

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☒ DRILL ☐ REENTER 1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☒ Single Zone ☐ Multiple Zone		5. Lease Serial No. NMNM092167 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No. FLAMING SNAIL FEDERAL COM 503H 9. API Well No. 30-015-53646
2. Name of Operator COG OPERATING LLC 3a. Address 600 West Illinois Ave, Midland, TX 79701 3b. Phone No. (include area code) (432) 683-7443		10. Field and Pool, or Exploratory /Hay Hollow; Bone Spring, North 11. Sec., T. R. M. or Blk. and Survey or Area SEC 28/T25S/R27E/NMP
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENW / 957 FNL / 1589 FWL / LAT 32.105605 / LONG -104.198373 At proposed prod. zone SESW / 50 FSL / 2390 FWL / LAT 32.064449 / LONG -104.196299		12. County or Parish EDDY 13. State NM
14. Distance in miles and direction from nearest town or post office* 10 miles 15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 100 feet 16. No of acres in lease 17. Spacing Unit dedicated to this well 1920.0		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 820 feet 19. Proposed Depth 7534 feet / 23348 feet 20. BLM/BIA Bond No. in file FED:
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3161 feet 22. Approximate date work will start* 06/01/2024 23. Estimated duration 30 days		24. Attachments

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

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

25. Signature (Electronic Submission) Title Regulatory Advisor	Name (Printed/Typed) STAN WAGNER / Ph: (432) 683-7443	Date 08/26/2022
Approved by (Signature) (Electronic Submission) Title Assistant Field Manager Lands & Minerals	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959 Office Carlsbad Field Office	Date 03/16/2023

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)

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 746-1283 Fax: (575) 746-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- 53646	Pool Code 30216	Pool Name Hay Hollow; Bone Spring, North
Property Code 333880	Property Name FLAMING SNAIL FEDERAL COM	Well Number 503H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3161.1

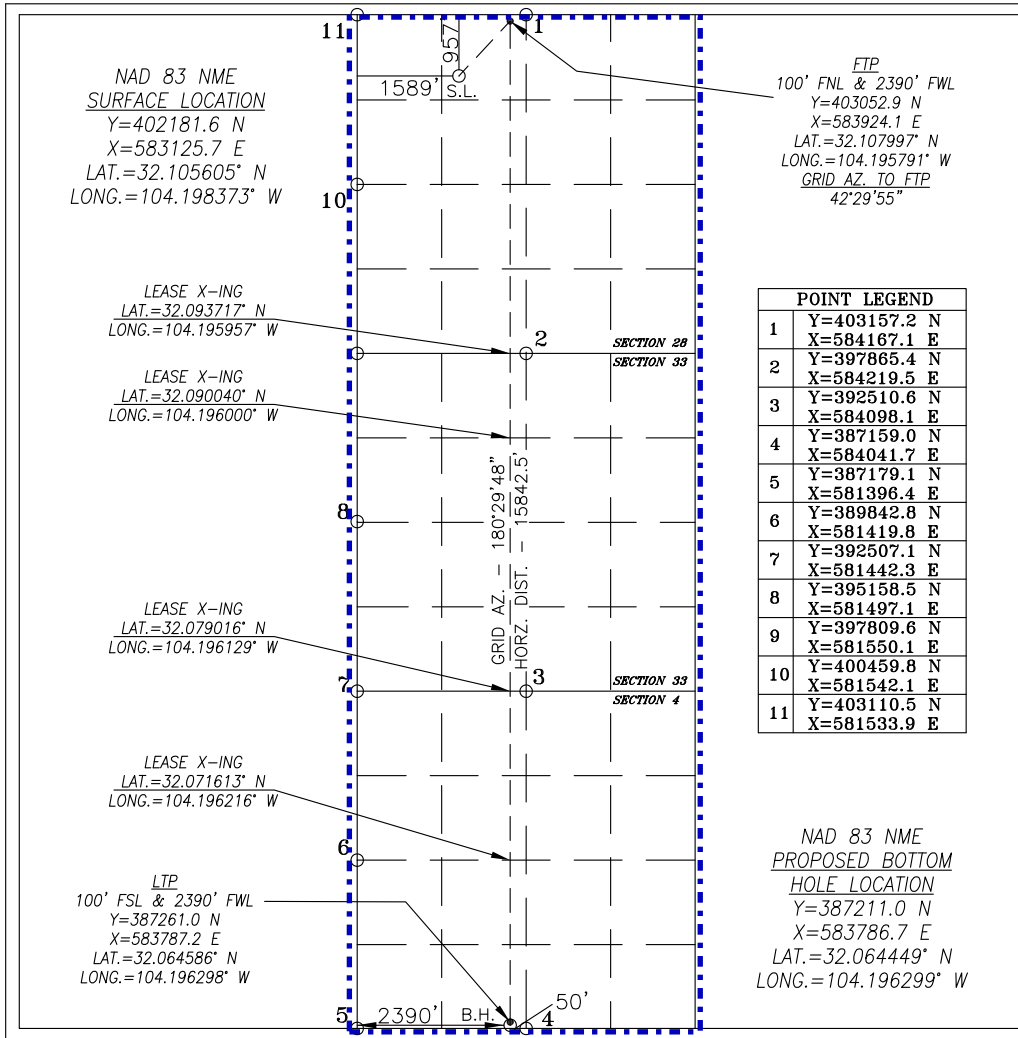
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	28	25-S	27-E		957	NORTH	1589	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	4	26-S	27-E		50	SOUTH	2390	WEST	EDDY
Dedicated Acres 1920	Joint or Infill	Consolidation Code Com	Order No.						

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



OPERATOR CERTIFICATION

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

Stan Wagner 2/6/2023
Signature Date

Stan Wagner
Printed Name

E-mail Address

SURVEYOR CERTIFICATION

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

JANUARY 26, 2023

Date of Survey

Signature & Seal of Professional Surveyor



Chad Harcrow 1/31/23
Certificate No. CHAD HARCROW 17777
W.O. #23-51 DRAWN BY: WN

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: COG Operating LLC

OGRID: 229137

Date: 08/22/2022

II. Type: El 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
Flaming Snail Fed Com 501H	30-015	A-28-25S-27E	805 FNL & 975 FEL	± 1588	± 7149	± 2142
Flaming Snail Fed Com 502H	30-015-	A-28-25S-27E	805 FNL * 1035 FEL	± 1588	± 7149	± 2142
Flaming Snail Fed Com 503H	30-015-	C-28-25S-27E	855 FNL * 1715 FWL	± 1588	± 7149	± 2142
Flaming Snail Fed Com 504H	30-015-	C-28-25S-27E	855 FNL & 1655 FWL	± 1588	± 7149	± 2142
Flaming Snail Fed Com 520H	30-015-	A-28-25S-27E	805 FNL & 1005 FEL	± 1567	± 4376	± 1600
Flaming Snail Fed Com 521H	30-015-	C-28-25S-27E	855 FNL & 1685 FWL	± 1567	± 4376	± 1600

IV. Central Delivery Point Name: Flaming Snail Fed Com East CTB NWNE 28-25S-27E [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
Flaming Snail Fed Com	Pending	± 4/01/23	± 25 days from spud	TBD	TBD	TBD
501H, 502H, 503H, 504H, 520H, 521H						

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

VII. Operational Practices: El 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: El 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

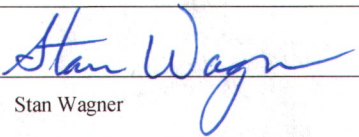
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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:	08/22/2022
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

COG Production LLC - Flaming Snail Federal Com #503H

1. Geologic Formations

TVD of target	7,553' EOL	Pilot hole depth	NA
MD at TD:	23,316'	Deepest expected fresh water:	28'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	80	Water	
Top of Salt	547	Salt	
Base of Salt	1968	Salt	
Lamar	2140	Salt Water	
Bell Canyon	2204	Salt Water	
Cherry Canyon	2996	Oil/Gas	
Brushy Canyon	4091	Oil/Gas	
Bone Spring Lime	5703	Oil/Gas	
1st Bone Spring Sand	6635	Oil/Gas	
2nd Bone Spring Sand	7159	Oil/Gas	
3rd Bone Spring Sand	8482	Not Penetrated	
Wolfcamp	8808	Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
17.5"	0	510	13.375"	54.5	J55	STC	4.84	2.97	18.49
12.25"	0	2160	9.625"	40	J55	LTC	2.27	1.36	6.02
8.75"	0	23,316	5.5"	17	P110	LTC	2.05	3.67	3.47
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Intermediate burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface.

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

COG Production LLC - Flaming Snail Federal Com #503H

	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.	N
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?	

COG Production LLC - Flaming Snail Federal Com #503H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	120	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Inter.	320	12.7	2.0	9.6	16	Lead: 35:65:6 C Blend
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl
5.5 Prod	680	11.9	2.5	19	72	Lead: 50:50:10 H Blend
	3980	14.4	1.24	5.7	19	Tail: 50:50:2 Class H Blend

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	1,660'	20% OH in Lateral (KOP to EOL) – 25% OH in Vertical

COG Production LLC - Flaming Snail Federal Com #503H

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:
12-1/4"	13-5/8"	2M	Annular	x	2000 psi
			Blind Ram		2M
			Pipe Ram		
			Double Ram		
			Other*		
8-3/4"	13-5/8"	3M	Annular	x	50% testing pressure
			Blind Ram	x	3M
			Pipe Ram	x	
			Double Ram		
			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.

X	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?
N	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

COG Production LLC - Flaming Snail Federal Com #503H

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	9-5/8" Int shoe	Saturated Brine	10 - 10.1	28-34	N/C
9-5/8" Int shoe	Lateral TD	Cut Brine	8.6 - 9.3	28-34	N/C

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

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

6. Logging and Testing Procedures

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

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

COG Production LLC - Flaming Snail Federal Com #503H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	3655 psi at 7553' TVD
Abnormal Temperature	NO 135 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

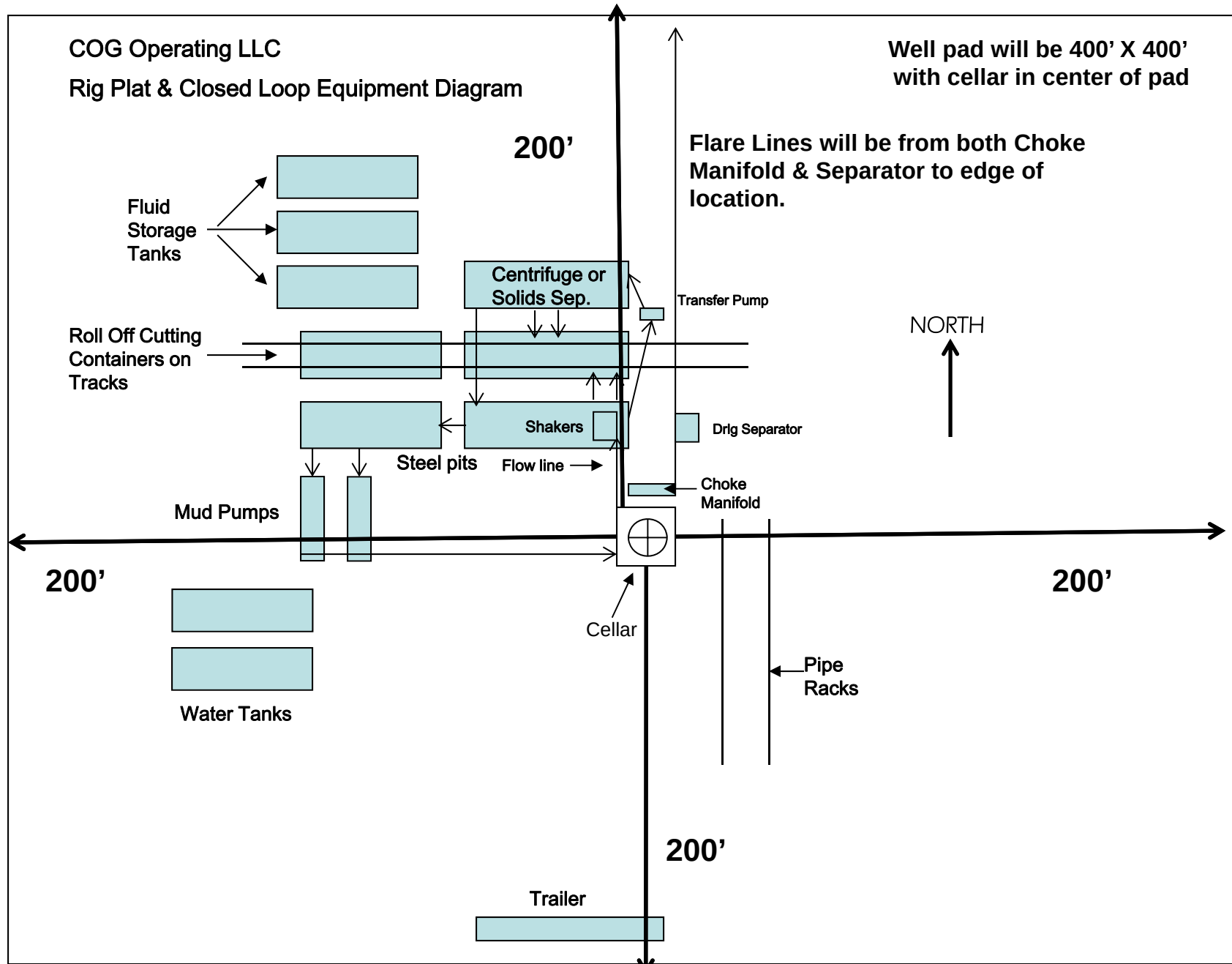


Exhibit 1

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

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

FLAMING SNAIL FED COM PROJECT

FLAMING SNAIL FEDERAL COM #503H

OWB

PWP0

Anticollision Report

01 July, 2022

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 95.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,000.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	7/1/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	2,000.0	PWP0 (OWB)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
2,000.0	7,106.0	PWP0 (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	
7,106.0	23,316.1	PWP0 (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	

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						
FLAMING SNAIL FED COM PROJECT						
*FLAMING SNAIL FED COM #701H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #702H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #703H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #704H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #705H - OWB - PWP0	7,716.0	7,687.9	623.2	593.8	21.149	CC, ES
*FLAMING SNAIL FED COM #705H - OWB - PWP0	7,790.0	7,715.5	627.3	597.5	21.047	SF
*FLAMING SNAIL FED COM #706H - OWB - PWP0	3,773.9	3,773.0	47.9	34.7	3.631	CC
*FLAMING SNAIL FED COM #706H - OWB - PWP0	7,674.5	7,541.6	57.4	28.5	1.986	Advise and Monitor, ES, SF
*FLAMING SNAIL FED COM #707H - OWB - PWP0	3,202.5	3,202.4	132.1	122.0	13.133	CC
*FLAMING SNAIL FED COM #707H - OWB - PWP0	3,230.0	3,229.6	132.1	122.0	13.002	ES
*FLAMING SNAIL FED COM #707H - OWB - PWP0	3,800.0	3,794.7	153.4	140.4	11.809	SF
*FLAMING SNAIL FED COM #708H - OWB - PWP0	2,685.7	2,687.5	168.4	159.1	18.105	CC
*FLAMING SNAIL FED COM #708H - OWB - PWP0	2,700.0	2,700.0	168.4	159.1	17.937	ES
*FLAMING SNAIL FED COM #708H - OWB - PWP0	2,800.0	2,791.7	172.6	162.6	17.197	SF
*FLAMING SNAIL FED COM #709H - OWB - PWP0	1,429.2	1,447.9	208.3	201.4	30.051	CC
*FLAMING SNAIL FED COM #709H - OWB - PWP0	1,500.0	1,517.8	208.4	201.3	29.678	ES
*FLAMING SNAIL FED COM #709H - OWB - PWP0	1,615.0	1,627.4	210.3	203.2	29.395	SF
*FLAMING SNAIL FED COM #710H - OWB - PWP0	1,910.5	1,929.2	220.1	212.6	29.315	CC
*FLAMING SNAIL FED COM #710H - OWB - PWP0	1,995.0	2,013.0	220.1	212.5	28.848	ES
*FLAMING SNAIL FED COM #710H - OWB - PWP0	2,185.0	2,193.3	222.5	214.7	28.561	SF
*FLAMING SNAIL FED COM #801H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #802H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #803H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #804H - OWB - PWP0	7,550.0	7,431.2	116.9	87.9	4.030	SF
*FLAMING SNAIL FED COM #804H - OWB - PWP0	7,562.9	7,440.4	116.5	87.8	4.062	CC, ES
*FLAMING SNAIL FED COM #805H - OWB - PWP0	2,801.0	2,764.8	301.1	286.3	20.268	CC, ES
*FLAMING SNAIL FED COM #805H - OWB - PWP0	3,515.0	3,451.2	359.4	339.8	18.341	SF
*FLAMING SNAIL FED COM #806H - OWB - PWP0	2,782.0	2,751.6	314.5	305.6	35.156	CC, ES
*FLAMING SNAIL FED COM #806H - OWB - PWP0	3,135.0	3,072.6	343.6	333.6	34.369	SF
FLAMING SNAIL FEDERAL COM #502H - OWB - PWP0						Out of range
FLAMING SNAIL FEDERAL COM #504H - OWB - PWP0	1,996.0	1,996.9	60.0	53.4	9.122	CC
FLAMING SNAIL FEDERAL COM #504H - OWB - PWP0	2,000.0	2,000.9	60.0	53.4	9.118	ES, SF

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 WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

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						
FLAMING SNAIL FED COM PROJECT						
FLAMING SNAIL FEDERAL COM #520H - OWB - PWP0						Out of range
FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0	1,995.1	1,995.8	30.0	23.4	4.561	CC
FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0	2,000.0	2,000.7	30.0	23.4	4.559	ES
FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0	23,316.1	23,617.5	933.1	690.7	3.850	SF
LEONARDO BKL FEDERAL COM #1 - OWB - AWP	9,332.1	7,498.5	909.7	666.2	3.736	CC, ES, SF
WHITE CITY 21 25 27 FEDERAL COM #5H - OWB - AW						Out of range
WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AW	7,056.4	6,897.8	508.2	462.6	11.158	CC
WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AW	7,106.0	6,946.2	508.2	462.5	11.101	ES
WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AW	7,150.0	6,990.0	509.1	463.2	11.084	SF

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset 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						
FLAMING SNAIL FED COM PROJECT						
*FLAMING SNAIL FED COM #701H - OWB - PWP0	23,316.1	24,422.9				Out of Range @TD
*FLAMING SNAIL FED COM #702H - OWB - PWP0	23,316.1	24,369.6				Out of Range @TD
*FLAMING SNAIL FED COM #703H - OWB - PWP0	23,316.1	24,381.8				Out of Range @TD
*FLAMING SNAIL FED COM #704H - OWB - PWP0	23,316.1	24,378.8				Out of Range @TD
*FLAMING SNAIL FED COM #705H - OWB - PWP0	23,316.1	24,429.2				Out of Range @TD
*FLAMING SNAIL FED COM #706H - OWB - PWP0	23,316.1	24,346.1				Out of Range @TD
*FLAMING SNAIL FED COM #707H - OWB - PWP0	23,316.1	24,239.9				Out of Range @TD
*FLAMING SNAIL FED COM #708H - OWB - PWP0	23,316.1	24,070.0				Out of Range @TD
*FLAMING SNAIL FED COM #709H - OWB - PWP0	23,316.1	24,223.8				Out of Range @TD
*FLAMING SNAIL FED COM #710H - OWB - PWP0	23,316.1	24,280.6				Out of Range @TD
*FLAMING SNAIL FED COM #801H - OWB - PWP0	23,316.1	25,570.8				Out of Range @TD
*FLAMING SNAIL FED COM #802H - OWB - PWP0	23,316.1	25,500.7				Out of Range @TD
*FLAMING SNAIL FED COM #803H - OWB - PWP0	23,316.1	25,812.8				Out of Range @TD
*FLAMING SNAIL FED COM #804H - OWB - PWP0	23,316.1	25,412.6				Out of Range @TD
*FLAMING SNAIL FED COM #805H - OWB - PWP0	23,316.1	25,343.3				Out of Range @TD
*FLAMING SNAIL FED COM #806H - OWB - PWP0	23,316.1	24,981.6				Out of Range @TD
FLAMING SNAIL FEDERAL COM #502H - OWB - PWP0	23,316.1	23,348.5				Out of Range @TD
FLAMING SNAIL FEDERAL COM #504H - OWB - PWP0	23,316.1	23,235.3				Out of Range @TD
FLAMING SNAIL FEDERAL COM #520H - OWB - PWP0	23,316.1	23,734.1				Out of Range @TD
FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0	23,316.1	23,617.5	933.1	690.7	3.850	SF
LEONARDO BKL FEDERAL COM #1 - OWB - AWP	23,316.1	7,481.2				Out of Range @TD
WHITE CITY 21 25 27 FEDERAL COM #5H - OWB - AW	23,316.1	6,936.0				Out of Range @TD
WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AW	23,316.1	7,022.0				Out of Range @TD

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #705H - OWB - PWP0												Offset Site Error: 0.0 usft	
Survey Program: 0-Standard Keeper 104, 8568-MWD+IFR1+FDIR												Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:					
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
6,080.0	5,965.4	6,340.0	6,225.0	17.5	9.1	68.06	485.4	1,535.3	996.6	973.0	23.58	42.260	
6,100.0	5,984.7	6,358.2	6,242.6	17.5	9.1	68.34	486.3	1,531.0	989.8	966.2	23.68	41.799	
6,175.0	6,057.4	6,426.5	6,308.9	17.8	9.3	69.42	489.5	1,514.8	964.5	940.5	24.05	40.108	
6,193.8	6,075.6	6,443.6	6,325.5	17.9	9.3	69.70	490.3	1,510.7	958.2	934.1	24.14	39.693	
6,200.0	6,081.6	6,449.3	6,331.0	17.9	9.3	69.75	490.5	1,509.4	956.2	932.0	24.17	39.559	
6,270.0	6,149.6	6,513.3	6,393.1	18.2	9.5	70.32	493.5	1,494.2	933.3	908.8	24.52	38.069	
6,300.0	6,178.8	6,541.0	6,419.9	18.3	9.5	70.55	494.8	1,487.6	923.8	899.1	24.66	37.453	

