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

# Sundry Print Report

02/29/2024

**Well Name:** HARRIER FEDERAL COM

**Well Location:** T25S / R32E / SEC 35 / NWNW /

**County or Parish/State:**

**Well Number:** 704H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM108973

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:** 3002549890

**Well Status:** Approved Application for Permit to Drill

**Operator:** COG OPERATING LLC

## Notice of Intent

**Sundry ID:** 2774648

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 02/12/2024

**Time Sundry Submitted:** 12:34

**Date proposed operation will begin:** 02/12/2024

**Procedure Description:** COG Operating requests an amendment to our approved APD for this well to reflect a change in BHL. Change BHL FROM: 50' FSL & 330' FWL SWSW 2-26S-32E Change BHL TO: 50' FSL & 880' FWL SWSW 2-26S-32E

## NOI Attachments

**Procedure Description**

HARRIER_FED_COM_704H_PWP0_PPLOT_20240212123337.pdf

Harrier_Fed_Com_704H_APD_drill_plan_20240212123337.pdf

HARRIER_FED_COM_704H_C102_NAD83_signed_1_23_24_20240212123337.pdf

HARRIER_FED_COM_704H_C102_A_NAD83_signed_1_23_24_20240212123337.pdf

HARRIER_FED_COM_704H_PWP0_AC_RPT_20240212123337.pdf

HARRIER_FED_COM_704H_PWP0_DIR_RPT_20240212123337.pdf

| | | |
|---|---|---|
| **Well Name:** HARRIER FEDERAL COM | **Well Location:** T25S / R32E / SEC 35 / NWNW / | **County or Parish/State:** |
| **Well Number:** 704H | **Type of Well:** OIL WELL | **Allottee or Tribe Name:** |
| **Lease Number:** NMNM108973 | **Unit or CA Name:** | **Unit or CA Number:** |
| **US Well Number:** 3002549890 | **Well Status:** Approved Application for Permit to Drill | **Operator:** COG OPERATING LLC |

## 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:** FEB 12, 2024 12:34 PM

**Name:** COG OPERATING 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:** 02/28/2024

**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: NWNW / 890 FNL / 925 FWL / TWSP: 25S / RANGE: 32E / SECTION: 35 / LAT: 32.091804 / LONG: -103.651264 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNW / 100 FNL / 330 FWL / TWSP: 25S / RANGE: 32E / SECTION: 35 / LAT: 32.093975 / LONG: -103.653171 ( TVD: 12017 feet, MD: 12056 feet )

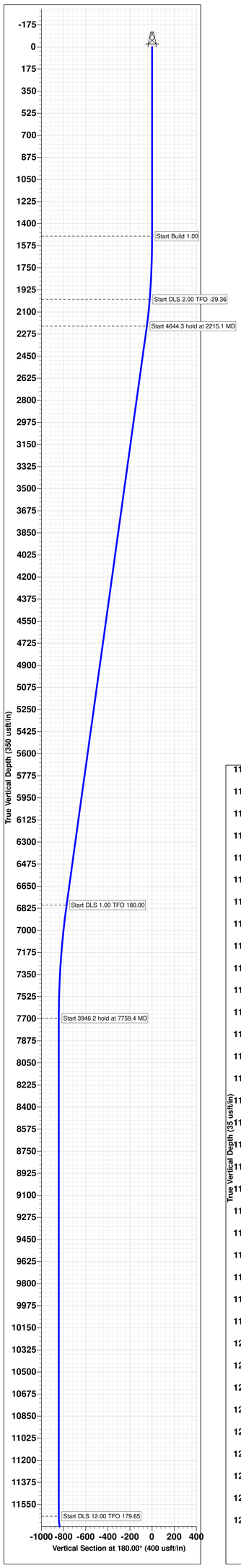
BHL: SWSW / 50 FSL / 330 FWL / TWSP: 26S / RANGE: 32E / SECTION: 2 / LAT: 32.065143 / LONG: -103.653176 ( TVD: 12262 feet, MD: 22047 feet )

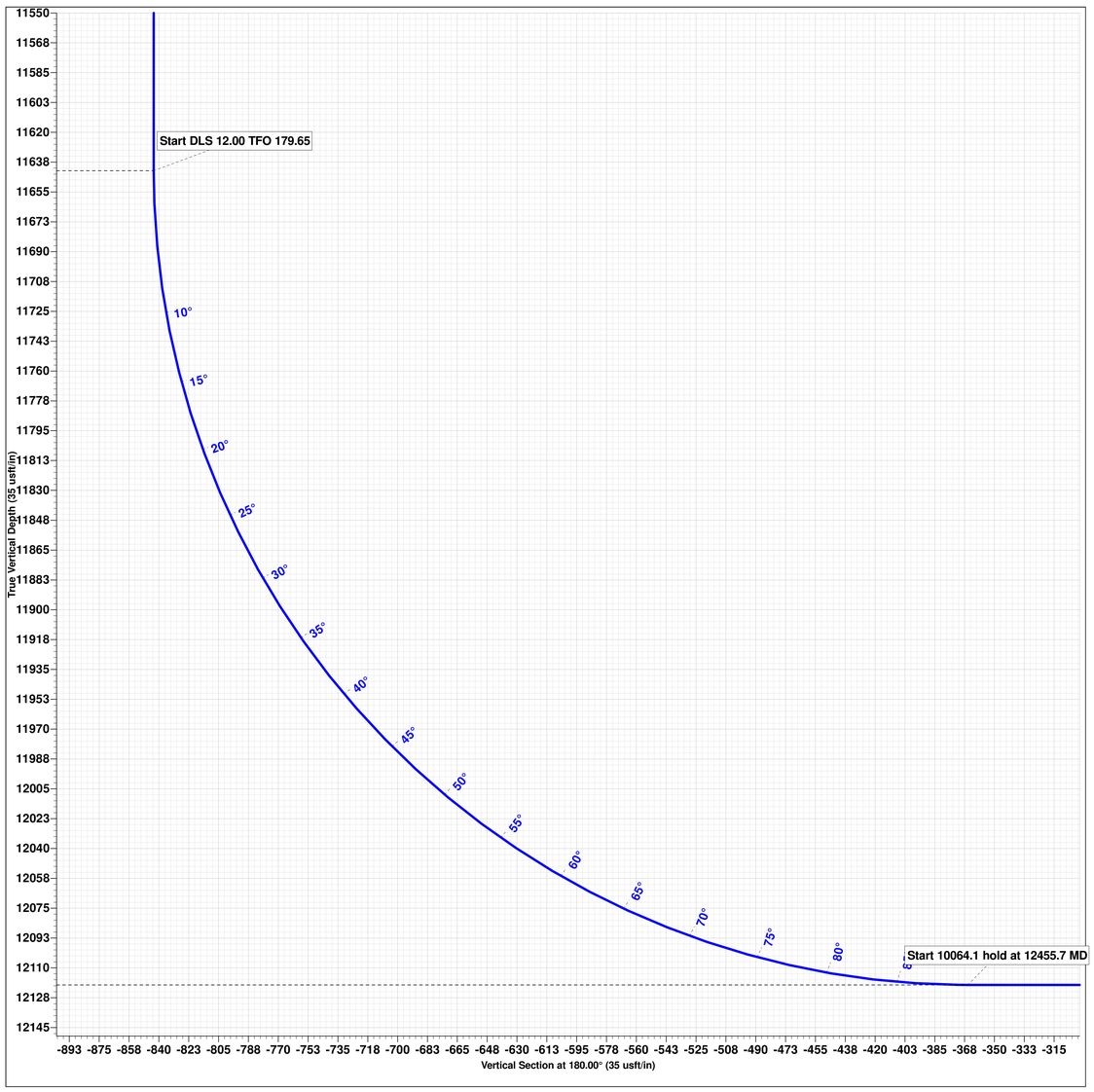
ConocoPhillips

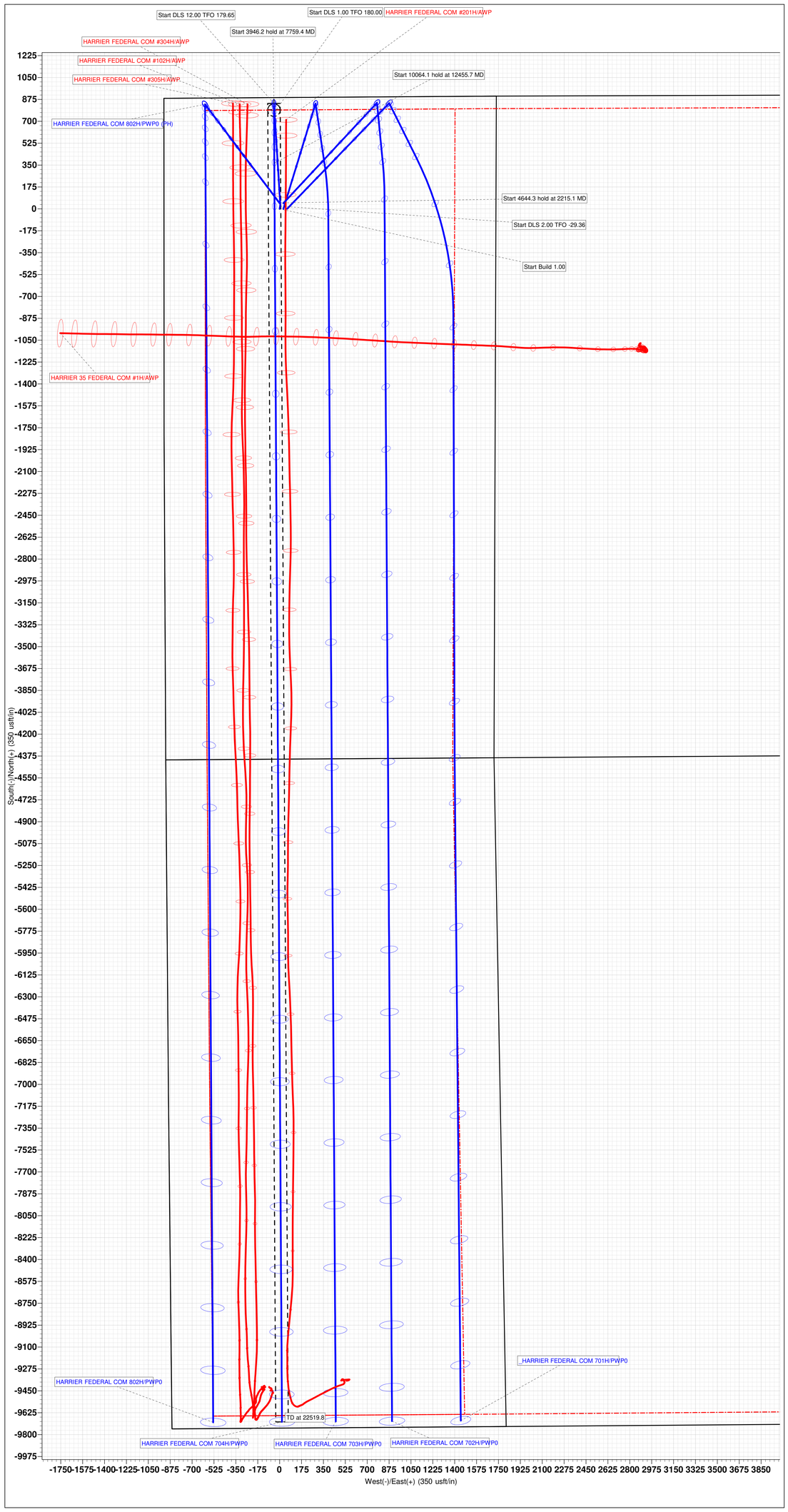
| | |
|---|---|
| Project: | LEA COUNT SOUTH WEST (NM-E) |
| Site: | HARRIER FEDERAL PROJECT |
| Well: | HARRIER FEDERAL COM 704H |
| Wellbore: | OWB |
| Design: | PWP0 |

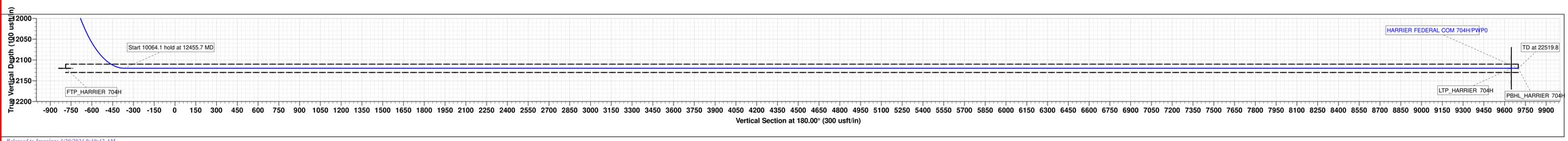
**SECTION DETAILS**

| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | TFace | VSect |
|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 |
| 1500.0 | 0.00 | 0.00 | 1500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 |
| 2000.0 | 5.00 | 10.00 | 1999.4 | 21.5 | 3.8 | 1.00 | 10.00 | -21.5 |
| 2215.1 | 9.00 | 356.40 | 2212.9 | 47.5 | 4.4 | 2.00 | -29.36 | -47.5 |
| 6859.4 | 9.00 | 356.40 | 6800.0 | 772.6 | -41.3 | 0.00 | 0.00 | -772.7 |
| 7759.4 | 0.00 | 0.00 | 7696.3 | 843.0 | -45.7 | 1.00 | 180.00 | -843.1 |
| 11705.7 | 0.00 | 0.00 | 11642.5 | 843.0 | -45.7 | 0.00 | 0.00 | -843.1 |
| 12455.7 | 90.00 | 179.65 | 12120.0 | 365.6 | -42.8 | 12.00 | 179.65 | -365.6 |
| 22519.8 | 90.00 | 179.65 | 12120.0 | -9698.4 | 18.8 | 0.00 | 0.00 | 9698.4 |



# COG Operating, LLC - Harrier Federal Com 704H

## 1. Geologic Formations

| | | | |
|---|---|---|---|
| TVD of target | 12,120' EOL | Pilot hole depth | NA |
| MD at TD: | 22,520' | Deepest expected fresh water: | 207' |

| Formation | Depth (TVD) from KB | Water/Mineral Bearing/ Target Zone? | Hazards* |
|---|---|---|---|
| Quaternary Fill | Surface | Water | |
| Rustler | 746 | Water | |
| Top of Salt | 1109 | Salt | |
| Base of Salt | 4504 | Salt | |
| Lamar | 4699 | Salt Water | |
| Bell Canyon | 4734 | Salt Water | |
| Cherry Canyon | 5726 | Oil/Gas | |
| Brushy Canyon | 7292 | Oil/Gas | |
| Bone Spring Lime | 8854 | Oil/Gas | |
| 1st Bone Spring Sand | 9818 | Oil/Gas | |
| 2nd Bone Spring Sand | 10437 | Oil/Gas | |
| 3rd Bone Spring Sand | 11602 | Oil/Gas | |
| Wolfcamp A | 12224 | Target | |
| Wolfcamp B | 0 | Not Penetrated | |
| Wolfcamp D | 0 | Not Penetrated | |

## 2. Casing Program

| Hole Size | Casing Interval | | Csg. Size | Weight | Grade | Conn. | SF | SF Burst | SF | SF |
|---|---|---|---|---|---|---|---|---|---|---|
| | From | To | | (lbs) | | | Collapse | | Body | Joint |
| 14.75" | 0 | 1050 | 10.75" | 45.5 | N80 | BTC | 5.14 | 1.71 | 21.77 | 22.96 |
| 9.875" | 0 | 8300 | 7.625" | 29.7 | HCL80 | BTC | 1.60 | 1.08 | 2.95 | 2.97 |
| 8.750" | 8300 | 11800 | 7.625" | 29.7 | HCP110 | FJM | 1.21 | 1.40 | 2.68 | 1.59 |
| 6.75" | 0 | 11300 | 5.5" | 23 | P110 | BTC | 1.98 | 2.34 | 2.80 | 2.79 |
| 6.75" | 11300 | 22,520 | 5.5" | 23 | P110 | Talon | 1.82 | 2.15 | 2.58 | 2.50 |
| | | | | | BLM Minimum Safety Factor | | 1.125 | 1 | 1.6 Dry<br>1.8 Wet | 1.6 Dry<br>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

The 5 1/2" talon 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 - Harrier Federal Com 704H

| | 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 - Harrier Federal Com 704H**

### 3. Cementing Program

| Casing | # Sks | Wt. lb/ gal | Yld ft3/ sack | $H_20$ gal/sk | 500# Comp. Strength (hours) | Slurry Description |
|---|---|---|---|---|---|---|
| Surf. | 501 | 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 |
| Inter. Stage 1 | 840 | 10.3 | 3.3 | 22 | 24 | Halliburton tunded light |
| | 250 | 14.8 | 1.35 | 6.6 | 8 | Tail: Class H |
| Prod | 524 | 12.7 | 2 | 10.7 | 72 | Lead: 50:50:10 H Blend |
| | 1018 | 14.4 | 1.24 | 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 | 11,300' | 35% OH in Lateral (KOP to EOL) |

# COG Operating, LLC - Harrier Federal Com 704H

## 4. Pressure Control Equipment

| | |
|---|---|
| N | A variance is requested for the use of a diverter on the surface casing.<br>See attached for schematic. |

| BOP installed and tested before drilling which hole? | Size? | Min. Required WP | Type | x | Tested to: |
|---|---|---|---|---|---|
| 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. 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 43 CFR part 3170 Subpart 3172.<br>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 - Harrier Federal Com 704H

## 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 - 9 | 28-34 | N/C |
| 7-5/8" Int shoe | Lateral TD | OBM | 9.6 - 12.5 | 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 |

## 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 | |

**COG Operating, LLC - Harrier Federal Com 704H**

### 7. Drilling Conditions

| Condition | Specify what type and where? |
|---|---|
| BH Pressure at deepest TVD | 7990 psi at 12292' TVD |
| Abnormal Temperature | NO 180 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 Onshore Oil and Gas Order #6. 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 |

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 |
|---|---|---|
| 30-025-49890 | 98180 | WC-025 G-09 S253309P; Upper Wolfcamp |

| Property Code | Property Name | Well Number |
|---|---|---|
| 325390 | HARRIER FEDERAL COM | 704H |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 229137 | COG OPERATING LLC | 3366.3' |

## Surface Location

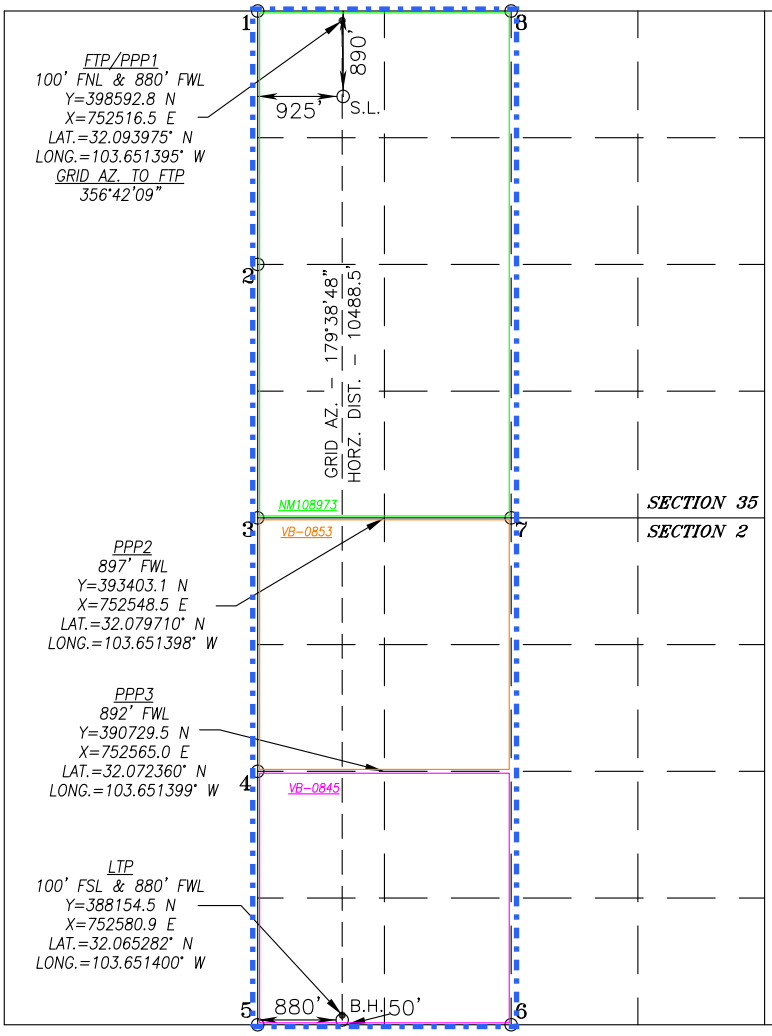
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| D | 35 | 25-S | 32-E | | 890 | NORTH | 925 | WEST | LEA |

## 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 |
|---|---|---|---|---|---|---|---|---|---|
| M | 2 | 26-S | 32-E | | 50 | SOUTH | 880 | WEST | LEA |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 640 | | Com | |

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




NAD 83 NME
SURFACE LOCATION
Y=397803.1 N
X=752562.0 E
LAT.=32.091804° N
LONG.=103.651264° W

| POINT LEGEND | |
|---|---|
| 1 | Y=398686.8 N X=751636.5 E |
| 2 | Y=396042.9 N X=751638.1 E |
| 3 | Y=393397.2 N X=751651.4 E |
| 4 | Y=390723.7 N X=751673.0 E |
| 5 | Y=388048.2 N X=751701.8 E |
| 6 | Y=388067.3 N X=754374.2 E |
| 7 | Y=393414.5 N X=754276.4 E |
| 8 | Y=398704.8 N X=754294.7 E |

NAD 83 NME
PROPOSED BOTTOM
HOLE LOCATION
Y=388104.5 N
X=752581.2 E
LAT.=32.065144° N
LONG.=103.651400° W

## 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 1/23/24
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.*

MARCH 29, 2021
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW NEW MEXICO 17777 LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 11/6/23

Certificate No. CHAD HARCROW 17777

W.O. #23-867 DRAWN BY: WN

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 |
|---|---|---|
| 30-025-49890 | 98158 | WC-025 G-09 S253236A; Upper Wolfcamp |

| Property Code | Property Name | Well Number |
|---|---|---|
| 325390 | HARRIER FEDERAL COM | 704H |

| OGRID No. | Operator Name | Elevation |
|---|---|---|
| 229137 | COG OPERATING LLC | 3366.3' |

## Surface Location

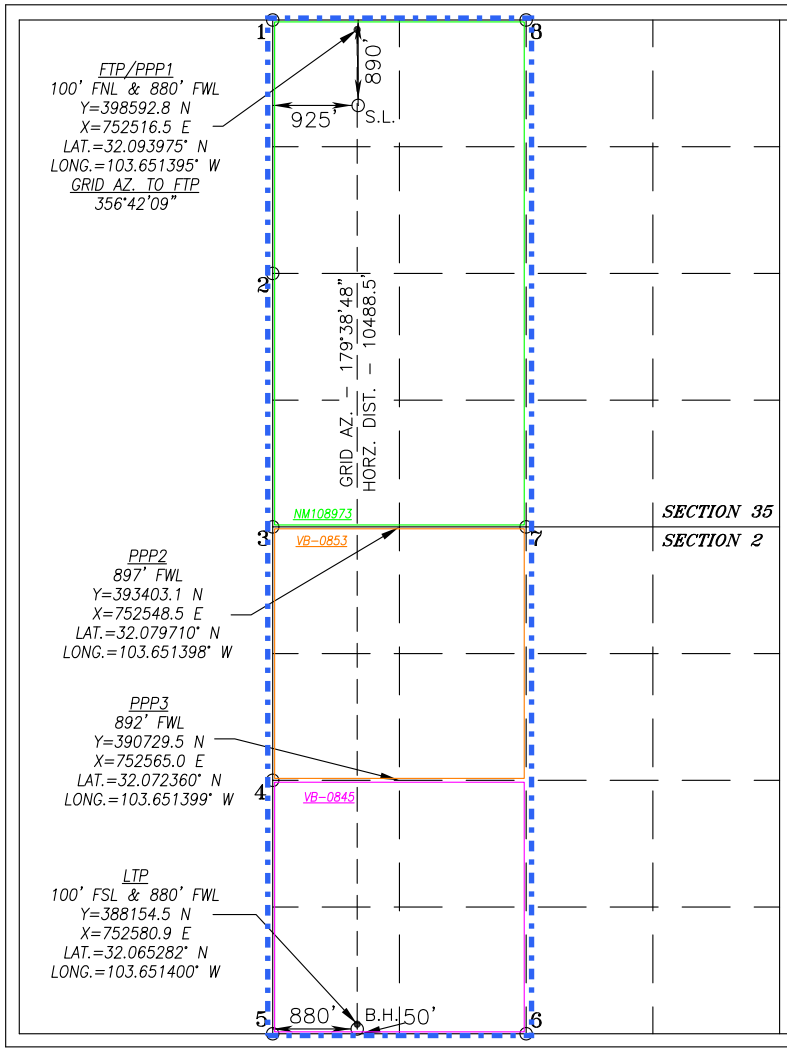
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| D | 35 | 25-S | 32-E | | 890 | NORTH | 925 | WEST | LEA |

## 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 |
|---|---|---|---|---|---|---|---|---|---|
| M | 2 | 26-S | 32-E | | 50 | SOUTH | 880 | WEST | LEA |

| Dedicated Acres | Joint or Infill | Consolidation Code | Order No. |
|---|---|---|---|
| 640 | | Com | |

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




NAD 83 NME
SURFACE LOCATION
Y=397803.1 N
X=752562.0 E
LAT.=32.091804° N
LONG.=103.651264° W

| POINT LEGEND | |
|---|---|
| 1 | Y=398686.8 N X=751636.5 E |
| 2 | Y=396042.9 N X=751638.1 E |
| 3 | Y=393397.2 N X=751651.4 E |
| 4 | Y=390723.7 N X=751673.0 E |
| 5 | Y=388048.2 N X=751701.8 E |
| 6 | Y=388067.3 N X=754374.2 E |
| 7 | Y=393414.5 N X=754276.4 E |
| 8 | Y=398704.8 N X=754294.7 E |

NAD 83 NME
PROPOSED BOTTOM
HOLE LOCATION
Y=388104.5 N
X=752581.2 E
LAT.=32.065144° N
LONG.=103.651400° W

## 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 1/23/24
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.*

MARCH 29, 2021
Date of Survey

Signature & Seal of Professional Surveyor

CHAD L. HARCROW
NEW MEXICO
17777
LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 11/6/23
Certificate No. CHAD HARCROW 17777
W.O. #23-867 DRAWN BY: WN

# DELAWARE BASIN EAST

**LEA COUNT SOUTH WEST (NM-E)**
**HARRIER FEDERAL PROJECT**
**HARRIER FEDERAL COM 704H**
**300254989000**
**OWB**
**PWP0**

# Anticollision Report

**12 January, 2024**

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

| | | | |
|---|---|---|---|
| **Reference** | PWP0 | | |
| **Filter type:** | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| **Interpolation Method:** | MD + Stations 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** 1/12/2024

| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
|---|---|---|---|---|
| 0.0 | 22,519.8 | PWP0 (OWB) | r.5 MWD+IFR1 | OWSG MWD + IFR1 rev.5 |

**Summary**

| Site Name<br>Offset Well - Wellbore - Design | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
|---|---|---|---|---|---|---|
| HARRIER FEDERAL PROJECT | | | | | | |
| _HARRIER FEDERAL COM 701H - OWB - PWP0 | 1,500.0 | 1,499.7 | 60.0 | 48.4 | 5.186 | CC, ES |
| _HARRIER FEDERAL COM 701H - OWB - PWP0 | 1,600.0 | 1,598.2 | 61.0 | 49.1 | 5.132 | SF |
| HARRIER 35 FEDERAL COM #1H - OWB - AWP | 13,840.6 | 14,668.8 | 136.3 | 70.8 | 2.082 | Caution - Monitor Closely, C |
| HARRIER 35 FEDERAL COM #1H - OWB - AWP | 13,900.0 | 14,668.0 | 148.7 | 70.8 | 1.908 | Caution - Monitor Closely, E |
| HARRIER FEDERAL COM #102H - OWB - AWP | 9,194.5 | 19,312.0 | 273.3 | 145.1 | 2.131 | Caution - Monitor Closely, C |
| HARRIER FEDERAL COM #201H - OWB - AWP | 9,429.4 | 19,405.0 | 163.5 | 78.4 | 1.921 | Caution - Monitor Closely, C |
| HARRIER FEDERAL COM #304H - OWB - AWP | 10,171.1 | 20,380.0 | 211.0 | 82.2 | 1.639 | Caution - Monitor Closely, C |
| HARRIER FEDERAL COM #305H - OWB - AWP | 9,659.8 | 19,869.4 | 327.7 | 198.7 | 2.541 | Normal Operations, CC, ES, |
| HARRIER FEDERAL COM 702H - OWB - PWP0 | 1,466.6 | 1,466.8 | 54.2 | 42.8 | 4.729 | CC |
| HARRIER FEDERAL COM 702H - OWB - PWP0 | 1,500.0 | 1,500.0 | 54.3 | 42.7 | 4.689 | ES |
| HARRIER FEDERAL COM 702H - OWB - PWP0 | 22,519.8 | 22,570.4 | 880.0 | 678.8 | 4.374 | SF |
| HARRIER FEDERAL COM 703H - OWB - PWP0 | 1,466.6 | 1,466.8 | 30.0 | 18.5 | 2.615 | Normal Operations, CC |
| HARRIER FEDERAL COM 703H - OWB - PWP0 | 1,500.0 | 1,500.2 | 30.0 | 18.4 | 2.593 | Normal Operations, ES |
| HARRIER FEDERAL COM 703H - OWB - PWP0 | 1,600.0 | 1,600.0 | 30.4 | 18.5 | 2.560 | Normal Operations, SF |
| HARRIER FEDERAL COM 802H - OWB - PWP0 | 966.5 | 967.0 | 44.9 | 35.0 | 4.522 | CC |
| HARRIER FEDERAL COM 802H - OWB - PWP0 | 1,000.0 | 1,000.0 | 44.9 | 34.9 | 4.473 | ES |
| HARRIER FEDERAL COM 802H - OWB - PWP0 | 22,519.8 | 22,815.9 | 617.0 | 425.7 | 3.227 | SF |
| HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH) | 966.5 | 967.0 | 44.9 | 35.6 | 4.828 | CC |
| HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH) | 1,000.0 | 1,000.0 | 44.9 | 35.5 | 4.779 | ES |
| HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH) | 1,100.0 | 1,099.2 | 46.3 | 36.6 | 4.760 | SF |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**TD Summary**

| Site Name<br>Offset Well - Wellbore - Design | Reference Measured Depth (usft) | Offset Measured Depth (usft) | Distance Between Centres (usft) | Distance Between Ellipses (usft) | Separation Factor | Warning |
|---|---|---|---|---|---|---|
| HARRIER FEDERAL PROJECT | | | | | | |
| _HARRIER FEDERAL COM 701H - OWB - PWP0 | 22,519.8 | 22,943.6 | | | | Out of Range @TD |
| HARRIER 35 FEDERAL COM #1H - OWB - AWP | 22,519.8 | 14,205.9 | | | | Out of Range @TD |
| HARRIER FEDERAL COM #102H - OWB - AWP | 22,519.8 | 9,357.0 | | | | Out of Range @TD |
| HARRIER FEDERAL COM #201H - OWB - AWP | 22,519.8 | 9,553.0 | | | | Out of Range @TD |
| HARRIER FEDERAL COM #304H - OWB - AWP | 22,519.8 | 10,223.0 | | | | Out of Range @TD |
| HARRIER FEDERAL COM #305H - OWB - AWP | 22,519.8 | 9,852.0 | | | | Out of Range @TD |
| HARRIER FEDERAL COM 702H - OWB - PWP0 | 22,519.8 | 22,570.4 | 880.0 | 678.8 | 4.374 | SF |
| HARRIER FEDERAL COM 703H - OWB - PWP0 | 22,519.8 | 22,830.4 | 513.0 | 321.2 | 2.674 | Normal Operations |
| HARRIER FEDERAL COM 802H - OWB - PWP0 | 22,519.8 | 22,815.9 | 617.0 | 425.7 | 3.227 | SF |
| HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH) | 22,519.8 | 12,203.3 | | | | Out of Range @TD |

**Offset Design:** HARRIER FEDERAL PROJECT - _HARRIER FEDERAL COM 701H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-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 | 89.62 | 0.4 | 60.0 | 60.0 | | | | |
| 100.0 | 100.0 | 99.7 | 99.7 | 3.1 | 3.1 | 89.62 | 0.4 | 60.0 | 60.0 | 53.4 | 6.62 | 9.066 | |
| 200.0 | 200.0 | 199.7 | 199.7 | 3.3 | 3.3 | 89.62 | 0.4 | 60.0 | 60.0 | 52.9 | 7.07 | 8.486 | |
| 300.0 | 300.0 | 299.7 | 299.7 | 3.5 | 3.5 | 89.62 | 0.4 | 60.0 | 60.0 | 52.5 | 7.50 | 8.002 | |
| 400.0 | 400.0 | 399.7 | 399.7 | 3.7 | 3.7 | 89.62 | 0.4 | 60.0 | 60.0 | 52.1 | 7.90 | 7.591 | |
| 500.0 | 500.0 | 499.7 | 499.7 | 3.9 | 3.9 | 89.62 | 0.4 | 60.0 | 60.0 | 51.7 | 8.29 | 7.236 | |
| 600.0 | 600.0 | 599.7 | 599.7 | 4.1 | 4.1 | 89.62 | 0.4 | 60.0 | 60.0 | 51.3 | 8.67 | 6.924 | |
| 700.0 | 700.0 | 699.7 | 699.7 | 4.3 | 4.3 | 89.62 | 0.4 | 60.0 | 60.0 | 51.0 | 9.03 | 6.648 | |
| 800.0 | 800.0 | 799.7 | 799.7 | 4.5 | 4.5 | 89.62 | 0.4 | 60.0 | 60.0 | 50.6 | 9.37 | 6.402 | |
| 900.0 | 900.0 | 899.7 | 899.7 | 4.7 | 4.7 | 89.62 | 0.4 | 60.0 | 60.0 | 50.3 | 9.71 | 6.179 | |
| 1,000.0 | 1,000.0 | 999.7 | 999.7 | 4.8 | 4.8 | 89.62 | 0.4 | 60.0 | 60.0 | 50.0 | 10.04 | 5.977 | |
| 1,100.0 | 1,100.0 | 1,099.7 | 1,099.7 | 5.0 | 5.0 | 89.62 | 0.4 | 60.0 | 60.0 | 49.6 | 10.36 | 5.792 | |
| 1,200.0 | 1,200.0 | 1,199.7 | 1,199.7 | 5.2 | 5.2 | 89.62 | 0.4 | 60.0 | 60.0 | 49.3 | 10.67 | 5.623 | |
| 1,300.0 | 1,300.0 | 1,299.7 | 1,299.7 | 5.3 | 5.3 | 89.62 | 0.4 | 60.0 | 60.0 | 49.0 | 10.98 | 5.466 | |
| 1,400.0 | 1,400.0 | 1,399.7 | 1,399.7 | 5.5 | 5.5 | 89.62 | 0.4 | 60.0 | 60.0 | 48.7 | 11.28 | 5.321 | |
| 1,500.0 | 1,500.0 | 1,499.7 | 1,499.7 | 5.6 | 5.6 | 89.62 | 0.4 | 60.0 | 60.0 | 48.4 | 11.57 | 5.186 | CC, ES |
| 1,600.0 | 1,600.0 | 1,598.2 | 1,598.2 | 5.8 | 5.8 | 79.27 | 1.6 | 61.2 | 61.0 | 49.1 | 11.89 | 5.132 | SF |
| 1,700.0 | 1,700.0 | 1,696.7 | 1,696.5 | 5.9 | 6.1 | 78.29 | 5.3 | 64.7 | 64.2 | 52.0 | 12.21 | 5.256 | |
| 1,800.0 | 1,799.9 | 1,794.9 | 1,794.3 | 6.1 | 6.3 | 76.84 | 11.3 | 70.5 | 69.5 | 56.9 | 12.53 | 5.542 | |
| 1,900.0 | 1,899.7 | 1,892.7 | 1,891.5 | 6.3 | 6.6 | 75.15 | 19.7 | 78.7 | 76.9 | 64.0 | 12.86 | 5.978 | |
| 2,000.0 | 1,999.4 | 1,990.1 | 1,987.7 | 6.5 | 6.9 | 73.39 | 30.5 | 89.1 | 86.5 | 73.3 | 13.20 | 6.550 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - _HARRIER FEDERAL COM 701H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1+MS

**Offset Well Error:** 3.0 usft

**Rule Assigned:**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2,100.0 | 2,098.8 | 2,086.9 | 2,082.8 | 6.8 | 7.2 | 80.33 | 43.5 | 101.6 | 98.9 | 85.3 | 13.55 | 7.294 | |
| 2,200.0 | 2,197.9 | 2,184.6 | 2,178.3 | 7.1 | 7.4 | 84.79 | 58.5 | 116.1 | 114.1 | 100.2 | 13.85 | 8.235 | |
| 2,215.1 | 2,212.9 | 2,199.6 | 2,192.9 | 7.1 | 7.4 | 85.43 | 60.9 | 118.4 | 116.5 | 102.6 | 13.89 | 8.387 | |
| 2,300.0 | 2,296.7 | 2,283.4 | 2,274.7 | 7.3 | 7.7 | 86.22 | 73.9 | 131.0 | 130.0 | 115.8 | 14.19 | 9.158 | |
| 2,400.0 | 2,395.5 | 2,382.1 | 2,371.0 | 7.6 | 8.0 | 86.97 | 89.3 | 145.8 | 145.9 | 131.3 | 14.55 | 10.025 | |
| 2,500.0 | 2,494.2 | 2,480.8 | 2,467.4 | 7.9 | 8.3 | 87.58 | 104.6 | 160.7 | 161.8 | 146.9 | 14.92 | 10.843 | |
| 2,600.0 | 2,593.0 | 2,579.5 | 2,563.8 | 8.2 | 8.6 | 88.07 | 120.0 | 175.5 | 177.7 | 162.4 | 15.30 | 11.615 | |
| 2,700.0 | 2,691.8 | 2,678.2 | 2,660.1 | 8.5 | 8.9 | 88.48 | 135.4 | 190.3 | 193.7 | 178.0 | 15.69 | 12.341 | |
| 2,800.0 | 2,790.5 | 2,776.9 | 2,756.5 | 8.9 | 9.3 | 88.83 | 150.7 | 205.2 | 209.6 | 193.6 | 16.09 | 13.026 | |
| 2,900.0 | 2,889.3 | 2,875.6 | 2,852.9 | 9.2 | 9.6 | 89.13 | 166.1 | 220.0 | 225.6 | 209.1 | 16.50 | 13.671 | |
| 3,000.0 | 2,988.1 | 2,974.3 | 2,949.3 | 9.6 | 10.0 | 89.39 | 181.5 | 234.9 | 241.6 | 224.7 | 16.92 | 14.279 | |
| 3,100.0 | 3,086.8 | 3,073.0 | 3,045.6 | 9.9 | 10.4 | 89.62 | 196.9 | 249.7 | 257.6 | 240.2 | 17.34 | 14.852 | |
| 3,200.0 | 3,185.6 | 3,171.8 | 3,142.0 | 10.3 | 10.8 | 89.82 | 212.2 | 264.6 | 273.5 | 255.8 | 17.77 | 15.393 | |
| 3,300.0 | 3,284.4 | 3,270.5 | 3,238.4 | 10.7 | 11.2 | 90.00 | 227.6 | 279.4 | 289.5 | 271.3 | 18.21 | 15.902 | |
| 3,400.0 | 3,383.1 | 3,369.2 | 3,334.7 | 11.0 | 11.6 | 90.16 | 243.0 | 294.2 | 305.5 | 286.9 | 18.65 | 16.383 | |
| 3,500.0 | 3,481.9 | 3,467.9 | 3,431.1 | 11.4 | 12.0 | 90.31 | 258.3 | 309.1 | 321.5 | 302.4 | 19.09 | 16.838 | |
| 3,600.0 | 3,580.7 | 3,566.6 | 3,527.5 | 11.8 | 12.4 | 90.44 | 273.7 | 323.9 | 337.5 | 317.9 | 19.54 | 17.267 | |
| 3,700.0 | 3,679.5 | 3,665.3 | 3,623.9 | 12.2 | 12.8 | 90.56 | 289.1 | 338.8 | 353.5 | 333.5 | 20.00 | 17.674 | |
| 3,800.0 | 3,778.2 | 3,764.0 | 3,720.2 | 12.6 | 13.2 | 90.67 | 304.4 | 353.6 | 369.5 | 349.0 | 20.46 | 18.058 | |
| 3,900.0 | 3,877.0 | 3,862.7 | 3,816.6 | 13.0 | 13.6 | 90.77 | 319.8 | 368.4 | 385.5 | 364.5 | 20.92 | 18.423 | |
| 4,000.0 | 3,975.8 | 3,961.4 | 3,913.0 | 13.4 | 14.1 | 90.86 | 335.2 | 383.3 | 401.5 | 380.1 | 21.39 | 18.768 | |
| 4,100.0 | 4,074.5 | 4,060.2 | 4,009.3 | 13.8 | 14.5 | 90.94 | 350.5 | 398.1 | 417.4 | 395.6 | 21.86 | 19.096 | |
| 4,200.0 | 4,173.3 | 4,158.9 | 4,105.7 | 14.2 | 14.9 | 91.02 | 365.9 | 413.0 | 433.4 | 411.1 | 22.33 | 19.407 | |
| 4,300.0 | 4,272.1 | 4,257.6 | 4,202.1 | 14.6 | 15.4 | 91.10 | 381.3 | 427.8 | 449.4 | 426.6 | 22.81 | 19.703 | |
| 4,400.0 | 4,370.8 | 4,356.3 | 4,298.5 | 15.0 | 15.8 | 91.16 | 396.6 | 442.6 | 465.4 | 442.1 | 23.29 | 19.984 | |
| 4,500.0 | 4,469.6 | 4,455.0 | 4,394.8 | 15.4 | 16.2 | 91.23 | 412.0 | 457.5 | 481.4 | 457.7 | 23.77 | 20.252 | |
| 4,600.0 | 4,568.4 | 4,553.7 | 4,491.2 | 15.8 | 16.7 | 91.29 | 427.4 | 472.3 | 497.4 | 473.2 | 24.26 | 20.507 | |
| 4,700.0 | 4,667.1 | 4,652.4 | 4,587.6 | 16.2 | 17.1 | 91.34 | 442.8 | 487.2 | 513.4 | 488.7 | 24.74 | 20.750 | |
| 4,800.0 | 4,765.9 | 4,751.1 | 4,683.9 | 16.7 | 17.6 | 91.39 | 458.1 | 502.0 | 529.4 | 504.2 | 25.23 | 20.982 | |
| 4,900.0 | 4,864.7 | 4,849.8 | 4,780.3 | 17.1 | 18.0 | 91.44 | 473.5 | 516.9 | 545.4 | 519.7 | 25.72 | 21.204 | |
| 5,000.0 | 4,963.4 | 4,948.6 | 4,876.7 | 17.5 | 18.4 | 91.49 | 488.9 | 531.7 | 561.4 | 535.2 | 26.22 | 21.415 | |
| 5,100.0 | 5,062.2 | 5,047.3 | 4,973.0 | 17.9 | 18.9 | 91.53 | 504.2 | 546.5 | 577.4 | 550.7 | 26.71 | 21.618 | |
| 5,200.0 | 5,161.0 | 5,146.0 | 5,069.4 | 18.3 | 19.3 | 91.58 | 519.6 | 561.4 | 593.4 | 566.2 | 27.21 | 21.811 | |
| 5,300.0 | 5,259.8 | 5,244.7 | 5,165.8 | 18.8 | 19.8 | 91.61 | 535.0 | 576.2 | 609.4 | 581.7 | 27.71 | 21.997 | |
| 5,400.0 | 5,358.5 | 5,343.4 | 5,262.2 | 19.2 | 20.2 | 91.65 | 550.3 | 591.1 | 625.4 | 597.2 | 28.21 | 22.174 | |
| 5,500.0 | 5,457.3 | 5,442.1 | 5,358.5 | 19.6 | 20.7 | 91.69 | 565.7 | 605.9 | 641.4 | 612.7 | 28.71 | 22.345 | |
| 5,600.0 | 5,556.1 | 5,540.8 | 5,454.9 | 20.0 | 21.1 | 91.72 | 581.1 | 620.7 | 657.4 | 628.2 | 29.21 | 22.508 | |
| 5,700.0 | 5,654.8 | 5,639.5 | 5,551.3 | 20.5 | 21.6 | 91.75 | 596.4 | 635.6 | 673.4 | 643.7 | 29.71 | 22.665 | |
| 5,800.0 | 5,753.6 | 5,738.2 | 5,647.6 | 20.9 | 22.1 | 91.78 | 611.8 | 650.4 | 689.4 | 659.2 | 30.22 | 22.816 | |
| 5,900.0 | 5,852.4 | 5,836.9 | 5,744.0 | 21.3 | 22.5 | 91.81 | 627.2 | 665.3 | 705.4 | 674.7 | 30.72 | 22.960 | |
| 6,000.0 | 5,951.1 | 5,935.7 | 5,840.4 | 21.8 | 23.0 | 91.84 | 642.5 | 680.1 | 721.4 | 690.2 | 31.23 | 23.100 | |
| 6,100.0 | 6,049.9 | 6,034.4 | 5,936.8 | 22.2 | 23.4 | 91.87 | 657.9 | 695.0 | 737.4 | 705.7 | 31.74 | 23.234 | |
| 6,200.0 | 6,148.7 | 6,133.1 | 6,033.1 | 22.6 | 23.9 | 91.89 | 673.3 | 709.8 | 753.5 | 721.2 | 32.25 | 23.363 | |
| 6,300.0 | 6,247.4 | 6,231.8 | 6,129.5 | 23.1 | 24.3 | 91.92 | 688.6 | 724.6 | 769.5 | 736.7 | 32.76 | 23.487 | |
| 6,400.0 | 6,346.2 | 6,330.5 | 6,225.9 | 23.5 | 24.8 | 91.94 | 704.0 | 739.5 | 785.5 | 752.2 | 33.27 | 23.607 | |
| 6,500.0 | 6,445.0 | 6,429.2 | 6,322.2 | 23.9 | 25.3 | 91.96 | 719.4 | 754.3 | 801.5 | 767.7 | 33.78 | 23.723 | |
| 6,600.0 | 6,543.7 | 6,527.9 | 6,418.6 | 24.4 | 25.7 | 91.99 | 734.8 | 769.2 | 817.5 | 783.2 | 34.30 | 23.834 | |
| 6,700.0 | 6,642.5 | 6,628.4 | 6,516.7 | 24.8 | 26.2 | 92.01 | 750.4 | 784.2 | 833.5 | 798.6 | 34.82 | 23.937 | |
| 6,800.0 | 6,741.3 | 6,738.6 | 6,624.6 | 25.2 | 26.7 | 92.10 | 766.6 | 799.9 | 848.6 | 813.2 | 35.38 | 23.988 | |
| 6,859.4 | 6,800.0 | 6,804.4 | 6,689.2 | 25.5 | 27.0 | 92.20 | 775.5 | 808.5 | 856.9 | 821.3 | 35.67 | 24.023 | |
| 6,900.0 | 6,840.1 | 6,849.3 | 6,733.3 | 25.6 | 27.2 | 92.33 | 781.3 | 814.1 | 862.4 | 826.5 | 35.86 | 24.047 | |
| 7,000.0 | 6,939.1 | 6,960.3 | 6,842.8 | 26.1 | 27.7 | 92.62 | 794.6 | 826.9 | 874.7 | 838.4 | 36.35 | 24.065 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - _HARRIER FEDERAL COM 701H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1+MS

