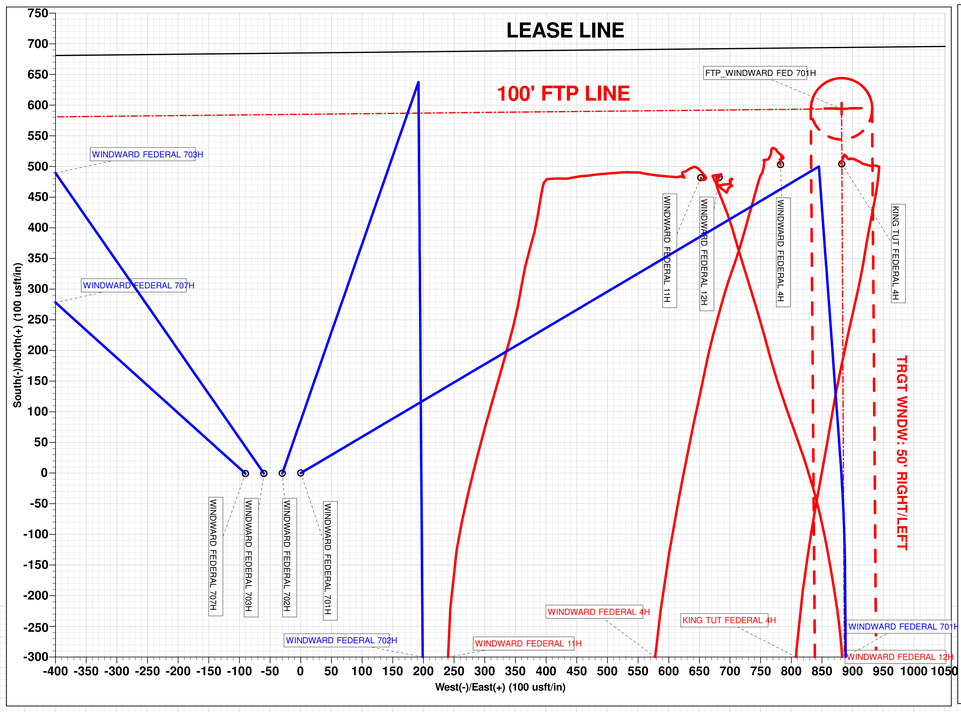
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP_WINDWARD FED 701H	12060.0	594.1	882.0	435315.50	694113.80	32° 11' 42.873 N	103° 42' 20.956 W
LTP_WINDWARD FED 701H	12060.0	-9763.0	957.5	424958.40	694189.30	32° 10' 0.376 N	103° 42' 20.781 W
PBHL (WINDWARD FED 701H	12060.0	-9813.0	957.9	424908.40	694189.70	32° 9' 59.881 N	103° 42' 20.780 W

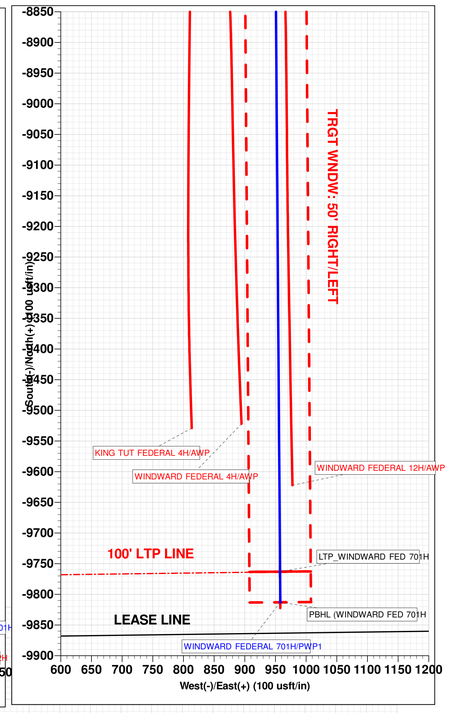
WINDWARD FEDERAL 701H

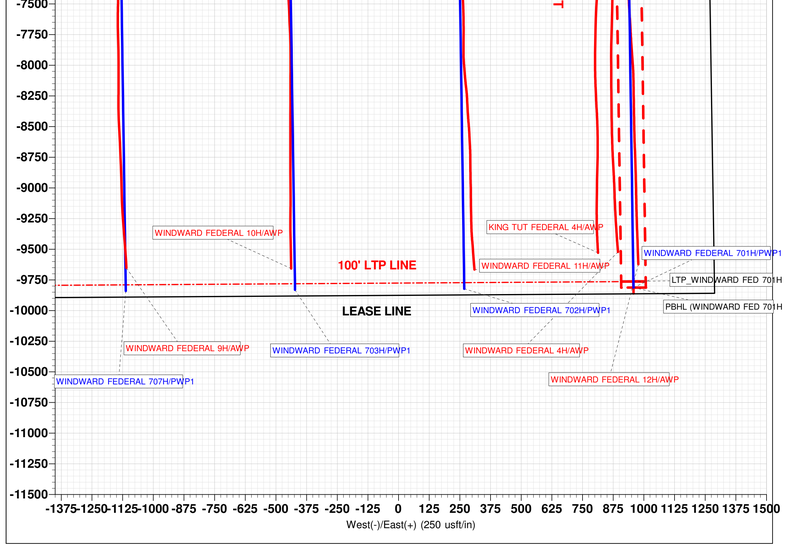
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
1837.4	12.75	59.39	1832.1	36.0	60.8	2.00	59.39	-29.9	Start 3489.6 hold at 1837.4 MD
5327.0	12.75	59.39	5235.7	428.1	723.5	0.00	0.00	-355.8	Start Drop -1.00
6601.8	0.00	0.00	6500.0	500.0	845.0	1.00	180.00	-415.5	Start 5082.5 hold at 6601.8 MD
11684.3	0.00	0.00	11582.5	500.0	845.0	0.00	0.00	-415.5	Start Build 12.00
12434.3	90.00	175.80	12060.0	23.8	880.0	12.00	175.80	61.8	Start DLS 2.00 TFO 90.00
12623.4	90.00	179.58	12060.0	-165.1	887.6	2.00	90.00	250.6	Start 9648.1 hold at 12623.4 MD
22271.5	90.00	179.58	12060.0	-9813.0	957.9	0.00	0.00	9859.6	TD at 22271.5

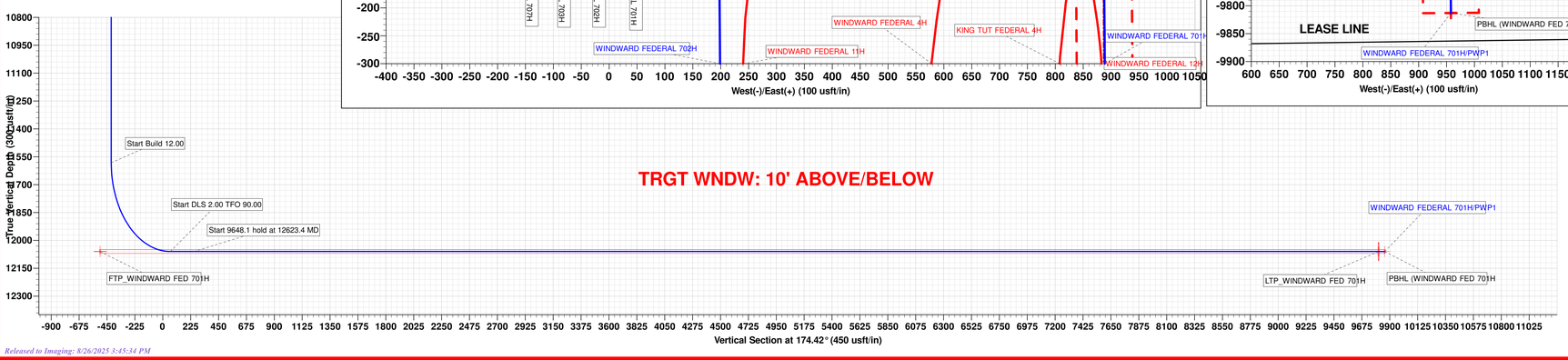












Tenaris

API BTC

Coupling	Pipe Body
Grade: **J55 (Casing)**	Grade: **J55 (Casing)**
Body: **Bright Green**	1st Band: **Bright Green**
1st Band: **White**	2nd Band: **-**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**

Outside Diameter	10.750 in.	**Wall Thickness**	0.400 in.	**Grade**	J55 (Casing)
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry				Performance	
Nominal OD	10.750 in.	**Drift**	9.794 in.	**SMYS**	55,000 psi
Wall Thickness	0.400 in.	**Plain End Weight**	44.26 lb/ft	**Min UTS**	75,000 psi
Nominal Weight	45.500 lb/ft	**OD Tolerance**	API	**Body Yield Strength**	715 x1000 lb
Nominal ID	9.950 in.			**Min. Internal Yield Pressure**	3580 psi
				Collapse Pressure	2090 psi
				Max. Allowed Bending	23 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	**Joint Strength**	796 x1000 lb
Connection OD	11.750 in.	**Coupling Face Load**	628 x1000 lb
Hand Tight Stand Off	1 in.	**Internal Pressure Capacity**	3580 psi

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.

Tenaris

TXP® BTC

Coupling	Pipe Body
Grade: **L80-ICY**	Grade: **L80-ICY**
Body: **Red**	1st Band: **Red**
1st Band: **Brown**	2nd Band: **Brown**
2nd Band: **Pale Green**	3rd Band: **Pale Green**
3rd Band: **-**	4th Band: **Pale Green**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	7.625 in.	**Wall Thickness**	0.375 in.	**Grade**	L80-ICY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	**Wall Thickness**	0.375 in.	**Body Yield Strength**	726 x1000 lb
Nominal Weight	29.70 lb/ft	**Plain End Weight**	29.06 lb/ft	**Min. Internal Yield Pressure**	7320 psi
Drift	6.750 in.	**OD Tolerance**	API	**SMYS**	85,000 psi
Nominal ID	6.875 in.			**Collapse Pressure**	5900 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	8.500 in.	**Tension Efficiency**	100 %	**Minimum**	16,100 ft-lb
Coupling Length	10.575 in.	**Joint Yield Strength**	726 x1000 lb	**Optimum**	17,890 ft-lb
Connection ID	6.863 in.	**Internal Pressure Capacity**	7320 psi	**Maximum**	19,680 ft-lb
Make-up Loss	4.766 in.	**Compression Efficiency**	100 %		
Threads per inch	5	**Compression Strength**	726 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	51 °/100 ft	**Yield Torque**	25,100 ft-lb
		External Pressure Capacity	5900 psi		

Notes

This connection is fully interchangeable with:
TXP® BTC - 7.625 in. - 0.328 / 0.43 / 0.5 / 0.562 / 0.595 / 0.625 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version
Datasheet is also valid for Special Bevel option when applicable - except for Coupling Face Load, which will be reduced. Please contact a local Tenaris technical sales representative.
Standard coupling design comes with optimized 20° bevel.

For the lastest performance data, always visit our website: www.tenaris.com

Tenaris

Wedge 513®

Coupling	Pipe Body
Grade: **P110-ICY**	Grade: **P110-ICY**
Body: **White**	1st Band: **White**
1st Band: **Pale Green**	2nd Band: **Pale Green**
2nd Band: **-**	3rd Band: **Pale Green**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	7.625 in.	**Wall Thickness**	0.375 in.	**Grade**	P110-ICY
Min. Wall Thickness	90.00 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	**Wall Thickness**	0.375 in.	**Body Yield Strength**	1068 x1000 lb
Nominal Weight	29.70 lb/ft	**Plain End Weight**	29.06 lb/ft	**Min. Internal Yield Pressure**	11,070 psi
Drift	6.750 in.	**OD Tolerance**	API	**SMYS**	125,000 psi
Nominal ID	6.875 in.			**Collapse Pressure**	7360 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	**Tension Efficiency**	60 %	**Minimum**	9000 ft-lb
Connection ID	6.800 in.	**Joint Yield Strength**	641 x1000 lb	**Optimum**	10,800 ft-lb
Make-up Loss	4.420 in.	**Internal Pressure Capacity**	11,070 psi	**Maximum**	15,800 ft-lb
Threads per inch	3.29	**Compression Efficiency**	75.20 %		
Connection OD Option	Regular	**Compression Strength**	803 x1000 lb	**Operation Limit Torques**	
		Max. Allowable Bending	45 °/100 ft	**Operating Torque**	53,000 ft-lb
		External Pressure Capacity	7360 psi	**Yield Torque**	79,000 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 523® - 7.625 in. - 0.375 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For the lastest performance data, always visit our website: www.tenaris.com

Tenaris

TXP® BTC

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.415 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.415 in.	**Body Yield Strength**	729 x1000 lb
Nominal Weight	23 lb/ft	**Plain End Weight**	22.56 lb/ft	**Min. Internal Yield Pressure**	14,530 psi
Drift	4.545 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.670 in.			**Collapse Pressure**	14,540 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	6.200 in.	**Tension Efficiency**	100 %	**Minimum**	12,980 ft-lb
Coupling Length	9.450 in.	**Joint Yield Strength**	729 x1000 lb	**Optimum**	14,420 ft-lb
Connection ID	4.658 in.	**Internal Pressure Capacity**	14,530 psi	**Maximum**	15,860 ft-lb
Make-up Loss	4.204 in.	**Compression Efficiency**	100 %		
Threads per inch	5	**Compression Strength**	729 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	92 °/100 ft	**Operating Torque**	24,200 ft-lb
		External Pressure Capacity	14,540 psi	**Yield Torque**	26,900 ft-lb

Notes

This connection is fully interchangeable with:
TXP® BTC - 5.5 in. - 0.275 / 0.304 / 0.361 / 0.476 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version
Datasheet is also valid for Special Bevel option when applicable - except for Coupling Face Load, which will be reduced. Please contact a local Tenaris technical sales representative.
Standard coupling design comes with optimized 20° bevel.

For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris

TenarisHydril Wedge 441®

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.415 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.415 in.	**Body Yield Strength**	729 x1000 lb
Nominal Weight	23 lb/ft	**Plain End Weight**	22.56 lb/ft	**Min. Internal Yield Pressure**	14,530 psi
Drift	4.545 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.670 in.			**Collapse Pressure**	14,540 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.900 in.	**Tension Efficiency**	90.80 %	**Minimum**	15,000 ft-lb
Coupling Length	8.714 in.	**Joint Yield Strength**	662 x1000 lb	**Optimum**	16,000 ft-lb
Connection ID	4.670 in.	**Internal Pressure Capacity**	14,530 psi	**Maximum**	19,200 ft-lb
Make-up Loss	3.780 in.	**Compression Efficiency**	90.80 %		
Threads per inch	3.40	**Compression Strength**	662 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	82 °/100 ft	**Operating Torque**	33,000 ft-lb
		External Pressure Capacity	14,540 psi	**Yield Torque**	39,000 ft-lb
		Coupling Face Load	172,000 lb	**Buck-On**	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.476 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version

For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

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
30-025-50379	98248	WC-025 G-08 S243217P; Upper Wolfcamp

Property Code	Property Name	Well Number
40143	WINDWARD FEDERAL	701H

OGRID No.	Operator Name	Elevation
217955	COG PRODUCTION LLC	3550.5'

Surface Location

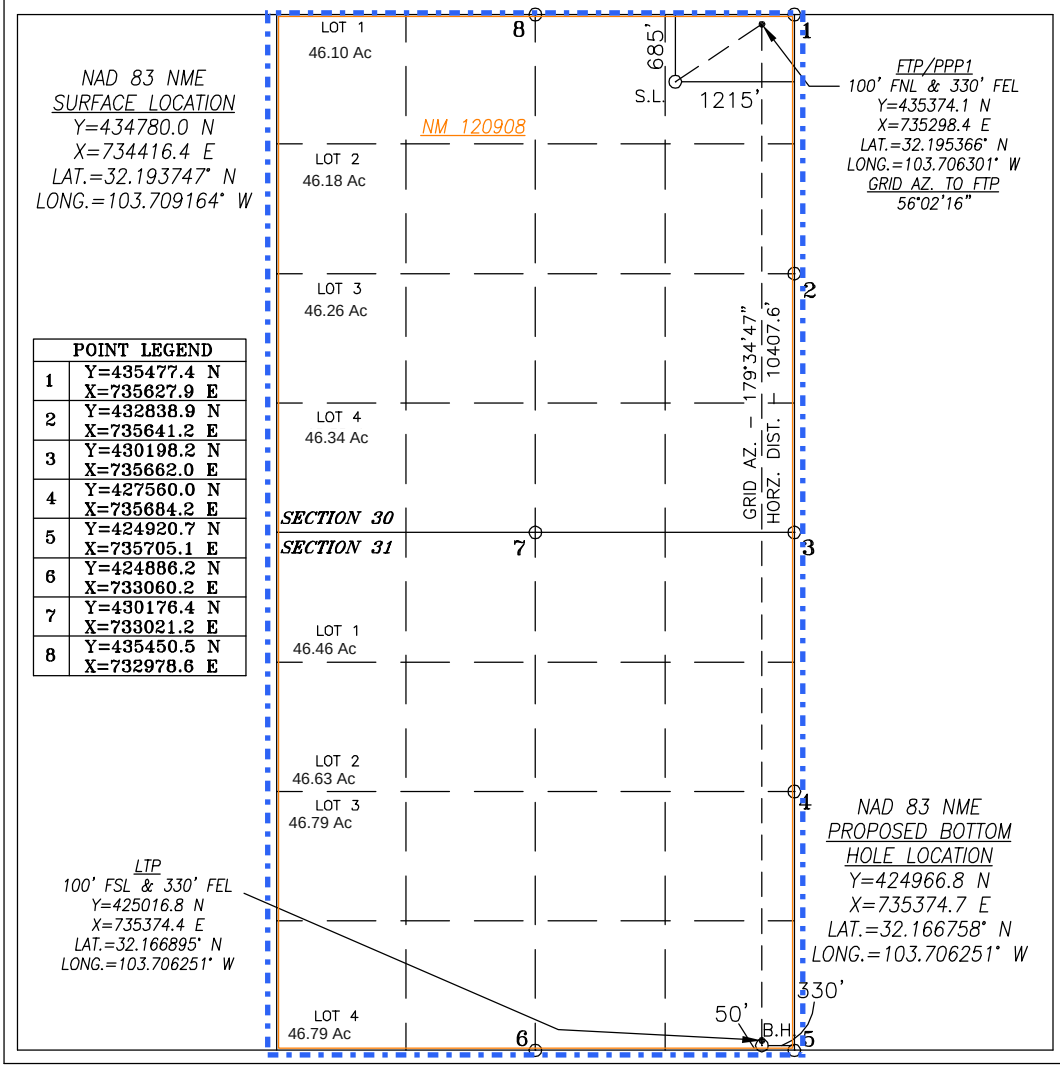
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	30	24-S	32-E		685	NORTH	1215	EAST	LEA

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
P	31	24-S	32-E		50	SOUTH	330	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
1331.72			

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



POINT LEGEND	
1	Y=435477.4 N X=735627.9 E
2	Y=432838.9 N X=735641.2 E
3	Y=430198.2 N X=735662.0 E
4	Y=427560.0 N X=735684.2 E
5	Y=424920.7 N X=735705.1 E
6	Y=424886.2 N X=733060.2 E
7	Y=430176.4 N X=733021.2 E
8	Y=435450.5 N X=732978.6 E

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.

Stan Wagner 4/25/2024
Signature Date

Stan Wagner
Printed Name

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.

NOVEMBER 20, 2020
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 3/24/24
Certificate No. CHAD HARCROW 17777
W.O. # 24-280 DRAWN BY: WN

COG Operating, LLC - Windward Federal 701H

1. Geologic Formations

TVD of target	12,060' EOL	Pilot hole depth	NA
MD at TD:	22,272'	Deepest expected fresh water:	380'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	776	Water	
Top of Salt	1072	Salt	
Base of Salt	4391	Salt	
Lamar	4627	Salt Water	
Bell Canyon	4651	Salt Water	
Cherry Canyon	5569	Oil/Gas	
Brushy Canyon	6863	Oil/Gas	
Bone Spring	8490	Oil/Gas	
1st Bone Spring Sand	9629	Oil/Gas	
1st Bone Spring Shale	9864	Oil/Gas	
2nd Bone Spring Sand	10233	Oil/Gas	
3rd Bone Spring Sand	11606	Oil/Gas	
Wolfcamp	11957	Oil/Gas	
Wolfcamp A	12086	Oil/Gas	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
17.50"	0	930	13.375"	54.5	J55	BTC	2.66	1.43	16.83	17.93
9.875"	0	8500	7.625"	29.7	L80-ICY	BTC	1.33	1.01	2.88	2.90
8.750"	8500	11500	7.625"	29.7	P110-ICY	W513	1.23	1.52	3.13	1.88
6.75"	0	11300	5.5"	23	P110-CY	BTC	1.83	2.14	2.80	2.80
6.75"	11300	22,272	5.5"	23	P110-CY	W441	1.72	2.00	2.63	2.39
					BLM Minimum Safety Factor		1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

2b. Contingtency Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
17.50"	0	930	13.375"	54.5	J55	BTC	2.66	1.43	16.83	17.93
12.25"	0	4530	9.625"	40	L80-IC	BTC	1.64	1.28	5.06	5.23
8.75"	4330	11500	7.625"	29.7	P110-ICY	W513	1.23	1.52	3.13	1.88
6.75"	0	11300	5.5"	23	P110-CY	BTC	1.83	2.14	2.80	2.80
6.75"	11300	22,272	5.5"	23	P110-CY	W441	1.72	2.00	2.63	2.39
					BLM Minimum Safety Factor		1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and
All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172

Contingency program will be run if large water flows or losses are encountered.

The 5 1/2" W441 casing will be run back 200' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

COG Operating, LLC - Windward Federal 701H

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

COG Operating, LLC - Windward Federal 701H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	450	12.8	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Inter. Stage 1	840	10.3	3.3	22	24	Halliburton tuned light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	710	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	830	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

If losses are encountered in the intermediate section a DV/ECP tool will be run ~50' above the Lamar Lime top, cement will be adjusted accordingly if this contingency is necessary.

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results
Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0'	50%
1st Intermediate	0'	50%
Production	11,000'	20% OH in Lateral (KOP to EOL)

3b. Contingency Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	560	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl2
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl2
Int. #1	670	12.8	1.75	9.21	12	Lead: Class C + 4% Gel + 1% CaCl2
	390	14.8	1.35	6.6	8	Tail: Class C + 2% CaCl2
Inter. #2 (Liner)	200	10.5	3.3	22	24	Tuned light
	90	14.8	1.35	6.6	8	Tail: Class H
Prod	850	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	830	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

Contingency program will be run if large water flows or losses are encountered.

Casing String	TOC	% Excess
Surface	0'	50%
1st Intermediate	0'	50%
2nd Intermediate	4,330'	20%
Production	11,250'	20% OH in Lateral (KOP to EOL)

COG Operating, LLC - Windward Federal 701H

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
Y	A variance is requested for the use of BOPE break testing on intermediate skids (in accordance with the 30 day full BOPE test requirements).

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
12-1/4" or 9-7/8”	13-5/8”	5M	Annular	x	2500psi
			Blind Ram	x	5000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		
6-3/4”	13-5/8”	10M	5M Annular	x	5000psi
			Blind Ram	x	10000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR Part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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

Y	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR Part 3170 Subpart 3172.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
	N Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per 43 CFR Part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

COG Operating, LLC - Windward Federal 701H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 13.5	35-45	<20

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

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

5b. Contingency Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
9-5/8" Int shoe	7-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 13.5	35-45	<20

6. Logging and Testing Procedures

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

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
Y	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8470 psi at 12060' TVD
Abnormal Temperature	NO 175 Deg. F.

No abnormal pressure or temperature conditions are anticipated. Sufficient mud materials to maintain mud properties and weight increase requirements will be kept on location at all times.

Sufficient supplies of Paper/LCM for periodic sweeps to control seepage and losses will be maintained on location.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR Part 3170 Subpart 3176. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S Plan attached

8. Other Facets of Operation

Y	Is it a walking operation?
Y	Is casing pre-set?

