

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER		5. Lease Serial No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-025-53966
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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 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.

(Continued on page 2)

*(Instructions on page 2)



Approval Date: 11/01/2024

Additional Operator Remarks

Location of Well

0. SHL: SESW / 340 FSL / 1545 FWL / TWSP: 25S / RANGE: 35E / SECTION: 22 / LAT: 32.109551 / LONG: -103.35896 (TVD: 0 feet, MD: 0 feet)

PPP: NWSW / 2639 FSL / 427 FWL / TWSP: 25S / RANGE: 35E / SECTION: 27 / LAT: 32.101364 / LONG: -103.362553 (TVD: 12400 feet, MD: 15591 feet)

PPP: NWNW / 100 FNL / 430 FWL / TWSP: 25S / RANGE: 35E / SECTION: 27 / LAT: 32.108339 / LONG: -103.362559 (TVD: 12400 feet, MD: 13050 feet)

BHL: SWSW / 50 FSL / 430 FWL / TWSP: 26S / RANGE: 35E / SECTION: 3 / LAT: 32.065191 / LONG: -103.362518 (TVD: 12400 feet, MD: 28746 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 30-025-53966	Pool Code 97088	Pool Name WC-025 G-08 S2535340; Bone Spring
Property Code 336534	Property Name HENNIN FEDERAL COM	Well Number 601H
OGRID No. 229137	Operator Name COG OPERATING LLC	Ground Level Elevation 3208.9'
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	1545 FWL	32.109551°N	103.358960°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	430 FWL	32.065191°N	103.362518°W	LEA

Dedicated Acres 480	Infill or Defining Well Defining	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code 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	1545 FWL	32.109551°N	103.358960°W	LEA

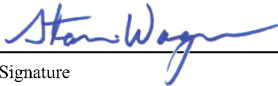
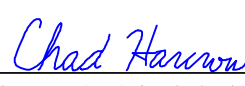
First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	27	25-S	35-E		100 FNL	430 FWL	32.108339°N	103.362559°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	430 FWL	32.065329°N	103.362518°W	LEA

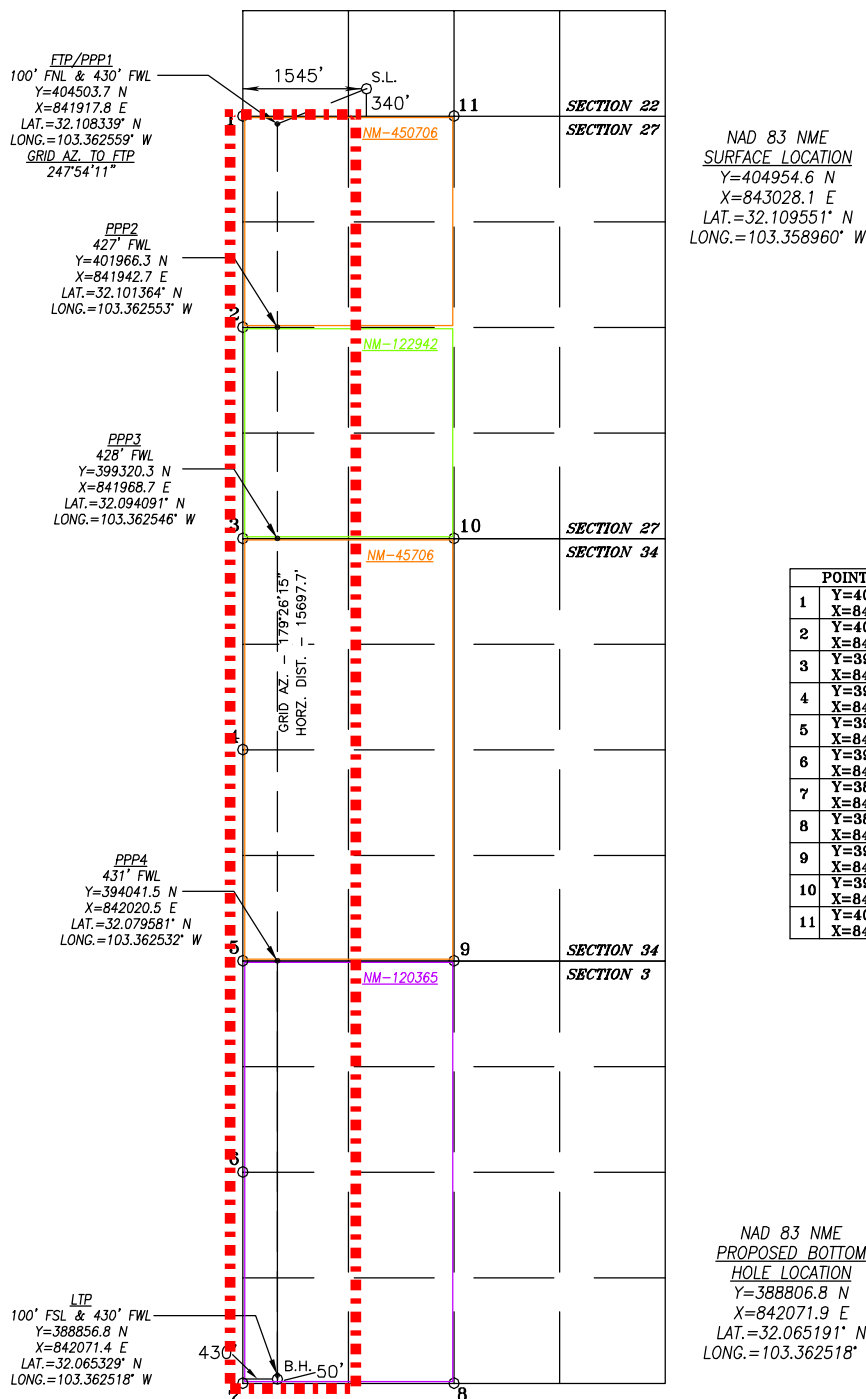
Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation: 3208.9'
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OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and 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.</i> <i>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.</i>		SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>	
 Signature		 Signature and Seal of Professional Surveyor	
Date 9/11/23		11/7/24	
Printed Name Stan Wagner		Certificate Number 17777	Date of Survey JUNE 19, 2023
Email Address		W.O.#24-1121	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.

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.



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

Submit Electronically
Via E-permitting

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	Pending	± 8/1/2025	± 25 days from spud	TBD	TBD	TBD
601H, 602H, 701H, 801H						

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

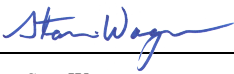
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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: 
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

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1. Geologic Formations

TVD of target	12,400' EOL	Pilot hole depth	NA
MD at TD:	28,746'	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	5260	Salt Water	
Bell Canyon	5299	Salt Water	
Cherry Canyon	6201	Oil/Gas	
Brushy Canyon	7741	Oil/Gas	
Bone Spring Lime	9034	Oil/Gas	
1st Bone Spring Sand	10294	Oil/Gas	
2nd Bone Spring Sand	10835	Oil/Gas	
3rd Bone Spring Carb	11325	Oil/Gas	
3rd Bone Spring Sand	11934	Target	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
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	1.07	3.06	3.09
8.750"	8000	11822	7.625"	29.7	P110-ICY	W513	1.30	1.62	3.04	1.83
6.75"	0	11322	5.5"	23	P110-CY	BTC	1.98	2.33	2.80	2.80
6.75"	11322	28,746	5.5"	23	P110-CY	W441	1.80	2.13	2.56	2.32
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.

ConocoPhillips Company - Hennin Fed Com 601H

	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 3 rd 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 2 nd 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	# Sk	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	415	13.5	1.75	9.21	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.4	8	Tail: Class C + 2% CaCl ₂
Inter. Stage 1	830	10.3	3.3	22	24	Halliburton tunded light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	710	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	1466	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%
1 st Intermediate	0'	50%
Production	11,322'	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.
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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
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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 601H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	8060 psi at 12400' TVD
Abnormal Temperature	NO 180 Deg. F.

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

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

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N H₂S is present

Y H₂S Plan attached

8. Other Facets of Operation

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

x	H ₂ S Plan.
x	BOP & Choke Schematics.
x	Directional Plan

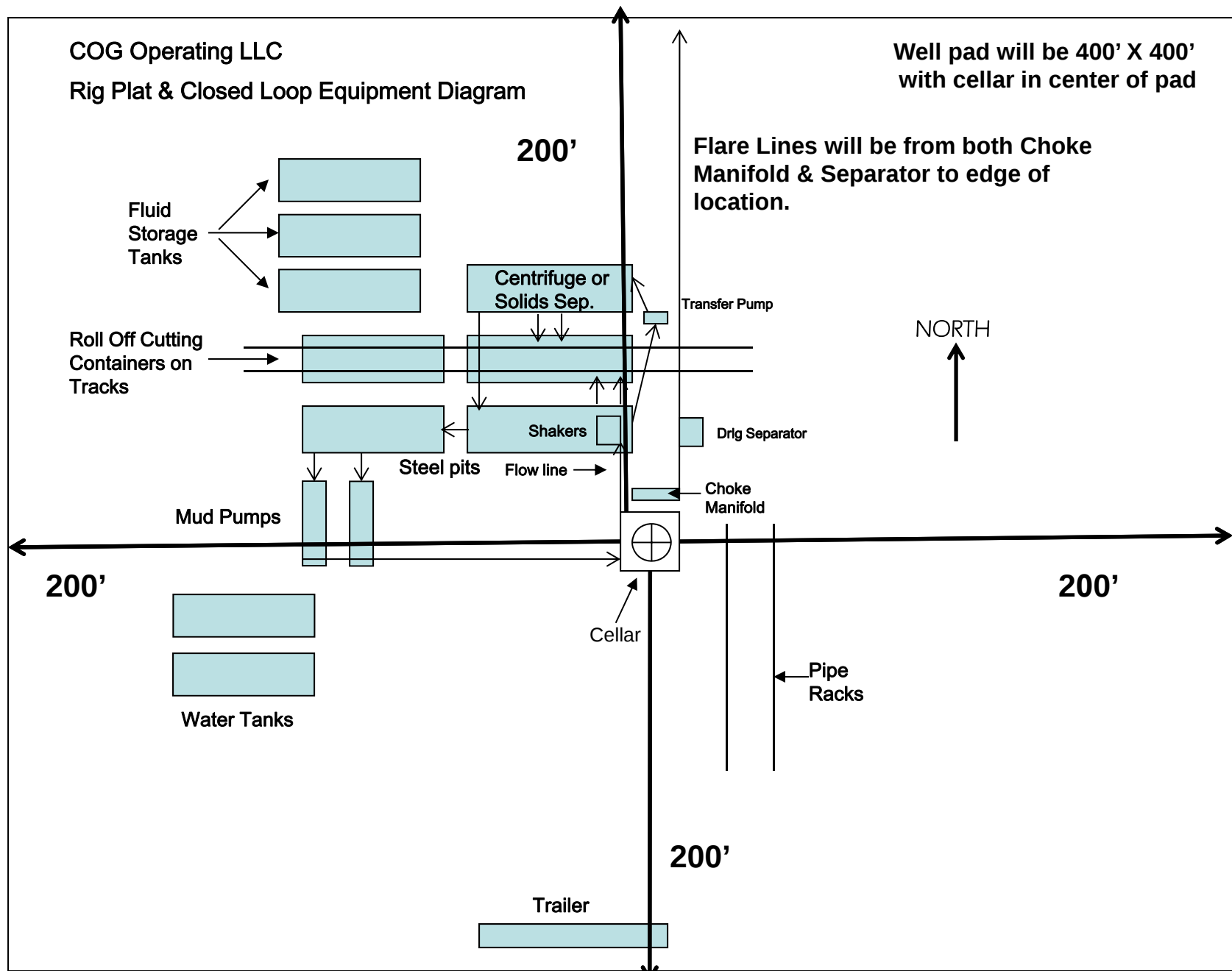


Exhibit 1

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

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 (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S 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 H₂S 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. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S 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 H₂S 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

	<u>OFFICE</u>	<u>MOBILE</u>
COG OPERATING LLC OFFICE	575-748-6940	
Dallas Daley	432-818-2329	432-631-6977

EMERGENCY RESPONSE NUMBERS

	<u>OFFICE</u>
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

DELAWARE BASIN EAST

BULLDOG PROSPECT (NM-E)

HENNIN PROJECT

***HENNIN FED COM #601H**

OWB

PWP0

Anticollision Report

29 June, 2023

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
AKUBRA PROJECT						
*AKUBRA FED COM #704H - OWB - PWP0	28,746.7	12,225.0				Out of Range @TD
HENNIN PROJECT						
JAVELINA FEDERAL #1 (P&A) - OWB - AWP	28,746.7	12,351.9				Out of Range @TD
*HENNIN FED COM #602H - OWB - PWP0	28,746.7	28,697.6	1,865.0	1,614.9	7.457	SF
*HENNIN FED COM #701H - OWB - PWP0	28,746.7	28,955.9	1,253.7	1,000.5	4.952	SF
*HENNIN FED COM #702H - OWB - PWP0	28,746.7	23,481.2				Out of Range @TD
*HENNIN FED COM #703H - OWB - PWP0	28,746.7	28,465.4				Out of Range @TD
*HENNIN FED COM #801H - OWB - PWP0	28,746.7	29,455.7	810.0	526.3	2.855	
*HENNIN FED COM #802H - OWB - PWP0	28,746.7	29,395.3				Out of Range @TD
HENNIN FED #12H - OWB - AWP	28,746.7	17,199.0				Out of Range @TD
HENNIN FED #24H - OWB - AWP	28,746.7	17,431.0				Out of Range @TD
JAZZBASS 34 FEDERAL 003H - OWB - AWP	28,746.7	11,730.0				Out of Range @TD

