Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

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

8. Lease Name and Well No.

[325390]

2. Name of Operator

[229137]

9. API Well No. **30-025-49890**

3a. Address

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

10. Field and Pool, or Exploratory **[98180]**

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Title		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Title	Office	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NGMP Rec 03/10/2022

KZ
03/17/2022

SL

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 03/09/2022

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
~~239137~~ 229137	COG OPERATING, LLC	3366.3'

Surface Location

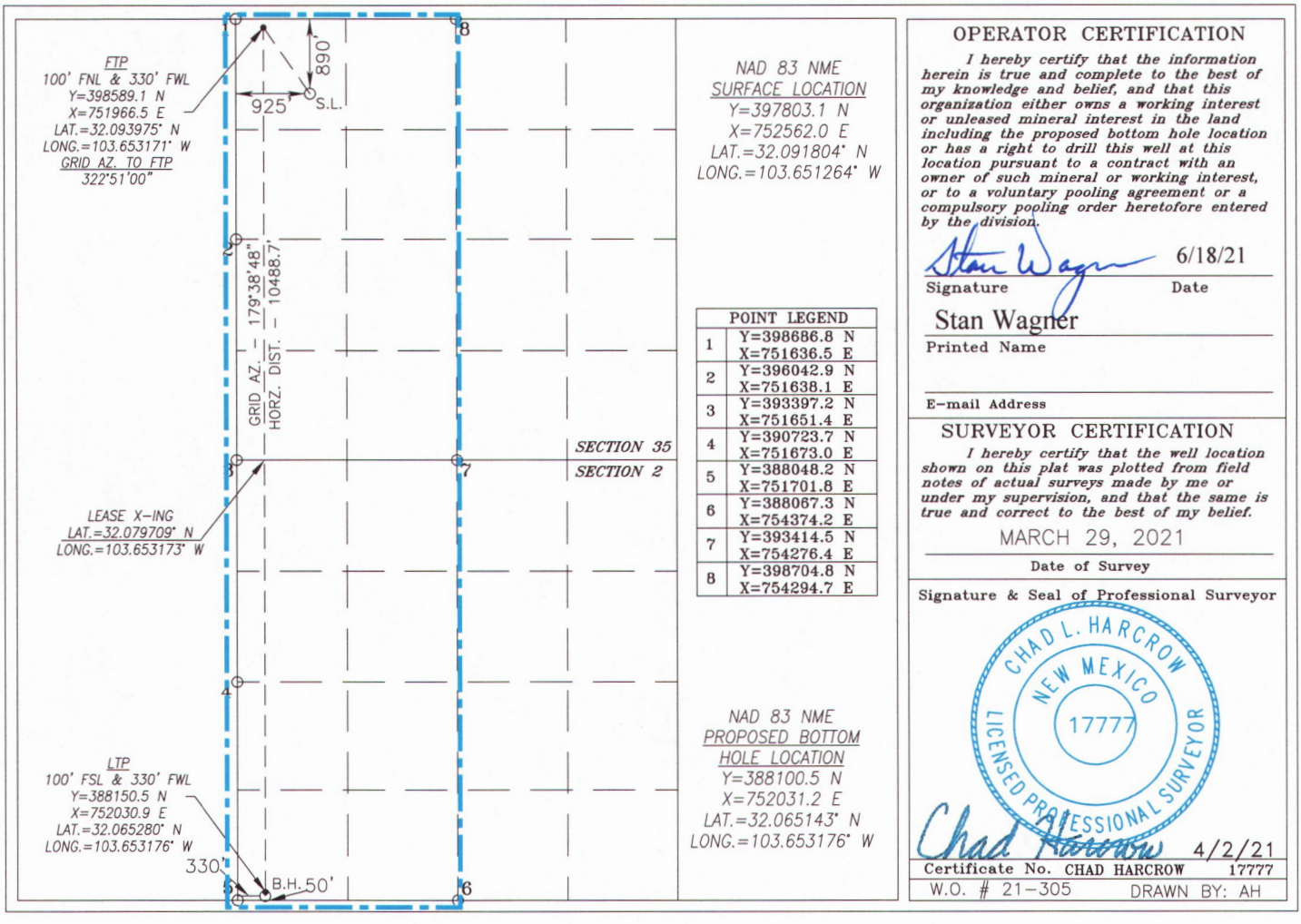
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	35	25-S	32-E		890	NORTH	925	WEST	LEA

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	330	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
640			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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=388100.5 N
X=752031.2 E
LAT.=32.065143° N
LONG.=103.653176° 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 6/18/21
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 4/2/21
Certificate No. CHAD HARCROW 17777
W.O. # 21-305 DRAWN BY: AH

Intent [X] As Drilled [ ]

API # 30-025-49890
30-025-

Operator Name:	Property Name:	Well Number
COG Operating LLC	Harrier Federal Com	704H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	35	25S	32E						Lea

Latitude	Longitude	NAD
		83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	35	25S	32E		100	North	330	West	Lea

Latitude	Longitude	NAD
32.093975	-103.653171	NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
M	2	26S	32E		100	South	330	West	Lea

Latitude	Longitude	NAD
32.065280	-103.653176	NAD 83

Is this well the defining well for the Horizontal Spacing Unit? [No]

Is this well an infill well? [Yes]

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #
30-025-

Operator Name:	Property Name:	Well Number
COG Operating LLC	Harrier Federal Com	703H

KZ 06/29/2018

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: COG Operating LLC **OGRID:** 239137 **Date:** 06/10/2021

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Harrier Federal Com 701H	30-025-	D-35-25S-32E	845 FNL & 985 FWL	± 2000	± 5630	± 2220
Harrier Federal Com 702H	30-025-	D-35-25S-32E	845 FNL & 955 FWL	± 2000	± 5630	± 2220
Harrier Federal Com 703H	30-025-	D-35-25S-32E	890 FNL & 955 FWL	± 2000	± 5630	± 2220
Harrier Federal Com 704H	30-025-	D-35-25S-32E	890 FNL & 925 FWL	± 2000	± 5630	± 2220 30-025-49890
Harrier Federal Com 801H	30-025-	D-35-25S-32E	845 FNL & 985 FWL	± 2000	± 5630	± 2220
Harrier Federal Com 802H	30-025-	D-35-25S-32E	845 FNL & 925 FWL	± 2000	± 5630	± 2220

IV. Central Delivery Point Name: Harrier Fed Com 2 N CTB 780 FSL & 1835 FWL 2-26S-32E [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Harrier Federal Com	Pending	± 10/1/2022	± 25 days from spud	TBD	TBD	TBD
701H, 702H, 703H, 704H, 801H, 802H	30-025-49890					

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature:	Stan Wagner
Printed Name:	Stan Wagner
Title:	Regulatory Advisor
E-mail Address.	stan.s.wagner@conocophillips.com
Date:	06/10/2021
Phone:	432-253-9685

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

VI. Separation Equipment

How Operator will size separation equipment to optimize gas capture:

Initial separation equipment will be sized with adequate retention time to effectively separate all phases of production and capture gas prior to liquid phases entering storage tanks.

VII. Operational Practices

Actions Operator will take to comply with the requirements below:

- Install VCU on all vent lines from tanks to combust gas emitted due to normal tank breathing
- All flare stacks are equipped with auto ignition devices and are located at a minimum of 150' from storage tanks and wellheads
- Install meters on all flare lines to quantify volume of gas being flared during an upset condition
- A properly sized mud gas separator and flare stack located a minimum of 100 feet from the nearest surface hole location will be used to combust natural gas from normal drilling operations. Will report natural gas vented or flared due to an emergency or malfunction.

VIII. Best Management Practices

Operator's best management practices to minimize venting during active and planned maintenance:

Operations plan will be to shut in production for planned maintenance activities that may result in venting of natural gas.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**COG**
LEASE NO.:	**NMNM108973**
LOCATION:	Section 35, T.25 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	Harrier Fed Com 704H
SURFACE HOLE FOOTAGE:	890'/N & 925'/W
BOTTOM HOLE FOOTAGE	50'/S & 330'/W

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **850** feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

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

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

2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
   - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess calculates to 22%. Additional cement maybe requried.**

Wait on cement (WOC) time for a primary cement job is to include the tail cement slurry due to cave/karst.

Option 2:

Operator is approved to run a DV Tool, the depth may be adjusted as long as the cement is changed proportionally. Operator shall contact BLM before running The DV Tool.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
   - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

   a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
   b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
   c. Manufacturer representative shall install the test plug for the initial BOP test.
   d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

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

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

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure

rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).

b. When the operator proposes to set surface casing with Spudder Rig
   - Notify the BLM when moving in and removing the Spudder Rig.
   - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
   - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

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b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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

a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall

have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

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

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
ZS 022822

Approval Date: 03/09/2022

COG Operating, LLC - Harrier Federal Com 704H

1. Geologic Formations

TVD of target	12,292' EOL	Pilot hole depth	NA
MD at TD:	22,500'	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	22,500	5.5"	23	P110	Talon	1.82	2.15	2.58	2.50
					BLM Minimum Safety Factor		1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing.to mitigate collapse. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

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. 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 Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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

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

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

COG Operating LLC

Rig Plat & Closed Loop Equipment Diagram

Well pad will be 400' X 400' with cellar in center of pad

Flare Lines will be from both Choke Manifold & Separator to edge of location.

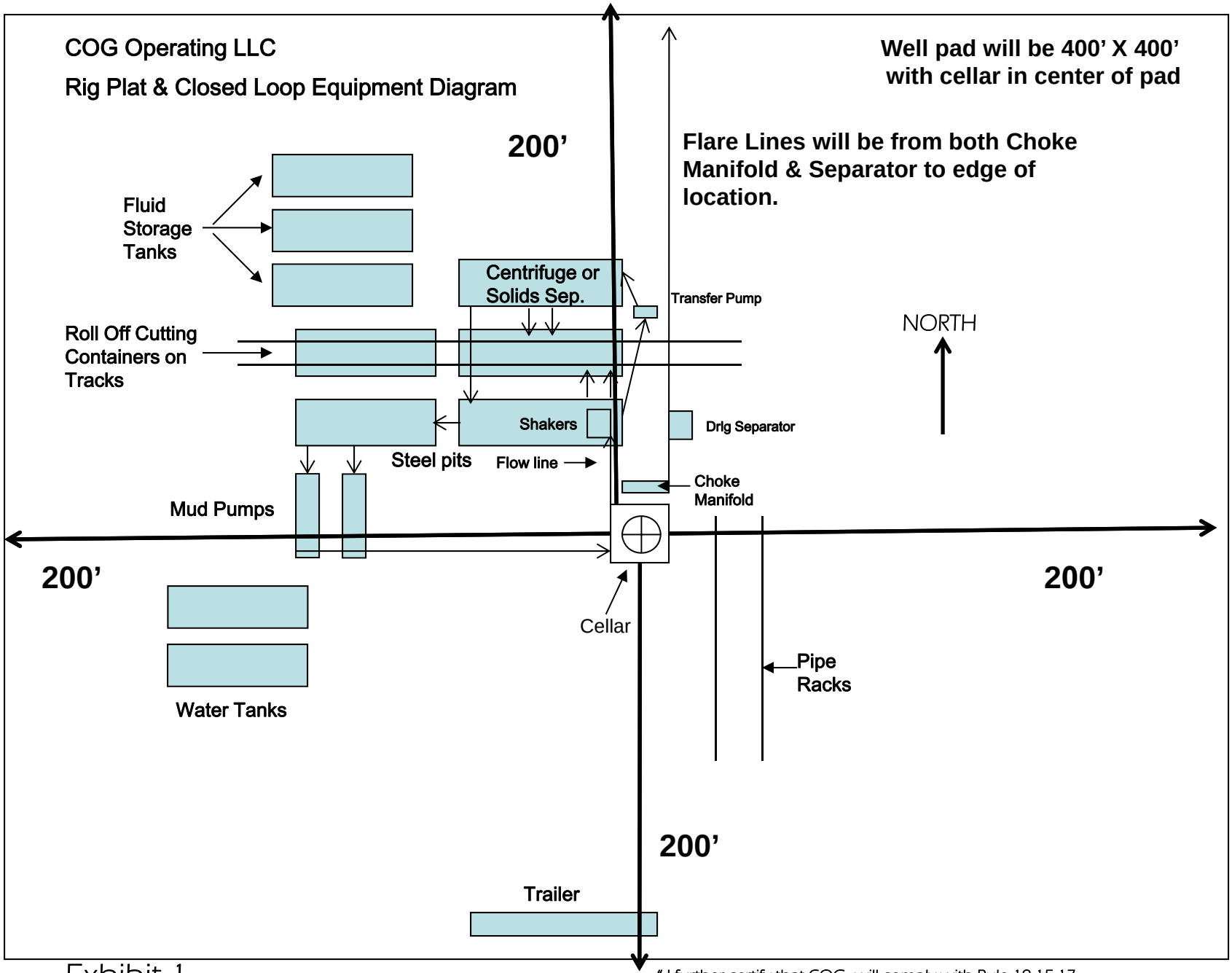

Exhibit 1

" I further certify that COG will comply with Rule 19.15.17 NMAC by using a Closed Loop System."

DELAWARE BASIN EAST

LEA PROSPECT (NM-E)
HARRIER FEDERAL PROJECT (LEA 2632)
HARRIER FED COM #704H

OWB
PWP1

Anticollision Report

04 May, 2021

ConocoPhillips

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference PWP1

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 2,000.0 usft	**Error Surface:**	Pedal Curve
Warning Levels Evaluated at:	2.00 **Sigma**	**Casing Method:**	Not applied

Survey Tool Program **Date** 5/4/2021

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,814.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
11,814.0	22,047.1	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
HARRIER FEDERAL PROJECT (LEA 2632)						
HARRIER 35 FEDERAL COM #1H - OWB - ACTUAL WE	13,358.7	15,223.0	319.5	254.4	4.905	CC, ES
HARRIER 35 FEDERAL COM #1H - OWB - ACTUAL WE	13,500.0	15,218.1	349.3	271.0	4.461	SF
HARRIER FED COM #102H - OWB - AWP	9,172.0	18,699.8	280.8	186.0	2.963	CC, ES, SF
HARRIER FED COM #201H - OWB - AWB	9,380.2	18,913.7	643.7	549.5	6.837	CC, ES, SF
HARRIER FED COM #202H - OWB - AWP	9,200.0	9,490.4	142.3	119.8	6.305	SF
HARRIER FED COM #202H - OWB - AWP	9,269.7	9,519.0	127.0	108.2	6.760	CC, ES
HARRIER FED COM #304H - OWB - AWP	10,170.6	19,767.2	322.4	227.0	3.377	CC, ES, SF
HARRIER FED COM #305H - OWB - AWP	9,622.3	19,255.8	221.8	126.4	2.324	CC, ES, SF
HARRIER FED COM #701H - OWB - PWP1	2,500.0	2,498.7	60.0	53.1	8.701	CC, ES, SF
HARRIER FED COM #702H - OWB - PWP1	2,500.0	2,499.2	54.2	46.0	6.572	CC, ES
HARRIER FED COM #702H - OWB - PWP1	22,047.1	22,282.4	665.1	490.8	3.817	SF
HARRIER FED COM #703H - OWB - PWP1	2,500.0	2,499.8	30.0	17.3	2.366	CC, ES, SF
HARRIER FED COM #801H - OWB - PWP1	2,416.2	2,417.7	75.2	67.7	9.979	CC
HARRIER FED COM #801H - OWB - PWP1	2,500.0	2,501.5	75.2	67.6	9.849	ES, SF
HARRIER FED COM #802H - OWB - PWP1	2,500.0	2,499.5	44.9	36.1	5.110	CC, ES
HARRIER FED COM #802H - OWB - PWP1	22,047.1	22,528.7	418.6	247.6	2.448	SF
PILEDRIVER FED & FIGURE FOUR FED PROJECT						
FIGURE FOUR FED #701H - OWB - PWP1	16,762.5	15,083.9	659.5	566.0	7.054	CC
FIGURE FOUR FED #701H - OWB - PWP1	18,300.0	13,546.4	662.5	561.8	6.580	ES
FIGURE FOUR FED #701H - OWB - PWP1	18,400.0	13,464.3	664.0	562.7	6.552	SF
MONSOON FEDERAL SWD#1 - OWB - AWP	13,210.0	12,237.3	464.4	406.1	7.963	CC, ES
MONSOON FEDERAL SWD#1 - OWB - AWP	13,300.0	12,236.9	473.0	413.3	7.915	SF
PILEDRIVER FEDERAL #701H - OWB - PWP2	20,994.1	13,945.6	662.0	563.0	6.682	CC
PILEDRIVER FEDERAL #701H - OWB - PWP2	22,047.1	14,998.3	662.6	547.0	5.731	ES, SF

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER 35 FEDERAL COM #1H - OWB - ACTUAL WE

Offset Site Error: 0.0 usft

Survey Program: 100-MWD

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
12,400.0	12,251.9	15,266.2	11,953.1	14.3	93.2	3.31	-1,011.6	-627.5	992.2	888.1	104.13	9.528	
12,425.0	12,261.3	15,264.6	11,953.2	14.4	93.2	3.38	-1,011.6	-625.9	972.8	869.0	103.88	9.365	

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

ConocoPhillips
Anticollision Report

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Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER 35 FEDERAL COM #1H - OWB - ACTUAL WE

Offset Site Error: 0.0 usft

Survey Program: 100-MWD

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
12,450.0	12,269.5	15,263.1	11,953.2	14.4	93.2	3.46	-1,011.7	-624.4	952.9	849.3	103.62	9.196	
12,475.0	12,276.5	15,261.6	11,953.3	14.4	93.1	3.57	-1,011.8	-622.9	932.4	829.1	103.35	9.022	
12,500.0	12,282.2	15,260.1	11,953.3	14.4	93.1	3.70	-1,011.8	-621.5	911.4	808.3	103.09	8.841	
12,525.0	12,286.6	15,258.8	11,953.4	14.5	93.1	3.86	-1,011.9	-620.1	889.9	787.1	102.82	8.655	
12,550.0	12,289.7	15,257.4	11,953.4	14.5	93.1	4.07	-1,012.0	-618.8	867.9	765.4	102.55	8.463	
12,575.0	12,291.5	15,256.2	11,953.5	14.5	93.0	4.32	-1,012.0	-617.5	845.5	743.2	102.29	8.266	
12,598.2	12,292.0	15,255.0	11,953.5	14.5	93.0	4.62	-1,012.1	-616.4	824.3	722.3	102.05	8.078	
12,600.0	12,292.0	15,255.0	11,953.5	14.5	93.0	4.60	-1,012.1	-616.3	822.7	720.6	102.03	8.063	
12,700.0	12,291.7	15,250.3	11,953.6	14.7	92.9	3.78	-1,012.3	-611.6	731.6	630.8	100.80	7.258	
12,800.0	12,291.4	15,245.8	11,953.8	14.8	92.8	2.99	-1,012.5	-607.2	643.2	544.1	99.08	6.492	
12,900.0	12,291.2	15,241.6	11,953.9	15.0	92.7	2.22	-1,012.7	-602.9	558.7	462.2	96.56	5.786	
13,000.0	12,290.9	15,237.5	11,954.0	15.2	92.6	1.49	-1,012.8	-598.8	480.2	387.5	92.66	5.182	
13,100.0	12,290.7	15,233.4	11,954.1	15.5	92.5	0.77	-1,013.0	-594.8	411.0	324.5	86.46	4.753	
13,200.0	12,290.4	15,229.1	11,954.1	15.8	92.4	0.00	-1,013.2	-590.5	356.7	279.5	77.15	4.623	
13,300.0	12,290.2	15,225.2	11,954.2	16.2	92.4	-0.71	-1,013.3	-586.6	324.8	257.8	67.09	4.842	
13,358.7	12,290.0	15,223.0	11,954.3	16.4	92.3	-1.10	-1,013.4	-584.4	319.5	254.4	65.14	4.905	CC, ES
13,400.0	12,289.9	15,221.5	11,954.3	16.6	92.3	-1.37	-1,013.4	-582.9	322.2	255.1	67.05	4.805	
13,500.0	12,289.6	15,218.1	11,954.4	17.1	92.2	-1.98	-1,013.6	-579.5	349.3	271.0	78.29	4.461	SF
13,600.0	12,289.4	15,214.9	11,954.4	17.7	92.1	-2.54	-1,013.7	-576.3	400.3	311.2	89.10	4.492	
13,700.0	12,289.1	15,212.0	11,954.5	18.2	92.1	-3.08	-1,013.8	-573.4	467.3	371.2	96.15	4.861	
13,800.0	12,288.9	15,209.2	11,954.5	18.8	92.0	-3.57	-1,013.8	-570.6	544.6	444.2	100.36	5.426	
13,900.0	12,288.6	15,206.6	11,954.6	19.5	92.0	-4.04	-1,013.9	-568.0	628.3	525.4	102.87	6.107	
14,000.0	12,288.3	15,203.0	11,954.6	20.1	91.9	-4.68	-1,014.0	-564.4	716.1	611.7	104.39	6.860	
14,100.0	12,288.1	15,201.6	11,954.6	20.8	91.8	-4.94	-1,014.1	-562.9	806.8	701.4	105.39	7.656	
14,200.0	12,287.8	15,198.8	11,954.7	21.5	91.8	-5.43	-1,014.1	-560.2	899.5	793.5	106.03	8.483	
14,300.0	12,287.6	15,196.1	11,954.7	22.2	91.7	-5.92	-1,014.2	-557.4	993.6	887.1	106.46	9.333	

ConocoPhillips
Anticollision Report

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Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #102H - OWB - AWP

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,200.0	8,169.9	18,682.8	9,020.5	10.0	84.8	165.11	207.9	-313.0	996.5	904.9	91.58	10.880	
8,300.0	8,269.3	18,685.4	9,020.5	10.2	84.9	164.65	210.5	-313.0	902.5	810.6	91.88	9.822	
8,400.0	8,368.8	18,688.2	9,020.5	10.3	84.9	164.16	213.3	-313.0	810.0	717.8	92.20	8.785	
8,424.5	8,393.1	18,688.9	9,020.5	10.3	84.9	164.04	214.0	-313.0	787.6	695.4	92.28	8.535	
8,500.0	8,468.3	18,691.0	9,020.5	10.4	84.9	163.21	216.1	-313.0	719.3	626.7	92.53	7.773	
8,600.0	8,567.9	18,693.5	9,020.5	10.5	84.9	162.18	218.5	-313.0	630.5	537.6	92.88	6.789	
8,700.0	8,667.7	18,695.5	9,020.5	10.7	85.0	161.26	220.6	-313.0	544.7	451.5	93.25	5.841	
8,800.0	8,767.6	18,697.2	9,020.5	10.8	85.0	160.48	222.3	-313.0	463.6	369.9	93.65	4.950	
8,900.0	8,867.6	18,698.4	9,020.6	10.9	85.0	159.87	223.5	-313.0	390.0	296.0	94.05	4.147	
9,000.0	8,967.5	18,699.2	9,020.6	11.0	85.0	159.45	224.2	-313.0	329.2	234.9	94.38	3.488	
9,024.5	8,992.0	18,699.3	9,020.6	11.0	85.0	90.13	224.3	-313.0	317.2	222.7	94.43	3.359	
9,100.0	9,067.5	18,699.5	9,020.6	11.1	85.0	90.08	224.6	-313.0	289.9	195.3	94.54	3.066	
9,172.0	9,139.6	18,699.8	9,020.6	11.2	85.0	90.03	224.9	-313.0	280.8	186.0	94.76	2.963	CC, ES, SF
9,200.0	9,167.5	18,699.9	9,020.6	11.2	85.0	90.01	225.0	-313.0	282.2	187.3	94.92	2.973	
9,300.0	9,267.5	18,700.3	9,020.6	11.3	85.0	89.93	225.3	-313.0	308.6	213.0	95.56	3.229	
9,400.0	9,367.5	18,700.7	9,020.6	11.4	85.0	89.84	225.8	-313.0	361.7	265.8	95.93	3.770	
9,500.0	9,467.5	18,701.1	9,020.6	11.5	85.0	89.75	226.2	-313.0	431.8	335.6	96.10	4.493	
9,600.0	9,567.5	18,701.6	9,020.6	11.6	85.0	89.65	226.7	-313.0	511.9	415.6	96.25	5.318	
9,700.0	9,667.5	18,702.1	9,020.6	11.7	85.0	89.55	227.2	-313.0	598.0	501.6	96.42	6.202	
9,800.0	9,767.5	18,702.7	9,020.6	11.8	85.0	89.43	227.8	-313.0	687.9	591.3	96.63	7.119	
9,900.0	9,867.5	18,703.3	9,020.6	11.9	85.0	89.30	228.4	-313.0	780.3	683.4	96.87	8.055	
10,000.0	9,967.5	18,704.0	9,020.6	12.0	85.0	89.16	229.1	-313.0	874.3	777.2	97.13	9.002	
10,100.0	10,067.5	18,704.8	9,020.6	12.1	85.0	89.01	229.9	-313.0	969.5	872.1	97.40	9.954	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #201H - OWB - AWB — **Offset Site Error:** 0.0 usft

Survey Program: 100-Standard Keeper 104, 8506-MWD+IFR1+FDIR — **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
8,700.0	8,667.7	18,921.3	9,224.6	10.7	84.3	159.82	228.3	49.9	930.4	837.2	93.21	9.982	
8,800.0	8,767.6	18,921.3	9,224.6	10.8	84.3	159.51	228.4	49.9	863.4	769.9	93.48	9.236	
8,900.0	8,867.6	18,921.0	9,224.6	10.9	84.3	159.26	228.0	49.9	802.0	708.3	93.72	8.558	
9,000.0	8,967.5	18,920.1	9,224.6	11.0	84.3	159.11	227.1	49.9	747.5	653.6	93.90	7.961	
9,024.5	8,992.0	18,919.8	9,224.6	11.0	84.3	89.84	226.8	49.9	735.4	641.5	93.93	7.830	
9,100.0	9,067.5	18,918.8	9,224.6	11.1	84.3	89.93	225.8	49.9	702.0	608.0	93.97	7.470	
9,200.0	9,167.5	18,917.2	9,224.7	11.2	84.3	90.07	224.2	49.9	668.4	574.4	93.99	7.111	
9,300.0	9,267.5	18,915.4	9,224.7	11.3	84.3	90.23	222.4	49.9	648.7	554.6	94.03	6.898	
9,380.2	9,347.7	18,913.7	9,224.7	11.4	84.3	90.38	220.8	49.9	643.7	549.5	94.15	6.837	CC, ES, SF
9,400.0	9,367.5	18,913.3	9,224.7	11.4	84.3	90.42	220.3	49.9	644.0	549.8	94.19	6.837	
9,500.0	9,467.5	18,910.8	9,224.8	11.5	84.2	90.64	217.8	49.8	654.7	560.2	94.48	6.929	
9,600.0	9,567.5	18,907.7	9,224.9	11.6	84.2	90.91	214.8	49.8	680.2	585.3	94.87	7.169	
9,700.0	9,667.5	18,904.0	9,225.0	11.7	84.2	91.25	211.0	49.8	718.7	623.4	95.27	7.544	
9,800.0	9,767.5	18,900.0	9,225.1	11.8	84.1	91.60	207.0	49.8	768.4	672.8	95.63	8.035	
9,900.0	9,867.5	18,896.3	9,225.3	11.9	84.1	91.93	203.4	49.8	827.2	731.3	95.97	8.620	
10,000.0	9,967.5	18,893.2	9,225.4	12.0	84.1	92.20	200.3	49.7	893.4	797.1	96.28	9.280	
10,100.0	10,067.5	18,890.2	9,225.5	12.1	84.1	92.47	197.3	49.7	965.4	868.8	96.57	9.997	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #202H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8598-MWD+IFR1+FDIR

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	1.0	1.0	3.0	3.0	-55.77	450.5	-662.2	800.9				
100.0	100.0	96.6	96.6	3.0	3.0	-55.76	450.8	-662.3	801.2	795.2	6.00	133.518	
200.0	200.0	195.3	195.3	3.0	3.0	-55.71	451.6	-662.3	801.6	795.6	6.01	133.481	
300.0	300.0	293.4	293.4	3.0	3.0	-55.64	452.7	-662.2	802.2	796.1	6.02	133.340	
400.0	400.0	398.6	398.5	3.0	3.0	-55.58	453.5	-661.9	802.4	796.3	6.03	133.050	
437.7	437.7	436.5	436.4	3.0	3.0	-55.56	453.7	-661.7	802.3	796.3	6.04	132.915	
500.0	500.0	497.7	497.7	3.1	3.0	-55.52	454.2	-661.4	802.4	796.3	6.05	132.666	
600.0	600.0	594.3	594.3	3.1	3.1	-55.46	455.1	-661.2	802.7	796.6	6.07	132.196	
700.0	700.0	694.2	694.2	3.1	3.1	-55.42	455.9	-661.4	803.3	797.2	6.11	131.575	
800.0	800.0	791.6	791.6	3.2	3.1	-55.37	456.9	-661.5	804.0	797.8	6.14	130.862	
900.0	900.0	888.0	888.0	3.2	3.2	-55.32	458.1	-662.1	805.2	799.0	6.19	130.070	
1,000.0	1,000.0	989.6	989.6	3.2	3.2	-55.29	459.0	-662.8	806.3	800.0	6.25	129.064	
1,100.0	1,100.0	1,088.6	1,088.5	3.3	3.3	-55.28	459.9	-663.6	807.4	801.1	6.31	127.936	
1,200.0	1,200.0	1,190.1	1,190.0	3.4	3.3	-55.24	460.9	-664.2	808.5	802.2	6.38	126.682	
1,300.0	1,300.0	1,286.4	1,286.3	3.4	3.4	-55.22	462.0	-665.1	809.9	803.4	6.46	125.395	
1,400.0	1,400.0	1,388.0	1,388.0	3.5	3.4	-55.18	463.1	-666.0	811.3	804.7	6.54	123.965	
1,500.0	1,500.0	1,485.8	1,485.7	3.5	3.5	-55.14	464.5	-666.8	812.7	806.0	6.63	122.522	
1,600.0	1,600.0	1,581.6	1,581.5	3.6	3.5	-55.10	466.0	-667.8	814.5	807.8	6.73	121.079	
1,700.0	1,700.0	1,683.5	1,683.4	3.7	3.6	-55.07	467.5	-669.3	816.5	809.7	6.83	119.505	
1,800.0	1,800.0	1,805.4	1,805.2	3.8	3.7	-55.00	469.1	-670.0	817.9	810.9	6.94	117.832	
1,900.0	1,900.0	1,906.6	1,906.5	3.9	3.7	-54.91	469.6	-668.5	817.0	810.0	6.99	116.878	
2,000.0	2,000.0	2,002.4	2,002.3	3.9	3.7	-54.83	470.2	-667.4	816.4	809.4	7.05	115.836	
2,100.0	2,100.0	2,100.0	2,099.8	4.0	3.8	-54.75	471.0	-666.5	816.1	809.0	7.12	114.656	
2,200.0	2,200.0	2,199.6	2,199.4	4.1	3.9	-54.68	471.8	-665.8	816.1	808.9	7.20	113.377	
2,239.2	2,239.2	2,238.1	2,237.9	4.1	3.9	-54.65	472.1	-665.6	816.0	808.8	7.23	112.871	
2,300.0	2,300.0	2,298.5	2,298.3	4.2	3.9	-54.61	472.6	-665.3	816.1	808.8	7.28	112.046	
2,400.0	2,400.0	2,398.9	2,398.7	4.3	4.0	-54.55	473.3	-664.7	816.1	808.7	7.37	110.706	
2,447.4	2,447.4	2,446.4	2,446.2	4.3	4.0	-54.51	473.7	-664.5	816.0	808.6	7.41	110.071	
2,500.0	2,500.0	2,499.8	2,499.5	4.4	4.1	-54.48	474.1	-664.2	816.0	808.6	7.46	109.359	
2,600.0	2,600.0	2,598.0	2,597.8	4.5	4.2	14.86	474.7	-663.8	814.4	806.9	7.57	107.609	
2,700.0	2,699.8	2,698.3	2,698.1	4.5	4.2	15.00	475.0	-663.7	809.4	801.7	7.69	105.281	
2,800.0	2,799.5	2,797.5	2,797.3	4.6	4.3	15.20	475.0	-663.7	801.0	793.2	7.82	102.412	
2,900.0	2,898.9	2,898.2	2,898.0	4.6	4.3	15.40	475.1	-663.9	791.1	783.1	7.97	99.231	
3,000.0	2,998.4	2,998.1	2,997.9	4.7	4.3	15.59	474.9	-664.0	781.0	772.9	8.09	96.505	
3,100.0	3,097.8	3,101.1	3,100.9	4.8	4.3	15.80	474.7	-663.8	770.6	762.4	8.19	94.136	
3,200.0	3,197.3	3,206.7	3,206.4	4.8	4.3	16.07	474.4	-662.6	759.5	751.2	8.29	91.642	
3,300.0	3,296.7	3,310.7	3,310.5	4.9	4.3	16.36	473.9	-660.8	747.8	739.4	8.40	89.073	
3,400.0	3,396.2	3,410.1	3,409.8	5.0	4.4	16.67	473.5	-658.5	735.8	727.3	8.51	86.457	
3,500.0	3,495.6	3,512.4	3,512.1	5.1	4.4	17.03	473.3	-655.7	723.5	714.9	8.63	83.806	
3,600.0	3,595.1	3,605.7	3,605.4	5.1	4.5	17.40	473.3	-653.0	711.2	702.4	8.76	81.198	
3,700.0	3,694.5	3,694.1	3,693.8	5.2	4.5	17.65	473.2	-652.4	700.6	691.8	8.89	78.838	
3,800.0	3,794.0	3,793.1	3,792.8	5.3	4.6	17.92	473.2	-652.3	690.6	681.6	9.03	76.480	
3,900.0	3,893.4	3,892.9	3,892.6	5.4	4.6	18.17	473.0	-652.3	680.5	671.3	9.17	74.185	
4,000.0	3,992.9	4,004.9	4,004.5	5.5	4.6	18.50	472.5	-651.5	669.8	660.4	9.32	71.885	
4,100.0	4,092.3	4,107.8	4,107.4	5.6	4.7	18.86	471.6	-649.3	657.7	648.2	9.46	69.533	
4,200.0	4,191.8	4,214.6	4,214.2	5.6	4.7	19.26	470.4	-646.4	645.0	635.4	9.61	67.132	
4,300.0	4,291.2	4,323.4	4,322.8	5.7	4.8	19.74	468.3	-641.6	630.5	620.8	9.76	64.576	
4,400.0	4,390.7	4,420.1	4,419.4	5.8	4.8	20.19	466.1	-636.9	615.6	605.6	9.92	62.077	
4,500.0	4,490.1	4,496.6	4,495.8	5.9	4.8	20.44	464.4	-635.1	602.6	592.5	10.05	59.933	
4,600.0	4,589.6	4,591.7	4,591.0	6.0	4.8	20.65	463.0	-635.6	592.2	582.0	10.21	58.003	
4,700.0	4,689.0	4,692.3	4,691.5	6.1	4.8	20.87	461.5	-636.1	581.9	571.5	10.37	56.118	
4,800.0	4,788.5	4,789.1	4,788.3	6.2	4.8	21.13	460.4	-636.4	571.5	561.0	10.53	54.288	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #202H - OWB - AWP — **Offset Site Error:** 0.0 usft