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Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #705H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8568-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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)			
6,365.0	6,242.5	6,601.2	6,478.4	18.6	9.6	71.04	497.7	1,473.3	903.6	878.6	25.01	36.135	
6,400.0	6,276.9	6,633.8	6,510.0	18.8	9.7	71.29	499.2	1,465.6	893.0	867.8	25.19	35.452	
6,460.0	6,336.0	6,690.0	6,564.5	19.0	9.8	71.69	501.8	1,452.2	875.2	849.7	25.50	34.325	
6,500.0	6,375.5	6,727.7	6,601.1	19.2	9.9	71.93	503.6	1,443.3	863.7	838.0	25.70	33.601	
6,555.0	6,430.0	6,774.4	6,646.4	19.5	10.0	72.18	505.8	1,432.3	848.3	822.3	26.00	32.623	
6,600.0	6,474.7	6,811.8	6,682.8	19.7	10.1	72.35	507.5	1,423.8	836.3	810.1	26.25	31.859	
6,650.0	6,524.4	6,853.7	6,723.6	19.9	10.2	72.51	509.3	1,414.5	823.6	797.1	26.52	31.055	
6,700.0	6,574.2	6,900.0	6,768.8	20.1	10.3	72.67	511.3	1,404.6	811.6	784.8	26.78	30.310	
6,745.0	6,619.1	6,934.2	6,802.2	20.3	10.3	72.73	512.7	1,397.5	801.2	774.2	27.03	29.645	
6,800.0	6,674.1	6,981.3	6,848.3	20.6	10.4	72.81	514.5	1,388.0	789.3	762.0	27.32	28.894	
6,840.0	6,714.0	7,015.7	6,882.1	20.8	10.5	72.83	515.8	1,381.4	781.2	753.7	27.53	28.380	
6,900.0	6,774.0	7,067.6	6,933.0	21.0	10.6	72.81	517.8	1,371.7	769.7	741.8	27.83	27.652	
6,919.0	6,793.0	7,084.1	6,949.2	21.1	10.6	112.58	518.3	1,368.7	766.2	738.3	27.92	27.440	
6,935.0	6,809.0	7,100.0	6,964.9	21.1	10.6	112.63	518.9	1,365.9	763.4	735.4	27.99	27.272	
7,000.0	6,874.0	7,154.6	7,018.7	21.3	10.7	112.77	520.8	1,356.4	752.2	723.9	28.30	26.576	
7,030.0	6,904.0	7,180.9	7,044.5	21.3	10.8	112.84	521.6	1,352.1	747.2	718.8	28.39	26.316	
7,106.0	6,980.0	7,247.4	7,110.2	21.5	10.9	113.01	523.7	1,341.6	735.3	706.6	28.63	25.685	
7,125.0	6,999.0	7,264.1	7,126.7	21.5	10.9	-67.74	524.2	1,339.1	732.3	703.6	28.66	25.550	
7,150.0	7,024.0	7,286.0	7,148.4	21.5	10.9	-68.17	524.8	1,335.9	728.1	699.4	28.71	25.365	
7,200.0	7,073.6	7,329.6	7,191.5	21.5	11.0	-69.35	526.1	1,329.7	718.8	690.0	28.80	24.962	
7,220.0	7,093.3	7,346.8	7,208.6	21.6	11.0	-69.93	526.5	1,327.4	714.8	686.0	28.83	24.795	
7,250.0	7,122.5	7,372.5	7,234.0	21.6	11.1	-70.94	527.2	1,323.9	708.5	679.6	28.87	24.536	
7,300.0	7,170.3	7,414.5	7,275.6	21.7	11.1	-72.94	528.3	1,318.6	697.2	668.3	28.93	24.096	
7,315.0	7,184.4	7,426.9	7,287.9	21.7	11.1	-73.61	528.6	1,317.1	693.7	664.7	28.95	23.962	
7,350.0	7,216.7	7,455.3	7,316.1	21.8	11.2	-75.31	529.2	1,313.7	685.3	656.4	28.98	23.649	
7,400.0	7,261.3	7,494.4	7,355.0	21.9	11.2	-77.98	530.1	1,309.3	673.2	644.2	29.01	23.205	
7,410.0	7,270.0	7,500.0	7,360.5	21.9	11.2	-78.46	530.2	1,308.7	670.8	641.8	29.03	23.110	
7,450.0	7,303.7	7,531.8	7,392.1	22.0	11.3	-80.88	530.9	1,305.3	661.3	632.3	29.04	22.774	
7,500.0	7,343.7	7,566.9	7,427.1	22.1	11.3	-83.89	531.6	1,301.7	650.1	621.0	29.07	22.366	
7,505.0	7,347.6	7,570.3	7,430.5	22.1	11.3	-84.20	531.7	1,301.4	649.0	620.0	29.07	22.327	
7,550.0	7,380.9	7,600.0	7,460.0	22.2	11.4	-86.91	532.2	1,298.6	640.1	611.0	29.10	21.995	
7,600.0	7,415.1	7,629.7	7,489.6	22.3	11.4	-89.74	532.7	1,295.9	631.9	602.8	29.17	21.667	
7,650.0	7,445.9	7,656.9	7,516.7	22.4	11.4	-92.29	533.2	1,293.6	626.2	596.9	29.26	21.398	
7,695.0	7,470.6	7,678.6	7,538.3	22.5	11.4	-94.24	533.5	1,291.9	623.5	594.1	29.39	21.214	
7,700.0	7,473.2	7,680.9	7,540.6	22.5	11.4	-94.44	533.6	1,291.7	623.4	594.0	29.41	21.197	
7,716.0	7,481.2	7,687.9	7,547.5	22.5	11.5	-95.02	533.7	1,291.2	623.2	593.8	29.47	21.149 CC, ES	
7,750.0	7,496.8	7,700.0	7,559.6	22.6	11.5	-95.93	533.9	1,290.3	624.1	594.5	29.62	21.071	
7,790.0	7,512.8	7,715.5	7,575.1	22.6	11.5	-96.92	534.1	1,289.1	627.3	597.5	29.81	21.047 SF	
7,800.0	7,516.4	7,718.7	7,578.3	22.6	11.5	-97.07	534.1	1,288.9	628.5	598.7	29.86	21.050	
7,850.0	7,531.9	7,732.1	7,591.7	22.7	11.5	-97.39	534.3	1,287.9	637.0	606.9	30.16	21.124	
7,885.0	7,540.3	7,739.3	7,598.9	22.7	11.5	-97.18	534.4	1,287.4	645.4	615.0	30.38	21.241	
7,900.0	7,543.2	7,741.8	7,601.4	22.7	11.5	-96.98	534.4	1,287.3	649.6	619.1	30.49	21.308	
7,950.0	7,550.3	7,747.7	7,607.2	22.7	11.5	-95.77	534.5	1,286.9	666.0	635.2	30.83	21.604	
7,980.0	7,552.4	7,749.3	7,608.8	22.8	11.5	-94.66	534.5	1,286.8	677.7	646.6	31.04	21.836	
8,000.0	7,553.0	7,749.5	7,609.1	22.8	11.5	-93.76	534.5	1,286.8	686.1	654.9	31.17	22.012	
8,006.7	7,553.0	7,749.5	7,609.0	22.8	11.5	-93.43	534.5	1,286.8	689.1	657.9	31.22	22.075	
8,075.0	7,552.9	7,748.6	7,608.1	22.8	11.5	-93.35	534.5	1,286.8	722.0	690.3	31.66	22.803	
8,100.0	7,552.9	7,748.3	7,607.8	22.8	11.5	-93.32	534.5	1,286.8	735.2	703.4	31.81	23.110	
8,170.0	7,552.8	7,747.4	7,606.9	22.9	11.5	-93.24	534.5	1,286.9	775.5	743.2	32.23	24.063	
8,200.0	7,552.8	7,747.0	7,606.6	22.9	11.5	-93.20	534.5	1,286.9	794.0	761.6	32.39	24.516	
8,265.0	7,552.7	7,746.2	7,605.7	23.0	11.5	-93.12	534.5	1,287.0	836.3	803.6	32.71	25.571	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:		FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #705H - OWB - PWP0											Offset Site Error:		0.0 usft	
Survey Program:		0-Standard Keeper 104, 8568-MWD+HFR1+FDIR											Offset Well Error:		3.0 usft	
Reference		Offset		Semi Major Axis		Rule Assigned:										
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Distance							
Depth	Depth	Depth	Depth			Toolface	+N/-S	+E/-W	Between	Between	Minimum	Separation	Warning			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	Separation	Factor				
									(usft)	(usft)	(usft)					
8,300.0	7,552.6	7,745.8	7,605.3	23.0	11.5	-93.08	534.5	1,287.0	860.3	827.5	32.86	26.181				
8,360.0	7,552.6	7,745.0	7,604.5	23.0	11.5	-93.01	534.5	1,287.1	903.1	870.0	33.10	27.283				
8,400.0	7,552.5	7,744.5	7,604.0	23.1	11.5	-92.96	534.5	1,287.1	932.7	899.5	33.24	28.057				
8,455.0	7,552.4	7,743.8	7,603.3	23.1	11.5	-92.90	534.5	1,287.1	974.6	941.2	33.42	29.161				