Offset Design: AKUBRA PROJECT - *AKUBRA FED COM #704H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error: 3.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Reference	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,100.0	10,984.7	23,272.8	12,620.0	32.5	108.2	-134.38	-402.3	-1,870.1	1,945.0	1,805.1	139.87	13.906	
11,200.0	11,084.7	23,272.8	12,620.0	32.6	108.2	-134.38	-402.3	-1,870.1	1,861.7	1,721.8	139.82	13.315	
11,300.0	11,184.7	23,272.8	12,620.0	32.6	108.2	-134.38	-402.3	-1,870.1	1,780.1	1,640.4	139.70	12.742	
11,400.0	11,284.7	23,272.8	12,620.0	32.6	108.2	-134.38	-402.3	-1,870.1	1,700.5	1,561.0	139.50	12.190	
11,500.0	11,384.7	23,272.8	12,620.0	32.7	108.2	-134.38	-402.3	-1,870.1	1,623.2	1,484.0	139.20	11.661	
11,600.0	11,484.7	23,272.8	12,620.0	32.7	108.2	-134.38	-402.3	-1,870.1	1,548.4	1,409.6	138.77	11.158	
11,700.0	11,584.7	23,272.8	12,620.0	32.7	108.2	-134.38	-402.3	-1,870.1	1,476.7	1,338.5	138.19	10.686	
11,800.0	11,684.7	23,272.8	12,620.0	32.8	108.2	-134.38	-402.3	-1,870.1	1,408.4	1,270.9	137.42	10.249	
11,900.0	11,784.7	23,272.8	12,620.0	32.8	108.2	-134.38	-402.3	-1,870.1	1,344.0	1,207.6	136.42	9.852	
12,000.0	11,884.6	23,272.8	12,620.0	32.8	108.2	49.52	-402.3	-1,870.1	1,282.7	1,147.4	135.33	9.478	
12,100.0	11,982.8	23,272.8	12,620.0	32.7	108.2	56.25	-402.3	-1,870.1	1,218.1	1,083.3	134.86	9.033	
12,200.0	12,076.1	23,272.8	12,620.0	32.5	108.2	64.11	-402.3	-1,870.1	1,151.0	1,015.7	135.27	8.508	
12,300.0	12,162.0	23,272.8	12,620.0	32.4	108.2	72.74	-402.3	-1,870.1	1,082.9	946.1	136.74	7.919	
12,400.0	12,237.6	23,272.8	12,620.0	32.3	108.2	81.50	-402.3	-1,870.1	1,016.0	876.7	139.38	7.290	
12,500.0	12,300.7	23,272.8	12,620.0	32.2	108.2	89.62	-402.3	-1,870.1	952.9	809.7	143.17	6.656	
12,600.0	12,349.5	23,272.8	12,620.0	32.1	108.2	96.47	-402.3	-1,870.1	896.4	748.5	147.88	6.061	
12,700.0	12,382.4	23,272.8	12,620.0	32.1	108.2	101.70	-402.3	-1,870.1	849.6	696.6	153.02	5.552	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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: AKUBRA PROJECT - *AKUBRA FED COM #704H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
12,800.0	12,398.4	23,272.8	12,620.0	32.1	108.2	-402.3	-1,870.1	815.9	658.1	157.85	5.169	
12,900.0	12,400.0	23,272.8	12,620.0	32.2	108.2	-402.3	-1,870.1	797.1	635.6	161.47	4.937	
12,998.4	12,400.0	23,272.8	12,620.0	32.3	108.2	-402.3	-1,870.1	791.0	627.9	163.12	4.849	
13,000.0	12,400.0	23,272.8	12,620.0	32.3	108.2	-402.3	-1,870.1	791.0	627.9	163.13	4.849 SF	
13,100.0	12,400.0	23,177.1	12,620.0	32.4	107.6	-498.0	-1,869.9	791.7	629.5	162.26	4.879	
13,200.0	12,400.0	23,077.1	12,620.0	32.6	106.6	-598.0	-1,869.7	792.5	631.5	161.01	4.922	
13,300.0	12,400.0	22,977.1	12,620.0	32.7	105.7	-698.0	-1,869.5	793.2	633.5	159.77	4.965	
13,400.0	12,400.0	22,877.1	12,620.0	32.9	104.8	-798.0	-1,869.3	794.0	635.4	158.54	5.008	
13,500.0	12,400.0	22,777.1	12,620.0	33.1	103.9	-898.0	-1,869.1	794.7	637.4	157.32	5.052	
13,600.0	12,400.0	22,677.1	12,620.0	33.2	103.0	-998.0	-1,868.9	795.5	639.4	156.11	5.096	
13,700.0	12,400.0	22,577.1	12,620.0	33.5	102.1	-1,098.0	-1,868.7	796.2	641.3	154.90	5.140	
13,800.0	12,400.0	22,477.1	12,620.0	33.7	101.2	-1,198.0	-1,868.5	797.0	643.2	153.71	5.185	
13,900.0	12,400.0	22,377.1	12,620.0	33.9	100.3	-1,298.0	-1,868.3	797.7	645.2	152.53	5.230	
14,000.0	12,400.0	22,277.1	12,620.0	34.2	99.4	-1,398.0	-1,868.0	798.4	647.1	151.35	5.275	
14,100.0	12,400.0	22,177.1	12,620.0	34.4	98.4	-1,498.0	-1,867.8	799.2	649.0	150.19	5.321	
14,200.0	12,400.0	22,077.1	12,620.0	34.7	97.5	-1,598.0	-1,867.6	799.9	650.9	149.03	5.367	
14,300.0	12,400.0	21,977.1	12,620.0	35.0	96.6	-1,698.0	-1,867.4	800.7	652.8	147.89	5.414	
14,400.0	12,400.0	21,877.1	12,620.0	35.3	95.7	-1,798.0	-1,867.2	801.4	654.7	146.76	5.461	
14,500.0	12,400.0	21,777.1	12,620.0	35.7	94.8	-1,898.0	-1,867.0	802.2	656.5	145.64	5.508	
14,600.0	12,400.0	21,677.1	12,620.0	36.0	93.9	-1,998.0	-1,866.8	802.9	658.4	144.53	5.555	
14,700.0	12,400.0	21,577.1	12,620.0	36.3	93.0	-2,098.0	-1,866.6	803.7	660.2	143.44	5.603	
14,800.0	12,400.0	21,477.1	12,620.0	36.7	92.1	-2,198.0	-1,866.4	804.4	662.1	142.35	5.651	
14,900.0	12,400.0	21,377.1	12,620.0	37.1	91.2	-2,298.0	-1,866.2	805.2	663.9	141.28	5.699	
15,000.0	12,400.0	21,277.1	12,620.0	37.4	90.3	-2,398.0	-1,866.0	805.9	665.7	140.22	5.748	
15,100.0	12,400.0	21,177.1	12,620.0	37.8	89.4	-2,498.0	-1,865.8	806.7	667.5	139.17	5.796	
15,200.0	12,400.0	21,077.2	12,620.0	38.2	88.5	-2,597.9	-1,865.6	807.4	669.3	138.14	5.845	
15,300.0	12,400.0	20,977.2	12,620.0	38.6	87.7	-2,697.9	-1,865.4	808.2	671.0	137.12	5.894	
15,400.0	12,400.0	20,877.2	12,620.0	39.1	86.8	-2,797.9	-1,865.2	808.9	672.8	136.11	5.943	
15,500.0	12,400.0	20,777.2	12,620.0	39.5	85.9	-2,897.9	-1,865.0	809.7	674.5	135.12	5.992	
15,600.0	12,400.0	20,677.2	12,620.0	39.9	85.0	-2,997.9	-1,864.8	810.4	676.3	134.14	6.042	
15,700.0	12,400.0	20,577.2	12,620.0	40.4	84.1	-3,097.9	-1,864.6	811.2	678.0	133.18	6.091	
15,800.0	12,400.0	20,477.2	12,620.0	40.8	83.2	-3,197.9	-1,864.4	811.9	679.7	132.23	6.140	
15,900.0	12,400.0	20,377.2	12,620.0	41.3	82.3	-3,297.9	-1,864.2	812.6	681.4	131.29	6.189	
16,000.0	12,400.0	20,277.2	12,620.0	41.8	81.5	-3,397.9	-1,863.9	813.4	683.0	130.38	6.239	
16,100.0	12,400.0	20,177.2	12,620.0	42.3	80.6	-3,497.9	-1,863.7	814.1	684.7	129.48	6.288	
16,200.0	12,400.0	20,077.2	12,620.0	42.8	79.7	-3,597.9	-1,863.5	814.9	686.3	128.59	6.337	
16,300.0	12,400.0	19,977.2	12,620.0	43.3	78.8	-3,697.9	-1,863.3	815.6	687.9	127.72	6.386	
16,400.0	12,400.0	19,877.2	12,620.0	43.8	77.9	-3,797.9	-1,863.1	816.4	689.5	126.87	6.435	
16,500.0	12,400.0	19,777.2	12,620.0	44.3	77.1	-3,897.9	-1,862.9	817.1	691.1	126.04	6.483	
16,600.0	12,400.0	19,677.2	12,620.0	44.8	76.2	-3,997.9	-1,862.7	817.9	692.7	125.23	6.531	
16,700.0	12,400.0	19,577.2	12,620.0	45.3	75.3	-4,097.9	-1,862.5	818.6	694.2	124.43	6.579	
16,800.0	12,400.0	19,477.2	12,620.0	45.9	74.5	-4,197.9	-1,862.3	819.4	695.7	123.65	6.627	
16,900.0	12,400.0	19,377.2	12,620.0	46.4	73.6	-4,297.9	-1,862.1	820.1	697.2	122.89	6.674	
17,000.0	12,400.0	19,277.2	12,620.0	46.9	72.7	-4,397.9	-1,861.9	820.9	698.7	122.15	6.720	
17,100.0	12,400.0	19,177.2	12,620.0	47.5	71.9	-4,497.9	-1,861.7	821.6	700.2	121.43	6.766	
17,200.0	12,400.0	19,077.2	12,620.0	48.1	71.0	-4,597.9	-1,861.5	822.4	701.6	120.73	6.812	
17,300.0	12,400.0	18,977.2	12,620.0	48.6	70.2	-4,697.9	-1,861.3	823.1	703.1	120.05	6.857	
17,400.0	12,400.0	18,877.2	12,620.0	49.2	69.3	-4,797.9	-1,861.1	823.9	704.5	119.39	6.901	
17,500.0	12,400.0	18,777.2	12,620.0	49.8	68.5	-4,897.9	-1,860.9	824.6	705.9	118.75	6.944	
17,600.0	12,400.0	18,677.2	12,620.0	50.3	67.6	-4,997.9	-1,860.7	825.4	707.2	118.13	6.987	
17,700.0	12,400.0	18,577.2	12,620.0	50.9	66.8	-5,097.9	-1,860.5	826.1	708.6	117.53	7.029	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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: AKUBRA PROJECT - *AKUBRA FED COM #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,800.0	12,400.0	18,477.2	12,620.0	51.5	66.0	105.43	-5,197.9	-1,860.3	826.9	709.9	116.96	7.070	
17,900.0	12,400.0	18,377.2	12,620.0	52.1	65.1	105.42	-5,297.9	-1,860.0	827.6	711.2	116.41	7.110	
18,000.0	12,400.0	18,277.2	12,620.0	52.7	64.3	105.40	-5,397.9	-1,859.8	828.4	712.5	115.88	7.149	
18,100.0	12,400.0	18,177.2	12,620.0	53.3	63.5	105.39	-5,497.9	-1,859.6	829.1	713.7	115.37	7.187	
18,200.0	12,400.0	18,077.2	12,620.0	53.9	62.7	105.38	-5,597.9	-1,859.4	829.9	715.0	114.89	7.223	
18,300.0	12,400.0	17,964.9	12,620.0	54.5	61.7	105.38	-5,710.2	-1,858.0	829.5	715.3	114.22	7.263	
18,400.0	12,400.0	17,864.9	12,620.0	55.1	60.9	105.40	-5,810.1	-1,856.2	828.8	715.0	113.78	7.284	
18,500.0	12,400.0	17,764.9	12,620.0	55.7	60.1	105.41	-5,910.1	-1,854.5	828.0	714.7	113.36	7.305	
18,600.0	12,400.0	17,664.9	12,620.0	56.4	59.3	105.42	-6,010.1	-1,852.7	827.3	714.3	112.96	7.324	
18,700.0	12,400.0	17,564.9	12,620.0	57.0	58.5	105.44	-6,110.1	-1,851.0	826.6	714.0	112.60	7.341	
18,800.0	12,400.0	17,464.9	12,620.0	57.6	57.7	105.45	-6,210.1	-1,849.2	825.8	713.6	112.25	7.357	
18,900.0	12,400.0	17,364.9	12,620.0	58.2	56.9	105.47	-6,310.1	-1,847.5	825.1	713.2	111.93	7.371	
19,000.0	12,400.0	17,264.9	12,620.0	58.9	56.1	105.48	-6,410.0	-1,845.8	824.4	712.7	111.64	7.384	
19,100.0	12,400.0	17,164.9	12,620.0	59.5	55.3	105.49	-6,510.0	-1,844.0	823.6	712.3	111.37	7.395	
19,200.0	12,400.0	17,064.9	12,620.0	60.1	54.5	105.51	-6,610.0	-1,842.3	822.9	711.8	111.13	7.405	
19,300.0	12,400.0	16,964.9	12,620.0	60.8	53.8	105.52	-6,710.0	-1,840.5	822.2	711.2	110.91	7.413	
19,400.0	12,400.0	16,864.9	12,620.0	61.4	53.0	105.54	-6,810.0	-1,838.8	821.4	710.7	110.72	7.419	
19,500.0	12,400.0	16,765.0	12,620.0	62.1	52.2	105.55	-6,909.9	-1,837.0	820.7	710.1	110.55	7.424	
19,600.0	12,400.0	16,665.0	12,620.0	62.7	51.5	105.57	-7,009.9	-1,835.3	819.9	709.5	110.41	7.426	
19,700.0	12,400.0	16,565.0	12,620.0	63.4	50.7	105.58	-7,109.9	-1,833.5	819.2	708.9	110.30	7.427	
19,800.0	12,400.0	16,465.0	12,620.0	64.0	50.0	105.59	-7,209.9	-1,831.8	818.5	708.3	110.21	7.426	
19,900.0	12,400.0	16,365.0	12,620.0	64.7	49.3	105.61	-7,309.9	-1,830.0	817.7	707.6	110.15	7.424	
20,000.0	12,400.0	16,265.0	12,620.0	65.3	48.5	105.62	-7,409.9	-1,828.3	817.0	706.9	110.11	7.420	
20,100.0	12,400.0	16,165.0	12,620.0	66.0	47.8	105.64	-7,509.8	-1,826.6	816.3	706.2	110.11	7.414	
20,200.0	12,400.0	16,065.0	12,620.0	66.7	47.1	105.65	-7,609.8	-1,824.8	815.5	705.4	110.12	7.406	
20,300.0	12,400.0	15,965.0	12,620.0	67.3	46.4	105.67	-7,709.8	-1,823.1	814.8	704.6	110.17	7.396	
20,400.0	12,400.0	15,865.0	12,620.0	68.0	45.8	105.68	-7,809.8	-1,821.3	814.1	703.8	110.24	7.385	
20,500.0	12,400.0	15,765.0	12,620.0	68.7	45.1	105.69	-7,909.8	-1,819.6	813.3	703.0	110.33	7.371	
20,600.0	12,400.0	15,665.0	12,620.0	69.3	44.4	105.71	-8,009.7	-1,817.8	812.6	702.1	110.46	7.357	
20,700.0	12,400.0	15,565.0	12,620.0	70.0	43.8	105.72	-8,109.7	-1,816.1	811.9	701.3	110.61	7.340	
20,800.0	12,400.0	15,465.0	12,620.0	70.7	43.1	105.74	-8,209.7	-1,814.3	811.1	700.3	110.78	7.322	
20,900.0	12,400.0	15,365.0	12,620.0	71.4	42.5	105.75	-8,309.7	-1,812.6	810.4	699.4	110.98	7.302	
21,000.0	12,400.0	15,265.0	12,620.0	72.0	41.9	105.77	-8,409.7	-1,810.9	809.7	698.4	111.21	7.281	
21,100.0	12,400.0	15,165.0	12,620.0	72.7	41.3	105.78	-8,509.7	-1,809.1	808.9	697.5	111.46	7.258	
21,200.0	12,400.0	15,065.0	12,620.0	73.4	40.7	105.80	-8,609.6	-1,807.4	808.2	696.4	111.74	7.233	
21,300.0	12,400.0	14,965.0	12,620.0	74.1	40.1	105.81	-8,709.6	-1,805.6	807.4	695.4	112.04	7.207	
21,400.0	12,400.0	14,865.0	12,620.0	74.8	39.6	105.83	-8,809.6	-1,803.9	806.7	694.3	112.37	7.179	
21,500.0	12,400.0	14,765.0	12,620.0	75.5	39.0	105.84	-8,909.6	-1,802.1	806.0	693.3	112.72	7.150	
21,600.0	12,400.0	14,665.0	12,620.0	76.2	38.5	105.86	-9,009.6	-1,800.4	805.2	692.2	113.10	7.120	
21,700.0	12,400.0	14,565.0	12,620.0	76.8	38.0	105.87	-9,109.5	-1,798.6	804.5	691.0	113.50	7.088	
21,800.0	12,400.0	14,465.0	12,620.0	77.5	37.5	105.89	-9,209.5	-1,796.9	803.8	689.9	113.92	7.056	
21,900.0	12,400.0	14,365.0	12,620.0	78.2	37.0	105.90	-9,309.5	-1,795.1	803.0	688.7	114.37	7.021	
22,000.0	12,400.0	14,265.0	12,620.0	78.9	36.6	105.91	-9,409.5	-1,793.4	802.3	687.5	114.84	6.986	
22,100.0	12,400.0	14,165.0	12,620.0	79.6	36.2	105.93	-9,509.5	-1,791.7	801.6	686.2	115.34	6.950	
22,200.0	12,400.0	14,065.0	12,620.0	80.3	35.8	105.94	-9,609.5	-1,789.9	800.8	685.0	115.86	6.912	
22,300.0	12,400.0	13,965.0	12,620.0	81.0	35.4	105.96	-9,709.4	-1,788.2	800.1	683.7	116.40	6.874	
22,400.0	12,400.0	13,865.0	12,620.0	81.7	35.0	105.97	-9,809.4	-1,786.4	799.4	682.4	116.96	6.835	
22,500.0	12,400.0	13,765.0	12,620.0	82.4	34.7	105.99	-9,909.4	-1,784.7	798.6	681.1	117.54	6.794	
22,600.0	12,400.0	13,665.0	12,620.0	83.1	34.4	106.00	-10,009.4	-1,782.9	797.9	679.8	118.15	6.753	
22,700.0	12,400.0	13,565.0	12,620.0	83.8	34.1	106.02	-10,109.4	-1,781.2	797.2	678.4	118.78	6.711	
22,800.0	12,400.0	13,465.0	12,620.0	84.5	33.8	106.03	-10,209.3	-1,779.4	796.4	677.0	119.43	6.669	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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: AKUBRA PROJECT - *AKUBRA FED COM #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program:		0-r.5 MWD+IFR1				Rule Assigned:		Offset Well Error:		3.0 usft			
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
22,900.0	12,400.0	13,365.1	12,620.0	85.2	33.6	106.05	-10,309.3	-1,777.7	795.7	675.6	120.09	6.626	
23,000.0	12,400.0	13,265.1	12,620.0	85.9	33.4	106.06	-10,409.3	-1,775.9	795.0	674.2	120.78	6.582	
23,100.0	12,400.0	13,165.1	12,620.0	86.6	33.2	106.08	-10,509.3	-1,774.2	794.2	672.7	121.49	6.537	
23,200.0	12,400.0	13,065.1	12,620.0	87.3	33.0	106.10	-10,609.3	-1,772.5	793.5	671.3	122.22	6.492	
23,300.0	12,400.0	12,965.1	12,620.0	88.1	32.9	106.11	-10,709.3	-1,770.7	792.8	669.8	122.97	6.447	
23,400.0	12,400.0	12,797.2	12,595.4	88.8	32.7	104.41	-10,874.5	-1,767.8	788.3	664.7	123.59	6.378	
23,500.0	12,400.0	12,652.4	12,529.5	89.5	32.6	99.68	-11,002.8	-1,765.6	776.7	650.9	125.85	6.172	
23,600.0	12,400.0	12,551.0	12,462.0	90.2	32.6	94.67	-11,078.0	-1,764.3	765.0	635.1	129.83	5.892	
23,700.0	12,400.0	12,482.0	12,407.5	90.9	32.6	90.56	-11,120.4	-1,763.5	758.7	624.5	134.19	5.654	
23,724.0	12,400.0	12,468.8	12,396.4	91.1	32.6	89.73	-11,127.5	-1,763.4	758.4	623.3	135.13	5.613	CC, ES
23,800.0	12,400.0	12,433.7	12,366.0	91.6	32.6	87.44	-11,145.1	-1,763.1	761.3	623.7	137.62	5.532	
23,900.0	12,400.0	12,400.0	12,335.7	92.3	32.6	85.16	-11,159.8	-1,762.8	774.3	635.0	139.37	5.556	
24,000.0	12,400.0	12,375.0	12,312.6	93.0	32.5	83.43	-11,169.3	-1,762.7	798.2	658.9	139.30	5.730	
24,100.0	12,400.0	12,350.0	12,289.0	93.8	32.5	81.67	-11,177.6	-1,762.5	832.5	694.5	137.97	6.034	
24,200.0	12,400.0	12,336.1	12,275.8	94.5	32.5	80.69	-11,181.7	-1,762.5	876.3	741.3	135.01	6.490	
24,300.0	12,400.0	12,325.0	12,265.0	95.2	32.5	79.91	-11,184.7	-1,762.4	928.4	797.1	131.27	7.072	
24,400.0	12,400.0	12,312.2	12,252.7	95.9	32.5	79.00	-11,187.8	-1,762.4	987.5	860.2	127.34	7.755	
24,500.0	12,400.0	12,300.0	12,240.7	96.6	32.5	78.13	-11,190.4	-1,762.3	1,052.7	929.3	123.33	8.535	
24,600.0	12,400.0	12,300.0	12,240.7	97.3	32.5	78.13	-11,190.4	-1,762.3	1,122.8	1,004.1	118.75	9.455	
24,700.0	12,400.0	12,288.8	12,229.7	98.1	32.5	77.34	-11,192.6	-1,762.3	1,197.1	1,082.0	115.07	10.403	
24,800.0	12,400.0	12,275.0	12,216.1	98.8	32.5	76.36	-11,194.9	-1,762.2	1,274.8	1,163.0	111.79	11.403	
24,900.0	12,400.0	12,275.0	12,216.1	99.5	32.5	76.36	-11,194.9	-1,762.2	1,355.3	1,247.2	108.10	12.538	
25,000.0	12,400.0	12,275.0	12,216.1	100.2	32.5	76.36	-11,194.9	-1,762.2	1,438.3	1,333.5	104.74	13.732	
25,100.0	12,400.0	12,275.0	12,216.1	100.9	32.5	76.36	-11,194.9	-1,762.2	1,523.2	1,421.5	101.69	14.979	
25,200.0	12,400.0	12,275.0	12,216.1	101.7	32.5	76.36	-11,194.9	-1,762.2	1,610.0	1,511.0	98.95	16.271	
25,300.0	12,400.0	12,262.6	12,203.9	102.4	32.5	75.49	-11,196.7	-1,762.2	1,697.9	1,600.9	97.01	17.503	
25,400.0	12,400.0	12,259.7	12,201.0	103.1	32.5	75.29	-11,197.0	-1,762.2	1,787.3	1,692.4	94.88	18.838	
25,500.0	12,400.0	12,250.0	12,191.3	103.8	32.5	74.61	-11,198.1	-1,762.2	1,877.7	1,784.5	93.23	20.141	
25,600.0	12,400.0	12,250.0	12,191.3	104.6	32.5	74.61	-11,198.1	-1,762.2	1,969.0	1,877.6	91.38	21.548	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)		Ellipses (usft)			
0.0	0.0	0.0	0.0	3.0	3.0	89.49	0.8	90.0	90.0	83.6	6.43	14.000	
100.0	100.0	100.0	100.0	3.2	3.2	89.49	0.8	90.0	90.0	83.1	6.89	13.058	
200.0	200.0	200.0	200.0	3.5	3.5	89.49	0.8	90.0	90.0	82.7	7.33	12.282	
300.0	300.0	300.0	300.0	3.7	3.7	89.49	0.8	90.0	90.0	82.3	7.74	11.626	
400.0	400.0	400.0	400.0	3.9	3.9	89.49	0.8	90.0	90.0	81.9	8.14	11.063	
500.0	500.0	500.0	500.0	4.1	4.1	89.49	0.8	90.0	90.0	81.5	8.51	10.572	
600.0	600.0	600.0	600.0	4.2	4.2	89.49	0.8	90.0	90.0	81.1	8.88	10.138	
700.0	700.0	700.0	700.0	4.4	4.4	89.49	0.8	90.0	90.0	80.8	9.23	9.752	
800.0	800.0	800.0	800.0	4.6	4.6	89.49	0.8	90.0	90.0	80.4	9.57	9.404	
900.0	900.0	900.0	900.0	4.8	4.8	89.49	0.8	90.0	90.0	80.1	9.90	9.090	
1,000.0	1,000.0	1,000.0	1,000.0	4.9	4.9	89.49	0.8	90.0	90.0	79.8	10.22	8.803	
1,100.0	1,100.0	1,100.0	1,100.0	5.1	5.1	89.49	0.8	90.0	90.0	79.5	10.54	8.540	
1,200.0	1,200.0	1,200.0	1,200.0	5.2	5.2	89.49	0.8	90.0	90.0	79.2	10.85	8.297 CC, ES	
1,300.0	1,300.0	1,297.9	1,297.9	5.4	5.4	162.70	1.4	91.1	92.4	81.2	11.20	8.249	
1,400.0	1,399.9	1,395.5	1,395.4	5.6	5.6	162.32	3.2	94.4	99.5	88.0	11.55	8.616	
1,500.0	1,499.7	1,492.4	1,492.1	5.8	5.8	161.79	6.1	99.8	111.4	99.5	11.92	9.343	
1,600.0	1,599.3	1,588.3	1,587.6	6.1	6.0	161.20	10.2	107.3	128.0	115.7	12.32	10.387	
1,700.0	1,698.6	1,682.9	1,681.7	6.3	6.3	160.62	15.3	116.8	149.2	136.5	12.74	11.708	
1,800.0	1,797.5	1,776.0	1,773.8	6.6	6.5	160.08	21.4	128.1	175.0	161.8	13.19	13.266	
1,900.0	1,896.1	1,867.2	1,863.8	6.9	6.7	159.59	28.4	141.1	205.2	191.6	13.62	15.073	
2,000.0	1,994.2	1,961.4	1,956.6	7.2	7.0	159.27	36.2	155.5	238.8	224.7	14.11	16.924	
2,100.0	2,092.0	2,055.2	2,049.0	7.5	7.3	159.27	44.0	169.8	273.5	258.9	14.63	18.692	
2,200.0	2,189.8	2,149.0	2,141.3	7.8	7.5	159.27	51.7	184.2	308.2	293.1	15.18	20.307	
2,300.0	2,287.6	2,242.8	2,233.7	8.1	7.9	159.27	59.5	198.5	343.0	327.2	15.75	21.776	
2,400.0	2,385.4	2,336.5	2,326.0	8.5	8.2	159.27	67.2	212.8	377.7	361.3	16.34	23.112	
2,500.0	2,483.2	2,430.3	2,418.4	8.9	8.5	159.27	75.0	227.1	412.4	395.4	16.95	24.327	
2,600.0	2,581.1	2,524.1	2,510.7	9.2	8.8	159.27	82.7	241.5	447.1	429.5	17.58	25.433	
2,700.0	2,678.9	2,617.9	2,603.1	9.6	9.2	159.27	90.4	255.8	481.8	463.6	18.22	26.440	
2,800.0	2,776.7	2,711.6	2,695.4	10.0	9.5	159.27	98.2	270.1	516.6	497.7	18.88	27.359	
2,900.0	2,874.5	2,805.4	2,787.8	10.4	9.9	159.27	105.9	284.4	551.3	531.7	19.55	28.199	
3,000.0	2,972.3	2,899.2	2,880.1	10.8	10.2	159.27	113.7	298.8	586.0	565.8	20.23	28.967	
3,100.0	3,070.1	2,993.0	2,972.5	11.2	10.6	159.27	121.4	313.1	620.7	599.8	20.92	29.670	
3,200.0	3,167.9	3,086.8	3,064.8	11.6	11.0	159.27	129.2	327.4	655.5	633.8	21.62	30.316	
3,300.0	3,265.8	3,180.5	3,157.2	12.0	11.3	159.27	136.9	341.7	690.2	667.9	22.33	30.911	
3,400.0	3,363.6	3,274.3	3,249.6	12.4	11.7	159.27	144.7	356.1	724.9	701.9	23.04	31.459	
3,500.0	3,461.4	3,368.1	3,341.9	12.9	12.1	159.27	152.4	370.4	759.6	735.9	23.76	31.965	
3,600.0	3,559.2	3,461.9	3,434.3	13.3	12.5	159.27	160.2	384.7	794.3	769.9	24.49	32.433	
3,700.0	3,657.0	3,555.7	3,526.6	13.7	12.9	159.27	167.9	399.0	829.1	803.8	25.23	32.867	
3,800.0	3,754.8	3,649.4	3,619.0	14.2	13.3	159.27	175.6	413.4	863.8	837.8	25.96	33.269	
3,900.0	3,852.6	3,743.2	3,711.3	14.6	13.6	159.27	183.4	427.7	898.5	871.8	26.71	33.644	
4,000.0	3,950.5	3,837.0	3,803.7	15.0	14.0	159.27	191.1	442.0	933.2	905.8	27.45	33.993	
4,100.0	4,048.3	3,930.8	3,896.0	15.5	14.4	159.27	198.9	456.3	968.0	939.8	28.21	34.319	
4,200.0	4,146.1	4,024.5	3,988.4	15.9	14.8	159.27	206.6	470.7	1,002.7	973.7	28.96	34.623	
4,300.0	4,243.9	4,118.3	4,080.7	16.4	15.2	159.27	214.4	485.0	1,037.4	1,007.7	29.72	34.908	
4,400.0	4,341.7	4,212.1	4,173.1	16.8	15.6	159.27	222.1	499.3	1,072.1	1,041.7	30.48	35.176	
4,500.0	4,439.5	4,305.9	4,265.4	17.3	16.0	159.27	229.9	513.6	1,106.9	1,075.6	31.24	35.426	
4,600.0	4,537.3	4,399.7	4,357.8	17.7	16.4	159.27	237.6	528.0	1,141.6	1,109.6	32.01	35.662	
4,700.0	4,635.2	4,493.4	4,450.1	18.2	16.8	159.27	245.4	542.3	1,176.3	1,143.5	32.78	35.884	
4,800.0	4,733.0	4,587.2	4,542.5	18.6	17.2	159.27	253.1	556.6	1,211.0	1,177.5	33.55	36.094	
4,900.0	4,830.8	4,681.0	4,634.9	19.1	17.7	159.27	260.8	570.9	1,245.7	1,211.4	34.33	36.291	
5,000.0	4,928.6	4,774.8	4,727.2	19.5	18.1	159.27	268.6	585.3	1,280.5	1,245.4	35.10	36.478	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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									Rule Assigned:				Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,100.0	5,026.4	4,868.5	4,819.6	20.0	18.5	159.27	276.3	599.6	1,315.2	1,279.3	35.88	36.655		
5,200.0	5,124.2	4,962.3	4,911.9	20.4	18.9	159.27	284.1	613.9	1,349.9	1,313.3	36.66	36.822		
5,300.0	5,222.1	5,056.1	5,004.3	20.9	19.3	159.27	291.8	628.2	1,384.6	1,347.2	37.44	36.981		
5,400.0	5,319.9	5,149.9	5,096.6	21.4	19.7	159.27	299.6	642.6	1,419.4	1,381.1	38.22	37.132		
5,500.0	5,417.7	5,243.7	5,189.0	21.8	20.1	159.27	307.3	656.9	1,454.1	1,415.1	39.01	37.275		
5,600.0	5,515.5	5,337.4	5,281.3	22.3	20.5	159.27	315.1	671.2	1,488.8	1,449.0	39.79	37.419		
5,700.0	5,613.3	5,458.2	5,400.4	22.7	21.0	159.29	324.5	688.7	1,522.8	1,482.0	40.77	37.351		
5,800.0	5,711.1	5,583.3	5,524.2	23.2	21.6	159.35	333.1	704.5	1,554.9	1,513.1	41.77	37.222		
5,900.0	5,808.9	5,710.0	5,650.0	23.7	22.1	159.46	340.4	718.1	1,585.1	1,542.4	42.76	37.071		
6,000.0	5,906.8	5,838.2	5,777.6	24.1	22.6	159.60	346.5	729.3	1,613.5	1,569.7	43.72	36.904		
6,100.0	6,004.6	5,967.9	5,906.9	24.6	23.1	159.79	351.2	738.1	1,639.8	1,595.2	44.65	36.723		
6,200.0	6,102.4	6,098.8	6,037.6	25.1	23.5	160.01	354.6	744.4	1,664.2	1,618.7	45.55	36.536		
6,300.0	6,200.2	6,230.9	6,169.6	25.5	23.9	160.28	356.6	748.1	1,686.6	1,640.2	46.39	36.360		
6,400.0	6,298.0	6,359.3	6,298.0	26.0	24.2	160.57	357.2	749.1	1,707.0	1,660.0	47.08	36.261		
6,500.0	6,395.8	6,457.1	6,395.8	26.4	24.2	160.80	357.2	749.1	1,726.7	1,679.1	47.57	36.301		
6,600.0	6,493.6	6,555.0	6,493.6	26.9	24.2	161.02	357.2	749.1	1,746.4	1,698.3	48.07	36.330		
6,700.0	6,591.6	6,652.9	6,591.6	27.4	24.3	161.29	357.2	749.1	1,765.4	1,716.8	48.57	36.347		
6,800.0	6,689.9	6,751.2	6,689.9	27.8	24.3	161.53	357.2	749.1	1,782.8	1,733.7	49.07	36.333		
6,900.0	6,788.5	6,849.8	6,788.5	28.3	24.3	161.75	357.2	749.1	1,798.6	1,749.0	49.56	36.290		
7,000.0	6,887.4	6,948.7	6,887.4	28.7	24.4	161.94	357.2	749.1	1,812.8	1,762.7	50.05	36.221		
7,100.0	6,986.5	7,047.8	6,986.5	29.1	24.4	162.11	357.2	749.1	1,825.3	1,774.8	50.52	36.127		
7,200.0	7,085.9	7,147.2	7,085.9	29.5	24.5	162.25	357.2	749.1	1,836.2	1,785.2	50.99	36.010		
7,300.0	7,185.4	7,246.7	7,185.4	29.9	24.5	162.37	357.2	749.1	1,845.4	1,794.0	51.44	35.873		
7,400.0	7,285.1	7,346.4	7,285.1	30.3	24.6	162.47	357.2	749.1	1,853.0	1,801.1	51.88	35.718		
7,500.0	7,384.9	7,446.2	7,384.9	30.7	24.6	162.55	357.2	749.1	1,859.0	1,806.7	52.30	35.547		
7,600.0	7,484.8	7,546.1	7,484.8	31.0	24.6	162.60	357.2	749.1	1,863.2	1,810.5	52.69	35.365		
7,700.0	7,584.8	7,646.1	7,584.8	31.3	24.7	162.63	357.2	749.1	1,865.8	1,812.8	53.04	35.180		
7,800.0	7,684.7	7,746.1	7,684.7	31.4	24.7	162.64	357.2	749.1	1,866.8	1,813.5	53.24	35.063		
7,900.0	7,784.7	7,846.1	7,784.7	31.5	24.8	89.29	357.2	749.1	1,866.8	1,813.5	53.32	35.011		
8,000.0	7,884.7	7,946.1	7,884.7	31.5	24.8	89.29	357.2	749.1	1,866.8	1,813.4	53.39	34.962		
8,100.0	7,984.7	8,046.1	7,984.7	31.5	24.9	89.29	357.2	749.1	1,866.8	1,813.3	53.47	34.914		
8,200.0	8,084.7	8,146.1	8,084.7	31.6	24.9	89.29	357.2	749.1	1,866.8	1,813.2	53.54	34.866		
8,300.0	8,184.7	8,246.1	8,184.7	31.6	24.9	89.29	357.2	749.1	1,866.8	1,813.2	53.62	34.817		
8,400.0	8,284.7	8,346.1	8,284.7	31.6	25.0	89.29	357.2	749.1	1,866.8	1,813.1	53.69	34.769		
8,500.0	8,384.7	8,446.1	8,384.7	31.7	25.0	89.29	357.2	749.1	1,866.8	1,813.0	53.77	34.720		
8,600.0	8,484.7	8,546.1	8,484.7	31.7	25.1	89.29	357.2	749.1	1,866.8	1,812.9	53.84	34.671		
8,700.0	8,584.7	8,646.1	8,584.7	31.7	25.1	89.29	357.2	749.1	1,866.8	1,812.9	53.92	34.622		
8,800.0	8,684.7	8,746.1	8,684.7	31.8	25.2	89.29	357.2	749.1	1,866.8	1,812.8	53.99	34.573		
8,900.0	8,784.7	8,846.1	8,784.7	31.8	25.2	89.29	357.2	749.1	1,866.8	1,812.7	54.07	34.524		
9,000.0	8,884.7	8,946.1	8,884.7	31.8	25.3	89.29	357.2	749.1	1,866.8	1,812.6	54.15	34.475		
9,100.0	8,984.7	9,046.1	8,984.7	31.9	25.3	89.29	357.2	749.1	1,866.8	1,812.5	54.23	34.426		
9,200.0	9,084.7	9,146.1	9,084.7	31.9	25.3	89.29	357.2	749.1	1,866.8	1,812.5	54.30	34.376		
9,300.0	9,184.7	9,246.1	9,184.7	31.9	25.4	89.29	357.2	749.1	1,866.8	1,812.4	54.38	34.327		
9,400.0	9,284.7	9,346.1	9,284.7	32.0	25.4	89.29	357.2	749.1	1,866.8	1,812.3	54.46	34.277		
9,500.0	9,384.7	9,446.1	9,384.7	32.0	25.5	89.29	357.2	749.1	1,866.8	1,812.2	54.54	34.228		
9,600.0	9,484.7	9,546.1	9,484.7	32.0	25.5	89.29	357.2	749.1	1,866.8	1,812.2	54.62	34.178		
9,700.0	9,584.7	9,646.1	9,584.7	32.0	25.6	89.29	357.2	749.1	1,866.8	1,812.1	54.70	34.128		
9,800.0	9,684.7	9,746.1	9,684.7	32.1	25.6	89.29	357.2	749.1	1,866.8	1,812.0	54.78	34.078		
9,900.0	9,784.7	9,846.1	9,784.7	32.1	25.7	89.29	357.2	749.1	1,866.8	1,811.9	54.86	34.028		
10,000.0	9,884.7	9,946.1	9,884.7	32.1	25.7	89.29	357.2	749.1	1,866.8	1,811.8	54.94	33.978		
10,100.0	9,984.7	10,046.1	9,984.7	32.2	25.8	89.29	357.2	749.1	1,866.8	1,811.8	55.02	33.928		

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)		Reference (usft)	Offset (usft)	+N/-S (usft)	+E/-W (usft)					
10,200.0	10,084.7	10,146.1	10,084.7		32.2	25.8	357.2	749.1	1,866.8	1,811.7		55.10	33.878
10,300.0	10,184.7	10,246.1	10,184.7		32.3	25.9	357.2	749.1	1,866.8	1,811.6		55.19	33.827
10,400.0	10,284.7	10,346.1	10,284.7		32.3	25.9	357.2	749.1	1,866.8	1,811.5		55.27	33.777
10,500.0	10,384.7	10,446.1	10,384.7		32.3	26.0	357.2	749.1	1,866.8	1,811.4		55.35	33.727
10,600.0	10,484.7	10,546.1	10,484.7		32.4	26.0	357.2	749.1	1,866.8	1,811.3		55.43	33.676
10,700.0	10,584.7	10,646.1	10,584.7		32.4	26.1	357.2	749.1	1,866.8	1,811.3		55.52	33.626
10,800.0	10,684.7	10,746.1	10,684.7		32.4	26.1	357.2	749.1	1,866.8	1,811.2		55.60	33.575
10,900.0	10,784.7	10,846.1	10,784.7		32.5	26.1	357.2	749.1	1,866.8	1,811.1		55.68	33.524
11,000.0	10,884.7	10,946.1	10,884.7		32.5	26.2	357.2	749.1	1,866.8	1,811.0		55.77	33.474
11,100.0	10,984.7	11,046.1	10,984.7		32.5	26.2	357.2	749.1	1,866.8	1,810.9		55.85	33.423
11,200.0	11,084.7	11,146.1	11,084.7		32.6	26.3	357.2	749.1	1,866.8	1,810.8		55.94	33.372
11,300.0	11,184.7	11,246.1	11,184.7		32.6	26.3	357.2	749.1	1,866.8	1,810.8		56.02	33.321
11,400.0	11,284.7	11,346.1	11,284.7		32.6	26.4	357.2	749.1	1,866.8	1,810.7		56.11	33.271
11,500.0	11,384.7	11,446.1	11,384.7		32.7	26.4	357.2	749.1	1,866.8	1,810.6		56.19	33.220
11,600.0	11,484.7	11,546.1	11,484.7		32.7	26.5	357.2	749.1	1,866.8	1,810.5		56.28	33.169
11,700.0	11,584.7	11,646.1	11,584.7		32.7	26.5	357.2	749.1	1,866.8	1,810.4		56.37	33.118
11,800.0	11,684.7	11,746.1	11,684.7		32.8	26.6	357.2	749.1	1,866.8	1,810.3		56.45	33.067
11,900.0	11,784.7	11,846.1	11,784.7		32.8	26.6	357.2	749.1	1,866.8	1,810.2		56.54	33.017
12,000.0	11,884.6	11,946.6	11,885.1		32.8	26.6	354.2	749.1	1,866.8	1,810.2		56.57	33.002
12,100.0	11,982.8	12,047.4	11,984.0		32.7	26.4	335.2	749.3	1,866.8	1,810.2		56.52	33.027
12,200.0	12,076.1	12,148.2	12,078.1		32.5	26.2	299.3	749.7	1,866.8	1,810.3		56.46	33.065
12,300.0	12,162.0	12,248.9	12,164.3		32.4	26.1	247.4	750.2	1,866.8	1,810.4		56.38	33.110
12,400.0	12,237.6	12,349.6	12,240.0		32.3	25.9	181.4	750.8	1,866.8	1,810.4		56.30	33.155
12,500.0	12,300.7	12,450.1	12,303.0		32.2	25.8	103.2	751.6	1,866.7	1,810.5		56.24	33.193
12,600.0	12,349.5	12,550.5	12,351.3		32.1	25.7	15.3	752.4	1,866.7	1,810.5		56.20	33.215
12,700.0	12,382.4	12,650.8	12,383.5		32.1	25.6	-79.5	753.4	1,866.7	1,810.5		56.20	33.216
12,800.0	12,398.4	12,750.9	12,398.7		32.1	25.7	-178.4	754.3	1,866.7	1,810.5		56.24	33.192
12,900.0	12,400.0	12,850.9	12,400.0		32.2	25.7	-278.3	755.3	1,866.7	1,810.4		56.33	33.138
13,000.0	12,400.0	12,950.9	12,400.0		32.3	25.8	-378.3	756.3	1,866.7	1,810.2		56.48	33.053
13,100.0	12,400.0	13,050.9	12,400.0		32.4	26.0	-478.3	757.2	1,866.7	1,810.0		56.66	32.946
13,200.0	12,400.0	13,150.9	12,400.0		32.6	26.1	-578.3	758.2	1,866.7	1,809.8		56.88	32.816
13,300.0	12,400.0	13,250.9	12,400.0		32.7	26.3	-678.3	759.2	1,866.7	1,809.5		57.15	32.665
13,400.0	12,400.0	13,350.9	12,400.0		32.9	26.5	-778.3	760.1	1,866.6	1,809.2		57.45	32.494
13,500.0	12,400.0	13,450.9	12,400.0		33.1	26.7	-878.3	761.1	1,866.6	1,808.9		57.79	32.303
13,600.0	12,400.0	13,550.9	12,400.0		33.2	26.9	-978.3	762.1	1,866.6	1,808.5		58.16	32.093
13,700.0	12,400.0	13,650.9	12,400.0		33.5	27.1	-1,078.3	763.1	1,866.6	1,808.0		58.58	31.867
13,800.0	12,400.0	13,750.9	12,400.0		33.7	27.4	-1,178.3	764.0	1,866.6	1,807.6		59.03	31.624
13,900.0	12,400.0	13,850.9	12,400.0		33.9	27.6	-1,278.3	765.0	1,866.6	1,807.1		59.51	31.366
14,000.0	12,400.0	13,950.9	12,400.0		34.2	27.9	-1,378.3	766.0	1,866.6	1,806.6		60.03	31.095
14,100.0	12,400.0	14,050.9	12,400.0		34.4	28.2	-1,478.3	766.9	1,866.6	1,806.0		60.58	30.812
14,200.0	12,400.0	14,150.9	12,400.0		34.7	28.5	-1,578.3	767.9	1,866.6	1,805.4		61.16	30.517
14,300.0	12,400.0	14,250.9	12,400.0		35.0	28.8	-1,678.3	768.9	1,866.6	1,804.8		61.78	30.213
14,400.0	12,400.0	14,350.9	12,400.0		35.3	29.2	-1,778.3	769.9	1,866.5	1,804.1		62.43	29.900
14,500.0	12,400.0	14,450.9	12,400.0		35.7	29.5	-1,878.3	770.8	1,866.5	1,803.4		63.10	29.580
14,600.0	12,400.0	14,550.9	12,400.0		36.0	29.9	-1,978.3	771.8	1,866.5	1,802.7		63.81	29.253
14,700.0	12,400.0	14,650.9	12,400.0		36.3	30.3	-2,078.2	772.8	1,866.5	1,802.0		64.54	28.921
14,800.0	12,400.0	14,750.9	12,400.0		36.7	30.7	-2,178.2	773.7	1,866.5	1,801.2		65.30	28.585
14,900.0	12,400.0	14,850.9	12,400.0		37.1	31.1	-2,278.2	774.7	1,866.5	1,800.4		66.08	28.245
15,000.0	12,400.0	14,950.9	12,400.0		37.4	31.5	-2,378.2	775.7	1,866.5	1,799.6		66.89	27.903
15,100.0	12,400.0	15,050.9	12,400.0		37.8	32.0	-2,478.2	776.7	1,866.5	1,798.7		67.73	27.559
15,200.0	12,400.0	15,150.9	12,400.0		38.2	32.4	-2,578.2	777.6	1,866.5	1,797.9		68.58	27.215