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST
WINDWARD FEDERAL PROJECT
WINDWARD FEDERAL 701H
300255037900
OWB
PWP1

Anticollision Report

23 April, 2024

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Reference PWP1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,000.0usft	**Error Surface:**	Combined Pedal Curve
Warning Levels Evaluated at:	2.79 **Sigma**	**Casing Method:**	Added to Error Values

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

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	1,200.0	PWP1 (OWB)	r.5 SDI_KPR_WL_NS-CT	SDI Keeper Wireline Gyrocomp-Initilzd Cont. rev.5
1,200.0	22,271.5	PWP1 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
AZORES FEDERAL PROJECT (BULLDOG 2432)						
AZORES FEDERAL #9H - OWB - AWP	9,278.2	13,874.0	664.0	545.6	5.608	CC, ES, SF
AZORES FEDERAL COM #708H - OWB - AWP	16,416.3	12,401.2	680.6	607.8	9.353	CC, ES
AZORES FEDERAL COM #708H - OWB - AWP	16,900.0	12,036.8	714.6	631.1	8.557	SF
AZORES FEDERAL COM #708H - OWB - PWP3	12,600.0	16,221.6	661.8	588.9	9.073	ES
AZORES FEDERAL COM #708H - OWB - PWP3	12,680.5	16,141.1	661.5	589.1	9.130	CC
AZORES FEDERAL COM #708H - OWB - PWP3	16,900.0	12,036.8	714.6	631.1	8.557	SF
CORVO FEDERAL #4H (P&A) - OWB - AWP	8,600.0	12,886.0	898.6	786.0	7.978	CC
CORVO FEDERAL #4H (P&A) - OWB - AWP	8,604.4	12,886.0	898.6	786.0	7.977	ES, SF
WINDWARD FEDERAL PROJECT						
KING TUT FEDERAL 4H - OWB - AWP	6,506.2	6,397.7	78.5	32.2	1.697	Caution - Monitor Closely, C
WINDWARD FEDERAL 10H - OWB - AWP	0.0	0.0	873.1			
WINDWARD FEDERAL 10H - OWB - AWP	1,204.4	1,201.6	874.2	866.4	111.270	ES
WINDWARD FEDERAL 10H - OWB - AWP	2,500.0	2,488.4	992.0	980.4	85.941	SF
WINDWARD FEDERAL 11H - OWB - AWP	4,800.0	4,716.6	114.2	95.4	6.060	SF
WINDWARD FEDERAL 11H - OWB - AWP	4,951.2	4,861.4	106.5	89.9	6.407	CC, ES
WINDWARD FEDERAL 12H - OWB - AWP	5,300.0	5,204.9	41.5	24.2	2.398	Caution - Monitor Closely, C
WINDWARD FEDERAL 12H - OWB - AWP	5,304.4	5,209.2	41.5	24.1	2.391	Caution - Monitor Closely, E
WINDWARD FEDERAL 12H - OWB - AWP	5,400.0	5,302.2	47.4	25.5	2.166	Caution - Monitor Closely, SI
WINDWARD FEDERAL 4H - OWB - AWP	5,835.3	5,731.4	55.5	21.8	1.649	Caution - Monitor Closely, C
WINDWARD FEDERAL 4H - OWB - AWP	10,000.0	9,894.0	92.4	31.7	1.521	Caution - Monitor Closely, SI
WINDWARD FEDERAL 702H - OWB - PWP1	1,200.0	1,200.0	30.0	21.2	3.427	CC, ES, SF
WINDWARD FEDERAL 703H - OWB - PWP1	1,200.0	1,200.0	60.0	51.2	6.853	CC, ES, SF
WINDWARD FEDERAL 707H - OWB - PWP1	1,200.0	1,200.0	90.1	81.3	10.291	CC, ES
WINDWARD FEDERAL 707H - OWB - PWP1	1,300.0	1,297.7	92.9	83.8	10.237	SF
WINDWARD FEDERAL 9H - OWB - AWP	0.0	0.0	915.5			
WINDWARD FEDERAL 9H - OWB - AWP	1,223.4	1,224.1	916.2	908.3	116.494	ES
WINDWARD FEDERAL 9H - OWB - AWP	2,200.0	2,181.7	990.2	979.7	94.715	SF

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

TD Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
AZORES FEDERAL PROJECT (BULLDOG 2432)						
AZORES FEDERAL #9H - OWB - AWP	22,271.5	9,002.0				Out of Range @TD
AZORES FEDERAL COM #708H - OWB - AWP	22,271.5	11,726.0				Out of Range @TD
AZORES FEDERAL COM #708H - OWB - PWP3	22,271.5	11,726.0				Out of Range @TD
CORVO FEDERAL #4H (P&A) - OWB - AWP	22,271.5	8,140.0				Out of Range @TD
WINDWARD FEDERAL PROJECT						
KING TUT FEDERAL 4H - OWB - AWP	22,271.5	18,222.0				Out of Range @TD
WINDWARD FEDERAL 10H - OWB - AWP	22,271.5	19,025.0				Out of Range @TD
WINDWARD FEDERAL 11H - OWB - AWP	22,271.5	19,115.0				Out of Range @TD
WINDWARD FEDERAL 12H - OWB - AWP	22,271.5	19,062.0				Out of Range @TD
WINDWARD FEDERAL 4H - OWB - AWP	22,271.5	20,361.0				Out of Range @TD
WINDWARD FEDERAL 702H - OWB - PWP1	22,271.5	22,441.2	694.0	534.8	4.360	
WINDWARD FEDERAL 703H - OWB - PWP1	22,271.5	22,447.3				Out of Range @TD
WINDWARD FEDERAL 707H - OWB - PWP1	22,271.5	22,458.1				Out of Range @TD
WINDWARD FEDERAL 9H - OWB - AWP	22,271.5	19,067.7				Out of Range @TD

Offset Design: AZORES FEDERAL PROJECT (BULLDOG 2432) - AZORES FEDERAL #9H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8454-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,600.0	8,498.2	13,874.0	9,176.5	26.7	81.1	91.64	481.0	1,508.7	949.1	855.7	93.44	10.158	
8,700.0	8,598.2	13,874.0	9,176.5	26.8	81.1	91.64	481.0	1,508.7	880.4	782.8	97.66	9.015	
8,800.0	8,698.2	13,874.0	9,176.5	26.8	81.1	91.64	481.0	1,508.7	818.3	716.0	102.23	8.004	
8,900.0	8,798.2	13,874.0	9,176.5	26.8	81.1	91.64	481.0	1,508.7	764.1	657.2	106.95	7.145	
9,000.0	8,898.2	13,874.0	9,176.5	26.9	81.1	91.64	481.0	1,508.7	719.9	608.5	111.45	6.460	
9,100.0	8,998.2	13,874.0	9,176.5	26.9	81.1	91.64	481.0	1,508.7	687.5	572.3	115.21	5.967	
9,200.0	9,098.2	13,874.0	9,176.5	27.0	81.1	91.64	481.0	1,508.7	668.6	550.9	117.68	5.681	
9,278.2	9,176.5	13,874.0	9,176.5	27.0	81.1	91.64	481.0	1,508.7	664.0	545.6	118.40	5.608	CC, ES, SF
9,300.0	9,198.2	13,874.0	9,176.5	27.0	81.1	91.64	481.0	1,508.7	664.3	545.9	118.40	5.611	
9,400.0	9,298.2	13,874.0	9,176.5	27.0	81.1	91.64	481.0	1,508.7	675.1	557.8	117.26	5.757	
9,500.0	9,398.2	13,874.0	9,176.5	27.1	81.1	91.64	481.0	1,508.7	700.0	585.5	114.52	6.113	
9,600.0	9,498.2	13,874.0	9,176.5	27.1	81.1	91.64	481.0	1,508.7	737.9	627.1	110.71	6.665	
9,700.0	9,598.2	13,874.0	9,176.5	27.2	81.1	91.64	481.0	1,508.7	786.6	680.2	106.39	7.394	
9,800.0	9,698.2	13,874.0	9,176.5	27.2	81.1	91.64	481.0	1,508.7	844.5	742.5	102.01	8.278	
9,900.0	9,798.2	13,874.0	9,176.5	27.2	81.1	91.64	481.0	1,508.7	909.7	811.8	97.87	9.294	
10,000.0	9,898.2	13,874.0	9,176.5	27.3	81.1	91.64	481.0	1,508.7	980.7	886.6	94.13	10.419	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: AZORES FEDERAL PROJECT (BULLDOG 2432) - AZORES FEDERAL COM #708H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 937-r.5 MWD+IFR1+MS, 11638-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,600.0	11,498.2	16,840.0	12,099.5	28.0	52.5	91.41	482.0	1,573.3	944.6	868.1	76.47	12.353	
11,700.0	11,598.2	16,841.9	12,099.6	28.0	52.5	-85.86	483.9	1,573.3	884.3	807.6	76.70	11.529	
11,800.0	11,697.1	16,830.4	12,099.4	27.8	52.5	-92.51	472.5	1,573.2	831.1	754.4	76.76	10.827	
11,900.0	11,791.0	16,795.6	12,099.4	27.6	52.3	-95.85	437.7	1,572.5	787.1	710.6	76.47	10.293	
12,000.0	11,875.7	16,722.6	12,101.4	27.4	52.0	-95.59	364.8	1,569.3	752.4	677.3	75.13	10.015	
12,100.0	11,947.7	16,649.5	12,104.1	27.3	51.7	-95.00	291.9	1,564.5	725.2	650.8	74.34	9.755	
12,200.0	12,003.6	16,581.4	12,106.0	27.1	51.4	-94.52	223.9	1,560.8	705.2	630.9	74.34	9.487	
12,300.0	12,041.2	16,505.0	12,106.0	27.1	51.0	-93.82	147.5	1,560.3	693.1	618.8	74.34	9.324	
12,400.0	12,058.7	16,438.4	12,105.6	27.1	50.8	-93.75	81.0	1,562.2	686.8	611.7	75.06	9.150	
12,500.0	12,060.0	16,334.5	12,107.8	27.2	50.3	-94.02	-22.9	1,565.6	683.5	609.3	74.24	9.207	
12,598.2	12,060.0	16,228.4	12,109.5	27.3	49.9	-94.16	-129.0	1,567.8	682.4	609.1	73.28	9.311	
12,600.0	12,060.0	16,226.4	12,109.5	27.3	49.9	-94.16	-130.9	1,567.8	682.4	609.1	73.27	9.314	
12,700.0	12,060.0	16,142.2	12,107.7	27.4	49.6	-94.00	-215.0	1,569.6	683.6	610.2	73.37	9.317	
12,800.0	12,060.0	16,007.6	12,102.0	27.5	49.0	-93.53	-349.5	1,570.0	682.4	611.2	71.20	9.585	
12,836.5	12,060.0	15,983.8	12,101.7	27.5	48.9	-93.51	-373.3	1,569.9	682.1	610.5	71.57	9.530	
12,900.0	12,060.0	15,937.0	12,101.7	27.6	48.8	-93.50	-420.1	1,571.1	683.2	611.2	71.95	9.495	
13,000.0	12,060.0	15,869.3	12,101.7	27.8	48.5	-93.49	-487.6	1,575.3	688.4	615.6	72.79	9.457	
13,100.0	12,060.0	15,760.2	12,101.5	28.0	48.1	-93.43	-596.4	1,584.0	695.7	623.8	71.91	9.675	
13,200.0	12,060.0	15,617.5	12,106.1	28.1	47.6	-93.79	-738.9	1,588.7	698.5	628.9	69.54	10.044	
13,300.0	12,060.0	15,498.2	12,110.2	28.3	47.2	-94.14	-858.1	1,586.5	696.0	627.9	68.18	10.209	
13,400.0	12,060.0	15,397.7	12,111.5	28.6	46.9	-94.27	-958.6	1,584.0	692.9	625.1	67.75	10.228	
13,500.0	12,060.0	15,289.3	12,110.9	28.8	46.6	-94.25	-1,066.9	1,580.9	689.3	622.3	66.97	10.292	
13,600.0	12,060.0	15,187.9	12,110.2	29.0	46.3	-94.21	-1,168.2	1,577.0	684.7	618.1	66.57	10.286	
13,700.0	12,060.0	15,116.7	12,107.7	29.3	46.0	-94.02	-1,239.4	1,575.8	682.1	614.4	67.64	10.084	
13,708.7	12,060.0	15,110.6	12,107.5	29.3	46.0	-93.99	-1,245.5	1,575.9	682.1	614.3	67.74	10.069	
13,800.0	12,060.0	15,027.6	12,104.8	29.6	45.8	-93.76	-1,328.4	1,577.7	683.1	615.2	67.89	10.061	
13,900.0	12,060.0	14,923.7	12,107.4	29.9	45.5	-93.97	-1,432.2	1,579.2	684.1	616.6	67.45	10.141	
14,000.0	12,060.0	14,823.0	12,108.7	30.2	45.2	-94.08	-1,532.9	1,580.4	684.6	617.4	67.20	10.187	
14,100.0	12,060.0	14,715.5	12,108.1	30.5	45.0	-94.03	-1,640.4	1,581.3	684.7	618.0	66.69	10.267	
14,200.0	12,060.0	14,598.0	12,108.0	30.8	44.7	-94.04	-1,757.9	1,579.5	682.3	616.6	65.70	10.385	
14,299.1	12,060.0	14,520.0	12,106.5	31.2	44.5	-93.92	-1,835.9	1,578.9	680.7	614.1	66.61	10.218	
14,300.0	12,060.0	14,520.0	12,106.5	31.2	44.5	-93.92	-1,835.9	1,578.9	680.7	614.0	66.65	10.212	
14,400.0	12,060.0	14,439.3	12,103.3	31.5	44.3	-93.64	-1,916.5	1,580.8	682.1	614.6	67.51	10.105	
14,500.0	12,060.0	14,349.9	12,100.2	31.9	44.1	-93.37	-2,005.7	1,585.2	686.0	618.0	67.99	10.091	
14,600.0	12,060.0	14,234.0	12,100.8	32.3	43.9	-93.40	-2,121.5	1,590.2	689.7	622.4	67.27	10.253	
14,700.0	12,060.0	14,122.8	12,103.4	32.7	43.6	-93.60	-2,232.6	1,592.3	691.0	624.3	66.77	10.350	
14,800.0	12,060.0	14,020.0	12,105.4	33.1	43.5	-93.77	-2,335.5	1,593.1	691.2	624.5	66.68	10.366	
14,900.0	12,060.0	13,926.5	12,105.0	33.5	43.3	-93.73	-2,428.9	1,594.5	691.9	624.8	67.09	10.314	
15,000.0	12,060.0	13,821.9	12,099.1	34.0	43.1	-93.23	-2,533.3	1,596.9	693.2	626.0	67.13	10.326	
15,100.0	12,060.0	13,713.8	12,096.6	34.4	42.9	-93.03	-2,641.3	1,597.1	692.4	625.4	66.98	10.337	
15,200.0	12,060.0	13,614.4	12,091.2	34.9	42.8	-92.59	-2,740.6	1,597.8	692.1	624.8	67.33	10.279	
15,300.0	12,060.0	13,513.0	12,088.6	35.3	42.6	-92.37	-2,842.0	1,597.7	691.2	623.7	67.57	10.230	
15,400.0	12,060.0	13,408.4	12,084.6	35.8	42.5	-92.04	-2,946.6	1,597.7	690.3	622.6	67.73	10.193	
15,500.0	12,060.0	13,292.0	12,084.3	36.3	42.4	-92.03	-3,062.8	1,595.2	687.4	620.1	67.30	10.213	
15,582.7	12,060.0	13,235.3	12,087.2	36.7	42.3	-92.28	-3,119.4	1,594.1	685.6	616.9	68.65	9.986	
15,600.0	12,060.0	13,224.3	12,087.7	36.8	42.3	-92.32	-3,130.4	1,594.3	685.6	616.7	68.96	9.942	
15,700.0	12,060.0	13,141.8	12,089.7	37.3	42.2	-92.48	-3,212.8	1,597.2	688.4	618.4	70.01	9.833	
15,800.0	12,060.0	13,031.8	12,087.3	37.8	42.1	-92.26	-3,322.7	1,601.5	691.5	621.5	70.06	9.871	
15,900.0	12,060.0	12,908.5	12,084.8	38.3	41.9	-92.06	-3,445.9	1,602.8	691.8	622.3	69.56	9.945	
16,000.0	12,060.0	12,805.5	12,082.1	38.9	41.9	-91.84	-3,548.9	1,602.3	690.5	620.5	69.98	9.867	
16,100.0	12,060.0	12,700.3	12,080.8	39.4	41.8	-91.74	-3,654.1	1,599.9	687.4	617.1	70.27	9.782	
16,159.7	12,060.0	12,658.0	12,080.7	39.7	41.8	-91.73	-3,696.3	1,599.7	686.6	615.3	71.31	9.629	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: AZORES FEDERAL PROJECT (BULLDOG 2432) - AZORES FEDERAL COM #708H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 937-r.5 MWD+IFR1+MS, 11638-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,200.0	12,060.0	12,626.5	12,080.4	39.9	41.7	-91.71	-3,727.8	1,600.2	687.0	615.1	71.88	9.558	
16,300.0	12,060.0	12,486.0	12,078.5	40.5	41.6	-91.55	-3,868.3	1,598.3	684.7	614.0	70.76	9.676	
16,400.0	12,060.0	12,409.7	12,075.7	41.0	41.6	-91.33	-3,944.4	1,595.6	680.7	608.3	72.36	9.407	
16,416.3	12,060.0	12,401.2	12,075.5	41.1	41.6	-91.30	-3,953.0	1,595.6	680.6	607.8	72.77	9.353	CC, ES
16,500.0	12,060.0	12,350.0	12,074.0	41.6	41.5	-91.18	-4,004.1	1,597.8	683.1	608.7	74.47	9.173	
16,600.0	12,060.0	12,225.3	12,050.3	42.2	41.4	-89.19	-4,125.6	1,603.9	687.6	612.7	74.90	9.180	
16,700.0	12,060.0	12,135.2	12,012.2	42.8	41.4	-86.02	-4,207.1	1,604.9	690.1	612.8	77.27	8.931	
16,800.0	12,060.0	12,082.2	11,984.4	43.3	41.4	-83.74	-4,252.3	1,605.9	697.8	617.3	80.50	8.668	
16,900.0	12,060.0	12,036.8	11,956.7	43.9	41.4	-81.50	-4,288.0	1,609.0	714.6	631.1	83.51	8.557	SF
17,000.0	12,060.0	11,986.7	11,924.4	44.5	41.4	-78.97	-4,326.1	1,613.2	739.0	653.0	85.99	8.594	
17,100.0	12,060.0	11,941.1	11,892.6	45.1	41.4	-76.55	-4,358.3	1,618.1	771.5	683.6	87.94	8.773	
17,200.0	12,060.0	11,894.6	11,858.1	45.7	41.4	-74.01	-4,389.2	1,622.7	810.8	721.4	89.39	9.070	
17,300.0	12,060.0	11,868.0	11,836.5	46.4	41.3	-72.44	-4,404.6	1,624.6	857.3	767.3	90.00	9.526	
17,400.0	12,060.0	11,837.9	11,810.6	47.0	41.3	-70.58	-4,419.7	1,626.0	910.8	820.6	90.19	10.099	
17,500.0	12,060.0	11,820.0	11,794.5	47.6	41.3	-69.44	-4,427.7	1,626.4	970.6	880.8	89.71	10.818	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: AZORES FEDERAL PROJECT (BULLDOG 2432) - AZORES FEDERAL COM #708H - OWB - PWP3 — **Offset Site Error:** 0.0 usft

Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 937-r.5 MWD+IFR1+MS, 11638-r.5 MWD+IFR1+MS, 15277-r.5 MWD+IFR1+MS — **Rule Assigned:** — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,500.0	11,398.2	16,862.3	12,111.7	27.9	52.6	89.62	504.6	1,541.6	997.1	920.4	76.71	12.998	
11,600.0	11,498.2	16,862.5	12,111.7	28.0	52.6	89.61	504.8	1,541.6	928.2	851.2	76.98	12.057	
11,700.0	11,598.2	16,862.5	12,111.7	28.0	52.6	-87.61	504.7	1,541.6	865.3	788.1	77.22	11.207	
11,800.0	11,697.1	16,849.0	12,111.6	27.8	52.5	-94.54	491.3	1,541.7	809.8	732.5	77.28	10.479	
11,900.0	11,791.0	16,815.3	12,111.6	27.6	52.4	-98.15	457.6	1,542.0	764.0	686.9	77.10	9.909	
12,000.0	11,875.7	16,762.9	12,111.5	27.4	52.1	-99.01	405.1	1,542.5	729.3	652.5	76.72	9.506	
12,100.0	11,947.7	16,694.0	12,111.3	27.3	51.8	-98.02	336.2	1,543.1	704.9	628.7	76.17	9.254	
12,200.0	12,003.6	16,611.6	12,111.1	27.1	51.5	-96.22	253.9	1,543.8	688.7	613.2	75.54	9.117	
12,300.0	12,041.2	16,519.4	12,110.9	27.1	51.1	-94.66	161.7	1,544.6	677.9	603.1	74.88	9.053	
12,400.0	12,058.7	16,421.4	12,110.7	27.1	50.7	-94.18	63.7	1,545.4	670.0	595.8	74.22	9.028	
12,500.0	12,060.0	16,321.6	12,110.5	27.2	50.3	-94.37	-36.1	1,546.3	664.2	590.7	73.56	9.030	
12,600.0	12,060.0	16,221.6	12,110.3	27.3	49.9	-94.36	-136.1	1,547.2	661.8	588.9	72.95	9.073	ES
12,680.5	12,060.0	16,141.1	12,110.2	27.3	49.6	-94.35	-216.6	1,547.9	661.5	589.1	72.46	9.130	CC
12,700.0	12,060.0	16,121.6	12,110.1	27.4	49.5	-94.35	-236.1	1,548.1	661.8	589.5	72.34	9.149	
12,800.0	12,060.0	16,033.9	12,109.9	27.5	49.2	-94.33	-323.8	1,549.3	662.6	590.2	72.33	9.161	
12,900.0	12,060.0	15,952.7	12,109.8	27.6	48.8	-94.29	-404.9	1,552.7	666.0	593.3	72.61	9.171	
13,000.0	12,060.0	15,871.7	12,109.6	27.8	48.5	-94.25	-485.7	1,558.3	672.2	599.3	72.89	9.221	
13,100.0	12,060.0	15,794.4	12,109.4	28.0	48.2	-94.19	-562.7	1,565.8	681.2	607.9	73.30	9.293	
13,200.0	12,060.0	15,663.8	12,109.3	28.1	47.8	-94.11	-692.7	1,578.1	689.8	618.2	71.59	9.636	
13,300.0	12,060.0	15,532.4	12,109.6	28.3	47.3	-94.10	-823.9	1,584.4	693.9	624.1	69.78	9.944	
13,400.0	12,060.0	15,400.8	12,110.2	28.6	46.9	-94.15	-955.5	1,584.8	693.5	625.6	67.90	10.214	
13,500.0	12,060.0	15,288.0	12,110.9	28.8	46.5	-94.25	-1,068.2	1,580.9	689.3	622.4	66.91	10.302	
13,600.0	12,060.0	15,187.9	12,110.2	29.0	46.3	-94.21	-1,168.2	1,577.0	684.7	618.1	66.57	10.286	
13,700.0	12,060.0	15,116.7	12,107.7	29.3	46.0	-94.02	-1,239.4	1,575.8	682.1	614.4	67.64	10.084	
13,708.7	12,060.0	15,110.6	12,107.5	29.3	46.0	-93.99	-1,245.5	1,575.9	682.1	614.3	67.74	10.069	
13,800.0	12,060.0	15,027.6	12,104.8	29.6	45.8	-93.76	-1,328.4	1,577.7	683.1	615.2	67.89	10.061	
13,900.0	12,060.0	14,923.7	12,107.4	29.9	45.5	-93.97	-1,432.2	1,579.2	684.1	616.6	67.45	10.141	
14,000.0	12,060.0	14,823.0	12,108.7	30.2	45.2	-94.08	-1,532.9	1,580.4	684.6	617.4	67.20	10.187	
14,100.0	12,060.0	14,715.5	12,108.1	30.5	45.0	-94.03	-1,640.4	1,581.3	684.7	618.0	66.69	10.267	
14,200.0	12,060.0	14,598.0	12,108.0	30.8	44.7	-94.04	-1,757.9	1,579.5	682.3	616.6	65.70	10.385	
14,299.1	12,060.0	14,520.0	12,106.5	31.2	44.5	-93.92	-1,835.9	1,578.9	680.7	614.1	66.61	10.218	
14,300.0	12,060.0	14,520.0	12,106.5	31.2	44.5	-93.92	-1,835.9	1,578.9	680.7	614.0	66.65	10.212	
14,400.0	12,060.0	14,439.3	12,103.3	31.5	44.3	-93.64	-1,916.5	1,580.8	682.1	614.6	67.51	10.105	
14,500.0	12,060.0	14,349.9	12,100.2	31.9	44.1	-93.37	-2,005.7	1,585.2	686.0	618.0	67.99	10.091	
14,600.0	12,060.0	14,234.0	12,100.8	32.3	43.9	-93.40	-2,121.5	1,590.2	689.7	622.4	67.27	10.253	
14,700.0	12,060.0	14,122.8	12,103.4	32.7	43.6	-93.60	-2,232.6	1,592.3	691.0	624.3	66.77	10.350	
14,800.0	12,060.0	14,020.0	12,105.4	33.1	43.5	-93.77	-2,335.5	1,593.1	691.2	624.5	66.68	10.366	
14,900.0	12,060.0	13,926.5	12,105.0	33.5	43.3	-93.73	-2,428.9	1,594.5	691.9	624.8	67.09	10.314	
15,000.0	12,060.0	13,821.9	12,099.1	34.0	43.1	-93.23	-2,533.3	1,596.9	693.2	626.0	67.13	10.326	
15,100.0	12,060.0	13,713.8	12,096.6	34.4	42.9	-93.03	-2,641.3	1,597.1	692.4	625.4	66.98	10.337	
15,200.0	12,060.0	13,614.4	12,091.2	34.9	42.8	-92.59	-2,740.6	1,597.8	692.1	624.8	67.33	10.279	
15,300.0	12,060.0	13,513.0	12,088.6	35.3	42.6	-92.37	-2,842.0	1,597.7	691.2	623.7	67.57	10.230	
15,400.0	12,060.0	13,408.4	12,084.6	35.8	42.5	-92.04	-2,946.6	1,597.7	690.3	622.6	67.73	10.193	
15,500.0	12,060.0	13,292.0	12,084.3	36.3	42.4	-92.03	-3,062.8	1,595.2	687.4	620.1	67.30	10.213	
15,582.7	12,060.0	13,235.3	12,087.2	36.7	42.3	-92.28	-3,119.4	1,594.1	685.6	616.9	68.65	9.986	
15,600.0	12,060.0	13,224.3	12,087.7	36.8	42.3	-92.32	-3,130.4	1,594.3	685.6	616.7	68.96	9.942	
15,700.0	12,060.0	13,141.8	12,089.7	37.3	42.2	-92.48	-3,212.8	1,597.2	688.4	618.4	70.01	9.833	
15,800.0	12,060.0	13,031.8	12,087.3	37.8	42.1	-92.26	-3,322.7	1,601.5	691.5	621.5	70.06	9.871	
15,900.0	12,060.0	12,908.5	12,084.8	38.3	41.9	-92.06	-3,445.9	1,602.8	691.8	622.3	69.56	9.945	
16,000.0	12,060.0	12,805.5	12,082.1	38.9	41.9	-91.84	-3,548.9	1,602.3	690.5	620.5	69.98	9.867	
16,100.0	12,060.0	12,700.3	12,080.8	39.4	41.8	-91.74	-3,654.1	1,599.9	687.4	617.1	70.27	9.782	
16,159.7	12,060.0	12,658.0	12,080.7	39.7	41.8	-91.73	-3,696.3	1,599.7	686.6	615.3	71.31	9.629	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: AZORES FEDERAL PROJECT (BULLDOG 2432) - AZORES FEDERAL COM #708H - OWB - PWP3