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #706H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8492-MWD+IFR1+FDIR												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	18.7	18.7	3.0	3.0	5.80	196.1	19.9	197.1				
95.0	95.0	113.7	113.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.00	32.851	
100.0	100.0	118.7	118.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.00	32.850	
190.0	190.0	208.7	208.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.01	32.799	
200.0	200.0	218.7	218.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.01	32.790	
285.0	285.0	303.7	303.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.03	32.691	
300.0	300.0	318.7	318.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.03	32.669	
380.0	380.0	398.7	398.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.06	32.529	
400.0	400.0	418.7	418.7	3.0	3.0	5.80	196.1	19.9	197.1	191.1	6.07	32.489	
475.0	475.0	493.7	493.7	3.0	3.1	5.80	196.1	19.9	197.1	191.0	6.10	32.316	
500.0	500.0	518.7	518.7	3.1	3.1	5.80	196.1	19.9	197.1	191.0	6.11	32.251	
570.0	570.0	588.7	588.7	3.1	3.1	5.80	196.1	19.9	197.1	191.0	6.15	32.053	
600.0	600.0	618.7	618.7	3.1	3.1	5.80	196.1	19.9	197.1	191.0	6.17	31.961	
665.0	665.0	683.7	683.7	3.1	3.1	5.80	196.1	19.9	197.1	190.9	6.21	31.745	
700.0	700.0	718.7	718.7	3.1	3.1	5.80	196.1	19.9	197.1	190.9	6.23	31.621	
760.0	760.0	778.7	778.7	3.1	3.1	5.80	196.1	19.9	197.1	190.9	6.28	31.397	
800.0	800.0	818.7	818.7	3.2	3.2	5.80	196.1	19.9	197.1	190.8	6.31	31.239	
855.0	855.0	873.7	873.7	3.2	3.2	5.80	196.1	19.9	197.1	190.8	6.36	31.011	
900.0	900.0	918.7	918.7	3.2	3.2	5.80	196.1	19.9	197.1	190.7	6.40	30.817	
950.0	950.0	968.7	968.7	3.2	3.2	5.80	196.1	19.9	197.1	190.7	6.44	30.594	
1,000.0	1,000.0	1,018.7	1,018.7	3.2	3.3	5.80	196.1	19.9	197.1	190.6	6.49	30.363	
1,045.0	1,045.0	1,063.7	1,063.7	3.3	3.3	5.80	196.1	19.9	197.1	190.6	6.54	30.149	
1,100.0	1,100.0	1,118.7	1,118.7	3.3	3.3	5.80	196.1	19.9	197.1	190.5	6.60	29.880	
1,140.0	1,140.0	1,158.7	1,158.7	3.3	3.3	5.80	196.1	19.9	197.1	190.5	6.64	29.680	
1,200.0	1,200.0	1,218.7	1,218.7	3.4	3.4	5.80	196.1	19.9	197.1	190.4	6.71	29.375	
1,235.0	1,235.0	1,253.7	1,253.7	3.4	3.4	5.80	196.1	19.9	197.1	190.4	6.75	29.193	
1,300.0	1,300.0	1,318.7	1,318.7	3.4	3.4	5.80	196.1	19.9	197.1	190.3	6.83	28.851	
1,330.0	1,330.0	1,348.7	1,348.7	3.4	3.4	5.80	196.1	19.9	197.1	190.3	6.87	28.692	
1,400.0	1,400.0	1,418.7	1,418.7	3.5	3.5	5.80	196.1	19.9	197.1	190.2	6.96	28.315	
1,425.0	1,425.0	1,443.7	1,443.7	3.5	3.5	5.80	196.1	19.9	197.1	190.1	7.00	28.179	
1,500.0	1,500.0	1,518.7	1,518.7	3.5	3.6	5.80	196.1	19.9	197.1	190.0	7.10	27.769	
1,520.0	1,520.0	1,538.7	1,538.7	3.6	3.6	5.80	196.1	19.9	197.1	190.0	7.13	27.659	
1,600.0	1,600.0	1,618.7	1,618.7	3.6	3.6	5.80	196.1	19.9	197.1	189.9	7.24	27.217	
1,615.0	1,615.0	1,633.7	1,633.7	3.6	3.6	5.80	196.1	19.9	197.1	189.9	7.27	27.135	
1,700.0	1,700.0	1,718.7	1,718.7	3.7	3.7	5.80	196.1	19.9	197.1	189.7	7.39	26.664	
1,710.0	1,710.0	1,728.7	1,728.7	3.7	3.7	5.80	196.1	19.9	197.1	189.7	7.41	26.609	
1,800.0	1,800.0	1,818.7	1,818.7	3.8	3.8	5.80	196.1	19.9	197.1	189.6	7.55	26.111	
1,805.0	1,805.0	1,823.7	1,823.7	3.8	3.8	5.80	196.1	19.9	197.1	189.6	7.56	26.084	
1,900.0	1,900.0	1,918.7	1,918.7	3.9	3.9	5.80	196.1	19.9	197.1	189.4	7.71	25.562	
1,995.0	1,995.0	2,013.7	2,013.7	3.9	3.9	5.80	196.1	19.9	197.1	189.3	7.87	25.045	
2,000.0	2,000.0	2,018.7	2,018.7	3.9	4.0	5.80	196.1	19.9	197.1	189.3	7.88	25.018	
2,090.0	2,090.0	2,108.7	2,108.7	4.0	4.0	-34.23	196.1	19.9	196.0	187.9	8.07	24.282	
2,100.0	2,100.0	2,118.7	2,118.7	4.1	4.0	-34.29	196.1	19.9	195.7	187.6	8.09	24.179	
2,185.0	2,184.9	2,203.6	2,203.6	4.5	4.1	-35.04	196.1	19.9	192.2	183.8	8.44	22.775	
2,200.0	2,199.8	2,218.5	2,218.5	4.6	4.1	-35.22	196.1	19.9	191.4	182.9	8.50	22.509	
2,280.0	2,279.6	2,298.3	2,298.3	5.1	4.2	-36.47	196.1	19.9	186.0	177.1	8.81	21.103	
2,300.0	2,299.5	2,318.2	2,318.2	5.2	4.2	-36.86	196.1	19.9	184.3	175.4	8.89	20.742	
2,375.0	2,373.9	2,392.6	2,392.6	5.6	4.3	-38.65	196.1	19.9	177.3	168.2	9.14	19.393	
2,400.0	2,398.7	2,417.4	2,417.4	5.8	4.3	-39.38	196.1	19.9	174.7	165.5	9.22	18.942	
2,470.0	2,467.9	2,486.6	2,486.6	6.2	4.4	-41.78	196.1	19.9	166.6	157.2	9.42	17.696	
2,500.0	2,497.5	2,515.8	2,515.8	6.3	4.4	-42.98	196.1	20.0	162.9	153.4	9.48	17.179	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #706H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 8492-MWD+IFR1+FDIR						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		Distance		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
2,565.0	2,561.3	2,578.5	2,578.5	6.7	4.5	-45.70	196.6	20.9	154.6	145.0	9.60	16.112		
2,600.0	2,595.6	2,612.4	2,612.4	6.9	4.5	-47.25	197.1	21.9	150.1	140.5	9.64	15.568		
2,660.0	2,654.2	2,670.6	2,670.5	7.2	4.5	-50.07	198.4	24.5	142.3	132.6	9.69	14.677		
2,700.0	2,693.1	2,709.4	2,709.2	7.4	4.5	-52.08	199.5	26.8	137.0	127.3	9.71	14.109		
2,725.1	2,717.4	2,733.9	2,733.6	7.4	4.6	-53.40	200.4	28.5	133.6	123.9	9.70	13.781		
2,755.0	2,746.3	2,763.0	2,762.6	7.4	4.6	-54.93	201.5	30.7	129.7	120.0	9.68	13.400		
2,800.0	2,789.9	2,807.0	2,806.4	7.5	4.6	-57.16	203.4	34.7	124.1	114.5	9.67	12.843		
2,850.0	2,838.3	2,856.1	2,855.1	7.6	4.6	-59.50	205.9	39.7	118.3	108.6	9.67	12.227		
2,900.0	2,886.7	2,905.3	2,904.0	7.7	4.7	-61.66	208.8	45.6	112.7	103.0	9.70	11.623		
2,945.0	2,930.3	2,949.8	2,948.0	7.8	4.7	-63.41	211.7	51.5	107.9	98.1	9.74	11.072		
3,000.0	2,983.5	3,004.4	3,001.8	7.9	4.7	-65.24	215.7	59.6	102.1	92.3	9.82	10.401		
3,040.0	3,022.2	3,044.1	3,040.9	8.0	4.8	-66.52	218.8	65.8	98.0	88.1	9.89	9.913		
3,100.0	3,080.3	3,103.7	3,099.6	8.1	4.8	-68.66	223.4	75.1	92.0	82.0	9.99	9.206		
3,135.0	3,114.2	3,138.4	3,133.8	8.2	4.8	-70.03	226.1	80.5	88.5	78.5	10.06	8.803		
3,200.0	3,177.1	3,203.0	3,197.4	8.3	4.9	-72.90	231.0	90.5	82.3	72.1	10.18	8.081		
3,230.0	3,206.2	3,232.8	3,226.7	8.4	4.9	-74.37	233.3	95.2	79.4	69.2	10.24	7.757		
3,300.0	3,274.0	3,302.3	3,295.2	8.5	4.9	-78.23	238.7	106.0	73.1	62.7	10.39	7.033		
3,325.0	3,298.2	3,327.1	3,319.6	8.6	5.0	-79.77	240.6	109.9	70.9	60.5	10.45	6.783		
3,400.0	3,370.8	3,401.6	3,393.0	8.8	5.0	-85.00	246.3	121.5	64.7	54.1	10.66	6.072		
3,420.0	3,390.1	3,421.5	3,412.6	8.8	5.0	-86.56	247.8	124.6	63.2	52.5	10.73	5.891		
3,500.0	3,467.6	3,500.9	3,490.8	9.0	5.1	-93.60	254.0	136.9	57.5	46.5	11.04	5.212		
3,515.0	3,482.1	3,515.8	3,505.5	9.1	5.1	-95.07	255.1	139.2	56.6	45.5	11.11	5.093		
3,600.0	3,564.4	3,600.3	3,588.6	9.3	5.2	-104.32	261.6	152.4	52.0	40.4	11.60	4.478		
3,610.0	3,574.1	3,610.2	3,598.4	9.3	5.2	-105.50	262.4	153.9	51.5	39.9	11.68	4.413		
3,700.0	3,661.2	3,699.6	3,686.4	9.6	5.3	-117.00	269.2	167.8	48.6	36.2	12.43	3.912		
3,705.0	3,666.1	3,704.5	3,691.3	9.6	5.3	-117.67	269.6	168.6	48.5	36.0	12.48	3.889		
3,773.9	3,732.8	3,773.0	3,758.7	9.8	5.3	-127.14	274.9	179.3	47.9	34.7	13.18	3.631 CC		
3,800.0	3,758.0	3,798.9	3,784.2	9.9	5.4	-130.75	276.9	183.3	47.9	34.5	13.46	3.563		
3,895.0	3,850.0	3,893.2	3,877.1	10.1	5.4	-143.47	284.1	198.0	49.9	35.4	14.45	3.452		
3,900.0	3,854.8	3,898.2	3,882.0	10.2	5.4	-144.11	284.5	198.8	50.1	35.6	14.50	3.452		
3,990.0	3,942.0	3,987.6	3,970.1	10.4	5.5	-154.74	291.4	212.7	54.1	38.8	15.31	3.533		
4,000.0	3,951.7	3,997.5	3,979.8	10.4	5.5	-155.82	292.2	214.2	54.6	39.2	15.38	3.551		
4,085.0	4,033.9	4,082.0	4,063.0	10.7	5.6	-164.11	298.7	227.4	60.0	44.1	15.97	3.760		
4,100.0	4,048.5	4,096.9	4,077.7	10.8	5.6	-165.41	299.8	229.7	61.1	45.1	16.06	3.805		
4,180.0	4,125.9	4,176.3	4,155.9	11.0	5.7	-171.63	305.9	242.1	67.3	50.8	16.49	4.081		
4,200.0	4,145.3	4,196.2	4,175.5	11.1	5.7	-173.01	307.5	245.1	69.0	52.4	16.59	4.157		
4,275.0	4,217.9	4,270.7	4,248.8	11.3	5.8	-177.62	313.2	256.7	75.5	58.6	16.93	4.460		
4,300.0	4,242.1	4,295.5	4,273.3	11.4	5.8	-178.99	315.1	260.6	77.8	60.8	17.04	4.566		
4,370.0	4,309.9	4,365.0	4,341.7	11.6	5.9	-177.60	320.4	271.4	84.4	67.1	17.32	4.870		
4,400.0	4,338.9	4,394.8	4,371.1	11.7	5.9	-176.29	322.7	276.1	87.3	69.8	17.44	5.004		
4,465.0	4,401.8	4,459.4	4,434.7	11.9	6.0	-173.74	327.7	286.1	93.7	76.0	17.70	5.295		
4,500.0	4,435.7	4,494.1	4,468.9	12.0	6.0	-172.51	330.4	291.5	97.2	79.4	17.83	5.453		
4,560.0	4,493.8	4,553.7	4,527.6	12.2	6.1	-170.60	335.0	300.8	103.4	85.3	18.06	5.724		
4,600.0	4,532.5	4,593.4	4,566.7	12.3	6.1	-169.44	338.0	307.0	107.5	89.3	18.22	5.903		
4,655.0	4,585.8	4,648.1	4,620.5	12.5	6.2	-167.99	342.2	315.5	113.3	94.9	18.43	6.148		
4,700.0	4,629.4	4,692.8	4,664.5	12.7	6.2	-166.91	345.7	322.5	118.1	99.5	18.61	6.347		
4,750.0	4,677.8	4,742.4	4,713.4	12.8	6.3	-165.81	349.5	330.2	123.4	104.6	18.80	6.565		
4,800.0	4,726.2	4,792.1	4,762.3	13.0	6.3	-164.80	353.3	337.9	128.8	109.8	19.00	6.780		
4,845.0	4,769.7	4,836.8	4,806.3	13.1	6.4	-163.96	356.7	344.9	133.7	114.5	19.18	6.971		
4,900.0	4,823.0	4,891.4	4,860.1	13.3	6.4	-163.02	361.0	353.4	139.7	120.3	19.41	7.200		
4,940.0	4,861.7	4,931.1	4,899.3	13.5	6.5	-162.38	364.0	359.6	144.1	124.6	19.57	7.364		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #706H - OWB - PWP0													Offset Site Error: 0.0 usft		
Survey Program: Reference		0-Standard Keeper 104, 8492-MWD+IFR1+FDIR					Rule Assigned:							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)	Distance Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
5,000.0	4,919.8	4,990.7	4,957.9	13.7	6.6	161.49	368.6	368.8	150.7	130.9	19.82	7.606			
5,035.0	4,953.7	5,025.5	4,992.2	13.8	6.6	161.01	371.3	374.2	154.6	134.6	19.96	7.744			
5,100.0	5,016.6	5,090.0	5,055.7	14.0	6.7	160.17	376.2	384.3	161.8	141.6	20.24	7.996			
5,130.0	5,045.6	5,119.8	5,085.1	14.1	6.7	159.81	378.5	388.9	165.2	144.8	20.37	8.111			
5,200.0	5,113.4	5,189.4	5,153.6	14.4	6.8	159.02	383.9	399.8	173.0	152.3	20.67	8.372			
5,225.0	5,137.6	5,214.2	5,178.0	14.4	6.8	158.76	385.8	403.6	175.8	155.0	20.77	8.463			
5,300.0	5,210.2	5,288.7	5,251.4	14.7	6.9	158.02	391.5	415.2	184.2	163.1	21.10	8.731			
5,320.0	5,229.6	5,308.5	5,270.9	14.8	6.9	157.83	393.0	418.3	186.5	165.3	21.19	8.802			
5,400.0	5,307.0	5,388.0	5,349.2	15.0	7.0	157.12	399.2	430.7	195.5	174.0	21.54	9.076			
5,415.0	5,321.6	5,402.9	5,363.8	15.1	7.0	157.00	400.3	433.0	197.2	175.6	21.61	9.127			
5,500.0	5,403.9	5,487.3	5,447.0	15.4	7.1	156.33	406.8	446.1	206.8	184.9	21.99	9.407			
5,510.0	5,413.5	5,497.2	5,456.8	15.4	7.1	156.25	407.6	447.7	208.0	185.9	22.03	9.439			
5,600.0	5,500.7	5,586.6	5,544.8	15.7	7.2	155.62	414.4	461.6	218.2	195.8	22.44	9.723			
5,605.0	5,505.5	5,591.6	5,549.7	15.8	7.2	155.58	414.8	462.4	218.8	196.3	22.47	9.738			
5,700.0	5,597.5	5,685.9	5,642.6	16.1	7.4	154.97	422.1	477.1	229.6	206.7	22.90	10.025			
5,795.0	5,689.5	5,780.3	5,735.5	16.4	7.5	154.42	429.4	491.7	240.4	217.1	23.34	10.301			
5,800.0	5,694.3	5,785.3	5,740.4	16.5	7.5	154.39	429.7	492.5	241.0	217.6	23.36	10.315			
5,890.0	5,781.4	5,874.6	5,828.4	16.8	7.6	153.91	436.6	506.4	251.3	227.5	23.79	10.565			
5,900.0	5,791.1	5,884.6	5,838.2	16.8	7.6	153.86	437.4	508.0	252.4	228.6	23.83	10.592			
5,985.0	5,873.4	5,969.0	5,921.4	17.1	7.7	153.45	443.9	521.1	262.2	237.9	24.23	10.818			
6,000.0	5,887.9	5,983.9	5,936.0	17.2	7.7	153.38	445.0	523.4	263.9	239.6	24.31	10.857			
6,080.0	5,965.4	6,063.3	6,014.3	17.5	7.8	153.02	451.1	535.8	273.1	248.4	24.69	11.061			
6,100.0	5,984.7	6,083.2	6,033.8	17.5	7.8	152.94	452.7	538.9	275.4	250.6	24.78	11.111			
6,175.0	6,057.4	6,157.7	6,107.2	17.8	7.9	152.63	458.4	550.5	284.0	258.8	25.14	11.295			
6,193.8	6,075.6	6,176.4	6,125.6	17.9	8.0	152.55	459.8	553.4	286.1	260.9	25.23	11.340			
6,200.0	6,081.6	6,182.5	6,131.6	17.9	8.0	152.54	460.3	554.4	286.9	261.6	25.26	11.354			
6,270.0	6,149.6	6,252.1	6,200.2	18.2	8.0	152.25	465.7	565.2	294.0	268.4	25.61	11.480			
6,300.0	6,178.8	6,282.0	6,229.6	18.3	8.1	152.07	468.0	569.8	296.6	270.9	25.76	11.515			
6,365.0	6,242.5	6,346.8	6,293.4	18.6	8.2	151.61	472.9	579.9	301.4	275.2	26.11	11.541			
6,400.0	6,276.9	6,381.7	6,327.8	18.8	8.2	151.31	475.6	585.4	303.4	277.1	26.30	11.536			
6,460.0	6,336.0	6,441.5	6,386.7	19.0	8.3	150.70	480.2	594.7	306.0	279.4	26.61	11.501			
6,500.0	6,375.5	6,481.4	6,426.0	19.2	8.3	150.23	483.3	600.9	307.2	280.4	26.81	11.457			
6,555.0	6,430.0	6,536.3	6,480.0	19.5	8.4	149.50	487.5	609.4	308.0	280.9	27.08	11.375			
6,600.0	6,474.7	6,581.1	6,524.2	19.7	8.5	148.82	491.0	616.4	308.1	280.8	27.29	11.288			
6,650.0	6,524.4	6,630.9	6,573.2	19.9	8.5	147.98	494.8	624.2	307.5	280.0	27.52	11.174			
6,700.0	6,574.2	6,680.7	6,622.2	20.1	8.6	147.04	498.6	631.9	306.2	278.5	27.74	11.040			
6,745.0	6,619.1	6,725.4	6,666.2	20.3	8.7	146.11	502.1	638.9	304.5	276.6	27.92	10.906			
6,800.0	6,674.1	6,779.9	6,719.9	20.6	8.7	144.85	506.3	647.4	301.8	273.7	28.14	10.724			
6,840.0	6,714.0	6,819.5	6,758.9	20.8	8.8	143.84	509.3	653.5	299.4	271.1	28.29	10.582			
6,900.0	6,774.0	6,877.8	6,816.4	21.0	8.9	142.22	513.7	662.5	295.1	266.6	28.50	10.357			
6,919.0	6,793.0	6,896.1	6,834.4	21.1	8.9	-178.53	515.1	665.2	293.7	265.2	28.55	10.287			
6,935.0	6,809.0	6,911.5	6,849.6	21.1	8.9	-178.97	516.2	667.4	292.5	263.9	28.59	10.229			
7,000.0	6,874.0	6,974.3	6,911.6	21.3	9.0	179.30	520.5	676.2	287.9	259.2	28.77	10.008			
7,030.0	6,904.0	7,003.3	6,940.3	21.3	9.0	178.52	522.4	680.1	286.0	257.2	28.81	9.926			
7,106.0	6,980.0	7,077.1	7,013.4	21.5	9.1	176.63	527.0	689.3	281.7	252.8	28.93	9.739			
7,125.0	6,999.0	7,095.6	7,031.7	21.5	9.1	-4.34	528.1	691.4	280.4	251.5	28.93	9.692			
7,150.0	7,024.0	7,119.8	7,055.7	21.5	9.2	-4.97	529.4	694.2	277.8	248.9	28.94	9.601			
7,200.0	7,073.6	7,167.9	7,103.5	21.5	9.2	-6.33	532.0	699.4	269.7	240.6	29.10	9.268			
7,220.0	7,093.3	7,186.9	7,122.4	21.6	9.2	-6.92	533.0	701.4	265.3	236.1	29.17	9.095			
7,250.0	7,122.5	7,215.2	7,150.5	21.6	9.3	-7.88	534.4	704.2	257.6	228.3	29.27	8.800			
7,300.0	7,170.3	7,261.4	7,196.5	21.7	9.3	-9.74	536.5	708.5	241.6	212.2	29.42	8.214			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #706H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8492-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Factor		
7,315.0	7,184.4	7,275.0	7,210.0	21.7	9.3	-10.39	537.1	709.8	236.1	206.6	29.45	8.016	
7,350.0	7,216.7	7,306.3	7,241.1	21.8	9.4	-12.11	538.4	712.4	221.9	192.4	29.53	7.517	
7,400.0	7,261.3	7,349.3	7,284.0	21.9	9.4	-15.27	540.1	715.9	198.8	169.2	29.59	6.720	
7,410.0	7,270.0	7,357.7	7,292.4	21.9	9.4	-16.04	540.5	716.5	193.8	164.2	29.59	6.550	
7,450.0	7,303.7	7,390.4	7,324.9	22.0	9.5	-19.73	541.6	718.9	172.6	143.0	29.57	5.835	
7,500.0	7,343.7	7,429.1	7,363.5	22.1	9.5	-26.37	542.9	721.5	143.7	114.2	29.43	4.881	
7,505.0	7,347.6	7,432.8	7,367.2	22.1	9.5	-27.20	543.0	721.7	140.7	111.2	29.41	4.782	
7,550.0	7,380.9	7,465.1	7,399.4	22.2	9.6	-36.73	544.0	723.7	113.1	84.0	29.09	3.888	
7,600.0	7,415.1	7,498.2	7,432.5	22.3	9.6	-53.01	544.9	725.6	83.2	54.8	28.43	2.927	