**Offset Well Error:** 3.0 usft

**Rule Assigned:**

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7,100.0 | 7,038.3 | 7,071.6 | 6,953.0 | 26.5 | 28.2 | 92.87 | 806.4 | 838.3 | 885.7 | 848.9 | 36.82 | 24.056 | |
| 7,200.0 | 7,137.7 | 7,183.3 | 7,063.7 | 26.9 | 28.6 | 93.07 | 816.6 | 848.2 | 895.2 | 858.0 | 37.27 | 24.022 | |
| 7,300.0 | 7,237.3 | 7,295.2 | 7,174.9 | 27.3 | 29.1 | 93.23 | 825.3 | 856.6 | 903.3 | 865.6 | 37.69 | 23.965 | |
| 7,400.0 | 7,337.1 | 7,407.3 | 7,286.6 | 27.6 | 29.5 | 93.35 | 832.5 | 863.6 | 909.9 | 871.8 | 38.09 | 23.886 | |
| 7,500.0 | 7,436.9 | 7,519.7 | 7,398.7 | 28.0 | 29.9 | 93.43 | 838.1 | 869.0 | 915.1 | 876.6 | 38.47 | 23.789 | |
| 7,600.0 | 7,536.9 | 7,632.1 | 7,511.0 | 28.3 | 30.3 | 93.47 | 842.1 | 872.9 | 918.8 | 880.0 | 38.80 | 23.677 | |
| 7,700.0 | 7,636.9 | 7,744.7 | 7,623.5 | 28.6 | 30.6 | 93.47 | 844.6 | 875.2 | 921.0 | 881.9 | 39.10 | 23.554 | |
| 7,759.4 | 7,696.3 | 7,811.6 | 7,690.4 | 28.6 | 30.8 | 89.86 | 845.3 | 875.9 | 921.6 | 882.4 | 39.23 | 23.489 | |
| 7,800.0 | 7,736.9 | 7,857.3 | 7,736.1 | 28.7 | 30.9 | 89.85 | 845.4 | 876.0 | 921.7 | 882.5 | 39.27 | 23.469 | |
| 7,900.0 | 7,836.9 | 7,957.7 | 7,836.6 | 28.7 | 30.9 | 89.85 | 845.4 | 876.0 | 921.7 | 882.4 | 39.38 | 23.409 | |
| 8,000.0 | 7,936.9 | 8,057.7 | 7,936.6 | 28.8 | 30.9 | 89.85 | 845.4 | 876.0 | 921.7 | 882.2 | 39.49 | 23.343 | |
| 8,100.0 | 8,036.9 | 8,157.7 | 8,036.6 | 28.8 | 31.0 | 89.85 | 845.4 | 876.0 | 921.7 | 882.1 | 39.60 | 23.277 | |
| 8,200.0 | 8,136.9 | 8,257.7 | 8,136.6 | 28.9 | 31.0 | 89.85 | 845.4 | 876.0 | 921.7 | 882.0 | 39.71 | 23.212 | |
| 8,300.0 | 8,236.9 | 8,357.7 | 8,236.6 | 28.9 | 31.0 | 89.85 | 845.4 | 876.0 | 921.7 | 881.9 | 39.82 | 23.147 | |
| 8,400.0 | 8,336.9 | 8,457.7 | 8,336.6 | 29.0 | 31.1 | 89.85 | 845.4 | 876.0 | 921.7 | 881.8 | 39.93 | 23.082 | |
| 8,500.0 | 8,436.9 | 8,557.7 | 8,436.6 | 29.0 | 31.1 | 89.85 | 845.4 | 876.0 | 921.7 | 881.7 | 40.05 | 23.017 | |
| 8,600.0 | 8,536.9 | 8,657.7 | 8,536.6 | 29.1 | 31.2 | 89.85 | 845.4 | 876.0 | 921.7 | 881.6 | 40.16 | 22.952 | |
| 8,700.0 | 8,636.9 | 8,757.7 | 8,636.6 | 29.1 | 31.2 | 89.85 | 845.4 | 876.0 | 921.7 | 881.5 | 40.27 | 22.888 | |
| 8,800.0 | 8,736.9 | 8,857.7 | 8,736.6 | 29.2 | 31.2 | 89.85 | 845.4 | 876.0 | 921.7 | 881.3 | 40.39 | 22.823 | |
| 8,900.0 | 8,836.9 | 8,957.7 | 8,836.6 | 29.2 | 31.3 | 89.85 | 845.4 | 876.0 | 921.7 | 881.2 | 40.50 | 22.759 | |
| 9,000.0 | 8,936.9 | 9,057.7 | 8,936.6 | 29.3 | 31.3 | 89.85 | 845.4 | 876.0 | 921.7 | 881.1 | 40.61 | 22.695 | |
| 9,100.0 | 9,036.9 | 9,157.7 | 9,036.6 | 29.3 | 31.4 | 89.85 | 845.4 | 876.0 | 921.7 | 881.0 | 40.73 | 22.631 | |
| 9,200.0 | 9,136.9 | 9,257.7 | 9,136.6 | 29.4 | 31.4 | 89.85 | 845.4 | 876.0 | 921.7 | 880.9 | 40.84 | 22.568 | |
| 9,300.0 | 9,236.9 | 9,357.7 | 9,236.6 | 29.4 | 31.4 | 89.85 | 845.4 | 876.0 | 921.7 | 880.8 | 40.96 | 22.504 | |
| 9,400.0 | 9,336.9 | 9,457.7 | 9,336.6 | 29.5 | 31.5 | 89.85 | 845.4 | 876.0 | 921.7 | 880.7 | 41.07 | 22.441 | |
| 9,500.0 | 9,436.9 | 9,557.7 | 9,436.6 | 29.5 | 31.5 | 89.85 | 845.4 | 876.0 | 921.7 | 880.5 | 41.19 | 22.378 | |
| 9,600.0 | 9,536.9 | 9,657.7 | 9,536.6 | 29.6 | 31.5 | 89.85 | 845.4 | 876.0 | 921.7 | 880.4 | 41.31 | 22.315 | |
| 9,700.0 | 9,636.9 | 9,757.7 | 9,636.6 | 29.6 | 31.6 | 89.85 | 845.4 | 876.0 | 921.7 | 880.3 | 41.42 | 22.252 | |
| 9,800.0 | 9,736.9 | 9,857.7 | 9,736.6 | 29.7 | 31.6 | 89.85 | 845.4 | 876.0 | 921.7 | 880.2 | 41.54 | 22.190 | |
| 9,900.0 | 9,836.9 | 9,957.7 | 9,836.6 | 29.7 | 31.7 | 89.85 | 845.4 | 876.0 | 921.7 | 880.1 | 41.66 | 22.127 | |
| 10,000.0 | 9,936.9 | 10,057.7 | 9,936.6 | 29.8 | 31.7 | 89.85 | 845.4 | 876.0 | 921.7 | 880.0 | 41.77 | 22.065 | |
| 10,100.0 | 10,036.9 | 10,157.7 | 10,036.6 | 29.9 | 31.7 | 89.85 | 845.4 | 876.0 | 921.7 | 879.8 | 41.89 | 22.003 | |
| 10,200.0 | 10,136.9 | 10,257.7 | 10,136.6 | 29.9 | 31.8 | 89.85 | 845.4 | 876.0 | 921.7 | 879.7 | 42.01 | 21.942 | |
| 10,300.0 | 10,236.9 | 10,357.7 | 10,236.6 | 30.0 | 31.8 | 89.85 | 845.4 | 876.0 | 921.7 | 879.6 | 42.13 | 21.880 | |
| 10,400.0 | 10,336.9 | 10,457.7 | 10,336.6 | 30.0 | 31.9 | 89.85 | 845.4 | 876.0 | 921.7 | 879.5 | 42.24 | 21.819 | |
| 10,500.0 | 10,436.9 | 10,557.7 | 10,436.6 | 30.1 | 31.9 | 89.85 | 845.4 | 876.0 | 921.7 | 879.4 | 42.36 | 21.758 | |
| 10,600.0 | 10,536.9 | 10,657.7 | 10,536.6 | 30.1 | 31.9 | 89.85 | 845.4 | 876.0 | 921.7 | 879.2 | 42.48 | 21.697 | |
| 10,700.0 | 10,636.9 | 10,757.7 | 10,636.6 | 30.2 | 32.0 | 89.85 | 845.4 | 876.0 | 921.7 | 879.1 | 42.60 | 21.636 | |
| 10,800.0 | 10,736.9 | 10,857.7 | 10,736.6 | 30.2 | 32.0 | 89.85 | 845.4 | 876.0 | 921.7 | 879.0 | 42.72 | 21.575 | |
| 10,900.0 | 10,836.9 | 10,957.7 | 10,836.6 | 30.3 | 32.1 | 89.85 | 845.4 | 876.0 | 921.7 | 878.9 | 42.84 | 21.515 | |
| 11,000.0 | 10,936.9 | 11,057.7 | 10,936.6 | 30.3 | 32.1 | 89.85 | 845.4 | 876.0 | 921.7 | 878.8 | 42.96 | 21.455 | |
| 11,100.0 | 11,036.9 | 11,157.7 | 11,036.6 | 30.4 | 32.2 | 89.85 | 845.4 | 876.0 | 921.7 | 878.6 | 43.08 | 21.395 | |
| 11,200.0 | 11,136.9 | 11,257.7 | 11,136.6 | 30.5 | 32.2 | 89.85 | 845.4 | 876.0 | 921.7 | 878.5 | 43.20 | 21.335 | |
| 11,300.0 | 11,236.9 | 11,357.7 | 11,236.6 | 30.5 | 32.2 | 89.85 | 845.4 | 876.0 | 921.7 | 878.4 | 43.32 | 21.276 | |
| 11,400.0 | 11,336.9 | 11,457.7 | 11,336.6 | 30.6 | 32.3 | 89.85 | 845.4 | 876.0 | 921.7 | 878.3 | 43.44 | 21.216 | |
| 11,500.0 | 11,436.9 | 11,557.7 | 11,436.6 | 30.6 | 32.3 | 89.85 | 845.4 | 876.0 | 921.7 | 878.2 | 43.57 | 21.157 | |
| 11,600.0 | 11,536.9 | 11,657.7 | 11,536.6 | 30.7 | 32.4 | 89.85 | 845.4 | 876.0 | 921.7 | 878.0 | 43.69 | 21.098 | |
| 11,700.0 | 11,636.9 | 11,757.7 | 11,636.6 | 30.7 | 32.4 | 89.85 | 845.4 | 876.0 | 921.7 | 877.9 | 43.81 | 21.038 | |
| 11,705.7 | 11,642.5 | 11,763.4 | 11,642.2 | 30.7 | 32.4 | 89.85 | 845.4 | 876.0 | 921.7 | 877.9 | 43.82 | 21.035 | |
| 11,725.0 | 11,661.9 | 11,782.7 | 11,661.6 | 30.7 | 32.4 | -89.82 | 845.4 | 876.0 | 921.7 | 877.9 | 43.85 | 21.018 | |
| 11,750.0 | 11,686.8 | 11,807.7 | 11,686.5 | 30.6 | 32.4 | -89.93 | 845.4 | 876.0 | 921.7 | 877.8 | 43.89 | 21.001 | |
| 11,761.2 | 11,698.0 | 11,818.9 | 11,697.7 | 30.6 | 32.4 | -90.00 | 845.4 | 876.0 | 921.7 | 877.8 | 43.91 | 20.991 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - _HARRIER FEDERAL COM 701H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11,775.0 | 11,711.6 | 11,832.5 | 11,711.3 | 30.5 | 32.4 | -90.11 | 845.4 | 876.0 | 921.7 | 877.8 | 43.94 | 20.975 | |
| 11,800.0 | 11,736.2 | 11,857.1 | 11,735.9 | 30.5 | 32.5 | -90.37 | 845.4 | 876.0 | 921.7 | 877.7 | 44.02 | 20.939 | |
| 11,825.0 | 11,760.6 | 11,881.5 | 11,760.3 | 30.4 | 32.5 | -90.70 | 845.4 | 876.0 | 921.8 | 877.7 | 44.12 | 20.894 | |
| 11,850.0 | 11,784.7 | 11,905.6 | 11,784.4 | 30.2 | 32.5 | -91.09 | 845.4 | 876.0 | 921.9 | 877.7 | 44.24 | 20.840 | |
| 11,875.0 | 11,808.3 | 11,929.2 | 11,808.0 | 30.1 | 32.5 | -91.54 | 845.4 | 876.0 | 922.1 | 877.7 | 44.38 | 20.778 | |
| 11,900.0 | 11,831.5 | 11,952.4 | 11,831.2 | 30.0 | 32.5 | -92.04 | 845.4 | 876.0 | 922.4 | 877.9 | 44.54 | 20.709 | |
| 11,925.0 | 11,854.2 | 11,975.1 | 11,853.9 | 29.9 | 32.5 | -92.58 | 845.4 | 876.0 | 922.9 | 878.2 | 44.73 | 20.633 | |
| 11,950.0 | 11,876.3 | 11,997.2 | 11,876.0 | 29.8 | 32.5 | -93.14 | 845.4 | 876.0 | 923.5 | 878.6 | 44.94 | 20.552 | |
| 11,975.0 | 11,897.8 | 12,018.7 | 11,897.5 | 29.7 | 32.5 | -93.71 | 845.4 | 876.0 | 924.4 | 879.3 | 45.16 | 20.469 | |
| 12,000.0 | 11,918.6 | 12,039.4 | 11,918.3 | 29.6 | 32.5 | -94.29 | 845.4 | 876.0 | 925.6 | 880.2 | 45.41 | 20.382 | |
| 12,025.0 | 11,938.6 | 12,050.0 | 11,928.8 | 29.5 | 32.5 | -94.48 | 845.4 | 876.1 | 927.2 | 881.4 | 45.73 | 20.276 | |
| 12,050.0 | 11,957.8 | 12,065.1 | 11,943.9 | 29.4 | 32.5 | -94.81 | 845.0 | 876.3 | 929.2 | 883.2 | 46.04 | 20.183 | |
| 12,075.0 | 11,976.1 | 12,075.0 | 11,953.8 | 29.3 | 32.5 | -94.89 | 844.5 | 876.5 | 931.8 | 885.4 | 46.39 | 20.087 | |
| 12,100.0 | 11,993.5 | 12,088.7 | 11,967.4 | 29.2 | 32.5 | -95.07 | 843.5 | 877.0 | 934.9 | 888.2 | 46.73 | 20.008 | |
| 12,125.0 | 12,010.0 | 12,100.0 | 11,978.7 | 29.1 | 32.5 | -95.10 | 842.5 | 877.5 | 938.6 | 891.5 | 47.09 | 19.932 | |
| 12,150.0 | 12,025.4 | 12,111.9 | 11,990.5 | 29.0 | 32.5 | -95.10 | 841.1 | 878.2 | 942.8 | 895.3 | 47.45 | 19.869 | |
| 12,175.0 | 12,039.8 | 12,125.0 | 12,003.4 | 28.9 | 32.4 | -95.11 | 839.2 | 879.1 | 947.5 | 899.7 | 47.80 | 19.821 | |
| 12,200.0 | 12,053.2 | 12,134.6 | 12,012.9 | 28.9 | 32.4 | -94.90 | 837.7 | 879.9 | 952.8 | 904.6 | 48.19 | 19.774 | |
| 12,225.0 | 12,065.4 | 12,145.8 | 12,023.8 | 28.8 | 32.4 | -94.70 | 835.7 | 880.9 | 958.7 | 910.1 | 48.55 | 19.745 | |
| 12,250.0 | 12,076.4 | 12,156.7 | 12,034.5 | 28.7 | 32.4 | -94.44 | 833.5 | 882.0 | 965.0 | 916.1 | 48.92 | 19.729 | |
| 12,275.0 | 12,086.2 | 12,167.5 | 12,045.0 | 28.7 | 32.4 | -94.11 | 831.1 | 883.2 | 971.9 | 922.7 | 49.27 | 19.726 | |
| 12,300.0 | 12,094.8 | 12,178.1 | 12,055.2 | 28.6 | 32.4 | -93.70 | 828.6 | 884.4 | 979.4 | 929.7 | 49.62 | 19.737 | |
| 12,325.0 | 12,102.2 | 12,188.5 | 12,065.1 | 28.6 | 32.3 | -93.23 | 825.9 | 885.8 | 987.3 | 937.3 | 49.96 | 19.763 | |
| 12,350.0 | 12,108.4 | 12,200.0 | 12,076.0 | 28.6 | 32.3 | -92.75 | 822.7 | 887.3 | 995.7 | 945.5 | 50.27 | 19.809 | |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER 35 FEDERAL COM #1H - OWB - AWP

**Offset Site Error:** 0.0 usft

**Survey Program:** 100-r.5 GYRO-NS, 4800-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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12,900.0 | 12,120.0 | 14,677.2 | 11,966.2 | 28.5 | 71.2 | 1.95 | -1,019.3 | -38.9 | 950.4 | 844.5 | 105.96 | 8.970 | |
| 13,000.0 | 12,120.0 | 14,676.6 | 11,966.2 | 28.5 | 71.2 | 1.70 | -1,019.3 | -38.4 | 851.6 | 745.9 | 105.64 | 8.061 | |
| 13,100.0 | 12,120.0 | 14,676.0 | 11,966.2 | 28.5 | 71.2 | 1.43 | -1,019.3 | -37.7 | 753.0 | 647.8 | 105.22 | 7.157 | |
| 13,200.0 | 12,120.0 | 14,675.3 | 11,966.3 | 28.5 | 71.2 | 1.14 | -1,019.3 | -37.0 | 654.9 | 550.3 | 104.63 | 6.259 | |
| 13,300.0 | 12,120.0 | 14,674.5 | 11,966.3 | 28.5 | 71.2 | 0.82 | -1,019.3 | -36.2 | 557.5 | 453.8 | 103.77 | 5.373 | |
| 13,400.0 | 12,120.0 | 14,673.7 | 11,966.3 | 28.6 | 71.1 | 0.47 | -1,019.3 | -35.4 | 461.2 | 358.8 | 102.41 | 4.504 | |
| 13,500.0 | 12,120.0 | 14,672.7 | 11,966.3 | 28.6 | 71.1 | 0.09 | -1,019.3 | -34.5 | 366.9 | 266.8 | 100.04 | 3.667 | |
| 13,600.0 | 12,120.0 | 14,671.7 | 11,966.3 | 28.6 | 71.1 | -0.34 | -1,019.3 | -33.5 | 276.6 | 181.2 | 95.38 | 2.900 | Normal Operations |
| 13,700.0 | 12,120.0 | 14,670.6 | 11,966.4 | 28.6 | 71.1 | -0.81 | -1,019.4 | -32.4 | 195.9 | 111.0 | 84.92 | 2.307 | Caution - Monitor Closely |
| 13,800.0 | 12,120.0 | 14,669.4 | 11,966.4 | 28.6 | 71.0 | -1.34 | -1,019.4 | -31.1 | 142.3 | 75.8 | 66.50 | 2.139 | Caution - Monitor Closely |
| 13,840.6 | 12,120.0 | 14,668.8 | 11,966.4 | 28.7 | 71.0 | -1.57 | -1,019.4 | -30.6 | 136.3 | 70.8 | 65.49 | 2.082 | Caution - Monitor Closely, CC |
| 13,900.0 | 12,120.0 | 14,668.0 | 11,966.4 | 28.7 | 71.0 | -1.93 | -1,019.4 | -29.7 | 148.7 | 70.8 | 77.92 | 1.908 | Caution - Monitor Closely, ES, SF |
| 14,000.0 | 12,120.0 | 14,666.4 | 11,966.5 | 28.7 | 71.0 | -2.60 | -1,019.4 | -28.1 | 209.7 | 113.1 | 96.60 | 2.171 | Caution - Monitor Closely |
| 14,100.0 | 12,120.0 | 14,664.6 | 11,966.5 | 28.7 | 70.9 | -3.33 | -1,019.4 | -26.4 | 293.0 | 189.6 | 103.38 | 2.834 | Normal Operations |
| 14,200.0 | 12,120.0 | 14,663.0 | 11,966.6 | 28.8 | 70.9 | -4.02 | -1,019.4 | -24.7 | 384.3 | 278.5 | 105.86 | 3.631 | |
| 14,300.0 | 12,120.0 | 14,661.2 | 11,966.6 | 28.8 | 70.8 | -4.76 | -1,019.4 | -23.0 | 479.1 | 372.2 | 106.89 | 4.482 | |
| 14,400.0 | 12,120.0 | 14,659.3 | 11,966.7 | 28.9 | 70.8 | -5.54 | -1,019.4 | -21.1 | 575.7 | 468.3 | 107.36 | 5.362 | |
| 14,500.0 | 12,120.0 | 14,657.3 | 11,966.8 | 29.0 | 70.8 | -6.38 | -1,019.5 | -19.1 | 673.2 | 565.7 | 107.58 | 6.258 | |
| 14,600.0 | 12,120.0 | 14,655.2 | 11,966.8 | 29.2 | 70.7 | -7.27 | -1,019.5 | -17.0 | 771.4 | 663.7 | 107.67 | 7.164 | |
| 14,700.0 | 12,120.0 | 14,652.9 | 11,966.9 | 29.8 | 70.6 | -8.22 | -1,019.5 | -14.7 | 870.0 | 762.3 | 107.70 | 8.078 | |
| 14,800.0 | 12,120.0 | 14,650.5 | 11,967.0 | 30.5 | 70.6 | -9.23 | -1,019.5 | -12.2 | 968.9 | 861.2 | 107.69 | 8.997 | |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM #102H - OWB - AWP

**Offset Site Error:** 0.0 usft

**Survey Program:** 100-Standard Keeper 104, 8457-MWD+IFR1+FDIR

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8,300.0 | 8,236.9 | 19,312.0 | 9,011.4 | 28.9 | 90.3 | -91.30 | 836.8 | -318.9 | 935.3 | 816.8 | 118.53 | 7.891 | |
| 8,400.0 | 8,336.9 | 19,312.0 | 9,011.4 | 29.0 | 90.3 | -91.30 | 836.8 | -318.9 | 840.2 | 721.4 | 118.80 | 7.072 | |
| 8,500.0 | 8,436.9 | 19,312.0 | 9,011.4 | 29.0 | 90.3 | -91.30 | 836.8 | -318.9 | 746.4 | 627.2 | 119.16 | 6.264 | |
| 8,600.0 | 8,536.9 | 19,312.0 | 9,011.4 | 29.1 | 90.3 | -91.30 | 836.8 | -318.9 | 654.3 | 534.7 | 119.64 | 5.469 | |
| 8,700.0 | 8,636.9 | 19,312.0 | 9,011.4 | 29.1 | 90.3 | -91.30 | 836.8 | -318.9 | 565.0 | 444.7 | 120.31 | 4.696 | |
| 8,800.0 | 8,736.9 | 19,312.0 | 9,011.4 | 29.2 | 90.3 | -91.30 | 836.8 | -318.9 | 479.9 | 358.6 | 121.30 | 3.957 | |
| 8,900.0 | 8,836.9 | 19,312.0 | 9,011.4 | 29.2 | 90.3 | -91.30 | 836.8 | -318.9 | 401.8 | 279.0 | 122.76 | 3.273 | |
| 9,000.0 | 8,936.9 | 19,312.0 | 9,011.4 | 29.3 | 90.3 | -91.30 | 836.8 | -318.9 | 335.4 | 210.6 | 124.83 | 2.687 | Normal Operations |
| 9,100.0 | 9,036.9 | 19,312.0 | 9,011.4 | 29.3 | 90.3 | -91.30 | 836.8 | -318.9 | 289.2 | 162.0 | 127.13 | 2.275 | Caution - Monitor Closely |
| 9,194.5 | 9,131.4 | 19,312.0 | 9,011.4 | 29.4 | 90.3 | -91.30 | 836.8 | -318.9 | 273.3 | 145.1 | 128.22 | 2.131 | Caution - Monitor Closely, CC, ES, SF |
| 9,200.0 | 9,136.9 | 19,312.0 | 9,011.4 | 29.4 | 90.3 | -91.30 | 836.8 | -318.9 | 273.3 | 145.1 | 128.22 | 2.132 | Caution - Monitor Closely |
| 9,300.0 | 9,236.9 | 19,312.0 | 9,011.4 | 29.4 | 90.3 | -91.30 | 836.8 | -318.9 | 292.9 | 165.9 | 127.05 | 2.306 | Caution - Monitor Closely |
| 9,400.0 | 9,336.9 | 19,307.2 | 9,011.6 | 29.5 | 90.2 | -92.29 | 832.1 | -318.9 | 341.9 | 217.1 | 124.80 | 2.740 | Normal Operations |
| 9,500.0 | 9,436.9 | 19,301.6 | 9,012.0 | 29.5 | 90.2 | -93.46 | 826.5 | -318.9 | 409.7 | 286.9 | 122.87 | 3.335 | |
| 9,600.0 | 9,536.9 | 19,296.1 | 9,012.3 | 29.6 | 90.1 | -94.62 | 820.9 | -318.9 | 488.7 | 367.2 | 121.55 | 4.021 | |
| 9,700.0 | 9,636.9 | 19,290.5 | 9,012.6 | 29.6 | 90.1 | -95.78 | 815.3 | -318.9 | 574.2 | 453.5 | 120.70 | 4.757 | |
| 9,800.0 | 9,736.9 | 19,284.9 | 9,012.9 | 29.7 | 90.0 | -96.94 | 809.8 | -319.0 | 663.7 | 543.6 | 120.14 | 5.525 | |
| 9,900.0 | 9,836.9 | 19,279.3 | 9,013.2 | 29.7 | 90.0 | -98.08 | 804.2 | -319.0 | 755.9 | 636.1 | 119.77 | 6.311 | |
| 10,000.0 | 9,936.9 | 19,273.7 | 9,013.5 | 29.8 | 89.9 | -99.23 | 798.6 | -319.0 | 849.7 | 730.2 | 119.53 | 7.109 | |
| 10,100.0 | 10,036.9 | 19,268.1 | 9,013.8 | 29.9 | 89.9 | -100.36 | 793.0 | -319.0 | 944.8 | 825.4 | 119.36 | 7.916 | |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM #201H - OWB - AWP

**Offset Site Error:** 0.0 usft

**Survey Program:** 100-Standard Keeper 104, 8552-MWD+IFR1+FDIR

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8,500.0 | 8,436.9 | 19,405.0 | 9,242.2 | 29.0 | 88.4 | 143.45 | 711.6 | 51.7 | 943.7 | 828.8 | 114.91 | 8.212 | |
| 8,600.0 | 8,536.9 | 19,405.0 | 9,242.2 | 29.1 | 88.4 | 143.45 | 711.6 | 51.7 | 845.3 | 730.6 | 114.76 | 7.366 | |
| 8,700.0 | 8,636.9 | 19,405.0 | 9,242.2 | 29.1 | 88.4 | 143.45 | 711.6 | 51.7 | 747.5 | 633.0 | 114.52 | 6.527 | |
| 8,800.0 | 8,736.9 | 19,405.0 | 9,242.2 | 29.2 | 88.4 | 143.45 | 711.6 | 51.7 | 650.3 | 536.1 | 114.15 | 5.697 | |
| 8,900.0 | 8,836.9 | 19,405.0 | 9,242.2 | 29.2 | 88.4 | 143.45 | 711.6 | 51.7 | 554.1 | 440.5 | 113.53 | 4.880 | |
| 9,000.0 | 8,936.9 | 19,405.0 | 9,242.2 | 29.3 | 88.4 | 143.45 | 711.6 | 51.7 | 459.5 | 347.0 | 112.47 | 4.085 | |
| 9,100.0 | 9,036.9 | 19,405.0 | 9,242.2 | 29.3 | 88.4 | 143.45 | 711.6 | 51.7 | 367.7 | 257.3 | 110.48 | 3.328 | |
| 9,200.0 | 9,136.9 | 19,405.0 | 9,242.2 | 29.4 | 88.4 | 143.45 | 711.6 | 51.7 | 281.7 | 175.2 | 106.45 | 2.646 | Normal Operations |
| 9,300.0 | 9,236.9 | 19,405.0 | 9,242.2 | 29.4 | 88.4 | 143.45 | 711.6 | 51.7 | 208.5 | 110.6 | 97.92 | 2.129 | Caution - Monitor Closely |
| 9,400.0 | 9,336.9 | 19,405.0 | 9,242.2 | 29.5 | 88.4 | 143.45 | 711.6 | 51.7 | 166.1 | 80.0 | 86.11 | 1.929 | Caution - Monitor Closely |
| 9,429.4 | 9,366.2 | 19,405.0 | 9,242.2 | 29.5 | 88.4 | 143.45 | 711.6 | 51.7 | 163.5 | 78.4 | 85.14 | 1.921 | Caution - Monitor Closely, CC, ES, SF |
| 9,500.0 | 9,436.9 | 19,405.0 | 9,242.2 | 29.5 | 88.4 | 143.45 | 711.6 | 51.7 | 178.1 | 86.9 | 91.18 | 1.953 | Caution - Monitor Closely |
| 9,600.0 | 9,536.9 | 19,405.0 | 9,242.2 | 29.6 | 88.4 | 143.45 | 711.6 | 51.7 | 236.3 | 133.1 | 103.25 | 2.289 | Caution - Monitor Closely |
| 9,700.0 | 9,636.9 | 19,405.0 | 9,242.2 | 29.6 | 88.4 | 143.45 | 711.6 | 51.7 | 316.2 | 206.6 | 109.59 | 2.885 | Normal Operations |
| 9,800.0 | 9,736.9 | 19,405.0 | 9,242.2 | 29.7 | 88.4 | 143.45 | 711.6 | 51.7 | 405.1 | 292.5 | 112.61 | 3.597 | |
| 9,900.0 | 9,836.9 | 19,405.0 | 9,242.2 | 29.7 | 88.4 | 143.45 | 711.6 | 51.7 | 498.2 | 384.0 | 114.21 | 4.362 | |
| 10,000.0 | 9,936.9 | 19,405.0 | 9,242.2 | 29.8 | 88.4 | 143.45 | 711.6 | 51.7 | 593.6 | 478.4 | 115.16 | 5.155 | |
| 10,100.0 | 10,036.9 | 19,405.0 | 9,242.2 | 29.9 | 88.4 | 143.45 | 711.6 | 51.7 | 690.3 | 574.5 | 115.78 | 5.962 | |
| 10,200.0 | 10,136.9 | 19,405.0 | 9,242.2 | 29.9 | 88.4 | 143.45 | 711.6 | 51.7 | 787.8 | 671.6 | 116.22 | 6.779 | |
| 10,300.0 | 10,236.9 | 19,405.0 | 9,242.2 | 30.0 | 88.4 | 143.45 | 711.6 | 51.7 | 885.8 | 769.3 | 116.55 | 7.600 | |
| 10,400.0 | 10,336.9 | 19,405.0 | 9,242.2 | 30.0 | 88.4 | 143.45 | 711.6 | 51.7 | 984.3 | 867.5 | 116.82 | 8.426 | |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM #304H - OWB - AWP

**Offset Site Error:** 0.0 usft

**Survey Program:** 100-Standard Keeper 104, 9409-MWD+IFR1+FDIR

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9,200.0 | 9,136.9 | 20,380.0 | 9,987.7 | 29.4 | 90.5 | -91.62 | 837.0 | -256.6 | 993.7 | 873.7 | 120.02 | 8.279 | |
| 9,300.0 | 9,236.9 | 20,380.0 | 9,987.7 | 29.4 | 90.5 | -91.62 | 837.0 | -256.6 | 896.2 | 776.0 | 120.20 | 7.456 | |
| 9,400.0 | 9,336.9 | 20,380.0 | 9,987.7 | 29.5 | 90.5 | -91.62 | 837.0 | -256.6 | 799.4 | 679.0 | 120.41 | 6.639 | |
| 9,500.0 | 9,436.9 | 20,380.0 | 9,987.7 | 29.5 | 90.5 | -91.62 | 837.0 | -256.6 | 703.4 | 582.8 | 120.68 | 5.829 | |
| 9,600.0 | 9,536.9 | 20,380.0 | 9,987.7 | 29.6 | 90.5 | -91.62 | 837.0 | -256.6 | 608.8 | 487.7 | 121.04 | 5.030 | |
| 9,700.0 | 9,636.9 | 20,380.0 | 9,987.7 | 29.6 | 90.5 | -91.62 | 837.0 | -256.6 | 516.1 | 394.6 | 121.54 | 4.247 | |
| 9,800.0 | 9,736.9 | 20,380.0 | 9,987.7 | 29.7 | 90.5 | -91.62 | 837.0 | -256.6 | 426.8 | 304.5 | 122.31 | 3.490 | |
| 9,900.0 | 9,836.9 | 20,380.0 | 9,987.7 | 29.7 | 90.5 | -91.62 | 837.0 | -256.6 | 343.5 | 219.9 | 123.54 | 2.780 | Normal Operations |
| 10,000.0 | 9,936.9 | 20,380.0 | 9,987.7 | 29.8 | 90.5 | -91.62 | 837.0 | -256.6 | 271.6 | 146.1 | 125.52 | 2.164 | Caution - Monitor Closely |
| 10,100.0 | 10,036.9 | 20,380.0 | 9,987.7 | 29.9 | 90.5 | -91.62 | 837.0 | -256.6 | 222.6 | 94.6 | 127.96 | 1.740 | Caution - Monitor Closely |
| 10,171.1 | 10,107.9 | 20,380.0 | 9,987.7 | 29.9 | 90.5 | -91.62 | 837.0 | -256.6 | 211.0 | 82.2 | 128.75 | 1.639 | Caution - Monitor Closely, CC, ES, SF |
| 10,200.0 | 10,136.9 | 20,380.0 | 9,987.7 | 29.9 | 90.5 | -91.62 | 837.0 | -256.6 | 212.9 | 84.4 | 128.58 | 1.656 | Caution - Monitor Closely |
| 10,300.0 | 10,236.9 | 20,380.0 | 9,987.7 | 30.0 | 90.5 | -91.62 | 837.0 | -256.6 | 247.2 | 120.7 | 126.50 | 1.955 | Caution - Monitor Closely |
| 10,400.0 | 10,336.9 | 20,375.1 | 9,988.1 | 30.0 | 90.5 | -92.95 | 832.1 | -256.7 | 311.3 | 187.0 | 124.30 | 2.504 | Normal Operations |
| 10,500.0 | 10,436.9 | 20,367.8 | 9,988.6 | 30.1 | 90.4 | -94.90 | 824.9 | -256.9 | 390.6 | 267.7 | 122.93 | 3.177 | |
| 10,600.0 | 10,536.9 | 20,360.6 | 9,989.1 | 30.1 | 90.4 | -96.83 | 817.7 | -257.1 | 477.6 | 355.5 | 122.16 | 3.910 | |
| 10,700.0 | 10,636.9 | 20,353.4 | 9,989.6 | 30.2 | 90.3 | -98.74 | 810.5 | -257.3 | 568.8 | 447.1 | 121.72 | 4.673 | |
| 10,800.0 | 10,736.9 | 20,346.1 | 9,990.2 | 30.2 | 90.2 | -100.63 | 803.3 | -257.5 | 662.5 | 541.1 | 121.46 | 5.455 | |
| 10,900.0 | 10,836.9 | 20,338.9 | 9,990.7 | 30.3 | 90.2 | -102.49 | 796.1 | -257.7 | 757.7 | 636.4 | 121.31 | 6.247 | |
| 11,000.0 | 10,936.9 | 20,331.6 | 9,991.2 | 30.3 | 90.1 | -104.32 | 788.8 | -257.9 | 854.0 | 732.8 | 121.22 | 7.045 | |
| 11,100.0 | 11,036.9 | 20,324.4 | 9,991.7 | 30.4 | 90.0 | -106.12 | 781.6 | -258.1 | 951.0 | 829.8 | 121.17 | 7.848 | |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM #305H - OWB - AWP