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 937-r.5 MWD+IFR1+MS, 11638-r.5 MWD+IFR1+MS, 15277-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,200.0	12,060.0	12,626.5	12,080.4	39.9	41.7	-91.71	-3,727.8	1,600.2	687.0	615.1	71.88	9.558	
16,300.0	12,060.0	12,486.0	12,078.5	40.5	41.6	-91.55	-3,868.3	1,598.3	684.7	614.0	70.76	9.676	
16,400.0	12,060.0	12,409.7	12,075.7	41.0	41.6	-91.33	-3,944.4	1,595.6	680.7	608.3	72.36	9.407	
16,416.3	12,060.0	12,401.2	12,075.5	41.1	41.6	-91.30	-3,953.0	1,595.6	680.6	607.8	72.77	9.353	
16,500.0	12,060.0	12,350.0	12,074.0	41.6	41.5	-91.18	-4,004.1	1,597.8	683.1	608.7	74.47	9.173	
16,600.0	12,060.0	12,225.3	12,050.3	42.2	41.4	-89.19	-4,125.6	1,603.9	687.6	612.7	74.90	9.180	
16,700.0	12,060.0	12,135.2	12,012.2	42.8	41.4	-86.02	-4,207.1	1,604.9	690.1	612.8	77.27	8.931	
16,800.0	12,060.0	12,082.2	11,984.4	43.3	41.4	-83.74	-4,252.3	1,605.9	697.8	617.3	80.50	8.668	
16,900.0	12,060.0	12,036.8	11,956.7	43.9	41.4	-81.50	-4,288.0	1,609.0	714.6	631.1	83.51	8.557	SF
17,000.0	12,060.0	11,986.7	11,924.4	44.5	41.4	-78.97	-4,326.1	1,613.2	739.0	653.0	85.99	8.594	
17,100.0	12,060.0	11,941.1	11,892.6	45.1	41.4	-76.55	-4,358.3	1,618.1	771.5	683.6	87.94	8.773	
17,200.0	12,060.0	11,894.6	11,858.1	45.7	41.4	-74.01	-4,389.2	1,622.7	810.8	721.4	89.39	9.070	
17,300.0	12,060.0	11,868.0	11,836.5	46.4	41.3	-72.44	-4,404.6	1,624.6	857.3	767.3	90.00	9.526	
17,400.0	12,060.0	11,837.9	11,810.6	47.0	41.3	-70.58	-4,419.7	1,626.0	910.8	820.6	90.19	10.099	
17,500.0	12,060.0	11,820.0	11,794.5	47.6	41.3	-69.44	-4,427.7	1,626.4	970.6	880.8	89.71	10.818	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: AZORES FEDERAL PROJECT (BULLDOG 2432) - CORVO FEDERAL #4H (P&A) - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-GYD_DP_MS, 7764-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,200.0	8,098.2	12,886.0	8,499.3	26.6	78.1	100.13	341.9	1,729.6	984.0	878.9	105.08	9.364	
8,300.0	8,198.2	12,886.0	8,499.3	26.6	78.1	100.13	341.9	1,729.6	947.7	839.7	108.00	8.775	
8,400.0	8,298.2	12,886.0	8,499.3	26.6	78.1	100.13	341.9	1,729.6	920.8	810.4	110.36	8.344	
8,500.0	8,398.2	12,886.0	8,499.3	26.7	78.1	100.13	341.9	1,729.6	904.2	792.3	111.96	8.077	
8,600.0	8,498.2	12,886.0	8,499.3	26.7	78.1	100.13	341.9	1,729.6	898.6	786.0	112.63	7.978	CC
8,604.4	8,502.7	12,886.0	8,499.3	26.7	78.1	100.13	341.9	1,729.6	898.6	786.0	112.64	7.977	ES, SF
8,700.0	8,598.2	12,886.0	8,499.3	26.8	78.1	100.13	341.9	1,729.6	904.0	791.7	112.32	8.048	
8,800.0	8,698.2	12,886.0	8,499.3	26.8	78.1	100.13	341.9	1,729.6	920.4	809.3	111.08	8.285	
8,900.0	8,798.2	12,886.0	8,499.3	26.8	78.1	100.13	341.9	1,729.6	947.0	838.0	109.07	8.683	
9,000.0	8,898.2	12,886.0	8,499.3	26.9	78.1	100.13	341.9	1,729.6	983.2	876.7	106.48	9.233	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - KING TUT FEDERAL 4H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 191-r.5 GYRO-NS, 4565-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
1,600.0	1,598.7	1,596.1	1,601.9	5.4	7.2	0.34	516.7	884.9	996.8	983.8	12.96	76.910	
1,700.0	1,697.5	1,693.0	1,698.9	5.7	7.5	0.36	516.5	884.8	981.0	967.4	13.63	71.953	
1,800.0	1,795.6	1,785.3	1,791.2	6.1	7.8	0.35	517.1	885.0	962.4	948.1	14.26	67.508	
1,900.0	1,893.2	1,883.3	1,889.1	6.3	9.0	0.33	517.7	885.2	941.0	925.2	15.77	59.684	
2,000.0	1,990.7	1,981.2	1,987.0	6.6	10.1	0.32	518.1	885.4	919.3	902.0	17.39	52.878	
2,100.0	2,088.3	2,079.1	2,084.9	7.0	11.3	0.31	518.5	885.6	897.7	878.6	19.05	47.117	
2,200.0	2,185.8	2,176.7	2,182.6	7.3	12.4	0.32	518.7	885.9	875.9	855.3	20.61	42.496	
2,300.0	2,283.4	2,273.1	2,279.0	7.7	12.9	0.33	518.8	886.3	854.3	832.8	21.47	39.790	
2,400.0	2,380.9	2,369.6	2,375.5	8.1	13.4	0.36	518.9	886.9	832.8	810.5	22.34	37.280	
2,500.0	2,478.4	2,467.1	2,472.9	8.5	13.9	0.39	518.9	887.7	811.4	788.2	23.21	34.954	
2,600.0	2,576.0	2,567.4	2,573.2	8.9	14.4	0.47	518.4	888.6	789.9	765.8	24.09	32.793	
2,700.0	2,673.5	2,667.5	2,673.4	9.3	14.9	0.61	517.1	889.5	768.0	743.0	24.96	30.764	
2,800.0	2,771.0	2,765.9	2,771.7	9.7	15.4	0.79	515.3	890.5	745.8	720.0	25.83	28.873	
2,900.0	2,868.6	2,862.1	2,867.9	10.1	15.8	0.96	513.7	891.4	723.7	697.1	26.68	27.124	
3,000.0	2,966.1	2,958.4	2,964.2	10.5	16.3	1.10	512.6	892.2	701.9	674.3	27.54	25.484	
3,100.0	3,063.6	3,049.0	3,054.8	11.0	16.6	1.22	512.0	893.1	680.3	652.1	28.27	24.069	
3,200.0	3,161.2	3,141.1	3,146.9	11.4	16.8	1.34	512.2	895.2	660.3	631.5	28.86	22.884	
3,300.0	3,258.7	3,246.5	3,252.2	11.8	17.1	1.39	512.9	896.7	639.8	610.3	29.47	21.710	
3,400.0	3,356.2	3,348.7	3,354.4	12.3	17.3	1.46	513.1	897.3	618.3	588.2	30.09	20.545	
3,500.0	3,453.8	3,447.5	3,453.2	12.7	17.6	1.54	512.9	897.6	596.4	565.6	30.75	19.393	
3,600.0	3,551.3	3,544.7	3,550.5	13.2	17.9	1.65	512.5	897.9	574.4	543.0	31.45	18.267	
3,700.0	3,648.8	3,641.1	3,646.9	13.6	18.2	1.78	512.1	898.4	552.6	520.4	32.23	17.145	
3,800.0	3,746.4	3,736.9	3,742.6	14.1	18.7	1.91	511.9	899.1	531.1	498.0	33.10	16.045	
3,900.0	3,843.9	3,832.7	3,838.5	14.5	19.1	2.02	512.1	899.9	509.9	475.9	33.97	15.010	
4,000.0	3,941.4	3,931.2	3,936.9	15.0	19.5	2.13	512.5	901.0	488.9	454.1	34.81	14.044	
4,100.0	4,039.0	4,031.3	4,037.0	15.4	19.9	2.26	512.6	901.6	467.5	431.9	35.63	13.119	
4,200.0	4,136.5	4,131.1	4,136.9	15.9	20.3	2.41	512.4	901.9	445.6	409.2	36.46	12.224	
4,300.0	4,234.1	4,228.4	4,234.1	16.4	20.8	2.57	512.2	902.0	423.5	386.2	37.37	11.335	
4,400.0	4,331.6	4,325.6	4,331.3	16.8	21.3	2.71	512.2	902.0	401.5	363.2	38.28	10.489	
4,500.0	4,429.1	4,422.9	4,428.6	17.3	21.7	2.85	512.4	902.1	379.6	340.4	39.20	9.684	
4,600.0	4,526.7	4,520.8	4,526.5	17.7	22.0	3.01	512.5	902.1	357.6	317.8	39.83	8.977	
4,700.0	4,624.2	4,617.4	4,623.1	18.2	22.0	3.27	512.2	902.4	335.7	295.4	40.32	8.325	
4,800.0	4,721.7	4,715.0	4,720.7	18.7	22.1	3.61	511.8	902.9	314.0	273.2	40.76	7.703	
4,900.0	4,819.3	4,812.4	4,818.1	19.1	22.1	4.04	511.3	903.6	292.3	251.1	41.21	7.093	
5,000.0	4,916.8	4,908.9	4,914.6	19.6	22.1	4.56	510.8	904.5	270.9	229.2	41.68	6.500	
5,100.0	5,014.3	5,006.0	5,011.7	20.1	22.2	5.17	510.4	905.7	249.8	207.7	42.14	5.929	
5,200.0	5,111.9	5,104.0	5,109.7	20.5	22.2	5.94	509.8	907.1	228.8	186.2	42.59	5.373	
5,300.0	5,209.4	5,201.9	5,207.6	21.0	22.3	6.89	509.2	908.3	207.8	164.8	43.04	4.828	
5,400.0	5,307.0	5,299.7	5,305.3	21.5	22.3	7.99	508.5	909.6	187.2	143.8	43.47	4.307	
5,500.0	5,405.0	5,397.8	5,403.5	21.9	22.4	9.20	508.1	910.7	168.4	124.5	43.91	3.836	
5,600.0	5,503.3	5,496.5	5,502.2	22.4	22.4	10.62	507.6	911.8	151.2	106.9	44.31	3.413	
5,700.0	5,602.0	5,595.4	5,601.0	22.8	22.5	12.29	506.9	912.8	135.7	91.1	44.68	3.038	
5,800.0	5,700.9	5,694.4	5,700.0	23.2	22.5	14.21	506.2	913.7	122.0	77.0	45.01	2.711	Normal Operations
5,900.0	5,800.0	5,793.6	5,799.2	23.7	22.6	16.31	505.5	914.6	110.0	64.7	45.29	2.429	Caution - Monitor Closely
6,000.0	5,899.4	5,892.7	5,898.4	24.1	22.6	18.59	504.9	915.6	100.0	54.5	45.52	2.197	Caution - Monitor Closely
6,100.0	5,998.9	5,992.1	5,997.7	24.5	22.7	21.01	504.3	916.9	92.1	46.4	45.70	2.015	Caution - Monitor Closely
6,200.0	6,098.6	6,091.7	6,097.3	24.8	22.8	23.30	503.8	918.3	86.2	40.3	45.84	1.880	Caution - Monitor Closely
6,300.0	6,198.4	6,191.7	6,197.3	25.2	22.8	25.36	503.5	919.8	82.0	36.1	45.95	1.785	Caution - Monitor Closely
6,400.0	6,298.3	6,291.6	6,297.2	25.5	22.9	27.02	503.2	921.2	79.4	33.4	46.08	1.724	Caution - Monitor Closely
6,500.0	6,398.3	6,391.5	6,397.1	25.8	23.0	28.18	502.9	922.6	78.5	32.2	46.23	1.697	Caution - Monitor Closely
6,506.2	6,404.5	6,397.7	6,403.3	25.8	23.0	28.23	502.8	922.7	78.5	32.2	46.24	1.697	Caution - Monitor Closely, CC, ES, SF
6,600.0	6,498.2	6,491.3	6,496.8	26.0	23.1	28.87	502.4	924.2	79.3	32.9	46.35	1.710	Caution - Monitor Closely

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - KING TUT FEDERAL 4H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 191-r.5 GYRO-NS, 4565-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,700.0	6,598.2	6,591.3	6,596.9	26.0	23.2	88.66	501.9	926.0	81.0	34.6	46.39	1.747	Caution - Monitor Closely
6,800.0	6,698.2	6,691.2	6,696.8	26.1	23.3	89.06	501.4	927.7	82.8	36.3	46.45	1.782	Caution - Monitor Closely
6,900.0	6,798.2	6,791.3	6,796.8	26.1	23.3	89.38	500.9	929.5	84.5	38.0	46.51	1.817	Caution - Monitor Closely
7,000.0	6,898.2	6,891.2	6,896.7	26.1	23.4	89.48	500.8	931.3	86.3	39.6	46.62	1.850	Caution - Monitor Closely
7,100.0	6,998.2	6,991.3	6,996.7	26.2	23.5	89.35	501.0	933.0	88.0	41.2	46.77	1.882	Caution - Monitor Closely
7,200.0	7,098.2	7,091.3	7,096.8	26.2	23.6	89.18	501.3	934.7	89.7	42.8	46.92	1.912	Caution - Monitor Closely
7,300.0	7,198.2	7,191.5	7,197.0	26.2	23.7	89.14	501.4	936.2	91.2	44.2	47.05	1.939	Caution - Monitor Closely
7,400.0	7,298.2	7,291.6	7,297.1	26.3	23.8	89.17	501.3	937.6	92.6	45.4	47.17	1.963	Caution - Monitor Closely
7,500.0	7,398.2	7,391.9	7,397.3	26.3	23.9	89.25	501.2	938.7	93.7	46.4	47.28	1.982	Caution - Monitor Closely
7,600.0	7,498.2	7,491.9	7,497.3	26.3	24.0	89.46	500.9	939.7	94.7	47.3	47.37	1.999	Caution - Monitor Closely
7,700.0	7,598.2	7,591.8	7,597.3	26.4	24.1	89.72	500.5	940.6	95.6	48.2	47.46	2.015	Caution - Monitor Closely
7,800.0	7,698.2	7,691.7	7,697.1	26.4	24.2	89.99	500.0	941.8	96.8	49.2	47.56	2.035	Caution - Monitor Closely
7,900.0	7,798.2	7,791.9	7,797.3	26.5	24.3	90.21	499.6	942.9	97.9	50.2	47.65	2.054	Caution - Monitor Closely
8,000.0	7,898.2	7,893.6	7,898.8	26.5	24.4	93.69	493.7	942.9	98.1	51.0	47.15	2.081	Caution - Monitor Closely
8,025.8	7,924.0	7,919.3	7,924.0	26.5	24.4	96.40	489.1	942.4	98.1	51.3	46.73	2.098	Caution - Monitor Closely
8,100.0	7,998.2	7,990.7	7,992.9	26.5	24.4	107.11	470.7	940.2	99.8	54.8	44.98	2.219	Caution - Monitor Closely
8,200.0	8,098.2	8,081.5	8,077.0	26.6	24.5	125.17	437.0	934.5	111.5	69.8	41.70	2.673	Normal Operations
8,300.0	8,198.2	8,160.1	8,146.0	26.6	24.6	140.51	400.2	927.2	139.4	100.5	38.93	3.582	
8,400.0	8,298.2	8,229.1	8,202.5	26.6	24.7	151.46	361.3	920.4	184.7	147.5	37.12	4.975	
8,500.0	8,398.2	8,295.0	8,253.6	26.7	24.8	159.24	320.2	913.2	240.6	204.4	36.19	6.649	
8,600.0	8,498.2	8,350.6	8,293.9	26.7	24.9	164.49	282.8	905.3	304.2	268.7	35.46	8.579	
8,700.0	8,598.2	8,389.0	8,319.8	26.8	25.0	167.57	255.2	898.9	374.7	340.1	34.59	10.832	
8,800.0	8,698.2	8,430.8	8,345.7	26.8	25.1	170.38	223.2	891.9	450.6	416.4	34.20	13.174	
8,900.0	8,798.2	8,465.2	8,365.5	26.8	25.1	172.31	195.7	886.1	530.6	496.7	33.89	15.659	
9,000.0	8,898.2	8,497.7	8,383.1	26.9	25.2	173.89	168.9	880.5	613.4	579.7	33.72	18.191	
9,100.0	8,998.2	8,525.8	8,397.4	26.9	25.3	175.07	145.2	875.6	698.4	664.8	33.63	20.771	
9,200.0	9,098.2	8,545.0	8,406.7	27.0	25.4	175.78	128.7	872.4	785.4	751.9	33.53	23.427	
9,300.0	9,198.2	8,577.0	8,421.1	27.0	25.5	176.80	100.6	867.3	874.1	840.4	33.68	25.951	
9,400.0	9,298.2	8,577.0	8,421.1	27.0	25.5	176.80	100.6	867.3	964.1	930.5	33.57	28.721	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 10H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8683-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	3.2	3.0	3.0	-57.63	467.5	-737.4	873.1				
100.0	100.0	95.7	98.9	3.0	3.0	-57.62	467.6	-737.4	873.2	866.7	6.44	135.501	
200.0	200.0	194.2	197.4	3.2	3.0	-57.61	467.9	-737.5	873.4	866.8	6.57	132.927	
300.0	300.0	294.9	298.1	3.3	3.0	-57.60	468.2	-737.6	873.6	866.9	6.70	130.414	
400.0	400.0	394.4	397.6	3.4	3.0	-57.58	468.5	-737.7	873.9	867.1	6.83	127.963	
500.0	500.0	494.0	497.2	3.5	3.1	-57.57	468.8	-737.9	874.2	867.2	6.96	125.536	
600.0	600.0	593.0	596.2	3.7	3.1	-57.57	469.1	-738.2	874.6	867.5	7.10	123.154	
700.0	700.0	695.6	698.8	3.8	3.1	-57.56	469.3	-738.4	874.9	867.7	7.24	120.800	
800.0	800.0	800.0	803.2	3.9	3.1	-57.58	468.9	-738.4	874.7	867.3	7.36	118.848	
900.0	900.0	899.9	903.1	4.0	3.1	-57.61	468.4	-738.3	874.4	866.9	7.48	116.954	
994.7	994.7	991.5	994.7	4.1	3.1	-57.65	467.8	-738.5	874.2	866.6	7.59	115.162	
1,000.0	1,000.0	996.5	999.7	4.2	3.1	-57.65	467.8	-738.5	874.2	866.6	7.60	115.061	
1,090.7	1,090.7	1,087.5	1,090.7	4.3	3.1	-57.68	467.3	-738.8	874.2	866.5	7.71	113.375	
1,100.0	1,100.0	1,096.3	1,099.5	4.3	3.1	-57.69	467.3	-738.8	874.2	866.5	7.72	113.203	
1,200.0	1,200.0	1,197.1	1,200.3	4.4	3.1	-57.72	466.9	-739.1	874.2	866.4	7.85	111.389	
1,204.4	1,204.4	1,201.6	1,204.8	4.4	3.1	-117.11	466.8	-739.2	874.2	866.4	7.86	111.270 ES	
1,300.0	1,300.0	1,295.9	1,299.1	4.5	3.2	-117.22	466.6	-739.4	875.1	867.1	7.99	109.474	
1,400.0	1,399.8	1,394.9	1,398.1	4.8	3.2	-117.51	466.2	-739.8	877.7	869.4	8.23	106.600	
1,500.0	1,499.5	1,493.3	1,496.5	5.1	3.2	-117.95	466.1	-740.2	882.0	873.5	8.48	103.973	
1,600.0	1,598.7	1,591.3	1,594.5	5.4	3.3	-118.53	466.2	-740.6	888.2	879.5	8.75	101.532	
1,700.0	1,697.5	1,690.6	1,693.8	5.7	3.3	-119.24	466.8	-740.9	896.4	887.3	9.03	99.299	
1,800.0	1,795.6	1,787.3	1,790.5	6.1	3.3	-120.03	467.8	-740.9	906.5	897.2	9.32	97.276	
1,900.0	1,893.2	1,885.3	1,888.5	6.3	3.4	-121.04	469.2	-740.7	918.3	908.8	9.52	96.487	
2,000.0	1,990.7	1,986.1	1,989.2	6.6	3.4	-122.09	471.2	-740.0	930.4	920.6	9.81	94.796	
2,100.0	2,088.3	2,083.7	2,086.8	7.0	3.4	-123.06	473.6	-739.1	942.7	932.5	10.13	93.094	
2,200.0	2,185.8	2,184.2	2,187.3	7.3	3.5	-124.11	474.7	-738.6	955.2	944.7	10.46	91.338	
2,300.0	2,283.4	2,286.6	2,289.7	7.7	3.5	-125.25	474.3	-738.5	967.6	956.8	10.80	89.570	
2,400.0	2,380.9	2,388.7	2,391.8	8.1	3.5	-126.30	474.4	-737.4	979.8	968.6	11.16	87.774	
2,500.0	2,478.4	2,488.4	2,491.5	8.5	3.5	-127.27	474.9	-735.9	992.0	980.4	11.54	85.941 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 11H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8607-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	6.2	3.0	3.0	53.56	481.7	652.5	811.1				
100.0	100.0	97.6	103.8	3.0	3.0	53.60	481.2	652.6	810.8	804.4	6.44	125.826	
200.0	200.0	197.1	203.3	3.2	3.0	53.66	480.3	652.8	810.5	803.9	6.57	123.363	
300.0	300.0	294.6	300.8	3.3	3.0	53.72	479.4	653.1	810.2	803.5	6.70	120.997	
400.0	400.0	394.9	401.1	3.4	3.0	53.76	478.8	653.3	810.0	803.2	6.82	118.707	
419.1	419.1	412.9	419.1	3.4	3.0	53.77	478.7	653.4	810.0	803.1	6.85	118.306	
500.0	500.0	488.9	495.1	3.5	3.0	53.81	478.4	653.9	810.2	803.3	6.95	116.613	
600.0	600.0	587.6	593.8	3.7	3.1	53.85	478.4	654.8	811.0	803.9	7.07	114.673	
700.0	700.0	687.4	693.6	3.8	3.1	53.90	478.3	656.0	811.9	804.7	7.20	112.773	
800.0	800.0	787.0	793.2	3.9	3.1	53.95	478.2	657.0	812.6	805.3	7.33	110.894	
900.0	900.0	889.9	896.0	4.0	3.1	53.99	478.2	658.0	813.4	805.9	7.46	109.042	
1,000.0	1,000.0	982.8	988.9	4.2	3.2	54.01	478.3	658.7	814.1	806.5	7.59	107.243	
1,100.0	1,100.0	1,079.8	1,086.0	4.3	3.2	53.98	479.6	659.7	815.7	808.0	7.73	105.559	
1,200.0	1,200.0	1,185.0	1,191.1	4.4	3.2	53.94	481.1	660.6	817.2	809.3	7.87	103.852	
1,300.0	1,300.0	1,292.4	1,298.5	4.5	3.2	-5.62	483.3	659.8	816.2	808.0	8.13	100.443	
1,400.0	1,399.8	1,394.1	1,400.1	4.8	3.2	-5.97	486.6	657.3	810.8	802.4	8.47	95.675	
1,500.0	1,499.5	1,495.8	1,501.8	5.1	3.2	-6.33	489.7	654.9	802.1	793.3	8.85	90.681	
1,600.0	1,598.7	1,594.0	1,599.9	5.4	3.2	-6.66	491.8	652.9	789.7	780.4	9.24	85.464	
1,700.0	1,697.5	1,693.8	1,699.6	5.7	3.3	-7.07	494.0	650.8	773.8	764.2	9.66	80.094	
1,800.0	1,795.6	1,793.0	1,798.8	6.1	3.3	-7.53	496.3	648.7	754.7	744.5	10.11	74.644	
1,900.0	1,893.2	1,898.6	1,904.3	6.3	3.3	-8.05	498.0	646.0	732.0	721.6	10.42	70.269	
2,000.0	1,990.7	1,996.6	2,002.3	6.6	3.3	-8.55	499.3	642.9	708.6	697.8	10.82	65.488	
2,100.0	2,088.3	2,100.8	2,106.4	7.0	3.3	-8.97	498.8	640.0	684.3	673.1	11.24	60.881	
2,200.0	2,185.8	2,197.2	2,202.8	7.3	3.4	-9.32	497.7	637.5	659.9	648.3	11.69	56.454	
2,300.0	2,283.4	2,291.3	2,296.9	7.7	3.4	-9.69	496.7	635.3	635.7	623.5	12.16	52.257	
2,400.0	2,380.9	2,388.7	2,394.2	8.1	3.4	-10.09	495.7	633.4	611.9	599.2	12.65	48.358	
2,500.0	2,478.4	2,482.3	2,487.9	8.5	3.5	-10.48	494.7	631.9	588.3	575.1	13.17	44.682	
2,600.0	2,576.0	2,580.6	2,586.1	8.9	3.5	-10.92	494.0	630.4	565.0	551.3	13.68	41.292	
2,700.0	2,673.5	2,675.6	2,681.1	9.3	3.5	-11.36	493.0	629.3	541.8	527.6	14.22	38.099	
2,800.0	2,771.0	2,775.9	2,781.4	9.7	3.6	-11.87	492.0	627.9	518.6	503.8	14.75	35.150	
2,900.0	2,868.6	2,874.5	2,879.9	10.1	3.6	-12.54	491.4	625.6	494.8	479.5	15.29	32.358	
3,000.0	2,966.1	2,968.3	2,973.7	10.5	3.7	-13.22	490.8	623.5	471.3	455.4	15.86	29.725	
3,100.0	3,063.6	3,064.4	3,069.8	11.0	3.7	-13.85	489.8	622.6	448.4	432.0	16.42	27.311	
3,200.0	3,161.2	3,159.4	3,164.8	11.4	3.8	-14.44	488.6	622.4	425.9	408.9	16.99	25.067	
3,300.0	3,258.7	3,255.5	3,260.9	11.8	3.8	-15.07	487.3	622.5	403.7	386.2	17.56	22.990	
3,400.0	3,356.2	3,351.9	3,357.3	12.3	3.9	-15.89	487.0	622.4	382.2	364.0	18.13	21.082	
3,500.0	3,453.8	3,448.4	3,453.8	12.7	3.9	-16.69	486.2	622.9	360.8	342.1	18.69	19.303	
3,600.0	3,551.3	3,546.4	3,551.8	13.2	4.0	-17.56	485.5	623.9	339.7	320.4	19.23	17.660	
3,700.0	3,648.8	3,644.6	3,650.0	13.6	4.0	-18.82	485.5	623.4	318.4	298.7	19.76	16.116	
3,800.0	3,746.4	3,742.5	3,747.9	14.1	4.1	-20.11	485.0	623.5	297.2	276.9	20.27	14.662	
3,900.0	3,843.9	3,840.3	3,845.6	14.5	4.1	-21.32	483.4	624.5	275.9	255.1	20.78	13.279	
4,000.0	3,941.4	3,938.4	3,943.8	15.0	4.2	-22.72	481.7	625.4	254.6	233.3	21.26	11.977	
4,100.0	4,039.0	4,034.0	4,039.3	15.4	4.2	-25.14	482.3	623.9	233.9	212.2	21.66	10.797	
4,200.0	4,136.5	4,131.0	4,136.3	15.9	4.3	-28.14	483.3	622.3	214.1	192.1	21.95	9.753	
4,300.0	4,234.1	4,228.9	4,234.2	16.4	4.3	-31.54	483.9	621.3	194.8	172.7	22.12	8.807	
4,400.0	4,331.6	4,327.4	4,332.7	16.8	4.4	-35.65	484.0	620.3	175.9	153.8	22.12	7.953	
4,500.0	4,429.1	4,424.9	4,430.2	17.3	4.5	-40.68	483.9	619.0	157.7	135.8	21.90	7.204	
4,600.0	4,526.7	4,522.3	4,527.6	17.7	4.6	-46.92	483.4	617.6	140.8	119.4	21.34	6.596	
4,700.0	4,624.2	4,619.7	4,625.0	18.2	4.6	-54.84	483.1	616.0	126.0	105.7	20.31	6.203	
4,800.0	4,721.7	4,716.6	4,721.9	18.7	4.7	-64.56	482.7	614.2	114.2	95.4	18.85	6.060 SF	
4,900.0	4,819.3	4,812.4	4,817.6	19.1	4.8	-76.61	482.8	610.8	107.4	90.2	17.20	6.247	
4,951.2	4,869.2	4,861.4	4,866.5	19.4	4.8	-83.39	483.0	608.5	106.5	89.9	16.63	6.407 CC, ES	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 11H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8607-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,916.8	4,908.7	4,913.8	19.6	4.9	-90.03	483.2	606.2	107.2	90.7	16.47	6.507	
5,100.0	5,014.3	5,004.0	5,008.9	20.1	5.0	-102.96	483.5	600.8	113.6	96.1	17.52	6.484	
5,200.0	5,111.9	5,099.7	5,104.4	20.5	5.1	-114.31	484.1	594.5	126.5	106.8	19.73	6.412	
5,300.0	5,209.4	5,195.8	5,200.3	21.0	5.1	-123.45	484.7	587.9	143.7	121.6	22.10	6.503	
5,400.0	5,307.0	5,291.7	5,296.0	21.5	5.2	-130.55	485.4	581.3	163.7	139.5	24.12	6.784	
5,500.0	5,405.0	5,388.6	5,392.6	21.9	5.3	-135.77	486.2	574.7	184.2	158.5	25.78	7.147	
5,600.0	5,503.3	5,486.3	5,490.1	22.4	5.4	-139.61	487.2	568.3	204.4	177.3	27.13	7.535	
5,700.0	5,602.0	5,583.8	5,587.4	22.8	5.5	-142.47	488.1	562.2	223.7	195.4	28.25	7.919	
5,800.0	5,700.9	5,680.8	5,684.3	23.2	5.6	-144.54	489.4	555.9	242.1	213.0	29.17	8.302	
5,900.0	5,800.0	5,783.8	5,787.1	23.7	5.7	-146.31	490.3	549.7	258.9	228.8	30.15	8.589	
6,000.0	5,899.4	5,883.0	5,886.1	24.1	5.8	-147.75	490.3	544.8	273.4	242.5	30.96	8.834	
6,100.0	5,998.9	5,982.0	5,984.9	24.5	5.9	-148.86	490.3	539.9	286.5	254.9	31.67	9.048	
6,200.0	6,098.6	6,080.5	6,083.4	24.8	6.0	-149.66	490.5	535.1	298.2	265.9	32.29	9.236	
6,300.0	6,198.4	6,180.1	6,182.8	25.2	6.1	-150.27	490.6	530.0	308.6	275.8	32.87	9.390	
6,400.0	6,298.3	6,279.4	6,282.0	25.5	6.2	-150.73	490.4	524.9	317.5	284.1	33.38	9.512	
6,500.0	6,398.3	6,379.3	6,381.7	25.8	6.3	-151.03	490.1	519.8	325.0	291.1	33.83	9.606	
6,600.0	6,498.2	6,479.7	6,482.1	26.0	6.4	-151.19	489.6	514.9	330.7	296.6	34.10	9.698	
6,700.0	6,598.2	6,578.0	6,580.2	26.0	6.5	-91.82	489.3	509.9	335.8	301.6	34.16	9.829	
6,800.0	6,698.2	6,678.2	6,680.3	26.1	6.6	-91.86	488.9	504.5	341.1	306.9	34.27	9.954	
6,900.0	6,798.2	6,777.9	6,779.8	26.1	6.7	-91.91	488.5	499.2	346.5	312.1	34.37	10.080	
7,000.0	6,898.2	6,878.4	6,880.2	26.1	6.8	-91.96	488.0	493.9	351.8	317.3	34.49	10.199	
7,100.0	6,998.2	6,978.8	6,980.5	26.2	6.9	-92.00	487.6	488.9	356.8	322.2	34.60	10.309	
7,200.0	7,098.2	7,079.0	7,080.5	26.2	7.1	-92.05	487.1	483.8	361.8	327.1	34.72	10.422	
7,300.0	7,198.2	7,179.2	7,180.6	26.2	7.2	-92.12	486.5	479.0	366.7	331.8	34.84	10.525	
7,400.0	7,298.2	7,279.0	7,280.3	26.3	7.3	-92.18	485.9	474.2	371.5	336.6	34.95	10.630	
7,500.0	7,398.2	7,379.6	7,380.8	26.3	7.4	-92.27	485.1	469.5	376.2	341.1	35.08	10.724	
7,600.0	7,498.2	7,475.8	7,476.9	26.3	7.5	-92.31	484.7	464.7	381.3	346.1	35.13	10.854	
7,700.0	7,598.2	7,575.2	7,576.1	26.4	7.6	-92.33	484.3	458.9	387.1	351.8	35.23	10.988	
7,800.0	7,698.2	7,676.1	7,676.8	26.4	7.7	-92.39	483.6	453.2	392.8	357.4	35.36	11.108	
7,900.0	7,798.2	7,778.0	7,778.6	26.5	7.9	-92.50	482.6	447.9	398.0	362.5	35.52	11.204	
8,000.0	7,898.2	7,877.1	7,877.6	26.5	8.0	-92.60	481.8	442.9	403.0	367.4	35.63	11.310	
8,100.0	7,998.2	7,976.4	7,976.7	26.5	8.1	-92.71	480.8	437.8	408.2	372.5	35.75	11.418	
8,200.0	8,098.2	8,074.2	8,074.4	26.6	8.2	-92.75	480.2	432.4	413.8	377.9	35.84	11.546	
8,300.0	8,198.2	8,174.1	8,174.1	26.6	8.3	-92.70	480.3	426.7	419.5	383.5	35.94	11.673	
8,400.0	8,298.2	8,273.0	8,272.8	26.6	8.4	-92.64	480.4	420.8	425.4	389.4	36.02	11.810	
8,500.0	8,398.2	8,373.2	8,372.8	26.7	8.5	-92.62	480.3	414.8	431.4	395.2	36.13	11.939	
8,600.0	8,498.2	8,474.6	8,474.1	26.7	8.7	-92.64	479.9	409.1	437.0	400.7	36.27	12.049	
8,700.0	8,598.2	8,573.7	8,573.0	26.8	8.8	-92.66	479.5	403.4	442.8	406.4	36.37	12.175	
8,800.0	8,698.2	8,674.4	8,673.5	26.8	9.5	-93.04	476.3	397.8	448.5	411.7	36.84	12.175	
8,900.0	8,798.2	8,766.4	8,763.9	26.8	9.8	-94.95	460.9	393.4	454.6	417.3	37.29	12.192	
9,000.0	8,898.2	8,840.0	8,832.8	26.9	9.8	-98.04	435.6	389.1	465.1	427.6	37.48	12.409	
9,100.0	8,998.2	8,909.0	8,894.5	26.9	9.9	-101.62	405.1	383.7	482.2	444.7	37.56	12.840	
9,200.0	9,098.2	8,958.5	8,936.6	27.0	10.0	-104.41	379.9	377.7	508.9	471.7	37.17	13.690	
9,300.0	9,198.2	9,021.5	8,987.1	27.0	10.2	-108.13	343.7	367.6	544.9	507.9	37.06	14.706	
9,400.0	9,298.2	9,077.0	9,028.6	27.0	10.4	-111.66	307.6	360.4	587.0	550.2	36.78	15.958	
9,500.0	9,398.2	9,124.0	9,061.0	27.1	10.6	-114.73	274.0	354.3	636.8	600.4	36.41	17.492	
9,600.0	9,498.2	9,148.0	9,076.5	27.1	10.7	-116.26	256.1	350.6	694.1	658.2	35.86	19.356	
9,700.0	9,598.2	9,171.0	9,090.9	27.2	10.8	-117.66	238.7	346.3	757.9	722.4	35.49	21.353	
9,800.0	9,698.2	9,198.8	9,107.2	27.2	11.0	-119.30	216.9	340.6	827.0	791.7	35.36	23.390	
9,900.0	9,798.2	9,218.0	9,117.7	27.2	11.1	-120.41	201.4	336.4	900.5	865.3	35.28	25.524	
10,000.0	9,898.2	9,218.0	9,117.7	27.3	11.1	-120.41	201.4	336.4	978.3	943.1	35.21	27.781	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 12H - OWB - AWP — **Offset Site Error:** 0.0 usft