7,650.0	7,445.9	7,528.2	7,462.4	22.4	9.6	-75.42	545.7	727.1	60.9	32.8	28.06	2.171	
7,674.5	7,459.7	7,541.6	7,475.8	22.5	9.6	-86.87	546.0	727.7	57.4	28.5	28.90	1.986	Advise and Monitor, ES, SF
7,695.0	7,470.6	7,552.2	7,486.4	22.5	9.7	-95.63	546.2	728.2	60.0	29.9	30.09	1.994	Advise and Monitor
7,700.0	7,473.2	7,554.7	7,488.9	22.5	9.7	-97.58	546.3	728.3	61.4	31.0	30.38	2.021	
7,750.0	7,496.8	7,577.6	7,511.7	22.6	9.7	-112.72	546.8	729.3	87.6	55.6	32.04	2.735	
7,790.0	7,512.8	7,593.1	7,527.2	22.6	9.7	-119.40	547.1	729.9	118.0	85.7	32.32	3.650	
7,800.0	7,516.4	7,596.5	7,530.7	22.6	9.7	-120.44	547.1	730.0	126.2	93.9	32.34	3.903	
7,850.0	7,531.9	7,611.5	7,545.6	22.7	9.7	-122.25	547.4	730.6	170.1	137.7	32.33	5.260	
7,885.0	7,540.3	7,619.4	7,553.6	22.7	9.7	-120.21	547.6	730.9	202.4	170.1	32.28	6.270	
7,900.0	7,543.2	7,622.2	7,556.3	22.7	9.7	-118.40	547.6	731.0	216.6	184.3	32.26	6.712	
7,950.0	7,550.3	7,628.6	7,562.7	22.7	9.7	-107.27	547.7	731.2	264.6	232.4	32.19	8.219	
7,980.0	7,552.4	7,630.3	7,564.4	22.8	9.7	-95.95	547.7	731.2	293.8	261.7	32.15	9.139	
8,000.0	7,553.0	7,630.5	7,564.6	22.8	9.7	-86.41	547.7	731.2	313.4	281.3	32.13	9.756	
8,006.7	7,553.0	7,630.4	7,564.5	22.8	9.7	-82.93	547.7	731.2	320.0	287.9	32.12	9.964	
8,075.0	7,552.9	7,629.2	7,563.3	22.8	9.7	-81.76	547.7	731.2	387.3	355.2	32.04	12.086	
8,100.0	7,552.9	7,628.7	7,562.8	22.8	9.7	-81.33	547.7	731.2	412.0	379.9	32.02	12.866	
8,170.0	7,552.8	7,627.4	7,561.5	22.9	9.7	-80.12	547.7	731.1	481.3	449.3	31.97	15.056	
8,200.0	7,552.8	7,626.8	7,561.0	22.9	9.7	-79.60	547.7	731.1	511.0	479.1	31.95	15.997	
8,265.0	7,552.7	7,625.6	7,559.7	23.0	9.7	-78.47	547.7	731.1	575.6	543.7	31.91	18.037	
8,300.0	7,552.6	7,624.9	7,559.0	23.0	9.7	-77.86	547.6	731.1	610.4	578.5	31.90	19.137	
8,360.0	7,552.6	7,623.8	7,557.9	23.0	9.7	-76.81	547.6	731.0	670.2	638.3	31.88	21.023	
8,400.0	7,552.5	7,623.0	7,557.1	23.1	9.7	-76.11	547.6	731.0	710.0	678.1	31.86	22.282	
8,455.0	7,552.4	7,621.9	7,556.0	23.1	9.7	-75.14	547.6	731.0	764.8	732.9	31.85	24.012	
8,500.0	7,552.4	7,621.0	7,555.1	23.2	9.7	-74.35	547.6	730.9	809.6	777.8	31.84	25.428	
8,550.0	7,552.3	7,620.0	7,554.1	23.2	9.7	-73.47	547.6	730.9	859.5	827.7	31.83	27.002	
8,600.0	7,552.3	7,619.0	7,553.1	23.3	9.7	-72.59	547.5	730.9	909.4	877.6	31.82	28.576	
8,645.0	7,552.2	7,618.1	7,552.2	23.4	9.7	-71.79	547.5	730.8	954.3	922.5	31.82	29.992	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #707H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8452-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)			
0.0	0.0	18.7	18.7	3.0	3.0	-2.94	196.2	-10.1	196.4					
95.0	95.0	113.7	113.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.00	32.735		
100.0	100.0	118.7	118.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.00	32.734		
190.0	190.0	208.7	208.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.01	32.684		
200.0	200.0	218.7	218.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.01	32.675		
285.0	285.0	303.7	303.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.03	32.576		
300.0	300.0	318.7	318.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.03	32.554		
380.0	380.0	398.7	398.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.06	32.414		
400.0	400.0	418.7	418.7	3.0	3.0	-2.94	196.2	-10.1	196.4	190.4	6.07	32.373		
475.0	475.0	493.7	493.7	3.0	3.1	-2.94	196.2	-10.1	196.4	190.3	6.10	32.199		
500.0	500.0	518.7	518.7	3.1	3.1	-2.94	196.2	-10.1	196.4	190.3	6.11	32.135		
570.0	570.0	588.7	588.7	3.1	3.1	-2.94	196.2	-10.1	196.4	190.3	6.15	31.936		
600.0	600.0	618.7	618.7	3.1	3.1	-2.94	196.2	-10.1	196.4	190.3	6.17	31.844		
665.0	665.0	683.7	683.7	3.1	3.1	-2.94	196.2	-10.1	196.4	190.2	6.21	31.628		
700.0	700.0	718.7	718.7	3.1	3.1	-2.94	196.2	-10.1	196.4	190.2	6.24	31.504		
760.0	760.0	778.7	778.7	3.1	3.1	-2.94	196.2	-10.1	196.4	190.2	6.28	31.279		
800.0	800.0	818.7	818.7	3.2	3.2	-2.94	196.2	-10.1	196.4	190.1	6.31	31.121		
855.0	855.0	873.7	873.7	3.2	3.2	-2.94	196.2	-10.1	196.4	190.1	6.36	30.893		
900.0	900.0	918.7	918.7	3.2	3.2	-2.94	196.2	-10.1	196.4	190.0	6.40	30.699		
950.0	950.0	968.7	968.7	3.2	3.2	-2.94	196.2	-10.1	196.4	190.0	6.45	30.475		
1,000.0	1,000.0	1,018.7	1,018.7	3.2	3.3	-2.94	196.2	-10.1	196.4	189.9	6.50	30.244		
1,045.0	1,045.0	1,063.7	1,063.7	3.3	3.3	-2.94	196.2	-10.1	196.4	189.9	6.54	30.030		
1,100.0	1,100.0	1,118.7	1,118.7	3.3	3.3	-2.94	196.2	-10.1	196.4	189.8	6.60	29.761		
1,140.0	1,140.0	1,158.7	1,158.7	3.3	3.3	-2.94	196.2	-10.1	196.4	189.8	6.65	29.561		
1,200.0	1,200.0	1,218.7	1,218.7	3.4	3.4	-2.94	196.2	-10.1	196.4	189.7	6.71	29.256		
1,235.0	1,235.0	1,253.7	1,253.7	3.4	3.4	-2.94	196.2	-10.1	196.4	189.7	6.76	29.074		
1,300.0	1,300.0	1,318.7	1,318.7	3.4	3.4	-2.94	196.2	-10.1	196.4	189.6	6.84	28.732		
1,330.0	1,330.0	1,348.7	1,348.7	3.4	3.4	-2.94	196.2	-10.1	196.4	189.6	6.88	28.572		
1,400.0	1,400.0	1,418.7	1,418.7	3.5	3.5	-2.94	196.2	-10.1	196.4	189.5	6.97	28.196		
1,425.0	1,425.0	1,443.7	1,443.7	3.5	3.5	-2.94	196.2	-10.1	196.4	189.4	7.00	28.060		
1,500.0	1,500.0	1,518.7	1,518.7	3.5	3.6	-2.94	196.2	-10.1	196.4	189.3	7.10	27.650		
1,520.0	1,520.0	1,538.7	1,538.7	3.6	3.6	-2.94	196.2	-10.1	196.4	189.3	7.13	27.540		
1,600.0	1,600.0	1,618.7	1,618.7	3.6	3.6	-2.94	196.2	-10.1	196.4	189.2	7.25	27.099		
1,615.0	1,615.0	1,633.7	1,633.7	3.6	3.6	-2.94	196.2	-10.1	196.4	189.2	7.27	27.016		
1,700.0	1,700.0	1,718.7	1,718.7	3.7	3.7	-2.94	196.2	-10.1	196.4	189.0	7.40	26.546		
1,710.0	1,710.0	1,728.7	1,728.7	3.7	3.7	-2.94	196.2	-10.1	196.4	189.0	7.42	26.490		
1,800.0	1,800.0	1,818.7	1,818.7	3.8	3.8	-2.94	196.2	-10.1	196.4	188.9	7.56	25.993		
1,805.0	1,805.0	1,823.7	1,823.7	3.8	3.8	-2.94	196.2	-10.1	196.4	188.9	7.57	25.966		
1,900.0	1,900.0	1,918.7	1,918.7	3.9	3.9	-2.94	196.2	-10.1	196.4	188.7	7.72	25.445		
1,995.0	1,995.0	2,013.7	2,013.7	3.9	3.9	-2.94	196.2	-10.1	196.4	188.6	7.88	24.928		
2,000.0	2,000.0	2,018.7	2,018.7	3.9	4.0	-2.94	196.2	-10.1	196.4	188.6	7.89	24.901		
2,090.0	2,090.0	2,108.7	2,108.7	4.0	4.0	-43.02	196.2	-10.1	195.4	187.4	8.06	24.254		
2,100.0	2,100.0	2,118.7	2,118.7	4.1	4.0	-43.09	196.2	-10.1	195.2	187.1	8.07	24.171		
2,185.0	2,184.9	2,203.6	2,203.6	4.5	4.1	-43.99	196.2	-10.1	192.1	183.8	8.34	23.044		
2,200.0	2,199.8	2,218.5	2,218.5	4.6	4.1	-44.21	196.2	-10.1	191.4	183.0	8.38	22.840		
2,280.0	2,279.6	2,298.3	2,298.3	5.1	4.2	-45.71	196.2	-10.1	186.6	178.0	8.61	21.681		
2,300.0	2,299.5	2,318.2	2,318.2	5.2	4.2	-46.18	196.2	-10.1	185.2	176.6	8.66	21.388		
2,375.0	2,373.9	2,392.6	2,392.6	5.6	4.3	-48.29	196.2	-10.1	179.2	170.4	8.84	20.270		
2,400.0	2,398.7	2,417.4	2,417.4	5.8	4.3	-49.14	196.2	-10.1	177.0	168.1	8.89	19.904		
2,470.0	2,467.9	2,486.6	2,486.6	6.2	4.4	-51.92	196.2	-10.1	170.2	161.2	9.01	18.888		
2,500.0	2,497.5	2,515.6	2,515.6	6.3	4.4	-53.29	196.2	-10.0	167.1	158.1	9.04	18.477		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #707H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program:		0-Standard Keeper 104, 8452-MWD+IFR1+FDIR						Rule Assigned:					Offset Well Error: 3.0 usft	
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Minimum Separation		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)	Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
2,565.0	2,561.3	2,577.7	2,577.7	6.7	4.5	-56.40	197.0	-9.4	160.7	151.6	9.10	17.667		
2,600.0	2,595.6	2,611.2	2,611.2	6.9	4.5	-58.18	197.8	-8.7	157.5	148.4	9.11	17.283		
2,660.0	2,654.2	2,668.8	2,668.7	7.2	4.5	-61.40	199.9	-6.8	152.2	143.1	9.12	16.688		
2,700.0	2,693.1	2,707.3	2,707.1	7.4	4.6	-63.68	201.9	-5.2	149.0	139.9	9.12	16.339		
2,725.1	2,717.4	2,731.5	2,731.3	7.4	4.6	-65.17	203.3	-4.0	147.1	138.0	9.11	16.139		
2,755.0	2,746.3	2,760.4	2,760.0	7.4	4.6	-66.89	205.1	-2.3	145.0	135.9	9.11	15.910		
2,800.0	2,789.9	2,804.1	2,803.5	7.5	4.6	-69.37	208.4	0.5	142.3	133.2	9.13	15.592		
2,850.0	2,838.3	2,852.9	2,852.0	7.6	4.7	-71.94	212.6	4.1	139.9	130.7	9.18	15.242		
2,900.0	2,886.7	2,902.4	2,901.2	7.7	4.7	-74.48	217.2	8.1	137.9	128.6	9.25	14.911		
2,945.0	2,930.3	2,947.1	2,945.5	7.8	4.8	-76.83	221.3	11.6	136.3	127.0	9.33	14.611		
3,000.0	2,983.5	3,001.6	2,999.6	7.9	4.8	-79.77	226.3	16.0	134.7	125.3	9.44	14.264		
3,040.0	3,022.2	3,041.2	3,038.9	8.0	4.8	-81.95	230.0	19.1	133.8	124.2	9.55	14.016		
3,100.0	3,080.3	3,100.7	3,098.0	8.1	4.9	-85.26	235.4	23.9	132.8	123.1	9.71	13.670		
3,135.0	3,114.2	3,135.4	3,132.4	8.2	4.9	-87.22	238.6	26.7	132.4	122.6	9.82	13.475		
3,200.0	3,177.1	3,199.9	3,196.4	8.3	5.0	-90.86	244.6	31.8	132.1	122.0	10.05	13.146		
3,202.5	3,179.6	3,202.4	3,198.9	8.3	5.0	-91.00	244.8	32.0	132.1	122.0	10.06	13.133 CC		
3,230.0	3,206.2	3,229.6	3,225.9	8.4	5.0	-92.55	247.3	34.2	132.1	122.0	10.16	13.002 ES		
3,300.0	3,274.0	3,299.0	3,294.8	8.5	5.1	-96.46	253.7	39.7	132.7	122.3	10.45	12.705		
3,325.0	3,298.2	3,323.8	3,319.4	8.6	5.1	-97.85	256.0	41.7	133.1	122.5	10.55	12.608		
3,400.0	3,370.8	3,398.2	3,393.2	8.8	5.2	-101.96	262.9	47.6	134.6	123.7	10.89	12.356		
3,420.0	3,390.1	3,418.0	3,412.9	8.8	5.2	-103.04	264.7	49.2	135.1	124.1	10.99	12.297		
3,500.0	3,467.6	3,497.3	3,491.6	9.0	5.3	-107.26	272.0	55.5	137.7	126.3	11.38	12.099		
3,515.0	3,482.1	3,512.2	3,506.4	9.1	5.3	-108.03	273.4	56.7	138.3	126.8	11.46	12.068		
3,600.0	3,564.4	3,596.4	3,590.0	9.3	5.4	-112.29	281.1	63.4	141.9	130.0	11.90	11.928		
3,610.0	3,574.1	3,606.4	3,599.8	9.3	5.4	-112.78	282.0	64.2	142.4	130.5	11.95	11.915		
3,700.0	3,661.2	3,695.6	3,688.4	9.6	5.5	-117.00	290.3	71.3	147.2	134.8	12.44	11.835		
3,705.0	3,666.1	3,700.5	3,693.3	9.6	5.5	-117.23	290.7	71.7	147.5	135.0	12.47	11.832		
3,800.0	3,758.0	3,794.7	3,786.8	9.9	5.5	-121.36	299.4	79.2	153.4	140.4	12.99	11.809 SF		
3,895.0	3,850.0	3,888.9	3,880.3	10.1	5.6	-125.17	308.1	86.7	160.1	146.6	13.52	11.838		
3,900.0	3,854.8	3,893.9	3,885.2	10.2	5.6	-125.37	308.5	87.1	160.5	146.9	13.55	11.841		
3,990.0	3,942.0	3,983.1	3,973.8	10.4	5.7	-128.67	316.8	94.2	167.4	153.4	14.06	11.910		
4,000.0	3,951.7	3,993.0	3,983.6	10.4	5.7	-129.02	317.7	95.0	168.2	154.1	14.11	11.920		
4,085.0	4,033.9	4,077.3	4,067.3	10.7	5.8	-131.87	325.5	101.7	175.3	160.7	14.59	12.017		
4,100.0	4,048.5	4,092.2	4,082.0	10.8	5.8	-132.35	326.8	102.9	176.6	161.9	14.67	12.037		
4,180.0	4,125.9	4,171.5	4,160.8	11.0	5.9	-134.78	334.1	109.3	183.7	168.6	15.12	12.154		
4,200.0	4,145.3	4,191.3	4,180.4	11.1	6.0	-135.36	336.0	110.8	185.5	170.3	15.23	12.186		
4,275.0	4,217.9	4,265.7	4,254.2	11.3	6.0	-137.44	342.8	116.8	192.5	176.9	15.64	12.312		
4,300.0	4,242.1	4,290.4	4,278.8	11.4	6.1	-138.10	345.1	118.7	194.9	179.2	15.77	12.358		
4,370.0	4,309.9	4,359.8	4,347.7	11.6	6.1	-139.86	351.5	124.3	201.7	185.6	16.15	12.489		
4,400.0	4,338.9	4,389.6	4,377.2	11.7	6.2	-140.58	354.2	126.6	204.7	188.4	16.32	12.547		
4,465.0	4,401.8	4,454.0	4,441.2	11.9	6.2	-142.07	360.2	131.8	211.3	194.6	16.67	12.678		
4,500.0	4,435.7	4,488.7	4,475.6	12.0	6.3	-142.83	363.4	134.6	214.9	198.0	16.85	12.750		
4,560.0	4,493.8	4,548.2	4,534.7	12.2	6.3	-144.08	368.9	139.3	221.1	203.9	17.17	12.877		
4,600.0	4,532.5	4,587.9	4,574.0	12.3	6.4	-144.88	372.5	142.5	225.3	207.9	17.38	12.963		
4,655.0	4,585.8	4,642.4	4,628.2	12.5	6.4	-145.92	377.5	146.8	231.2	213.5	17.67	13.082		
4,700.0	4,629.4	4,687.0	4,672.5	12.7	6.5	-146.74	381.7	150.4	236.0	218.1	17.91	13.180		
4,750.0	4,677.8	4,736.6	4,721.7	12.8	6.5	-147.61	386.2	154.3	241.5	223.3	18.17	13.290		
4,800.0	4,726.2	4,786.2	4,770.9	13.0	6.6	-148.44	390.8	158.3	247.0	228.5	18.43	13.401		
4,845.0	4,769.7	4,830.8	4,815.1	13.1	6.6	-149.16	394.9	161.8	251.9	233.3	18.66	13.501		
4,900.0	4,823.0	4,885.3	4,869.3	13.3	6.7	-150.00	399.9	166.2	258.1	239.1	18.94	13.623		
4,940.0	4,861.7	4,925.0	4,908.6	13.5	6.7	-150.59	403.6	169.3	262.6	243.4	19.15	13.712		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #707H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8452-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance		Minimum	Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)			
5,000.0	4,919.8	4,984.4	4,967.7	13.7	6.8	-151.43	409.1	174.1	269.4	249.9	19.46	13.845		
5,035.0	4,953.7	5,019.1	5,002.1	13.8	6.8	-151.90	412.3	176.8	273.4	253.7	19.64	13.922		
5,100.0	5,016.6	5,083.6	5,066.1	14.0	6.9	-152.74	418.2	182.0	280.8	260.9	19.97	14.064		
5,130.0	5,045.6	5,113.3	5,095.6	14.1	6.9	-153.12	420.9	184.4	284.3	264.2	20.12	14.129		
5,200.0	5,113.4	5,182.7	5,164.5	14.4	7.0	-153.95	427.3	189.9	292.4	272.0	20.48	14.281		
5,225.0	5,137.6	5,207.5	5,189.1	14.4	7.1	-154.24	429.6	191.9	295.4	274.8	20.60	14.334		
5,300.0	5,210.2	5,281.9	5,262.9	14.7	7.1	-155.07	436.5	197.8	304.1	283.2	20.99	14.494		
5,320.0	5,229.6	5,301.7	5,282.6	14.8	7.2	-155.28	438.3	199.4	306.5	285.4	21.09	14.536		
5,400.0	5,307.0	5,381.0	5,361.3	15.0	7.2	-156.10	445.6	205.7	316.0	294.5	21.49	14.702		
5,415.0	5,321.6	5,395.9	5,376.0	15.1	7.3	-156.25	447.0	206.9	317.7	296.2	21.57	14.733		
5,500.0	5,403.9	5,480.2	5,459.7	15.4	7.4	-157.06	454.8	213.6	327.9	305.9	22.00	14.906		
5,510.0	5,413.5	5,490.1	5,469.5	15.4	7.4	-157.16	455.7	214.4	329.1	307.0	22.05	14.927		
5,600.0	5,500.7	5,579.3	5,558.1	15.7	7.5	-157.96	463.9	221.5	339.9	317.4	22.50	15.106		
5,605.0	5,505.5	5,584.2	5,562.9	15.8	7.5	-158.00	464.3	221.9	340.5	318.0	22.52	15.116		
5,700.0	5,597.5	5,673.2	5,651.4	16.1	7.6	-158.78	472.0	228.5	352.7	329.7	22.98	15.345		
5,795.0	5,689.5	5,761.8	5,739.6	16.4	7.7	-159.59	478.6	234.2	366.3	342.8	23.44	15.629		
5,800.0	5,694.3	5,766.5	5,744.2	16.5	7.7	-159.63	478.9	234.5	367.0	343.6	23.46	15.645		
5,890.0	5,781.4	5,850.0	5,827.4	16.8	7.8	-160.40	484.1	239.0	381.4	357.5	23.89	15.963		
5,900.0	5,791.1	5,859.3	5,836.7	16.8	7.8	-160.49	484.7	239.5	383.0	359.1	23.94	16.002		
5,985.0	5,873.4	5,937.7	5,914.9	17.1	7.9	-161.21	488.6	242.9	397.9	373.5	24.34	16.348		
6,000.0	5,887.9	5,951.5	5,928.7	17.2	7.9	-161.34	489.3	243.4	400.6	376.2	24.41	16.413		
6,080.0	5,965.4	6,024.9	6,002.0	17.5	8.0	-162.01	492.1	245.9	415.9	391.1	24.78	16.780		
6,100.0	5,984.7	6,043.2	6,020.3	17.5	8.0	-162.17	492.7	246.4	419.8	394.9	24.88	16.876		
6,175.0	6,057.4	6,111.5	6,088.6	17.8	8.1	-162.79	494.6	248.0	435.3	410.0	25.22	17.257		
6,193.8	6,075.6	6,128.6	6,105.6	17.9	8.1	-162.94	494.9	248.3	439.3	414.0	25.31	17.357		
6,200.0	6,081.6	6,134.2	6,111.2	17.9	8.1	-163.00	495.0	248.4	440.6	415.3	25.34	17.390		
6,270.0	6,149.6	6,200.0	6,177.0	18.2	8.2	-163.62	496.0	249.3	455.2	429.5	25.69	17.719		
6,300.0	6,178.8	6,225.0	6,202.0	18.3	8.2	-163.84	496.3	249.5	461.1	435.3	25.81	17.865		
6,365.0	6,242.5	6,284.2	6,261.2	18.6	8.3	-164.31	496.5	249.7	473.6	447.4	26.18	18.091		
6,400.0	6,276.9	6,318.5	6,295.6	18.8	8.3	-164.56	496.5	249.7	479.8	453.5	26.38	18.188		
6,460.0	6,336.0	6,377.7	6,354.7	19.0	8.4	-164.93	496.5	249.7	489.7	462.9	26.73	18.321		