**Offset Site Error:** 0.0 usft

**Survey Program:** 100-Standard Keeper 104, 8955-MWD+IFR1+FDIR

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8,800.0 | 8,736.9 | 19,869.5 | 9,476.9 | 29.2 | 90.7 | -90.40 | 840.7 | -373.4 | 920.1 | 799.7 | 120.44 | 7.640 | |
| 8,900.0 | 8,836.9 | 19,869.5 | 9,476.9 | 29.2 | 90.7 | -90.41 | 840.7 | -373.4 | 827.4 | 706.6 | 120.80 | 6.849 | |
| 9,000.0 | 8,936.9 | 19,869.5 | 9,476.9 | 29.3 | 90.7 | -90.41 | 840.7 | -373.4 | 736.7 | 615.4 | 121.27 | 6.074 | |
| 9,100.0 | 9,036.9 | 19,869.5 | 9,476.9 | 29.3 | 90.7 | -90.41 | 840.6 | -373.4 | 648.6 | 526.7 | 121.90 | 5.321 | |
| 9,200.0 | 9,136.9 | 19,869.5 | 9,476.9 | 29.4 | 90.7 | -90.42 | 840.6 | -373.4 | 564.6 | 441.8 | 122.75 | 4.599 | |
| 9,300.0 | 9,236.9 | 19,869.4 | 9,476.9 | 29.4 | 90.7 | -90.42 | 840.6 | -373.4 | 486.6 | 362.7 | 123.92 | 3.927 | |
| 9,400.0 | 9,336.9 | 19,869.4 | 9,476.9 | 29.5 | 90.7 | -90.42 | 840.6 | -373.4 | 418.1 | 292.7 | 125.47 | 3.333 | |
| 9,500.0 | 9,436.9 | 19,869.4 | 9,476.9 | 29.5 | 90.7 | -90.43 | 840.6 | -373.4 | 364.5 | 237.3 | 127.27 | 2.864 | Normal Operations |
| 9,600.0 | 9,536.9 | 19,869.4 | 9,476.9 | 29.6 | 90.7 | -90.43 | 840.6 | -373.4 | 333.1 | 204.4 | 128.70 | 2.588 | Normal Operations |
| 9,659.8 | 9,596.6 | 19,869.4 | 9,476.9 | 29.6 | 90.7 | -90.43 | 840.5 | -373.4 | 327.7 | 198.7 | 128.98 | 2.541 | Normal Operations, CC, ES, SF |
| 9,700.0 | 9,636.9 | 19,869.4 | 9,476.9 | 29.6 | 90.7 | -90.43 | 840.5 | -373.4 | 330.1 | 201.3 | 128.83 | 2.562 | Normal Operations |
| 9,800.0 | 9,736.9 | 19,869.4 | 9,476.9 | 29.7 | 90.7 | -90.43 | 840.5 | -373.4 | 356.4 | 228.8 | 127.58 | 2.794 | Normal Operations |
| 9,900.0 | 9,836.9 | 19,869.3 | 9,476.9 | 29.7 | 90.7 | -90.44 | 840.5 | -373.4 | 406.3 | 280.4 | 125.86 | 3.228 | |
| 10,000.0 | 9,936.9 | 19,869.3 | 9,476.9 | 29.8 | 90.7 | -90.44 | 840.5 | -373.4 | 472.4 | 348.0 | 124.39 | 3.797 | |
| 10,100.0 | 10,036.9 | 19,869.3 | 9,476.9 | 29.9 | 90.7 | -90.44 | 840.5 | -373.4 | 548.8 | 425.5 | 123.34 | 4.449 | |
| 10,200.0 | 10,136.9 | 19,869.3 | 9,476.9 | 29.9 | 90.7 | -90.45 | 840.5 | -373.4 | 631.8 | 509.2 | 122.63 | 5.152 | |
| 10,300.0 | 10,236.9 | 19,869.3 | 9,476.9 | 30.0 | 90.7 | -90.45 | 840.4 | -373.4 | 719.2 | 597.0 | 122.17 | 5.887 | |
| 10,400.0 | 10,336.9 | 19,869.2 | 9,476.9 | 30.0 | 90.7 | -90.45 | 840.4 | -373.4 | 809.5 | 687.6 | 121.88 | 6.642 | |
| 10,500.0 | 10,436.9 | 19,869.2 | 9,476.9 | 30.1 | 90.7 | -90.46 | 840.4 | -373.4 | 901.9 | 780.2 | 121.69 | 7.411 | |
| 10,600.0 | 10,536.9 | 19,869.2 | 9,476.9 | 30.1 | 90.7 | -90.46 | 840.4 | -373.4 | 995.7 | 874.1 | 121.59 | 8.189 | |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 702H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**Offset Well Error:** 3.0 usft

**Rule Assigned:**

| 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 | 0.2 | 0.2 | 3.0 | 3.0 | 33.57 | 45.2 | 30.0 | 54.2 | | | | |
| 100.0 | 100.0 | 100.2 | 100.2 | 3.1 | 3.1 | 33.57 | 45.2 | 30.0 | 54.2 | 47.6 | 6.62 | 8.196 | |
| 200.0 | 200.0 | 200.2 | 200.2 | 3.3 | 3.3 | 33.57 | 45.2 | 30.0 | 54.2 | 47.2 | 7.07 | 7.671 | |
| 300.0 | 300.0 | 300.2 | 300.2 | 3.5 | 3.5 | 33.57 | 45.2 | 30.0 | 54.2 | 46.8 | 7.50 | 7.234 | |
| 400.0 | 400.0 | 400.2 | 400.2 | 3.7 | 3.7 | 33.57 | 45.2 | 30.0 | 54.2 | 46.3 | 7.91 | 6.862 | |
| 500.0 | 500.0 | 500.2 | 500.2 | 3.9 | 3.9 | 33.57 | 45.2 | 30.0 | 54.2 | 46.0 | 8.29 | 6.541 | |
| 600.0 | 600.0 | 600.2 | 600.2 | 4.1 | 4.1 | 33.57 | 45.2 | 30.0 | 54.2 | 45.6 | 8.67 | 6.260 | |
| 700.0 | 700.0 | 700.2 | 700.2 | 4.3 | 4.3 | 33.57 | 45.2 | 30.0 | 54.2 | 45.2 | 9.03 | 6.010 | |
| 800.0 | 800.0 | 800.2 | 800.2 | 4.5 | 4.5 | 33.57 | 45.2 | 30.0 | 54.2 | 44.9 | 9.37 | 5.787 | |
| 900.0 | 900.0 | 900.2 | 900.2 | 4.7 | 4.7 | 33.57 | 45.2 | 30.0 | 54.2 | 44.5 | 9.71 | 5.586 | |
| 1,000.0 | 1,000.0 | 1,000.2 | 1,000.2 | 4.8 | 4.8 | 33.57 | 45.2 | 30.0 | 54.2 | 44.2 | 10.04 | 5.403 | |
| 1,100.0 | 1,100.0 | 1,100.2 | 1,100.2 | 5.0 | 5.0 | 33.57 | 45.2 | 30.0 | 54.2 | 43.9 | 10.36 | 5.237 | |
| 1,200.0 | 1,200.0 | 1,200.2 | 1,200.2 | 5.2 | 5.2 | 33.57 | 45.2 | 30.0 | 54.2 | 43.6 | 10.67 | 5.083 | |
| 1,300.0 | 1,300.0 | 1,300.2 | 1,300.2 | 5.3 | 5.3 | 33.57 | 45.2 | 30.0 | 54.2 | 43.3 | 10.98 | 4.942 | |
| 1,400.0 | 1,400.0 | 1,400.2 | 1,400.2 | 5.5 | 5.5 | 33.57 | 45.2 | 30.0 | 54.2 | 43.0 | 11.28 | 4.810 | |
| 1,466.6 | 1,466.6 | 1,466.8 | 1,466.8 | 5.6 | 5.6 | 33.57 | 45.2 | 30.0 | 54.2 | 42.8 | 11.47 | 4.729 CC | |
| 1,500.0 | 1,500.0 | 1,500.0 | 1,500.0 | 5.6 | 5.6 | 33.57 | 45.2 | 30.0 | 54.3 | 42.7 | 11.57 | 4.689 ES | |
| 1,600.0 | 1,600.0 | 1,598.3 | 1,598.3 | 5.8 | 5.8 | 24.21 | 46.4 | 31.2 | 55.2 | 43.2 | 11.93 | 4.622 | |
| 1,700.0 | 1,700.0 | 1,696.4 | 1,696.2 | 5.9 | 6.1 | 26.01 | 50.1 | 34.6 | 57.9 | 45.6 | 12.30 | 4.706 | |
| 1,800.0 | 1,799.9 | 1,794.2 | 1,793.7 | 6.1 | 6.3 | 28.64 | 56.2 | 40.3 | 62.5 | 49.8 | 12.68 | 4.932 | |
| 1,900.0 | 1,899.7 | 1,891.7 | 1,890.4 | 6.3 | 6.6 | 31.70 | 64.8 | 48.2 | 69.2 | 56.1 | 13.07 | 5.294 | |
| 2,000.0 | 1,999.4 | 1,988.7 | 1,986.3 | 6.5 | 6.9 | 34.84 | 75.6 | 58.4 | 78.0 | 64.5 | 13.48 | 5.786 | |
| 2,100.0 | 2,098.8 | 2,085.1 | 2,081.1 | 6.8 | 7.2 | 46.58 | 88.8 | 70.6 | 89.0 | 75.1 | 13.92 | 6.394 | |
| 2,200.0 | 2,197.9 | 2,182.7 | 2,176.4 | 7.1 | 7.4 | 55.59 | 104.0 | 84.8 | 101.9 | 87.6 | 14.29 | 7.134 | |
| 2,215.1 | 2,212.9 | 2,197.7 | 2,191.0 | 7.1 | 7.4 | 56.84 | 106.4 | 87.0 | 103.9 | 89.5 | 14.33 | 7.250 | |
| 2,300.0 | 2,296.7 | 2,281.5 | 2,272.8 | 7.3 | 7.7 | 60.67 | 119.6 | 99.4 | 115.1 | 100.4 | 14.67 | 7.845 | |
| 2,400.0 | 2,395.5 | 2,380.3 | 2,369.3 | 7.6 | 8.0 | 64.31 | 135.3 | 114.0 | 128.8 | 113.7 | 15.07 | 8.549 | |
| 2,500.0 | 2,494.2 | 2,479.0 | 2,465.7 | 7.9 | 8.3 | 67.25 | 150.9 | 128.6 | 142.9 | 127.5 | 15.47 | 9.239 | |
| 2,600.0 | 2,593.0 | 2,577.8 | 2,562.1 | 8.2 | 8.6 | 69.66 | 166.5 | 143.1 | 157.4 | 141.5 | 15.88 | 9.908 | |
| 2,700.0 | 2,691.8 | 2,676.5 | 2,658.5 | 8.5 | 8.9 | 71.66 | 182.2 | 157.7 | 172.0 | 155.7 | 16.30 | 10.553 | |
| 2,800.0 | 2,790.5 | 2,775.3 | 2,754.9 | 8.9 | 9.3 | 73.34 | 197.8 | 172.3 | 186.9 | 170.2 | 16.73 | 11.172 | |
| 2,900.0 | 2,889.3 | 2,874.0 | 2,851.3 | 9.2 | 9.6 | 74.78 | 213.4 | 186.9 | 201.9 | 184.7 | 17.16 | 11.762 | |
| 3,000.0 | 2,988.1 | 2,972.8 | 2,947.7 | 9.6 | 10.0 | 76.02 | 229.1 | 201.5 | 217.0 | 199.4 | 17.60 | 12.326 | |
| 3,100.0 | 3,086.8 | 3,071.5 | 3,044.1 | 9.9 | 10.4 | 77.10 | 244.7 | 216.0 | 232.1 | 214.1 | 18.05 | 12.862 | |
| 3,200.0 | 3,185.6 | 3,170.3 | 3,140.6 | 10.3 | 10.8 | 78.04 | 260.3 | 230.6 | 247.4 | 228.9 | 18.50 | 13.373 | |
| 3,300.0 | 3,284.4 | 3,269.0 | 3,237.0 | 10.7 | 11.2 | 78.88 | 276.0 | 245.2 | 262.7 | 243.7 | 18.95 | 13.858 | |
| 3,400.0 | 3,383.1 | 3,367.8 | 3,333.4 | 11.0 | 11.6 | 79.62 | 291.6 | 259.8 | 278.0 | 258.6 | 19.42 | 14.320 | |
| 3,500.0 | 3,481.9 | 3,466.5 | 3,429.8 | 11.4 | 12.0 | 80.28 | 307.2 | 274.3 | 293.4 | 273.5 | 19.88 | 14.758 | |
| 3,600.0 | 3,580.7 | 3,565.3 | 3,526.2 | 11.8 | 12.4 | 80.88 | 322.9 | 288.9 | 308.8 | 288.5 | 20.35 | 15.175 | |
| 3,700.0 | 3,679.5 | 3,664.1 | 3,622.6 | 12.2 | 12.8 | 81.43 | 338.5 | 303.5 | 324.3 | 303.5 | 20.83 | 15.572 | |
| 3,800.0 | 3,778.2 | 3,762.8 | 3,719.0 | 12.6 | 13.2 | 81.92 | 354.1 | 318.1 | 339.8 | 318.5 | 21.30 | 15.949 | |
| 3,900.0 | 3,877.0 | 3,861.6 | 3,815.5 | 13.0 | 13.6 | 82.37 | 369.8 | 332.6 | 355.3 | 333.5 | 21.79 | 16.308 | |
| 4,000.0 | 3,975.8 | 3,960.3 | 3,911.9 | 13.4 | 14.1 | 82.78 | 385.4 | 347.2 | 370.8 | 348.5 | 22.27 | 16.650 | |
| 4,100.0 | 4,074.5 | 4,059.1 | 4,008.3 | 13.8 | 14.5 | 83.16 | 401.0 | 361.8 | 386.4 | 363.6 | 22.76 | 16.976 | |
| 4,200.0 | 4,173.3 | 4,157.8 | 4,104.7 | 14.2 | 14.9 | 83.51 | 416.6 | 376.4 | 401.9 | 378.7 | 23.25 | 17.287 | |
| 4,300.0 | 4,272.1 | 4,256.6 | 4,201.1 | 14.6 | 15.4 | 83.83 | 432.3 | 391.0 | 417.5 | 393.7 | 23.74 | 17.583 | |
| 4,400.0 | 4,370.8 | 4,355.3 | 4,297.5 | 15.0 | 15.8 | 84.13 | 447.9 | 405.5 | 433.1 | 408.8 | 24.24 | 17.866 | |
| 4,500.0 | 4,469.6 | 4,454.1 | 4,393.9 | 15.4 | 16.2 | 84.41 | 463.5 | 420.1 | 448.7 | 423.9 | 24.74 | 18.136 | |
| 4,600.0 | 4,568.4 | 4,552.8 | 4,490.3 | 15.8 | 16.7 | 84.67 | 479.2 | 434.7 | 464.3 | 439.0 | 25.24 | 18.395 | |
| 4,700.0 | 4,667.1 | 4,651.6 | 4,586.8 | 16.2 | 17.1 | 84.92 | 494.8 | 449.3 | 479.9 | 454.1 | 25.74 | 18.642 | |
| 4,800.0 | 4,765.9 | 4,750.3 | 4,683.2 | 16.7 | 17.5 | 85.14 | 510.4 | 463.8 | 495.5 | 469.2 | 26.25 | 18.878 | |
| 4,900.0 | 4,864.7 | 4,849.1 | 4,779.6 | 17.1 | 18.0 | 85.36 | 526.1 | 478.4 | 511.1 | 484.4 | 26.75 | 19.104 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 702H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**Offset Well Error:** 3.0 usft

**Rule Assigned:**

| 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 | 4,963.4 | 4,947.9 | 4,876.0 | 17.5 | 18.4 | 85.56 | 541.7 | 493.0 | 526.7 | 499.5 | 27.26 | 19.321 | |
| 5,100.0 | 5,062.2 | 5,046.6 | 4,972.4 | 17.9 | 18.9 | 85.75 | 557.3 | 507.6 | 542.4 | 514.6 | 27.77 | 19.530 | |
| 5,200.0 | 5,161.0 | 5,145.4 | 5,068.8 | 18.3 | 19.3 | 85.93 | 573.0 | 522.2 | 558.0 | 529.7 | 28.28 | 19.729 | |
| 5,300.0 | 5,259.8 | 5,244.1 | 5,165.2 | 18.8 | 19.8 | 86.10 | 588.6 | 536.7 | 573.7 | 544.9 | 28.80 | 19.921 | |
| 5,400.0 | 5,358.5 | 5,342.9 | 5,261.7 | 19.2 | 20.2 | 86.26 | 604.2 | 551.3 | 589.3 | 560.0 | 29.31 | 20.105 | |
| 5,500.0 | 5,457.3 | 5,441.6 | 5,358.1 | 19.6 | 20.7 | 86.41 | 619.9 | 565.9 | 605.0 | 575.2 | 29.83 | 20.282 | |
| 5,600.0 | 5,556.1 | 5,540.4 | 5,454.5 | 20.0 | 21.1 | 86.56 | 635.5 | 580.5 | 620.7 | 590.3 | 30.35 | 20.452 | |
| 5,700.0 | 5,654.8 | 5,639.1 | 5,550.9 | 20.5 | 21.6 | 86.70 | 651.1 | 595.0 | 636.3 | 605.5 | 30.87 | 20.616 | |
| 5,800.0 | 5,753.6 | 5,737.9 | 5,647.3 | 20.9 | 22.1 | 86.83 | 666.8 | 609.6 | 652.0 | 620.6 | 31.39 | 20.774 | |
| 5,900.0 | 5,852.4 | 5,836.6 | 5,743.7 | 21.3 | 22.5 | 86.95 | 682.4 | 624.2 | 667.7 | 635.8 | 31.91 | 20.925 | |
| 6,000.0 | 5,951.1 | 5,935.4 | 5,840.1 | 21.8 | 23.0 | 87.07 | 698.0 | 638.8 | 683.3 | 650.9 | 32.43 | 21.072 | |
| 6,100.0 | 6,049.9 | 6,034.2 | 5,936.5 | 22.2 | 23.4 | 87.18 | 713.7 | 653.3 | 699.0 | 666.1 | 32.95 | 21.213 | |
| 6,200.0 | 6,148.7 | 6,132.9 | 6,033.0 | 22.6 | 23.9 | 87.29 | 729.3 | 667.9 | 714.7 | 681.2 | 33.48 | 21.349 | |
| 6,300.0 | 6,247.4 | 6,231.7 | 6,129.4 | 23.1 | 24.3 | 87.40 | 744.9 | 682.5 | 730.4 | 696.4 | 33.99 | 21.486 | |
| 6,400.0 | 6,346.2 | 6,338.8 | 6,234.1 | 23.5 | 24.8 | 87.54 | 761.4 | 697.9 | 745.6 | 711.1 | 34.54 | 21.589 | |
| 6,500.0 | 6,445.0 | 6,448.5 | 6,341.8 | 23.9 | 25.3 | 87.78 | 776.9 | 712.3 | 759.5 | 724.4 | 35.07 | 21.657 | |
| 6,600.0 | 6,543.7 | 6,558.6 | 6,450.1 | 24.4 | 25.8 | 88.12 | 790.8 | 725.3 | 772.0 | 736.4 | 35.56 | 21.710 | |
| 6,700.0 | 6,642.5 | 6,668.9 | 6,559.1 | 24.8 | 26.3 | 88.55 | 803.3 | 736.9 | 783.1 | 747.1 | 36.00 | 21.751 | |
| 6,800.0 | 6,741.3 | 6,779.3 | 6,668.6 | 25.2 | 26.8 | 89.08 | 814.2 | 747.1 | 792.8 | 756.4 | 36.40 | 21.783 | |
| 6,859.4 | 6,800.0 | 6,845.0 | 6,733.8 | 25.5 | 27.0 | 89.43 | 820.0 | 752.5 | 798.0 | 761.4 | 36.59 | 21.806 | |
| 6,900.0 | 6,840.1 | 6,889.9 | 6,778.3 | 25.6 | 27.2 | 89.71 | 823.6 | 755.9 | 801.2 | 764.5 | 36.72 | 21.820 | |
| 7,000.0 | 6,939.1 | 7,000.5 | 6,888.5 | 26.1 | 27.6 | 90.37 | 831.5 | 763.2 | 808.3 | 771.3 | 37.04 | 21.824 | |
| 7,100.0 | 7,038.3 | 7,111.3 | 6,999.0 | 26.5 | 28.1 | 90.97 | 837.8 | 769.1 | 814.1 | 776.7 | 37.33 | 21.809 | |
| 7,200.0 | 7,137.7 | 7,222.2 | 7,109.7 | 26.9 | 28.4 | 91.52 | 842.6 | 773.6 | 818.5 | 780.9 | 37.59 | 21.776 | |
| 7,300.0 | 7,237.3 | 7,333.2 | 7,220.5 | 27.3 | 28.8 | 92.02 | 845.8 | 776.5 | 821.5 | 783.7 | 37.81 | 21.729 | |
| 7,400.0 | 7,337.1 | 7,444.1 | 7,331.4 | 27.6 | 29.1 | 92.48 | 847.4 | 778.0 | 823.2 | 785.2 | 37.96 | 21.689 | |
| 7,500.0 | 7,436.9 | 7,549.8 | 7,437.1 | 28.0 | 29.2 | 92.87 | 847.6 | 778.2 | 823.6 | 785.6 | 38.01 | 21.667 | |
| 7,600.0 | 7,536.9 | 7,649.8 | 7,537.1 | 28.3 | 29.2 | 93.13 | 847.6 | 778.2 | 823.8 | 785.8 | 38.07 | 21.639 | |
| 7,700.0 | 7,636.9 | 7,749.7 | 7,637.1 | 28.6 | 29.3 | 93.26 | 847.6 | 778.2 | 823.9 | 785.8 | 38.16 | 21.593 | |
| 7,759.4 | 7,696.3 | 7,809.2 | 7,696.5 | 28.6 | 29.3 | 89.68 | 847.6 | 778.2 | 824.0 | 785.7 | 38.21 | 21.564 | |
| 7,800.0 | 7,736.9 | 7,849.7 | 7,737.1 | 28.7 | 29.3 | 89.68 | 847.6 | 778.2 | 824.0 | 785.7 | 38.25 | 21.543 | |
| 7,900.0 | 7,836.9 | 7,949.7 | 7,837.1 | 28.7 | 29.3 | 89.68 | 847.6 | 778.2 | 824.0 | 785.6 | 38.36 | 21.479 | |
| 8,000.0 | 7,936.9 | 8,049.7 | 7,937.1 | 28.8 | 29.4 | 89.68 | 847.6 | 778.2 | 824.0 | 785.5 | 38.48 | 21.415 | |
| 8,100.0 | 8,036.9 | 8,149.7 | 8,037.1 | 28.8 | 29.4 | 89.68 | 847.6 | 778.2 | 824.0 | 785.4 | 38.59 | 21.351 | |
| 8,200.0 | 8,136.9 | 8,249.7 | 8,137.1 | 28.9 | 29.5 | 89.68 | 847.6 | 778.2 | 824.0 | 785.2 | 38.71 | 21.288 | |
| 8,300.0 | 8,236.9 | 8,349.7 | 8,237.1 | 28.9 | 29.5 | 89.68 | 847.6 | 778.2 | 824.0 | 785.1 | 38.82 | 21.224 | |
| 8,400.0 | 8,336.9 | 8,449.7 | 8,337.1 | 29.0 | 29.6 | 89.68 | 847.6 | 778.2 | 824.0 | 785.0 | 38.94 | 21.161 | |
| 8,500.0 | 8,436.9 | 8,549.7 | 8,437.1 | 29.0 | 29.6 | 89.68 | 847.6 | 778.2 | 824.0 | 784.9 | 39.05 | 21.098 | |
| 8,600.0 | 8,536.9 | 8,649.7 | 8,537.1 | 29.1 | 29.7 | 89.68 | 847.6 | 778.2 | 824.0 | 784.8 | 39.17 | 21.035 | |
| 8,700.0 | 8,636.9 | 8,749.7 | 8,637.1 | 29.1 | 29.7 | 89.68 | 847.6 | 778.2 | 824.0 | 784.7 | 39.29 | 20.973 | |
| 8,800.0 | 8,736.9 | 8,849.7 | 8,737.1 | 29.2 | 29.8 | 89.68 | 847.6 | 778.2 | 824.0 | 784.5 | 39.40 | 20.910 | |
| 8,900.0 | 8,836.9 | 8,949.7 | 8,837.1 | 29.2 | 29.8 | 89.68 | 847.6 | 778.2 | 824.0 | 784.4 | 39.52 | 20.848 | |
| 9,000.0 | 8,936.9 | 9,049.7 | 8,937.1 | 29.3 | 29.8 | 89.68 | 847.6 | 778.2 | 824.0 | 784.3 | 39.64 | 20.786 | |
| 9,100.0 | 9,036.9 | 9,149.7 | 9,037.1 | 29.3 | 29.9 | 89.68 | 847.6 | 778.2 | 824.0 | 784.2 | 39.76 | 20.724 | |
| 9,200.0 | 9,136.9 | 9,249.7 | 9,137.1 | 29.4 | 29.9 | 89.68 | 847.6 | 778.2 | 824.0 | 784.1 | 39.88 | 20.663 | |
| 9,300.0 | 9,236.9 | 9,349.7 | 9,237.1 | 29.4 | 30.0 | 89.68 | 847.6 | 778.2 | 824.0 | 784.0 | 39.99 | 20.602 | |
| 9,400.0 | 9,336.9 | 9,449.7 | 9,337.1 | 29.5 | 30.0 | 89.68 | 847.6 | 778.2 | 824.0 | 783.8 | 40.11 | 20.540 | |
| 9,500.0 | 9,436.9 | 9,549.7 | 9,437.1 | 29.5 | 30.1 | 89.68 | 847.6 | 778.2 | 824.0 | 783.7 | 40.23 | 20.479 | |
| 9,600.0 | 9,536.9 | 9,649.7 | 9,537.1 | 29.6 | 30.1 | 89.68 | 847.6 | 778.2 | 824.0 | 783.6 | 40.35 | 20.419 | |
| 9,700.0 | 9,636.9 | 9,749.7 | 9,637.1 | 29.6 | 30.2 | 89.68 | 847.6 | 778.2 | 824.0 | 783.5 | 40.47 | 20.358 | |
| 9,800.0 | 9,736.9 | 9,849.7 | 9,737.1 | 29.7 | 30.2 | 89.68 | 847.6 | 778.2 | 824.0 | 783.4 | 40.59 | 20.298 | |
| 9,900.0 | 9,836.9 | 9,949.7 | 9,837.1 | 29.7 | 30.3 | 89.68 | 847.6 | 778.2 | 824.0 | 783.2 | 40.71 | 20.238 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 702H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 | 9,936.9 | 10,049.7 | 9,937.1 | 29.8 | 30.3 | 89.68 | 847.6 | 778.2 | 824.0 | 783.1 | 40.83 | 20.178 | |
| 10,100.0 | 10,036.9 | 10,149.7 | 10,037.1 | 29.9 | 30.4 | 89.68 | 847.6 | 778.2 | 824.0 | 783.0 | 40.96 | 20.118 | |
| 10,200.0 | 10,136.9 | 10,249.7 | 10,137.1 | 29.9 | 30.4 | 89.68 | 847.6 | 778.2 | 824.0 | 782.9 | 41.08 | 20.059 | |
| 10,300.0 | 10,236.9 | 10,349.7 | 10,237.1 | 30.0 | 30.4 | 89.68 | 847.6 | 778.2 | 824.0 | 782.8 | 41.20 | 20.000 | |
| 10,400.0 | 10,336.9 | 10,449.7 | 10,337.1 | 30.0 | 30.5 | 89.68 | 847.6 | 778.2 | 824.0 | 782.6 | 41.32 | 19.941 | |
| 10,500.0 | 10,436.9 | 10,549.7 | 10,437.1 | 30.1 | 30.5 | 89.68 | 847.6 | 778.2 | 824.0 | 782.5 | 41.44 | 19.882 | |
| 10,600.0 | 10,536.9 | 10,649.7 | 10,537.1 | 30.1 | 30.6 | 89.68 | 847.6 | 778.2 | 824.0 | 782.4 | 41.56 | 19.823 | |
| 10,700.0 | 10,636.9 | 10,749.7 | 10,637.1 | 30.2 | 30.6 | 89.68 | 847.6 | 778.2 | 824.0 | 782.3 | 41.69 | 19.765 | |
| 10,800.0 | 10,736.9 | 10,849.7 | 10,737.1 | 30.2 | 30.7 | 89.68 | 847.6 | 778.2 | 824.0 | 782.1 | 41.81 | 19.707 | |
| 10,900.0 | 10,836.9 | 10,949.7 | 10,837.1 | 30.3 | 30.7 | 89.68 | 847.6 | 778.2 | 824.0 | 782.0 | 41.93 | 19.649 | |
| 11,000.0 | 10,936.9 | 11,049.7 | 10,937.1 | 30.3 | 30.8 | 89.68 | 847.6 | 778.2 | 824.0 | 781.9 | 42.06 | 19.591 | |
| 11,100.0 | 11,036.9 | 11,149.7 | 11,037.1 | 30.4 | 30.8 | 89.68 | 847.6 | 778.2 | 824.0 | 781.8 | 42.18 | 19.534 | |
| 11,200.0 | 11,136.9 | 11,249.7 | 11,137.1 | 30.5 | 30.9 | 89.68 | 847.6 | 778.2 | 824.0 | 781.6 | 42.30 | 19.477 | |
| 11,300.0 | 11,236.9 | 11,349.7 | 11,237.1 | 30.5 | 30.9 | 89.68 | 847.6 | 778.2 | 824.0 | 781.5 | 42.43 | 19.420 | |
| 11,400.0 | 11,336.9 | 11,449.7 | 11,337.1 | 30.6 | 31.0 | 89.68 | 847.6 | 778.2 | 824.0 | 781.4 | 42.55 | 19.363 | |
| 11,500.0 | 11,436.9 | 11,549.7 | 11,437.1 | 30.6 | 31.0 | 89.68 | 847.6 | 778.2 | 824.0 | 781.3 | 42.68 | 19.306 | |
| 11,600.0 | 11,536.9 | 11,649.7 | 11,537.1 | 30.7 | 31.1 | 89.68 | 847.6 | 778.2 | 824.0 | 781.1 | 42.80 | 19.250 | |
| 11,700.0 | 11,636.9 | 11,749.7 | 11,637.1 | 30.7 | 31.1 | 89.68 | 847.6 | 778.2 | 824.0 | 781.0 | 42.92 | 19.197 | |
| 11,705.0 | 11,641.9 | 11,754.7 | 11,642.1 | 30.7 | 31.1 | 89.68 | 847.6 | 778.2 | 824.0 | 781.0 | 42.93 | 19.194 | |
| 11,705.7 | 11,642.5 | 11,755.2 | 11,642.5 | 30.7 | 31.1 | 89.68 | 847.6 | 778.2 | 824.0 | 781.0 | 42.93 | 19.193 | |
| 11,725.0 | 11,661.9 | 11,772.1 | 11,659.4 | 30.7 | 31.1 | -89.97 | 847.3 | 778.3 | 824.0 | 781.0 | 42.97 | 19.175 | |
| 11,750.0 | 11,686.8 | 11,793.6 | 11,680.9 | 30.6 | 31.1 | -89.97 | 846.1 | 778.4 | 824.1 | 781.1 | 42.99 | 19.170 | |
| 11,775.0 | 11,711.6 | 11,815.2 | 11,702.4 | 30.5 | 31.0 | -89.96 | 843.8 | 778.6 | 824.3 | 781.3 | 43.01 | 19.168 | |
| 11,800.0 | 11,736.2 | 11,836.8 | 11,723.7 | 30.5 | 31.0 | -89.96 | 840.7 | 778.9 | 824.7 | 781.7 | 43.03 | 19.166 | |
| 11,825.0 | 11,760.6 | 11,858.4 | 11,745.0 | 30.4 | 30.9 | -89.95 | 836.5 | 779.3 | 825.1 | 782.1 | 43.05 | 19.166 | |
| 11,850.0 | 11,784.7 | 11,880.1 | 11,766.0 | 30.2 | 30.9 | -89.94 | 831.4 | 779.8 | 825.7 | 782.6 | 43.08 | 19.166 | |
| 11,875.0 | 11,808.3 | 11,901.8 | 11,786.8 | 30.1 | 30.8 | -89.93 | 825.4 | 780.4 | 826.3 | 783.2 | 43.11 | 19.168 | |
| 11,900.0 | 11,831.5 | 11,925.0 | 11,808.8 | 30.0 | 30.7 | -89.93 | 817.9 | 781.2 | 827.0 | 783.9 | 43.13 | 19.177 | |
| 11,925.0 | 11,854.2 | 11,945.2 | 11,827.6 | 29.9 | 30.7 | -89.91 | 810.5 | 781.9 | 827.9 | 784.7 | 43.18 | 19.175 | |
| 11,950.0 | 11,876.3 | 11,967.0 | 11,847.5 | 29.8 | 30.6 | -89.90 | 801.6 | 782.8 | 828.8 | 785.6 | 43.21 | 19.180 | |
| 11,975.0 | 11,897.8 | 11,988.9 | 11,867.0 | 29.7 | 30.5 | -89.89 | 791.8 | 783.7 | 829.8 | 786.6 | 43.25 | 19.186 | |
| 12,000.0 | 11,918.6 | 12,010.8 | 11,886.1 | 29.6 | 30.5 | -89.87 | 781.1 | 784.8 | 831.0 | 787.7 | 43.29 | 19.195 | |
| 12,025.0 | 11,938.6 | 12,032.8 | 11,904.7 | 29.5 | 30.4 | -89.86 | 769.5 | 785.9 | 832.2 | 788.8 | 43.33 | 19.204 | |
| 12,050.0 | 11,957.8 | 12,054.8 | 11,922.9 | 29.4 | 30.3 | -89.84 | 757.1 | 787.1 | 833.5 | 790.1 | 43.38 | 19.215 | |
| 12,075.0 | 11,976.1 | 12,076.9 | 11,940.5 | 29.3 | 30.3 | -89.83 | 743.7 | 788.4 | 834.9 | 791.4 | 43.42 | 19.228 | |
| 12,100.0 | 11,993.5 | 12,100.0 | 11,958.1 | 29.2 | 30.2 | -89.82 | 729.0 | 789.9 | 836.3 | 792.9 | 43.45 | 19.248 | |
| 12,125.0 | 12,010.0 | 12,121.4 | 11,973.9 | 29.1 | 30.1 | -89.79 | 714.5 | 791.3 | 837.9 | 794.4 | 43.51 | 19.259 | |
| 12,150.0 | 12,025.4 | 12,143.8 | 11,989.6 | 29.0 | 30.1 | -89.77 | 698.7 | 792.8 | 839.5 | 796.0 | 43.55 | 19.277 | |
| 12,175.0 | 12,039.8 | 12,166.3 | 12,004.7 | 28.9 | 30.0 | -89.76 | 682.1 | 794.5 | 841.2 | 797.6 | 43.59 | 19.297 | |
| 12,200.0 | 12,053.2 | 12,188.9 | 12,019.0 | 28.9 | 30.0 | -89.74 | 664.7 | 796.2 | 843.0 | 799.3 | 43.64 | 19.319 | |
| 12,225.0 | 12,065.4 | 12,211.6 | 12,032.6 | 28.8 | 29.9 | -89.72 | 646.5 | 798.0 | 844.8 | 801.1 | 43.68 | 19.342 | |
| 12,250.0 | 12,076.4 | 12,234.5 | 12,045.3 | 28.7 | 29.9 | -89.70 | 627.6 | 799.8 | 846.7 | 803.0 | 43.72 | 19.368 | |
| 12,275.0 | 12,086.2 | 12,257.5 | 12,057.2 | 28.7 | 29.9 | -89.68 | 608.1 | 801.7 | 848.7 | 804.9 | 43.76 | 19.396 | |
| 12,300.0 | 12,094.8 | 12,280.6 | 12,068.1 | 28.6 | 29.8 | -89.67 | 587.8 | 803.7 | 850.7 | 806.9 | 43.79 | 19.425 | |
| 12,325.0 | 12,102.2 | 12,303.8 | 12,078.2 | 28.6 | 29.8 | -89.65 | 566.9 | 805.8 | 852.7 | 808.9 | 43.83 | 19.457 | |
| 12,350.0 | 12,108.4 | 12,327.3 | 12,087.2 | 28.6 | 29.8 | -89.63 | 545.5 | 807.9 | 854.9 | 811.0 | 43.86 | 19.490 | |
| 12,375.0 | 12,113.2 | 12,350.8 | 12,095.3 | 28.5 | 29.7 | -89.62 | 523.4 | 810.0 | 857.0 | 813.1 | 43.89 | 19.525 | |
| 12,400.0 | 12,116.8 | 12,374.6 | 12,102.2 | 28.5 | 29.7 | -89.60 | 500.8 | 812.2 | 859.2 | 815.3 | 43.92 | 19.562 | |
| 12,425.0 | 12,119.0 | 12,398.5 | 12,108.1 | 28.5 | 29.7 | -89.59 | 477.8 | 814.5 | 861.4 | 817.5 | 43.95 | 19.601 | |
| 12,450.0 | 12,120.0 | 12,422.6 | 12,112.9 | 28.5 | 29.7 | -89.58 | 454.2 | 816.8 | 863.6 | 819.7 | 43.97 | 19.641 | |
| 12,455.7 | 12,120.0 | 12,428.1 | 12,113.8 | 28.5 | 29.7 | -89.57 | 448.8 | 817.3 | 864.2 | 820.2 | 43.98 | 19.650 | |
| 12,500.0 | 12,120.0 | 12,471.6 | 12,118.8 | 28.5 | 29.7 | -89.91 | 405.9 | 821.6 | 868.2 | 824.2 | 44.03 | 19.718 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 702H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12,600.0 | 12,120.0 | 12,600.1 | 12,120.0 | 28.5 | 29.8 | -89.99 | 277.8 | 832.5 | 876.3 | 832.3 | 43.91 | 19.957 | |
| 12,700.0 | 12,120.0 | 12,744.3 | 12,120.0 | 28.5 | 30.0 | -89.99 | 133.8 | 838.2 | 879.6 | 835.8 | 43.75 | 20.103 | |
| 12,800.0 | 12,120.0 | 12,851.4 | 12,120.0 | 28.5 | 30.2 | -89.99 | 26.7 | 839.0 | 879.7 | 835.5 | 44.13 | 19.934 | |
| 12,900.0 | 12,120.0 | 12,951.4 | 12,120.0 | 28.5 | 30.3 | -89.99 | -73.3 | 839.6 | 879.7 | 835.0 | 44.66 | 19.696 | |
| 13,000.0 | 12,120.0 | 13,051.4 | 12,120.0 | 28.5 | 30.5 | -89.99 | -173.3 | 840.2 | 879.7 | 834.4 | 45.27 | 19.431 | |
| 13,100.0 | 12,120.0 | 13,151.4 | 12,120.0 | 28.5 | 30.7 | -89.99 | -273.3 | 840.8 | 879.7 | 833.7 | 45.95 | 19.143 | |
| 13,200.0 | 12,120.0 | 13,251.4 | 12,120.0 | 28.5 | 30.9 | -89.99 | -373.3 | 841.4 | 879.7 | 833.0 | 46.70 | 18.836 | |
| 13,300.0 | 12,120.0 | 13,351.4 | 12,120.0 | 28.5 | 31.1 | -89.99 | -473.3 | 842.1 | 879.7 | 832.2 | 47.52 | 18.513 | |
| 13,400.0 | 12,120.0 | 13,451.4 | 12,120.0 | 28.6 | 31.3 | -89.99 | -573.3 | 842.7 | 879.7 | 831.3 | 48.39 | 18.178 | |
| 13,500.0 | 12,120.0 | 13,551.4 | 12,120.0 | 28.6 | 31.6 | -89.99 | -673.3 | 843.3 | 879.7 | 830.4 | 49.33 | 17.834 | |
| 13,600.0 | 12,120.0 | 13,651.4 | 12,120.0 | 28.6 | 31.9 | -89.99 | -773.3 | 843.9 | 879.7 | 829.4 | 50.32 | 17.483 | |
| 13,700.0 | 12,120.0 | 13,751.4 | 12,120.0 | 28.6 | 32.2 | -89.99 | -873.3 | 844.5 | 879.7 | 828.3 | 51.36 | 17.129 | |
| 13,800.0 | 12,120.0 | 13,851.4 | 12,120.0 | 28.6 | 32.5 | -89.99 | -973.3 | 845.1 | 879.7 | 827.2 | 52.45 | 16.773 | |
| 13,900.0 | 12,120.0 | 13,951.4 | 12,120.0 | 28.7 | 32.9 | -89.99 | -1,073.3 | 845.7 | 879.7 | 826.1 | 53.58 | 16.417 | |
| 14,000.0 | 12,120.0 | 14,051.4 | 12,120.0 | 28.7 | 33.3 | -89.99 | -1,173.3 | 846.4 | 879.7 | 824.9 | 54.76 | 16.064 | |
| 14,100.0 | 12,120.0 | 14,151.4 | 12,120.0 | 28.7 | 33.7 | -89.99 | -1,273.3 | 847.0 | 879.7 | 823.7 | 55.98 | 15.714 | |
| 14,200.0 | 12,120.0 | 14,251.4 | 12,120.0 | 28.8 | 34.1 | -89.99 | -1,373.3 | 847.6 | 879.7 | 822.5 | 57.24 | 15.369 | |
| 14,300.0 | 12,120.0 | 14,351.4 | 12,120.0 | 28.8 | 34.6 | -89.99 | -1,473.3 | 848.2 | 879.7 | 821.2 | 58.53 | 15.030 | |
| 14,400.0 | 12,120.0 | 14,451.4 | 12,120.0 | 28.9 | 35.0 | -89.99 | -1,573.3 | 848.8 | 879.7 | 819.9 | 59.85 | 14.698 | |
| 14,500.0 | 12,120.0 | 14,551.4 | 12,120.0 | 29.0 | 35.5 | -89.99 | -1,673.3 | 849.4 | 879.7 | 818.5 | 61.21 | 14.372 | |
| 14,600.0 | 12,120.0 | 14,651.4 | 12,120.0 | 29.2 | 36.0 | -89.99 | -1,773.3 | 850.1 | 879.7 | 817.1 | 62.59 | 14.055 | |
| 14,700.0 | 12,120.0 | 14,751.4 | 12,120.0 | 29.8 | 36.6 | -89.99 | -1,873.3 | 850.7 | 879.7 | 815.7 | 64.00 | 13.745 | |
| 14,800.0 | 12,120.0 | 14,851.4 | 12,120.0 | 30.5 | 37.1 | -89.99 | -1,973.3 | 851.3 | 879.7 | 814.3 | 65.44 | 13.443 | |
| 14,900.0 | 12,120.0 | 14,951.4 | 12,120.0 | 31.3 | 37.7 | -89.99 | -2,073.3 | 851.9 | 879.7 | 812.8 | 66.90 | 13.150 | |
| 15,000.0 | 12,120.0 | 15,051.4 | 12,120.0 | 32.1 | 38.3 | -89.99 | -2,173.3 | 852.5 | 879.7 | 811.4 | 68.38 | 12.866 | |
| 15,100.0 | 12,120.0 | 15,151.4 | 12,120.0 | 32.9 | 38.9 | -89.99 | -2,273.3 | 853.1 | 879.7 | 809.9 | 69.88 | 12.589 | |
| 15,200.0 | 12,120.0 | 15,251.4 | 12,120.0 | 33.8 | 39.6 | -89.99 | -2,373.3 | 853.7 | 879.7 | 808.3 | 71.40 | 12.321 | |
| 15,300.0 | 12,120.0 | 15,351.4 | 12,120.0 | 34.6 | 40.2 | -89.99 | -2,473.3 | 854.4 | 879.7 | 806.8 | 72.94 | 12.061 | |
| 15,400.0 | 12,120.0 | 15,451.4 | 12,120.0 | 35.4 | 40.9 | -89.99 | -2,573.3 | 855.0 | 879.8 | 805.3 | 74.50 | 11.809 | |
| 15,500.0 | 12,120.0 | 15,551.4 | 12,120.0 | 36.3 | 41.6 | -89.99 | -2,673.3 | 855.6 | 879.8 | 803.7 | 76.07 | 11.565 | |
| 15,600.0 | 12,120.0 | 15,651.4 | 12,120.0 | 37.1 | 42.3 | -89.99 | -2,773.3 | 856.2 | 879.8 | 802.1 | 77.65 | 11.329 | |
| 15,700.0 | 12,120.0 | 15,751.4 | 12,120.0 | 38.0 | 43.0 | -89.99 | -2,873.3 | 856.8 | 879.8 | 800.5 | 79.25 | 11.101 | |
| 15,800.0 | 12,120.0 | 15,851.4 | 12,120.0 | 38.8 | 43.7 | -89.99 | -2,973.3 | 857.4 | 879.8 | 798.9 | 80.87 | 10.879 | |
| 15,900.0 | 12,120.0 | 15,951.4 | 12,120.0 | 39.7 | 44.4 | -89.99 | -3,073.3 | 858.1 | 879.8 | 797.3 | 82.49 | 10.665 | |
| 16,000.0 | 12,120.0 | 16,051.4 | 12,120.0 | 40.6 | 45.1 | -89.99 | -3,173.3 | 858.7 | 879.8 | 795.6 | 84.13 | 10.457 | |
| 16,100.0 | 12,120.0 | 16,151.4 | 12,120.0 | 41.5 | 45.9 | -89.99 | -3,273.3 | 859.3 | 879.8 | 794.0 | 85.78 | 10.256 | |
| 16,200.0 | 12,120.0 | 16,251.4 | 12,120.0 | 42.3 | 46.7 | -89.99 | -3,373.3 | 859.9 | 879.8 | 792.3 | 87.44 | 10.062 | |
| 16,300.0 | 12,120.0 | 16,351.4 | 12,120.0 | 43.2 | 47.4 | -89.99 | -3,473.3 | 860.5 | 879.8 | 790.7 | 89.11 | 9.873 | |
| 16,400.0 | 12,120.0 | 16,451.4 | 12,120.0 | 44.1 | 48.2 | -89.99 | -3,573.3 | 861.1 | 879.8 | 789.0 | 90.78 | 9.691 | |
| 16,500.0 | 12,120.0 | 16,551.4 | 12,120.0 | 45.0 | 49.0 | -89.99 | -3,673.3 | 861.7 | 879.8 | 787.3 | 92.47 | 9.514 | |
| 16,600.0 | 12,120.0 | 16,651.4 | 12,120.0 | 45.9 | 49.8 | -89.99 | -3,773.3 | 862.4 | 879.8 | 785.6 | 94.16 | 9.343 | |
| 16,700.0 | 12,120.0 | 16,751.4 | 12,120.0 | 46.8 | 50.6 | -89.99 | -3,873.3 | 863.0 | 879.8 | 783.9 | 95.87 | 9.177 | |
| 16,800.0 | 12,120.0 | 16,851.4 | 12,120.0 | 47.7 | 51.4 | -89.99 | -3,973.3 | 863.6 | 879.8 | 782.2 | 97.58 | 9.016 | |
| 16,900.0 | 12,120.0 | 16,951.4 | 12,120.0 | 48.6 | 52.2 | -89.99 | -4,073.3 | 864.2 | 879.8 | 780.5 | 99.29 | 8.861 | |
| 17,000.0 | 12,120.0 | 17,051.4 | 12,120.0 | 49.5 | 53.0 | -89.99 | -4,173.3 | 864.8 | 879.8 | 778.8 | 101.02 | 8.709 | |
| 17,100.0 | 12,120.0 | 17,151.4 | 12,120.0 | 50.4 | 53.8 | -89.99 | -4,273.3 | 865.4 | 879.8 | 777.1 | 102.75 | 8.563 | |
| 17,200.0 | 12,120.0 | 17,251.4 | 12,120.0 | 51.3 | 54.7 | -89.99 | -4,373.3 | 866.1 | 879.8 | 775.3 | 104.48 | 8.421 | |
| 17,300.0 | 12,120.0 | 17,351.4 | 12,120.0 | 52.2 | 55.5 | -89.99 | -4,473.3 | 866.7 | 879.8 | 773.6 | 106.22 | 8.283 | |
| 17,400.0 | 12,120.0 | 17,451.4 | 12,120.0 | 53.1 | 56.3 | -89.99 | -4,573.3 | 867.3 | 879.8 | 771.9 | 107.97 | 8.149 | |
| 17,500.0 | 12,120.0 | 17,551.4 | 12,120.0 | 54.0 | 57.2 | -89.99 | -4,673.3 | 867.9 | 879.8 | 770.1 | 109.72 | 8.019 | |
| 17,600.0 | 12,120.0 | 17,651.4 | 12,120.0 | 54.9 | 58.0 | -89.99 | -4,773.3 | 868.5 | 879.8 | 768.4 | 111.48 | 7.892 | |
| 17,700.0 | 12,120.0 | 17,751.4 | 12,120.0 | 55.9 | 58.9 | -89.99 | -4,873.3 | 869.1 | 879.8 | 766.6 | 113.24 | 7.769 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 702H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17,800.0 | 12,120.0 | 17,851.4 | 12,120.0 | 56.8 | 59.7 | -89.99 | -4,973.3 | 869.8 | 879.8 | 764.8 | 115.01 | 7.650 | |
| 17,900.0 | 12,120.0 | 17,951.4 | 12,120.0 | 57.7 | 60.6 | -89.99 | -5,073.3 | 870.4 | 879.8 | 763.1 | 116.78 | 7.534 | |
| 18,000.0 | 12,120.0 | 18,051.4 | 12,120.0 | 58.6 | 61.4 | -89.99 | -5,173.2 | 871.0 | 879.9 | 761.3 | 118.55 | 7.422 | |
| 18,100.0 | 12,120.0 | 18,151.4 | 12,120.0 | 59.5 | 62.3 | -89.99 | -5,273.2 | 871.6 | 879.9 | 759.5 | 120.33 | 7.312 | |
| 18,200.0 | 12,120.0 | 18,251.4 | 12,120.0 | 60.5 | 63.2 | -89.99 | -5,373.2 | 872.2 | 879.9 | 757.7 | 122.11 | 7.205 | |
| 18,300.0 | 12,120.0 | 18,351.4 | 12,120.0 | 61.4 | 64.1 | -89.99 | -5,473.2 | 872.8 | 879.9 | 756.0 | 123.90 | 7.101 | |
| 18,400.0 | 12,120.0 | 18,451.4 | 12,120.0 | 62.3 | 64.9 | -89.99 | -5,573.2 | 873.4 | 879.9 | 754.2 | 125.69 | 7.000 | |
| 18,500.0 | 12,120.0 | 18,551.4 | 12,120.0 | 63.2 | 65.8 | -89.99 | -5,673.2 | 874.1 | 879.9 | 752.4 | 127.48 | 6.902 | |
| 18,600.0 | 12,120.0 | 18,651.4 | 12,120.0 | 64.2 | 66.7 | -89.99 | -5,773.2 | 874.7 | 879.9 | 750.6 | 129.28 | 6.806 | |
| 18,700.0 | 12,120.0 | 18,751.4 | 12,120.0 | 65.1 | 67.6 | -89.99 | -5,873.2 | 875.3 | 879.9 | 748.8 | 131.08 | 6.713 | |
| 18,800.0 | 12,120.0 | 18,851.4 | 12,120.0 | 66.0 | 68.5 | -89.99 | -5,973.2 | 875.9 | 879.9 | 747.0 | 132.88 | 6.622 | |
| 18,900.0 | 12,120.0 | 18,951.4 | 12,120.0 | 67.0 | 69.3 | -89.99 | -6,073.2 | 876.5 | 879.9 | 745.2 | 134.68 | 6.533 | |
| 19,000.0 | 12,120.0 | 19,051.4 | 12,120.0 | 67.9 | 70.2 | -89.99 | -6,173.2 | 877.1 | 879.9 | 743.4 | 136.49 | 6.447 | |
| 19,100.0 | 12,120.0 | 19,151.4 | 12,120.0 | 68.8 | 71.1 | -89.99 | -6,273.2 | 877.8 | 879.9 | 741.6 | 138.30 | 6.362 | |
| 19,200.0 | 12,120.0 | 19,251.4 | 12,120.0 | 69.8 | 72.0 | -89.99 | -6,373.2 | 878.4 | 879.9 | 739.8 | 140.11 | 6.280 | |
| 19,300.0 | 12,120.0 | 19,351.4 | 12,120.0 | 70.7 | 72.9 | -89.99 | -6,473.2 | 879.0 | 879.9 | 738.0 | 141.92 | 6.200 | |
| 19,400.0 | 12,120.0 | 19,451.4 | 12,120.0 | 71.6 | 73.8 | -89.99 | -6,573.2 | 879.6 | 879.9 | 736.2 | 143.74 | 6.121 | |
| 19,500.0 | 12,120.0 | 19,551.4 | 12,120.0 | 72.6 | 74.7 | -89.99 | -6,673.2 | 880.2 | 879.9 | 734.3 | 145.56 | 6.045 | |
| 19,600.0 | 12,120.0 | 19,651.4 | 12,120.0 | 73.5 | 75.6 | -89.99 | -6,773.2 | 880.8 | 879.9 | 732.5 | 147.38 | 5.970 | |
| 19,700.0 | 12,120.0 | 19,751.4 | 12,120.0 | 74.4 | 76.5 | -89.99 | -6,873.2 | 881.4 | 879.9 | 730.7 | 149.20 | 5.897 | |
| 19,800.0 | 12,120.0 | 19,851.4 | 12,120.0 | 75.4 | 77.4 | -89.99 | -6,973.2 | 882.1 | 879.9 | 728.9 | 151.03 | 5.826 | |
| 19,900.0 | 12,120.0 | 19,951.4 | 12,120.0 | 76.3 | 78.3 | -89.99 | -7,073.2 | 882.7 | 879.9 | 727.1 | 152.85 | 5.757 | |
| 20,000.0 | 12,120.0 | 20,051.4 | 12,120.0 | 77.3 | 79.2 | -89.99 | -7,173.2 | 883.3 | 879.9 | 725.2 | 154.68 | 5.689 | |
| 20,100.0 | 12,120.0 | 20,151.4 | 12,120.0 | 78.2 | 80.2 | -89.99 | -7,273.2 | 883.9 | 879.9 | 723.4 | 156.51 | 5.622 | |
| 20,200.0 | 12,120.0 | 20,251.4 | 12,120.0 | 79.1 | 81.1 | -89.99 | -7,373.2 | 884.5 | 879.9 | 721.6 | 158.34 | 5.557 | |
| 20,300.0 | 12,120.0 | 20,351.4 | 12,120.0 | 80.1 | 82.0 | -89.99 | -7,473.2 | 885.1 | 879.9 | 719.8 | 160.18 | 5.493 | |
| 20,400.0 | 12,120.0 | 20,451.4 | 12,120.0 | 81.0 | 82.9 | -89.99 | -7,573.2 | 885.8 | 879.9 | 717.9 | 162.01 | 5.431 | |
| 20,500.0 | 12,120.0 | 20,551.4 | 12,120.0 | 82.0 | 83.8 | -89.99 | -7,673.2 | 886.4 | 879.9 | 716.1 | 163.85 | 5.370 | |
| 20,600.0 | 12,120.0 | 20,651.4 | 12,120.0 | 82.9 | 84.7 | -89.99 | -7,773.2 | 887.0 | 879.9 | 714.3 | 165.69 | 5.311 | |
| 20,700.0 | 12,120.0 | 20,751.4 | 12,120.0 | 83.9 | 85.6 | -89.99 | -7,873.2 | 887.6 | 880.0 | 712.4 | 167.53 | 5.253 | |
| 20,800.0 | 12,120.0 | 20,851.4 | 12,120.0 | 84.8 | 86.6 | -89.99 | -7,973.2 | 888.2 | 880.0 | 710.6 | 169.37 | 5.196 | |
| 20,900.0 | 12,120.0 | 20,951.4 | 12,120.0 | 85.7 | 87.5 | -89.99 | -8,073.2 | 888.8 | 880.0 | 708.7 | 171.21 | 5.140 | |
| 21,000.0 | 12,120.0 | 21,051.4 | 12,120.0 | 86.7 | 88.4 | -89.99 | -8,173.2 | 889.4 | 880.0 | 706.9 | 173.05 | 5.085 | |
| 21,100.0 | 12,120.0 | 21,151.4 | 12,120.0 | 87.6 | 89.3 | -89.99 | -8,273.2 | 890.1 | 880.0 | 705.1 | 174.90 | 5.031 | |
| 21,200.0 | 12,120.0 | 21,251.4 | 12,120.0 | 88.6 | 90.2 | -89.99 | -8,373.2 | 890.7 | 880.0 | 703.2 | 176.74 | 4.979 | |
| 21,300.0 | 12,120.0 | 21,351.4 | 12,120.0 | 89.5 | 91.2 | -89.99 | -8,473.2 | 891.3 | 880.0 | 701.4 | 178.59 | 4.927 | |
| 21,400.0 | 12,120.0 | 21,451.4 | 12,120.0 | 90.5 | 92.1 | -89.99 | -8,573.2 | 891.9 | 880.0 | 699.5 | 180.44 | 4.877 | |
| 21,500.0 | 12,120.0 | 21,551.4 | 12,120.0 | 91.4 | 93.0 | -89.99 | -8,673.2 | 892.5 | 880.0 | 697.7 | 182.29 | 4.827 | |
| 21,600.0 | 12,120.0 | 21,651.4 | 12,120.0 | 92.4 | 93.9 | -89.99 | -8,773.2 | 893.1 | 880.0 | 695.8 | 184.14 | 4.779 | |
| 21,700.0 | 12,120.0 | 21,751.4 | 12,120.0 | 93.3 | 94.9 | -89.99 | -8,873.2 | 893.8 | 880.0 | 694.0 | 185.99 | 4.731 | |
| 21,800.0 | 12,120.0 | 21,851.4 | 12,120.0 | 94.3 | 95.8 | -89.99 | -8,973.2 | 894.4 | 880.0 | 692.2 | 187.84 | 4.685 | |
| 21,900.0 | 12,120.0 | 21,951.4 | 12,120.0 | 95.2 | 96.7 | -89.99 | -9,073.2 | 895.0 | 880.0 | 690.3 | 189.70 | 4.639 | |
| 22,000.0 | 12,120.0 | 22,051.4 | 12,120.0 | 96.2 | 97.6 | -89.99 | -9,173.2 | 895.6 | 880.0 | 688.5 | 191.55 | 4.594 | |
| 22,100.0 | 12,120.0 | 22,151.4 | 12,120.0 | 97.1 | 98.6 | -89.99 | -9,273.2 | 896.2 | 880.0 | 686.6 | 193.41 | 4.550 | |
| 22,200.0 | 12,120.0 | 22,251.4 | 12,120.0 | 98.1 | 99.5 | -89.99 | -9,373.2 | 896.8 | 880.0 | 684.7 | 195.26 | 4.507 | |
| 22,300.0 | 12,120.0 | 22,351.4 | 12,120.0 | 99.0 | 100.4 | -89.99 | -9,473.2 | 897.5 | 880.0 | 682.9 | 197.12 | 4.464 | |
| 22,400.0 | 12,120.0 | 22,451.4 | 12,120.0 | 100.0 | 101.4 | -89.99 | -9,573.2 | 898.1 | 880.0 | 681.0 | 198.98 | 4.423 | |
| 22,500.0 | 12,120.0 | 22,551.4 | 12,120.0 | 100.9 | 102.3 | -89.99 | -9,673.2 | 898.7 | 880.0 | 679.2 | 200.84 | 4.382 | |
| 22,501.5 | 12,120.0 | 22,552.9 | 12,120.0 | 100.9 | 102.3 | -89.99 | -9,674.7 | 898.7 | 880.0 | 679.2 | 200.86 | 4.381 | |
| 22,519.8 | 12,120.0 | 22,570.4 | 12,120.0 | 101.1 | 102.5 | -89.99 | -9,692.1 | 898.8 | 880.0 | 678.8 | 201.20 | 4.374 | SF |

