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.

2. Name of Operator

9. API Well No.
30-025-53971

3a. Address	3b. Phone No. *(include area code)*	10. Field and Pool, or Exploratory

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 11/01/2024

Additional Operator Remarks

Location of Well

0. SHL: SESW / 340 FSL / 1575 FWL / TWSP: 25S / RANGE: 35E / SECTION: 22 / LAT: 32.109551 / LONG: -103.358863 (TVD: 0 feet, MD: 0 feet)

PPP: NWSW / 2639 FSL / 837 FWL / TWSP: 25S / RANGE: 35E / SECTION: 27 / LAT: 32.101361 / LONG: -103.361229 (TVD: 13100 feet, MD: 16301 feet)

PPP: NWNW / 100 FNL / 840 FWL / TWSP: 25S / RANGE: 35E / SECTION: 27 / LAT: 32.10834 / LONG: -103.361235 (TVD: 13100 feet, MD: 13760 feet)

BHL: SWSW / 50 FSL / 840 FWL / TWSP: 26S / RANGE: 35E / SECTION: 3 / LAT: 32.065185 / LONG: -103.361195 (TVD: 13100 feet, MD: 29458 feet)

BLM Point of Contact

Name: JANET D ESTES
Title: ADJUDICATOR
Phone: (575) 234-6233
Email: JESTES@BLM.GOV

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024 Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number 30-025-53971	Pool Code 98117	Pool Name WC-025 G-09 S263504N; Wolfcamp
Property Code 336534	Property Name HENNIN FEDERAL COM	Well Number 801H
OGRID No. 229137	Operator Name COG OPERATING LLC	Ground Level Elevation 3208.2'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	22	25-S	35-E		340 FSL	1575 FWL	32.109551°N	103.358863°W	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	3	26-S	35-E		50 FSL	840 FWL	32.065185°N	103.361195°W	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
960	Defining			COM

Order Numbers. Well setbacks are under Common Ownership: ☒Yes ☐No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	22	25-S	35-E		340 FSL	1575 FWL	32.109551°N	103.358863°W	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	27	25-S	35-E		100 FNL	840 FWL	32.108340°N	103.361235°W	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	3	26-S	34-E		100 FSL	840 FWL	32.065322°N	103.361195°W	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation: 3208.2'

OPERATOR CERTIFICATIONS

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

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Stan Wagner 9/11/23

Signature Date

Stan Wagner

Printed Name

Email Address

SURVEYOR CERTIFICATIONS

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

CHAD L. HARCROW NEW MEXICO 17777 LICENSED PROFESSIONAL SURVEYOR

Chad Harcrow 11/7/24

Signature and Seal of Professional Suveyor

Certificate Number	Date of Survey
17777	JUNE 19, 2023

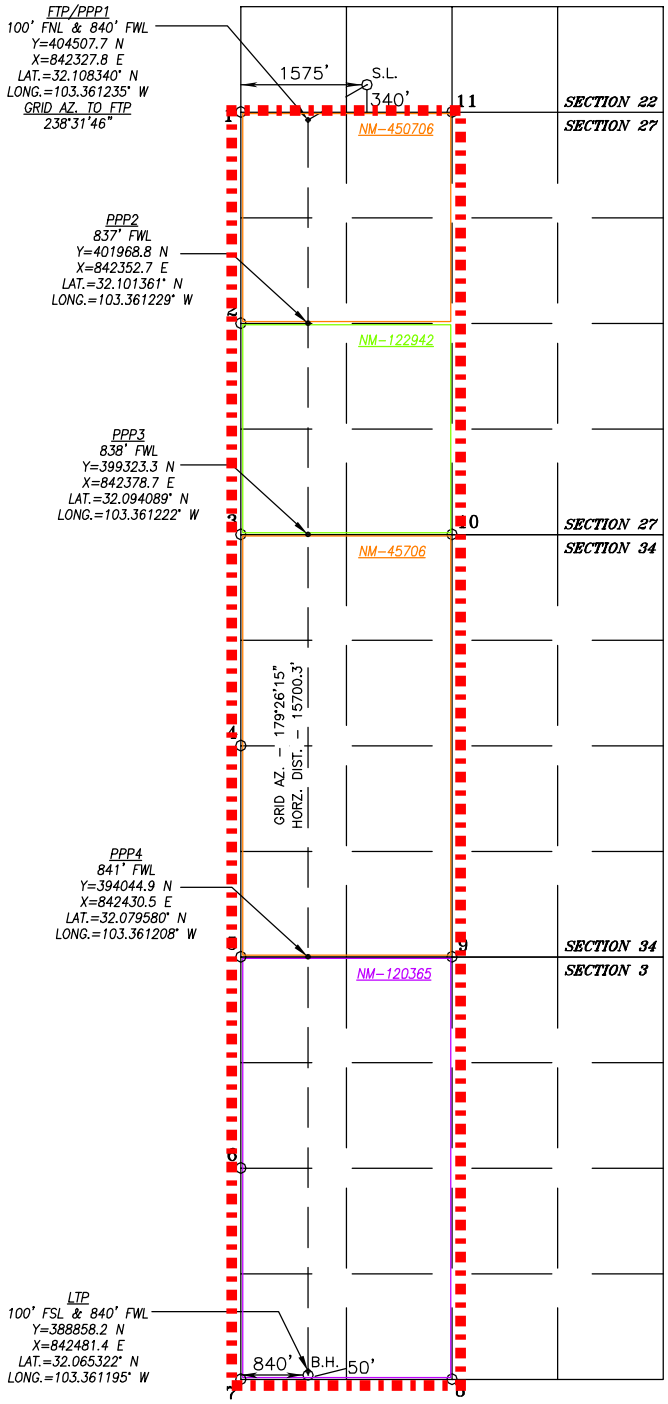
W.O.#24-1126 | DRAWN BY: WN | PAGE 1 OF 2

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



NAD 83 NME
SURFACE LOCATION
Y=404954.9 N
X=843058.3 E
LAT.=32.109551° N
LONG.=103.358863° W

POINT LEGEND	
1	Y=404599.6 N X=841486.7 E
2	Y=401963.7 N X=841515.9 E
3	Y=399317.2 N X=841540.4 E
4	Y=396677.3 N X=841563.6 E
5	Y=394038.0 N X=841589.3 E
6	Y=391396.2 N X=841615.0 E
7	Y=388755.3 N X=841642.4 E
8	Y=388764.2 N X=844285.8 E
9	Y=394059.7 N X=844233.2 E
10	Y=399336.6 N X=844183.4 E
11	Y=404625.3 N X=844131.7 E

NAD 83 NME
PROPOSED BOTTOM
HOLE LOCATION
Y=388808.2 N
X=842481.9 E
LAT.=32.065185° N
LONG.=103.361195° W

PAGE 2 OF 2

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: 229137** **Date: 09/19/2023**

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
Hennin Federal Com 601H	30-025-	N-22-25S-35E	340 FSL & 1545 FWL	± 1540	± 1860	± 2770
Hennin Federal Com 602H	30-025-	N-22-25S-35E	340 FSL & 1635 FWL	± 1340	± 1615	± 2410
Hennin Federal Com 701H	30-025-	N-22-25S-35E	340 FSL & 1605 FWL	± 1540	± 1860	± 2770
Hennin Federal Com 801H	30-025-	N-22-25S-35E	340 FSL & 1575 FWL	± 1150	± 1370	± 5590

IV. Central Delivery Point Name: 27 C CTB NENW 27-25S-35E [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
Hennin Federal Com 601H, 602H, 701H, 801H	Pending	± 8/1/2025	± 25 days from spud	TBD	TBD	TBD

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: 09/19/2023
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:

All ConocoPhillips production facility equipment will be sized per industry standards (API 12J) with adequate retention time to effectively separate all phases of production. Each project will take into consideration the number of wells and type curves for each formation pool to ensure adequate facility capacity. Design considerations will also include review of all piping, tanks, VRU's and associated equipment to ensure optimized gas capture minimized risk of release.

VII. Operational Practices

Actions Operator will take to comply with the requirements below:

B. Drilling Operations

- During drilling, flare stacks will be located a minimum of 100 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety, and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.

C. Completion Operations

- During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
- Individual well test separators will be set to properly separate gas and liquids. A temporary test separator will be utilized initially to process volumes. In addition, separators will be tied into flowback tanks which will be tied into the gas processing equipment for sales down a pipeline.

D. Venting and flaring during production operations

- During each phase of well life (drilling, completion and production) of a ConocoPhillips well, COP personnel will follow all necessary procedures to ensure both the operation and the equipment are within the NMAC 19.15.27.8 Subsection D guidelines.
- During well operations that require unloading of the well to atmospheric pressure, all reasonable actions will be taken to minimize vented gas
- Through the life of the well all flaring shall be measured, and venting events quantified using the data available and industry best practice.

E. Performance standards for separation, storage tank and flare equipment

- All storage tanks and separation equipment are designed minimize risk of liquid or vapor release and optimize gas capture. This includes automation for automatic gauging and pressure monitoring.

- All flare stacks are equipped with auto ignition devices and/or continuous pilots and are designed to operate at maximum combustion efficiency pursuant NMAC 19.15.27.8 Subsection E. Flares will follow COP spacing guidelines to ensure they are a safe distance from combustibles and operations equipment.
- COP personnel will conduct routine AVO inspections on a regular basis per NMAC 19.15.27.8 Subsection E guidelines.

F. Measurement of vented and flared natural gas.

- Measurement equipment will be installed to quantify gas flared during drilling, completion and production of the well.
- All measurement devices installed will meet accuracy ratings per AGA and API standards.
- Measurement devices will be installed without manifolds that allow diversion of gas around the metering element, except for the sole purpose of inspection of servicing the measurement device.

VIII. Best Management Practices

- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize blowdowns to atmosphere
- When feasible, Operator will use electric or air actuated equipment to reduce bleed emissions

ConocoPhillips Company - Hennin Fed Com 801H

1. Geologic Formations

TVD of target	13,100' EOL	Pilot hole depth	NA
MD at TD:	29,458'	Deepest expected fresh water:	230'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	820	Water	
Top of Salt	1187	Salt	
Base of Salt	4876	Salt	
Lamar	5259	Salt Water	
Bell Canyon	5299	Salt Water	
Cherry Canyon	6200	Oil/Gas	
Brushy Canyon	7735	Oil/Gas	
Bone Spring	9028	Oil/Gas	
1st Bone Spring Sand	10288	Oil/Gas	
2nd Bone Spring Sand	10833	Oil/Gas	
3rd Bone Spring Carb	11329	Oil/Gas	
3rd Bone Spring Sand	11933	Oil/Gas	
Wolfcamp A	12341	Oil/Gas	
Wolfcamp B	12649	Target	

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	870	10.75"	45.5	J55	BTC	5.25	1.18	18.06	20.11
9.875"	0	8000	7.625"	29.7	L80-ICY	BTC	1.54	1.02	3.06	3.09
8.750"	8000	12472	7.625"	29.7	P110-ICY	W513	1.23	1.54	2.88	1.73
6.75"	0	11972	5.5"	23	P110-CY	BTC	1.87	2.21	2.65	2.65
6.75"	11972	29,458	5.5"	23	P110-CY	W441	1.71	2.02	2.42	2.20
					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" W441 casing will be run back 200’ into the intermediate casing to ensure the coupling OD clearance is greater than .422” for the cement bond tie in.

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	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?	

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3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H_20 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	415	13.5	1.75	9.21	12	Lead: Class C + 4% Gel + 1% CaCl2
	250	14.8	1.34	6.4	8	Tail: Class C + 2% CaCl2
Inter. Stage 1	860	10.3	3.3	22	24	Halliburton tunded light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	751	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	1471	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

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

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

Casing String	TOC	% Excess
Surface	0’	50%
1st Intermediate	0’	50%
Production	11,972'	35% OH in Lateral (KOP to EOL)

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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.

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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 - 9.2	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	

ConocoPhillips Company - Hennin Fed Com 801H

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	8515 psi at 13100' TVD
Abnormal Temperature	NO 185 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.

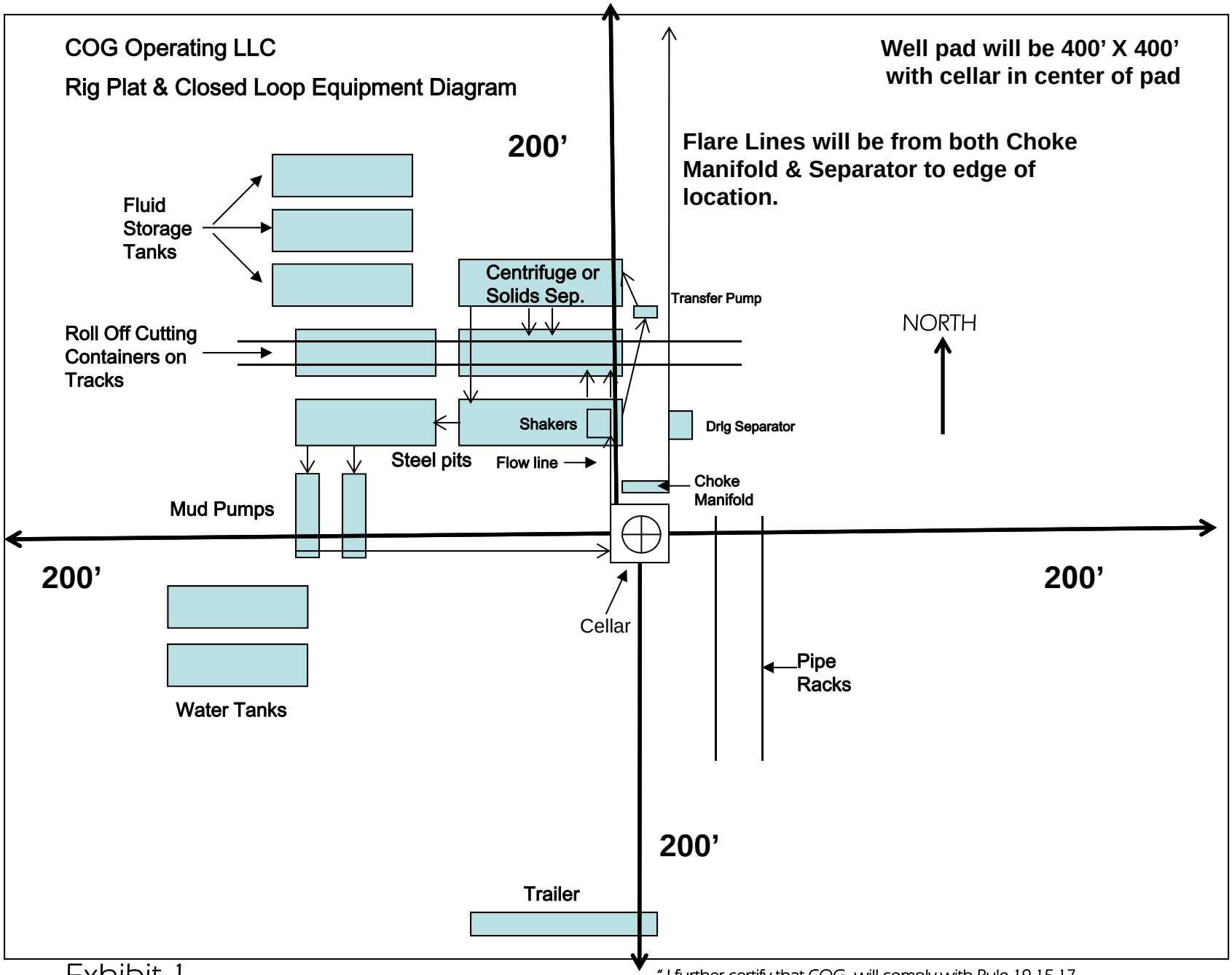

Exhibit 1

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

DELAWARE BASIN EAST

BULLDOG PROSPECT (NM-E)
HENNIN PROJECT
***HENNIN FED COM #801H**

OWB
PWP0

Anticollision Report

29 June, 2023

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Reference PWP0

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2,000.0usft	**Error Surface:**	Combined Pedal Curve
Warning Levels Evaluated at:	2.79 **Sigma**	**Casing Method:**	Added to Error Values

Survey Tool Program **Date** 6/29/2023

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	29,457.3	PWP0 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
HENNIN PROJECT						
JAVELINA FEDERAL #1 (P&A) - OWB - AWP						Out of range
*HENNIN FED COM #601H - OWB - PWP0	1,200.0	1,200.0	30.0	19.2	2.766	CC
*HENNIN FED COM #601H - OWB - PWP0	1,400.0	1,398.5	30.4	18.8	2.631	ES
*HENNIN FED COM #601H - OWB - PWP0	1,600.0	1,597.0	31.7	19.4	2.580	SF
*HENNIN FED COM #602H - OWB - PWP0	1,200.0	1,200.0	60.0	49.2	5.531	CC, ES, SF
*HENNIN FED COM #701H - OWB - PWP0	1,200.0	1,200.0	30.0	19.2	2.766	CC, ES, SF
*HENNIN FED COM #702H - OWB - PWP0						Out of range
*HENNIN FED COM #703H - OWB - PWP0						Out of range
*HENNIN FED COM #802H - OWB - PWP0						Out of range
HENNIN FED #12H - OWB - AWP						Out of range
HENNIN FED #24H - OWB - AWP						Out of range
JAZZBASS 34 FEDERAL 003H - OWB - AWP						Out of range

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

TD Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
HENNIN PROJECT						
JAVELINA FEDERAL #1 (P&A) - OWB - AWP	29,458.3	13,045.5				Out of Range @TD
*HENNIN FED COM #601H - OWB - PWP0	29,458.3	28,746.7	810.1	526.0	2.852	
*HENNIN FED COM #602H - OWB - PWP0	29,458.3	28,700.2	1,616.8	1,364.7	6.414	
*HENNIN FED COM #701H - OWB - PWP0	29,458.3	28,958.5	969.0	723.6	3.950	
*HENNIN FED COM #702H - OWB - PWP0	29,458.3	23,481.2				Out of Range @TD
*HENNIN FED COM #703H - OWB - PWP0	29,458.3	28,467.9				Out of Range @TD
*HENNIN FED COM #802H - OWB - PWP0	29,458.3	29,397.7				Out of Range @TD
HENNIN FED #12H - OWB - AWP	29,458.3	17,199.0				Out of Range @TD
HENNIN FED #24H - OWB - AWP	29,458.3	17,431.0				Out of Range @TD
JAZZBASS 34 FEDERAL 003H - OWB - AWP	29,458.3	11,746.2				Out of Range @TD

Offset Design: HENNIN PROJECT - *HENNIN FED COM #601H - OWB - PWP0

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Rule Assigned:

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.57	-0.3	-30.0	30.0	23.6	6.43	4.667	
100.0	100.0	100.0	100.0	3.2	3.2	-90.57	-0.3	-30.0	30.0	23.1	6.89	4.353	
200.0	200.0	200.0	200.0	3.5	3.5	-90.57	-0.3	-30.0	30.0	22.7	7.33	4.094	
300.0	300.0	300.0	300.0	3.7	3.7	-90.57	-0.3	-30.0	30.0	22.3	7.74	3.875	
400.0	400.0	400.0	400.0	3.9	3.9	-90.57	-0.3	-30.0	30.0	21.9	8.14	3.688	
500.0	500.0	500.0	500.0	4.1	4.1	-90.57	-0.3	-30.0	30.0	21.5	8.51	3.524	
600.0	600.0	600.0	600.0	4.2	4.2	-90.57	-0.3	-30.0	30.0	21.1	8.88	3.379	
700.0	700.0	700.0	700.0	4.4	4.4	-90.57	-0.3	-30.0	30.0	20.8	9.23	3.251	
800.0	800.0	800.0	800.0	4.6	4.6	-90.57	-0.3	-30.0	30.0	20.4	9.57	3.135	
900.0	900.0	900.0	900.0	4.8	4.8	-90.57	-0.3	-30.0	30.0	20.1	9.90	3.030	
1,000.0	1,000.0	1,000.0	1,000.0	4.9	4.9	-90.57	-0.3	-30.0	30.0	19.8	10.22	2.934	
1,100.0	1,100.0	1,100.0	1,100.0	5.1	5.1	-90.57	-0.3	-30.0	30.0	19.5	10.54	2.847	
1,200.0	1,200.0	1,200.0	1,200.0	5.2	5.2	-90.57	-0.3	-30.0	30.0	19.2	10.85	2.766	CC
1,300.0	1,300.0	1,299.3	1,299.2	5.4	5.4	-29.03	0.1	-31.2	30.1	18.9	11.20	2.687	
1,400.0	1,399.9	1,398.5	1,398.4	5.6	5.6	-30.38	1.2	-34.9	30.4	18.8	11.55	2.631	ES
1,500.0	1,499.7	1,497.8	1,497.4	5.8	5.8	-32.57	3.0	-41.1	30.9	19.0	11.91	2.594	
1,600.0	1,599.3	1,597.0	1,596.3	6.1	6.0	-35.50	5.6	-49.7	31.7	19.4	12.29	2.580	SF
1,700.0	1,698.6	1,696.2	1,694.8	6.3	6.3	-39.05	8.9	-60.8	32.8	20.2	12.66	2.593	
1,800.0	1,797.5	1,795.4	1,793.0	6.6	6.6	-43.03	13.0	-74.4	34.4	21.3	13.04	2.638	
1,900.0	1,896.1	1,894.6	1,890.8	6.8	6.9	-47.12	17.7	-90.3	36.5	23.2	13.33	2.739	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #601H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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
2,000.0	1,994.6	1,993.7	1,988.0	7.1	7.2	-49.06	23.2	-108.7	40.5	26.7	13.72	2.949	
2,100.0	2,093.1	2,093.5	2,085.6	7.4	7.5	-49.50	29.2	-128.6	45.6	31.4	14.16	3.217	
2,200.0	2,191.6	2,193.4	2,183.3	7.7	7.8	-49.85	35.1	-148.5	50.7	36.1	14.63	3.464	
2,300.0	2,290.0	2,293.3	2,281.0	8.0	8.1	-50.13	41.1	-168.4	55.8	40.7	15.11	3.692	
2,400.0	2,388.5	2,393.1	2,378.7	8.4	8.5	-50.37	47.0	-188.3	60.9	45.3	15.61	3.903	
2,500.0	2,487.0	2,493.0	2,476.4	8.7	8.8	-50.57	53.0	-208.2	66.1	49.9	16.12	4.097	
2,600.0	2,585.5	2,592.9	2,574.1	9.1	9.2	-50.74	58.9	-228.1	71.2	54.5	16.65	4.276	
2,700.0	2,684.0	2,692.7	2,671.8	9.5	9.6	-50.89	64.9	-248.0	76.3	59.1	17.18	4.441	
2,800.0	2,782.4	2,792.6	2,769.4	9.8	10.0	-51.02	70.8	-267.9	81.4	63.7	17.72	4.594	
2,900.0	2,880.9	2,892.5	2,867.1	10.2	10.4	-51.13	76.8	-287.7	86.5	68.3	18.27	4.736	
3,000.0	2,979.4	2,992.3	2,964.8	10.6	10.8	-51.23	82.7	-307.6	91.7	72.8	18.83	4.867	
3,100.0	3,077.9	3,092.2	3,062.5	11.0	11.2	-51.32	88.7	-327.5	96.8	77.4	19.40	4.989	
3,200.0	3,176.4	3,192.1	3,160.2	11.4	11.6	-51.40	94.6	-347.4	101.9	81.9	19.98	5.102	
3,300.0	3,274.8	3,291.9	3,257.9	11.8	12.0	-51.48	100.6	-367.3	107.0	86.5	20.55	5.208	
3,400.0	3,373.3	3,391.8	3,355.6	12.2	12.4	-51.55	106.5	-387.2	112.2	91.0	21.14	5.306	
3,500.0	3,471.8	3,491.7	3,453.3	12.6	12.8	-51.61	112.5	-407.1	117.3	95.6	21.73	5.398	
3,600.0	3,570.3	3,591.6	3,550.9	13.0	13.3	-51.66	118.4	-427.0	122.4	100.1	22.33	5.483	
3,700.0	3,668.8	3,691.4	3,648.6	13.5	13.7	-51.71	124.4	-446.9	127.5	104.6	22.93	5.564	
3,800.0	3,767.2	3,791.3	3,746.3	13.9	14.1	-51.76	130.3	-466.8	132.7	109.1	23.53	5.639	
3,900.0	3,865.7	3,891.2	3,844.0	14.3	14.6	-51.81	136.3	-486.7	137.8	113.7	24.14	5.709	
4,000.0	3,964.2	3,991.0	3,941.7	14.7	15.0	-51.85	142.2	-506.6	142.9	118.2	24.75	5.776	
4,100.0	4,062.7	4,090.9	4,039.4	15.2	15.4	-51.88	148.2	-526.5	148.1	122.7	25.36	5.838	
4,200.0	4,161.2	4,190.8	4,137.1	15.6	15.9	-51.92	154.1	-546.4	153.2	127.2	25.98	5.897	
4,300.0	4,259.7	4,290.6	4,234.7	16.0	16.3	-51.95	160.1	-566.3	158.3	131.7	26.60	5.952	
4,400.0	4,358.1	4,390.5	4,332.4	16.4	16.8	-51.98	166.0	-586.1	163.4	136.2	27.22	6.005	
4,500.0	4,456.6	4,490.4	4,430.1	16.9	17.2	-52.01	172.0	-606.0	168.6	140.7	27.84	6.054	
4,600.0	4,555.1	4,590.2	4,527.8	17.3	17.7	-52.04	177.9	-625.9	173.7	145.2	28.47	6.101	
4,700.0	4,653.6	4,690.1	4,625.5	17.7	18.1	-52.07	183.9	-645.8	178.8	149.7	29.10	6.146	
4,800.0	4,752.1	4,790.0	4,723.2	18.2	18.6	-52.09	189.8	-665.7	183.9	154.2	29.73	6.188	
4,900.0	4,850.5	4,889.8	4,820.9	18.6	19.0	-52.11	195.8	-685.6	189.1	158.7	30.36	6.228	
5,000.0	4,949.0	4,989.7	4,918.5	19.0	19.5	-52.14	201.7	-705.5	194.2	163.2	30.99	6.266	
5,100.0	5,047.5	5,089.6	5,016.2	19.5	19.9	-52.16	207.7	-725.4	199.3	167.7	31.63	6.302	
5,200.0	5,146.0	5,189.4	5,113.9	19.9	20.4	-52.18	213.6	-745.3	204.4	172.2	32.26	6.337	
5,300.0	5,244.5	5,289.3	5,211.6	20.4	20.9	-52.20	219.6	-765.2	209.6	176.7	32.90	6.370	
5,400.0	5,342.9	5,389.2	5,309.3	20.8	21.3	-52.21	225.5	-785.1	214.7	181.2	33.54	6.401	
5,500.0	5,441.4	5,489.1	5,407.0	21.2	21.8	-52.23	231.5	-805.0	219.8	185.6	34.18	6.431	
5,600.0	5,539.9	5,588.9	5,504.7	21.7	22.2	-52.25	237.4	-824.9	225.0	190.1	34.82	6.460	
5,700.0	5,638.4	5,688.8	5,602.3	22.1	22.7	-52.26	243.4	-844.8	230.1	194.6	35.47	6.487	
5,800.0	5,736.9	5,788.7	5,700.0	22.6	23.1	-52.28	249.3	-864.7	235.2	199.1	36.11	6.514	
5,900.0	5,835.4	5,888.5	5,797.7	23.0	23.6	-52.28	255.3	-884.5	240.4	203.7	36.74	6.544	
6,000.0	5,934.1	5,988.3	5,895.3	23.4	24.1	-52.03	261.2	-904.4	246.6	209.1	37.50	6.576	
6,100.0	6,033.1	6,088.0	5,992.9	23.9	24.5	-51.50	267.1	-924.3	253.8	215.5	38.37	6.615	
6,200.0	6,132.4	6,187.6	6,090.3	24.3	25.0	-50.71	273.1	-944.1	262.2	222.9	39.35	6.664	
6,300.0	6,231.8	6,287.0	6,187.5	24.7	25.5	-49.70	279.0	-963.9	271.8	231.3	40.42	6.724	
6,400.0	6,331.5	6,386.2	6,284.6	25.1	25.9	-48.51	284.9	-983.7	282.5	241.0	41.56	6.797	
6,500.0	6,431.2	6,485.2	6,381.4	25.4	26.4	-47.17	290.8	-1,003.4	294.6	251.8	42.78	6.887	
6,600.0	6,531.1	6,584.0	6,478.0	25.8	26.8	-45.72	296.7	-1,023.1	308.1	264.0	44.04	6.996	
6,700.0	6,631.0	6,686.3	6,578.1	26.1	27.3	-44.18	302.6	-1,042.9	322.5	277.2	45.32	7.117	
6,800.0	6,731.0	6,789.9	6,680.0	26.3	27.8	-42.71	308.1	-1,061.3	337.0	290.5	46.54	7.242	
6,900.0	6,831.0	6,893.9	6,782.5	26.4	28.2	-103.30	313.1	-1,078.0	351.3	303.7	47.56	7.386	
7,000.0	6,931.0	6,998.5	6,886.0	26.5	28.7	-102.06	317.6	-1,093.0	364.4	315.9	48.47	7.518	