Survey Program: 100-Standard Keeper 104, 8598-MWD+IFR1+FDIR — **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
4,900.0	4,887.9	4,875.0	4,874.2	6.3	4.9	21.59	461.9	-636.2	562.8	552.1	10.69	52.649	
5,000.0	4,987.4	4,968.7	4,967.8	6.4	5.0	22.32	466.2	-635.7	555.8	544.9	10.86	51.162	
5,100.0	5,086.9	5,055.6	5,054.6	6.5	5.0	22.98	471.1	-636.9	551.0	539.9	11.04	49.913	
5,200.0	5,186.3	5,137.3	5,136.0	6.6	5.1	23.61	476.9	-638.9	548.1	536.9	11.22	48.837	
5,222.1	5,208.3	5,155.9	5,154.6	6.6	5.1	23.78	478.7	-639.5	548.0	536.8	11.27	48.649	
5,300.0	5,285.8	5,232.2	5,230.3	6.7	5.2	24.48	486.4	-642.5	548.3	536.9	11.41	48.048	
5,400.0	5,385.2	5,331.3	5,328.9	6.8	5.3	25.34	496.2	-646.5	548.8	537.2	11.60	47.297	
5,500.0	5,484.7	5,432.3	5,429.4	6.9	5.3	26.20	506.0	-650.8	549.4	537.6	11.80	46.570	
5,600.0	5,584.1	5,534.9	5,531.4	7.0	5.4	27.03	515.3	-655.2	549.6	537.6	11.99	45.836	
5,700.0	5,683.6	5,644.4	5,640.5	7.2	5.5	27.88	524.1	-659.1	548.7	536.5	12.19	45.019	
5,800.0	5,783.0	5,744.8	5,740.5	7.3	5.6	28.68	531.5	-662.0	547.0	534.6	12.39	44.154	
5,900.0	5,882.5	5,854.0	5,849.3	7.4	5.7	29.89	540.7	-662.0	544.3	531.7	12.59	43.220	
6,000.0	5,981.9	5,946.6	5,941.6	7.5	5.8	31.06	549.0	-660.7	541.4	528.6	12.80	42.310	
6,100.0	6,081.4	6,040.5	6,034.9	7.6	5.9	32.28	558.8	-660.2	540.5	527.5	13.00	41.566	
6,127.8	6,109.0	6,065.8	6,060.2	7.6	5.9	32.61	561.6	-660.2	540.4	527.4	13.06	41.373	
6,200.0	6,180.8	6,137.5	6,131.4	7.7	6.0	33.53	569.5	-660.2	540.6	527.4	13.21	40.908	
6,300.0	6,280.3	6,235.6	6,228.9	7.8	6.1	34.78	580.1	-660.3	540.9	527.5	13.43	40.293	
6,400.0	6,379.7	6,337.2	6,330.0	7.9	6.2	36.01	590.9	-660.8	541.5	527.9	13.64	39.712	
6,500.0	6,479.2	6,437.9	6,430.1	8.0	6.3	37.17	600.8	-661.6	541.9	528.0	13.85	39.133	
6,600.0	6,578.6	6,542.0	6,533.8	8.2	6.4	38.30	610.4	-662.7	542.0	527.9	14.06	38.553	
6,700.0	6,678.1	6,645.6	6,637.0	8.3	6.5	39.37	618.9	-663.9	541.5	527.3	14.27	37.943	
6,800.0	6,777.5	6,745.4	6,736.5	8.4	6.6	40.36	626.6	-665.2	540.9	526.4	14.49	37.337	
6,828.7	6,806.1	6,770.8	6,761.8	8.4	6.6	40.60	628.6	-665.6	540.8	526.2	14.55	37.171	
6,900.0	6,877.0	6,838.4	6,829.2	8.5	6.7	41.25	634.3	-667.0	541.2	526.5	14.70	36.808	
7,000.0	6,976.4	6,937.7	6,928.1	8.6	6.8	42.15	642.7	-669.6	542.1	527.2	14.92	36.337	
7,100.0	7,075.9	7,036.9	7,026.9	8.7	6.9	42.97	650.6	-672.7	542.9	527.8	15.14	35.868	
7,200.0	7,175.3	7,119.3	7,108.8	8.9	7.0	43.73	659.1	-675.3	546.0	530.6	15.37	35.523	
7,300.0	7,274.8	7,223.1	7,211.9	9.0	7.1	44.76	671.4	-678.6	550.6	535.0	15.58	35.340	
7,400.0	7,374.3	7,327.7	7,315.8	9.1	7.2	45.71	682.2	-681.8	554.0	538.2	15.79	35.079	
7,500.0	7,473.7	7,430.6	7,418.2	9.2	7.3	46.64	692.2	-684.7	556.8	540.8	16.01	34.786	
7,600.0	7,573.2	7,533.4	7,520.6	9.3	7.4	47.53	701.4	-687.6	559.0	542.8	16.22	34.463	
7,700.0	7,672.6	7,638.7	7,625.5	9.4	7.5	48.39	710.0	-690.6	560.7	544.3	16.44	34.112	
7,800.0	7,772.1	7,738.8	7,725.3	9.6	7.6	49.21	717.6	-693.3	561.8	545.2	16.65	33.735	
7,900.0	7,871.5	7,842.0	7,828.1	9.7	7.8	50.12	725.6	-695.4	563.1	546.2	16.87	33.376	
8,000.0	7,971.0	7,946.2	7,932.0	9.8	7.9	50.98	732.7	-697.7	563.6	546.5	17.09	32.980	
8,100.0	8,070.4	8,031.8	8,017.5	9.9	8.0	51.69	738.6	-699.7	564.5	547.2	17.31	32.606	
8,200.0	8,169.9	8,128.6	8,113.6	10.0	8.1	52.91	748.9	-698.5	568.0	550.5	17.52	32.413	
8,300.0	8,269.3	8,231.8	8,216.3	10.2	8.2	54.20	759.4	-697.2	571.3	553.5	17.73	32.226	
8,400.0	8,368.8	8,335.7	8,319.8	10.3	8.3	55.40	768.9	-696.4	573.9	556.0	17.93	32.005	
8,424.5	8,393.1	8,360.8	8,344.8	10.3	8.3	55.68	771.0	-696.2	574.5	556.5	17.98	31.946	
8,500.0	8,468.3	8,461.8	8,445.5	10.4	8.5	56.69	777.8	-695.9	575.3	557.2	18.15	31.698	
8,600.0	8,567.9	8,565.5	8,549.2	10.5	8.5	57.45	781.1	-696.0	573.9	555.6	18.34	31.301	
8,700.0	8,667.7	9,224.5	9,094.8	10.7	9.1	46.10	485.9	-717.4	520.3	492.3	28.08	18.533	
8,800.0	8,767.6	9,269.1	9,117.8	10.8	9.2	41.13	447.8	-719.9	436.9	408.8	28.07	15.565	
8,900.0	8,867.6	9,336.4	9,152.9	10.9	9.2	32.36	390.3	-721.2	355.2	326.7	28.50	12.464	
9,000.0	8,967.5	9,392.5	9,180.9	11.0	9.3	22.23	341.7	-719.5	274.8	246.4	28.40	9.676	
9,024.5	8,992.0	9,405.1	9,187.0	11.0	9.3	-49.88	330.7	-719.2	255.8	227.6	28.24	9.059	
9,100.0	9,067.5	9,444.9	9,205.5	11.1	9.4	-60.64	295.5	-719.1	200.2	173.0	27.17	7.367	
9,200.0	9,167.5	9,490.4	9,224.9	11.2	9.4	-76.91	254.4	-720.1	142.3	119.8	22.58	6.305	SF
9,269.7	9,237.2	9,519.0	9,235.9	11.3	9.5	-88.63	228.0	-720.8	127.0	108.2	18.79	6.760	CC, ES
9,300.0	9,267.5	9,529.2	9,239.4	11.3	9.5	-92.94	218.5	-721.0	130.1	110.9	19.24	6.766	
9,400.0	9,367.5	9,556.9	9,248.0	11.4	9.5	-104.45	192.1	-721.6	177.2	151.3	25.88	6.847	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #202H - OWB - AWP

Offset Site Error: 0.0 usft

Survey Program: 100-Standard Keeper 104, 8598-MWD+IFR1+FDIR

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
9,500.0	9,467.5	9,579.3	9,254.2	11.5	9.6	-112.97	170.6	-722.2	253.7	223.9	29.88	8.492	
9,600.0	9,567.5	9,595.9	9,258.3	11.6	9.6	-118.70	154.5	-722.5	341.1	309.3	31.85	10.709	
9,700.0	9,667.5	9,609.2	9,261.2	11.7	9.6	-122.90	141.6	-722.8	433.2	400.2	33.01	13.121	
9,800.0	9,767.5	9,620.3	9,263.4	11.8	9.6	-126.12	130.7	-723.0	527.6	493.8	33.82	15.601	
9,900.0	9,867.5	9,634.0	9,265.9	11.9	9.7	-129.76	117.2	-723.4	623.6	589.1	34.43	18.112	
10,000.0	9,967.5	9,640.2	9,266.9	12.0	9.7	-131.29	111.1	-723.5	720.3	685.3	34.98	20.593	
10,100.0	10,067.5	9,653.2	9,269.1	12.1	9.7	-134.28	98.2	-723.8	817.6	782.2	35.44	23.070	
10,200.0	10,167.5	9,665.0	9,270.9	12.2	9.8	-136.72	86.6	-724.1	915.3	879.4	35.87	25.513	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #304H - OWB - AWP — **Offset Site Error:** 0.0 usft

Survey Program: 100-Standard Keeper 104, 9409-MWD+IFR1+FDIR — **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
9,300.0	9,267.5	19,774.6	10,018.9	11.3	85.3	88.62	232.7	-271.4	928.4	832.9	95.53	9.718	
9,400.0	9,367.5	19,773.6	10,018.9	11.4	85.3	88.80	231.7	-271.4	835.3	739.6	95.77	8.722	
9,500.0	9,467.5	19,772.6	10,018.9	11.5	85.3	88.97	230.8	-271.4	744.1	648.1	95.99	7.751	
9,600.0	9,567.5	19,771.7	10,018.9	11.6	85.3	89.14	229.9	-271.4	655.4	559.2	96.19	6.813	
9,700.0	9,667.5	19,770.8	10,018.9	11.7	85.3	89.29	229.0	-271.4	570.5	474.1	96.34	5.921	
9,800.0	9,767.5	19,770.0	10,018.9	11.8	85.3	89.44	228.1	-271.4	491.2	394.8	96.40	5.096	
9,900.0	9,867.5	19,769.2	10,019.0	11.9	85.3	89.58	227.3	-271.4	421.0	324.7	96.27	4.373	
10,000.0	9,967.5	19,768.4	10,019.0	12.0	85.3	89.72	226.6	-271.4	364.8	268.9	95.87	3.805	
10,100.0	10,067.5	19,767.7	10,019.0	12.1	85.3	89.85	225.8	-271.4	330.1	234.7	95.38	3.461	
10,170.6	10,138.2	19,767.2	10,019.0	12.2	85.2	89.94	225.3	-271.4	322.4	227.0	95.48	3.377	CC, ES, SF
10,200.0	10,167.5	19,767.0	10,019.0	12.2	85.2	89.98	225.1	-271.4	323.8	228.1	95.72	3.383	
10,300.0	10,267.5	19,766.3	10,019.0	12.3	85.2	90.10	224.4	-271.4	347.4	250.4	97.03	3.581	
10,400.0	10,367.5	19,765.6	10,019.0	12.4	85.2	90.22	223.8	-271.4	395.7	297.5	98.24	4.028	
10,500.0	10,467.5	19,765.0	10,019.0	12.5	85.2	90.33	223.1	-271.4	460.9	361.9	99.06	4.653	
10,600.0	10,567.5	19,764.4	10,019.0	12.6	85.2	90.44	222.5	-271.4	537.0	437.3	99.62	5.390	
10,700.0	10,667.5	19,763.8	10,019.0	12.8	85.2	90.55	221.9	-271.4	619.8	519.8	100.06	6.194	
10,800.0	10,767.5	19,763.2	10,019.0	12.9	85.2	90.65	221.4	-271.4	707.2	606.7	100.45	7.040	
10,900.0	10,867.5	19,762.6	10,019.0	13.0	85.2	90.75	220.8	-271.4	797.5	696.6	100.80	7.911	
11,000.0	10,967.5	19,762.1	10,019.0	13.1	85.2	90.84	220.3	-271.4	889.8	788.7	101.15	8.797	
11,100.0	11,067.5	19,761.6	10,019.0	13.2	85.2	90.93	219.8	-271.4	983.7	882.2	101.49	9.692	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #305H - OWB - AWP — **Offset Site Error:** 0.0 usft