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
15,300.0	12,400.0	15,250.9	12,400.0	38.6	32.9	-90.00	-2,678.2	778.6	1,866.4	1,797.0	69.46	26.870	
15,400.0	12,400.0	15,350.9	12,400.0	39.1	33.4	-90.00	-2,778.2	779.6	1,866.4	1,796.1	70.36	26.526	
15,500.0	12,400.0	15,450.9	12,400.0	39.5	33.8	-90.00	-2,878.2	780.5	1,866.4	1,795.1	71.28	26.183	
15,600.0	12,400.0	15,550.9	12,400.0	39.9	34.3	-90.00	-2,978.2	781.5	1,866.4	1,794.2	72.22	25.842	
15,700.0	12,400.0	15,650.9	12,400.0	40.4	34.8	-90.00	-3,078.2	782.5	1,866.4	1,793.2	73.18	25.503	
15,800.0	12,400.0	15,750.9	12,400.0	40.8	35.3	-90.00	-3,178.2	783.5	1,866.4	1,792.2	74.16	25.166	
15,900.0	12,400.0	15,850.9	12,400.0	41.3	35.9	-90.00	-3,278.2	784.4	1,866.4	1,791.2	75.16	24.832	
16,000.0	12,400.0	15,950.9	12,400.0	41.8	36.4	-90.00	-3,378.2	785.4	1,866.4	1,790.2	76.17	24.502	
16,100.0	12,400.0	16,050.9	12,400.0	42.3	36.9	-90.00	-3,478.2	786.4	1,866.4	1,789.2	77.20	24.175	
16,200.0	12,400.0	16,150.9	12,400.0	42.8	37.5	-90.00	-3,578.2	787.3	1,866.3	1,788.1	78.25	23.852	
16,300.0	12,400.0	16,250.9	12,400.0	43.3	38.0	-90.00	-3,678.2	788.3	1,866.3	1,787.0	79.31	23.534	
16,400.0	12,400.0	16,350.9	12,400.0	43.8	38.6	-90.00	-3,778.2	789.3	1,866.3	1,785.9	80.38	23.219	
16,500.0	12,400.0	16,450.9	12,400.0	44.3	39.2	-90.00	-3,878.2	790.3	1,866.3	1,784.8	81.47	22.909	
16,600.0	12,400.0	16,550.9	12,400.0	44.8	39.7	-90.00	-3,978.2	791.2	1,866.3	1,783.7	82.57	22.603	
16,700.0	12,400.0	16,650.9	12,400.0	45.3	40.3	-90.00	-4,078.2	792.2	1,866.3	1,782.6	83.68	22.302	
16,800.0	12,400.0	16,750.9	12,400.0	45.9	40.9	-90.00	-4,178.2	793.2	1,866.3	1,781.5	84.81	22.006	
16,900.0	12,400.0	16,850.9	12,400.0	46.4	41.5	-90.00	-4,278.1	794.1	1,866.3	1,780.3	85.95	21.715	
17,000.0	12,400.0	16,950.9	12,400.0	46.9	42.1	-90.00	-4,378.1	795.1	1,866.3	1,779.2	87.09	21.428	
17,100.0	12,400.0	17,050.9	12,400.0	47.5	42.7	-90.00	-4,478.1	796.1	1,866.3	1,778.0	88.25	21.146	
17,200.0	12,400.0	17,150.9	12,400.0	48.1	43.3	-90.00	-4,578.1	797.1	1,866.2	1,776.8	89.42	20.870	
17,300.0	12,400.0	17,250.9	12,400.0	48.6	43.9	-90.00	-4,678.1	798.0	1,866.2	1,775.6	90.60	20.598	
17,400.0	12,400.0	17,350.9	12,400.0	49.2	44.5	-90.00	-4,778.1	799.0	1,866.2	1,774.4	91.79	20.330	
17,500.0	12,400.0	17,450.9	12,400.0	49.8	45.2	-90.00	-4,878.1	800.0	1,866.2	1,773.2	92.99	20.068	
17,600.0	12,400.0	17,550.9	12,400.0	50.3	45.8	-90.00	-4,978.1	800.9	1,866.2	1,772.0	94.20	19.811	
17,700.0	12,400.0	17,650.9	12,400.0	50.9	46.4	-90.00	-5,078.1	801.9	1,866.2	1,770.8	95.42	19.558	
17,800.0	12,400.0	17,750.9	12,400.0	51.5	47.1	-90.00	-5,178.1	802.9	1,866.2	1,769.5	96.64	19.310	
17,900.0	12,400.0	17,850.9	12,400.0	52.1	47.7	-90.00	-5,278.1	803.9	1,866.2	1,768.3	97.87	19.067	
18,000.0	12,400.0	17,950.9	12,400.0	52.7	48.3	-90.00	-5,378.1	804.8	1,866.2	1,767.0	99.11	18.828	
18,100.0	12,400.0	18,050.9	12,400.0	53.3	49.0	-90.00	-5,478.1	805.8	1,866.1	1,765.8	100.36	18.594	
18,200.0	12,400.0	18,150.9	12,400.0	53.9	49.6	-90.00	-5,578.1	806.8	1,866.1	1,764.5	101.62	18.364	
18,300.0	12,400.0	18,250.9	12,400.0	54.5	50.3	-90.00	-5,678.1	807.7	1,866.1	1,763.2	102.88	18.139	
18,400.0	12,400.0	18,350.9	12,400.0	55.1	50.9	-90.00	-5,778.1	808.7	1,866.1	1,762.0	104.15	17.918	
18,500.0	12,400.0	18,450.9	12,400.0	55.7	51.6	-90.00	-5,878.1	809.7	1,866.1	1,760.7	105.42	17.702	
18,600.0	12,400.0	18,550.9	12,400.0	56.4	52.3	-90.00	-5,978.1	810.7	1,866.1	1,759.4	106.70	17.489	
18,700.0	12,400.0	18,650.9	12,400.0	57.0	52.9	-90.00	-6,078.1	811.6	1,866.1	1,758.1	107.99	17.281	
18,800.0	12,400.0	18,750.9	12,400.0	57.6	53.6	-90.00	-6,178.1	812.6	1,866.1	1,756.8	109.28	17.076	
18,900.0	12,400.0	18,850.9	12,400.0	58.2	54.3	-90.00	-6,278.1	813.6	1,866.1	1,755.5	110.58	16.876	
19,000.0	12,400.0	18,950.9	12,400.0	58.9	54.9	-90.00	-6,378.0	814.5	1,866.0	1,754.2	111.88	16.679	
19,100.0	12,400.0	19,050.9	12,400.0	59.5	55.6	-90.00	-6,478.0	815.5	1,866.0	1,752.9	113.19	16.486	
19,200.0	12,400.0	19,150.9	12,400.0	60.1	56.3	-90.00	-6,578.0	816.5	1,866.0	1,751.5	114.50	16.297	
19,300.0	12,400.0	19,250.9	12,400.0	60.8	57.0	-90.00	-6,678.0	817.5	1,866.0	1,750.2	115.82	16.112	
19,400.0	12,400.0	19,350.9	12,400.0	61.4	57.7	-90.00	-6,778.0	818.4	1,866.0	1,748.9	117.14	15.930	
19,500.0	12,400.0	19,450.9	12,400.0	62.1	58.3	-90.00	-6,878.0	819.4	1,866.0	1,747.5	118.46	15.752	
19,600.0	12,400.0	19,550.9	12,400.0	62.7	59.0	-90.00	-6,978.0	820.4	1,866.0	1,746.2	119.79	15.577	
19,700.0	12,400.0	19,650.9	12,400.0	63.4	59.7	-90.00	-7,078.0	821.3	1,866.0	1,744.8	121.13	15.405	
19,800.0	12,400.0	19,750.9	12,400.0	64.0	60.4	-90.00	-7,178.0	822.3	1,866.0	1,743.5	122.47	15.236	
19,900.0	12,400.0	19,850.9	12,400.0	64.7	61.1	-90.00	-7,278.0	823.3	1,866.0	1,742.1	123.81	15.071	
20,000.0	12,400.0	19,950.9	12,400.0	65.3	61.8	-90.00	-7,378.0	824.3	1,865.9	1,740.8	125.16	14.909	
20,100.0	12,400.0	20,050.9	12,400.0	66.0	62.5	-90.00	-7,478.0	825.2	1,865.9	1,739.4	126.51	14.750	
20,200.0	12,400.0	20,150.9	12,400.0	66.7	63.2	-90.00	-7,578.0	826.2	1,865.9	1,738.1	127.86	14.593	
20,300.0	12,400.0	20,250.9	12,400.0	67.3	63.9	-90.00	-7,678.0	827.2	1,865.9	1,736.7	129.22	14.440	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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:												
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Warning
20,400.0	12,400.0	20,350.9	12,400.0	68.0	64.6	-90.00	-7,778.0	828.1	1,865.9	1,735.3	130.58	14.290
20,500.0	12,400.0	20,450.9	12,400.0	68.7	65.3	-90.00	-7,878.0	829.1	1,865.9	1,733.9	131.94	14.142
20,600.0	12,400.0	20,550.9	12,400.0	69.3	66.0	-90.00	-7,978.0	830.1	1,865.9	1,732.6	133.31	13.997
20,700.0	12,400.0	20,650.9	12,400.0	70.0	66.7	-90.00	-8,078.0	831.1	1,865.9	1,731.2	134.68	13.854
20,800.0	12,400.0	20,750.9	12,400.0	70.7	67.4	-90.00	-8,178.0	832.0	1,865.9	1,729.8	136.05	13.715
20,900.0	12,400.0	20,850.9	12,400.0	71.4	68.1	-90.00	-8,278.0	833.0	1,865.8	1,728.4	137.42	13.577
21,000.0	12,400.0	20,950.9	12,400.0	72.0	68.8	-90.00	-8,378.0	834.0	1,865.8	1,727.0	138.80	13.442
21,100.0	12,400.0	21,050.9	12,400.0	72.7	69.5	-90.00	-8,477.9	834.9	1,865.8	1,725.6	140.18	13.310
21,200.0	12,400.0	21,150.9	12,400.0	73.4	70.2	-90.00	-8,577.9	835.9	1,865.8	1,724.2	141.57	13.180
21,300.0	12,400.0	21,250.9	12,400.0	74.1	71.0	-90.00	-8,677.9	836.9	1,865.8	1,722.9	142.95	13.052
21,400.0	12,400.0	21,350.9	12,400.0	74.8	71.7	-90.00	-8,777.9	837.9	1,865.8	1,721.5	144.34	12.926
21,500.0	12,400.0	21,450.9	12,400.0	75.5	72.4	-90.00	-8,877.9	838.8	1,865.8	1,720.1	145.73	12.803
21,600.0	12,400.0	21,550.9	12,400.0	76.2	73.1	-90.00	-8,977.9	839.8	1,865.8	1,718.6	147.12	12.682
21,700.0	12,400.0	21,650.9	12,400.0	76.8	73.8	-90.00	-9,077.9	840.8	1,865.8	1,717.2	148.52	12.563
21,800.0	12,400.0	21,750.9	12,400.0	77.5	74.5	-90.00	-9,177.9	841.7	1,865.8	1,715.8	149.92	12.445
21,900.0	12,400.0	21,850.9	12,400.0	78.2	75.3	-90.00	-9,277.9	842.7	1,865.7	1,714.4	151.31	12.330
22,000.0	12,400.0	21,950.9	12,400.0	78.9	76.0	-90.00	-9,377.9	843.7	1,865.7	1,713.0	152.72	12.217
22,100.0	12,400.0	22,050.9	12,400.0	79.6	76.7	-90.00	-9,477.9	844.7	1,865.7	1,711.6	154.12	12.106
22,200.0	12,400.0	22,150.9	12,400.0	80.3	77.4	-90.00	-9,577.9	845.6	1,865.7	1,710.2	155.52	11.996
22,300.0	12,400.0	22,250.9	12,400.0	81.0	78.1	-90.00	-9,677.9	846.6	1,865.7	1,708.8	156.93	11.889
22,400.0	12,400.0	22,350.9	12,400.0	81.7	78.9	-90.00	-9,777.9	847.6	1,865.7	1,707.3	158.34	11.783
22,500.0	12,400.0	22,450.9	12,400.0	82.4	79.6	-90.00	-9,877.9	848.5	1,865.7	1,705.9	159.75	11.679
22,600.0	12,400.0	22,550.9	12,400.0	83.1	80.3	-90.00	-9,977.9	849.5	1,865.7	1,704.5	161.16	11.576
22,700.0	12,400.0	22,650.9	12,400.0	83.8	81.0	-90.00	-10,077.9	850.5	1,865.7	1,703.1	162.58	11.475
22,800.0	12,400.0	22,750.9	12,400.0	84.5	81.8	-90.00	-10,177.9	851.5	1,865.6	1,701.7	163.99	11.376
22,900.0	12,400.0	22,850.9	12,400.0	85.2	82.5	-90.00	-10,277.9	852.4	1,865.6	1,700.2	165.41	11.279
23,000.0	12,400.0	22,950.9	12,400.0	85.9	83.2	-90.00	-10,377.9	853.4	1,865.6	1,698.8	166.83	11.183
23,100.0	12,400.0	23,050.9	12,400.0	86.6	83.9	-90.00	-10,477.9	854.4	1,865.6	1,697.4	168.25	11.088
23,200.0	12,400.0	23,150.9	12,400.0	87.3	84.7	-90.00	-10,577.8	855.3	1,865.6	1,695.9	169.67	10.995
23,300.0	12,400.0	23,250.9	12,400.0	88.1	85.4	-90.00	-10,677.8	856.3	1,865.6	1,694.5	171.10	10.904
23,400.0	12,400.0	23,350.9	12,400.0	88.8	86.1	-90.00	-10,777.8	857.3	1,865.6	1,693.1	172.52	10.814
23,500.0	12,400.0	23,450.9	12,400.0	89.5	86.9	-90.00	-10,877.8	858.3	1,865.6	1,691.6	173.95	10.725
23,600.0	12,400.0	23,550.9	12,400.0	90.2	87.6	-90.00	-10,977.8	859.2	1,865.6	1,690.2	175.38	10.638
23,700.0	12,400.0	23,650.9	12,400.0	90.9	88.3	-90.00	-11,077.8	860.2	1,865.5	1,688.7	176.80	10.551
23,800.0	12,400.0	23,750.9	12,400.0	91.6	89.0	-90.00	-11,177.8	861.2	1,865.5	1,687.3	178.23	10.467
23,900.0	12,400.0	23,850.9	12,400.0	92.3	89.8	-90.00	-11,277.8	862.1	1,865.5	1,685.9	179.67	10.383
24,000.0	12,400.0	23,950.9	12,400.0	93.0	90.5	-90.00	-11,377.8	863.1	1,865.5	1,684.4	181.10	10.301
24,100.0	12,400.0	24,050.9	12,400.0	93.8	91.2	-90.00	-11,477.8	864.1	1,865.5	1,683.0	182.53	10.220
24,200.0	12,400.0	24,150.9	12,400.0	94.5	92.0	-90.00	-11,577.8	865.1	1,865.5	1,681.5	183.97	10.140
24,300.0	12,400.0	24,250.9	12,400.0	95.2	92.7	-90.00	-11,677.8	866.0	1,865.5	1,680.1	185.40	10.062
24,400.0	12,400.0	24,350.9	12,400.0	95.9	93.5	-90.00	-11,777.8	867.0	1,865.5	1,678.6	186.84	9.984
24,500.0	12,400.0	24,450.9	12,400.0	96.6	94.2	-90.00	-11,877.8	868.0	1,865.5	1,677.2	188.28	9.908
24,600.0	12,400.0	24,550.9	12,400.0	97.3	94.9	-90.00	-11,977.8	868.9	1,865.5	1,675.7	189.72	9.833
24,700.0	12,400.0	24,650.9	12,400.0	98.1	95.7	-90.00	-12,077.8	869.9	1,865.4	1,674.3	191.16	9.759
24,800.0	12,400.0	24,750.9	12,400.0	98.8	96.4	-90.00	-12,177.8	870.9	1,865.4	1,672.8	192.60	9.685
24,900.0	12,400.0	24,850.9	12,400.0	99.5	97.1	-90.00	-12,277.8	871.9	1,865.4	1,671.4	194.04	9.613
25,000.0	12,400.0	24,950.9	12,400.0	100.2	97.9	-90.00	-12,377.8	872.8	1,865.4	1,669.9	195.49	9.542
25,100.0	12,400.0	25,050.9	12,400.0	100.9	98.6	-90.00	-12,477.8	873.8	1,865.4	1,668.5	196.93	9.472
25,200.0	12,400.0	25,150.9	12,400.0	101.7	99.3	-90.00	-12,577.8	874.8	1,865.4	1,667.0	198.38	9.403
25,300.0	12,400.0	25,250.9	12,400.0	102.4	100.1	-90.00	-12,677.7	875.7	1,865.4	1,665.6	199.82	9.335
25,400.0	12,400.0	25,350.9	12,400.0	103.1	100.8	-90.00	-12,777.7	876.7	1,865.4	1,664.1	201.27	9.268

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		
25,500.0	12,400.0	25,450.9	12,400.0	103.8	101.6	-90.00	-12,877.7	877.7	1,865.4	1,662.6	202.72	9.202
25,600.0	12,400.0	25,550.9	12,400.0	104.6	102.3	-90.00	-12,977.7	878.7	1,865.3	1,661.2	204.17	9.136
25,700.0	12,400.0	25,650.9	12,400.0	105.3	103.0	-90.00	-13,077.7	879.6	1,865.3	1,659.7	205.62	9.072
25,800.0	12,400.0	25,750.9	12,400.0	106.0	103.8	-90.00	-13,177.7	880.6	1,865.3	1,658.3	207.07	9.008
25,900.0	12,400.0	25,850.9	12,400.0	106.7	104.5	-90.00	-13,277.7	881.6	1,865.3	1,656.8	208.52	8.946
26,000.0	12,400.0	25,950.9	12,400.0	107.5	105.3	-90.00	-13,377.7	882.5	1,865.3	1,655.3	209.97	8.884
26,100.0	12,400.0	26,050.9	12,400.0	108.2	106.0	-90.00	-13,477.7	883.5	1,865.3	1,653.9	211.42	8.823
26,200.0	12,400.0	26,150.9	12,400.0	108.9	106.8	-90.00	-13,577.7	884.5	1,865.3	1,652.4	212.88	8.762
26,300.0	12,400.0	26,250.9	12,400.0	109.7	107.5	-90.00	-13,677.7	885.4	1,865.3	1,650.9	214.33	8.703
26,400.0	12,400.0	26,350.9	12,400.0	110.4	108.2	-90.00	-13,777.7	886.4	1,865.3	1,649.5	215.79	8.644
26,500.0	12,400.0	26,450.9	12,400.0	111.1	109.0	-90.00	-13,877.7	887.4	1,865.2	1,648.0	217.24	8.586
26,600.0	12,400.0	26,550.9	12,400.0	111.8	109.7	-90.00	-13,977.7	888.4	1,865.2	1,646.5	218.70	8.529
26,700.0	12,400.0	26,650.9	12,400.0	112.6	110.5	-90.00	-14,077.7	889.3	1,865.2	1,645.1	220.16	8.472
26,800.0	12,400.0	26,750.9	12,400.0	113.3	111.2	-90.00	-14,177.7	890.3	1,865.2	1,643.6	221.61	8.417
26,900.0	12,400.0	26,850.9	12,400.0	114.0	112.0	-90.00	-14,277.7	891.3	1,865.2	1,642.1	223.07	8.361
27,000.0	12,400.0	26,950.9	12,400.0	114.8	112.7	-90.00	-14,377.7	892.2	1,865.2	1,640.7	224.53	8.307
27,100.0	12,400.0	27,050.9	12,400.0	115.5	113.4	-90.00	-14,477.7	893.2	1,865.2	1,639.2	225.99	8.253
27,200.0	12,400.0	27,150.9	12,400.0	116.2	114.2	-90.00	-14,577.7	894.2	1,865.2	1,637.7	227.45	8.200
27,300.0	12,400.0	27,250.9	12,400.0	117.0	114.9	-90.00	-14,677.7	895.2	1,865.2	1,636.3	228.91	8.148
27,400.0	12,400.0	27,350.9	12,400.0	117.7	115.7	-90.00	-14,777.7	896.1	1,865.2	1,634.8	230.37	8.096
27,500.0	12,400.0	27,450.9	12,400.0	118.4	116.4	-90.00	-14,877.6	897.1	1,865.1	1,633.3	231.83	8.045
27,600.0	12,400.0	27,550.9	12,400.0	119.2	117.2	-90.00	-14,977.6	898.1	1,865.1	1,631.8	233.30	7.995
27,700.0	12,400.0	27,650.9	12,400.0	119.9	117.9	-90.00	-15,077.6	899.0	1,865.1	1,630.4	234.76	7.945
27,800.0	12,400.0	27,750.9	12,400.0	120.6	118.7	-90.00	-15,177.6	900.0	1,865.1	1,628.9	236.22	7.896
27,900.0	12,400.0	27,850.9	12,400.0	121.4	119.4	-90.00	-15,277.6	901.0	1,865.1	1,627.4	237.69	7.847
28,000.0	12,400.0	27,950.9	12,400.0	122.1	120.2	-90.00	-15,377.6	902.0	1,865.1	1,625.9	239.15	7.799
28,100.0	12,400.0	28,050.9	12,400.0	122.8	120.9	-90.00	-15,477.6	902.9	1,865.1	1,624.5	240.62	7.751
28,200.0	12,400.0	28,150.9	12,400.0	123.6	121.6	-90.00	-15,577.6	903.9	1,865.1	1,623.0	242.08	7.704
28,300.0	12,400.0	28,250.9	12,400.0	124.3	122.4	-90.00	-15,677.6	904.9	1,865.1	1,621.5	243.55	7.658
28,400.0	12,400.0	28,350.9	12,400.0	125.1	123.1	-90.00	-15,777.6	905.8	1,865.0	1,620.0	245.02	7.612
28,500.0	12,400.0	28,450.9	12,400.0	125.8	123.9	-90.00	-15,877.6	906.8	1,865.0	1,618.6	246.48	7.567
28,600.0	12,400.0	28,550.9	12,400.0	126.5	124.6	-90.00	-15,977.6	907.8	1,865.0	1,617.1	247.95	7.522
28,700.0	12,400.0	28,650.9	12,400.0	127.3	125.4	-90.00	-16,077.6	908.8	1,865.0	1,615.6	249.42	7.477
28,746.7	12,400.0	28,697.6	12,400.0	127.6	125.7	-90.00	-16,124.3	909.2	1,865.0	1,614.9	250.11	7.457 SF

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Separation	Factor		
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Centres	Ellipses			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
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
1,300.0	1,300.0	1,299.7	1,299.7	5.4	5.4	162.02	1.8	60.2	61.4	50.3	11.18	5.497	
1,400.0	1,399.9	1,399.3	1,399.2	5.6	5.6	159.70	5.6	60.7	65.9	54.4	11.51	5.723	
1,500.0	1,499.7	1,498.5	1,498.2	5.8	5.8	156.46	12.0	61.6	73.4	61.6	11.85	6.197	
1,600.0	1,599.3	1,597.3	1,596.5	6.1	6.1	152.91	20.9	62.8	84.3	72.1	12.20	6.909	
1,700.0	1,698.6	1,695.3	1,693.9	6.3	6.3	149.50	32.3	64.4	98.5	86.0	12.56	7.847	
1,800.0	1,797.5	1,793.2	1,790.9	6.6	6.5	146.65	45.6	66.3	116.0	103.2	12.87	9.014	
1,900.0	1,896.1	1,891.2	1,887.9	6.9	6.8	145.05	59.1	68.1	135.9	122.7	13.27	10.246	
2,000.0	1,994.2	1,988.7	1,984.5	7.2	7.1	144.36	72.5	70.0	157.9	144.3	13.68	11.545	
2,100.0	2,092.0	2,086.0	2,080.9	7.5	7.3	144.24	85.9	71.9	181.0	166.9	14.09	12.843	
2,200.0	2,189.8	2,183.3	2,177.2	7.8	7.6	144.15	99.4	73.7	204.1	189.6	14.52	14.053	
2,300.0	2,287.6	2,280.6	2,273.6	8.1	7.9	144.07	112.8	75.6	227.1	212.2	14.96	15.180	
2,400.0	2,385.4	2,377.9	2,369.9	8.5	8.3	144.01	126.2	77.4	250.2	234.8	15.42	16.228	
2,500.0	2,483.2	2,475.2	2,466.3	8.9	8.6	143.96	139.6	79.3	273.3	257.4	15.88	17.203	
2,600.0	2,581.1	2,572.5	2,562.6	9.2	8.9	143.91	153.0	81.2	296.3	280.0	16.36	18.111	
2,700.0	2,678.9	2,669.8	2,659.0	9.6	9.3	143.87	166.4	83.0	319.4	302.6	16.85	18.956	
2,800.0	2,776.7	2,767.1	2,755.3	10.0	9.6	143.84	179.8	84.9	342.5	325.1	17.35	19.743	
2,900.0	2,874.5	2,864.4	2,851.7	10.4	10.0	143.81	193.2	86.7	365.5	347.7	17.85	20.476	
3,000.0	2,972.3	2,961.7	2,948.1	10.8	10.3	143.79	206.7	88.6	388.6	370.2	18.36	21.161	
3,100.0	3,070.1	3,059.1	3,044.4	11.2	10.7	143.77	220.1	90.5	411.7	392.8	18.88	21.800	
3,200.0	3,167.9	3,156.4	3,140.8	11.6	11.1	143.75	233.5	92.3	434.7	415.3	19.41	22.398	
3,300.0	3,265.8	3,253.7	3,237.1	12.0	11.5	143.73	246.9	94.2	457.8	437.9	19.94	22.957	
3,400.0	3,363.6	3,351.0	3,333.5	12.4	11.8	143.71	260.3	96.1	480.9	460.4	20.48	23.482	
3,500.0	3,461.4	3,448.3	3,429.8	12.9	12.2	143.70	273.7	97.9	503.9	482.9	21.02	23.973	
3,600.0	3,559.2	3,545.6	3,526.2	13.3	12.6	143.69	287.1	99.8	527.0	505.4	21.57	24.435	
3,700.0	3,657.0	3,642.9	3,622.6	13.7	13.0	143.67	300.6	101.6	550.1	528.0	22.12	24.869	
3,800.0	3,754.8	3,740.2	3,718.9	14.2	13.4	143.66	314.0	103.5	573.1	550.5	22.67	25.278	
3,900.0	3,852.6	3,837.5	3,815.3	14.6	13.8	143.65	327.4	105.4	596.2	573.0	23.23	25.663	
4,000.0	3,950.5	3,934.8	3,911.6	15.0	14.1	143.64	340.8	107.2	619.3	595.5	23.79	26.026	
4,100.0	4,048.3	4,032.1	4,008.0	15.5	14.5	143.63	354.2	109.1	642.3	618.0	24.36	26.369	
4,200.0	4,146.1	4,129.4	4,104.3	15.9	14.9	143.62	367.6	110.9	665.4	640.5	24.93	26.693	
4,300.0	4,243.9	4,226.7	4,200.7	16.4	15.3	143.62	381.0	112.8	688.5	663.0	25.49	27.007	
4,400.0	4,341.7	4,327.4	4,300.5	16.8	15.7	143.63	394.6	114.7	711.4	685.4	26.06	27.297	
4,500.0	4,439.5	4,430.8	4,403.1	17.3	16.1	143.77	406.9	116.4	733.6	707.0	26.67	27.507	
4,600.0	4,537.3	4,534.4	4,506.2	17.7	16.5	144.03	417.3	117.8	755.0	727.8	27.28	27.677	
4,700.0	4,635.2	4,638.3	4,609.7	18.2	16.9	144.40	425.9	119.0	775.7	747.8	27.89	27.811	
4,800.0	4,733.0	4,742.3	4,713.5	18.6	17.3	144.88	432.7	120.0	795.6	767.1	28.50	27.912	
4,900.0	4,830.8	4,846.4	4,817.5	19.1	17.6	145.45	437.6	120.6	814.8	785.7	29.12	27.985	
5,000.0	4,928.6	4,950.6	4,921.6	19.5	17.9	146.12	440.6	121.1	833.3	803.6	29.73	28.032	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
5,100.0	5,026.4	5,054.7	5,025.7	20.0	18.1	146.87	441.7	121.2	851.2	820.9	30.32	28.076		
5,200.0	5,124.2	5,153.2	5,124.2	20.4	18.2	147.62	441.7	121.2	868.8	838.0	30.87	28.146		
5,300.0	5,222.1	5,251.0	5,222.1	20.9	18.2	148.34	441.7	121.2	886.6	855.1	31.44	28.201		
5,400.0	5,319.9	5,348.8	5,319.9	21.4	18.3	149.02	441.7	121.2	904.5	872.4	32.02	28.248		
5,500.0	5,417.7	5,446.7	5,417.7	21.8	18.4	149.69	441.7	121.2	922.4	889.8	32.61	28.291		
5,600.0	5,515.5	5,544.5	5,515.5	22.3	18.4	150.32	441.7	121.2	940.5	907.3	33.20	28.328		
5,700.0	5,613.3	5,642.3	5,613.3	22.7	18.5	150.93	441.7	121.2	958.8	925.0	33.80	28.362		
5,800.0	5,711.1	5,740.1	5,711.1	23.2	18.5	151.52	441.7	121.2	977.1	942.7	34.41	28.392		
5,900.0	5,808.9	5,837.9	5,808.9	23.7	18.6	152.09	441.7	121.2	995.5	960.5	35.03	28.419		
6,000.0	5,906.8	5,935.7	5,906.8	24.1	18.6	152.64	441.7	121.2	1,014.0	978.3	35.65	28.443		
6,100.0	6,004.6	6,033.5	6,004.6	24.6	18.7	153.17	441.7	121.2	1,032.6	996.3	36.28	28.465		
6,200.0	6,102.4	6,131.4	6,102.4	25.1	18.8	153.68	441.7	121.2	1,051.3	1,014.4	36.91	28.486		
6,300.0	6,200.2	6,229.2	6,200.2	25.5	18.8	154.17	441.7	121.2	1,070.0	1,032.5	37.54	28.504		
6,400.0	6,298.0	6,327.0	6,298.0	26.0	18.9	154.64	441.7	121.2	1,088.8	1,050.7	38.18	28.521		
6,500.0	6,395.8	6,424.8	6,395.8	26.4	18.9	155.10	441.7	121.2	1,107.7	1,068.9	38.82	28.537		
6,600.0	6,493.6	6,522.6	6,493.6	26.9	19.0	155.54	441.7	121.2	1,126.7	1,087.2	39.47	28.549		
6,700.0	6,591.6	6,620.6	6,591.6	27.4	19.1	156.03	441.7	121.2	1,145.0	1,104.9	40.10	28.552		
6,800.0	6,689.9	6,718.9	6,689.9	27.8	19.1	156.46	441.7	121.2	1,161.9	1,121.1	40.73	28.525		
6,900.0	6,788.5	6,817.5	6,788.5	28.3	19.2	156.85	441.7	121.2	1,177.2	1,135.8	41.35	28.471		
7,000.0	6,887.4	6,916.4	6,887.4	28.7	19.2	157.18	441.7	121.2	1,190.9	1,149.0	41.95	28.391		
7,100.0	6,986.5	7,015.5	6,986.5	29.1	19.3	157.47	441.7	121.2	1,203.1	1,160.5	42.53	28.287		
7,200.0	7,085.9	7,114.9	7,085.9	29.5	19.4	157.72	441.7	121.2	1,213.6	1,170.5	43.09	28.162		
7,300.0	7,185.4	7,214.4	7,185.4	29.9	19.4	157.92	441.7	121.2	1,222.6	1,179.0	43.64	28.018		
7,400.0	7,285.1	7,314.1	7,285.1	30.3	19.5	158.09	441.7	121.2	1,230.0	1,185.9	44.16	27.856		
7,500.0	7,384.9	7,413.9	7,384.9	30.7	19.5	158.22	441.7	121.2	1,235.8	1,191.1	44.65	27.679		
7,600.0	7,484.8	7,513.8	7,484.8	31.0	19.6	158.31	441.7	121.2	1,239.9	1,194.8	45.10	27.492		
7,700.0	7,584.8	7,613.7	7,584.8	31.3	19.7	158.37	441.7	121.2	1,242.5	1,197.0	45.51	27.301		
7,800.0	7,684.7	7,713.7	7,684.7	31.4	19.7	158.39	441.7	121.2	1,243.4	1,197.6	45.75	27.178		
7,900.0	7,784.7	7,813.7	7,784.7	31.5	19.8	85.04	441.7	121.2	1,243.4	1,197.6	45.85	27.120		
8,000.0	7,884.7	7,913.7	7,884.7	31.5	19.9	85.04	441.7	121.2	1,243.4	1,197.5	45.94	27.066		
8,100.0	7,984.7	8,013.7	7,984.7	31.5	19.9	85.04	441.7	121.2	1,243.4	1,197.4	46.03	27.012		
8,200.0	8,084.7	8,113.7	8,084.7	31.6	20.0	85.04	441.7	121.2	1,243.4	1,197.3	46.12	26.958		
8,300.0	8,184.7	8,213.7	8,184.7	31.6	20.1	85.04	441.7	121.2	1,243.4	1,197.2	46.22	26.904		
8,400.0	8,284.7	8,313.7	8,284.7	31.6	20.1	85.04	441.7	121.2	1,243.4	1,197.1	46.31	26.849		
8,500.0	8,384.7	8,413.7	8,384.7	31.7	20.2	85.04	441.7	121.2	1,243.4	1,197.0	46.40	26.795		
8,600.0	8,484.7	8,513.7	8,484.7	31.7	20.2	85.04	441.7	121.2	1,243.4	1,196.9	46.50	26.741		
8,700.0	8,584.7	8,613.7	8,584.7	31.7	20.3	85.04	441.7	121.2	1,243.4	1,196.8	46.59	26.687		
8,800.0	8,684.7	8,713.7	8,684.7	31.8	20.4	85.04	441.7	121.2	1,243.4	1,196.7	46.69	26.632		
8,900.0	8,784.7	8,813.7	8,784.7	31.8	20.4	85.04	441.7	121.2	1,243.4	1,196.6	46.78	26.578		
9,000.0	8,884.7	8,913.7	8,884.7	31.8	20.5	85.04	441.7	121.2	1,243.4	1,196.5	46.88	26.524		
9,100.0	8,984.7	9,013.7	8,984.7	31.9	20.6	85.04	441.7	121.2	1,243.4	1,196.4	46.97	26.470		
9,200.0	9,084.7	9,113.7	9,084.7	31.9	20.6	85.04	441.7	121.2	1,243.4	1,196.3	47.07	26.416		
9,300.0	9,184.7	9,213.7	9,184.7	31.9	20.7	85.04	441.7	121.2	1,243.4	1,196.2	47.17	26.362		
9,400.0	9,284.7	9,313.7	9,284.7	32.0	20.8	85.04	441.7	121.2	1,243.4	1,196.1	47.26	26.308		
9,500.0	9,384.7	9,413.7	9,384.7	32.0	20.8	85.04	441.7	121.2	1,243.4	1,196.0	47.36	26.254		
9,600.0	9,484.7	9,513.7	9,484.7	32.0	20.9	85.04	441.7	121.2	1,243.4	1,195.9	47.46	26.200		
9,700.0	9,584.7	9,613.7	9,584.7	32.0	21.0	85.04	441.7	121.2	1,243.4	1,195.8	47.56	26.146		
9,800.0	9,684.7	9,713.7	9,684.7	32.1	21.0	85.04	441.7	121.2	1,243.4	1,195.7	47.66	26.092		
9,900.0	9,784.7	9,813.7	9,784.7	32.1	21.1	85.04	441.7	121.2	1,243.4	1,195.6	47.75	26.038		
10,000.0	9,884.7	9,913.7	9,884.7	32.1	21.1	85.04	441.7	121.2	1,243.4	1,195.5	47.85	25.984		
10,100.0	9,984.7	10,013.7	9,984.7	32.2	21.2	85.04	441.7	121.2	1,243.4	1,195.4	47.95	25.930		