Rule Assigned:

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
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Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #601H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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
7,100.0	7,031.0	7,103.7	6,990.2	26.5	29.1	-101.04	321.6	-1,106.3	376.0	326.7	49.26	7.632	
7,200.0	7,131.0	7,209.3	7,095.1	26.5	29.6	-100.21	325.0	-1,117.7	386.1	336.1	49.97	7.726	
7,300.0	7,231.0	7,315.3	7,200.6	26.6	30.0	-99.55	327.9	-1,127.4	394.5	344.0	50.58	7.801	
7,400.0	7,331.0	7,421.6	7,306.7	26.6	30.4	-99.04	330.2	-1,135.1	401.4	350.3	51.11	7.854	
7,500.0	7,431.0	7,528.3	7,413.1	26.6	30.8	-98.66	332.0	-1,141.0	406.6	355.1	51.55	7.888	
7,600.0	7,531.0	7,635.1	7,519.9	26.7	31.1	-98.41	333.2	-1,145.1	410.2	358.3	51.91	7.902	
7,700.0	7,631.0	7,742.0	7,626.8	26.7	31.4	-98.28	333.8	-1,147.2	412.1	359.9	52.13	7.904	
7,800.0	7,731.0	7,846.2	7,731.0	26.8	31.5	-98.26	333.9	-1,147.5	412.4	360.1	52.21	7.898	
7,900.0	7,831.0	7,946.2	7,831.0	26.8	31.5	-98.26	333.9	-1,147.5	412.4	360.1	52.29	7.887	
8,000.0	7,931.0	8,046.2	7,931.0	26.8	31.5	-98.26	333.9	-1,147.5	412.4	360.0	52.36	7.875	
8,100.0	8,031.0	8,146.2	8,031.0	26.9	31.6	-98.26	333.9	-1,147.5	412.4	359.9	52.44	7.864	
8,200.0	8,131.0	8,246.2	8,131.0	26.9	31.6	-98.26	333.9	-1,147.5	412.4	359.8	52.51	7.853	
8,300.0	8,231.0	8,346.2	8,231.0	27.0	31.6	-98.26	333.9	-1,147.5	412.4	359.8	52.59	7.841	
8,400.0	8,331.0	8,446.2	8,331.0	27.0	31.6	-98.26	333.9	-1,147.5	412.4	359.7	52.67	7.830	
8,500.0	8,431.0	8,546.2	8,431.0	27.0	31.7	-98.26	333.9	-1,147.5	412.4	359.6	52.74	7.818	
8,600.0	8,531.0	8,646.2	8,531.0	27.1	31.7	-98.26	333.9	-1,147.5	412.4	359.5	52.82	7.807	
8,700.0	8,631.0	8,746.2	8,631.0	27.1	31.7	-98.26	333.9	-1,147.5	412.4	359.5	52.90	7.796	
8,800.0	8,731.0	8,846.2	8,731.0	27.2	31.8	-98.26	333.9	-1,147.5	412.4	359.4	52.97	7.784	
8,900.0	8,831.0	8,946.2	8,831.0	27.2	31.8	-98.26	333.9	-1,147.5	412.4	359.3	53.05	7.773	
9,000.0	8,931.0	9,046.2	8,931.0	27.2	31.8	-98.26	333.9	-1,147.5	412.4	359.2	53.13	7.761	
9,100.0	9,031.0	9,146.2	9,031.0	27.3	31.9	-98.26	333.9	-1,147.5	412.4	359.2	53.21	7.750	
9,200.0	9,131.0	9,246.2	9,131.0	27.3	31.9	-98.26	333.9	-1,147.5	412.4	359.1	53.29	7.738	
9,300.0	9,231.0	9,346.2	9,231.0	27.4	31.9	-98.26	333.9	-1,147.5	412.4	359.0	53.37	7.726	
9,400.0	9,331.0	9,446.2	9,331.0	27.4	32.0	-98.26	333.9	-1,147.5	412.4	358.9	53.45	7.715	
9,500.0	9,431.0	9,546.2	9,431.0	27.5	32.0	-98.26	333.9	-1,147.5	412.4	358.8	53.53	7.703	
9,600.0	9,531.0	9,646.2	9,531.0	27.5	32.0	-98.26	333.9	-1,147.5	412.4	358.7	53.61	7.692	
9,700.0	9,631.0	9,746.2	9,631.0	27.5	32.1	-98.26	333.9	-1,147.5	412.4	358.7	53.69	7.680	
9,800.0	9,731.0	9,846.2	9,731.0	27.6	32.1	-98.26	333.9	-1,147.5	412.4	358.6	53.77	7.668	
9,900.0	9,831.0	9,946.2	9,831.0	27.6	32.1	-98.26	333.9	-1,147.5	412.4	358.5	53.86	7.657	
10,000.0	9,931.0	10,046.2	9,931.0	27.7	32.2	-98.26	333.9	-1,147.5	412.4	358.4	53.94	7.645	
10,100.0	10,031.0	10,146.2	10,031.0	27.7	32.2	-98.26	333.9	-1,147.5	412.4	358.3	54.02	7.633	
10,200.0	10,131.0	10,246.2	10,131.0	27.8	32.2	-98.26	333.9	-1,147.5	412.4	358.3	54.11	7.621	
10,300.0	10,231.0	10,346.2	10,231.0	27.8	32.3	-98.26	333.9	-1,147.5	412.4	358.2	54.19	7.610	
10,400.0	10,331.0	10,446.2	10,331.0	27.8	32.3	-98.26	333.9	-1,147.5	412.4	358.1	54.27	7.598	
10,500.0	10,431.0	10,546.2	10,431.0	27.9	32.3	-98.26	333.9	-1,147.5	412.4	358.0	54.36	7.586	
10,600.0	10,531.0	10,646.2	10,531.0	27.9	32.4	-98.26	333.9	-1,147.5	412.4	357.9	54.44	7.574	
10,700.0	10,631.0	10,746.2	10,631.0	28.0	32.4	-98.26	333.9	-1,147.5	412.4	357.8	54.53	7.563	
10,800.0	10,731.0	10,846.2	10,731.0	28.0	32.4	-98.26	333.9	-1,147.5	412.4	357.8	54.61	7.551	
10,900.0	10,831.0	10,946.2	10,831.0	28.1	32.5	-98.26	333.9	-1,147.5	412.4	357.7	54.70	7.539	
11,000.0	10,931.0	11,046.2	10,931.0	28.1	32.5	-98.26	333.9	-1,147.5	412.4	357.6	54.78	7.527	
11,100.0	11,031.0	11,146.2	11,031.0	28.2	32.5	-98.26	333.9	-1,147.5	412.4	357.5	54.87	7.515	
11,200.0	11,131.0	11,246.2	11,131.0	28.2	32.6	-98.26	333.9	-1,147.5	412.4	357.4	54.96	7.504	
11,300.0	11,231.0	11,346.2	11,231.0	28.2	32.6	-98.26	333.9	-1,147.5	412.4	357.3	55.04	7.492	
11,400.0	11,331.0	11,446.2	11,331.0	28.3	32.7	-98.26	333.9	-1,147.5	412.4	357.2	55.13	7.480	
11,500.0	11,431.0	11,546.2	11,431.0	28.3	32.7	-98.26	333.9	-1,147.5	412.4	357.1	55.22	7.468	
11,600.0	11,531.0	11,646.2	11,531.0	28.4	32.7	-98.26	333.9	-1,147.5	412.4	357.1	55.31	7.456	
11,700.0	11,631.0	11,746.2	11,631.0	28.4	32.8	-98.26	333.9	-1,147.5	412.4	357.0	55.39	7.444	
11,800.0	11,731.0	11,846.2	11,731.0	28.5	32.8	-98.26	333.9	-1,147.5	412.4	356.9	55.48	7.432	
11,865.3	11,796.3	11,911.5	11,796.3	28.5	32.8	-98.26	333.9	-1,147.5	412.4	356.8	55.54	7.425	
11,900.0	11,831.0	11,945.9	11,830.6	28.5	32.8	-98.26	333.9	-1,147.5	412.4	356.8	55.57	7.421	
12,000.0	11,931.0	12,036.2	11,920.6	28.6	32.7	-99.32	326.2	-1,147.4	413.6	358.2	55.44	7.461	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #601H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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
12,100.0	12,031.0	12,122.1	12,003.9	28.6	32.6	-102.08	305.9	-1,147.2	417.9	363.1	54.79	7.627	
12,200.0	12,131.0	12,200.0	12,076.1	28.7	32.5	-105.92	276.9	-1,147.0	427.3	373.4	53.87	7.933	
12,300.0	12,231.0	12,269.7	12,136.9	28.7	32.4	-110.26	242.9	-1,146.6	444.1	391.2	52.87	8.400	
12,400.0	12,331.0	12,329.6	12,185.5	28.8	32.4	-114.49	207.9	-1,146.3	470.1	418.0	52.10	9.024	
12,500.0	12,431.0	12,381.0	12,224.1	28.8	32.3	-118.33	174.0	-1,145.9	506.1	454.3	51.71	9.786	
12,600.0	12,531.0	12,424.8	12,254.5	28.8	32.3	58.68	142.4	-1,145.6	551.6	499.9	51.74	10.662	
12,700.0	12,630.4	12,466.2	12,280.9	28.7	32.2	51.26	110.6	-1,145.3	601.3	549.0	52.33	11.491	
12,800.0	12,726.7	12,500.0	12,300.7	28.5	32.2	45.50	83.2	-1,145.1	649.1	595.4	53.67	12.093	
12,900.0	12,816.9	12,550.0	12,327.0	28.3	32.2	40.38	40.7	-1,144.6	692.6	637.8	54.86	12.625	
13,000.0	12,898.3	12,600.0	12,349.5	28.1	32.1	36.56	-3.9	-1,144.2	730.7	674.5	56.26	12.989	
13,100.0	12,968.5	12,650.0	12,368.0	27.9	32.1	33.80	-50.4	-1,143.7	762.4	704.6	57.77	13.197	
13,200.0	13,025.2	12,684.6	12,378.4	27.8	32.1	32.05	-83.4	-1,143.4	786.5	726.9	59.59	13.199	
13,300.0	13,066.8	12,729.4	12,388.9	27.7	32.1	30.85	-126.9	-1,143.0	803.0	741.8	61.17	13.127	
13,400.0	13,091.9	12,774.3	12,395.9	27.7	32.1	30.27	-171.2	-1,142.6	811.3	748.7	62.67	12.945	
13,500.0	13,100.0	12,819.2	12,399.5	27.8	32.2	30.26	-216.0	-1,142.1	811.4	747.4	64.07	12.664	
13,568.6	13,100.0	12,859.6	12,400.0	27.8	32.2	30.27	-256.3	-1,141.7	810.5	745.7	64.87	12.496	
13,600.0	13,100.0	12,891.0	12,400.0	27.8	32.2	30.27	-287.8	-1,141.4	810.5	745.4	65.12	12.447	
13,700.0	13,100.0	12,991.0	12,400.0	28.0	32.3	30.27	-387.7	-1,140.4	810.5	744.6	65.95	12.289	
13,800.0	13,100.0	13,091.0	12,400.0	28.1	32.4	30.27	-487.7	-1,139.4	810.5	743.7	66.81	12.131	
13,900.0	13,100.0	13,191.0	12,400.0	28.2	32.5	30.27	-587.7	-1,138.5	810.5	742.8	67.70	11.973	
14,000.0	13,100.0	13,291.0	12,400.0	28.4	32.7	30.27	-687.7	-1,137.5	810.5	741.9	68.60	11.815	
14,100.0	13,100.0	13,391.0	12,400.0	28.5	32.9	30.27	-787.7	-1,136.5	810.5	741.0	69.53	11.657	
14,200.0	13,100.0	13,491.0	12,400.0	28.7	33.0	30.27	-887.7	-1,135.5	810.5	740.0	70.48	11.500	
14,300.0	13,100.0	13,591.0	12,400.0	28.9	33.2	30.27	-987.7	-1,134.5	810.5	739.1	71.45	11.344	
14,400.0	13,100.0	13,691.0	12,400.0	29.1	33.4	30.27	-1,087.7	-1,133.6	810.5	738.1	72.44	11.189	
14,500.0	13,100.0	13,791.0	12,400.0	29.4	33.7	30.27	-1,187.7	-1,132.6	810.5	737.1	73.45	11.035	
14,600.0	13,100.0	13,891.0	12,400.0	29.6	33.9	30.27	-1,287.7	-1,131.6	810.5	736.0	74.48	10.883	
14,700.0	13,100.0	13,991.0	12,400.0	29.9	34.2	30.27	-1,387.7	-1,130.6	810.5	735.0	75.52	10.732	
14,800.0	13,100.0	14,091.0	12,400.0	30.2	34.4	30.27	-1,487.7	-1,129.6	810.5	733.9	76.58	10.583	
14,900.0	13,100.0	14,191.0	12,400.0	30.5	34.7	30.27	-1,587.7	-1,128.6	810.5	732.8	77.66	10.436	
15,000.0	13,100.0	14,291.0	12,400.0	30.8	35.0	30.27	-1,687.7	-1,127.7	810.5	731.7	78.75	10.291	
15,100.0	13,100.0	14,391.0	12,400.0	31.1	35.3	30.27	-1,787.7	-1,126.7	810.5	730.6	79.86	10.149	
15,200.0	13,100.0	14,491.0	12,400.0	31.4	35.6	30.27	-1,887.7	-1,125.7	810.5	729.5	80.98	10.008	
15,300.0	13,100.0	14,591.0	12,400.0	31.8	36.0	30.27	-1,987.7	-1,124.7	810.5	728.4	82.12	9.870	
15,400.0	13,100.0	14,691.0	12,400.0	32.1	36.3	30.27	-2,087.7	-1,123.7	810.5	727.2	83.27	9.734	
15,500.0	13,100.0	14,791.0	12,400.0	32.5	36.7	30.27	-2,187.7	-1,122.8	810.5	726.0	84.43	9.600	
15,600.0	13,100.0	14,891.0	12,400.0	32.9	37.0	30.27	-2,287.7	-1,121.8	810.5	724.9	85.60	9.468	
15,700.0	13,100.0	14,991.0	12,400.0	33.3	37.4	30.27	-2,387.7	-1,120.8	810.5	723.7	86.78	9.339	
15,800.0	13,100.0	15,091.0	12,400.0	33.7	37.8	30.26	-2,487.6	-1,119.8	810.5	722.5	87.98	9.212	
15,900.0	13,100.0	15,191.0	12,400.0	34.1	38.2	30.26	-2,587.6	-1,118.8	810.5	721.3	89.18	9.088	
16,000.0	13,100.0	15,291.0	12,400.0	34.6	38.6	30.26	-2,687.6	-1,117.8	810.5	720.1	90.40	8.966	
16,100.0	13,100.0	15,391.0	12,400.0	35.0	39.0	30.26	-2,787.6	-1,116.9	810.5	718.8	91.62	8.846	
16,200.0	13,100.0	15,491.0	12,400.0	35.5	39.5	30.26	-2,887.6	-1,115.9	810.5	717.6	92.86	8.728	
16,300.0	13,100.0	15,591.0	12,400.0	35.9	39.9	30.26	-2,987.6	-1,114.9	810.4	716.3	94.10	8.613	
16,400.0	13,100.0	15,691.0	12,400.0	36.4	40.3	30.26	-3,087.6	-1,113.9	810.4	715.1	95.35	8.500	
16,500.0	13,100.0	15,791.0	12,400.0	36.9	40.8	30.26	-3,187.6	-1,112.9	810.4	713.8	96.61	8.389	
16,600.0	13,100.0	15,891.0	12,400.0	37.4	41.3	30.26	-3,287.6	-1,112.0	810.4	712.6	97.88	8.280	
16,700.0	13,100.0	15,991.0	12,400.0	37.9	41.7	30.26	-3,387.6	-1,111.0	810.4	711.3	99.16	8.173	
16,800.0	13,100.0	16,091.0	12,400.0	38.4	42.2	30.26	-3,487.6	-1,110.0	810.4	710.0	100.44	8.069	
16,900.0	13,100.0	16,191.0	12,400.0	38.9	42.7	30.26	-3,587.6	-1,109.0	810.4	708.7	101.73	7.967	
17,000.0	13,100.0	16,291.0	12,400.0	39.5	43.2	30.26	-3,687.6	-1,108.0	810.4	707.4	103.03	7.866	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #601H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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
17,100.0	13,100.0	16,391.0	12,400.0	40.0	43.7	30.26	-3,787.6	-1,107.0	810.4	706.1	104.33	7.768	
17,200.0	13,100.0	16,491.0	12,400.0	40.5	44.2	30.26	-3,887.6	-1,106.1	810.4	704.8	105.64	7.672	
17,300.0	13,100.0	16,591.0	12,400.0	41.1	44.8	30.26	-3,987.6	-1,105.1	810.4	703.5	106.95	7.577	
17,400.0	13,100.0	16,691.0	12,400.0	41.6	45.3	30.26	-4,087.6	-1,104.1	810.4	702.1	108.28	7.485	
17,500.0	13,100.0	16,791.0	12,400.0	42.2	45.8	30.26	-4,187.6	-1,103.1	810.4	700.8	109.60	7.394	
17,600.0	13,100.0	16,891.0	12,400.0	42.8	46.4	30.26	-4,287.6	-1,102.1	810.4	699.5	110.94	7.305	
17,700.0	13,100.0	16,991.0	12,400.0	43.4	46.9	30.26	-4,387.6	-1,101.1	810.4	698.1	112.27	7.218	
17,800.0	13,100.0	17,091.0	12,400.0	43.9	47.4	30.26	-4,487.5	-1,100.2	810.4	696.8	113.62	7.133	
17,900.0	13,100.0	17,191.0	12,400.0	44.5	48.0	30.26	-4,587.5	-1,099.2	810.4	695.4	114.96	7.049	
18,000.0	13,100.0	17,291.0	12,400.0	45.1	48.6	30.26	-4,687.5	-1,098.2	810.4	694.1	116.32	6.967	
18,100.0	13,100.0	17,391.0	12,400.0	45.7	49.1	30.26	-4,787.5	-1,097.2	810.4	692.7	117.67	6.887	
18,200.0	13,100.0	17,491.0	12,400.0	46.3	49.7	30.26	-4,887.5	-1,096.2	810.4	691.4	119.04	6.808	
18,300.0	13,100.0	17,591.0	12,400.0	46.9	50.3	30.26	-4,987.5	-1,095.3	810.4	690.0	120.40	6.731	
18,400.0	13,100.0	17,691.0	12,400.0	47.6	50.9	30.26	-5,087.5	-1,094.3	810.4	688.6	121.77	6.655	
18,500.0	13,100.0	17,791.0	12,400.0	48.2	51.5	30.25	-5,187.5	-1,093.3	810.4	687.2	123.14	6.581	
18,600.0	13,100.0	17,891.0	12,400.0	48.8	52.0	30.25	-5,287.5	-1,092.3	810.4	685.9	124.52	6.508	
18,700.0	13,100.0	17,991.0	12,400.0	49.4	52.6	30.25	-5,387.5	-1,091.3	810.4	684.5	125.90	6.436	
18,800.0	13,100.0	18,091.0	12,400.0	50.1	53.2	30.25	-5,487.5	-1,090.3	810.4	683.1	127.29	6.366	
18,900.0	13,100.0	18,191.0	12,400.0	50.7	53.8	30.25	-5,587.5	-1,089.4	810.4	681.7	128.68	6.298	
19,000.0	13,100.0	18,291.0	12,400.0	51.3	54.4	30.25	-5,687.5	-1,088.4	810.4	680.3	130.07	6.230	
19,100.0	13,100.0	18,391.0	12,400.0	52.0	55.1	30.25	-5,787.5	-1,087.4	810.4	678.9	131.46	6.164	
19,200.0	13,100.0	18,491.0	12,400.0	52.6	55.7	30.25	-5,887.5	-1,086.4	810.4	677.5	132.86	6.099	
19,300.0	13,100.0	18,591.0	12,400.0	53.3	56.3	30.25	-5,987.5	-1,085.4	810.4	676.1	134.26	6.036	
19,400.0	13,100.0	18,691.0	12,400.0	53.9	56.9	30.25	-6,087.5	-1,084.5	810.4	674.7	135.67	5.973	
19,500.0	13,100.0	18,791.0	12,400.0	54.6	57.5	30.25	-6,187.5	-1,083.5	810.4	673.3	137.07	5.912	
19,600.0	13,100.0	18,891.0	12,400.0	55.2	58.2	30.25	-6,287.5	-1,082.5	810.3	671.9	138.48	5.852	
19,700.0	13,100.0	18,991.0	12,400.0	55.9	58.8	30.25	-6,387.5	-1,081.5	810.3	670.5	139.89	5.793	
19,800.0	13,100.0	19,091.0	12,400.0	56.6	59.4	30.25	-6,487.5	-1,080.5	810.3	669.0	141.31	5.735	
19,900.0	13,100.0	19,191.0	12,400.0	57.2	60.1	30.25	-6,587.4	-1,079.5	810.3	667.6	142.73	5.678	
20,000.0	13,100.0	19,291.0	12,400.0	57.9	60.7	30.25	-6,687.4	-1,078.6	810.3	666.2	144.15	5.622	
20,100.0	13,100.0	19,391.0	12,400.0	58.6	61.4	30.25	-6,787.4	-1,077.6	810.3	664.8	145.57	5.567	
20,200.0	13,100.0	19,491.0	12,400.0	59.2	62.0	30.25	-6,887.4	-1,076.6	810.3	663.3	146.99	5.513	
20,300.0	13,100.0	19,591.0	12,400.0	59.9	62.7	30.25	-6,987.4	-1,075.6	810.3	661.9	148.42	5.460	
20,400.0	13,100.0	19,691.0	12,400.0	60.6	63.3	30.25	-7,087.4	-1,074.6	810.3	660.5	149.85	5.408	
20,500.0	13,100.0	19,791.0	12,400.0	61.3	64.0	30.25	-7,187.4	-1,073.7	810.3	659.0	151.28	5.356	
20,600.0	13,100.0	19,891.0	12,400.0	62.0	64.6	30.25	-7,287.4	-1,072.7	810.3	657.6	152.71	5.306	
20,700.0	13,100.0	19,991.0	12,400.0	62.6	65.3	30.25	-7,387.4	-1,071.7	810.3	656.2	154.15	5.257	
20,800.0	13,100.0	20,091.0	12,400.0	63.3	65.9	30.25	-7,487.4	-1,070.7	810.3	654.7	155.58	5.208	
20,900.0	13,100.0	20,191.0	12,400.0	64.0	66.6	30.25	-7,587.4	-1,069.7	810.3	653.3	157.02	5.160	
21,000.0	13,100.0	20,291.0	12,400.0	64.7	67.3	30.25	-7,687.4	-1,068.7	810.3	651.8	158.46	5.114	
21,100.0	13,100.0	20,391.0	12,400.0	65.4	67.9	30.25	-7,787.4	-1,067.8	810.3	650.4	159.91	5.067	
21,200.0	13,100.0	20,491.0	12,400.0	66.1	68.6	30.25	-7,887.4	-1,066.8	810.3	648.9	161.35	5.022	
21,300.0	13,100.0	20,591.0	12,400.0	66.8	69.3	30.24	-7,987.4	-1,065.8	810.3	647.5	162.80	4.977	
21,400.0	13,100.0	20,691.0	12,400.0	67.5	70.0	30.24	-8,087.4	-1,064.8	810.3	646.0	164.24	4.933	
21,500.0	13,100.0	20,791.0	12,400.0	68.2	70.6	30.24	-8,187.4	-1,063.8	810.3	644.6	165.69	4.890	
21,600.0	13,100.0	20,891.0	12,400.0	68.9	71.3	30.24	-8,287.4	-1,062.9	810.3	643.1	167.14	4.848	
21,700.0	13,100.0	20,991.0	12,400.0	69.6	72.0	30.24	-8,387.4	-1,061.9	810.3	641.7	168.60	4.806	
21,800.0	13,100.0	21,091.0	12,400.0	70.3	72.7	30.24	-8,487.4	-1,060.9	810.3	640.2	170.05	4.765	
21,900.0	13,100.0	21,191.0	12,400.0	71.0	73.4	30.24	-8,587.4	-1,059.9	810.3	638.8	171.50	4.725	
22,000.0	13,100.0	21,291.0	12,400.0	71.7	74.0	30.24	-8,687.3	-1,058.9	810.3	637.3	172.96	4.685	
22,100.0	13,100.0	21,391.0	12,400.0	72.4	74.7	30.24	-8,787.3	-1,057.9	810.3	635.9	174.42	4.646	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #601H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
22,200.0	13,100.0	21,491.0	12,400.0	73.1	75.4	30.24	-8,887.3	-1,057.0	810.3	634.4	175.88	4.607	
22,300.0	13,100.0	21,591.0	12,400.0	73.8	76.1	30.24	-8,987.3	-1,056.0	810.3	632.9	177.34	4.569	
22,400.0	13,100.0	21,691.0	12,400.0	74.5	76.8	30.24	-9,087.3	-1,055.0	810.3	631.5	178.80	4.532	
22,500.0	13,100.0	21,791.0	12,400.0	75.2	77.5	30.24	-9,187.3	-1,054.0	810.3	630.0	180.26	4.495	
22,600.0	13,100.0	21,891.0	12,400.0	75.9	78.2	30.24	-9,287.3	-1,053.0	810.3	628.5	181.73	4.459	
22,700.0	13,100.0	21,991.0	12,400.0	76.6	78.9	30.24	-9,387.3	-1,052.0	810.3	627.1	183.19	4.423	
22,800.0	13,100.0	22,091.0	12,400.0	77.4	79.6	30.24	-9,487.3	-1,051.1	810.3	625.6	184.66	4.388	
22,900.0	13,100.0	22,191.0	12,400.0	78.1	80.3	30.24	-9,587.3	-1,050.1	810.2	624.1	186.13	4.353	
23,000.0	13,100.0	22,291.0	12,400.0	78.8	81.0	30.24	-9,687.3	-1,049.1	810.2	622.6	187.60	4.319	
23,100.0	13,100.0	22,391.0	12,400.0	79.5	81.7	30.24	-9,787.3	-1,048.1	810.2	621.2	189.07	4.285	
23,200.0	13,100.0	22,491.0	12,400.0	80.2	82.4	30.24	-9,887.3	-1,047.1	810.2	619.7	190.54	4.252	
23,300.0	13,100.0	22,591.0	12,400.0	80.9	83.1	30.24	-9,987.3	-1,046.2	810.2	618.2	192.01	4.220	
23,400.0	13,100.0	22,691.0	12,400.0	81.7	83.8	30.24	-10,087.3	-1,045.2	810.2	616.7	193.48	4.188	
23,500.0	13,100.0	22,791.0	12,400.0	82.4	84.5	30.24	-10,187.3	-1,044.2	810.2	615.3	194.96	4.156	
23,600.0	13,100.0	22,891.0	12,400.0	83.1	85.2	30.24	-10,287.3	-1,043.2	810.2	613.8	196.43	4.125	
23,700.0	13,100.0	22,991.0	12,400.0	83.8	85.9	30.24	-10,387.3	-1,042.2	810.2	612.3	197.91	4.094	
23,800.0	13,100.0	23,091.0	12,400.0	84.5	86.6	30.24	-10,487.3	-1,041.2	810.2	610.8	199.39	4.064	
23,900.0	13,100.0	23,191.0	12,400.0	85.3	87.3	30.24	-10,587.3	-1,040.3	810.2	609.4	200.86	4.034	
24,000.0	13,100.0	23,291.0	12,400.0	86.0	88.0	30.23	-10,687.2	-1,039.3	810.2	607.9	202.34	4.004	
24,100.0	13,100.0	23,391.0	12,400.0	86.7	88.7	30.23	-10,787.2	-1,038.3	810.2	606.4	203.82	3.975	
24,200.0	13,100.0	23,491.0	12,400.0	87.4	89.4	30.23	-10,887.2	-1,037.3	810.2	604.9	205.30	3.946	
24,300.0	13,100.0	23,591.0	12,400.0	88.2	90.1	30.23	-10,987.2	-1,036.3	810.2	603.4	206.78	3.918	
24,400.0	13,100.0	23,691.0	12,400.0	88.9	90.8	30.23	-11,087.2	-1,035.4	810.2	601.9	208.27	3.890	
24,500.0	13,100.0	23,791.0	12,400.0	89.6	91.5	30.23	-11,187.2	-1,034.4	810.2	600.5	209.75	3.863	
24,600.0	13,100.0	23,891.0	12,400.0	90.3	92.3	30.23	-11,287.2	-1,033.4	810.2	599.0	211.23	3.836	
24,700.0	13,100.0	23,991.0	12,400.0	91.1	93.0	30.23	-11,387.2	-1,032.4	810.2	597.5	212.72	3.809	
24,800.0	13,100.0	24,091.0	12,400.0	91.8	93.7	30.23	-11,487.2	-1,031.4	810.2	596.0	214.20	3.782	
24,900.0	13,100.0	24,191.0	12,400.0	92.5	94.4	30.23	-11,587.2	-1,030.4	810.2	594.5	215.69	3.756	
25,000.0	13,100.0	24,291.0	12,400.0	93.3	95.1	30.23	-11,687.2	-1,029.5	810.2	593.0	217.17	3.731	
25,100.0	13,100.0	24,391.0	12,400.0	94.0	95.8	30.23	-11,787.2	-1,028.5	810.2	591.5	218.66	3.705	
25,200.0	13,100.0	24,491.0	12,400.0	94.7	96.6	30.23	-11,887.2	-1,027.5	810.2	590.0	220.15	3.680	
25,300.0	13,100.0	24,591.0	12,400.0	95.4	97.3	30.23	-11,987.2	-1,026.5	810.2	588.5	221.64	3.655	
25,400.0	13,100.0	24,691.0	12,400.0	96.2	98.0	30.23	-12,087.2	-1,025.5	810.2	587.0	223.13	3.631	
25,500.0	13,100.0	24,791.0	12,400.0	96.9	98.7	30.23	-12,187.2	-1,024.6	810.2	585.6	224.62	3.607	
25,600.0	13,100.0	24,891.0	12,400.0	97.6	99.4	30.23	-12,287.2	-1,023.6	810.2	584.1	226.11	3.583	
25,700.0	13,100.0	24,991.0	12,400.0	98.4	100.2	30.23	-12,387.2	-1,022.6	810.2	582.6	227.60	3.560	
25,800.0	13,100.0	25,091.0	12,400.0	99.1	100.9	30.23	-12,487.2	-1,021.6	810.2	581.1	229.09	3.536	
25,900.0	13,100.0	25,191.0	12,400.0	99.8	101.6	30.23	-12,587.2	-1,020.6	810.2	579.6	230.58	3.514	
26,000.0	13,100.0	25,291.0	12,400.0	100.6	102.3	30.23	-12,687.2	-1,019.6	810.2	578.1	232.07	3.491	
26,100.0	13,100.0	25,391.0	12,400.0	101.3	103.1	30.23	-12,787.1	-1,018.7	810.2	576.6	233.57	3.469	
26,200.0	13,100.0	25,491.0	12,400.0	102.1	103.8	30.23	-12,887.1	-1,017.7	810.1	575.1	235.06	3.447	
26,300.0	13,100.0	25,591.0	12,400.0	102.8	104.5	30.23	-12,987.1	-1,016.7	810.1	573.6	236.55	3.425	
26,400.0	13,100.0	25,691.0	12,400.0	103.5	105.2	30.23	-13,087.1	-1,015.7	810.1	572.1	238.05	3.403	
26,500.0	13,100.0	25,791.0	12,400.0	104.3	106.0	30.23	-13,187.1	-1,014.7	810.1	570.6	239.55	3.382	
26,600.0	13,100.0	25,891.0	12,400.0	105.0	106.7	30.23	-13,287.1	-1,013.8	810.1	569.1	241.04	3.361	
26,700.0	13,100.0	25,991.0	12,400.0	105.7	107.4	30.22	-13,387.1	-1,012.8	810.1	567.6	242.54	3.340	
26,800.0	13,100.0	26,091.0	12,400.0	106.5	108.1	30.22	-13,487.1	-1,011.8	810.1	566.1	244.03	3.320	
26,900.0	13,100.0	26,191.0	12,400.0	107.2	108.9	30.22	-13,587.1	-1,010.8	810.1	564.6	245.53	3.299	
27,000.0	13,100.0	26,291.0	12,400.0	108.0	109.6	30.22	-13,687.1	-1,009.8	810.1	563.1	247.03	3.279	
27,100.0	13,100.0	26,391.0	12,400.0	108.7	110.3	30.22	-13,787.1	-1,008.8	810.1	561.6	248.53	3.260	
27,200.0	13,100.0	26,491.0	12,400.0	109.4	111.1	30.22	-13,887.1	-1,007.9	810.1	560.1	250.03	3.240	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #601H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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)	Rule Assigned: Minimum Separation (usft)	Separation Factor	Warning
27,300.0	13,100.0	26,591.0	12,400.0	110.2	111.8	30.22	-13,987.1	-1,006.9	810.1	558.6	251.53	3.221	
27,400.0	13,100.0	26,691.0	12,400.0	110.9	112.5	30.22	-14,087.1	-1,005.9	810.1	557.1	253.03	3.202	
27,500.0	13,100.0	26,791.0	12,400.0	111.7	113.2	30.22	-14,187.1	-1,004.9	810.1	555.6	254.53	3.183	
27,600.0	13,100.0	26,891.0	12,400.0	112.4	114.0	30.22	-14,287.1	-1,003.9	810.1	554.1	256.03	3.164	
27,700.0	13,100.0	26,991.0	12,400.0	113.1	114.7	30.22	-14,387.1	-1,002.9	810.1	552.6	257.53	3.146	
27,800.0	13,100.0	27,091.0	12,400.0	113.9	115.4	30.22	-14,487.1	-1,002.0	810.1	551.1	259.03	3.127	
27,900.0	13,100.0	27,191.0	12,400.0	114.6	116.2	30.22	-14,587.1	-1,001.0	810.1	549.6	260.53	3.109	
28,000.0	13,100.0	27,291.0	12,400.0	115.4	116.9	30.22	-14,687.1	-1,000.0	810.1	548.1	262.03	3.092	
28,100.0	13,100.0	27,391.0	12,400.0	116.1	117.6	30.22	-14,787.1	-999.0	810.1	546.6	263.54	3.074	
28,200.0	13,100.0	27,491.0	12,400.0	116.8	118.4	30.22	-14,887.0	-998.0	810.1	545.0	265.04	3.056	
28,300.0	13,100.0	27,591.0	12,400.0	117.6	119.1	30.22	-14,987.0	-997.1	810.1	543.5	266.54	3.039	
28,400.0	13,100.0	27,691.0	12,400.0	118.3	119.8	30.22	-15,087.0	-996.1	810.1	542.0	268.05	3.022	
28,500.0	13,100.0	27,791.0	12,400.0	119.1	120.6	30.22	-15,187.0	-995.1	810.1	540.5	269.55	3.005	
28,600.0	13,100.0	27,891.0	12,400.0	119.8	121.3	30.22	-15,287.0	-994.1	810.1	539.0	271.06	2.989	
28,700.0	13,100.0	27,991.0	12,400.0	120.6	122.0	30.22	-15,387.0	-993.1	810.1	537.5	272.56	2.972	
28,800.0	13,100.0	28,091.0	12,400.0	121.3	122.8	30.22	-15,487.0	-992.1	810.1	536.0	274.07	2.956	
28,900.0	13,100.0	28,191.0	12,400.0	122.0	123.5	30.22	-15,587.0	-991.2	810.1	534.5	275.57	2.940	
29,000.0	13,100.0	28,291.0	12,400.0	122.8	124.3	30.22	-15,687.0	-990.2	810.1	533.0	277.08	2.924	
29,100.0	13,100.0	28,391.0	12,400.0	123.5	125.0	30.22	-15,787.0	-989.2	810.1	531.5	278.58	2.908	
29,200.0	13,100.0	28,491.0	12,400.0	124.3	125.7	30.22	-15,887.0	-988.2	810.1	530.0	280.09	2.892	
29,300.0	13,100.0	28,591.0	12,400.0	125.0	126.5	30.22	-15,987.0	-987.2	810.1	528.5	281.60	2.877	
29,400.0	13,100.0	28,691.0	12,400.0	125.8	127.2	30.22	-16,087.0	-986.3	810.1	526.9	283.11	2.861	
29,455.8	13,100.0	28,746.7	12,400.0	126.2	127.6	30.21	-16,142.7	-985.7	810.1	526.1	283.95	2.853	
29,458.3	13,100.0	28,746.7	12,400.0	126.2	127.6	30.21	-16,142.7	-985.7	810.1	526.0	284.05	2.852	