Survey Program: 100-Standard Keeper 104, 8955-MWD+IFR1+FDIR — **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
8,700.0	8,667.7	19,254.5	9,471.1	10.7	85.5	162.40	225.7	-372.0	946.4	852.7	93.75	10.095	
8,800.0	8,767.6	19,256.0	9,471.1	10.8	85.5	161.00	227.2	-372.0	850.5	756.5	94.03	9.045	
8,900.0	8,867.6	19,256.9	9,471.1	10.9	85.5	159.72	228.1	-372.0	755.2	660.9	94.31	8.007	
9,000.0	8,967.5	19,257.2	9,471.1	11.0	85.5	158.62	228.4	-372.0	660.6	566.0	94.59	6.983	
9,024.5	8,992.0	19,257.1	9,471.1	11.0	85.5	89.13	228.4	-372.0	637.6	542.9	94.66	6.736	
9,100.0	9,067.5	19,257.0	9,471.1	11.1	85.5	89.18	228.2	-372.0	567.4	472.5	94.87	5.981	
9,200.0	9,167.5	19,256.7	9,471.1	11.2	85.5	89.23	228.0	-372.0	477.0	381.8	95.14	5.013	
9,300.0	9,267.5	19,256.5	9,471.1	11.3	85.5	89.29	227.7	-372.0	391.2	295.8	95.39	4.101	
9,400.0	9,367.5	19,256.3	9,471.1	11.4	85.5	89.35	227.5	-372.0	314.0	218.5	95.55	3.286	
9,500.0	9,467.5	19,256.1	9,471.1	11.5	85.5	89.41	227.3	-372.0	253.3	157.8	95.46	2.653	
9,600.0	9,567.5	19,255.8	9,471.1	11.6	85.5	89.46	227.1	-372.0	222.9	127.6	95.31	2.339	
9,622.3	9,589.8	19,255.8	9,471.1	11.6	85.5	89.48	227.0	-372.0	221.8	126.4	95.43	2.324	CC, ES, SF
9,700.0	9,667.5	19,255.6	9,471.1	11.7	85.5	89.52	226.8	-372.0	235.1	138.7	96.35	2.440	
9,800.0	9,767.5	19,255.4	9,471.1	11.8	85.5	89.58	226.6	-372.0	284.3	186.9	97.34	2.920	
9,900.0	9,867.5	19,255.2	9,471.1	11.9	85.5	89.64	226.4	-372.0	355.5	257.7	97.78	3.635	
10,000.0	9,967.5	19,254.9	9,471.1	12.0	85.5	89.70	226.2	-372.0	438.1	340.0	98.06	4.467	
10,100.0	10,067.5	19,254.7	9,471.1	12.1	85.5	89.76	225.9	-372.0	526.7	428.4	98.31	5.358	
10,200.0	10,167.5	19,254.5	9,471.1	12.2	85.5	89.81	225.7	-372.0	618.9	520.3	98.56	6.279	
10,300.0	10,267.5	19,254.3	9,471.1	12.3	85.5	89.87	225.5	-372.0	713.1	614.3	98.84	7.215	
10,400.0	10,367.5	19,254.0	9,471.1	12.4	85.5	89.93	225.3	-372.0	808.8	709.6	99.12	8.159	
10,500.0	10,467.5	19,253.8	9,471.1	12.5	85.5	89.99	225.0	-372.0	905.3	805.9	99.42	9.106	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #701H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 11908-MWD+IFR1+FDIR — **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	98.7	98.7	3.0	3.0	89.62	0.4	60.0	60.0	54.0	6.00	10.000	
200.0	200.0	198.7	198.7	3.0	3.0	89.62	0.4	60.0	60.0	54.0	6.00	9.995	
300.0	300.0	298.7	298.7	3.0	3.0	89.62	0.4	60.0	60.0	54.0	6.01	9.985	
400.0	400.0	398.7	398.7	3.0	3.0	89.62	0.4	60.0	60.0	54.0	6.02	9.970	
500.0	500.0	498.7	498.7	3.1	3.1	89.62	0.4	60.0	60.0	54.0	6.03	9.950	
600.0	600.0	598.7	598.7	3.1	3.1	89.62	0.4	60.0	60.0	54.0	6.05	9.924	
700.0	700.0	698.7	698.7	3.1	3.1	89.62	0.4	60.0	60.0	53.9	6.06	9.893	
800.0	800.0	798.7	798.7	3.2	3.2	89.62	0.4	60.0	60.0	53.9	6.09	9.857	
900.0	900.0	898.7	898.7	3.2	3.2	89.62	0.4	60.0	60.0	53.9	6.11	9.817	
1,000.0	1,000.0	998.7	998.7	3.2	3.2	89.62	0.4	60.0	60.0	53.9	6.14	9.772	
1,100.0	1,100.0	1,098.7	1,098.7	3.3	3.3	89.62	0.4	60.0	60.0	53.8	6.17	9.723	
1,200.0	1,200.0	1,198.7	1,198.7	3.4	3.4	89.62	0.4	60.0	60.0	53.8	6.21	9.669	
1,300.0	1,300.0	1,298.7	1,298.7	3.4	3.4	89.62	0.4	60.0	60.0	53.8	6.24	9.612	
1,400.0	1,400.0	1,398.7	1,398.7	3.5	3.5	89.62	0.4	60.0	60.0	53.7	6.28	9.550	
1,500.0	1,500.0	1,498.7	1,498.7	3.5	3.5	89.62	0.4	60.0	60.0	53.7	6.33	9.486	
1,600.0	1,600.0	1,598.7	1,598.7	3.6	3.6	89.62	0.4	60.0	60.0	53.6	6.37	9.418	
1,700.0	1,700.0	1,698.7	1,698.7	3.7	3.7	89.62	0.4	60.0	60.0	53.6	6.42	9.347	
1,800.0	1,800.0	1,798.7	1,798.7	3.8	3.8	89.62	0.4	60.0	60.0	53.5	6.47	9.274	
1,900.0	1,900.0	1,898.7	1,898.7	3.9	3.9	89.62	0.4	60.0	60.0	53.5	6.52	9.197	
2,000.0	2,000.0	1,998.7	1,998.7	3.9	3.9	89.62	0.4	60.0	60.0	53.4	6.58	9.119	
2,100.0	2,100.0	2,098.7	2,098.7	4.0	4.0	89.62	0.4	60.0	60.0	53.4	6.64	9.039	
2,200.0	2,200.0	2,198.7	2,198.7	4.1	4.1	89.62	0.4	60.0	60.0	53.3	6.70	8.956	
2,300.0	2,300.0	2,298.7	2,298.7	4.2	4.2	89.62	0.4	60.0	60.0	53.2	6.76	8.873	
2,400.0	2,400.0	2,398.7	2,398.7	4.3	4.3	89.62	0.4	60.0	60.0	53.2	6.83	8.787	
2,500.0	2,500.0	2,498.7	2,498.7	4.4	4.4	89.62	0.4	60.0	60.0	53.1	6.90	8.701	CC, ES, SF
2,600.0	2,600.0	2,596.7	2,596.7	4.5	4.5	158.90	1.0	61.5	63.2	56.2	6.96	9.074	
2,700.0	2,699.8	2,694.0	2,693.9	4.5	4.5	158.97	2.6	66.2	72.8	65.8	7.04	10.348	
2,800.0	2,799.5	2,790.2	2,789.7	4.6	4.6	159.03	5.4	73.8	88.9	81.8	7.12	12.480	
2,900.0	2,898.9	2,888.0	2,887.0	4.6	4.6	159.12	8.9	83.4	108.4	101.2	7.21	15.021	
3,000.0	2,998.4	2,986.1	2,984.5	4.7	4.7	159.18	12.4	93.0	127.9	120.6	7.31	17.483	
3,100.0	3,097.8	3,084.2	3,082.1	4.8	4.8	159.23	15.9	102.7	147.4	139.9	7.42	19.860	
3,200.0	3,197.3	3,182.2	3,179.6	4.8	4.8	159.26	19.4	112.3	166.9	159.3	7.53	22.150	
3,300.0	3,296.7	3,280.3	3,277.1	4.9	4.9	159.29	22.9	121.9	186.4	178.7	7.65	24.352	
3,400.0	3,396.2	3,378.4	3,374.7	5.0	5.0	159.31	26.4	131.6	205.9	198.1	7.78	26.466	
3,500.0	3,495.6	3,476.5	3,472.2	5.1	5.0	159.33	30.0	141.2	225.4	217.5	7.91	28.492	
3,600.0	3,595.1	3,574.6	3,569.8	5.1	5.1	159.34	33.5	150.8	244.9	236.8	8.05	30.431	
3,700.0	3,694.5	3,672.6	3,667.3	5.2	5.2	159.36	37.0	160.5	264.4	256.2	8.19	32.284	
3,800.0	3,794.0	3,770.7	3,764.8	5.3	5.3	159.37	40.5	170.1	283.9	275.6	8.34	34.053	
3,900.0	3,893.4	3,868.8	3,862.4	5.4	5.3	159.38	44.0	179.7	303.4	294.9	8.49	35.741	
4,000.0	3,992.9	3,966.9	3,959.9	5.5	5.4	159.39	47.5	189.4	322.9	314.3	8.65	37.350	
4,100.0	4,092.3	4,065.0	4,057.5	5.6	5.5	159.39	51.0	199.0	342.4	333.6	8.81	38.882	
4,200.0	4,191.8	4,163.0	4,155.0	5.6	5.6	159.40	54.5	208.6	361.9	352.9	8.97	40.341	
4,300.0	4,291.2	4,261.1	4,252.6	5.7	5.7	159.41	58.0	218.3	381.4	372.3	9.14	41.729	
4,400.0	4,390.7	4,359.2	4,350.1	5.8	5.8	159.41	61.5	227.9	400.9	391.6	9.31	43.049	
4,500.0	4,490.1	4,457.3	4,447.6	5.9	5.9	159.42	65.0	237.5	420.4	410.9	9.49	44.305	
4,600.0	4,589.6	4,555.4	4,545.2	6.0	6.0	159.42	68.5	247.2	439.9	430.2	9.67	45.499	
4,700.0	4,689.0	4,653.4	4,642.7	6.1	6.1	159.43	72.0	256.8	459.4	449.6	9.85	46.635	
4,800.0	4,788.5	4,751.5	4,740.3	6.2	6.2	159.43	75.5	266.4	478.9	468.9	10.04	47.714	
4,900.0	4,887.9	4,849.6	4,837.8	6.3	6.3	159.43	79.0	276.1	498.4	488.2	10.23	48.740	
5,000.0	4,987.4	4,947.7	4,935.4	6.4	6.4	159.44	82.5	285.7	517.9	507.5	10.42	49.716	
5,100.0	5,086.9	5,045.7	5,032.9	6.5	6.5	159.44	86.1	295.3	537.4	526.8	10.61	50.644	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #701H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 11908-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,186.3	5,143.8	5,130.4	6.6	6.6	159.44	89.6	305.0	556.9	546.1	10.81	51.527	
5,300.0	5,285.8	5,241.9	5,228.0	6.7	6.7	159.45	93.1	314.6	576.4	565.4	11.01	52.367	
5,400.0	5,385.2	5,340.0	5,325.5	6.8	6.8	159.45	96.6	324.2	595.9	584.7	11.21	53.166	
5,500.0	5,484.7	5,438.1	5,423.1	6.9	6.9	159.45	100.1	333.9	615.4	604.0	11.41	53.926	
5,600.0	5,584.1	5,536.1	5,520.6	7.0	7.0	159.45	103.6	343.5	634.9	623.3	11.62	54.650	
5,700.0	5,683.6	5,634.2	5,618.2	7.2	7.1	159.45	107.1	353.1	654.5	642.6	11.83	55.339	
5,800.0	5,783.0	5,732.3	5,715.7	7.3	7.2	159.46	110.6	362.8	674.0	661.9	12.04	55.995	
5,900.0	5,882.5	5,830.4	5,813.2	7.4	7.3	159.46	114.1	372.4	693.5	681.2	12.25	56.621	
6,000.0	5,981.9	5,928.5	5,910.8	7.5	7.4	159.46	117.6	382.0	713.0	700.5	12.46	57.217	
6,100.0	6,081.4	6,026.5	6,008.3	7.6	7.5	159.46	121.1	391.7	732.5	719.8	12.68	57.785	
6,200.0	6,180.8	6,124.6	6,105.9	7.7	7.6	159.46	124.6	401.3	752.0	739.1	12.89	58.327	
6,300.0	6,280.3	6,222.7	6,203.4	7.8	7.7	159.46	128.1	410.9	771.5	758.4	13.11	58.844	
6,400.0	6,379.7	6,320.8	6,300.9	7.9	7.8	159.47	131.6	420.6	791.0	777.6	13.33	59.337	
6,500.0	6,479.2	6,418.9	6,398.5	8.0	7.9	159.47	135.1	430.2	810.5	796.9	13.55	59.808	
6,600.0	6,578.6	6,516.9	6,496.0	8.2	8.0	159.47	138.7	439.8	830.0	816.2	13.77	60.257	
6,700.0	6,678.1	6,615.0	6,593.6	8.3	8.2	159.47	142.2	449.5	849.5	835.5	14.00	60.687	
6,800.0	6,777.5	6,713.1	6,691.1	8.4	8.3	159.47	145.7	459.1	869.0	854.8	14.22	61.097	
6,900.0	6,877.0	6,811.2	6,788.7	8.5	8.4	159.47	149.2	468.7	888.5	874.0	14.45	61.489	
7,000.0	6,976.4	6,909.3	6,886.2	8.6	8.5	159.47	152.7	478.4	908.0	893.3	14.68	61.864	
7,100.0	7,075.9	7,007.3	6,983.7	8.7	8.6	159.47	156.2	488.0	927.5	912.6	14.91	62.222	
7,200.0	7,175.3	7,105.4	7,081.3	8.9	8.7	159.47	159.7	497.6	947.0	931.9	15.14	62.565	
7,300.0	7,274.8	7,203.5	7,178.8	9.0	8.8	159.48	163.2	507.3	966.5	951.1	15.37	62.892	
7,400.0	7,374.3	7,301.6	7,276.4	9.1	9.0	159.48	166.7	516.9	986.0	970.4	15.60	63.206	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #702H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 11850-MWD+IFR1+FDIR — **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	33.57	45.2	30.0	54.3				
100.0	100.0	99.2	99.2	3.0	3.0	33.57	45.2	30.0	54.2	48.2	6.00	9.041	
200.0	200.0	199.2	199.2	3.0	3.0	33.57	45.2	30.0	54.2	48.2	6.01	9.029	
300.0	300.0	299.2	299.2	3.0	3.0	33.57	45.2	30.0	54.2	48.2	6.02	9.004	
400.0	400.0	399.2	399.2	3.0	3.0	33.57	45.2	30.0	54.2	48.2	6.05	8.966	
500.0	500.0	499.2	499.2	3.1	3.1	33.57	45.2	30.0	54.2	48.2	6.08	8.916	
600.0	600.0	599.2	599.2	3.1	3.1	33.57	45.2	30.0	54.2	48.1	6.13	8.853	
700.0	700.0	699.2	699.2	3.1	3.1	33.57	45.2	30.0	54.2	48.1	6.18	8.779	
800.0	800.0	799.2	799.2	3.2	3.2	33.57	45.2	30.0	54.2	48.0	6.24	8.695	
900.0	900.0	899.2	899.2	3.2	3.2	33.57	45.2	30.0	54.2	47.9	6.31	8.602	
1,000.0	1,000.0	999.2	999.2	3.2	3.2	33.57	45.2	30.0	54.2	47.9	6.38	8.500	
1,100.0	1,100.0	1,099.2	1,099.2	3.3	3.3	33.57	45.2	30.0	54.2	47.8	6.47	8.391	
1,200.0	1,200.0	1,199.2	1,199.2	3.4	3.4	33.57	45.2	30.0	54.2	47.7	6.56	8.275	
1,300.0	1,300.0	1,299.2	1,299.2	3.4	3.4	33.57	45.2	30.0	54.2	47.6	6.65	8.154	
1,400.0	1,400.0	1,399.2	1,399.2	3.5	3.5	33.57	45.2	30.0	54.2	47.5	6.76	8.029	
1,500.0	1,500.0	1,499.2	1,499.2	3.5	3.5	33.57	45.2	30.0	54.2	47.4	6.87	7.900	
1,600.0	1,600.0	1,599.2	1,599.2	3.6	3.6	33.57	45.2	30.0	54.2	47.3	6.98	7.769	
1,700.0	1,700.0	1,699.2	1,699.2	3.7	3.7	33.57	45.2	30.0	54.2	47.1	7.11	7.635	
1,800.0	1,800.0	1,799.2	1,799.2	3.8	3.8	33.57	45.2	30.0	54.2	47.0	7.23	7.501	
1,900.0	1,900.0	1,899.2	1,899.2	3.9	3.9	33.57	45.2	30.0	54.2	46.9	7.37	7.366	
2,000.0	2,000.0	1,999.2	1,999.2	3.9	3.9	33.57	45.2	30.0	54.2	46.7	7.50	7.231	
2,100.0	2,100.0	2,099.2	2,099.2	4.0	4.0	33.57	45.2	30.0	54.2	46.6	7.64	7.096	
2,200.0	2,200.0	2,199.2	2,199.2	4.1	4.1	33.57	45.2	30.0	54.2	46.5	7.79	6.963	
2,300.0	2,300.0	2,299.2	2,299.2	4.2	4.2	33.57	45.2	30.0	54.2	46.3	7.94	6.831	
2,400.0	2,400.0	2,399.2	2,399.2	4.3	4.3	33.57	45.2	30.0	54.2	46.2	8.10	6.701	
2,500.0	2,500.0	2,499.2	2,499.2	4.4	4.4	33.57	45.2	30.0	54.2	46.0	8.25	6.572	CC, ES
2,600.0	2,600.0	2,597.3	2,597.3	4.5	4.5	104.40	46.6	30.8	56.3	48.0	8.33	6.762	
2,700.0	2,699.8	2,695.0	2,694.8	4.5	4.6	108.47	50.9	33.4	62.9	54.6	8.29	7.589	
2,800.0	2,799.5	2,792.9	2,792.4	4.6	4.7	113.67	57.8	37.5	74.1	65.9	8.19	9.045	
2,900.0	2,898.9	2,891.8	2,890.9	4.6	4.7	118.60	65.1	42.0	87.1	79.0	8.11	10.740	
3,000.0	2,998.4	2,990.7	2,989.5	4.7	4.8	122.24	72.5	46.4	100.6	92.5	8.08	12.454	
3,100.0	3,097.8	3,089.6	3,088.0	4.8	4.9	125.01	79.9	50.8	114.4	106.3	8.08	14.159	
3,200.0	3,197.3	3,188.5	3,186.5	4.8	5.0	127.18	87.3	55.3	128.3	120.2	8.10	15.838	
3,300.0	3,296.7	3,287.4	3,285.1	4.9	5.1	128.92	94.7	59.7	142.5	134.3	8.15	17.481	
3,400.0	3,396.2	3,386.3	3,383.6	5.0	5.2	130.35	102.1	64.1	156.7	148.5	8.21	19.079	
3,500.0	3,495.6	3,485.3	3,482.1	5.1	5.3	131.54	109.5	68.6	171.0	162.7	8.29	20.629	
3,600.0	3,595.1	3,584.2	3,580.7	5.1	5.4	132.55	116.9	73.0	185.4	177.0	8.38	22.129	
3,700.0	3,694.5	3,683.1	3,679.2	5.2	5.5	133.41	124.3	77.4	199.8	191.4	8.48	23.577	
3,800.0	3,794.0	3,782.0	3,777.7	5.3	5.6	134.15	131.7	81.9	214.3	205.7	8.58	24.971	
3,900.0	3,893.4	3,880.9	3,876.3	5.4	5.7	134.80	139.1	86.3	228.8	220.1	8.70	26.312	
4,000.0	3,992.9	3,979.8	3,974.8	5.5	5.8	135.37	146.5	90.8	243.3	234.5	8.82	27.601	
4,100.0	4,092.3	4,078.7	4,073.4	5.6	5.9	135.88	153.9	95.2	257.9	248.9	8.94	28.837	
4,200.0	4,191.8	4,177.6	4,171.9	5.6	6.0	136.34	161.2	99.6	272.4	263.4	9.07	30.022	
4,300.0	4,291.2	4,276.6	4,270.4	5.7	6.1	136.75	168.6	104.1	287.0	277.8	9.21	31.157	
4,400.0	4,390.7	4,375.5	4,369.0	5.8	6.2	137.11	176.0	108.5	301.6	292.2	9.35	32.243	
4,500.0	4,490.1	4,474.4	4,467.5	5.9	6.3	137.45	183.4	112.9	316.2	306.7	9.50	33.282	
4,600.0	4,589.6	4,573.3	4,566.0	6.0	6.5	137.75	190.8	117.4	330.8	321.2	9.65	34.275	
4,700.0	4,689.0	4,672.2	4,664.6	6.1	6.6	138.03	198.2	121.8	345.4	335.6	9.81	35.224	
4,800.0	4,788.5	4,771.1	4,763.1	6.2	6.7	138.29	205.6	126.2	360.1	350.1	9.97	36.131	
4,900.0	4,887.9	4,870.0	4,861.6	6.3	6.8	138.53	213.0	130.7	374.7	364.6	10.13	36.996	
5,000.0	4,987.4	4,968.9	4,960.2	6.4	6.9	138.75	220.4	135.1	389.3	379.0	10.29	37.822	
5,100.0	5,086.9	5,067.8	5,058.7	6.5	7.0	138.95	227.8	139.5	404.0	393.5	10.46	38.611	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #702H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 11850-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,186.3	5,166.8	5,157.2	6.6	7.1	139.14	235.2	144.0	418.6	408.0	10.63	39.363	
5,300.0	5,285.8	5,265.7	5,255.8	6.7	7.2	139.31	242.6	148.4	433.3	422.5	10.81	40.081	
5,400.0	5,385.2	5,364.6	5,354.3	6.8	7.3	139.48	250.0	152.9	447.9	436.9	10.99	40.766	
5,500.0	5,484.7	5,463.5	5,452.9	6.9	7.5	139.63	257.3	157.3	462.6	451.4	11.17	41.420	
5,600.0	5,584.1	5,562.4	5,551.4	7.0	7.6	139.78	264.7	161.7	477.2	465.9	11.35	42.043	
5,700.0	5,683.6	5,661.3	5,649.9	7.2	7.7	139.91	272.1	166.2	491.9	480.4	11.54	42.638	
5,800.0	5,783.0	5,760.2	5,748.5	7.3	7.8	140.04	279.5	170.6	506.6	494.9	11.72	43.205	
5,900.0	5,882.5	5,859.1	5,847.0	7.4	7.9	140.16	286.9	175.0	521.3	509.3	11.92	43.747	
6,000.0	5,981.9	5,958.1	5,945.5	7.5	8.0	140.28	294.3	179.5	535.9	523.8	12.11	44.263	
6,100.0	6,081.4	6,057.0	6,044.1	7.6	8.2	140.38	301.7	183.9	550.6	538.3	12.30	44.756	
6,200.0	6,180.8	6,155.9	6,142.6	7.7	8.3	140.49	309.1	188.3	565.3	552.8	12.50	45.227	
6,300.0	6,280.3	6,254.8	6,241.1	7.8	8.4	140.58	316.5	192.8	580.0	567.3	12.70	45.675	
6,400.0	6,379.7	6,353.7	6,339.7	7.9	8.5	140.68	323.9	197.2	594.6	581.7	12.90	46.104	
6,500.0	6,479.2	6,452.6	6,438.2	8.0	8.6	140.76	331.3	201.6	609.3	596.2	13.10	46.513	
6,600.0	6,578.6	6,551.5	6,536.7	8.2	8.7	140.85	338.7	206.1	624.0	610.7	13.30	46.903	
6,700.0	6,678.1	6,650.4	6,635.3	8.3	8.9	140.93	346.0	210.5	638.7	625.2	13.51	47.276	
6,800.0	6,777.5	6,749.4	6,733.8	8.4	9.0	141.01	353.4	214.9	653.4	639.6	13.72	47.631	
6,900.0	6,877.0	6,848.3	6,832.4	8.5	9.1	141.08	360.8	219.4	668.1	654.1	13.93	47.971	
7,000.0	6,976.4	6,947.2	6,930.9	8.6	9.2	141.15	368.2	223.8	682.7	668.6	14.14	48.295	
7,100.0	7,075.9	7,046.1	7,029.4	8.7	9.3	141.22	375.6	228.3	697.4	683.1	14.35	48.605	
7,200.0	7,175.3	7,145.0	7,128.0	8.9	9.5	141.28	383.0	232.7	712.1	697.6	14.56	48.900	
7,300.0	7,274.8	7,243.9	7,226.5	9.0	9.6	141.34	390.4	237.1	726.8	712.0	14.78	49.183	
7,400.0	7,374.3	7,342.8	7,325.0	9.1	9.7	141.40	397.8	241.6	741.5	726.5	14.99	49.452	
7,500.0	7,473.7	7,441.7	7,423.6	9.2	9.8	141.46	405.2	246.0	756.2	741.0	15.21	49.710	
7,600.0	7,573.2	7,540.7	7,522.1	9.3	9.9	141.51	412.6	250.4	770.9	755.4	15.43	49.956	
7,700.0	7,672.6	7,639.6	7,620.6	9.4	10.1	141.57	420.0	254.9	785.6	769.9	15.65	50.191	
7,800.0	7,772.1	7,739.8	7,720.5	9.6	10.2	141.62	427.5	259.4	800.3	784.4	15.87	50.420	
7,900.0	7,871.5	7,850.5	7,830.9	9.7	10.3	141.73	434.6	263.6	814.1	798.0	16.08	50.627	
8,000.0	7,971.0	7,961.5	7,941.7	9.8	10.5	141.95	439.9	266.8	826.5	810.2	16.29	50.749	
8,100.0	8,070.4	8,072.8	8,052.9	9.9	10.6	142.25	443.4	268.9	837.4	820.9	16.49	50.793	
8,200.0	8,169.9	8,184.3	8,164.4	10.0	10.7	142.65	445.1	269.9	847.0	830.3	16.69	50.749	
8,300.0	8,269.3	8,288.4	8,268.5	10.2	10.9	143.09	445.2	270.0	855.5	838.6	16.87	50.712	
8,400.0	8,368.8	8,387.9	8,368.0	10.3	11.0	143.50	445.2	270.0	863.9	846.8	17.04	50.699	
8,424.5	8,393.1	8,412.2	8,392.3	10.3	11.0	143.60	445.2	270.0	865.9	848.8	17.08	50.696	
8,500.0	8,468.3	8,487.4	8,467.5	10.4	11.1	143.93	445.2	270.0	871.9	854.7	17.21	50.665	
8,600.0	8,567.9	8,587.0	8,567.1	10.5	11.2	144.28	445.2	270.0	878.6	861.2	17.38	50.560	
8,700.0	8,667.7	8,686.8	8,666.9	10.7	11.3	144.56	445.2	270.0	883.9	866.4	17.54	50.381	
8,800.0	8,767.6	8,786.7	8,766.8	10.8	11.5	144.76	445.2	270.0	887.8	870.1	17.71	50.141	
8,900.0	8,867.6	8,886.6	8,866.8	10.9	11.6	144.89	445.2	270.0	890.3	872.5	17.87	49.835	
9,000.0	8,967.5	8,986.6	8,966.7	11.0	11.7	144.94	445.2	270.0	891.4	873.4	18.03	49.452	
9,024.5	8,992.0	9,011.1	8,991.2	11.0	11.7	75.70	445.2	270.0	891.4	873.4	18.06	49.367	
9,100.0	9,067.5	9,086.6	9,066.7	11.1	11.8	75.70	445.2	270.0	891.4	873.3	18.13	49.167	
9,200.0	9,167.5	9,186.6	9,166.7	11.2	11.9	75.70	445.2	270.0	891.4	873.2	18.23	48.902	
9,300.0	9,267.5	9,286.6	9,266.7	11.3	12.1	75.70	445.2	270.0	891.4	873.1	18.33	48.639	
9,400.0	9,367.5	9,386.6	9,366.7	11.4	12.2	75.70	445.2	270.0	891.4	873.0	18.43	48.377	
9,500.0	9,467.5	9,486.6	9,466.7	11.5	12.3	75.70	445.2	270.0	891.4	872.9	18.53	48.116	
9,600.0	9,567.5	9,586.6	9,566.7	11.6	12.4	75.70	445.2	270.0	891.4	872.8	18.63	47.856	
9,700.0	9,667.5	9,686.6	9,666.7	11.7	12.6	75.70	445.2	270.0	891.4	872.7	18.73	47.597	
9,800.0	9,767.5	9,786.6	9,766.7	11.8	12.7	75.70	445.2	270.0	891.4	872.6	18.83	47.339	
9,900.0	9,867.5	9,886.6	9,866.7	11.9	12.8	75.70	445.2	270.0	891.4	872.5	18.93	47.083	
10,000.0	9,967.5	9,986.6	9,966.7	12.0	12.9	75.70	445.2	270.0	891.4	872.4	19.04	46.828	
10,100.0	10,067.5	10,086.6	10,066.7	12.1	13.0	75.70	445.2	270.0	891.4	872.3	19.14	46.575	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #702H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 11850-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.0	10,167.5	10,186.6	10,166.7	12.2	13.2	75.70	445.2	270.0	891.4	872.2	19.24	46.322	
10,300.0	10,267.5	10,286.6	10,266.7	12.3	13.3	75.70	445.2	270.0	891.4	872.1	19.35	46.072	
10,400.0	10,367.5	10,386.6	10,366.7	12.4	13.4	75.70	445.2	270.0	891.4	872.0	19.45	45.822	
10,500.0	10,467.5	10,486.6	10,466.7	12.5	13.5	75.70	445.2	270.0	891.4	871.9	19.56	45.574	
10,600.0	10,567.5	10,586.6	10,566.7	12.6	13.7	75.70	445.2	270.0	891.4	871.8	19.67	45.327	
10,700.0	10,667.5	10,686.6	10,666.7	12.8	13.8	75.70	445.2	270.0	891.4	871.7	19.77	45.082	
10,800.0	10,767.5	10,786.6	10,766.7	12.9	13.9	75.70	445.2	270.0	891.4	871.5	19.88	44.838	
10,900.0	10,867.5	10,886.6	10,866.7	13.0	14.0	75.70	445.2	270.0	891.4	871.4	19.99	44.596	
11,000.0	10,967.5	10,986.6	10,966.7	13.1	14.2	75.70	445.2	270.0	891.4	871.3	20.10	44.355	
11,100.0	11,067.5	11,086.6	11,066.7	13.2	14.3	75.70	445.2	270.0	891.4	871.2	20.21	44.115	
11,200.0	11,167.5	11,186.6	11,166.7	13.3	14.4	75.70	445.2	270.0	891.4	871.1	20.32	43.877	
11,300.0	11,267.5	11,286.6	11,266.7	13.4	14.5	75.70	445.2	270.0	891.4	871.0	20.43	43.641	
11,400.0	11,367.5	11,386.6	11,366.7	13.5	14.7	75.70	445.2	270.0	891.4	870.9	20.54	43.406	
11,500.0	11,467.5	11,486.6	11,466.7	13.6	14.8	75.70	445.2	270.0	891.4	870.8	20.65	43.173	
11,600.0	11,567.5	11,586.6	11,566.7	13.7	14.9	75.70	445.2	270.0	891.4	870.7	20.76	42.941	
11,700.0	11,667.5	11,686.6	11,666.7	13.8	15.0	75.70	445.2	270.0	891.4	870.6	20.87	42.710	
11,800.0	11,767.5	11,786.6	11,766.7	14.0	15.2	75.70	445.2	270.0	891.4	870.4	20.98	42.481	
11,847.0	11,814.5	11,833.6	11,813.7	14.0	15.2	75.70	445.2	270.0	891.4	870.4	21.02	42.414	
11,850.0	11,817.5	11,836.6	11,816.7	14.0	15.2	-104.15	445.2	270.0	891.4	870.4	21.02	42.411	
11,875.0	11,842.5	11,939.6	11,919.2	14.0	15.2	-103.98	437.0	267.9	891.0	869.6	21.41	41.620	
11,900.0	11,867.4	12,140.6	12,103.1	14.0	15.3	-100.96	362.2	248.8	886.3	861.9	24.41	36.304	
11,925.0	11,892.2	12,302.2	12,217.9	14.0	15.5	-95.95	253.1	220.8	878.3	850.8	27.50	31.943	
11,950.0	11,916.7	12,394.5	12,264.2	14.0	15.5	-92.56	176.0	201.1	868.7	840.0	28.71	30.257	
11,975.0	11,941.0	12,442.6	12,282.0	14.0	15.6	-91.17	132.7	190.0	858.4	829.5	28.85	29.756	
12,000.0	11,964.9	12,493.0	12,295.8	14.0	15.6	-89.51	85.7	178.0	847.9	818.9	28.91	29.329	
12,025.0	11,988.4	12,545.1	12,304.8	14.0	15.6	-87.60	36.1	165.3	837.3	808.4	28.86	29.012	
12,050.0	12,011.5	12,576.9	12,307.4	14.0	15.6	-86.89	5.4	157.5	826.8	798.3	28.48	29.027	
12,075.0	12,034.0	12,604.4	12,307.9	14.1	15.7	-86.41	-21.2	150.7	816.5	788.5	28.03	29.125	
12,100.0	12,055.9	12,601.0	12,308.0	14.1	15.7	-87.93	-17.9	151.5	806.6	779.3	27.33	29.516	
12,125.0	12,077.1	12,621.4	12,307.9	14.1	15.7	-87.84	-37.7	146.5	797.1	770.2	26.86	29.675	
12,150.0	12,097.6	12,632.3	12,307.9	14.1	15.7	-88.32	-48.3	143.9	788.0	761.7	26.34	29.922	
12,175.0	12,117.3	12,644.1	12,307.9	14.1	15.7	-88.71	-59.8	141.1	779.4	753.6	25.85	30.146	
12,200.0	12,136.2	12,656.7	12,307.9	14.1	15.7	-89.02	-72.0	138.2	771.3	745.8	25.42	30.340	
12,225.0	12,154.3	12,670.0	12,307.9	14.2	15.7	-89.25	-85.0	135.2	763.5	738.5	25.04	30.498	
12,250.0	12,171.4	12,684.1	12,307.9	14.2	15.7	-89.42	-98.7	132.1	756.2	731.5	24.70	30.613	
12,275.0	12,187.5	12,700.0	12,307.8	14.2	15.7	-89.49	-114.3	128.6	749.3	724.9	24.43	30.667	
12,300.0	12,202.6	12,714.4	12,307.8	14.2	15.7	-89.63	-128.3	125.6	742.8	718.6	24.20	30.689	
12,325.0	12,216.6	12,730.4	12,307.8	14.3	15.7	-89.69	-144.1	122.3	736.6	712.6	24.04	30.646	
12,350.0	12,229.5	12,747.1	12,307.8	14.3	15.7	-89.72	-160.4	118.9	730.8	706.9	23.92	30.554	
12,375.0	12,241.3	12,764.4	12,307.8	14.3	15.7	-89.76	-177.3	115.6	725.3	701.4	23.84	30.417	
12,400.0	12,251.9	12,782.1	12,307.7	14.3	15.7	-89.80	-194.7	112.2	720.0	696.2	23.81	30.239	
12,425.0	12,261.3	12,800.0	12,307.7	14.4	15.7	-89.87	-212.3	108.9	715.1	691.2	23.81	30.030	
12,450.0	12,269.5	12,818.9	12,307.7	14.4	15.7	-89.94	-230.9	105.6	710.3	686.5	23.86	29.774	
12,475.0	12,276.5	12,837.9	12,307.7	14.4	15.7	-90.06	-249.6	102.4	705.8	681.9	23.93	29.499	
12,500.0	12,282.2	12,857.1	12,307.6	14.4	15.7	-90.22	-268.6	99.2	701.6	677.5	24.02	29.209	
12,525.0	12,286.6	12,876.7	12,307.6	14.5	15.7	-90.44	-287.9	96.1	697.5	673.4	24.13	28.908	
12,550.0	12,289.7	12,900.0	12,307.6	14.5	15.7	-90.68	-311.0	92.6	693.6	669.3	24.29	28.561	
12,575.0	12,291.5	12,916.3	12,307.6	14.5	15.7	-91.04	-327.1	90.3	689.9	665.5	24.39	28.286	
12,598.2	12,292.0	12,934.8	12,307.6	14.5	15.7	-91.40	-345.4	87.8	686.7	662.1	24.53	27.992	
12,600.0	12,292.0	12,936.2	12,307.6	14.5	15.7	-91.40	-346.8	87.6	686.4	661.9	24.54	27.969	
12,700.0	12,291.7	13,016.4	12,307.5	14.7	15.8	-91.43	-426.5	78.0	674.2	649.0	25.21	26.747	
12,800.0	12,291.4	13,100.0	12,307.3	14.8	15.8	-91.46	-509.7	70.5	664.9	638.9	25.98	25.589	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #702H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 11850-MWD+IFR1+FDIR — **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	12,291.2	13,178.2	12,307.3	15.0	15.8	-91.48	-587.7	65.6	658.3	631.5	26.78	24.583	
13,000.0	12,290.9	13,259.5	12,307.1	15.2	15.9	-91.49	-669.0	62.7	654.6	626.9	27.67	23.659	
13,100.0	12,290.7	13,349.2	12,307.0	15.5	15.9	-91.51	-758.7	62.0	653.4	624.7	28.69	22.775	
13,200.0	12,290.4	13,449.2	12,306.9	15.8	16.0	-91.52	-858.7	61.5	652.6	622.8	29.87	21.852	
13,300.0	12,290.2	13,549.2	12,306.8	16.2	16.2	-91.53	-958.7	61.0	651.9	620.8	31.09	20.965	
13,400.0	12,289.9	13,649.2	12,306.7	16.6	16.6	-91.55	-1,058.7	60.5	651.1	618.8	32.37	20.117	
13,500.0	12,289.6	13,749.2	12,306.5	17.1	17.2	-91.56	-1,158.7	60.0	650.4	616.7	33.68	19.311	
13,600.0	12,289.4	13,849.2	12,306.4	17.7	17.9	-91.57	-1,258.7	59.5	649.6	614.6	35.03	18.546	
13,700.0	12,289.1	13,949.2	12,306.3	18.2	18.6	-91.59	-1,358.7	59.0	648.9	612.5	36.41	17.823	
13,800.0	12,288.9	14,049.2	12,306.2	18.8	19.3	-91.60	-1,458.7	58.5	648.1	610.3	37.81	17.140	
13,900.0	12,288.6	14,149.2	12,306.0	19.5	20.0	-91.62	-1,558.7	58.1	647.4	608.1	39.25	16.496	
14,000.0	12,288.3	14,249.2	12,305.9	20.1	20.8	-91.63	-1,658.7	57.6	646.6	605.9	40.70	15.888	
14,100.0	12,288.1	14,349.2	12,305.8	20.8	21.5	-91.64	-1,758.7	57.1	645.9	603.7	42.17	15.315	
14,200.0	12,287.8	14,449.2	12,305.7	21.5	22.3	-91.66	-1,858.7	56.6	645.1	601.5	43.67	14.774	
14,300.0	12,287.6	14,549.2	12,305.5	22.2	23.1	-91.67	-1,958.7	56.1	644.4	599.2	45.18	14.264	
14,400.0	12,287.3	14,649.2	12,305.4	23.0	23.8	-91.68	-2,058.7	55.6	643.6	596.9	46.70	13.783	
14,500.0	12,287.1	14,749.2	12,305.3	23.7	24.6	-91.70	-2,158.6	55.1	642.9	594.6	48.23	13.328	
14,600.0	12,286.8	14,849.2	12,305.2	24.5	25.4	-91.71	-2,258.6	54.6	642.1	592.4	49.78	12.899	
14,700.0	12,286.5	14,949.2	12,305.1	25.2	26.2	-91.73	-2,358.6	54.2	641.4	590.0	51.34	12.492	
14,800.0	12,286.3	15,049.2	12,304.9	26.0	27.0	-91.74	-2,458.6	53.7	640.6	587.7	52.91	12.108	
14,900.0	12,286.0	15,149.2	12,304.8	26.7	27.8	-91.75	-2,558.6	53.2	639.9	585.4	54.49	11.743	
15,000.0	12,285.8	15,249.2	12,304.7	27.5	28.6	-91.77	-2,658.6	52.7	639.1	583.1	56.08	11.397	
15,100.0	12,285.5	15,349.2	12,304.6	28.3	29.4	-91.78	-2,758.6	52.2	638.4	580.7	57.67	11.069	
15,200.0	12,285.2	15,449.2	12,304.4	29.1	30.2	-91.80	-2,858.6	51.7	637.6	578.4	59.27	10.758	
15,300.0	12,285.0	15,549.2	12,304.3	29.9	31.0	-91.81	-2,958.6	51.2	636.9	576.0	60.88	10.461	
15,400.0	12,284.7	15,649.2	12,304.2	30.7	31.9	-91.83	-3,058.6	50.7	636.1	573.6	62.49	10.179	
15,500.0	12,284.5	15,749.2	12,304.1	31.5	32.7	-91.84	-3,158.6	50.3	635.4	571.3	64.11	9.910	
15,600.0	12,284.2	15,849.2	12,303.9	32.3	33.5	-91.85	-3,258.6	49.8	634.6	568.9	65.74	9.654	
15,700.0	12,284.0	15,949.2	12,303.8	33.1	34.3	-91.87	-3,358.6	49.3	633.9	566.5	67.37	9.410	
15,800.0	12,283.7	16,049.1	12,303.7	33.9	35.1	-91.88	-3,458.6	48.8	633.1	564.1	69.00	9.176	
15,900.0	12,283.4	16,149.1	12,303.6	34.7	36.0	-91.90	-3,558.6	48.3	632.4	561.8	70.64	8.953	
16,000.0	12,283.2	16,249.1	12,303.4	35.5	36.8	-91.91	-3,658.6	47.8	631.7	559.4	72.28	8.739	
16,100.0	12,282.9	16,349.1	12,303.3	36.3	37.6	-91.93	-3,758.6	47.3	630.9	557.0	73.93	8.534	
16,200.0	12,282.7	16,449.1	12,303.2	37.1	38.4	-91.94	-3,858.6	46.9	630.2	554.6	75.57	8.338	
16,300.0	12,282.4	16,549.1	12,303.1	38.0	39.3	-91.95	-3,958.6	46.4	629.4	552.2	77.23	8.150	
16,400.0	12,282.2	16,649.2	12,302.8	38.8	40.1	-91.95	-4,058.7	45.9	628.7	549.8	78.88	7.970	
16,458.5	12,282.0	16,707.8	12,302.5	39.3	40.6	-91.94	-4,117.2	45.6	628.2	548.4	79.85	7.868	
16,461.1	12,282.0	16,710.3	12,302.5	39.3	40.6	-91.94	-4,119.7	45.6	628.2	548.3	79.89	7.863	
16,500.0	12,281.9	16,749.2	12,302.2	39.6	40.9	-91.94	-4,158.7	45.4	627.9	547.4	80.53	7.797	
16,600.0	12,281.5	16,849.2	12,301.7	40.4	41.8	-91.92	-4,258.7	44.9	627.1	544.9	82.19	7.630	
16,700.0	12,281.2	16,949.2	12,301.2	41.2	42.6	-91.91	-4,358.6	44.4	626.4	542.5	83.85	7.470	
16,748.0	12,281.0	16,996.0	12,301.0	41.6	43.0	-91.90	-4,405.4	44.2	626.0	541.4	84.64	7.397	
16,767.9	12,280.9	17,012.3	12,300.9	41.8	43.1	-91.90	-4,421.7	44.2	625.9	541.0	84.92	7.370	
16,791.3	12,280.8	17,031.5	12,300.8	42.0	43.3	-91.90	-4,440.9	44.3	625.8	540.6	85.26	7.340	
16,800.0	12,280.8	17,038.6	12,300.7	42.1	43.4	-91.90	-4,448.1	44.4	625.8	540.5	85.38	7.330	
16,900.0	12,280.5	17,135.5	12,300.2	42.9	44.2	-91.88	-4,544.9	46.0	626.5	539.5	87.01	7.201	
17,000.0	12,280.1	17,235.5	12,299.7	43.7	45.0	-91.86	-4,644.9	47.7	627.3	538.6	88.68	7.074	
17,100.0	12,279.7	17,335.5	12,299.2	44.6	45.8	-91.85	-4,744.9	49.4	628.0	537.7	90.35	6.951	
17,200.0	12,279.4	17,435.5	12,298.6	45.4	46.7	-91.83	-4,844.9	51.1	628.8	536.8	92.02	6.833	
17,300.0	12,279.0	17,535.5	12,298.1	46.2	47.5	-91.81	-4,944.8	52.8	629.5	535.8	93.69	6.719	
17,400.0	12,278.7	17,635.5	12,297.6	47.1	48.4	-91.79	-5,044.8	54.5	630.3	534.9	95.37	6.609	
17,500.0	12,278.3	17,735.5	12,297.1	47.9	49.2	-91.77	-5,144.8	56.2	631.0	534.0	97.05	6.502	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #702H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 11850-MWD+IFR1+FDIR — **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
17,600.0	12,277.9	17,835.5	12,296.5	48.7	50.0	-91.76	-5,244.8	57.9	631.8	533.1	98.73	6.399	
17,700.0	12,277.6	17,935.5	12,296.0	49.6	50.9	-91.74	-5,344.8	59.6	632.5	532.1	100.41	6.299	
17,800.0	12,277.2	18,035.5	12,295.5	50.4	51.7	-91.72	-5,444.7	61.3	633.3	531.2	102.09	6.203	
17,900.0	12,276.9	18,135.5	12,294.9	51.3	52.6	-91.70	-5,544.7	63.0	634.0	530.2	103.78	6.110	
18,000.0	12,276.5	18,235.5	12,294.4	52.1	53.4	-91.69	-5,644.7	64.7	634.8	529.3	105.46	6.019	
18,100.0	12,276.2	18,335.5	12,293.9	52.9	54.3	-91.67	-5,744.7	66.4	635.5	528.4	107.15	5.931	
18,200.0	12,275.8	18,435.5	12,293.4	53.8	55.1	-91.65	-5,844.7	68.1	636.3	527.4	108.83	5.846	
18,300.0	12,275.4	18,535.5	12,292.8	54.6	56.0	-91.64	-5,944.6	69.8	637.0	526.5	110.52	5.764	
18,400.0	12,275.1	18,635.5	12,292.3	55.5	56.8	-91.62	-6,044.6	71.6	637.8	525.6	112.21	5.684	
18,500.0	12,274.7	18,735.4	12,291.8	56.3	57.7	-91.60	-6,144.6	73.3	638.5	524.6	113.90	5.606	
18,600.0	12,274.4	18,835.4	12,291.3	57.1	58.5	-91.58	-6,244.6	75.0	639.3	523.7	115.59	5.530	
18,700.0	12,274.0	18,935.4	12,290.7	58.0	59.3	-91.57	-6,344.6	76.7	640.0	522.7	117.29	5.457	
18,800.0	12,273.6	19,035.4	12,290.2	58.8	60.2	-91.55	-6,444.6	78.4	640.8	521.8	118.98	5.385	
18,900.0	12,273.3	19,135.4	12,289.7	59.7	61.0	-91.53	-6,544.5	80.1	641.5	520.8	120.67	5.316	
19,000.0	12,272.9	19,235.4	12,289.1	60.5	61.9	-91.52	-6,644.5	81.8	642.3	519.9	122.37	5.249	
19,100.0	12,272.6	19,335.4	12,288.6	61.4	62.7	-91.50	-6,744.5	83.5	643.0	518.9	124.06	5.183	
19,200.0	12,272.2	19,435.4	12,288.1	62.2	63.6	-91.48	-6,844.5	85.2	643.8	518.0	125.76	5.119	
19,300.0	12,271.9	19,535.4	12,287.6	63.1	64.4	-91.47	-6,944.5	86.9	644.5	517.0	127.46	5.057	
19,400.0	12,271.5	19,635.4	12,287.0	63.9	65.3	-91.45	-7,044.4	88.6	645.3	516.1	129.15	4.996	
19,500.0	12,271.1	19,735.4	12,286.5	64.8	66.1	-91.43	-7,144.4	90.3	646.0	515.1	130.85	4.937	
19,600.0	12,270.8	19,835.4	12,286.0	65.6	67.0	-91.42	-7,244.4	92.0	646.7	514.2	132.55	4.879	
19,700.0	12,270.4	19,935.4	12,285.4	66.5	67.8	-91.40	-7,344.4	93.7	647.5	513.2	134.25	4.823	
19,800.0	12,270.1	20,035.4	12,284.9	67.3	68.7	-91.38	-7,444.4	95.4	648.2	512.3	135.95	4.768	
19,900.0	12,269.7	20,135.4	12,284.4	68.2	69.5	-91.37	-7,544.3	97.1	649.0	511.3	137.65	4.715	
20,000.0	12,269.3	20,235.4	12,283.9	69.0	70.4	-91.35	-7,644.3	98.8	649.7	510.4	139.35	4.663	
20,100.0	12,269.0	20,335.4	12,283.3	69.9	71.2	-91.33	-7,744.3	100.5	650.5	509.4	141.05	4.612	
20,200.0	12,268.6	20,435.4	12,282.8	70.7	72.1	-91.32	-7,844.3	102.2	651.2	508.5	142.75	4.562	
20,300.0	12,268.3	20,535.4	12,282.3	71.6	73.0	-91.30	-7,944.3	103.9	652.0	507.5	144.46	4.513	
20,400.0	12,267.9	20,635.4	12,281.7	72.4	73.8	-91.28	-8,044.2	105.6	652.7	506.6	146.16	4.466	
20,500.0	12,267.5	20,735.4	12,281.2	73.3	74.7	-91.27	-8,144.2	107.3	653.5	505.6	147.86	4.420	
20,600.0	12,267.2	20,835.4	12,280.7	74.1	75.5	-91.25	-8,244.2	109.0	654.2	504.7	149.57	4.374	
20,700.0	12,266.8	20,935.4	12,280.2	75.0	76.4	-91.23	-8,344.2	110.7	655.0	503.7	151.27	4.330	
20,800.0	12,266.5	21,035.4	12,279.6	75.8	77.2	-91.22	-8,444.2	112.4	655.7	502.8	152.98	4.287	
20,900.0	12,266.1	21,135.4	12,279.1	76.7	78.1	-91.20	-8,544.2	114.1	656.5	501.8	154.68	4.244	
21,000.0	12,265.8	21,235.4	12,278.6	77.5	78.9	-91.19	-8,644.1	115.9	657.2	500.9	156.39	4.203	
21,100.0	12,265.4	21,335.4	12,278.0	78.4	79.8	-91.17	-8,744.1	117.6	658.0	499.9	158.09	4.162	
21,200.0	12,265.0	21,435.4	12,277.5	79.2	80.6	-91.15	-8,844.1	119.3	658.7	498.9	159.80	4.122	
21,300.0	12,264.7	21,535.4	12,277.0	80.1	81.5	-91.14	-8,944.1	121.0	659.5	498.0	161.50	4.083	
21,400.0	12,264.3	21,635.4	12,276.5	80.9	82.3	-91.12	-9,044.1	122.7	660.2	497.0	163.21	4.045	
21,500.0	12,264.0	21,735.4	12,275.9	81.8	83.2	-91.10	-9,144.0	124.4	661.0	496.1	164.92	4.008	
21,600.0	12,263.6	21,835.4	12,275.4	82.6	84.0	-91.09	-9,244.0	126.1	661.7	495.1	166.63	3.971	
21,700.0	12,263.2	21,935.4	12,274.9	83.5	84.9	-91.07	-9,344.0	127.8	662.5	494.2	168.33	3.936	
21,800.0	12,262.9	22,035.4	12,274.3	84.3	85.8	-91.06	-9,444.0	129.5	663.2	493.2	170.04	3.900	
21,900.0	12,262.5	22,135.3	12,273.8	85.2	86.6	-91.04	-9,544.0	131.2	664.0	492.2	171.75	3.866	
22,000.0	12,262.2	22,235.3	12,273.3	86.0	87.5	-91.03	-9,643.9	132.9	664.7	491.3	173.46	3.832	
22,047.1	12,262.0	22,282.4	12,273.0	86.4	87.9	-91.02	-9,691.0	133.7	665.1	490.8	174.26	3.817	SF