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
10,200.0	10,084.7	10,113.7	10,084.7	32.2	21.3	85.04	441.7	121.2	1,243.4	1,195.3	48.05	25.876
10,300.0	10,184.7	10,213.7	10,184.7	32.3	21.3	85.04	441.7	121.2	1,243.4	1,195.2	48.15	25.822
10,400.0	10,284.7	10,313.7	10,284.7	32.3	21.4	85.04	441.7	121.2	1,243.4	1,195.1	48.25	25.769
10,500.0	10,384.7	10,413.7	10,384.7	32.3	21.5	85.04	441.7	121.2	1,243.4	1,195.0	48.35	25.715
10,600.0	10,484.7	10,513.7	10,484.7	32.4	21.5	85.04	441.7	121.2	1,243.4	1,194.9	48.45	25.661
10,700.0	10,584.7	10,613.7	10,584.7	32.4	21.6	85.04	441.7	121.2	1,243.4	1,194.8	48.56	25.608
10,800.0	10,684.7	10,713.7	10,684.7	32.4	21.7	85.04	441.7	121.2	1,243.4	1,194.7	48.66	25.554
10,900.0	10,784.7	10,813.7	10,784.7	32.5	21.7	85.04	441.7	121.2	1,243.4	1,194.6	48.76	25.501
11,000.0	10,884.7	10,913.7	10,884.7	32.5	21.8	85.04	441.7	121.2	1,243.4	1,194.5	48.86	25.447
11,100.0	10,984.7	11,013.7	10,984.7	32.5	21.9	85.04	441.7	121.2	1,243.4	1,194.4	48.96	25.394
11,200.0	11,084.7	11,113.7	11,084.7	32.6	21.9	85.04	441.7	121.2	1,243.4	1,194.3	49.07	25.341
11,300.0	11,184.7	11,213.7	11,184.7	32.6	22.0	85.04	441.7	121.2	1,243.4	1,194.2	49.17	25.287
11,400.0	11,284.7	11,313.7	11,284.7	32.6	22.1	85.04	441.7	121.2	1,243.4	1,194.1	49.27	25.234
11,500.0	11,384.7	11,413.7	11,384.7	32.7	22.1	85.04	441.7	121.2	1,243.4	1,194.0	49.38	25.181
11,600.0	11,484.7	11,513.7	11,484.7	32.7	22.2	85.04	441.7	121.2	1,243.4	1,193.9	49.48	25.128
11,700.0	11,584.7	11,613.7	11,584.7	32.7	22.3	85.04	441.7	121.2	1,243.4	1,193.8	49.59	25.075
11,800.0	11,684.7	11,713.7	11,684.7	32.8	22.3	85.04	441.7	121.2	1,243.4	1,193.7	49.69	25.022
11,900.0	11,784.7	11,813.7	11,784.7	32.8	22.4	85.04	441.7	121.2	1,243.4	1,193.6	49.80	24.969
11,904.4	11,789.2	11,818.2	11,789.2	32.8	22.4	-94.40	441.7	121.2	1,243.4	1,193.6	49.80	24.967
12,000.0	11,884.6	11,913.6	11,884.6	32.8	22.5	-94.51	441.7	121.2	1,243.6	1,193.8	49.86	24.942
12,100.0	11,982.8	12,011.7	11,982.8	32.7	22.5	-95.19	441.7	121.2	1,245.2	1,195.4	49.81	25.000
12,200.0	12,076.1	12,122.6	12,093.5	32.5	22.5	-96.50	437.9	121.3	1,248.7	1,199.0	49.70	25.124
12,300.0	12,162.0	12,256.7	12,223.6	32.4	22.2	-97.94	406.9	121.6	1,252.7	1,203.0	49.71	25.198
12,400.0	12,237.6	12,403.0	12,353.2	32.3	21.8	-99.13	339.8	122.2	1,256.2	1,206.3	49.91	25.168
12,500.0	12,300.7	12,559.6	12,468.2	32.2	21.4	-99.90	234.3	123.2	1,258.6	1,208.3	50.31	25.015
12,600.0	12,349.5	12,721.9	12,552.8	32.1	21.2	-100.13	96.4	124.6	1,259.3	1,208.5	50.83	24.774
12,700.0	12,382.4	12,883.4	12,595.4	32.1	21.0	-99.75	-58.8	126.1	1,258.1	1,206.8	51.31	24.519
12,800.0	12,398.4	13,009.3	12,600.0	32.1	21.0	-99.21	-184.5	127.3	1,255.9	1,204.4	51.53	24.371
12,899.6	12,402.1	13,108.7	12,600.0	32.2	21.0	-99.07	-284.0	128.3	1,255.3	1,203.6	51.73	24.268
12,900.0	12,400.0	13,109.2	12,600.0	32.2	21.0	-99.16	-284.4	128.3	1,255.7	1,203.9	51.75	24.265
13,000.0	12,400.0	13,209.2	12,600.0	32.3	21.1	-99.17	-384.4	129.2	1,255.7	1,203.6	52.03	24.135
13,100.0	12,400.0	13,309.2	12,600.0	32.4	21.1	-99.17	-484.4	130.2	1,255.7	1,203.3	52.35	23.987
13,200.0	12,400.0	13,409.2	12,600.0	32.6	21.1	-99.17	-584.4	131.2	1,255.6	1,202.9	52.71	23.821
13,300.0	12,400.0	13,509.2	12,600.0	32.7	21.2	-99.17	-684.4	132.1	1,255.6	1,202.5	53.11	23.640
13,400.0	12,400.0	13,609.2	12,600.0	32.9	21.2	-99.17	-784.4	133.1	1,255.6	1,202.1	53.56	23.445
13,500.0	12,400.0	13,709.2	12,600.0	33.1	21.2	-99.17	-884.4	134.1	1,255.6	1,201.6	54.04	23.235
13,600.0	12,400.0	13,809.2	12,600.0	33.2	21.3	-99.17	-984.4	135.1	1,255.6	1,201.0	54.56	23.014
13,700.0	12,400.0	13,909.2	12,600.0	33.5	21.3	-99.17	-1,084.4	136.0	1,255.6	1,200.5	55.11	22.781
13,800.0	12,400.0	14,009.2	12,600.0	33.7	21.4	-99.17	-1,184.4	137.0	1,255.6	1,199.9	55.71	22.539
13,900.0	12,400.0	14,109.2	12,600.0	33.9	21.4	-99.17	-1,284.4	138.0	1,255.6	1,199.2	56.33	22.288
14,000.0	12,400.0	14,209.2	12,600.0	34.2	21.5	-99.17	-1,384.4	138.9	1,255.5	1,198.5	56.99	22.030
14,100.0	12,400.0	14,309.2	12,600.0	34.4	21.6	-99.17	-1,484.4	139.9	1,255.5	1,197.8	57.68	21.766
14,200.0	12,400.0	14,409.2	12,600.0	34.7	21.7	-99.17	-1,584.4	140.9	1,255.5	1,197.1	58.41	21.496
14,300.0	12,400.0	14,509.2	12,600.0	35.0	21.9	-99.17	-1,684.4	141.8	1,255.5	1,196.3	59.16	21.223
14,400.0	12,400.0	14,609.2	12,600.0	35.3	22.1	-99.17	-1,784.4	142.8	1,255.5	1,195.6	59.94	20.946
14,500.0	12,400.0	14,709.2	12,600.0	35.7	22.4	-99.17	-1,884.4	143.8	1,255.5	1,194.7	60.75	20.667
14,600.0	12,400.0	14,809.2	12,600.0	36.0	22.7	-99.17	-1,984.4	144.7	1,255.5	1,193.9	61.58	20.386
14,700.0	12,400.0	14,909.2	12,600.0	36.3	23.1	-99.17	-2,084.4	145.7	1,255.5	1,193.0	62.44	20.105
14,800.0	12,400.0	15,009.2	12,600.0	36.7	23.6	-99.17	-2,184.4	146.7	1,255.4	1,192.1	63.33	19.824
14,900.0	12,400.0	15,109.2	12,600.0	37.1	24.1	-99.17	-2,284.4	147.7	1,255.4	1,191.2	64.24	19.544
15,000.0	12,400.0	15,209.2	12,600.0	37.4	24.6	-99.17	-2,384.3	148.6	1,255.4	1,190.2	65.17	19.264

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
15,100.0	12,400.0	15,309.2	12,600.0	37.8	25.2	-99.17	-2,484.3	149.6	1,255.4	1,189.3	66.12	18.987	
15,200.0	12,400.0	15,409.2	12,600.0	38.2	25.7	-99.17	-2,584.3	150.6	1,255.4	1,188.3	67.09	18.711	
15,300.0	12,400.0	15,509.2	12,600.0	38.6	26.3	-99.17	-2,684.3	151.5	1,255.4	1,187.3	68.09	18.438	
15,400.0	12,400.0	15,609.2	12,600.0	39.1	26.9	-99.17	-2,784.3	152.5	1,255.4	1,186.3	69.10	18.168	
15,500.0	12,400.0	15,709.2	12,600.0	39.5	27.5	-99.17	-2,884.3	153.5	1,255.4	1,185.2	70.13	17.902	
15,600.0	12,400.0	15,809.2	12,600.0	39.9	28.1	-99.17	-2,984.3	154.4	1,255.3	1,184.2	71.17	17.638	
15,700.0	12,400.0	15,909.2	12,600.0	40.4	28.7	-99.17	-3,084.3	155.4	1,255.3	1,183.1	72.23	17.379	
15,800.0	12,400.0	16,009.2	12,600.0	40.8	29.3	-99.17	-3,184.3	156.4	1,255.3	1,182.0	73.31	17.123	
15,900.0	12,400.0	16,109.2	12,600.0	41.3	30.0	-99.17	-3,284.3	157.4	1,255.3	1,180.9	74.41	16.871	
16,000.0	12,400.0	16,209.2	12,600.0	41.8	30.6	-99.17	-3,384.3	158.3	1,255.3	1,179.8	75.51	16.623	
16,100.0	12,400.0	16,309.2	12,600.0	42.3	31.3	-99.17	-3,484.3	159.3	1,255.3	1,178.6	76.63	16.380	
16,200.0	12,400.0	16,409.2	12,600.0	42.8	31.9	-99.17	-3,584.3	160.3	1,255.3	1,177.5	77.77	16.141	
16,300.0	12,400.0	16,509.2	12,600.0	43.3	32.6	-99.17	-3,684.3	161.2	1,255.3	1,176.3	78.92	15.906	
16,400.0	12,400.0	16,609.2	12,600.0	43.8	33.2	-99.17	-3,784.3	162.2	1,255.2	1,175.2	80.08	15.676	
16,500.0	12,400.0	16,709.2	12,600.0	44.3	33.9	-99.17	-3,884.3	163.2	1,255.2	1,174.0	81.25	15.450	
16,600.0	12,400.0	16,809.2	12,600.0	44.8	34.6	-99.17	-3,984.3	164.1	1,255.2	1,172.8	82.43	15.228	
16,700.0	12,400.0	16,909.2	12,600.0	45.3	35.3	-99.17	-4,084.3	165.1	1,255.2	1,171.6	83.62	15.011	
16,800.0	12,400.0	17,009.2	12,600.0	45.9	35.9	-99.17	-4,184.3	166.1	1,255.2	1,170.4	84.82	14.798	
16,900.0	12,400.0	17,109.2	12,600.0	46.4	36.6	-99.17	-4,284.3	167.0	1,255.2	1,169.1	86.03	14.589	
17,000.0	12,400.0	17,209.2	12,600.0	46.9	37.3	-99.17	-4,384.3	168.0	1,255.2	1,167.9	87.25	14.385	
17,100.0	12,400.0	17,309.2	12,600.0	47.5	38.0	-99.17	-4,484.3	169.0	1,255.2	1,166.7	88.48	14.185	
17,200.0	12,400.0	17,409.2	12,600.0	48.1	38.7	-99.17	-4,584.2	170.0	1,255.1	1,165.4	89.72	13.989	
17,300.0	12,400.0	17,509.2	12,600.0	48.6	39.4	-99.17	-4,684.2	170.9	1,255.1	1,164.2	90.97	13.797	
17,400.0	12,400.0	17,609.2	12,600.0	49.2	40.1	-99.17	-4,784.2	171.9	1,255.1	1,162.9	92.22	13.609	
17,500.0	12,400.0	17,709.2	12,600.0	49.8	40.8	-99.17	-4,884.2	172.9	1,255.1	1,161.6	93.49	13.426	
17,600.0	12,400.0	17,809.2	12,600.0	50.3	41.5	-99.17	-4,984.2	173.8	1,255.1	1,160.3	94.76	13.246	
17,700.0	12,400.0	17,909.2	12,600.0	50.9	42.2	-99.17	-5,084.2	174.8	1,255.1	1,159.0	96.03	13.069	
17,800.0	12,400.0	18,009.2	12,600.0	51.5	42.9	-99.17	-5,184.2	175.8	1,255.1	1,157.8	97.31	12.897	
17,900.0	12,400.0	18,109.2	12,600.0	52.1	43.6	-99.17	-5,284.2	176.7	1,255.1	1,156.5	98.60	12.728	
18,000.0	12,400.0	18,209.2	12,600.0	52.7	44.3	-99.17	-5,384.2	177.7	1,255.0	1,155.1	99.90	12.563	
18,100.0	12,400.0	18,309.2	12,600.0	53.3	45.0	-99.17	-5,484.2	178.7	1,255.0	1,153.8	101.20	12.401	
18,200.0	12,400.0	18,409.2	12,600.0	53.9	45.7	-99.17	-5,584.2	179.6	1,255.0	1,152.5	102.51	12.243	
18,300.0	12,400.0	18,509.2	12,600.0	54.5	46.4	-99.17	-5,684.2	180.6	1,255.0	1,151.2	103.82	12.088	
18,400.0	12,400.0	18,609.2	12,600.0	55.1	47.1	-99.17	-5,784.2	181.6	1,255.0	1,149.9	105.14	11.937	
18,500.0	12,400.0	18,709.2	12,600.0	55.7	47.9	-99.17	-5,884.2	182.6	1,255.0	1,148.5	106.46	11.788	
18,600.0	12,400.0	18,809.2	12,600.0	56.4	48.6	-99.17	-5,984.2	183.5	1,255.0	1,147.2	107.79	11.643	
18,700.0	12,400.0	18,909.2	12,600.0	57.0	49.3	-99.17	-6,084.2	184.5	1,255.0	1,145.8	109.12	11.501	
18,800.0	12,400.0	19,009.2	12,600.0	57.6	50.0	-99.17	-6,184.2	185.5	1,254.9	1,144.5	110.46	11.362	
18,900.0	12,400.0	19,109.2	12,600.0	58.2	50.7	-99.17	-6,284.2	186.4	1,254.9	1,143.1	111.80	11.225	
19,000.0	12,400.0	19,209.2	12,600.0	58.9	51.5	-99.17	-6,384.2	187.4	1,254.9	1,141.8	113.14	11.092	
19,100.0	12,400.0	19,309.2	12,600.0	59.5	52.2	-99.17	-6,484.2	188.4	1,254.9	1,140.4	114.49	10.961	
19,200.0	12,400.0	19,409.2	12,600.0	60.1	52.9	-99.17	-6,584.2	189.3	1,254.9	1,139.1	115.84	10.833	
19,300.0	12,400.0	19,509.2	12,600.0	60.8	53.6	-99.17	-6,684.1	190.3	1,254.9	1,137.7	117.20	10.707	
19,400.0	12,400.0	19,609.2	12,600.0	61.4	54.4	-99.17	-6,784.1	191.3	1,254.9	1,136.3	118.56	10.584	
19,500.0	12,400.0	19,709.2	12,600.0	62.1	55.1	-99.17	-6,884.1	192.3	1,254.9	1,134.9	119.93	10.464	
19,600.0	12,400.0	19,809.2	12,600.0	62.7	55.8	-99.17	-6,984.1	193.2	1,254.8	1,133.6	121.29	10.346	
19,700.0	12,400.0	19,909.2	12,600.0	63.4	56.6	-99.17	-7,084.1	194.2	1,254.8	1,132.2	122.66	10.230	
19,800.0	12,400.0	20,009.2	12,600.0	64.0	57.3	-99.17	-7,184.1	195.2	1,254.8	1,130.8	124.04	10.116	
19,900.0	12,400.0	20,109.2	12,600.0	64.7	58.0	-99.17	-7,284.1	196.1	1,254.8	1,129.4	125.42	10.005	
20,000.0	12,400.0	20,209.2	12,600.0	65.3	58.8	-99.17	-7,384.1	197.1	1,254.8	1,128.0	126.80	9.896	
20,100.0	12,400.0	20,309.2	12,600.0	66.0	59.5	-99.17	-7,484.1	198.1	1,254.8	1,126.6	128.18	9.789	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		
20,200.0	12,400.0	20,409.2	12,600.0	66.7	60.2	-99.17	-7,584.1	199.0	1,254.8	1,125.2	129.56	9.685
20,300.0	12,400.0	20,509.2	12,600.0	67.3	61.0	-99.17	-7,684.1	200.0	1,254.8	1,123.8	130.95	9.582
20,400.0	12,400.0	20,609.2	12,600.0	68.0	61.7	-99.17	-7,784.1	201.0	1,254.7	1,122.4	132.34	9.481
20,500.0	12,400.0	20,709.2	12,600.0	68.7	62.4	-99.17	-7,884.1	201.9	1,254.7	1,121.0	133.74	9.382
20,600.0	12,400.0	20,809.2	12,600.0	69.3	63.2	-99.17	-7,984.1	202.9	1,254.7	1,119.6	135.13	9.285
20,700.0	12,400.0	20,909.2	12,600.0	70.0	63.9	-99.17	-8,084.1	203.9	1,254.7	1,118.2	136.53	9.190
20,800.0	12,400.0	21,009.2	12,600.0	70.7	64.7	-99.17	-8,184.1	204.9	1,254.7	1,116.8	137.93	9.096
20,900.0	12,400.0	21,109.2	12,600.0	71.4	65.4	-99.17	-8,284.1	205.8	1,254.7	1,115.3	139.34	9.005
21,000.0	12,400.0	21,209.2	12,600.0	72.0	66.1	-99.17	-8,384.1	206.8	1,254.7	1,113.9	140.74	8.915
21,100.0	12,400.0	21,309.2	12,600.0	72.7	66.9	-99.17	-8,484.1	207.8	1,254.7	1,112.5	142.15	8.826
21,200.0	12,400.0	21,409.2	12,600.0	73.4	67.6	-99.17	-8,584.1	208.7	1,254.6	1,111.1	143.56	8.740
21,300.0	12,400.0	21,509.2	12,600.0	74.1	68.4	-99.17	-8,684.1	209.7	1,254.6	1,109.7	144.97	8.655
21,400.0	12,400.0	21,609.2	12,600.0	74.8	69.1	-99.17	-8,784.0	210.7	1,254.6	1,108.2	146.38	8.571
21,500.0	12,400.0	21,709.2	12,600.0	75.5	69.8	-99.17	-8,884.0	211.6	1,254.6	1,106.8	147.80	8.489
21,600.0	12,400.0	21,809.2	12,600.0	76.2	70.6	-99.17	-8,984.0	212.6	1,254.6	1,105.4	149.21	8.408
21,700.0	12,400.0	21,909.2	12,600.0	76.8	71.3	-99.17	-9,084.0	213.6	1,254.6	1,104.0	150.63	8.329
21,800.0	12,400.0	22,009.2	12,600.0	77.5	72.1	-99.17	-9,184.0	214.5	1,254.6	1,102.5	152.05	8.251
21,900.0	12,400.0	22,109.2	12,600.0	78.2	72.8	-99.17	-9,284.0	215.5	1,254.6	1,101.1	153.47	8.174
22,000.0	12,400.0	22,209.2	12,600.0	78.9	73.6	-99.17	-9,384.0	216.5	1,254.5	1,099.7	154.90	8.099
22,100.0	12,400.0	22,309.2	12,600.0	79.6	74.3	-99.17	-9,484.0	217.5	1,254.5	1,098.2	156.32	8.025
22,200.0	12,400.0	22,409.2	12,600.0	80.3	75.0	-99.17	-9,584.0	218.4	1,254.5	1,096.8	157.75	7.953
22,300.0	12,400.0	22,509.2	12,600.0	81.0	75.8	-99.17	-9,684.0	219.4	1,254.5	1,095.3	159.18	7.881
22,400.0	12,400.0	22,609.2	12,600.0	81.7	76.5	-99.17	-9,784.0	220.4	1,254.5	1,093.9	160.61	7.811
22,500.0	12,400.0	22,709.2	12,600.0	82.4	77.3	-99.17	-9,884.0	221.3	1,254.5	1,092.4	162.04	7.742
22,600.0	12,400.0	22,809.2	12,600.0	83.1	78.0	-99.17	-9,984.0	222.3	1,254.5	1,091.0	163.47	7.674
22,700.0	12,400.0	22,909.2	12,600.0	83.8	78.8	-99.17	-10,084.0	223.3	1,254.5	1,089.6	164.90	7.607
22,800.0	12,400.0	23,009.2	12,600.0	84.5	79.5	-99.17	-10,184.0	224.2	1,254.4	1,088.1	166.34	7.542
22,900.0	12,400.0	23,109.2	12,600.0	85.2	80.3	-99.17	-10,284.0	225.2	1,254.4	1,086.7	167.77	7.477
23,000.0	12,400.0	23,209.2	12,600.0	85.9	81.0	-99.17	-10,384.0	226.2	1,254.4	1,085.2	169.21	7.413
23,100.0	12,400.0	23,309.2	12,600.0	86.6	81.8	-99.17	-10,484.0	227.1	1,254.4	1,083.8	170.65	7.351
23,200.0	12,400.0	23,409.2	12,600.0	87.3	82.5	-99.17	-10,584.0	228.1	1,254.4	1,082.3	172.09	7.289
23,300.0	12,400.0	23,509.2	12,600.0	88.1	83.3	-99.17	-10,684.0	229.1	1,254.4	1,080.9	173.53	7.229
23,400.0	12,400.0	23,609.2	12,600.0	88.8	84.0	-99.17	-10,784.0	230.1	1,254.4	1,079.4	174.97	7.169
23,500.0	12,400.0	23,709.2	12,600.0	89.5	84.8	-99.17	-10,884.0	231.0	1,254.4	1,077.9	176.42	7.110
23,600.0	12,400.0	23,809.2	12,600.0	90.2	85.5	-99.17	-10,983.9	232.0	1,254.3	1,076.5	177.86	7.052
23,700.0	12,400.0	23,909.2	12,600.0	90.9	86.3	-99.17	-11,083.9	233.0	1,254.3	1,075.0	179.31	6.996
23,800.0	12,400.0	24,009.2	12,600.0	91.6	87.0	-99.17	-11,183.9	233.9	1,254.3	1,073.6	180.75	6.939
23,900.0	12,400.0	24,109.2	12,600.0	92.3	87.8	-99.17	-11,283.9	234.9	1,254.3	1,072.1	182.20	6.884
24,000.0	12,400.0	24,209.2	12,600.0	93.0	88.5	-99.18	-11,383.9	235.9	1,254.3	1,070.7	183.65	6.830
24,100.0	12,400.0	24,309.2	12,600.0	93.8	89.3	-99.18	-11,483.9	236.8	1,254.3	1,069.2	185.10	6.776
24,200.0	12,400.0	24,409.2	12,600.0	94.5	90.0	-99.18	-11,583.9	237.8	1,254.3	1,067.7	186.55	6.724
24,300.0	12,400.0	24,509.2	12,600.0	95.2	90.8	-99.18	-11,683.9	238.8	1,254.3	1,066.3	188.00	6.672
24,400.0	12,400.0	24,609.2	12,600.0	95.9	91.5	-99.18	-11,783.9	239.8	1,254.3	1,064.8	189.45	6.620
24,500.0	12,400.0	24,709.2	12,600.0	96.6	92.3	-99.18	-11,883.9	240.7	1,254.2	1,063.3	190.90	6.570
24,600.0	12,400.0	24,809.2	12,600.0	97.3	93.0	-99.18	-11,983.9	241.7	1,254.2	1,061.9	192.36	6.520
24,700.0	12,400.0	24,909.2	12,600.0	98.1	93.8	-99.18	-12,083.9	242.7	1,254.2	1,060.4	193.81	6.471
24,800.0	12,400.0	25,009.2	12,600.0	98.8	94.5	-99.18	-12,183.9	243.6	1,254.2	1,058.9	195.27	6.423
24,900.0	12,400.0	25,109.2	12,600.0	99.5	95.3	-99.18	-12,283.9	244.6	1,254.2	1,057.5	196.72	6.375
25,000.0	12,400.0	25,209.2	12,600.0	100.2	96.0	-99.18	-12,383.9	245.6	1,254.2	1,056.0	198.18	6.328
25,100.0	12,400.0	25,309.2	12,600.0	100.9	96.8	-99.18	-12,483.9	246.5	1,254.2	1,054.5	199.64	6.282
25,200.0	12,400.0	25,409.2	12,600.0	101.7	97.5	-99.18	-12,583.9	247.5	1,254.2	1,053.1	201.10	6.237

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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:												
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Reference (usft)	Major Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Warning
25,300.0	12,400.0	25,509.2	12,600.0	102.4	98.3	-99.18	-12,683.9	248.5	1,254.1	1,051.6	202.55	6.192
25,400.0	12,400.0	25,609.2	12,600.0	103.1	99.0	-99.18	-12,783.9	249.4	1,254.1	1,050.1	204.01	6.147
25,500.0	12,400.0	25,709.2	12,600.0	103.8	99.8	-99.18	-12,883.9	250.4	1,254.1	1,048.6	205.47	6.103
25,600.0	12,400.0	25,809.2	12,600.0	104.6	100.6	-99.18	-12,983.9	251.4	1,254.1	1,047.2	206.94	6.060
25,700.0	12,400.0	25,909.2	12,600.0	105.3	101.3	-99.18	-13,083.8	252.4	1,254.1	1,045.7	208.40	6.018
25,800.0	12,400.0	26,009.2	12,600.0	106.0	102.1	-99.18	-13,183.8	253.3	1,254.1	1,044.2	209.86	5.976
25,900.0	12,400.0	26,109.2	12,600.0	106.7	102.8	-99.18	-13,283.8	254.3	1,254.1	1,042.7	211.32	5.934
26,000.0	12,400.0	26,209.2	12,600.0	107.5	103.6	-99.18	-13,383.8	255.3	1,254.1	1,041.3	212.79	5.893
26,100.0	12,400.0	26,309.2	12,600.0	108.2	104.3	-99.18	-13,483.8	256.2	1,254.0	1,039.8	214.25	5.853
26,200.0	12,400.0	26,409.2	12,600.0	108.9	105.1	-99.18	-13,583.8	257.2	1,254.0	1,038.3	215.72	5.813
26,300.0	12,400.0	26,509.2	12,600.0	109.7	105.8	-99.18	-13,683.8	258.2	1,254.0	1,036.8	217.18	5.774
26,400.0	12,400.0	26,609.2	12,600.0	110.4	106.6	-99.18	-13,783.8	259.1	1,254.0	1,035.4	218.65	5.735
26,500.0	12,400.0	26,709.2	12,600.0	111.1	107.3	-99.18	-13,883.8	260.1	1,254.0	1,033.9	220.11	5.697
26,600.0	12,400.0	26,809.2	12,600.0	111.8	108.1	-99.18	-13,983.8	261.1	1,254.0	1,032.4	221.58	5.659
26,700.0	12,400.0	26,909.2	12,600.0	112.6	108.9	-99.18	-14,083.8	262.0	1,254.0	1,030.9	223.05	5.622
26,800.0	12,400.0	27,009.2	12,600.0	113.3	109.6	-99.18	-14,183.8	263.0	1,254.0	1,029.4	224.52	5.585
26,900.0	12,400.0	27,109.2	12,600.0	114.0	110.4	-99.18	-14,283.8	264.0	1,253.9	1,028.0	225.98	5.549
27,000.0	12,400.0	27,209.2	12,600.0	114.8	111.1	-99.18	-14,383.8	265.0	1,253.9	1,026.5	227.45	5.513
27,100.0	12,400.0	27,309.2	12,600.0	115.5	111.9	-99.18	-14,483.8	265.9	1,253.9	1,025.0	228.92	5.477
27,200.0	12,400.0	27,409.2	12,600.0	116.2	112.6	-99.18	-14,583.8	266.9	1,253.9	1,023.5	230.39	5.442
27,300.0	12,400.0	27,509.2	12,600.0	117.0	113.4	-99.18	-14,683.8	267.9	1,253.9	1,022.0	231.86	5.408
27,400.0	12,400.0	27,609.2	12,600.0	117.7	114.1	-99.18	-14,783.8	268.8	1,253.9	1,020.5	233.34	5.374
27,500.0	12,400.0	27,709.2	12,600.0	118.4	114.9	-99.18	-14,883.8	269.8	1,253.9	1,019.1	234.81	5.340
27,600.0	12,400.0	27,809.2	12,600.0	119.2	115.7	-99.18	-14,983.8	270.8	1,253.9	1,017.6	236.28	5.307
27,700.0	12,400.0	27,909.2	12,600.0	119.9	116.4	-99.18	-15,083.8	271.7	1,253.8	1,016.1	237.75	5.274
27,800.0	12,400.0	28,009.2	12,600.0	120.6	117.2	-99.18	-15,183.7	272.7	1,253.8	1,014.6	239.22	5.241
27,900.0	12,400.0	28,109.2	12,600.0	121.4	117.9	-99.18	-15,283.7	273.7	1,253.8	1,013.1	240.70	5.209
28,000.0	12,400.0	28,209.2	12,600.0	122.1	118.7	-99.18	-15,383.7	274.7	1,253.8	1,011.6	242.17	5.177
28,100.0	12,400.0	28,309.2	12,600.0	122.8	119.4	-99.18	-15,483.7	275.6	1,253.8	1,010.1	243.65	5.146
28,200.0	12,400.0	28,409.2	12,600.0	123.6	120.2	-99.18	-15,583.7	276.6	1,253.8	1,008.7	245.12	5.115
28,300.0	12,400.0	28,509.2	12,600.0	124.3	120.9	-99.18	-15,683.7	277.6	1,253.8	1,007.2	246.60	5.084
28,400.0	12,400.0	28,609.2	12,600.0	125.1	121.7	-99.18	-15,783.7	278.5	1,253.8	1,005.7	248.07	5.054
28,500.0	12,400.0	28,709.2	12,600.0	125.8	122.5	-99.18	-15,883.7	279.5	1,253.7	1,004.2	249.55	5.024
28,600.0	12,400.0	28,809.2	12,600.0	126.5	123.2	-99.18	-15,983.7	280.5	1,253.7	1,002.7	251.02	4.994
28,700.0	12,400.0	28,909.2	12,600.0	127.3	124.0	-99.18	-16,083.7	281.4	1,253.7	1,001.2	252.50	4.965
28,746.7	12,400.0	28,955.9	12,600.0	127.6	124.3	-99.18	-16,130.4	281.9	1,253.7	1,000.5	253.19	4.952 SF