Survey Program: 100-Standard Keeper 104, 8582-r.5 MWD+IFR1+MS — **Rule Assigned:** — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	6.0	3.0	3.0	54.77	482.0	682.5	835.6				
100.0	100.0	91.8	97.8	3.0	3.0	54.76	482.2	682.5	835.7	829.2	6.44	129.681	
200.0	200.0	188.5	194.5	3.2	3.0	54.74	482.7	682.7	836.1	829.5	6.57	127.253	
300.0	300.0	288.8	294.8	3.3	3.0	54.70	483.5	683.0	836.9	830.2	6.70	124.904	
400.0	400.0	384.1	390.1	3.4	3.0	54.67	484.4	683.5	837.8	831.0	6.83	122.630	
500.0	500.0	481.5	487.4	3.5	3.0	54.64	485.6	684.2	839.1	832.1	6.97	120.432	
600.0	600.0	580.8	586.8	3.7	3.1	54.61	486.8	685.4	840.8	833.7	7.11	118.300	
700.0	700.0	712.1	718.0	3.8	3.1	54.56	487.3	684.7	840.5	833.3	7.23	116.215	
800.0	800.0	810.9	816.8	3.9	3.1	54.51	486.6	682.4	838.3	831.0	7.35	114.109	
900.0	900.0	908.5	914.4	4.0	3.1	54.45	486.2	680.3	836.3	828.8	7.46	112.033	
1,000.0	1,000.0	1,008.8	1,014.7	4.2	3.1	54.39	485.9	678.4	834.6	827.1	7.59	110.030	
1,100.0	1,100.0	1,107.6	1,113.5	4.3	3.1	54.33	485.6	676.5	832.8	825.1	7.71	108.026	
1,200.0	1,200.0	1,209.4	1,215.2	4.4	3.2	54.25	485.4	674.4	831.1	823.3	7.84	106.051	
1,300.0	1,300.0	1,309.3	1,315.1	4.5	3.2	-5.20	485.1	672.6	827.7	819.6	8.09	102.339	
1,400.0	1,399.8	1,399.0	1,404.8	4.8	3.2	-5.23	484.3	671.8	821.3	812.8	8.44	97.306	
1,500.0	1,499.5	1,496.5	1,502.2	5.1	3.2	-5.12	481.9	672.9	812.0	803.2	8.81	92.150	
1,600.0	1,598.7	1,596.7	1,602.5	5.4	3.2	-5.02	479.3	674.0	799.3	790.1	9.21	86.783	
1,700.0	1,697.5	1,697.4	1,703.1	5.7	3.2	-4.95	476.8	675.4	783.4	773.7	9.64	81.295	
1,800.0	1,795.6	1,793.6	1,799.3	6.1	3.2	-4.89	474.2	676.6	763.8	753.7	10.09	75.701	
1,900.0	1,893.2	1,890.5	1,896.1	6.3	3.3	-4.81	471.6	677.8	741.6	731.2	10.41	71.256	
2,000.0	1,990.7	1,980.9	1,986.5	6.6	3.3	-4.78	469.8	679.0	719.5	708.7	10.82	66.472	
2,100.0	2,088.3	2,079.3	2,084.9	7.0	3.3	-4.86	469.4	679.9	698.1	686.8	11.26	61.986	
2,200.0	2,185.8	2,173.9	2,179.5	7.3	3.4	-4.92	469.0	681.0	676.7	665.0	11.73	57.706	
2,300.0	2,283.4	2,269.2	2,274.8	7.7	3.4	-5.00	468.8	682.4	655.8	643.6	12.21	53.692	
2,400.0	2,380.9	2,367.0	2,372.6	8.1	3.4	-5.11	469.0	683.9	635.2	622.4	12.72	49.942	
2,500.0	2,478.4	2,464.4	2,470.0	8.5	3.5	-5.25	469.5	685.4	614.6	601.4	13.24	46.425	
2,600.0	2,576.0	2,559.5	2,565.0	8.9	3.5	-5.39	470.1	687.0	594.4	580.6	13.78	43.132	
2,700.0	2,673.5	2,655.9	2,661.4	9.3	3.5	-5.51	470.5	689.1	574.4	560.0	14.33	40.070	
2,800.0	2,771.0	2,752.7	2,758.2	9.7	3.6	-5.58	470.7	691.7	554.7	539.8	14.90	37.226	
2,900.0	2,868.6	2,848.7	2,854.1	10.1	3.6	-5.64	470.9	694.5	535.1	519.6	15.48	34.570	
3,000.0	2,966.1	2,949.3	2,954.7	10.5	3.7	-5.74	471.2	697.1	515.3	499.3	16.06	32.098	
3,100.0	3,063.6	3,049.0	3,054.3	11.0	3.8	-5.86	471.4	699.4	495.4	478.7	16.64	29.769	
3,200.0	3,161.2	3,149.1	3,154.4	11.4	3.8	-6.24	473.1	700.3	475.1	457.8	17.23	27.578	
3,300.0	3,258.7	3,245.7	3,251.0	11.8	3.9	-6.75	475.4	700.6	454.7	436.9	17.83	25.508	
3,400.0	3,356.2	3,341.2	3,346.5	12.3	3.9	-7.24	477.5	701.4	434.9	416.4	18.44	23.582	
3,500.0	3,453.8	3,440.1	3,445.4	12.7	4.0	-7.69	479.4	703.1	415.4	396.4	19.04	21.814	
3,600.0	3,551.3	3,553.1	3,558.3	13.2	4.0	-8.30	479.6	702.2	393.0	373.4	19.54	20.112	
3,700.0	3,648.8	3,648.6	3,653.8	13.6	4.0	-8.86	478.9	700.6	369.4	349.3	20.14	18.344	
3,800.0	3,746.4	3,745.1	3,750.3	14.1	4.1	-9.35	477.7	699.9	346.3	325.5	20.74	16.699	
3,900.0	3,843.9	3,842.1	3,847.3	14.5	4.1	-9.65	475.6	700.1	323.3	302.0	21.34	15.149	
4,000.0	3,941.4	3,940.9	3,946.0	15.0	4.1	-9.84	472.8	700.9	300.4	278.4	21.94	13.693	
4,100.0	4,039.0	4,034.9	4,040.0	15.4	4.2	-10.01	469.8	701.6	277.2	254.6	22.59	12.272	
4,200.0	4,136.5	4,130.4	4,135.4	15.9	4.3	-10.57	468.9	702.5	255.6	232.4	23.22	11.008	
4,300.0	4,234.1	4,229.2	4,234.3	16.4	4.3	-11.33	468.5	703.5	234.4	210.6	23.80	9.847	
4,400.0	4,331.6	4,328.8	4,333.9	16.8	4.4	-12.65	468.4	702.7	212.1	187.8	24.32	8.722	
4,500.0	4,429.1	4,425.9	4,431.0	17.3	4.4	-14.20	467.9	701.8	189.6	164.8	24.86	7.628	
4,600.0	4,526.7	4,523.0	4,528.1	17.7	4.4	-16.17	467.5	700.8	167.3	141.9	25.35	6.597	
4,700.0	4,624.2	4,620.7	4,625.8	18.2	4.5	-18.71	466.9	699.9	145.2	119.4	25.76	5.635	
4,800.0	4,721.7	4,718.3	4,723.3	18.7	4.5	-22.06	466.2	699.1	123.3	97.2	26.04	4.734	
4,900.0	4,819.3	4,815.6	4,820.6	19.1	4.6	-26.79	465.3	698.2	101.8	75.7	26.09	3.904	
5,000.0	4,916.8	4,912.9	4,917.9	19.6	4.6	-33.86	464.2	697.3	81.3	55.7	25.63	3.172	
5,100.0	5,014.3	5,010.2	5,015.3	20.1	4.7	-45.03	462.8	696.7	62.5	38.4	24.08	2.593	Normal Operations

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 12H - OWB - AWP — **Offset Site Error:** 0.0 usft

Survey Program: 100-Standard Keeper 104, 8582-r.5 MWD+IFR1+MS — **Rule Assigned:** — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,111.9	5,107.5	5,112.5	20.5	4.7	-63.78	461.4	696.3	47.6	27.2	20.46	2.328	Caution - Monitor Closely
5,300.0	5,209.4	5,204.9	5,209.9	21.0	4.8	-92.45	459.9	695.7	41.5	24.2	17.31	2.398	Caution - Monitor Closely, CC
5,304.4	5,213.7	5,209.2	5,214.2	21.0	4.8	-93.84	459.8	695.7	41.5	24.1	17.36	2.391	Caution - Monitor Closely, ES
5,400.0	5,307.0	5,302.2	5,307.2	21.5	4.9	-120.81	458.3	695.1	47.4	25.5	21.89	2.166	Caution - Monitor Closely, SF
5,500.0	5,405.0	5,399.4	5,404.4	21.9	4.9	-138.18	457.4	694.4	60.7	34.3	26.39	2.301	Caution - Monitor Closely
5,600.0	5,503.3	5,497.4	5,502.4	22.4	5.0	-146.88	458.2	693.4	76.5	47.7	28.75	2.661	Normal Operations
5,700.0	5,602.0	5,596.0	5,600.9	22.8	5.0	-151.98	459.2	692.3	91.9	61.7	30.25	3.039	
5,800.0	5,700.9	5,694.9	5,699.8	23.2	5.0	-155.19	460.3	691.1	106.3	74.9	31.36	3.389	
5,900.0	5,800.0	5,793.8	5,798.7	23.7	5.1	-157.28	461.4	689.9	119.4	87.2	32.23	3.705	
6,000.0	5,899.4	5,892.9	5,897.8	24.1	5.1	-158.74	462.3	688.5	131.1	98.2	32.98	3.976	
6,100.0	5,998.9	5,992.1	5,997.0	24.5	5.2	-159.69	463.3	687.0	141.4	107.8	33.64	4.204	
6,200.0	6,098.6	6,092.3	6,097.1	24.8	5.2	-160.26	464.4	685.8	149.8	115.5	34.25	4.374	
6,300.0	6,198.4	6,192.4	6,197.2	25.2	5.3	-160.58	465.5	684.7	156.4	121.7	34.78	4.498	
6,400.0	6,298.3	6,292.0	6,296.8	25.5	5.3	-160.65	466.6	683.5	161.6	126.4	35.22	4.588	
6,500.0	6,398.3	6,391.7	6,396.6	25.8	5.4	-160.50	467.7	682.4	164.9	129.3	35.59	4.634	
6,600.0	6,498.2	6,492.2	6,497.1	26.0	5.4	-160.22	468.7	681.3	166.7	130.9	35.78	4.659	
6,700.0	6,598.2	6,591.6	6,596.4	26.0	5.5	-100.43	469.7	680.3	167.5	131.7	35.76	4.683	
6,800.0	6,698.2	6,693.3	6,698.1	26.1	5.6	-100.06	470.6	679.3	168.3	132.5	35.83	4.698	
6,900.0	6,798.2	6,793.7	6,798.5	26.1	5.6	-99.70	471.7	679.4	168.0	132.2	35.85	4.687	
7,000.0	6,898.2	6,894.0	6,898.8	26.1	5.7	-99.30	472.9	679.4	167.8	132.0	35.86	4.681	
7,100.0	6,998.2	6,994.1	6,998.9	26.2	5.7	-98.75	474.5	679.5	167.5	131.7	35.83	4.674	
7,200.0	7,098.2	7,094.1	7,098.9	26.2	5.8	-98.15	476.3	679.6	167.1	131.3	35.79	4.668	
7,300.0	7,198.2	7,194.0	7,198.7	26.2	5.9	-97.66	477.7	679.5	167.0	131.2	35.77	4.667	
7,400.0	7,298.2	7,293.9	7,298.6	26.3	5.9	-97.18	479.2	679.6	166.7	131.0	35.75	4.664	
7,500.0	7,398.2	7,393.9	7,398.6	26.3	6.0	-96.70	480.6	679.6	166.5	130.8	35.73	4.661	
7,600.0	7,498.2	7,494.3	7,499.0	26.3	6.1	-96.24	481.9	679.7	166.3	130.6	35.73	4.655	
7,700.0	7,598.2	7,594.3	7,599.0	26.4	6.1	-95.88	483.0	680.0	165.9	130.1	35.73	4.642	
7,800.0	7,698.2	7,694.2	7,698.9	26.4	6.2	-95.61	483.8	680.4	165.4	129.6	35.74	4.626	
7,900.0	7,798.2	7,794.0	7,798.7	26.5	6.3	-95.45	484.3	680.8	164.9	129.2	35.78	4.610	
8,000.0	7,898.2	7,893.8	7,898.5	26.5	6.3	-95.53	484.1	681.0	164.7	128.9	35.86	4.594	
8,050.7	7,949.0	7,944.3	7,949.0	26.5	6.3	-95.67	483.7	681.1	164.7	128.8	35.92	4.585	
8,100.0	7,998.2	7,993.5	7,998.2	26.5	6.4	-95.84	483.2	681.1	164.7	128.7	35.98	4.578	
8,165.7	8,064.0	8,059.3	8,064.0	26.6	6.4	-96.10	482.5	681.2	164.7	128.6	36.08	4.565	
8,200.0	8,098.2	8,093.3	8,098.0	26.6	6.4	-96.25	482.1	681.2	164.7	128.6	36.13	4.560	
8,300.0	8,198.2	8,192.9	8,197.6	26.6	6.5	-96.73	480.7	681.1	165.1	128.8	36.28	4.550	
8,400.0	8,298.2	8,292.0	8,296.6	26.6	6.5	-97.27	479.0	680.7	165.6	129.2	36.43	4.547	
8,500.0	8,398.2	8,391.5	8,396.2	26.7	6.6	-97.88	477.1	679.8	166.8	130.2	36.60	4.558	
8,600.0	8,498.2	8,491.2	8,495.8	26.7	6.6	-98.47	475.2	678.6	168.2	131.5	36.77	4.576	
8,700.0	8,598.2	8,591.3	8,595.9	26.8	6.7	-98.97	473.5	677.4	169.7	132.8	36.93	4.595	
8,800.0	8,698.2	8,697.8	8,701.8	26.8	8.7	-102.06	464.6	679.5	169.2	130.8	38.44	4.403	
8,895.4	8,793.6	8,794.0	8,793.6	26.8	9.0	-111.69	438.3	689.8	167.0	127.6	39.48	4.231	
8,900.0	8,798.2	8,798.1	8,797.4	26.8	9.0	-112.22	436.8	690.4	167.1	127.6	39.49	4.230	
9,000.0	8,898.2	8,880.0	8,871.4	26.9	9.2	-123.95	403.8	702.2	174.3	135.3	38.94	4.476	
9,100.0	8,998.2	8,956.3	8,936.1	26.9	9.3	-135.72	365.2	713.5	198.3	161.2	37.11	5.344	
9,200.0	9,098.2	9,030.0	8,995.7	27.0	9.5	-146.06	323.7	726.4	235.9	200.9	35.06	6.729	
9,300.0	9,198.2	9,077.0	9,030.3	27.0	9.7	-152.10	293.4	735.6	287.8	254.4	33.44	8.607	
9,400.0	9,298.2	9,124.0	9,061.6	27.0	9.8	-157.54	259.8	745.7	351.5	318.8	32.65	10.763	
9,500.0	9,398.2	9,172.0	9,091.4	27.1	9.9	-162.17	223.7	756.1	422.4	390.0	32.38	13.047	
9,600.0	9,498.2	9,201.7	9,108.8	27.1	10.0	-164.60	200.5	762.5	498.2	465.7	32.52	15.317	
9,700.0	9,598.2	9,218.0	9,117.8	27.2	10.0	-165.83	187.4	766.1	578.6	545.7	32.90	17.584	
9,800.0	9,698.2	9,251.0	9,134.6	27.2	10.1	-168.19	160.1	774.0	662.0	628.7	33.30	19.883	
9,900.0	9,798.2	9,266.0	9,141.5	27.2	10.1	-169.23	147.4	777.9	748.4	714.6	33.79	22.150	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 12H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8582-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,000.0	9,898.2	9,282.9	9,148.7	27.3	10.2	-170.36	132.8	782.6	837.0	802.7	34.28	24.414	
10,100.0	9,998.2	9,294.8	9,153.3	27.3	10.2	-171.14	122.4	786.1	927.4	892.6	34.78	26.660	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 4H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 GYRO-NS, 9967-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	4.0	3.0	3.0	57.27	503.0	782.5	930.2				
100.0	100.0	96.2	100.2	3.0	3.0	57.26	503.1	782.4	930.2	923.8	6.46	143.936	
200.0	200.0	196.1	200.1	3.2	3.1	57.23	503.5	782.1	930.2	923.5	6.67	139.391	
268.6	268.6	264.6	268.6	3.3	3.2	57.20	503.8	781.9	930.2	923.4	6.83	136.131	
300.0	300.0	295.9	299.9	3.3	3.2	57.19	504.0	781.8	930.2	923.3	6.92	134.478	
400.0	400.0	394.3	398.3	3.4	3.4	57.15	504.6	781.6	930.3	923.1	7.19	129.464	
500.0	500.0	490.8	494.7	3.5	3.6	57.10	505.4	781.4	930.7	923.2	7.47	124.517	
600.0	600.0	587.7	591.6	3.7	3.8	57.05	506.5	781.6	931.4	923.6	7.78	119.662	
700.0	700.0	687.1	691.1	3.8	4.0	57.01	507.6	782.0	932.3	924.2	8.12	114.864	
800.0	800.0	786.1	790.1	3.9	4.2	56.97	508.7	782.4	933.3	924.9	8.47	110.253	
900.0	900.0	895.4	899.4	4.0	4.5	56.92	509.8	782.6	934.0	925.1	8.86	105.448	
1,000.0	1,000.0	999.2	1,003.2	4.2	4.8	56.89	510.0	782.2	933.8	924.6	9.25	100.987	
1,100.0	1,100.0	1,096.7	1,100.7	4.3	5.1	56.90	509.9	782.1	933.6	924.0	9.63	96.956	
1,200.0	1,200.0	1,196.3	1,200.3	4.4	5.4	56.90	509.8	782.0	933.6	923.5	10.03	93.100	
1,300.0	1,300.0	1,296.2	1,300.1	4.5	5.7	-2.49	509.8	782.0	931.8	921.3	10.53	88.507	
1,400.0	1,399.8	1,397.0	1,400.9	4.8	6.0	-2.51	509.8	782.0	926.5	915.4	11.11	83.383	
1,500.0	1,499.5	1,495.8	1,499.8	5.1	6.3	-2.54	509.7	781.9	917.7	906.0	11.71	78.397	
1,600.0	1,598.7	1,595.2	1,599.2	5.4	6.6	-2.59	509.7	781.9	905.5	893.2	12.32	73.484	
1,700.0	1,697.5	1,693.9	1,697.9	5.7	6.9	-2.65	509.7	781.9	889.8	876.9	12.96	68.673	
1,800.0	1,795.6	1,792.0	1,795.9	6.1	7.2	-2.72	509.6	781.8	870.7	857.1	13.61	63.973	
1,900.0	1,893.2	1,889.7	1,893.6	6.3	7.5	-2.80	509.6	781.8	848.9	834.7	14.16	59.935	
2,000.0	1,990.7	1,987.5	1,991.4	6.6	7.8	-2.87	509.6	781.8	826.8	812.0	14.79	55.910	
2,100.0	2,088.3	2,084.4	2,088.4	7.0	8.1	-2.95	509.5	781.7	804.7	789.3	15.43	52.155	
2,200.0	2,185.8	2,181.7	2,185.6	7.3	8.5	-3.03	509.5	781.7	782.7	766.6	16.09	48.652	
2,300.0	2,283.4	2,278.4	2,282.4	7.7	8.8	-3.12	509.5	781.8	760.7	743.9	16.76	45.393	
2,400.0	2,380.9	2,376.6	2,380.5	8.1	9.1	-3.21	509.6	781.9	738.8	721.3	17.45	42.348	
2,500.0	2,478.4	2,472.8	2,476.8	8.5	9.4	-3.31	509.6	782.0	716.8	698.7	18.14	39.518	
2,600.0	2,576.0	2,569.8	2,573.8	8.9	9.7	-3.42	509.9	782.2	695.1	676.2	18.85	36.882	
2,700.0	2,673.5	2,668.1	2,672.1	9.3	10.1	-3.58	510.5	782.1	673.3	653.8	19.57	34.415	
2,800.0	2,771.0	2,766.8	2,770.8	9.7	10.4	-3.76	511.0	781.8	651.4	631.1	20.29	32.102	
2,900.0	2,868.6	2,865.7	2,869.7	10.1	10.7	-3.94	511.4	781.5	629.3	608.3	21.03	29.931	
3,000.0	2,966.1	2,962.1	2,966.1	10.5	11.0	-4.09	511.4	781.3	607.2	585.4	21.77	27.890	
3,100.0	3,063.6	3,055.9	3,059.8	11.0	11.4	-4.17	511.0	782.0	585.4	562.9	22.52	25.998	
3,200.0	3,161.2	3,150.9	3,154.9	11.4	11.7	-4.27	511.0	783.0	564.4	541.1	23.27	24.257	
3,300.0	3,258.7	3,249.4	3,253.4	11.8	12.0	-4.45	511.7	783.9	543.5	519.4	24.02	22.623	
3,400.0	3,356.2	3,350.6	3,354.5	12.3	12.4	-4.70	512.5	784.2	522.2	497.4	24.78	21.071	
3,500.0	3,453.8	3,449.5	3,453.4	12.7	12.7	-4.96	512.9	784.0	500.2	474.7	25.54	19.584	
3,600.0	3,551.3	3,544.1	3,548.0	13.2	13.0	-5.14	512.8	784.4	478.5	452.2	26.31	18.188	
3,700.0	3,648.8	3,640.5	3,644.4	13.6	13.4	-5.41	513.6	785.1	457.6	430.5	27.08	16.897	
3,800.0	3,746.4	3,740.4	3,744.3	14.1	13.7	-5.80	514.6	785.1	436.2	408.4	27.84	15.666	
3,900.0	3,843.9	3,838.7	3,842.6	14.5	14.0	-6.18	515.2	785.1	414.7	386.0	28.61	14.491	
4,000.0	3,941.4	3,936.5	3,940.5	15.0	14.4	-6.57	515.6	785.2	393.0	363.6	29.38	13.374	
4,100.0	4,039.0	4,034.1	4,038.0	15.4	14.7	-6.98	515.9	785.3	371.3	341.2	30.16	12.313	
4,200.0	4,136.5	4,131.4	4,135.3	15.9	15.0	-7.49	516.4	785.2	349.7	318.7	30.93	11.306	
4,300.0	4,234.1	4,229.4	4,233.3	16.4	15.4	-8.12	517.2	785.2	328.2	296.5	31.70	10.355	
4,400.0	4,331.6	4,330.1	4,334.0	16.8	15.7	-8.77	517.2	784.8	306.1	273.7	32.44	9.435	
4,500.0	4,429.1	4,429.3	4,433.2	17.3	16.0	-9.44	516.3	783.9	283.1	249.9	33.19	8.528	
4,600.0	4,526.7	4,524.9	4,528.8	17.7	16.4	-9.98	514.8	783.7	260.1	226.2	33.97	7.657	
4,700.0	4,624.2	4,620.1	4,624.0	18.2	16.7	-10.50	513.4	784.4	238.0	203.3	34.76	6.847	
4,800.0	4,721.7	4,715.2	4,719.1	18.7	17.0	-11.20	512.9	785.7	217.0	181.5	35.55	6.105	
4,900.0	4,819.3	4,812.9	4,816.7	19.1	17.4	-12.44	513.7	786.7	196.7	160.4	36.29	5.420	
5,000.0	4,916.8	4,911.8	4,915.7	19.6	17.7	-14.35	515.1	786.7	176.1	139.2	36.96	4.766	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 4H - OWB - AWP — **Offset Site Error:** 0.0 usft