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #703H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **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	0.2	30.0	30.0				
100.0	100.0	99.8	99.8	3.0	3.0	89.62	0.2	30.0	30.0	24.0	6.00	4.998	
200.0	200.0	199.8	199.8	3.0	3.0	89.62	0.2	30.0	30.0	24.0	6.04	4.967	
300.0	300.0	299.8	299.8	3.0	3.1	89.62	0.2	30.0	30.0	23.9	6.12	4.902	
400.0	400.0	399.8	399.8	3.0	3.2	89.62	0.2	30.0	30.0	23.8	6.24	4.808	
500.0	500.0	499.8	499.8	3.1	3.4	89.62	0.2	30.0	30.0	23.6	6.40	4.691	
600.0	600.0	599.8	599.8	3.1	3.6	89.62	0.2	30.0	30.0	23.4	6.58	4.557	
700.0	700.0	699.8	699.8	3.1	3.8	89.62	0.2	30.0	30.0	23.2	6.80	4.413	
800.0	800.0	799.8	799.8	3.2	4.0	89.62	0.2	30.0	30.0	23.0	7.04	4.264	
900.0	900.0	899.8	899.8	3.2	4.2	89.62	0.2	30.0	30.0	22.7	7.29	4.113	
1,000.0	1,000.0	999.8	999.8	3.2	4.5	89.62	0.2	30.0	30.0	22.4	7.57	3.964	
1,100.0	1,100.0	1,099.8	1,099.8	3.3	4.8	89.62	0.2	30.0	30.0	22.1	7.86	3.819	
1,200.0	1,200.0	1,199.8	1,199.8	3.4	5.1	89.62	0.2	30.0	30.0	21.8	8.16	3.678	
1,300.0	1,300.0	1,299.8	1,299.8	3.4	5.3	89.62	0.2	30.0	30.0	21.5	8.47	3.543	
1,400.0	1,400.0	1,399.8	1,399.8	3.5	5.6	89.62	0.2	30.0	30.0	21.2	8.79	3.413	
1,500.0	1,500.0	1,499.8	1,499.8	3.5	6.0	89.62	0.2	30.0	30.0	20.9	9.12	3.291	
1,600.0	1,600.0	1,599.8	1,599.8	3.6	6.3	89.62	0.2	30.0	30.0	20.5	9.45	3.174	
1,700.0	1,700.0	1,699.8	1,699.8	3.7	6.6	89.62	0.2	30.0	30.0	20.2	9.79	3.063	
1,800.0	1,800.0	1,799.8	1,799.8	3.8	6.9	89.62	0.2	30.0	30.0	19.9	10.14	2.959	
1,900.0	1,900.0	1,899.8	1,899.8	3.9	7.2	89.62	0.2	30.0	30.0	19.5	10.49	2.860	
2,000.0	2,000.0	1,999.8	1,999.8	3.9	7.6	89.62	0.2	30.0	30.0	19.2	10.85	2.766	
2,100.0	2,100.0	2,099.8	2,099.8	4.0	7.9	89.62	0.2	30.0	30.0	18.8	11.21	2.677	
2,200.0	2,200.0	2,199.8	2,199.8	4.1	8.2	89.62	0.2	30.0	30.0	18.4	11.57	2.593	
2,300.0	2,300.0	2,299.8	2,299.8	4.2	8.6	89.62	0.2	30.0	30.0	18.1	11.94	2.514	
2,400.0	2,400.0	2,399.8	2,399.8	4.3	8.9	89.62	0.2	30.0	30.0	17.7	12.31	2.438	
2,500.0	2,500.0	2,499.8	2,499.8	4.4	9.2	89.62	0.2	30.0	30.0	17.3	12.68	2.366	CC, ES, SF
2,600.0	2,600.0	2,599.8	2,599.8	4.5	9.6	159.99	0.2	30.0	31.6	18.6	13.05	2.424	
2,700.0	2,699.8	2,699.6	2,699.6	4.5	9.9	162.77	0.2	30.0	36.6	23.2	13.44	2.722	
2,800.0	2,799.5	2,799.3	2,799.3	4.6	10.3	166.02	0.2	30.0	45.0	31.1	13.85	3.248	
2,900.0	2,898.9	2,898.7	2,898.7	4.6	10.6	168.64	0.2	30.0	55.2	40.9	14.28	3.866	
3,000.0	2,998.4	2,998.2	2,998.2	4.7	10.9	170.44	0.2	30.0	65.5	50.8	14.71	4.453	
3,100.0	3,097.8	3,097.6	3,097.6	4.8	11.3	171.75	0.2	30.0	75.8	60.7	15.14	5.009	
3,200.0	3,197.3	3,197.1	3,197.1	4.8	11.6	172.75	0.2	30.0	86.2	70.6	15.57	5.535	
3,300.0	3,296.7	3,296.5	3,296.5	4.9	12.0	173.53	0.2	30.0	96.5	80.5	16.00	6.034	
3,400.0	3,396.2	3,396.0	3,396.0	5.0	12.3	174.16	0.2	30.0	106.9	90.5	16.44	6.506	
3,500.0	3,495.6	3,495.4	3,495.4	5.1	12.7	174.68	0.2	30.0	117.3	100.5	16.88	6.953	
3,600.0	3,595.1	3,594.9	3,594.9	5.1	13.0	175.12	0.2	30.0	127.8	110.4	17.32	7.378	
3,700.0	3,694.5	3,694.3	3,694.3	5.2	13.4	175.49	0.2	30.0	138.2	120.4	17.76	7.781	
3,800.0	3,794.0	3,793.8	3,793.8	5.3	13.7	175.80	0.2	30.0	148.6	130.4	18.20	8.163	
3,900.0	3,893.4	3,893.2	3,893.2	5.4	14.0	176.08	0.2	30.0	159.0	140.4	18.65	8.527	
4,000.0	3,992.9	3,992.7	3,992.7	5.5	14.4	176.32	0.2	30.0	169.5	150.4	19.10	8.873	
4,100.0	4,092.3	4,092.1	4,092.1	5.6	14.7	176.53	0.2	30.0	179.9	160.3	19.55	9.203	
4,200.0	4,191.8	4,191.6	4,191.6	5.6	15.1	176.72	0.2	30.0	190.3	170.3	20.00	9.518	
4,300.0	4,291.2	4,291.0	4,291.0	5.7	15.4	176.89	0.2	30.0	200.8	180.3	20.45	9.817	
4,400.0	4,390.7	4,390.5	4,390.5	5.8	15.8	177.05	0.2	30.0	211.2	190.3	20.90	10.104	
4,500.0	4,490.1	4,489.9	4,489.9	5.9	16.1	177.19	0.2	30.0	221.6	200.3	21.36	10.377	
4,600.0	4,589.6	4,589.4	4,589.4	6.0	16.5	177.31	0.2	30.0	232.1	210.3	21.82	10.639	
4,700.0	4,689.0	4,688.8	4,688.8	6.1	16.8	177.43	0.2	30.0	242.5	220.2	22.27	10.889	
4,800.0	4,788.5	4,788.3	4,788.3	6.2	17.2	177.54	0.2	30.0	253.0	230.2	22.73	11.128	
4,900.0	4,887.9	4,887.7	4,887.7	6.3	17.5	177.63	0.2	30.0	263.4	240.2	23.19	11.358	
5,000.0	4,987.4	4,987.2	4,987.2	6.4	17.9	177.72	0.2	30.0	273.9	250.2	23.65	11.578	
5,100.0	5,086.9	5,086.7	5,086.7	6.5	18.2	177.81	0.2	30.0	284.3	260.2	24.11	11.790	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #703H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,186.3	5,186.1	5,186.1	6.6	18.6	177.89	0.2	30.0	294.7	270.2	24.58	11.993	
5,300.0	5,285.8	5,285.6	5,285.6	6.7	19.0	177.96	0.2	30.0	305.2	280.1	25.04	12.188	
5,400.0	5,385.2	5,385.0	5,385.0	6.8	19.3	178.03	0.2	30.0	315.6	290.1	25.50	12.375	
5,500.0	5,484.7	5,484.5	5,484.5	6.9	19.7	178.09	0.2	30.0	326.1	300.1	25.97	12.556	
5,600.0	5,584.1	5,579.8	5,579.8	7.0	20.0	177.97	1.0	30.8	337.0	310.6	26.42	12.759	
5,700.0	5,683.6	5,673.9	5,673.8	7.2	20.3	177.41	3.9	33.7	349.5	322.6	26.84	13.019	
5,800.0	5,783.0	5,767.8	5,767.4	7.3	20.7	176.46	9.0	38.8	363.4	336.2	27.25	13.336	
5,900.0	5,882.5	5,866.4	5,865.6	7.4	21.0	175.34	15.4	45.2	378.1	350.4	27.67	13.665	
6,000.0	5,981.9	5,965.1	5,963.9	7.5	21.3	174.31	21.7	51.5	393.0	364.9	28.10	13.987	
6,100.0	6,081.4	6,063.7	6,062.1	7.6	21.7	173.35	28.1	57.9	407.9	379.4	28.52	14.302	
6,200.0	6,180.8	6,162.4	6,160.4	7.7	22.0	172.46	34.4	64.2	423.0	394.0	28.95	14.611	
6,300.0	6,280.3	6,261.0	6,258.6	7.8	22.4	171.63	40.7	70.5	438.2	408.8	29.38	14.912	
6,400.0	6,379.7	6,359.7	6,356.8	7.9	22.7	170.85	47.1	76.9	453.4	423.6	29.82	15.206	
6,500.0	6,479.2	6,458.3	6,455.1	8.0	23.1	170.13	53.4	83.2	468.7	438.5	30.25	15.493	
6,600.0	6,578.6	6,557.0	6,553.3	8.2	23.4	169.45	59.7	89.5	484.1	453.4	30.69	15.774	
6,700.0	6,678.1	6,655.6	6,651.6	8.3	23.8	168.81	66.1	95.9	499.6	468.4	31.13	16.047	
6,800.0	6,777.5	6,754.3	6,749.8	8.4	24.1	168.21	72.4	102.2	515.1	483.5	31.57	16.314	
6,900.0	6,877.0	6,852.9	6,848.1	8.5	24.5	167.65	78.8	108.6	530.6	498.6	32.02	16.574	
7,000.0	6,976.4	6,951.6	6,946.3	8.6	24.8	167.12	85.1	114.9	546.2	513.8	32.46	16.827	
7,100.0	7,075.9	7,050.2	7,044.5	8.7	25.2	166.62	91.4	121.2	561.9	529.0	32.91	17.075	
7,200.0	7,175.3	7,148.9	7,142.8	8.9	25.5	166.14	97.8	127.6	577.6	544.2	33.36	17.315	
7,300.0	7,274.8	7,247.5	7,241.0	9.0	25.9	165.69	104.1	133.9	593.3	559.5	33.81	17.550	
7,400.0	7,374.3	7,346.2	7,339.3	9.1	26.2	165.27	110.4	140.2	609.1	574.8	34.26	17.779	
7,500.0	7,473.7	7,444.8	7,437.5	9.2	26.6	164.86	116.8	146.6	624.9	590.2	34.71	18.002	
7,600.0	7,573.2	7,543.5	7,535.8	9.3	26.9	164.48	123.1	152.9	640.7	605.5	35.16	18.220	
7,700.0	7,672.6	7,642.1	7,634.0	9.4	27.3	164.11	129.5	159.3	656.6	620.9	35.62	18.432	
7,800.0	7,772.1	7,740.8	7,732.2	9.6	27.6	163.76	135.8	165.6	672.4	636.3	36.08	18.639	
7,900.0	7,871.5	7,839.4	7,830.5	9.7	28.0	163.43	142.1	171.9	688.3	651.8	36.53	18.841	
8,000.0	7,971.0	7,938.1	7,928.7	9.8	28.3	163.11	148.5	178.3	704.2	667.3	36.99	19.038	
8,100.0	8,070.4	8,036.7	8,027.0	9.9	28.7	162.80	154.8	184.6	720.2	682.7	37.45	19.229	
8,200.0	8,169.9	8,135.4	8,125.2	10.0	29.0	162.51	161.1	190.9	736.1	698.2	37.91	19.417	
8,300.0	8,269.3	8,234.1	8,223.5	10.2	29.4	162.24	167.5	197.3	752.1	713.7	38.37	19.599	
8,400.0	8,368.8	8,332.7	8,321.7	10.3	29.7	161.97	173.8	203.6	768.1	729.3	38.84	19.778	
8,424.5	8,393.1	8,356.8	8,345.8	10.3	29.8	161.90	175.4	205.2	772.0	733.1	38.95	19.820	
8,500.0	8,468.3	8,431.4	8,420.0	10.4	30.1	161.74	180.2	210.0	783.7	744.4	39.30	19.940	
8,600.0	8,567.9	8,530.4	8,518.5	10.5	30.4	161.49	186.5	216.3	797.6	757.9	39.76	20.060	
8,700.0	8,667.7	8,629.5	8,617.3	10.7	30.8	161.20	192.9	222.7	810.0	769.8	40.22	20.137	
8,800.0	8,767.6	8,728.8	8,716.1	10.8	31.1	160.88	199.3	229.1	820.7	780.0	40.68	20.175	
8,900.0	8,867.6	8,828.2	8,815.2	10.9	31.5	160.52	205.7	235.5	829.9	788.7	41.13	20.175	
9,000.0	8,967.5	8,927.7	8,914.3	11.0	31.8	160.13	212.1	241.9	837.4	795.8	41.58	20.137	
9,024.5	8,992.0	8,952.1	8,938.5	11.0	31.9	90.78	213.6	243.4	839.0	797.3	41.69	20.126	
9,100.0	9,067.5	9,027.3	9,013.4	11.1	32.2	90.45	218.4	248.2	843.8	801.8	41.98	20.102	
9,200.0	9,167.5	9,126.9	9,112.6	11.2	32.6	90.01	224.8	254.6	850.2	807.9	42.36	20.071	
9,300.0	9,267.5	9,226.5	9,211.8	11.3	32.9	89.58	231.2	261.0	856.7	813.9	42.74	20.043	
9,400.0	9,367.5	9,326.1	9,311.0	11.4	33.3	89.16	237.6	267.4	863.2	820.1	43.13	20.015	
9,500.0	9,467.5	9,425.7	9,410.1	11.5	33.6	88.74	244.0	273.8	869.7	826.2	43.51	19.990	
9,600.0	9,567.5	9,525.2	9,509.3	11.6	34.0	88.33	250.4	280.2	876.3	832.4	43.89	19.966	
9,700.0	9,667.5	9,624.8	9,608.5	11.7	34.3	87.93	256.8	286.6	883.0	838.7	44.28	19.943	
9,800.0	9,767.5	9,724.4	9,707.7	11.8	34.7	87.53	263.2	293.0	889.7	845.0	44.66	19.921	
9,900.0	9,867.5	9,824.0	9,806.8	11.9	35.1	87.14	269.6	299.4	896.4	851.4	45.04	19.901	
10,000.0	9,967.5	9,923.6	9,906.0	12.0	35.4	86.75	276.0	305.8	903.2	857.7	45.43	19.882	
10,100.0	10,067.5	10,023.2	10,005.2	12.1	35.8	86.37	282.4	312.2	910.0	864.2	45.81	19.864	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #703H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.0	10,167.5	10,122.8	10,104.4	12.2	36.1	86.00	288.8	318.6	916.8	870.6	46.20	19.846	
10,300.0	10,267.5	10,222.4	10,203.5	12.3	36.5	85.63	295.2	325.0	923.7	877.1	46.58	19.830	
10,400.0	10,367.5	10,321.9	10,302.7	12.4	36.8	85.27	301.6	331.4	930.6	883.7	46.97	19.815	
10,500.0	10,467.5	10,421.5	10,401.9	12.5	37.2	84.91	308.0	337.8	937.6	890.3	47.35	19.801	
10,600.0	10,567.5	10,521.1	10,501.1	12.6	37.6	84.55	314.4	344.2	944.6	896.9	47.74	19.787	
10,700.0	10,667.5	10,620.7	10,600.2	12.8	37.9	84.21	320.8	350.6	951.6	903.5	48.12	19.774	
10,800.0	10,767.5	10,720.3	10,699.4	12.9	38.3	83.86	327.2	357.0	958.7	910.2	48.51	19.762	
10,900.0	10,867.5	10,819.9	10,798.6	13.0	38.6	83.53	333.6	363.4	965.8	916.9	48.90	19.751	
11,000.0	10,967.5	10,919.5	10,897.8	13.1	39.0	83.19	340.0	369.8	972.9	923.7	49.29	19.740	
11,100.0	11,067.5	11,019.0	10,996.9	13.2	39.3	82.87	346.4	376.2	980.1	930.4	49.68	19.730	
11,200.0	11,167.5	11,118.6	11,096.1	13.3	39.7	82.54	352.8	382.6	987.3	937.2	50.07	19.720	
11,300.0	11,267.5	11,218.2	11,195.3	13.4	40.1	82.22	359.2	389.0	994.5	944.1	50.46	19.711	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #801H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 12132-MWD+IFR1+FDIR — **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	1.5	1.5	3.0	3.0	52.89	45.4	60.0	75.2				
100.0	100.0	101.5	101.5	3.0	3.0	52.89	45.4	60.0	75.2	69.2	6.00	12.539	
200.0	200.0	201.5	201.5	3.0	3.0	52.89	45.4	60.0	75.2	69.2	6.01	12.528	
300.0	300.0	301.5	301.5	3.0	3.0	52.89	45.4	60.0	75.2	69.2	6.02	12.504	
400.0	400.0	401.5	401.5	3.0	3.0	52.89	45.4	60.0	75.2	69.2	6.04	12.467	
500.0	500.0	501.5	501.5	3.1	3.1	52.89	45.4	60.0	75.2	69.2	6.06	12.417	
600.0	600.0	601.5	601.5	3.1	3.1	52.89	45.4	60.0	75.2	69.2	6.09	12.356	
700.0	700.0	701.5	701.5	3.1	3.1	52.89	45.4	60.0	75.2	69.1	6.13	12.283	
800.0	800.0	801.5	801.5	3.2	3.2	52.89	45.4	60.0	75.2	69.1	6.17	12.199	
900.0	900.0	901.5	901.5	3.2	3.2	52.89	45.4	60.0	75.2	69.0	6.22	12.105	
1,000.0	1,000.0	1,001.5	1,001.5	3.2	3.2	52.89	45.4	60.0	75.2	69.0	6.27	12.002	
1,100.0	1,100.0	1,101.5	1,101.5	3.3	3.3	52.89	45.4	60.0	75.2	68.9	6.33	11.890	
1,200.0	1,200.0	1,201.5	1,201.5	3.4	3.4	52.89	45.4	60.0	75.2	68.8	6.39	11.770	
1,300.0	1,300.0	1,301.5	1,301.5	3.4	3.4	52.89	45.4	60.0	75.2	68.8	6.46	11.644	
1,400.0	1,400.0	1,401.5	1,401.5	3.5	3.5	52.89	45.4	60.0	75.2	68.7	6.54	11.511	
1,500.0	1,500.0	1,501.5	1,501.5	3.5	3.5	52.89	45.4	60.0	75.2	68.6	6.62	11.373	
1,600.0	1,600.0	1,601.5	1,601.5	3.6	3.6	52.89	45.4	60.0	75.2	68.5	6.70	11.230	
1,700.0	1,700.0	1,701.5	1,701.5	3.7	3.7	52.89	45.4	60.0	75.2	68.5	6.79	11.083	
1,800.0	1,800.0	1,801.5	1,801.5	3.8	3.8	52.89	45.4	60.0	75.2	68.4	6.88	10.933	
1,900.0	1,900.0	1,901.5	1,901.5	3.9	3.9	52.89	45.4	60.0	75.2	68.3	6.98	10.781	
2,000.0	2,000.0	2,001.5	2,001.5	3.9	3.9	52.89	45.4	60.0	75.2	68.2	7.08	10.627	
2,100.0	2,100.0	2,101.5	2,101.5	4.0	4.0	52.89	45.4	60.0	75.2	68.1	7.19	10.472	
2,200.0	2,200.0	2,201.5	2,201.5	4.1	4.1	52.89	45.4	60.0	75.2	67.9	7.29	10.316	
2,300.0	2,300.0	2,301.5	2,301.5	4.2	4.2	52.89	45.4	60.0	75.2	67.8	7.41	10.160	
2,400.0	2,400.0	2,401.5	2,401.5	4.3	4.3	52.89	45.4	60.0	75.2	67.7	7.52	10.004	
2,416.2	2,416.2	2,417.7	2,417.7	4.3	4.3	52.89	45.4	60.0	75.2	67.7	7.54	9.979	CC
2,500.0	2,500.0	2,501.5	2,501.5	4.4	4.4	52.89	45.4	60.0	75.2	67.6	7.64	9.849	ES, SF
2,600.0	2,600.0	2,600.0	2,600.0	4.5	4.5	123.52	46.0	61.6	77.9	70.2	7.69	10.125	
2,700.0	2,699.8	2,695.7	2,695.6	4.5	4.5	127.02	47.8	66.2	85.9	78.3	7.65	11.237	
2,800.0	2,799.5	2,791.4	2,790.9	4.6	4.6	131.56	50.8	73.8	99.9	92.3	7.57	13.184	
2,900.0	2,898.9	2,888.8	2,887.8	4.6	4.6	135.87	54.6	83.5	117.7	110.2	7.54	15.607	
3,000.0	2,998.4	2,986.9	2,985.2	4.7	4.7	139.06	58.4	93.3	136.2	128.6	7.56	18.004	
3,100.0	3,097.8	3,084.9	3,082.7	4.8	4.8	141.49	62.2	103.1	154.9	147.3	7.61	20.344	
3,200.0	3,197.3	3,183.0	3,180.2	4.8	4.8	143.39	66.1	112.9	173.8	166.1	7.69	22.614	
3,300.0	3,296.7	3,281.0	3,277.7	4.9	4.9	144.92	69.9	122.7	192.9	185.1	7.78	24.807	
3,400.0	3,396.2	3,379.0	3,375.2	5.0	5.0	146.17	73.7	132.5	212.1	204.2	7.88	26.918	
3,500.0	3,495.6	3,477.1	3,472.6	5.1	5.0	147.21	77.5	142.3	231.4	223.4	7.99	28.945	
3,600.0	3,595.1	3,575.1	3,570.1	5.1	5.1	148.10	81.4	152.1	250.7	242.6	8.12	30.888	
3,700.0	3,694.5	3,673.2	3,667.6	5.2	5.2	148.86	85.2	161.9	270.1	261.9	8.25	32.747	
3,800.0	3,794.0	3,771.2	3,765.1	5.3	5.3	149.51	89.0	171.8	289.5	281.2	8.39	34.524	
3,900.0	3,893.4	3,869.3	3,862.5	5.4	5.4	150.09	92.8	181.6	309.0	300.5	8.53	36.220	
4,000.0	3,992.9	3,967.3	3,960.0	5.5	5.4	150.59	96.7	191.4	328.5	319.8	8.68	37.837	
4,100.0	4,092.3	4,065.4	4,057.5	5.6	5.5	151.04	100.5	201.2	348.0	339.2	8.84	39.378	
4,200.0	4,191.8	4,163.4	4,155.0	5.6	5.6	151.44	104.3	211.0	367.5	358.5	9.00	40.845	
4,300.0	4,291.2	4,261.4	4,252.4	5.7	5.7	151.80	108.2	220.8	387.1	377.9	9.16	42.241	
4,400.0	4,390.7	4,359.5	4,349.9	5.8	5.8	152.13	112.0	230.6	406.6	397.3	9.33	43.570	
4,500.0	4,490.1	4,457.5	4,447.4	5.9	5.9	152.42	115.8	240.4	426.2	416.7	9.51	44.833	
4,600.0	4,589.6	4,555.6	4,544.9	6.0	6.0	152.69	119.6	250.2	445.8	436.1	9.68	46.035	
4,700.0	4,689.0	4,653.6	4,642.4	6.1	6.1	152.94	123.5	260.0	465.4	455.5	9.86	47.178	
4,800.0	4,788.5	4,751.7	4,739.8	6.2	6.2	153.17	127.3	269.8	485.0	474.9	10.05	48.264	
4,900.0	4,887.9	4,849.7	4,837.3	6.3	6.3	153.38	131.1	279.6	504.6	494.3	10.24	49.297	
5,000.0	4,987.4	4,947.8	4,934.8	6.4	6.4	153.57	134.9	289.4	524.2	513.7	10.43	50.279	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #801H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 12132-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,100.0	5,086.9	5,045.8	5,032.3	6.5	6.5	153.75	138.8	299.2	543.8	533.2	10.62	51.213	
5,200.0	5,186.3	5,143.8	5,129.7	6.6	6.6	153.92	142.6	309.1	563.4	552.6	10.81	52.101	
5,300.0	5,285.8	5,241.9	5,227.2	6.7	6.7	154.08	146.4	318.9	583.0	572.0	11.01	52.946	
5,400.0	5,385.2	5,339.9	5,324.7	6.8	6.8	154.22	150.3	328.7	602.6	591.4	11.21	53.749	
5,500.0	5,484.7	5,438.0	5,422.2	6.9	6.9	154.36	154.1	338.5	622.3	610.9	11.41	54.514	
5,600.0	5,584.1	5,536.0	5,519.7	7.0	7.0	154.49	157.9	348.3	641.9	630.3	11.62	55.242	
5,700.0	5,683.6	5,634.1	5,617.1	7.2	7.1	154.61	161.7	358.1	661.5	649.7	11.83	55.935	
5,800.0	5,783.0	5,732.1	5,714.6	7.3	7.2	154.72	165.6	367.9	681.2	669.1	12.04	56.595	
5,900.0	5,882.5	5,830.1	5,812.1	7.4	7.3	154.83	169.4	377.7	700.8	688.6	12.25	57.224	
6,000.0	5,981.9	5,928.2	5,909.6	7.5	7.4	154.93	173.2	387.5	720.5	708.0	12.46	57.823	
6,100.0	6,081.4	6,026.2	6,007.0	7.6	7.5	155.03	177.1	397.3	740.1	727.4	12.67	58.395	
6,200.0	6,180.8	6,124.3	6,104.5	7.7	7.6	155.12	180.9	407.1	759.7	746.9	12.89	58.939	
6,300.0	6,280.3	6,222.3	6,202.0	7.8	7.7	155.21	184.7	416.9	779.4	766.3	13.11	59.458	
6,400.0	6,379.7	6,320.4	6,299.5	7.9	7.9	155.29	188.5	426.7	799.0	785.7	13.33	59.954	
6,500.0	6,479.2	6,418.4	6,396.9	8.0	8.0	155.37	192.4	436.5	818.7	805.1	13.55	60.427	
6,600.0	6,578.6	6,516.5	6,494.4	8.2	8.1	155.44	196.2	446.3	838.3	824.6	13.77	60.878	
6,700.0	6,678.1	6,614.5	6,591.9	8.3	8.2	155.51	200.0	456.2	858.0	844.0	13.99	61.309	
6,800.0	6,777.5	6,712.5	6,689.4	8.4	8.3	155.58	203.8	466.0	877.7	863.4	14.22	61.721	
6,900.0	6,877.0	6,810.6	6,786.9	8.5	8.4	155.65	207.7	475.8	897.3	882.9	14.45	62.115	
7,000.0	6,976.4	6,908.6	6,884.3	8.6	8.5	155.71	211.5	485.6	917.0	902.3	14.67	62.491	
7,100.0	7,075.9	7,006.7	6,981.8	8.7	8.6	155.77	215.3	495.4	936.6	921.7	14.90	62.850	
7,200.0	7,175.3	7,104.7	7,079.3	8.9	8.8	155.83	219.2	505.2	956.3	941.2	15.13	63.194	
7,300.0	7,274.8	7,202.8	7,176.8	9.0	8.9	155.88	223.0	515.0	975.9	960.6	15.36	63.523	
7,400.0	7,374.3	7,300.8	7,274.2	9.1	9.0	155.94	226.8	524.8	995.6	980.0	15.60	63.837	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #802H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 12096-MWD+IFR1+FDIR — **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	0.00	44.9	0.0	44.9				
100.0	100.0	99.5	99.5	3.0	3.0	0.00	44.9	0.0	44.9	38.9	6.00	7.482	
200.0	200.0	199.5	199.5	3.0	3.0	0.00	44.9	0.0	44.9	38.9	6.01	7.470	
300.0	300.0	299.5	299.5	3.0	3.0	0.00	44.9	0.0	44.9	38.9	6.03	7.444	
400.0	400.0	399.5	399.5	3.0	3.0	0.00	44.9	0.0	44.9	38.8	6.06	7.404	
500.0	500.0	499.5	499.5	3.1	3.1	0.00	44.9	0.0	44.9	38.8	6.11	7.351	
600.0	600.0	599.5	599.5	3.1	3.1	0.00	44.9	0.0	44.9	38.7	6.16	7.285	
700.0	700.0	699.5	699.5	3.1	3.1	0.00	44.9	0.0	44.9	38.7	6.23	7.208	
800.0	800.0	799.5	799.5	3.2	3.2	0.00	44.9	0.0	44.9	38.6	6.30	7.122	
900.0	900.0	899.5	899.5	3.2	3.2	0.00	44.9	0.0	44.9	38.5	6.39	7.026	
1,000.0	1,000.0	999.5	999.5	3.2	3.2	0.00	44.9	0.0	44.9	38.4	6.49	6.922	
1,100.0	1,100.0	1,099.5	1,099.5	3.3	3.3	0.00	44.9	0.0	44.9	38.3	6.59	6.812	
1,200.0	1,200.0	1,199.5	1,199.5	3.4	3.4	0.00	44.9	0.0	44.9	38.2	6.70	6.697	
1,300.0	1,300.0	1,299.5	1,299.5	3.4	3.4	0.00	44.9	0.0	44.9	38.1	6.83	6.578	
1,400.0	1,400.0	1,399.5	1,399.5	3.5	3.5	0.00	44.9	0.0	44.9	37.9	6.96	6.455	
1,500.0	1,500.0	1,499.5	1,499.5	3.5	3.5	0.00	44.9	0.0	44.9	37.8	7.09	6.330	
1,600.0	1,600.0	1,599.5	1,599.5	3.6	3.6	0.00	44.9	0.0	44.9	37.7	7.24	6.204	
1,700.0	1,700.0	1,699.5	1,699.5	3.7	3.7	0.00	44.9	0.0	44.9	37.5	7.39	6.078	
1,800.0	1,800.0	1,799.5	1,799.5	3.8	3.8	0.00	44.9	0.0	44.9	37.4	7.54	5.951	
1,900.0	1,900.0	1,899.5	1,899.5	3.9	3.9	0.00	44.9	0.0	44.9	37.2	7.71	5.826	
2,000.0	2,000.0	1,999.5	1,999.5	3.9	3.9	0.00	44.9	0.0	44.9	37.0	7.88	5.701	
2,100.0	2,100.0	2,099.5	2,099.5	4.0	4.0	0.00	44.9	0.0	44.9	36.9	8.05	5.579	
2,200.0	2,200.0	2,199.5	2,199.5	4.1	4.1	0.00	44.9	0.0	44.9	36.7	8.23	5.458	
2,300.0	2,300.0	2,299.5	2,299.5	4.2	4.2	0.00	44.9	0.0	44.9	36.5	8.41	5.339	
2,400.0	2,400.0	2,399.5	2,399.5	4.3	4.3	0.00	44.9	0.0	44.9	36.3	8.60	5.223	
2,500.0	2,500.0	2,499.5	2,499.5	4.4	4.4	0.00	44.9	0.0	44.9	36.1	8.79	5.110	CC, ES
2,600.0	2,600.0	2,598.0	2,598.0	4.5	4.5	70.73	46.5	-0.4	45.9	37.0	8.95	5.134	
2,700.0	2,699.8	2,696.3	2,696.2	4.5	4.6	74.74	51.4	-1.6	49.3	40.2	9.06	5.441	
2,800.0	2,799.5	2,794.3	2,793.8	4.6	4.7	80.27	59.6	-3.7	55.3	46.2	9.11	6.073	
2,900.0	2,898.9	2,893.8	2,892.7	4.6	4.8	85.56	69.6	-6.2	63.3	54.2	9.14	6.931	
3,000.0	2,998.4	2,993.3	2,991.7	4.7	4.9	89.65	79.7	-8.7	71.7	62.6	9.15	7.837	
3,100.0	3,097.8	3,092.8	3,090.7	4.8	5.0	92.87	89.8	-11.2	80.4	71.3	9.17	8.767	
3,200.0	3,197.3	3,192.4	3,189.7	4.8	5.1	95.45	99.9	-13.8	89.3	80.1	9.20	9.708	
3,300.0	3,296.7	3,291.9	3,288.7	4.9	5.2	97.56	110.0	-16.3	98.4	89.1	9.24	10.650	
3,400.0	3,396.2	3,391.4	3,387.6	5.0	5.3	99.32	120.1	-18.8	107.5	98.2	9.28	11.587	
3,500.0	3,495.6	3,491.0	3,486.6	5.1	5.4	100.80	130.2	-21.3	116.8	107.4	9.33	12.512	
3,600.0	3,595.1	3,590.5	3,585.6	5.1	5.5	102.06	140.3	-23.8	126.1	116.7	9.39	13.424	
3,700.0	3,694.5	3,690.0	3,684.6	5.2	5.6	103.15	150.4	-26.4	135.4	126.0	9.46	14.319	
3,800.0	3,794.0	3,789.6	3,783.6	5.3	5.7	104.10	160.5	-28.9	144.8	135.3	9.53	15.195	
3,900.0	3,893.4	3,889.1	3,882.6	5.4	5.8	104.93	170.6	-31.4	154.2	144.6	9.61	16.052	
4,000.0	3,992.9	3,988.6	3,981.6	5.5	5.9	105.66	180.7	-33.9	163.7	154.0	9.69	16.886	
4,100.0	4,092.3	4,088.1	4,080.5	5.6	6.0	106.32	190.8	-36.5	173.2	163.4	9.79	17.699	
4,200.0	4,191.8	4,187.7	4,179.5	5.6	6.1	106.91	200.8	-39.0	182.7	172.8	9.88	18.489	
4,300.0	4,291.2	4,287.2	4,278.5	5.7	6.2	107.43	210.9	-41.5	192.2	182.2	9.98	19.255	
4,400.0	4,390.7	4,386.7	4,377.5	5.8	6.3	107.91	221.0	-44.0	201.7	191.7	10.09	19.999	
4,500.0	4,490.1	4,486.3	4,476.5	5.9	6.4	108.35	231.1	-46.6	211.3	201.1	10.20	20.718	
4,600.0	4,589.6	4,585.8	4,575.5	6.0	6.6	108.75	241.2	-49.1	220.9	210.5	10.31	21.414	
4,700.0	4,689.0	4,685.3	4,674.5	6.1	6.7	109.11	251.3	-51.6	230.4	220.0	10.43	22.087	
4,800.0	4,788.5	4,784.9	4,773.4	6.2	6.8	109.45	261.4	-54.1	240.0	229.4	10.56	22.736	
4,900.0	4,887.9	4,884.4	4,872.4	6.3	6.9	109.76	271.5	-56.6	249.6	238.9	10.68	23.362	
5,000.0	4,987.4	4,983.9	4,971.4	6.4	7.0	110.05	281.6	-59.2	259.2	248.4	10.81	23.966	
5,100.0	5,086.9	5,083.5	5,070.4	6.5	7.1	110.31	291.7	-61.7	268.8	257.8	10.95	24.547	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #802H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 12096-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,186.3	5,183.0	5,169.4	6.6	7.2	110.56	301.8	-64.2	278.4	267.3	11.09	25.107	
5,300.0	5,285.8	5,282.5	5,268.4	6.7	7.4	110.79	311.9	-66.7	288.0	276.8	11.23	25.644	
5,400.0	5,385.2	5,382.0	5,367.4	6.8	7.5	111.01	322.0	-69.3	297.6	286.2	11.38	26.161	
5,500.0	5,484.7	5,481.6	5,466.3	6.9	7.6	111.21	332.1	-71.8	307.2	295.7	11.52	26.657	
5,600.0	5,584.1	5,581.1	5,565.3	7.0	7.7	111.40	342.2	-74.3	316.8	305.2	11.68	27.134	
5,700.0	5,683.6	5,680.6	5,664.3	7.2	7.8	111.58	352.2	-76.8	326.5	314.6	11.83	27.590	
5,800.0	5,783.0	5,780.2	5,763.3	7.3	7.9	111.75	362.3	-79.4	336.1	324.1	11.99	28.028	
5,900.0	5,882.5	5,879.7	5,862.3	7.4	8.1	111.91	372.4	-81.9	345.7	333.6	12.15	28.448	
6,000.0	5,981.9	5,979.2	5,961.3	7.5	8.2	112.06	382.5	-84.4	355.4	343.0	12.32	28.849	
6,100.0	6,081.4	6,078.8	6,060.3	7.6	8.3	112.21	392.6	-86.9	365.0	352.5	12.49	29.234	
6,200.0	6,180.8	6,178.3	6,159.2	7.7	8.4	112.34	402.7	-89.5	374.6	362.0	12.66	29.601	
6,300.0	6,280.3	6,277.8	6,258.2	7.8	8.5	112.47	412.8	-92.0	384.3	371.4	12.83	29.953	
6,400.0	6,379.7	6,380.5	6,360.4	7.9	8.7	112.68	422.6	-94.4	393.6	380.6	13.00	30.284	
6,500.0	6,479.2	6,483.9	6,463.5	8.0	8.8	113.10	430.7	-96.4	401.9	388.8	13.15	30.568	
6,600.0	6,578.6	6,587.4	6,566.8	8.2	8.9	113.73	436.9	-98.0	409.4	396.1	13.28	30.819	
6,700.0	6,678.1	6,690.9	6,670.1	8.3	9.0	114.55	441.4	-99.1	416.0	402.6	13.40	31.041	
6,800.0	6,777.5	6,794.2	6,773.4	8.4	9.2	115.57	444.1	-99.8	421.7	408.2	13.51	31.223	
6,900.0	6,877.0	6,897.3	6,876.5	8.5	9.3	116.78	444.9	-100.0	426.8	413.2	13.61	31.356	
7,000.0	6,976.4	6,996.7	6,975.9	8.6	9.4	118.01	444.9	-100.0	431.6	417.9	13.72	31.461	
7,100.0	7,075.9	7,096.2	7,075.4	8.7	9.5	119.21	444.9	-100.0	436.6	422.8	13.83	31.569	
7,200.0	7,175.3	7,195.6	7,174.8	8.9	9.7	120.39	444.9	-100.0	441.9	427.9	13.95	31.679	
7,300.0	7,274.8	7,295.1	7,274.3	9.0	9.8	121.54	444.9	-100.0	447.3	433.2	14.07	31.791	
7,400.0	7,374.3	7,394.5	7,373.8	9.1	9.9	122.67	444.9	-100.0	452.8	438.6	14.19	31.905	
7,500.0	7,473.7	7,494.0	7,473.2	9.2	10.0	123.76	444.9	-100.0	458.6	444.3	14.32	32.019	
7,600.0	7,573.2	7,593.4	7,572.7	9.3	10.1	124.83	444.9	-100.0	464.5	450.0	14.45	32.135	
7,700.0	7,672.6	7,692.9	7,672.1	9.4	10.3	125.87	444.9	-100.0	470.6	456.0	14.59	32.250	
7,800.0	7,772.1	7,792.3	7,771.6	9.6	10.4	126.89	444.9	-100.0	476.8	462.1	14.73	32.366	
7,900.0	7,871.5	7,891.8	7,871.0	9.7	10.5	127.87	444.9	-100.0	483.2	468.3	14.87	32.482	
8,000.0	7,971.0	7,991.3	7,970.5	9.8	10.6	128.84	444.9	-100.0	489.7	474.6	15.02	32.598	
8,100.0	8,070.4	8,090.7	8,069.9	9.9	10.8	129.77	444.9	-100.0	496.3	481.1	15.17	32.713	
8,200.0	8,169.9	8,190.2	8,169.4	10.0	10.9	130.68	444.9	-100.0	503.1	487.8	15.32	32.828	
8,300.0	8,269.3	8,289.6	8,268.8	10.2	11.0	131.57	444.9	-100.0	510.0	494.5	15.48	32.942	
8,400.0	8,368.8	8,389.1	8,368.3	10.3	11.1	132.44	444.9	-100.0	517.0	501.4	15.64	33.056	
8,424.5	8,393.1	8,413.4	8,392.6	10.3	11.2	132.64	444.9	-100.0	518.7	503.1	15.68	33.084	
8,500.0	8,468.3	8,488.6	8,467.8	10.4	11.3	133.28	444.9	-100.0	523.8	508.0	15.80	33.149	
8,600.0	8,567.9	8,588.2	8,567.4	10.5	11.4	133.97	444.9	-100.0	529.5	513.5	15.96	33.171	
8,700.0	8,667.7	8,688.0	8,667.2	10.7	11.5	134.50	444.9	-100.0	534.1	517.9	16.12	33.123	
8,800.0	8,767.6	8,787.9	8,767.1	10.8	11.6	134.89	444.9	-100.0	537.4	521.2	16.28	33.016	
8,900.0	8,867.6	8,887.8	8,867.1	10.9	11.8	135.14	444.9	-100.0	539.6	523.2	16.43	32.845	
9,000.0	8,967.5	8,987.8	8,967.0	11.0	11.9	135.24	444.9	-100.0	540.5	523.9	16.58	32.598	
9,024.5	8,992.0	9,012.3	8,991.5	11.0	11.9	66.00	444.9	-100.0	540.6	523.9	16.61	32.539	
9,100.0	9,067.5	9,087.8	9,067.0	11.1	12.0	66.00	444.9	-100.0	540.6	523.9	16.69	32.388	
9,200.0	9,167.5	9,187.8	9,167.0	11.2	12.1	66.00	444.9	-100.0	540.6	523.8	16.79	32.188	
9,300.0	9,267.5	9,287.8	9,267.0	11.3	12.3	66.00	444.9	-100.0	540.6	523.7	16.90	31.990	
9,400.0	9,367.5	9,387.8	9,367.0	11.4	12.4	66.00	444.9	-100.0	540.6	523.5	17.00	31.792	
9,500.0	9,467.5	9,487.8	9,467.0	11.5	12.5	66.00	444.9	-100.0	540.6	523.4	17.11	31.595	
9,600.0	9,567.5	9,587.8	9,567.0	11.6	12.7	66.00	444.9	-100.0	540.6	523.3	17.22	31.399	
9,700.0	9,667.5	9,687.8	9,667.0	11.7	12.8	66.00	444.9	-100.0	540.6	523.2	17.32	31.204	
9,800.0	9,767.5	9,787.8	9,767.0	11.8	12.9	66.00	444.9	-100.0	540.6	523.1	17.43	31.010	
9,900.0	9,867.5	9,887.8	9,867.0	11.9	13.0	66.00	444.9	-100.0	540.6	523.0	17.54	30.816	
10,000.0	9,967.5	9,987.8	9,967.0	12.0	13.2	66.00	444.9	-100.0	540.6	522.9	17.65	30.624	
10,100.0	10,067.5	10,087.8	10,067.0	12.1	13.3	66.00	444.9	-100.0	540.6	522.8	17.76	30.433	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #802H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 12096-MWD+IFR1+FDIR — **Offset Well Error:** 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.0	10,167.5	10,187.8	10,167.0	12.2	13.4	66.00	444.9	-100.0	540.6	522.7	17.87	30.242	
10,300.0	10,267.5	10,287.8	10,267.0	12.3	13.5	66.00	444.9	-100.0	540.6	522.6	17.99	30.053	
10,400.0	10,367.5	10,387.8	10,367.0	12.4	13.7	66.00	444.9	-100.0	540.6	522.5	18.10	29.865	
10,500.0	10,467.5	10,487.8	10,467.0	12.5	13.8	66.00	444.9	-100.0	540.6	522.3	18.21	29.678	
10,600.0	10,567.5	10,587.8	10,567.0	12.6	13.9	66.00	444.9	-100.0	540.6	522.2	18.33	29.492	
10,700.0	10,667.5	10,687.8	10,667.0	12.8	14.1	66.00	444.9	-100.0	540.6	522.1	18.44	29.308	
10,800.0	10,767.5	10,787.8	10,767.0	12.9	14.2	66.00	444.9	-100.0	540.6	522.0	18.56	29.124	
10,900.0	10,867.5	10,887.8	10,867.0	13.0	14.3	66.00	444.9	-100.0	540.6	521.9	18.68	28.942	
11,000.0	10,967.5	10,987.8	10,967.0	13.1	14.4	66.00	444.9	-100.0	540.6	521.8	18.79	28.761	
11,100.0	11,067.5	11,087.8	11,067.0	13.2	14.6	66.00	444.9	-100.0	540.6	521.6	18.91	28.581	
11,200.0	11,167.5	11,187.8	11,167.0	13.3	14.7	66.00	444.9	-100.0	540.6	521.5	19.03	28.402	
11,300.0	11,267.5	11,287.8	11,267.0	13.4	14.8	66.00	444.9	-100.0	540.6	521.4	19.15	28.225	
11,400.0	11,367.5	11,387.8	11,367.0	13.5	15.0	66.00	444.9	-100.0	540.6	521.3	19.27	28.049	
11,500.0	11,467.5	11,487.8	11,467.0	13.6	15.1	66.00	444.9	-100.0	540.6	521.2	19.39	27.874	
11,600.0	11,567.5	11,587.8	11,567.0	13.7	15.2	66.00	444.9	-100.0	540.6	521.0	19.51	27.700	
11,700.0	11,667.5	11,687.8	11,667.0	13.8	15.3	66.00	444.9	-100.0	540.6	520.9	19.64	27.528	
11,800.0	11,767.5	11,787.8	11,767.0	14.0	15.5	66.00	444.9	-100.0	540.6	520.8	19.76	27.357	
11,847.0	11,814.5	11,834.8	11,814.0	14.0	15.5	66.00	444.9	-100.0	540.6	520.7	19.81	27.290	
11,850.0	11,817.5	11,837.8	11,817.0	14.0	15.5	-113.85	444.9	-100.0	540.6	520.7	19.81	27.287	
11,875.0	11,842.5	11,862.8	11,842.0	14.0	15.6	-113.90	444.9	-100.0	540.9	521.0	19.84	27.268	
11,900.0	11,867.4	11,887.7	11,866.9	14.0	15.6	-114.00	444.9	-100.0	541.7	521.9	19.87	27.264	
11,925.0	11,892.2	11,912.5	11,891.7	14.0	15.6	-114.18	444.9	-100.0	543.2	523.2	19.92	27.274	
11,950.0	11,916.7	11,937.0	11,916.2	14.0	15.7	-114.41	444.9	-100.0	545.1	525.2	19.97	27.298	
11,975.0	11,941.0	11,961.3	11,940.5	14.0	15.7	-114.68	444.9	-100.0	547.7	527.6	20.04	27.336	
12,000.0	11,964.9	11,985.2	11,964.4	14.0	15.7	-115.00	444.9	-100.0	550.8	530.7	20.11	27.387	
12,025.0	11,988.4	12,008.7	11,987.9	14.0	15.7	-115.34	444.9	-100.0	554.6	534.4	20.20	27.456	
12,050.0	12,011.5	12,031.8	12,011.0	14.0	15.8	-115.69	444.9	-100.0	559.1	538.8	20.30	27.546	
12,075.0	12,034.0	12,054.3	12,033.5	14.1	15.8	-116.04	444.9	-100.0	564.3	543.9	20.41	27.649	
12,100.0	12,055.9	12,076.1	12,055.4	14.1	15.8	-116.37	444.9	-100.0	570.2	549.7	20.54	27.766	
12,125.0	12,077.1	12,098.9	12,078.1	14.1	15.8	-116.74	444.9	-100.0	576.9	556.2	20.68	27.899	
12,150.0	12,097.6	12,241.1	12,218.1	14.1	15.8	-121.95	423.6	-104.5	582.1	559.2	22.91	25.405	
12,175.0	12,117.3	12,390.4	12,351.3	14.1	15.9	-125.14	358.9	-118.2	582.7	554.5	28.25	20.630	
12,200.0	12,136.2	12,577.4	12,479.2	14.1	16.1	-125.92	227.1	-146.2	578.1	542.4	35.69	16.197	
12,225.0	12,154.3	12,720.6	12,536.5	14.2	16.2	-123.97	99.4	-173.3	568.6	528.9	39.69	14.327	
12,250.0	12,171.4	12,830.0	12,552.7	14.2	16.3	-120.86	-6.2	-195.6	555.9	514.7	41.18	13.500	
12,275.0	12,187.5	12,859.8	12,553.0	14.2	16.3	-120.95	-35.4	-201.8	542.0	501.1	40.91	13.251	
12,300.0	12,202.6	12,877.0	12,553.0	14.2	16.3	-121.66	-52.2	-205.2	528.9	488.5	40.48	13.066	
12,325.0	12,216.6	12,894.8	12,553.0	14.3	16.3	-122.29	-69.7	-208.7	516.7	476.6	40.08	12.892	
12,350.0	12,229.5	12,913.3	12,553.0	14.3	16.3	-122.83	-87.9	-212.2	505.2	465.5	39.70	12.727	
12,375.0	12,241.3	12,932.4	12,553.0	14.3	16.3	-123.32	-106.7	-215.6	494.6	455.2	39.35	12.569	
12,400.0	12,251.9	12,952.0	12,553.0	14.3	16.3	-123.75	-126.0	-219.0	484.8	445.8	39.04	12.418	
12,425.0	12,261.3	12,972.2	12,553.0	14.4	16.3	-124.16	-145.9	-222.4	475.9	437.1	38.77	12.274	
12,450.0	12,269.5	12,992.8	12,553.0	14.4	16.3	-124.54	-166.2	-225.7	467.8	429.3	38.55	12.135	
12,475.0	12,276.5	13,013.8	12,553.0	14.4	16.3	-124.91	-187.0	-229.0	460.6	422.2	38.39	12.000	
12,500.0	12,282.2	13,035.2	12,553.0	14.4	16.3	-125.28	-208.1	-232.1	454.3	416.0	38.28	11.867	
12,525.0	12,286.6	13,056.8	12,553.0	14.5	16.4	-125.65	-229.5	-235.1	448.9	410.7	38.24	11.739	
12,550.0	12,289.7	13,078.6	12,553.0	14.5	16.4	-126.04	-251.2	-237.9	444.4	406.1	38.26	11.614	
12,575.0	12,291.5	13,100.0	12,553.0	14.5	16.4	-126.44	-272.4	-240.6	440.8	402.5	38.34	11.496	
12,598.2	12,292.0	13,121.1	12,553.0	14.5	16.4	-126.83	-293.3	-243.1	438.3	399.8	38.50	11.384	
12,600.0	12,292.0	13,122.7	12,553.0	14.5	16.4	-126.84	-294.9	-243.2	438.1	399.6	38.51	11.375	
12,700.0	12,291.7	13,211.5	12,553.0	14.7	16.4	-127.57	-383.3	-251.8	430.3	391.1	39.24	10.967	
12,800.0	12,291.4	13,300.0	12,553.0	14.8	16.5	-128.10	-471.6	-257.7	425.1	385.2	39.88	10.659	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #802H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 12096-MWD+IFR1+FDIR — **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	12,291.2	13,390.2	12,553.0	15.0	16.6	-128.40	-561.8	-260.8	422.3	381.8	40.46	10.437	
12,962.8	12,291.0	13,446.5	12,553.0	15.1	16.6	-128.47	-618.1	-261.3	421.8	381.0	40.78	10.345	
13,000.0	12,290.9	13,483.1	12,553.0	15.2	16.6	-128.49	-654.6	-261.2	421.9	380.9	41.01	10.288	
13,100.0	12,290.7	13,583.1	12,553.0	15.5	16.7	-128.51	-754.6	-261.0	422.0	380.3	41.71	10.118	
13,200.0	12,290.4	13,683.1	12,553.0	15.8	16.9	-128.54	-854.6	-260.7	422.2	379.7	42.47	9.941	
13,300.0	12,290.2	13,783.1	12,553.0	16.2	17.0	-128.57	-954.6	-260.4	422.3	379.1	43.28	9.759	
13,400.0	12,289.9	13,883.1	12,553.0	16.6	17.3	-128.60	-1,054.6	-260.2	422.5	378.4	44.13	9.573	
13,500.0	12,289.6	13,983.1	12,553.0	17.1	17.7	-128.63	-1,154.6	-259.9	422.7	377.6	45.03	9.385	
13,600.0	12,289.4	14,083.1	12,553.0	17.7	18.1	-128.65	-1,254.6	-259.7	422.8	376.8	45.98	9.196	
13,700.0	12,289.1	14,183.1	12,553.0	18.2	18.7	-128.68	-1,354.6	-259.4	423.0	376.0	46.96	9.007	
13,800.0	12,288.9	14,283.1	12,553.0	18.8	19.4	-128.71	-1,454.6	-259.2	423.1	375.1	47.98	8.819	
13,900.0	12,288.6	14,383.1	12,553.0	19.5	20.1	-128.74	-1,554.6	-258.9	423.3	374.3	49.03	8.633	
14,000.0	12,288.3	14,483.1	12,553.0	20.1	20.8	-128.77	-1,654.6	-258.6	423.4	373.3	50.12	8.448	
14,100.0	12,288.1	14,583.1	12,553.0	20.8	21.5	-128.79	-1,754.6	-258.4	423.6	372.4	51.24	8.267	
14,200.0	12,287.8	14,683.1	12,553.0	21.5	22.3	-128.82	-1,854.6	-258.1	423.8	371.4	52.38	8.089	
14,300.0	12,287.6	14,783.1	12,553.0	22.2	23.0	-128.85	-1,954.6	-257.9	423.9	370.4	53.56	7.915	
14,400.0	12,287.3	14,883.1	12,553.0	23.0	23.8	-128.88	-2,054.6	-257.6	424.1	369.3	54.76	7.745	
14,500.0	12,287.1	14,983.1	12,553.0	23.7	24.6	-128.90	-2,154.6	-257.3	424.2	368.2	55.98	7.579	
14,600.0	12,286.8	15,083.1	12,553.0	24.5	25.4	-128.93	-2,254.6	-257.1	424.4	367.2	57.22	7.417	
14,700.0	12,286.5	15,183.1	12,553.0	25.2	26.1	-128.96	-2,354.6	-256.8	424.5	366.1	58.48	7.259	
14,800.0	12,286.3	15,283.1	12,553.0	26.0	26.9	-128.99	-2,454.6	-256.6	424.7	364.9	59.77	7.106	
14,900.0	12,286.0	15,383.1	12,553.0	26.7	27.7	-129.02	-2,554.6	-256.3	424.9	363.8	61.07	6.957	
15,000.0	12,285.8	15,483.1	12,553.0	27.5	28.5	-129.04	-2,654.6	-256.0	425.0	362.6	62.39	6.813	
15,100.0	12,285.5	15,583.1	12,553.0	28.3	29.3	-129.07	-2,754.6	-255.8	425.2	361.5	63.72	6.672	
15,200.0	12,285.2	15,683.1	12,553.0	29.1	30.2	-129.10	-2,854.6	-255.5	425.3	360.3	65.07	6.537	
15,300.0	12,285.0	15,783.1	12,553.0	29.9	31.0	-129.13	-2,954.6	-255.3	425.5	359.1	66.43	6.405	
15,400.0	12,284.7	15,883.1	12,553.0	30.7	31.8	-129.15	-3,054.6	-255.0	425.6	357.8	67.81	6.277	
15,500.0	12,284.5	15,983.1	12,553.0	31.5	32.6	-129.18	-3,154.6	-254.7	425.8	356.6	69.20	6.154	
15,600.0	12,284.2	16,083.1	12,553.0	32.3	33.4	-129.21	-3,254.6	-254.5	426.0	355.4	70.59	6.034	
15,700.0	12,284.0	16,183.1	12,553.0	33.1	34.2	-129.24	-3,354.6	-254.2	426.1	354.1	72.00	5.918	
15,800.0	12,283.7	16,283.1	12,553.0	33.9	35.1	-129.26	-3,454.6	-254.0	426.3	352.9	73.42	5.806	
15,900.0	12,283.4	16,383.1	12,553.0	34.7	35.9	-129.29	-3,554.6	-253.7	426.4	351.6	74.85	5.697	
16,000.0	12,283.2	16,483.1	12,553.0	35.5	36.7	-129.32	-3,654.6	-253.4	426.6	350.3	76.29	5.592	
16,100.0	12,282.9	16,583.1	12,553.0	36.3	37.6	-129.35	-3,754.6	-253.2	426.8	349.0	77.74	5.489	
16,200.0	12,282.7	16,683.1	12,553.0	37.1	38.4	-129.37	-3,854.6	-252.9	426.9	347.7	79.20	5.391	
16,300.0	12,282.4	16,783.1	12,553.0	38.0	39.2	-129.40	-3,954.6	-252.7	427.1	346.4	80.66	5.295	
16,400.0	12,282.2	16,883.1	12,553.0	38.8	40.1	-129.43	-4,054.6	-252.4	427.2	345.1	82.13	5.202	
16,458.5	12,282.0	16,941.7	12,553.0	39.3	40.5	-129.45	-4,113.3	-252.2	427.3	344.3	83.00	5.149	
16,461.1	12,282.0	16,944.5	12,553.0	39.3	40.6	-129.45	-4,116.1	-252.2	427.3	344.3	83.04	5.146	
16,500.0	12,281.9	16,984.7	12,552.8	39.6	40.9	-129.44	-4,156.3	-252.1	427.3	343.6	83.65	5.108	
16,600.0	12,281.5	17,084.7	12,552.2	40.4	41.7	-129.41	-4,256.3	-251.9	427.1	342.0	85.12	5.018	
16,700.0	12,281.2	17,184.7	12,551.6	41.2	42.6	-129.38	-4,356.3	-251.6	427.0	340.4	86.61	4.930	
16,748.0	12,281.0	17,232.4	12,551.3	41.6	43.0	-129.37	-4,404.0	-251.5	426.9	339.6	87.31	4.889	
16,767.9	12,280.9	17,250.3	12,551.2	41.8	43.1	-129.37	-4,421.9	-251.4	426.9	339.3	87.55	4.875	
16,800.0	12,280.8	17,282.5	12,551.0	42.1	43.4	-129.36	-4,454.0	-251.1	426.8	338.8	88.03	4.848	
16,900.0	12,280.5	17,382.5	12,550.4	42.9	44.2	-129.33	-4,554.0	-250.1	426.6	337.1	89.53	4.765	
17,000.0	12,280.1	17,482.5	12,549.8	43.7	45.1	-129.31	-4,654.0	-249.2	426.5	335.5	91.03	4.685	
17,100.0	12,279.7	17,582.5	12,549.2	44.6	45.9	-129.28	-4,754.0	-248.2	426.3	333.8	92.54	4.607	
17,200.0	12,279.4	17,682.5	12,548.5	45.4	46.7	-129.25	-4,854.0	-247.3	426.2	332.1	94.06	4.531	
17,300.0	12,279.0	17,782.5	12,547.9	46.2	47.6	-129.23	-4,954.0	-246.3	426.0	330.4	95.58	4.457	
17,400.0	12,278.7	17,882.5	12,547.3	47.1	48.4	-129.20	-5,053.9	-245.4	425.9	328.8	97.10	4.386	
17,500.0	12,278.3	17,982.5	12,546.7	47.9	49.3	-129.18	-5,153.9	-244.4	425.7	327.1	98.63	4.316	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design HARRIER FEDERAL PROJECT (LEA 2632) - HARRIER FED COM #802H - OWB - PWP1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-Standard Keeper 104, 12096-MWD+IFR1+FDIR — **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
17,600.0	12,277.9	18,082.5	12,546.1	48.7	50.1	-129.15	-5,253.9	-243.5	425.5	325.4	100.16	4.248	
17,700.0	12,277.6	18,182.5	12,545.5	49.6	51.0	-129.12	-5,353.9	-242.5	425.4	323.7	101.70	4.183	
17,800.0	12,277.2	18,282.5	12,544.9	50.4	51.8	-129.10	-5,453.9	-241.6	425.2	322.0	103.24	4.119	
17,900.0	12,276.9	18,382.5	12,544.3	51.3	52.6	-129.07	-5,553.9	-240.6	425.1	320.3	104.79	4.056	
18,000.0	12,276.5	18,482.5	12,543.7	52.1	53.5	-129.04	-5,653.9	-239.7	424.9	318.6	106.34	3.996	
18,100.0	12,276.2	18,582.5	12,543.1	52.9	54.3	-129.02	-5,753.9	-238.7	424.7	316.9	107.89	3.937	
18,200.0	12,275.8	18,682.5	12,542.4	53.8	55.2	-128.99	-5,853.9	-237.8	424.6	315.1	109.45	3.879	
18,300.0	12,275.4	18,782.5	12,541.8	54.6	56.0	-128.97	-5,953.9	-236.8	424.4	313.4	111.01	3.823	
18,400.0	12,275.1	18,882.5	12,541.2	55.5	56.9	-128.94	-6,053.9	-235.9	424.3	311.7	112.57	3.769	
18,500.0	12,274.7	18,982.5	12,540.6	56.3	57.7	-128.91	-6,153.9	-234.9	424.1	310.0	114.14	3.716	
18,600.0	12,274.4	19,082.4	12,540.0	57.1	58.6	-128.89	-6,253.9	-234.0	424.0	308.3	115.71	3.664	
18,700.0	12,274.0	19,182.4	12,539.4	58.0	59.4	-128.86	-6,353.9	-233.0	423.8	306.5	117.28	3.614	
18,800.0	12,273.6	19,282.4	12,538.8	58.8	60.3	-128.83	-6,453.9	-232.1	423.6	304.8	118.85	3.564	
18,900.0	12,273.3	19,382.4	12,538.2	59.7	61.1	-128.81	-6,553.8	-231.1	423.5	303.1	120.43	3.516	
19,000.0	12,272.9	19,482.4	12,537.6	60.5	62.0	-128.78	-6,653.8	-230.2	423.3	301.3	122.01	3.470	
19,100.0	12,272.6	19,582.4	12,537.0	61.4	62.8	-128.75	-6,753.8	-229.2	423.2	299.6	123.59	3.424	
19,200.0	12,272.2	19,682.4	12,536.3	62.2	63.7	-128.73	-6,853.8	-228.3	423.0	297.8	125.18	3.379	
19,300.0	12,271.9	19,782.4	12,535.7	63.1	64.5	-128.70	-6,953.8	-227.3	422.9	296.1	126.76	3.336	
19,400.0	12,271.5	19,882.4	12,535.1	63.9	65.4	-128.67	-7,053.8	-226.4	422.7	294.3	128.35	3.293	
19,500.0	12,271.1	19,982.4	12,534.5	64.8	66.2	-128.65	-7,153.8	-225.4	422.5	292.6	129.94	3.252	
19,600.0	12,270.8	20,082.4	12,533.9	65.6	67.1	-128.62	-7,253.8	-224.5	422.4	290.9	131.54	3.211	
19,700.0	12,270.4	20,182.4	12,533.3	66.5	67.9	-128.59	-7,353.8	-223.5	422.2	289.1	133.13	3.172	
19,800.0	12,270.1	20,282.4	12,532.7	67.3	68.8	-128.57	-7,453.8	-222.6	422.1	287.3	134.73	3.133	
19,900.0	12,269.7	20,382.4	12,532.1	68.2	69.6	-128.54	-7,553.8	-221.6	421.9	285.6	136.33	3.095	
20,000.0	12,269.3	20,482.4	12,531.5	69.0	70.5	-128.51	-7,653.8	-220.7	421.8	283.8	137.93	3.058	
20,100.0	12,269.0	20,582.4	12,530.9	69.9	71.3	-128.49	-7,753.8	-219.7	421.6	282.1	139.53	3.022	
20,200.0	12,268.6	20,682.4	12,530.3	70.7	72.2	-128.46	-7,853.8	-218.7	421.4	280.3	141.14	2.986	
20,300.0	12,268.3	20,782.4	12,529.6	71.6	73.0	-128.43	-7,953.8	-217.8	421.3	278.6	142.74	2.951	
20,400.0	12,267.9	20,882.4	12,529.0	72.4	73.9	-128.41	-8,053.7	-216.8	421.1	276.8	144.35	2.918	
20,500.0	12,267.5	20,982.4	12,528.4	73.3	74.7	-128.38	-8,153.7	-215.9	421.0	275.0	145.96	2.884	
20,600.0	12,267.2	21,082.4	12,527.8	74.1	75.6	-128.35	-8,253.7	-214.9	420.8	273.3	147.57	2.852	
20,700.0	12,266.8	21,182.4	12,527.2	75.0	76.4	-128.33	-8,353.7	-214.0	420.7	271.5	149.18	2.820	
20,800.0	12,266.5	21,282.4	12,526.6	75.8	77.3	-128.30	-8,453.7	-213.0	420.5	269.7	150.79	2.789	
20,900.0	12,266.1	21,382.4	12,526.0	76.7	78.2	-128.27	-8,553.7	-212.1	420.4	268.0	152.41	2.758	
21,000.0	12,265.8	21,482.4	12,525.4	77.5	79.0	-128.25	-8,653.7	-211.1	420.2	266.2	154.02	2.728	
21,100.0	12,265.4	21,582.4	12,524.8	78.4	79.9	-128.22	-8,753.7	-210.2	420.0	264.4	155.64	2.699	
21,200.0	12,265.0	21,682.4	12,524.2	79.2	80.7	-128.19	-8,853.7	-209.2	419.9	262.6	157.26	2.670	
21,300.0	12,264.7	21,782.4	12,523.5	80.1	81.6	-128.17	-8,953.7	-208.3	419.7	260.9	158.88	2.642	
21,400.0	12,264.3	21,882.4	12,522.9	80.9	82.4	-128.14	-9,053.7	-207.3	419.6	259.1	160.50	2.614	
21,500.0	12,264.0	21,982.4	12,522.3	81.8	83.3	-128.11	-9,153.7	-206.4	419.4	257.3	162.12	2.587	
21,600.0	12,263.6	22,082.4	12,521.7	82.6	84.1	-128.09	-9,253.7	-205.4	419.3	255.5	163.74	2.561	
21,700.0	12,263.2	22,182.4	12,521.1	83.5	85.0	-128.06	-9,353.7	-204.5	419.1	253.8	165.37	2.535	
21,800.0	12,262.9	22,282.4	12,520.5	84.3	85.8	-128.03	-9,453.7	-203.5	419.0	252.0	166.99	2.509	
21,900.0	12,262.5	22,382.4	12,519.9	85.2	86.7	-128.00	-9,553.6	-202.6	418.8	250.2	168.62	2.484	
22,000.0	12,262.2	22,482.4	12,519.3	86.0	87.5	-127.98	-9,653.6	-201.6	418.7	248.4	170.24	2.459	
22,044.3	12,262.0	22,526.7	12,519.0	86.4	87.9	-127.96	-9,697.9	-201.2	418.6	247.6	170.96	2.448	
22,047.1	12,262.0	22,528.7	12,519.0	86.4	87.9	-127.96	-9,699.9	-201.2	418.6	247.6	170.99	2.448	SF