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Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #602H - OWB - PWP0

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Rule Assigned:

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	89.52	0.5	60.0	60.0	53.6	6.43	9.333	
100.0	100.0	100.0	100.0	3.2	3.2	89.52	0.5	60.0	60.0	53.1	6.89	8.706	
200.0	200.0	200.0	200.0	3.5	3.5	89.52	0.5	60.0	60.0	52.7	7.33	8.188	
300.0	300.0	300.0	300.0	3.7	3.7	89.52	0.5	60.0	60.0	52.3	7.74	7.751	
400.0	400.0	400.0	400.0	3.9	3.9	89.52	0.5	60.0	60.0	51.9	8.14	7.375	
500.0	500.0	500.0	500.0	4.1	4.1	89.52	0.5	60.0	60.0	51.5	8.51	7.048	
600.0	600.0	600.0	600.0	4.2	4.2	89.52	0.5	60.0	60.0	51.1	8.88	6.759	
700.0	700.0	700.0	700.0	4.4	4.4	89.52	0.5	60.0	60.0	50.8	9.23	6.501	
800.0	800.0	800.0	800.0	4.6	4.6	89.52	0.5	60.0	60.0	50.4	9.57	6.269	
900.0	900.0	900.0	900.0	4.8	4.8	89.52	0.5	60.0	60.0	50.1	9.90	6.060	
1,000.0	1,000.0	1,000.0	1,000.0	4.9	4.9	89.52	0.5	60.0	60.0	49.8	10.22	5.868	
1,100.0	1,100.0	1,100.0	1,100.0	5.1	5.1	89.52	0.5	60.0	60.0	49.5	10.54	5.693	
1,200.0	1,200.0	1,200.0	1,200.0	5.2	5.2	89.52	0.5	60.0	60.0	49.2	10.85	5.531	CC, ES, SF
1,300.0	1,300.0	1,298.6	1,298.6	5.4	5.4	151.52	1.1	61.1	62.3	51.1	11.20	5.564	
1,400.0	1,399.9	1,396.9	1,396.8	5.6	5.6	151.53	2.9	64.5	69.2	57.6	11.55	5.990	
1,500.0	1,499.7	1,494.5	1,494.2	5.8	5.8	151.52	5.9	70.0	80.6	68.7	11.91	6.763	
1,600.0	1,599.3	1,591.3	1,590.6	6.1	6.0	151.49	10.0	77.6	96.5	84.2	12.30	7.843	
1,700.0	1,698.6	1,686.8	1,685.5	6.3	6.3	151.44	15.2	87.3	116.8	104.1	12.71	9.191	
1,800.0	1,797.5	1,780.9	1,778.7	6.6	6.5	151.37	21.5	98.8	141.6	128.4	13.15	10.769	
1,900.0	1,896.1	1,873.6	1,870.1	6.8	6.8	151.33	28.7	112.1	170.5	157.0	13.49	12.639	
2,000.0	1,994.6	1,968.9	1,964.0	7.1	7.0	151.35	36.5	126.7	200.7	186.8	13.94	14.393	
2,100.0	2,093.1	2,064.2	2,057.8	7.4	7.3	151.36	44.4	141.2	230.9	216.5	14.45	15.984	
2,200.0	2,191.6	2,159.5	2,151.7	7.7	7.6	151.37	52.3	155.8	261.2	246.2	14.98	17.440	
2,300.0	2,290.0	2,254.8	2,245.6	8.0	7.9	151.37	60.2	170.3	291.4	275.9	15.53	18.771	
2,400.0	2,388.5	2,350.2	2,339.4	8.4	8.2	151.38	68.0	184.9	321.7	305.6	16.10	19.987	
2,500.0	2,487.0	2,445.5	2,433.3	8.7	8.5	151.38	75.9	199.5	351.9	335.3	16.68	21.098	
2,600.0	2,585.5	2,540.8	2,527.2	9.1	8.9	151.39	83.8	214.0	382.2	364.9	17.28	22.115	
2,700.0	2,684.0	2,636.1	2,621.0	9.5	9.2	151.39	91.7	228.6	412.4	394.5	17.90	23.045	
2,800.0	2,782.4	2,731.4	2,714.9	9.8	9.6	151.39	99.5	243.1	442.7	424.2	18.52	23.898	
2,900.0	2,880.9	2,826.7	2,808.8	10.2	9.9	151.40	107.4	257.7	472.9	453.8	19.16	24.681	
3,000.0	2,979.4	2,922.1	2,902.6	10.6	10.3	151.40	115.3	272.3	503.2	483.4	19.81	25.400	
3,100.0	3,077.9	3,017.4	2,996.5	11.0	10.7	151.40	123.1	286.8	533.4	512.9	20.47	26.063	
3,200.0	3,176.4	3,112.7	3,090.4	11.4	11.1	151.40	131.0	301.4	563.7	542.5	21.13	26.674	
3,300.0	3,274.8	3,208.0	3,184.2	11.8	11.4	151.40	138.9	315.9	593.9	572.1	21.80	27.238	
3,400.0	3,373.3	3,303.3	3,278.1	12.2	11.8	151.41	146.8	330.5	624.2	601.7	22.48	27.760	
3,500.0	3,471.8	3,398.6	3,372.0	12.6	12.2	151.41	154.6	345.1	654.4	631.2	23.17	28.244	
3,600.0	3,570.3	3,494.0	3,465.8	13.0	12.6	151.41	162.5	359.6	684.6	660.8	23.86	28.694	
3,700.0	3,668.8	3,589.3	3,559.7	13.5	13.0	151.41	170.4	374.2	714.9	690.3	24.56	29.112	
3,800.0	3,767.2	3,684.6	3,653.6	13.9	13.4	151.41	178.2	388.7	745.1	719.9	25.26	29.501	
3,900.0	3,865.7	3,779.9	3,747.5	14.3	13.8	151.41	186.1	403.3	775.4	749.4	25.96	29.865	
4,000.0	3,964.2	3,875.2	3,841.3	14.7	14.2	151.41	194.0	417.8	805.6	779.0	26.67	30.204	
4,100.0	4,062.7	3,970.5	3,935.2	15.2	14.6	151.41	201.9	432.4	835.9	808.5	27.39	30.522	
4,200.0	4,161.2	4,065.8	4,029.1	15.6	15.0	151.41	209.7	447.0	866.1	838.0	28.10	30.821	
4,300.0	4,259.7	4,161.2	4,122.9	16.0	15.4	151.41	217.6	461.5	896.4	867.6	28.82	31.101	
4,400.0	4,358.1	4,256.5	4,216.8	16.4	15.8	151.41	225.5	476.1	926.6	897.1	29.54	31.364	
4,500.0	4,456.6	4,351.8	4,310.7	16.9	16.2	151.41	233.4	490.6	956.9	926.6	30.27	31.612	
4,600.0	4,555.1	4,447.1	4,404.5	17.3	16.6	151.42	241.2	505.2	987.1	956.1	31.00	31.845	
4,700.0	4,653.6	4,542.4	4,498.4	17.7	17.1	151.42	249.1	519.8	1,017.4	985.6	31.73	32.066	
4,800.0	4,752.1	4,637.7	4,592.3	18.2	17.5	151.42	257.0	534.3	1,047.6	1,015.1	32.46	32.275	
4,900.0	4,850.5	4,733.1	4,686.1	18.6	17.9	151.42	264.8	548.9	1,077.9	1,044.7	33.19	32.472	
5,000.0	4,949.0	4,828.4	4,780.0	19.0	18.3	151.42	272.7	563.4	1,108.1	1,074.2	33.93	32.659	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #602H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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	5,047.5	4,923.7	4,873.9	19.5	18.7	151.42	280.6	578.0	1,138.3	1,103.7	34.67	32.836	
5,200.0	5,146.0	5,019.0	4,967.7	19.9	19.1	151.42	288.5	592.6	1,168.6	1,133.2	35.41	33.004	
5,300.0	5,244.5	5,114.3	5,061.6	20.4	19.5	151.42	296.3	607.1	1,198.8	1,162.7	36.15	33.164	
5,400.0	5,342.9	5,209.6	5,155.5	20.8	20.0	151.42	304.2	621.7	1,229.1	1,192.2	36.89	33.316	
5,500.0	5,441.4	5,305.0	5,249.3	21.2	20.4	151.42	312.1	636.2	1,259.3	1,221.7	37.63	33.462	
5,600.0	5,539.9	5,413.6	5,356.4	21.7	20.8	151.43	320.9	652.5	1,289.3	1,250.8	38.46	33.525	
5,700.0	5,638.4	5,533.4	5,474.8	22.1	21.4	151.49	329.5	668.5	1,317.7	1,278.3	39.37	33.471	
5,800.0	5,736.9	5,654.5	5,594.8	22.6	21.9	151.60	337.0	682.4	1,344.3	1,304.0	40.26	33.389	
5,900.0	5,835.4	5,776.7	5,716.3	23.0	22.3	151.80	343.4	694.2	1,369.0	1,327.8	41.12	33.295	
6,000.0	5,934.1	5,900.4	5,839.5	23.4	22.8	152.07	348.6	703.9	1,390.5	1,348.6	41.96	33.139	
6,100.0	6,033.1	6,025.4	5,964.2	23.9	23.3	152.33	352.6	711.2	1,408.7	1,365.9	42.76	32.943	
6,200.0	6,132.4	6,151.4	6,090.2	24.3	23.7	152.58	355.3	716.2	1,423.5	1,380.0	43.51	32.713	
6,300.0	6,231.8	6,278.3	6,217.0	24.7	24.0	152.82	356.7	718.8	1,434.8	1,390.6	44.20	32.465	
6,400.0	6,331.5	6,392.8	6,331.5	25.1	24.2	153.03	356.9	719.1	1,442.9	1,398.3	44.66	32.313	
6,500.0	6,431.2	6,492.5	6,431.2	25.4	24.2	153.19	356.9	719.1	1,449.2	1,404.2	45.03	32.185	
6,600.0	6,531.1	6,592.4	6,531.1	25.8	24.2	153.30	356.9	719.1	1,454.0	1,408.6	45.39	32.036	
6,700.0	6,631.0	6,692.3	6,631.0	26.1	24.3	153.38	356.9	719.1	1,457.2	1,411.4	45.72	31.873	
6,800.0	6,731.0	6,792.3	6,731.0	26.3	24.3	153.42	356.9	719.1	1,458.8	1,412.8	46.01	31.707	
6,900.0	6,831.0	6,892.3	6,831.0	26.4	24.4	91.42	356.9	719.1	1,459.0	1,412.9	46.12	31.634	
7,000.0	6,931.0	6,992.3	6,931.0	26.5	24.4	91.42	356.9	719.1	1,459.0	1,412.8	46.21	31.576	
7,100.0	7,031.0	7,092.3	7,031.0	26.5	24.4	91.42	356.9	719.1	1,459.0	1,412.7	46.29	31.519	
7,200.0	7,131.0	7,192.3	7,131.0	26.5	24.5	91.42	356.9	719.1	1,459.0	1,412.6	46.37	31.461	
7,300.0	7,231.0	7,292.3	7,231.0	26.6	24.5	91.42	356.9	719.1	1,459.0	1,412.5	46.46	31.404	
7,400.0	7,331.0	7,392.3	7,331.0	26.6	24.6	91.42	356.9	719.1	1,459.0	1,412.5	46.54	31.346	
7,500.0	7,431.0	7,492.3	7,431.0	26.6	24.6	91.42	356.9	719.1	1,459.0	1,412.4	46.63	31.289	
7,600.0	7,531.0	7,592.3	7,531.0	26.7	24.7	91.42	356.9	719.1	1,459.0	1,412.3	46.72	31.231	
7,700.0	7,631.0	7,692.3	7,631.0	26.7	24.7	91.42	356.9	719.1	1,459.0	1,412.2	46.80	31.173	
7,800.0	7,731.0	7,792.3	7,731.0	26.8	24.7	91.42	356.9	719.1	1,459.0	1,412.1	46.89	31.115	
7,900.0	7,831.0	7,892.3	7,831.0	26.8	24.8	91.42	356.9	719.1	1,459.0	1,412.0	46.98	31.057	
8,000.0	7,931.0	7,992.3	7,931.0	26.8	24.8	91.42	356.9	719.1	1,459.0	1,411.9	47.07	30.999	
8,100.0	8,031.0	8,092.3	8,031.0	26.9	24.9	91.42	356.9	719.1	1,459.0	1,411.8	47.15	30.941	
8,200.0	8,131.0	8,192.3	8,131.0	26.9	24.9	91.42	356.9	719.1	1,459.0	1,411.8	47.24	30.883	
8,300.0	8,231.0	8,292.3	8,231.0	27.0	25.0	91.42	356.9	719.1	1,459.0	1,411.7	47.33	30.825	
8,400.0	8,331.0	8,392.3	8,331.0	27.0	25.0	91.42	356.9	719.1	1,459.0	1,411.6	47.42	30.767	
8,500.0	8,431.0	8,492.3	8,431.0	27.0	25.1	91.42	356.9	719.1	1,459.0	1,411.5	47.51	30.709	
8,600.0	8,531.0	8,592.3	8,531.0	27.1	25.1	91.42	356.9	719.1	1,459.0	1,411.4	47.60	30.651	
8,700.0	8,631.0	8,692.3	8,631.0	27.1	25.1	91.42	356.9	719.1	1,459.0	1,411.3	47.69	30.593	
8,800.0	8,731.0	8,792.3	8,731.0	27.2	25.2	91.42	356.9	719.1	1,459.0	1,411.2	47.78	30.535	
8,900.0	8,831.0	8,892.3	8,831.0	27.2	25.2	91.42	356.9	719.1	1,459.0	1,411.1	47.87	30.477	
9,000.0	8,931.0	8,992.3	8,931.0	27.2	25.3	91.42	356.9	719.1	1,459.0	1,411.0	47.96	30.419	
9,100.0	9,031.0	9,092.3	9,031.0	27.3	25.3	91.42	356.9	719.1	1,459.0	1,410.9	48.06	30.360	
9,200.0	9,131.0	9,192.3	9,131.0	27.3	25.4	91.42	356.9	719.1	1,459.0	1,410.9	48.15	30.302	
9,300.0	9,231.0	9,292.3	9,231.0	27.4	25.4	91.42	356.9	719.1	1,459.0	1,410.8	48.24	30.244	
9,400.0	9,331.0	9,392.3	9,331.0	27.4	25.5	91.42	356.9	719.1	1,459.0	1,410.7	48.33	30.186	
9,500.0	9,431.0	9,492.3	9,431.0	27.5	25.5	91.42	356.9	719.1	1,459.0	1,410.6	48.43	30.128	
9,600.0	9,531.0	9,592.3	9,531.0	27.5	25.6	91.42	356.9	719.1	1,459.0	1,410.5	48.52	30.069	
9,700.0	9,631.0	9,692.3	9,631.0	27.5	25.6	91.42	356.9	719.1	1,459.0	1,410.4	48.62	30.011	
9,800.0	9,731.0	9,792.3	9,731.0	27.6	25.6	91.42	356.9	719.1	1,459.0	1,410.3	48.71	29.953	
9,900.0	9,831.0	9,892.3	9,831.0	27.6	25.7	91.42	356.9	719.1	1,459.0	1,410.2	48.80	29.895	
10,000.0	9,931.0	9,992.3	9,931.0	27.7	25.7	91.42	356.9	719.1	1,459.0	1,410.1	48.90	29.837	
10,100.0	10,031.0	10,092.3	10,031.0	27.7	25.8	91.42	356.9	719.1	1,459.0	1,410.0	49.00	29.778	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #602H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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)	Rule Assigned: Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,200.0	10,131.0	10,192.3	10,131.0	27.8	25.8	91.42	356.9	719.1	1,459.0	1,409.9	49.09	29.720	
10,300.0	10,231.0	10,292.3	10,231.0	27.8	25.9	91.42	356.9	719.1	1,459.0	1,409.8	49.19	29.662	
10,400.0	10,331.0	10,392.3	10,331.0	27.8	25.9	91.42	356.9	719.1	1,459.0	1,409.7	49.28	29.604	
10,500.0	10,431.0	10,492.3	10,431.0	27.9	26.0	91.42	356.9	719.1	1,459.0	1,409.6	49.38	29.546	
10,600.0	10,531.0	10,592.3	10,531.0	27.9	26.0	91.42	356.9	719.1	1,459.0	1,409.5	49.48	29.488	
10,700.0	10,631.0	10,692.3	10,631.0	28.0	26.1	91.42	356.9	719.1	1,459.0	1,409.4	49.58	29.430	
10,800.0	10,731.0	10,792.3	10,731.0	28.0	26.1	91.42	356.9	719.1	1,459.0	1,409.3	49.67	29.372	
10,900.0	10,831.0	10,892.3	10,831.0	28.1	26.2	91.42	356.9	719.1	1,459.0	1,409.2	49.77	29.314	
11,000.0	10,931.0	10,992.3	10,931.0	28.1	26.2	91.42	356.9	719.1	1,459.0	1,409.1	49.87	29.256	
11,100.0	11,031.0	11,092.3	11,031.0	28.2	26.3	91.42	356.9	719.1	1,459.0	1,409.0	49.97	29.198	
11,200.0	11,131.0	11,192.3	11,131.0	28.2	26.3	91.42	356.9	719.1	1,459.0	1,408.9	50.07	29.140	
11,300.0	11,231.0	11,292.3	11,231.0	28.2	26.4	91.42	356.9	719.1	1,459.0	1,408.8	50.17	29.082	
11,400.0	11,331.0	11,392.3	11,331.0	28.3	26.4	91.42	356.9	719.1	1,459.0	1,408.7	50.27	29.025	
11,500.0	11,431.0	11,492.3	11,431.0	28.3	26.5	91.42	356.9	719.1	1,459.0	1,408.6	50.37	28.967	
11,600.0	11,531.0	11,592.3	11,531.0	28.4	26.5	91.42	356.9	719.1	1,459.0	1,408.5	50.47	28.909	
11,700.0	11,631.0	11,692.3	11,631.0	28.4	26.6	91.42	356.9	719.1	1,459.0	1,408.4	50.57	28.852	
11,800.0	11,731.0	11,792.3	11,731.0	28.5	26.6	91.42	356.9	719.1	1,459.0	1,408.3	50.67	28.794	
11,865.3	11,796.3	11,857.6	11,796.3	28.5	26.6	91.42	356.9	719.1	1,459.0	1,408.3	50.73	28.758	
11,900.0	11,831.0	11,892.0	11,830.7	28.5	26.7	91.43	356.9	719.1	1,459.0	1,408.2	50.77	28.740	
12,000.0	11,931.0	11,983.0	11,921.3	28.6	26.5	91.73	349.1	719.2	1,459.3	1,408.5	50.81	28.719	
12,100.0	12,031.0	12,069.5	12,005.2	28.6	26.4	92.54	328.5	719.4	1,460.5	1,409.6	50.86	28.715	
12,200.0	12,131.0	12,150.0	12,079.7	28.7	26.2	93.73	298.2	719.7	1,463.1	1,412.2	50.91	28.737	
12,300.0	12,231.0	12,217.8	12,138.6	28.7	26.1	95.03	264.8	720.0	1,468.0	1,417.0	50.97	28.800	
12,400.0	12,331.0	12,277.8	12,187.2	28.8	26.0	96.40	229.5	720.4	1,476.0	1,424.9	51.05	28.915	
12,500.0	12,431.0	12,329.2	12,225.7	28.8	25.9	97.71	195.4	720.7	1,487.7	1,436.5	51.14	29.090	
12,600.0	12,531.0	12,373.1	12,255.9	28.8	25.9	-80.44	163.8	721.0	1,503.7	1,452.4	51.26	29.333	
12,700.0	12,630.4	12,414.4	12,282.2	28.7	25.8	-77.45	131.8	721.3	1,522.6	1,471.2	51.32	29.667	
12,800.0	12,726.7	12,450.0	12,302.9	28.5	25.8	-74.68	102.9	721.6	1,542.0	1,490.6	51.38	30.011	
12,900.0	12,816.9	12,500.0	12,328.9	28.3	25.7	-71.83	60.2	722.0	1,560.9	1,509.4	51.45	30.338	
13,000.0	12,898.3	12,550.0	12,351.1	28.1	25.7	-69.36	15.4	722.4	1,578.2	1,526.7	51.54	30.622	
13,100.0	12,968.5	12,600.0	12,369.3	27.9	25.6	-67.34	-31.1	722.9	1,593.2	1,541.6	51.65	30.847	
13,200.0	13,025.2	12,632.8	12,379.0	27.8	25.6	-65.95	-62.4	723.2	1,605.0	1,553.2	51.78	30.994	
13,300.0	13,066.8	12,677.6	12,389.3	27.7	25.6	-64.91	-106.0	723.6	1,613.3	1,561.4	51.90	31.084	
13,400.0	13,091.9	12,722.5	12,396.2	27.7	25.6	-64.37	-150.3	724.0	1,617.6	1,565.6	52.00	31.108	
13,500.0	13,100.0	12,767.4	12,399.6	27.8	25.7	-64.34	-195.1	724.5	1,617.8	1,565.7	52.06	31.076	
13,562.7	13,100.0	12,804.5	12,400.0	27.8	25.7	-64.36	-232.3	724.8	1,617.4	1,565.3	52.11	31.041	
13,600.0	13,100.0	12,841.8	12,400.0	27.8	25.7	-64.36	-269.6	725.2	1,617.4	1,565.3	52.16	31.006	
13,700.0	13,100.0	12,941.8	12,400.0	28.0	25.8	-64.36	-369.6	726.2	1,617.4	1,565.1	52.36	30.890	
13,800.0	13,100.0	13,041.8	12,400.0	28.1	26.0	-64.36	-469.6	727.1	1,617.4	1,564.8	52.60	30.750	
13,900.0	13,100.0	13,141.8	12,400.0	28.2	26.1	-64.36	-569.6	728.1	1,617.4	1,564.5	52.88	30.586	
14,000.0	13,100.0	13,241.8	12,400.0	28.4	26.3	-64.36	-669.6	729.1	1,617.4	1,564.2	53.20	30.400	
14,100.0	13,100.0	13,341.8	12,400.0	28.5	26.4	-64.36	-769.6	730.1	1,617.4	1,563.8	53.57	30.193	
14,200.0	13,100.0	13,441.8	12,400.0	28.7	26.6	-64.35	-869.5	731.0	1,617.4	1,563.4	53.97	29.966	
14,300.0	13,100.0	13,541.8	12,400.0	28.9	26.9	-64.35	-969.5	732.0	1,617.4	1,563.0	54.42	29.721	
14,400.0	13,100.0	13,641.8	12,400.0	29.1	27.1	-64.35	-1,069.5	733.0	1,617.4	1,562.5	54.90	29.459	
14,500.0	13,100.0	13,741.8	12,400.0	29.4	27.3	-64.35	-1,169.5	733.9	1,617.4	1,562.0	55.42	29.182	
14,600.0	13,100.0	13,841.8	12,400.0	29.6	27.6	-64.35	-1,269.5	734.9	1,617.4	1,561.4	55.98	28.891	
14,700.0	13,100.0	13,941.8	12,400.0	29.9	27.9	-64.35	-1,369.5	735.9	1,617.4	1,560.8	56.58	28.588	
14,800.0	13,100.0	14,041.8	12,400.0	30.2	28.2	-64.35	-1,469.5	736.9	1,617.4	1,560.2	57.20	28.274	
14,900.0	13,100.0	14,141.8	12,400.0	30.5	28.5	-64.35	-1,569.5	737.8	1,617.4	1,559.5	57.86	27.951	
15,000.0	13,100.0	14,241.8	12,400.0	30.8	28.8	-64.35	-1,669.5	738.8	1,617.4	1,558.8	58.56	27.621	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #602H - OWB - PWP0