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #801H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-r.5 MWD+IFR1+MS				Rule Assigned:									Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			Minimum Separation (usft)	
0.0	0.0	0.0	0.0	3.0	3.0	89.43	0.3	30.0	30.0	23.6	6.43	4.667		
100.0	100.0	100.0	100.0	3.2	3.2	89.43	0.3	30.0	30.0	23.1	6.89	4.353		
200.0	200.0	200.0	200.0	3.5	3.5	89.43	0.3	30.0	30.0	22.7	7.33	4.094		
300.0	300.0	300.0	300.0	3.7	3.7	89.43	0.3	30.0	30.0	22.3	7.74	3.875		
400.0	400.0	400.0	400.0	3.9	3.9	89.43	0.3	30.0	30.0	21.9	8.14	3.688		
500.0	500.0	500.0	500.0	4.1	4.1	89.43	0.3	30.0	30.0	21.5	8.51	3.524		
600.0	600.0	600.0	600.0	4.2	4.2	89.43	0.3	30.0	30.0	21.1	8.88	3.379		
700.0	700.0	700.0	700.0	4.4	4.4	89.43	0.3	30.0	30.0	20.8	9.23	3.251		
800.0	800.0	800.0	800.0	4.6	4.6	89.43	0.3	30.0	30.0	20.4	9.57	3.135		
900.0	900.0	900.0	900.0	4.8	4.8	89.43	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	89.43	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	89.43	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	89.43	0.3	30.0	30.0	19.2	10.85	2.766 CC		
1,300.0	1,300.0	1,300.7	1,300.7	5.4	5.4	162.31	0.9	28.8	30.1	18.9	11.20	2.686		
1,400.0	1,399.9	1,401.4	1,401.3	5.6	5.6	160.93	2.8	25.3	30.4	18.8	11.56	2.630 ES		
1,500.0	1,499.7	1,502.1	1,501.7	5.8	5.8	158.69	5.9	19.5	30.9	19.0	11.92	2.593		
1,600.0	1,599.3	1,602.7	1,602.0	6.1	6.1	155.69	10.3	11.3	31.7	19.4	12.30	2.578 SF		
1,700.0	1,698.6	1,703.4	1,701.9	6.3	6.3	152.07	15.8	0.8	32.9	20.2	12.69	2.591		
1,800.0	1,797.5	1,804.0	1,801.5	6.6	6.6	148.00	22.7	-12.1	34.5	21.4	13.07	2.637		
1,900.0	1,896.1	1,904.4	1,900.4	6.9	6.8	143.89	30.6	-27.0	36.7	23.3	13.39	2.738		
2,000.0	1,994.2	2,004.3	1,998.8	7.2	7.1	142.06	38.8	-42.3	40.7	26.9	13.81	2.949		
2,100.0	2,092.0	2,104.1	2,097.1	7.5	7.4	141.63	46.9	-57.6	45.8	31.6	14.26	3.215		
2,200.0	2,189.8	2,204.0	2,195.5	7.8	7.7	141.28	55.0	-73.0	51.0	36.2	14.72	3.461		
2,300.0	2,287.6	2,303.9	2,293.8	8.1	8.1	141.00	63.2	-88.3	56.1	40.9	15.20	3.688		
2,400.0	2,385.4	2,403.7	2,392.2	8.5	8.4	140.77	71.3	-103.6	61.2	45.5	15.70	3.898		
2,500.0	2,483.2	2,503.6	2,490.6	8.9	8.7	140.57	79.5	-118.9	66.3	50.1	16.21	4.091		
2,600.0	2,581.1	2,603.5	2,588.9	9.2	9.1	140.40	87.6	-134.2	71.4	54.7	16.73	4.270		
2,700.0	2,678.9	2,703.3	2,687.3	9.6	9.5	140.25	95.8	-149.5	76.6	59.3	17.27	4.435		
2,800.0	2,776.7	2,803.2	2,785.6	10.0	9.9	140.12	103.9	-164.8	81.7	63.9	17.81	4.587		
2,900.0	2,874.5	2,903.1	2,884.0	10.4	10.2	140.01	112.0	-180.1	86.8	68.5	18.36	4.729		
3,000.0	2,972.3	3,002.9	2,982.3	10.8	10.6	139.91	120.2	-195.5	91.9	73.0	18.92	4.860		
3,100.0	3,070.1	3,102.8	3,080.7	11.2	11.0	139.82	128.3	-210.8	97.1	77.6	19.49	4.982		
3,200.0	3,167.9	3,202.7	3,179.0	11.6	11.4	139.74	136.5	-226.1	102.2	82.1	20.06	5.095		
3,300.0	3,265.8	3,302.6	3,277.4	12.0	11.8	139.66	144.6	-241.4	107.3	86.7	20.64	5.200		
3,400.0	3,363.6	3,402.4	3,375.7	12.4	12.2	139.60	152.7	-256.7	112.4	91.2	21.22	5.298		
3,500.0	3,461.4	3,502.3	3,474.1	12.9	12.6	139.53	160.9	-272.0	117.6	95.8	21.81	5.390		
3,600.0	3,559.2	3,602.2	3,572.4	13.3	13.1	139.48	169.0	-287.3	122.7	100.3	22.41	5.476		
3,700.0	3,657.0	3,702.0	3,670.8	13.7	13.5	139.43	177.2	-302.6	127.8	104.8	23.01	5.556		
3,800.0	3,754.8	3,801.9	3,769.1	14.2	13.9	139.38	185.3	-318.0	132.9	109.3	23.61	5.631		
3,900.0	3,852.6	3,901.8	3,867.5	14.6	14.3	139.34	193.5	-333.3	138.1	113.9	24.21	5.702		
4,000.0	3,950.5	4,001.6	3,965.8	15.0	14.7	139.30	201.6	-348.6	143.2	118.4	24.82	5.768		
4,100.0	4,048.3	4,101.5	4,064.2	15.5	15.2	139.26	209.7	-363.9	148.3	122.9	25.44	5.831		
4,200.0	4,146.1	4,201.4	4,162.5	15.9	15.6	139.22	217.9	-379.2	153.5	127.4	26.05	5.890		
4,300.0	4,243.9	4,301.2	4,260.9	16.4	16.0	139.19	226.0	-394.5	158.6	131.9	26.67	5.945		
4,400.0	4,341.7	4,401.1	4,359.2	16.8	16.4	139.16	234.2	-409.8	163.7	136.4	27.29	5.998		
4,500.0	4,439.5	4,501.0	4,457.6	17.3	16.9	139.13	242.3	-425.1	168.8	140.9	27.92	6.048		
4,600.0	4,537.3	4,600.8	4,555.9	17.7	17.3	139.10	250.4	-440.4	174.0	145.4	28.54	6.095		
4,700.0	4,635.2	4,700.7	4,654.3	18.2	17.7	139.08	258.6	-455.8	179.1	149.9	29.17	6.139		
4,800.0	4,733.0	4,800.6	4,752.6	18.6	18.2	139.05	266.7	-471.1	184.2	154.4	29.80	6.181		
4,900.0	4,830.8	4,900.5	4,851.0	19.1	18.6	139.03	274.9	-486.4	189.3	158.9	30.43	6.222		
5,000.0	4,928.6	5,000.3	4,949.3	19.5	19.0	139.01	283.0	-501.7	194.5	163.4	31.07	6.260		

CC - Min centre to center distance or convergent 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 #601H - Slot HENNIN FED COM #601H
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 #601H	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 #801H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-r.5 MWD+IFR1+MS				Offset					Rule Assigned:				Offset Well Error: 3.0 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,100.0	5,026.4	5,100.2	5,047.7	20.0	19.5	138.99	291.1	-517.0	199.6	167.9	31.70	6.296		
5,200.0	5,124.2	5,200.1	5,146.0	20.4	19.9	138.97	299.3	-532.3	204.7	172.4	32.34	6.331		
5,300.0	5,222.1	5,299.9	5,244.4	20.9	20.4	138.95	307.4	-547.6	209.8	176.9	32.97	6.364		
5,400.0	5,319.9	5,399.8	5,342.7	21.4	20.8	138.93	315.6	-562.9	215.0	181.4	33.61	6.395		
5,500.0	5,417.7	5,499.7	5,441.1	21.8	21.2	138.91	323.7	-578.3	220.1	185.8	34.25	6.426		
5,600.0	5,515.5	5,599.5	5,539.4	22.3	21.7	138.90	331.9	-593.6	225.2	190.3	34.89	6.454		
5,700.0	5,613.3	5,699.4	5,637.8	22.7	22.1	138.88	340.0	-608.9	230.3	194.8	35.54	6.482		
5,800.0	5,711.1	5,799.3	5,736.1	23.2	22.6	138.87	348.1	-624.2	235.5	199.3	36.18	6.508		
5,900.0	5,808.9	5,898.0	5,833.4	23.7	23.0	138.88	356.1	-639.2	240.7	203.9	36.81	6.539		
6,000.0	5,906.8	5,995.3	5,929.5	24.1	23.4	139.16	363.3	-652.7	246.8	209.3	37.55	6.574		
6,100.0	6,004.6	6,092.4	6,025.6	24.6	23.8	139.71	369.7	-664.8	254.0	215.6	38.39	6.617		
6,200.0	6,102.4	6,189.2	6,121.7	25.1	24.2	140.52	375.4	-675.4	262.3	222.9	39.32	6.670		
6,300.0	6,200.2	6,285.7	6,217.7	25.5	24.6	141.53	380.2	-684.6	271.7	231.3	40.34	6.734		
6,400.0	6,298.0	6,382.0	6,313.5	26.0	25.0	142.73	384.3	-692.3	282.3	240.8	41.43	6.813		
6,500.0	6,395.8	6,477.8	6,409.0	26.4	25.3	144.06	387.7	-698.5	294.1	251.6	42.57	6.910		
6,600.0	6,493.6	6,573.1	6,504.2	26.9	25.7	145.51	390.2	-703.4	307.3	263.5	43.74	7.026		
6,700.0	6,591.6	6,668.1	6,599.1	27.4	26.0	147.03	392.0	-706.8	321.2	276.3	44.88	7.156		
6,800.0	6,689.9	6,762.9	6,693.8	27.8	26.2	148.46	393.1	-708.8	335.0	289.1	45.95	7.290		
6,900.0	6,788.5	6,857.5	6,788.5	28.3	26.4	149.82	393.5	-709.4	348.8	301.9	46.91	7.434		
7,000.0	6,887.4	6,956.4	6,887.4	28.7	26.4	151.06	393.5	-709.4	361.8	314.0	47.80	7.568		
7,100.0	6,986.5	7,055.6	6,986.5	29.1	26.5	152.09	393.5	-709.4	373.4	324.8	48.60	7.682		
7,200.0	7,085.9	7,154.9	7,085.9	29.5	26.5	152.94	393.5	-709.4	383.5	334.2	49.33	7.775		
7,300.0	7,185.4	7,254.4	7,185.4	29.9	26.5	153.62	393.5	-709.4	392.2	342.2	49.99	7.846		
7,400.0	7,285.1	7,354.1	7,285.1	30.3	26.6	154.16	393.5	-709.4	399.3	348.8	50.58	7.896		
7,500.0	7,384.9	7,453.9	7,384.9	30.7	26.6	154.57	393.5	-709.4	404.9	353.8	51.10	7.924		
7,600.0	7,484.8	7,553.8	7,484.8	31.0	26.7	154.85	393.5	-709.4	409.0	357.4	51.57	7.931		
7,700.0	7,584.8	7,653.8	7,584.8	31.3	26.7	155.03	393.5	-709.4	411.5	359.5	51.96	7.919		
7,800.0	7,684.7	7,753.8	7,684.7	31.4	26.7	155.09	393.5	-709.4	412.4	360.2	52.17	7.904		
7,900.0	7,784.7	7,853.8	7,784.7	31.5	26.8	81.74	393.5	-709.4	412.4	360.1	52.25	7.892		
8,000.0	7,884.7	7,953.8	7,884.7	31.5	26.8	81.74	393.5	-709.4	412.4	360.0	52.33	7.880		
8,100.0	7,984.7	8,053.8	7,984.7	31.5	26.9	81.74	393.5	-709.4	412.4	360.0	52.40	7.869		
8,200.0	8,084.7	8,153.8	8,084.7	31.6	26.9	81.74	393.5	-709.4	412.4	359.9	52.48	7.858		
8,300.0	8,184.7	8,253.8	8,184.7	31.6	26.9	81.74	393.5	-709.4	412.4	359.8	52.55	7.847		
8,400.0	8,284.7	8,353.8	8,284.7	31.6	27.0	81.74	393.5	-709.4	412.4	359.7	52.63	7.835		
8,500.0	8,384.7	8,453.8	8,384.7	31.7	27.0	81.74	393.5	-709.4	412.4	359.7	52.71	7.824		
8,600.0	8,484.7	8,553.8	8,484.7	31.7	27.1	81.74	393.5	-709.4	412.4	359.6	52.78	7.812		
8,700.0	8,584.7	8,653.8	8,584.7	31.7	27.1	81.74	393.5	-709.4	412.4	359.5	52.86	7.801		
8,800.0	8,684.7	8,753.8	8,684.7	31.8	27.1	81.74	393.5	-709.4	412.4	359.4	52.94	7.789		
8,900.0	8,784.7	8,853.8	8,784.7	31.8	27.2	81.74	393.5	-709.4	412.4	359.3	53.02	7.778		
9,000.0	8,884.7	8,953.8	8,884.7	31.8	27.2	81.74	393.5	-709.4	412.4	359.3	53.10	7.766		
9,100.0	8,984.7	9,053.8	8,984.7	31.9	27.3	81.74	393.5	-709.4	412.4	359.2	53.17	7.755		
9,200.0	9,084.7	9,153.8	9,084.7	31.9	27.3	81.74	393.5	-709.4	412.4	359.1	53.25	7.743		
9,300.0	9,184.7	9,253.8	9,184.7	31.9	27.3	81.74	393.5	-709.4	412.4	359.0	53.33	7.732		
9,400.0	9,284.7	9,353.8	9,284.7	32.0	27.4	81.74	393.5	-709.4	412.4	358.9	53.41	7.720		
9,500.0	9,384.7	9,453.8	9,384.7	32.0	27.4	81.74	393.5	-709.4	412.4	358.9	53.49	7.709		
9,600.0	9,484.7	9,553.8	9,484.7	32.0	27.5	81.74	393.5	-709.4	412.4	358.8	53.57	7.697		
9,700.0	9,584.7	9,653.8	9,584.7	32.0	27.5	81.74	393.5	-709.4	412.4	358.7	53.66	7.685		
9,800.0	9,684.7	9,753.8	9,684.7	32.1	27.6	81.74	393.5	-709.4	412.4	358.6	53.74	7.674		
9,900.0	9,784.7	9,853.8	9,784.7	32.1	27.6	81.74	393.5	-709.4	412.4	358.5	53.82	7.662		
10,000.0	9,884.7	9,953.8	9,884.7	32.1	27.6	81.74	393.5	-709.4	412.4	358.5	53.90	7.650		
10,100.0	9,984.7	10,053.8	9,984.7	32.2	27.7	81.74	393.5	-709.4	412.4	358.4	53.98	7.639		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #801H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
10,200.0	10,084.7	10,153.8	10,084.7	32.2	27.7	81.74	393.5	-709.4	412.4	358.3	54.07	7.627	
10,300.0	10,184.7	10,253.8	10,184.7	32.3	27.8	81.74	393.5	-709.4	412.4	358.2	54.15	7.615	
10,400.0	10,284.7	10,353.8	10,284.7	32.3	27.8	81.74	393.5	-709.4	412.4	358.1	54.23	7.603	
10,500.0	10,384.7	10,453.8	10,384.7	32.3	27.9	81.74	393.5	-709.4	412.4	358.0	54.32	7.592	
10,600.0	10,484.7	10,553.8	10,484.7	32.4	27.9	81.74	393.5	-709.4	412.4	358.0	54.40	7.580	
10,700.0	10,584.7	10,653.8	10,584.7	32.4	28.0	81.74	393.5	-709.4	412.4	357.9	54.49	7.568	
10,800.0	10,684.7	10,753.8	10,684.7	32.4	28.0	81.74	393.5	-709.4	412.4	357.8	54.57	7.556	
10,900.0	10,784.7	10,853.8	10,784.7	32.5	28.0	81.74	393.5	-709.4	412.4	357.7	54.66	7.545	
11,000.0	10,884.7	10,953.8	10,884.7	32.5	28.1	81.74	393.5	-709.4	412.4	357.6	54.74	7.533	
11,100.0	10,984.7	11,053.8	10,984.7	32.5	28.1	81.74	393.5	-709.4	412.4	357.5	54.83	7.521	
11,200.0	11,084.7	11,153.8	11,084.7	32.6	28.2	81.74	393.5	-709.4	412.4	357.4	54.92	7.509	
11,300.0	11,184.7	11,253.8	11,184.7	32.6	28.2	81.74	393.5	-709.4	412.4	357.4	55.00	7.497	
11,400.0	11,284.7	11,353.8	11,284.7	32.6	28.3	81.74	393.5	-709.4	412.4	357.3	55.09	7.485	
11,500.0	11,384.7	11,453.8	11,384.7	32.7	28.3	81.74	393.5	-709.4	412.4	357.2	55.18	7.473	
11,600.0	11,484.7	11,553.8	11,484.7	32.7	28.4	81.74	393.5	-709.4	412.4	357.1	55.26	7.462	
11,700.0	11,584.7	11,653.8	11,584.7	32.7	28.4	81.74	393.5	-709.4	412.4	357.0	55.35	7.450	
11,800.0	11,684.7	11,753.8	11,684.7	32.8	28.4	81.74	393.5	-709.4	412.4	356.9	55.44	7.438	
11,900.0	11,784.7	11,853.8	11,784.7	32.8	28.5	81.74	393.5	-709.4	412.4	356.8	55.53	7.426	
11,904.4	11,789.2	11,858.2	11,789.2	32.8	28.5	-97.70	393.5	-709.4	412.4	356.8	55.53	7.426	
12,000.0	11,884.6	11,953.7	11,884.6	32.8	28.5	-98.06	393.5	-709.4	412.8	357.3	55.47	7.441	
12,100.0	11,982.8	12,051.8	11,982.8	32.7	28.6	-100.25	393.5	-709.4	415.8	361.1	54.69	7.603	
12,200.0	12,076.1	12,145.2	12,076.1	32.5	28.6	-103.89	393.5	-709.4	423.8	370.7	53.09	7.983	
12,300.0	12,162.0	12,231.0	12,162.0	32.4	28.7	-107.97	393.5	-709.4	440.1	389.4	50.71	8.678	
12,400.0	12,237.6	12,306.6	12,237.6	32.3	28.7	-111.31	393.5	-709.4	468.2	420.4	47.81	9.793	
12,500.0	12,300.7	12,369.8	12,300.7	32.2	28.7	-112.84	393.5	-709.4	510.5	465.7	44.82	11.390	
12,600.0	12,349.5	12,418.5	12,349.5	32.1	28.8	-111.54	393.5	-709.4	567.0	524.9	42.17	13.446	
12,700.0	12,382.4	12,451.4	12,382.4	32.1	28.8	-106.34	393.5	-709.4	636.0	595.9	40.11	15.859	
12,800.0	12,398.4	12,467.4	12,398.4	32.1	28.8	-96.03	393.5	-709.4	714.4	675.8	38.64	18.491	
12,900.0	12,400.0	12,469.0	12,400.0	32.2	28.8	-90.00	393.5	-709.4	798.4	760.8	37.65	21.208	
13,000.0	12,400.0	13,709.0	13,100.0	32.3	28.0	-149.73	-392.5	-701.8	810.5	744.5	66.03	12.275	
13,100.0	12,400.0	13,809.0	13,100.0	32.4	28.1	-149.73	-492.5	-700.8	810.5	743.6	66.89	12.117	
13,200.0	12,400.0	13,909.0	13,100.0	32.6	28.2	-149.73	-592.5	-699.8	810.5	742.7	67.78	11.959	
13,300.0	12,400.0	14,009.0	13,100.0	32.7	28.4	-149.73	-692.5	-698.8	810.5	741.8	68.68	11.801	
13,400.0	12,400.0	14,109.0	13,100.0	32.9	28.5	-149.73	-792.5	-697.9	810.5	740.9	69.62	11.643	
13,500.0	12,400.0	14,209.0	13,100.0	33.1	28.7	-149.73	-892.4	-696.9	810.5	739.9	70.57	11.486	
13,600.0	12,400.0	14,309.0	13,100.0	33.2	28.9	-149.73	-992.4	-695.9	810.5	739.0	71.54	11.330	
13,700.0	12,400.0	14,409.0	13,100.0	33.5	29.2	-149.73	-1,092.4	-694.9	810.5	738.0	72.53	11.175	
13,800.0	12,400.0	14,509.0	13,100.0	33.7	29.4	-149.73	-1,192.4	-694.0	810.5	737.0	73.54	11.021	
13,900.0	12,400.0	14,609.0	13,100.0	33.9	29.6	-149.73	-1,292.4	-693.0	810.5	735.9	74.57	10.869	
14,000.0	12,400.0	14,709.0	13,100.0	34.2	29.9	-149.73	-1,392.4	-692.0	810.5	734.9	75.62	10.718	
14,100.0	12,400.0	14,809.0	13,100.0	34.4	30.2	-149.73	-1,492.4	-691.0	810.5	733.8	76.68	10.570	
14,200.0	12,400.0	14,909.0	13,100.0	34.7	30.5	-149.73	-1,592.4	-690.1	810.5	732.7	77.76	10.423	
14,300.0	12,400.0	15,009.0	13,100.0	35.0	30.8	-149.73	-1,692.4	-689.1	810.5	731.6	78.85	10.278	
14,400.0	12,400.0	15,109.0	13,100.0	35.3	31.1	-149.73	-1,792.4	-688.1	810.5	730.5	79.96	10.136	
14,500.0	12,400.0	15,209.0	13,100.0	35.7	31.5	-149.73	-1,892.4	-687.1	810.5	729.4	81.08	9.995	
14,600.0	12,400.0	15,309.0	13,100.0	36.0	31.8	-149.73	-1,992.4	-686.1	810.5	728.3	82.22	9.857	
14,700.0	12,400.0	15,409.0	13,100.0	36.3	32.2	-149.73	-2,092.4	-685.2	810.5	727.1	83.37	9.721	
14,800.0	12,400.0	15,509.0	13,100.0	36.7	32.5	-149.73	-2,192.4	-684.2	810.5	725.9	84.53	9.588	
14,900.0	12,400.0	15,609.0	13,100.0	37.1	32.9	-149.73	-2,292.4	-683.2	810.5	724.8	85.71	9.456	
15,000.0	12,400.0	15,709.0	13,100.0	37.4	33.3	-149.73	-2,392.4	-682.2	810.5	723.6	86.89	9.327	
15,100.0	12,400.0	15,809.0	13,100.0	37.8	33.7	-149.74	-2,492.4	-681.3	810.5	722.4	88.09	9.201	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #801H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
15,200.0	12,400.0	15,909.0	13,100.0	38.2	34.2	-149.74	-2,592.4	-680.3	810.5	721.2	89.29	9.077	
15,300.0	12,400.0	16,009.0	13,100.0	38.6	34.6	-149.74	-2,692.4	-679.3	810.5	719.9	90.51	8.955	
15,400.0	12,400.0	16,109.0	13,100.0	39.1	35.0	-149.74	-2,792.4	-678.3	810.5	718.7	91.73	8.835	
15,500.0	12,400.0	16,209.0	13,100.0	39.5	35.5	-149.74	-2,892.4	-677.4	810.4	717.5	92.97	8.717	
15,600.0	12,400.0	16,309.0	13,100.0	39.9	36.0	-149.74	-2,992.3	-676.4	810.4	716.2	94.21	8.602	
15,700.0	12,400.0	16,409.0	13,100.0	40.4	36.5	-149.74	-3,092.3	-675.4	810.4	715.0	95.47	8.489	
15,800.0	12,400.0	16,509.0	13,100.0	40.8	36.9	-149.74	-3,192.3	-674.4	810.4	713.7	96.73	8.379	
15,900.0	12,400.0	16,609.0	13,100.0	41.3	37.4	-149.74	-3,292.3	-673.5	810.4	712.4	98.00	8.270	
16,000.0	12,400.0	16,709.0	13,100.0	41.8	37.9	-149.74	-3,392.3	-672.5	810.4	711.2	99.27	8.164	
16,100.0	12,400.0	16,809.0	13,100.0	42.3	38.5	-149.74	-3,492.3	-671.5	810.4	709.9	100.56	8.060	
16,200.0	12,400.0	16,909.0	13,100.0	42.8	39.0	-149.74	-3,592.3	-670.5	810.4	708.6	101.85	7.957	
16,300.0	12,400.0	17,009.0	13,100.0	43.3	39.5	-149.74	-3,692.3	-669.6	810.4	707.3	103.14	7.857	
16,400.0	12,400.0	17,109.0	13,100.0	43.8	40.0	-149.74	-3,792.3	-668.6	810.4	706.0	104.45	7.759	
16,500.0	12,400.0	17,209.0	13,100.0	44.3	40.6	-149.74	-3,892.3	-667.6	810.4	704.7	105.76	7.663	
16,600.0	12,400.0	17,309.0	13,100.0	44.8	41.1	-149.74	-3,992.3	-666.6	810.4	703.3	107.07	7.569	
16,700.0	12,400.0	17,409.0	13,100.0	45.3	41.7	-149.74	-4,092.3	-665.7	810.4	702.0	108.40	7.476	
16,800.0	12,400.0	17,509.0	13,100.0	45.9	42.3	-149.74	-4,192.3	-664.7	810.4	700.7	109.72	7.386	
16,900.0	12,400.0	17,609.0	13,100.0	46.4	42.8	-149.74	-4,292.3	-663.7	810.4	699.4	111.06	7.297	
17,000.0	12,400.0	17,709.0	13,100.0	46.9	43.4	-149.74	-4,392.3	-662.7	810.4	698.0	112.40	7.210	
17,100.0	12,400.0	17,809.0	13,100.0	47.5	44.0	-149.74	-4,492.3	-661.7	810.4	696.7	113.74	7.125	
17,200.0	12,400.0	17,909.0	13,100.0	48.1	44.6	-149.74	-4,592.3	-660.8	810.4	695.3	115.09	7.042	
17,300.0	12,400.0	18,009.0	13,100.0	48.6	45.2	-149.74	-4,692.3	-659.8	810.4	694.0	116.44	6.960	
17,400.0	12,400.0	18,109.0	13,100.0	49.2	45.8	-149.74	-4,792.3	-658.8	810.4	692.6	117.80	6.880	
17,500.0	12,400.0	18,209.0	13,100.0	49.8	46.4	-149.74	-4,892.3	-657.8	810.4	691.2	119.16	6.801	
17,600.0	12,400.0	18,309.0	13,100.0	50.3	47.0	-149.74	-4,992.3	-656.9	810.4	689.9	120.53	6.724	
17,700.0	12,400.0	18,409.0	13,100.0	50.9	47.6	-149.74	-5,092.2	-655.9	810.4	688.5	121.90	6.648	
17,800.0	12,400.0	18,509.0	13,100.0	51.5	48.2	-149.75	-5,192.2	-654.9	810.4	687.1	123.27	6.574	
17,900.0	12,400.0	18,609.0	13,100.0	52.1	48.9	-149.75	-5,292.2	-653.9	810.4	685.7	124.65	6.501	
18,000.0	12,400.0	18,709.0	13,100.0	52.7	49.5	-149.75	-5,392.2	-653.0	810.4	684.3	126.03	6.430	
18,100.0	12,400.0	18,809.0	13,100.0	53.3	50.1	-149.75	-5,492.2	-652.0	810.4	683.0	127.41	6.360	
18,200.0	12,400.0	18,909.0	13,100.0	53.9	50.8	-149.75	-5,592.2	-651.0	810.4	681.6	128.80	6.292	
18,300.0	12,400.0	19,009.0	13,100.0	54.5	51.4	-149.75	-5,692.2	-650.0	810.4	680.2	130.19	6.224	
18,400.0	12,400.0	19,109.0	13,100.0	55.1	52.0	-149.75	-5,792.2	-649.1	810.4	678.8	131.59	6.158	
18,500.0	12,400.0	19,209.0	13,100.0	55.7	52.7	-149.75	-5,892.2	-648.1	810.4	677.4	132.99	6.093	
18,600.0	12,400.0	19,309.0	13,100.0	56.4	53.3	-149.75	-5,992.2	-647.1	810.4	676.0	134.39	6.030	
18,700.0	12,400.0	19,409.0	13,100.0	57.0	54.0	-149.75	-6,092.2	-646.1	810.4	674.6	135.79	5.968	
18,800.0	12,400.0	19,509.0	13,100.0	57.6	54.6	-149.75	-6,192.2	-645.2	810.3	673.1	137.20	5.906	
18,900.0	12,400.0	19,609.0	13,100.0	58.2	55.3	-149.75	-6,292.2	-644.2	810.3	671.7	138.61	5.846	
19,000.0	12,400.0	19,709.0	13,100.0	58.9	56.0	-149.75	-6,392.2	-643.2	810.3	670.3	140.02	5.787	
19,100.0	12,400.0	19,809.0	13,100.0	59.5	56.6	-149.75	-6,492.2	-642.2	810.3	668.9	141.44	5.729	
19,200.0	12,400.0	19,909.0	13,100.0	60.1	57.3	-149.75	-6,592.2	-641.3	810.3	667.5	142.85	5.672	
19,300.0	12,400.0	20,009.0	13,100.0	60.8	58.0	-149.75	-6,692.2	-640.3	810.3	666.1	144.27	5.617	
19,400.0	12,400.0	20,109.0	13,100.0	61.4	58.6	-149.75	-6,792.2	-639.3	810.3	664.6	145.70	5.562	
19,500.0	12,400.0	20,209.0	13,100.0	62.1	59.3	-149.75	-6,892.2	-638.3	810.3	663.2	147.12	5.508	
19,600.0	12,400.0	20,309.0	13,100.0	62.7	60.0	-149.75	-6,992.2	-637.3	810.3	661.8	148.55	5.455	
19,700.0	12,400.0	20,409.0	13,100.0	63.4	60.7	-149.75	-7,092.2	-636.4	810.3	660.3	149.98	5.403	
19,800.0	12,400.0	20,509.0	13,100.0	64.0	61.3	-149.75	-7,192.1	-635.4	810.3	658.9	151.41	5.352	
19,900.0	12,400.0	20,609.0	13,100.0	64.7	62.0	-149.75	-7,292.1	-634.4	810.3	657.5	152.84	5.302	
20,000.0	12,400.0	20,709.0	13,100.0	65.3	62.7	-149.75	-7,392.1	-633.4	810.3	656.0	154.28	5.252	
20,100.0	12,400.0	20,809.0	13,100.0	66.0	63.4	-149.75	-7,492.1	-632.5	810.3	654.6	155.71	5.204	
20,200.0	12,400.0	20,909.0	13,100.0	66.7	64.1	-149.75	-7,592.1	-631.5	810.3	653.2	157.15	5.156	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #801H - OWB - PWP0												Offset Site Error: 0.0 usft		
Survey Program: 0-r.5 MWD+IFR1+MS				Reference Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned: Distance			Offset Well Error: 3.0 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
20,300.0	12,400.0	21,009.0	13,100.0	67.3	64.8	-149.75	-7,692.1	-630.5	810.3	651.7	158.59	5.109		
20,400.0	12,400.0	21,109.0	13,100.0	68.0	65.5	-149.75	-7,792.1	-629.5	810.3	650.3	160.04	5.063		
20,500.0	12,400.0	21,209.0	13,100.0	68.7	66.1	-149.75	-7,892.1	-628.6	810.3	648.8	161.48	5.018		
20,600.0	12,400.0	21,309.0	13,100.0	69.3	66.8	-149.76	-7,992.1	-627.6	810.3	647.4	162.93	4.973		
20,700.0	12,400.0	21,409.0	13,100.0	70.0	67.5	-149.76	-8,092.1	-626.6	810.3	645.9	164.38	4.930		
20,800.0	12,400.0	21,509.0	13,100.0	70.7	68.2	-149.76	-8,192.1	-625.6	810.3	644.5	165.82	4.886		
20,900.0	12,400.0	21,609.0	13,100.0	71.4	68.9	-149.76	-8,292.1	-624.7	810.3	643.0	167.28	4.844		
21,000.0	12,400.0	21,709.0	13,100.0	72.0	69.6	-149.76	-8,392.1	-623.7	810.3	641.6	168.73	4.802		
21,100.0	12,400.0	21,809.0	13,100.0	72.7	70.3	-149.76	-8,492.1	-622.7	810.3	640.1	170.18	4.761		
21,200.0	12,400.0	21,909.0	13,100.0	73.4	71.0	-149.76	-8,592.1	-621.7	810.3	638.6	171.64	4.721		
21,300.0	12,400.0	22,009.0	13,100.0	74.1	71.7	-149.76	-8,692.1	-620.8	810.3	637.2	173.09	4.681		
21,400.0	12,400.0	22,109.0	13,100.0	74.8	72.4	-149.76	-8,792.1	-619.8	810.3	635.7	174.55	4.642		
21,500.0	12,400.0	22,209.0	13,100.0	75.5	73.2	-149.76	-8,892.1	-618.8	810.3	634.3	176.01	4.604		
21,600.0	12,400.0	22,309.0	13,100.0	76.2	73.9	-149.76	-8,992.1	-617.8	810.3	632.8	177.47	4.566		
21,700.0	12,400.0	22,409.0	13,100.0	76.8	74.6	-149.76	-9,092.1	-616.9	810.3	631.3	178.93	4.528		
21,800.0	12,400.0	22,509.0	13,100.0	77.5	75.3	-149.76	-9,192.1	-615.9	810.3	629.9	180.40	4.492		
21,900.0	12,400.0	22,609.0	13,100.0	78.2	76.0	-149.76	-9,292.0	-614.9	810.3	628.4	181.86	4.455		
22,000.0	12,400.0	22,709.0	13,100.0	78.9	76.7	-149.76	-9,392.0	-613.9	810.3	626.9	183.33	4.420		
22,100.0	12,400.0	22,809.0	13,100.0	79.6	77.4	-149.76	-9,492.0	-612.9	810.3	625.5	184.79	4.385		
22,200.0	12,400.0	22,909.0	13,100.0	80.3	78.1	-149.76	-9,592.0	-612.0	810.2	624.0	186.26	4.350		
22,300.0	12,400.0	23,009.0	13,100.0	81.0	78.8	-149.76	-9,692.0	-611.0	810.2	622.5	187.73	4.316		
22,400.0	12,400.0	23,109.0	13,100.0	81.7	79.6	-149.76	-9,792.0	-610.0	810.2	621.0	189.20	4.282		
22,500.0	12,400.0	23,209.0	13,100.0	82.4	80.3	-149.76	-9,892.0	-609.0	810.2	619.6	190.67	4.249		
22,600.0	12,400.0	23,309.0	13,100.0	83.1	81.0	-149.76	-9,992.0	-608.1	810.2	618.1	192.14	4.217		
22,700.0	12,400.0	23,409.0	13,100.0	83.8	81.7	-149.76	-10,092.0	-607.1	810.2	616.6	193.62	4.185		
22,800.0	12,400.0	23,509.0	13,100.0	84.5	82.4	-149.76	-10,192.0	-606.1	810.2	615.1	195.09	4.153		
22,900.0	12,400.0	23,609.0	13,100.0	85.2	83.2	-149.76	-10,292.0	-605.1	810.2	613.7	196.57	4.122		
23,000.0	12,400.0	23,709.0	13,100.0	85.9	83.9	-149.76	-10,392.0	-604.2	810.2	612.2	198.04	4.091		
23,100.0	12,400.0	23,809.0	13,100.0	86.6	84.6	-149.76	-10,492.0	-603.2	810.2	610.7	199.52	4.061		
23,200.0	12,400.0	23,909.0	13,100.0	87.3	85.3	-149.76	-10,592.0	-602.2	810.2	609.2	201.00	4.031		
23,300.0	12,400.0	24,009.0	13,100.0	88.1	86.0	-149.77	-10,692.0	-601.2	810.2	607.7	202.48	4.002		
23,400.0	12,400.0	24,109.0	13,100.0	88.8	86.8	-149.77	-10,792.0	-600.3	810.2	606.3	203.96	3.972		
23,500.0	12,400.0	24,209.0	13,100.0	89.5	87.5	-149.77	-10,892.0	-599.3	810.2	604.8	205.44	3.944		
23,600.0	12,400.0	24,309.0	13,100.0	90.2	88.2	-149.77	-10,992.0	-598.3	810.2	603.3	206.92	3.916		
23,700.0	12,400.0	24,409.0	13,100.0	90.9	88.9	-149.77	-11,092.0	-597.3	810.2	601.8	208.40	3.888		
23,800.0	12,400.0	24,509.0	13,100.0	91.6	89.7	-149.77	-11,192.0	-596.4	810.2	600.3	209.88	3.860		
23,900.0	12,400.0	24,609.0	13,100.0	92.3	90.4	-149.77	-11,292.0	-595.4	810.2	598.8	211.37	3.833		
24,000.0	12,400.0	24,709.0	13,100.0	93.0	91.1	-149.77	-11,391.9	-594.4	810.2	597.3	212.85	3.806		
24,100.0	12,400.0	24,809.0	13,100.0	93.8	91.9	-149.77	-11,491.9	-593.4	810.2	595.9	214.34	3.780		
24,200.0	12,400.0	24,909.0	13,100.0	94.5	92.6	-149.77	-11,591.9	-592.5	810.2	594.4	215.82	3.754		
24,300.0	12,400.0	25,009.0	13,100.0	95.2	93.3	-149.77	-11,691.9	-591.5	810.2	592.9	217.31	3.728		
24,400.0	12,400.0	25,109.0	13,100.0	95.9	94.1	-149.77	-11,791.9	-590.5	810.2	591.4	218.79	3.703		
24,500.0	12,400.0	25,209.0	13,100.0	96.6	94.8	-149.77	-11,891.9	-589.5	810.2	589.9	220.28	3.678		
24,600.0	12,400.0	25,309.0	13,100.0	97.3	95.5	-149.77	-11,991.9	-588.5	810.2	588.4	221.77	3.653		
24,700.0	12,400.0	25,409.0	13,100.0	98.1	96.2	-149.77	-12,091.9	-587.6	810.2	586.9	223.26	3.629		
24,800.0	12,400.0	25,509.0	13,100.0	98.8	97.0	-149.77	-12,191.9	-586.6	810.2	585.4	224.75	3.605		
24,900.0	12,400.0	25,609.0	13,100.0	99.5	97.7	-149.77	-12,291.9	-585.6	810.2	583.9	226.24	3.581		
25,000.0	12,400.0	25,709.0	13,100.0	100.2	98.4	-149.77	-12,391.9	-584.6	810.2	582.4	227.73	3.558		
25,100.0	12,400.0	25,809.0	13,100.0	100.9	99.2	-149.77	-12,491.9	-583.7	810.2	580.9	229.22	3.534		
25,200.0	12,400.0	25,909.0	13,100.0	101.7	99.9	-149.77	-12,591.9	-582.7	810.2	579.4	230.72	3.511		
25,300.0	12,400.0	26,009.0	13,100.0	102.4	100.6	-149.77	-12,691.9	-581.7	810.2	577.9	232.21	3.489		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #801H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
25,400.0	12,400.0	26,109.0	13,100.0	103.1	101.4	-149.77	-12,791.9	-580.7	810.2	576.4	233.70	3.467	
25,500.0	12,400.0	26,209.0	13,100.0	103.8	102.1	-149.77	-12,891.9	-579.8	810.1	575.0	235.20	3.445	
25,600.0	12,400.0	26,309.0	13,100.0	104.6	102.9	-149.77	-12,991.9	-578.8	810.1	573.5	236.69	3.423	
25,700.0	12,400.0	26,409.0	13,100.0	105.3	103.6	-149.77	-13,091.9	-577.8	810.1	572.0	238.19	3.401	
25,800.0	12,400.0	26,509.0	13,100.0	106.0	104.3	-149.77	-13,191.9	-576.8	810.1	570.5	239.68	3.380	
25,900.0	12,400.0	26,609.0	13,100.0	106.7	105.1	-149.77	-13,291.9	-575.9	810.1	569.0	241.18	3.359	
26,000.0	12,400.0	26,709.0	13,100.0	107.5	105.8	-149.78	-13,391.9	-574.9	810.1	567.5	242.67	3.338	
26,100.0	12,400.0	26,809.0	13,100.0	108.2	106.5	-149.78	-13,491.8	-573.9	810.1	566.0	244.17	3.318	
26,200.0	12,400.0	26,909.0	13,100.0	108.9	107.3	-149.78	-13,591.8	-572.9	810.1	564.5	245.67	3.298	
26,300.0	12,400.0	27,009.0	13,100.0	109.7	108.0	-149.78	-13,691.8	-572.0	810.1	563.0	247.17	3.278	
26,400.0	12,400.0	27,109.0	13,100.0	110.4	108.8	-149.78	-13,791.8	-571.0	810.1	561.5	248.66	3.258	
26,500.0	12,400.0	27,209.0	13,100.0	111.1	109.5	-149.78	-13,891.8	-570.0	810.1	560.0	250.16	3.238	
26,600.0	12,400.0	27,309.0	13,100.0	111.8	110.2	-149.78	-13,991.8	-569.0	810.1	558.5	251.66	3.219	
26,700.0	12,400.0	27,409.0	13,100.0	112.6	111.0	-149.78	-14,091.8	-568.1	810.1	556.9	253.16	3.200	
26,800.0	12,400.0	27,509.0	13,100.0	113.3	111.7	-149.78	-14,191.8	-567.1	810.1	555.4	254.66	3.181	
26,900.0	12,400.0	27,609.0	13,100.0	114.0	112.5	-149.78	-14,291.8	-566.1	810.1	553.9	256.16	3.162	
27,000.0	12,400.0	27,709.0	13,100.0	114.8	113.2	-149.78	-14,391.8	-565.1	810.1	552.4	257.67	3.144	
27,100.0	12,400.0	27,809.0	13,100.0	115.5	113.9	-149.78	-14,491.8	-564.1	810.1	550.9	259.17	3.126	
27,200.0	12,400.0	27,909.0	13,100.0	116.2	114.7	-149.78	-14,591.8	-563.2	810.1	549.4	260.67	3.108	
27,300.0	12,400.0	28,009.0	13,100.0	117.0	115.4	-149.78	-14,691.8	-562.2	810.1	547.9	262.17	3.090	
27,400.0	12,400.0	28,109.0	13,100.0	117.7	116.2	-149.78	-14,791.8	-561.2	810.1	546.4	263.67	3.072	
27,500.0	12,400.0	28,209.0	13,100.0	118.4	116.9	-149.78	-14,891.8	-560.2	810.1	544.9	265.18	3.055	
27,600.0	12,400.0	28,309.0	13,100.0	119.2	117.7	-149.78	-14,991.8	-559.3	810.1	543.4	266.68	3.038	
27,700.0	12,400.0	28,409.0	13,100.0	119.9	118.4	-149.78	-15,091.8	-558.3	810.1	541.9	268.18	3.021	
27,800.0	12,400.0	28,509.0	13,100.0	120.6	119.1	-149.78	-15,191.8	-557.3	810.1	540.4	269.69	3.004	
27,900.0	12,400.0	28,609.0	13,100.0	121.4	119.9	-149.78	-15,291.8	-556.3	810.1	538.9	271.19	2.987	
28,000.0	12,400.0	28,709.0	13,100.0	122.1	120.6	-149.78	-15,391.8	-555.4	810.1	537.4	272.70	2.971	
28,100.0	12,400.0	28,809.0	13,100.0	122.8	121.4	-149.78	-15,491.8	-554.4	810.1	535.9	274.20	2.954	
28,200.0	12,400.0	28,909.0	13,100.0	123.6	122.1	-149.78	-15,591.7	-553.4	810.1	534.4	275.71	2.938	
28,300.0	12,400.0	29,009.0	13,100.0	124.3	122.9	-149.78	-15,691.7	-552.4	810.1	532.8	277.22	2.922	
28,400.0	12,400.0	29,109.0	13,100.0	125.1	123.6	-149.78	-15,791.7	-551.5	810.1	531.3	278.72	2.906	
28,500.0	12,400.0	29,209.0	13,100.0	125.8	124.4	-149.78	-15,891.7	-550.5	810.1	529.8	280.23	2.891	
28,600.0	12,400.0	29,309.0	13,100.0	126.5	125.1	-149.78	-15,991.7	-549.5	810.1	528.3	281.74	2.875	
28,700.0	12,400.0	29,409.0	13,100.0	127.3	125.8	-149.79	-16,091.7	-548.5	810.1	526.8	283.21	2.860	
28,746.7	12,400.0	29,455.7	13,100.0	127.6	126.1	-149.79	-16,138.4	-548.1	810.0	526.3	283.76	2.855	