Survey Program: 100-r.5 GYRO-NS, 9967-r.5 MWD — **Rule Assigned:** — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,014.3	5,010.5	5,014.3	20.1	18.0	-16.93	516.3	785.8	155.1	117.6	37.57	4.129	
5,200.0	5,111.9	5,107.9	5,111.7	20.5	18.4	-20.32	517.3	784.7	134.2	96.1	38.09	3.523	
5,300.0	5,209.4	5,205.3	5,209.1	21.0	18.7	-24.97	518.4	783.6	113.9	75.5	38.43	2.964	Normal Operations
5,400.0	5,307.0	5,302.9	5,306.7	21.5	19.1	-31.40	519.6	782.3	95.0	56.6	38.41	2.474	Caution - Monitor Closely
5,500.0	5,405.0	5,400.9	5,404.6	21.9	19.4	-40.02	520.6	781.0	79.1	41.2	37.89	2.088	Caution - Monitor Closely
5,600.0	5,503.3	5,499.0	5,502.8	22.4	19.7	-51.32	521.7	779.6	66.9	30.2	36.68	1.823	Caution - Monitor Closely
5,700.0	5,602.0	5,597.5	5,601.2	22.8	20.1	-65.03	522.8	778.4	59.1	24.1	35.02	1.688	Caution - Monitor Closely
5,800.0	5,700.9	5,696.5	5,700.2	23.2	20.4	-79.68	523.8	777.5	55.8	22.0	33.82	1.649	Caution - Monitor Closely
5,835.3	5,735.8	5,731.4	5,735.1	23.4	20.5	-84.68	524.1	777.2	55.5	21.8	33.69	1.649	Caution - Monitor Closely, CC, ES
5,900.0	5,800.0	5,795.5	5,799.2	23.7	20.8	-93.15	524.8	776.7	56.2	22.3	33.90	1.659	Caution - Monitor Closely
6,000.0	5,899.4	5,895.2	5,898.9	24.1	21.1	-104.10	525.8	776.2	59.0	24.0	35.05	1.684	Caution - Monitor Closely
6,100.0	5,998.9	5,994.7	5,998.4	24.5	21.4	-112.38	526.5	775.9	62.8	26.2	36.59	1.717	Caution - Monitor Closely
6,200.0	6,098.6	6,094.4	6,098.1	24.8	21.8	-118.35	527.2	775.5	66.9	28.8	38.08	1.758	Caution - Monitor Closely
6,300.0	6,198.4	6,194.2	6,197.9	25.2	22.1	-122.62	527.8	775.0	70.8	31.4	39.39	1.796	Caution - Monitor Closely
6,400.0	6,298.3	6,294.2	6,297.9	25.5	22.5	-125.45	528.1	774.5	73.8	33.3	40.49	1.823	Caution - Monitor Closely
6,500.0	6,398.3	6,394.1	6,397.8	25.8	22.8	-127.01	528.4	774.0	75.9	34.6	41.33	1.836	Caution - Monitor Closely
6,600.0	6,498.2	6,494.2	6,497.9	26.0	23.2	-127.47	528.7	773.6	77.0	35.1	41.90	1.837	Caution - Monitor Closely
6,700.0	6,598.2	6,594.1	6,597.8	26.0	23.5	-68.16	528.8	773.1	77.5	35.1	42.33	1.830	Caution - Monitor Closely
6,800.0	6,698.2	6,694.1	6,697.8	26.1	23.9	-68.19	529.0	772.6	78.0	35.3	42.76	1.824	Caution - Monitor Closely
6,900.0	6,798.2	6,794.1	6,797.9	26.1	24.2	-68.17	529.2	772.1	78.6	35.4	43.18	1.819	Caution - Monitor Closely
7,000.0	6,898.2	6,894.2	6,897.9	26.1	24.6	-68.08	529.5	771.7	79.0	35.5	43.59	1.813	Caution - Monitor Closely
7,100.0	6,998.2	6,994.2	6,997.9	26.2	24.9	-67.83	530.0	771.4	79.5	35.5	43.97	1.808	Caution - Monitor Closely
7,200.0	7,098.2	7,094.2	7,097.9	26.2	25.3	-67.70	530.3	771.0	79.9	35.6	44.38	1.801	Caution - Monitor Closely
7,300.0	7,198.2	7,194.1	7,197.8	26.2	25.6	-67.76	530.4	770.6	80.4	35.6	44.81	1.795	Caution - Monitor Closely
7,400.0	7,298.2	7,294.0	7,297.7	26.3	26.0	-68.06	530.3	769.8	81.0	35.7	45.30	1.789	Caution - Monitor Closely
7,500.0	7,398.2	7,394.2	7,397.9	26.3	26.3	-68.65	529.7	769.0	81.6	35.7	45.85	1.779	Caution - Monitor Closely
7,600.0	7,498.2	7,494.1	7,497.8	26.3	26.6	-69.21	529.1	768.3	82.1	35.7	46.38	1.769	Caution - Monitor Closely
7,700.0	7,598.2	7,594.6	7,598.3	26.4	27.0	-69.80	528.4	767.7	82.4	35.4	46.94	1.755	Caution - Monitor Closely
7,800.0	7,698.2	7,694.9	7,698.6	26.4	27.3	-70.60	527.3	767.5	82.1	34.6	47.53	1.728	Caution - Monitor Closely
7,900.0	7,798.2	7,795.0	7,798.7	26.5	27.7	-71.71	525.6	767.4	81.7	33.5	48.16	1.696	Caution - Monitor Closely
8,000.0	7,898.2	7,894.9	7,898.5	26.5	28.0	-73.09	523.6	767.3	81.3	32.4	48.84	1.664	Caution - Monitor Closely
8,100.0	7,998.2	7,994.7	7,998.3	26.5	28.4	-74.65	521.5	766.8	81.1	31.5	49.54	1.636	Caution - Monitor Closely
8,164.0	8,062.3	8,058.7	8,062.3	26.6	28.6	-75.63	520.1	766.5	81.0	31.1	49.98	1.621	Caution - Monitor Closely
8,200.0	8,098.2	8,094.6	8,098.2	26.6	28.7	-76.15	519.4	766.3	81.0	30.8	50.23	1.614	Caution - Monitor Closely
8,300.0	8,198.2	8,194.3	8,197.9	26.6	29.1	-77.63	517.4	765.6	81.3	30.4	50.90	1.597	Caution - Monitor Closely
8,400.0	8,298.2	8,294.0	8,297.6	26.6	29.4	-79.07	515.5	764.6	81.9	30.4	51.56	1.589	Caution - Monitor Closely
8,500.0	8,398.2	8,394.2	8,397.7	26.7	29.8	-80.45	513.7	763.5	82.7	30.4	52.22	1.583	Caution - Monitor Closely
8,600.0	8,498.2	8,494.1	8,497.6	26.7	30.1	-81.74	512.0	762.5	83.4	30.5	52.86	1.577	Caution - Monitor Closely
8,700.0	8,598.2	8,592.7	8,596.2	26.8	30.5	-82.45	511.2	760.8	84.9	31.6	53.34	1.592	Caution - Monitor Closely
8,800.0	8,698.2	8,692.8	8,696.3	26.8	30.8	-82.78	511.0	758.4	87.3	33.5	53.83	1.622	Caution - Monitor Closely
8,900.0	8,798.2	8,793.2	8,796.6	26.8	31.2	-83.02	510.9	756.3	89.4	35.1	54.31	1.645	Caution - Monitor Closely
9,000.0	8,898.2	8,894.4	8,897.8	26.9	31.5	-83.30	510.6	755.1	90.5	35.7	54.83	1.651	Caution - Monitor Closely
9,100.0	8,998.2	8,995.2	8,998.7	26.9	31.9	-83.79	509.8	755.0	90.5	35.2	55.37	1.635	Caution - Monitor Closely
9,200.0	9,098.2	9,095.7	9,099.1	27.0	32.2	-84.39	508.8	755.6	89.8	33.9	55.90	1.607	Caution - Monitor Closely
9,300.0	9,198.2	9,195.0	9,198.4	27.0	32.5	-85.32	507.3	756.1	89.2	32.8	56.45	1.581	Caution - Monitor Closely
9,331.2	9,229.5	9,226.1	9,229.5	27.0	32.7	-85.70	506.7	756.1	89.2	32.6	56.63	1.575	Caution - Monitor Closely
9,400.0	9,298.2	9,294.5	9,297.9	27.0	32.9	-86.63	505.3	755.8	89.3	32.3	57.05	1.566	Caution - Monitor Closely
9,500.0	9,398.2	9,394.6	9,398.0	27.1	33.2	-88.08	503.0	755.3	89.7	32.0	57.69	1.556	Caution - Monitor Closely
9,600.0	9,498.2	9,495.0	9,498.4	27.1	33.6	-89.62	500.6	755.2	89.8	31.5	58.34	1.540	Caution - Monitor Closely
9,618.6	9,516.8	9,513.5	9,516.8	27.1	33.7	-89.93	500.1	755.2	89.8	31.4	58.46	1.536	Caution - Monitor Closely
9,700.0	9,598.2	9,594.0	9,597.3	27.2	33.9	-91.36	497.9	754.8	90.2	31.3	58.96	1.530	Caution - Monitor Closely
9,800.0	9,698.2	9,694.2	9,697.5	27.2	34.3	-93.19	494.9	753.9	91.2	31.6	59.63	1.530	Caution - Monitor Closely

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 4H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-r.5 GYRO-NS, 9967-r.5 MWD