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,100.0	13,100.0	14,341.8	12,400.0	31.1	29.2	-64.35	-1,769.5	739.8	1,617.4	1,558.1	59.28	27.283	
15,200.0	13,100.0	14,441.8	12,400.0	31.4	29.5	-64.35	-1,869.5	740.7	1,617.4	1,557.3	60.03	26.941	
15,300.0	13,100.0	14,541.8	12,400.0	31.8	29.9	-64.35	-1,969.5	741.7	1,617.3	1,556.5	60.82	26.594	
15,400.0	13,100.0	14,641.8	12,400.0	32.1	30.3	-64.35	-2,069.5	742.7	1,617.3	1,555.7	61.63	26.245	
15,500.0	13,100.0	14,741.8	12,400.0	32.5	30.7	-64.35	-2,169.5	743.7	1,617.3	1,554.9	62.46	25.893	
15,600.0	13,100.0	14,841.8	12,400.0	32.9	31.1	-64.35	-2,269.5	744.6	1,617.3	1,554.0	63.32	25.541	
15,700.0	13,100.0	14,941.8	12,400.0	33.3	31.5	-64.35	-2,369.5	745.6	1,617.3	1,553.1	64.21	25.188	
15,800.0	13,100.0	15,041.8	12,400.0	33.7	31.9	-64.35	-2,469.5	746.6	1,617.3	1,552.2	65.12	24.836	
15,900.0	13,100.0	15,141.8	12,400.0	34.1	32.4	-64.35	-2,569.5	747.5	1,617.3	1,551.3	66.05	24.486	
16,000.0	13,100.0	15,241.8	12,400.0	34.6	32.8	-64.35	-2,669.5	748.5	1,617.3	1,550.3	67.00	24.137	
16,100.0	13,100.0	15,341.8	12,400.0	35.0	33.3	-64.35	-2,769.5	749.5	1,617.3	1,549.3	67.98	23.791	
16,200.0	13,100.0	15,441.8	12,400.0	35.5	33.8	-64.35	-2,869.5	750.5	1,617.3	1,548.3	68.97	23.449	
16,300.0	13,100.0	15,541.8	12,400.0	35.9	34.3	-64.35	-2,969.4	751.4	1,617.3	1,547.3	69.99	23.109	
16,400.0	13,100.0	15,641.8	12,400.0	36.4	34.8	-64.35	-3,069.4	752.4	1,617.3	1,546.3	71.02	22.774	
16,500.0	13,100.0	15,741.8	12,400.0	36.9	35.3	-64.35	-3,169.4	753.4	1,617.3	1,545.2	72.06	22.443	
16,600.0	13,100.0	15,841.8	12,400.0	37.4	35.8	-64.35	-3,269.4	754.3	1,617.3	1,544.2	73.13	22.116	
16,700.0	13,100.0	15,941.8	12,400.0	37.9	36.3	-64.35	-3,369.4	755.3	1,617.3	1,543.1	74.21	21.794	
16,800.0	13,100.0	16,041.8	12,400.0	38.4	36.9	-64.35	-3,469.4	756.3	1,617.3	1,542.0	75.30	21.477	
16,900.0	13,100.0	16,141.8	12,400.0	38.9	37.4	-64.35	-3,569.4	757.3	1,617.3	1,540.9	76.41	21.165	
17,000.0	13,100.0	16,241.8	12,400.0	39.5	38.0	-64.35	-3,669.4	758.2	1,617.3	1,539.7	77.54	20.858	
17,100.0	13,100.0	16,341.8	12,400.0	40.0	38.5	-64.35	-3,769.4	759.2	1,617.3	1,538.6	78.67	20.557	
17,200.0	13,100.0	16,441.8	12,400.0	40.5	39.1	-64.35	-3,869.4	760.2	1,617.3	1,537.4	79.82	20.261	
17,300.0	13,100.0	16,541.8	12,400.0	41.1	39.7	-64.35	-3,969.4	761.1	1,617.3	1,536.3	80.99	19.970	
17,400.0	13,100.0	16,641.8	12,400.0	41.6	40.3	-64.35	-4,069.4	762.1	1,617.3	1,535.1	82.16	19.685	
17,500.0	13,100.0	16,741.8	12,400.0	42.2	40.8	-64.35	-4,169.4	763.1	1,617.3	1,533.9	83.34	19.405	
17,600.0	13,100.0	16,841.8	12,400.0	42.8	41.4	-64.35	-4,269.4	764.1	1,617.3	1,532.7	84.54	19.130	
17,700.0	13,100.0	16,941.8	12,400.0	43.4	42.0	-64.35	-4,369.4	765.0	1,617.2	1,531.5	85.74	18.861	
17,800.0	13,100.0	17,041.8	12,400.0	43.9	42.6	-64.35	-4,469.4	766.0	1,617.2	1,530.3	86.96	18.598	
17,900.0	13,100.0	17,141.8	12,400.0	44.5	43.2	-64.35	-4,569.4	767.0	1,617.2	1,529.1	88.18	18.340	
18,000.0	13,100.0	17,241.8	12,400.0	45.1	43.9	-64.35	-4,669.4	767.9	1,617.2	1,527.8	89.42	18.087	
18,100.0	13,100.0	17,341.8	12,400.0	45.7	44.5	-64.35	-4,769.4	768.9	1,617.2	1,526.6	90.66	17.839	
18,200.0	13,100.0	17,441.8	12,400.0	46.3	45.1	-64.35	-4,869.4	769.9	1,617.2	1,525.3	91.91	17.596	
18,300.0	13,100.0	17,541.8	12,400.0	46.9	45.7	-64.35	-4,969.4	770.9	1,617.2	1,524.1	93.17	17.358	
18,400.0	13,100.0	17,641.8	12,400.0	47.6	46.4	-64.35	-5,069.3	771.8	1,617.2	1,522.8	94.43	17.126	
18,500.0	13,100.0	17,741.8	12,400.0	48.2	47.0	-64.35	-5,169.3	772.8	1,617.2	1,521.5	95.71	16.898	
18,600.0	13,100.0	17,841.8	12,400.0	48.8	47.6	-64.35	-5,269.3	773.8	1,617.2	1,520.2	96.99	16.675	
18,700.0	13,100.0	17,941.8	12,400.0	49.4	48.3	-64.35	-5,369.3	774.7	1,617.2	1,518.9	98.27	16.456	
18,800.0	13,100.0	18,041.8	12,400.0	50.1	48.9	-64.35	-5,469.3	775.7	1,617.2	1,517.6	99.57	16.243	
18,900.0	13,100.0	18,141.8	12,400.0	50.7	49.6	-64.35	-5,569.3	776.7	1,617.2	1,516.3	100.87	16.033	
19,000.0	13,100.0	18,241.8	12,400.0	51.3	50.2	-64.35	-5,669.3	777.7	1,617.2	1,515.0	102.17	15.828	
19,100.0	13,100.0	18,341.8	12,400.0	52.0	50.9	-64.35	-5,769.3	778.6	1,617.2	1,513.7	103.48	15.628	
19,200.0	13,100.0	18,441.8	12,400.0	52.6	51.5	-64.35	-5,869.3	779.6	1,617.2	1,512.4	104.80	15.431	
19,300.0	13,100.0	18,541.8	12,400.0	53.3	52.2	-64.35	-5,969.3	780.6	1,617.2	1,511.1	106.12	15.239	
19,400.0	13,100.0	18,641.8	12,400.0	53.9	52.9	-64.35	-6,069.3	781.5	1,617.2	1,509.7	107.45	15.051	
19,500.0	13,100.0	18,741.8	12,400.0	54.6	53.5	-64.35	-6,169.3	782.5	1,617.2	1,508.4	108.78	14.866	
19,600.0	13,100.0	18,841.8	12,400.0	55.2	54.2	-64.35	-6,269.3	783.5	1,617.2	1,507.1	110.12	14.686	
19,700.0	13,100.0	18,941.8	12,400.0	55.9	54.9	-64.35	-6,369.3	784.5	1,617.2	1,505.7	111.46	14.509	
19,800.0	13,100.0	19,041.8	12,400.0	56.6	55.6	-64.35	-6,469.3	785.4	1,617.2	1,504.4	112.81	14.336	
19,900.0	13,100.0	19,141.8	12,400.0	57.2	56.2	-64.35	-6,569.3	786.4	1,617.2	1,503.0	114.16	14.166	
20,000.0	13,100.0	19,241.8	12,400.0	57.9	56.9	-64.35	-6,669.3	787.4	1,617.2	1,501.6	115.51	14.000	
20,100.0	13,100.0	19,341.8	12,400.0	58.6	57.6	-64.35	-6,769.3	788.3	1,617.1	1,500.3	116.87	13.837	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #602H - OWB - PWP0

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,200.0	13,100.0	19,441.8	12,400.0	59.2	58.3	-64.35	-6,869.3	789.3	1,617.1	1,498.9	118.23	13.678	
20,300.0	13,100.0	19,541.8	12,400.0	59.9	59.0	-64.35	-6,969.3	790.3	1,617.1	1,497.5	119.60	13.522	
20,400.0	13,100.0	19,641.8	12,400.0	60.6	59.7	-64.35	-7,069.3	791.3	1,617.1	1,496.2	120.97	13.368	
20,500.0	13,100.0	19,741.8	12,400.0	61.3	60.4	-64.35	-7,169.3	792.2	1,617.1	1,494.8	122.34	13.218	
20,600.0	13,100.0	19,841.8	12,400.0	62.0	61.0	-64.35	-7,269.2	793.2	1,617.1	1,493.4	123.72	13.071	
20,700.0	13,100.0	19,941.8	12,400.0	62.6	61.7	-64.35	-7,369.2	794.2	1,617.1	1,492.0	125.10	12.927	
20,800.0	13,100.0	20,041.8	12,400.0	63.3	62.4	-64.35	-7,469.2	795.1	1,617.1	1,490.6	126.48	12.786	
20,900.0	13,100.0	20,141.8	12,400.0	64.0	63.1	-64.35	-7,569.2	796.1	1,617.1	1,489.3	127.86	12.647	
21,000.0	13,100.0	20,241.8	12,400.0	64.7	63.8	-64.35	-7,669.2	797.1	1,617.1	1,487.9	129.25	12.511	
21,100.0	13,100.0	20,341.8	12,400.0	65.4	64.5	-64.35	-7,769.2	798.1	1,617.1	1,486.5	130.64	12.378	
21,200.0	13,100.0	20,441.8	12,400.0	66.1	65.2	-64.35	-7,869.2	799.0	1,617.1	1,485.1	132.04	12.247	
21,300.0	13,100.0	20,541.8	12,400.0	66.8	65.9	-64.35	-7,969.2	800.0	1,617.1	1,483.7	133.43	12.119	
21,400.0	13,100.0	20,641.8	12,400.0	67.5	66.6	-64.35	-8,069.2	801.0	1,617.1	1,482.3	134.83	11.993	
21,500.0	13,100.0	20,741.8	12,400.0	68.2	67.3	-64.35	-8,169.2	801.9	1,617.1	1,480.9	136.24	11.870	
21,600.0	13,100.0	20,841.8	12,400.0	68.9	68.1	-64.35	-8,269.2	802.9	1,617.1	1,479.4	137.64	11.749	
21,700.0	13,100.0	20,941.8	12,400.0	69.6	68.8	-64.35	-8,369.2	803.9	1,617.1	1,478.0	139.05	11.630	
21,800.0	13,100.0	21,041.8	12,400.0	70.3	69.5	-64.35	-8,469.2	804.9	1,617.1	1,476.6	140.46	11.513	
21,900.0	13,100.0	21,141.8	12,400.0	71.0	70.2	-64.35	-8,569.2	805.8	1,617.1	1,475.2	141.87	11.398	
22,000.0	13,100.0	21,241.8	12,400.0	71.7	70.9	-64.35	-8,669.2	806.8	1,617.1	1,473.8	143.28	11.286	
22,100.0	13,100.0	21,341.8	12,400.0	72.4	71.6	-64.35	-8,769.2	807.8	1,617.1	1,472.4	144.70	11.176	
22,200.0	13,100.0	21,441.8	12,400.0	73.1	72.3	-64.35	-8,869.2	808.7	1,617.1	1,470.9	146.11	11.067	
22,300.0	13,100.0	21,541.8	12,400.0	73.8	73.0	-64.35	-8,969.2	809.7	1,617.1	1,469.5	147.53	10.961	
22,400.0	13,100.0	21,641.8	12,400.0	74.5	73.8	-64.35	-9,069.2	810.7	1,617.1	1,468.1	148.95	10.856	
22,500.0	13,100.0	21,741.8	12,400.0	75.2	74.5	-64.35	-9,169.2	811.7	1,617.0	1,466.7	150.38	10.753	
22,600.0	13,100.0	21,841.8	12,400.0	75.9	75.2	-64.35	-9,269.2	812.6	1,617.0	1,465.2	151.80	10.652	
22,700.0	13,100.0	21,941.8	12,400.0	76.6	75.9	-64.35	-9,369.1	813.6	1,617.0	1,463.8	153.23	10.553	
22,800.0	13,100.0	22,041.8	12,400.0	77.4	76.6	-64.35	-9,469.1	814.6	1,617.0	1,462.4	154.66	10.456	
22,900.0	13,100.0	22,141.8	12,400.0	78.1	77.4	-64.35	-9,569.1	815.5	1,617.0	1,460.9	156.09	10.360	
23,000.0	13,100.0	22,241.8	12,400.0	78.8	78.1	-64.35	-9,669.1	816.5	1,617.0	1,459.5	157.52	10.266	
23,100.0	13,100.0	22,341.8	12,400.0	79.5	78.8	-64.35	-9,769.1	817.5	1,617.0	1,458.1	158.95	10.173	
23,200.0	13,100.0	22,441.8	12,400.0	80.2	79.5	-64.35	-9,869.1	818.5	1,617.0	1,456.6	160.39	10.082	
23,300.0	13,100.0	22,541.8	12,400.0	80.9	80.2	-64.35	-9,969.1	819.4	1,617.0	1,455.2	161.82	9.992	
23,400.0	13,100.0	22,641.8	12,400.0	81.7	81.0	-64.35	-10,069.1	820.4	1,617.0	1,453.7	163.26	9.904	
23,500.0	13,100.0	22,741.8	12,400.0	82.4	81.7	-64.35	-10,169.1	821.4	1,617.0	1,452.3	164.70	9.818	
23,600.0	13,100.0	22,841.8	12,400.0	83.1	82.4	-64.35	-10,269.1	822.3	1,617.0	1,450.9	166.14	9.733	
23,700.0	13,100.0	22,941.8	12,400.0	83.8	83.1	-64.35	-10,369.1	823.3	1,617.0	1,449.4	167.58	9.649	
23,800.0	13,100.0	23,041.8	12,400.0	84.5	83.9	-64.35	-10,469.1	824.3	1,617.0	1,448.0	169.03	9.567	
23,900.0	13,100.0	23,141.8	12,400.0	85.3	84.6	-64.35	-10,569.1	825.3	1,617.0	1,446.5	170.47	9.485	
24,000.0	13,100.0	23,241.8	12,400.0	86.0	85.3	-64.35	-10,669.1	826.2	1,617.0	1,445.1	171.92	9.406	
24,100.0	13,100.0	23,341.8	12,400.0	86.7	86.1	-64.35	-10,769.1	827.2	1,617.0	1,443.6	173.36	9.327	
24,200.0	13,100.0	23,441.8	12,400.0	87.4	86.8	-64.35	-10,869.1	828.2	1,617.0	1,442.2	174.81	9.250	
24,300.0	13,100.0	23,541.8	12,400.0	88.2	87.5	-64.35	-10,969.1	829.1	1,617.0	1,440.7	176.26	9.174	
24,400.0	13,100.0	23,641.8	12,400.0	88.9	88.3	-64.35	-11,069.1	830.1	1,617.0	1,439.3	177.71	9.099	
24,500.0	13,100.0	23,741.8	12,400.0	89.6	89.0	-64.35	-11,169.1	831.1	1,617.0	1,437.8	179.16	9.025	
24,600.0	13,100.0	23,841.8	12,400.0	90.3	89.7	-64.35	-11,269.1	832.0	1,617.0	1,436.3	180.61	8.953	
24,700.0	13,100.0	23,941.8	12,400.0	91.1	90.4	-64.35	-11,369.1	833.0	1,617.0	1,434.9	182.07	8.881	
24,800.0	13,100.0	24,041.8	12,400.0	91.8	91.2	-64.35	-11,469.0	834.0	1,616.9	1,433.4	183.52	8.811	
24,900.0	13,100.0	24,141.8	12,400.0	92.5	91.9	-64.35	-11,569.0	835.0	1,616.9	1,432.0	184.98	8.741	
25,000.0	13,100.0	24,241.8	12,400.0	93.3	92.7	-64.35	-11,669.0	835.9	1,616.9	1,430.5	186.43	8.673	
25,100.0	13,100.0	24,341.8	12,400.0	94.0	93.4	-64.35	-11,769.0	836.9	1,616.9	1,429.0	187.89	8.606	
25,200.0	13,100.0	24,441.8	12,400.0	94.7	94.1	-64.35	-11,869.0	837.9	1,616.9	1,427.6	189.35	8.539	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #602H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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
25,300.0	13,100.0	24,541.8	12,400.0	95.4	94.9	-64.35	-11,969.0	838.8	1,616.9	1,426.1	190.81	8.474	
25,400.0	13,100.0	24,641.8	12,400.0	96.2	95.6	-64.35	-12,069.0	839.8	1,616.9	1,424.7	192.27	8.410	
25,500.0	13,100.0	24,741.8	12,400.0	96.9	96.3	-64.35	-12,169.0	840.8	1,616.9	1,423.2	193.73	8.346	
25,600.0	13,100.0	24,841.8	12,400.0	97.6	97.1	-64.35	-12,269.0	841.8	1,616.9	1,421.7	195.19	8.284	
25,700.0	13,100.0	24,941.8	12,400.0	98.4	97.8	-64.35	-12,369.0	842.7	1,616.9	1,420.3	196.65	8.222	
25,800.0	13,100.0	25,041.8	12,400.0	99.1	98.5	-64.35	-12,469.0	843.7	1,616.9	1,418.8	198.12	8.161	
25,900.0	13,100.0	25,141.8	12,400.0	99.8	99.3	-64.35	-12,569.0	844.7	1,616.9	1,417.3	199.58	8.102	
26,000.0	13,100.0	25,241.8	12,400.0	100.6	100.0	-64.35	-12,669.0	845.6	1,616.9	1,415.9	201.05	8.042	
26,100.0	13,100.0	25,341.8	12,400.0	101.3	100.8	-64.35	-12,769.0	846.6	1,616.9	1,414.4	202.51	7.984	
26,200.0	13,100.0	25,441.8	12,400.0	102.1	101.5	-64.35	-12,869.0	847.6	1,616.9	1,412.9	203.98	7.927	
26,300.0	13,100.0	25,541.8	12,400.0	102.8	102.2	-64.35	-12,969.0	848.6	1,616.9	1,411.4	205.44	7.870	
26,400.0	13,100.0	25,641.8	12,400.0	103.5	103.0	-64.35	-13,069.0	849.5	1,616.9	1,410.0	206.91	7.814	
26,500.0	13,100.0	25,741.8	12,400.0	104.3	103.7	-64.35	-13,169.0	850.5	1,616.9	1,408.5	208.38	7.759	
26,600.0	13,100.0	25,841.8	12,400.0	105.0	104.5	-64.35	-13,269.0	851.5	1,616.9	1,407.0	209.85	7.705	
26,700.0	13,100.0	25,941.8	12,400.0	105.7	105.2	-64.35	-13,369.0	852.4	1,616.9	1,405.6	211.32	7.651	
26,800.0	13,100.0	26,041.8	12,400.0	106.5	105.9	-64.35	-13,469.0	853.4	1,616.9	1,404.1	212.79	7.598	
26,900.0	13,100.0	26,141.8	12,400.0	107.2	106.7	-64.35	-13,568.9	854.4	1,616.9	1,402.6	214.26	7.546	
27,000.0	13,100.0	26,241.8	12,400.0	108.0	107.4	-64.35	-13,668.9	855.4	1,616.9	1,401.1	215.73	7.495	
27,100.0	13,100.0	26,341.8	12,400.0	108.7	108.2	-64.35	-13,768.9	856.3	1,616.9	1,399.6	217.21	7.444	
27,200.0	13,100.0	26,441.8	12,400.0	109.4	108.9	-64.35	-13,868.9	857.3	1,616.8	1,398.2	218.68	7.394	
27,300.0	13,100.0	26,541.8	12,400.0	110.2	109.7	-64.35	-13,968.9	858.3	1,616.8	1,396.7	220.15	7.344	
27,400.0	13,100.0	26,641.8	12,400.0	110.9	110.4	-64.35	-14,068.9	859.2	1,616.8	1,395.2	221.63	7.295	
27,500.0	13,100.0	26,741.8	12,400.0	111.7	111.1	-64.35	-14,168.9	860.2	1,616.8	1,393.7	223.10	7.247	
27,600.0	13,100.0	26,841.8	12,400.0	112.4	111.9	-64.35	-14,268.9	861.2	1,616.8	1,392.3	224.58	7.200	
27,700.0	13,100.0	26,941.8	12,400.0	113.1	112.6	-64.35	-14,368.9	862.2	1,616.8	1,390.8	226.05	7.152	
27,800.0	13,100.0	27,041.8	12,400.0	113.9	113.4	-64.35	-14,468.9	863.1	1,616.8	1,389.3	227.53	7.106	
27,900.0	13,100.0	27,141.8	12,400.0	114.6	114.1	-64.35	-14,568.9	864.1	1,616.8	1,387.8	229.00	7.060	
28,000.0	13,100.0	27,241.8	12,400.0	115.4	114.9	-64.35	-14,668.9	865.1	1,616.8	1,386.3	230.48	7.015	
28,100.0	13,100.0	27,341.8	12,400.0	116.1	115.6	-64.35	-14,768.9	866.0	1,616.8	1,384.9	231.96	6.970	
28,200.0	13,100.0	27,441.8	12,400.0	116.8	116.4	-64.34	-14,868.9	867.0	1,616.8	1,383.4	233.44	6.926	
28,300.0	13,100.0	27,541.8	12,400.0	117.6	117.1	-64.34	-14,968.9	868.0	1,616.8	1,381.9	234.92	6.882	
28,400.0	13,100.0	27,641.8	12,400.0	118.3	117.8	-64.34	-15,068.9	869.0	1,616.8	1,380.4	236.40	6.839	
28,500.0	13,100.0	27,741.8	12,400.0	119.1	118.6	-64.34	-15,168.9	869.9	1,616.8	1,378.9	237.87	6.797	
28,600.0	13,100.0	27,841.8	12,400.0	119.8	119.3	-64.34	-15,268.9	870.9	1,616.8	1,377.4	239.35	6.755	
28,700.0	13,100.0	27,941.8	12,400.0	120.6	120.1	-64.34	-15,368.9	871.9	1,616.8	1,376.0	240.84	6.713	
28,800.0	13,100.0	28,041.8	12,400.0	121.3	120.8	-64.34	-15,468.9	872.8	1,616.8	1,374.5	242.32	6.672	
28,900.0	13,100.0	28,141.8	12,400.0	122.0	121.6	-64.34	-15,568.9	873.8	1,616.8	1,373.0	243.80	6.632	
29,000.0	13,100.0	28,241.8	12,400.0	122.8	122.3	-64.34	-15,668.8	874.8	1,616.8	1,371.5	245.28	6.592	
29,100.0	13,100.0	28,341.8	12,400.0	123.5	123.1	-64.34	-15,768.8	875.8	1,616.8	1,370.0	246.76	6.552	
29,200.0	13,100.0	28,441.8	12,400.0	124.3	123.8	-64.34	-15,868.8	876.7	1,616.8	1,368.5	248.24	6.513	
29,300.0	13,100.0	28,541.8	12,400.0	125.0	124.6	-64.34	-15,968.8	877.7	1,616.8	1,367.0	249.73	6.474	
29,400.0	13,100.0	28,641.8	12,400.0	125.8	125.3	-64.34	-16,068.8	878.7	1,616.8	1,365.5	251.21	6.436	
29,458.3	13,100.0	28,700.2	12,400.0	126.2	125.8	-64.34	-16,127.2	879.2	1,616.8	1,364.7	252.08	6.414	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #701H - OWB - PWP0