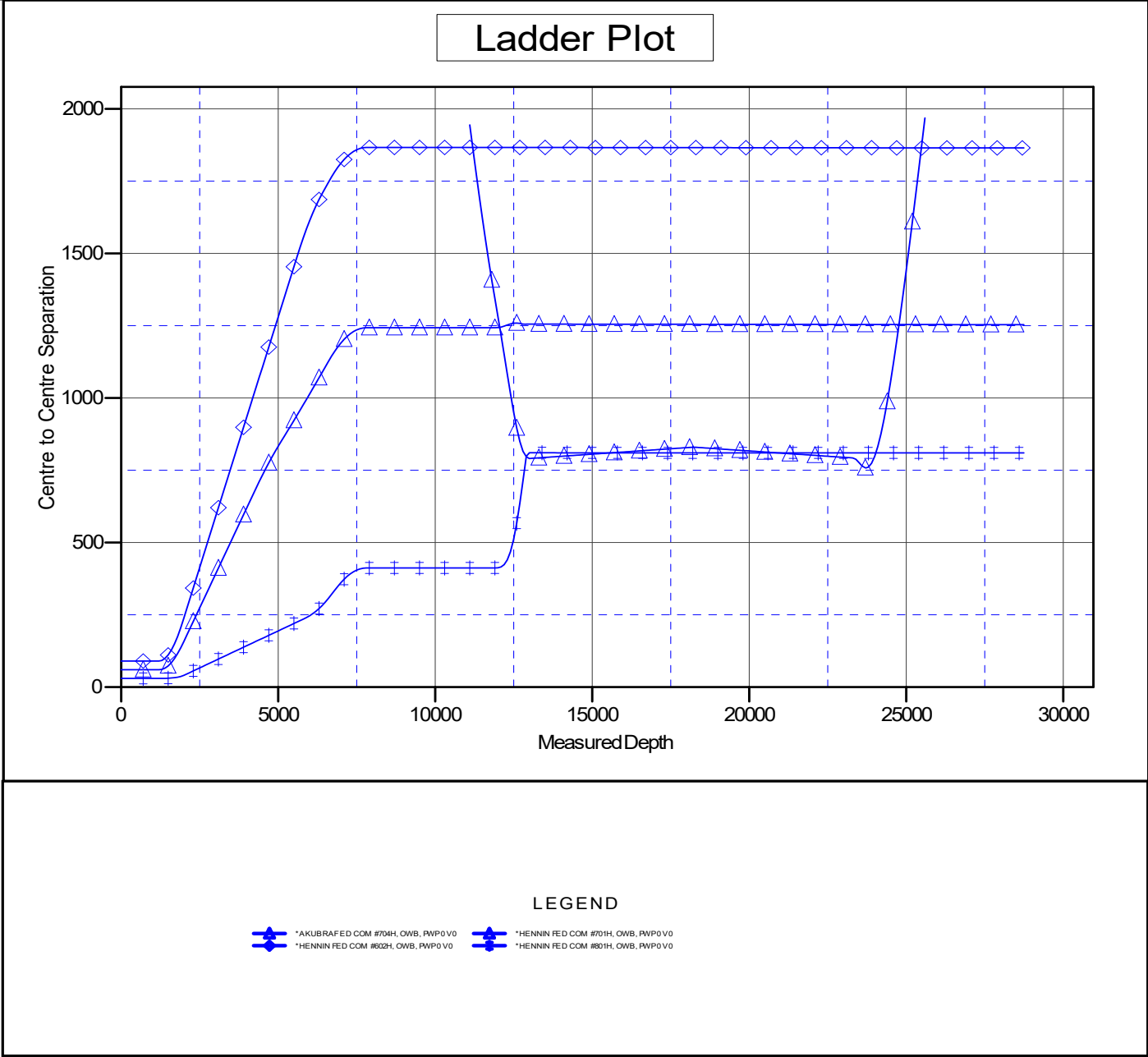
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #601H - Slot HENNIN FED COM
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.52°

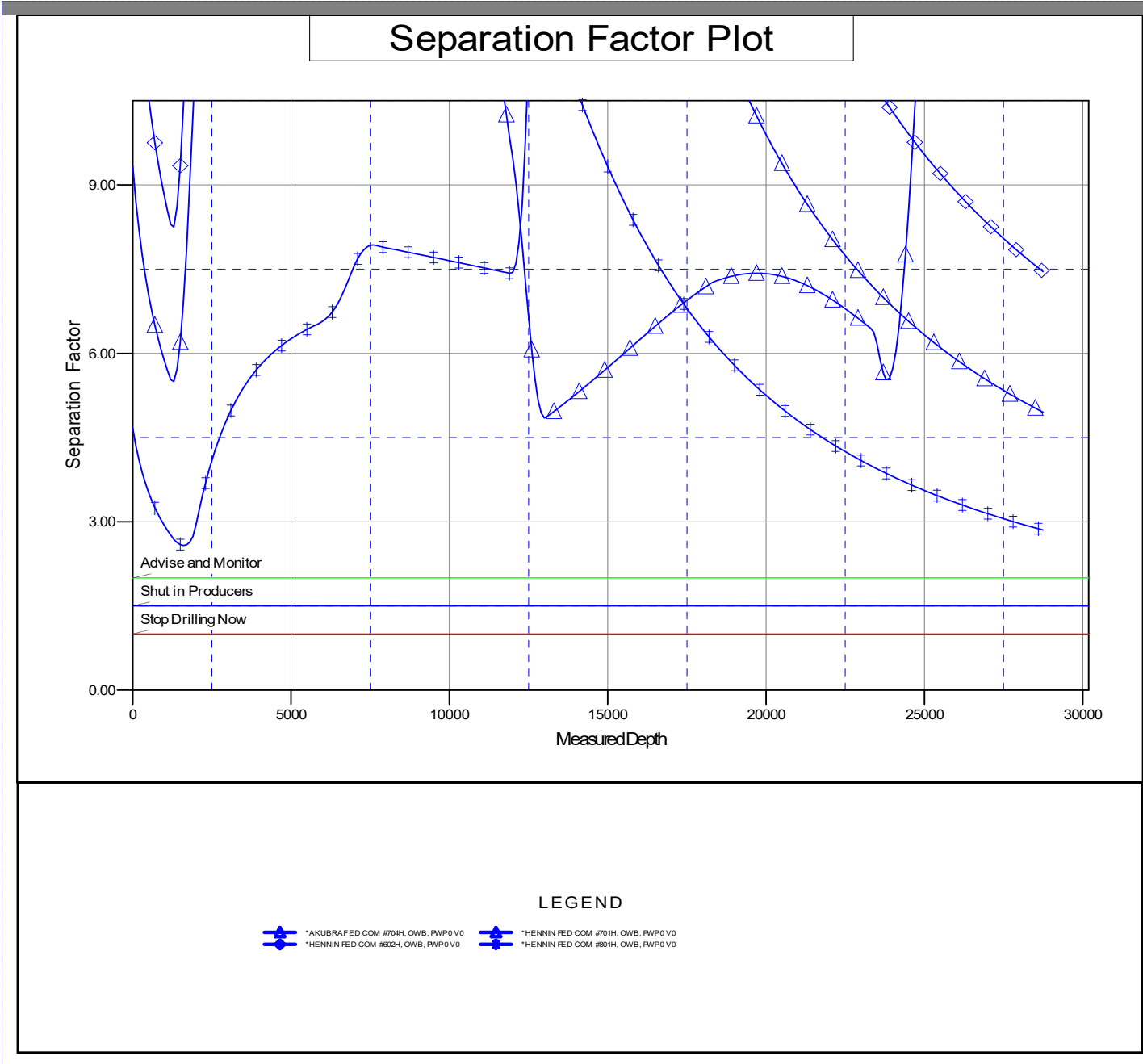


ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #601H - 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 #601H - Slot HENNIN FED COM #601H**

OWB

Plan: PWP0

Standard Planning Report

29 June, 2023

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #601H - Slot HENNIN FED COM #601H					
Well Position	+N/-S	0.0 usft	Northing:	404,891.53 usft	Latitude:	32° 6' 33.879 N
	+E/-W	0.0 usft	Easting:	801,839.82 usft	Longitude:	103° 21' 30.604 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	4/13/2023	6.18	59.66	47,394.91053231

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	183.39

Plan Survey Tool Program	Date	6/29/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	28,746.7 PWP0 (OWB)	r.5 MWD+IFR1+MS		
			OWSG MWD + IFR1 + Multi-Sl		