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,900.0	9,798.2	9,794.8	9,798.0	27.2	34.6	-94.69	492.5	753.5	91.8	31.5	60.26	1.523	Caution - Monitor Closely
10,000.0	9,898.2	9,894.0	9,897.2	27.3	35.0	-95.88	490.5	753.0	92.4	31.7	60.79	1.521	Caution - Monitor Closely, SF
10,100.0	9,998.2	9,990.2	9,993.3	27.3	35.1	-97.95	486.8	750.6	95.4	34.3	61.06	1.562	Caution - Monitor Closely
10,200.0	10,098.2	10,084.9	10,086.7	27.4	35.1	-105.25	472.9	745.8	103.5	42.1	61.41	1.685	Caution - Monitor Closely
10,300.0	10,198.2	10,174.9	10,173.5	27.4	35.2	-115.27	450.2	739.4	119.3	58.2	61.12	1.953	Caution - Monitor Closely
10,400.0	10,298.2	10,255.6	10,248.4	27.5	35.2	-124.66	421.4	731.3	146.9	87.4	59.50	2.470	Caution - Monitor Closely
10,500.0	10,398.2	10,329.5	10,313.9	27.5	35.2	-132.19	388.5	722.0	186.2	128.8	57.34	3.247	
10,600.0	10,498.2	10,390.8	10,364.9	27.5	35.3	-137.32	355.9	712.1	237.1	182.2	54.83	4.323	
10,700.0	10,598.2	10,442.9	10,405.0	27.6	35.3	-140.73	324.4	701.5	297.9	245.3	52.64	5.660	
10,800.0	10,698.2	10,494.0	10,441.6	27.6	35.3	-143.58	290.5	690.4	365.6	314.4	51.22	7.138	
10,900.0	10,798.2	10,536.4	10,470.0	27.7	35.4	-145.79	260.2	682.0	438.0	388.0	49.97	8.766	
11,000.0	10,898.2	10,567.5	10,489.1	27.7	35.4	-147.24	236.6	675.5	515.3	466.5	48.82	10.554	
11,100.0	10,998.2	10,586.0	10,499.7	27.8	35.5	-148.05	221.9	671.6	596.6	548.8	47.78	12.486	
11,200.0	11,098.2	10,618.0	10,516.3	27.8	35.5	-149.45	195.4	665.2	681.0	633.5	47.47	14.346	
11,300.0	11,198.2	10,618.0	10,516.3	27.8	35.5	-149.45	195.4	665.2	768.2	721.5	46.74	16.434	
11,400.0	11,298.2	10,649.0	10,530.0	27.9	35.6	-150.76	168.2	659.3	857.2	810.4	46.80	18.314	
11,500.0	11,398.2	10,649.0	10,530.0	27.9	35.6	-150.76	168.2	659.3	947.9	901.3	46.54	20.364	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 702H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.57	-0.3	-30.0	30.0				
100.0	100.0	100.0	100.0	3.0	3.0	-90.57	-0.3	-30.0	30.0	23.5	6.49	4.623	
200.0	200.0	200.0	200.0	3.2	3.2	-90.57	-0.3	-30.0	30.0	23.3	6.73	4.458	
300.0	300.0	300.0	300.0	3.3	3.3	-90.57	-0.3	-30.0	30.0	23.0	6.96	4.310	
400.0	400.0	400.0	400.0	3.4	3.4	-90.57	-0.3	-30.0	30.0	22.8	7.18	4.176	
500.0	500.0	500.0	500.0	3.5	3.5	-90.57	-0.3	-30.0	30.0	22.6	7.40	4.054	
524.1	524.1	524.1	524.1	3.6	3.6	-90.57	-0.3	-30.0	30.0	22.6	7.45	4.028	
600.0	600.0	600.0	600.0	3.7	3.7	-90.57	-0.3	-30.0	30.0	22.4	7.61	3.943	
633.3	633.3	633.3	633.3	3.7	3.7	-90.57	-0.3	-30.0	30.0	22.3	7.68	3.909	
700.0	700.0	700.0	700.0	3.8	3.8	-90.57	-0.3	-30.0	30.0	22.2	7.81	3.840	
800.0	800.0	800.0	800.0	3.9	3.9	-90.57	-0.3	-30.0	30.0	22.0	8.01	3.745	
900.0	900.0	900.0	900.0	4.0	4.0	-90.57	-0.3	-30.0	30.0	21.8	8.20	3.657	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.57	-0.3	-30.0	30.0	21.6	8.39	3.575	
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.57	-0.3	-30.0	30.0	21.4	8.58	3.498	
1,200.0	1,200.0	1,200.0	1,200.0	4.4	4.4	-90.57	-0.3	-30.0	30.0	21.2	8.76	3.427	CC, ES, SF
1,300.0	1,300.0	1,300.3	1,300.3	4.5	4.6	-148.51	1.4	-29.4	30.9	21.9	9.02	3.428	
1,400.0	1,399.8	1,400.6	1,400.4	4.8	4.9	-144.65	6.3	-27.7	33.8	24.4	9.44	3.583	
1,500.0	1,499.5	1,500.7	1,500.1	5.1	5.2	-139.53	14.6	-24.8	38.9	29.1	9.83	3.956	
1,600.0	1,598.7	1,600.5	1,599.2	5.4	5.5	-134.30	26.1	-20.8	46.4	36.2	10.21	4.543	
1,700.0	1,697.5	1,700.0	1,697.4	5.7	5.8	-129.63	40.8	-15.7	56.3	45.8	10.57	5.331	
1,800.0	1,795.6	1,799.2	1,795.1	6.1	6.1	-127.20	57.1	-10.0	68.7	57.8	10.94	6.280	
1,900.0	1,893.2	1,898.2	1,892.6	6.3	6.4	-127.15	73.3	-4.4	82.8	71.6	11.24	7.368	
2,000.0	1,990.7	1,997.2	1,990.1	6.6	6.7	-127.29	89.5	1.3	97.0	85.4	11.62	8.354	
2,100.0	2,088.3	2,096.1	2,087.6	7.0	7.0	-127.40	105.8	6.9	111.3	99.3	12.00	9.270	
2,200.0	2,185.8	2,195.1	2,185.1	7.3	7.3	-127.48	122.0	12.6	125.5	113.1	12.40	10.123	
2,300.0	2,283.4	2,294.1	2,282.5	7.7	7.7	-127.54	138.2	18.2	139.8	127.0	12.80	10.916	
2,400.0	2,380.9	2,393.1	2,380.0	8.1	8.0	-127.60	154.5	23.9	154.0	140.8	13.21	11.656	
2,500.0	2,478.4	2,492.1	2,477.5	8.5	8.4	-127.64	170.7	29.5	168.3	154.6	13.63	12.345	
2,600.0	2,576.0	2,591.0	2,575.0	8.9	8.8	-127.68	186.9	35.2	182.5	168.5	14.05	12.989	
2,700.0	2,673.5	2,690.0	2,672.4	9.3	9.1	-127.71	203.2	40.8	196.8	182.3	14.48	13.590	
2,800.0	2,771.0	2,789.0	2,769.9	9.7	9.5	-127.74	219.4	46.5	211.0	196.1	14.91	14.153	
2,900.0	2,868.6	2,888.0	2,867.4	10.1	9.9	-127.76	235.6	52.1	225.2	209.9	15.34	14.680	
3,000.0	2,966.1	2,987.0	2,964.9	10.5	10.3	-127.78	251.9	57.8	239.5	223.7	15.78	15.174	
3,100.0	3,063.6	3,085.9	3,062.3	11.0	10.7	-127.80	268.1	63.4	253.7	237.5	16.23	15.639	
3,200.0	3,161.2	3,184.9	3,159.8	11.4	11.1	-127.82	284.3	69.1	268.0	251.3	16.67	16.075	
3,300.0	3,258.7	3,283.9	3,257.3	11.8	11.5	-127.83	300.6	74.7	282.2	265.1	17.12	16.486	
3,400.0	3,356.2	3,382.9	3,354.8	12.3	11.9	-127.85	316.8	80.4	296.5	278.9	17.57	16.874	
3,500.0	3,453.8	3,481.9	3,452.3	12.7	12.4	-127.86	333.0	86.0	310.7	292.7	18.02	17.239	
3,600.0	3,551.3	3,580.8	3,549.7	13.2	12.8	-127.87	349.3	91.7	325.0	306.5	18.48	17.585	
3,700.0	3,648.8	3,679.8	3,647.2	13.6	13.2	-127.88	365.5	97.3	339.2	320.3	18.94	17.912	
3,800.0	3,746.4	3,778.8	3,744.7	14.1	13.6	-127.89	381.7	103.0	353.5	334.1	19.40	18.221	
3,900.0	3,843.9	3,877.8	3,842.2	14.5	14.0	-127.90	398.0	108.6	367.7	347.8	19.86	18.514	
4,000.0	3,941.4	3,976.8	3,939.6	15.0	14.5	-127.91	414.2	114.3	382.0	361.6	20.32	18.793	
4,100.0	4,039.0	4,075.7	4,037.1	15.4	14.9	-127.92	430.4	119.9	396.2	375.4	20.79	19.058	
4,200.0	4,136.5	4,174.7	4,134.6	15.9	15.3	-127.92	446.7	125.5	410.4	389.2	21.26	19.309	
4,300.0	4,234.1	4,273.7	4,232.1	16.4	15.8	-127.93	462.9	131.2	424.7	403.0	21.72	19.549	
4,400.0	4,331.6	4,372.7	4,329.5	16.8	16.2	-127.94	479.1	136.8	438.9	416.7	22.19	19.777	
4,500.0	4,429.1	4,471.7	4,427.0	17.3	16.6	-127.94	495.4	142.5	453.2	430.5	22.67	19.995	
4,600.0	4,526.7	4,570.6	4,524.5	17.7	17.0	-127.95	511.6	148.1	467.4	444.3	23.14	20.202	
4,700.0	4,624.2	4,669.6	4,622.0	18.2	17.5	-127.95	527.8	153.8	481.7	458.1	23.61	20.401	
4,800.0	4,721.7	4,768.6	4,719.4	18.7	17.9	-127.96	544.1	159.4	495.9	471.8	24.08	20.591	
4,900.0	4,819.3	4,867.6	4,817.0	19.1	18.3	-127.97	560.2	165.1	510.2	485.6	24.54	20.791	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 702H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.0	4,916.8	4,966.8	4,914.9	19.6	18.8	-128.13	575.2	170.3	524.4	499.3	25.03	20.950	
5,100.0	5,014.3	5,066.0	5,013.0	20.1	19.2	-128.46	588.6	174.9	538.6	513.0	25.56	21.068	
5,200.0	5,111.9	5,165.0	5,111.3	20.5	19.6	-128.95	600.3	179.0	552.7	526.6	26.13	21.155	
5,300.0	5,209.4	5,263.8	5,209.5	21.0	20.0	-129.59	610.5	182.6	567.0	540.2	26.73	21.211	
5,400.0	5,307.0	5,362.5	5,307.7	21.5	20.4	-130.42	619.0	185.5	581.0	553.6	27.33	21.255	
5,500.0	5,405.0	5,461.1	5,406.1	21.9	20.7	-131.26	625.9	187.9	594.0	566.1	27.96	21.242	
5,600.0	5,503.3	5,559.7	5,504.5	22.4	21.1	-132.11	631.2	189.8	606.1	577.5	28.60	21.194	
5,700.0	5,602.0	5,658.3	5,603.0	22.8	21.4	-132.96	634.9	191.1	617.1	587.9	29.23	21.114	
5,800.0	5,700.9	5,756.7	5,701.5	23.2	21.7	-133.80	637.1	191.8	627.2	597.4	29.86	21.003	
5,900.0	5,800.0	5,855.3	5,800.0	23.7	21.8	-134.66	637.6	192.0	636.4	605.9	30.48	20.876	
6,000.0	5,899.4	5,954.6	5,899.4	24.1	21.9	-135.43	637.6	192.0	644.4	613.3	31.09	20.728	
6,100.0	5,998.9	6,054.2	5,998.9	24.5	21.9	-136.07	637.6	192.0	651.3	619.7	31.67	20.568	
6,200.0	6,098.6	6,153.9	6,098.6	24.8	22.0	-136.59	637.6	192.0	657.0	624.8	32.20	20.404	
6,300.0	6,198.4	6,253.7	6,198.4	25.2	22.0	-136.98	637.6	192.0	661.5	628.8	32.69	20.236	
6,400.0	6,298.3	6,353.6	6,298.3	25.5	22.0	-137.26	637.6	192.0	664.7	631.6	33.13	20.067	
6,500.0	6,398.3	6,453.5	6,398.3	25.8	22.1	-137.43	637.6	192.0	666.7	633.2	33.50	19.900	
6,600.0	6,498.2	6,553.5	6,498.2	26.0	22.1	-137.49	637.6	192.0	667.3	633.6	33.73	19.787	
6,700.0	6,598.2	6,653.5	6,598.2	26.0	22.2	-78.10	637.6	192.0	667.3	633.5	33.84	19.722	
6,800.0	6,698.2	6,753.5	6,698.2	26.1	22.2	-78.10	637.6	192.0	667.3	633.4	33.95	19.658	
6,900.0	6,798.2	6,853.5	6,798.2	26.1	22.3	-78.10	637.6	192.0	667.3	633.3	34.06	19.594	
7,000.0	6,898.2	6,953.5	6,898.2	26.1	22.3	-78.10	637.6	192.0	667.3	633.2	34.17	19.531	
7,100.0	6,998.2	7,053.5	6,998.2	26.2	22.4	-78.10	637.6	192.0	667.3	633.1	34.28	19.467	
7,200.0	7,098.2	7,153.5	7,098.2	26.2	22.4	-78.10	637.6	192.0	667.3	632.9	34.39	19.404	
7,300.0	7,198.2	7,253.5	7,198.2	26.2	22.5	-78.10	637.6	192.0	667.3	632.8	34.50	19.341	
7,400.0	7,298.2	7,353.5	7,298.2	26.3	22.5	-78.10	637.6	192.0	667.3	632.7	34.62	19.278	
7,500.0	7,398.2	7,453.5	7,398.2	26.3	22.6	-78.10	637.6	192.0	667.3	632.6	34.73	19.216	
7,600.0	7,498.2	7,553.5	7,498.2	26.3	22.6	-78.10	637.6	192.0	667.3	632.5	34.84	19.153	
7,700.0	7,598.2	7,653.5	7,598.2	26.4	22.7	-78.10	637.6	192.0	667.3	632.4	34.96	19.091	
7,800.0	7,698.2	7,753.5	7,698.2	26.4	22.7	-78.10	637.6	192.0	667.3	632.3	35.07	19.029	
7,900.0	7,798.2	7,853.5	7,798.2	26.5	22.8	-78.10	637.6	192.0	667.3	632.2	35.18	18.967	
8,000.0	7,898.2	7,953.5	7,898.2	26.5	22.8	-78.10	637.6	192.0	667.3	632.0	35.30	18.906	
8,100.0	7,998.2	8,053.5	7,998.2	26.5	22.9	-78.10	637.6	192.0	667.3	631.9	35.41	18.844	
8,200.0	8,098.2	8,153.5	8,098.2	26.6	22.9	-78.10	637.6	192.0	667.3	631.8	35.53	18.783	
8,300.0	8,198.2	8,253.5	8,198.2	26.6	23.0	-78.10	637.6	192.0	667.3	631.7	35.64	18.722	
8,400.0	8,298.2	8,353.5	8,298.2	26.6	23.0	-78.10	637.6	192.0	667.3	631.6	35.76	18.661	
8,500.0	8,398.2	8,453.5	8,398.2	26.7	23.1	-78.10	637.6	192.0	667.3	631.5	35.88	18.601	
8,600.0	8,498.2	8,553.5	8,498.2	26.7	23.1	-78.10	637.6	192.0	667.3	631.3	35.99	18.540	
8,700.0	8,598.2	8,653.5	8,598.2	26.8	23.2	-78.10	637.6	192.0	667.3	631.2	36.11	18.480	
8,800.0	8,698.2	8,753.5	8,698.2	26.8	23.2	-78.10	637.6	192.0	667.3	631.1	36.23	18.420	
8,900.0	8,798.2	8,853.5	8,798.2	26.8	23.3	-78.10	637.6	192.0	667.3	631.0	36.35	18.360	
9,000.0	8,898.2	8,953.5	8,898.2	26.9	23.3	-78.10	637.6	192.0	667.3	630.9	36.46	18.301	
9,100.0	8,998.2	9,053.5	8,998.2	26.9	23.4	-78.10	637.6	192.0	667.3	630.8	36.58	18.242	
9,200.0	9,098.2	9,153.5	9,098.2	27.0	23.4	-78.10	637.6	192.0	667.3	630.6	36.70	18.183	
9,300.0	9,198.2	9,253.5	9,198.2	27.0	23.5	-78.10	637.6	192.0	667.3	630.5	36.82	18.124	
9,400.0	9,298.2	9,353.5	9,298.2	27.0	23.6	-78.10	637.6	192.0	667.3	630.4	36.94	18.065	
9,500.0	9,398.2	9,453.5	9,398.2	27.1	23.6	-78.10	637.6	192.0	667.3	630.3	37.06	18.007	
9,600.0	9,498.2	9,553.5	9,498.2	27.1	23.7	-78.10	637.6	192.0	667.3	630.2	37.18	17.949	
9,700.0	9,598.2	9,653.5	9,598.2	27.2	23.7	-78.10	637.6	192.0	667.3	630.0	37.30	17.891	
9,800.0	9,698.2	9,753.5	9,698.2	27.2	23.8	-78.10	637.6	192.0	667.3	629.9	37.42	17.833	
9,900.0	9,798.2	9,853.5	9,798.2	27.2	23.8	-78.10	637.6	192.0	667.3	629.8	37.54	17.775	
10,000.0	9,898.2	9,953.5	9,898.2	27.3	23.9	-78.10	637.6	192.0	667.3	629.7	37.66	17.718	
10,100.0	9,998.2	10,053.5	9,998.2	27.3	23.9	-78.10	637.6	192.0	667.3	629.6	37.79	17.661	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 702H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.0	10,098.2	10,153.5	10,098.2	27.4	24.0	-78.10	637.6	192.0	667.3	629.4	37.91	17.604	
10,300.0	10,198.2	10,253.5	10,198.2	27.4	24.0	-78.10	637.6	192.0	667.3	629.3	38.03	17.548	
10,400.0	10,298.2	10,353.5	10,298.2	27.5	24.1	-78.10	637.6	192.0	667.3	629.2	38.15	17.491	
10,500.0	10,398.2	10,453.5	10,398.2	27.5	24.1	-78.10	637.6	192.0	667.3	629.1	38.28	17.435	
10,600.0	10,498.2	10,553.5	10,498.2	27.5	24.2	-78.10	637.6	192.0	667.3	628.9	38.40	17.379	
10,700.0	10,598.2	10,653.5	10,598.2	27.6	24.3	-78.10	637.6	192.0	667.3	628.8	38.52	17.324	
10,800.0	10,698.2	10,753.5	10,698.2	27.6	24.3	-78.10	637.6	192.0	667.3	628.7	38.65	17.268	
10,900.0	10,798.2	10,853.5	10,798.2	27.7	24.4	-78.10	637.6	192.0	667.3	628.6	38.77	17.213	
11,000.0	10,898.2	10,953.5	10,898.2	27.7	24.4	-78.10	637.6	192.0	667.3	628.4	38.89	17.158	
11,100.0	10,998.2	11,053.5	10,998.2	27.8	24.5	-78.10	637.6	192.0	667.3	628.3	39.02	17.103	
11,200.0	11,098.2	11,153.5	11,098.2	27.8	24.5	-78.10	637.6	192.0	667.3	628.2	39.14	17.049	
11,300.0	11,198.2	11,253.5	11,198.2	27.8	24.6	-78.10	637.6	192.0	667.3	628.1	39.27	16.995	
11,400.0	11,298.2	11,353.5	11,298.2	27.9	24.6	-78.10	637.6	192.0	667.3	627.9	39.39	16.941	
11,500.0	11,398.2	11,453.5	11,398.2	27.9	24.7	-78.10	637.6	192.0	667.3	627.8	39.52	16.887	
11,600.0	11,498.2	11,553.5	11,498.2	28.0	24.8	-78.10	637.6	192.0	667.3	627.7	39.64	16.833	
11,604.9	11,503.1	11,558.4	11,503.1	28.0	24.8	106.10	637.6	192.0	667.3	627.7	39.65	16.831	
11,700.0	11,598.2	11,653.5	11,598.2	28.0	24.8	106.11	637.6	192.0	667.4	627.7	39.76	16.788	
11,800.0	11,697.1	11,771.4	11,716.0	27.8	24.7	106.85	634.0	192.0	670.8	631.0	39.74	16.877	
11,900.0	11,791.0	11,920.4	11,858.7	27.6	24.2	107.19	593.1	192.3	674.6	634.3	40.27	16.752	
12,000.0	11,875.7	12,070.4	11,982.6	27.4	23.6	106.34	509.8	192.9	677.1	635.8	41.31	16.391	
12,100.0	11,947.7	12,215.1	12,072.2	27.3	23.2	104.43	396.8	193.7	678.5	636.0	42.47	15.975	
12,200.0	12,003.6	12,350.2	12,121.7	27.1	23.0	101.74	271.7	194.7	679.6	636.3	43.34	15.682	
12,300.0	12,041.2	12,471.9	12,135.0	27.1	23.0	98.65	151.0	195.5	681.2	637.6	43.64	15.610	
12,400.0	12,058.7	12,569.9	12,135.0	27.1	23.0	96.65	53.0	196.2	685.5	642.0	43.47	15.768	
12,500.0	12,060.0	12,669.7	12,135.0	27.2	23.0	96.24	-46.8	197.0	691.2	647.6	43.59	15.854	
12,600.0	12,060.0	12,769.7	12,135.0	27.3	23.0	96.21	-146.8	197.7	693.7	649.9	43.82	15.831	
12,700.0	12,060.0	12,869.7	12,135.0	27.4	23.1	96.21	-246.8	198.4	693.8	649.7	44.07	15.742	
12,800.0	12,060.0	12,969.7	12,135.0	27.5	23.1	96.21	-346.8	199.2	693.8	649.4	44.38	15.632	
12,900.0	12,060.0	13,069.7	12,135.0	27.6	23.2	96.21	-446.7	199.9	693.8	649.1	44.74	15.506	
13,000.0	12,060.0	13,169.7	12,135.0	27.8	23.2	96.21	-546.7	200.6	693.8	648.7	45.15	15.366	
13,100.0	12,060.0	13,269.7	12,135.0	28.0	23.3	96.21	-646.7	201.3	693.8	648.2	45.61	15.212	
13,200.0	12,060.0	13,369.7	12,135.0	28.1	23.4	96.21	-746.7	202.1	693.8	647.7	46.11	15.047	
13,300.0	12,060.0	13,469.7	12,135.0	28.3	23.4	96.21	-846.7	202.8	693.8	647.2	46.65	14.871	
13,400.0	12,060.0	13,569.7	12,135.0	28.6	23.5	96.21	-946.7	203.5	693.8	646.6	47.24	14.686	
13,500.0	12,060.0	13,669.7	12,135.0	28.8	23.6	96.21	-1,046.7	204.2	693.8	645.9	47.87	14.493	
13,600.0	12,060.0	13,769.7	12,135.0	29.0	23.7	96.21	-1,146.7	205.0	693.8	645.3	48.54	14.294	
13,700.0	12,060.0	13,869.7	12,135.0	29.3	23.8	96.21	-1,246.7	205.7	693.8	644.6	49.24	14.089	
13,800.0	12,060.0	13,969.7	12,135.0	29.6	24.0	96.21	-1,346.7	206.4	693.8	643.8	49.99	13.880	
13,900.0	12,060.0	14,069.7	12,135.0	29.9	24.1	96.21	-1,446.7	207.1	693.8	643.1	50.76	13.668	
14,000.0	12,060.0	14,169.7	12,135.0	30.2	24.3	96.21	-1,546.7	207.9	693.8	642.3	51.57	13.454	
14,100.0	12,060.0	14,269.7	12,135.0	30.5	24.5	96.21	-1,646.7	208.6	693.8	641.4	52.41	13.238	
14,200.0	12,060.0	14,369.7	12,135.0	30.8	24.7	96.21	-1,746.7	209.3	693.8	640.6	53.28	13.022	
14,300.0	12,060.0	14,469.7	12,135.0	31.2	24.9	96.21	-1,846.7	210.1	693.8	639.7	54.18	12.806	
14,400.0	12,060.0	14,569.7	12,135.0	31.5	25.2	96.21	-1,946.7	210.8	693.8	638.7	55.11	12.591	
14,500.0	12,060.0	14,669.7	12,135.0	31.9	25.5	96.21	-2,046.7	211.5	693.8	637.8	56.06	12.377	
14,600.0	12,060.0	14,769.7	12,135.0	32.3	25.8	96.21	-2,146.7	212.2	693.8	636.8	57.04	12.165	
14,700.0	12,060.0	14,869.7	12,135.0	32.7	26.2	96.21	-2,246.7	213.0	693.8	635.8	58.03	11.956	
14,800.0	12,060.0	14,969.7	12,135.0	33.1	26.6	96.21	-2,346.7	213.7	693.8	634.8	59.06	11.749	
14,900.0	12,060.0	15,069.7	12,135.0	33.5	27.0	96.21	-2,446.7	214.4	693.9	633.8	60.10	11.545	
15,000.0	12,060.0	15,169.7	12,135.0	34.0	27.4	96.21	-2,546.7	215.1	693.9	632.7	61.16	11.345	
15,100.0	12,060.0	15,269.7	12,135.0	34.4	27.9	96.21	-2,646.7	215.9	693.9	631.6	62.24	11.148	
15,200.0	12,060.0	15,369.7	12,135.0	34.9	28.4	96.21	-2,746.7	216.6	693.9	630.5	63.34	10.955	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 702H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,300.0	12,060.0	15,469.7	12,135.0	35.3	28.9	96.21	-2,846.7	217.3	693.9	629.4	64.45	10.765	
15,400.0	12,060.0	15,569.7	12,135.0	35.8	29.5	96.21	-2,946.7	218.0	693.9	628.3	65.58	10.580	
15,500.0	12,060.0	15,669.7	12,135.0	36.3	30.0	96.21	-3,046.7	218.8	693.9	627.1	66.73	10.398	
15,600.0	12,060.0	15,769.7	12,135.0	36.8	30.6	96.21	-3,146.7	219.5	693.9	626.0	67.89	10.220	
15,700.0	12,060.0	15,869.7	12,135.0	37.3	31.2	96.21	-3,246.7	220.2	693.9	624.8	69.06	10.047	
15,800.0	12,060.0	15,969.7	12,135.0	37.8	31.8	96.21	-3,346.7	220.9	693.9	623.6	70.25	9.877	
15,900.0	12,060.0	16,069.7	12,135.0	38.3	32.4	96.21	-3,446.7	221.7	693.9	622.4	71.45	9.711	
16,000.0	12,060.0	16,169.7	12,135.0	38.9	33.0	96.21	-3,546.7	222.4	693.9	621.2	72.66	9.549	
16,100.0	12,060.0	16,269.7	12,135.0	39.4	33.6	96.21	-3,646.7	223.1	693.9	620.0	73.88	9.391	
16,200.0	12,060.0	16,369.7	12,135.0	39.9	34.3	96.21	-3,746.7	223.9	693.9	618.8	75.12	9.237	
16,300.0	12,060.0	16,469.7	12,135.0	40.5	34.9	96.21	-3,846.7	224.6	693.9	617.5	76.36	9.087	
16,400.0	12,060.0	16,569.7	12,135.0	41.0	35.5	96.21	-3,946.7	225.3	693.9	616.3	77.61	8.940	
16,500.0	12,060.0	16,669.7	12,135.0	41.6	36.2	96.21	-4,046.7	226.0	693.9	615.0	78.88	8.797	
16,600.0	12,060.0	16,769.7	12,135.0	42.2	36.9	96.21	-4,146.7	226.8	693.9	613.7	80.15	8.658	
16,700.0	12,060.0	16,869.7	12,135.0	42.8	37.5	96.21	-4,246.6	227.5	693.9	612.5	81.42	8.522	
16,800.0	12,060.0	16,969.7	12,135.0	43.3	38.2	96.21	-4,346.6	228.2	693.9	611.2	82.71	8.389	
16,900.0	12,060.0	17,069.7	12,135.0	43.9	38.9	96.21	-4,446.6	228.9	693.9	609.9	84.01	8.260	
17,000.0	12,060.0	17,169.7	12,135.0	44.5	39.6	96.20	-4,546.6	229.7	693.9	608.6	85.31	8.134	
17,100.0	12,060.0	17,269.7	12,135.0	45.1	40.2	96.20	-4,646.6	230.4	693.9	607.3	86.61	8.011	
17,200.0	12,060.0	17,369.7	12,135.0	45.7	40.9	96.20	-4,746.6	231.1	693.9	606.0	87.93	7.892	
17,300.0	12,060.0	17,469.7	12,135.0	46.4	41.6	96.20	-4,846.6	231.8	693.9	604.7	89.25	7.775	
17,400.0	12,060.0	17,569.7	12,135.0	47.0	42.3	96.20	-4,946.6	232.6	693.9	603.3	90.58	7.661	
17,500.0	12,060.0	17,669.7	12,135.0	47.6	43.0	96.20	-5,046.6	233.3	693.9	602.0	91.91	7.550	
17,600.0	12,060.0	17,769.7	12,135.0	48.2	43.7	96.20	-5,146.6	234.0	693.9	600.7	93.25	7.442	
17,700.0	12,060.0	17,869.7	12,135.0	48.8	44.4	96.20	-5,246.6	234.8	693.9	599.3	94.59	7.336	
17,800.0	12,060.0	17,969.7	12,135.0	49.5	45.1	96.20	-5,346.6	235.5	693.9	598.0	95.94	7.233	
17,900.0	12,060.0	18,069.7	12,135.0	50.1	45.8	96.20	-5,446.6	236.2	693.9	596.6	97.29	7.132	
18,000.0	12,060.0	18,169.7	12,135.0	50.8	46.5	96.20	-5,546.6	236.9	693.9	595.3	98.65	7.034	
18,100.0	12,060.0	18,269.7	12,135.0	51.4	47.2	96.20	-5,646.6	237.7	693.9	593.9	100.01	6.938	
18,200.0	12,060.0	18,369.7	12,135.0	52.0	47.9	96.20	-5,746.6	238.4	693.9	592.5	101.38	6.845	
18,300.0	12,060.0	18,469.7	12,135.0	52.7	48.7	96.20	-5,846.6	239.1	693.9	591.2	102.75	6.753	
18,400.0	12,060.0	18,569.7	12,135.0	53.4	49.4	96.20	-5,946.6	239.8	693.9	589.8	104.13	6.664	
18,500.0	12,060.0	18,669.7	12,135.0	54.0	50.1	96.20	-6,046.6	240.6	693.9	588.4	105.50	6.577	
18,600.0	12,060.0	18,769.7	12,135.0	54.7	50.8	96.20	-6,146.6	241.3	693.9	587.0	106.89	6.492	
18,700.0	12,060.0	18,869.7	12,135.0	55.3	51.5	96.20	-6,246.6	242.0	693.9	585.7	108.27	6.409	
18,800.0	12,060.0	18,969.7	12,135.0	56.0	52.3	96.20	-6,346.6	242.7	693.9	584.3	109.66	6.328	
18,900.0	12,060.0	19,069.7	12,135.0	56.7	53.0	96.20	-6,446.6	243.5	693.9	582.9	111.05	6.249	
19,000.0	12,060.0	19,169.7	12,135.0	57.3	53.7	96.20	-6,546.6	244.2	693.9	581.5	112.45	6.171	
19,100.0	12,060.0	19,269.7	12,135.0	58.0	54.4	96.20	-6,646.6	244.9	693.9	580.1	113.84	6.096	
19,200.0	12,060.0	19,369.7	12,135.0	58.7	55.2	96.20	-6,746.6	245.7	693.9	578.7	115.25	6.021	
19,300.0	12,060.0	19,469.7	12,135.0	59.4	55.9	96.20	-6,846.6	246.4	693.9	577.3	116.65	5.949	
19,400.0	12,060.0	19,569.7	12,135.0	60.0	56.6	96.20	-6,946.6	247.1	693.9	575.9	118.06	5.878	
19,500.0	12,060.0	19,669.7	12,135.0	60.7	57.3	96.20	-7,046.6	247.8	694.0	574.5	119.46	5.809	
19,600.0	12,060.0	19,769.7	12,135.0	61.4	58.1	96.20	-7,146.6	248.6	694.0	573.1	120.88	5.741	
19,700.0	12,060.0	19,869.7	12,135.0	62.1	58.8	96.20	-7,246.6	249.3	694.0	571.7	122.29	5.675	
19,800.0	12,060.0	19,969.7	12,135.0	62.8	59.5	96.20	-7,346.6	250.0	694.0	570.3	123.71	5.610	
19,900.0	12,060.0	20,069.7	12,135.0	63.5	60.3	96.20	-7,446.6	250.7	694.0	568.8	125.12	5.546	
20,000.0	12,060.0	20,169.7	12,135.0	64.2	61.0	96.20	-7,546.6	251.5	694.0	567.4	126.54	5.484	
20,100.0	12,060.0	20,269.7	12,135.0	64.9	61.8	96.20	-7,646.6	252.2	694.0	566.0	127.97	5.423	
20,200.0	12,060.0	20,369.7	12,135.0	65.6	62.5	96.20	-7,746.6	252.9	694.0	564.6	129.39	5.363	
20,300.0	12,060.0	20,469.7	12,135.0	66.3	63.2	96.20	-7,846.6	253.6	694.0	563.2	130.82	5.305	
20,400.0	12,060.0	20,569.7	12,135.0	67.0	64.0	96.20	-7,946.5	254.4	694.0	561.7	132.25	5.248	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 702H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+MS **Rule Assigned:** **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,500.0	12,060.0	20,669.7	12,135.0	67.7	64.7	96.20	-8,046.5	255.1	694.0	560.3	133.68	5.191	
20,600.0	12,060.0	20,769.7	12,135.0	68.4	65.4	96.20	-8,146.5	255.8	694.0	558.9	135.11	5.136	
20,700.0	12,060.0	20,869.7	12,135.0	69.1	66.2	96.20	-8,246.5	256.6	694.0	557.4	136.54	5.083	
20,800.0	12,060.0	20,969.7	12,135.0	69.8	66.9	96.20	-8,346.5	257.3	694.0	556.0	137.98	5.030	
20,900.0	12,060.0	21,069.7	12,135.0	70.5	67.7	96.20	-8,446.5	258.0	694.0	554.6	139.41	4.978	
21,000.0	12,060.0	21,169.7	12,135.0	71.2	68.4	96.20	-8,546.5	258.7	694.0	553.1	140.85	4.927	
21,100.0	12,060.0	21,269.7	12,135.0	71.9	69.1	96.20	-8,646.5	259.5	694.0	551.7	142.29	4.877	
21,200.0	12,060.0	21,369.7	12,135.0	72.6	69.9	96.20	-8,746.5	260.2	694.0	550.3	143.74	4.828	
21,300.0	12,060.0	21,469.7	12,135.0	73.3	70.6	96.20	-8,846.5	260.9	694.0	548.8	145.18	4.780	
21,400.0	12,060.0	21,569.7	12,135.0	74.0	71.4	96.20	-8,946.5	261.6	694.0	547.4	146.62	4.733	
21,500.0	12,060.0	21,669.7	12,135.0	74.7	72.1	96.20	-9,046.5	262.4	694.0	545.9	148.07	4.687	
21,600.0	12,060.0	21,769.7	12,135.0	75.5	72.9	96.20	-9,146.5	263.1	694.0	544.5	149.52	4.642	
21,700.0	12,060.0	21,869.7	12,135.0	76.2	73.6	96.20	-9,246.5	263.8	694.0	543.0	150.96	4.597	
21,800.0	12,060.0	21,969.7	12,135.0	76.9	74.4	96.20	-9,346.5	264.5	694.0	541.6	152.41	4.553	
21,900.0	12,060.0	22,069.7	12,135.0	77.6	75.1	96.20	-9,446.5	265.3	694.0	540.1	153.86	4.511	
22,000.0	12,060.0	22,169.7	12,135.0	78.3	75.9	96.20	-9,546.5	266.0	694.0	538.7	155.32	4.468	
22,100.0	12,060.0	22,269.7	12,135.0	79.0	76.6	96.20	-9,646.5	266.7	694.0	537.2	156.77	4.427	
22,200.0	12,060.0	22,369.7	12,135.0	79.8	77.3	96.20	-9,746.5	267.5	694.0	535.8	158.22	4.386	
22,271.5	12,060.0	22,441.2	12,135.0	80.3	77.8	96.20	-9,818.0	268.0	694.0	534.8	159.19	4.360	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 703H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.57	-0.6	-60.0	60.0				
100.0	100.0	100.0	100.0	3.0	3.0	-90.57	-0.6	-60.0	60.0	53.5	6.49	9.247	
200.0	200.0	200.0	200.0	3.2	3.2	-90.57	-0.6	-60.0	60.0	53.3	6.73	8.917	
300.0	300.0	300.0	300.0	3.3	3.3	-90.57	-0.6	-60.0	60.0	53.0	6.96	8.621	
400.0	400.0	400.0	400.0	3.4	3.4	-90.57	-0.6	-60.0	60.0	52.8	7.18	8.353	
500.0	500.0	500.0	500.0	3.5	3.5	-90.57	-0.6	-60.0	60.0	52.6	7.40	8.109	
524.8	524.8	524.8	524.8	3.6	3.6	-90.57	-0.6	-60.0	60.0	52.6	7.45	8.054	
600.0	600.0	600.0	600.0	3.7	3.7	-90.57	-0.6	-60.0	60.0	52.4	7.61	7.886	
633.3	633.3	633.3	633.3	3.7	3.7	-90.57	-0.6	-60.0	60.0	52.3	7.68	7.817	
700.0	700.0	700.0	700.0	3.8	3.8	-90.57	-0.6	-60.0	60.0	52.2	7.81	7.680	
800.0	800.0	800.0	800.0	3.9	3.9	-90.57	-0.6	-60.0	60.0	52.0	8.01	7.490	
900.0	900.0	900.0	900.0	4.0	4.0	-90.57	-0.6	-60.0	60.0	51.8	8.20	7.314	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.57	-0.6	-60.0	60.0	51.6	8.39	7.150	
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.57	-0.6	-60.0	60.0	51.4	8.58	6.997	
1,200.0	1,200.0	1,200.0	1,200.0	4.4	4.4	-90.57	-0.6	-60.0	60.0	51.2	8.76	6.853	CC, ES, SF
1,300.0	1,300.0	1,298.8	1,298.8	4.5	4.6	-149.43	0.8	-61.0	62.5	53.4	9.05	6.905	
1,400.0	1,399.8	1,397.2	1,397.0	4.8	4.8	-148.08	5.0	-63.9	69.9	60.4	9.51	7.356	
1,500.0	1,499.5	1,494.8	1,494.3	5.1	5.1	-146.34	11.9	-68.6	82.4	72.4	9.98	8.259	
1,600.0	1,598.7	1,591.3	1,590.1	5.4	5.4	-144.61	21.3	-75.2	99.8	89.4	10.45	9.551	
1,700.0	1,697.5	1,686.4	1,684.1	5.7	5.7	-143.07	33.2	-83.5	122.2	111.2	10.94	11.171	
1,800.0	1,795.6	1,782.5	1,778.7	6.1	6.0	-142.08	46.9	-93.0	148.6	137.2	11.42	13.007	
1,900.0	1,893.2	1,878.3	1,873.1	6.3	6.3	-142.06	60.6	-102.5	177.2	165.3	11.82	14.991	
2,000.0	1,990.7	1,974.1	1,967.4	6.6	6.6	-142.18	74.3	-111.9	205.9	193.6	12.29	16.752	
2,100.0	2,088.3	2,069.9	2,061.7	7.0	6.9	-142.28	87.9	-121.4	234.7	221.9	12.79	18.353	
2,200.0	2,185.8	2,165.6	2,156.0	7.3	7.2	-142.36	101.6	-130.9	263.4	250.1	13.30	19.808	
2,300.0	2,283.4	2,261.4	2,250.3	7.7	7.5	-142.42	115.2	-140.4	292.2	278.3	13.83	21.132	
2,400.0	2,380.9	2,357.2	2,344.7	8.1	7.9	-142.46	128.9	-149.9	320.9	306.6	14.37	22.336	
2,500.0	2,478.4	2,453.0	2,439.0	8.5	8.2	-142.51	142.6	-159.4	349.7	334.8	14.92	23.434	
2,600.0	2,576.0	2,548.7	2,533.3	8.9	8.6	-142.54	156.2	-168.8	378.4	362.9	15.49	24.435	
2,700.0	2,673.5	2,644.5	2,627.6	9.3	9.0	-142.57	169.9	-178.3	407.2	391.1	16.06	25.350	
2,800.0	2,771.0	2,740.3	2,721.9	9.7	9.3	-142.60	183.6	-187.8	435.9	419.3	16.65	26.189	
2,900.0	2,868.6	2,836.1	2,816.3	10.1	9.7	-142.62	197.2	-197.3	464.7	447.5	17.24	26.958	
3,000.0	2,966.1	2,931.8	2,910.6	10.5	10.1	-142.64	210.9	-206.8	493.5	475.6	17.84	27.665	
3,100.0	3,063.6	3,027.6	3,004.9	11.0	10.5	-142.66	224.6	-216.2	522.2	503.8	18.44	28.316	
3,200.0	3,161.2	3,123.4	3,099.2	11.4	10.9	-142.67	238.2	-225.7	551.0	531.9	19.05	28.917	
3,300.0	3,258.7	3,219.2	3,193.6	11.8	11.3	-142.69	251.9	-235.2	579.7	560.0	19.67	29.473	
3,400.0	3,356.2	3,314.9	3,287.9	12.3	11.7	-142.70	265.6	-244.7	608.5	588.2	20.29	29.988	
3,500.0	3,453.8	3,410.7	3,382.2	12.7	12.0	-142.71	279.2	-254.2	637.2	616.3	20.92	30.466	
3,600.0	3,551.3	3,506.5	3,476.5	13.2	12.5	-142.72	292.9	-263.7	666.0	644.4	21.55	30.911	
3,700.0	3,648.8	3,602.3	3,570.8	13.6	12.9	-142.73	306.5	-273.1	694.7	672.6	22.18	31.326	
3,800.0	3,746.4	3,698.1	3,665.2	14.1	13.3	-142.74	320.2	-282.6	723.5	700.7	22.81	31.713	
3,900.0	3,843.9	3,793.8	3,759.5	14.5	13.7	-142.75	333.9	-292.1	752.2	728.8	23.45	32.074	
4,000.0	3,941.4	3,889.6	3,853.8	15.0	14.1	-142.76	347.5	-301.6	781.0	756.9	24.10	32.413	
4,100.0	4,039.0	3,985.4	3,948.1	15.4	14.5	-142.77	361.2	-311.1	809.8	785.0	24.74	32.731	
4,200.0	4,136.5	4,081.2	4,042.4	15.9	14.9	-142.77	374.9	-320.5	838.5	813.1	25.39	33.029	
4,300.0	4,234.1	4,176.9	4,136.8	16.4	15.3	-142.78	388.5	-330.0	867.3	841.2	26.04	33.310	
4,400.0	4,331.6	4,272.7	4,231.1	16.8	15.7	-142.79	402.2	-339.5	896.0	869.3	26.69	33.575	
4,500.0	4,429.1	4,368.5	4,325.4	17.3	16.2	-142.79	415.9	-349.0	924.8	897.4	27.34	33.824	
4,600.0	4,526.7	4,464.3	4,419.7	17.7	16.6	-142.80	429.5	-358.5	953.5	925.5	28.00	34.060	
4,700.0	4,624.2	4,560.0	4,514.1	18.2	17.0	-142.80	443.2	-367.9	982.3	953.6	28.65	34.283	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 707H - OWB - PWP1