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Rule Assigned:

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	89.62	0.2	30.0	30.0	23.6	6.43	4.667	
100.0	100.0	100.0	100.0	3.2	3.2	89.62	0.2	30.0	30.0	23.1	6.89	4.353	
200.0	200.0	200.0	200.0	3.5	3.5	89.62	0.2	30.0	30.0	22.7	7.33	4.094	
300.0	300.0	300.0	300.0	3.7	3.7	89.62	0.2	30.0	30.0	22.3	7.74	3.875	
400.0	400.0	400.0	400.0	3.9	3.9	89.62	0.2	30.0	30.0	21.9	8.14	3.688	
500.0	500.0	500.0	500.0	4.1	4.1	89.62	0.2	30.0	30.0	21.5	8.51	3.524	
600.0	600.0	600.0	600.0	4.2	4.2	89.62	0.2	30.0	30.0	21.1	8.88	3.379	
700.0	700.0	700.0	700.0	4.4	4.4	89.62	0.2	30.0	30.0	20.8	9.23	3.251	
800.0	800.0	800.0	800.0	4.6	4.6	89.62	0.2	30.0	30.0	20.4	9.57	3.135	
900.0	900.0	900.0	900.0	4.8	4.8	89.62	0.2	30.0	30.0	20.1	9.90	3.030	
1,000.0	1,000.0	1,000.0	1,000.0	4.9	4.9	89.62	0.2	30.0	30.0	19.8	10.22	2.934	
1,100.0	1,100.0	1,100.0	1,100.0	5.1	5.1	89.62	0.2	30.0	30.0	19.5	10.54	2.846	
1,200.0	1,200.0	1,200.0	1,200.0	5.2	5.2	89.62	0.2	30.0	30.0	19.2	10.85	2.766	CC, ES, SF
1,300.0	1,300.0	1,299.9	1,299.9	5.4	5.4	150.38	1.5	30.2	31.3	20.2	11.17	2.805	
1,400.0	1,399.9	1,399.6	1,399.5	5.6	5.6	147.24	5.4	30.7	35.5	24.0	11.50	3.084	
1,500.0	1,499.7	1,499.1	1,498.8	5.8	5.8	143.38	11.8	31.6	42.5	30.7	11.82	3.593	
1,600.0	1,599.3	1,598.1	1,597.4	6.1	6.1	139.71	20.7	32.8	52.5	40.3	12.16	4.319	
1,700.0	1,698.6	1,696.7	1,695.3	6.3	6.3	136.63	32.1	34.4	65.6	53.1	12.50	5.246	
1,800.0	1,797.5	1,795.1	1,792.8	6.6	6.5	134.49	45.5	36.3	81.4	68.6	12.79	6.366	
1,900.0	1,896.1	1,893.5	1,890.2	6.8	6.8	134.00	59.1	38.2	99.1	86.0	13.09	7.571	
2,000.0	1,994.6	1,991.9	1,987.6	7.1	7.1	133.95	72.7	40.1	117.2	103.7	13.46	8.706	
2,100.0	2,093.1	2,090.2	2,085.0	7.4	7.4	133.92	86.2	41.9	135.2	121.4	13.84	9.771	
2,200.0	2,191.6	2,188.6	2,182.4	7.7	7.7	133.89	99.8	43.8	153.3	139.1	14.23	10.771	
2,300.0	2,290.0	2,286.9	2,279.8	8.0	8.0	133.87	113.3	45.7	171.4	156.7	14.64	11.709	
2,400.0	2,388.5	2,385.3	2,377.2	8.4	8.3	133.85	126.9	47.6	189.5	174.4	15.05	12.589	
2,500.0	2,487.0	2,483.6	2,474.6	8.7	8.6	133.84	140.5	49.5	207.5	192.1	15.47	13.414	
2,600.0	2,585.5	2,582.0	2,572.0	9.1	9.0	133.83	154.0	51.3	225.6	209.7	15.90	14.188	
2,700.0	2,684.0	2,680.3	2,669.4	9.5	9.3	133.82	167.6	53.2	243.7	227.3	16.34	14.914	
2,800.0	2,782.4	2,778.7	2,766.8	9.8	9.7	133.81	181.1	55.1	261.8	245.0	16.78	15.597	
2,900.0	2,880.9	2,877.1	2,864.2	10.2	10.0	133.80	194.7	57.0	279.8	262.6	17.23	16.239	
3,000.0	2,979.4	2,975.4	2,961.6	10.6	10.4	133.79	208.2	58.9	297.9	280.2	17.69	16.842	
3,100.0	3,077.9	3,073.8	3,059.0	11.0	10.8	133.79	221.8	60.7	316.0	297.8	18.15	17.410	
3,200.0	3,176.4	3,172.1	3,156.4	11.4	11.1	133.78	235.4	62.6	334.1	315.4	18.62	17.946	
3,300.0	3,274.8	3,270.5	3,253.8	11.8	11.5	133.78	248.9	64.5	352.1	333.1	19.09	18.450	
3,400.0	3,373.3	3,368.8	3,351.2	12.2	11.9	133.77	262.5	66.4	370.2	350.7	19.56	18.927	
3,500.0	3,471.8	3,467.2	3,448.6	12.6	12.3	133.77	276.0	68.3	388.3	368.2	20.04	19.377	
3,600.0	3,570.3	3,565.5	3,546.0	13.0	12.7	133.77	289.6	70.2	406.4	385.8	20.52	19.803	
3,700.0	3,668.8	3,663.9	3,643.4	13.5	13.1	133.76	303.1	72.0	424.4	403.4	21.01	20.206	
3,800.0	3,767.2	3,762.2	3,740.8	13.9	13.4	133.76	316.7	73.9	442.5	421.0	21.49	20.587	
3,900.0	3,865.7	3,860.6	3,838.1	14.3	13.8	133.76	330.3	75.8	460.6	438.6	21.99	20.949	
4,000.0	3,964.2	3,958.9	3,935.5	14.7	14.2	133.75	343.8	77.7	478.7	456.2	22.48	21.293	
4,100.0	4,062.7	4,057.3	4,032.9	15.2	14.6	133.75	357.4	79.6	496.7	473.8	22.98	21.619	
4,200.0	4,161.2	4,155.6	4,130.3	15.6	15.0	133.75	370.9	81.4	514.8	491.3	23.48	21.930	
4,300.0	4,259.7	4,254.0	4,227.7	16.0	15.4	133.75	384.5	83.3	532.9	508.9	23.96	22.238	
4,400.0	4,358.1	4,356.0	4,328.9	16.4	15.8	133.81	397.9	85.2	550.7	526.2	24.47	22.507	
4,500.0	4,456.6	4,458.9	4,431.0	16.9	16.2	134.04	409.6	86.8	567.7	542.7	25.00	22.712	
4,600.0	4,555.1	4,561.8	4,533.5	17.3	16.6	134.43	419.4	88.2	584.0	558.5	25.53	22.877	
4,700.0	4,653.6	4,664.9	4,636.3	17.7	17.0	134.95	427.5	89.3	599.6	573.5	26.06	23.006	
4,800.0	4,752.1	4,768.0	4,739.2	18.2	17.4	135.61	433.7	90.2	614.5	587.9	26.60	23.101	
4,900.0	4,850.5	4,871.1	4,842.2	18.6	17.7	136.39	438.1	90.8	628.8	601.7	27.15	23.164	
5,000.0	4,949.0	4,974.1	4,945.1	19.0	18.0	137.28	440.7	91.1	642.5	614.8	27.69	23.201	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #701H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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	5,047.5	5,076.5	5,047.5	19.5	18.1	138.29	441.4	91.2	655.7	627.5	28.22	23.238	
5,200.0	5,146.0	5,175.0	5,146.0	19.9	18.2	139.27	441.4	91.2	668.9	640.1	28.74	23.276	
5,300.0	5,244.5	5,273.4	5,244.5	20.4	18.3	140.22	441.4	91.2	682.2	652.9	29.28	23.300	
5,400.0	5,342.9	5,371.9	5,342.9	20.8	18.3	141.13	441.4	91.2	695.7	665.9	29.84	23.318	
5,500.0	5,441.4	5,470.4	5,441.4	21.2	18.4	142.00	441.4	91.2	709.4	679.0	30.41	23.332	
5,600.0	5,539.9	5,568.9	5,539.9	21.7	18.4	142.84	441.4	91.2	723.3	692.3	30.99	23.342	
5,700.0	5,638.4	5,667.4	5,638.4	22.1	18.5	143.65	441.4	91.2	737.2	705.7	31.57	23.349	
5,800.0	5,736.9	5,765.8	5,736.9	22.6	18.5	144.43	441.4	91.2	751.4	719.2	32.17	23.354	
5,900.0	5,835.4	5,864.4	5,835.4	23.0	18.6	145.22	441.4	91.2	765.5	732.7	32.75	23.372	
6,000.0	5,934.1	5,963.1	5,934.1	23.4	18.7	145.95	441.4	91.2	778.5	745.2	33.35	23.346	
6,100.0	6,033.1	6,062.1	6,033.1	23.9	18.7	146.58	441.4	91.2	790.2	756.2	33.93	23.292	
6,200.0	6,132.4	6,161.4	6,132.4	24.3	18.8	147.12	441.4	91.2	800.5	766.0	34.49	23.211	
6,300.0	6,231.8	6,260.8	6,231.8	24.7	18.8	147.57	441.4	91.2	809.3	774.3	35.03	23.107	
6,400.0	6,331.5	6,360.4	6,331.5	25.1	18.9	147.94	441.4	91.2	816.8	781.2	35.54	22.980	
6,500.0	6,431.2	6,460.2	6,431.2	25.4	19.0	148.23	441.4	91.2	822.7	786.7	36.03	22.835	
6,600.0	6,531.1	6,560.0	6,531.1	25.8	19.0	148.45	441.4	91.2	827.3	790.8	36.49	22.673	
6,700.0	6,631.0	6,660.0	6,631.0	26.1	19.1	148.59	441.4	91.2	830.3	793.4	36.90	22.500	
6,800.0	6,731.0	6,760.0	6,731.0	26.3	19.1	148.66	441.4	91.2	831.8	794.6	37.26	22.326	
6,900.0	6,831.0	6,860.0	6,831.0	26.4	19.2	86.67	441.4	91.2	832.1	794.7	37.40	22.245	
7,000.0	6,931.0	6,960.0	6,931.0	26.5	19.3	86.67	441.4	91.2	832.1	794.5	37.52	22.179	
7,100.0	7,031.0	7,060.0	7,031.0	26.5	19.3	86.67	441.4	91.2	832.1	794.4	37.63	22.113	
7,200.0	7,131.0	7,160.0	7,131.0	26.5	19.4	86.67	441.4	91.2	832.1	794.3	37.74	22.048	
7,300.0	7,231.0	7,260.0	7,231.0	26.6	19.5	86.67	441.4	91.2	832.1	794.2	37.85	21.982	
7,400.0	7,331.0	7,360.0	7,331.0	26.6	19.5	86.67	441.4	91.2	832.1	794.1	37.96	21.917	
7,500.0	7,431.0	7,460.0	7,431.0	26.6	19.6	86.67	441.4	91.2	832.1	794.0	38.08	21.852	
7,600.0	7,531.0	7,560.0	7,531.0	26.7	19.6	86.67	441.4	91.2	832.1	793.9	38.19	21.787	
7,700.0	7,631.0	7,660.0	7,631.0	26.7	19.7	86.67	441.4	91.2	832.1	793.8	38.30	21.723	
7,800.0	7,731.0	7,760.0	7,731.0	26.8	19.8	86.67	441.4	91.2	832.1	793.6	38.42	21.658	
7,900.0	7,831.0	7,860.0	7,831.0	26.8	19.8	86.67	441.4	91.2	832.1	793.5	38.53	21.594	
8,000.0	7,931.0	7,960.0	7,931.0	26.8	19.9	86.67	441.4	91.2	832.1	793.4	38.65	21.530	
8,100.0	8,031.0	8,060.0	8,031.0	26.9	20.0	86.67	441.4	91.2	832.1	793.3	38.76	21.466	
8,200.0	8,131.0	8,160.0	8,131.0	26.9	20.0	86.67	441.4	91.2	832.1	793.2	38.88	21.402	
8,300.0	8,231.0	8,260.0	8,231.0	27.0	20.1	86.67	441.4	91.2	832.1	793.1	38.99	21.339	
8,400.0	8,331.0	8,360.0	8,331.0	27.0	20.1	86.67	441.4	91.2	832.1	793.0	39.11	21.275	
8,500.0	8,431.0	8,460.0	8,431.0	27.0	20.2	86.67	441.4	91.2	832.1	792.8	39.23	21.212	
8,600.0	8,531.0	8,560.0	8,531.0	27.1	20.3	86.67	441.4	91.2	832.1	792.7	39.34	21.149	
8,700.0	8,631.0	8,660.0	8,631.0	27.1	20.3	86.67	441.4	91.2	832.1	792.6	39.46	21.087	
8,800.0	8,731.0	8,760.0	8,731.0	27.2	20.4	86.67	441.4	91.2	832.1	792.5	39.58	21.024	
8,900.0	8,831.0	8,860.0	8,831.0	27.2	20.5	86.67	441.4	91.2	832.1	792.4	39.69	20.962	
9,000.0	8,931.0	8,960.0	8,931.0	27.2	20.5	86.67	441.4	91.2	832.1	792.3	39.81	20.900	
9,100.0	9,031.0	9,060.0	9,031.0	27.3	20.6	86.67	441.4	91.2	832.1	792.1	39.93	20.838	
9,200.0	9,131.0	9,160.0	9,131.0	27.3	20.7	86.67	441.4	91.2	832.1	792.0	40.05	20.776	
9,300.0	9,231.0	9,260.0	9,231.0	27.4	20.7	86.67	441.4	91.2	832.1	791.9	40.17	20.715	
9,400.0	9,331.0	9,360.0	9,331.0	27.4	20.8	86.67	441.4	91.2	832.1	791.8	40.29	20.654	
9,500.0	9,431.0	9,460.0	9,431.0	27.5	20.9	86.67	441.4	91.2	832.1	791.7	40.41	20.593	
9,600.0	9,531.0	9,560.0	9,531.0	27.5	20.9	86.67	441.4	91.2	832.1	791.5	40.53	20.532	
9,700.0	9,631.0	9,660.0	9,631.0	27.5	21.0	86.67	441.4	91.2	832.1	791.4	40.65	20.471	
9,800.0	9,731.0	9,760.0	9,731.0	27.6	21.0	86.67	441.4	91.2	832.1	791.3	40.77	20.411	
9,900.0	9,831.0	9,860.0	9,831.0	27.6	21.1	86.67	441.4	91.2	832.1	791.2	40.89	20.351	
10,000.0	9,931.0	9,960.0	9,931.0	27.7	21.2	86.67	441.4	91.2	832.1	791.1	41.01	20.291	
10,100.0	10,031.0	10,060.0	10,031.0	27.7	21.2	86.67	441.4	91.2	832.1	790.9	41.13	20.231	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #701H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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	10,131.0	10,160.0	10,131.0	27.8	21.3	86.67	441.4	91.2	832.1	790.8	41.25	20.171	
10,300.0	10,231.0	10,260.0	10,231.0	27.8	21.4	86.67	441.4	91.2	832.1	790.7	41.37	20.112	
10,400.0	10,331.0	10,360.0	10,331.0	27.8	21.4	86.67	441.4	91.2	832.1	790.6	41.49	20.053	
10,500.0	10,431.0	10,460.0	10,431.0	27.9	21.5	86.67	441.4	91.2	832.1	790.4	41.62	19.994	
10,600.0	10,531.0	10,560.0	10,531.0	27.9	21.6	86.67	441.4	91.2	832.1	790.3	41.74	19.935	
10,700.0	10,631.0	10,660.0	10,631.0	28.0	21.6	86.67	441.4	91.2	832.1	790.2	41.86	19.877	
10,800.0	10,731.0	10,760.0	10,731.0	28.0	21.7	86.67	441.4	91.2	832.1	790.1	41.98	19.819	
10,900.0	10,831.0	10,860.0	10,831.0	28.1	21.8	86.67	441.4	91.2	832.1	790.0	42.11	19.761	
11,000.0	10,931.0	10,960.0	10,931.0	28.1	21.8	86.67	441.4	91.2	832.1	789.8	42.23	19.703	
11,100.0	11,031.0	11,060.0	11,031.0	28.2	21.9	86.67	441.4	91.2	832.1	789.7	42.35	19.645	
11,200.0	11,131.0	11,160.0	11,131.0	28.2	22.0	86.67	441.4	91.2	832.1	789.6	42.48	19.588	
11,300.0	11,231.0	11,260.0	11,231.0	28.2	22.0	86.67	441.4	91.2	832.1	789.5	42.60	19.531	
11,400.0	11,331.0	11,360.0	11,331.0	28.3	22.1	86.67	441.4	91.2	832.1	789.3	42.73	19.474	
11,500.0	11,431.0	11,460.0	11,431.0	28.3	22.2	86.67	441.4	91.2	832.1	789.2	42.85	19.417	
11,600.0	11,531.0	11,560.0	11,531.0	28.4	22.2	86.67	441.4	91.2	832.1	789.1	42.98	19.361	
11,700.0	11,631.0	11,660.0	11,631.0	28.4	22.3	86.67	441.4	91.2	832.1	789.0	43.10	19.305	
11,800.0	11,731.0	11,760.0	11,731.0	28.5	22.4	86.67	441.4	91.2	832.1	788.8	43.23	19.248	
11,900.0	11,831.0	11,860.0	11,831.0	28.5	22.4	86.67	441.4	91.2	832.1	788.7	43.35	19.193	
12,000.0	11,931.0	11,960.0	11,931.0	28.6	22.5	86.67	441.4	91.2	832.1	788.6	43.48	19.137	
12,100.0	12,031.0	12,060.3	12,031.3	28.6	22.6	86.68	441.4	91.2	832.1	788.5	43.59	19.087	
12,200.0	12,131.0	12,166.4	12,136.8	28.7	22.4	87.40	430.8	91.3	831.6	787.9	43.76	19.006	
12,300.0	12,231.0	12,265.5	12,231.9	28.7	22.2	89.28	403.6	91.6	831.1	787.1	44.03	18.875	
12,306.9	12,237.9	12,271.9	12,237.9	28.7	22.1	89.44	401.2	91.6	831.1	787.0	44.05	18.865	
12,400.0	12,331.0	12,353.1	12,311.0	28.8	21.9	91.86	366.1	92.0	832.1	787.7	44.36	18.757	
12,500.0	12,431.0	12,427.7	12,373.2	28.8	21.7	94.68	325.0	92.4	836.6	791.9	44.70	18.715	
12,600.0	12,531.0	12,490.1	12,420.8	28.8	21.6	-81.96	284.7	92.7	846.4	801.4	45.06	18.786	
12,700.0	12,630.4	12,550.0	12,462.0	28.7	21.5	-77.88	241.3	93.2	861.2	815.9	45.31	19.007	
12,800.0	12,726.7	12,600.0	12,492.9	28.5	21.3	-74.24	202.0	93.5	878.7	833.2	45.46	19.327	
12,900.0	12,816.9	12,650.0	12,520.2	28.3	21.3	-70.75	160.1	94.0	897.3	851.7	45.61	19.671	
13,000.0	12,898.3	12,711.5	12,548.6	28.1	21.2	-67.29	105.6	94.5	915.6	869.8	45.77	20.003	
13,100.0	12,968.5	12,765.5	12,568.6	27.9	21.1	-64.52	55.5	95.0	932.5	886.6	45.93	20.303	
13,200.0	13,025.2	12,819.3	12,583.7	27.8	21.1	-62.27	3.9	95.5	947.1	901.1	46.07	20.557	
13,300.0	13,066.8	12,872.8	12,593.9	27.7	21.0	-60.58	-48.6	96.0	958.6	912.5	46.17	20.762	
13,400.0	13,091.9	12,926.2	12,599.2	27.7	21.0	-59.47	-101.8	96.5	966.5	920.3	46.20	20.919	
13,500.0	13,100.0	13,000.2	12,600.0	27.8	21.0	-58.97	-175.7	97.2	969.9	923.7	46.16	21.013	
13,600.0	13,100.0	13,100.2	12,600.0	27.8	21.0	-58.97	-275.7	98.2	969.9	923.7	46.12	21.030	
13,700.0	13,100.0	13,200.2	12,600.0	28.0	21.1	-58.97	-375.7	99.1	969.9	923.7	46.13	21.024	
13,800.0	13,100.0	13,300.2	12,600.0	28.1	21.1	-58.97	-475.7	100.1	969.9	923.7	46.19	20.995	
13,900.0	13,100.0	13,400.2	12,600.0	28.2	21.1	-58.97	-575.7	101.1	969.8	923.5	46.31	20.944	
14,000.0	13,100.0	13,500.2	12,600.0	28.4	21.1	-58.97	-675.7	102.1	969.8	923.4	46.47	20.870	
14,100.0	13,100.0	13,600.2	12,600.0	28.5	21.2	-58.97	-775.7	103.0	969.8	923.2	46.68	20.774	
14,200.0	13,100.0	13,700.2	12,600.0	28.7	21.2	-58.97	-875.7	104.0	969.8	922.9	46.95	20.658	
14,300.0	13,100.0	13,800.2	12,600.0	28.9	21.3	-58.97	-975.6	105.0	969.8	922.6	47.26	20.523	
14,400.0	13,100.0	13,900.2	12,600.0	29.1	21.3	-58.97	-1,075.6	105.9	969.8	922.2	47.61	20.369	
14,500.0	13,100.0	14,000.2	12,600.0	29.4	21.4	-58.96	-1,175.6	106.9	969.8	921.8	48.02	20.198	
14,600.0	13,100.0	14,100.2	12,600.0	29.6	21.4	-58.96	-1,275.6	107.9	969.8	921.3	48.46	20.011	
14,700.0	13,100.0	14,200.2	12,600.0	29.9	21.5	-58.96	-1,375.6	108.8	969.8	920.8	48.95	19.810	
14,800.0	13,100.0	14,300.2	12,600.0	30.2	21.6	-58.96	-1,475.6	109.8	969.8	920.3	49.49	19.597	
14,900.0	13,100.0	14,400.2	12,600.0	30.5	21.7	-58.96	-1,575.6	110.8	969.8	919.7	50.06	19.372	
15,000.0	13,100.0	14,500.2	12,600.0	30.8	21.9	-58.96	-1,675.6	111.8	969.8	919.1	50.68	19.137	
15,100.0	13,100.0	14,600.2	12,600.0	31.1	22.1	-58.96	-1,775.6	112.7	969.8	918.5	51.33	18.894	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #701H - OWB - PWP0