6,500.0	6,375.5	6,417.2	6,394.2	19.2	8.4	-165.14	496.5	249.7	495.6	468.6	26.96	18.384		
6,555.0	6,430.0	6,471.7	6,448.7	19.5	8.5	-165.40	496.5	249.7	502.8	475.6	27.27	18.441		
6,600.0	6,474.7	6,516.4	6,493.4	19.7	8.6	-165.57	496.5	249.7	508.0	480.5	27.52	18.460		
6,650.0	6,524.4	6,566.1	6,543.1	19.9	8.6	-165.74	496.5	249.7	513.0	485.2	27.79	18.457		
6,700.0	6,574.2	6,615.9	6,592.9	20.1	8.7	-165.88	496.5	249.7	517.1	489.0	28.07	18.424		
6,745.0	6,619.1	6,660.8	6,637.8	20.3	8.7	-165.97	496.5	249.7	520.1	491.8	28.31	18.373		
6,800.0	6,674.1	6,715.7	6,692.8	20.6	8.8	-166.06	496.5	249.7	522.8	494.2	28.60	18.280		
6,840.0	6,714.0	6,755.7	6,732.7	20.8	8.8	-166.11	496.5	249.7	524.2	495.4	28.81	18.195		
6,900.0	6,774.0	6,815.7	6,792.7	21.0	8.9	-166.14	496.5	249.7	525.2	496.0	29.12	18.036		
6,919.0	6,793.0	6,834.7	6,811.7	21.1	8.9	-126.35	496.5	249.7	525.2	496.0	29.19	17.994		
6,935.0	6,809.0	6,850.7	6,827.7	21.1	8.9	-126.35	496.5	249.7	525.2	496.0	29.25	17.957		
7,000.0	6,874.0	6,915.7	6,892.7	21.3	9.0	-126.35	496.5	249.7	525.2	495.7	29.49	17.810		
7,030.0	6,904.0	6,945.7	6,922.7	21.3	9.1	-126.35	496.5	249.7	525.2	495.7	29.56	17.766		
7,106.0	6,980.0	7,021.7	6,998.7	21.5	9.1	-126.35	496.5	249.7	525.2	495.5	29.75	17.654		
7,125.0	6,999.0	7,040.7	7,017.7	21.5	9.2	53.19	496.5	249.7	525.0	495.3	29.77	17.636		
7,150.0	7,024.0	7,065.7	7,042.7	21.5	9.2	53.38	496.5	249.7	524.2	494.4	29.79	17.595		
7,200.0	7,073.6	7,115.3	7,092.3	21.5	9.3	54.20	496.5	249.7	520.6	490.8	29.89	17.421		
7,220.0	7,093.3	7,135.0	7,112.0	21.6	9.3	54.69	496.5	249.7	518.5	488.6	29.92	17.331		
7,250.0	7,122.5	7,164.2	7,141.2	21.6	9.3	55.61	496.5	249.7	514.6	484.7	29.96	17.177		
7,300.0	7,170.3	7,212.0	7,189.0	21.7	9.4	57.63	496.5	249.7	506.4	476.4	30.00	16.881		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8452-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
7,315.0	7,184.4	7,226.1	7,203.1	21.7	9.4	58.35	496.5	249.7	503.5	473.5	30.00	16.784	
7,350.0	7,216.7	7,258.4	7,235.4	21.8	9.4	60.25	496.5	249.7	496.2	466.2	29.99	16.547	
7,400.0	7,261.3	7,303.0	7,280.0	21.9	9.5	63.44	496.5	249.7	484.6	454.7	29.92	16.195	
7,410.0	7,270.0	7,311.6	7,288.7	21.9	9.5	64.14	496.5	249.7	482.1	452.2	29.90	16.124	
7,450.0	7,303.7	7,345.4	7,322.4	22.0	9.5	67.14	496.5	249.7	472.0	442.2	29.79	15.846	
7,500.0	7,343.7	7,385.4	7,362.4	22.1	9.6	71.24	496.5	249.7	459.1	429.5	29.57	15.526	
7,505.0	7,347.6	7,389.2	7,366.3	22.1	9.6	71.66	496.5	249.7	457.8	428.3	29.54	15.496	
7,550.0	7,380.9	7,422.6	7,399.6	22.2	9.6	75.57	496.5	249.7	446.7	417.4	29.27	15.262	
7,600.0	7,415.1	7,456.7	7,433.8	22.3	9.7	79.91	496.5	249.7	435.7	406.8	28.89	15.083	
7,650.0	7,445.9	7,487.6	7,464.6	22.4	9.7	84.02	496.5	249.7	427.0	398.6	28.43	15.018	
7,695.0	7,470.6	7,512.3	7,489.3	22.5	9.7	87.33	496.5	249.7	422.0	394.0	27.99	15.075	
7,700.0	7,473.2	7,514.9	7,491.9	22.5	9.7	87.66	496.5	249.7	421.6	393.7	27.94	15.088	
7,738.4	7,491.6	7,533.3	7,510.3	22.5	9.8	90.00	496.5	249.7	420.3	392.7	27.57	15.242	
7,750.0	7,496.8	7,538.4	7,515.5	22.6	9.8	90.61	496.5	249.7	420.4	392.9	27.47	15.306	
7,790.0	7,512.8	7,554.4	7,531.5	22.6	9.8	92.36	496.5	249.7	422.9	395.8	27.13	15.586	
7,800.0	7,516.4	7,558.0	7,535.1	22.6	9.8	92.70	496.5	249.7	424.0	397.0	27.06	15.670	
7,850.0	7,531.9	7,573.6	7,550.6	22.7	9.8	93.80	496.5	249.7	432.9	406.2	26.78	16.168	
7,885.0	7,540.3	7,581.9	7,559.0	22.7	9.8	93.93	496.5	249.7	442.3	415.7	26.67	16.588	
7,900.0	7,543.2	7,584.9	7,561.9	22.7	9.8	93.82	496.5	249.7	447.1	420.5	26.64	16.784	
7,950.0	7,550.3	7,591.9	7,569.0	22.7	9.8	92.69	496.5	249.7	466.3	439.7	26.64	17.503	
7,980.0	7,552.4	7,594.1	7,571.1	22.8	9.8	91.43	496.5	249.7	480.1	453.4	26.70	17.978	
8,000.0	7,553.0	7,594.6	7,571.7	22.8	9.8	90.36	496.5	249.7	490.0	463.3	26.76	18.313	
8,006.7	7,553.0	7,594.7	7,571.7	22.8	9.8	89.96	496.5	249.7	493.5	466.7	26.78	18.429	
8,075.0	7,552.9	7,594.6	7,571.6	22.8	9.8	89.94	496.5	249.7	532.5	505.4	27.06	19.676	
8,100.0	7,552.9	7,594.6	7,571.6	22.8	9.8	89.94	496.5	249.7	548.2	521.0	27.18	20.168	
8,170.0	7,552.8	7,594.5	7,571.5	22.9	9.8	89.93	496.5	249.7	595.6	568.0	27.54	21.625	
8,200.0	7,552.8	7,594.4	7,571.5	22.9	9.8	89.92	496.5	249.7	617.2	589.5	27.69	22.288	
8,265.0	7,552.7	7,594.4	7,571.4	23.0	9.8	89.91	496.5	249.7	666.3	638.2	28.01	23.784	
8,300.0	7,552.6	7,594.3	7,571.3	23.0	9.8	89.91	496.5	249.7	693.8	665.6	28.17	24.625	
8,360.0	7,552.6	7,594.2	7,571.3	23.0	9.8	89.90	496.5	249.7	742.4	714.0	28.43	26.110	
8,400.0	7,552.5	7,594.2	7,571.2	23.1	9.8	89.89	496.5	249.7	775.7	747.1	28.59	27.130	
8,455.0	7,552.4	7,594.1	7,571.1	23.1	9.8	89.88	496.5	249.7	822.5	793.7	28.79	28.564	
8,500.0	7,552.4	7,594.1	7,571.1	23.2	9.8	89.87	496.5	249.7	861.4	832.5	28.94	29.763	
8,550.0	7,552.3	7,594.0	7,571.0	23.2	9.8	89.86	496.5	249.7	905.4	876.3	29.10	31.116	
8,600.0	7,552.3	7,593.9	7,571.0	23.3	9.8	89.86	496.5	249.7	950.0	920.8	29.24	32.492	
8,645.0	7,552.2	7,593.9	7,570.9	23.4	9.8	89.85	496.5	249.7	990.5	961.2	29.36	33.743	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2500-MWD+IFR1+MS, 8441-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Factor	
0.0	0.0	18.7	18.7	3.0	3.0	-11.55	196.1	-40.1	200.2				
95.0	95.0	113.7	113.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.2	6.00	33.357	
100.0	100.0	118.7	118.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.2	6.00	33.355	
190.0	190.0	208.7	208.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.2	6.01	33.305	
200.0	200.0	218.7	218.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.2	6.01	33.297	
285.0	285.0	303.7	303.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.1	6.03	33.198	
300.0	300.0	318.7	318.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.1	6.03	33.176	
380.0	380.0	398.7	398.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.1	6.06	33.037	
400.0	400.0	418.7	418.7	3.0	3.0	-11.55	196.1	-40.1	200.2	194.1	6.07	32.997	
475.0	475.0	493.7	493.7	3.0	3.1	-11.55	196.1	-40.1	200.2	194.1	6.10	32.825	
500.0	500.0	518.7	518.7	3.1	3.1	-11.55	196.1	-40.1	200.2	194.1	6.11	32.761	
570.0	570.0	588.7	588.7	3.1	3.1	-11.55	196.1	-40.1	200.2	194.0	6.15	32.564	
600.0	600.0	618.7	618.7	3.1	3.1	-11.55	196.1	-40.1	200.2	194.0	6.16	32.472	
665.0	665.0	683.7	683.7	3.1	3.1	-11.55	196.1	-40.1	200.2	194.0	6.21	32.257	
700.0	700.0	718.7	718.7	3.1	3.1	-11.55	196.1	-40.1	200.2	193.9	6.23	32.134	
760.0	760.0	778.7	778.7	3.1	3.1	-11.55	196.1	-40.1	200.2	193.9	6.27	31.910	
800.0	800.0	818.7	818.7	3.2	3.2	-11.55	196.1	-40.1	200.2	193.9	6.30	31.753	
855.0	855.0	873.7	873.7	3.2	3.2	-11.55	196.1	-40.1	200.2	193.8	6.35	31.526	
900.0	900.0	918.7	918.7	3.2	3.2	-11.55	196.1	-40.1	200.2	193.8	6.39	31.333	
950.0	950.0	968.7	968.7	3.2	3.2	-11.55	196.1	-40.1	200.2	193.7	6.43	31.110	
1,000.0	1,000.0	1,018.7	1,018.7	3.2	3.3	-11.55	196.1	-40.1	200.2	193.7	6.48	30.879	
1,045.0	1,045.0	1,063.7	1,063.7	3.3	3.3	-11.55	196.1	-40.1	200.2	193.6	6.53	30.665	
1,100.0	1,100.0	1,118.7	1,118.7	3.3	3.3	-11.55	196.1	-40.1	200.2	193.6	6.59	30.397	
1,140.0	1,140.0	1,158.7	1,158.7	3.3	3.3	-11.55	196.1	-40.1	200.2	193.5	6.63	30.198	
1,200.0	1,200.0	1,218.7	1,218.7	3.4	3.4	-11.55	196.1	-40.1	200.2	193.5	6.70	29.892	
1,235.0	1,235.0	1,253.7	1,253.7	3.4	3.4	-11.55	196.1	-40.1	200.2	193.4	6.74	29.711	
1,300.0	1,300.0	1,318.7	1,318.7	3.4	3.4	-11.55	196.1	-40.1	200.2	193.4	6.82	29.369	
1,330.0	1,330.0	1,348.7	1,348.7	3.4	3.4	-11.55	196.1	-40.1	200.2	193.3	6.85	29.209	
1,400.0	1,400.0	1,418.7	1,418.7	3.5	3.5	-11.55	196.1	-40.1	200.2	193.2	6.94	28.831	
1,425.0	1,425.0	1,443.7	1,443.7	3.5	3.5	-11.55	196.1	-40.1	200.2	193.2	6.98	28.695	
1,500.0	1,500.0	1,518.7	1,518.7	3.5	3.6	-11.55	196.1	-40.1	200.2	193.1	7.08	28.284	
1,520.0	1,520.0	1,538.7	1,538.7	3.6	3.6	-11.55	196.1	-40.1	200.2	193.1	7.10	28.174	
1,600.0	1,600.0	1,618.7	1,618.7	3.6	3.6	-11.55	196.1	-40.1	200.2	193.0	7.22	27.731	
1,615.0	1,615.0	1,633.7	1,633.7	3.6	3.6	-11.55	196.1	-40.1	200.2	192.9	7.24	27.648	
1,700.0	1,700.0	1,718.7	1,718.7	3.7	3.7	-11.55	196.1	-40.1	200.2	192.8	7.37	27.175	
1,710.0	1,710.0	1,728.7	1,728.7	3.7	3.7	-11.55	196.1	-40.1	200.2	192.8	7.38	27.120	
1,800.0	1,800.0	1,818.7	1,818.7	3.8	3.8	-11.55	196.1	-40.1	200.2	192.7	7.52	26.620	
1,805.0	1,805.0	1,823.7	1,823.7	3.8	3.8	-11.55	196.1	-40.1	200.2	192.6	7.53	26.592	
1,900.0	1,900.0	1,918.7	1,918.7	3.9	3.9	-11.55	196.1	-40.1	200.2	192.5	7.68	26.067	
1,995.0	1,995.0	2,013.7	2,013.7	3.9	3.9	-11.55	196.1	-40.1	200.2	192.3	7.84	25.547	
2,000.0	2,000.0	2,018.7	2,018.7	3.9	4.0	-11.55	196.1	-40.1	200.2	192.3	7.84	25.519	
2,090.0	2,090.0	2,108.7	2,108.7	4.0	4.0	-51.67	196.1	-40.1	199.3	191.3	7.99	24.945	
2,100.0	2,100.0	2,118.7	2,118.7	4.1	4.0	-51.74	196.1	-40.1	199.1	191.1	8.00	24.881	
2,185.0	2,184.9	2,203.6	2,203.6	4.5	4.1	-52.75	196.1	-40.1	196.5	188.3	8.19	23.999	
2,200.0	2,199.8	2,218.5	2,218.5	4.6	4.1	-53.00	196.1	-40.1	195.9	187.7	8.21	23.852	
2,280.0	2,279.6	2,298.3	2,298.3	5.1	4.2	-54.65	196.1	-40.1	191.9	183.6	8.37	22.926	
2,300.0	2,299.5	2,318.2	2,318.2	5.2	4.2	-55.16	196.1	-40.1	190.8	182.4	8.40	22.698	
2,375.0	2,373.9	2,392.6	2,392.6	5.6	4.3	-57.47	196.1	-40.1	185.8	177.3	8.52	21.803	
2,400.0	2,398.7	2,417.4	2,417.4	5.8	4.3	-58.38	196.1	-40.1	184.0	175.5	8.55	21.515	
2,470.0	2,467.9	2,486.6	2,486.6	6.2	4.4	-61.34	196.1	-40.1	178.7	170.1	8.63	20.711	
2,500.0	2,497.5	2,515.3	2,515.3	6.3	4.4	-62.77	196.1	-40.1	176.3	167.7	8.66	20.372	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2500-MWD+IFR1+MS, 8441-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Factor		
2,565.0	2,561.3	2,576.0	2,575.9	6.7	4.5	-66.33	196.7	-40.9	172.0	163.3	8.75	19.664	
2,600.0	2,595.6	2,608.4	2,608.4	6.9	4.6	-68.54	197.4	-41.7	170.3	161.5	8.83	19.285	
2,660.0	2,654.2	2,663.9	2,663.8	7.2	4.9	-72.76	199.0	-43.8	168.6	159.4	9.14	18.440	
2,685.7	2,679.2	2,687.5	2,687.4	7.3	5.0	-74.71	199.9	-44.9	168.4	159.1	9.30	18.105 CC	
2,700.0	2,693.1	2,700.0	2,699.8	7.4	5.1	-75.77	200.4	-45.6	168.4	159.1	9.39	17.937 ES	
2,725.1	2,717.4	2,723.6	2,723.3	7.4	5.2	-77.83	201.4	-47.0	168.8	159.3	9.54	17.704	
2,755.0	2,746.3	2,750.8	2,750.5	7.4	5.3	-80.26	202.8	-48.8	169.9	160.1	9.73	17.467	
2,800.0	2,789.9	2,791.7	2,791.2	7.5	5.6	-83.88	205.2	-51.8	172.6	162.6	10.04	17.197 SF	
2,850.0	2,838.3	2,837.0	2,836.2	7.6	5.7	-87.76	208.2	-55.8	177.3	167.0	10.27	17.258	
2,900.0	2,886.7	2,884.2	2,883.1	7.7	5.8	-91.59	211.7	-60.3	183.5	173.0	10.47	17.530	
2,945.0	2,930.3	2,927.4	2,925.9	7.8	5.8	-94.89	214.9	-64.5	189.8	179.1	10.66	17.809	
3,000.0	2,983.5	2,980.1	2,978.3	7.9	5.9	-98.63	218.8	-69.6	198.3	187.4	10.90	18.199	
3,040.0	3,022.2	3,018.5	3,016.4	8.0	5.9	-101.16	221.6	-73.3	205.1	194.0	11.09	18.495	
3,100.0	3,080.3	3,076.1	3,073.6	8.1	6.0	-104.66	225.9	-78.9	215.8	204.5	11.38	18.973	
3,135.0	3,114.2	3,109.7	3,106.9	8.2	6.1	-106.54	228.4	-82.1	222.5	210.9	11.55	19.264	
3,200.0	3,177.1	3,172.1	3,168.8	8.3	6.2	-109.77	233.0	-88.1	235.4	223.5	11.87	19.825	
3,230.0	3,206.2	3,200.9	3,197.4	8.4	6.2	-111.15	235.2	-90.9	241.6	229.6	12.03	20.090	
3,300.0	3,274.0	3,268.1	3,264.1	8.5	6.4	-114.10	240.2	-97.4	256.6	244.2	12.39	20.714	
3,325.0	3,298.2	3,292.1	3,287.9	8.6	6.4	-115.08	242.0	-99.7	262.0	249.5	12.52	20.938	
3,400.0	3,370.8	3,364.0	3,359.3	8.8	6.6	-117.78	247.3	-106.7	278.9	266.0	12.91	21.606	
3,420.0	3,390.1	3,383.2	3,378.4	8.8	6.6	-118.45	248.7	-108.5	283.5	270.5	13.02	21.782	
3,500.0	3,467.6	3,460.0	3,454.6	9.0	6.8	-120.91	254.4	-116.0	302.3	288.8	13.45	22.476	
3,515.0	3,482.1	3,474.4	3,468.9	9.1	6.8	-121.34	255.5	-117.3	305.8	292.3	13.53	22.604	
3,600.0	3,564.4	3,556.0	3,549.9	9.3	7.0	-123.60	261.6	-125.2	326.4	312.4	14.00	23.311	
3,610.0	3,574.1	3,565.6	3,559.4	9.3	7.0	-123.85	262.3	-126.2	328.8	314.7	14.06	23.392	
3,700.0	3,661.2	3,652.0	3,645.1	9.6	7.3	-125.92	268.7	-134.5	351.0	336.5	14.57	24.101	
3,705.0	3,666.1	3,656.8	3,649.9	9.6	7.3	-126.03	269.0	-135.0	352.3	337.7	14.59	24.139	
3,800.0	3,758.0	3,747.9	3,740.4	9.9	7.5	-127.94	275.8	-143.8	376.2	361.1	15.14	24.842	
3,895.0	3,850.0	3,839.1	3,830.9	10.1	7.7	-129.63	282.6	-152.6	400.5	384.8	15.70	25.501	
3,900.0	3,854.8	3,843.9	3,835.6	10.2	7.8	-129.71	282.9	-153.0	401.8	386.0	15.73	25.535	
3,990.0	3,942.0	3,930.3	3,921.4	10.4	8.0	-131.12	289.4	-161.4	425.0	408.7	16.27	26.118	
4,000.0	3,951.7	3,939.9	3,930.9	10.4	8.0	-131.27	290.1	-162.3	427.6	411.3	16.33	26.180	
4,085.0	4,033.9	4,021.4	4,011.8	10.7	8.2	-132.45	296.1	-170.2	449.8	433.0	16.85	26.693	
4,100.0	4,048.5	4,035.8	4,026.1	10.8	8.3	-132.65	297.2	-171.6	453.8	436.8	16.94	26.780	
4,180.0	4,125.9	4,112.6	4,102.3	11.0	8.5	-133.65	302.9	-179.0	474.8	457.4	17.44	27.228	
4,200.0	4,145.3	4,131.8	4,121.4	11.1	8.6	-133.88	304.3	-180.9	480.1	462.6	17.56	27.337	
4,275.0	4,217.9	4,203.8	4,192.8	11.3	8.8	-134.72	309.7	-187.8	500.0	482.0	18.03	27.728	
4,300.0	4,242.1	4,227.8	4,216.7	11.4	8.8	-134.99	311.4	-190.1	506.7	488.5	18.19	27.854	
4,370.0	4,309.9	4,295.0	4,283.3	11.6	9.0	-135.69	316.4	-196.6	525.3	506.7	18.63	28.193	
4,400.0	4,338.9	4,323.8	4,311.9	11.7	9.1	-135.98	318.6	-199.4	533.4	514.5	18.82	28.334	
4,465.0	4,401.8	4,389.1	4,376.8	11.9	9.3	-136.62	323.3	-205.6	550.7	531.4	19.26	28.592	
4,500.0	4,435.7	4,425.2	4,412.7	12.0	9.4	-136.97	325.8	-208.8	559.8	540.3	19.50	28.708	
4,560.0	4,493.8	4,487.2	4,474.3	12.2	9.6	-137.60	329.6	-213.8	575.2	555.3	19.92	28.882	
4,600.0	4,532.5	4,528.5	4,515.5	12.3	9.7	-138.02	332.0	-216.9	585.3	565.1	20.19	28.982	
4,655.0	4,585.8	4,585.5	4,572.3	12.5	9.9	-138.62	334.9	-220.7	598.8	578.3	20.58	29.100	
4,700.0	4,629.4	4,632.2	4,618.8	12.7	10.0	-139.12	337.1	-223.5	609.7	588.8	20.89	29.181	
4,750.0	4,677.8	4,684.2	4,670.7	12.8	10.2	-139.68	339.2	-226.3	621.6	600.3	21.25	29.256	
4,800.0	4,726.2	4,736.2	4,722.6	13.0	10.3	-140.25	341.1	-228.7	633.2	611.6	21.60	29.316	
4,845.0	4,769.7	4,783.1	4,769.5	13.1	10.5	-140.78	342.5	-230.5	643.4	621.5	21.92	29.357	
4,900.0	4,823.0	4,840.5	4,826.8	13.3	10.7	-141.44	343.9	-232.4	655.7	633.4	22.31	29.395	
4,940.0	4,861.7	4,882.2	4,868.5	13.5	10.8	-141.92	344.7	-233.4	664.4	641.9	22.59	29.412	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #708H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2500-MWD+IFR1+MS, 8441-MWD+IFR1+MS													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (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
5,000.0	4,919.8	4,944.9	4,931.2	13.7	11.0	-142.67		345.6	-234.6	677.3	654.3	23.02	29.426	
5,035.0	4,953.7	4,981.5	4,967.7	13.8	11.1	-143.11		345.9	-235.0	684.7	661.4	23.27	29.427	
5,100.0	5,016.6	5,049.1	5,035.3	14.0	11.3	-143.94		346.1	-235.3	698.1	674.4	23.73	29.421	
5,130.0	5,045.6	5,078.1	5,064.3	14.1	11.4	-144.29		346.1	-235.3	704.3	680.4	23.93	29.430	
5,200.0	5,113.4	5,145.9	5,132.1	14.4	11.6	-145.10		346.1	-235.3	718.8	694.3	24.41	29.446	