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design PILEDRIVER FED & FIGURE FOUR FED PROJECT - FIGURE FOUR FED #701H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **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
11,700.0	11,667.5	19,721.4	12,255.9	13.8	80.3	-90.95	214.0	-1,253.7	955.7	860.2	95.47	10.010	
11,800.0	11,767.5	19,722.7	12,255.9	14.0	80.3	-90.84	215.3	-1,253.7	886.1	790.3	95.80	9.249	
11,847.0	11,814.5	19,723.3	12,255.9	14.0	80.3	-90.78	216.0	-1,253.7	855.4	760.3	95.16	8.990	
11,850.0	11,817.5	19,723.3	12,255.9	14.0	80.3	89.67	216.0	-1,253.7	853.5	758.3	95.16	8.969	
11,875.0	11,842.5	19,722.8	12,255.9	14.0	80.3	92.03	215.5	-1,253.7	837.9	742.7	95.16	8.805	
11,900.0	11,867.4	19,721.1	12,255.9	14.0	80.3	94.15	213.7	-1,253.7	822.7	727.6	95.13	8.648	
11,925.0	11,892.2	19,718.0	12,255.8	14.0	80.3	96.03	210.6	-1,253.7	808.2	713.1	95.08	8.500	
11,950.0	11,916.7	19,713.6	12,255.8	14.0	80.2	97.67	206.2	-1,253.7	794.2	699.2	94.99	8.361	
11,975.0	11,941.0	19,707.9	12,255.7	14.0	80.2	99.06	200.6	-1,253.6	780.9	686.1	94.88	8.231	
12,000.0	11,964.9	19,701.0	12,255.6	14.0	80.2	100.22	193.6	-1,253.6	768.4	673.6	94.74	8.110	
12,025.0	11,988.4	19,692.8	12,255.5	14.0	80.1	101.16	185.5	-1,253.6	756.5	662.0	94.57	8.000	
12,050.0	12,011.5	19,683.4	12,255.4	14.0	80.0	101.88	176.0	-1,253.6	745.5	651.1	94.37	7.899	
12,075.0	12,034.0	19,672.8	12,255.2	14.1	80.0	102.40	165.4	-1,253.5	735.2	641.1	94.15	7.809	
12,100.0	12,055.9	19,661.0	12,255.1	14.1	79.9	102.74	153.7	-1,253.5	725.8	631.9	93.90	7.729	
12,125.0	12,077.1	19,648.1	12,254.9	14.1	79.8	102.91	140.8	-1,253.5	717.1	623.5	93.64	7.658	
12,150.0	12,097.6	19,634.1	12,254.7	14.1	79.7	102.92	126.7	-1,253.4	709.3	615.9	93.36	7.597	
12,175.0	12,117.3	19,619.0	12,254.5	14.1	79.6	102.79	111.7	-1,253.4	702.2	609.1	93.07	7.545	
12,200.0	12,136.2	19,602.9	12,254.3	14.1	79.4	102.53	95.6	-1,253.4	695.9	603.1	92.77	7.502	
12,225.0	12,154.3	19,585.8	12,254.1	14.2	79.3	102.17	78.5	-1,253.3	690.3	597.9	92.47	7.466	
12,250.0	12,171.4	19,567.8	12,253.8	14.2	79.2	101.72	60.5	-1,253.3	685.4	593.3	92.17	7.437	
12,275.0	12,187.5	19,548.9	12,253.6	14.2	79.1	101.19	41.6	-1,253.2	681.2	589.3	91.87	7.414	
12,300.0	12,202.6	19,529.2	12,253.3	14.2	78.9	100.61	21.8	-1,253.1	677.5	586.0	91.59	7.398	
12,325.0	12,216.6	19,508.7	12,253.0	14.3	78.8	100.00	1.3	-1,253.1	674.4	583.1	91.31	7.386	
12,350.0	12,229.5	19,487.4	12,252.8	14.3	78.6	99.36	-19.9	-1,253.0	671.8	580.8	91.05	7.379	
12,375.0	12,241.3	19,465.6	12,252.5	14.3	78.5	98.72	-41.8	-1,253.0	669.7	578.9	90.81	7.375	
12,400.0	12,251.9	19,443.1	12,252.2	14.3	78.3	98.10	-64.3	-1,252.9	667.9	577.3	90.58	7.374	
12,425.0	12,261.3	19,420.0	12,251.9	14.4	78.1	97.51	-87.3	-1,252.8	666.5	576.1	90.36	7.375	
12,450.0	12,269.5	19,396.5	12,251.6	14.4	78.0	96.96	-110.8	-1,252.8	665.3	575.1	90.16	7.379	
12,475.0	12,276.5	19,372.6	12,251.2	14.4	77.8	96.47	-134.7	-1,252.7	664.4	574.4	89.98	7.384	
12,500.0	12,282.2	19,348.3	12,250.9	14.4	77.6	96.05	-159.0	-1,252.6	663.7	573.9	89.82	7.390	
12,525.0	12,286.6	19,323.8	12,250.6	14.5	77.5	95.72	-183.5	-1,252.6	663.2	573.6	89.67	7.397	
12,550.0	12,289.7	19,299.0	12,250.3	14.5	77.3	95.46	-208.3	-1,252.5	662.9	573.4	89.53	7.404	
12,575.0	12,291.5	19,274.1	12,249.9	14.5	77.1	95.31	-233.2	-1,252.4	662.7	573.3	89.41	7.412	
12,598.2	12,292.0	19,251.0	12,249.6	14.5	77.0	95.25	-256.3	-1,252.4	662.6	573.3	89.31	7.420	
12,600.0	12,292.0	19,249.1	12,249.6	14.5	76.9	95.24	-258.1	-1,252.4	662.6	573.3	89.30	7.420	
12,700.0	12,291.7	19,149.2	12,248.3	14.7	76.2	95.15	-358.1	-1,252.1	662.5	573.6	88.92	7.450	
12,800.0	12,291.4	19,049.2	12,247.0	14.8	75.5	95.06	-458.1	-1,251.8	662.4	573.8	88.60	7.476	
12,900.0	12,291.2	18,949.2	12,245.6	15.0	74.8	94.97	-558.1	-1,251.5	662.3	574.0	88.33	7.498	
13,000.0	12,290.9	18,849.2	12,244.3	15.2	74.1	94.88	-658.1	-1,251.2	662.2	574.1	88.09	7.517	
13,100.0	12,290.7	18,749.2	12,243.0	15.5	73.5	94.79	-758.1	-1,251.0	662.1	574.2	87.90	7.532	
13,200.0	12,290.4	18,649.2	12,241.7	15.8	72.8	94.69	-858.1	-1,250.7	662.0	574.2	87.75	7.544	
13,300.0	12,290.2	18,549.2	12,240.4	16.2	72.1	94.60	-958.0	-1,250.4	661.9	574.3	87.63	7.553	
13,400.0	12,289.9	18,449.2	12,239.0	16.6	71.4	94.51	-1,058.0	-1,250.1	661.8	574.3	87.54	7.560	
13,500.0	12,289.6	18,349.2	12,237.7	17.1	70.7	94.42	-1,158.0	-1,249.9	661.7	574.2	87.47	7.564	
13,600.0	12,289.4	18,249.2	12,236.4	17.7	70.1	94.33	-1,258.0	-1,249.6	661.6	574.2	87.44	7.567	
13,700.0	12,289.1	18,149.2	12,235.1	18.2	69.4	94.23	-1,358.0	-1,249.3	661.5	574.1	87.42	7.567	
13,800.0	12,288.9	18,049.2	12,233.7	18.8	68.7	94.14	-1,458.0	-1,249.0	661.4	574.0	87.43	7.566	
13,900.0	12,288.6	17,949.2	12,232.4	19.5	68.1	94.05	-1,558.0	-1,248.7	661.3	573.9	87.45	7.562	
14,000.0	12,288.3	17,849.2	12,231.1	20.1	67.4	93.96	-1,657.9	-1,248.5	661.2	573.8	87.49	7.558	
14,100.0	12,288.1	17,749.2	12,229.8	20.8	66.8	93.87	-1,757.9	-1,248.2	661.2	573.6	87.55	7.552	
14,200.0	12,287.8	17,649.2	12,228.5	21.5	66.1	93.78	-1,857.9	-1,247.9	661.1	573.5	87.63	7.544	
14,300.0	12,287.6	17,549.2	12,227.1	22.2	65.5	93.68	-1,957.9	-1,247.6	661.0	573.3	87.72	7.536	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design PILEDRIVER FED & FIGURE FOUR FED PROJECT - FIGURE FOUR FED #701H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **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
14,400.0	12,287.3	17,449.3	12,225.8	23.0	64.9	93.59	-2,057.9	-1,247.3	660.9	573.1	87.82	7.526	
14,500.0	12,287.1	17,349.3	12,224.5	23.7	64.2	93.50	-2,157.9	-1,247.1	660.8	572.9	87.94	7.515	
14,600.0	12,286.8	17,249.3	12,223.2	24.5	63.6	93.41	-2,257.9	-1,246.8	660.8	572.7	88.07	7.503	
14,700.0	12,286.5	17,149.3	12,221.8	25.2	63.0	93.31	-2,357.8	-1,246.5	660.7	572.5	88.21	7.490	
14,800.0	12,286.3	17,049.3	12,220.5	26.0	62.4	93.22	-2,457.8	-1,246.2	660.6	572.3	88.36	7.476	
14,900.0	12,286.0	16,949.3	12,219.2	26.7	61.8	93.13	-2,557.8	-1,245.9	660.5	572.0	88.52	7.462	
15,000.0	12,285.8	16,849.3	12,217.9	27.5	61.2	93.04	-2,657.8	-1,245.7	660.5	571.8	88.70	7.446	
15,100.0	12,285.5	16,749.3	12,216.6	28.3	60.6	92.95	-2,757.8	-1,245.4	660.4	571.5	88.89	7.430	
15,200.0	12,285.2	16,649.3	12,215.2	29.1	60.0	92.85	-2,857.8	-1,245.1	660.3	571.3	89.08	7.413	
15,300.0	12,285.0	16,549.3	12,213.9	29.9	59.4	92.76	-2,957.8	-1,244.8	660.3	571.0	89.29	7.395	
15,400.0	12,284.7	16,449.3	12,212.6	30.7	58.8	92.67	-3,057.7	-1,244.6	660.2	570.7	89.51	7.376	
15,500.0	12,284.5	16,349.3	12,211.3	31.5	58.3	92.58	-3,157.7	-1,244.3	660.1	570.4	89.74	7.357	
15,600.0	12,284.2	16,249.3	12,209.9	32.3	57.7	92.49	-3,257.7	-1,244.0	660.1	570.1	89.97	7.336	
15,700.0	12,284.0	16,149.3	12,208.6	33.1	57.2	92.39	-3,357.7	-1,243.7	660.0	569.8	90.22	7.316	
15,800.0	12,283.7	16,049.3	12,207.3	33.9	56.6	92.30	-3,457.7	-1,243.4	660.0	569.5	90.48	7.294	
15,900.0	12,283.4	15,949.3	12,206.0	34.7	56.1	92.21	-3,557.7	-1,243.2	659.9	569.2	90.75	7.272	
16,000.0	12,283.2	15,849.3	12,204.6	35.5	55.5	92.12	-3,657.6	-1,242.9	659.9	568.8	91.03	7.249	
16,100.0	12,282.9	15,749.3	12,203.3	36.3	55.0	92.02	-3,757.6	-1,242.6	659.8	568.5	91.32	7.225	
16,200.0	12,282.7	15,649.4	12,202.0	37.1	54.5	91.93	-3,857.6	-1,242.3	659.8	568.1	91.62	7.201	
16,300.0	12,282.4	15,549.4	12,200.7	38.0	54.0	91.84	-3,957.6	-1,242.0	659.7	567.8	91.93	7.176	
16,400.0	12,282.2	15,449.4	12,199.4	38.8	53.5	91.75	-4,057.6	-1,241.8	659.7	567.4	92.25	7.151	
16,458.5	12,282.0	15,390.8	12,198.6	39.3	53.2	91.69	-4,116.1	-1,241.6	659.6	567.2	92.45	7.136	
16,461.1	12,282.0	15,388.3	12,198.6	39.3	53.2	91.69	-4,118.6	-1,241.6	659.6	567.2	92.45	7.135	
16,500.0	12,281.9	15,349.4	12,198.0	39.6	53.0	91.66	-4,157.6	-1,241.5	659.6	567.0	92.58	7.125	
16,600.0	12,281.5	15,249.4	12,196.7	40.4	52.6	91.57	-4,257.6	-1,241.2	659.6	566.6	92.93	7.098	
16,700.0	12,281.2	15,149.4	12,195.4	41.2	52.1	91.49	-4,357.5	-1,240.9	659.5	566.2	93.28	7.070	
16,748.0	12,281.0	15,098.7	12,194.7	41.6	51.9	91.45	-4,408.2	-1,240.8	659.5	566.1	93.43	7.058	
16,762.5	12,280.9	15,083.9	12,194.5	41.8	51.8	91.43	-4,423.0	-1,240.7	659.5	566.0	93.48	7.054	CC
16,767.9	12,280.9	15,078.5	12,194.5	41.8	51.8	91.43	-4,428.4	-1,240.6	659.5	566.0	93.50	7.053	
16,800.0	12,280.8	15,046.4	12,194.0	42.1	51.6	91.40	-4,460.5	-1,240.4	659.5	565.9	93.62	7.044	
16,900.0	12,280.5	14,946.4	12,192.7	42.9	51.2	91.32	-4,560.5	-1,239.6	659.7	565.7	94.00	7.018	
17,000.0	12,280.1	14,846.4	12,191.4	43.7	50.7	91.23	-4,660.5	-1,238.9	659.9	565.5	94.40	6.991	
17,100.0	12,279.7	14,746.4	12,190.1	44.6	50.3	91.15	-4,760.5	-1,238.2	660.1	565.3	94.80	6.963	
17,200.0	12,279.4	14,646.4	12,188.7	45.4	49.9	91.06	-4,860.5	-1,237.4	660.3	565.1	95.22	6.935	
17,300.0	12,279.0	14,546.4	12,187.4	46.2	49.5	90.98	-4,960.5	-1,236.7	660.5	564.8	95.65	6.905	
17,400.0	12,278.7	14,446.4	12,186.1	47.1	49.1	90.90	-5,060.5	-1,236.0	660.7	564.6	96.09	6.876	
17,500.0	12,278.3	14,346.4	12,184.8	47.9	48.7	90.81	-5,160.4	-1,235.2	660.9	564.3	96.54	6.845	
17,600.0	12,277.9	14,246.4	12,183.5	48.7	48.4	90.73	-5,260.4	-1,234.5	661.1	564.1	97.01	6.814	
17,700.0	12,277.6	14,146.4	12,182.1	49.6	48.0	90.65	-5,360.4	-1,233.7	661.3	563.8	97.49	6.783	
17,800.0	12,277.2	14,046.4	12,180.8	50.4	47.7	90.56	-5,460.4	-1,233.0	661.5	563.5	97.99	6.751	
17,900.0	12,276.9	13,946.4	12,179.5	51.3	47.4	90.48	-5,560.4	-1,232.3	661.7	563.2	98.50	6.718	
18,000.0	12,276.5	13,846.4	12,178.2	52.1	47.0	90.39	-5,660.4	-1,231.5	661.9	562.9	99.02	6.684	
18,100.0	12,276.2	13,746.4	12,176.9	52.9	46.8	90.31	-5,760.3	-1,230.8	662.1	562.5	99.56	6.650	
18,200.0	12,275.8	13,646.4	12,175.5	53.8	46.5	90.23	-5,860.3	-1,230.1	662.3	562.2	100.11	6.616	
18,300.0	12,275.4	13,546.4	12,174.2	54.6	46.2	90.14	-5,960.3	-1,229.3	662.5	561.8	100.68	6.580	ES
18,400.0	12,275.1	13,464.3	12,173.1	55.5	46.0	90.08	-6,042.4	-1,229.8	664.0	562.7	101.34	6.552	SF
18,500.0	12,274.7	13,383.3	12,172.1	56.3	45.8	90.01	-6,123.4	-1,232.5	668.3	566.4	101.97	6.554	
18,600.0	12,274.4	13,300.0	12,171.0	57.1	45.6	89.94	-6,206.5	-1,237.7	675.5	572.9	102.57	6.586	
18,700.0	12,274.0	13,222.1	12,169.9	58.0	45.4	89.88	-6,284.1	-1,244.7	685.4	582.3	103.12	6.647	
18,800.0	12,273.6	13,142.2	12,168.9	58.8	45.2	89.82	-6,363.4	-1,254.1	698.2	594.5	103.64	6.737	
18,900.0	12,273.3	13,062.9	12,167.8	59.7	45.0	89.76	-6,441.8	-1,265.7	713.6	609.5	104.11	6.854	
19,000.0	12,272.9	12,984.4	12,166.8	60.5	44.9	89.70	-6,519.2	-1,279.2	731.8	627.3	104.55	7.000	