# ConocoPhillips

## Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 703H - OWB - PWP0 — **Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1 — **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 | 0.2 | 0.2 | 3.0 | 3.0 | 89.62 | 0.2 | 30.0 | 30.0 | | | | |
| 100.0 | 100.0 | 100.2 | 100.2 | 3.1 | 3.1 | 89.62 | 0.2 | 30.0 | 30.0 | 23.4 | 6.62 | 4.532 | |
| 200.0 | 200.0 | 200.2 | 200.2 | 3.3 | 3.3 | 89.62 | 0.2 | 30.0 | 30.0 | 22.9 | 7.07 | 4.242 | |
| 300.0 | 300.0 | 300.2 | 300.2 | 3.5 | 3.5 | 89.62 | 0.2 | 30.0 | 30.0 | 22.5 | 7.50 | 4.000 | |
| 400.0 | 400.0 | 400.2 | 400.2 | 3.7 | 3.7 | 89.62 | 0.2 | 30.0 | 30.0 | 22.1 | 7.91 | 3.795 | |
| 500.0 | 500.0 | 500.2 | 500.2 | 3.9 | 3.9 | 89.62 | 0.2 | 30.0 | 30.0 | 21.7 | 8.29 | 3.617 | |
| 600.0 | 600.0 | 600.2 | 600.2 | 4.1 | 4.1 | 89.62 | 0.2 | 30.0 | 30.0 | 21.3 | 8.67 | 3.462 | |
| 700.0 | 700.0 | 700.2 | 700.2 | 4.3 | 4.3 | 89.62 | 0.2 | 30.0 | 30.0 | 21.0 | 9.03 | 3.324 | |
| 800.0 | 800.0 | 800.2 | 800.2 | 4.5 | 4.5 | 89.62 | 0.2 | 30.0 | 30.0 | 20.6 | 9.37 | 3.200 | |
| 900.0 | 900.0 | 900.2 | 900.2 | 4.7 | 4.7 | 89.62 | 0.2 | 30.0 | 30.0 | 20.3 | 9.71 | 3.089 | |
| 1,000.0 | 1,000.0 | 1,000.2 | 1,000.2 | 4.8 | 4.8 | 89.62 | 0.2 | 30.0 | 30.0 | 20.0 | 10.04 | 2.988 | Normal Operations |
| 1,100.0 | 1,100.0 | 1,100.2 | 1,100.2 | 5.0 | 5.0 | 89.62 | 0.2 | 30.0 | 30.0 | 19.6 | 10.36 | 2.896 | Normal Operations |
| 1,200.0 | 1,200.0 | 1,200.2 | 1,200.2 | 5.2 | 5.2 | 89.62 | 0.2 | 30.0 | 30.0 | 19.3 | 10.67 | 2.811 | Normal Operations |
| 1,300.0 | 1,300.0 | 1,300.2 | 1,300.2 | 5.3 | 5.3 | 89.62 | 0.2 | 30.0 | 30.0 | 19.0 | 10.98 | 2.733 | Normal Operations |
| 1,400.0 | 1,400.0 | 1,400.2 | 1,400.2 | 5.5 | 5.5 | 89.62 | 0.2 | 30.0 | 30.0 | 18.7 | 11.28 | 2.660 | Normal Operations |
| 1,466.6 | 1,466.6 | 1,466.8 | 1,466.8 | 5.6 | 5.6 | 89.62 | 0.2 | 30.0 | 30.0 | 18.5 | 11.47 | 2.615 | Normal Operations, CC |
| 1,500.0 | 1,500.0 | 1,500.2 | 1,500.2 | 5.6 | 5.6 | 89.62 | 0.2 | 30.0 | 30.0 | 18.4 | 11.57 | 2.593 | Normal Operations, ES |
| 1,600.0 | 1,600.0 | 1,600.0 | 1,600.0 | 5.8 | 5.8 | 78.09 | 1.9 | 30.5 | 30.4 | 18.5 | 11.87 | 2.560 | Normal Operations, SF |
| 1,700.0 | 1,700.0 | 1,699.5 | 1,699.3 | 5.9 | 6.1 | 73.78 | 6.8 | 32.0 | 31.6 | 19.5 | 12.16 | 2.599 | Normal Operations |
| 1,800.0 | 1,799.9 | 1,798.9 | 1,798.3 | 6.1 | 6.3 | 67.38 | 15.1 | 34.6 | 34.0 | 21.6 | 12.48 | 2.728 | Normal Operations |
| 1,900.0 | 1,899.7 | 1,898.0 | 1,896.7 | 6.3 | 6.6 | 59.95 | 26.6 | 38.1 | 38.0 | 25.2 | 12.83 | 2.963 | Normal Operations |
| 2,000.0 | 1,999.4 | 1,996.7 | 1,994.3 | 6.5 | 6.9 | 52.56 | 41.3 | 42.6 | 43.9 | 30.6 | 13.23 | 3.315 | |
| 2,100.0 | 2,098.8 | 2,095.1 | 2,090.8 | 6.8 | 7.2 | 55.25 | 59.1 | 48.0 | 51.9 | 38.2 | 13.68 | 3.791 | |
| 2,200.0 | 2,197.9 | 2,193.8 | 2,187.1 | 7.1 | 7.4 | 57.22 | 79.8 | 54.3 | 61.7 | 47.6 | 14.06 | 4.387 | |
| 2,215.1 | 2,212.9 | 2,208.8 | 2,201.8 | 7.1 | 7.5 | 57.63 | 83.1 | 55.3 | 63.2 | 49.1 | 14.11 | 4.477 | |
| 2,300.0 | 2,296.7 | 2,293.3 | 2,284.1 | 7.3 | 7.7 | 57.32 | 101.2 | 60.9 | 71.4 | 56.9 | 14.49 | 4.926 | |
| 2,400.0 | 2,395.5 | 2,392.8 | 2,381.1 | 7.6 | 8.0 | 57.04 | 122.7 | 67.4 | 81.0 | 66.1 | 14.94 | 5.423 | |
| 2,500.0 | 2,494.2 | 2,492.4 | 2,478.0 | 7.9 | 8.3 | 56.82 | 144.1 | 74.0 | 90.7 | 75.3 | 15.42 | 5.882 | |
| 2,600.0 | 2,593.0 | 2,591.9 | 2,575.0 | 8.2 | 8.7 | 56.63 | 165.5 | 80.5 | 100.4 | 84.5 | 15.91 | 6.307 | |
| 2,700.0 | 2,691.8 | 2,691.4 | 2,672.0 | 8.5 | 9.0 | 56.48 | 186.9 | 87.1 | 110.0 | 93.6 | 16.42 | 6.700 | |
| 2,800.0 | 2,790.5 | 2,791.0 | 2,769.0 | 8.9 | 9.4 | 56.36 | 208.3 | 93.6 | 119.7 | 102.8 | 16.95 | 7.063 | |
| 2,900.0 | 2,889.3 | 2,890.5 | 2,866.0 | 9.2 | 9.7 | 56.25 | 229.7 | 100.2 | 129.4 | 111.9 | 17.48 | 7.399 | |
| 3,000.0 | 2,988.1 | 2,990.0 | 2,962.9 | 9.6 | 10.1 | 56.16 | 251.1 | 106.7 | 139.0 | 121.0 | 18.03 | 7.709 | |
| 3,100.0 | 3,086.8 | 3,089.6 | 3,059.9 | 9.9 | 10.5 | 56.08 | 272.5 | 113.3 | 148.7 | 130.1 | 18.60 | 7.996 | |
| 3,200.0 | 3,185.6 | 3,189.1 | 3,156.9 | 10.3 | 10.9 | 56.01 | 293.9 | 119.8 | 158.4 | 139.2 | 19.17 | 8.262 | |
| 3,300.0 | 3,284.4 | 3,288.6 | 3,253.9 | 10.7 | 11.3 | 55.95 | 315.4 | 126.4 | 168.0 | 148.3 | 19.75 | 8.509 | |
| 3,400.0 | 3,383.1 | 3,388.2 | 3,350.9 | 11.0 | 11.7 | 55.90 | 336.8 | 132.9 | 177.7 | 157.4 | 20.34 | 8.738 | |
| 3,500.0 | 3,481.9 | 3,487.7 | 3,447.8 | 11.4 | 12.1 | 55.85 | 358.2 | 139.4 | 187.4 | 166.4 | 20.93 | 8.951 | |
| 3,600.0 | 3,580.7 | 3,587.2 | 3,544.8 | 11.8 | 12.5 | 55.80 | 379.6 | 146.0 | 197.0 | 175.5 | 21.54 | 9.149 | |
| 3,700.0 | 3,679.5 | 3,686.8 | 3,641.8 | 12.2 | 13.0 | 55.76 | 401.0 | 152.5 | 206.7 | 184.6 | 22.15 | 9.333 | |
| 3,800.0 | 3,778.2 | 3,786.3 | 3,738.8 | 12.6 | 13.4 | 55.72 | 422.4 | 159.1 | 216.4 | 193.6 | 22.76 | 9.505 | |
| 3,900.0 | 3,877.0 | 3,885.8 | 3,835.8 | 13.0 | 13.8 | 55.69 | 443.8 | 165.6 | 226.0 | 202.7 | 23.39 | 9.666 | |
| 4,000.0 | 3,975.8 | 3,985.3 | 3,932.7 | 13.4 | 14.3 | 55.66 | 465.2 | 172.2 | 235.7 | 211.7 | 24.01 | 9.816 | |
| 4,100.0 | 4,074.5 | 4,084.9 | 4,029.7 | 13.8 | 14.7 | 55.63 | 486.7 | 178.7 | 245.4 | 220.7 | 24.64 | 9.957 | |
| 4,200.0 | 4,173.3 | 4,184.4 | 4,126.7 | 14.2 | 15.1 | 55.60 | 508.1 | 185.3 | 255.1 | 229.8 | 25.28 | 10.089 | |
| 4,300.0 | 4,272.1 | 4,283.9 | 4,223.7 | 14.6 | 15.6 | 55.58 | 529.5 | 191.8 | 264.7 | 238.8 | 25.92 | 10.213 | |
| 4,400.0 | 4,370.8 | 4,383.5 | 4,320.7 | 15.0 | 16.0 | 55.56 | 550.9 | 198.4 | 274.4 | 247.8 | 26.56 | 10.329 | |
| 4,500.0 | 4,469.6 | 4,483.0 | 4,417.6 | 15.4 | 16.5 | 55.54 | 572.3 | 204.9 | 284.1 | 256.8 | 27.21 | 10.439 | |
| 4,600.0 | 4,568.4 | 4,582.5 | 4,514.6 | 15.8 | 16.9 | 55.52 | 593.7 | 211.5 | 293.7 | 265.9 | 27.86 | 10.543 | |
| 4,700.0 | 4,667.1 | 4,682.1 | 4,611.6 | 16.2 | 17.4 | 55.50 | 615.1 | 218.0 | 303.4 | 274.9 | 28.51 | 10.640 | |
| 4,800.0 | 4,765.9 | 4,781.6 | 4,708.6 | 16.7 | 17.8 | 55.48 | 636.5 | 224.5 | 313.1 | 283.9 | 29.17 | 10.733 | |
| 4,900.0 | 4,864.7 | 4,881.1 | 4,805.6 | 17.1 | 18.3 | 55.46 | 657.9 | 231.1 | 322.7 | 292.9 | 29.83 | 10.820 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 703H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 | 4,963.4 | 4,980.7 | 4,902.5 | 17.5 | 18.7 | 55.45 | 679.4 | 237.6 | 332.4 | 301.9 | 30.49 | 10.903 | |
| 5,100.0 | 5,062.2 | 5,080.2 | 4,999.5 | 17.9 | 19.2 | 55.43 | 700.8 | 244.2 | 342.1 | 310.9 | 31.14 | 10.984 | |
| 5,200.0 | 5,161.0 | 5,184.9 | 5,101.8 | 18.3 | 19.6 | 55.51 | 722.4 | 250.8 | 351.0 | 319.2 | 31.82 | 11.030 | |
| 5,300.0 | 5,259.8 | 5,290.0 | 5,204.7 | 18.8 | 20.1 | 55.76 | 742.3 | 256.9 | 358.5 | 326.0 | 32.45 | 11.047 | |
| 5,400.0 | 5,358.5 | 5,395.1 | 5,308.2 | 19.2 | 20.6 | 56.18 | 760.4 | 262.4 | 364.4 | 331.4 | 33.01 | 11.040 | |
| 5,500.0 | 5,457.3 | 5,500.4 | 5,412.1 | 19.6 | 21.0 | 56.76 | 776.8 | 267.4 | 368.9 | 335.4 | 33.50 | 11.013 | |
| 5,600.0 | 5,556.1 | 5,605.7 | 5,516.3 | 20.0 | 21.5 | 57.50 | 791.3 | 271.9 | 372.0 | 338.1 | 33.91 | 10.969 | |
| 5,700.0 | 5,654.8 | 5,711.0 | 5,620.7 | 20.5 | 21.9 | 58.42 | 803.9 | 275.7 | 373.7 | 339.4 | 34.25 | 10.912 | |
| 5,800.0 | 5,753.6 | 5,816.1 | 5,725.2 | 20.9 | 22.3 | 59.50 | 814.7 | 279.0 | 374.0 | 339.6 | 34.49 | 10.846 | |
| 5,900.0 | 5,852.4 | 5,921.1 | 5,829.8 | 21.3 | 22.7 | 60.78 | 823.7 | 281.8 | 373.1 | 338.5 | 34.63 | 10.775 | |
| 6,000.0 | 5,951.1 | 6,025.8 | 5,934.2 | 21.8 | 23.1 | 62.25 | 830.8 | 283.9 | 371.0 | 336.3 | 34.66 | 10.705 | |
| 6,100.0 | 6,049.9 | 6,130.1 | 6,038.4 | 22.2 | 23.5 | 63.94 | 836.1 | 285.5 | 367.8 | 333.2 | 34.56 | 10.641 | |
| 6,200.0 | 6,148.7 | 6,234.1 | 6,142.3 | 22.6 | 23.8 | 65.86 | 839.5 | 286.6 | 363.6 | 329.2 | 34.33 | 10.590 | |
| 6,300.0 | 6,247.4 | 6,337.6 | 6,245.8 | 23.1 | 24.0 | 68.03 | 841.1 | 287.1 | 358.5 | 324.6 | 33.93 | 10.567 | |
| 6,400.0 | 6,346.2 | 6,438.2 | 6,346.4 | 23.5 | 24.1 | 70.39 | 841.3 | 287.2 | 353.0 | 319.7 | 33.36 | 10.583 | |
| 6,500.0 | 6,445.0 | 6,537.0 | 6,445.2 | 23.9 | 24.2 | 72.79 | 841.3 | 287.2 | 348.0 | 315.3 | 32.77 | 10.622 | |
| 6,600.0 | 6,543.7 | 6,635.7 | 6,543.9 | 24.4 | 24.2 | 75.25 | 841.3 | 287.2 | 343.7 | 311.5 | 32.16 | 10.687 | |
| 6,700.0 | 6,642.5 | 6,734.5 | 6,642.7 | 24.8 | 24.3 | 77.77 | 841.3 | 287.2 | 340.0 | 308.4 | 31.56 | 10.773 | |
| 6,800.0 | 6,741.3 | 6,833.3 | 6,741.5 | 25.2 | 24.3 | 80.34 | 841.3 | 287.2 | 337.0 | 306.0 | 30.98 | 10.877 | |
| 6,859.4 | 6,800.0 | 6,892.0 | 6,800.2 | 25.5 | 24.3 | 81.89 | 841.3 | 287.2 | 335.5 | 304.9 | 30.64 | 10.949 | |
| 6,900.0 | 6,840.1 | 6,932.1 | 6,840.3 | 25.6 | 24.3 | 82.92 | 841.3 | 287.2 | 334.7 | 304.3 | 30.43 | 10.999 | |
| 7,000.0 | 6,939.1 | 7,031.1 | 6,939.3 | 26.1 | 24.4 | 85.28 | 841.3 | 287.2 | 333.2 | 303.2 | 30.02 | 11.100 | |
| 7,100.0 | 7,038.3 | 7,130.3 | 7,038.5 | 26.5 | 24.4 | 87.38 | 841.3 | 287.2 | 332.4 | 302.7 | 29.74 | 11.178 | |
| 7,200.0 | 7,137.7 | 7,229.7 | 7,137.9 | 26.9 | 24.5 | 89.20 | 841.3 | 287.2 | 332.1 | 302.5 | 29.57 | 11.231 | |
| 7,250.3 | 7,187.9 | 7,279.9 | 7,188.1 | 27.1 | 24.5 | 90.00 | 841.3 | 287.2 | 332.1 | 302.6 | 29.52 | 11.248 | |
| 7,300.0 | 7,237.3 | 7,329.3 | 7,237.5 | 27.3 | 24.5 | 90.72 | 841.3 | 287.2 | 332.1 | 302.6 | 29.50 | 11.259 | |
| 7,400.0 | 7,337.1 | 7,429.1 | 7,337.3 | 27.6 | 24.6 | 91.95 | 841.3 | 287.2 | 332.3 | 302.8 | 29.50 | 11.265 | |
| 7,500.0 | 7,436.9 | 7,528.9 | 7,437.1 | 28.0 | 24.6 | 92.88 | 841.3 | 287.2 | 332.5 | 302.9 | 29.55 | 11.250 | |
| 7,600.0 | 7,536.9 | 7,628.9 | 7,537.1 | 28.3 | 24.7 | 93.51 | 841.3 | 287.2 | 332.7 | 303.0 | 29.65 | 11.220 | |
| 7,700.0 | 7,636.9 | 7,728.9 | 7,637.1 | 28.6 | 24.7 | 93.84 | 841.3 | 287.2 | 332.8 | 303.0 | 29.78 | 11.176 | |
| 7,759.4 | 7,696.3 | 7,788.3 | 7,696.5 | 28.6 | 24.8 | 90.29 | 841.3 | 287.2 | 332.8 | 303.0 | 29.85 | 11.150 | |
| 7,800.0 | 7,736.9 | 7,828.9 | 7,737.1 | 28.7 | 24.8 | 90.29 | 841.3 | 287.2 | 332.8 | 302.9 | 29.90 | 11.132 | |
| 7,900.0 | 7,836.9 | 7,928.9 | 7,837.1 | 28.7 | 24.8 | 90.29 | 841.3 | 287.2 | 332.8 | 302.8 | 30.05 | 11.076 | |
| 8,000.0 | 7,936.9 | 8,028.9 | 7,937.1 | 28.8 | 24.9 | 90.29 | 841.3 | 287.2 | 332.8 | 302.6 | 30.20 | 11.021 | |
| 8,100.0 | 8,036.9 | 8,128.9 | 8,037.1 | 28.8 | 24.9 | 90.29 | 841.3 | 287.2 | 332.8 | 302.5 | 30.35 | 10.966 | |
| 8,200.0 | 8,136.9 | 8,228.9 | 8,137.1 | 28.9 | 25.0 | 90.29 | 841.3 | 287.2 | 332.8 | 302.3 | 30.50 | 10.911 | |
| 8,300.0 | 8,236.9 | 8,328.9 | 8,237.1 | 28.9 | 25.0 | 90.29 | 841.3 | 287.2 | 332.8 | 302.2 | 30.66 | 10.857 | |
| 8,400.0 | 8,336.9 | 8,428.9 | 8,337.1 | 29.0 | 25.1 | 90.29 | 841.3 | 287.2 | 332.8 | 302.0 | 30.81 | 10.804 | |
| 8,500.0 | 8,436.9 | 8,528.9 | 8,437.1 | 29.0 | 25.1 | 90.29 | 841.3 | 287.2 | 332.8 | 301.9 | 30.96 | 10.751 | |
| 8,600.0 | 8,536.9 | 8,628.9 | 8,537.1 | 29.1 | 25.2 | 90.29 | 841.3 | 287.2 | 332.8 | 301.7 | 31.11 | 10.699 | |
| 8,700.0 | 8,636.9 | 8,728.9 | 8,637.1 | 29.1 | 25.2 | 90.29 | 841.3 | 287.2 | 332.8 | 301.6 | 31.26 | 10.647 | |
| 8,800.0 | 8,736.9 | 8,828.9 | 8,737.1 | 29.2 | 25.3 | 90.29 | 841.3 | 287.2 | 332.8 | 301.4 | 31.41 | 10.595 | |
| 8,900.0 | 8,836.9 | 8,928.9 | 8,837.1 | 29.2 | 25.3 | 90.29 | 841.3 | 287.2 | 332.8 | 301.3 | 31.57 | 10.544 | |
| 9,000.0 | 8,936.9 | 9,028.9 | 8,937.1 | 29.3 | 25.4 | 90.29 | 841.3 | 287.2 | 332.8 | 301.1 | 31.72 | 10.494 | |
| 9,100.0 | 9,036.9 | 9,128.9 | 9,037.1 | 29.3 | 25.4 | 90.29 | 841.3 | 287.2 | 332.8 | 301.0 | 31.87 | 10.443 | |
| 9,200.0 | 9,136.9 | 9,228.9 | 9,137.1 | 29.4 | 25.5 | 90.29 | 841.3 | 287.2 | 332.8 | 300.8 | 32.02 | 10.394 | |
| 9,300.0 | 9,236.9 | 9,328.9 | 9,237.1 | 29.4 | 25.5 | 90.29 | 841.3 | 287.2 | 332.8 | 300.7 | 32.18 | 10.345 | |
| 9,400.0 | 9,336.9 | 9,428.9 | 9,337.1 | 29.5 | 25.6 | 90.29 | 841.3 | 287.2 | 332.8 | 300.5 | 32.33 | 10.296 | |
| 9,500.0 | 9,436.9 | 9,528.9 | 9,437.1 | 29.5 | 25.6 | 90.29 | 841.3 | 287.2 | 332.8 | 300.4 | 32.48 | 10.247 | |
| 9,600.0 | 9,536.9 | 9,628.9 | 9,537.1 | 29.6 | 25.7 | 90.29 | 841.3 | 287.2 | 332.8 | 300.2 | 32.63 | 10.199 | |
| 9,700.0 | 9,636.9 | 9,728.9 | 9,637.1 | 29.6 | 25.8 | 90.29 | 841.3 | 287.2 | 332.8 | 300.1 | 32.79 | 10.152 | |
| 9,800.0 | 9,736.9 | 9,828.9 | 9,737.1 | 29.7 | 25.8 | 90.29 | 841.3 | 287.2 | 332.8 | 299.9 | 32.94 | 10.105 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 703H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 | 9,836.9 | 9,928.9 | 9,837.1 | 29.7 | 25.9 | 90.29 | 841.3 | 287.2 | 332.8 | 299.8 | 33.09 | 10.058 | |
| 10,000.0 | 9,936.9 | 10,028.9 | 9,937.1 | 29.8 | 25.9 | 90.29 | 841.3 | 287.2 | 332.8 | 299.6 | 33.24 | 10.012 | |
| 10,100.0 | 10,036.9 | 10,128.9 | 10,037.1 | 29.9 | 26.0 | 90.29 | 841.3 | 287.2 | 332.8 | 299.4 | 33.40 | 9.966 | |
| 10,200.0 | 10,136.9 | 10,228.9 | 10,137.1 | 29.9 | 26.0 | 90.29 | 841.3 | 287.2 | 332.8 | 299.3 | 33.55 | 9.921 | |
| 10,300.0 | 10,236.9 | 10,328.9 | 10,237.1 | 30.0 | 26.1 | 90.29 | 841.3 | 287.2 | 332.8 | 299.1 | 33.70 | 9.876 | |
| 10,400.0 | 10,336.9 | 10,428.9 | 10,337.1 | 30.0 | 26.1 | 90.29 | 841.3 | 287.2 | 332.8 | 299.0 | 33.86 | 9.831 | |
| 10,500.0 | 10,436.9 | 10,528.9 | 10,437.1 | 30.1 | 26.2 | 90.29 | 841.3 | 287.2 | 332.8 | 298.8 | 34.01 | 9.786 | |
| 10,600.0 | 10,536.9 | 10,628.9 | 10,537.1 | 30.1 | 26.2 | 90.29 | 841.3 | 287.2 | 332.8 | 298.7 | 34.16 | 9.743 | |
| 10,700.0 | 10,636.9 | 10,728.9 | 10,637.1 | 30.2 | 26.3 | 90.29 | 841.3 | 287.2 | 332.8 | 298.5 | 34.32 | 9.699 | |
| 10,800.0 | 10,736.9 | 10,828.9 | 10,737.1 | 30.2 | 26.3 | 90.29 | 841.3 | 287.2 | 332.8 | 298.4 | 34.47 | 9.656 | |
| 10,900.0 | 10,836.9 | 10,928.9 | 10,837.1 | 30.3 | 26.4 | 90.29 | 841.3 | 287.2 | 332.8 | 298.2 | 34.62 | 9.613 | |
| 11,000.0 | 10,936.9 | 11,028.9 | 10,937.1 | 30.3 | 26.4 | 90.29 | 841.3 | 287.2 | 332.8 | 298.1 | 34.78 | 9.570 | |
| 11,100.0 | 11,036.9 | 11,128.9 | 11,037.1 | 30.4 | 26.5 | 90.29 | 841.3 | 287.2 | 332.8 | 297.9 | 34.93 | 9.528 | |
| 11,200.0 | 11,136.9 | 11,228.9 | 11,137.1 | 30.5 | 26.6 | 90.29 | 841.3 | 287.2 | 332.8 | 297.8 | 35.09 | 9.487 | |
| 11,300.0 | 11,236.9 | 11,328.9 | 11,237.1 | 30.5 | 26.6 | 90.29 | 841.3 | 287.2 | 332.8 | 297.6 | 35.24 | 9.445 | |
| 11,400.0 | 11,336.9 | 11,428.9 | 11,337.1 | 30.6 | 26.7 | 90.29 | 841.3 | 287.2 | 332.8 | 297.5 | 35.39 | 9.404 | |
| 11,500.0 | 11,436.9 | 11,528.9 | 11,437.1 | 30.6 | 26.7 | 90.29 | 841.3 | 287.2 | 332.8 | 297.3 | 35.55 | 9.363 | |
| 11,600.0 | 11,536.9 | 11,628.9 | 11,537.1 | 30.7 | 26.8 | 90.29 | 841.3 | 287.2 | 332.8 | 297.1 | 35.70 | 9.323 | |
| 11,700.0 | 11,636.9 | 11,728.9 | 11,637.1 | 30.7 | 26.8 | 90.29 | 841.3 | 287.2 | 332.8 | 297.0 | 35.86 | 9.282 | |
| 11,705.7 | 11,642.5 | 11,734.5 | 11,642.7 | 30.7 | 26.8 | 90.29 | 841.3 | 287.2 | 332.8 | 297.0 | 35.87 | 9.280 | |
| 11,725.0 | 11,661.9 | 11,753.9 | 11,662.1 | 30.7 | 26.8 | -89.42 | 841.3 | 287.2 | 332.8 | 296.9 | 35.91 | 9.269 | |
| 11,750.0 | 11,686.8 | 11,778.8 | 11,687.0 | 30.6 | 26.9 | -89.71 | 841.3 | 287.2 | 332.8 | 296.9 | 35.94 | 9.260 | |
| 11,765.5 | 11,702.2 | 11,794.2 | 11,702.4 | 30.6 | 26.9 | -90.00 | 841.3 | 287.2 | 332.8 | 296.9 | 35.97 | 9.253 | |
| 11,775.0 | 11,711.6 | 11,803.6 | 11,711.8 | 30.5 | 26.9 | -90.22 | 841.3 | 287.2 | 332.8 | 296.8 | 35.99 | 9.247 | |
| 11,800.0 | 11,736.2 | 11,828.2 | 11,736.4 | 30.5 | 26.9 | -90.94 | 841.3 | 287.2 | 332.9 | 296.8 | 36.07 | 9.228 | |
| 11,825.0 | 11,760.6 | 11,852.6 | 11,760.8 | 30.4 | 26.9 | -91.85 | 841.3 | 287.2 | 333.0 | 296.8 | 36.18 | 9.203 | |
| 11,850.0 | 11,784.7 | 11,876.7 | 11,784.9 | 30.2 | 26.9 | -92.94 | 841.3 | 287.2 | 333.3 | 297.0 | 36.34 | 9.173 | |
| 11,875.0 | 11,808.3 | 11,900.3 | 11,808.5 | 30.1 | 26.9 | -94.18 | 841.3 | 287.2 | 333.8 | 297.3 | 36.54 | 9.136 | |
| 11,900.0 | 11,831.5 | 11,923.5 | 11,831.7 | 30.0 | 26.9 | -95.56 | 841.3 | 287.2 | 334.7 | 297.9 | 36.80 | 9.094 | |
| 11,925.0 | 11,854.2 | 11,946.2 | 11,854.4 | 29.9 | 26.9 | -97.02 | 841.3 | 287.2 | 336.0 | 298.8 | 37.14 | 9.046 | |
| 11,950.0 | 11,876.3 | 11,968.3 | 11,876.5 | 29.8 | 27.0 | -98.55 | 841.3 | 287.2 | 337.7 | 300.2 | 37.55 | 8.994 | |
| 11,975.0 | 11,897.8 | 11,989.8 | 11,898.0 | 29.7 | 27.0 | -100.11 | 841.3 | 287.2 | 340.2 | 302.1 | 38.05 | 8.940 | |
| 12,000.0 | 11,918.6 | 12,010.6 | 11,918.8 | 29.6 | 27.0 | -101.65 | 841.3 | 287.2 | 343.3 | 304.7 | 38.62 | 8.889 | |
| 12,025.0 | 11,938.6 | 12,032.5 | 11,940.7 | 29.5 | 27.0 | -103.30 | 841.0 | 287.2 | 347.2 | 308.0 | 39.23 | 8.852 | |
| 12,050.0 | 11,957.8 | 12,055.4 | 11,963.6 | 29.4 | 26.9 | -104.94 | 839.6 | 287.4 | 351.9 | 312.1 | 39.82 | 8.836 | |
| 12,075.0 | 11,976.1 | 12,079.1 | 11,987.1 | 29.3 | 26.8 | -106.53 | 837.0 | 287.8 | 357.2 | 316.9 | 40.39 | 8.844 | |
| 12,100.0 | 11,993.5 | 12,103.7 | 12,011.3 | 29.2 | 26.8 | -108.08 | 833.1 | 288.4 | 363.3 | 322.4 | 40.92 | 8.878 | |
| 12,125.0 | 12,010.0 | 12,129.1 | 12,036.2 | 29.1 | 26.7 | -109.60 | 827.7 | 289.2 | 369.9 | 328.5 | 41.39 | 8.937 | |
| 12,150.0 | 12,025.4 | 12,155.7 | 12,061.8 | 29.0 | 26.6 | -111.07 | 820.8 | 290.2 | 377.2 | 335.4 | 41.79 | 9.025 | |
| 12,175.0 | 12,039.8 | 12,183.4 | 12,088.1 | 28.9 | 26.5 | -112.50 | 812.0 | 291.5 | 384.9 | 342.8 | 42.12 | 9.139 | |
| 12,200.0 | 12,053.2 | 12,212.5 | 12,115.1 | 28.9 | 26.4 | -113.90 | 801.2 | 293.1 | 393.1 | 350.7 | 42.35 | 9.281 | |
| 12,225.0 | 12,065.4 | 12,243.1 | 12,142.7 | 28.8 | 26.3 | -115.25 | 788.1 | 295.1 | 401.7 | 359.1 | 42.51 | 9.449 | |
| 12,250.0 | 12,076.4 | 12,275.4 | 12,170.8 | 28.7 | 26.1 | -116.57 | 772.4 | 297.4 | 410.5 | 367.9 | 42.58 | 9.641 | |
| 12,275.0 | 12,086.2 | 12,309.6 | 12,199.3 | 28.7 | 26.0 | -117.85 | 753.8 | 300.2 | 419.6 | 377.0 | 42.58 | 9.854 | |
| 12,300.0 | 12,094.8 | 12,345.9 | 12,228.1 | 28.6 | 25.9 | -119.07 | 731.9 | 303.5 | 428.7 | 386.2 | 42.51 | 10.086 | |
| 12,325.0 | 12,102.2 | 12,384.7 | 12,256.8 | 28.6 | 25.8 | -120.24 | 706.3 | 307.3 | 437.9 | 395.5 | 42.39 | 10.330 | |
| 12,350.0 | 12,108.4 | 12,426.0 | 12,285.0 | 28.6 | 25.6 | -121.32 | 676.4 | 311.8 | 447.0 | 404.7 | 42.25 | 10.580 | |
| 12,375.0 | 12,113.2 | 12,470.1 | 12,312.2 | 28.5 | 25.5 | -122.31 | 642.0 | 316.9 | 455.8 | 413.7 | 42.10 | 10.826 | |
| 12,400.0 | 12,116.8 | 12,517.2 | 12,337.5 | 28.5 | 25.4 | -123.17 | 602.7 | 322.8 | 464.2 | 422.2 | 41.98 | 11.059 | |
| 12,425.0 | 12,119.0 | 12,567.4 | 12,360.0 | 28.5 | 25.3 | -123.86 | 558.4 | 329.4 | 472.2 | 430.2 | 41.91 | 11.267 | |
| 12,450.0 | 12,120.0 | 12,620.7 | 12,378.5 | 28.5 | 25.2 | -124.35 | 509.0 | 336.8 | 479.4 | 437.5 | 41.91 | 11.440 | |
| 12,455.7 | 12,120.0 | 12,633.2 | 12,382.1 | 28.5 | 25.2 | -124.42 | 497.2 | 338.6 | 481.0 | 439.1 | 41.92 | 11.474 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 703H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12,500.0 | 12,120.0 | 12,735.8 | 12,399.1 | 28.5 | 25.2 | -125.13 | 397.3 | 353.5 | 490.3 | 448.3 | 42.07 | 11.655 | |
| 12,600.0 | 12,120.0 | 12,866.3 | 12,400.0 | 28.5 | 25.2 | -124.11 | 268.0 | 371.0 | 500.9 | 458.8 | 42.18 | 11.877 | |