5,225.0	5,137.6	5,170.1	5,156.3	14.4	11.6	-145.38		346.1	-235.3	724.0	699.4	24.58	29.452	
5,300.0	5,210.2	5,242.7	5,228.9	14.7	11.9	-146.20		346.1	-235.3	739.6	714.5	25.10	29.465	
5,320.0	5,229.6	5,262.0	5,248.3	14.8	11.9	-146.41		346.1	-235.3	743.8	718.6	25.24	29.468	
5,400.0	5,307.0	5,339.5	5,325.7	15.0	12.1	-147.24		346.1	-235.3	760.8	735.0	25.80	29.483	
5,415.0	5,321.6	5,354.0	5,340.3	15.1	12.2	-147.39		346.1	-235.3	764.0	738.1	25.91	29.486	
5,500.0	5,403.9	5,436.3	5,422.6	15.4	12.4	-148.22		346.1	-235.3	782.1	755.6	26.51	29.506	
5,510.0	5,413.5	5,446.0	5,432.2	15.4	12.5	-148.32		346.1	-235.3	784.3	757.7	26.58	29.509	
5,600.0	5,500.7	5,533.1	5,519.4	15.7	12.7	-149.16		346.1	-235.3	803.7	776.5	27.21	29.534	
5,605.0	5,505.5	5,538.0	5,524.2	15.8	12.7	-149.20		346.1	-235.3	804.8	777.6	27.25	29.536	
5,700.0	5,597.5	5,629.9	5,616.2	16.1	13.0	-150.04		346.1	-235.3	825.5	797.6	27.92	29.567	
5,795.0	5,689.5	5,721.9	5,708.2	16.4	13.3	-150.84		346.1	-235.3	846.4	817.8	28.59	29.600	
5,800.0	5,694.3	5,726.7	5,713.0	16.5	13.3	-150.88		346.1	-235.3	847.5	818.8	28.63	29.602	
5,890.0	5,781.4	5,813.9	5,800.1	16.8	13.6	-151.60		346.1	-235.3	867.4	838.1	29.27	29.637	
5,900.0	5,791.1	5,823.6	5,809.8	16.8	13.6	-151.68		346.1	-235.3	869.6	840.2	29.34	29.641	
5,985.0	5,873.4	5,905.9	5,892.1	17.1	13.9	-152.32		346.1	-235.3	888.5	858.6	29.94	29.675	
6,000.0	5,887.9	5,920.4	5,906.6	17.2	13.9	-152.43		346.1	-235.3	891.9	861.8	30.05	29.681	
6,080.0	5,965.4	5,997.8	5,984.1	17.5	14.2	-153.01		346.1	-235.3	909.8	879.2	30.62	29.715	
6,100.0	5,984.7	6,017.2	6,003.4	17.5	14.2	-153.16		346.1	-235.3	914.3	883.5	30.76	29.724	
6,175.0	6,057.4	6,089.8	6,076.1	17.8	14.4	-153.68		346.1	-235.3	931.2	899.9	31.29	29.758	
6,193.8	6,075.6	6,108.0	6,094.3	17.9	14.5	-153.80		346.1	-235.3	935.4	904.0	31.43	29.767	
6,200.0	6,081.6	6,114.0	6,100.3	17.9	14.5	-153.86		346.1	-235.3	936.8	905.4	31.47	29.770	
6,270.0	6,149.6	6,182.0	6,168.3	18.2	14.7	-154.43		346.1	-235.3	951.8	919.8	31.98	29.760	
6,300.0	6,178.8	6,211.3	6,197.5	18.3	14.8	-154.65		346.1	-235.3	957.8	925.6	32.20	29.742	
6,365.0	6,242.5	6,274.9	6,261.2	18.6	15.0	-155.08		346.1	-235.3	969.8	937.0	32.74	29.617	
6,400.0	6,276.9	6,309.3	6,295.6	18.8	15.2	-155.29		346.1	-235.3	975.7	942.7	33.04	29.534	
6,460.0	6,336.0	6,368.4	6,354.7	19.0	15.3	-155.62		346.1	-235.3	985.0	951.5	33.53	29.376	
6,500.0	6,375.5	6,408.0	6,394.2	19.2	15.5	-155.81		346.1	-235.3	990.6	956.7	33.86	29.254	
6,555.0	6,430.0	6,462.5	6,448.7	19.5	15.6	-156.04		346.1	-235.3	997.4	963.1	34.31	29.071	
7,350.0	7,216.7	7,249.2	7,235.4	21.8	18.3	67.14		346.1	-235.3	996.1	956.9	39.20	25.411	
7,400.0	7,261.3	7,293.7	7,280.0	21.9	18.4	69.12		346.1	-235.3	986.8	947.4	39.35	25.076	
7,410.0	7,270.0	7,302.4	7,288.7	21.9	18.4	69.55		346.1	-235.3	984.8	945.4	39.38	25.008	
7,450.0	7,303.7	7,336.2	7,322.4	22.0	18.5	71.37		346.1	-235.3	976.5	937.0	39.48	24.734	
7,500.0	7,343.7	7,376.2	7,362.4	22.1	18.7	73.82		346.1	-235.3	965.5	925.9	39.58	24.394	
7,505.0	7,347.6	7,380.0	7,366.3	22.1	18.7	74.08		346.1	-235.3	964.4	924.8	39.59	24.361	
7,550.0	7,380.9	7,413.4	7,399.6	22.2	18.8	76.40		346.1	-235.3	954.3	914.7	39.65	24.068	
7,600.0	7,415.1	7,447.5	7,433.8	22.3	18.9	79.02		346.1	-235.3	943.2	903.5	39.69	23.764	
7,650.0	7,445.9	7,478.4	7,464.6	22.4	19.0	81.57		346.1	-235.3	932.8	893.1	39.70	23.492	
7,695.0	7,470.6	7,503.1	7,489.3	22.5	19.1	83.72		346.1	-235.3	924.2	884.5	39.69	23.283	
7,700.0	7,473.2	7,505.7	7,491.9	22.5	19.1	83.95		346.1	-235.3	923.3	883.6	39.69	23.262	
7,750.0	7,496.8	7,529.2	7,515.5	22.6	19.2	86.06		346.1	-235.3	915.4	875.7	39.65	23.083	
7,790.0	7,512.8	7,545.2	7,531.5	22.6	19.3	87.49		346.1	-235.3	910.3	870.7	39.61	22.981	
7,800.0	7,516.4	7,548.8	7,535.1	22.6	19.3	87.81		346.1	-235.3	909.2	869.6	39.60	22.962	
7,850.0	7,531.9	7,564.3	7,550.6	22.7	19.3	89.14		346.1	-235.3	905.3	865.8	39.52	22.906	
7,885.0	7,540.3	7,572.7	7,559.0	22.7	19.3	89.78		346.1	-235.3	904.1	864.6	39.47	22.908	
7,900.0	7,543.2	7,575.7	7,561.9	22.7	19.4	89.98		346.1	-235.3	903.9	864.5	39.44	22.919	
7,902.0	7,543.6	7,576.0	7,562.3	22.7	19.4	90.00		346.1	-235.3	903.9	864.5	39.44	22.921	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:	FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #708H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program:	0-Standard Keeper 104, 2500-MWD+IFR1+MS, 8441-MWD+IFR1+MS											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:									
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	(usft)		
7,950.0	7,550.3	7,582.7	7,569.0	22.7	19.4	90.29	346.1	-235.3	905.2	865.8	39.35	23.004	
7,980.0	7,552.4	7,584.9	7,571.1	22.8	19.4	90.22	346.1	-235.3	907.2	867.9	39.29	23.089	
8,000.0	7,553.0	7,585.4	7,571.7	22.8	19.4	90.06	346.1	-235.3	909.2	869.9	39.25	23.161	
8,006.7	7,553.0	7,585.4	7,571.7	22.8	19.4	89.99	346.1	-235.3	909.9	870.7	39.24	23.188	
8,075.0	7,552.9	7,585.4	7,571.6	22.8	19.4	89.99	346.1	-235.3	920.2	881.1	39.13	23.515	
8,100.0	7,552.9	7,585.3	7,571.6	22.8	19.4	89.98	346.1	-235.3	925.2	886.1	39.10	23.663	
8,170.0	7,552.8	7,585.2	7,571.5	22.9	19.4	89.98	346.1	-235.3	942.6	903.6	39.04	24.144	
8,200.0	7,552.8	7,585.2	7,571.5	22.9	19.4	89.98	346.1	-235.3	951.6	912.6	39.02	24.385	
8,265.0	7,552.7	7,585.1	7,571.4	23.0	19.4	89.97	346.1	-235.3	973.9	934.9	39.01	24.962	
8,300.0	7,552.6	7,585.1	7,571.3	23.0	19.4	89.97	346.1	-235.3	987.4	948.4	39.02	25.308	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #709H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8485-MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
0.0	0.0	18.7	18.7	3.0	3.0	-19.62	196.2	-70.0	208.3					
95.0	95.0	113.7	113.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.00	34.714		
100.0	100.0	118.7	118.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.00	34.713		
190.0	190.0	208.7	208.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.01	34.663		
200.0	200.0	218.7	218.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.01	34.655		
285.0	285.0	303.7	303.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.03	34.558		
300.0	300.0	318.7	318.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.03	34.536		
380.0	380.0	398.7	398.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.06	34.399		
400.0	400.0	418.7	418.7	3.0	3.0	-19.62	196.2	-70.0	208.3	202.3	6.06	34.359		
475.0	475.0	493.7	493.7	3.0	3.1	-19.62	196.2	-70.0	208.3	202.2	6.09	34.189		
500.0	500.0	518.7	518.7	3.1	3.1	-19.62	196.2	-70.0	208.3	202.2	6.10	34.126		
570.0	570.0	588.7	588.7	3.1	3.1	-19.62	196.2	-70.0	208.3	202.2	6.14	33.931		
600.0	600.0	618.7	618.7	3.1	3.1	-19.62	196.2	-70.0	208.3	202.2	6.16	33.841		
665.0	665.0	683.7	683.7	3.1	3.1	-19.62	196.2	-70.0	208.3	202.1	6.19	33.629		
700.0	700.0	718.7	718.7	3.1	3.1	-19.62	196.2	-70.0	208.3	202.1	6.22	33.506		
760.0	760.0	778.7	778.7	3.1	3.1	-19.62	196.2	-70.0	208.3	202.1	6.26	33.285		
800.0	800.0	818.7	818.7	3.2	3.2	-19.62	196.2	-70.0	208.3	202.0	6.29	33.128		
855.0	855.0	873.7	873.7	3.2	3.2	-19.62	196.2	-70.0	208.3	202.0	6.33	32.904		
900.0	900.0	918.7	918.7	3.2	3.2	-19.62	196.2	-70.0	208.3	201.9	6.37	32.711		
950.0	950.0	968.7	968.7	3.2	3.2	-19.62	196.2	-70.0	208.3	201.9	6.41	32.490		
1,000.0	1,000.0	1,018.7	1,018.7	3.2	3.3	-19.62	196.2	-70.0	208.3	201.9	6.46	32.260		
1,045.0	1,045.0	1,063.7	1,063.7	3.3	3.3	-19.62	196.2	-70.0	208.3	201.8	6.50	32.047		
1,100.0	1,100.0	1,118.7	1,118.7	3.3	3.3	-19.62	196.2	-70.0	208.3	201.8	6.56	31.779		
1,140.0	1,140.0	1,158.7	1,158.7	3.3	3.3	-19.62	196.2	-70.0	208.3	201.7	6.60	31.580		
1,200.0	1,200.0	1,218.7	1,218.7	3.4	3.4	-19.62	196.2	-70.0	208.3	201.7	6.66	31.275		
1,235.0	1,235.0	1,253.7	1,253.7	3.4	3.4	-19.62	196.2	-70.0	208.3	201.6	6.70	31.093		
1,300.0	1,300.0	1,318.7	1,318.7	3.4	3.4	-19.62	196.2	-70.0	208.3	201.5	6.77	30.750		
1,330.0	1,330.0	1,348.7	1,348.7	3.4	3.4	-19.62	196.2	-70.0	208.3	201.5	6.81	30.590		
1,400.0	1,400.0	1,418.7	1,418.7	3.5	3.5	-19.62	196.2	-70.0	208.3	201.4	6.90	30.211		
1,425.0	1,425.0	1,443.7	1,443.7	3.5	3.5	-19.62	196.2	-70.0	208.3	201.4	6.93	30.074		
1,429.2	1,429.2	1,447.9	1,447.9	3.5	3.5	-19.62	196.2	-70.0	208.3	201.4	6.93	30.051 CC		
1,500.0	1,500.0	1,517.8	1,517.8	3.5	3.6	-19.63	196.2	-70.0	208.4	201.3	7.02	29.678 ES		
1,520.0	1,520.0	1,536.9	1,536.9	3.6	3.6	-19.67	196.3	-70.2	208.5	201.4	7.04	29.598		
1,600.0	1,600.0	1,613.1	1,613.1	3.6	3.6	-20.07	197.1	-72.0	209.9	202.8	7.14	29.402		
1,615.0	1,615.0	1,627.4	1,627.4	3.6	3.6	-20.19	197.3	-72.6	210.3	203.2	7.15	29.395 SF		
1,700.0	1,700.0	1,708.2	1,708.0	3.7	3.6	-21.13	199.1	-76.9	213.7	206.5	7.25	29.491		
1,710.0	1,710.0	1,717.6	1,717.4	3.7	3.7	-21.26	199.4	-77.6	214.2	207.0	7.26	29.520		
1,800.0	1,800.0	1,802.7	1,802.2	3.8	3.7	-22.72	202.3	-84.7	220.0	212.6	7.35	29.928		
1,805.0	1,805.0	1,807.4	1,806.9	3.8	3.7	-22.81	202.5	-85.2	220.4	213.0	7.36	29.959		
1,900.0	1,900.0	1,896.7	1,895.4	3.9	3.7	-24.74	206.7	-95.3	228.8	221.4	7.45	30.725		
1,995.0	1,995.0	1,985.1	1,982.8	3.9	3.8	-26.96	211.9	-107.8	239.8	232.2	7.53	31.829		
2,000.0	2,000.0	1,989.7	1,987.3	3.9	3.8	-27.08	212.2	-108.5	240.4	232.9	7.54	31.897		
2,090.0	2,090.0	2,077.6	2,073.9	4.0	3.8	-69.21	218.1	-122.6	252.1	244.5	7.61	33.112		
2,100.0	2,100.0	2,087.4	2,083.6	4.1	3.8	-69.49	218.7	-124.2	253.4	245.7	7.61	33.273		
2,185.0	2,184.9	2,170.8	2,165.7	4.5	3.9	-72.07	224.3	-137.5	264.0	256.3	7.67	34.423		
2,200.0	2,199.8	2,185.5	2,180.2	4.6	3.9	-72.55	225.3	-139.9	265.8	258.2	7.67	34.679		
2,280.0	2,279.6	2,263.7	2,257.1	5.1	4.0	-75.27	230.5	-152.4	275.8	268.0	7.73	35.679		
2,300.0	2,299.5	2,283.2	2,276.3	5.2	4.0	-75.98	231.8	-155.6	278.3	270.5	7.74	35.943		
2,375.0	2,373.9	2,356.1	2,348.1	5.6	4.0	-78.75	236.6	-167.3	287.9	280.1	7.83	36.764		
2,400.0	2,398.7	2,380.3	2,372.0	5.8	4.0	-79.71	238.2	-171.1	291.2	283.3	7.86	37.030		
2,470.0	2,467.9	2,447.9	2,438.5	6.2	4.1	-82.47	242.7	-182.0	300.7	292.7	7.99	37.647		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #709H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-Standard Keeper 104, 8485-MWD+IFR1+MS						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	
2,500.0	2,497.5	2,476.7	2,467.0	6.3	4.1	-83.68	244.7	-186.6	305.0	296.9	8.05	37.890		
2,565.0	2,561.3	2,539.0	2,528.3	6.7	4.2	-86.35	248.8	-196.6	314.7	306.5	8.22	38.301		
2,600.0	2,595.6	2,572.4	2,561.2	6.9	4.2	-87.81	251.0	-202.0	320.3	311.9	8.32	38.491		
2,660.0	2,654.2	2,629.4	2,617.3	7.2	4.2	-90.33	254.8	-211.1	330.3	321.8	8.53	38.729		
2,700.0	2,693.1	2,667.2	2,654.5	7.4	4.3	-92.02	257.3	-217.2	337.5	328.8	8.68	38.858		
2,725.1	2,717.4	2,690.9	2,677.9	7.4	4.3	-93.08	258.9	-221.0	342.2	333.4	8.78	38.977		
2,755.0	2,746.3	2,719.0	2,705.5	7.4	4.3	-94.43	260.8	-225.5	347.9	339.0	8.90	39.111		
2,800.0	2,789.9	2,761.3	2,747.2	7.5	4.3	-96.40	263.6	-232.2	357.0	347.9	9.07	39.345		
2,850.0	2,838.3	2,808.3	2,793.5	7.6	4.4	-98.47	266.7	-239.8	367.5	358.2	9.29	39.561		
2,900.0	2,886.7	2,855.4	2,839.8	7.7	4.4	-100.44	269.9	-247.3	378.5	369.0	9.51	39.823		
2,945.0	2,930.3	2,897.7	2,881.5	7.8	4.4	-102.11	272.7	-254.1	388.8	379.1	9.71	40.047		
3,000.0	2,983.5	2,949.4	2,932.5	7.9	4.5	-104.05	276.1	-262.4	401.8	391.8	9.95	40.366		
3,040.0	3,022.2	2,987.0	2,969.5	8.0	4.5	-105.39	278.6	-268.4	411.5	401.4	10.13	40.606		
3,100.0	3,080.3	3,043.5	3,025.1	8.1	4.6	-107.28	282.4	-277.5	426.5	416.1	10.40	41.005		
3,135.0	3,114.2	3,076.4	3,057.5	8.2	4.6	-108.33	284.6	-282.8	435.4	424.9	10.56	41.243		
3,200.0	3,177.1	3,137.5	3,117.7	8.3	4.7	-110.17	288.7	-292.6	452.4	441.6	10.84	41.719		
3,230.0	3,206.2	3,165.7	3,145.5	8.4	4.7	-110.98	290.5	-297.1	460.4	449.4	10.98	41.941		
3,300.0	3,274.0	3,231.6	3,210.3	8.5	4.7	-112.76	294.9	-307.7	479.3	468.0	11.28	42.485		
3,325.0	3,298.2	3,255.1	3,233.5	8.6	4.8	-113.36	296.5	-311.4	486.2	474.8	11.39	42.679		
3,400.0	3,370.8	3,325.6	3,303.0	8.8	4.8	-115.07	301.2	-322.7	507.1	495.4	11.72	43.283		
3,420.0	3,390.1	3,344.4	3,321.5	8.8	4.9	-115.51	302.4	-325.8	512.7	500.9	11.80	43.443		
3,500.0	3,467.6	3,419.7	3,395.6	9.0	4.9	-117.16	307.4	-337.8	535.6	523.4	12.15	44.096		
3,515.0	3,482.1	3,433.8	3,409.5	9.1	4.9	-117.45	308.4	-340.1	539.9	527.7	12.21	44.217		
3,600.0	3,564.4	3,513.7	3,488.2	9.3	5.0	-119.03	313.7	-352.9	564.7	552.1	12.57	44.912		
3,610.0	3,574.1	3,523.1	3,497.5	9.3	5.0	-119.21	314.3	-354.4	567.6	555.0	12.62	44.992		
3,700.0	3,661.2	3,607.8	3,580.8	9.6	5.1	-120.73	320.0	-368.0	594.3	581.3	13.00	45.720		
3,705.0	3,666.1	3,612.5	3,585.5	9.6	5.1	-120.81	320.3	-368.8	595.8	582.7	13.02	45.760		
3,800.0	3,758.0	3,701.8	3,673.5	9.9	5.2	-122.27	326.2	-383.1	624.3	610.9	13.42	46.513		
3,895.0	3,850.0	3,791.2	3,761.4	10.1	5.3	-123.61	332.2	-397.4	653.2	639.4	13.83	47.247		
3,900.0	3,854.8	3,795.9	3,766.1	10.2	5.3	-123.67	332.5	-398.2	654.8	640.9	13.85	47.285		
3,990.0	3,942.0	3,880.5	3,849.4	10.4	5.4	-124.83	338.1	-411.7	682.4	668.2	14.23	47.958		
4,000.0	3,951.7	3,890.0	3,858.7	10.4	5.4	-124.95	338.8	-413.3	685.5	671.2	14.27	48.033		
4,085.0	4,033.9	3,969.9	3,937.4	10.7	5.5	-125.96	344.1	-426.1	711.9	697.3	14.63	48.646		
4,100.0	4,048.5	3,984.0	3,951.3	10.8	5.5	-126.12	345.0	-428.3	716.6	701.9	14.70	48.753		
4,180.0	4,125.9	4,059.2	4,025.4	11.0	5.6	-126.99	350.0	-440.4	741.6	726.6	15.04	49.308		
4,200.0	4,145.3	4,078.1	4,044.0	11.1	5.6	-127.20	351.3	-443.4	747.9	732.8	15.13	49.445		
4,275.0	4,217.9	4,148.6	4,113.4	11.3	5.7	-127.95	356.0	-454.7	771.5	756.1	15.45	49.943		
4,300.0	4,242.1	4,172.1	4,136.6	11.4	5.7	-128.19	357.5	-458.5	779.4	763.9	15.56	50.107		
4,370.0	4,309.9	4,238.0	4,201.4	11.6	5.8	-128.84	361.9	-469.1	801.6	785.7	15.86	50.552		
4,400.0	4,338.9	4,266.2	4,229.2	11.7	5.8	-129.10	363.8	-473.6	811.1	795.2	15.99	50.739		
4,465.0	4,401.8	4,327.3	4,289.4	11.9	5.9	-129.66	367.9	-483.4	831.9	815.6	16.27	51.134		
4,500.0	4,435.7	4,360.2	4,321.8	12.0	5.9	-129.95	370.1	-488.7	843.0	826.6	16.42	51.342		
4,560.0	4,493.8	4,416.7	4,377.4	12.2	6.0	-130.43	373.8	-497.7	862.3	845.6	16.68	51.689		
4,600.0	4,532.5	4,454.3	4,414.5	12.3	6.0	-130.74	376.3	-503.8	875.1	858.2	16.86	51.916		
4,655.0	4,585.8	4,506.0	4,465.4	12.5	6.1	-131.14	379.8	-512.0	892.8	875.7	17.10	52.219		
4,700.0	4,629.4	4,548.3	4,507.1	12.7	6.1	-131.47	382.6	-518.8	907.3	890.0	17.29	52.461		
4,750.0	4,677.8	4,595.4	4,553.4	12.8	6.2	-131.81	385.7	-526.4	923.4	905.9	17.52	52.723		
4,800.0	4,726.2	4,642.4	4,599.7	13.0	6.2	-132.15	388.9	-533.9	939.6	921.9	17.74	52.979		
4,845.0	4,769.7	4,684.7	4,641.4	13.1	6.3	-132.44	391.7	-540.7	954.2	936.3	17.94	53.203		
4,900.0	4,823.0	4,736.4	4,692.3	13.3	6.4	-132.78	395.1	-549.0	972.1	953.9	18.18	53.470		
4,940.0	4,861.7	4,774.1	4,729.4	13.5	6.4	-133.03	397.6	-555.0	985.1	966.7	18.36	53.659		