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 FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design PILEDRIVER FED & FIGURE FOUR FED PROJECT - FIGURE FOUR FED #701H - OWB - PWP1 — **Offset Site Error:** 3.0 usft

Survey Program: 0-MWD+IFR1+FDIR — **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
19,100.0	12,272.6	12,892.3	12,165.6	61.4	44.7	89.64	-6,609.5	-1,297.0	752.0	646.9	105.13	7.153	
19,200.0	12,272.2	12,794.4	12,164.3	62.2	44.5	89.58	-6,705.5	-1,315.9	772.4	666.6	105.79	7.301	
19,300.0	12,271.9	12,696.5	12,163.0	63.1	44.4	89.52	-6,801.6	-1,334.9	792.7	686.2	106.46	7.446	
19,400.0	12,271.5	12,598.6	12,161.7	63.9	44.2	89.46	-6,897.6	-1,353.9	813.0	705.9	107.15	7.588	
19,500.0	12,271.1	12,500.7	12,160.5	64.8	44.1	89.41	-6,993.7	-1,372.9	833.4	725.5	107.85	7.727	
19,600.0	12,270.8	12,409.1	12,156.4	65.6	44.0	89.17	-7,083.3	-1,390.8	853.9	745.4	108.48	7.871	
19,700.0	12,270.4	12,325.0	12,138.8	66.5	43.9	88.03	-7,163.7	-1,407.6	875.8	766.8	108.95	8.039	
19,800.0	12,270.1	12,250.0	12,111.3	67.3	43.8	86.26	-7,231.8	-1,422.5	900.0	790.8	109.17	8.244	
19,900.0	12,269.7	12,185.0	12,078.8	68.2	43.7	84.23	-7,286.6	-1,435.1	927.7	818.6	109.11	8.503	
20,000.0	12,269.3	12,130.1	12,045.7	69.0	43.6	82.21	-7,329.2	-1,445.4	959.9	851.2	108.72	8.830	
20,100.0	12,269.0	12,084.2	12,014.3	69.9	43.5	80.34	-7,361.6	-1,453.5	997.5	889.4	108.02	9.234	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design PILEDRIVER FED & FIGURE FOUR FED PROJECT - MONSOON FEDERAL SWD#1 - OWB - AWP — **Offset Site Error:** 3.0 usft

Survey Program: 249-MWD — **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
12,325.0	12,216.6	12,166.3	12,163.9	14.3	44.8	43.67	-866.7	-1,052.2	985.3	930.9	54.38	18.118	
12,350.0	12,229.5	12,178.9	12,176.5	14.3	44.8	46.75	-866.7	-1,052.6	966.7	912.3	54.39	17.772	
12,375.0	12,241.3	12,190.4	12,188.0	14.3	44.9	50.13	-866.7	-1,053.0	947.6	893.2	54.40	17.420	
12,400.0	12,251.9	12,200.7	12,198.3	14.3	44.9	53.81	-866.7	-1,053.4	928.1	873.7	54.39	17.062	
12,425.0	12,261.3	12,209.8	12,207.4	14.4	44.9	57.77	-866.7	-1,053.8	908.3	853.9	54.38	16.701	
12,450.0	12,269.5	12,219.0	12,216.6	14.4	45.0	62.09	-866.7	-1,054.1	888.2	833.8	54.37	16.335	
12,475.0	12,276.5	12,224.7	12,222.3	14.4	45.0	66.38	-866.7	-1,054.4	867.9	813.6	54.34	15.971	
12,500.0	12,282.2	12,230.4	12,228.0	14.4	45.0	70.91	-866.7	-1,054.6	847.6	793.3	54.32	15.604	
12,525.0	12,286.6	12,234.8	12,232.4	14.5	45.0	75.45	-866.7	-1,054.8	827.2	772.9	54.28	15.238	
12,550.0	12,289.7	12,237.9	12,235.5	14.5	45.0	79.91	-866.7	-1,054.9	806.9	752.6	54.25	14.874	
12,575.0	12,291.5	12,239.7	12,237.3	14.5	45.0	84.21	-866.7	-1,055.0	786.6	732.4	54.20	14.513	
12,598.2	12,292.0	12,240.2	12,237.7	14.5	45.1	87.98	-866.7	-1,055.0	768.1	713.9	54.16	14.181	
12,600.0	12,292.0	12,240.1	12,237.7	14.5	45.1	87.98	-866.7	-1,055.0	766.6	712.5	54.16	14.156	
12,700.0	12,291.7	12,239.7	12,237.2	14.7	45.0	87.92	-866.7	-1,055.0	689.7	635.7	54.02	12.768	
12,800.0	12,291.4	12,239.2	12,236.8	14.8	45.0	87.86	-866.7	-1,054.9	619.4	565.4	54.05	11.461	
12,900.0	12,291.2	12,238.7	12,236.3	15.0	45.0	87.81	-866.7	-1,054.9	558.3	503.9	54.39	10.265	
13,000.0	12,290.9	12,238.2	12,235.8	15.2	45.0	87.75	-866.7	-1,054.9	509.6	454.5	55.19	9.235	
13,100.0	12,290.7	12,237.8	12,235.4	15.5	45.0	87.69	-866.7	-1,054.9	477.2	420.7	56.50	8.447	
13,200.0	12,290.4	12,237.3	12,234.9	15.8	45.0	87.63	-866.7	-1,054.9	464.5	406.3	58.15	7.988	
13,210.0	12,290.4	12,237.3	12,234.9	15.8	45.0	87.63	-866.7	-1,054.9	464.4	406.1	58.32	7.963	CC, ES
13,300.0	12,290.2	12,236.9	12,234.5	16.2	45.0	87.58	-866.7	-1,054.9	473.0	413.3	59.77	7.915	SF
13,400.0	12,289.9	12,236.4	12,234.0	16.6	45.0	87.52	-866.7	-1,054.8	501.7	440.7	61.02	8.223	
13,500.0	12,289.6	12,236.0	12,233.6	17.1	45.0	87.47	-866.7	-1,054.8	547.5	485.7	61.80	8.859	
13,600.0	12,289.4	12,235.6	12,233.2	17.7	45.0	87.42	-866.7	-1,054.8	606.4	544.2	62.19	9.751	
13,700.0	12,289.1	12,235.1	12,232.7	18.2	45.0	87.36	-866.7	-1,054.8	675.1	612.8	62.33	10.832	
13,800.0	12,288.9	12,234.7	12,232.3	18.8	45.0	87.31	-866.7	-1,054.8	750.8	688.5	62.32	12.048	
13,900.0	12,288.6	12,234.3	12,231.9	19.5	45.0	87.26	-866.7	-1,054.7	831.7	769.5	62.24	13.363	
14,000.0	12,288.3	12,233.9	12,231.5	20.1	45.0	87.21	-866.7	-1,054.7	916.4	854.3	62.14	14.748	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Offset Design PILEDRIVER FED & FIGURE FOUR FED PROJECT - PILEDRIVER FEDERAL #701H - OWB - PWP2 — **Offset Site Error:** 3.0 usft