ConocoPhillips

Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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	
2,000.0	12.00	286.65	1,994.2	23.9	-80.0	1.50	1.50	0.00	286.65	
6,606.5	12.00	286.65	6,500.0	298.3	-997.6	0.00	0.00	0.00	0.00	
7,806.5	0.00	0.00	7,691.2	334.2	-1,117.5	1.00	-1.00	0.00	180.00	
11,942.3	0.00	0.00	11,827.0	334.2	-1,117.5	0.00	0.00	0.00	0.00	
12,842.3	90.00	179.44	12,400.0	-238.7	-1,111.9	10.00	10.00	19.94	179.44	
28,746.7	90.00	179.44	12,400.0	-16,142.4	-955.7	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 #601H - Slot HENNIN FED COM #601H
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 #601H	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	286.65	1,300.0	0.4	-1.3	-0.3	1.50	1.50	0.00	
1,400.0	3.00	286.65	1,399.9	1.5	-5.0	-1.2	1.50	1.50	0.00	
1,500.0	4.50	286.65	1,499.7	3.4	-11.3	-2.7	1.50	1.50	0.00	
1,600.0	6.00	286.65	1,599.3	6.0	-20.0	-4.8	1.50	1.50	0.00	
1,700.0	7.50	286.65	1,698.6	9.4	-31.3	-7.5	1.50	1.50	0.00	
1,800.0	9.00	286.65	1,797.5	13.5	-45.1	-10.8	1.50	1.50	0.00	
1,900.0	10.50	286.65	1,896.1	18.3	-61.3	-14.7	1.50	1.50	0.00	
2,000.0	12.00	286.65	1,994.2	23.9	-80.0	-19.1	1.50	1.50	0.00	
2,100.0	12.00	286.65	2,092.0	29.9	-99.9	-23.9	0.00	0.00	0.00	
2,200.0	12.00	286.65	2,189.8	35.8	-119.8	-28.7	0.00	0.00	0.00	
2,300.0	12.00	286.65	2,287.6	41.8	-139.7	-33.5	0.00	0.00	0.00	
2,400.0	12.00	286.65	2,385.4	47.7	-159.6	-38.2	0.00	0.00	0.00	
2,500.0	12.00	286.65	2,483.2	53.7	-179.6	-43.0	0.00	0.00	0.00	
2,600.0	12.00	286.65	2,581.1	59.7	-199.5	-47.8	0.00	0.00	0.00	
2,700.0	12.00	286.65	2,678.9	65.6	-219.4	-52.5	0.00	0.00	0.00	
2,800.0	12.00	286.65	2,776.7	71.6	-239.3	-57.3	0.00	0.00	0.00	
2,900.0	12.00	286.65	2,874.5	77.5	-259.2	-62.1	0.00	0.00	0.00	
3,000.0	12.00	286.65	2,972.3	83.5	-279.2	-66.8	0.00	0.00	0.00	
3,100.0	12.00	286.65	3,070.1	89.4	-299.1	-71.6	0.00	0.00	0.00	
3,200.0	12.00	286.65	3,167.9	95.4	-319.0	-76.4	0.00	0.00	0.00	
3,300.0	12.00	286.65	3,265.8	101.4	-338.9	-81.2	0.00	0.00	0.00	
3,400.0	12.00	286.65	3,363.6	107.3	-358.8	-85.9	0.00	0.00	0.00	
3,500.0	12.00	286.65	3,461.4	113.3	-378.8	-90.7	0.00	0.00	0.00	
3,600.0	12.00	286.65	3,559.2	119.2	-398.7	-95.5	0.00	0.00	0.00	
3,700.0	12.00	286.65	3,657.0	125.2	-418.6	-100.2	0.00	0.00	0.00	
3,800.0	12.00	286.65	3,754.8	131.1	-438.5	-105.0	0.00	0.00	0.00	
3,900.0	12.00	286.65	3,852.6	137.1	-458.4	-109.8	0.00	0.00	0.00	
4,000.0	12.00	286.65	3,950.5	143.1	-478.4	-114.5	0.00	0.00	0.00	
4,100.0	12.00	286.65	4,048.3	149.0	-498.3	-119.3	0.00	0.00	0.00	
4,200.0	12.00	286.65	4,146.1	155.0	-518.2	-124.1	0.00	0.00	0.00	
4,300.0	12.00	286.65	4,243.9	160.9	-538.1	-128.8	0.00	0.00	0.00	
4,400.0	12.00	286.65	4,341.7	166.9	-558.0	-133.6	0.00	0.00	0.00	
4,500.0	12.00	286.65	4,439.5	172.8	-578.0	-138.4	0.00	0.00	0.00	
4,600.0	12.00	286.65	4,537.3	178.8	-597.9	-143.2	0.00	0.00	0.00	
4,700.0	12.00	286.65	4,635.2	184.8	-617.8	-147.9	0.00	0.00	0.00	
4,800.0	12.00	286.65	4,733.0	190.7	-637.7	-152.7	0.00	0.00	0.00	
4,900.0	12.00	286.65	4,830.8	196.7	-657.6	-157.5	0.00	0.00	0.00	
5,000.0	12.00	286.65	4,928.6	202.6	-677.6	-162.2	0.00	0.00	0.00	
5,100.0	12.00	286.65	5,026.4	208.6	-697.5	-167.0	0.00	0.00	0.00	
5,200.0	12.00	286.65	5,124.2	214.5	-717.4	-171.8	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
5,300.0	12.00	286.65	5,222.1	220.5	-737.3	-176.5	0.00	0.00	0.00	
5,400.0	12.00	286.65	5,319.9	226.5	-757.2	-181.3	0.00	0.00	0.00	
5,500.0	12.00	286.65	5,417.7	232.4	-777.2	-186.1	0.00	0.00	0.00	
5,600.0	12.00	286.65	5,515.5	238.4	-797.1	-190.9	0.00	0.00	0.00	
5,700.0	12.00	286.65	5,613.3	244.3	-817.0	-195.6	0.00	0.00	0.00	
5,800.0	12.00	286.65	5,711.1	250.3	-836.9	-200.4	0.00	0.00	0.00	
5,900.0	12.00	286.65	5,808.9	256.2	-856.8	-205.2	0.00	0.00	0.00	
6,000.0	12.00	286.65	5,906.8	262.2	-876.7	-209.9	0.00	0.00	0.00	
6,100.0	12.00	286.65	6,004.6	268.2	-896.7	-214.7	0.00	0.00	0.00	
6,200.0	12.00	286.65	6,102.4	274.1	-916.6	-219.5	0.00	0.00	0.00	
6,300.0	12.00	286.65	6,200.2	280.1	-936.5	-224.2	0.00	0.00	0.00	
6,400.0	12.00	286.65	6,298.0	286.0	-956.4	-229.0	0.00	0.00	0.00	
6,500.0	12.00	286.65	6,395.8	292.0	-976.3	-233.8	0.00	0.00	0.00	
6,606.5	12.00	286.65	6,500.0	298.3	-997.6	-238.9	0.00	0.00	0.00	
6,700.0	11.06	286.65	6,591.6	303.7	-1,015.5	-243.1	1.00	-1.00	0.00	
6,800.0	10.06	286.65	6,689.9	308.9	-1,033.0	-247.3	1.00	-1.00	0.00	
6,900.0	9.06	286.65	6,788.5	313.7	-1,049.0	-251.2	1.00	-1.00	0.00	
7,000.0	8.06	286.65	6,887.4	318.0	-1,063.2	-254.6	1.00	-1.00	0.00	
7,100.0	7.06	286.65	6,986.5	321.7	-1,075.8	-257.6	1.00	-1.00	0.00	
7,200.0	6.06	286.65	7,085.9	325.0	-1,086.8	-260.2	1.00	-1.00	0.00	
7,300.0	5.06	286.65	7,185.4	327.8	-1,096.1	-262.4	1.00	-1.00	0.00	
7,400.0	4.06	286.65	7,285.1	330.1	-1,103.7	-264.3	1.00	-1.00	0.00	
7,500.0	3.06	286.65	7,384.9	331.9	-1,109.7	-265.7	1.00	-1.00	0.00	
7,600.0	2.06	286.65	7,484.8	333.1	-1,114.0	-266.7	1.00	-1.00	0.00	
7,700.0	1.06	286.65	7,584.8	333.9	-1,116.6	-267.4	1.00	-1.00	0.00	
7,806.5	0.00	0.00	7,691.2	334.2	-1,117.5	-267.6	1.00	-1.00	0.00	
7,900.0	0.00	0.00	7,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,100.0	0.00	0.00	8,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,100.0	0.00	0.00	9,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,300.0	0.00	0.00	10,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,400.0	0.00	0.00	10,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,500.0	0.00	0.00	10,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)
10,600.0	0.00	0.00	10,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
10,700.0	0.00	0.00	10,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
10,800.0	0.00	0.00	10,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
10,900.0	0.00	0.00	10,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,000.0	0.00	0.00	10,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,100.0	0.00	0.00	10,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,200.0	0.00	0.00	11,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,300.0	0.00	0.00	11,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,400.0	0.00	0.00	11,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,500.0	0.00	0.00	11,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,600.0	0.00	0.00	11,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,700.0	0.00	0.00	11,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,800.0	0.00	0.00	11,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,900.0	0.00	0.00	11,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,942.3	0.00	0.00	11,827.0	334.2	-1,117.5	-267.6	0.00	0.00	0.00
11,950.0	0.77	179.44	11,834.7	334.2	-1,117.5	-267.5	10.00	10.00	0.00
12,000.0	5.77	179.44	11,884.6	331.3	-1,117.5	-264.7	10.00	10.00	0.00
12,050.0	10.77	179.44	11,934.1	324.1	-1,117.4	-257.5	10.00	10.00	0.00
12,100.0	15.77	179.44	11,982.8	312.6	-1,117.3	-246.0	10.00	10.00	0.00
12,150.0	20.77	179.44	12,030.2	297.0	-1,117.1	-230.4	10.00	10.00	0.00
12,200.0	25.77	179.44	12,076.1	277.2	-1,117.0	-210.7	10.00	10.00	0.00
12,250.0	30.77	179.44	12,120.2	253.5	-1,116.7	-187.1	10.00	10.00	0.00
12,300.0	35.77	179.44	12,162.0	226.1	-1,116.5	-159.7	10.00	10.00	0.00
12,350.0	40.77	179.44	12,201.2	195.1	-1,116.1	-128.8	10.00	10.00	0.00
12,400.0	45.77	179.44	12,237.6	160.9	-1,115.8	-94.7	10.00	10.00	0.00
12,450.0	50.77	179.44	12,270.9	123.6	-1,115.4	-57.4	10.00	10.00	0.00
12,500.0	55.77	179.44	12,300.7	83.5	-1,115.1	-17.5	10.00	10.00	0.00
12,550.0	60.77	179.44	12,327.0	41.0	-1,114.6	24.9	10.00	10.00	0.00
12,600.0	65.77	179.44	12,349.5	-3.6	-1,114.2	69.5	10.00	10.00	0.00
12,650.0	70.77	179.44	12,368.0	-50.1	-1,113.7	115.8	10.00	10.00	0.00
12,700.0	75.77	179.44	12,382.4	-97.9	-1,113.3	163.6	10.00	10.00	0.00
12,750.0	80.77	179.44	12,392.5	-146.9	-1,112.8	212.4	10.00	10.00	0.00
12,800.0	85.77	179.44	12,398.4	-196.5	-1,112.3	261.9	10.00	10.00	0.00
12,842.3	90.00	179.44	12,400.0	-238.7	-1,111.9	304.0	10.00	10.00	0.00
12,900.0	90.00	179.44	12,400.0	-296.5	-1,111.3	361.6	0.00	0.00	0.00
13,000.0	90.00	179.44	12,400.0	-396.5	-1,110.3	461.4	0.00	0.00	0.00
13,100.0	90.00	179.44	12,400.0	-496.5	-1,109.4	561.2	0.00	0.00	0.00
13,200.0	90.00	179.44	12,400.0	-596.5	-1,108.4	660.9	0.00	0.00	0.00
13,300.0	90.00	179.44	12,400.0	-696.4	-1,107.4	760.7	0.00	0.00	0.00
13,400.0	90.00	179.44	12,400.0	-796.4	-1,106.4	860.4	0.00	0.00	0.00
13,500.0	90.00	179.44	12,400.0	-896.4	-1,105.4	960.2	0.00	0.00	0.00
13,600.0	90.00	179.44	12,400.0	-996.4	-1,104.4	1,060.0	0.00	0.00	0.00
13,700.0	90.00	179.44	12,400.0	-1,096.4	-1,103.5	1,159.7	0.00	0.00	0.00
13,800.0	90.00	179.44	12,400.0	-1,196.4	-1,102.5	1,259.5	0.00	0.00	0.00
13,900.0	90.00	179.44	12,400.0	-1,296.4	-1,101.5	1,359.3	0.00	0.00	0.00
14,000.0	90.00	179.44	12,400.0	-1,396.4	-1,100.5	1,459.0	0.00	0.00	0.00
14,100.0	90.00	179.44	12,400.0	-1,496.4	-1,099.5	1,558.8	0.00	0.00	0.00
14,200.0	90.00	179.44	12,400.0	-1,596.4	-1,098.6	1,658.5	0.00	0.00	0.00
14,300.0	90.00	179.44	12,400.0	-1,696.4	-1,097.6	1,758.3	0.00	0.00	0.00
14,400.0	90.00	179.44	12,400.0	-1,796.4	-1,096.6	1,858.1	0.00	0.00	0.00
14,500.0	90.00	179.44	12,400.0	-1,896.4	-1,095.6	1,957.8	0.00	0.00	0.00
14,600.0	90.00	179.44	12,400.0	-1,996.4	-1,094.6	2,057.6	0.00	0.00	0.00
14,700.0	90.00	179.44	12,400.0	-2,096.4	-1,093.6	2,157.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
14,800.0	90.00	179.44	12,400.0	-2,196.4	-1,092.7	2,257.1	0.00	0.00	0.00	
14,900.0	90.00	179.44	12,400.0	-2,296.4	-1,091.7	2,356.9	0.00	0.00	0.00	
15,000.0	90.00	179.44	12,400.0	-2,396.4	-1,090.7	2,456.6	0.00	0.00	0.00	
15,100.0	90.00	179.44	12,400.0	-2,496.4	-1,089.7	2,556.4	0.00	0.00	0.00	
15,200.0	90.00	179.44	12,400.0	-2,596.4	-1,088.7	2,656.2	0.00	0.00	0.00	
15,300.0	90.00	179.44	12,400.0	-2,696.4	-1,087.8	2,755.9	0.00	0.00	0.00	
15,400.0	90.00	179.44	12,400.0	-2,796.3	-1,086.8	2,855.7	0.00	0.00	0.00	
15,500.0	90.00	179.44	12,400.0	-2,896.3	-1,085.8	2,955.5	0.00	0.00	0.00	
15,600.0	90.00	179.44	12,400.0	-2,996.3	-1,084.8	3,055.2	0.00	0.00	0.00	
15,700.0	90.00	179.44	12,400.0	-3,096.3	-1,083.8	3,155.0	0.00	0.00	0.00	
15,800.0	90.00	179.44	12,400.0	-3,196.3	-1,082.8	3,254.7	0.00	0.00	0.00	
15,900.0	90.00	179.44	12,400.0	-3,296.3	-1,081.9	3,354.5	0.00	0.00	0.00	
16,000.0	90.00	179.44	12,400.0	-3,396.3	-1,080.9	3,454.3	0.00	0.00	0.00	
16,100.0	90.00	179.44	12,400.0	-3,496.3	-1,079.9	3,554.0	0.00	0.00	0.00	
16,200.0	90.00	179.44	12,400.0	-3,596.3	-1,078.9	3,653.8	0.00	0.00	0.00	
16,300.0	90.00	179.44	12,400.0	-3,696.3	-1,077.9	3,753.5	0.00	0.00	0.00	
16,400.0	90.00	179.44	12,400.0	-3,796.3	-1,077.0	3,853.3	0.00	0.00	0.00	
16,500.0	90.00	179.44	12,400.0	-3,896.3	-1,076.0	3,953.1	0.00	0.00	0.00	
16,600.0	90.00	179.44	12,400.0	-3,996.3	-1,075.0	4,052.8	0.00	0.00	0.00	
16,700.0	90.00	179.44	12,400.0	-4,096.3	-1,074.0	4,152.6	0.00	0.00	0.00	
16,800.0	90.00	179.44	12,400.0	-4,196.3	-1,073.0	4,252.4	0.00	0.00	0.00	
16,900.0	90.00	179.44	12,400.0	-4,296.3	-1,072.0	4,352.1	0.00	0.00	0.00	
17,000.0	90.00	179.44	12,400.0	-4,396.3	-1,071.1	4,451.9	0.00	0.00	0.00	
17,100.0	90.00	179.44	12,400.0	-4,496.3	-1,070.1	4,551.6	0.00	0.00	0.00	
17,200.0	90.00	179.44	12,400.0	-4,596.3	-1,069.1	4,651.4	0.00	0.00	0.00	
17,300.0	90.00	179.44	12,400.0	-4,696.3	-1,068.1	4,751.2	0.00	0.00	0.00	
17,400.0	90.00	179.44	12,400.0	-4,796.2	-1,067.1	4,850.9	0.00	0.00	0.00	
17,500.0	90.00	179.44	12,400.0	-4,896.2	-1,066.1	4,950.7	0.00	0.00	0.00	
17,600.0	90.00	179.44	12,400.0	-4,996.2	-1,065.2	5,050.5	0.00	0.00	0.00	
17,700.0	90.00	179.44	12,400.0	-5,096.2	-1,064.2	5,150.2	0.00	0.00	0.00	
17,800.0	90.00	179.44	12,400.0	-5,196.2	-1,063.2	5,250.0	0.00	0.00	0.00	
17,900.0	90.00	179.44	12,400.0	-5,296.2	-1,062.2	5,349.7	0.00	0.00	0.00	
18,000.0	90.00	179.44	12,400.0	-5,396.2	-1,061.2	5,449.5	0.00	0.00	0.00	
18,100.0	90.00	179.44	12,400.0	-5,496.2	-1,060.3	5,549.3	0.00	0.00	0.00	
18,200.0	90.00	179.44	12,400.0	-5,596.2	-1,059.3	5,649.0	0.00	0.00	0.00	
18,300.0	90.00	179.44	12,400.0	-5,696.2	-1,058.3	5,748.8	0.00	0.00	0.00	
18,400.0	90.00	179.44	12,400.0	-5,796.2	-1,057.3	5,848.6	0.00	0.00	0.00	
18,500.0	90.00	179.44	12,400.0	-5,896.2	-1,056.3	5,948.3	0.00	0.00	0.00	
18,600.0	90.00	179.44	12,400.0	-5,996.2	-1,055.3	6,048.1	0.00	0.00	0.00	
18,700.0	90.00	179.44	12,400.0	-6,096.2	-1,054.4	6,147.8	0.00	0.00	0.00	
18,800.0	90.00	179.44	12,400.0	-6,196.2	-1,053.4	6,247.6	0.00	0.00	0.00	
18,900.0	90.00	179.44	12,400.0	-6,296.2	-1,052.4	6,347.4	0.00	0.00	0.00	
19,000.0	90.00	179.44	12,400.0	-6,396.2	-1,051.4	6,447.1	0.00	0.00	0.00	
19,100.0	90.00	179.44	12,400.0	-6,496.2	-1,050.4	6,546.9	0.00	0.00	0.00	
19,200.0	90.00	179.44	12,400.0	-6,596.2	-1,049.5	6,646.7	0.00	0.00	0.00	
19,300.0	90.00	179.44	12,400.0	-6,696.2	-1,048.5	6,746.4	0.00	0.00	0.00	
19,400.0	90.00	179.44	12,400.0	-6,796.2	-1,047.5	6,846.2	0.00	0.00	0.00	
19,500.0	90.00	179.44	12,400.0	-6,896.1	-1,046.5	6,945.9	0.00	0.00	0.00	
19,600.0	90.00	179.44	12,400.0	-6,996.1	-1,045.5	7,045.7	0.00	0.00	0.00	
19,700.0	90.00	179.44	12,400.0	-7,096.1	-1,044.5	7,145.5	0.00	0.00	0.00	
19,800.0	90.00	179.44	12,400.0	-7,196.1	-1,043.6	7,245.2	0.00	0.00	0.00	
19,900.0	90.00	179.44	12,400.0	-7,296.1	-1,042.6	7,345.0	0.00	0.00	0.00	
20,000.0	90.00	179.44	12,400.0	-7,396.1	-1,041.6	7,444.8	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
20,100.0	90.00	179.44	12,400.0	-7,496.1	-1,040.6	7,544.5	0.00	0.00	0.00	
20,200.0	90.00	179.44	12,400.0	-7,596.1	-1,039.6	7,644.3	0.00	0.00	0.00	
20,300.0	90.00	179.44	12,400.0	-7,696.1	-1,038.7	7,744.0	0.00	0.00	0.00	
20,400.0	90.00	179.44	12,400.0	-7,796.1	-1,037.7	7,843.8	0.00	0.00	0.00	
20,500.0	90.00	179.44	12,400.0	-7,896.1	-1,036.7	7,943.6	0.00	0.00	0.00	
20,600.0	90.00	179.44	12,400.0	-7,996.1	-1,035.7	8,043.3	0.00	0.00	0.00	
20,700.0	90.00	179.44	12,400.0	-8,096.1	-1,034.7	8,143.1	0.00	0.00	0.00	
20,800.0	90.00	179.44	12,400.0	-8,196.1	-1,033.7	8,242.9	0.00	0.00	0.00	
20,900.0	90.00	179.44	12,400.0	-8,296.1	-1,032.8	8,342.6	0.00	0.00	0.00	
21,000.0	90.00	179.44	12,400.0	-8,396.1	-1,031.8	8,442.4	0.00	0.00	0.00	
21,100.0	90.00	179.44	12,400.0	-8,496.1	-1,030.8	8,542.1	0.00	0.00	0.00	
21,200.0	90.00	179.44	12,400.0	-8,596.1	-1,029.8	8,641.9	0.00	0.00	0.00	
21,300.0	90.00	179.44	12,400.0	-8,696.1	-1,028.8	8,741.7	0.00	0.00	0.00	
21,400.0	90.00	179.44	12,400.0	-8,796.1	-1,027.9	8,841.4	0.00	0.00	0.00	
21,500.0	90.00	179.44	12,400.0	-8,896.1	-1,026.9	8,941.2	0.00	0.00	0.00	
21,600.0	90.00	179.44	12,400.0	-8,996.0	-1,025.9	9,041.0	0.00	0.00	0.00	
21,700.0	90.00	179.44	12,400.0	-9,096.0	-1,024.9	9,140.7	0.00	0.00	0.00	
21,800.0	90.00	179.44	12,400.0	-9,196.0	-1,023.9	9,240.5	0.00	0.00	0.00	
21,900.0	90.00	179.44	12,400.0	-9,296.0	-1,022.9	9,340.2	0.00	0.00	0.00	
22,000.0	90.00	179.44	12,400.0	-9,396.0	-1,022.0	9,440.0	0.00	0.00	0.00	
22,100.0	90.00	179.44	12,400.0	-9,496.0	-1,021.0	9,539.8	0.00	0.00	0.00	
22,200.0	90.00	179.44	12,400.0	-9,596.0	-1,020.0	9,639.5	0.00	0.00	0.00	
22,300.0	90.00	179.44	12,400.0	-9,696.0	-1,019.0	9,739.3	0.00	0.00	0.00	
22,400.0	90.00	179.44	12,400.0	-9,796.0	-1,018.0	9,839.1	0.00	0.00	0.00	
22,500.0	90.00	179.44	12,400.0	-9,896.0	-1,017.0	9,938.8	0.00	0.00	0.00	
22,600.0	90.00	179.44	12,400.0	-9,996.0	-1,016.1	10,038.6	0.00	0.00	0.00	
22,700.0	90.00	179.44	12,400.0	-10,096.0	-1,015.1	10,138.3	0.00	0.00	0.00	
22,800.0	90.00	179.44	12,400.0	-10,196.0	-1,014.1	10,238.1	0.00	0.00	0.00	
22,900.0	90.00	179.44	12,400.0	-10,296.0	-1,013.1	10,337.9	0.00	0.00	0.00	
23,000.0	90.00	179.44	12,400.0	-10,396.0	-1,012.1	10,437.6	0.00	0.00	0.00	
23,100.0	90.00	179.44	12,400.0	-10,496.0	-1,011.2	10,537.4	0.00	0.00	0.00	
23,200.0	90.00	179.44	12,400.0	-10,596.0	-1,010.2	10,637.2	0.00	0.00	0.00	
23,300.0	90.00	179.44	12,400.0	-10,696.0	-1,009.2	10,736.9	0.00	0.00	0.00	
23,400.0	90.00	179.44	12,400.0	-10,796.0	-1,008.2	10,836.7	0.00	0.00	0.00	
23,500.0	90.00	179.44	12,400.0	-10,896.0	-1,007.2	10,936.4	0.00	0.00	0.00	
23,600.0	90.00	179.44	12,400.0	-10,996.0	-1,006.2	11,036.2	0.00	0.00	0.00	
23,700.0	90.00	179.44	12,400.0	-11,095.9	-1,005.3	11,136.0	0.00	0.00	0.00	
23,800.0	90.00	179.44	12,400.0	-11,195.9	-1,004.3	11,235.7	0.00	0.00	0.00	
23,900.0	90.00	179.44	12,400.0	-11,295.9	-1,003.3	11,335.5	0.00	0.00	0.00	
24,000.0	90.00	179.44	12,400.0	-11,395.9	-1,002.3	11,435.2	0.00	0.00	0.00	
24,100.0	90.00	179.44	12,400.0	-11,495.9	-1,001.3	11,535.0	0.00	0.00	0.00	
24,200.0	90.00	179.44	12,400.0	-11,595.9	-1,000.4	11,634.8	0.00	0.00	0.00	
24,300.0	90.00	179.44	12,400.0	-11,695.9	-999.4	11,734.5	0.00	0.00	0.00	
24,400.0	90.00	179.44	12,400.0	-11,795.9	-998.4	11,834.3	0.00	0.00	0.00	
24,500.0	90.00	179.44	12,400.0	-11,895.9	-997.4	11,934.1	0.00	0.00	0.00	
24,600.0	90.00	179.44	12,400.0	-11,995.9	-996.4	12,033.8	0.00	0.00	0.00	
24,700.0	90.00	179.44	12,400.0	-12,095.9	-995.4	12,133.6	0.00	0.00	0.00	
24,800.0	90.00	179.44	12,400.0	-12,195.9	-994.5	12,233.3	0.00	0.00	0.00	
24,900.0	90.00	179.44	12,400.0	-12,295.9	-993.5	12,333.1	0.00	0.00	0.00	
25,000.0	90.00	179.44	12,400.0	-12,395.9	-992.5	12,432.9	0.00	0.00	0.00	
25,100.0	90.00	179.44	12,400.0	-12,495.9	-991.5	12,532.6	0.00	0.00	0.00	
25,200.0	90.00	179.44	12,400.0	-12,595.9	-990.5	12,632.4	0.00	0.00	0.00	
25,300.0	90.00	179.44	12,400.0	-12,695.9	-989.6	12,732.2	0.00	0.00	0.00	

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
25,400.0	90.00	179.44	12,400.0	-12,795.9	-988.6	12,831.9	0.00	0.00	0.00	
25,500.0	90.00	179.44	12,400.0	-12,895.9	-987.6	12,931.7	0.00	0.00	0.00	
25,600.0	90.00	179.44	12,400.0	-12,995.9	-986.6	13,031.4	0.00	0.00	0.00	
25,700.0	90.00	179.44	12,400.0	-13,095.8	-985.6	13,131.2	0.00	0.00	0.00	
25,800.0	90.00	179.44	12,400.0	-13,195.8	-984.6	13,231.0	0.00	0.00	0.00	
25,900.0	90.00	179.44	12,400.0	-13,295.8	-983.7	13,330.7	0.00	0.00	0.00	
26,000.0	90.00	179.44	12,400.0	-13,395.8	-982.7	13,430.5	0.00	0.00	0.00	
26,100.0	90.00	179.44	12,400.0	-13,495.8	-981.7	13,530.3	0.00	0.00	0.00	
26,200.0	90.00	179.44	12,400.0	-13,595.8	-980.7	13,630.0	0.00	0.00	0.00	
26,300.0	90.00	179.44	12,400.0	-13,695.8	-979.7	13,729.8	0.00	0.00	0.00	
26,400.0	90.00	179.44	12,400.0	-13,795.8	-978.8	13,829.5	0.00	0.00	0.00	
26,500.0	90.00	179.44	12,400.0	-13,895.8	-977.8	13,929.3	0.00	0.00	0.00	
26,600.0	90.00	179.44	12,400.0	-13,995.8	-976.8	14,029.1	0.00	0.00	0.00	
26,700.0	90.00	179.44	12,400.0	-14,095.8	-975.8	14,128.8	0.00	0.00	0.00	
26,800.0	90.00	179.44	12,400.0	-14,195.8	-974.8	14,228.6	0.00	0.00	0.00	
26,900.0	90.00	179.44	12,400.0	-14,295.8	-973.8	14,328.4	0.00	0.00	0.00	
27,000.0	90.00	179.44	12,400.0	-14,395.8	-972.9	14,428.1	0.00	0.00	0.00	
27,100.0	90.00	179.44	12,400.0	-14,495.8	-971.9	14,527.9	0.00	0.00	0.00	
27,200.0	90.00	179.44	12,400.0	-14,595.8	-970.9	14,627.6	0.00	0.00	0.00	
27,300.0	90.00	179.44	12,400.0	-14,695.8	-969.9	14,727.4	0.00	0.00	0.00	
27,400.0	90.00	179.44	12,400.0	-14,795.8	-968.9	14,827.2	0.00	0.00	0.00	
27,500.0	90.00	179.44	12,400.0	-14,895.8	-967.9	14,926.9	0.00	0.00	0.00	
27,600.0	90.00	179.44	12,400.0	-14,995.8	-967.0	15,026.7	0.00	0.00	0.00	
27,700.0	90.00	179.44	12,400.0	-15,095.8	-966.0	15,126.5	0.00	0.00	0.00	
27,800.0	90.00	179.44	12,400.0	-15,195.7	-965.0	15,226.2	0.00	0.00	0.00	
27,900.0	90.00	179.44	12,400.0	-15,295.7	-964.0	15,326.0	0.00	0.00	0.00	
28,000.0	90.00	179.44	12,400.0	-15,395.7	-963.0	15,425.7	0.00	0.00	0.00	
28,100.0	90.00	179.44	12,400.0	-15,495.7	-962.1	15,525.5	0.00	0.00	0.00	
28,200.0	90.00	179.44	12,400.0	-15,595.7	-961.1	15,625.3	0.00	0.00	0.00	
28,300.0	90.00	179.44	12,400.0	-15,695.7	-960.1	15,725.0	0.00	0.00	0.00	
28,400.0	90.00	179.44	12,400.0	-15,795.7	-959.1	15,824.8	0.00	0.00	0.00	
28,500.0	90.00	179.44	12,400.0	-15,895.7	-958.1	15,924.6	0.00	0.00	0.00	
28,600.0	90.00	179.44	12,400.0	-15,995.7	-957.1	16,024.3	0.00	0.00	0.00	
28,700.0	90.00	179.44	12,400.0	-16,095.7	-956.2	16,124.1	0.00	0.00	0.00	
28,746.7	90.00	179.44	12,400.0	-16,142.4	-955.7	16,170.7	0.00	0.00	0.00	

Design Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting			
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude	
LTP (HENNIN FED COM - plan hits target center - Circle (radius 50.0)	90.00	179.45	12,400.0	-16,092.4	-956.2	388,799.13	800,883.60	32° 3' 54.727 N	103° 21' 43.405 W	
FTP (HENNIN FED COM - plan misses target center by 0.2usft at 13050.6usft MD (12400.0 TVD, -447.1 N, -1109.8 E) - Circle (radius 50.0)	0.00	0.00	12,400.0	-447.1	-1,110.0	404,444.44	800,729.82	32° 6' 29.554 N	103° 21' 43.555 W	
PBHL (HENNIN FED CC - plan hits target center - Rectangle (sides W100.0 H15,696.1 D20.0)	0.00	359.44	12,400.0	-16,142.4	-955.7	388,749.14	800,884.12	32° 3' 54.233 N	103° 21' 43.404 W	

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H		
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 #601H	Survey Calculation Method:	Minimum Curvature		
Wellbore:	OWB				
Design:	PWP0				

Casing Points					
	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
	28,746.7	12,400.0	5-1/2" Production Casing	5-1/2	6-3/4

DELAWARE BASIN EAST

BULLDOG PROSPECT (NM-E)

HENNIN PROJECT

***HENNIN FED COM #601H - Slot HENNIN FED COM #601H**

OWB

Plan: PWP0

Standard Planning Report

29 June, 2023

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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 #601H - Slot HENNIN FED COM #601H					
Well Position	+N/-S	0.0 usft	Northing:	404,891.53 usft	Latitude:	32° 6' 33.879 N
	+E/-W	0.0 usft	Easting:	801,839.82 usft	Longitude:	103° 21' 30.604 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	4/13/2023	6.18	59.66	47,394.91053231

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	183.39

Plan Survey Tool Program	Date	6/29/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	28,746.7 PWP0 (OWB)	r.5 MWD+IFR1+MS		
			OWSG MWD + IFR1 + Multi-Sl		

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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	
2,000.0	12.00	286.65	1,994.2	23.9	-80.0	1.50	1.50	0.00	286.65	
6,606.5	12.00	286.65	6,500.0	298.3	-997.6	0.00	0.00	0.00	0.00	
7,806.5	0.00	0.00	7,691.2	334.2	-1,117.5	1.00	-1.00	0.00	180.00	
11,942.3	0.00	0.00	11,827.0	334.2	-1,117.5	0.00	0.00	0.00	0.00	
12,842.3	90.00	179.44	12,400.0	-238.7	-1,111.9	10.00	10.00	19.94	179.44	
28,746.7	90.00	179.44	12,400.0	-16,142.4	-955.7	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 #601H - Slot HENNIN FED COM #601H
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 #601H	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	286.65	1,300.0	0.4	-1.3	-0.3	1.50	1.50	0.00	
1,400.0	3.00	286.65	1,399.9	1.5	-5.0	-1.2	1.50	1.50	0.00	
1,500.0	4.50	286.65	1,499.7	3.4	-11.3	-2.7	1.50	1.50	0.00	
1,600.0	6.00	286.65	1,599.3	6.0	-20.0	-4.8	1.50	1.50	0.00	
1,700.0	7.50	286.65	1,698.6	9.4	-31.3	-7.5	1.50	1.50	0.00	
1,800.0	9.00	286.65	1,797.5	13.5	-45.1	-10.8	1.50	1.50	0.00	
1,900.0	10.50	286.65	1,896.1	18.3	-61.3	-14.7	1.50	1.50	0.00	
2,000.0	12.00	286.65	1,994.2	23.9	-80.0	-19.1	1.50	1.50	0.00	
2,100.0	12.00	286.65	2,092.0	29.9	-99.9	-23.9	0.00	0.00	0.00	
2,200.0	12.00	286.65	2,189.8	35.8	-119.8	-28.7	0.00	0.00	0.00	
2,300.0	12.00	286.65	2,287.6	41.8	-139.7	-33.5	0.00	0.00	0.00	
2,400.0	12.00	286.65	2,385.4	47.7	-159.6	-38.2	0.00	0.00	0.00	
2,500.0	12.00	286.65	2,483.2	53.7	-179.6	-43.0	0.00	0.00	0.00	
2,600.0	12.00	286.65	2,581.1	59.7	-199.5	-47.8	0.00	0.00	0.00	
2,700.0	12.00	286.65	2,678.9	65.6	-219.4	-52.5	0.00	0.00	0.00	
2,800.0	12.00	286.65	2,776.7	71.6	-239.3	-57.3	0.00	0.00	0.00	
2,900.0	12.00	286.65	2,874.5	77.5	-259.2	-62.1	0.00	0.00	0.00	
3,000.0	12.00	286.65	2,972.3	83.5	-279.2	-66.8	0.00	0.00	0.00	
3,100.0	12.00	286.65	3,070.1	89.4	-299.1	-71.6	0.00	0.00	0.00	
3,200.0	12.00	286.65	3,167.9	95.4	-319.0	-76.4	0.00	0.00	0.00	
3,300.0	12.00	286.65	3,265.8	101.4	-338.9	-81.2	0.00	0.00	0.00	
3,400.0	12.00	286.65	3,363.6	107.3	-358.8	-85.9	0.00	0.00	0.00	
3,500.0	12.00	286.65	3,461.4	113.3	-378.8	-90.7	0.00	0.00	0.00	
3,600.0	12.00	286.65	3,559.2	119.2	-398.7	-95.5	0.00	0.00	0.00	
3,700.0	12.00	286.65	3,657.0	125.2	-418.6	-100.2	0.00	0.00	0.00	
3,800.0	12.00	286.65	3,754.8	131.1	-438.5	-105.0	0.00	0.00	0.00	
3,900.0	12.00	286.65	3,852.6	137.1	-458.4	-109.8	0.00	0.00	0.00	
4,000.0	12.00	286.65	3,950.5	143.1	-478.4	-114.5	0.00	0.00	0.00	
4,100.0	12.00	286.65	4,048.3	149.0	-498.3	-119.3	0.00	0.00	0.00	
4,200.0	12.00	286.65	4,146.1	155.0	-518.2	-124.1	0.00	0.00	0.00	
4,300.0	12.00	286.65	4,243.9	160.9	-538.1	-128.8	0.00	0.00	0.00	
4,400.0	12.00	286.65	4,341.7	166.9	-558.0	-133.6	0.00	0.00	0.00	
4,500.0	12.00	286.65	4,439.5	172.8	-578.0	-138.4	0.00	0.00	0.00	
4,600.0	12.00	286.65	4,537.3	178.8	-597.9	-143.2	0.00	0.00	0.00	
4,700.0	12.00	286.65	4,635.2	184.8	-617.8	-147.9	0.00	0.00	0.00	
4,800.0	12.00	286.65	4,733.0	190.7	-637.7	-152.7	0.00	0.00	0.00	
4,900.0	12.00	286.65	4,830.8	196.7	-657.6	-157.5	0.00	0.00	0.00	
5,000.0	12.00	286.65	4,928.6	202.6	-677.6	-162.2	0.00	0.00	0.00	
5,100.0	12.00	286.65	5,026.4	208.6	-697.5	-167.0	0.00	0.00	0.00	
5,200.0	12.00	286.65	5,124.2	214.5	-717.4	-171.8	0.00	0.00	0.00	

ConocoPhillips

Planning Report

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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 #601H	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)	
5,300.0	12.00	286.65	5,222.1	220.5	-737.3	-176.5	0.00	0.00	0.00	
5,400.0	12.00	286.65	5,319.9	226.5	-757.2	-181.3	0.00	0.00	0.00	
5,500.0	12.00	286.65	5,417.7	232.4	-777.2	-186.1	0.00	0.00	0.00	
5,600.0	12.00	286.65	5,515.5	238.4	-797.1	-190.9	0.00	0.00	0.00	
5,700.0	12.00	286.65	5,613.3	244.3	-817.0	-195.6	0.00	0.00	0.00	
5,800.0	12.00	286.65	5,711.1	250.3	-836.9	-200.4	0.00	0.00	0.00	
5,900.0	12.00	286.65	5,808.9	256.2	-856.8	-205.2	0.00	0.00	0.00	
6,000.0	12.00	286.65	5,906.8	262.2	-876.7	-209.9	0.00	0.00	0.00	
6,100.0	12.00	286.65	6,004.6	268.2	-896.7	-214.7	0.00	0.00	0.00	
6,200.0	12.00	286.65	6,102.4	274.1	-916.6	-219.5	0.00	0.00	0.00	
6,300.0	12.00	286.65	6,200.2	280.1	-936.5	-224.2	0.00	0.00	0.00	
6,400.0	12.00	286.65	6,298.0	286.0	-956.4	-229.0	0.00	0.00	0.00	
6,500.0	12.00	286.65	6,395.8	292.0	-976.3	-233.8	0.00	0.00	0.00	
6,606.5	12.00	286.65	6,500.0	298.3	-997.6	-238.9	0.00	0.00	0.00	
6,700.0	11.06	286.65	6,591.6	303.7	-1,015.5	-243.1	1.00	-1.00	0.00	
6,800.0	10.06	286.65	6,689.9	308.9	-1,033.0	-247.3	1.00	-1.00	0.00	
6,900.0	9.06	286.65	6,788.5	313.7	-1,049.0	-251.2	1.00	-1.00	0.00	
7,000.0	8.06	286.65	6,887.4	318.0	-1,063.2	-254.6	1.00	-1.00	0.00	
7,100.0	7.06	286.65	6,986.5	321.7	-1,075.8	-257.6	1.00	-1.00	0.00	
7,200.0	6.06	286.65	7,085.9	325.0	-1,086.8	-260.2	1.00	-1.00	0.00	
7,300.0	5.06	286.65	7,185.4	327.8	-1,096.1	-262.4	1.00	-1.00	0.00	
7,400.0	4.06	286.65	7,285.1	330.1	-1,103.7	-264.3	1.00	-1.00	0.00	
7,500.0	3.06	286.65	7,384.9	331.9	-1,109.7	-265.7	1.00	-1.00	0.00	
7,600.0	2.06	286.65	7,484.8	333.1	-1,114.0	-266.7	1.00	-1.00	0.00	
7,700.0	1.06	286.65	7,584.8	333.9	-1,116.6	-267.4	1.00	-1.00	0.00	
7,806.5	0.00	0.00	7,691.2	334.2	-1,117.5	-267.6	1.00	-1.00	0.00	
7,900.0	0.00	0.00	7,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,100.0	0.00	0.00	8,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,100.0	0.00	0.00	9,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,300.0	0.00	0.00	10,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,400.0	0.00	0.00	10,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,500.0	0.00	0.00	10,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	