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #710H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8540-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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)			
0.0	0.0	18.7	18.7	3.0	3.0	-27.01	196.1	-100.0	220.1				
95.0	95.0	113.7	113.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.1	6.00	36.678	
100.0	100.0	118.7	118.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.1	6.00	36.677	
190.0	190.0	208.7	208.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.1	6.01	36.629	
200.0	200.0	218.7	218.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.1	6.01	36.620	
285.0	285.0	303.7	303.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.1	6.03	36.526	
300.0	300.0	318.7	318.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.1	6.03	36.504	
380.0	380.0	398.7	398.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.0	6.05	36.370	
400.0	400.0	418.7	418.7	3.0	3.0	-27.01	196.1	-100.0	220.1	214.0	6.06	36.331	
475.0	475.0	493.7	493.7	3.0	3.1	-27.01	196.1	-100.0	220.1	214.0	6.09	36.164	
500.0	500.0	518.7	518.7	3.1	3.1	-27.01	196.1	-100.0	220.1	214.0	6.10	36.102	
570.0	570.0	588.7	588.7	3.1	3.1	-27.01	196.1	-100.0	220.1	214.0	6.13	35.910	
600.0	600.0	618.7	618.7	3.1	3.1	-27.01	196.1	-100.0	220.1	214.0	6.14	35.821	
665.0	665.0	683.7	683.7	3.1	3.1	-27.01	196.1	-100.0	220.1	213.9	6.18	35.612	
700.0	700.0	718.7	718.7	3.1	3.1	-27.01	196.1	-100.0	220.1	213.9	6.20	35.491	
760.0	760.0	778.7	778.7	3.1	3.1	-27.01	196.1	-100.0	220.1	213.9	6.24	35.272	
800.0	800.0	818.7	818.7	3.2	3.2	-27.01	196.1	-100.0	220.1	213.8	6.27	35.118	
855.0	855.0	873.7	873.7	3.2	3.2	-27.01	196.1	-100.0	220.1	213.8	6.31	34.895	
900.0	900.0	918.7	918.7	3.2	3.2	-27.01	196.1	-100.0	220.1	213.8	6.34	34.705	
950.0	950.0	968.7	968.7	3.2	3.2	-27.01	196.1	-100.0	220.1	213.7	6.38	34.485	
1,000.0	1,000.0	1,018.7	1,018.7	3.2	3.3	-27.01	196.1	-100.0	220.1	213.7	6.42	34.257	
1,045.0	1,045.0	1,063.7	1,063.7	3.3	3.3	-27.01	196.1	-100.0	220.1	213.6	6.46	34.045	
1,100.0	1,100.0	1,118.7	1,118.7	3.3	3.3	-27.01	196.1	-100.0	220.1	213.6	6.52	33.779	
1,140.0	1,140.0	1,158.7	1,158.7	3.3	3.3	-27.01	196.1	-100.0	220.1	213.5	6.55	33.580	
1,200.0	1,200.0	1,218.7	1,218.7	3.4	3.4	-27.01	196.1	-100.0	220.1	213.5	6.61	33.275	
1,235.0	1,235.0	1,253.7	1,253.7	3.4	3.4	-27.01	196.1	-100.0	220.1	213.4	6.65	33.093	
1,300.0	1,300.0	1,318.7	1,318.7	3.4	3.4	-27.01	196.1	-100.0	220.1	213.4	6.72	32.750	
1,330.0	1,330.0	1,348.7	1,348.7	3.4	3.4	-27.01	196.1	-100.0	220.1	213.3	6.75	32.589	
1,400.0	1,400.0	1,418.7	1,418.7	3.5	3.5	-27.01	196.1	-100.0	220.1	213.3	6.83	32.208	
1,425.0	1,425.0	1,443.7	1,443.7	3.5	3.5	-27.01	196.1	-100.0	220.1	213.2	6.86	32.070	
1,500.0	1,500.0	1,518.7	1,518.7	3.5	3.6	-27.01	196.1	-100.0	220.1	213.1	6.95	31.653	
1,520.0	1,520.0	1,538.7	1,538.7	3.6	3.6	-27.01	196.1	-100.0	220.1	213.1	6.98	31.541	
1,600.0	1,600.0	1,618.7	1,618.7	3.6	3.6	-27.01	196.1	-100.0	220.1	213.0	7.08	31.089	
1,615.0	1,615.0	1,633.7	1,633.7	3.6	3.6	-27.01	196.1	-100.0	220.1	213.0	7.10	31.004	
1,700.0	1,700.0	1,718.7	1,718.7	3.7	3.7	-27.01	196.1	-100.0	220.1	212.9	7.21	30.520	
1,710.0	1,710.0	1,728.7	1,728.7	3.7	3.7	-27.01	196.1	-100.0	220.1	212.9	7.23	30.463	
1,800.0	1,800.0	1,818.7	1,818.7	3.8	3.8	-27.01	196.1	-100.0	220.1	212.8	7.35	29.948	
1,805.0	1,805.0	1,823.7	1,823.7	3.8	3.8	-27.01	196.1	-100.0	220.1	212.7	7.36	29.919	
1,900.0	1,900.0	1,918.7	1,918.7	3.9	3.9	-27.01	196.1	-100.0	220.1	212.6	7.49	29.375	
1,910.5	1,910.5	1,929.2	1,929.2	3.9	3.9	-27.01	196.1	-100.0	220.1	212.6	7.51	29.315 CC	
1,995.0	1,995.0	2,013.0	2,013.0	3.9	3.9	-27.02	196.1	-100.0	220.1	212.5	7.63	28.848 ES	
2,000.0	2,000.0	2,017.8	2,017.8	3.9	3.9	-27.02	196.1	-100.0	220.1	212.5	7.64	28.825	
2,090.0	2,090.0	2,103.4	2,103.4	4.0	4.0	-67.47	196.6	-101.8	220.9	213.1	7.73	28.566	
2,100.0	2,100.0	2,112.9	2,112.8	4.1	4.0	-67.61	196.6	-102.1	221.0	213.2	7.73	28.579	
2,185.0	2,184.9	2,193.3	2,193.1	4.5	4.0	-69.35	197.7	-106.3	222.5	214.7	7.79	28.561 SF	
2,200.0	2,199.8	2,207.4	2,207.2	4.6	4.0	-69.75	197.9	-107.2	222.9	215.1	7.79	28.623	
2,280.0	2,279.6	2,282.4	2,281.9	5.1	4.1	-72.36	199.5	-113.4	225.7	217.8	7.83	28.815	
2,300.0	2,299.5	2,300.0	2,299.5	5.2	4.1	-73.07	200.0	-115.2	226.6	218.7	7.83	28.919	
2,375.0	2,373.9	2,370.3	2,369.3	5.6	4.1	-76.31	202.0	-123.1	231.0	223.1	7.88	29.308	
2,400.0	2,398.7	2,393.2	2,392.0	5.8	4.1	-77.48	202.7	-126.1	232.9	225.0	7.90	29.489	
2,470.0	2,467.9	2,456.7	2,454.7	6.2	4.2	-80.96	205.1	-135.2	239.5	231.5	7.97	30.038	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #710H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8540-MWD+IFR1+FDIR													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)				
2,500.0	2,497.5	2,483.6	2,481.3	6.3	4.2	-82.53	206.1	-139.4	242.9	234.9	8.01	30.318		
2,565.0	2,561.3	2,541.2	2,538.0	6.7	4.2	-86.01	208.7	-149.3	252.0	243.9	8.14	30.951		
2,600.0	2,595.6	2,571.8	2,568.0	6.9	4.2	-87.90	210.1	-155.1	257.8	249.6	8.23	31.328		
2,660.0	2,654.2	2,625.6	2,620.6	7.2	4.3	-91.26	212.9	-165.8	269.3	260.9	8.43	31.960		
2,700.0	2,693.1	2,662.8	2,657.0	7.4	4.3	-93.55	214.8	-173.3	277.8	269.2	8.59	32.342		
2,725.1	2,717.4	2,686.0	2,679.8	7.4	4.3	-94.96	216.0	-178.0	283.4	274.7	8.69	32.622		
2,755.0	2,746.3	2,713.6	2,706.8	7.4	4.3	-96.72	217.4	-183.5	290.3	281.5	8.81	32.955		
2,800.0	2,789.9	2,755.3	2,747.5	7.5	4.3	-99.23	219.5	-191.9	301.3	292.3	8.99	33.493		
2,850.0	2,838.3	2,801.5	2,792.7	7.6	4.4	-101.83	221.9	-201.2	314.1	304.9	9.22	34.068		
2,900.0	2,886.7	2,847.7	2,837.9	7.7	4.4	-104.24	224.3	-210.5	327.5	318.1	9.44	34.693		
2,945.0	2,930.3	2,889.3	2,878.6	7.8	4.4	-106.25	226.4	-218.9	340.0	330.4	9.65	35.253		
3,000.0	2,983.5	2,940.2	2,928.4	7.9	4.5	-108.52	229.0	-229.2	355.9	346.0	9.89	35.981		
3,040.0	3,022.2	2,977.1	2,964.5	8.0	4.5	-110.06	230.9	-236.6	367.7	357.7	10.07	36.519		
3,100.0	3,080.3	3,032.6	3,018.8	8.1	4.5	-112.20	233.8	-247.8	386.0	375.6	10.33	37.360		
3,135.0	3,114.2	3,065.0	3,050.4	8.2	4.6	-113.36	235.4	-254.3	396.8	386.3	10.48	37.852		
3,200.0	3,177.1	3,125.1	3,109.2	8.3	4.6	-115.37	238.5	-266.4	417.3	406.6	10.76	38.791		
3,230.0	3,206.2	3,152.8	3,136.4	8.4	4.6	-116.23	239.9	-272.0	427.0	416.1	10.89	39.222		
3,300.0	3,274.0	3,217.5	3,199.7	8.5	4.7	-118.10	243.3	-285.0	449.8	438.6	11.18	40.242		
3,325.0	3,298.2	3,240.7	3,222.3	8.6	4.7	-118.73	244.4	-289.7	458.0	446.7	11.28	40.602		
3,400.0	3,370.8	3,310.0	3,290.1	8.8	4.8	-120.48	248.0	-303.7	483.0	471.4	11.59	41.688		
3,420.0	3,390.1	3,328.5	3,308.2	8.8	4.8	-120.92	249.0	-307.4	489.7	478.1	11.67	41.973		
3,500.0	3,467.6	3,402.5	3,380.5	9.0	4.9	-122.56	252.8	-322.3	516.9	504.9	11.99	43.111		
3,515.0	3,482.1	3,416.3	3,394.1	9.1	4.9	-122.85	253.5	-325.1	522.1	510.0	12.05	43.319		
3,600.0	3,564.4	3,494.9	3,471.0	9.3	4.9	-124.39	257.5	-340.9	551.4	539.0	12.39	44.496		
3,610.0	3,574.1	3,504.2	3,480.0	9.3	4.9	-124.56	258.0	-342.8	554.9	542.4	12.43	44.631		
3,700.0	3,661.2	3,587.4	3,561.4	9.6	5.0	-126.00	262.2	-359.6	586.3	573.5	12.79	45.835		
3,705.0	3,666.1	3,592.0	3,565.9	9.6	5.0	-126.08	262.5	-360.5	588.1	575.3	12.81	45.900		
3,800.0	3,758.0	3,679.8	3,651.9	9.9	5.1	-127.44	267.0	-378.2	621.6	608.4	13.19	47.122		
3,895.0	3,850.0	3,767.7	3,737.8	10.1	5.2	-128.67	271.5	-395.9	655.4	641.8	13.57	48.294		
3,900.0	3,854.8	3,772.3	3,742.3	10.2	5.2	-128.73	271.7	-396.8	657.2	643.6	13.59	48.355		
3,990.0	3,942.0	3,855.5	3,823.7	10.4	5.3	-129.78	276.0	-413.6	689.5	675.5	13.95	49.415		
4,000.0	3,951.7	3,864.7	3,832.7	10.4	5.3	-129.89	276.5	-415.4	693.1	679.1	13.99	49.530		
4,085.0	4,033.9	3,943.3	3,909.6	10.7	5.4	-130.78	280.5	-431.3	723.7	709.4	14.34	50.484		
4,100.0	4,048.5	3,957.2	3,923.2	10.8	5.4	-130.93	281.2	-434.1	729.2	714.8	14.40	50.649		
4,180.0	4,125.9	4,031.2	3,995.5	11.0	5.5	-131.70	285.0	-449.0	758.2	743.5	14.72	51.502		
4,200.0	4,145.3	4,049.7	4,013.6	11.1	5.5	-131.88	286.0	-452.7	765.5	750.7	14.80	51.710		
4,275.0	4,217.9	4,119.0	4,081.4	11.3	5.6	-132.53	289.5	-466.7	792.8	777.7	15.11	52.470		
4,300.0	4,242.1	4,142.1	4,104.0	11.4	5.6	-132.74	290.7	-471.3	801.9	786.7	15.21	52.717		
4,370.0	4,309.9	4,206.8	4,167.3	11.6	5.7	-133.30	294.1	-484.4	827.5	812.0	15.50	53.389		
4,400.0	4,338.9	4,234.6	4,194.5	11.7	5.7	-133.53	295.5	-489.9	838.5	822.9	15.62	53.670		
4,465.0	4,401.8	4,294.7	4,253.3	11.9	5.8	-134.01	298.6	-502.1	862.4	846.5	15.89	54.260		
4,500.0	4,435.7	4,327.0	4,284.9	12.0	5.8	-134.25	300.2	-508.6	875.3	859.2	16.04	54.571		
4,560.0	4,493.8	4,382.5	4,339.2	12.2	5.9	-134.66	303.1	-519.7	897.3	881.1	16.29	55.087		
4,600.0	4,532.5	4,419.5	4,375.3	12.3	5.9	-134.92	305.0	-527.2	912.1	895.6	16.46	55.422		
4,655.0	4,585.8	4,470.3	4,425.1	12.5	6.0	-135.26	307.6	-537.4	932.4	915.7	16.69	55.870		
4,700.0	4,629.4	4,511.9	4,465.8	12.7	6.0	-135.53	309.7	-545.8	949.0	932.2	16.88	56.227		
4,750.0	4,677.8	4,558.2	4,511.0	12.8	6.1	-135.82	312.1	-555.1	967.5	950.5	17.09	56.611		
4,800.0	4,726.2	4,604.4	4,556.2	13.0	6.1	-136.10	314.5	-564.5	986.1	968.8	17.30	56.986		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #804H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9478-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
0.0	0.0	0.7	0.7	3.0	3.0	-6.78	336.1	-40.0	338.5					
95.0	95.0	95.7	95.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.5	6.00	56.404		
100.0	100.0	100.7	100.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.5	6.00	56.403		
190.0	190.0	190.7	190.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.4	6.01	56.325		
200.0	200.0	200.7	200.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.4	6.01	56.311		
285.0	285.0	285.7	285.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.4	6.03	56.150		
300.0	300.0	300.7	300.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.4	6.03	56.113		
380.0	380.0	380.7	380.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.4	6.06	55.881		
400.0	400.0	400.7	400.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.4	6.06	55.813		
475.0	475.0	475.7	475.7	3.0	3.0	-6.78	336.1	-40.0	338.5	332.4	6.10	55.523		
500.0	500.0	500.7	500.7	3.1	3.1	-6.78	336.1	-40.0	338.5	332.3	6.11	55.414		
570.0	570.0	570.7	570.7	3.1	3.1	-6.78	336.1	-40.0	338.5	332.3	6.14	55.081		
600.0	600.0	600.7	600.7	3.1	3.1	-6.78	336.1	-40.0	338.5	332.3	6.16	54.925		
665.0	665.0	665.7	665.7	3.1	3.1	-6.78	336.1	-40.0	338.5	332.3	6.20	54.561		
700.0	700.0	700.7	700.7	3.1	3.1	-6.78	336.1	-40.0	338.5	332.2	6.23	54.351		
760.0	760.0	760.7	760.7	3.1	3.1	-6.78	336.1	-40.0	338.5	332.2	6.27	53.970		
800.0	800.0	800.7	800.7	3.2	3.2	-6.78	336.1	-40.0	338.5	332.2	6.30	53.702		
855.0	855.0	855.7	855.7	3.2	3.2	-6.78	336.1	-40.0	338.5	332.1	6.35	53.316		
900.0	900.0	900.7	900.7	3.2	3.2	-6.78	336.1	-40.0	338.5	332.1	6.39	52.986		
950.0	950.0	950.7	950.7	3.2	3.2	-6.78	336.1	-40.0	338.5	332.0	6.43	52.605		
1,000.0	1,000.0	1,000.7	1,000.7	3.2	3.2	-6.78	336.1	-40.0	338.5	332.0	6.48	52.212		
1,045.0	1,045.0	1,045.7	1,045.7	3.3	3.3	-6.78	336.1	-40.0	338.5	331.9	6.53	51.847		
1,100.0	1,100.0	1,100.7	1,100.7	3.3	3.3	-6.78	336.1	-40.0	338.5	331.9	6.59	51.389		
1,140.0	1,140.0	1,140.7	1,140.7	3.3	3.3	-6.78	336.1	-40.0	338.5	331.8	6.63	51.048		
1,200.0	1,200.0	1,200.7	1,200.7	3.4	3.4	-6.78	336.1	-40.0	338.5	331.8	6.70	50.526		
1,235.0	1,235.0	1,235.7	1,235.7	3.4	3.4	-6.78	336.1	-40.0	338.5	331.7	6.74	50.216		
1,300.0	1,300.0	1,300.7	1,300.7	3.4	3.4	-6.78	336.1	-40.0	338.5	331.6	6.82	49.632		
1,330.0	1,330.0	1,330.7	1,330.7	3.4	3.4	-6.78	336.1	-40.0	338.5	331.6	6.86	49.358		
1,400.0	1,400.0	1,400.7	1,400.7	3.5	3.5	-6.78	336.1	-40.0	338.5	331.5	6.95	48.713		
1,425.0	1,425.0	1,425.7	1,425.7	3.5	3.5	-6.78	336.1	-40.0	338.5	331.5	6.98	48.481		
1,500.0	1,500.0	1,500.7	1,500.7	3.5	3.5	-6.78	336.1	-40.0	338.5	331.4	7.08	47.779		
1,520.0	1,520.0	1,520.7	1,520.7	3.6	3.6	-6.78	336.1	-40.0	338.5	331.3	7.11	47.591		
1,600.0	1,600.0	1,600.7	1,600.7	3.6	3.6	-6.78	336.1	-40.0	338.5	331.2	7.23	46.834		
1,615.0	1,615.0	1,615.7	1,615.7	3.6	3.6	-6.78	336.1	-40.0	338.5	331.2	7.25	46.692		
1,700.0	1,700.0	1,700.7	1,700.7	3.7	3.7	-6.78	336.1	-40.0	338.5	331.1	7.38	45.885		
1,710.0	1,710.0	1,710.7	1,710.7	3.7	3.7	-6.78	336.1	-40.0	338.5	331.1	7.39	45.790		
1,800.0	1,800.0	1,800.7	1,800.7	3.8	3.8	-6.78	336.1	-40.0	338.5	330.9	7.53	44.937		
1,805.0	1,805.0	1,805.7	1,805.7	3.8	3.8	-6.78	336.1	-40.0	338.5	330.9	7.54	44.890		
1,900.0	1,900.0	1,900.7	1,900.7	3.9	3.9	-6.78	336.1	-40.0	338.5	330.8	7.69	43.994		
1,995.0	1,995.0	1,995.7	1,995.7	3.9	3.9	-6.78	336.1	-40.0	338.5	330.6	7.85	43.107		
2,000.0	2,000.0	2,000.7	2,000.7	3.9	3.9	-6.78	336.1	-40.0	338.5	330.6	7.86	43.060		
2,090.0	2,090.0	2,090.7	2,090.7	4.0	4.0	-46.75	336.1	-40.0	337.5	329.5	8.02	42.090		
2,100.0	2,100.0	2,100.7	2,100.7	4.1	4.0	-46.80	336.1	-40.0	337.3	329.2	8.03	41.980		
2,185.0	2,184.9	2,185.6	2,185.6	4.5	4.1	-47.37	336.1	-40.0	334.4	326.1	8.27	40.443		
2,200.0	2,199.8	2,200.5	2,200.5	4.6	4.1	-47.51	336.1	-40.0	333.7	325.4	8.31	40.180		
2,280.0	2,279.6	2,280.3	2,280.3	5.1	4.2	-48.43	336.1	-40.0	329.2	320.7	8.52	38.626		
2,300.0	2,299.5	2,300.2	2,300.2	5.2	4.2	-48.71	336.1	-40.0	327.9	319.3	8.57	38.239		
2,375.0	2,373.9	2,374.6	2,374.6	5.6	4.3	-49.98	336.1	-40.0	322.1	313.3	8.77	36.738		
2,400.0	2,398.7	2,399.4	2,399.4	5.8	4.3	-50.47	336.1	-40.0	319.9	311.1	8.83	36.245		
2,470.0	2,467.9	2,468.6	2,468.6	6.2	4.4	-52.06	336.1	-40.0	313.3	304.3	8.99	34.851		
2,500.0	2,497.5	2,498.2	2,498.2	6.3	4.4	-52.84	336.1	-40.0	310.1	301.1	9.05	34.269		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #804H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9478-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:											
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Distance		Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	(usft)			
2,565.0	2,561.3	2,560.7	2,560.7	6.7	4.4	-54.59	336.4	-39.4	303.1	293.9	9.17	33.066		
2,600.0	2,595.6	2,594.4	2,594.4	6.9	4.5	-55.55	336.8	-38.6	299.2	290.0	9.22	32.444		
2,660.0	2,654.2	2,652.3	2,652.2	7.2	4.5	-57.24	337.9	-36.3	292.3	283.0	9.31	31.409		
2,700.0	2,693.1	2,691.0	2,690.8	7.4	4.5	-58.41	339.0	-34.3	287.6	278.3	9.36	30.740		
2,725.1	2,717.4	2,715.3	2,715.1	7.4	4.5	-59.16	339.7	-32.7	284.6	275.2	9.38	30.347		
2,755.0	2,746.3	2,744.3	2,744.0	7.4	4.6	-59.97	340.8	-30.7	281.0	271.6	9.41	29.877		
2,800.0	2,789.9	2,788.1	2,787.6	7.5	4.6	-61.13	342.6	-27.0	275.9	266.4	9.45	29.178		
2,850.0	2,838.3	2,837.1	2,836.3	7.6	4.6	-62.30	345.0	-22.3	270.3	260.8	9.53	28.370		
2,900.0	2,886.7	2,886.2	2,885.0	7.7	4.7	-63.34	347.8	-16.8	264.9	255.3	9.61	27.568		
2,945.0	2,930.3	2,930.5	2,928.9	7.8	4.7	-64.16	350.6	-11.1	260.2	250.5	9.70	26.821		
3,000.0	2,983.5	2,985.0	2,982.7	7.9	4.7	-65.04	354.4	-3.6	254.5	244.7	9.82	25.916		
3,040.0	3,022.2	3,024.7	3,021.9	8.0	4.7	-65.70	357.2	2.0	250.5	240.5	9.92	25.255		
3,100.0	3,080.3	3,084.2	3,080.7	8.1	4.8	-66.73	361.4	10.3	244.4	234.3	10.06	24.294		
3,135.0	3,114.2	3,118.9	3,115.0	8.2	4.8	-67.35	363.9	15.1	240.9	230.8	10.15	23.736		
3,200.0	3,177.1	3,183.4	3,178.7	8.3	4.9	-68.55	368.4	24.1	234.5	224.2	10.32	22.732		
3,230.0	3,206.2	3,213.2	3,208.1	8.4	4.9	-69.13	370.5	28.3	231.6	221.2	10.40	22.273		
3,300.0	3,274.0	3,282.6	3,276.7	8.5	4.9	-70.54	375.4	38.0	224.8	214.3	10.59	21.238		
3,325.0	3,298.2	3,307.4	3,301.2	8.6	5.0	-71.06	377.2	41.5	222.5	211.8	10.66	20.874		
3,400.0	3,370.8	3,381.9	3,374.7	8.8	5.0	-72.70	382.4	51.8	215.5	204.6	10.87	19.818		
3,420.0	3,390.1	3,401.7	3,394.3	8.8	5.0	-73.15	383.8	54.6	213.7	202.7	10.93	19.542		
3,500.0	3,467.6	3,481.1	3,472.7	9.0	5.1	-75.05	389.4	65.7	206.5	195.3	11.17	18.476		
3,515.0	3,482.1	3,495.9	3,487.4	9.1	5.1	-75.42	390.4	67.8	205.1	193.9	11.22	18.281		
3,600.0	3,564.4	3,580.3	3,570.7	9.3	5.2	-77.61	396.4	79.6	197.8	186.3	11.49	17.215		
3,610.0	3,574.1	3,590.2	3,580.5	9.3	5.2	-77.87	397.1	80.9	197.0	185.5	11.52	17.093		
3,700.0	3,661.2	3,679.5	3,668.7	9.6	5.3	-80.39	403.4	93.4	189.6	177.8	11.82	16.035		
3,705.0	3,666.1	3,684.5	3,673.6	9.6	5.3	-80.54	403.7	94.1	189.2	177.4	11.84	15.978		
3,800.0	3,758.0	3,778.7	3,766.7	9.9	5.3	-83.42	410.4	107.3	181.9	169.7	12.18	14.937		
3,895.0	3,850.0	3,873.0	3,859.8	10.1	5.4	-86.53	417.0	120.4	175.0	162.5	12.53	13.969		
3,900.0	3,854.8	3,877.9	3,864.7	10.2	5.4	-86.70	417.4	121.1	174.7	162.1	12.55	13.921		
3,990.0	3,942.0	3,967.2	3,952.9	10.4	5.5	-89.88	423.7	133.6	168.8	155.9	12.91	13.075		
4,000.0	3,951.7	3,977.1	3,962.7	10.4	5.5	-90.24	424.4	135.0	168.1	155.2	12.95	12.986		
4,085.0	4,033.9	4,061.5	4,045.9	10.7	5.6	-93.47	430.3	146.8	163.1	149.8	13.31	12.255		
4,100.0	4,048.5	4,076.4	4,060.6	10.8	5.6	-94.06	431.3	148.8	162.3	148.9	13.38	12.132		