Survey Program: 0-Standard Keeper 104, 11794-MWD+IFR1+FDIR — **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
18,500.0	12,274.7	12,000.0	11,927.2	56.3	14.2	69.15	-6,806.5	-1,247.7	979.9	922.0	57.86	16.934	
18,600.0	12,274.4	12,017.4	11,942.4	57.1	14.2	70.22	-6,814.9	-1,246.1	916.7	855.8	60.97	15.035	
18,700.0	12,274.0	12,040.4	11,961.9	58.0	14.2	71.63	-6,826.8	-1,243.9	859.3	795.2	64.10	13.407	
18,800.0	12,273.6	12,067.5	11,984.1	58.8	14.2	73.27	-6,842.1	-1,241.5	808.6	741.4	67.18	12.037	
18,900.0	12,273.3	12,100.0	12,009.6	59.7	14.2	75.20	-6,862.0	-1,238.7	765.4	695.3	70.04	10.927	
19,000.0	12,272.9	12,138.0	12,037.7	60.5	14.2	77.38	-6,887.5	-1,235.5	730.2	657.7	72.56	10.064	
19,100.0	12,272.6	12,183.9	12,068.7	61.4	14.3	79.87	-6,921.1	-1,232.0	703.4	628.8	74.59	9.431	
19,200.0	12,272.2	12,238.8	12,101.3	62.2	14.3	82.55	-6,965.0	-1,228.2	684.6	608.4	76.11	8.994	
19,300.0	12,271.9	12,303.4	12,133.1	63.1	14.4	85.22	-7,021.1	-1,224.4	672.7	595.4	77.25	8.708	
19,400.0	12,271.5	12,377.8	12,159.9	63.9	14.5	87.53	-7,090.4	-1,221.1	666.2	588.0	78.21	8.518	
19,500.0	12,271.1	12,460.0	12,176.6	64.8	14.7	88.99	-7,170.7	-1,218.6	663.5	584.3	79.17	8.381	
19,600.0	12,270.8	12,552.0	12,181.0	65.6	14.9	89.40	-7,262.5	-1,217.4	663.0	582.8	80.23	8.264	
19,700.0	12,270.4	12,652.0	12,183.2	66.5	15.1	89.62	-7,362.5	-1,216.4	662.9	581.5	81.37	8.147	
19,800.0	12,270.1	12,752.0	12,185.5	67.3	15.4	89.85	-7,462.4	-1,215.3	662.8	580.2	82.55	8.029	
19,900.0	12,269.7	12,851.9	12,187.7	68.2	15.8	90.07	-7,562.4	-1,214.2	662.7	578.9	83.77	7.911	
20,000.0	12,269.3	12,951.9	12,189.9	69.0	16.2	90.29	-7,662.3	-1,213.2	662.6	577.5	85.03	7.792	
20,100.0	12,269.0	13,051.9	12,192.2	69.9	16.6	90.52	-7,762.2	-1,212.1	662.5	576.1	86.32	7.674	
20,200.0	12,268.6	13,151.8	12,194.4	70.7	17.1	90.74	-7,862.2	-1,211.0	662.4	574.7	87.65	7.557	
20,300.0	12,268.3	13,251.8	12,196.6	71.6	17.6	90.97	-7,962.1	-1,210.0	662.3	573.3	89.01	7.441	
20,400.0	12,267.9	13,351.8	12,198.9	72.4	18.1	91.19	-8,062.0	-1,208.9	662.2	571.8	90.39	7.326	
20,500.0	12,267.5	13,451.7	12,201.1	73.3	18.7	91.42	-8,162.0	-1,207.8	662.2	570.4	91.81	7.213	
20,600.0	12,267.2	13,551.7	12,203.3	74.1	19.2	91.64	-8,261.9	-1,206.8	662.1	568.9	93.24	7.101	
20,700.0	12,266.8	13,651.7	12,205.6	75.0	19.9	91.86	-8,361.8	-1,205.7	662.1	567.4	94.70	6.992	
20,800.0	12,266.5	13,751.6	12,207.8	75.8	20.5	92.09	-8,461.8	-1,204.7	662.1	565.9	96.17	6.884	
20,900.0	12,266.1	13,851.6	12,210.0	76.7	21.1	92.31	-8,561.7	-1,203.6	662.1	564.4	97.66	6.779	
20,994.1	12,265.8	13,945.6	12,212.1	77.5	21.7	92.52	-8,655.7	-1,202.6	662.0	563.0	99.08	6.682	CC
21,000.0	12,265.8	13,951.6	12,212.3	77.5	21.8	92.54	-8,661.6	-1,202.5	662.0	562.9	99.17	6.676	
21,100.0	12,265.4	14,051.5	12,214.5	78.4	22.4	92.76	-8,761.6	-1,201.5	662.1	561.4	100.69	6.575	
21,200.0	12,265.0	14,151.5	12,216.7	79.2	23.1	92.99	-8,861.5	-1,200.4	662.1	559.8	102.23	6.476	
21,300.0	12,264.7	14,251.5	12,219.0	80.1	23.8	93.21	-8,961.5	-1,199.3	662.1	558.3	103.78	6.380	
21,400.0	12,264.3	14,351.4	12,221.2	80.9	24.5	93.44	-9,061.4	-1,198.3	662.1	556.8	105.33	6.286	
21,500.0	12,264.0	14,451.4	12,223.4	81.8	25.3	93.66	-9,161.3	-1,197.2	662.2	555.3	106.90	6.194	
21,600.0	12,263.6	14,551.4	12,225.7	82.6	26.0	93.88	-9,261.3	-1,196.1	662.2	553.8	108.48	6.105	
21,700.0	12,263.2	14,651.3	12,227.9	83.5	26.7	94.11	-9,361.2	-1,195.1	662.3	552.2	110.06	6.017	
21,800.0	12,262.9	14,751.3	12,230.1	84.3	27.5	94.33	-9,461.1	-1,194.0	662.4	550.7	111.66	5.932	
21,900.0	12,262.5	14,851.3	12,232.4	85.2	28.2	94.56	-9,561.1	-1,192.9	662.5	549.2	113.26	5.849	
22,000.0	12,262.2	14,951.2	12,234.6	86.0	29.0	94.78	-9,661.0	-1,191.9	662.6	547.7	114.86	5.768	
22,047.1	12,262.0	14,998.3	12,235.6	86.4	29.3	94.89	-9,708.1	-1,191.4	662.6	547.0	115.62	5.731	ES, SF

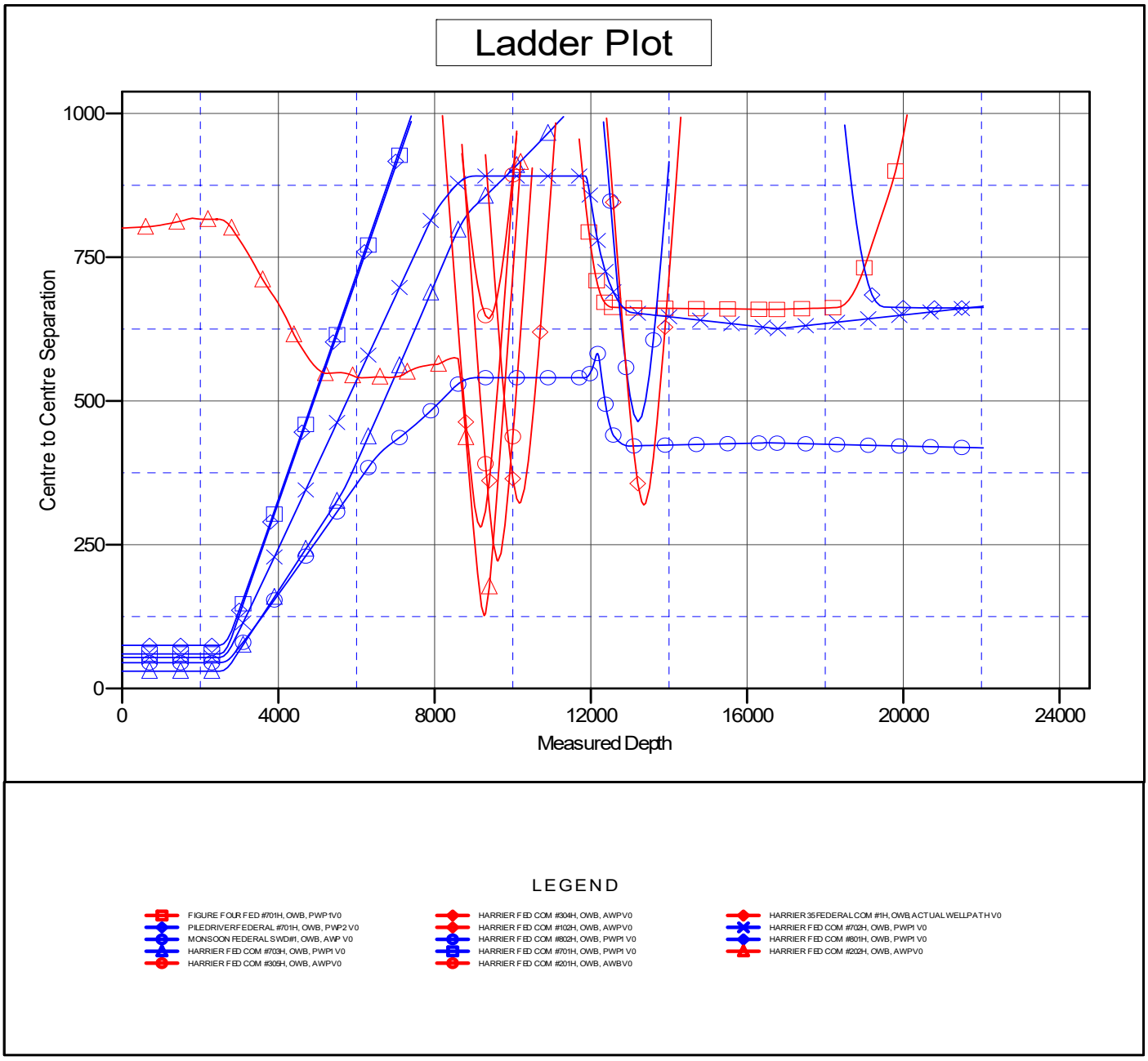
CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to *KB=30' @ 3397.3usft (TBD)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

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



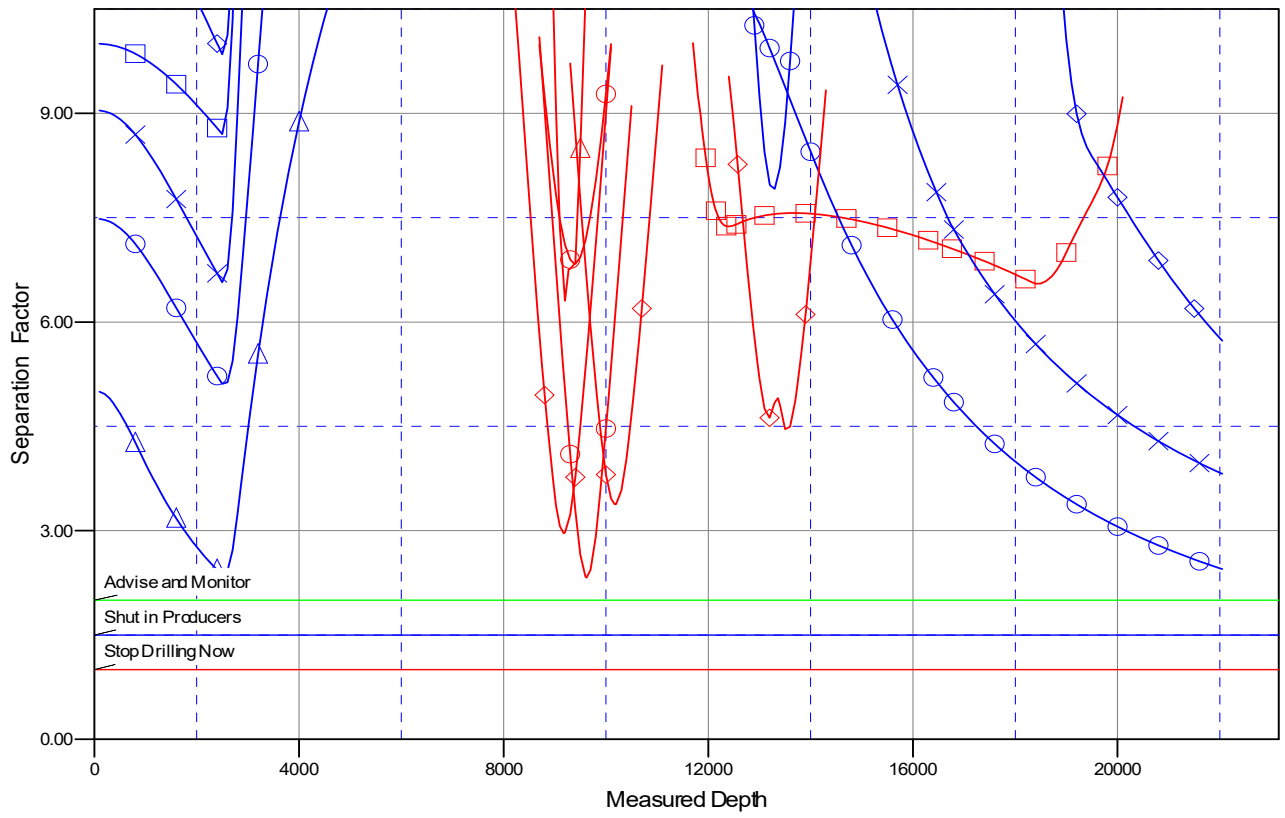
ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Reference Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	HARRIER FED COM #704H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	edm
Reference Design:	PWP1	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to *KB=30' @ 3397.3usft (TBD)
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

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

Separation Factor Plot



LEGEND

FIGURE FOUR FED #701H, OWB, PWP1V0
PILEDRIVERFEDERAL #701H, OWB, PWP2 V0
MONSOON FEDERAL SWD#1, OWB, AWP V0
HARRIER FED COM #703H, OWB, PWP1 V0
HARRIER FED COM #305H, OWB, AWPV0
HARRIER FED COM #304H, OWB, AWPV0
HARRIER FED COM #102H, OWB, AWPV0
HARRIER FED COM #802H, OWB, PWP1 V0
HARRIER FED COM #701H, OWB, PWP1 V0
HARRIER FED COM #201H, OWB, AWBV0
HARRIER 35 FEDERAL COM #1H, OWB, ACTUAL WELLPATH V0
HARRIER FED COM #702H, OWB, PWP1 V0
HARRIER FED COM #801H, OWB, PWP1 V0
HARRIER FED COM #202H, OWB, AWPV0

DELAWARE BASIN EAST

LEA PROSPECT (NM-E)
HARRIER FEDERAL PROJECT (LEA 2632)
HARRIER FED COM #704H

OWB

Plan: PWP1

Standard Survey Report

04 May, 2021

ConocoPhillips

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Well:	HARRIER FED COM #704H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Project	LEA PROSPECT (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		

Well	HARRIER FED 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

Wellbore	OWB				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2020	5/4/2021	6.59	59.77	47,419.56719401

Design	PWP1				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (usft)**	**+N/-S (usft)**	**+E/-W (usft)**	**Direction (°)**	
	0.0	0.0	0.0	183.13	

Survey Tool Program **Date** 5/4/2021

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,814.0	PWP1 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4
11,814.0	22,047.1	PWP1 (OWB)	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

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

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Well:	HARRIER FED COM #704H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
Start Build 2.00									
2,600.0	2.00	290.75	2,600.0	0.6	-1.6	-0.5	2.00	2.00	0.00
2,700.0	4.00	290.75	2,699.8	2.5	-6.5	-2.1	2.00	2.00	0.00
2,800.0	6.00	290.75	2,799.5	5.6	-14.7	-4.8	2.00	2.00	0.00
Start 5624.5 hold at 2800.0 MD									
2,900.0	6.00	290.75	2,898.9	9.3	-24.5	-7.9	0.00	0.00	0.00
3,000.0	6.00	290.75	2,998.4	13.0	-34.2	-11.1	0.00	0.00	0.00
3,100.0	6.00	290.75	3,097.8	16.7	-44.0	-14.2	0.00	0.00	0.00
3,200.0	6.00	290.75	3,197.3	20.4	-53.8	-17.4	0.00	0.00	0.00
3,300.0	6.00	290.75	3,296.7	24.1	-63.5	-20.6	0.00	0.00	0.00
3,400.0	6.00	290.75	3,396.2	27.8	-73.3	-23.7	0.00	0.00	0.00
3,500.0	6.00	290.75	3,495.6	31.5	-83.1	-26.9	0.00	0.00	0.00
3,600.0	6.00	290.75	3,595.1	35.2	-92.9	-30.1	0.00	0.00	0.00
3,700.0	6.00	290.75	3,694.5	38.9	-102.6	-33.2	0.00	0.00	0.00
3,800.0	6.00	290.75	3,794.0	42.6	-112.4	-36.4	0.00	0.00	0.00
3,900.0	6.00	290.75	3,893.4	46.3	-122.2	-39.6	0.00	0.00	0.00
4,000.0	6.00	290.75	3,992.9	50.0	-132.0	-42.7	0.00	0.00	0.00
4,100.0	6.00	290.75	4,092.3	53.7	-141.7	-45.9	0.00	0.00	0.00
4,200.0	6.00	290.75	4,191.8	57.4	-151.5	-49.0	0.00	0.00	0.00
4,300.0	6.00	290.75	4,291.2	61.1	-161.3	-52.2	0.00	0.00	0.00
4,400.0	6.00	290.75	4,390.7	64.8	-171.1	-55.4	0.00	0.00	0.00
4,500.0	6.00	290.75	4,490.1	68.5	-180.8	-58.5	0.00	0.00	0.00
4,600.0	6.00	290.75	4,589.6	72.2	-190.6	-61.7	0.00	0.00	0.00
4,700.0	6.00	290.75	4,689.0	75.9	-200.4	-64.9	0.00	0.00	0.00
4,800.0	6.00	290.75	4,788.5	79.6	-210.2	-68.0	0.00	0.00	0.00
4,900.0	6.00	290.75	4,887.9	83.3	-219.9	-71.2	0.00	0.00	0.00
5,000.0	6.00	290.75	4,987.4	87.0	-229.7	-74.4	0.00	0.00	0.00
5,100.0	6.00	290.75	5,086.9	90.7	-239.5	-77.5	0.00	0.00	0.00
5,200.0	6.00	290.75	5,186.3	94.5	-249.3	-80.7	0.00	0.00	0.00
5,300.0	6.00	290.75	5,285.8	98.2	-259.0	-83.8	0.00	0.00	0.00
5,400.0	6.00	290.75	5,385.2	101.9	-268.8	-87.0	0.00	0.00	0.00
5,500.0	6.00	290.75	5,484.7	105.6	-278.6	-90.2	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Well:	HARRIER FED COM #704H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,600.0	6.00	290.75	5,584.1	109.3	-288.4	-93.3	0.00	0.00	0.00
5,700.0	6.00	290.75	5,683.6	113.0	-298.1	-96.5	0.00	0.00	0.00
5,800.0	6.00	290.75	5,783.0	116.7	-307.9	-99.7	0.00	0.00	0.00
5,900.0	6.00	290.75	5,882.5	120.4	-317.7	-102.8	0.00	0.00	0.00
6,000.0	6.00	290.75	5,981.9	124.1	-327.5	-106.0	0.00	0.00	0.00
6,100.0	6.00	290.75	6,081.4	127.8	-337.2	-109.2	0.00	0.00	0.00
6,200.0	6.00	290.75	6,180.8	131.5	-347.0	-112.3	0.00	0.00	0.00
6,300.0	6.00	290.75	6,280.3	135.2	-356.8	-115.5	0.00	0.00	0.00
6,400.0	6.00	290.75	6,379.7	138.9	-366.6	-118.6	0.00	0.00	0.00
6,500.0	6.00	290.75	6,479.2	142.6	-376.3	-121.8	0.00	0.00	0.00
6,600.0	6.00	290.75	6,578.6	146.3	-386.1	-125.0	0.00	0.00	0.00
6,700.0	6.00	290.75	6,678.1	150.0	-395.9	-128.1	0.00	0.00	0.00
6,800.0	6.00	290.75	6,777.5	153.7	-405.7	-131.3	0.00	0.00	0.00
6,900.0	6.00	290.75	6,877.0	157.4	-415.4	-134.5	0.00	0.00	0.00
7,000.0	6.00	290.75	6,976.4	161.1	-425.2	-137.6	0.00	0.00	0.00
7,100.0	6.00	290.75	7,075.9	164.8	-435.0	-140.8	0.00	0.00	0.00
7,200.0	6.00	290.75	7,175.3	168.5	-444.8	-144.0	0.00	0.00	0.00
7,300.0	6.00	290.75	7,274.8	172.2	-454.5	-147.1	0.00	0.00	0.00
7,400.0	6.00	290.75	7,374.3	175.9	-464.3	-150.3	0.00	0.00	0.00
7,500.0	6.00	290.75	7,473.7	179.6	-474.1	-153.5	0.00	0.00	0.00
7,600.0	6.00	290.75	7,573.2	183.3	-483.9	-156.6	0.00	0.00	0.00
7,700.0	6.00	290.75	7,672.6	187.0	-493.6	-159.8	0.00	0.00	0.00
7,800.0	6.00	290.75	7,772.1	190.7	-503.4	-162.9	0.00	0.00	0.00
7,900.0	6.00	290.75	7,871.5	194.5	-513.2	-166.1	0.00	0.00	0.00
8,000.0	6.00	290.75	7,971.0	198.2	-523.0	-169.3	0.00	0.00	0.00
8,100.0	6.00	290.75	8,070.4	201.9	-532.7	-172.4	0.00	0.00	0.00
8,200.0	6.00	290.75	8,169.9	205.6	-542.5	-175.6	0.00	0.00	0.00
8,300.0	6.00	290.75	8,269.3	209.3	-552.3	-178.8	0.00	0.00	0.00
8,400.0	6.00	290.75	8,368.8	213.0	-562.1	-181.9	0.00	0.00	0.00
8,424.5	6.00	290.75	8,393.1	213.9	-564.4	-182.7	0.00	0.00	0.00
Start Drop -1.00									
8,500.0	5.24	290.75	8,468.3	216.5	-571.4	-184.9	1.00	-1.00	0.00
8,600.0	4.24	290.75	8,567.9	219.4	-579.1	-187.4	1.00	-1.00	0.00
8,700.0	3.24	290.75	8,667.7	221.7	-585.2	-189.4	1.00	-1.00	0.00
8,800.0	2.24	290.75	8,767.6	223.4	-589.7	-190.9	1.00	-1.00	0.00
8,900.0	1.24	290.75	8,867.6	224.5	-592.5	-191.8	1.00	-1.00	0.00
9,000.0	0.24	290.75	8,967.5	225.0	-593.8	-192.2	1.00	-1.00	0.00
9,024.5	0.00	0.00	8,992.0	225.0	-593.8	-192.2	1.00	-1.00	0.00
Start 2822.5 hold at 9024.5 MD									
9,100.0	0.00	0.00	9,067.5	225.0	-593.8	-192.2	0.00	0.00	0.00
9,200.0	0.00	0.00	9,167.5	225.0	-593.8	-192.2	0.00	0.00	0.00
9,300.0	0.00	0.00	9,267.5	225.0	-593.8	-192.2	0.00	0.00	0.00
9,400.0	0.00	0.00	9,367.5	225.0	-593.8	-192.2	0.00	0.00	0.00
9,500.0	0.00	0.00	9,467.5	225.0	-593.8	-192.2	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Well:	HARRIER FED COM #704H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
9,600.0	0.00	0.00	9,567.5	225.0	-593.8	-192.2	0.00	0.00	0.00
9,700.0	0.00	0.00	9,667.5	225.0	-593.8	-192.2	0.00	0.00	0.00
9,800.0	0.00	0.00	9,767.5	225.0	-593.8	-192.2	0.00	0.00	0.00
9,900.0	0.00	0.00	9,867.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,000.0	0.00	0.00	9,967.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,100.0	0.00	0.00	10,067.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,200.0	0.00	0.00	10,167.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,300.0	0.00	0.00	10,267.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,400.0	0.00	0.00	10,367.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,500.0	0.00	0.00	10,467.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,600.0	0.00	0.00	10,567.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,700.0	0.00	0.00	10,667.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,800.0	0.00	0.00	10,767.5	225.0	-593.8	-192.2	0.00	0.00	0.00
10,900.0	0.00	0.00	10,867.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,000.0	0.00	0.00	10,967.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,100.0	0.00	0.00	11,067.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,200.0	0.00	0.00	11,167.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,300.0	0.00	0.00	11,267.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,400.0	0.00	0.00	11,367.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,500.0	0.00	0.00	11,467.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,600.0	0.00	0.00	11,567.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,700.0	0.00	0.00	11,667.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,800.0	0.00	0.00	11,767.5	225.0	-593.8	-192.2	0.00	0.00	0.00
11,847.0	0.00	0.00	11,814.5	225.0	-593.8	-192.2	0.00	0.00	0.00
Start DLS 12.00 TFO 179.85									
11,900.0	6.37	179.85	11,867.4	222.1	-593.8	-189.3	12.00	12.00	0.00
12,000.0	18.37	179.85	11,964.9	200.7	-593.7	-167.9	12.00	12.00	0.00
12,100.0	30.37	179.85	12,055.9	159.5	-593.6	-126.8	12.00	12.00	0.00
12,200.0	42.37	179.85	12,136.2	100.3	-593.5	-67.7	12.00	12.00	0.00
12,300.0	54.37	179.85	12,202.6	25.7	-593.3	6.8	12.00	12.00	0.00
12,400.0	66.37	179.85	12,251.9	-61.0	-593.0	93.4	12.00	12.00	0.00
12,500.0	78.37	179.85	12,282.2	-156.2	-592.8	188.3	12.00	12.00	0.00
12,598.2	90.15	179.85	12,292.0	-253.7	-592.5	285.7	12.00	12.00	0.00
Start 3860.3 hold at 12598.2 MD									
12,600.0	90.15	179.85	12,292.0	-255.5	-592.5	287.5	0.00	0.00	0.00
12,700.0	90.15	179.85	12,291.7	-355.5	-592.3	387.4	0.00	0.00	0.00
12,800.0	90.15	179.85	12,291.4	-455.5	-592.0	487.2	0.00	0.00	0.00
12,900.0	90.15	179.85	12,291.2	-555.5	-591.7	587.0	0.00	0.00	0.00
13,000.0	90.15	179.85	12,290.9	-655.5	-591.5	686.9	0.00	0.00	0.00
13,100.0	90.15	179.85	12,290.7	-755.5	-591.2	786.7	0.00	0.00	0.00
13,200.0	90.15	179.85	12,290.4	-855.5	-590.9	886.5	0.00	0.00	0.00
13,300.0	90.15	179.85	12,290.2	-955.5	-590.7	986.4	0.00	0.00	0.00
13,400.0	90.15	179.85	12,289.9	-1,055.5	-590.4	1,086.2	0.00	0.00	0.00
13,500.0	90.15	179.85	12,289.6	-1,155.5	-590.1	1,186.0	0.00	0.00	0.00

ConocoPhillips

Survey Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Well:	HARRIER FED COM #704H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
13,600.0	90.15	179.85	12,289.4	-1,255.5	-589.9	1,285.9	0.00	0.00	0.00
13,700.0	90.15	179.85	12,289.1	-1,355.5	-589.6	1,385.7	0.00	0.00	0.00
13,800.0	90.15	179.85	12,288.9	-1,455.5	-589.3	1,485.5	0.00	0.00	0.00
13,900.0	90.15	179.85	12,288.6	-1,555.5	-589.1	1,585.4	0.00	0.00	0.00
14,000.0	90.15	179.85	12,288.3	-1,655.5	-588.8	1,685.2	0.00	0.00	0.00
14,100.0	90.15	179.85	12,288.1	-1,755.5	-588.5	1,785.0	0.00	0.00	0.00
14,200.0	90.15	179.85	12,287.8	-1,855.5	-588.3	1,884.9	0.00	0.00	0.00
14,300.0	90.15	179.85	12,287.6	-1,955.5	-588.0	1,984.7	0.00	0.00	0.00
14,400.0	90.15	179.85	12,287.3	-2,055.5	-587.7	2,084.6	0.00	0.00	0.00
14,500.0	90.15	179.85	12,287.1	-2,155.5	-587.5	2,184.4	0.00	0.00	0.00
14,600.0	90.15	179.85	12,286.8	-2,255.5	-587.2	2,284.2	0.00	0.00	0.00
14,700.0	90.15	179.85	12,286.5	-2,355.5	-586.9	2,384.1	0.00	0.00	0.00
14,800.0	90.15	179.85	12,286.3	-2,455.5	-586.7	2,483.9	0.00	0.00	0.00
14,900.0	90.15	179.85	12,286.0	-2,555.5	-586.4	2,583.7	0.00	0.00	0.00
15,000.0	90.15	179.85	12,285.8	-2,655.5	-586.1	2,683.6	0.00	0.00	0.00
15,100.0	90.15	179.85	12,285.5	-2,755.5	-585.9	2,783.4	0.00	0.00	0.00
15,200.0	90.15	179.85	12,285.2	-2,855.5	-585.6	2,883.2	0.00	0.00	0.00
15,300.0	90.15	179.85	12,285.0	-2,955.5	-585.3	2,983.1	0.00	0.00	0.00
15,400.0	90.15	179.85	12,284.7	-3,055.5	-585.1	3,082.9	0.00	0.00	0.00
15,500.0	90.15	179.85	12,284.5	-3,155.5	-584.8	3,182.7	0.00	0.00	0.00
15,600.0	90.15	179.85	12,284.2	-3,255.5	-584.5	3,282.6	0.00	0.00	0.00
15,700.0	90.15	179.85	12,284.0	-3,355.5	-584.3	3,382.4	0.00	0.00	0.00
15,800.0	90.15	179.85	12,283.7	-3,455.5	-584.0	3,482.2	0.00	0.00	0.00
15,900.0	90.15	179.85	12,283.4	-3,555.5	-583.7	3,582.1	0.00	0.00	0.00
16,000.0	90.15	179.85	12,283.2	-3,655.5	-583.5	3,681.9	0.00	0.00	0.00
16,100.0	90.15	179.85	12,282.9	-3,755.5	-583.2	3,781.7	0.00	0.00	0.00
16,200.0	90.15	179.85	12,282.7	-3,855.5	-582.9	3,881.6	0.00	0.00	0.00
16,300.0	90.15	179.85	12,282.4	-3,955.5	-582.7	3,981.4	0.00	0.00	0.00
16,400.0	90.15	179.85	12,282.2	-4,055.5	-582.4	4,081.3	0.00	0.00	0.00
16,458.5	90.15	179.85	12,282.0	-4,114.0	-582.2	4,139.7	0.00	0.00	0.00
Start DLS 2.00 TFO 5.59									
16,461.1	90.20	179.85	12,282.0	-4,116.5	-582.2	4,142.2	2.00	1.99	0.19
Start 287.0 hold at 16461.1 MD									
16,500.0	90.20	179.85	12,281.9	-4,155.5	-582.1	4,181.1	0.00	0.00	0.00
16,600.0	90.20	179.85	12,281.5	-4,255.5	-581.9	4,280.9	0.00	0.00	0.00
16,700.0	90.20	179.85	12,281.2	-4,355.5	-581.6	4,380.8	0.00	0.00	0.00
16,748.0	90.20	179.85	12,281.0	-4,403.5	-581.5	4,428.7	0.00	0.00	0.00
Start DLS 2.00 TFO -88.94									
16,767.9	90.21	179.46	12,280.9	-4,423.4	-581.4	4,448.5	2.00	0.04	-2.00
Start 5279.2 hold at 16767.9 MD									
16,800.0	90.21	179.46	12,280.8	-4,455.5	-581.1	4,480.6	0.00	0.00	0.00
16,900.0	90.21	179.46	12,280.5	-4,555.5	-580.1	4,580.4	0.00	0.00	0.00
17,000.0	90.21	179.46	12,280.1	-4,655.5	-579.2	4,680.2	0.00	0.00	0.00
17,100.0	90.21	179.46	12,279.7	-4,755.5	-578.2	4,780.0	0.00	0.00	0.00