| 12,700.0 | 12,120.0 | 12,983.0 | 12,400.0 | 28.5 | 25.3 | -123.47 | 151.8 | 381.8 | 508.1 | 465.6 | 42.51 | 11.952 | |
| 12,800.0 | 12,120.0 | 13,100.4 | 12,400.0 | 28.5 | 25.4 | -123.14 | 34.5 | 387.8 | 511.9 | 468.8 | 43.12 | 11.873 | |
| 12,900.0 | 12,120.0 | 13,211.1 | 12,400.0 | 28.5 | 25.5 | -123.09 | -76.1 | 389.4 | 512.5 | 468.7 | 43.81 | 11.700 | |
| 13,000.0 | 12,120.0 | 13,311.1 | 12,400.0 | 28.5 | 25.5 | -123.09 | -176.1 | 390.0 | 512.6 | 468.2 | 44.40 | 11.543 | |
| 13,100.0 | 12,120.0 | 13,411.1 | 12,400.0 | 28.5 | 25.6 | -123.09 | -276.1 | 390.6 | 512.6 | 467.5 | 45.06 | 11.374 | |
| 13,200.0 | 12,120.0 | 13,511.1 | 12,400.0 | 28.5 | 25.7 | -123.09 | -376.1 | 391.2 | 512.6 | 466.8 | 45.79 | 11.195 | |
| 13,300.0 | 12,120.0 | 13,611.1 | 12,400.0 | 28.5 | 25.9 | -123.08 | -476.1 | 391.9 | 512.6 | 466.0 | 46.57 | 11.007 | |
| 13,400.0 | 12,120.0 | 13,711.1 | 12,400.0 | 28.6 | 26.0 | -123.08 | -576.1 | 392.5 | 512.6 | 465.2 | 47.40 | 10.813 | |
| 13,500.0 | 12,120.0 | 13,811.1 | 12,400.0 | 28.6 | 26.2 | -123.08 | -676.1 | 393.1 | 512.6 | 464.3 | 48.30 | 10.613 | |
| 13,600.0 | 12,120.0 | 13,911.1 | 12,400.0 | 28.6 | 26.4 | -123.08 | -776.1 | 393.7 | 512.6 | 463.3 | 49.24 | 10.411 | |
| 13,700.0 | 12,120.0 | 14,011.1 | 12,400.0 | 28.6 | 26.6 | -123.08 | -876.1 | 394.3 | 512.6 | 462.4 | 50.23 | 10.206 | |
| 13,800.0 | 12,120.0 | 14,111.1 | 12,400.0 | 28.6 | 26.9 | -123.08 | -976.1 | 394.9 | 512.6 | 461.3 | 51.26 | 10.000 | |
| 13,900.0 | 12,120.0 | 14,211.1 | 12,400.0 | 28.7 | 27.2 | -123.08 | -1,076.1 | 395.6 | 512.6 | 460.3 | 52.33 | 9.795 | |
| 14,000.0 | 12,120.0 | 14,311.1 | 12,400.0 | 28.7 | 27.6 | -123.08 | -1,176.1 | 396.2 | 512.6 | 459.2 | 53.45 | 9.590 | |
| 14,100.0 | 12,120.0 | 14,411.1 | 12,400.0 | 28.7 | 28.0 | -123.08 | -1,276.1 | 396.8 | 512.6 | 458.0 | 54.60 | 9.388 | |
| 14,200.0 | 12,120.0 | 14,511.1 | 12,400.0 | 28.8 | 28.5 | -123.08 | -1,376.1 | 397.4 | 512.6 | 456.8 | 55.79 | 9.188 | |
| 14,300.0 | 12,120.0 | 14,611.1 | 12,400.0 | 28.8 | 29.0 | -123.08 | -1,476.1 | 398.0 | 512.6 | 455.6 | 57.01 | 8.992 | |
| 14,400.0 | 12,120.0 | 14,711.1 | 12,400.0 | 28.9 | 29.6 | -123.08 | -1,576.1 | 398.6 | 512.6 | 454.4 | 58.26 | 8.799 | |
| 14,500.0 | 12,120.0 | 14,811.1 | 12,400.0 | 29.0 | 30.2 | -123.08 | -1,676.1 | 399.3 | 512.6 | 453.1 | 59.54 | 8.610 | |
| 14,600.0 | 12,120.0 | 14,911.1 | 12,400.0 | 29.2 | 30.8 | -123.08 | -1,776.1 | 399.9 | 512.6 | 451.8 | 60.84 | 8.426 | |
| 14,700.0 | 12,120.0 | 15,011.1 | 12,400.0 | 29.8 | 31.5 | -123.08 | -1,876.1 | 400.5 | 512.6 | 450.5 | 62.17 | 8.245 | |
| 14,800.0 | 12,120.0 | 15,111.1 | 12,400.0 | 30.5 | 32.1 | -123.08 | -1,976.1 | 401.1 | 512.6 | 449.1 | 63.53 | 8.070 | |
| 14,900.0 | 12,120.0 | 15,211.1 | 12,400.0 | 31.3 | 32.8 | -123.08 | -2,076.1 | 401.7 | 512.6 | 447.7 | 64.90 | 7.899 | |
| 15,000.0 | 12,120.0 | 15,311.1 | 12,400.0 | 32.1 | 33.6 | -123.08 | -2,176.1 | 402.4 | 512.7 | 446.4 | 66.30 | 7.732 | |
| 15,100.0 | 12,120.0 | 15,411.1 | 12,400.0 | 32.9 | 34.3 | -123.08 | -2,276.1 | 403.0 | 512.7 | 444.9 | 67.72 | 7.571 | |
| 15,200.0 | 12,120.0 | 15,511.1 | 12,400.0 | 33.8 | 35.1 | -123.08 | -2,376.1 | 403.6 | 512.7 | 443.5 | 69.15 | 7.414 | |
| 15,300.0 | 12,120.0 | 15,611.1 | 12,400.0 | 34.6 | 35.9 | -123.08 | -2,476.1 | 404.2 | 512.7 | 442.1 | 70.60 | 7.262 | |
| 15,400.0 | 12,120.0 | 15,711.1 | 12,400.0 | 35.4 | 36.6 | -123.08 | -2,576.1 | 404.8 | 512.7 | 440.6 | 72.07 | 7.114 | |
| 15,500.0 | 12,120.0 | 15,811.1 | 12,400.0 | 36.3 | 37.4 | -123.08 | -2,676.1 | 405.4 | 512.7 | 439.1 | 73.55 | 6.971 | |
| 15,600.0 | 12,120.0 | 15,911.1 | 12,400.0 | 37.1 | 38.2 | -123.08 | -2,776.1 | 406.1 | 512.7 | 437.6 | 75.05 | 6.832 | |
| 15,700.0 | 12,120.0 | 16,011.1 | 12,400.0 | 38.0 | 39.1 | -123.08 | -2,876.1 | 406.7 | 512.7 | 436.1 | 76.55 | 6.697 | |
| 15,800.0 | 12,120.0 | 16,111.1 | 12,400.0 | 38.8 | 39.9 | -123.08 | -2,976.1 | 407.3 | 512.7 | 434.6 | 78.08 | 6.567 | |
| 15,900.0 | 12,120.0 | 16,211.1 | 12,400.0 | 39.7 | 40.7 | -123.08 | -3,076.1 | 407.9 | 512.7 | 433.1 | 79.61 | 6.440 | |
| 16,000.0 | 12,120.0 | 16,311.1 | 12,400.0 | 40.6 | 41.6 | -123.07 | -3,176.0 | 408.5 | 512.7 | 431.5 | 81.16 | 6.318 | |
| 16,100.0 | 12,120.0 | 16,411.1 | 12,400.0 | 41.5 | 42.4 | -123.07 | -3,276.0 | 409.1 | 512.7 | 430.0 | 82.71 | 6.199 | |
| 16,200.0 | 12,120.0 | 16,511.1 | 12,400.0 | 42.3 | 43.3 | -123.07 | -3,376.0 | 409.8 | 512.7 | 428.4 | 84.28 | 6.084 | |
| 16,300.0 | 12,120.0 | 16,611.1 | 12,400.0 | 43.2 | 44.1 | -123.07 | -3,476.0 | 410.4 | 512.7 | 426.9 | 85.85 | 5.972 | |
| 16,400.0 | 12,120.0 | 16,711.1 | 12,400.0 | 44.1 | 45.0 | -123.07 | -3,576.0 | 411.0 | 512.7 | 425.3 | 87.43 | 5.864 | |
| 16,500.0 | 12,120.0 | 16,811.1 | 12,400.0 | 45.0 | 45.8 | -123.07 | -3,676.0 | 411.6 | 512.7 | 423.7 | 89.03 | 5.759 | |
| 16,600.0 | 12,120.0 | 16,911.1 | 12,400.0 | 45.9 | 46.7 | -123.07 | -3,776.0 | 412.2 | 512.7 | 422.1 | 90.63 | 5.658 | |
| 16,700.0 | 12,120.0 | 17,011.1 | 12,400.0 | 46.8 | 47.6 | -123.07 | -3,876.0 | 412.9 | 512.7 | 420.5 | 92.23 | 5.559 | |
| 16,800.0 | 12,120.0 | 17,111.1 | 12,400.0 | 47.7 | 48.5 | -123.07 | -3,976.0 | 413.5 | 512.7 | 418.9 | 93.85 | 5.464 | |
| 16,900.0 | 12,120.0 | 17,211.1 | 12,400.0 | 48.6 | 49.3 | -123.07 | -4,076.0 | 414.1 | 512.7 | 417.3 | 95.47 | 5.371 | |
| 17,000.0 | 12,120.0 | 17,311.1 | 12,400.0 | 49.5 | 50.2 | -123.07 | -4,176.0 | 414.7 | 512.8 | 415.7 | 97.10 | 5.281 | |
| 17,100.0 | 12,120.0 | 17,411.1 | 12,400.0 | 50.4 | 51.1 | -123.07 | -4,276.0 | 415.3 | 512.8 | 414.0 | 98.73 | 5.194 | |
| 17,200.0 | 12,120.0 | 17,511.1 | 12,400.0 | 51.3 | 52.0 | -123.07 | -4,376.0 | 415.9 | 512.8 | 412.4 | 100.37 | 5.109 | |
| 17,300.0 | 12,120.0 | 17,611.1 | 12,400.0 | 52.2 | 52.9 | -123.07 | -4,476.0 | 416.6 | 512.8 | 410.8 | 102.01 | 5.026 | |
| 17,400.0 | 12,120.0 | 17,711.1 | 12,400.0 | 53.1 | 53.8 | -123.07 | -4,576.0 | 417.2 | 512.8 | 409.1 | 103.67 | 4.946 | |
| 17,500.0 | 12,120.0 | 17,811.1 | 12,400.0 | 54.0 | 54.7 | -123.07 | -4,676.0 | 417.8 | 512.8 | 407.5 | 105.32 | 4.869 | |
| 17,600.0 | 12,120.0 | 17,911.1 | 12,400.0 | 54.9 | 55.6 | -123.07 | -4,776.0 | 418.4 | 512.8 | 405.8 | 106.98 | 4.793 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 703H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17,700.0 | 12,120.0 | 18,011.1 | 12,400.0 | 55.9 | 56.5 | -123.07 | -4,876.0 | 419.0 | 512.8 | 404.1 | 108.65 | 4.720 | |
| 17,800.0 | 12,120.0 | 18,111.1 | 12,400.0 | 56.8 | 57.4 | -123.07 | -4,976.0 | 419.6 | 512.8 | 402.5 | 110.31 | 4.648 | |
| 17,900.0 | 12,120.0 | 18,211.1 | 12,400.0 | 57.7 | 58.3 | -123.07 | -5,076.0 | 420.3 | 512.8 | 400.8 | 111.99 | 4.579 | |
| 18,000.0 | 12,120.0 | 18,311.1 | 12,400.0 | 58.6 | 59.2 | -123.07 | -5,176.0 | 420.9 | 512.8 | 399.1 | 113.66 | 4.512 | |
| 18,100.0 | 12,120.0 | 18,411.1 | 12,400.0 | 59.5 | 60.2 | -123.07 | -5,276.0 | 421.5 | 512.8 | 397.5 | 115.35 | 4.446 | |
| 18,200.0 | 12,120.0 | 18,511.1 | 12,400.0 | 60.5 | 61.1 | -123.07 | -5,376.0 | 422.1 | 512.8 | 395.8 | 117.03 | 4.382 | |
| 18,300.0 | 12,120.0 | 18,611.1 | 12,400.0 | 61.4 | 62.0 | -123.07 | -5,476.0 | 422.7 | 512.8 | 394.1 | 118.72 | 4.320 | |
| 18,400.0 | 12,120.0 | 18,711.1 | 12,400.0 | 62.3 | 62.9 | -123.07 | -5,576.0 | 423.4 | 512.8 | 392.4 | 120.41 | 4.259 | |
| 18,500.0 | 12,120.0 | 18,811.1 | 12,400.0 | 63.2 | 63.8 | -123.07 | -5,676.0 | 424.0 | 512.8 | 390.7 | 122.10 | 4.200 | |
| 18,600.0 | 12,120.0 | 18,911.1 | 12,400.0 | 64.2 | 64.7 | -123.07 | -5,776.0 | 424.6 | 512.8 | 389.0 | 123.80 | 4.142 | |
| 18,700.0 | 12,120.0 | 19,011.1 | 12,400.0 | 65.1 | 65.7 | -123.07 | -5,876.0 | 425.2 | 512.8 | 387.3 | 125.50 | 4.086 | |
| 18,800.0 | 12,120.0 | 19,111.1 | 12,400.0 | 66.0 | 66.6 | -123.06 | -5,976.0 | 425.8 | 512.8 | 385.6 | 127.21 | 4.032 | |
| 18,900.0 | 12,120.0 | 19,211.1 | 12,400.0 | 67.0 | 67.5 | -123.06 | -6,076.0 | 426.4 | 512.8 | 383.9 | 128.91 | 3.978 | |
| 19,000.0 | 12,120.0 | 19,311.1 | 12,400.0 | 67.9 | 68.4 | -123.06 | -6,176.0 | 427.1 | 512.9 | 382.2 | 130.62 | 3.926 | |
| 19,100.0 | 12,120.0 | 19,411.1 | 12,400.0 | 68.8 | 69.4 | -123.06 | -6,276.0 | 427.7 | 512.9 | 380.5 | 132.33 | 3.876 | |
| 19,200.0 | 12,120.0 | 19,511.1 | 12,400.0 | 69.8 | 70.3 | -123.06 | -6,376.0 | 428.3 | 512.9 | 378.8 | 134.05 | 3.826 | |
| 19,300.0 | 12,120.0 | 19,611.1 | 12,400.0 | 70.7 | 71.2 | -123.06 | -6,476.0 | 428.9 | 512.9 | 377.1 | 135.76 | 3.778 | |
| 19,400.0 | 12,120.0 | 19,711.1 | 12,400.0 | 71.6 | 72.1 | -123.06 | -6,576.0 | 429.5 | 512.9 | 375.4 | 137.48 | 3.731 | |
| 19,500.0 | 12,120.0 | 19,811.1 | 12,400.0 | 72.6 | 73.1 | -123.06 | -6,676.0 | 430.1 | 512.9 | 373.7 | 139.20 | 3.684 | |
| 19,600.0 | 12,120.0 | 19,911.1 | 12,400.0 | 73.5 | 74.0 | -123.06 | -6,776.0 | 430.8 | 512.9 | 372.0 | 140.92 | 3.639 | |
| 19,700.0 | 12,120.0 | 20,011.1 | 12,400.0 | 74.4 | 74.9 | -123.06 | -6,876.0 | 431.4 | 512.9 | 370.2 | 142.65 | 3.595 | |
| 19,800.0 | 12,120.0 | 20,111.1 | 12,400.0 | 75.4 | 75.9 | -123.06 | -6,976.0 | 432.0 | 512.9 | 368.5 | 144.37 | 3.553 | |
| 19,900.0 | 12,120.0 | 20,211.1 | 12,400.0 | 76.3 | 76.8 | -123.06 | -7,076.0 | 432.6 | 512.9 | 366.8 | 146.10 | 3.511 | |
| 20,000.0 | 12,120.0 | 20,311.1 | 12,400.0 | 77.3 | 77.7 | -123.06 | -7,176.0 | 433.2 | 512.9 | 365.1 | 147.83 | 3.469 | |
| 20,100.0 | 12,120.0 | 20,411.1 | 12,400.0 | 78.2 | 78.7 | -123.06 | -7,276.0 | 433.9 | 512.9 | 363.3 | 149.56 | 3.429 | |
| 20,200.0 | 12,120.0 | 20,511.1 | 12,400.0 | 79.1 | 79.6 | -123.06 | -7,376.0 | 434.5 | 512.9 | 361.6 | 151.30 | 3.390 | |
| 20,300.0 | 12,120.0 | 20,611.1 | 12,400.0 | 80.1 | 80.5 | -123.06 | -7,476.0 | 435.1 | 512.9 | 359.9 | 153.03 | 3.352 | |
| 20,400.0 | 12,120.0 | 20,711.1 | 12,400.0 | 81.0 | 81.5 | -123.06 | -7,576.0 | 435.7 | 512.9 | 358.2 | 154.77 | 3.314 | |
| 20,500.0 | 12,120.0 | 20,811.1 | 12,400.0 | 82.0 | 82.4 | -123.06 | -7,676.0 | 436.3 | 512.9 | 356.4 | 156.51 | 3.277 | |
| 20,600.0 | 12,120.0 | 20,911.1 | 12,400.0 | 82.9 | 83.3 | -123.06 | -7,776.0 | 436.9 | 512.9 | 354.7 | 158.25 | 3.241 | |
| 20,700.0 | 12,120.0 | 21,011.1 | 12,400.0 | 83.9 | 84.3 | -123.06 | -7,876.0 | 437.6 | 512.9 | 352.9 | 159.99 | 3.206 | |
| 20,800.0 | 12,120.0 | 21,111.1 | 12,400.0 | 84.8 | 85.2 | -123.06 | -7,976.0 | 438.2 | 512.9 | 351.2 | 161.73 | 3.172 | |
| 20,900.0 | 12,120.0 | 21,211.1 | 12,400.0 | 85.7 | 86.2 | -123.06 | -8,076.0 | 438.8 | 512.9 | 349.5 | 163.47 | 3.138 | |
| 21,000.0 | 12,120.0 | 21,311.1 | 12,400.0 | 86.7 | 87.1 | -123.06 | -8,176.0 | 439.4 | 513.0 | 347.7 | 165.22 | 3.105 | |
| 21,100.0 | 12,120.0 | 21,411.1 | 12,400.0 | 87.6 | 88.0 | -123.06 | -8,276.0 | 440.0 | 513.0 | 346.0 | 166.96 | 3.072 | |
| 21,200.0 | 12,120.0 | 21,511.1 | 12,400.0 | 88.6 | 89.0 | -123.06 | -8,375.9 | 440.7 | 513.0 | 344.3 | 168.71 | 3.040 | |
| 21,300.0 | 12,120.0 | 21,611.1 | 12,400.0 | 89.5 | 89.9 | -123.06 | -8,475.9 | 441.3 | 513.0 | 342.5 | 170.46 | 3.009 | |
| 21,400.0 | 12,120.0 | 21,711.1 | 12,400.0 | 90.5 | 90.9 | -123.06 | -8,575.9 | 441.9 | 513.0 | 340.8 | 172.21 | 2.979 | Normal Operations |
| 21,500.0 | 12,120.0 | 21,811.1 | 12,400.0 | 91.4 | 91.8 | -123.05 | -8,675.9 | 442.5 | 513.0 | 339.0 | 173.96 | 2.949 | Normal Operations |
| 21,600.0 | 12,120.0 | 21,911.1 | 12,400.0 | 92.4 | 92.8 | -123.05 | -8,775.9 | 443.1 | 513.0 | 337.3 | 175.71 | 2.919 | Normal Operations |
| 21,700.0 | 12,120.0 | 22,011.1 | 12,400.0 | 93.3 | 93.7 | -123.05 | -8,875.9 | 443.7 | 513.0 | 335.5 | 177.46 | 2.891 | Normal Operations |
| 21,800.0 | 12,120.0 | 22,111.1 | 12,400.0 | 94.3 | 94.6 | -123.05 | -8,975.9 | 444.4 | 513.0 | 333.8 | 179.22 | 2.862 | Normal Operations |
| 21,900.0 | 12,120.0 | 22,211.1 | 12,400.0 | 95.2 | 95.6 | -123.05 | -9,075.9 | 445.0 | 513.0 | 332.0 | 180.97 | 2.835 | Normal Operations |
| 22,000.0 | 12,120.0 | 22,311.1 | 12,400.0 | 96.2 | 96.5 | -123.05 | -9,175.9 | 445.6 | 513.0 | 330.3 | 182.73 | 2.807 | Normal Operations |
| 22,100.0 | 12,120.0 | 22,411.1 | 12,400.0 | 97.1 | 97.5 | -123.05 | -9,275.9 | 446.2 | 513.0 | 328.5 | 184.49 | 2.781 | Normal Operations |
| 22,200.0 | 12,120.0 | 22,511.1 | 12,400.0 | 98.1 | 98.4 | -123.05 | -9,375.9 | 446.8 | 513.0 | 326.8 | 186.24 | 2.755 | Normal Operations |
| 22,300.0 | 12,120.0 | 22,611.1 | 12,400.0 | 99.0 | 99.4 | -123.05 | -9,475.9 | 447.4 | 513.0 | 325.0 | 188.00 | 2.729 | Normal Operations |
| 22,400.0 | 12,120.0 | 22,711.1 | 12,400.0 | 100.0 | 100.3 | -123.05 | -9,575.9 | 448.1 | 513.0 | 323.3 | 189.76 | 2.704 | Normal Operations |
| 22,500.0 | 12,120.0 | 22,811.1 | 12,400.0 | 100.9 | 101.3 | -123.05 | -9,675.9 | 448.7 | 513.0 | 321.5 | 191.52 | 2.679 | Normal Operations |
| 22,501.5 | 12,120.0 | 22,812.6 | 12,400.0 | 100.9 | 101.3 | -123.05 | -9,677.4 | 448.7 | 513.0 | 321.5 | 191.55 | 2.678 | Normal Operations |
| 22,519.8 | 12,120.0 | 22,830.4 | 12,400.0 | 101.1 | 101.5 | -123.05 | -9,695.2 | 448.8 | 513.0 | 321.2 | 191.84 | 2.674 | 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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1 **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 | 0.5 | 0.5 | 3.0 | 3.0 | 0.00 | 44.9 | 0.0 | 44.9 | | | | |
| 100.0 | 100.0 | 100.5 | 100.5 | 3.1 | 3.1 | 0.00 | 44.9 | 0.0 | 44.9 | 38.3 | 6.62 | 6.783 | |
| 200.0 | 200.0 | 200.5 | 200.5 | 3.3 | 3.3 | 0.00 | 44.9 | 0.0 | 44.9 | 37.8 | 7.07 | 6.348 | |
| 300.0 | 300.0 | 300.5 | 300.5 | 3.5 | 3.5 | 0.00 | 44.9 | 0.0 | 44.9 | 37.4 | 7.50 | 5.987 | |
| 400.0 | 400.0 | 400.5 | 400.5 | 3.7 | 3.7 | 0.00 | 44.9 | 0.0 | 44.9 | 37.0 | 7.91 | 5.679 | |
| 500.0 | 500.0 | 500.5 | 500.5 | 3.9 | 3.9 | 0.00 | 44.9 | 0.0 | 44.9 | 36.6 | 8.29 | 5.414 | |
| 600.0 | 600.0 | 600.5 | 600.5 | 4.1 | 4.1 | 0.00 | 44.9 | 0.0 | 44.9 | 36.2 | 8.67 | 5.181 | |
| 700.0 | 700.0 | 700.5 | 700.5 | 4.3 | 4.3 | 0.00 | 44.9 | 0.0 | 44.9 | 35.9 | 9.03 | 4.974 | |
| 800.0 | 800.0 | 800.5 | 800.5 | 4.5 | 4.5 | 0.00 | 44.9 | 0.0 | 44.9 | 35.5 | 9.37 | 4.790 | |
| 900.0 | 900.0 | 900.5 | 900.5 | 4.7 | 4.7 | 0.00 | 44.9 | 0.0 | 44.9 | 35.2 | 9.71 | 4.623 | |
| 966.5 | 966.5 | 967.0 | 967.0 | 4.8 | 4.8 | 0.00 | 44.9 | 0.0 | 44.9 | 35.0 | 9.93 | 4.522 | CC |
| 1,000.0 | 1,000.0 | 1,000.0 | 1,000.0 | 4.8 | 4.8 | 0.00 | 44.9 | 0.0 | 44.9 | 34.9 | 10.04 | 4.473 | ES |
| 1,100.0 | 1,100.0 | 1,099.2 | 1,099.2 | 5.0 | 5.1 | -1.28 | 46.3 | -1.0 | 46.3 | 35.9 | 10.42 | 4.444 | |
| 1,200.0 | 1,200.0 | 1,197.7 | 1,197.5 | 5.2 | 5.4 | -4.66 | 50.3 | -4.1 | 50.6 | 39.8 | 10.80 | 4.684 | |
| 1,300.0 | 1,300.0 | 1,295.7 | 1,295.2 | 5.3 | 5.6 | -9.13 | 57.1 | -9.2 | 58.1 | 46.9 | 11.20 | 5.185 | |
| 1,400.0 | 1,400.0 | 1,393.1 | 1,391.8 | 5.5 | 5.9 | -13.71 | 66.4 | -16.2 | 68.9 | 57.3 | 11.61 | 5.936 | |
| 1,500.0 | 1,500.0 | 1,489.5 | 1,487.1 | 5.6 | 6.2 | -17.80 | 78.2 | -25.1 | 83.2 | 71.2 | 12.03 | 6.919 | |
| 1,600.0 | 1,600.0 | 1,587.8 | 1,583.9 | 5.8 | 6.5 | -31.24 | 91.8 | -35.4 | 99.1 | 86.6 | 12.45 | 7.958 | |
| 1,700.0 | 1,700.0 | 1,686.5 | 1,681.2 | 5.9 | 6.8 | -34.21 | 105.5 | -45.7 | 113.7 | 100.9 | 12.89 | 8.825 | |
| 1,800.0 | 1,799.9 | 1,785.4 | 1,778.6 | 6.1 | 7.0 | -36.96 | 119.2 | -56.0 | 127.3 | 113.9 | 13.36 | 9.530 | |
| 1,900.0 | 1,899.7 | 1,884.5 | 1,876.1 | 6.3 | 7.4 | -39.61 | 133.0 | -66.4 | 139.7 | 125.9 | 13.85 | 10.089 | |
| 2,000.0 | 1,999.4 | 1,983.6 | 1,973.7 | 6.5 | 7.7 | -42.25 | 146.7 | -76.7 | 151.2 | 136.8 | 14.36 | 10.525 | |
| 2,100.0 | 2,098.8 | 2,082.8 | 2,071.5 | 6.8 | 8.0 | -36.67 | 160.5 | -87.1 | 160.6 | 145.7 | 14.93 | 10.759 | |
| 2,200.0 | 2,197.9 | 2,182.3 | 2,169.4 | 7.1 | 8.4 | -34.69 | 174.3 | -97.5 | 167.1 | 151.5 | 15.51 | 10.770 | |
| 2,215.1 | 2,212.9 | 2,197.4 | 2,184.2 | 7.1 | 8.4 | -34.58 | 176.4 | -99.1 | 167.8 | 152.2 | 15.58 | 10.767 | |
| 2,300.0 | 2,296.7 | 2,281.8 | 2,267.4 | 7.3 | 8.7 | -36.98 | 188.1 | -107.9 | 171.8 | 155.7 | 16.06 | 10.699 | |
| 2,400.0 | 2,395.5 | 2,381.4 | 2,365.5 | 7.6 | 9.1 | -39.65 | 201.9 | -118.3 | 176.9 | 160.3 | 16.61 | 10.650 | |
| 2,500.0 | 2,494.2 | 2,480.9 | 2,463.5 | 7.9 | 9.5 | -42.18 | 215.7 | -128.7 | 182.3 | 165.2 | 17.16 | 10.628 | |
| 2,600.0 | 2,593.0 | 2,580.5 | 2,561.5 | 8.2 | 9.8 | -44.55 | 229.5 | -139.1 | 188.1 | 170.4 | 17.70 | 10.630 | |
| 2,700.0 | 2,691.8 | 2,680.0 | 2,659.5 | 8.5 | 10.2 | -46.78 | 243.3 | -149.5 | 194.2 | 176.0 | 18.23 | 10.653 | |
| 2,800.0 | 2,790.5 | 2,779.5 | 2,757.6 | 8.9 | 10.6 | -48.87 | 257.1 | -159.9 | 200.6 | 181.8 | 18.76 | 10.694 | |
| 2,900.0 | 2,889.3 | 2,879.1 | 2,855.6 | 9.2 | 11.0 | -50.83 | 270.9 | -170.3 | 207.2 | 187.9 | 19.27 | 10.752 | |
| 3,000.0 | 2,988.1 | 2,978.6 | 2,953.6 | 9.6 | 11.4 | -52.67 | 284.7 | -180.7 | 214.1 | 194.3 | 19.78 | 10.823 | |
| 3,100.0 | 3,086.8 | 3,078.1 | 3,051.6 | 9.9 | 11.8 | -54.39 | 298.5 | -191.1 | 221.1 | 200.9 | 20.28 | 10.905 | |
| 3,200.0 | 3,185.6 | 3,177.7 | 3,149.6 | 10.3 | 12.2 | -56.01 | 312.3 | -201.5 | 228.4 | 207.6 | 20.77 | 10.997 | |
| 3,300.0 | 3,284.4 | 3,277.2 | 3,247.7 | 10.7 | 12.6 | -57.52 | 326.1 | -211.9 | 235.8 | 214.5 | 21.25 | 11.097 | |
| 3,400.0 | 3,383.1 | 3,376.7 | 3,345.7 | 11.0 | 13.0 | -58.95 | 339.9 | -222.3 | 243.4 | 221.6 | 21.72 | 11.204 | |
| 3,500.0 | 3,481.9 | 3,476.3 | 3,443.7 | 11.4 | 13.5 | -60.28 | 353.7 | -232.7 | 251.1 | 228.9 | 22.19 | 11.316 | |
| 3,600.0 | 3,580.7 | 3,575.8 | 3,541.7 | 11.8 | 13.9 | -61.54 | 367.5 | -243.1 | 258.9 | 236.3 | 22.65 | 11.432 | |
| 3,700.0 | 3,679.5 | 3,675.4 | 3,639.8 | 12.2 | 14.3 | -62.72 | 381.3 | -253.5 | 266.9 | 243.8 | 23.10 | 11.552 | |
| 3,800.0 | 3,778.2 | 3,774.9 | 3,737.8 | 12.6 | 14.7 | -63.83 | 395.1 | -263.9 | 274.9 | 251.4 | 23.55 | 11.674 | |
| 3,900.0 | 3,877.0 | 3,874.4 | 3,835.8 | 13.0 | 15.2 | -64.88 | 408.9 | -274.3 | 283.1 | 259.1 | 23.99 | 11.798 | |
| 4,000.0 | 3,975.8 | 3,974.0 | 3,933.8 | 13.4 | 15.6 | -65.87 | 422.8 | -284.7 | 291.3 | 266.9 | 24.43 | 11.924 | |
| 4,100.0 | 4,074.5 | 4,073.5 | 4,031.9 | 13.8 | 16.0 | -66.81 | 436.6 | -295.1 | 299.7 | 274.8 | 24.87 | 12.050 | |
| 4,200.0 | 4,173.3 | 4,173.0 | 4,129.9 | 14.2 | 16.4 | -67.69 | 450.4 | -305.5 | 308.1 | 282.8 | 25.30 | 12.176 | |
| 4,300.0 | 4,272.1 | 4,272.6 | 4,227.9 | 14.6 | 16.9 | -68.53 | 464.2 | -315.9 | 316.5 | 290.8 | 25.73 | 12.302 | |
| 4,400.0 | 4,370.8 | 4,372.1 | 4,325.9 | 15.0 | 17.3 | -69.33 | 478.0 | -326.3 | 325.1 | 298.9 | 26.16 | 12.428 | |
| 4,500.0 | 4,469.6 | 4,471.6 | 4,424.0 | 15.4 | 17.7 | -70.08 | 491.8 | -336.7 | 333.7 | 307.1 | 26.58 | 12.553 | |
| 4,600.0 | 4,568.4 | 4,571.2 | 4,522.0 | 15.8 | 18.2 | -70.79 | 505.6 | -347.1 | 342.3 | 315.3 | 27.00 | 12.677 | |
| 4,700.0 | 4,667.1 | 4,670.7 | 4,620.0 | 16.2 | 18.6 | -71.47 | 519.4 | -357.5 | 351.0 | 323.6 | 27.42 | 12.800 | |
| 4,800.0 | 4,765.9 | 4,770.2 | 4,718.0 | 16.7 | 19.0 | -72.12 | 533.2 | -367.9 | 359.8 | 331.9 | 27.84 | 12.922 | |
| 4,900.0 | 4,864.7 | 4,869.8 | 4,816.1 | 17.1 | 19.5 | -72.74 | 547.0 | -378.3 | 368.6 | 340.3 | 28.26 | 13.043 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**Offset Well Error:** 3.0 usft