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,200.0	13,100.0	14,700.2	12,600.0	31.4	22.3	-58.96	-1,875.6	113.7	969.8	917.8	52.01	18.644	
15,300.0	13,100.0	14,800.2	12,600.0	31.8	22.7	-58.96	-1,975.6	114.7	969.8	917.0	52.74	18.388	
15,400.0	13,100.0	14,900.2	12,600.0	32.1	23.1	-58.96	-2,075.6	115.6	969.8	916.3	53.50	18.128	
15,500.0	13,100.0	15,000.2	12,600.0	32.5	23.5	-58.96	-2,175.6	116.6	969.8	915.5	54.28	17.864	
15,600.0	13,100.0	15,100.2	12,600.0	32.9	24.0	-58.96	-2,275.6	117.6	969.8	914.6	55.10	17.598	
15,700.0	13,100.0	15,200.2	12,600.0	33.3	24.6	-58.96	-2,375.6	118.5	969.7	913.8	55.95	17.331	
15,800.0	13,100.0	15,300.2	12,600.0	33.7	25.1	-58.96	-2,475.6	119.5	969.7	912.9	56.83	17.063	
15,900.0	13,100.0	15,400.2	12,600.0	34.1	25.7	-58.96	-2,575.6	120.5	969.7	912.0	57.74	16.796	
16,000.0	13,100.0	15,500.2	12,600.0	34.6	26.2	-58.96	-2,675.6	121.4	969.7	911.1	58.67	16.529	
16,100.0	13,100.0	15,600.2	12,600.0	35.0	26.8	-58.96	-2,775.6	122.4	969.7	910.1	59.62	16.265	
16,200.0	13,100.0	15,700.2	12,600.0	35.5	27.4	-58.96	-2,875.6	123.4	969.7	909.1	60.60	16.002	
16,300.0	13,100.0	15,800.2	12,600.0	35.9	28.0	-58.96	-2,975.6	124.4	969.7	908.1	61.60	15.742	
16,400.0	13,100.0	15,900.2	12,600.0	36.4	28.7	-58.96	-3,075.6	125.3	969.7	907.1	62.62	15.485	
16,500.0	13,100.0	16,000.2	12,600.0	36.9	29.3	-58.96	-3,175.5	126.3	969.7	906.0	63.66	15.232	
16,600.0	13,100.0	16,100.2	12,600.0	37.4	29.9	-58.96	-3,275.5	127.3	969.7	905.0	64.72	14.982	
16,700.0	13,100.0	16,200.2	12,600.0	37.9	30.6	-58.96	-3,375.5	128.2	969.7	903.9	65.80	14.737	
16,800.0	13,100.0	16,300.2	12,600.0	38.4	31.2	-58.96	-3,475.5	129.2	969.7	902.8	66.90	14.495	
16,900.0	13,100.0	16,400.2	12,600.0	38.9	31.9	-58.96	-3,575.5	130.2	969.7	901.7	68.01	14.258	
17,000.0	13,100.0	16,500.2	12,600.0	39.5	32.5	-58.96	-3,675.5	131.1	969.7	900.5	69.14	14.026	
17,100.0	13,100.0	16,600.2	12,600.0	40.0	33.2	-58.96	-3,775.5	132.1	969.7	899.4	70.28	13.798	
17,200.0	13,100.0	16,700.2	12,600.0	40.5	33.8	-58.96	-3,875.5	133.1	969.7	898.2	71.43	13.574	
17,300.0	13,100.0	16,800.2	12,600.0	41.1	34.5	-58.96	-3,975.5	134.0	969.7	897.1	72.60	13.355	
17,400.0	13,100.0	16,900.2	12,600.0	41.6	35.2	-58.96	-4,075.5	135.0	969.7	895.9	73.79	13.141	
17,500.0	13,100.0	17,000.2	12,600.0	42.2	35.9	-58.96	-4,175.5	136.0	969.6	894.7	74.98	12.932	
17,600.0	13,100.0	17,100.2	12,600.0	42.8	36.5	-58.96	-4,275.5	137.0	969.6	893.4	76.19	12.727	
17,700.0	13,100.0	17,200.2	12,600.0	43.4	37.2	-58.96	-4,375.5	137.9	969.6	892.2	77.41	12.526	
17,800.0	13,100.0	17,300.2	12,600.0	43.9	37.9	-58.96	-4,475.5	138.9	969.6	891.0	78.64	12.331	
17,900.0	13,100.0	17,400.2	12,600.0	44.5	38.6	-58.96	-4,575.5	139.9	969.6	889.7	79.87	12.139	
18,000.0	13,100.0	17,500.2	12,600.0	45.1	39.3	-58.96	-4,675.5	140.8	969.6	888.5	81.12	11.953	
18,100.0	13,100.0	17,600.2	12,600.0	45.7	40.0	-58.96	-4,775.5	141.8	969.6	887.2	82.38	11.770	
18,200.0	13,100.0	17,700.2	12,600.0	46.3	40.7	-58.96	-4,875.5	142.8	969.6	886.0	83.64	11.592	
18,300.0	13,100.0	17,800.2	12,600.0	46.9	41.4	-58.96	-4,975.5	143.7	969.6	884.7	84.92	11.418	
18,400.0	13,100.0	17,900.2	12,600.0	47.6	42.1	-58.96	-5,075.5	144.7	969.6	883.4	86.20	11.248	
18,500.0	13,100.0	18,000.2	12,600.0	48.2	42.8	-58.96	-5,175.5	145.7	969.6	882.1	87.49	11.082	
18,600.0	13,100.0	18,100.2	12,600.0	48.8	43.5	-58.96	-5,275.4	146.7	969.6	880.8	88.79	10.920	
18,700.0	13,100.0	18,200.2	12,600.0	49.4	44.2	-58.96	-5,375.4	147.6	969.6	879.5	90.09	10.762	
18,800.0	13,100.0	18,300.2	12,600.0	50.1	44.9	-58.96	-5,475.4	148.6	969.6	878.2	91.40	10.608	
18,900.0	13,100.0	18,400.2	12,600.0	50.7	45.6	-58.96	-5,575.4	149.6	969.6	876.8	92.72	10.457	
19,000.0	13,100.0	18,500.2	12,600.0	51.3	46.4	-58.96	-5,675.4	150.5	969.6	875.5	94.04	10.310	
19,100.0	13,100.0	18,600.2	12,600.0	52.0	47.1	-58.96	-5,775.4	151.5	969.6	874.2	95.37	10.166	
19,200.0	13,100.0	18,700.2	12,600.0	52.6	47.8	-58.96	-5,875.4	152.5	969.5	872.8	96.71	10.025	
19,300.0	13,100.0	18,800.2	12,600.0	53.3	48.5	-58.96	-5,975.4	153.4	969.5	871.5	98.05	9.888	
19,400.0	13,100.0	18,900.2	12,600.0	53.9	49.2	-58.96	-6,075.4	154.4	969.5	870.1	99.39	9.754	
19,500.0	13,100.0	19,000.2	12,600.0	54.6	50.0	-58.95	-6,175.4	155.4	969.5	868.8	100.74	9.624	
19,600.0	13,100.0	19,100.2	12,600.0	55.2	50.7	-58.95	-6,275.4	156.3	969.5	867.4	102.10	9.496	
19,700.0	13,100.0	19,200.2	12,600.0	55.9	51.4	-58.95	-6,375.4	157.3	969.5	866.1	103.46	9.371	
19,800.0	13,100.0	19,300.2	12,600.0	56.6	52.1	-58.95	-6,475.4	158.3	969.5	864.7	104.82	9.249	
19,900.0	13,100.0	19,400.2	12,600.0	57.2	52.8	-58.95	-6,575.4	159.3	969.5	863.3	106.19	9.130	
20,000.0	13,100.0	19,500.2	12,600.0	57.9	53.6	-58.95	-6,675.4	160.2	969.5	861.9	107.56	9.013	
20,100.0	13,100.0	19,600.2	12,600.0	58.6	54.3	-58.95	-6,775.4	161.2	969.5	860.6	108.94	8.899	
20,200.0	13,100.0	19,700.2	12,600.0	59.2	55.0	-58.95	-6,875.4	162.2	969.5	859.2	110.32	8.788	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #701H - OWB - PWP0

Offset Site Error: 0.0 usft

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

Offset Well Error: 3.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
20,300.0	13,100.0	19,800.2	12,600.0	59.9	55.8	-58.95	-6,975.4	163.1	969.5	857.8	111.70	8.679	
20,400.0	13,100.0	19,900.2	12,600.0	60.6	56.5	-58.95	-7,075.4	164.1	969.5	856.4	113.09	8.573	
20,500.0	13,100.0	20,000.2	12,600.0	61.3	57.2	-58.95	-7,175.4	165.1	969.5	855.0	114.48	8.468	
20,600.0	13,100.0	20,100.2	12,600.0	62.0	58.0	-58.95	-7,275.4	166.0	969.5	853.6	115.88	8.366	
20,700.0	13,100.0	20,200.2	12,600.0	62.6	58.7	-58.95	-7,375.3	167.0	969.5	852.2	117.27	8.267	
20,800.0	13,100.0	20,300.2	12,600.0	63.3	59.4	-58.95	-7,475.3	168.0	969.5	850.8	118.67	8.169	
20,900.0	13,100.0	20,400.2	12,600.0	64.0	60.2	-58.95	-7,575.3	168.9	969.5	849.4	120.08	8.074	
21,000.0	13,100.0	20,500.2	12,600.0	64.7	60.9	-58.95	-7,675.3	169.9	969.4	848.0	121.48	7.980	
21,100.0	13,100.0	20,600.2	12,600.0	65.4	61.6	-58.95	-7,775.3	170.9	969.4	846.6	122.89	7.889	
21,200.0	13,100.0	20,700.2	12,600.0	66.1	62.4	-58.95	-7,875.3	171.9	969.4	845.1	124.30	7.799	
21,300.0	13,100.0	20,800.2	12,600.0	66.8	63.1	-58.95	-7,975.3	172.8	969.4	843.7	125.71	7.711	
21,400.0	13,100.0	20,900.2	12,600.0	67.5	63.8	-58.95	-8,075.3	173.8	969.4	842.3	127.13	7.625	
21,500.0	13,100.0	21,000.2	12,600.0	68.2	64.6	-58.95	-8,175.3	174.8	969.4	840.9	128.55	7.541	
21,600.0	13,100.0	21,100.2	12,600.0	68.9	65.3	-58.95	-8,275.3	175.7	969.4	839.4	129.97	7.459	
21,700.0	13,100.0	21,200.2	12,600.0	69.6	66.1	-58.95	-8,375.3	176.7	969.4	838.0	131.39	7.378	
21,800.0	13,100.0	21,300.2	12,600.0	70.3	66.8	-58.95	-8,475.3	177.7	969.4	836.6	132.82	7.299	
21,900.0	13,100.0	21,400.2	12,600.0	71.0	67.5	-58.95	-8,575.3	178.6	969.4	835.2	134.24	7.221	
22,000.0	13,100.0	21,500.2	12,600.0	71.7	68.3	-58.95	-8,675.3	179.6	969.4	833.7	135.67	7.145	
22,100.0	13,100.0	21,600.2	12,600.0	72.4	69.0	-58.95	-8,775.3	180.6	969.4	832.3	137.10	7.070	
22,200.0	13,100.0	21,700.2	12,600.0	73.1	69.8	-58.95	-8,875.3	181.6	969.4	830.8	138.54	6.997	
22,300.0	13,100.0	21,800.2	12,600.0	73.8	70.5	-58.95	-8,975.3	182.5	969.4	829.4	139.97	6.925	
22,400.0	13,100.0	21,900.2	12,600.0	74.5	71.3	-58.95	-9,075.3	183.5	969.4	828.0	141.41	6.855	
22,500.0	13,100.0	22,000.2	12,600.0	75.2	72.0	-58.95	-9,175.3	184.5	969.4	826.5	142.85	6.786	
22,600.0	13,100.0	22,100.2	12,600.0	75.9	72.7	-58.95	-9,275.3	185.4	969.4	825.1	144.29	6.718	
22,700.0	13,100.0	22,200.2	12,600.0	76.6	73.5	-58.95	-9,375.3	186.4	969.4	823.6	145.73	6.652	
22,800.0	13,100.0	22,300.2	12,600.0	77.4	74.2	-58.95	-9,475.2	187.4	969.3	822.2	147.17	6.586	
22,900.0	13,100.0	22,400.2	12,600.0	78.1	75.0	-58.95	-9,575.2	188.3	969.3	820.7	148.62	6.522	
23,000.0	13,100.0	22,500.2	12,600.0	78.8	75.7	-58.95	-9,675.2	189.3	969.3	819.3	150.06	6.460	
23,100.0	13,100.0	22,600.2	12,600.0	79.5	76.5	-58.95	-9,775.2	190.3	969.3	817.8	151.51	6.398	
23,200.0	13,100.0	22,700.2	12,600.0	80.2	77.2	-58.95	-9,875.2	191.2	969.3	816.4	152.96	6.337	
23,300.0	13,100.0	22,800.2	12,600.0	80.9	78.0	-58.95	-9,975.2	192.2	969.3	814.9	154.41	6.278	
23,400.0	13,100.0	22,900.2	12,600.0	81.7	78.7	-58.95	-10,075.2	193.2	969.3	813.5	155.86	6.219	
23,500.0	13,100.0	23,000.2	12,600.0	82.4	79.5	-58.95	-10,175.2	194.2	969.3	812.0	157.31	6.162	
23,600.0	13,100.0	23,100.2	12,600.0	83.1	80.2	-58.95	-10,275.2	195.1	969.3	810.5	158.77	6.105	
23,700.0	13,100.0	23,200.2	12,600.0	83.8	81.0	-58.95	-10,375.2	196.1	969.3	809.1	160.22	6.050	
23,800.0	13,100.0	23,300.2	12,600.0	84.5	81.7	-58.95	-10,475.2	197.1	969.3	807.6	161.68	5.995	
23,900.0	13,100.0	23,400.2	12,600.0	85.3	82.5	-58.95	-10,575.2	198.0	969.3	806.1	163.14	5.942	
24,000.0	13,100.0	23,500.2	12,600.0	86.0	83.2	-58.95	-10,675.2	199.0	969.3	804.7	164.60	5.889	
24,100.0	13,100.0	23,600.2	12,600.0	86.7	84.0	-58.95	-10,775.2	200.0	969.3	803.2	166.06	5.837	
24,200.0	13,100.0	23,700.2	12,600.0	87.4	84.7	-58.95	-10,875.2	200.9	969.3	801.8	167.52	5.786	
24,300.0	13,100.0	23,800.2	12,600.0	88.2	85.5	-58.95	-10,975.2	201.9	969.3	800.3	168.98	5.736	
24,400.0	13,100.0	23,900.2	12,600.0	88.9	86.2	-58.95	-11,075.2	202.9	969.3	798.8	170.44	5.687	
24,500.0	13,100.0	24,000.2	12,600.0	89.6	87.0	-58.94	-11,175.2	203.8	969.3	797.3	171.91	5.638	
24,600.0	13,100.0	24,100.2	12,600.0	90.3	87.7	-58.94	-11,275.2	204.8	969.2	795.9	173.37	5.591	
24,700.0	13,100.0	24,200.2	12,600.0	91.1	88.5	-58.94	-11,375.2	205.8	969.2	794.4	174.84	5.544	
24,800.0	13,100.0	24,300.2	12,600.0	91.8	89.2	-58.94	-11,475.2	206.8	969.2	792.9	176.30	5.498	
24,900.0	13,100.0	24,400.2	12,600.0	92.5	90.0	-58.94	-11,575.2	207.7	969.2	791.5	177.77	5.452	
25,000.0	13,100.0	24,500.2	12,600.0	93.3	90.7	-58.94	-11,675.1	208.7	969.2	790.0	179.24	5.407	
25,100.0	13,100.0	24,600.2	12,600.0	94.0	91.5	-58.94	-11,775.1	209.7	969.2	788.5	180.71	5.363	
25,200.0	13,100.0	24,700.2	12,600.0	94.7	92.2	-58.94	-11,875.1	210.6	969.2	787.0	182.18	5.320	
25,300.0	13,100.0	24,800.2	12,600.0	95.4	93.0	-58.94	-11,975.1	211.6	969.2	785.6	183.65	5.277	

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 *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Offset Design: HENNIN PROJECT - *HENNIN FED COM #701H - OWB - PWP0

Offset Site Error: 0.0 usft

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

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
25,400.0	13,100.0	24,900.2	12,600.0	96.2	93.7	-58.94	-12,075.1	212.6	969.2	784.1	185.12	5.235	
25,500.0	13,100.0	25,000.2	12,600.0	96.9	94.5	-58.94	-12,175.1	213.5	969.2	782.6	186.59	5.194	
25,600.0	13,100.0	25,100.2	12,600.0	97.6	95.2	-58.94	-12,275.1	214.5	969.2	781.1	188.07	5.153	
25,700.0	13,100.0	25,200.2	12,600.0	98.4	96.0	-58.94	-12,375.1	215.5	969.2	779.6	189.54	5.113	
25,800.0	13,100.0	25,300.2	12,600.0	99.1	96.7	-58.94	-12,475.1	216.5	969.2	778.2	191.02	5.074	
25,900.0	13,100.0	25,400.2	12,600.0	99.8	97.5	-58.94	-12,575.1	217.4	969.2	776.7	192.49	5.035	
26,000.0	13,100.0	25,500.2	12,600.0	100.6	98.2	-58.94	-12,675.1	218.4	969.2	775.2	193.97	4.997	
26,100.0	13,100.0	25,600.2	12,600.0	101.3	99.0	-58.94	-12,775.1	219.4	969.2	773.7	195.44	4.959	
26,200.0	13,100.0	25,700.2	12,600.0	102.1	99.7	-58.94	-12,875.1	220.3	969.2	772.2	196.92	4.922	
26,300.0	13,100.0	25,800.2	12,600.0	102.8	100.5	-58.94	-12,975.1	221.3	969.1	770.8	198.40	4.885	
26,400.0	13,100.0	25,900.2	12,600.0	103.5	101.2	-58.94	-13,075.1	222.3	969.1	769.3	199.88	4.849	
26,500.0	13,100.0	26,000.2	12,600.0	104.3	102.0	-58.94	-13,175.1	223.2	969.1	767.8	201.36	4.813	
26,600.0	13,100.0	26,100.2	12,600.0	105.0	102.7	-58.94	-13,275.1	224.2	969.1	766.3	202.84	4.778	
26,700.0	13,100.0	26,200.2	12,600.0	105.7	103.5	-58.94	-13,375.1	225.2	969.1	764.8	204.32	4.743	
26,800.0	13,100.0	26,300.2	12,600.0	106.5	104.3	-58.94	-13,475.1	226.1	969.1	763.3	205.80	4.709	
26,900.0	13,100.0	26,400.2	12,600.0	107.2	105.0	-58.94	-13,575.1	227.1	969.1	761.8	207.28	4.675	
27,000.0	13,100.0	26,500.2	12,600.0	108.0	105.8	-58.94	-13,675.1	228.1	969.1	760.3	208.76	4.642	
27,100.0	13,100.0	26,600.2	12,600.0	108.7	106.5	-58.94	-13,775.0	229.1	969.1	758.9	210.24	4.609	
27,200.0	13,100.0	26,700.2	12,600.0	109.4	107.3	-58.94	-13,875.0	230.0	969.1	757.4	211.73	4.577	
27,300.0	13,100.0	26,800.2	12,600.0	110.2	108.0	-58.94	-13,975.0	231.0	969.1	755.9	213.21	4.545	
27,400.0	13,100.0	26,900.2	12,600.0	110.9	108.8	-58.94	-14,075.0	232.0	969.1	754.4	214.69	4.514	
27,500.0	13,100.0	27,000.2	12,600.0	111.7	109.5	-58.94	-14,175.0	232.9	969.1	752.9	216.18	4.483	
27,600.0	13,100.0	27,100.2	12,600.0	112.4	110.3	-58.94	-14,275.0	233.9	969.1	751.4	217.66	4.452	
27,700.0	13,100.0	27,200.2	12,600.0	113.1	111.1	-58.94	-14,375.0	234.9	969.1	749.9	219.15	4.422	
27,800.0	13,100.0	27,300.2	12,600.0	113.9	111.8	-58.94	-14,475.0	235.8	969.1	748.4	220.64	4.392	
27,900.0	13,100.0	27,400.2	12,600.0	114.6	112.6	-58.94	-14,575.0	236.8	969.1	746.9	222.12	4.363	
28,000.0	13,100.0	27,500.2	12,600.0	115.4	113.3	-58.94	-14,675.0	237.8	969.1	745.4	223.61	4.334	
28,100.0	13,100.0	27,600.2	12,600.0	116.1	114.1	-58.94	-14,775.0	238.7	969.0	744.0	225.10	4.305	
28,200.0	13,100.0	27,700.2	12,600.0	116.8	114.8	-58.94	-14,875.0	239.7	969.0	742.5	226.58	4.277	
28,300.0	13,100.0	27,800.2	12,600.0	117.6	115.6	-58.94	-14,975.0	240.7	969.0	741.0	228.07	4.249	
28,400.0	13,100.0	27,900.2	12,600.0	118.3	116.3	-58.94	-15,075.0	241.7	969.0	739.5	229.56	4.221	
28,500.0	13,100.0	28,000.2	12,600.0	119.1	117.1	-58.94	-15,175.0	242.6	969.0	738.0	231.05	4.194	
28,600.0	13,100.0	28,100.2	12,600.0	119.8	117.9	-58.94	-15,275.0	243.6	969.0	736.5	232.54	4.167	
28,700.0	13,100.0	28,200.2	12,600.0	120.6	118.6	-58.94	-15,375.0	244.6	969.0	735.0	234.03	4.141	
28,800.0	13,100.0	28,300.2	12,600.0	121.3	119.4	-58.94	-15,475.0	245.5	969.0	733.5	235.52	4.114	
28,900.0	13,100.0	28,400.2	12,600.0	122.0	120.1	-58.94	-15,575.0	246.5	969.0	732.0	237.01	4.088	
29,000.0	13,100.0	28,500.2	12,600.0	122.8	120.9	-58.94	-15,675.0	247.5	969.0	730.5	238.50	4.063	
29,100.0	13,100.0	28,600.2	12,600.0	123.5	121.6	-58.94	-15,775.0	248.4	969.0	729.0	239.99	4.038	
29,200.0	13,100.0	28,700.2	12,600.0	124.3	122.4	-58.94	-15,874.9	249.4	969.0	727.5	241.48	4.013	
29,300.0	13,100.0	28,800.2	12,600.0	125.0	123.2	-58.94	-15,974.9	250.4	969.0	726.0	242.98	3.988	
29,400.0	13,100.0	28,900.2	12,600.0	125.8	123.9	-58.94	-16,074.9	251.4	969.0	724.5	244.47	3.964	
29,458.3	13,100.0	28,958.5	12,600.0	126.2	124.3	-58.93	-16,133.3	251.9	969.0	723.6	245.34	3.950	