ConocoPhillips
Survey Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Well:	HARRIER FED COM #704H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
17,200.0	90.21	179.46	12,279.4	-4,855.5	-577.3	4,879.8	0.00	0.00	0.00
17,300.0	90.21	179.46	12,279.0	-4,955.5	-576.3	4,979.5	0.00	0.00	0.00
17,400.0	90.21	179.46	12,278.7	-5,055.4	-575.4	5,079.3	0.00	0.00	0.00
17,500.0	90.21	179.46	12,278.3	-5,155.4	-574.4	5,179.1	0.00	0.00	0.00
17,600.0	90.21	179.46	12,277.9	-5,255.4	-573.5	5,278.9	0.00	0.00	0.00
17,700.0	90.21	179.46	12,277.6	-5,355.4	-572.5	5,378.7	0.00	0.00	0.00
17,800.0	90.21	179.46	12,277.2	-5,455.4	-571.6	5,478.5	0.00	0.00	0.00
17,900.0	90.21	179.46	12,276.9	-5,555.4	-570.6	5,578.3	0.00	0.00	0.00
18,000.0	90.21	179.46	12,276.5	-5,655.4	-569.7	5,678.1	0.00	0.00	0.00
18,100.0	90.21	179.46	12,276.2	-5,755.4	-568.7	5,777.9	0.00	0.00	0.00
18,200.0	90.21	179.46	12,275.8	-5,855.4	-567.8	5,877.7	0.00	0.00	0.00
18,300.0	90.21	179.46	12,275.4	-5,955.4	-566.8	5,977.5	0.00	0.00	0.00
18,400.0	90.21	179.46	12,275.1	-6,055.4	-565.9	6,077.3	0.00	0.00	0.00
18,500.0	90.21	179.46	12,274.7	-6,155.4	-564.9	6,177.1	0.00	0.00	0.00
18,600.0	90.21	179.46	12,274.4	-6,255.4	-564.0	6,276.9	0.00	0.00	0.00
18,700.0	90.21	179.46	12,274.0	-6,355.4	-563.0	6,376.7	0.00	0.00	0.00
18,800.0	90.21	179.46	12,273.6	-6,455.4	-562.1	6,476.4	0.00	0.00	0.00
18,900.0	90.21	179.46	12,273.3	-6,555.4	-561.1	6,576.2	0.00	0.00	0.00
19,000.0	90.21	179.46	12,272.9	-6,655.4	-560.2	6,676.0	0.00	0.00	0.00
19,100.0	90.21	179.46	12,272.6	-6,755.4	-559.2	6,775.8	0.00	0.00	0.00
19,200.0	90.21	179.46	12,272.2	-6,855.4	-558.3	6,875.6	0.00	0.00	0.00
19,300.0	90.21	179.46	12,271.9	-6,955.3	-557.3	6,975.4	0.00	0.00	0.00
19,400.0	90.21	179.46	12,271.5	-7,055.3	-556.4	7,075.2	0.00	0.00	0.00
19,500.0	90.21	179.46	12,271.1	-7,155.3	-555.4	7,175.0	0.00	0.00	0.00
19,600.0	90.21	179.46	12,270.8	-7,255.3	-554.5	7,274.8	0.00	0.00	0.00
19,700.0	90.21	179.46	12,270.4	-7,355.3	-553.5	7,374.6	0.00	0.00	0.00
19,800.0	90.21	179.46	12,270.1	-7,455.3	-552.6	7,474.4	0.00	0.00	0.00
19,900.0	90.21	179.46	12,269.7	-7,555.3	-551.6	7,574.2	0.00	0.00	0.00
20,000.0	90.21	179.46	12,269.3	-7,655.3	-550.7	7,674.0	0.00	0.00	0.00
20,100.0	90.21	179.46	12,269.0	-7,755.3	-549.7	7,773.8	0.00	0.00	0.00
20,200.0	90.21	179.46	12,268.6	-7,855.3	-548.8	7,873.6	0.00	0.00	0.00
20,300.0	90.21	179.46	12,268.3	-7,955.3	-547.8	7,973.3	0.00	0.00	0.00
20,400.0	90.21	179.46	12,267.9	-8,055.3	-546.9	8,073.1	0.00	0.00	0.00
20,500.0	90.21	179.46	12,267.5	-8,155.3	-545.9	8,172.9	0.00	0.00	0.00
20,600.0	90.21	179.46	12,267.2	-8,255.3	-545.0	8,272.7	0.00	0.00	0.00
20,700.0	90.21	179.46	12,266.8	-8,355.3	-544.0	8,372.5	0.00	0.00	0.00
20,800.0	90.21	179.46	12,266.5	-8,455.3	-543.1	8,472.3	0.00	0.00	0.00
20,900.0	90.21	179.46	12,266.1	-8,555.3	-542.1	8,572.1	0.00	0.00	0.00
21,000.0	90.21	179.46	12,265.8	-8,655.3	-541.2	8,671.9	0.00	0.00	0.00
21,100.0	90.21	179.46	12,265.4	-8,755.3	-540.2	8,771.7	0.00	0.00	0.00
21,200.0	90.21	179.46	12,265.0	-8,855.2	-539.3	8,871.5	0.00	0.00	0.00
21,300.0	90.21	179.46	12,264.7	-8,955.2	-538.3	8,971.3	0.00	0.00	0.00
21,400.0	90.21	179.46	12,264.3	-9,055.2	-537.4	9,071.1	0.00	0.00	0.00

ConocoPhillips
Survey Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well HARRIER FED COM #704H
Project:	LEA PROSPECT (NM-E)	**TVD Reference:**	*KB=30' @ 3397.3usft (TBD)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)	**MD Reference:**	*KB=30' @ 3397.3usft (TBD)
Well:	HARRIER FED COM #704H	**North Reference:**	Grid
Wellbore:	OWB	**Survey Calculation Method:**	Minimum Curvature
Design:	PWP1	**Database:**	edm

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)
21,500.0	90.21	179.46	12,264.0	-9,155.2	-536.4	9,170.9	0.00	0.00	0.00
21,600.0	90.21	179.46	12,263.6	-9,255.2	-535.4	9,270.7	0.00	0.00	0.00
21,700.0	90.21	179.46	12,263.2	-9,355.2	-534.5	9,370.5	0.00	0.00	0.00
21,800.0	90.21	179.46	12,262.9	-9,455.2	-533.5	9,470.2	0.00	0.00	0.00
21,900.0	90.21	179.46	12,262.5	-9,555.2	-532.6	9,570.0	0.00	0.00	0.00
22,000.0	90.21	179.46	12,262.2	-9,655.2	-531.6	9,669.8	0.00	0.00	0.00
22,047.1	90.21	179.46	12,262.0	-9,702.3	-531.2	9,716.8	0.00	0.00	0.00
TD at 22047.1									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL (HARRIER FED - plan hits target center - Rectangle (sides W100.0 H5,298.0 D20.0)	0.21	359.46	12,262.0	-9,702.3	-531.2	388,043.10	710,844.50	32° 3' 54.065 N	103° 39' 9.736 W
LTP (HARRIER FED (- plan misses target center by 0.3usft at 21997.1usft MD (12262.2 TVD, -9652.3 N, -531.7 E) - Point	0.00	0.01	12,262.0	-9,652.3	-531.5	388,093.10	710,844.20	32° 3' 54.560 N	103° 39' 9.736 W
POI#1 (HARRIER FEI - plan hits target center - Rectangle (sides W100.0 H289.0 D20.0)	0.20	359.85	12,281.0	-4,403.5	-581.5	393,341.90	710,794.20	32° 4' 46.505 N	103° 39' 9.932 W
4900'FFTP (HARRIEF - plan hits target center - Rectangle (sides W100.0 H4,960.0 D20.0)	0.15	359.85	12,282.0	-4,114.0	-582.2	393,631.39	710,793.45	32° 4' 49.370 N	103° 39' 9.920 W
FTP (HARRIER FED (- plan misses target center by 665.5usft at 12056.6usft MD (12017.4 TVD, 179.7 N, -593.7 E) - Circle (radius 50.0)	0.00	0.00	12,292.0	786.0	-595.4	398,531.40	710,780.30	32° 5' 37.861 N	103° 39' 9.713 W

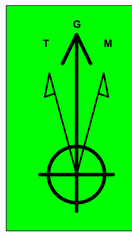
Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2500	2500	0	0	Start Build 2.00
2800	2799	6	-15	Start 5624.5 hold at 2800.0 MD
8424	8393	214	-564	Start Drop -1.00
9024	8992	225	-594	Start 2822.5 hold at 9024.5 MD
11,847	11,814	225	-594	Start DLS 12.00 TFO 179.85
12,598	12,292	-254	-593	Start 3860.3 hold at 12598.2 MD
16,459	12,282	-4114	-582	Start DLS 2.00 TFO 5.59
16,461	12,282	-4117	-582	Start 287.0 hold at 16461.1 MD
16,748	12,281	-4404	-581	Start DLS 2.00 TFO -88.94
16,768	12,281	-4423	-581	Start 5279.2 hold at 16767.9 MD
22,047	12,262	-9702	-531	TD at 22047.1

Checked By: _____ Approved By: _____ Date: _____

ConocoPhillips

Project:	LEA PROSPECT (NM-E)
Site:	HARRIER FEDERAL PROJECT (LEA 2632)
Well:	HARRIER FED COM #704H
Wellbore:	OWB
Design:	PWP1
GL:	3366.3
*KB=30' @ 3397.3usft (TBD)	



Azimuths to Grid North
True North: -0.36°
Magnetic North: 6.22°

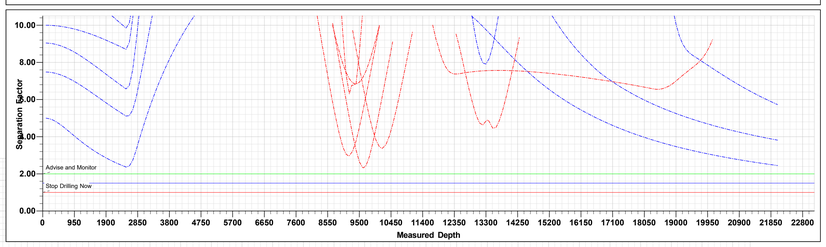
Magnetic Field
Strength: 47419.6nT
Dip Angle: 59.77°
Date: 5/4/2021
Model: IGRF2020

WELL DETAILS: HARRIER FED COM #704H

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	397745.40	711375.70	32° 5' 30.045 N	103° 39' 2.850 W

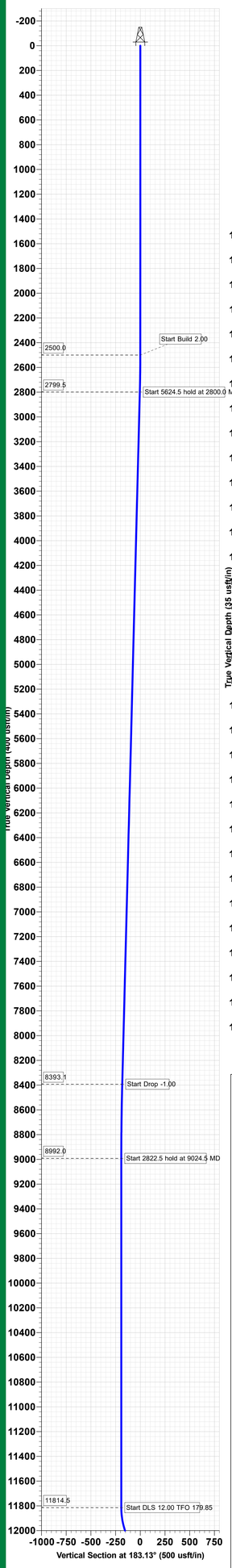
DESIGN TARGET DETAILS

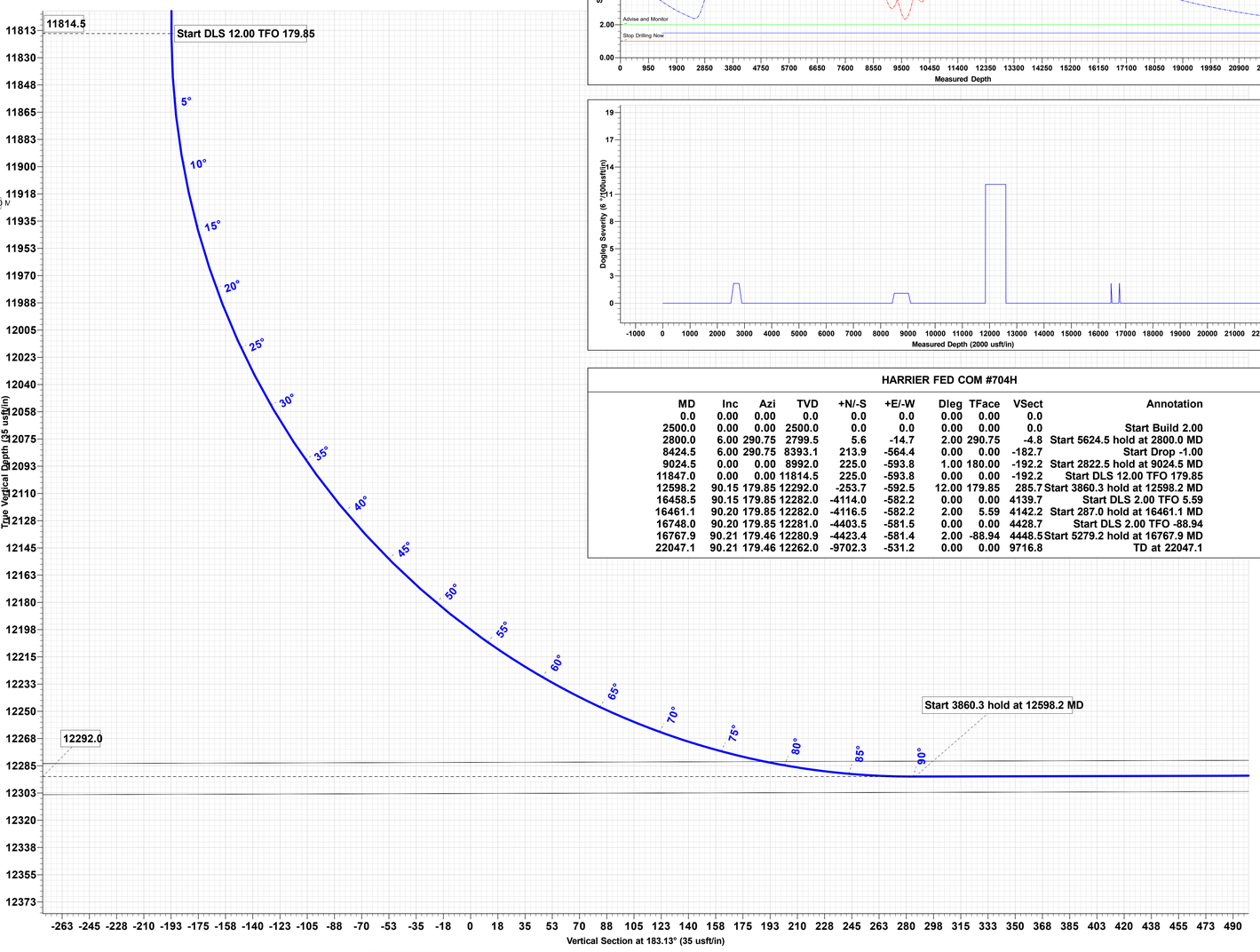
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
LTP (HARRIER FED COM #704H)	12262.0	-9652.3	-531.5	388093.10	710844.20	32° 3' 54.560 N	103° 39' 9.736 W
PBHL (HARRIER FED COM #704H)	12262.0	-9702.3	-531.2	388043.10	710844.50	32° 3' 54.065 N	103° 39' 9.736 W
POI#1 (HARRIER FED COM #704H)	12281.0	-4403.5	-581.5	393341.90	710794.20	32° 4' 46.505 N	103° 39' 9.932 W
4900'FFTP (HARRIER FED COM #704H)	12282.0	-4114.0	-582.2	393631.39	710793.45	32° 4' 49.370 N	103° 39' 9.920 W
FTP (HARRIER FED COM #704H)	12292.0	786.0	-595.4	398531.40	710780.30	32° 5' 37.861 N	103° 39' 9.713 W

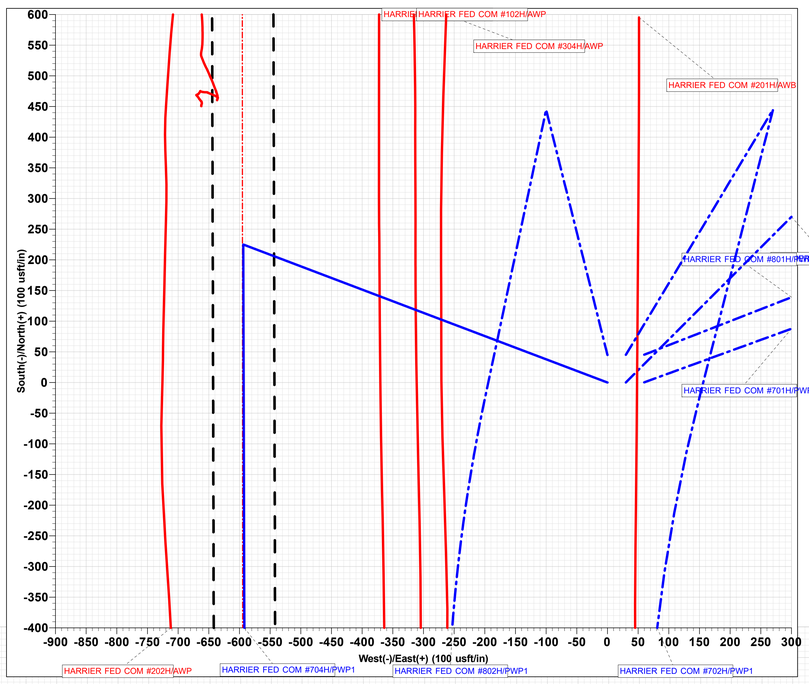


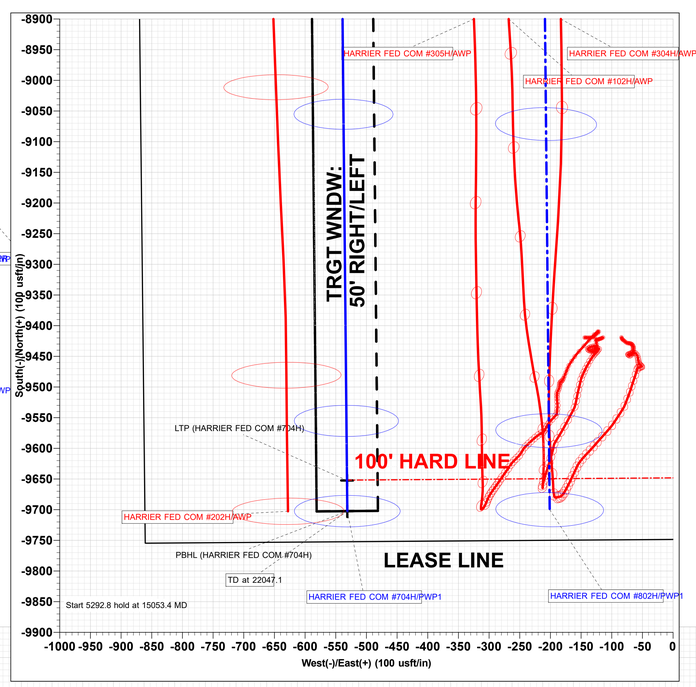
HARRIER FED COM #704H

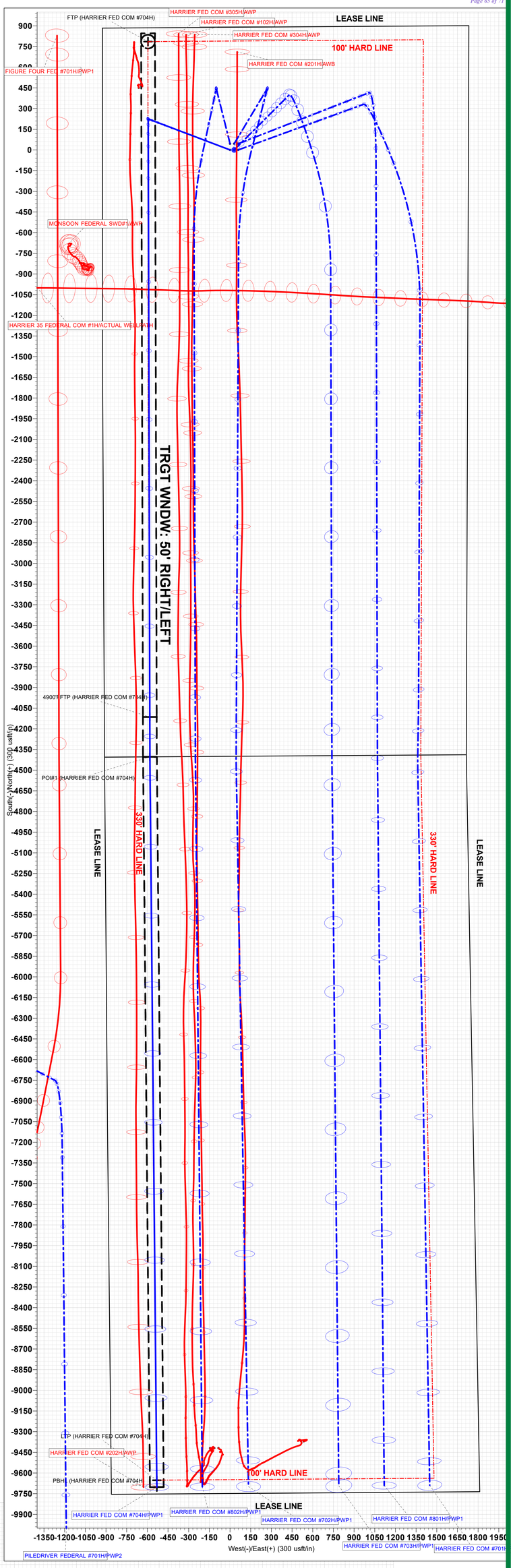
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0	Start Build 2.00
2800.0	6.00	290.75	2799.5	5.6	-14.7	2.00	290.75	-4.8	Start 5624.5 hold at 2800.0 MD
8424.5	6.00	290.75	8393.1	213.9	-564.4	0.00	0.00	-182.7	Start Drop -1.00
9024.5	0.00	0.00	8992.0	225.0	-593.8	1.00	180.00	-192.2	Start 2822.5 hold at 9024.5 MD
11847.0	0.00	0.00	11814.5	225.0	-593.8	0.00	0.00	-192.2	Start DLS 12.00 TFO 179.85
12598.2	90.15	179.85	12292.0	-253.7	-592.5	12.00	179.85	285.7	Start 3860.3 hold at 12598.2 MD
16458.5	90.15	179.85	12282.0	-4114.0	-582.2	0.00	0.00	4139.7	Start DLS 2.00 TFO 5.59
16461.1	90.20	179.85	12282.0	-4116.5	-582.2	2.00	5.59	4142.2	Start 287.0 hold at 16461.1 MD
16748.0	90.20	179.85	12281.0	-4403.5	-581.5	0.00	0.00	4428.7	Start DLS 2.00 TFO -88.94
16767.9	90.21	179.46	12280.9	-4423.4	-581.4	2.00	-88.94	4448.5	Start 5279.2 hold at 16767.9 MD
22047.1	90.21	179.46	12262.0	-9702.3	-531.2	0.00	0.00	9716.8	TD at 22047.1



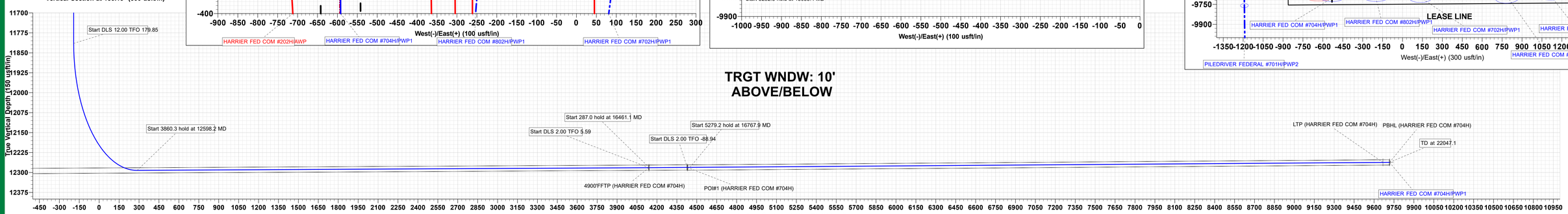






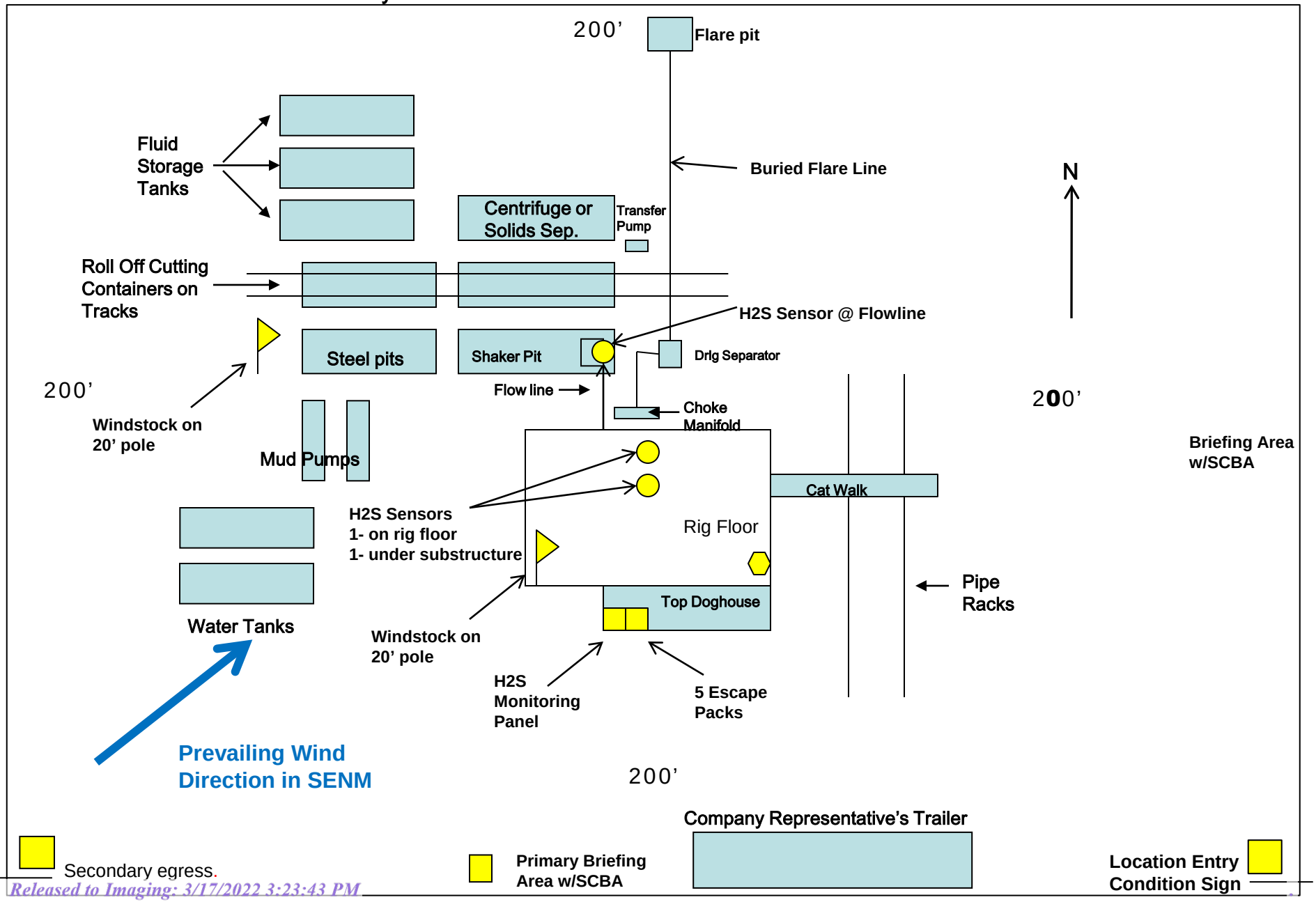


TRGT WNDW: 10' ABOVE/BELOW



COG Operating LLC
H_2S Equipment Schematic
Terrain: Shinnery sand hills.

Well pad will be 400' X 400' with cellar in center of pad



COG OPERATING LLC
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

a. The hazards and characteristics of hydrogen sulfide (H_2S).
b. The proper use and maintenance of personal protective equipment and life support systems.
c. The proper use of H_2S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
d. The proper techniques for first aid and rescue procedures.

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

a. The effects of H2S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
c. The contents and requirements of the H_2S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H_2S SAFETY EQUIPMENT AND SYSTEMS

Note: All H_2S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S. If H2S greater than 100 ppm is encountered in the gas stream we will shut in and install H2S equipment.

a. Well Control Equipment:
   Flare line.
   Choke manifold with remotely operated choke.
   Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
   Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

b. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.

c. H2S detection and monitoring equipment:
2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.

d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.

e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.

f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

g. Communication:
Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

W A R N I N G

YOU ARE ENTERING AN H_2S AREA
AUTHORIZED PERSONNEL ONLY

1. ***BEARDS OR CONTACT LENSES NOT ALLOWED***
2. ***HARD HATS REQUIRED***
3. ***SMOKING IN DESIGNATED AREAS ONLY***
4. ***BE WIND CONSCIOUS AT ALL TIMES***
5. ***CK WITH COG OPERATING LLC FOREMAN AT MAIN OFFICE***

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

	OFFICE	MOBILE
COG OPERATING LLC OFFICE	575-748-6940	
SETH WILD	432-683-7443	432-528-3633
WALTER ROYE	575-748-6940	432-934-1886

EMERGENCY RESPONSE NUMBERS

	OFFICE
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451

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 89165

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 89165
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	3/17/2022
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	3/17/2022
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	3/17/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	3/17/2022