**Rule Assigned:**

| 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 | 4,963.4 | 4,969.3 | 4,914.1 | 17.5 | 19.9 | -73.33 | 560.8 | -388.8 | 377.4 | 348.7 | 28.67 | 13.162 | |
| 5,100.0 | 5,062.2 | 5,068.9 | 5,012.1 | 17.9 | 20.4 | -73.89 | 574.6 | -399.2 | 386.3 | 357.2 | 29.09 | 13.279 | |
| 5,200.0 | 5,161.0 | 5,168.4 | 5,110.1 | 18.3 | 20.8 | -74.42 | 588.4 | -409.6 | 395.2 | 365.7 | 29.50 | 13.395 | |
| 5,300.0 | 5,259.8 | 5,267.9 | 5,208.2 | 18.8 | 21.2 | -74.94 | 602.2 | -420.0 | 404.1 | 374.2 | 29.91 | 13.510 | |
| 5,400.0 | 5,358.5 | 5,367.5 | 5,306.2 | 19.2 | 21.7 | -75.43 | 616.0 | -430.4 | 413.1 | 382.7 | 30.32 | 13.622 | |
| 5,500.0 | 5,457.3 | 5,467.0 | 5,404.2 | 19.6 | 22.1 | -75.89 | 629.8 | -440.8 | 422.1 | 391.3 | 30.73 | 13.733 | |
| 5,600.0 | 5,556.1 | 5,566.5 | 5,502.2 | 20.0 | 22.6 | -76.34 | 643.6 | -451.2 | 431.1 | 399.9 | 31.14 | 13.842 | |
| 5,700.0 | 5,654.8 | 5,666.1 | 5,600.2 | 20.5 | 23.0 | -76.78 | 657.4 | -461.6 | 440.1 | 408.6 | 31.55 | 13.949 | |
| 5,800.0 | 5,753.6 | 5,765.6 | 5,698.3 | 20.9 | 23.4 | -77.19 | 671.2 | -472.0 | 449.2 | 417.3 | 31.96 | 14.054 | |
| 5,900.0 | 5,852.4 | 5,865.1 | 5,796.3 | 21.3 | 23.9 | -77.59 | 685.0 | -482.4 | 458.3 | 425.9 | 32.37 | 14.158 | |
| 6,000.0 | 5,951.1 | 5,964.7 | 5,894.3 | 21.8 | 24.3 | -77.97 | 698.8 | -492.8 | 467.4 | 434.6 | 32.78 | 14.259 | |
| 6,100.0 | 6,049.9 | 6,064.2 | 5,992.3 | 22.2 | 24.8 | -78.34 | 712.6 | -503.2 | 476.6 | 443.4 | 33.19 | 14.359 | |
| 6,200.0 | 6,148.7 | 6,163.8 | 6,090.4 | 22.6 | 25.2 | -78.69 | 726.4 | -513.6 | 485.7 | 452.1 | 33.60 | 14.458 | |
| 6,300.0 | 6,247.4 | 6,263.3 | 6,188.4 | 23.1 | 25.7 | -79.03 | 740.2 | -524.0 | 494.9 | 460.9 | 34.00 | 14.554 | |
| 6,400.0 | 6,346.2 | 6,362.8 | 6,286.4 | 23.5 | 26.1 | -79.36 | 754.0 | -534.4 | 504.1 | 469.7 | 34.41 | 14.649 | |
| 6,500.0 | 6,445.0 | 6,463.0 | 6,385.1 | 23.9 | 26.5 | -79.68 | 767.9 | -544.8 | 513.3 | 478.5 | 34.81 | 14.747 | |
| 6,600.0 | 6,543.7 | 6,569.1 | 6,489.8 | 24.4 | 27.0 | -80.10 | 781.7 | -555.2 | 521.8 | 486.6 | 35.20 | 14.824 | |
| 6,700.0 | 6,642.5 | 6,675.3 | 6,594.9 | 24.8 | 27.5 | -80.66 | 794.0 | -564.5 | 529.0 | 493.5 | 35.52 | 14.892 | |
| 6,800.0 | 6,741.3 | 6,781.5 | 6,700.2 | 25.2 | 27.9 | -81.36 | 804.7 | -572.5 | 535.1 | 499.3 | 35.78 | 14.955 | |
| 6,859.4 | 6,800.0 | 6,844.7 | 6,763.0 | 25.5 | 28.2 | -81.85 | 810.3 | -576.8 | 538.1 | 502.3 | 35.88 | 14.997 | |
| 6,900.0 | 6,840.1 | 6,887.7 | 6,805.8 | 25.6 | 28.3 | -82.21 | 813.8 | -579.4 | 540.0 | 504.1 | 35.94 | 15.025 | |
| 7,000.0 | 6,939.1 | 6,993.9 | 6,911.5 | 26.1 | 28.7 | -83.06 | 821.4 | -585.1 | 544.0 | 507.9 | 36.10 | 15.071 | |
| 7,100.0 | 7,038.3 | 7,100.1 | 7,017.5 | 26.5 | 29.1 | -83.86 | 827.4 | -589.6 | 547.2 | 511.0 | 36.23 | 15.101 | |
| 7,200.0 | 7,137.7 | 7,206.2 | 7,123.5 | 26.9 | 29.5 | -84.60 | 831.8 | -593.0 | 549.4 | 513.1 | 36.35 | 15.117 | |
| 7,300.0 | 7,237.3 | 7,312.4 | 7,229.5 | 27.3 | 29.8 | -85.30 | 834.7 | -595.1 | 550.7 | 514.3 | 36.43 | 15.120 | |
| 7,400.0 | 7,337.1 | 7,418.4 | 7,335.6 | 27.6 | 30.1 | -85.96 | 836.0 | -596.1 | 551.1 | 514.7 | 36.45 | 15.118 | |
| 7,500.0 | 7,436.9 | 7,520.3 | 7,437.4 | 28.0 | 30.1 | -86.52 | 836.0 | -596.2 | 550.8 | 514.4 | 36.40 | 15.135 | |
| 7,600.0 | 7,536.9 | 7,620.2 | 7,537.4 | 28.3 | 30.2 | -86.90 | 836.0 | -596.2 | 550.6 | 514.2 | 36.40 | 15.126 | |
| 7,700.0 | 7,636.9 | 7,720.2 | 7,637.4 | 28.6 | 30.2 | -87.09 | 836.0 | -596.2 | 550.5 | 514.1 | 36.47 | 15.097 | |
| 7,759.4 | 7,696.3 | 7,779.7 | 7,696.8 | 28.6 | 30.2 | -90.73 | 836.0 | -596.2 | 550.5 | 514.0 | 36.52 | 15.076 | |
| 7,800.0 | 7,736.9 | 7,820.2 | 7,737.4 | 28.7 | 30.3 | -90.73 | 836.0 | -596.2 | 550.5 | 514.0 | 36.55 | 15.060 | |
| 7,900.0 | 7,836.9 | 7,920.2 | 7,837.4 | 28.7 | 30.3 | -90.73 | 836.0 | -596.2 | 550.5 | 513.8 | 36.68 | 15.011 | |
| 8,000.0 | 7,936.9 | 8,020.2 | 7,937.4 | 28.8 | 30.3 | -90.73 | 836.0 | -596.2 | 550.5 | 513.7 | 36.80 | 14.961 | |
| 8,100.0 | 8,036.9 | 8,120.2 | 8,037.4 | 28.8 | 30.4 | -90.73 | 836.0 | -596.2 | 550.5 | 513.6 | 36.92 | 14.912 | |
| 8,200.0 | 8,136.9 | 8,220.2 | 8,137.4 | 28.9 | 30.4 | -90.73 | 836.0 | -596.2 | 550.5 | 513.5 | 37.04 | 14.863 | |
| 8,300.0 | 8,236.9 | 8,320.2 | 8,237.4 | 28.9 | 30.5 | -90.73 | 836.0 | -596.2 | 550.5 | 513.4 | 37.16 | 14.814 | |
| 8,400.0 | 8,336.9 | 8,420.2 | 8,337.4 | 29.0 | 30.5 | -90.73 | 836.0 | -596.2 | 550.5 | 513.2 | 37.28 | 14.765 | |
| 8,500.0 | 8,436.9 | 8,520.2 | 8,437.4 | 29.0 | 30.5 | -90.73 | 836.0 | -596.2 | 550.5 | 513.1 | 37.41 | 14.717 | |
| 8,600.0 | 8,536.9 | 8,620.2 | 8,537.4 | 29.1 | 30.6 | -90.73 | 836.0 | -596.2 | 550.5 | 513.0 | 37.53 | 14.669 | |
| 8,700.0 | 8,636.9 | 8,720.2 | 8,637.4 | 29.1 | 30.6 | -90.73 | 836.0 | -596.2 | 550.5 | 512.9 | 37.65 | 14.620 | |
| 8,800.0 | 8,736.9 | 8,820.2 | 8,737.4 | 29.2 | 30.6 | -90.73 | 836.0 | -596.2 | 550.5 | 512.7 | 37.78 | 14.573 | |
| 8,900.0 | 8,836.9 | 8,920.2 | 8,837.4 | 29.2 | 30.7 | -90.73 | 836.0 | -596.2 | 550.5 | 512.6 | 37.90 | 14.525 | |
| 9,000.0 | 8,936.9 | 9,020.2 | 8,937.4 | 29.3 | 30.7 | -90.73 | 836.0 | -596.2 | 550.5 | 512.5 | 38.03 | 14.477 | |
| 9,100.0 | 9,036.9 | 9,120.2 | 9,037.4 | 29.3 | 30.8 | -90.73 | 836.0 | -596.2 | 550.5 | 512.4 | 38.15 | 14.430 | |
| 9,200.0 | 9,136.9 | 9,220.2 | 9,137.4 | 29.4 | 30.8 | -90.73 | 836.0 | -596.2 | 550.5 | 512.2 | 38.28 | 14.383 | |
| 9,300.0 | 9,236.9 | 9,320.2 | 9,237.4 | 29.4 | 30.8 | -90.73 | 836.0 | -596.2 | 550.5 | 512.1 | 38.40 | 14.336 | |
| 9,400.0 | 9,336.9 | 9,420.2 | 9,337.4 | 29.5 | 30.9 | -90.73 | 836.0 | -596.2 | 550.5 | 512.0 | 38.53 | 14.290 | |
| 9,500.0 | 9,436.9 | 9,520.2 | 9,437.4 | 29.5 | 30.9 | -90.73 | 836.0 | -596.2 | 550.5 | 511.9 | 38.65 | 14.243 | |
| 9,600.0 | 9,536.9 | 9,620.2 | 9,537.4 | 29.6 | 31.0 | -90.73 | 836.0 | -596.2 | 550.5 | 511.7 | 38.78 | 14.197 | |
| 9,700.0 | 9,636.9 | 9,720.2 | 9,637.4 | 29.6 | 31.0 | -90.73 | 836.0 | -596.2 | 550.5 | 511.6 | 38.90 | 14.151 | |
| 9,800.0 | 9,736.9 | 9,820.2 | 9,737.4 | 29.7 | 31.1 | -90.73 | 836.0 | -596.2 | 550.5 | 511.5 | 39.03 | 14.105 | |
| 9,900.0 | 9,836.9 | 9,920.2 | 9,837.4 | 29.7 | 31.1 | -90.73 | 836.0 | -596.2 | 550.5 | 511.4 | 39.16 | 14.060 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1 **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 | 9,936.9 | 10,020.2 | 9,937.4 | 29.8 | 31.1 | -90.73 | 836.0 | -596.2 | 550.5 | 511.2 | 39.28 | 14.014 | |
| 10,100.0 | 10,036.9 | 10,120.2 | 10,037.4 | 29.9 | 31.2 | -90.73 | 836.0 | -596.2 | 550.5 | 511.1 | 39.41 | 13.969 | |
| 10,200.0 | 10,136.9 | 10,220.2 | 10,137.4 | 29.9 | 31.2 | -90.73 | 836.0 | -596.2 | 550.5 | 511.0 | 39.54 | 13.924 | |
| 10,300.0 | 10,236.9 | 10,320.2 | 10,237.4 | 30.0 | 31.3 | -90.73 | 836.0 | -596.2 | 550.5 | 510.9 | 39.67 | 13.879 | |
| 10,400.0 | 10,336.9 | 10,420.2 | 10,337.4 | 30.0 | 31.3 | -90.73 | 836.0 | -596.2 | 550.5 | 510.7 | 39.79 | 13.834 | |
| 10,500.0 | 10,436.9 | 10,520.2 | 10,437.4 | 30.1 | 31.3 | -90.73 | 836.0 | -596.2 | 550.5 | 510.6 | 39.92 | 13.790 | |
| 10,600.0 | 10,536.9 | 10,620.2 | 10,537.4 | 30.1 | 31.4 | -90.73 | 836.0 | -596.2 | 550.5 | 510.5 | 40.05 | 13.746 | |
| 10,700.0 | 10,636.9 | 10,720.2 | 10,637.4 | 30.2 | 31.4 | -90.73 | 836.0 | -596.2 | 550.5 | 510.3 | 40.18 | 13.702 | |
| 10,800.0 | 10,736.9 | 10,820.2 | 10,737.4 | 30.2 | 31.5 | -90.73 | 836.0 | -596.2 | 550.5 | 510.2 | 40.31 | 13.658 | |
| 10,900.0 | 10,836.9 | 10,920.2 | 10,837.4 | 30.3 | 31.5 | -90.73 | 836.0 | -596.2 | 550.5 | 510.1 | 40.44 | 13.614 | |
| 11,000.0 | 10,936.9 | 11,020.2 | 10,937.4 | 30.3 | 31.6 | -90.73 | 836.0 | -596.2 | 550.5 | 510.0 | 40.57 | 13.571 | |
| 11,100.0 | 11,036.9 | 11,120.2 | 11,037.4 | 30.4 | 31.6 | -90.73 | 836.0 | -596.2 | 550.5 | 509.8 | 40.70 | 13.528 | |
| 11,200.0 | 11,136.9 | 11,220.2 | 11,137.4 | 30.5 | 31.6 | -90.73 | 836.0 | -596.2 | 550.5 | 509.7 | 40.82 | 13.485 | |
| 11,300.0 | 11,236.9 | 11,320.2 | 11,237.4 | 30.5 | 31.7 | -90.73 | 836.0 | -596.2 | 550.5 | 509.6 | 40.95 | 13.442 | |
| 11,400.0 | 11,336.9 | 11,420.2 | 11,337.4 | 30.6 | 31.7 | -90.73 | 836.0 | -596.2 | 550.5 | 509.4 | 41.08 | 13.399 | |
| 11,500.0 | 11,436.9 | 11,520.2 | 11,437.4 | 30.6 | 31.8 | -90.73 | 836.0 | -596.2 | 550.5 | 509.3 | 41.22 | 13.357 | |
| 11,600.0 | 11,536.9 | 11,620.2 | 11,537.4 | 30.7 | 31.8 | -90.73 | 836.0 | -596.2 | 550.5 | 509.2 | 41.35 | 13.315 | |
| 11,700.0 | 11,636.9 | 11,720.2 | 11,637.4 | 30.7 | 31.9 | -90.73 | 836.0 | -596.2 | 550.5 | 509.0 | 41.48 | 13.272 | |
| 11,705.7 | 11,642.5 | 11,725.9 | 11,643.0 | 30.7 | 31.9 | -90.73 | 836.0 | -596.2 | 550.5 | 509.0 | 41.49 | 13.269 | |
| 11,725.0 | 11,661.9 | 11,745.2 | 11,662.4 | 30.7 | 31.9 | 89.67 | 836.0 | -596.2 | 550.5 | 509.0 | 41.53 | 13.256 | |
| 11,750.0 | 11,686.8 | 11,770.1 | 11,687.3 | 30.6 | 31.9 | 89.84 | 836.0 | -596.2 | 550.5 | 508.9 | 41.59 | 13.238 | |
| 11,764.4 | 11,701.1 | 11,784.5 | 11,701.6 | 30.6 | 31.9 | 90.00 | 836.0 | -596.2 | 550.5 | 508.9 | 41.64 | 13.222 | |
| 11,775.0 | 11,711.6 | 11,795.0 | 11,712.1 | 30.5 | 31.9 | 90.15 | 836.0 | -596.2 | 550.5 | 508.8 | 41.68 | 13.207 | |
| 11,800.0 | 11,736.2 | 11,819.6 | 11,736.7 | 30.5 | 31.9 | 90.58 | 836.0 | -596.2 | 550.5 | 508.7 | 41.82 | 13.165 | |
| 11,825.0 | 11,760.6 | 11,844.0 | 11,761.1 | 30.4 | 31.9 | 91.13 | 836.0 | -596.2 | 550.6 | 508.6 | 41.99 | 13.113 | |
| 11,850.0 | 11,784.7 | 11,868.0 | 11,785.2 | 30.2 | 31.9 | 91.79 | 836.0 | -596.2 | 550.8 | 508.6 | 42.21 | 13.050 | |
| 11,875.0 | 11,808.3 | 11,891.7 | 11,808.8 | 30.1 | 31.9 | 92.55 | 836.0 | -596.2 | 551.1 | 508.7 | 42.47 | 12.978 | |
| 11,900.0 | 11,831.5 | 11,914.9 | 11,832.0 | 30.0 | 32.0 | 93.38 | 836.0 | -596.2 | 551.6 | 508.9 | 42.77 | 12.897 | |
| 11,925.0 | 11,854.2 | 11,937.6 | 11,854.7 | 29.9 | 32.0 | 94.27 | 836.0 | -596.2 | 552.4 | 509.3 | 43.12 | 12.810 | |
| 11,950.0 | 11,876.3 | 11,959.7 | 11,876.8 | 29.8 | 32.0 | 95.21 | 836.0 | -596.2 | 553.5 | 510.0 | 43.52 | 12.719 | |
| 11,975.0 | 11,897.8 | 11,981.1 | 11,898.3 | 29.7 | 32.0 | 96.16 | 836.0 | -596.2 | 555.0 | 511.0 | 43.96 | 12.625 | |
| 12,000.0 | 11,918.6 | 12,001.9 | 11,919.1 | 29.6 | 32.0 | 97.12 | 836.0 | -596.2 | 556.9 | 512.5 | 44.44 | 12.531 | |
| 12,025.0 | 11,938.6 | 12,026.3 | 11,943.4 | 29.5 | 32.0 | 98.29 | 835.6 | -596.2 | 559.3 | 514.4 | 44.91 | 12.454 | |
| 12,050.0 | 11,957.8 | 12,052.4 | 11,969.4 | 29.4 | 31.9 | 99.51 | 833.7 | -596.1 | 562.1 | 516.8 | 45.32 | 12.402 | |
| 12,075.0 | 11,976.1 | 12,079.6 | 11,996.4 | 29.3 | 31.8 | 100.73 | 830.3 | -596.1 | 565.2 | 519.5 | 45.69 | 12.371 | |
| 12,100.0 | 11,993.5 | 12,108.1 | 12,024.4 | 29.2 | 31.7 | 101.97 | 825.0 | -596.1 | 568.6 | 522.6 | 46.00 | 12.362 | |
| 12,125.0 | 12,010.0 | 12,138.0 | 12,053.5 | 29.1 | 31.6 | 103.22 | 817.7 | -596.1 | 572.4 | 526.1 | 46.24 | 12.379 | |
| 12,150.0 | 12,025.4 | 12,169.6 | 12,083.5 | 29.0 | 31.5 | 104.48 | 808.1 | -596.0 | 576.4 | 530.0 | 46.40 | 12.421 | |
| 12,175.0 | 12,039.8 | 12,202.9 | 12,114.5 | 28.9 | 31.4 | 105.75 | 795.8 | -595.9 | 580.5 | 534.1 | 46.48 | 12.491 | |
| 12,200.0 | 12,053.2 | 12,238.2 | 12,146.3 | 28.9 | 31.3 | 107.04 | 780.4 | -595.8 | 584.9 | 538.4 | 46.46 | 12.589 | |
| 12,225.0 | 12,065.4 | 12,275.8 | 12,178.7 | 28.8 | 31.1 | 108.33 | 761.5 | -595.7 | 589.3 | 543.0 | 46.34 | 12.717 | |
| 12,250.0 | 12,076.4 | 12,315.8 | 12,211.6 | 28.7 | 31.0 | 109.63 | 738.6 | -595.6 | 593.8 | 547.6 | 46.13 | 12.872 | |
| 12,275.0 | 12,086.2 | 12,358.5 | 12,244.3 | 28.7 | 30.9 | 110.90 | 711.3 | -595.4 | 598.1 | 552.3 | 45.82 | 13.054 | |
| 12,300.0 | 12,094.8 | 12,404.0 | 12,276.4 | 28.6 | 30.7 | 112.15 | 679.1 | -595.2 | 602.3 | 556.8 | 45.43 | 13.257 | |
| 12,325.0 | 12,102.2 | 12,452.4 | 12,307.1 | 28.6 | 30.6 | 113.33 | 641.6 | -595.0 | 606.1 | 561.2 | 44.98 | 13.477 | |
| 12,350.0 | 12,108.4 | 12,503.8 | 12,335.2 | 28.6 | 30.4 | 114.40 | 598.7 | -594.7 | 609.6 | 565.1 | 44.49 | 13.704 | |
| 12,375.0 | 12,113.2 | 12,558.0 | 12,359.8 | 28.5 | 30.3 | 115.34 | 550.4 | -594.4 | 612.6 | 568.6 | 43.99 | 13.925 | |
| 12,400.0 | 12,116.8 | 12,614.6 | 12,379.4 | 28.5 | 30.3 | 116.09 | 497.3 | -594.1 | 614.9 | 571.4 | 43.52 | 14.130 | |
| 12,425.0 | 12,119.0 | 12,673.2 | 12,392.9 | 28.5 | 30.2 | 116.62 | 440.3 | -593.7 | 616.5 | 573.4 | 43.09 | 14.308 | |
| 12,450.0 | 12,120.0 | 12,733.1 | 12,399.5 | 28.5 | 30.2 | 116.89 | 380.9 | -593.4 | 617.3 | 574.6 | 42.72 | 14.450 | |
| 12,455.7 | 12,120.0 | 12,746.7 | 12,399.9 | 28.5 | 30.2 | 116.91 | 367.2 | -593.3 | 617.4 | 574.7 | 42.64 | 14.477 | |
| 12,500.0 | 12,120.0 | 12,796.1 | 12,400.0 | 28.5 | 30.2 | 116.92 | 317.8 | -593.0 | 617.4 | 574.8 | 42.62 | 14.486 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12,600.0 | 12,120.0 | 12,896.1 | 12,400.0 | 28.5 | 30.3 | 116.92 | 217.8 | -592.4 | 617.4 | 574.6 | 42.75 | 14.442 | |
| 12,700.0 | 12,120.0 | 12,996.1 | 12,400.0 | 28.5 | 30.4 | 116.92 | 117.8 | -591.7 | 617.4 | 574.4 | 42.96 | 14.372 | |
| 12,800.0 | 12,120.0 | 13,096.1 | 12,400.0 | 28.5 | 30.5 | 116.92 | 17.8 | -591.1 | 617.4 | 574.1 | 43.24 | 14.276 | |
| 12,900.0 | 12,120.0 | 13,196.1 | 12,400.0 | 28.5 | 30.6 | 116.92 | -82.2 | -590.5 | 617.4 | 573.7 | 43.61 | 14.157 | |
| 13,000.0 | 12,120.0 | 13,296.1 | 12,400.0 | 28.5 | 30.7 | 116.92 | -182.2 | -589.9 | 617.4 | 573.3 | 44.05 | 14.016 | |
| 13,100.0 | 12,120.0 | 13,396.1 | 12,400.0 | 28.5 | 30.8 | 116.92 | -282.1 | -589.3 | 617.3 | 572.8 | 44.56 | 13.855 | |
| 13,200.0 | 12,120.0 | 13,496.1 | 12,400.0 | 28.5 | 31.0 | 116.92 | -382.1 | -588.7 | 617.3 | 572.2 | 45.14 | 13.677 | |
| 13,300.0 | 12,120.0 | 13,596.1 | 12,400.0 | 28.5 | 31.2 | 116.92 | -482.1 | -588.0 | 617.3 | 571.6 | 45.78 | 13.484 | |
| 13,400.0 | 12,120.0 | 13,696.1 | 12,400.0 | 28.6 | 31.4 | 116.92 | -582.1 | -587.4 | 617.3 | 570.8 | 46.49 | 13.278 | |
| 13,500.0 | 12,120.0 | 13,796.1 | 12,400.0 | 28.6 | 31.6 | 116.92 | -682.1 | -586.8 | 617.3 | 570.1 | 47.27 | 13.061 | |
| 13,600.0 | 12,120.0 | 13,896.1 | 12,400.0 | 28.6 | 31.8 | 116.92 | -782.1 | -586.2 | 617.3 | 569.2 | 48.10 | 12.835 | |
| 13,700.0 | 12,120.0 | 13,996.1 | 12,400.0 | 28.6 | 32.1 | 116.92 | -882.1 | -585.6 | 617.3 | 568.3 | 48.98 | 12.603 | |
| 13,800.0 | 12,120.0 | 14,096.1 | 12,400.0 | 28.6 | 32.4 | 116.92 | -982.1 | -585.0 | 617.3 | 567.4 | 49.92 | 12.366 | |
| 13,900.0 | 12,120.0 | 14,196.1 | 12,400.0 | 28.7 | 32.7 | 116.92 | -1,082.1 | -584.3 | 617.3 | 566.4 | 50.91 | 12.126 | |
| 14,000.0 | 12,120.0 | 14,296.1 | 12,400.0 | 28.7 | 33.0 | 116.92 | -1,182.1 | -583.7 | 617.3 | 565.4 | 51.94 | 11.884 | |
| 14,100.0 | 12,120.0 | 14,396.1 | 12,400.0 | 28.7 | 33.4 | 116.92 | -1,282.1 | -583.1 | 617.3 | 564.3 | 53.02 | 11.642 | |
| 14,200.0 | 12,120.0 | 14,496.1 | 12,400.0 | 28.8 | 33.8 | 116.92 | -1,382.1 | -582.5 | 617.3 | 563.2 | 54.14 | 11.401 | |
| 14,300.0 | 12,120.0 | 14,596.1 | 12,400.0 | 28.8 | 34.2 | 116.92 | -1,482.1 | -581.9 | 617.3 | 562.0 | 55.30 | 11.163 | |
| 14,400.0 | 12,120.0 | 14,696.1 | 12,400.0 | 28.9 | 34.6 | 116.92 | -1,582.1 | -581.3 | 617.3 | 560.8 | 56.49 | 10.927 | |
| 14,500.0 | 12,120.0 | 14,796.1 | 12,400.0 | 29.0 | 35.1 | 116.92 | -1,682.1 | -580.6 | 617.3 | 559.6 | 57.72 | 10.694 | |
| 14,600.0 | 12,120.0 | 14,896.1 | 12,400.0 | 29.2 | 35.6 | 116.92 | -1,782.1 | -580.0 | 617.3 | 558.3 | 58.98 | 10.465 | |
| 14,700.0 | 12,120.0 | 14,996.1 | 12,400.0 | 29.8 | 36.1 | 116.92 | -1,882.1 | -579.4 | 617.3 | 557.0 | 60.27 | 10.241 | |
| 14,800.0 | 12,120.0 | 15,096.1 | 12,400.0 | 30.5 | 36.6 | 116.92 | -1,982.1 | -578.8 | 617.3 | 555.7 | 61.59 | 10.022 | |
| 14,900.0 | 12,120.0 | 15,196.1 | 12,400.0 | 31.3 | 37.2 | 116.92 | -2,082.1 | -578.2 | 617.3 | 554.3 | 62.94 | 9.808 | |
| 15,000.0 | 12,120.0 | 15,296.1 | 12,400.0 | 32.1 | 37.8 | 116.92 | -2,182.1 | -577.6 | 617.3 | 553.0 | 64.30 | 9.599 | |
| 15,100.0 | 12,120.0 | 15,396.1 | 12,400.0 | 32.9 | 38.4 | 116.92 | -2,282.1 | -576.9 | 617.3 | 551.6 | 65.70 | 9.396 | |
| 15,200.0 | 12,120.0 | 15,496.1 | 12,400.0 | 33.8 | 39.0 | 116.92 | -2,382.1 | -576.3 | 617.3 | 550.2 | 67.11 | 9.198 | |
| 15,300.0 | 12,120.0 | 15,596.1 | 12,400.0 | 34.6 | 39.7 | 116.92 | -2,482.1 | -575.7 | 617.3 | 548.7 | 68.54 | 9.006 | |
| 15,400.0 | 12,120.0 | 15,696.1 | 12,400.0 | 35.4 | 40.3 | 116.92 | -2,582.1 | -575.1 | 617.3 | 547.3 | 69.99 | 8.819 | |
| 15,500.0 | 12,120.0 | 15,796.1 | 12,400.0 | 36.3 | 41.0 | 116.92 | -2,682.1 | -574.5 | 617.2 | 545.8 | 71.46 | 8.637 | |
| 15,600.0 | 12,120.0 | 15,896.1 | 12,400.0 | 37.1 | 41.7 | 116.92 | -2,782.1 | -573.9 | 617.2 | 544.3 | 72.95 | 8.461 | |
| 15,700.0 | 12,120.0 | 15,996.1 | 12,400.0 | 38.0 | 42.4 | 116.92 | -2,882.1 | -573.2 | 617.2 | 542.8 | 74.45 | 8.290 | |
| 15,800.0 | 12,120.0 | 16,096.1 | 12,400.0 | 38.8 | 43.1 | 116.93 | -2,982.1 | -572.6 | 617.2 | 541.3 | 75.97 | 8.125 | |
| 15,900.0 | 12,120.0 | 16,196.1 | 12,400.0 | 39.7 | 43.9 | 116.93 | -3,082.1 | -572.0 | 617.2 | 539.7 | 77.50 | 7.964 | |
| 16,000.0 | 12,120.0 | 16,296.1 | 12,400.0 | 40.6 | 44.6 | 116.93 | -3,182.1 | -571.4 | 617.2 | 538.2 | 79.05 | 7.809 | |
| 16,100.0 | 12,120.0 | 16,396.1 | 12,400.0 | 41.5 | 45.4 | 116.93 | -3,282.1 | -570.8 | 617.2 | 536.6 | 80.60 | 7.658 | |
| 16,200.0 | 12,120.0 | 16,496.1 | 12,400.0 | 42.3 | 46.2 | 116.93 | -3,382.1 | -570.2 | 617.2 | 535.0 | 82.17 | 7.512 | |
| 16,300.0 | 12,120.0 | 16,596.1 | 12,400.0 | 43.2 | 46.9 | 116.93 | -3,482.1 | -569.5 | 617.2 | 533.5 | 83.75 | 7.370 | |
| 16,400.0 | 12,120.0 | 16,696.1 | 12,400.0 | 44.1 | 47.7 | 116.93 | -3,582.1 | -568.9 | 617.2 | 531.9 | 85.34 | 7.233 | |
| 16,500.0 | 12,120.0 | 16,796.1 | 12,400.0 | 45.0 | 48.5 | 116.93 | -3,682.1 | -568.3 | 617.2 | 530.3 | 86.94 | 7.099 | |
| 16,600.0 | 12,120.0 | 16,896.1 | 12,400.0 | 45.9 | 49.3 | 116.93 | -3,782.1 | -567.7 | 617.2 | 528.7 | 88.54 | 6.970 | |
| 16,700.0 | 12,120.0 | 16,996.1 | 12,400.0 | 46.8 | 50.1 | 116.93 | -3,882.1 | -567.1 | 617.2 | 527.0 | 90.16 | 6.845 | |
| 16,800.0 | 12,120.0 | 17,096.1 | 12,400.0 | 47.7 | 50.9 | 116.93 | -3,982.1 | -566.5 | 617.2 | 525.4 | 91.79 | 6.724 | |
| 16,900.0 | 12,120.0 | 17,196.1 | 12,400.0 | 48.6 | 51.8 | 116.93 | -4,082.1 | -565.8 | 617.2 | 523.8 | 93.42 | 6.607 | |
| 17,000.0 | 12,120.0 | 17,296.1 | 12,400.0 | 49.5 | 52.6 | 116.93 | -4,182.1 | -565.2 | 617.2 | 522.1 | 95.06 | 6.493 | |
| 17,100.0 | 12,120.0 | 17,396.1 | 12,400.0 | 50.4 | 53.4 | 116.93 | -4,282.1 | -564.6 | 617.2 | 520.5 | 96.71 | 6.382 | |
| 17,200.0 | 12,120.0 | 17,496.1 | 12,400.0 | 51.3 | 54.3 | 116.93 | -4,382.1 | -564.0 | 617.2 | 518.8 | 98.36 | 6.275 | |
| 17,300.0 | 12,120.0 | 17,596.1 | 12,400.0 | 52.2 | 55.1 | 116.93 | -4,482.1 | -563.4 | 617.2 | 517.1 | 100.02 | 6.170 | |
| 17,400.0 | 12,120.0 | 17,696.1 | 12,400.0 | 53.1 | 56.0 | 116.93 | -4,582.1 | -562.8 | 617.2 | 515.5 | 101.69 | 6.069 | |
| 17,500.0 | 12,120.0 | 17,796.1 | 12,400.0 | 54.0 | 56.8 | 116.93 | -4,682.1 | -562.1 | 617.2 | 513.8 | 103.36 | 5.971 | |
| 17,600.0 | 12,120.0 | 17,896.1 | 12,400.0 | 54.9 | 57.7 | 116.93 | -4,782.1 | -561.5 | 617.2 | 512.1 | 105.04 | 5.875 | |
| 17,700.0 | 12,120.0 | 17,996.1 | 12,400.0 | 55.9 | 58.5 | 116.93 | -4,882.1 | -560.9 | 617.2 | 510.4 | 106.72 | 5.783 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - OWB - PWP0

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 MWD+IFR1

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17,800.0 | 12,120.0 | 18,096.1 | 12,400.0 | 56.8 | 59.4 | 116.93 | -4,982.1 | -560.3 | 617.2 | 508.7 | 108.41 | 5.693 | |
| 17,900.0 | 12,120.0 | 18,196.1 | 12,400.0 | 57.7 | 60.3 | 116.93 | -5,082.1 | -559.7 | 617.1 | 507.0 | 110.10 | 5.605 | |
| 18,000.0 | 12,120.0 | 18,296.1 | 12,400.0 | 58.6 | 61.1 | 116.93 | -5,182.1 | -559.1 | 617.1 | 505.3 | 111.80 | 5.520 | |
| 18,100.0 | 12,120.0 | 18,396.1 | 12,400.0 | 59.5 | 62.0 | 116.93 | -5,282.1 | -558.4 | 617.1 | 503.6 | 113.50 | 5.437 | |
| 18,200.0 | 12,120.0 | 18,496.1 | 12,400.0 | 60.5 | 62.9 | 116.93 | -5,382.1 | -557.8 | 617.1 | 501.9 | 115.21 | 5.357 | |
| 18,300.0 | 12,120.0 | 18,596.1 | 12,400.0 | 61.4 | 63.8 | 116.93 | -5,482.1 | -557.2 | 617.1 | 500.2 | 116.92 | 5.278 | |
| 18,400.0 | 12,120.0 | 18,696.1 | 12,400.0 | 62.3 | 64.6 | 116.93 | -5,582.0 | -556.6 | 617.1 | 498.5 | 118.63 | 5.202 | |
| 18,500.0 | 12,120.0 | 18,796.1 | 12,400.0 | 63.2 | 65.5 | 116.93 | -5,682.0 | -556.0 | 617.1 | 496.8 | 120.35 | 5.128 | |
| 18,600.0 | 12,120.0 | 18,896.1 | 12,400.0 | 64.2 | 66.4 | 116.93 | -5,782.0 | -555.4 | 617.1 | 495.0 | 122.07 | 5.055 | |
| 18,700.0 | 12,120.0 | 18,996.1 | 12,400.0 | 65.1 | 67.3 | 116.93 | -5,882.0 | -554.7 | 617.1 | 493.3 | 123.79 | 4.985 | |
| 18,800.0 | 12,120.0 | 19,096.1 | 12,400.0 | 66.0 | 68.2 | 116.93 | -5,982.0 | -554.1 | 617.1 | 491.6 | 125.52 | 4.916 | |
| 18,900.0 | 12,120.0 | 19,196.1 | 12,400.0 | 67.0 | 69.1 | 116.93 | -6,082.0 | -553.5 | 617.1 | 489.9 | 127.25 | 4.850 | |
| 19,000.0 | 12,120.0 | 19,296.1 | 12,400.0 | 67.9 | 70.0 | 116.93 | -6,182.0 | -552.9 | 617.1 | 488.1 | 128.98 | 4.784 | |
| 19,100.0 | 12,120.0 | 19,396.1 | 12,400.0 | 68.8 | 70.9 | 116.93 | -6,282.0 | -552.3 | 617.1 | 486.4 | 130.72 | 4.721 | |
| 19,200.0 | 12,120.0 | 19,496.1 | 12,400.0 | 69.8 | 71.8 | 116.93 | -6,382.0 | -551.7 | 617.1 | 484.6 | 132.46 | 4.659 | |
| 19,300.0 | 12,120.0 | 19,596.1 | 12,400.0 | 70.7 | 72.7 | 116.93 | -6,482.0 | -551.1 | 617.1 | 482.9 | 134.20 | 4.598 | |
| 19,400.0 | 12,120.0 | 19,696.1 | 12,400.0 | 71.6 | 73.6 | 116.93 | -6,582.0 | -550.4 | 617.1 | 481.1 | 135.94 | 4.539 | |
| 19,500.0 | 12,120.0 | 19,796.1 | 12,400.0 | 72.6 | 74.5 | 116.93 | -6,682.0 | -549.8 | 617.1 | 479.4 | 137.69 | 4.482 | |
| 19,600.0 | 12,120.0 | 19,896.1 | 12,400.0 | 73.5 | 75.4 | 116.93 | -6,782.0 | -549.2 | 617.1 | 477.6 | 139.44 | 4.425 | |
| 19,700.0 | 12,120.0 | 19,996.1 | 12,400.0 | 74.4 | 76.3 | 116.93 | -6,882.0 | -548.6 | 617.1 | 475.9 | 141.19 | 4.371 | |
| 19,800.0 | 12,120.0 | 20,096.1 | 12,400.0 | 75.4 | 77.2 | 116.93 | -6,982.0 | -548.0 | 617.1 | 474.1 | 142.94 | 4.317 | |
| 19,900.0 | 12,120.0 | 20,196.1 | 12,400.0 | 76.3 | 78.2 | 116.93 | -7,082.0 | -547.4 | 617.1 | 472.4 | 144.70 | 4.265 | |
| 20,000.0 | 12,120.0 | 20,296.1 | 12,400.0 | 77.3 | 79.1 | 116.93 | -7,182.0 | -546.7 | 617.1 | 470.6 | 146.45 | 4.213 | |
| 20,100.0 | 12,120.0 | 20,396.1 | 12,400.0 | 78.2 | 80.0 | 116.93 | -7,282.0 | -546.1 | 617.1 | 468.8 | 148.21 | 4.163 | |
| 20,200.0 | 12,120.0 | 20,496.1 | 12,400.0 | 79.1 | 80.9 | 116.93 | -7,382.0 | -545.5 | 617.1 | 467.1 | 149.97 | 4.114 | |
| 20,300.0 | 12,120.0 | 20,596.1 | 12,400.0 | 80.1 | 81.8 | 116.93 | -7,482.0 | -544.9 | 617.0 | 465.3 | 151.73 | 4.067 | |
| 20,400.0 | 12,120.0 | 20,696.1 | 12,400.0 | 81.0 | 82.7 | 116.93 | -7,582.0 | -544.3 | 617.0 | 463.5 | 153.50 | 4.020 | |
| 20,500.0 | 12,120.0 | 20,796.1 | 12,400.0 | 82.0 | 83.7 | 116.93 | -7,682.0 | -543.7 | 617.0 | 461.8 | 155.26 | 3.974 | |
| 20,600.0 | 12,120.0 | 20,896.1 | 12,400.0 | 82.9 | 84.6 | 116.93 | -7,782.0 | -543.0 | 617.0 | 460.0 | 157.03 | 3.929 | |
| 20,700.0 | 12,120.0 | 20,996.1 | 12,400.0 | 83.9 | 85.5 | 116.93 | -7,882.0 | -542.4 | 617.0 | 458.2 | 158.80 | 3.886 | |
| 20,800.0 | 12,120.0 | 21,096.1 | 12,400.0 | 84.8 | 86.4 | 116.93 | -7,982.0 | -541.8 | 617.0 | 456.5 | 160.57 | 3.843 | |
| 20,900.0 | 12,120.0 | 21,196.1 | 12,400.0 | 85.7 | 87.4 | 116.94 | -8,082.0 | -541.2 | 617.0 | 454.7 | 162.34 | 3.801 | |
| 21,000.0 | 12,120.0 | 21,296.1 | 12,400.0 | 86.7 | 88.3 | 116.94 | -8,182.0 | -540.6 | 617.0 | 452.9 | 164.12 | 3.760 | |
| 21,100.0 | 12,120.0 | 21,396.1 | 12,400.0 | 87.6 | 89.2 | 116.94 | -8,282.0 | -540.0 | 617.0 | 451.1 | 165.89 | 3.719 | |
| 21,200.0 | 12,120.0 | 21,496.1 | 12,400.0 | 88.6 | 90.1 | 116.94 | -8,382.0 | -539.3 | 617.0 | 449.3 | 167.67 | 3.680 | |
| 21,300.0 | 12,120.0 | 21,596.1 | 12,400.0 | 89.5 | 91.1 | 116.94 | -8,482.0 | -538.7 | 617.0 | 447.6 | 169.44 | 3.641 | |
| 21,400.0 | 12,120.0 | 21,696.1 | 12,400.0 | 90.5 | 92.0 | 116.94 | -8,582.0 | -538.1 | 617.0 | 445.8 | 171.22 | 3.604 | |
| 21,500.0 | 12,120.0 | 21,796.1 | 12,400.0 | 91.4 | 92.9 | 116.94 | -8,682.0 | -537.5 | 617.0 | 444.0 | 173.00 | 3.566 | |
| 21,600.0 | 12,120.0 | 21,896.1 | 12,400.0 | 92.4 | 93.8 | 116.94 | -8,782.0 | -536.9 | 617.0 | 442.2 | 174.78 | 3.530 | |
| 21,700.0 | 12,120.0 | 21,996.1 | 12,400.0 | 93.3 | 94.8 | 116.94 | -8,882.0 | -536.3 | 617.0 | 440.4 | 176.56 | 3.494 | |
| 21,800.0 | 12,120.0 | 22,096.1 | 12,400.0 | 94.3 | 95.7 | 116.94 | -8,982.0 | -535.6 | 617.0 | 438.6 | 178.35 | 3.459 | |
| 21,900.0 | 12,120.0 | 22,196.1 | 12,400.0 | 95.2 | 96.6 | 116.94 | -9,082.0 | -535.0 | 617.0 | 436.9 | 180.13 | 3.425 | |
| 22,000.0 | 12,120.0 | 22,296.1 | 12,400.0 | 96.2 | 97.6 | 116.94 | -9,182.0 | -534.4 | 617.0 | 435.1 | 181.92 | 3.392 | |
| 22,100.0 | 12,120.0 | 22,396.1 | 12,400.0 | 97.1 | 98.5 | 116.94 | -9,282.0 | -533.8 | 617.0 | 433.3 | 183.70 | 3.359 | |
| 22,200.0 | 12,120.0 | 22,496.1 | 12,400.0 | 98.1 | 99.4 | 116.94 | -9,382.0 | -533.2 | 617.0 | 431.5 | 185.49 | 3.326 | |
| 22,300.0 | 12,120.0 | 22,596.1 | 12,400.0 | 99.0 | 100.4 | 116.94 | -9,482.0 | -532.6 | 617.0 | 429.7 | 187.28 | 3.294 | |
| 22,400.0 | 12,120.0 | 22,696.1 | 12,400.0 | 100.0 | 101.3 | 116.94 | -9,582.0 | -531.9 | 617.0 | 427.9 | 189.07 | 3.263 | |
| 22,500.0 | 12,120.0 | 22,796.1 | 12,400.0 | 100.9 | 102.2 | 116.94 | -9,682.0 | -531.3 | 617.0 | 426.1 | 190.86 | 3.233 | |
| 22,519.8 | 12,120.0 | 22,815.9 | 12,400.0 | 101.1 | 102.4 | 116.94 | -9,701.8 | -531.2 | 617.0 | 425.7 | 191.21 | 3.227 | 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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH)