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

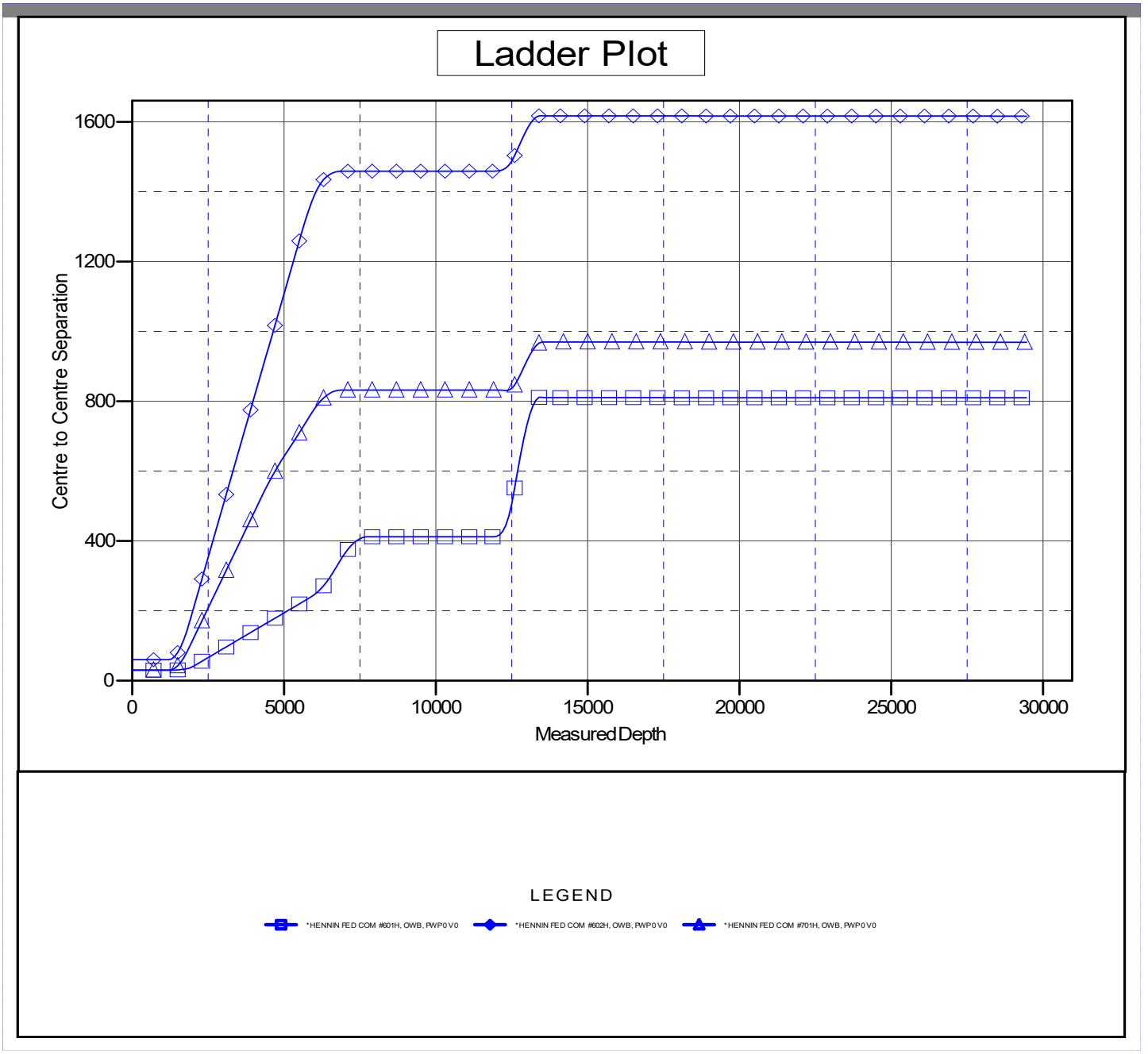
ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to WELL @ 3220.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: *HENNIN FED COM #801H - Slot HENNIN FED COM
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.52°



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

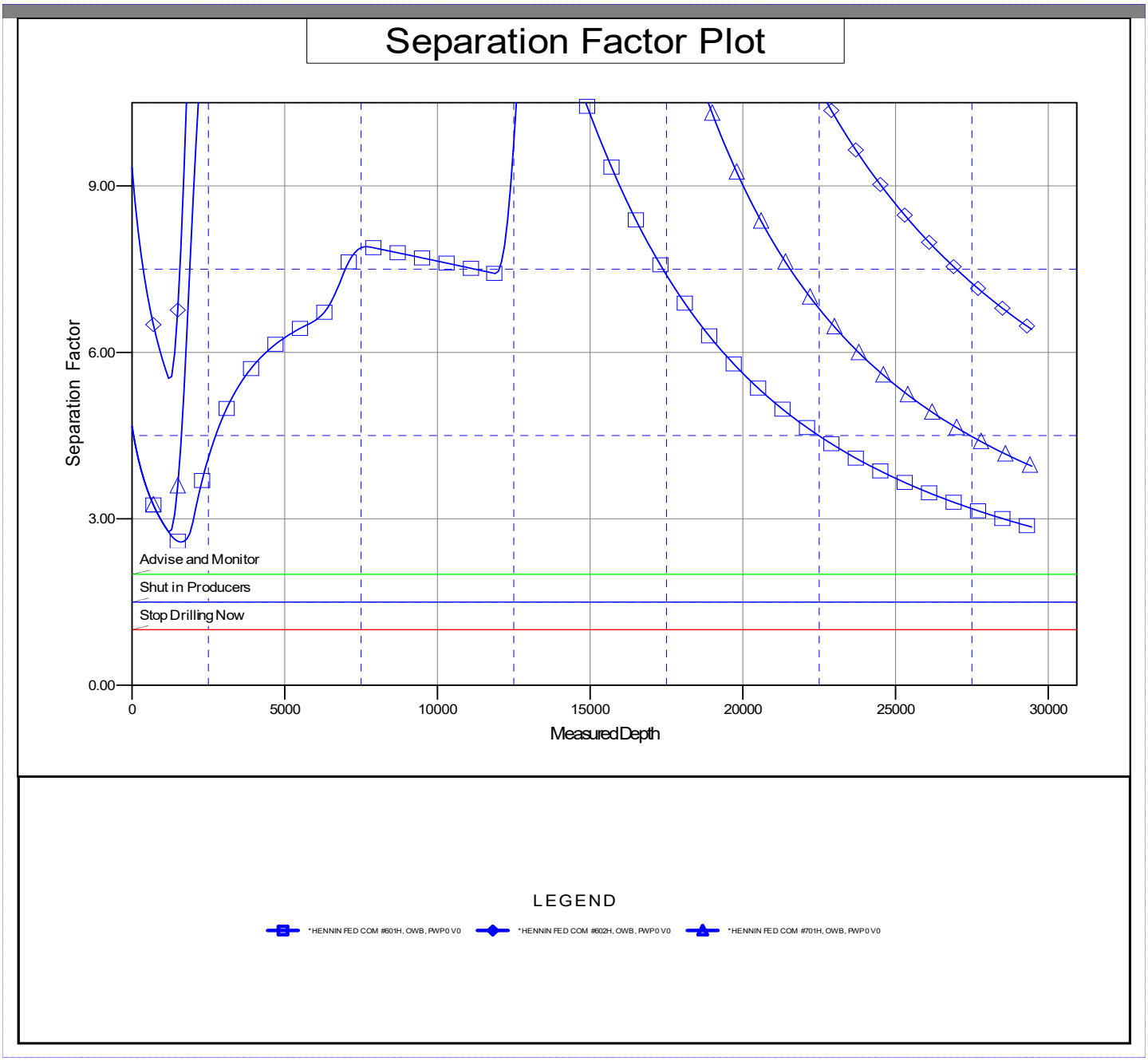
ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Project:	BULLDOG PROSPECT (NM-E)	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Reference Site:	HENNIN PROJECT	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site Error:	0.0 usft	**North Reference:**	Grid
Reference Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Well Error:	3.0 usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OWB	**Database:**	Central Planning Prod
Reference Design:	PWP0	**Offset TVD Reference:**	Reference Datum

Reference Depths are relative to WELL @ 3220.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: *HENNIN FED COM #801H - Slot HENNIN FED COM
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.52°



DELAWARE BASIN EAST

BULLDOG PROSPECT (NM-E)
HENNIN PROJECT
***HENNIN FED COM #801H - Slot HENNIN FED COM #801H**

OWB

Plan: PWP0

Standard Planning Report

29 June, 2023

ConocoPhillips

Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project BULLDOG 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		

Site HENNIN PROJECT

Site Position:		**Northing:**	397,009.03 usft	**Latitude:**	32° 5' 15.761 N
From:	Map	**Easting:**	803,170.42 usft	**Longitude:**	103° 21' 15.967 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H

Well Position	**+N/-S**	0.0 usft	**Northing:**	404,891.83 usft	**Latitude:**	32° 6' 33.879 N
	+E/-W	0.0 usft	**Easting:**	801,869.82 usft	**Longitude:**	103° 21' 30.255 W
Position Uncertainty		3.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,220.0 usft
Grid Convergence:		0.52 °				

Wellbore OWB

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	4/14/2023	6.18	59.66	47,394.61598906

Design PWP0

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

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	182.05

Plan Survey Tool Program **Date** 6/29/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	29,457.3	PWP0 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St	

ConocoPhillips

Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,866.7	10.00	298.00	1,863.3	27.2	-51.2	1.50	1.50	0.00	298.00	
5,854.0	10.00	298.00	5,790.0	352.3	-662.6	0.00	0.00	0.00	0.00	
6,854.0	0.00	0.00	6,784.9	393.2	-739.4	1.00	-1.00	0.00	180.00	
12,596.0	0.00	0.00	12,527.0	393.2	-739.4	0.00	0.00	0.00	0.00	
13,496.0	90.00	179.44	13,100.0	-179.8	-733.8	10.00	10.00	19.94	179.44	
29,458.3	90.00	179.44	13,100.0	-16,141.3	-578.0	0.00	0.00	0.00	0.00	PBHL (HENNIN FED

ConocoPhillips

Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	1.50	298.00	1,300.0	0.6	-1.2	-0.6	1.50	1.50	0.00
1,400.0	3.00	298.00	1,399.9	2.5	-4.6	-2.3	1.50	1.50	0.00
1,500.0	4.50	298.00	1,499.7	5.5	-10.4	-5.2	1.50	1.50	0.00
1,600.0	6.00	298.00	1,599.3	9.8	-18.5	-9.2	1.50	1.50	0.00
1,700.0	7.50	298.00	1,698.6	15.3	-28.9	-14.3	1.50	1.50	0.00
1,800.0	9.00	298.00	1,797.5	22.1	-41.5	-20.6	1.50	1.50	0.00
1,866.7	10.00	298.00	1,863.3	27.2	-51.2	-25.4	1.50	1.50	0.00
1,900.0	10.00	298.00	1,896.1	30.0	-56.3	-27.9	0.00	0.00	0.00
2,000.0	10.00	298.00	1,994.6	38.1	-71.7	-35.5	0.00	0.00	0.00
2,100.0	10.00	298.00	2,093.1	46.3	-87.0	-43.1	0.00	0.00	0.00
2,200.0	10.00	298.00	2,191.6	54.4	-102.3	-50.7	0.00	0.00	0.00
2,300.0	10.00	298.00	2,290.0	62.6	-117.7	-58.3	0.00	0.00	0.00
2,400.0	10.00	298.00	2,388.5	70.7	-133.0	-65.9	0.00	0.00	0.00
2,500.0	10.00	298.00	2,487.0	78.9	-148.3	-73.5	0.00	0.00	0.00
2,600.0	10.00	298.00	2,585.5	87.0	-163.7	-81.1	0.00	0.00	0.00
2,700.0	10.00	298.00	2,684.0	95.2	-179.0	-88.7	0.00	0.00	0.00
2,800.0	10.00	298.00	2,782.4	103.3	-194.3	-96.3	0.00	0.00	0.00
2,900.0	10.00	298.00	2,880.9	111.5	-209.7	-103.9	0.00	0.00	0.00
3,000.0	10.00	298.00	2,979.4	119.6	-225.0	-111.5	0.00	0.00	0.00
3,100.0	10.00	298.00	3,077.9	127.8	-240.3	-119.1	0.00	0.00	0.00
3,200.0	10.00	298.00	3,176.4	135.9	-255.7	-126.7	0.00	0.00	0.00
3,300.0	10.00	298.00	3,274.8	144.1	-271.0	-134.3	0.00	0.00	0.00
3,400.0	10.00	298.00	3,373.3	152.2	-286.3	-141.9	0.00	0.00	0.00
3,500.0	10.00	298.00	3,471.8	160.4	-301.7	-149.5	0.00	0.00	0.00
3,600.0	10.00	298.00	3,570.3	168.5	-317.0	-157.1	0.00	0.00	0.00
3,700.0	10.00	298.00	3,668.8	176.7	-332.3	-164.7	0.00	0.00	0.00
3,800.0	10.00	298.00	3,767.2	184.9	-347.7	-172.3	0.00	0.00	0.00
3,900.0	10.00	298.00	3,865.7	193.0	-363.0	-179.9	0.00	0.00	0.00
4,000.0	10.00	298.00	3,964.2	201.2	-378.3	-187.5	0.00	0.00	0.00
4,100.0	10.00	298.00	4,062.7	209.3	-393.7	-195.1	0.00	0.00	0.00
4,200.0	10.00	298.00	4,161.2	217.5	-409.0	-202.7	0.00	0.00	0.00
4,300.0	10.00	298.00	4,259.7	225.6	-424.3	-210.3	0.00	0.00	0.00
4,400.0	10.00	298.00	4,358.1	233.8	-439.7	-217.9	0.00	0.00	0.00
4,500.0	10.00	298.00	4,456.6	241.9	-455.0	-225.5	0.00	0.00	0.00
4,600.0	10.00	298.00	4,555.1	250.1	-470.3	-233.1	0.00	0.00	0.00
4,700.0	10.00	298.00	4,653.6	258.2	-485.7	-240.7	0.00	0.00	0.00
4,800.0	10.00	298.00	4,752.1	266.4	-501.0	-248.3	0.00	0.00	0.00
4,900.0	10.00	298.00	4,850.5	274.5	-516.3	-255.9	0.00	0.00	0.00
5,000.0	10.00	298.00	4,949.0	282.7	-531.6	-263.5	0.00	0.00	0.00
5,100.0	10.00	298.00	5,047.5	290.8	-547.0	-271.1	0.00	0.00	0.00