Offset Site Error: 0.0 usft

Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1200-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.57	-0.9	-90.1	90.1				
100.0	100.0	100.0	100.0	3.0	3.0	-90.57	-0.9	-90.1	90.1	83.6	6.49	13.886	
200.0	200.0	200.0	200.0	3.2	3.2	-90.57	-0.9	-90.1	90.1	83.4	6.73	13.390	
300.0	300.0	300.0	300.0	3.3	3.3	-90.57	-0.9	-90.1	90.1	83.1	6.96	12.945	
400.0	400.0	400.0	400.0	3.4	3.4	-90.57	-0.9	-90.1	90.1	82.9	7.18	12.543	
500.0	500.0	500.0	500.0	3.5	3.5	-90.57	-0.9	-90.1	90.1	82.7	7.40	12.177	
524.7	524.7	524.7	524.7	3.6	3.6	-90.57	-0.9	-90.1	90.1	82.7	7.45	12.095	
600.0	600.0	600.0	600.0	3.7	3.7	-90.57	-0.9	-90.1	90.1	82.5	7.61	11.842	
633.3	633.3	633.3	633.3	3.7	3.7	-90.57	-0.9	-90.1	90.1	82.4	7.68	11.739	
700.0	700.0	700.0	700.0	3.8	3.8	-90.57	-0.9	-90.1	90.1	82.3	7.81	11.533	
800.0	800.0	800.0	800.0	3.9	3.9	-90.57	-0.9	-90.1	90.1	82.1	8.01	11.248	
900.0	900.0	900.0	900.0	4.0	4.0	-90.57	-0.9	-90.1	90.1	81.9	8.20	10.984	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.57	-0.9	-90.1	90.1	81.7	8.39	10.737	
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.57	-0.9	-90.1	90.1	81.5	8.58	10.507	
1,166.7	1,166.7	1,166.7	1,166.7	4.4	4.4	-90.57	-0.9	-90.1	90.1	81.4	8.69	10.363	
1,200.0	1,200.0	1,200.0	1,200.0	4.4	4.4	-90.57	-0.9	-90.1	90.1	81.3	8.76	10.291	CC, ES
1,300.0	1,300.0	1,297.7	1,297.6	4.5	4.6	-149.76	0.2	-91.3	92.9	83.8	9.07	10.237	SF
1,400.0	1,399.8	1,394.9	1,394.7	4.8	4.8	-149.23	3.5	-95.0	101.2	91.6	9.55	10.588	
1,500.0	1,499.5	1,491.2	1,490.7	5.1	5.1	-148.51	9.0	-101.1	114.9	104.9	10.05	11.442	
1,600.0	1,598.7	1,586.2	1,585.0	5.4	5.4	-147.71	16.5	-109.4	134.1	123.6	10.55	12.719	
1,700.0	1,697.5	1,679.5	1,677.3	5.7	5.7	-146.93	25.9	-119.9	158.6	147.6	11.06	14.347	
1,800.0	1,795.6	1,770.8	1,767.0	6.1	6.0	-146.20	37.0	-132.2	188.4	176.8	11.58	16.268	
1,900.0	1,893.2	1,861.0	1,855.1	6.3	6.3	-145.69	49.8	-146.5	222.5	210.6	11.93	18.644	
2,000.0	1,990.7	1,954.6	1,946.5	6.6	6.5	-145.31	63.7	-161.9	257.6	245.1	12.41	20.747	
2,100.0	2,088.3	2,048.3	2,037.8	7.0	6.8	-145.02	77.6	-177.3	292.6	279.7	12.94	22.610	
2,200.0	2,185.8	2,141.9	2,129.1	7.3	7.2	-144.79	91.5	-192.8	327.7	314.2	13.49	24.287	
2,300.0	2,283.4	2,235.6	2,220.4	7.7	7.5	-144.61	105.4	-208.2	362.7	348.7	14.06	25.798	
2,400.0	2,380.9	2,329.2	2,311.7	8.1	7.8	-144.46	119.3	-223.6	397.8	383.2	14.65	27.159	
2,500.0	2,478.4	2,422.8	2,403.0	8.5	8.2	-144.33	133.2	-239.0	432.9	417.6	15.25	28.388	
2,600.0	2,576.0	2,516.5	2,494.3	8.9	8.6	-144.22	147.1	-254.5	467.9	452.1	15.86	29.499	
2,700.0	2,673.5	2,610.1	2,585.7	9.3	8.9	-144.13	161.0	-269.9	503.0	486.5	16.49	30.506	
2,800.0	2,771.0	2,703.8	2,677.0	9.7	9.3	-144.05	174.9	-285.3	538.1	521.0	17.13	31.420	
2,900.0	2,868.6	2,797.4	2,768.3	10.1	9.7	-143.98	188.8	-300.8	573.2	555.4	17.77	32.251	
3,000.0	2,966.1	2,891.1	2,859.6	10.5	10.1	-143.92	202.7	-316.2	608.2	589.8	18.43	33.009	
3,100.0	3,063.6	2,984.7	2,950.9	11.0	10.5	-143.86	216.6	-331.6	643.3	624.2	19.09	33.702	
3,200.0	3,161.2	3,078.4	3,042.2	11.4	10.9	-143.81	230.5	-347.1	678.4	658.6	19.76	34.338	
3,300.0	3,258.7	3,172.0	3,133.5	11.8	11.3	-143.77	244.4	-362.5	713.5	693.0	20.43	34.921	
3,400.0	3,356.2	3,265.7	3,224.9	12.3	11.7	-143.73	258.2	-377.9	748.5	727.4	21.11	35.458	
3,500.0	3,453.8	3,359.3	3,316.2	12.7	12.1	-143.69	272.1	-393.3	783.6	761.8	21.80	35.953	
3,600.0	3,551.3	3,452.9	3,407.5	13.2	12.5	-143.66	286.0	-408.8	818.7	796.2	22.48	36.411	
3,700.0	3,648.8	3,546.6	3,498.8	13.6	13.0	-143.63	299.9	-424.2	853.8	830.6	23.18	36.835	
3,800.0	3,746.4	3,640.2	3,590.1	14.1	13.4	-143.60	313.8	-439.6	888.8	865.0	23.87	37.229	
3,900.0	3,843.9	3,733.9	3,681.4	14.5	13.8	-143.57	327.7	-455.1	923.9	899.3	24.57	37.596	
4,000.0	3,941.4	3,827.5	3,772.8	15.0	14.2	-143.55	341.6	-470.5	959.0	933.7	25.28	37.937	
4,100.0	4,039.0	3,921.2	3,864.1	15.4	14.6	-143.52	355.5	-485.9	994.1	968.1	25.98	38.255	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Offset Design: WINDWARD FEDERAL PROJECT - WINDWARD FEDERAL 9H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8586-r.5 MWD+IFR1+MS

Rule Assigned:

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	3.0	3.0	3.0	-59.33	467.0	-787.4	915.5				
100.0	100.0	93.9	96.9	3.0	3.0	-59.32	467.2	-787.5	915.6	909.2	6.44	142.091	
200.0	200.0	195.0	198.0	3.2	3.0	-59.29	467.6	-787.4	915.8	909.2	6.57	139.406	
300.0	300.0	294.4	297.4	3.3	3.0	-59.26	468.2	-787.2	915.9	909.2	6.69	136.822	
400.0	400.0	394.1	397.1	3.4	3.0	-59.21	469.0	-787.0	916.2	909.4	6.82	134.336	
500.0	500.0	491.5	494.5	3.5	3.1	-59.16	469.9	-787.1	916.7	909.7	6.95	131.943	
600.0	600.0	591.7	594.6	3.7	3.1	-59.11	470.8	-787.1	917.2	910.1	7.08	129.624	
700.0	700.0	694.3	697.3	3.8	3.1	-59.08	471.4	-787.2	917.5	910.3	7.21	127.319	
800.0	800.0	798.5	801.4	3.9	3.1	-59.11	471.0	-787.4	917.5	910.2	7.33	125.118	
900.0	900.0	898.2	901.2	4.0	3.1	-59.16	470.2	-787.6	917.3	909.8	7.45	123.040	
1,000.0	1,000.0	998.1	1,001.1	4.2	3.1	-59.22	469.3	-787.8	917.0	909.4	7.58	121.018	
1,100.0	1,100.0	1,098.9	1,101.9	4.3	3.1	-59.28	468.3	-788.0	916.7	909.0	7.70	119.050	
1,200.0	1,200.0	1,200.9	1,203.8	4.4	3.1	-59.35	467.1	-788.2	916.3	908.4	7.82	117.130	
1,223.4	1,223.4	1,224.1	1,227.0	4.4	3.1	-118.76	466.9	-788.3	916.2	908.3	7.86	116.494 ES	
1,300.0	1,300.0	1,300.6	1,303.6	4.5	3.1	-118.89	466.0	-788.3	916.6	908.6	7.97	115.034	
1,400.0	1,399.8	1,400.5	1,403.4	4.8	3.1	-119.20	464.8	-788.4	918.6	910.4	8.21	111.932	
1,500.0	1,499.5	1,502.3	1,505.3	5.1	3.2	-119.68	463.7	-788.5	922.4	914.0	8.45	109.118	
1,600.0	1,598.7	1,600.7	1,603.6	5.4	3.2	-120.26	462.8	-788.2	927.9	919.2	8.71	106.529	
1,700.0	1,697.5	1,698.2	1,701.1	5.7	3.2	-120.97	462.1	-787.9	935.3	926.3	8.98	104.117	
1,800.0	1,795.6	1,797.9	1,800.9	6.1	3.3	-121.81	461.7	-787.5	944.8	935.5	9.28	101.830	
1,900.0	1,893.2	1,900.9	1,903.8	6.3	3.3	-122.87	461.6	-786.5	955.7	946.3	9.48	100.769	
2,000.0	1,990.7	2,001.4	2,004.3	6.6	3.3	-123.93	461.9	-785.0	966.9	957.1	9.79	98.717	
2,100.0	2,088.3	2,100.0	2,102.9	7.0	3.4	-124.91	462.6	-783.0	978.0	967.9	10.12	96.624	
2,200.0	2,185.8	2,181.7	2,184.6	7.3	3.4	-125.68	463.8	-781.8	990.2	979.7	10.45	94.715 SF	

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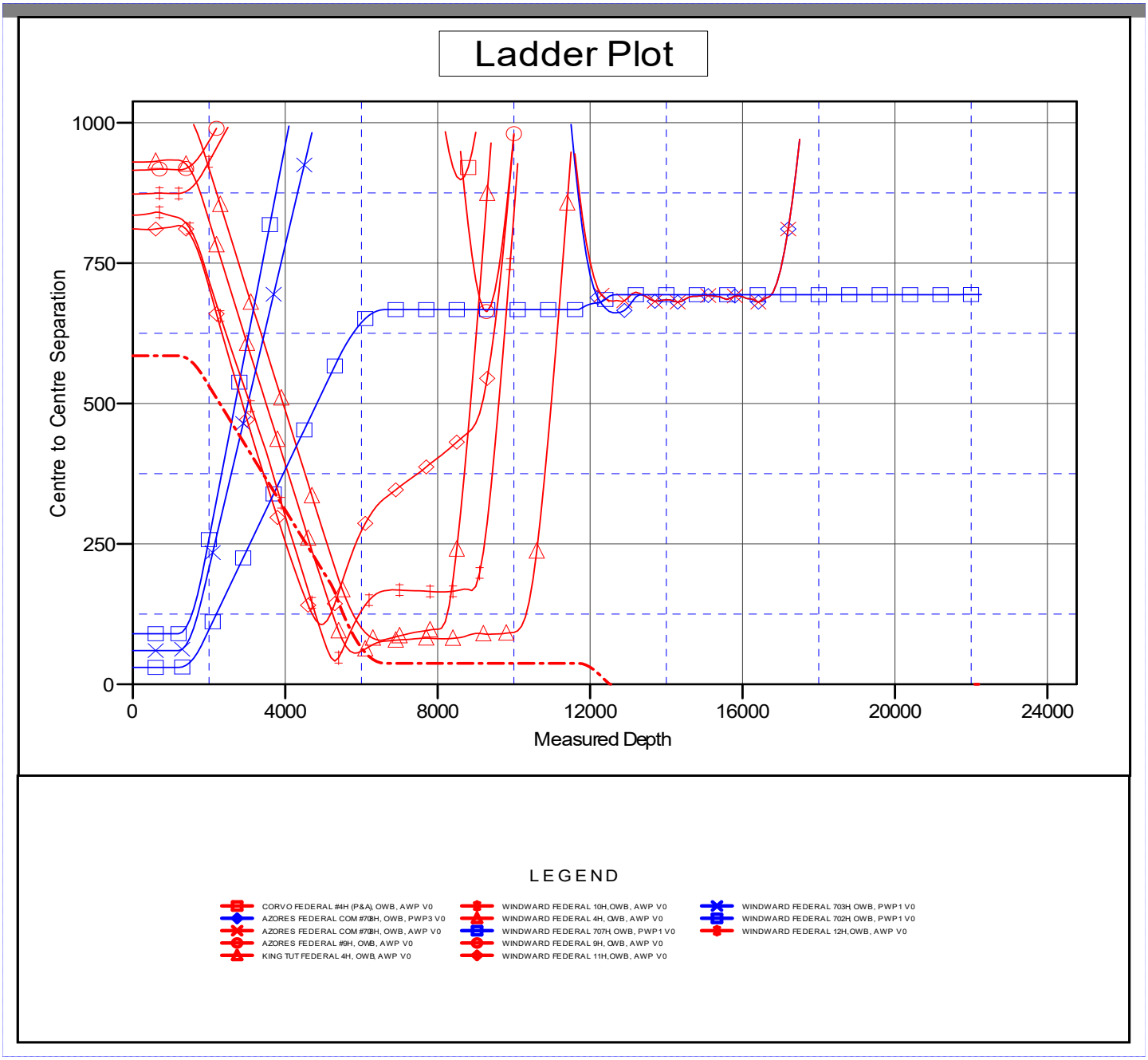
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to KB=30 @ 3580.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: WINDWARD FEDERAL 701H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.33°



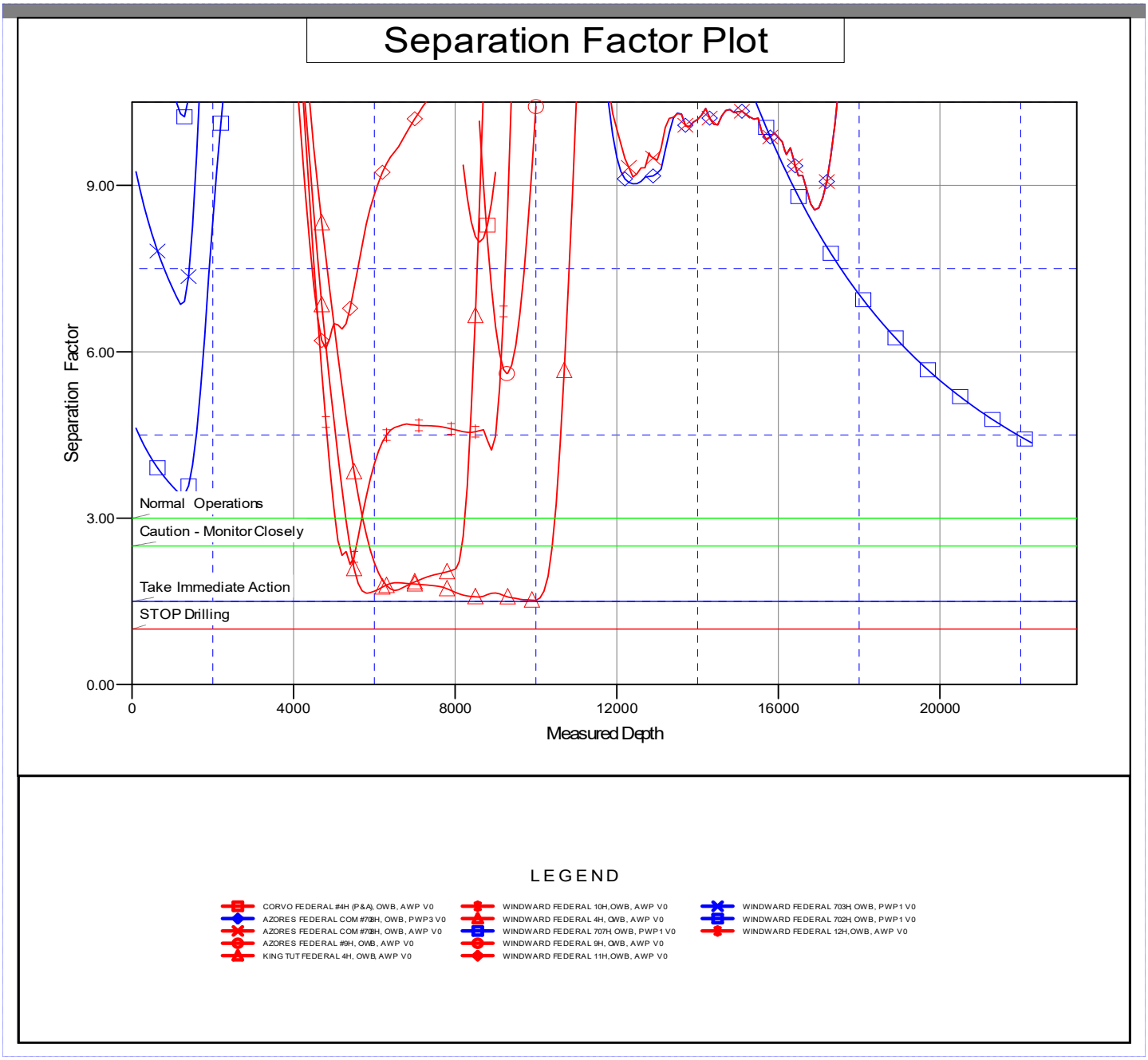
ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Project:	LEA COUNTY SOUTHEAST	**TVD Reference:**	KB=30 @ 3580.0usft
Reference Site:	WINDWARD FEDERAL PROJECT	**MD Reference:**	KB=30 @ 3580.0usft
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	EDT 17 Permian Prod
Reference Design:	PWP1	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to KB=30 @ 3580.0usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: WINDWARD FEDERAL 701H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.33°