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Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
10,600.0	0.00	0.00	10,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,700.0	0.00	0.00	10,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,800.0	0.00	0.00	10,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
10,900.0	0.00	0.00	10,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,000.0	0.00	0.00	10,884.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,100.0	0.00	0.00	10,984.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,200.0	0.00	0.00	11,084.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,300.0	0.00	0.00	11,184.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,400.0	0.00	0.00	11,284.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,500.0	0.00	0.00	11,384.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,600.0	0.00	0.00	11,484.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,700.0	0.00	0.00	11,584.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,800.0	0.00	0.00	11,684.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,900.0	0.00	0.00	11,784.7	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,942.3	0.00	0.00	11,827.0	334.2	-1,117.5	-267.6	0.00	0.00	0.00	
11,950.0	0.77	179.44	11,834.7	334.2	-1,117.5	-267.5	10.00	10.00	0.00	
12,000.0	5.77	179.44	11,884.6	331.3	-1,117.5	-264.7	10.00	10.00	0.00	
12,050.0	10.77	179.44	11,934.1	324.1	-1,117.4	-257.5	10.00	10.00	0.00	
12,100.0	15.77	179.44	11,982.8	312.6	-1,117.3	-246.0	10.00	10.00	0.00	
12,150.0	20.77	179.44	12,030.2	297.0	-1,117.1	-230.4	10.00	10.00	0.00	
12,200.0	25.77	179.44	12,076.1	277.2	-1,117.0	-210.7	10.00	10.00	0.00	
12,250.0	30.77	179.44	12,120.2	253.5	-1,116.7	-187.1	10.00	10.00	0.00	
12,300.0	35.77	179.44	12,162.0	226.1	-1,116.5	-159.7	10.00	10.00	0.00	
12,350.0	40.77	179.44	12,201.2	195.1	-1,116.1	-128.8	10.00	10.00	0.00	
12,400.0	45.77	179.44	12,237.6	160.9	-1,115.8	-94.7	10.00	10.00	0.00	
12,450.0	50.77	179.44	12,270.9	123.6	-1,115.4	-57.4	10.00	10.00	0.00	
12,500.0	55.77	179.44	12,300.7	83.5	-1,115.1	-17.5	10.00	10.00	0.00	
12,550.0	60.77	179.44	12,327.0	41.0	-1,114.6	24.9	10.00	10.00	0.00	
12,600.0	65.77	179.44	12,349.5	-3.6	-1,114.2	69.5	10.00	10.00	0.00	
12,650.0	70.77	179.44	12,368.0	-50.1	-1,113.7	115.8	10.00	10.00	0.00	
12,700.0	75.77	179.44	12,382.4	-97.9	-1,113.3	163.6	10.00	10.00	0.00	
12,750.0	80.77	179.44	12,392.5	-146.9	-1,112.8	212.4	10.00	10.00	0.00	
12,800.0	85.77	179.44	12,398.4	-196.5	-1,112.3	261.9	10.00	10.00	0.00	
12,842.3	90.00	179.44	12,400.0	-238.7	-1,111.9	304.0	10.00	10.00	0.00	
12,900.0	90.00	179.44	12,400.0	-296.5	-1,111.3	361.6	0.00	0.00	0.00	
13,000.0	90.00	179.44	12,400.0	-396.5	-1,110.3	461.4	0.00	0.00	0.00	
13,100.0	90.00	179.44	12,400.0	-496.5	-1,109.4	561.2	0.00	0.00	0.00	
13,200.0	90.00	179.44	12,400.0	-596.5	-1,108.4	660.9	0.00	0.00	0.00	
13,300.0	90.00	179.44	12,400.0	-696.4	-1,107.4	760.7	0.00	0.00	0.00	
13,400.0	90.00	179.44	12,400.0	-796.4	-1,106.4	860.4	0.00	0.00	0.00	
13,500.0	90.00	179.44	12,400.0	-896.4	-1,105.4	960.2	0.00	0.00	0.00	
13,600.0	90.00	179.44	12,400.0	-996.4	-1,104.4	1,060.0	0.00	0.00	0.00	
13,700.0	90.00	179.44	12,400.0	-1,096.4	-1,103.5	1,159.7	0.00	0.00	0.00	
13,800.0	90.00	179.44	12,400.0	-1,196.4	-1,102.5	1,259.5	0.00	0.00	0.00	
13,900.0	90.00	179.44	12,400.0	-1,296.4	-1,101.5	1,359.3	0.00	0.00	0.00	
14,000.0	90.00	179.44	12,400.0	-1,396.4	-1,100.5	1,459.0	0.00	0.00	0.00	
14,100.0	90.00	179.44	12,400.0	-1,496.4	-1,099.5	1,558.8	0.00	0.00	0.00	
14,200.0	90.00	179.44	12,400.0	-1,596.4	-1,098.6	1,658.5	0.00	0.00	0.00	
14,300.0	90.00	179.44	12,400.0	-1,696.4	-1,097.6	1,758.3	0.00	0.00	0.00	
14,400.0	90.00	179.44	12,400.0	-1,796.4	-1,096.6	1,858.1	0.00	0.00	0.00	
14,500.0	90.00	179.44	12,400.0	-1,896.4	-1,095.6	1,957.8	0.00	0.00	0.00	
14,600.0	90.00	179.44	12,400.0	-1,996.4	-1,094.6	2,057.6	0.00	0.00	0.00	
14,700.0	90.00	179.44	12,400.0	-2,096.4	-1,093.6	2,157.4	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
14,800.0	90.00	179.44	12,400.0	-2,196.4	-1,092.7	2,257.1	0.00	0.00	0.00	
14,900.0	90.00	179.44	12,400.0	-2,296.4	-1,091.7	2,356.9	0.00	0.00	0.00	
15,000.0	90.00	179.44	12,400.0	-2,396.4	-1,090.7	2,456.6	0.00	0.00	0.00	
15,100.0	90.00	179.44	12,400.0	-2,496.4	-1,089.7	2,556.4	0.00	0.00	0.00	
15,200.0	90.00	179.44	12,400.0	-2,596.4	-1,088.7	2,656.2	0.00	0.00	0.00	
15,300.0	90.00	179.44	12,400.0	-2,696.4	-1,087.8	2,755.9	0.00	0.00	0.00	
15,400.0	90.00	179.44	12,400.0	-2,796.3	-1,086.8	2,855.7	0.00	0.00	0.00	
15,500.0	90.00	179.44	12,400.0	-2,896.3	-1,085.8	2,955.5	0.00	0.00	0.00	
15,600.0	90.00	179.44	12,400.0	-2,996.3	-1,084.8	3,055.2	0.00	0.00	0.00	
15,700.0	90.00	179.44	12,400.0	-3,096.3	-1,083.8	3,155.0	0.00	0.00	0.00	
15,800.0	90.00	179.44	12,400.0	-3,196.3	-1,082.8	3,254.7	0.00	0.00	0.00	
15,900.0	90.00	179.44	12,400.0	-3,296.3	-1,081.9	3,354.5	0.00	0.00	0.00	
16,000.0	90.00	179.44	12,400.0	-3,396.3	-1,080.9	3,454.3	0.00	0.00	0.00	
16,100.0	90.00	179.44	12,400.0	-3,496.3	-1,079.9	3,554.0	0.00	0.00	0.00	
16,200.0	90.00	179.44	12,400.0	-3,596.3	-1,078.9	3,653.8	0.00	0.00	0.00	
16,300.0	90.00	179.44	12,400.0	-3,696.3	-1,077.9	3,753.5	0.00	0.00	0.00	
16,400.0	90.00	179.44	12,400.0	-3,796.3	-1,077.0	3,853.3	0.00	0.00	0.00	
16,500.0	90.00	179.44	12,400.0	-3,896.3	-1,076.0	3,953.1	0.00	0.00	0.00	
16,600.0	90.00	179.44	12,400.0	-3,996.3	-1,075.0	4,052.8	0.00	0.00	0.00	
16,700.0	90.00	179.44	12,400.0	-4,096.3	-1,074.0	4,152.6	0.00	0.00	0.00	
16,800.0	90.00	179.44	12,400.0	-4,196.3	-1,073.0	4,252.4	0.00	0.00	0.00	
16,900.0	90.00	179.44	12,400.0	-4,296.3	-1,072.0	4,352.1	0.00	0.00	0.00	
17,000.0	90.00	179.44	12,400.0	-4,396.3	-1,071.1	4,451.9	0.00	0.00	0.00	
17,100.0	90.00	179.44	12,400.0	-4,496.3	-1,070.1	4,551.6	0.00	0.00	0.00	
17,200.0	90.00	179.44	12,400.0	-4,596.3	-1,069.1	4,651.4	0.00	0.00	0.00	
17,300.0	90.00	179.44	12,400.0	-4,696.3	-1,068.1	4,751.2	0.00	0.00	0.00	
17,400.0	90.00	179.44	12,400.0	-4,796.2	-1,067.1	4,850.9	0.00	0.00	0.00	
17,500.0	90.00	179.44	12,400.0	-4,896.2	-1,066.1	4,950.7	0.00	0.00	0.00	
17,600.0	90.00	179.44	12,400.0	-4,996.2	-1,065.2	5,050.5	0.00	0.00	0.00	
17,700.0	90.00	179.44	12,400.0	-5,096.2	-1,064.2	5,150.2	0.00	0.00	0.00	
17,800.0	90.00	179.44	12,400.0	-5,196.2	-1,063.2	5,250.0	0.00	0.00	0.00	
17,900.0	90.00	179.44	12,400.0	-5,296.2	-1,062.2	5,349.7	0.00	0.00	0.00	
18,000.0	90.00	179.44	12,400.0	-5,396.2	-1,061.2	5,449.5	0.00	0.00	0.00	
18,100.0	90.00	179.44	12,400.0	-5,496.2	-1,060.3	5,549.3	0.00	0.00	0.00	
18,200.0	90.00	179.44	12,400.0	-5,596.2	-1,059.3	5,649.0	0.00	0.00	0.00	
18,300.0	90.00	179.44	12,400.0	-5,696.2	-1,058.3	5,748.8	0.00	0.00	0.00	
18,400.0	90.00	179.44	12,400.0	-5,796.2	-1,057.3	5,848.6	0.00	0.00	0.00	
18,500.0	90.00	179.44	12,400.0	-5,896.2	-1,056.3	5,948.3	0.00	0.00	0.00	
18,600.0	90.00	179.44	12,400.0	-5,996.2	-1,055.3	6,048.1	0.00	0.00	0.00	
18,700.0	90.00	179.44	12,400.0	-6,096.2	-1,054.4	6,147.8	0.00	0.00	0.00	
18,800.0	90.00	179.44	12,400.0	-6,196.2	-1,053.4	6,247.6	0.00	0.00	0.00	
18,900.0	90.00	179.44	12,400.0	-6,296.2	-1,052.4	6,347.4	0.00	0.00	0.00	
19,000.0	90.00	179.44	12,400.0	-6,396.2	-1,051.4	6,447.1	0.00	0.00	0.00	
19,100.0	90.00	179.44	12,400.0	-6,496.2	-1,050.4	6,546.9	0.00	0.00	0.00	
19,200.0	90.00	179.44	12,400.0	-6,596.2	-1,049.5	6,646.7	0.00	0.00	0.00	
19,300.0	90.00	179.44	12,400.0	-6,696.2	-1,048.5	6,746.4	0.00	0.00	0.00	
19,400.0	90.00	179.44	12,400.0	-6,796.2	-1,047.5	6,846.2	0.00	0.00	0.00	
19,500.0	90.00	179.44	12,400.0	-6,896.1	-1,046.5	6,945.9	0.00	0.00	0.00	
19,600.0	90.00	179.44	12,400.0	-6,996.1	-1,045.5	7,045.7	0.00	0.00	0.00	
19,700.0	90.00	179.44	12,400.0	-7,096.1	-1,044.5	7,145.5	0.00	0.00	0.00	
19,800.0	90.00	179.44	12,400.0	-7,196.1	-1,043.6	7,245.2	0.00	0.00	0.00	
19,900.0	90.00	179.44	12,400.0	-7,296.1	-1,042.6	7,345.0	0.00	0.00	0.00	
20,000.0	90.00	179.44	12,400.0	-7,396.1	-1,041.6	7,444.8	0.00	0.00	0.00	

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
20,100.0	90.00	179.44	12,400.0	-7,496.1	-1,040.6	7,544.5	0.00	0.00	0.00	
20,200.0	90.00	179.44	12,400.0	-7,596.1	-1,039.6	7,644.3	0.00	0.00	0.00	
20,300.0	90.00	179.44	12,400.0	-7,696.1	-1,038.7	7,744.0	0.00	0.00	0.00	
20,400.0	90.00	179.44	12,400.0	-7,796.1	-1,037.7	7,843.8	0.00	0.00	0.00	
20,500.0	90.00	179.44	12,400.0	-7,896.1	-1,036.7	7,943.6	0.00	0.00	0.00	
20,600.0	90.00	179.44	12,400.0	-7,996.1	-1,035.7	8,043.3	0.00	0.00	0.00	
20,700.0	90.00	179.44	12,400.0	-8,096.1	-1,034.7	8,143.1	0.00	0.00	0.00	
20,800.0	90.00	179.44	12,400.0	-8,196.1	-1,033.7	8,242.9	0.00	0.00	0.00	
20,900.0	90.00	179.44	12,400.0	-8,296.1	-1,032.8	8,342.6	0.00	0.00	0.00	
21,000.0	90.00	179.44	12,400.0	-8,396.1	-1,031.8	8,442.4	0.00	0.00	0.00	
21,100.0	90.00	179.44	12,400.0	-8,496.1	-1,030.8	8,542.1	0.00	0.00	0.00	
21,200.0	90.00	179.44	12,400.0	-8,596.1	-1,029.8	8,641.9	0.00	0.00	0.00	
21,300.0	90.00	179.44	12,400.0	-8,696.1	-1,028.8	8,741.7	0.00	0.00	0.00	
21,400.0	90.00	179.44	12,400.0	-8,796.1	-1,027.9	8,841.4	0.00	0.00	0.00	
21,500.0	90.00	179.44	12,400.0	-8,896.1	-1,026.9	8,941.2	0.00	0.00	0.00	
21,600.0	90.00	179.44	12,400.0	-8,996.0	-1,025.9	9,041.0	0.00	0.00	0.00	
21,700.0	90.00	179.44	12,400.0	-9,096.0	-1,024.9	9,140.7	0.00	0.00	0.00	
21,800.0	90.00	179.44	12,400.0	-9,196.0	-1,023.9	9,240.5	0.00	0.00	0.00	
21,900.0	90.00	179.44	12,400.0	-9,296.0	-1,022.9	9,340.2	0.00	0.00	0.00	
22,000.0	90.00	179.44	12,400.0	-9,396.0	-1,022.0	9,440.0	0.00	0.00	0.00	
22,100.0	90.00	179.44	12,400.0	-9,496.0	-1,021.0	9,539.8	0.00	0.00	0.00	
22,200.0	90.00	179.44	12,400.0	-9,596.0	-1,020.0	9,639.5	0.00	0.00	0.00	
22,300.0	90.00	179.44	12,400.0	-9,696.0	-1,019.0	9,739.3	0.00	0.00	0.00	
22,400.0	90.00	179.44	12,400.0	-9,796.0	-1,018.0	9,839.1	0.00	0.00	0.00	
22,500.0	90.00	179.44	12,400.0	-9,896.0	-1,017.0	9,938.8	0.00	0.00	0.00	
22,600.0	90.00	179.44	12,400.0	-9,996.0	-1,016.1	10,038.6	0.00	0.00	0.00	
22,700.0	90.00	179.44	12,400.0	-10,096.0	-1,015.1	10,138.3	0.00	0.00	0.00	
22,800.0	90.00	179.44	12,400.0	-10,196.0	-1,014.1	10,238.1	0.00	0.00	0.00	
22,900.0	90.00	179.44	12,400.0	-10,296.0	-1,013.1	10,337.9	0.00	0.00	0.00	
23,000.0	90.00	179.44	12,400.0	-10,396.0	-1,012.1	10,437.6	0.00	0.00	0.00	
23,100.0	90.00	179.44	12,400.0	-10,496.0	-1,011.2	10,537.4	0.00	0.00	0.00	
23,200.0	90.00	179.44	12,400.0	-10,596.0	-1,010.2	10,637.2	0.00	0.00	0.00	
23,300.0	90.00	179.44	12,400.0	-10,696.0	-1,009.2	10,736.9	0.00	0.00	0.00	
23,400.0	90.00	179.44	12,400.0	-10,796.0	-1,008.2	10,836.7	0.00	0.00	0.00	
23,500.0	90.00	179.44	12,400.0	-10,896.0	-1,007.2	10,936.4	0.00	0.00	0.00	
23,600.0	90.00	179.44	12,400.0	-10,996.0	-1,006.2	11,036.2	0.00	0.00	0.00	
23,700.0	90.00	179.44	12,400.0	-11,095.9	-1,005.3	11,136.0	0.00	0.00	0.00	
23,800.0	90.00	179.44	12,400.0	-11,195.9	-1,004.3	11,235.7	0.00	0.00	0.00	
23,900.0	90.00	179.44	12,400.0	-11,295.9	-1,003.3	11,335.5	0.00	0.00	0.00	
24,000.0	90.00	179.44	12,400.0	-11,395.9	-1,002.3	11,435.2	0.00	0.00	0.00	
24,100.0	90.00	179.44	12,400.0	-11,495.9	-1,001.3	11,535.0	0.00	0.00	0.00	
24,200.0	90.00	179.44	12,400.0	-11,595.9	-1,000.4	11,634.8	0.00	0.00	0.00	
24,300.0	90.00	179.44	12,400.0	-11,695.9	-999.4	11,734.5	0.00	0.00	0.00	
24,400.0	90.00	179.44	12,400.0	-11,795.9	-998.4	11,834.3	0.00	0.00	0.00	
24,500.0	90.00	179.44	12,400.0	-11,895.9	-997.4	11,934.1	0.00	0.00	0.00	
24,600.0	90.00	179.44	12,400.0	-11,995.9	-996.4	12,033.8	0.00	0.00	0.00	
24,700.0	90.00	179.44	12,400.0	-12,095.9	-995.4	12,133.6	0.00	0.00	0.00	
24,800.0	90.00	179.44	12,400.0	-12,195.9	-994.5	12,233.3	0.00	0.00	0.00	
24,900.0	90.00	179.44	12,400.0	-12,295.9	-993.5	12,333.1	0.00	0.00	0.00	
25,000.0	90.00	179.44	12,400.0	-12,395.9	-992.5	12,432.9	0.00	0.00	0.00	
25,100.0	90.00	179.44	12,400.0	-12,495.9	-991.5	12,532.6	0.00	0.00	0.00	
25,200.0	90.00	179.44	12,400.0	-12,595.9	-990.5	12,632.4	0.00	0.00	0.00	
25,300.0	90.00	179.44	12,400.0	-12,695.9	-989.6	12,732.2	0.00	0.00	0.00	

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	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)	
25,400.0	90.00	179.44	12,400.0	-12,795.9	-988.6	12,831.9	0.00	0.00	0.00	
25,500.0	90.00	179.44	12,400.0	-12,895.9	-987.6	12,931.7	0.00	0.00	0.00	
25,600.0	90.00	179.44	12,400.0	-12,995.9	-986.6	13,031.4	0.00	0.00	0.00	
25,700.0	90.00	179.44	12,400.0	-13,095.8	-985.6	13,131.2	0.00	0.00	0.00	
25,800.0	90.00	179.44	12,400.0	-13,195.8	-984.6	13,231.0	0.00	0.00	0.00	
25,900.0	90.00	179.44	12,400.0	-13,295.8	-983.7	13,330.7	0.00	0.00	0.00	
26,000.0	90.00	179.44	12,400.0	-13,395.8	-982.7	13,430.5	0.00	0.00	0.00	
26,100.0	90.00	179.44	12,400.0	-13,495.8	-981.7	13,530.3	0.00	0.00	0.00	
26,200.0	90.00	179.44	12,400.0	-13,595.8	-980.7	13,630.0	0.00	0.00	0.00	
26,300.0	90.00	179.44	12,400.0	-13,695.8	-979.7	13,729.8	0.00	0.00	0.00	
26,400.0	90.00	179.44	12,400.0	-13,795.8	-978.8	13,829.5	0.00	0.00	0.00	
26,500.0	90.00	179.44	12,400.0	-13,895.8	-977.8	13,929.3	0.00	0.00	0.00	
26,600.0	90.00	179.44	12,400.0	-13,995.8	-976.8	14,029.1	0.00	0.00	0.00	
26,700.0	90.00	179.44	12,400.0	-14,095.8	-975.8	14,128.8	0.00	0.00	0.00	
26,800.0	90.00	179.44	12,400.0	-14,195.8	-974.8	14,228.6	0.00	0.00	0.00	
26,900.0	90.00	179.44	12,400.0	-14,295.8	-973.8	14,328.4	0.00	0.00	0.00	
27,000.0	90.00	179.44	12,400.0	-14,395.8	-972.9	14,428.1	0.00	0.00	0.00	
27,100.0	90.00	179.44	12,400.0	-14,495.8	-971.9	14,527.9	0.00	0.00	0.00	
27,200.0	90.00	179.44	12,400.0	-14,595.8	-970.9	14,627.6	0.00	0.00	0.00	
27,300.0	90.00	179.44	12,400.0	-14,695.8	-969.9	14,727.4	0.00	0.00	0.00	
27,400.0	90.00	179.44	12,400.0	-14,795.8	-968.9	14,827.2	0.00	0.00	0.00	
27,500.0	90.00	179.44	12,400.0	-14,895.8	-967.9	14,926.9	0.00	0.00	0.00	
27,600.0	90.00	179.44	12,400.0	-14,995.8	-967.0	15,026.7	0.00	0.00	0.00	
27,700.0	90.00	179.44	12,400.0	-15,095.8	-966.0	15,126.5	0.00	0.00	0.00	
27,800.0	90.00	179.44	12,400.0	-15,195.7	-965.0	15,226.2	0.00	0.00	0.00	
27,900.0	90.00	179.44	12,400.0	-15,295.7	-964.0	15,326.0	0.00	0.00	0.00	
28,000.0	90.00	179.44	12,400.0	-15,395.7	-963.0	15,425.7	0.00	0.00	0.00	
28,100.0	90.00	179.44	12,400.0	-15,495.7	-962.1	15,525.5	0.00	0.00	0.00	
28,200.0	90.00	179.44	12,400.0	-15,595.7	-961.1	15,625.3	0.00	0.00	0.00	
28,300.0	90.00	179.44	12,400.0	-15,695.7	-960.1	15,725.0	0.00	0.00	0.00	
28,400.0	90.00	179.44	12,400.0	-15,795.7	-959.1	15,824.8	0.00	0.00	0.00	
28,500.0	90.00	179.44	12,400.0	-15,895.7	-958.1	15,924.6	0.00	0.00	0.00	
28,600.0	90.00	179.44	12,400.0	-15,995.7	-957.1	16,024.3	0.00	0.00	0.00	
28,700.0	90.00	179.44	12,400.0	-16,095.7	-956.2	16,124.1	0.00	0.00	0.00	
28,746.7	90.00	179.44	12,400.0	-16,142.4	-955.7	16,170.7	0.00	0.00	0.00	

Design Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
LTP (HENNIN FED COM - plan hits target center - Circle (radius 50.0)	90.00	179.45	12,400.0	-16,092.4	-956.2	388,799.13	800,883.60		32° 3' 54.727 N	103° 21' 43.405 W
FTP (HENNIN FED COM - plan misses target center by 0.2usft at 13050.6usft MD (12400.0 TVD, -447.1 N, -1109.8 E) - Circle (radius 50.0)	0.00	0.00	12,400.0	-447.1	-1,110.0	404,444.44	800,729.82		32° 6' 29.554 N	103° 21' 43.555 W
PBHL (HENNIN FED CC - plan hits target center - Rectangle (sides W100.0 H15,696.1 D20.0)	0.00	359.44	12,400.0	-16,142.4	-955.7	388,749.14	800,884.12		32° 3' 54.233 N	103° 21' 43.404 W

ConocoPhillips
Planning Report

Database:	Central Planning Prod	Local Co-ordinate Reference:	Well *HENNIN FED COM #601H - Slot HENNIN FED COM #601H
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 #601H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
28,746.7	12,400.0	5-1/2" Production Casing	5-1/2	6-3/4	



Project: BULLDOG PROSPECT (NM-E)
Site: HENNIN PROJECT
Well: *HENNIN FED COM #601H
Wellbore: OWS
Design: PWP0
GL: 3220.0
WELL @ 3220.0usft (Original Well Elev)

WELL DETAILS: *HENNIN FED COM #601H

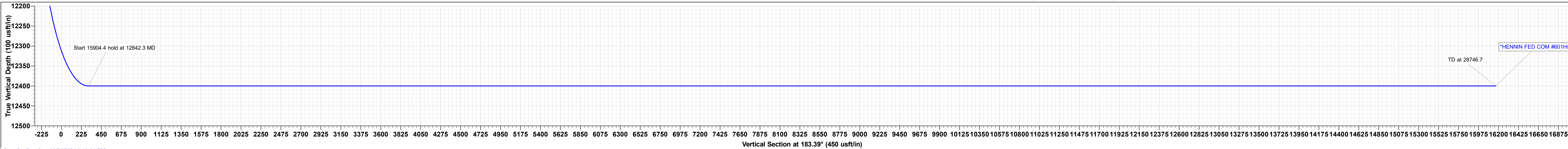
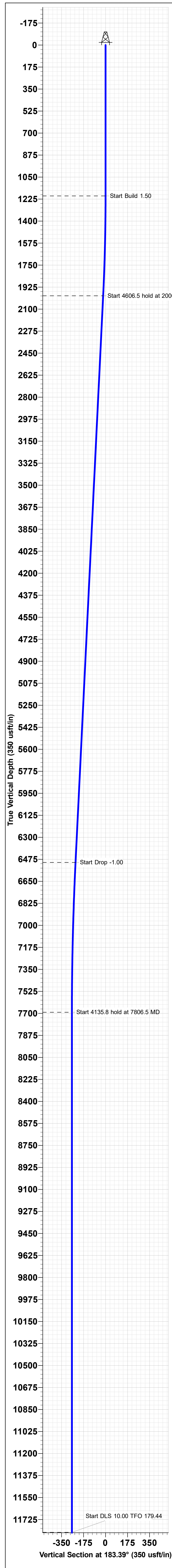
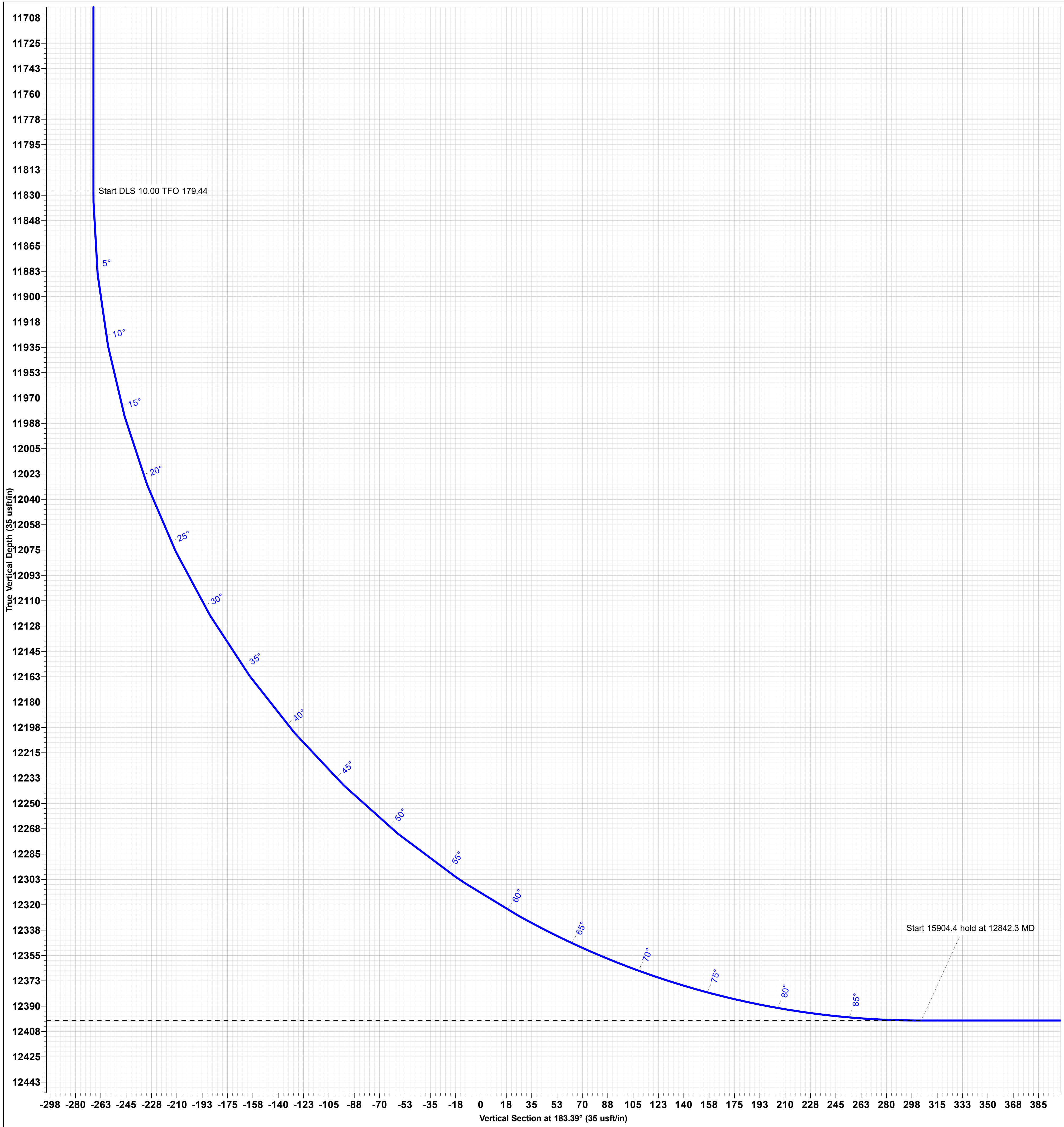
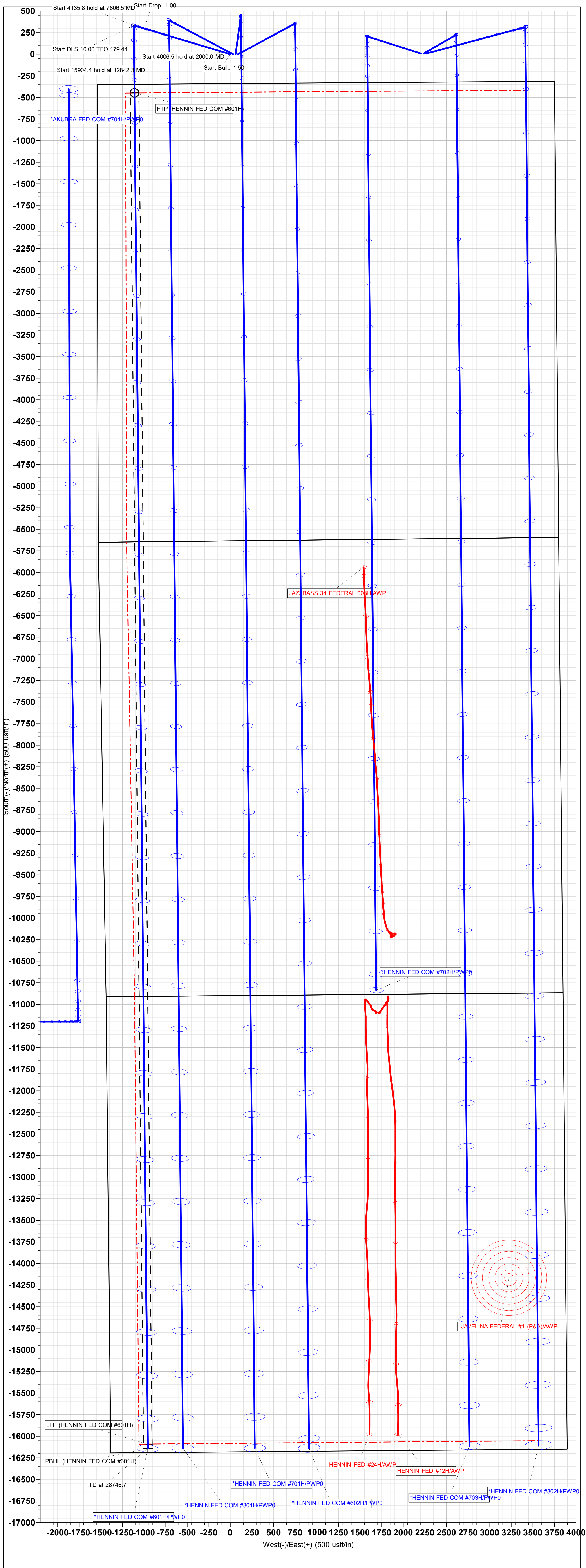
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	404891.54	801839.82	32° 6' 33.879 N	103° 21' 30.604 W HENNIN FED COM #601H

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (HENNIN FED COM #601H)	12400.0	-447.1	-1110.0	404444.44	800729.83
LTP (HENNIN FED COM #601H)	12400.0	-16092.4	-956.2	388799.14	800883.60
PBHL (HENNIN FED COM #601H)	12400.0	-16142.4	-955.7	388749.14	800884.12

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
2000.0	12.00	286.65	1994.2	23.9	-80.0	1.50	286.65	-19.1
6606.5	12.00	286.65	6500.0	298.3	-997.6	0.00	0.00	-238.9
7806.5	0.00	0.00	7691.2	334.2	-1117.5	1.00	180.00	-267.6
11942.3	0.00	0.00	11827.0	334.2	-1117.5	0.00	0.00	-267.6
12842.3	90.00	179.44	12400.0	-238.7	-1111.9	10.00	179.44	304.0
28746.7	90.00	179.44	12400.0	-16142.4	-955.7	0.00	0.00	16170.7



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG OPERATING LLC
WELL NAME & NO.:	HENNIN FED COM 601H
SURFACE HOLE FOOTAGE:	340'/S & 1545'/W
BOTTOM HOLE FOOTAGE:	50'/S & 430'/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	☒ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency Cement Squeeze	☐ EchoMeter	☐ Primary Cement Squeeze
Special Requirements	☐ Water Disposal	☒ COM	☐ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements Variance	☐ Break Testing	☐ Offline Cementing	☒ Casing Clearance

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

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 400711

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 400711
	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