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Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.0	10.00	298.00	5,146.0	299.0	-562.3	-278.7	0.00	0.00	0.00
5,300.0	10.00	298.00	5,244.5	307.1	-577.6	-286.3	0.00	0.00	0.00
5,400.0	10.00	298.00	5,342.9	315.3	-593.0	-293.9	0.00	0.00	0.00
5,500.0	10.00	298.00	5,441.4	323.4	-608.3	-301.5	0.00	0.00	0.00
5,600.0	10.00	298.00	5,539.9	331.6	-623.6	-309.1	0.00	0.00	0.00
5,700.0	10.00	298.00	5,638.4	339.7	-639.0	-316.7	0.00	0.00	0.00
5,800.0	10.00	298.00	5,736.9	347.9	-654.3	-324.3	0.00	0.00	0.00
5,854.0	10.00	298.00	5,790.0	352.3	-662.6	-328.4	0.00	0.00	0.00
5,900.0	9.54	298.00	5,835.4	356.0	-669.5	-331.8	1.00	-1.00	0.00
6,000.0	8.54	298.00	5,934.1	363.3	-683.3	-338.7	1.00	-1.00	0.00
6,100.0	7.54	298.00	6,033.1	369.9	-695.7	-344.8	1.00	-1.00	0.00
6,200.0	6.54	298.00	6,132.4	375.7	-706.5	-350.1	1.00	-1.00	0.00
6,300.0	5.54	298.00	6,231.8	380.6	-715.8	-354.7	1.00	-1.00	0.00
6,400.0	4.54	298.00	6,331.5	384.7	-723.6	-358.6	1.00	-1.00	0.00
6,500.0	3.54	298.00	6,431.2	388.0	-729.8	-361.7	1.00	-1.00	0.00
6,600.0	2.54	298.00	6,531.1	390.5	-734.5	-364.0	1.00	-1.00	0.00
6,700.0	1.54	298.00	6,631.0	392.2	-737.6	-365.5	1.00	-1.00	0.00
6,800.0	0.54	298.00	6,731.0	393.0	-739.2	-366.3	1.00	-1.00	0.00
6,854.0	0.00	0.00	6,784.9	393.2	-739.4	-366.4	1.00	-1.00	0.00
6,900.0	0.00	0.00	6,831.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,000.0	0.00	0.00	6,931.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,100.0	0.00	0.00	7,031.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,200.0	0.00	0.00	7,131.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,300.0	0.00	0.00	7,231.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,400.0	0.00	0.00	7,331.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,500.0	0.00	0.00	7,431.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,600.0	0.00	0.00	7,531.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,700.0	0.00	0.00	7,631.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,800.0	0.00	0.00	7,731.0	393.2	-739.4	-366.4	0.00	0.00	0.00
7,900.0	0.00	0.00	7,831.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,000.0	0.00	0.00	7,931.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,100.0	0.00	0.00	8,031.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,200.0	0.00	0.00	8,131.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,300.0	0.00	0.00	8,231.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,400.0	0.00	0.00	8,331.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,500.0	0.00	0.00	8,431.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,600.0	0.00	0.00	8,531.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,700.0	0.00	0.00	8,631.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,800.0	0.00	0.00	8,731.0	393.2	-739.4	-366.4	0.00	0.00	0.00
8,900.0	0.00	0.00	8,831.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,000.0	0.00	0.00	8,931.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,100.0	0.00	0.00	9,031.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,200.0	0.00	0.00	9,131.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,300.0	0.00	0.00	9,231.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,400.0	0.00	0.00	9,331.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,500.0	0.00	0.00	9,431.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,600.0	0.00	0.00	9,531.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,700.0	0.00	0.00	9,631.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,800.0	0.00	0.00	9,731.0	393.2	-739.4	-366.4	0.00	0.00	0.00
9,900.0	0.00	0.00	9,831.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,000.0	0.00	0.00	9,931.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,100.0	0.00	0.00	10,031.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,200.0	0.00	0.00	10,131.0	393.2	-739.4	-366.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.0	0.00	0.00	10,231.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,400.0	0.00	0.00	10,331.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,500.0	0.00	0.00	10,431.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,600.0	0.00	0.00	10,531.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,700.0	0.00	0.00	10,631.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,800.0	0.00	0.00	10,731.0	393.2	-739.4	-366.4	0.00	0.00	0.00
10,900.0	0.00	0.00	10,831.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,000.0	0.00	0.00	10,931.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,100.0	0.00	0.00	11,031.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,200.0	0.00	0.00	11,131.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,300.0	0.00	0.00	11,231.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,400.0	0.00	0.00	11,331.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,500.0	0.00	0.00	11,431.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,600.0	0.00	0.00	11,531.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,700.0	0.00	0.00	11,631.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,800.0	0.00	0.00	11,731.0	393.2	-739.4	-366.4	0.00	0.00	0.00
11,900.0	0.00	0.00	11,831.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,000.0	0.00	0.00	11,931.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,100.0	0.00	0.00	12,031.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,200.0	0.00	0.00	12,131.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,300.0	0.00	0.00	12,231.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,400.0	0.00	0.00	12,331.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,500.0	0.00	0.00	12,431.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,596.0	0.00	0.00	12,527.0	393.2	-739.4	-366.4	0.00	0.00	0.00
12,600.0	0.40	179.44	12,531.0	393.2	-739.4	-366.4	10.00	10.00	0.00
12,650.0	5.40	179.44	12,580.9	390.6	-739.4	-363.9	10.00	10.00	0.00
12,700.0	10.40	179.44	12,630.4	383.8	-739.3	-357.1	10.00	10.00	0.00
12,750.0	15.40	179.44	12,679.1	372.6	-739.2	-345.9	10.00	10.00	0.00
12,800.0	20.40	179.44	12,726.7	357.2	-739.1	-330.6	10.00	10.00	0.00
12,850.0	25.40	179.44	12,772.7	337.8	-738.9	-311.1	10.00	10.00	0.00
12,900.0	30.40	179.44	12,816.9	314.4	-738.7	-287.8	10.00	10.00	0.00
12,950.0	35.40	179.44	12,858.9	287.3	-738.4	-260.6	10.00	10.00	0.00
13,000.0	40.40	179.44	12,898.3	256.6	-738.1	-230.0	10.00	10.00	0.00
13,050.0	45.40	179.44	12,934.9	222.5	-737.8	-196.0	10.00	10.00	0.00
13,100.0	50.40	179.44	12,968.5	185.5	-737.4	-158.9	10.00	10.00	0.00
13,150.0	55.40	179.44	12,998.6	145.6	-737.0	-119.1	10.00	10.00	0.00
13,200.0	60.40	179.44	13,025.2	103.2	-736.6	-76.8	10.00	10.00	0.00
13,250.0	65.40	179.44	13,047.9	58.8	-736.2	-32.4	10.00	10.00	0.00
13,300.0	70.40	179.44	13,066.8	12.4	-735.7	13.9	10.00	10.00	0.00
13,350.0	75.40	179.44	13,081.5	-35.3	-735.3	61.6	10.00	10.00	0.00
13,400.0	80.40	179.44	13,091.9	-84.2	-734.8	110.4	10.00	10.00	0.00
13,450.0	85.40	179.44	13,098.1	-133.8	-734.3	160.0	10.00	10.00	0.00
13,496.0	90.00	179.44	13,100.0	-179.8	-733.8	205.9	10.00	10.00	0.00
13,500.0	90.00	179.44	13,100.0	-183.7	-733.8	209.9	0.00	0.00	0.00
13,600.0	90.00	179.44	13,100.0	-283.7	-732.8	309.8	0.00	0.00	0.00
13,700.0	90.00	179.44	13,100.0	-383.7	-731.9	409.7	0.00	0.00	0.00
13,800.0	90.00	179.44	13,100.0	-483.7	-730.9	509.6	0.00	0.00	0.00
13,900.0	90.00	179.44	13,100.0	-583.7	-729.9	609.5	0.00	0.00	0.00
14,000.0	90.00	179.44	13,100.0	-683.7	-728.9	709.4	0.00	0.00	0.00
14,100.0	90.00	179.44	13,100.0	-783.7	-727.9	809.3	0.00	0.00	0.00
14,200.0	90.00	179.44	13,100.0	-883.7	-727.0	909.2	0.00	0.00	0.00
14,300.0	90.00	179.44	13,100.0	-983.7	-726.0	1,009.1	0.00	0.00	0.00
14,400.0	90.00	179.44	13,100.0	-1,083.7	-725.0	1,109.0	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,500.0	90.00	179.44	13,100.0	-1,183.7	-724.0	1,208.8	0.00	0.00	0.00
14,600.0	90.00	179.44	13,100.0	-1,283.7	-723.1	1,308.7	0.00	0.00	0.00
14,700.0	90.00	179.44	13,100.0	-1,383.7	-722.1	1,408.6	0.00	0.00	0.00
14,800.0	90.00	179.44	13,100.0	-1,483.7	-721.1	1,508.5	0.00	0.00	0.00
14,900.0	90.00	179.44	13,100.0	-1,583.7	-720.1	1,608.4	0.00	0.00	0.00
15,000.0	90.00	179.44	13,100.0	-1,683.7	-719.2	1,708.3	0.00	0.00	0.00
15,100.0	90.00	179.44	13,100.0	-1,783.7	-718.2	1,808.2	0.00	0.00	0.00
15,200.0	90.00	179.44	13,100.0	-1,883.7	-717.2	1,908.1	0.00	0.00	0.00
15,300.0	90.00	179.44	13,100.0	-1,983.7	-716.2	2,008.0	0.00	0.00	0.00
15,400.0	90.00	179.44	13,100.0	-2,083.7	-715.3	2,107.9	0.00	0.00	0.00
15,500.0	90.00	179.44	13,100.0	-2,183.6	-714.3	2,207.8	0.00	0.00	0.00
15,600.0	90.00	179.44	13,100.0	-2,283.6	-713.3	2,307.7	0.00	0.00	0.00
15,700.0	90.00	179.44	13,100.0	-2,383.6	-712.3	2,407.6	0.00	0.00	0.00
15,800.0	90.00	179.44	13,100.0	-2,483.6	-711.4	2,507.5	0.00	0.00	0.00
15,900.0	90.00	179.44	13,100.0	-2,583.6	-710.4	2,607.4	0.00	0.00	0.00
16,000.0	90.00	179.44	13,100.0	-2,683.6	-709.4	2,707.3	0.00	0.00	0.00
16,100.0	90.00	179.44	13,100.0	-2,783.6	-708.4	2,807.2	0.00	0.00	0.00
16,200.0	90.00	179.44	13,100.0	-2,883.6	-707.5	2,907.1	0.00	0.00	0.00
16,300.0	90.00	179.44	13,100.0	-2,983.6	-706.5	3,007.0	0.00	0.00	0.00
16,400.0	90.00	179.44	13,100.0	-3,083.6	-705.5	3,106.9	0.00	0.00	0.00
16,500.0	90.00	179.44	13,100.0	-3,183.6	-704.5	3,206.8	0.00	0.00	0.00
16,600.0	90.00	179.44	13,100.0	-3,283.6	-703.5	3,306.7	0.00	0.00	0.00
16,700.0	90.00	179.44	13,100.0	-3,383.6	-702.6	3,406.6	0.00	0.00	0.00
16,800.0	90.00	179.44	13,100.0	-3,483.6	-701.6	3,506.5	0.00	0.00	0.00
16,900.0	90.00	179.44	13,100.0	-3,583.6	-700.6	3,606.4	0.00	0.00	0.00
17,000.0	90.00	179.44	13,100.0	-3,683.6	-699.6	3,706.3	0.00	0.00	0.00
17,100.0	90.00	179.44	13,100.0	-3,783.6	-698.7	3,806.2	0.00	0.00	0.00
17,200.0	90.00	179.44	13,100.0	-3,883.6	-697.7	3,906.0	0.00	0.00	0.00
17,300.0	90.00	179.44	13,100.0	-3,983.6	-696.7	4,005.9	0.00	0.00	0.00
17,400.0	90.00	179.44	13,100.0	-4,083.6	-695.7	4,105.8	0.00	0.00	0.00
17,500.0	90.00	179.44	13,100.0	-4,183.6	-694.8	4,205.7	0.00	0.00	0.00
17,600.0	90.00	179.44	13,100.0	-4,283.5	-693.8	4,305.6	0.00	0.00	0.00
17,700.0	90.00	179.44	13,100.0	-4,383.5	-692.8	4,405.5	0.00	0.00	0.00
17,800.0	90.00	179.44	13,100.0	-4,483.5	-691.8	4,505.4	0.00	0.00	0.00
17,900.0	90.00	179.44	13,100.0	-4,583.5	-690.9	4,605.3	0.00	0.00	0.00
18,000.0	90.00	179.44	13,100.0	-4,683.5	-689.9	4,705.2	0.00	0.00	0.00
18,100.0	90.00	179.44	13,100.0	-4,783.5	-688.9	4,805.1	0.00	0.00	0.00
18,200.0	90.00	179.44	13,100.0	-4,883.5	-687.9	4,905.0	0.00	0.00	0.00
18,300.0	90.00	179.44	13,100.0	-4,983.5	-687.0	5,004.9	0.00	0.00	0.00
18,400.0	90.00	179.44	13,100.0	-5,083.5	-686.0	5,104.8	0.00	0.00	0.00
18,500.0	90.00	179.44	13,100.0	-5,183.5	-685.0	5,204.7	0.00	0.00	0.00
18,600.0	90.00	179.44	13,100.0	-5,283.5	-684.0	5,304.6	0.00	0.00	0.00
18,700.0	90.00	179.44	13,100.0	-5,383.5	-683.1	5,404.5	0.00	0.00	0.00
18,800.0	90.00	179.44	13,100.0	-5,483.5	-682.1	5,504.4	0.00	0.00	0.00
18,900.0	90.00	179.44	13,100.0	-5,583.5	-681.1	5,604.3	0.00	0.00	0.00
19,000.0	90.00	179.44	13,100.0	-5,683.5	-680.1	5,704.2	0.00	0.00	0.00
19,100.0	90.00	179.44	13,100.0	-5,783.5	-679.1	5,804.1	0.00	0.00	0.00
19,200.0	90.00	179.44	13,100.0	-5,883.5	-678.2	5,904.0	0.00	0.00	0.00
19,300.0	90.00	179.44	13,100.0	-5,983.5	-677.2	6,003.9	0.00	0.00	0.00
19,400.0	90.00	179.44	13,100.0	-6,083.5	-676.2	6,103.8	0.00	0.00	0.00
19,500.0	90.00	179.44	13,100.0	-6,183.5	-675.2	6,203.7	0.00	0.00	0.00
19,600.0	90.00	179.44	13,100.0	-6,283.5	-674.3	6,303.6	0.00	0.00	0.00
19,700.0	90.00	179.44	13,100.0	-6,383.4	-673.3	6,403.5	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,800.0	90.00	179.44	13,100.0	-6,483.4	-672.3	6,503.3	0.00	0.00	0.00
19,900.0	90.00	179.44	13,100.0	-6,583.4	-671.3	6,603.2	0.00	0.00	0.00
20,000.0	90.00	179.44	13,100.0	-6,683.4	-670.4	6,703.1	0.00	0.00	0.00
20,100.0	90.00	179.44	13,100.0	-6,783.4	-669.4	6,803.0	0.00	0.00	0.00
20,200.0	90.00	179.44	13,100.0	-6,883.4	-668.4	6,902.9	0.00	0.00	0.00
20,300.0	90.00	179.44	13,100.0	-6,983.4	-667.4	7,002.8	0.00	0.00	0.00
20,400.0	90.00	179.44	13,100.0	-7,083.4	-666.5	7,102.7	0.00	0.00	0.00
20,500.0	90.00	179.44	13,100.0	-7,183.4	-665.5	7,202.6	0.00	0.00	0.00
20,600.0	90.00	179.44	13,100.0	-7,283.4	-664.5	7,302.5	0.00	0.00	0.00
20,700.0	90.00	179.44	13,100.0	-7,383.4	-663.5	7,402.4	0.00	0.00	0.00
20,800.0	90.00	179.44	13,100.0	-7,483.4	-662.6	7,502.3	0.00	0.00	0.00
20,900.0	90.00	179.44	13,100.0	-7,583.4	-661.6	7,602.2	0.00	0.00	0.00
21,000.0	90.00	179.44	13,100.0	-7,683.4	-660.6	7,702.1	0.00	0.00	0.00
21,100.0	90.00	179.44	13,100.0	-7,783.4	-659.6	7,802.0	0.00	0.00	0.00
21,200.0	90.00	179.44	13,100.0	-7,883.4	-658.7	7,901.9	0.00	0.00	0.00
21,300.0	90.00	179.44	13,100.0	-7,983.4	-657.7	8,001.8	0.00	0.00	0.00
21,400.0	90.00	179.44	13,100.0	-8,083.4	-656.7	8,101.7	0.00	0.00	0.00
21,500.0	90.00	179.44	13,100.0	-8,183.4	-655.7	8,201.6	0.00	0.00	0.00
21,600.0	90.00	179.44	13,100.0	-8,283.4	-654.7	8,301.5	0.00	0.00	0.00
21,700.0	90.00	179.44	13,100.0	-8,383.4	-653.8	8,401.4	0.00	0.00	0.00
21,800.0	90.00	179.44	13,100.0	-8,483.3	-652.8	8,501.3	0.00	0.00	0.00
21,900.0	90.00	179.44	13,100.0	-8,583.3	-651.8	8,601.2	0.00	0.00	0.00
22,000.0	90.00	179.44	13,100.0	-8,683.3	-650.8	8,701.1	0.00	0.00	0.00
22,100.0	90.00	179.44	13,100.0	-8,783.3	-649.9	8,801.0	0.00	0.00	0.00
22,200.0	90.00	179.44	13,100.0	-8,883.3	-648.9	8,900.9	0.00	0.00	0.00
22,300.0	90.00	179.44	13,100.0	-8,983.3	-647.9	9,000.8	0.00	0.00	0.00
22,400.0	90.00	179.44	13,100.0	-9,083.3	-646.9	9,100.7	0.00	0.00	0.00
22,500.0	90.00	179.44	13,100.0	-9,183.3	-646.0	9,200.5	0.00	0.00	0.00
22,600.0	90.00	179.44	13,100.0	-9,283.3	-645.0	9,300.4	0.00	0.00	0.00
22,700.0	90.00	179.44	13,100.0	-9,383.3	-644.0	9,400.3	0.00	0.00	0.00
22,800.0	90.00	179.44	13,100.0	-9,483.3	-643.0	9,500.2	0.00	0.00	0.00
22,900.0	90.00	179.44	13,100.0	-9,583.3	-642.1	9,600.1	0.00	0.00	0.00
23,000.0	90.00	179.44	13,100.0	-9,683.3	-641.1	9,700.0	0.00	0.00	0.00
23,100.0	90.00	179.44	13,100.0	-9,783.3	-640.1	9,799.9	0.00	0.00	0.00
23,200.0	90.00	179.44	13,100.0	-9,883.3	-639.1	9,899.8	0.00	0.00	0.00
23,300.0	90.00	179.44	13,100.0	-9,983.3	-638.2	9,999.7	0.00	0.00	0.00
23,400.0	90.00	179.44	13,100.0	-10,083.3	-637.2	10,099.6	0.00	0.00	0.00
23,500.0	90.00	179.44	13,100.0	-10,183.3	-636.2	10,199.5	0.00	0.00	0.00
23,600.0	90.00	179.44	13,100.0	-10,283.3	-635.2	10,299.4	0.00	0.00	0.00
23,700.0	90.00	179.44	13,100.0	-10,383.3	-634.3	10,399.3	0.00	0.00	0.00
23,800.0	90.00	179.44	13,100.0	-10,483.3	-633.3	10,499.2	0.00	0.00	0.00
23,900.0	90.00	179.44	13,100.0	-10,583.2	-632.3	10,599.1	0.00	0.00	0.00
24,000.0	90.00	179.44	13,100.0	-10,683.2	-631.3	10,699.0	0.00	0.00	0.00
24,100.0	90.00	179.44	13,100.0	-10,783.2	-630.3	10,798.9	0.00	0.00	0.00
24,200.0	90.00	179.44	13,100.0	-10,883.2	-629.4	10,898.8	0.00	0.00	0.00
24,300.0	90.00	179.44	13,100.0	-10,983.2	-628.4	10,998.7	0.00	0.00	0.00
24,400.0	90.00	179.44	13,100.0	-11,083.2	-627.4	11,098.6	0.00	0.00	0.00
24,500.0	90.00	179.44	13,100.0	-11,183.2	-626.4	11,198.5	0.00	0.00	0.00
24,600.0	90.00	179.44	13,100.0	-11,283.2	-625.5	11,298.4	0.00	0.00	0.00
24,700.0	90.00	179.44	13,100.0	-11,383.2	-624.5	11,398.3	0.00	0.00	0.00
24,800.0	90.00	179.44	13,100.0	-11,483.2	-623.5	11,498.2	0.00	0.00	0.00
24,900.0	90.00	179.44	13,100.0	-11,583.2	-622.5	11,598.1	0.00	0.00	0.00
25,000.0	90.00	179.44	13,100.0	-11,683.2	-621.6	11,698.0	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
25,100.0	90.00	179.44	13,100.0	-11,783.2	-620.6	11,797.9	0.00	0.00	0.00
25,200.0	90.00	179.44	13,100.0	-11,883.2	-619.6	11,897.7	0.00	0.00	0.00
25,300.0	90.00	179.44	13,100.0	-11,983.2	-618.6	11,997.6	0.00	0.00	0.00
25,400.0	90.00	179.44	13,100.0	-12,083.2	-617.7	12,097.5	0.00	0.00	0.00
25,500.0	90.00	179.44	13,100.0	-12,183.2	-616.7	12,197.4	0.00	0.00	0.00
25,600.0	90.00	179.44	13,100.0	-12,283.2	-615.7	12,297.3	0.00	0.00	0.00
25,700.0	90.00	179.44	13,100.0	-12,383.2	-614.7	12,397.2	0.00	0.00	0.00
25,800.0	90.00	179.44	13,100.0	-12,483.2	-613.8	12,497.1	0.00	0.00	0.00
25,900.0	90.00	179.44	13,100.0	-12,583.2	-612.8	12,597.0	0.00	0.00	0.00
26,000.0	90.00	179.44	13,100.0	-12,683.1	-611.8	12,696.9	0.00	0.00	0.00
26,100.0	90.00	179.44	13,100.0	-12,783.1	-610.8	12,796.8	0.00	0.00	0.00
26,200.0	90.00	179.44	13,100.0	-12,883.1	-609.9	12,896.7	0.00	0.00	0.00
26,300.0	90.00	179.44	13,100.0	-12,983.1	-608.9	12,996.6	0.00	0.00	0.00
26,400.0	90.00	179.44	13,100.0	-13,083.1	-607.9	13,096.5	0.00	0.00	0.00
26,500.0	90.00	179.44	13,100.0	-13,183.1	-606.9	13,196.4	0.00	0.00	0.00
26,600.0	90.00	179.44	13,100.0	-13,283.1	-605.9	13,296.3	0.00	0.00	0.00
26,700.0	90.00	179.44	13,100.0	-13,383.1	-605.0	13,396.2	0.00	0.00	0.00
26,800.0	90.00	179.44	13,100.0	-13,483.1	-604.0	13,496.1	0.00	0.00	0.00
26,900.0	90.00	179.44	13,100.0	-13,583.1	-603.0	13,596.0	0.00	0.00	0.00
27,000.0	90.00	179.44	13,100.0	-13,683.1	-602.0	13,695.9	0.00	0.00	0.00
27,100.0	90.00	179.44	13,100.0	-13,783.1	-601.1	13,795.8	0.00	0.00	0.00
27,200.0	90.00	179.44	13,100.0	-13,883.1	-600.1	13,895.7	0.00	0.00	0.00
27,300.0	90.00	179.44	13,100.0	-13,983.1	-599.1	13,995.6	0.00	0.00	0.00
27,400.0	90.00	179.44	13,100.0	-14,083.1	-598.1	14,095.5	0.00	0.00	0.00
27,500.0	90.00	179.44	13,100.0	-14,183.1	-597.2	14,195.4	0.00	0.00	0.00
27,600.0	90.00	179.44	13,100.0	-14,283.1	-596.2	14,295.3	0.00	0.00	0.00
27,700.0	90.00	179.44	13,100.0	-14,383.1	-595.2	14,395.2	0.00	0.00	0.00
27,800.0	90.00	179.44	13,100.0	-14,483.1	-594.2	14,495.0	0.00	0.00	0.00
27,900.0	90.00	179.44	13,100.0	-14,583.1	-593.3	14,594.9	0.00	0.00	0.00
28,000.0	90.00	179.44	13,100.0	-14,683.1	-592.3	14,694.8	0.00	0.00	0.00
28,100.0	90.00	179.44	13,100.0	-14,783.0	-591.3	14,794.7	0.00	0.00	0.00
28,200.0	90.00	179.44	13,100.0	-14,883.0	-590.3	14,894.6	0.00	0.00	0.00
28,300.0	90.00	179.44	13,100.0	-14,983.0	-589.4	14,994.5	0.00	0.00	0.00
28,400.0	90.00	179.44	13,100.0	-15,083.0	-588.4	15,094.4	0.00	0.00	0.00
28,500.0	90.00	179.44	13,100.0	-15,183.0	-587.4	15,194.3	0.00	0.00	0.00
28,600.0	90.00	179.44	13,100.0	-15,283.0	-586.4	15,294.2	0.00	0.00	0.00
28,700.0	90.00	179.44	13,100.0	-15,383.0	-585.5	15,394.1	0.00	0.00	0.00
28,800.0	90.00	179.44	13,100.0	-15,483.0	-584.5	15,494.0	0.00	0.00	0.00
28,900.0	90.00	179.44	13,100.0	-15,583.0	-583.5	15,593.9	0.00	0.00	0.00
29,000.0	90.00	179.44	13,100.0	-15,683.0	-582.5	15,693.8	0.00	0.00	0.00
29,100.0	90.00	179.44	13,100.0	-15,783.0	-581.5	15,793.7	0.00	0.00	0.00
29,200.0	90.00	179.44	13,100.0	-15,883.0	-580.6	15,893.6	0.00	0.00	0.00
29,300.0	90.00	179.44	13,100.0	-15,983.0	-579.6	15,993.5	0.00	0.00	0.00
29,400.0	90.00	179.44	13,100.0	-16,083.0	-578.6	16,093.4	0.00	0.00	0.00
29,458.3	90.00	179.44	13,100.0	-16,141.3	-578.0	16,151.7	0.00	0.00	0.00

ConocoPhillips
Planning Report

Database:	Central Planning Prod	**Local Co-ordinate Reference:**	Well *HENNIN FED COM #801H - Slot HENNIN FED COM #801H
Company:	DELAWARE BASIN EAST	**TVD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Project:	BULLDOG PROSPECT (NM-E)	**MD Reference:**	WELL @ 3220.0usft (Original Well Elev)
Site:	HENNIN PROJECT	**North Reference:**	Grid
Well:	*HENNIN FED COM #801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

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
FTP (HENNIN FED COM	0.00	0.00	13,100.0	-444.6	-732.0	404,447.24	801,137.82	32° 6' 29.545 N	103° 21' 38.811 W
- plan misses target center by 0.7usft at 13760.9usft MD (13100.0 TVD, -444.6 N, -731.3 E)									
- Circle (radius 50.0)									
LTP (HENNIN FED COM	90.00	179.45	13,100.0	-16,091.3	-578.2	388,800.50	801,291.61	32° 3' 54.705 N	103° 21' 38.664 W
- plan misses target center by 8.4usft at 29400.0usft MD (13100.0 TVD, -16083.0 N, -578.6 E)									
- Circle (radius 50.0)									
PBHL (HENNIN FED CC	0.00	359.44	13,100.0	-16,141.3	-578.0	388,750.50	801,291.77	32° 3' 54.210 N	103° 21' 38.667 W
- plan hits target center									
- Rectangle (sides W100.0 H15,696.1 D20.0)									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
29,458.4	13,100.0	5-1/2" Production Casing	5-1/2	6-3/4

ConocoPhillips

Project:	BULLDOG PROSPECT (NM-E)
Site:	HENNIN PROJECT
Well:	*HENNIN FED COM #801H
Wellbore:	OWB
Design:	PWP0
GL:	3220.0
WELL @ 3220.0usft (Original Well Elev)	

WELL DETAILS: *HENNIN FED COM #801H

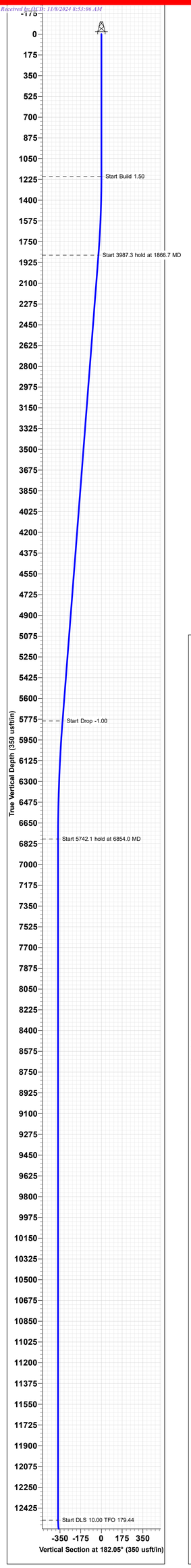
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude	
0.0	0.0	404891.84	801869.82	32° 6' 33.879 N	103° 21' 30.255 W	HENNIN FED COM #801H

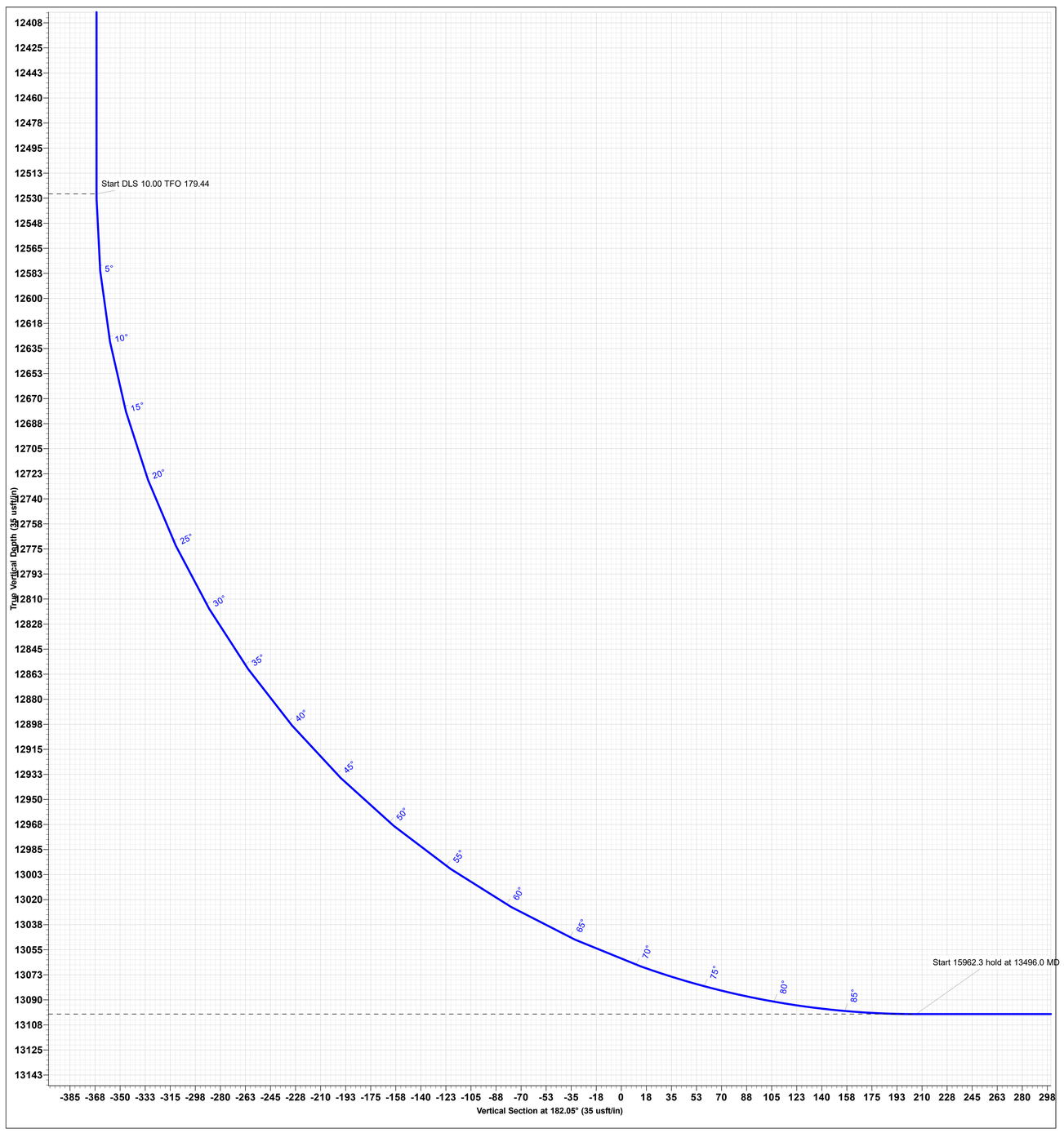
DESIGN TARGET DETAILS

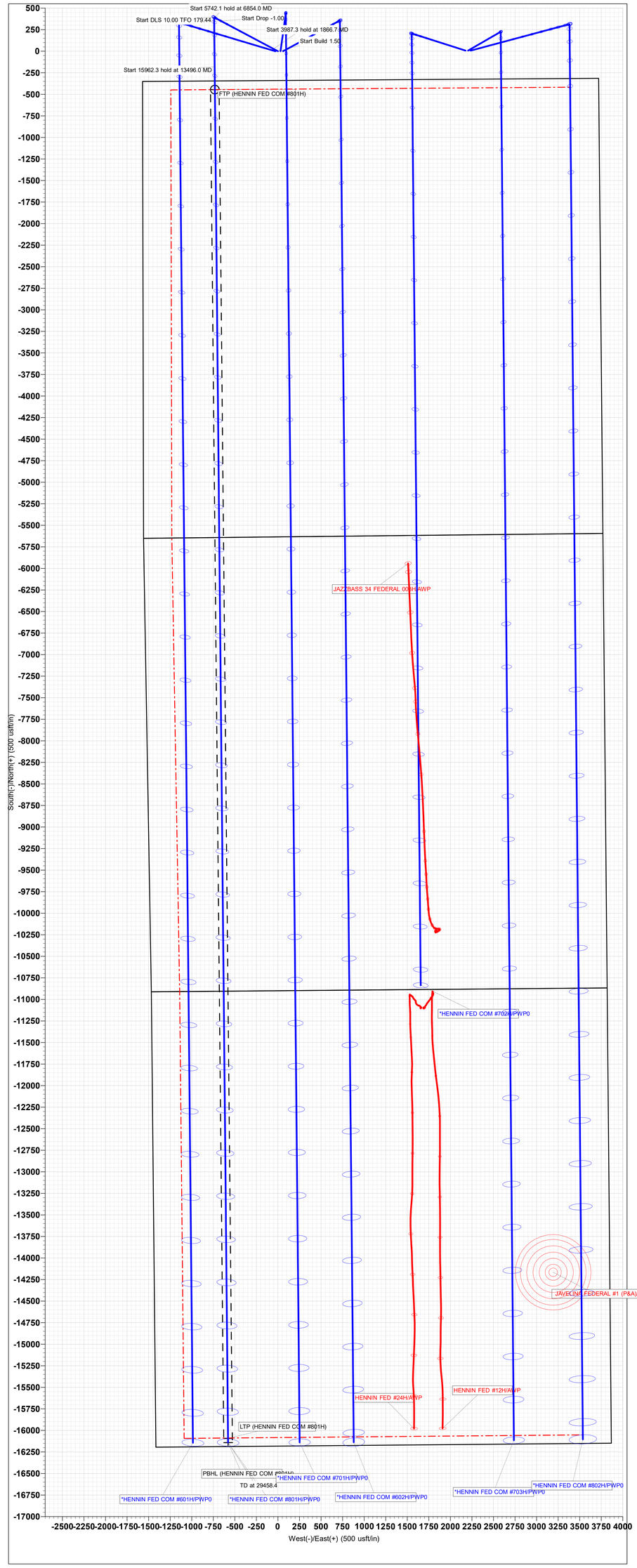
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (HENNIN FED COM #801H)	13100.0	-444.6	-732.0	404447.24	801137.82
LTP (HENNIN FED COM #801H)	13100.0	-16091.3	-578.2	388800.50	801291.61
PBHL (HENNIN FED COM #801H)	13100.0	-16141.3	-578.0	388750.50	801291.78

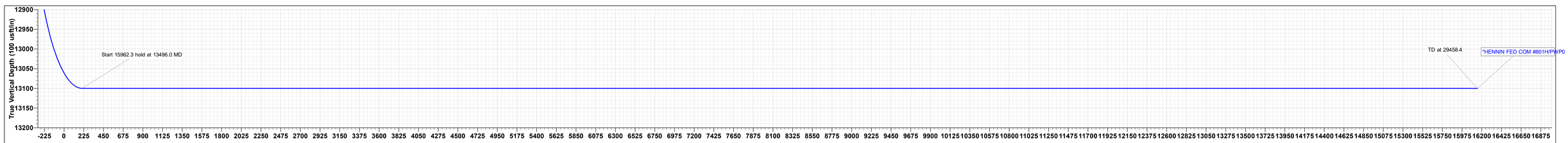
SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0
1866.7	10.00	298.00	1863.3	27.2	-51.2	1.50	298.00	-25.4
5854.0	10.00	298.00	5790.0	352.3	-662.6	0.00	0.00	-328.4
6854.0	0.00	0.00	6784.9	393.2	-739.4	1.00	180.00	-366.4
12596.0	0.00	0.00	12527.0	393.2	-739.4	0.00	0.00	-366.4
13496.0	90.00	179.44	13100.0	-179.8	-733.8	10.00	179.44	205.9
29458.4	90.00	179.44	13100.0	-16141.3	-578.0	0.00	0.00	16151.7









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	
Dallas Daley	432-818-2329	432-631-6977

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

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG OPERATING LLC
WELL NAME & NO.:	HENNIN FED COM 801H
SURFACE HOLE FOOTAGE:	340'/S & 1575'/W
BOTTOM HOLE FOOTAGE	50'/S & 840'/W
LOCATION:	Section 22, T.25 S., R.35 E.
COUNTY:	Lea County, New Mexico

COA

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

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Primary Casing Design:

1. The **10-3/4** inch surface casing shall be set at approximately **923 feet per BLM Geologist** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the

 Approval Date: 11/01/2024

salt, and below usable fresh water) and cemented to the surface. The surface hole shall be **14 3/4 inch** in diameter.

a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

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. **Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.**

Contingency:

Operator has proposed a contingency if losses are encountered, a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

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

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
  Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

3. **The W441 connection should tie back 500'+ into the W513 intermediate casing for clearance overlap.** 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 **10-3/4** inch 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 3500 (70% Working Pressure) psi.**

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in 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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in Onshore Order 1 and 2.

- 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.

Casing Clearance:

- **The W441 connection should tie back 500'+ into the W513 intermediate casing for clearance overlap.**

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

GENERAL REQUIREMENTS

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

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

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

☒ 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
        i. Notify the BLM when moving in and removing the Spudder Rig.

ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in

the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    iii. Manufacturer representative shall install the test plug for the initial BOP test.
    iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
    ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
    iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e.

against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

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

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

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

viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

JS 10/29/2024

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 400720

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 400720
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
stanwagner	Cement is required to circulate on both surface and intermediate1 strings of casing.	11/8/2024
stanwagner	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	11/8/2024
pkautz	File As Drilled C-102 and a directional Survey with C-104 completion packet.	11/26/2024
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.	11/26/2024
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.	11/26/2024