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 SDI_KPR_WL_NS-CT, 1000-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 | 0.5 | 0.5 | 3.0 | 3.0 | 0.00 | 44.9 | 0.0 | 44.9 | | | | |
| 100.0 | 100.0 | 100.5 | 100.5 | 3.1 | 3.0 | 0.00 | 44.9 | 0.0 | 44.9 | 38.3 | 6.57 | 6.836 | |
| 200.0 | 200.0 | 200.5 | 200.5 | 3.3 | 3.2 | 0.00 | 44.9 | 0.0 | 44.9 | 38.0 | 6.92 | 6.488 | |
| 300.0 | 300.0 | 300.5 | 300.5 | 3.5 | 3.3 | 0.00 | 44.9 | 0.0 | 44.9 | 37.6 | 7.26 | 6.184 | |
| 400.0 | 400.0 | 400.5 | 400.5 | 3.7 | 3.4 | 0.00 | 44.9 | 0.0 | 44.9 | 37.3 | 7.59 | 5.916 | |
| 500.0 | 500.0 | 500.5 | 500.5 | 3.9 | 3.5 | 0.00 | 44.9 | 0.0 | 44.9 | 37.0 | 7.91 | 5.677 | |
| 600.0 | 600.0 | 600.5 | 600.5 | 4.1 | 3.7 | 0.00 | 44.9 | 0.0 | 44.9 | 36.7 | 8.22 | 5.463 | |
| 700.0 | 700.0 | 700.5 | 700.5 | 4.3 | 3.8 | 0.00 | 44.9 | 0.0 | 44.9 | 36.4 | 8.52 | 5.268 | |
| 800.0 | 800.0 | 800.5 | 800.5 | 4.5 | 3.9 | 0.00 | 44.9 | 0.0 | 44.9 | 36.1 | 8.82 | 5.091 | |
| 900.0 | 900.0 | 900.5 | 900.5 | 4.7 | 4.0 | 0.00 | 44.9 | 0.0 | 44.9 | 35.8 | 9.11 | 4.928 | |
| 966.5 | 966.5 | 967.0 | 967.0 | 4.8 | 4.1 | 0.00 | 44.9 | 0.0 | 44.9 | 35.6 | 9.30 | 4.828 | CC |
| 1,000.0 | 1,000.0 | 1,000.0 | 1,000.0 | 4.8 | 4.2 | 0.00 | 44.9 | 0.0 | 44.9 | 35.5 | 9.40 | 4.779 | ES |
| 1,100.0 | 1,100.0 | 1,099.2 | 1,099.2 | 5.0 | 4.3 | -1.28 | 46.3 | -1.0 | 46.3 | 36.6 | 9.73 | 4.760 | SF |
| 1,200.0 | 1,200.0 | 1,197.7 | 1,197.5 | 5.2 | 4.6 | -4.66 | 50.3 | -4.1 | 50.6 | 40.5 | 10.13 | 4.997 | |
| 1,300.0 | 1,300.0 | 1,295.7 | 1,295.2 | 5.3 | 4.9 | -9.13 | 57.1 | -9.2 | 58.1 | 47.5 | 10.54 | 5.509 | |
| 1,400.0 | 1,400.0 | 1,393.1 | 1,391.8 | 5.5 | 5.2 | -13.71 | 66.4 | -16.2 | 68.9 | 57.9 | 10.96 | 6.284 | |
| 1,500.0 | 1,500.0 | 1,489.5 | 1,487.1 | 5.6 | 5.6 | -17.80 | 78.2 | -25.1 | 83.2 | 71.8 | 11.40 | 7.299 | |
| 1,600.0 | 1,600.0 | 1,587.8 | 1,583.9 | 5.8 | 5.9 | -31.24 | 91.8 | -35.4 | 99.1 | 87.2 | 11.83 | 8.372 | |
| 1,700.0 | 1,700.0 | 1,686.5 | 1,681.2 | 5.9 | 6.1 | -34.21 | 105.5 | -45.7 | 113.7 | 101.5 | 12.28 | 9.260 | |
| 1,800.0 | 1,799.9 | 1,785.4 | 1,778.6 | 6.1 | 6.5 | -36.96 | 119.2 | -56.0 | 127.3 | 114.5 | 12.76 | 9.973 | |
| 1,900.0 | 1,899.7 | 1,884.5 | 1,876.1 | 6.3 | 6.8 | -39.61 | 133.0 | -66.4 | 139.7 | 126.5 | 13.27 | 10.531 | |
| 2,000.0 | 1,999.4 | 1,983.6 | 1,973.7 | 6.5 | 7.1 | -42.25 | 146.7 | -76.7 | 151.2 | 137.4 | 13.79 | 10.959 | |
| 2,100.0 | 2,098.8 | 2,082.8 | 2,071.5 | 6.8 | 7.5 | -36.67 | 160.5 | -87.1 | 160.6 | 146.2 | 14.37 | 11.175 | |
| 2,200.0 | 2,197.9 | 2,182.3 | 2,169.4 | 7.1 | 7.8 | -34.69 | 174.3 | -97.5 | 167.1 | 152.1 | 14.97 | 11.161 | |
| 2,215.1 | 2,212.9 | 2,197.4 | 2,184.2 | 7.1 | 7.9 | -34.58 | 176.4 | -99.1 | 167.8 | 152.7 | 15.04 | 11.156 | |
| 2,300.0 | 2,296.7 | 2,281.8 | 2,267.4 | 7.3 | 8.2 | -36.98 | 188.1 | -107.9 | 171.8 | 156.3 | 15.52 | 11.067 | |
| 2,400.0 | 2,395.5 | 2,381.4 | 2,365.5 | 7.6 | 8.6 | -39.65 | 201.9 | -118.3 | 176.9 | 160.8 | 16.08 | 10.997 | |
| 2,500.0 | 2,494.2 | 2,480.9 | 2,463.5 | 7.9 | 9.0 | -42.18 | 215.7 | -128.7 | 182.3 | 165.7 | 16.64 | 10.958 | |
| 2,600.0 | 2,593.0 | 2,580.5 | 2,561.5 | 8.2 | 9.4 | -44.55 | 229.5 | -139.1 | 188.1 | 170.9 | 17.19 | 10.945 | |
| 2,700.0 | 2,691.8 | 2,680.0 | 2,659.5 | 8.5 | 9.8 | -46.78 | 243.3 | -149.5 | 194.2 | 176.5 | 17.73 | 10.955 | |
| 2,800.0 | 2,790.5 | 2,779.5 | 2,757.6 | 8.9 | 10.2 | -48.87 | 257.1 | -159.9 | 200.6 | 182.3 | 18.26 | 10.986 | |
| 2,900.0 | 2,889.3 | 2,879.1 | 2,855.6 | 9.2 | 10.6 | -50.83 | 270.9 | -170.3 | 207.2 | 188.4 | 18.78 | 11.034 | |
| 3,000.0 | 2,988.1 | 2,978.6 | 2,953.6 | 9.6 | 11.0 | -52.67 | 284.7 | -180.7 | 214.1 | 194.8 | 19.29 | 11.098 | |
| 3,100.0 | 3,086.8 | 3,078.1 | 3,051.6 | 9.9 | 11.4 | -54.39 | 298.5 | -191.1 | 221.1 | 201.3 | 19.79 | 11.174 | |
| 3,200.0 | 3,185.6 | 3,177.7 | 3,149.6 | 10.3 | 11.8 | -56.01 | 312.3 | -201.5 | 228.4 | 208.1 | 20.28 | 11.262 | |
| 3,300.0 | 3,284.4 | 3,277.2 | 3,247.7 | 10.7 | 12.2 | -57.52 | 326.1 | -211.9 | 235.8 | 215.0 | 20.76 | 11.358 | |
| 3,400.0 | 3,383.1 | 3,376.7 | 3,345.7 | 11.0 | 12.7 | -58.95 | 339.9 | -222.3 | 243.4 | 222.1 | 21.23 | 11.462 | |
| 3,500.0 | 3,481.9 | 3,476.3 | 3,443.7 | 11.4 | 13.1 | -60.28 | 353.7 | -232.7 | 251.1 | 229.4 | 21.70 | 11.572 | |
| 3,600.0 | 3,580.7 | 3,575.8 | 3,541.7 | 11.8 | 13.5 | -61.54 | 367.5 | -243.1 | 258.9 | 236.7 | 22.15 | 11.686 | |
| 3,700.0 | 3,679.5 | 3,675.4 | 3,639.8 | 12.2 | 13.9 | -62.72 | 381.3 | -253.5 | 266.9 | 244.3 | 22.61 | 11.805 | |
| 3,800.0 | 3,778.2 | 3,774.9 | 3,737.8 | 12.6 | 14.4 | -63.83 | 395.1 | -263.9 | 274.9 | 251.9 | 23.05 | 11.927 | |
| 3,900.0 | 3,877.0 | 3,874.4 | 3,835.8 | 13.0 | 14.8 | -64.88 | 408.9 | -274.3 | 283.1 | 259.6 | 23.49 | 12.051 | |
| 4,000.0 | 3,975.8 | 3,974.0 | 3,933.8 | 13.4 | 15.2 | -65.87 | 422.8 | -284.7 | 291.3 | 267.4 | 23.93 | 12.176 | |
| 4,100.0 | 4,074.5 | 4,073.5 | 4,031.9 | 13.8 | 15.7 | -66.81 | 436.6 | -295.1 | 299.7 | 275.3 | 24.36 | 12.303 | |
| 4,200.0 | 4,173.3 | 4,173.0 | 4,129.9 | 14.2 | 16.1 | -67.69 | 450.4 | -305.5 | 308.1 | 283.3 | 24.78 | 12.431 | |
| 4,300.0 | 4,272.1 | 4,272.6 | 4,227.9 | 14.6 | 16.5 | -68.53 | 464.2 | -315.9 | 316.5 | 291.3 | 25.21 | 12.558 | |
| 4,400.0 | 4,370.8 | 4,372.1 | 4,325.9 | 15.0 | 17.0 | -69.33 | 478.0 | -326.3 | 325.1 | 299.4 | 25.62 | 12.686 | |
| 4,500.0 | 4,469.6 | 4,471.6 | 4,424.0 | 15.4 | 17.4 | -70.08 | 491.8 | -336.7 | 333.7 | 307.6 | 26.04 | 12.813 | |
| 4,600.0 | 4,568.4 | 4,571.2 | 4,522.0 | 15.8 | 17.9 | -70.79 | 505.6 | -347.1 | 342.3 | 315.9 | 26.46 | 12.939 | |
| 4,700.0 | 4,667.1 | 4,670.7 | 4,620.0 | 16.2 | 18.3 | -71.47 | 519.4 | -357.5 | 351.0 | 324.1 | 26.87 | 13.064 | |
| 4,800.0 | 4,765.9 | 4,770.2 | 4,718.0 | 16.7 | 18.7 | -72.12 | 533.2 | -367.9 | 359.8 | 332.5 | 27.28 | 13.189 | |
| 4,900.0 | 4,864.7 | 4,869.8 | 4,816.1 | 17.1 | 19.2 | -72.74 | 547.0 | -378.3 | 368.6 | 340.9 | 27.69 | 13.312 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH)

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 SDI_KPR_WL_NS-CT, 1000-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 | 4,963.4 | 4,969.3 | 4,914.1 | 17.5 | 19.6 | -73.33 | 560.8 | -388.8 | 377.4 | 349.3 | 28.09 | 13.434 | |
| 5,100.0 | 5,062.2 | 5,068.9 | 5,012.1 | 17.9 | 20.1 | -73.89 | 574.6 | -399.2 | 386.3 | 357.8 | 28.50 | 13.554 | |
| 5,200.0 | 5,161.0 | 5,168.4 | 5,110.1 | 18.3 | 20.5 | -74.42 | 588.4 | -409.6 | 395.2 | 366.3 | 28.90 | 13.673 | |
| 5,300.0 | 5,259.8 | 5,267.9 | 5,208.2 | 18.8 | 21.0 | -74.94 | 602.2 | -420.0 | 404.1 | 374.8 | 29.30 | 13.790 | |
| 5,400.0 | 5,358.5 | 5,367.5 | 5,306.2 | 19.2 | 21.4 | -75.43 | 616.0 | -430.4 | 413.1 | 383.4 | 29.70 | 13.906 | |
| 5,500.0 | 5,457.3 | 5,467.0 | 5,404.2 | 19.6 | 21.8 | -75.89 | 629.8 | -440.8 | 422.1 | 392.0 | 30.11 | 14.020 | |
| 5,600.0 | 5,556.1 | 5,566.5 | 5,502.2 | 20.0 | 22.3 | -76.34 | 643.6 | -451.2 | 431.1 | 400.6 | 30.50 | 14.132 | |
| 5,700.0 | 5,654.8 | 5,666.1 | 5,600.2 | 20.5 | 22.7 | -76.78 | 657.4 | -461.6 | 440.1 | 409.2 | 30.90 | 14.243 | |
| 5,800.0 | 5,753.6 | 5,765.6 | 5,698.3 | 20.9 | 23.2 | -77.19 | 671.2 | -472.0 | 449.2 | 417.9 | 31.30 | 14.351 | |
| 5,900.0 | 5,852.4 | 5,865.1 | 5,796.3 | 21.3 | 23.6 | -77.59 | 685.0 | -482.4 | 458.3 | 426.6 | 31.70 | 14.458 | |
| 6,000.0 | 5,951.1 | 5,964.7 | 5,894.3 | 21.8 | 24.1 | -77.97 | 698.8 | -492.8 | 467.4 | 435.3 | 32.10 | 14.564 | |
| 6,100.0 | 6,049.9 | 6,064.2 | 5,992.3 | 22.2 | 24.5 | -78.34 | 712.6 | -503.2 | 476.6 | 444.1 | 32.49 | 14.667 | |
| 6,200.0 | 6,148.7 | 6,163.8 | 6,090.4 | 22.6 | 25.0 | -78.69 | 726.4 | -513.6 | 485.7 | 452.8 | 32.89 | 14.769 | |
| 6,300.0 | 6,247.4 | 6,263.3 | 6,188.4 | 23.1 | 25.4 | -79.03 | 740.2 | -524.0 | 494.9 | 461.6 | 33.28 | 14.869 | |
| 6,400.0 | 6,346.2 | 6,362.8 | 6,286.4 | 23.5 | 25.9 | -79.36 | 754.0 | -534.4 | 504.1 | 470.4 | 33.68 | 14.967 | |
| 6,500.0 | 6,445.0 | 6,463.0 | 6,385.1 | 23.9 | 26.3 | -79.68 | 767.9 | -544.8 | 513.3 | 479.2 | 34.06 | 15.069 | |
| 6,600.0 | 6,543.7 | 6,569.1 | 6,489.8 | 24.4 | 26.8 | -80.10 | 781.7 | -555.2 | 521.8 | 487.3 | 34.44 | 15.151 | |
| 6,700.0 | 6,642.5 | 6,675.3 | 6,594.9 | 24.8 | 27.2 | -80.66 | 794.0 | -564.5 | 529.0 | 494.3 | 34.75 | 15.224 | |
| 6,800.0 | 6,741.3 | 6,781.5 | 6,700.2 | 25.2 | 27.7 | -81.36 | 804.7 | -572.5 | 535.1 | 500.1 | 34.98 | 15.294 | |
| 6,859.4 | 6,800.0 | 6,844.7 | 6,763.0 | 25.5 | 27.9 | -81.85 | 810.3 | -576.8 | 538.1 | 503.1 | 35.08 | 15.342 | |
| 6,900.0 | 6,840.1 | 6,887.7 | 6,805.8 | 25.6 | 28.1 | -82.21 | 813.8 | -579.4 | 540.0 | 504.9 | 35.13 | 15.373 | |
| 7,000.0 | 6,939.1 | 6,993.9 | 6,911.5 | 26.1 | 28.5 | -83.06 | 821.4 | -585.1 | 544.0 | 508.8 | 35.26 | 15.428 | |
| 7,100.0 | 7,038.3 | 7,100.1 | 7,017.5 | 26.5 | 28.9 | -83.86 | 827.4 | -589.6 | 547.2 | 511.8 | 35.38 | 15.465 | |
| 7,200.0 | 7,137.7 | 7,206.2 | 7,123.5 | 26.9 | 29.3 | -84.60 | 831.8 | -593.0 | 549.4 | 513.9 | 35.48 | 15.486 | |
| 7,300.0 | 7,237.3 | 7,312.4 | 7,229.5 | 27.3 | 29.6 | -85.30 | 834.7 | -595.1 | 550.7 | 515.2 | 35.55 | 15.494 | |
| 7,400.0 | 7,337.1 | 7,418.4 | 7,335.6 | 27.6 | 29.9 | -85.96 | 836.0 | -596.1 | 551.1 | 515.6 | 35.56 | 15.498 | |
| 7,500.0 | 7,436.9 | 7,520.3 | 7,437.4 | 28.0 | 29.9 | -86.52 | 836.0 | -596.2 | 550.8 | 515.4 | 35.49 | 15.522 | |
| 7,600.0 | 7,536.9 | 7,620.2 | 7,537.4 | 28.3 | 29.9 | -86.90 | 836.0 | -596.2 | 550.6 | 515.1 | 35.49 | 15.516 | |
| 7,700.0 | 7,636.9 | 7,720.2 | 7,637.4 | 28.6 | 30.0 | -87.09 | 836.0 | -596.2 | 550.5 | 515.0 | 35.54 | 15.489 | |
| 7,759.4 | 7,696.3 | 7,779.7 | 7,696.8 | 28.6 | 30.0 | -90.73 | 836.0 | -596.2 | 550.5 | 514.9 | 35.59 | 15.467 | |
| 7,800.0 | 7,736.9 | 7,820.2 | 7,737.4 | 28.7 | 30.0 | -90.73 | 836.0 | -596.2 | 550.5 | 514.9 | 35.63 | 15.450 | |
| 7,900.0 | 7,836.9 | 7,920.2 | 7,837.4 | 28.7 | 30.1 | -90.73 | 836.0 | -596.2 | 550.5 | 514.8 | 35.75 | 15.398 | |
| 8,000.0 | 7,936.9 | 8,020.2 | 7,937.4 | 28.8 | 30.1 | -90.73 | 836.0 | -596.2 | 550.5 | 514.6 | 35.87 | 15.346 | |
| 8,100.0 | 8,036.9 | 8,120.2 | 8,037.4 | 28.8 | 30.1 | -90.73 | 836.0 | -596.2 | 550.5 | 514.5 | 35.99 | 15.295 | |
| 8,200.0 | 8,136.9 | 8,220.2 | 8,137.4 | 28.9 | 30.2 | -90.73 | 836.0 | -596.2 | 550.5 | 514.4 | 36.12 | 15.243 | |
| 8,300.0 | 8,236.9 | 8,320.2 | 8,237.4 | 28.9 | 30.2 | -90.73 | 836.0 | -596.2 | 550.5 | 514.3 | 36.24 | 15.192 | |
| 8,400.0 | 8,336.9 | 8,420.2 | 8,337.4 | 29.0 | 30.2 | -90.73 | 836.0 | -596.2 | 550.5 | 514.2 | 36.36 | 15.141 | |
| 8,500.0 | 8,436.9 | 8,520.2 | 8,437.4 | 29.0 | 30.3 | -90.73 | 836.0 | -596.2 | 550.5 | 514.0 | 36.48 | 15.090 | |
| 8,600.0 | 8,536.9 | 8,620.2 | 8,537.4 | 29.1 | 30.3 | -90.73 | 836.0 | -596.2 | 550.5 | 513.9 | 36.60 | 15.040 | |
| 8,700.0 | 8,636.9 | 8,720.2 | 8,637.4 | 29.1 | 30.4 | -90.73 | 836.0 | -596.2 | 550.5 | 513.8 | 36.73 | 14.990 | |
| 8,800.0 | 8,736.9 | 8,820.2 | 8,737.4 | 29.2 | 30.4 | -90.73 | 836.0 | -596.2 | 550.5 | 513.7 | 36.85 | 14.939 | |
| 8,900.0 | 8,836.9 | 8,920.2 | 8,837.4 | 29.2 | 30.4 | -90.73 | 836.0 | -596.2 | 550.5 | 513.5 | 36.97 | 14.890 | |
| 9,000.0 | 8,936.9 | 9,020.2 | 8,937.4 | 29.3 | 30.5 | -90.73 | 836.0 | -596.2 | 550.5 | 513.4 | 37.10 | 14.840 | |
| 9,100.0 | 9,036.9 | 9,120.2 | 9,037.4 | 29.3 | 30.5 | -90.73 | 836.0 | -596.2 | 550.5 | 513.3 | 37.22 | 14.790 | |
| 9,200.0 | 9,136.9 | 9,220.2 | 9,137.4 | 29.4 | 30.5 | -90.73 | 836.0 | -596.2 | 550.5 | 513.2 | 37.35 | 14.741 | |
| 9,300.0 | 9,236.9 | 9,320.2 | 9,237.4 | 29.4 | 30.6 | -90.73 | 836.0 | -596.2 | 550.5 | 513.0 | 37.47 | 14.692 | |
| 9,400.0 | 9,336.9 | 9,420.2 | 9,337.4 | 29.5 | 30.6 | -90.73 | 836.0 | -596.2 | 550.5 | 512.9 | 37.60 | 14.643 | |
| 9,500.0 | 9,436.9 | 9,520.2 | 9,437.4 | 29.5 | 30.7 | -90.73 | 836.0 | -596.2 | 550.5 | 512.8 | 37.72 | 14.595 | |
| 9,600.0 | 9,536.9 | 9,620.2 | 9,537.4 | 29.6 | 30.7 | -90.73 | 836.0 | -596.2 | 550.5 | 512.7 | 37.85 | 14.546 | |
| 9,700.0 | 9,636.9 | 9,720.2 | 9,637.4 | 29.6 | 30.7 | -90.73 | 836.0 | -596.2 | 550.5 | 512.5 | 37.97 | 14.498 | |
| 9,800.0 | 9,736.9 | 9,820.2 | 9,737.4 | 29.7 | 30.8 | -90.73 | 836.0 | -596.2 | 550.5 | 512.4 | 38.10 | 14.450 | |
| 9,900.0 | 9,836.9 | 9,920.2 | 9,837.4 | 29.7 | 30.8 | -90.73 | 836.0 | -596.2 | 550.5 | 512.3 | 38.22 | 14.402 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH)

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 SDI_KPR_WL_NS-CT, 1000-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 | 9,936.9 | 10,020.2 | 9,937.4 | 29.8 | 30.9 | -90.73 | 836.0 | -596.2 | 550.5 | 512.2 | 38.35 | 14.355 | |
| 10,100.0 | 10,036.9 | 10,120.2 | 10,037.4 | 29.9 | 30.9 | -90.73 | 836.0 | -596.2 | 550.5 | 512.0 | 38.48 | 14.308 | |
| 10,200.0 | 10,136.9 | 10,220.2 | 10,137.4 | 29.9 | 30.9 | -90.73 | 836.0 | -596.2 | 550.5 | 511.9 | 38.60 | 14.261 | |
| 10,300.0 | 10,236.9 | 10,320.2 | 10,237.4 | 30.0 | 31.0 | -90.73 | 836.0 | -596.2 | 550.5 | 511.8 | 38.73 | 14.214 | |
| 10,400.0 | 10,336.9 | 10,420.2 | 10,337.4 | 30.0 | 31.0 | -90.73 | 836.0 | -596.2 | 550.5 | 511.7 | 38.86 | 14.167 | |
| 10,500.0 | 10,436.9 | 10,520.2 | 10,437.4 | 30.1 | 31.1 | -90.73 | 836.0 | -596.2 | 550.5 | 511.5 | 38.99 | 14.121 | |
| 10,600.0 | 10,536.9 | 10,620.2 | 10,537.4 | 30.1 | 31.1 | -90.73 | 836.0 | -596.2 | 550.5 | 511.4 | 39.11 | 14.074 | |
| 10,700.0 | 10,636.9 | 10,720.2 | 10,637.4 | 30.2 | 31.1 | -90.73 | 836.0 | -596.2 | 550.5 | 511.3 | 39.24 | 14.028 | |
| 10,800.0 | 10,736.9 | 10,820.2 | 10,737.4 | 30.2 | 31.2 | -90.73 | 836.0 | -596.2 | 550.5 | 511.1 | 39.37 | 13.983 | |
| 10,900.0 | 10,836.9 | 10,920.2 | 10,837.4 | 30.3 | 31.2 | -90.73 | 836.0 | -596.2 | 550.5 | 511.0 | 39.50 | 13.937 | |
| 11,000.0 | 10,936.9 | 11,020.2 | 10,937.4 | 30.3 | 31.3 | -90.73 | 836.0 | -596.2 | 550.5 | 510.9 | 39.63 | 13.892 | |
| 11,100.0 | 11,036.9 | 11,120.2 | 11,037.4 | 30.4 | 31.3 | -90.73 | 836.0 | -596.2 | 550.5 | 510.8 | 39.76 | 13.846 | |
| 11,200.0 | 11,136.9 | 11,220.2 | 11,137.4 | 30.5 | 31.3 | -90.73 | 836.0 | -596.2 | 550.5 | 510.6 | 39.89 | 13.801 | |
| 11,300.0 | 11,236.9 | 11,320.2 | 11,237.4 | 30.5 | 31.4 | -90.73 | 836.0 | -596.2 | 550.5 | 510.5 | 40.02 | 13.757 | |
| 11,400.0 | 11,336.9 | 11,420.2 | 11,337.4 | 30.6 | 31.4 | -90.73 | 836.0 | -596.2 | 550.5 | 510.4 | 40.15 | 13.712 | |
| 11,500.0 | 11,436.9 | 11,520.2 | 11,437.4 | 30.6 | 31.5 | -90.73 | 836.0 | -596.2 | 550.5 | 510.2 | 40.28 | 13.668 | |
| 11,600.0 | 11,536.9 | 11,620.2 | 11,537.4 | 30.7 | 31.5 | -90.73 | 836.0 | -596.2 | 550.5 | 510.1 | 40.41 | 13.624 | |
| 11,700.0 | 11,636.9 | 11,720.2 | 11,637.4 | 30.7 | 31.6 | -90.73 | 836.0 | -596.2 | 550.5 | 510.0 | 40.54 | 13.579 | |
| 11,705.7 | 11,642.5 | 11,725.9 | 11,643.0 | 30.7 | 31.6 | -90.73 | 836.0 | -596.2 | 550.5 | 510.0 | 40.55 | 13.576 | |
| 11,725.0 | 11,661.9 | 11,745.2 | 11,662.4 | 30.7 | 31.6 | 89.67 | 836.0 | -596.2 | 550.5 | 509.9 | 40.59 | 13.562 | |
| 11,750.0 | 11,686.8 | 11,770.1 | 11,687.3 | 30.6 | 31.6 | 89.84 | 836.0 | -596.2 | 550.5 | 509.9 | 40.65 | 13.542 | |
| 11,764.4 | 11,701.1 | 11,784.5 | 11,701.6 | 30.6 | 31.6 | 90.00 | 836.0 | -596.2 | 550.5 | 509.8 | 40.71 | 13.524 | |
| 11,775.0 | 11,711.6 | 11,795.0 | 11,712.1 | 30.5 | 31.6 | 90.15 | 836.0 | -596.2 | 550.5 | 509.8 | 40.75 | 13.508 | |
| 11,800.0 | 11,736.2 | 11,819.6 | 11,736.7 | 30.5 | 31.6 | 90.58 | 836.0 | -596.2 | 550.5 | 509.6 | 40.90 | 13.462 | |
| 11,825.0 | 11,760.6 | 11,844.0 | 11,761.1 | 30.4 | 31.6 | 91.13 | 836.0 | -596.2 | 550.6 | 509.5 | 41.08 | 13.403 | |
| 11,850.0 | 11,784.7 | 11,868.0 | 11,785.2 | 30.2 | 31.6 | 91.79 | 836.0 | -596.2 | 550.8 | 509.5 | 41.31 | 13.333 | |
| 11,875.0 | 11,808.3 | 11,891.7 | 11,808.8 | 30.1 | 31.6 | 92.55 | 836.0 | -596.2 | 551.1 | 509.5 | 41.58 | 13.253 | |
| 11,900.0 | 11,831.5 | 11,914.9 | 11,832.0 | 30.0 | 31.6 | 93.38 | 836.0 | -596.2 | 551.6 | 509.7 | 41.91 | 13.164 | |
| 11,925.0 | 11,854.2 | 11,937.6 | 11,854.7 | 29.9 | 31.7 | 94.27 | 836.0 | -596.2 | 552.4 | 510.1 | 42.28 | 13.067 | |
| 11,950.0 | 11,876.3 | 11,959.7 | 11,876.8 | 29.8 | 31.7 | 95.21 | 836.0 | -596.2 | 553.5 | 510.8 | 42.69 | 12.965 | |
| 11,975.0 | 11,897.8 | 11,981.1 | 11,898.3 | 29.7 | 31.7 | 96.16 | 836.0 | -596.2 | 555.0 | 511.8 | 43.16 | 12.859 | |
| 12,000.0 | 11,918.6 | 12,001.9 | 11,919.1 | 29.6 | 31.7 | 97.12 | 836.0 | -596.2 | 556.9 | 513.3 | 43.67 | 12.754 | |
| 12,025.0 | 11,938.6 | 12,021.9 | 11,939.1 | 29.5 | 31.7 | 98.05 | 836.0 | -596.2 | 559.4 | 515.2 | 44.22 | 12.650 | |
| 12,050.0 | 11,957.8 | 12,041.1 | 11,958.3 | 29.4 | 31.7 | 98.94 | 836.0 | -596.2 | 562.4 | 517.6 | 44.81 | 12.551 | |
| 12,075.0 | 11,976.1 | 12,059.5 | 11,976.6 | 29.3 | 31.7 | 99.75 | 836.0 | -596.2 | 566.2 | 520.7 | 45.44 | 12.460 | |
| 12,100.0 | 11,993.5 | 12,076.9 | 11,994.0 | 29.2 | 31.7 | 100.48 | 836.0 | -596.2 | 570.6 | 524.5 | 46.09 | 12.380 | |
| 12,125.0 | 12,010.0 | 12,093.3 | 12,010.5 | 29.1 | 31.7 | 101.09 | 836.0 | -596.2 | 575.9 | 529.1 | 46.77 | 12.313 | |
| 12,150.0 | 12,025.4 | 12,108.8 | 12,025.9 | 29.0 | 31.7 | 101.57 | 836.0 | -596.2 | 581.9 | 534.5 | 47.46 | 12.262 | |
| 12,175.0 | 12,039.8 | 12,123.2 | 12,040.3 | 28.9 | 31.7 | 101.89 | 836.0 | -596.2 | 588.9 | 540.7 | 48.16 | 12.228 | |
| 12,200.0 | 12,053.2 | 12,136.5 | 12,053.7 | 28.9 | 31.7 | 102.05 | 836.0 | -596.2 | 596.7 | 547.9 | 48.85 | 12.215 | |
| 12,225.0 | 12,065.4 | 12,148.7 | 12,065.9 | 28.8 | 31.7 | 102.01 | 836.0 | -596.2 | 605.5 | 555.9 | 49.54 | 12.222 | |
| 12,250.0 | 12,076.4 | 12,159.7 | 12,076.9 | 28.7 | 31.7 | 101.76 | 836.0 | -596.2 | 615.1 | 564.9 | 50.21 | 12.251 | |
| 12,275.0 | 12,086.2 | 12,169.6 | 12,086.7 | 28.7 | 31.8 | 101.29 | 836.0 | -596.2 | 625.7 | 574.9 | 50.86 | 12.302 | |
| 12,300.0 | 12,094.8 | 12,178.2 | 12,095.3 | 28.6 | 31.8 | 100.58 | 836.0 | -596.2 | 637.2 | 585.7 | 51.49 | 12.375 | |
| 12,325.0 | 12,102.2 | 12,185.6 | 12,102.7 | 28.6 | 31.8 | 99.61 | 836.0 | -596.2 | 649.6 | 597.5 | 52.09 | 12.471 | |
| 12,350.0 | 12,108.4 | 12,191.7 | 12,108.9 | 28.6 | 31.8 | 98.37 | 836.0 | -596.2 | 662.8 | 610.1 | 52.65 | 12.587 | |
| 12,375.0 | 12,113.2 | 12,196.5 | 12,113.7 | 28.5 | 31.8 | 96.86 | 836.0 | -596.2 | 676.7 | 623.5 | 53.18 | 12.724 | |
| 12,400.0 | 12,116.8 | 12,200.1 | 12,117.3 | 28.5 | 31.8 | 95.05 | 836.0 | -596.2 | 691.4 | 637.7 | 53.68 | 12.880 | |
| 12,425.0 | 12,119.0 | 12,202.4 | 12,119.5 | 28.5 | 31.8 | 92.96 | 836.0 | -596.2 | 706.7 | 652.6 | 54.14 | 13.053 | |
| 12,450.0 | 12,120.0 | 12,203.3 | 12,120.5 | 28.5 | 31.8 | 90.58 | 836.0 | -596.2 | 722.7 | 668.1 | 54.57 | 13.243 | |
| 12,455.7 | 12,120.0 | 12,203.3 | 12,120.5 | 28.5 | 31.8 | 90.00 | 836.0 | -596.2 | 726.4 | 671.7 | 54.66 | 13.288 | |
| 12,500.0 | 12,120.0 | 12,203.3 | 12,120.5 | 28.5 | 31.8 | 90.00 | 836.0 | -596.2 | 756.0 | 700.7 | 55.33 | 13.664 | |

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 HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

**Offset Design:** HARRIER FEDERAL PROJECT - HARRIER FEDERAL COM 802H - PILOT - PWP0 (PH)

**Offset Site Error:** 0.0 usft

**Survey Program:** 0-r.5 SDI_KPR_WL_NS-CT, 1000-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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12,600.0 | 12,120.0 | 12,203.3 | 12,120.5 | 28.5 | 31.8 | 90.00 | 836.0 | -596.2 | 827.8 | 771.3 | 56.49 | 14.654 | |
| 12,700.0 | 12,120.0 | 12,203.3 | 12,120.5 | 28.5 | 31.8 | 90.00 | 836.0 | -596.2 | 904.9 | 847.6 | 57.28 | 15.797 | |
| 12,800.0 | 12,120.0 | 12,203.3 | 12,120.5 | 28.5 | 31.8 | 90.00 | 836.0 | -596.2 | 986.1 | 928.3 | 57.82 | 17.056 | |

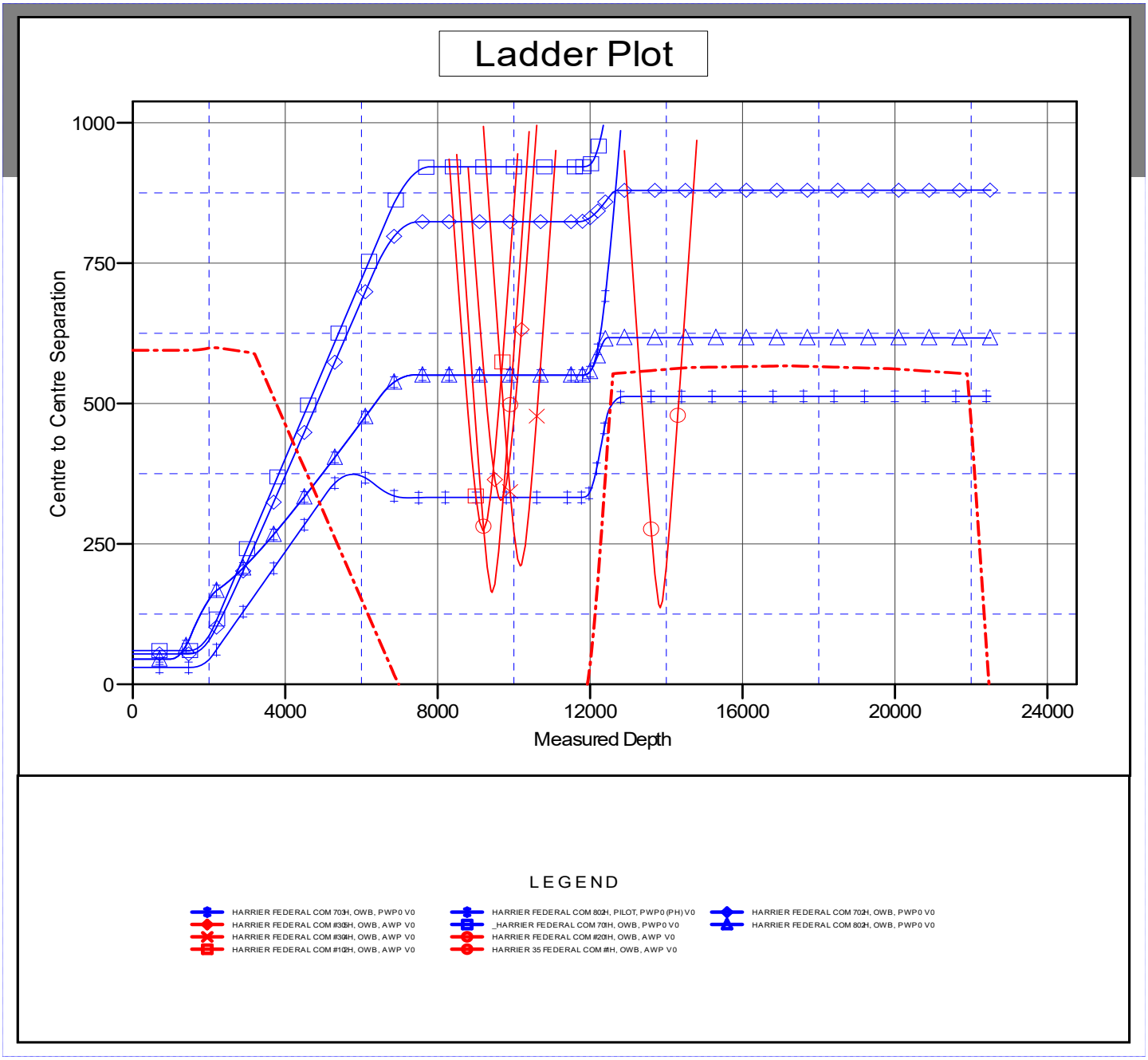
**ConocoPhillips**

Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

Reference Depths are relative to KB=32ft @ 3398.3usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: HARRIER FEDERAL COM 704H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°



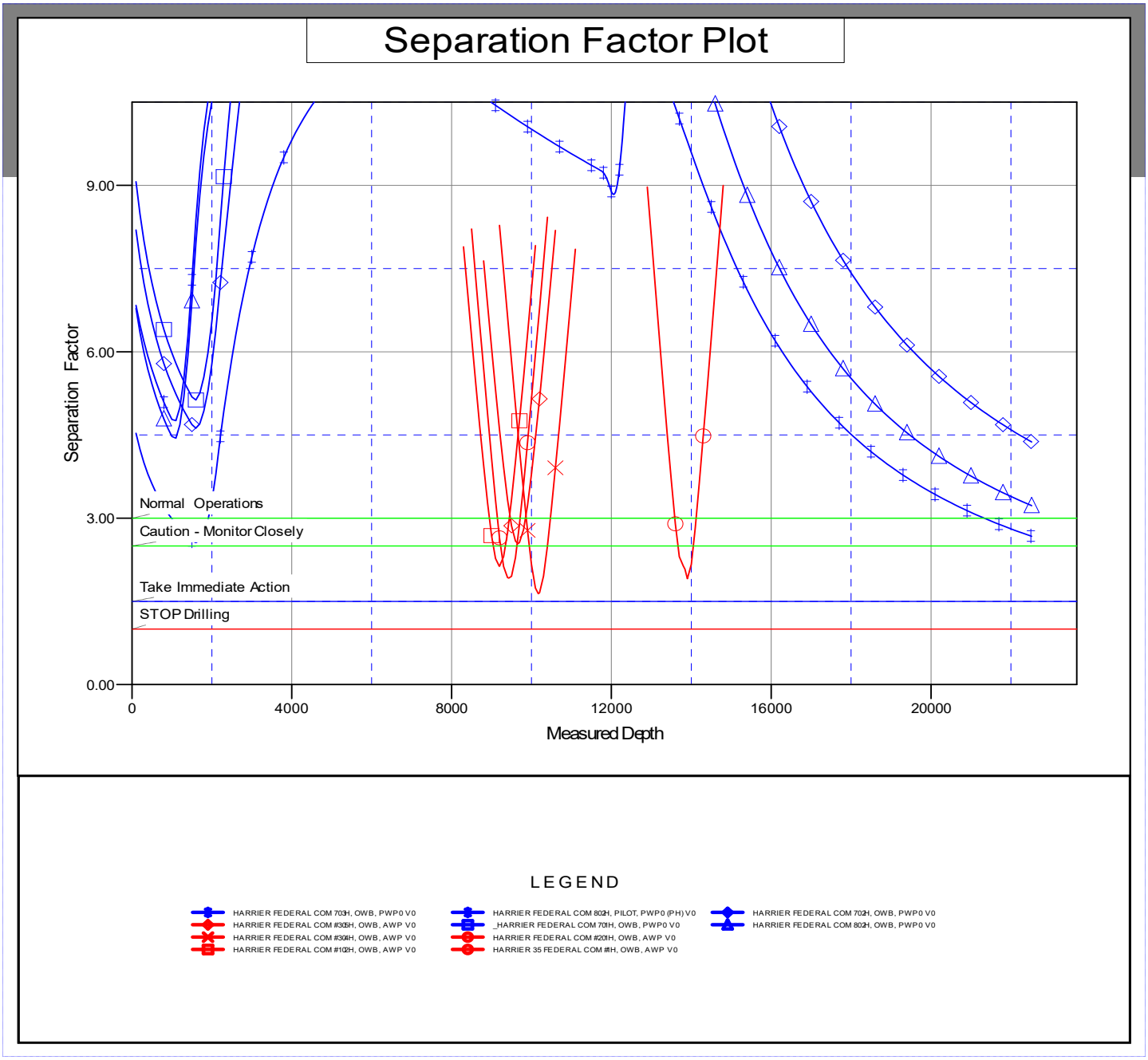
# ConocoPhillips

Anticollision Report

| | | | |
|---|---|---|---|
| **Company:** | DELAWARE BASIN EAST | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Reference Site:** | HARRIER FEDERAL PROJECT | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site Error:** | 0.0 usft | **North Reference:** | Grid |
| **Reference Well:** | HARRIER FEDERAL COM 704H | **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:** | PWP0 | **Offset TVD Reference:** | Offset Datum |

Reference Depths are relative to KB=32ft @ 3398.3usft
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: HARRIER FEDERAL COM 704H
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°