DELAWARE BASIN EAST

LEA COUNTY SOUTHEAST
WINDWARD FEDERAL PROJECT
WINDWARD FEDERAL 701H
300255037900
OWB

Plan: PWP1

Standard Planning Report

23 April, 2024

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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	WINDWARD FEDERAL PROJECT				
Site Position:		**Northing:**	398,637.10 usft	**Latitude:**	32° 5' 36.820 N
From:	Map	**Easting:**	741,887.40 usft	**Longitude:**	103° 33' 8.116 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well	WINDWARD FEDERAL 701H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	434,721.40 usft	**Latitude:**	32° 11' 37.044 N
	+E/-W	0.0 usft	**Easting:**	693,231.80 usft	**Longitude:**	103° 42' 31.260 W
Position Uncertainty		3.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,550.0 usft
Grid Convergence:		0.33 °				

Wellbore	OWB				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2020	10/27/2020	6.68	59.87	47,527.25454722

Design	PWP1				
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	174.42	

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

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	1,200.0	PWP1 (OWB)	r.5 SDI_KPR_WL_NS-CT SDI Keeper Wireline Gyrocomp	
2	1,200.0	22,271.5	PWP1 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St	

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,837.4	12.75	59.39	1,832.1	36.0	60.8	2.00	2.00	0.00	59.39	
5,327.0	12.75	59.39	5,235.7	428.1	723.5	0.00	0.00	0.00	0.00	
6,601.8	0.00	0.00	6,500.0	500.0	845.0	1.00	-1.00	0.00	180.00	
11,684.3	0.00	0.00	11,582.5	500.0	845.0	0.00	0.00	0.00	0.00	
12,434.3	90.00	175.80	12,060.0	23.8	880.0	12.00	12.00	0.00	175.80	
12,623.4	90.00	179.58	12,060.0	-165.1	887.6	2.00	0.00	2.00	90.00	
22,271.5	90.00	179.58	12,060.0	-9,813.0	957.9	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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
Start Build 2.00									
1,300.0	2.00	59.39	1,300.0	0.9	1.5	-0.7	2.00	2.00	0.00
1,400.0	4.00	59.39	1,399.8	3.6	6.0	-3.0	2.00	2.00	0.00
1,500.0	6.00	59.39	1,499.5	8.0	13.5	-6.6	2.00	2.00	0.00
1,600.0	8.00	59.39	1,598.7	14.2	24.0	-11.8	2.00	2.00	0.00
1,700.0	10.00	59.39	1,697.5	22.2	37.5	-18.4	2.00	2.00	0.00
1,800.0	12.00	59.39	1,795.6	31.9	53.9	-26.5	2.00	2.00	0.00
1,837.4	12.75	59.39	1,832.1	36.0	60.8	-29.9	2.00	2.00	0.00
Start 3489.6 hold at 1837.4 MD									
1,900.0	12.75	59.39	1,893.2	43.0	72.7	-35.7	0.00	0.00	0.00
2,000.0	12.75	59.39	1,990.7	54.2	91.7	-45.1	0.00	0.00	0.00
2,100.0	12.75	59.39	2,088.3	65.5	110.6	-54.4	0.00	0.00	0.00
2,200.0	12.75	59.39	2,185.8	76.7	129.6	-63.7	0.00	0.00	0.00
2,300.0	12.75	59.39	2,283.4	87.9	148.6	-73.1	0.00	0.00	0.00
2,400.0	12.75	59.39	2,380.9	99.2	167.6	-82.4	0.00	0.00	0.00
2,500.0	12.75	59.39	2,478.4	110.4	186.6	-91.8	0.00	0.00	0.00
2,600.0	12.75	59.39	2,576.0	121.7	205.6	-101.1	0.00	0.00	0.00
2,700.0	12.75	59.39	2,673.5	132.9	224.6	-110.4	0.00	0.00	0.00
2,800.0	12.75	59.39	2,771.0	144.1	243.6	-119.8	0.00	0.00	0.00
2,900.0	12.75	59.39	2,868.6	155.4	262.6	-129.1	0.00	0.00	0.00
3,000.0	12.75	59.39	2,966.1	166.6	281.6	-138.5	0.00	0.00	0.00
3,100.0	12.75	59.39	3,063.6	177.8	300.5	-147.8	0.00	0.00	0.00
3,200.0	12.75	59.39	3,161.2	189.1	319.5	-157.1	0.00	0.00	0.00
3,300.0	12.75	59.39	3,258.7	200.3	338.5	-166.5	0.00	0.00	0.00
3,400.0	12.75	59.39	3,356.2	211.5	357.5	-175.8	0.00	0.00	0.00
3,500.0	12.75	59.39	3,453.8	222.8	376.5	-185.2	0.00	0.00	0.00
3,600.0	12.75	59.39	3,551.3	234.0	395.5	-194.5	0.00	0.00	0.00
3,700.0	12.75	59.39	3,648.8	245.3	414.5	-203.8	0.00	0.00	0.00
3,800.0	12.75	59.39	3,746.4	256.5	433.5	-213.2	0.00	0.00	0.00
3,900.0	12.75	59.39	3,843.9	267.7	452.5	-222.5	0.00	0.00	0.00
4,000.0	12.75	59.39	3,941.4	279.0	471.5	-231.8	0.00	0.00	0.00
4,100.0	12.75	59.39	4,039.0	290.2	490.4	-241.2	0.00	0.00	0.00
4,200.0	12.75	59.39	4,136.5	301.4	509.4	-250.5	0.00	0.00	0.00
4,300.0	12.75	59.39	4,234.1	312.7	528.4	-259.9	0.00	0.00	0.00
4,400.0	12.75	59.39	4,331.6	323.9	547.4	-269.2	0.00	0.00	0.00
4,500.0	12.75	59.39	4,429.1	335.2	566.4	-278.5	0.00	0.00	0.00
4,600.0	12.75	59.39	4,526.7	346.4	585.4	-287.9	0.00	0.00	0.00
4,700.0	12.75	59.39	4,624.2	357.6	604.4	-297.2	0.00	0.00	0.00
4,800.0	12.75	59.39	4,721.7	368.9	623.4	-306.6	0.00	0.00	0.00
4,900.0	12.75	59.39	4,819.3	380.1	642.4	-315.9	0.00	0.00	0.00
5,000.0	12.75	59.39	4,916.8	391.3	661.4	-325.2	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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	12.75	59.39	5,014.3	402.6	680.4	-334.6	0.00	0.00	0.00
5,200.0	12.75	59.39	5,111.9	413.8	699.3	-343.9	0.00	0.00	0.00
5,300.0	12.75	59.39	5,209.4	425.0	718.3	-353.2	0.00	0.00	0.00
5,327.0	12.75	59.39	5,235.7	428.1	723.5	-355.8	0.00	0.00	0.00
Start Drop -1.00									
5,400.0	12.02	59.39	5,307.0	436.1	736.9	-362.4	1.00	-1.00	0.00
5,500.0	11.02	59.39	5,405.0	446.2	754.1	-370.8	1.00	-1.00	0.00
5,600.0	10.02	59.39	5,503.3	455.5	769.8	-378.6	1.00	-1.00	0.00
5,700.0	9.02	59.39	5,602.0	463.9	784.1	-385.6	1.00	-1.00	0.00
5,800.0	8.02	59.39	5,700.9	471.5	796.8	-391.8	1.00	-1.00	0.00
5,900.0	7.02	59.39	5,800.0	478.1	808.1	-397.4	1.00	-1.00	0.00
6,000.0	6.02	59.39	5,899.4	483.9	817.8	-402.2	1.00	-1.00	0.00
6,100.0	5.02	59.39	5,998.9	488.8	826.1	-406.2	1.00	-1.00	0.00
6,200.0	4.02	59.39	6,098.6	492.8	832.9	-409.6	1.00	-1.00	0.00
6,300.0	3.02	59.39	6,198.4	496.0	838.2	-412.2	1.00	-1.00	0.00
6,400.0	2.02	59.39	6,298.3	498.2	841.9	-414.0	1.00	-1.00	0.00
6,500.0	1.02	59.39	6,398.3	499.5	844.2	-415.2	1.00	-1.00	0.00
6,600.0	0.02	59.39	6,498.2	500.0	845.0	-415.5	1.00	-1.00	0.00
6,601.8	0.00	0.00	6,500.0	500.0	845.0	-415.5	1.00	-1.00	0.00
Start 5082.5 hold at 6601.8 MD									
6,700.0	0.00	0.00	6,598.2	500.0	845.0	-415.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,698.2	500.0	845.0	-415.5	0.00	0.00	0.00
6,900.0	0.00	0.00	6,798.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,000.0	0.00	0.00	6,898.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,100.0	0.00	0.00	6,998.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,098.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,300.0	0.00	0.00	7,198.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,298.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,500.0	0.00	0.00	7,398.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,498.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,598.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,698.2	500.0	845.0	-415.5	0.00	0.00	0.00
7,900.0	0.00	0.00	7,798.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,898.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,100.0	0.00	0.00	7,998.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,200.0	0.00	0.00	8,098.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,300.0	0.00	0.00	8,198.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,400.0	0.00	0.00	8,298.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,500.0	0.00	0.00	8,398.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,600.0	0.00	0.00	8,498.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,700.0	0.00	0.00	8,598.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,800.0	0.00	0.00	8,698.2	500.0	845.0	-415.5	0.00	0.00	0.00
8,900.0	0.00	0.00	8,798.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,000.0	0.00	0.00	8,898.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,100.0	0.00	0.00	8,998.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,200.0	0.00	0.00	9,098.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,300.0	0.00	0.00	9,198.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,298.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,500.0	0.00	0.00	9,398.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,600.0	0.00	0.00	9,498.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,700.0	0.00	0.00	9,598.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,800.0	0.00	0.00	9,698.2	500.0	845.0	-415.5	0.00	0.00	0.00
9,900.0	0.00	0.00	9,798.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,000.0	0.00	0.00	9,898.2	500.0	845.0	-415.5	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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	9,998.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,200.0	0.00	0.00	10,098.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,300.0	0.00	0.00	10,198.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,400.0	0.00	0.00	10,298.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,500.0	0.00	0.00	10,398.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,600.0	0.00	0.00	10,498.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,700.0	0.00	0.00	10,598.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,800.0	0.00	0.00	10,698.2	500.0	845.0	-415.5	0.00	0.00	0.00
10,900.0	0.00	0.00	10,798.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,000.0	0.00	0.00	10,898.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,100.0	0.00	0.00	10,998.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,200.0	0.00	0.00	11,098.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,300.0	0.00	0.00	11,198.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,400.0	0.00	0.00	11,298.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,500.0	0.00	0.00	11,398.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,600.0	0.00	0.00	11,498.2	500.0	845.0	-415.5	0.00	0.00	0.00
11,684.3	0.00	0.00	11,582.5	500.0	845.0	-415.5	0.00	0.00	0.00
Start Build 12.00									
11,700.0	1.89	175.80	11,598.2	499.7	845.0	-415.3	12.00	12.00	0.00
11,800.0	13.89	175.80	11,697.1	486.1	846.0	-401.6	12.00	12.00	0.00
11,900.0	25.89	175.80	11,791.0	452.2	848.5	-367.6	12.00	12.00	0.00
12,000.0	37.89	175.80	11,875.7	399.6	852.4	-314.9	12.00	12.00	0.00
FTP_WINDWARD FED 701H									
12,100.0	49.89	175.80	11,947.7	330.6	857.4	-245.7	12.00	12.00	0.00
12,200.0	61.89	175.80	12,003.6	248.2	863.5	-163.1	12.00	12.00	0.00
12,300.0	73.89	175.80	12,041.2	156.0	870.3	-70.7	12.00	12.00	0.00
12,400.0	85.89	175.80	12,058.7	57.9	877.5	27.6	12.00	12.00	0.00
12,434.3	90.00	175.80	12,060.0	23.8	880.0	61.8	12.00	12.00	0.00
Start DLS 2.00 TFO 90.00									
12,500.0	90.00	177.11	12,060.0	-41.8	884.0	127.5	2.00	0.00	2.00
12,600.0	90.00	179.11	12,060.0	-141.7	887.3	227.3	2.00	0.00	2.00
12,623.4	90.00	179.58	12,060.0	-165.1	887.6	250.6	2.00	0.00	2.00
Start 9648.1 hold at 12623.4 MD									
12,700.0	90.00	179.58	12,060.0	-241.7	888.1	326.9	0.00	0.00	0.00
12,800.0	90.00	179.58	12,060.0	-341.7	888.9	426.5	0.00	0.00	0.00
12,900.0	90.00	179.58	12,060.0	-441.7	889.6	526.1	0.00	0.00	0.00
13,000.0	90.00	179.58	12,060.0	-541.7	890.3	625.7	0.00	0.00	0.00
13,100.0	90.00	179.58	12,060.0	-641.7	891.1	725.3	0.00	0.00	0.00
13,200.0	90.00	179.58	12,060.0	-741.7	891.8	824.9	0.00	0.00	0.00
13,300.0	90.00	179.58	12,060.0	-841.7	892.5	924.5	0.00	0.00	0.00
13,400.0	90.00	179.58	12,060.0	-941.7	893.2	1,024.1	0.00	0.00	0.00
13,500.0	90.00	179.58	12,060.0	-1,041.7	894.0	1,123.6	0.00	0.00	0.00
13,600.0	90.00	179.58	12,060.0	-1,141.7	894.7	1,223.2	0.00	0.00	0.00
13,700.0	90.00	179.58	12,060.0	-1,241.7	895.4	1,322.8	0.00	0.00	0.00
13,800.0	90.00	179.58	12,060.0	-1,341.7	896.2	1,422.4	0.00	0.00	0.00
13,900.0	90.00	179.58	12,060.0	-1,441.7	896.9	1,522.0	0.00	0.00	0.00
14,000.0	90.00	179.58	12,060.0	-1,541.7	897.6	1,621.6	0.00	0.00	0.00
14,100.0	90.00	179.58	12,060.0	-1,641.7	898.3	1,721.2	0.00	0.00	0.00
14,200.0	90.00	179.58	12,060.0	-1,741.7	899.1	1,820.8	0.00	0.00	0.00
14,300.0	90.00	179.58	12,060.0	-1,841.7	899.8	1,920.4	0.00	0.00	0.00
14,400.0	90.00	179.58	12,060.0	-1,941.7	900.5	2,020.0	0.00	0.00	0.00
14,500.0	90.00	179.58	12,060.0	-2,041.7	901.3	2,119.6	0.00	0.00	0.00
14,600.0	90.00	179.58	12,060.0	-2,141.7	902.0	2,219.2	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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)
14,700.0	90.00	179.58	12,060.0	-2,241.7	902.7	2,318.8	0.00	0.00	0.00
14,800.0	90.00	179.58	12,060.0	-2,341.7	903.4	2,418.4	0.00	0.00	0.00
14,900.0	90.00	179.58	12,060.0	-2,441.7	904.2	2,518.0	0.00	0.00	0.00
15,000.0	90.00	179.58	12,060.0	-2,541.7	904.9	2,617.6	0.00	0.00	0.00
15,100.0	90.00	179.58	12,060.0	-2,641.7	905.6	2,717.2	0.00	0.00	0.00
15,200.0	90.00	179.58	12,060.0	-2,741.7	906.4	2,816.8	0.00	0.00	0.00
15,300.0	90.00	179.58	12,060.0	-2,841.7	907.1	2,916.4	0.00	0.00	0.00
15,400.0	90.00	179.58	12,060.0	-2,941.7	907.8	3,016.0	0.00	0.00	0.00
15,500.0	90.00	179.58	12,060.0	-3,041.7	908.6	3,115.5	0.00	0.00	0.00
15,600.0	90.00	179.58	12,060.0	-3,141.7	909.3	3,215.1	0.00	0.00	0.00
15,700.0	90.00	179.58	12,060.0	-3,241.7	910.0	3,314.7	0.00	0.00	0.00
15,800.0	90.00	179.58	12,060.0	-3,341.7	910.7	3,414.3	0.00	0.00	0.00
15,900.0	90.00	179.58	12,060.0	-3,441.7	911.5	3,513.9	0.00	0.00	0.00
16,000.0	90.00	179.58	12,060.0	-3,541.7	912.2	3,613.5	0.00	0.00	0.00
16,100.0	90.00	179.58	12,060.0	-3,641.7	912.9	3,713.1	0.00	0.00	0.00
16,200.0	90.00	179.58	12,060.0	-3,741.6	913.7	3,812.7	0.00	0.00	0.00
16,300.0	90.00	179.58	12,060.0	-3,841.6	914.4	3,912.3	0.00	0.00	0.00
16,400.0	90.00	179.58	12,060.0	-3,941.6	915.1	4,011.9	0.00	0.00	0.00
16,500.0	90.00	179.58	12,060.0	-4,041.6	915.8	4,111.5	0.00	0.00	0.00
16,600.0	90.00	179.58	12,060.0	-4,141.6	916.6	4,211.1	0.00	0.00	0.00
16,700.0	90.00	179.58	12,060.0	-4,241.6	917.3	4,310.7	0.00	0.00	0.00
16,800.0	90.00	179.58	12,060.0	-4,341.6	918.0	4,410.3	0.00	0.00	0.00
16,900.0	90.00	179.58	12,060.0	-4,441.6	918.8	4,509.9	0.00	0.00	0.00
17,000.0	90.00	179.58	12,060.0	-4,541.6	919.5	4,609.5	0.00	0.00	0.00
17,100.0	90.00	179.58	12,060.0	-4,641.6	920.2	4,709.1	0.00	0.00	0.00
17,200.0	90.00	179.58	12,060.0	-4,741.6	920.9	4,808.7	0.00	0.00	0.00
17,300.0	90.00	179.58	12,060.0	-4,841.6	921.7	4,908.3	0.00	0.00	0.00
17,400.0	90.00	179.58	12,060.0	-4,941.6	922.4	5,007.9	0.00	0.00	0.00
17,500.0	90.00	179.58	12,060.0	-5,041.6	923.1	5,107.4	0.00	0.00	0.00
17,600.0	90.00	179.58	12,060.0	-5,141.6	923.9	5,207.0	0.00	0.00	0.00
17,700.0	90.00	179.58	12,060.0	-5,241.6	924.6	5,306.6	0.00	0.00	0.00
17,800.0	90.00	179.58	12,060.0	-5,341.6	925.3	5,406.2	0.00	0.00	0.00
17,900.0	90.00	179.58	12,060.0	-5,441.6	926.0	5,505.8	0.00	0.00	0.00
18,000.0	90.00	179.58	12,060.0	-5,541.6	926.8	5,605.4	0.00	0.00	0.00
18,100.0	90.00	179.58	12,060.0	-5,641.6	927.5	5,705.0	0.00	0.00	0.00
18,200.0	90.00	179.58	12,060.0	-5,741.6	928.2	5,804.6	0.00	0.00	0.00
18,300.0	90.00	179.58	12,060.0	-5,841.6	929.0	5,904.2	0.00	0.00	0.00
18,400.0	90.00	179.58	12,060.0	-5,941.6	929.7	6,003.8	0.00	0.00	0.00
18,500.0	90.00	179.58	12,060.0	-6,041.6	930.4	6,103.4	0.00	0.00	0.00
18,600.0	90.00	179.58	12,060.0	-6,141.6	931.1	6,203.0	0.00	0.00	0.00
18,700.0	90.00	179.58	12,060.0	-6,241.6	931.9	6,302.6	0.00	0.00	0.00
18,800.0	90.00	179.58	12,060.0	-6,341.6	932.6	6,402.2	0.00	0.00	0.00
18,900.0	90.00	179.58	12,060.0	-6,441.6	933.3	6,501.8	0.00	0.00	0.00
19,000.0	90.00	179.58	12,060.0	-6,541.6	934.1	6,601.4	0.00	0.00	0.00
19,100.0	90.00	179.58	12,060.0	-6,641.6	934.8	6,701.0	0.00	0.00	0.00
19,200.0	90.00	179.58	12,060.0	-6,741.6	935.5	6,800.6	0.00	0.00	0.00
19,300.0	90.00	179.58	12,060.0	-6,841.6	936.2	6,900.2	0.00	0.00	0.00
19,400.0	90.00	179.58	12,060.0	-6,941.6	937.0	6,999.8	0.00	0.00	0.00
19,500.0	90.00	179.58	12,060.0	-7,041.6	937.7	7,099.4	0.00	0.00	0.00
19,600.0	90.00	179.58	12,060.0	-7,141.6	938.4	7,198.9	0.00	0.00	0.00
19,700.0	90.00	179.58	12,060.0	-7,241.6	939.2	7,298.5	0.00	0.00	0.00
19,800.0	90.00	179.58	12,060.0	-7,341.6	939.9	7,398.1	0.00	0.00	0.00
19,900.0	90.00	179.58	12,060.0	-7,441.6	940.6	7,497.7	0.00	0.00	0.00
20,000.0	90.00	179.58	12,060.0	-7,541.5	941.3	7,597.3	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

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)
20,100.0	90.00	179.58	12,060.0	-7,641.5	942.1	7,696.9	0.00	0.00	0.00
20,200.0	90.00	179.58	12,060.0	-7,741.5	942.8	7,796.5	0.00	0.00	0.00
20,300.0	90.00	179.58	12,060.0	-7,841.5	943.5	7,896.1	0.00	0.00	0.00
20,400.0	90.00	179.58	12,060.0	-7,941.5	944.3	7,995.7	0.00	0.00	0.00
20,500.0	90.00	179.58	12,060.0	-8,041.5	945.0	8,095.3	0.00	0.00	0.00
20,600.0	90.00	179.58	12,060.0	-8,141.5	945.7	8,194.9	0.00	0.00	0.00
20,700.0	90.00	179.58	12,060.0	-8,241.5	946.4	8,294.5	0.00	0.00	0.00
20,800.0	90.00	179.58	12,060.0	-8,341.5	947.2	8,394.1	0.00	0.00	0.00
20,900.0	90.00	179.58	12,060.0	-8,441.5	947.9	8,493.7	0.00	0.00	0.00
21,000.0	90.00	179.58	12,060.0	-8,541.5	948.6	8,593.3	0.00	0.00	0.00
21,100.0	90.00	179.58	12,060.0	-8,641.5	949.4	8,692.9	0.00	0.00	0.00
21,200.0	90.00	179.58	12,060.0	-8,741.5	950.1	8,792.5	0.00	0.00	0.00
21,300.0	90.00	179.58	12,060.0	-8,841.5	950.8	8,892.1	0.00	0.00	0.00
21,400.0	90.00	179.58	12,060.0	-8,941.5	951.5	8,991.7	0.00	0.00	0.00
21,500.0	90.00	179.58	12,060.0	-9,041.5	952.3	9,091.3	0.00	0.00	0.00
21,600.0	90.00	179.58	12,060.0	-9,141.5	953.0	9,190.8	0.00	0.00	0.00
21,700.0	90.00	179.58	12,060.0	-9,241.5	953.7	9,290.4	0.00	0.00	0.00
21,800.0	90.00	179.58	12,060.0	-9,341.5	954.5	9,390.0	0.00	0.00	0.00
21,900.0	90.00	179.58	12,060.0	-9,441.5	955.2	9,489.6	0.00	0.00	0.00
22,000.0	90.00	179.58	12,060.0	-9,541.5	955.9	9,589.2	0.00	0.00	0.00
22,100.0	90.00	179.58	12,060.0	-9,641.5	956.7	9,688.8	0.00	0.00	0.00
22,200.0	90.00	179.58	12,060.0	-9,741.5	957.4	9,788.4	0.00	0.00	0.00
LTP_WINDWARD FED 701H									
22,271.5	90.00	179.58	12,060.0	-9,813.0	957.9	9,859.6	0.00	0.00	0.00
TD at 22271.5 - PBHL (WINDWARD FED 701H									

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
PBHL (WINDWARD FEI	0.00	359.58	12,060.0	-9,813.0	957.9	424,908.40	694,189.70	32° 9' 59.881 N	103° 42' 20.780 W
- plan hits target center - Rectangle (sides W100.0 H10,408.0 D20.0)									
LTP_WINDWARD FED 7	90.00	179.50	12,060.0	-9,763.0	957.5	424,958.40	694,189.30	32° 10' 0.376 N	103° 42' 20.781 W
- plan misses target center by 21.5usft at 22200.0usft MD (12060.0 TVD, -9741.5 N, 957.4 E) - Circle (radius 50.0)									
FTP_WINDWARD FED	0.00	0.00	12,060.0	594.1	882.0	435,315.50	694,113.80	32° 11' 42.873 N	103° 42' 20.956 W
- plan misses target center by 269.5usft at 12000.0usft MD (11875.7 TVD, 399.6 N, 852.4 E) - Circle (radius 50.0)									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
22,271.6	12,060.0	5-1/2" Production Casing	5-1/2	6

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	**Local Co-ordinate Reference:**	Well WINDWARD FEDERAL 701H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	KB=30 @ 3580.0usft
Project:	LEA COUNTY SOUTHEAST	**MD Reference:**	KB=30 @ 3580.0usft
Site:	WINDWARD FEDERAL PROJECT	**North Reference:**	Grid
Well:	WINDWARD FEDERAL 701H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,200.0	1,200.0	0.0	0.0	Start Build 2.00
1,837.4	1,832.1	36.0	60.8	Start 3489.6 hold at 1837.4 MD
5,327.0	5,235.7	428.1	723.5	Start Drop -1.00
6,601.8	6,500.0	500.0	845.0	Start 5082.5 hold at 6601.8 MD
11,684.3	11,582.5	500.0	845.0	Start Build 12.00
12,434.3	12,060.0	23.8	880.0	Start DLS 2.00 TFO 90.00
12,623.4	12,060.0	-165.1	887.6	Start 9648.1 hold at 12623.4 MD
22,271.5	12,060.0	-9,813.0	957.9	TD at 22271.5

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

Operator:	OGRID:
COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	217955
	Action Number: 340087
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	8/26/2025
matthew.gomez	Administrative order required for non-standard spacing unit prior to production.	8/26/2025
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	8/26/2025