# DELAWARE BASIN EAST

**LEA COUNT SOUTH WEST (NM-E)**
**HARRIER FEDERAL PROJECT**
**HARRIER FEDERAL COM 704H**
**300254989000**
**OWB**

**Plan: PWP0**

# Standard Planning Report

**12 January, 2024**

# ConocoPhillips
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**Project** LEA COUNT SOUTH WEST (NM-E)

| | | | |
|---|---|---|---|
| **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** HARRIER 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** HARRIER FEDERAL COM 704H

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.0 usft | **Northing:** | 397,745.40 usft | **Latitude:** | 32° 5' 30.045 N |
| | **+E/-W** | 0.0 usft | **Easting:** | 711,375.70 usft | **Longitude:** | 103° 39' 2.850 W |
| **Position Uncertainty** | | 3.0 usft | **Wellhead Elevation:** | usft | **Ground Level:** | 3,366.3 usft |
| **Grid Convergence:** | | 0.36 ° | | | | |

**Wellbore** OWB

| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
|---|---|---|---|---|---|
| | BGGM2023 | 4/1/2024 | 6.29 | 59.61 | 47,257.48442398 |

**Design** PWP0

| | | | | | |
|---|---|---|---|---|---|
| **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 | 179.89 | |

**Plan Survey Tool Program** **Date** 1/12/2024

| | Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks |
|---|---|---|---|---|---|
| 1 | 0.0 | 22,519.8 | PWP0 (OWB) | r.5 MWD+IFR1<br>OWSG MWD + IFR1 rev.5 | |

# ConocoPhillips
## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**Plan Sections**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2,000.0 | 5.00 | 10.00 | 1,999.4 | 21.5 | 3.8 | 1.00 | 1.00 | 0.00 | 10.00 | |
| 2,215.1 | 9.00 | 356.40 | 2,212.9 | 47.5 | 4.4 | 2.00 | 1.86 | -6.32 | -29.36 | |
| 6,859.4 | 9.00 | 356.40 | 6,800.0 | 772.6 | -41.3 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,759.4 | 0.00 | 0.00 | 7,696.3 | 843.0 | -45.7 | 1.00 | -1.00 | 0.40 | 180.00 | |
| 11,705.7 | 0.00 | 0.00 | 11,642.5 | 843.0 | -45.7 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 12,455.7 | 90.00 | 179.65 | 12,120.0 | 365.6 | -42.8 | 12.00 | 12.00 | 23.95 | 179.65 | |
| 22,519.8 | 90.00 | 179.65 | 12,120.0 | -9,698.4 | 18.8 | 0.00 | 0.00 | 0.00 | 0.00 | |

# ConocoPhillips

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**Planned Survey**

| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 0.00 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 100.0 | 0.00 | 0.00 | 100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 200.0 | 0.00 | 0.00 | 200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 300.0 | 0.00 | 0.00 | 300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 500.0 | 0.00 | 0.00 | 500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 600.0 | 0.00 | 0.00 | 600.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 700.0 | 0.00 | 0.00 | 700.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 800.0 | 0.00 | 0.00 | 800.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 900.0 | 0.00 | 0.00 | 900.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,000.0 | 0.00 | 0.00 | 1,000.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,100.0 | 0.00 | 0.00 | 1,100.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,200.0 | 0.00 | 0.00 | 1,200.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,300.0 | 0.00 | 0.00 | 1,300.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,400.0 | 0.00 | 0.00 | 1,400.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| 1,500.0 | 0.00 | 0.00 | 1,500.0 | 0.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.00 |
| **Start Build 1.00** | | | | | | | | | |
| 1,600.0 | 1.00 | 10.00 | 1,600.0 | 0.9 | 0.2 | -0.9 | 1.00 | 1.00 | 0.00 |
| 1,700.0 | 2.00 | 10.00 | 1,700.0 | 3.4 | 0.6 | -3.4 | 1.00 | 1.00 | 0.00 |
| 1,800.0 | 3.00 | 10.00 | 1,799.9 | 7.7 | 1.4 | -7.7 | 1.00 | 1.00 | 0.00 |
| 1,900.0 | 4.00 | 10.00 | 1,899.7 | 13.7 | 2.4 | -13.7 | 1.00 | 1.00 | 0.00 |
| 2,000.0 | 5.00 | 10.00 | 1,999.4 | 21.5 | 3.8 | -21.5 | 1.00 | 1.00 | 0.00 |
| **Start DLS 2.00 TFO -29.36** | | | | | | | | | |
| 2,100.0 | 6.81 | 1.71 | 2,098.8 | 31.7 | 4.7 | -31.7 | 2.00 | 1.81 | -8.29 |
| 2,200.0 | 8.71 | 356.95 | 2,197.9 | 45.2 | 4.5 | -45.2 | 2.00 | 1.90 | -4.76 |
| 2,215.1 | 9.00 | 356.40 | 2,212.9 | 47.5 | 4.4 | -47.5 | 2.00 | 1.92 | -3.61 |
| **Start 4644.3 hold at 2215.1 MD** | | | | | | | | | |
| 2,300.0 | 9.00 | 356.40 | 2,296.7 | 60.8 | 3.5 | -60.8 | 0.00 | 0.00 | 0.00 |
| 2,400.0 | 9.00 | 356.40 | 2,395.5 | 76.4 | 2.5 | -76.4 | 0.00 | 0.00 | 0.00 |
| 2,500.0 | 9.00 | 356.40 | 2,494.2 | 92.0 | 1.6 | -92.0 | 0.00 | 0.00 | 0.00 |
| 2,600.0 | 9.00 | 356.40 | 2,593.0 | 107.6 | 0.6 | -107.6 | 0.00 | 0.00 | 0.00 |
| 2,700.0 | 9.00 | 356.40 | 2,691.8 | 123.2 | -0.4 | -123.2 | 0.00 | 0.00 | 0.00 |
| 2,800.0 | 9.00 | 356.40 | 2,790.5 | 138.8 | -1.4 | -138.8 | 0.00 | 0.00 | 0.00 |
| 2,900.0 | 9.00 | 356.40 | 2,889.3 | 154.4 | -2.4 | -154.4 | 0.00 | 0.00 | 0.00 |
| 3,000.0 | 9.00 | 356.40 | 2,988.1 | 170.0 | -3.4 | -170.1 | 0.00 | 0.00 | 0.00 |
| 3,100.0 | 9.00 | 356.40 | 3,086.8 | 185.7 | -4.3 | -185.7 | 0.00 | 0.00 | 0.00 |
| 3,200.0 | 9.00 | 356.40 | 3,185.6 | 201.3 | -5.3 | -201.3 | 0.00 | 0.00 | 0.00 |
| 3,300.0 | 9.00 | 356.40 | 3,284.4 | 216.9 | -6.3 | -216.9 | 0.00 | 0.00 | 0.00 |
| 3,400.0 | 9.00 | 356.40 | 3,383.1 | 232.5 | -7.3 | -232.5 | 0.00 | 0.00 | 0.00 |
| 3,500.0 | 9.00 | 356.40 | 3,481.9 | 248.1 | -8.3 | -248.1 | 0.00 | 0.00 | 0.00 |
| 3,600.0 | 9.00 | 356.40 | 3,580.7 | 263.7 | -9.2 | -263.7 | 0.00 | 0.00 | 0.00 |
| 3,700.0 | 9.00 | 356.40 | 3,679.5 | 279.3 | -10.2 | -279.4 | 0.00 | 0.00 | 0.00 |
| 3,800.0 | 9.00 | 356.40 | 3,778.2 | 294.9 | -11.2 | -295.0 | 0.00 | 0.00 | 0.00 |
| 3,900.0 | 9.00 | 356.40 | 3,877.0 | 310.6 | -12.2 | -310.6 | 0.00 | 0.00 | 0.00 |
| 4,000.0 | 9.00 | 356.40 | 3,975.8 | 326.2 | -13.2 | -326.2 | 0.00 | 0.00 | 0.00 |
| 4,100.0 | 9.00 | 356.40 | 4,074.5 | 341.8 | -14.2 | -341.8 | 0.00 | 0.00 | 0.00 |
| 4,200.0 | 9.00 | 356.40 | 4,173.3 | 357.4 | -15.1 | -357.4 | 0.00 | 0.00 | 0.00 |
| 4,300.0 | 9.00 | 356.40 | 4,272.1 | 373.0 | -16.1 | -373.0 | 0.00 | 0.00 | 0.00 |
| 4,400.0 | 9.00 | 356.40 | 4,370.8 | 388.6 | -17.1 | -388.7 | 0.00 | 0.00 | 0.00 |
| 4,500.0 | 9.00 | 356.40 | 4,469.6 | 404.2 | -18.1 | -404.3 | 0.00 | 0.00 | 0.00 |
| 4,600.0 | 9.00 | 356.40 | 4,568.4 | 419.8 | -19.1 | -419.9 | 0.00 | 0.00 | 0.00 |
| 4,700.0 | 9.00 | 356.40 | 4,667.1 | 435.5 | -20.1 | -435.5 | 0.00 | 0.00 | 0.00 |
| 4,800.0 | 9.00 | 356.40 | 4,765.9 | 451.1 | -21.0 | -451.1 | 0.00 | 0.00 | 0.00 |

# ConocoPhillips

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**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) |
|---|---|---|---|---|---|---|---|---|---|
| 4,900.0 | 9.00 | 356.40 | 4,864.7 | 466.7 | -22.0 | -466.7 | 0.00 | 0.00 | 0.00 |
| 5,000.0 | 9.00 | 356.40 | 4,963.4 | 482.3 | -23.0 | -482.3 | 0.00 | 0.00 | 0.00 |
| 5,100.0 | 9.00 | 356.40 | 5,062.2 | 497.9 | -24.0 | -498.0 | 0.00 | 0.00 | 0.00 |
| 5,200.0 | 9.00 | 356.40 | 5,161.0 | 513.5 | -25.0 | -513.6 | 0.00 | 0.00 | 0.00 |
| 5,300.0 | 9.00 | 356.40 | 5,259.8 | 529.1 | -25.9 | -529.2 | 0.00 | 0.00 | 0.00 |
| 5,400.0 | 9.00 | 356.40 | 5,358.5 | 544.8 | -26.9 | -544.8 | 0.00 | 0.00 | 0.00 |
| 5,500.0 | 9.00 | 356.40 | 5,457.3 | 560.4 | -27.9 | -560.4 | 0.00 | 0.00 | 0.00 |
| 5,600.0 | 9.00 | 356.40 | 5,556.1 | 576.0 | -28.9 | -576.0 | 0.00 | 0.00 | 0.00 |
| 5,700.0 | 9.00 | 356.40 | 5,654.8 | 591.6 | -29.9 | -591.6 | 0.00 | 0.00 | 0.00 |
| 5,800.0 | 9.00 | 356.40 | 5,753.6 | 607.2 | -30.9 | -607.3 | 0.00 | 0.00 | 0.00 |
| 5,900.0 | 9.00 | 356.40 | 5,852.4 | 622.8 | -31.8 | -622.9 | 0.00 | 0.00 | 0.00 |
| 6,000.0 | 9.00 | 356.40 | 5,951.1 | 638.4 | -32.8 | -638.5 | 0.00 | 0.00 | 0.00 |
| 6,100.0 | 9.00 | 356.40 | 6,049.9 | 654.0 | -33.8 | -654.1 | 0.00 | 0.00 | 0.00 |
| 6,200.0 | 9.00 | 356.40 | 6,148.7 | 669.7 | -34.8 | -669.7 | 0.00 | 0.00 | 0.00 |
| 6,300.0 | 9.00 | 356.40 | 6,247.4 | 685.3 | -35.8 | -685.3 | 0.00 | 0.00 | 0.00 |
| 6,400.0 | 9.00 | 356.40 | 6,346.2 | 700.9 | -36.7 | -700.9 | 0.00 | 0.00 | 0.00 |
| 6,500.0 | 9.00 | 356.40 | 6,445.0 | 716.5 | -37.7 | -716.6 | 0.00 | 0.00 | 0.00 |
| 6,600.0 | 9.00 | 356.40 | 6,543.7 | 732.1 | -38.7 | -732.2 | 0.00 | 0.00 | 0.00 |
| 6,700.0 | 9.00 | 356.40 | 6,642.5 | 747.7 | -39.7 | -747.8 | 0.00 | 0.00 | 0.00 |
| 6,800.0 | 9.00 | 356.40 | 6,741.3 | 763.3 | -40.7 | -763.4 | 0.00 | 0.00 | 0.00 |
| 6,859.4 | 9.00 | 356.40 | 6,800.0 | 772.6 | -41.3 | -772.7 | 0.00 | 0.00 | 0.00 |
| **Start DLS 1.00 TFO 180.00** | | | | | | | | | |
| 6,900.0 | 8.59 | 356.40 | 6,840.1 | 778.8 | -41.7 | -778.9 | 1.00 | -1.00 | 0.00 |
| 7,000.0 | 7.59 | 356.40 | 6,939.1 | 792.9 | -42.5 | -792.9 | 1.00 | -1.00 | 0.00 |
| 7,100.0 | 6.59 | 356.40 | 7,038.3 | 805.2 | -43.3 | -805.3 | 1.00 | -1.00 | 0.00 |
| 7,200.0 | 5.59 | 356.40 | 7,137.7 | 815.8 | -44.0 | -815.9 | 1.00 | -1.00 | 0.00 |
| 7,300.0 | 4.59 | 356.40 | 7,237.3 | 824.6 | -44.5 | -824.7 | 1.00 | -1.00 | 0.00 |
| 7,400.0 | 3.59 | 356.40 | 7,337.1 | 831.8 | -45.0 | -831.8 | 1.00 | -1.00 | 0.00 |
| 7,500.0 | 2.59 | 356.40 | 7,436.9 | 837.1 | -45.3 | -837.2 | 1.00 | -1.00 | 0.00 |
| 7,600.0 | 1.59 | 356.40 | 7,536.9 | 840.8 | -45.6 | -840.9 | 1.00 | -1.00 | 0.00 |
| 7,700.0 | 0.59 | 356.40 | 7,636.9 | 842.7 | -45.7 | -842.8 | 1.00 | -1.00 | 0.00 |
| 7,759.4 | 0.00 | 0.00 | 7,696.3 | 843.0 | -45.7 | -843.1 | 1.00 | -1.00 | 6.06 |
| **Start 3946.2 hold at 7759.4 MD** | | | | | | | | | |
| 7,800.0 | 0.00 | 0.00 | 7,736.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 7,900.0 | 0.00 | 0.00 | 7,836.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,000.0 | 0.00 | 0.00 | 7,936.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,100.0 | 0.00 | 0.00 | 8,036.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,200.0 | 0.00 | 0.00 | 8,136.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,300.0 | 0.00 | 0.00 | 8,236.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,400.0 | 0.00 | 0.00 | 8,336.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,500.0 | 0.00 | 0.00 | 8,436.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,600.0 | 0.00 | 0.00 | 8,536.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,700.0 | 0.00 | 0.00 | 8,636.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,800.0 | 0.00 | 0.00 | 8,736.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 8,900.0 | 0.00 | 0.00 | 8,836.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,000.0 | 0.00 | 0.00 | 8,936.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,100.0 | 0.00 | 0.00 | 9,036.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,200.0 | 0.00 | 0.00 | 9,136.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,300.0 | 0.00 | 0.00 | 9,236.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,400.0 | 0.00 | 0.00 | 9,336.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,500.0 | 0.00 | 0.00 | 9,436.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,600.0 | 0.00 | 0.00 | 9,536.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,700.0 | 0.00 | 0.00 | 9,636.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 9,800.0 | 0.00 | 0.00 | 9,736.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |

# ConocoPhillips

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**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) |
|---|---|---|---|---|---|---|---|---|---|
| 9,900.0 | 0.00 | 0.00 | 9,836.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,000.0 | 0.00 | 0.00 | 9,936.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,100.0 | 0.00 | 0.00 | 10,036.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,200.0 | 0.00 | 0.00 | 10,136.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,300.0 | 0.00 | 0.00 | 10,236.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,400.0 | 0.00 | 0.00 | 10,336.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,500.0 | 0.00 | 0.00 | 10,436.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,600.0 | 0.00 | 0.00 | 10,536.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,700.0 | 0.00 | 0.00 | 10,636.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,800.0 | 0.00 | 0.00 | 10,736.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 10,900.0 | 0.00 | 0.00 | 10,836.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,000.0 | 0.00 | 0.00 | 10,936.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,100.0 | 0.00 | 0.00 | 11,036.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,200.0 | 0.00 | 0.00 | 11,136.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,300.0 | 0.00 | 0.00 | 11,236.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,400.0 | 0.00 | 0.00 | 11,336.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,500.0 | 0.00 | 0.00 | 11,436.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,600.0 | 0.00 | 0.00 | 11,536.9 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| 11,705.7 | 0.00 | 0.00 | 11,642.5 | 843.0 | -45.7 | -843.1 | 0.00 | 0.00 | 0.00 |
| **Start DLS 12.00 TFO 179.65** | | | | | | | | | |
| 11,725.0 | 2.32 | 179.65 | 11,661.9 | 842.6 | -45.7 | -842.7 | 12.00 | 12.00 | 929.79 |
| 11,750.0 | 5.32 | 179.65 | 11,686.8 | 841.0 | -45.7 | -841.0 | 12.00 | 12.00 | 0.00 |
| 11,775.0 | 8.32 | 179.65 | 11,711.6 | 838.0 | -45.7 | -838.1 | 12.00 | 12.00 | 0.00 |
| 11,800.0 | 11.32 | 179.65 | 11,736.2 | 833.7 | -45.6 | -833.8 | 12.00 | 12.00 | 0.00 |
| 11,825.0 | 14.32 | 179.65 | 11,760.6 | 828.2 | -45.6 | -828.3 | 12.00 | 12.00 | 0.00 |
| 11,850.0 | 17.32 | 179.65 | 11,784.7 | 821.4 | -45.6 | -821.5 | 12.00 | 12.00 | 0.00 |
| 11,875.0 | 20.32 | 179.65 | 11,808.3 | 813.3 | -45.5 | -813.4 | 12.00 | 12.00 | 0.00 |
| 11,900.0 | 23.32 | 179.65 | 11,831.5 | 804.0 | -45.5 | -804.1 | 12.00 | 12.00 | 0.00 |
| 11,925.0 | 26.32 | 179.65 | 11,854.2 | 793.5 | -45.4 | -793.6 | 12.00 | 12.00 | 0.00 |
| 11,950.0 | 29.32 | 179.65 | 11,876.3 | 781.9 | -45.3 | -781.9 | 12.00 | 12.00 | 0.00 |
| 11,975.0 | 32.32 | 179.65 | 11,897.8 | 769.0 | -45.2 | -769.1 | 12.00 | 12.00 | 0.00 |
| 12,000.0 | 35.32 | 179.65 | 11,918.6 | 755.1 | -45.2 | -755.2 | 12.00 | 12.00 | 0.00 |
| 12,025.0 | 38.32 | 179.65 | 11,938.6 | 740.2 | -45.1 | -740.2 | 12.00 | 12.00 | 0.00 |
| 12,050.0 | 41.32 | 179.65 | 11,957.8 | 724.1 | -45.0 | -724.2 | 12.00 | 12.00 | 0.00 |
| 12,075.0 | 44.32 | 179.65 | 11,976.1 | 707.2 | -44.9 | -707.2 | 12.00 | 12.00 | 0.00 |
| 12,100.0 | 47.32 | 179.65 | 11,993.5 | 689.2 | -44.8 | -689.3 | 12.00 | 12.00 | 0.00 |
| 12,125.0 | 50.32 | 179.65 | 12,010.0 | 670.4 | -44.6 | -670.5 | 12.00 | 12.00 | 0.00 |
| 12,150.0 | 53.32 | 179.65 | 12,025.4 | 650.8 | -44.5 | -650.9 | 12.00 | 12.00 | 0.00 |
| 12,175.0 | 56.32 | 179.65 | 12,039.8 | 630.3 | -44.4 | -630.4 | 12.00 | 12.00 | 0.00 |
| 12,200.0 | 59.32 | 179.65 | 12,053.2 | 609.2 | -44.3 | -609.3 | 12.00 | 12.00 | 0.00 |
| 12,225.0 | 62.32 | 179.65 | 12,065.4 | 587.4 | -44.1 | -587.4 | 12.00 | 12.00 | 0.00 |
| 12,250.0 | 65.32 | 179.65 | 12,076.4 | 564.9 | -44.0 | -565.0 | 12.00 | 12.00 | 0.00 |
| 12,275.0 | 68.32 | 179.65 | 12,086.2 | 541.9 | -43.8 | -542.0 | 12.00 | 12.00 | 0.00 |
| 12,300.0 | 71.32 | 179.65 | 12,094.8 | 518.5 | -43.7 | -518.6 | 12.00 | 12.00 | 0.00 |
| 12,325.0 | 74.32 | 179.65 | 12,102.2 | 494.6 | -43.6 | -494.7 | 12.00 | 12.00 | 0.00 |
| 12,350.0 | 77.32 | 179.65 | 12,108.4 | 470.4 | -43.4 | -470.5 | 12.00 | 12.00 | 0.00 |
| 12,375.0 | 80.32 | 179.65 | 12,113.2 | 445.8 | -43.3 | -445.9 | 12.00 | 12.00 | 0.00 |
| 12,400.0 | 83.32 | 179.65 | 12,116.8 | 421.1 | -43.1 | -421.2 | 12.00 | 12.00 | 0.00 |
| 12,425.0 | 86.32 | 179.65 | 12,119.0 | 396.2 | -43.0 | -396.3 | 12.00 | 12.00 | 0.00 |
| 12,450.0 | 89.32 | 179.65 | 12,120.0 | 371.2 | -42.8 | -371.3 | 12.00 | 12.00 | 0.00 |
| 12,455.7 | 90.00 | 179.65 | 12,120.0 | 365.6 | -42.8 | -365.6 | 12.00 | 12.00 | 0.00 |
| **Start 10064.1 hold at 12455.7 MD** | | | | | | | | | |
| 12,500.0 | 90.00 | 179.65 | 12,120.0 | 321.2 | -42.5 | -321.3 | 0.00 | 0.00 | 0.00 |
| 12,600.0 | 90.00 | 179.65 | 12,120.0 | 221.2 | -41.9 | -221.3 | 0.00 | 0.00 | 0.00 |

# ConocoPhillips

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**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) |
|---|---|---|---|---|---|---|---|---|---|
| 12,700.0 | 90.00 | 179.65 | 12,120.0 | 121.2 | -41.3 | -121.3 | 0.00 | 0.00 | 0.00 |
| 12,800.0 | 90.00 | 179.65 | 12,120.0 | 21.2 | -40.7 | -21.3 | 0.00 | 0.00 | 0.00 |
| 12,900.0 | 90.00 | 179.65 | 12,120.0 | -78.8 | -40.1 | 78.7 | 0.00 | 0.00 | 0.00 |
| 13,000.0 | 90.00 | 179.65 | 12,120.0 | -178.8 | -39.4 | 178.7 | 0.00 | 0.00 | 0.00 |
| 13,100.0 | 90.00 | 179.65 | 12,120.0 | -278.8 | -38.8 | 278.7 | 0.00 | 0.00 | 0.00 |
| 13,200.0 | 90.00 | 179.65 | 12,120.0 | -378.8 | -38.2 | 378.7 | 0.00 | 0.00 | 0.00 |
| 13,300.0 | 90.00 | 179.65 | 12,120.0 | -478.8 | -37.6 | 478.7 | 0.00 | 0.00 | 0.00 |
| 13,400.0 | 90.00 | 179.65 | 12,120.0 | -578.8 | -37.0 | 578.7 | 0.00 | 0.00 | 0.00 |
| 13,500.0 | 90.00 | 179.65 | 12,120.0 | -678.7 | -36.4 | 678.7 | 0.00 | 0.00 | 0.00 |
| 13,600.0 | 90.00 | 179.65 | 12,120.0 | -778.7 | -35.8 | 778.7 | 0.00 | 0.00 | 0.00 |
| 13,700.0 | 90.00 | 179.65 | 12,120.0 | -878.7 | -35.2 | 878.7 | 0.00 | 0.00 | 0.00 |
| 13,800.0 | 90.00 | 179.65 | 12,120.0 | -978.7 | -34.5 | 978.7 | 0.00 | 0.00 | 0.00 |
| 13,900.0 | 90.00 | 179.65 | 12,120.0 | -1,078.7 | -33.9 | 1,078.7 | 0.00 | 0.00 | 0.00 |
| 14,000.0 | 90.00 | 179.65 | 12,120.0 | -1,178.7 | -33.3 | 1,178.7 | 0.00 | 0.00 | 0.00 |
| 14,100.0 | 90.00 | 179.65 | 12,120.0 | -1,278.7 | -32.7 | 1,278.7 | 0.00 | 0.00 | 0.00 |
| 14,200.0 | 90.00 | 179.65 | 12,120.0 | -1,378.7 | -32.1 | 1,378.7 | 0.00 | 0.00 | 0.00 |
| 14,300.0 | 90.00 | 179.65 | 12,120.0 | -1,478.7 | -31.5 | 1,478.7 | 0.00 | 0.00 | 0.00 |
| 14,400.0 | 90.00 | 179.65 | 12,120.0 | -1,578.7 | -30.9 | 1,578.7 | 0.00 | 0.00 | 0.00 |
| 14,500.0 | 90.00 | 179.65 | 12,120.0 | -1,678.7 | -30.3 | 1,678.7 | 0.00 | 0.00 | 0.00 |
| 14,600.0 | 90.00 | 179.65 | 12,120.0 | -1,778.7 | -29.7 | 1,778.7 | 0.00 | 0.00 | 0.00 |
| 14,700.0 | 90.00 | 179.65 | 12,120.0 | -1,878.7 | -29.0 | 1,878.7 | 0.00 | 0.00 | 0.00 |
| 14,800.0 | 90.00 | 179.65 | 12,120.0 | -1,978.7 | -28.4 | 1,978.7 | 0.00 | 0.00 | 0.00 |
| 14,900.0 | 90.00 | 179.65 | 12,120.0 | -2,078.7 | -27.8 | 2,078.7 | 0.00 | 0.00 | 0.00 |
| 15,000.0 | 90.00 | 179.65 | 12,120.0 | -2,178.7 | -27.2 | 2,178.7 | 0.00 | 0.00 | 0.00 |
| 15,100.0 | 90.00 | 179.65 | 12,120.0 | -2,278.7 | -26.6 | 2,278.7 | 0.00 | 0.00 | 0.00 |
| 15,200.0 | 90.00 | 179.65 | 12,120.0 | -2,378.7 | -26.0 | 2,378.7 | 0.00 | 0.00 | 0.00 |
| 15,300.0 | 90.00 | 179.65 | 12,120.0 | -2,478.7 | -25.4 | 2,478.7 | 0.00 | 0.00 | 0.00 |
| 15,400.0 | 90.00 | 179.65 | 12,120.0 | -2,578.7 | -24.8 | 2,578.7 | 0.00 | 0.00 | 0.00 |
| 15,500.0 | 90.00 | 179.65 | 12,120.0 | -2,678.7 | -24.1 | 2,678.7 | 0.00 | 0.00 | 0.00 |
| 15,600.0 | 90.00 | 179.65 | 12,120.0 | -2,778.7 | -23.5 | 2,778.7 | 0.00 | 0.00 | 0.00 |
| 15,700.0 | 90.00 | 179.65 | 12,120.0 | -2,878.7 | -22.9 | 2,878.7 | 0.00 | 0.00 | 0.00 |
| 15,800.0 | 90.00 | 179.65 | 12,120.0 | -2,978.7 | -22.3 | 2,978.7 | 0.00 | 0.00 | 0.00 |
| 15,900.0 | 90.00 | 179.65 | 12,120.0 | -3,078.7 | -21.7 | 3,078.7 | 0.00 | 0.00 | 0.00 |
| 16,000.0 | 90.00 | 179.65 | 12,120.0 | -3,178.7 | -21.1 | 3,178.7 | 0.00 | 0.00 | 0.00 |
| 16,100.0 | 90.00 | 179.65 | 12,120.0 | -3,278.7 | -20.5 | 3,278.7 | 0.00 | 0.00 | 0.00 |
| 16,200.0 | 90.00 | 179.65 | 12,120.0 | -3,378.7 | -19.9 | 3,378.7 | 0.00 | 0.00 | 0.00 |
| 16,300.0 | 90.00 | 179.65 | 12,120.0 | -3,478.7 | -19.3 | 3,478.7 | 0.00 | 0.00 | 0.00 |
| 16,400.0 | 90.00 | 179.65 | 12,120.0 | -3,578.7 | -18.6 | 3,578.7 | 0.00 | 0.00 | 0.00 |
| 16,500.0 | 90.00 | 179.65 | 12,120.0 | -3,678.7 | -18.0 | 3,678.7 | 0.00 | 0.00 | 0.00 |
| 16,600.0 | 90.00 | 179.65 | 12,120.0 | -3,778.7 | -17.4 | 3,778.6 | 0.00 | 0.00 | 0.00 |
| 16,700.0 | 90.00 | 179.65 | 12,120.0 | -3,878.7 | -16.8 | 3,878.6 | 0.00 | 0.00 | 0.00 |
| 16,800.0 | 90.00 | 179.65 | 12,120.0 | -3,978.7 | -16.2 | 3,978.6 | 0.00 | 0.00 | 0.00 |
| 16,900.0 | 90.00 | 179.65 | 12,120.0 | -4,078.7 | -15.6 | 4,078.6 | 0.00 | 0.00 | 0.00 |
| 17,000.0 | 90.00 | 179.65 | 12,120.0 | -4,178.7 | -15.0 | 4,178.6 | 0.00 | 0.00 | 0.00 |
| 17,100.0 | 90.00 | 179.65 | 12,120.0 | -4,278.7 | -14.4 | 4,278.6 | 0.00 | 0.00 | 0.00 |
| 17,200.0 | 90.00 | 179.65 | 12,120.0 | -4,378.7 | -13.7 | 4,378.6 | 0.00 | 0.00 | 0.00 |
| 17,300.0 | 90.00 | 179.65 | 12,120.0 | -4,478.7 | -13.1 | 4,478.6 | 0.00 | 0.00 | 0.00 |
| 17,400.0 | 90.00 | 179.65 | 12,120.0 | -4,578.7 | -12.5 | 4,578.6 | 0.00 | 0.00 | 0.00 |
| 17,500.0 | 90.00 | 179.65 | 12,120.0 | -4,678.7 | -11.9 | 4,678.6 | 0.00 | 0.00 | 0.00 |
| 17,600.0 | 90.00 | 179.65 | 12,120.0 | -4,778.7 | -11.3 | 4,778.6 | 0.00 | 0.00 | 0.00 |
| 17,700.0 | 90.00 | 179.65 | 12,120.0 | -4,878.7 | -10.7 | 4,878.6 | 0.00 | 0.00 | 0.00 |
| 17,800.0 | 90.00 | 179.65 | 12,120.0 | -4,978.7 | -10.1 | 4,978.6 | 0.00 | 0.00 | 0.00 |
| 17,900.0 | 90.00 | 179.65 | 12,120.0 | -5,078.7 | -9.5 | 5,078.6 | 0.00 | 0.00 | 0.00 |
| 18,000.0 | 90.00 | 179.65 | 12,120.0 | -5,178.7 | -8.9 | 5,178.6 | 0.00 | 0.00 | 0.00 |

# ConocoPhillips

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**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) |
|---|---|---|---|---|---|---|---|---|---|
| 18,100.0 | 90.00 | 179.65 | 12,120.0 | -5,278.7 | -8.2 | 5,278.6 | 0.00 | 0.00 | 0.00 |
| 18,200.0 | 90.00 | 179.65 | 12,120.0 | -5,378.7 | -7.6 | 5,378.6 | 0.00 | 0.00 | 0.00 |
| 18,300.0 | 90.00 | 179.65 | 12,120.0 | -5,478.7 | -7.0 | 5,478.6 | 0.00 | 0.00 | 0.00 |
| 18,400.0 | 90.00 | 179.65 | 12,120.0 | -5,578.7 | -6.4 | 5,578.6 | 0.00 | 0.00 | 0.00 |
| 18,500.0 | 90.00 | 179.65 | 12,120.0 | -5,678.7 | -5.8 | 5,678.6 | 0.00 | 0.00 | 0.00 |
| 18,600.0 | 90.00 | 179.65 | 12,120.0 | -5,778.7 | -5.2 | 5,778.6 | 0.00 | 0.00 | 0.00 |
| 18,700.0 | 90.00 | 179.65 | 12,120.0 | -5,878.7 | -4.6 | 5,878.6 | 0.00 | 0.00 | 0.00 |
| 18,800.0 | 90.00 | 179.65 | 12,120.0 | -5,978.6 | -4.0 | 5,978.6 | 0.00 | 0.00 | 0.00 |
| 18,900.0 | 90.00 | 179.65 | 12,120.0 | -6,078.6 | -3.3 | 6,078.6 | 0.00 | 0.00 | 0.00 |
| 19,000.0 | 90.00 | 179.65 | 12,120.0 | -6,178.6 | -2.7 | 6,178.6 | 0.00 | 0.00 | 0.00 |
| 19,100.0 | 90.00 | 179.65 | 12,120.0 | -6,278.6 | -2.1 | 6,278.6 | 0.00 | 0.00 | 0.00 |
| 19,200.0 | 90.00 | 179.65 | 12,120.0 | -6,378.6 | -1.5 | 6,378.6 | 0.00 | 0.00 | 0.00 |
| 19,300.0 | 90.00 | 179.65 | 12,120.0 | -6,478.6 | -0.9 | 6,478.6 | 0.00 | 0.00 | 0.00 |
| 19,400.0 | 90.00 | 179.65 | 12,120.0 | -6,578.6 | -0.3 | 6,578.6 | 0.00 | 0.00 | 0.00 |
| 19,500.0 | 90.00 | 179.65 | 12,120.0 | -6,678.6 | 0.3 | 6,678.6 | 0.00 | 0.00 | 0.00 |
| 19,600.0 | 90.00 | 179.65 | 12,120.0 | -6,778.6 | 0.9 | 6,778.6 | 0.00 | 0.00 | 0.00 |
| 19,700.0 | 90.00 | 179.65 | 12,120.0 | -6,878.6 | 1.5 | 6,878.6 | 0.00 | 0.00 | 0.00 |
| 19,800.0 | 90.00 | 179.65 | 12,120.0 | -6,978.6 | 2.2 | 6,978.6 | 0.00 | 0.00 | 0.00 |
| 19,900.0 | 90.00 | 179.65 | 12,120.0 | -7,078.6 | 2.8 | 7,078.6 | 0.00 | 0.00 | 0.00 |
| 20,000.0 | 90.00 | 179.65 | 12,120.0 | -7,178.6 | 3.4 | 7,178.6 | 0.00 | 0.00 | 0.00 |
| 20,100.0 | 90.00 | 179.65 | 12,120.0 | -7,278.6 | 4.0 | 7,278.6 | 0.00 | 0.00 | 0.00 |
| 20,200.0 | 90.00 | 179.65 | 12,120.0 | -7,378.6 | 4.6 | 7,378.6 | 0.00 | 0.00 | 0.00 |
| 20,300.0 | 90.00 | 179.65 | 12,120.0 | -7,478.6 | 5.2 | 7,478.6 | 0.00 | 0.00 | 0.00 |
| 20,400.0 | 90.00 | 179.65 | 12,120.0 | -7,578.6 | 5.8 | 7,578.6 | 0.00 | 0.00 | 0.00 |
| 20,500.0 | 90.00 | 179.65 | 12,120.0 | -7,678.6 | 6.4 | 7,678.6 | 0.00 | 0.00 | 0.00 |
| 20,600.0 | 90.00 | 179.65 | 12,120.0 | -7,778.6 | 7.1 | 7,778.6 | 0.00 | 0.00 | 0.00 |
| 20,700.0 | 90.00 | 179.65 | 12,120.0 | -7,878.6 | 7.7 | 7,878.6 | 0.00 | 0.00 | 0.00 |
| 20,800.0 | 90.00 | 179.65 | 12,120.0 | -7,978.6 | 8.3 | 7,978.6 | 0.00 | 0.00 | 0.00 |
| 20,900.0 | 90.00 | 179.65 | 12,120.0 | -8,078.6 | 8.9 | 8,078.6 | 0.00 | 0.00 | 0.00 |
| 21,000.0 | 90.00 | 179.65 | 12,120.0 | -8,178.6 | 9.5 | 8,178.6 | 0.00 | 0.00 | 0.00 |
| 21,100.0 | 90.00 | 179.65 | 12,120.0 | -8,278.6 | 10.1 | 8,278.6 | 0.00 | 0.00 | 0.00 |
| 21,200.0 | 90.00 | 179.65 | 12,120.0 | -8,378.6 | 10.7 | 8,378.6 | 0.00 | 0.00 | 0.00 |
| 21,300.0 | 90.00 | 179.65 | 12,120.0 | -8,478.6 | 11.3 | 8,478.6 | 0.00 | 0.00 | 0.00 |
| 21,400.0 | 90.00 | 179.65 | 12,120.0 | -8,578.6 | 11.9 | 8,578.6 | 0.00 | 0.00 | 0.00 |
| 21,500.0 | 90.00 | 179.65 | 12,120.0 | -8,678.6 | 12.6 | 8,678.6 | 0.00 | 0.00 | 0.00 |
| 21,600.0 | 90.00 | 179.65 | 12,120.0 | -8,778.6 | 13.2 | 8,778.6 | 0.00 | 0.00 | 0.00 |
| 21,700.0 | 90.00 | 179.65 | 12,120.0 | -8,878.6 | 13.8 | 8,878.6 | 0.00 | 0.00 | 0.00 |
| 21,800.0 | 90.00 | 179.65 | 12,120.0 | -8,978.6 | 14.4 | 8,978.6 | 0.00 | 0.00 | 0.00 |
| 21,900.0 | 90.00 | 179.65 | 12,120.0 | -9,078.6 | 15.0 | 9,078.6 | 0.00 | 0.00 | 0.00 |
| 22,000.0 | 90.00 | 179.65 | 12,120.0 | -9,178.6 | 15.6 | 9,178.6 | 0.00 | 0.00 | 0.00 |
| 22,100.0 | 90.00 | 179.65 | 12,120.0 | -9,278.6 | 16.2 | 9,278.6 | 0.00 | 0.00 | 0.00 |
| 22,200.0 | 90.00 | 179.65 | 12,120.0 | -9,378.6 | 16.8 | 9,378.6 | 0.00 | 0.00 | 0.00 |
| 22,300.0 | 90.00 | 179.65 | 12,120.0 | -9,478.6 | 17.5 | 9,478.6 | 0.00 | 0.00 | 0.00 |
| 22,400.0 | 90.00 | 179.65 | 12,120.0 | -9,578.6 | 18.1 | 9,578.6 | 0.00 | 0.00 | 0.00 |
| 22,500.0 | 90.00 | 179.65 | 12,120.0 | -9,678.6 | 18.7 | 9,678.6 | 0.00 | 0.00 | 0.00 |
| 22,519.8 | 90.00 | 179.65 | 12,120.0 | -9,698.4 | 18.8 | 9,698.4 | 0.00 | 0.00 | 0.00 |
| **TD at 22519.8** | | | | | | | | | |

**ConocoPhillips**
Planning Report

| | | | |
|---|---|---|---|
| **Database:** | EDT 17 Permian Prod | **Local Co-ordinate Reference:** | Well HARRIER FEDERAL COM 704H |
| **Company:** | DELAWARE BASIN EAST | **TVD Reference:** | KB=32ft @ 3398.3usft |
| **Project:** | LEA COUNT SOUTH WEST (NM-E) | **MD Reference:** | KB=32ft @ 3398.3usft |
| **Site:** | HARRIER FEDERAL PROJECT | **North Reference:** | Grid |
| **Well:** | HARRIER FEDERAL COM 704H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OWB | | |
| **Design:** | PWP0 | | |

**Design Targets**

| Target Name<br>- hit/miss target<br>- Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| KOP BOX: 0'N & 50'S X<br>- plan hits target center<br>- Rectangle (sides W100.0 H50.0 D3,946.2) | 0.00 | 0.00 | 11,644.5 | 843.0 | -45.7 | 398,588.41 | 711,330.00 | 32° 5' 38.390 N | 103° 39' 3.319 W |
| PBHL_HARRIER 704H<br>- plan hits target center<br>- Rectangle (sides W100.0 H10,487.9 D20.0) | 0.00 | 359.65 | 12,120.0 | -9,698.4 | 18.8 | 388,047.00 | 711,394.50 | 32° 3' 54.069 N | 103° 39' 3.344 W |
| LTP_HARRIER 704H<br>- plan hits target center<br>- Circle (radius 50.0) | 90.00 | 179.65 | 12,120.0 | -9,648.4 | 18.5 | 388,097.00 | 711,394.20 | 32° 3' 54.564 N | 103° 39' 3.344 W |
| FTP_HARRIER 704H<br>- plan misses target center by 161.2usft at 12107.7usft MD (11998.7 TVD, 683.6 N, -44.7 E)<br>- Circle (radius 50.0) | 0.00 | 0.01 | 12,120.0 | 789.7 | -45.4 | 398,535.10 | 711,330.30 | 32° 5' 37.863 N | 103° 39' 3.319 W |

**Plan Annotations**

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates +N/-S (usft) | Local Coordinates +E/-W (usft) | Comment |
|---|---|---|---|---|
| 1,500.0 | 1,500.0 | 0.0 | 0.0 | Start Build 1.00 |
| 2,000.0 | 1,999.4 | 21.5 | 3.8 | Start DLS 2.00 TFO -29.36 |
| 2,215.1 | 2,212.9 | 47.5 | 4.4 | Start 4644.3 hold at 2215.1 MD |
| 6,859.4 | 6,800.0 | 772.6 | -41.3 | Start DLS 1.00 TFO 180.00 |
| 7,759.4 | 7,696.3 | 843.0 | -45.7 | Start 3946.2 hold at 7759.4 MD |
| 11,705.7 | 11,642.5 | 843.0 | -45.7 | Start DLS 12.00 TFO 179.65 |
| 12,455.7 | 12,120.0 | 365.6 | -42.8 | Start 10064.1 hold at 12455.7 MD |
| 22,519.8 | 12,120.0 | -9,698.4 | 18.8 | TD at 22519.8 |

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

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

CONDITIONS

Action 319202

## CONDITIONS

| | |
|---|---|
| Operator:<br>COG OPERATING LLC<br>600 W Illinois Ave<br>Midland, TX 79701 | OGRID:<br>229137 |
| | Action Number:<br>319202 |
| | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| pkautz | None | 3/20/2024 |