4,180.0	4,125.9	4,155.7	4,139.0	11.0	5.7	-97.30	436.9	159.9	158.2	144.4	13.75	11.506		
4,200.0	4,145.3	4,175.6	4,158.6	11.1	5.7	-98.13	438.3	162.7	157.2	143.4	13.84	11.358		
4,275.0	4,217.9	4,250.0	4,232.1	11.3	5.8	-101.35	443.6	173.1	154.0	139.8	14.22	10.831		
4,300.0	4,242.1	4,274.8	4,256.6	11.4	5.8	-102.46	445.3	176.6	153.0	138.7	14.35	10.665		
4,370.0	4,309.9	4,344.2	4,325.2	11.6	5.9	-105.61	450.2	186.3	150.6	135.9	14.72	10.228		
4,400.0	4,338.9	4,374.0	4,354.6	11.7	5.9	-106.99	452.3	190.4	149.7	134.8	14.89	10.053		
4,465.0	4,401.8	4,438.5	4,418.3	11.9	6.0	-110.03	456.9	199.4	148.1	132.8	15.27	9.698		
4,500.0	4,435.7	4,473.2	4,452.6	12.0	6.0	-111.70	459.3	204.3	147.4	131.9	15.48	9.522		
4,560.0	4,493.8	4,532.8	4,511.4	12.2	6.1	-114.58	463.5	212.6	146.5	130.7	15.85	9.242		
4,600.0	4,532.5	4,572.4	4,550.6	12.3	6.1	-116.52	466.3	218.1	146.1	130.0	16.11	9.072		
4,655.0	4,585.8	4,627.0	4,604.5	12.5	6.2	-119.19	470.1	225.8	145.9	129.4	16.47	8.859		
4,668.8	4,599.1	4,640.7	4,618.0	12.6	6.2	-119.86	471.1	227.7	145.9	129.3	16.56	8.809		
4,700.0	4,629.4	4,671.7	4,648.6	12.7	6.2	-121.38	473.3	232.0	145.9	129.2	16.77	8.703		
4,750.0	4,677.8	4,721.3	4,697.6	12.8	6.3	-123.81	476.8	238.9	146.2	129.1	17.11	8.548		
4,800.0	4,726.2	4,770.9	4,746.6	13.0	6.3	-126.23	480.3	245.8	146.8	129.4	17.45	8.413		
4,845.0	4,769.7	4,815.5	4,790.7	13.1	6.4	-128.38	483.4	252.1	147.5	129.8	17.76	8.307		
4,900.0	4,823.0	4,870.1	4,844.6	13.3	6.4	-130.98	487.3	259.7	148.7	130.6	18.14	8.198		
4,940.0	4,861.7	4,909.8	4,883.8	13.5	6.5	-132.84	490.1	265.2	149.8	131.4	18.42	8.132		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #804H - OWB - PWP0													Offset Site Error: 0.0 usft		
Survey Program: 0-Standard Keeper 104, 9478-MWD+IFR1+FDIR				Rule Assigned:										Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance						
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		
5,000.0	4,919.8	4,969.3	4,942.6	13.7	6.5	-135.59	494.3	273.6	151.7	132.8	18.83	8.053			
5,035.0	4,953.7	5,004.0	4,976.9	13.8	6.6	-137.15	496.7	278.4	152.9	133.8	19.07	8.018			
5,100.0	5,016.6	5,068.5	5,040.6	14.0	6.6	-139.99	501.3	287.4	155.5	136.0	19.51	7.972			
5,130.0	5,045.6	5,098.3	5,070.0	14.1	6.7	-141.27	503.4	291.6	156.9	137.2	19.71	7.958			
5,200.0	5,113.4	5,167.7	5,138.6	14.4	6.7	-144.16	508.2	301.3	160.3	140.1	20.17	7.947			
5,225.0	5,137.6	5,192.5	5,163.1	14.4	6.8	-145.17	510.0	304.7	161.6	141.3	20.33	7.948			
5,300.0	5,210.2	5,267.0	5,236.6	14.7	6.8	-148.08	515.2	315.1	165.9	145.0	20.81	7.970			
5,320.0	5,229.6	5,286.8	5,256.2	14.8	6.9	-148.83	516.6	317.9	167.1	146.1	20.94	7.980			
5,400.0	5,307.0	5,366.2	5,334.6	15.0	7.0	-151.73	522.2	329.0	172.2	150.7	21.43	8.034			
5,415.0	5,321.6	5,381.0	5,349.3	15.1	7.0	-152.25	523.3	331.1	173.2	151.6	21.52	8.047			
5,500.0	5,403.9	5,465.4	5,432.6	15.4	7.1	-155.11	529.2	342.8	179.1	157.1	22.02	8.133			
5,510.0	5,413.5	5,475.3	5,442.4	15.4	7.1	-155.43	529.9	344.2	179.8	157.8	22.08	8.144			
5,600.0	5,500.7	5,564.6	5,530.6	15.7	7.2	-158.23	536.2	356.7	186.6	164.0	22.60	8.259			
5,605.0	5,505.5	5,569.6	5,535.5	15.8	7.2	-158.38	536.6	357.4	187.0	164.4	22.63	8.266			
5,700.0	5,597.5	5,663.8	5,628.6	16.1	7.3	-161.10	543.2	370.6	194.7	171.5	23.15	8.408			
5,795.0	5,689.5	5,758.1	5,721.6	16.4	7.4	-163.61	549.8	383.7	202.7	179.1	23.67	8.565			
5,800.0	5,694.3	5,763.0	5,726.5	16.5	7.4	-163.74	550.2	384.4	203.2	179.5	23.70	8.574			
5,890.0	5,781.4	5,852.3	5,814.7	16.8	7.5	-165.93	556.5	396.9	211.1	187.0	24.17	8.735			
5,900.0	5,791.1	5,862.2	5,824.5	16.8	7.5	-166.17	557.2	398.3	212.1	187.8	24.23	8.753			
5,985.0	5,873.4	5,946.6	5,907.8	17.1	7.6	-168.07	563.1	410.1	219.9	195.2	24.67	8.914			
6,000.0	5,887.9	5,961.5	5,922.5	17.2	7.6	-168.39	564.2	412.1	221.3	196.5	24.74	8.943			
6,080.0	5,965.4	6,040.8	6,000.9	17.5	7.7	-170.05	569.8	423.2	228.9	203.8	25.15	9.100			
6,100.0	5,984.7	6,060.7	6,020.5	17.5	7.8	-170.44	571.2	426.0	230.8	205.6	25.26	9.140			
6,175.0	6,057.4	6,135.1	6,094.0	17.8	7.8	-171.87	576.4	436.4	238.2	212.5	25.63	9.291			
6,193.8	6,075.6	6,153.8	6,112.5	17.9	7.9	-172.22	577.7	439.0	240.0	214.3	25.73	9.330			
6,200.0	6,081.6	6,159.9	6,118.5	17.9	7.9	-172.33	578.2	439.8	240.6	214.9	25.76	9.342			
6,270.0	6,149.6	6,229.4	6,187.2	18.2	8.0	-173.55	583.1	449.6	246.7	220.5	26.13	9.441			
6,300.0	6,178.8	6,259.3	6,216.7	18.3	8.0	-174.04	585.2	453.7	248.8	222.5	26.29	9.464			
6,365.0	6,242.5	6,324.1	6,280.7	18.6	8.1	-175.05	589.7	462.8	252.3	225.6	26.69	9.452			
6,400.0	6,276.9	6,359.0	6,315.1	18.8	8.1	-175.57	592.2	467.6	253.6	226.7	26.91	9.425			
6,460.0	6,336.0	6,418.8	6,374.3	19.0	8.2	-176.43	596.4	476.0	254.9	227.7	27.27	9.349			
6,500.0	6,375.5	6,458.7	6,413.7	19.2	8.2	-177.00	599.2	481.6	255.1	227.6	27.51	9.275			
6,555.0	6,430.0	6,513.6	6,467.9	19.5	8.3	-177.76	603.1	489.3	254.6	226.7	27.83	9.147			
6,600.0	6,474.7	6,557.4	6,511.2	19.7	8.4	-178.36	606.1	495.3	253.4	225.3	28.09	9.022			
6,650.0	6,524.4	6,605.4	6,558.6	19.9	8.4	-178.99	609.3	501.6	251.6	223.3	28.36	8.874			
6,700.0	6,574.2	6,653.3	6,606.1	20.1	8.5	-179.59	612.3	507.6	249.4	220.8	28.63	8.714			
6,745.0	6,619.1	6,696.5	6,648.8	20.3	8.5	-179.89	614.9	512.7	247.1	218.2	28.86	8.561			
6,800.0	6,674.1	6,749.2	6,701.2	20.6	8.6	-179.28	617.8	518.5	243.7	214.5	29.15	8.360			
6,840.0	6,714.0	6,787.6	6,739.3	20.8	8.6	-178.85	619.8	522.4	240.8	211.5	29.35	8.206			
6,900.0	6,774.0	6,845.2	6,796.6	21.0	8.7	-178.22	622.6	527.9	236.0	206.4	29.65	7.961			
6,919.0	6,793.0	6,863.4	6,814.7	21.1	8.7	-142.18	623.4	529.6	234.4	204.6	29.72	7.887			
6,935.0	6,809.0	6,878.8	6,830.0	21.1	8.7	-142.34	624.1	530.9	232.9	203.2	29.77	7.824			
7,000.0	6,874.0	6,941.2	6,892.2	21.3	8.8	-142.96	626.7	536.0	227.6	197.6	30.01	7.585			
7,030.0	6,904.0	6,970.1	6,921.0	21.3	8.8	-143.23	627.7	538.1	225.4	195.3	30.09	7.491			
7,106.0	6,980.0	7,043.4	6,994.0	21.5	8.9	-143.86	630.2	543.0	220.4	190.1	30.28	7.278			
7,125.0	6,999.0	7,061.7	7,012.3	21.5	9.0	35.63	630.7	544.0	219.0	188.7	30.30	7.228			
7,150.0	7,024.0	7,085.7	7,036.3	21.5	9.0	35.80	631.4	545.4	216.5	186.2	30.33	7.139			
7,200.0	7,073.6	7,133.5	7,084.0	21.5	9.0	36.83	632.6	547.8	209.2	178.7	30.50	6.858			
7,220.0	7,093.3	7,152.5	7,103.0	21.6	9.1	37.53	633.0	548.6	205.4	174.8	30.57	6.718			
7,250.0	7,122.5	7,180.6	7,131.1	21.6	9.1	38.92	633.6	549.8	198.8	168.1	30.68	6.481			
7,300.0	7,170.3	7,226.8	7,177.2	21.7	9.1	42.26	634.4	551.4	185.8	154.9	30.84	6.025			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #804H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9478-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Factor	
7,315.0	7,184.4	7,240.3	7,190.7	21.7	9.1	43.56	634.7	551.8	181.4	150.5	30.87	5.876	
7,350.0	7,216.7	7,271.5	7,221.9	21.8	9.2	47.19	635.1	552.7	170.6	139.6	30.94	5.512	
7,400.0	7,261.3	7,314.7	7,265.1	21.9	9.2	54.08	635.6	553.6	154.1	123.1	30.94	4.980	
7,410.0	7,270.0	7,323.1	7,273.5	21.9	9.2	55.72	635.6	553.8	150.7	119.8	30.91	4.876	
7,450.0	7,303.7	7,355.9	7,306.2	22.0	9.3	63.22	635.9	554.2	137.8	107.1	30.71	4.487	
7,500.0	7,343.7	7,394.8	7,345.2	22.1	9.3	74.47	636.0	554.6	124.2	94.1	30.08	4.127	
7,505.0	7,347.6	7,398.6	7,349.0	22.1	9.3	75.68	636.0	554.6	123.1	93.1	30.00	4.103	
7,550.0	7,380.9	7,431.2	7,381.6	22.2	9.3	86.79	636.1	554.7	116.9	87.9	29.00	4.030 SF	
7,562.9	7,390.0	7,440.4	7,390.7	22.3	9.4	90.00	636.1	554.7	116.5	87.8	28.69	4.062 CC, ES	
7,600.0	7,415.1	7,465.4	7,415.8	22.3	9.4	98.68	636.1	554.7	119.7	91.8	27.89	4.292	
7,650.0	7,445.9	7,496.2	7,446.6	22.4	9.4	108.42	636.1	554.7	134.3	106.8	27.42	4.896	
7,695.0	7,470.6	7,521.0	7,471.3	22.5	9.4	114.80	636.1	554.7	156.4	128.8	27.60	5.666	
7,700.0	7,473.2	7,523.5	7,473.9	22.5	9.4	115.37	636.1	554.7	159.3	131.6	27.64	5.762	
7,750.0	7,496.8	7,547.1	7,497.5	22.6	9.5	119.51	636.1	554.7	192.0	163.9	28.13	6.828	
7,790.0	7,512.8	7,563.1	7,513.5	22.6	9.5	120.88	636.1	554.7	222.3	193.8	28.52	7.793	
7,800.0	7,516.4	7,566.7	7,517.1	22.6	9.5	120.95	636.1	554.7	230.3	201.7	28.62	8.047	
7,850.0	7,531.9	7,582.2	7,532.6	22.7	9.5	119.60	636.1	554.7	272.3	243.3	29.03	9.381	
7,885.0	7,540.3	7,590.6	7,541.0	22.7	9.5	116.74	636.1	554.7	303.4	274.1	29.26	10.368	
7,900.0	7,543.2	7,593.6	7,543.9	22.7	9.5	114.96	636.1	554.7	317.0	287.7	29.35	10.802	
7,950.0	7,550.3	7,600.6	7,551.0	22.7	9.5	106.09	636.1	554.7	363.5	333.9	29.59	12.283	
7,980.0	7,552.4	7,602.7	7,553.1	22.8	9.5	98.29	636.1	554.7	391.9	362.2	29.71	13.192	
8,000.0	7,553.0	7,603.3	7,553.7	22.8	9.5	92.03	636.1	554.7	411.1	381.3	29.78	13.804	
8,006.7	7,553.0	7,603.3	7,553.7	22.8	9.5	89.76	636.1	554.7	417.5	387.7	29.80	14.011	
8,075.0	7,552.9	7,603.3	7,553.6	22.8	9.5	89.71	636.1	554.7	483.5	453.5	29.98	16.125	
8,100.0	7,552.9	7,603.2	7,553.6	22.8	9.5	89.70	636.1	554.7	507.8	477.7	30.04	16.905	
8,170.0	7,552.8	7,603.1	7,553.5	22.9	9.5	89.66	636.1	554.7	576.1	545.9	30.17	19.099	
8,200.0	7,552.8	7,603.1	7,553.5	22.9	9.5	89.64	636.1	554.7	605.5	575.3	30.21	20.043	
8,265.0	7,552.7	7,603.0	7,553.4	23.0	9.5	89.60	636.1	554.7	669.4	639.1	30.30	22.095	
8,300.0	7,552.6	7,603.0	7,553.3	23.0	9.5	89.58	636.1	554.7	703.9	673.6	30.34	23.202	
8,360.0	7,552.6	7,602.9	7,553.3	23.0	9.5	89.54	636.1	554.7	763.2	732.8	30.40	25.104	
8,400.0	7,552.5	7,602.8	7,553.2	23.1	9.5	89.52	636.1	554.7	802.7	772.3	30.44	26.374	
8,455.0	7,552.4	7,602.8	7,553.1	23.1	9.5	89.48	636.1	554.7	857.2	826.7	30.48	28.122	
8,500.0	7,552.4	7,602.7	7,553.1	23.2	9.5	89.45	636.1	554.7	901.8	871.3	30.51	29.554	
8,550.0	7,552.3	7,602.7	7,553.0	23.2	9.5	89.42	636.1	554.7	951.4	920.8	30.55	31.145	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #805H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-MWD+IFR1+FDIR												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	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)			
0.0	0.0	0.7	0.7	3.0	3.0	-11.76	336.1	-70.0	343.3				
95.0	95.0	95.7	95.7	3.0	3.0	-11.76	336.1	-70.0	343.3	337.3	6.00	57.190	
100.0	100.0	100.7	100.7	3.0	3.0	-11.76	336.1	-70.0	343.3	337.3	6.00	57.186	
190.0	190.0	190.7	190.7	3.0	3.0	-11.76	336.1	-70.0	343.3	337.3	6.04	56.855	
200.0	200.0	200.7	200.7	3.0	3.0	-11.76	336.1	-70.0	343.3	337.2	6.04	56.796	
285.0	285.0	285.7	285.7	3.0	3.1	-11.76	336.1	-70.0	343.3	337.2	6.12	56.129	
300.0	300.0	300.7	300.7	3.0	3.1	-11.76	336.1	-70.0	343.3	337.2	6.13	55.982	
380.0	380.0	380.7	380.7	3.0	3.2	-11.76	336.1	-70.0	343.3	337.1	6.23	55.067	
400.0	400.0	400.7	400.7	3.0	3.2	-11.76	336.1	-70.0	343.3	337.0	6.26	54.807	
475.0	475.0	475.7	475.7	3.0	3.3	-11.76	336.1	-70.0	343.3	336.9	6.39	53.735	
500.0	500.0	500.7	500.7	3.1	3.4	-11.76	336.1	-70.0	343.3	336.9	6.43	53.348	
570.0	570.0	570.7	570.7	3.1	3.5	-11.76	336.1	-70.0	343.3	336.7	6.58	52.204	
600.0	600.0	600.7	600.7	3.1	3.6	-11.76	336.1	-70.0	343.3	336.7	6.64	51.690	
665.0	665.0	665.7	665.7	3.1	3.7	-11.76	336.1	-70.0	343.3	336.5	6.79	50.541	
700.0	700.0	700.7	700.7	3.1	3.8	-11.76	336.1	-70.0	343.3	336.4	6.88	49.907	
760.0	760.0	760.7	760.7	3.1	3.9	-11.76	336.1	-70.0	343.3	336.3	7.03	48.805	
800.0	800.0	800.7	800.7	3.2	4.0	-11.76	336.1	-70.0	343.3	336.2	7.14	48.063	
855.0	855.0	855.7	855.7	3.2	4.1	-11.76	336.1	-70.0	343.3	336.0	7.30	47.041	
900.0	900.0	900.7	900.7	3.2	4.2	-11.76	336.1	-70.0	343.3	335.9	7.43	46.206	
950.0	950.0	950.7	950.7	3.2	4.4	-11.76	336.1	-70.0	343.3	335.7	7.58	45.285	
1,000.0	1,000.0	1,000.7	1,000.7	3.2	4.5	-11.76	336.1	-70.0	343.3	335.6	7.74	44.373	
1,045.0	1,045.0	1,045.7	1,045.7	3.3	4.6	-11.76	336.1	-70.0	343.3	335.4	7.88	43.563	
1,100.0	1,100.0	1,100.7	1,100.7	3.3	4.8	-11.76	336.1	-70.0	343.3	335.2	8.06	42.589	
1,140.0	1,140.0	1,140.7	1,140.7	3.3	4.9	-11.76	336.1	-70.0	343.3	335.1	8.19	41.893	
1,200.0	1,200.0	1,200.7	1,200.7	3.4	5.1	-11.76	336.1	-70.0	343.3	334.9	8.40	40.870	
1,235.0	1,235.0	1,235.7	1,235.7	3.4	5.2	-11.76	336.1	-70.0	343.3	334.8	8.52	40.286	
1,300.0	1,300.0	1,300.7	1,300.7	3.4	5.3	-11.76	336.1	-70.0	343.3	334.5	8.75	39.226	
1,330.0	1,330.0	1,330.7	1,330.7	3.4	5.4	-11.76	336.1	-70.0	343.3	334.4	8.86	38.748	
1,400.0	1,400.0	1,400.7	1,400.7	3.5	5.7	-11.76	336.1	-70.0	343.3	334.2	9.12	37.662	
1,425.0	1,425.0	1,425.7	1,425.7	3.5	5.7	-11.76	336.1	-70.0	343.3	334.1	9.21	37.284	
1,500.0	1,500.0	1,500.7	1,500.7	3.5	6.0	-11.76	336.1	-70.0	343.3	333.8	9.49	36.179	
1,520.0	1,520.0	1,520.7	1,520.7	3.6	6.0	-11.76	336.1	-70.0	343.3	333.7	9.56	35.892	
1,600.0	1,600.0	1,600.7	1,600.7	3.6	6.3	-11.76	336.1	-70.0	343.3	333.4	9.87	34.777	
1,615.0	1,615.0	1,615.7	1,615.7	3.6	6.3	-11.76	336.1	-70.0	343.3	333.4	9.93	34.574	
1,700.0	1,700.0	1,700.7	1,700.7	3.7	6.6	-11.76	336.1	-70.0	343.3	333.0	10.26	33.454	
1,710.0	1,710.0	1,710.7	1,710.7	3.7	6.6	-11.76	336.1	-70.0	343.3	333.0	10.30	33.326	
1,800.0	1,800.0	1,800.7	1,800.7	3.8	6.9	-11.76	336.1	-70.0	343.3	332.6	10.66	32.206	
1,805.0	1,805.0	1,805.7	1,805.7	3.8	6.9	-11.76	336.1	-70.0	343.3	332.6	10.68	32.146	
1,900.0	1,900.0	1,900.7	1,900.7	3.9	7.2	-11.76	336.1	-70.0	343.3	332.2	11.06	31.030	
1,995.0	1,995.0	1,995.7	1,995.7	3.9	7.5	-11.76	336.1	-70.0	343.3	331.8	11.45	29.976	
2,000.0	2,000.0	2,000.7	2,000.7	3.9	7.6	-11.76	336.1	-70.0	343.3	331.8	11.47	29.922	
2,090.0	2,090.0	2,090.7	2,090.7	4.0	7.9	-51.74	336.1	-70.0	342.4	330.6	11.84	28.919	
2,100.0	2,100.0	2,100.7	2,100.7	4.1	7.9	-51.79	336.1	-70.0	342.2	330.3	11.88	28.810	
2,185.0	2,184.9	2,185.6	2,185.6	4.5	8.2	-52.39	336.1	-70.0	339.6	327.3	12.28	27.649	
2,200.0	2,199.8	2,200.5	2,200.5	4.6	8.2	-52.53	336.1	-70.0	339.0	326.7	12.35	27.454	
2,280.0	2,279.6	2,280.3	2,280.3	5.1	8.5	-53.51	336.1	-70.0	335.0	322.2	12.73	26.313	
2,300.0	2,299.5	2,300.2	2,300.2	5.2	8.6	-53.80	336.1	-70.0	333.8	320.9	12.82	26.031	
2,375.0	2,373.9	2,374.6	2,374.6	5.6	8.8	-55.12	336.1	-70.0	328.6	315.4	13.17	24.943	
2,400.0	2,398.7	2,399.4	2,399.4	5.8	8.9	-55.64	336.1	-70.0	326.7	313.4	13.29	24.586	
2,470.0	2,467.9	2,468.6	2,468.6	6.2	9.1	-57.29	336.1	-70.0	320.8	307.2	13.61	23.577	
2,500.0	2,497.5	2,498.2	2,498.2	6.3	9.2	-58.09	336.1	-70.0	318.1	304.3	13.74	23.154	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #805H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-MWD+IFR1+FDIR				Offset					Rule Assigned:				Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance					
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	
2,565.0	2,561.3	2,556.4	2,556.4	6.7	9.4	-59.91	336.5	-70.3	312.4	298.4	14.00	22.315		
2,600.0	2,595.6	2,587.5	2,587.5	6.9	9.5	-61.02	337.1	-70.9	309.7	295.5	14.13	21.915		
2,660.0	2,654.2	2,640.7	2,640.7	7.2	9.7	-63.14	338.6	-72.3	305.7	291.3	14.35	21.298		
2,700.0	2,693.1	2,676.1	2,676.0	7.4	9.8	-64.70	340.1	-73.6	303.6	289.1	14.49	20.946		
2,725.1	2,717.4	2,700.0	2,699.8	7.4	9.9	-65.82	341.2	-74.7	302.6	288.0	14.59	20.738		
2,755.0	2,746.3	2,724.4	2,724.2	7.4	10.0	-66.97	342.6	-75.9	301.6	287.0	14.69	20.539		
2,800.0	2,789.9	2,763.9	2,763.6	7.5	10.1	-68.87	345.1	-78.1	301.1	286.3	14.85	20.274		
2,801.0	2,790.9	2,764.8	2,764.5	7.5	10.1	-68.91	345.1	-78.2	301.1	286.3	14.86	20.268	CC, ES	
2,850.0	2,838.3	2,808.6	2,808.0	7.6	10.3	-71.04	348.3	-81.1	301.7	286.6	15.07	20.027		
2,900.0	2,886.7	2,856.9	2,856.0	7.7	10.4	-73.38	352.1	-84.5	303.1	287.8	15.32	19.788		
2,945.0	2,930.3	2,900.4	2,899.3	7.8	10.6	-75.47	355.4	-87.6	304.8	289.2	15.57	19.578		
3,000.0	2,983.5	2,953.5	2,952.1	7.9	10.8	-77.98	359.5	-91.3	307.4	291.6	15.89	19.348		
3,040.0	3,022.2	2,992.2	2,990.6	8.0	10.9	-79.79	362.5	-94.1	309.8	293.6	16.14	19.190		
3,100.0	3,080.3	3,050.2	3,048.2	8.1	11.1	-82.44	367.0	-98.1	313.9	297.3	16.53	18.983		
3,135.0	3,114.2	3,084.0	3,081.9	8.2	11.2	-83.95	369.6	-100.5	316.6	299.8	16.77	18.874		
3,200.0	3,177.1	3,146.8	3,144.4	8.3	11.4	-86.70	374.5	-105.0	322.2	305.0	17.23	18.702		
3,230.0	3,206.2	3,175.8	3,173.2	8.4	11.5	-87.94	376.7	-107.0	325.1	307.6	17.45	18.632		
3,300.0	3,274.0	3,243.4	3,240.5	8.5	11.8	-90.74	381.9	-111.8	332.3	314.4	17.96	18.504		
3,325.0	3,298.2	3,267.6	3,264.5	8.6	11.8	-91.71	383.8	-113.5	335.1	317.0	18.15	18.467		
3,400.0	3,370.8	3,340.1	3,336.6	8.8	12.1	-94.54	389.4	-118.6	344.1	325.4	18.71	18.387		
3,420.0	3,390.1	3,359.4	3,355.8	8.8	12.2	-95.27	390.9	-119.9	346.6	327.7	18.87	18.372		
3,500.0	3,467.6	3,436.7	3,432.7	9.0	12.4	-98.08	396.9	-125.4	357.3	337.8	19.48	18.343		
3,515.0	3,482.1	3,451.2	3,447.1	9.1	12.5	-98.59	398.0	-126.4	359.4	339.8	19.59	18.341	SF	
3,600.0	3,564.4	3,533.4	3,528.8	9.3	12.8	-101.37	404.3	-132.2	371.8	351.6	20.25	18.362		
3,610.0	3,574.1	3,543.0	3,538.4	9.3	12.8	-101.69	405.1	-132.9	373.3	353.0	20.33	18.367		
3,700.0	3,661.2	3,630.0	3,624.9	9.6	13.1	-104.42	411.8	-139.0	387.5	366.5	21.02	18.437		
3,705.0	3,666.1	3,634.8	3,629.7	9.6	13.1	-104.56	412.2	-139.3	388.3	367.2	21.06	18.441		
3,800.0	3,758.0	3,726.6	3,721.0	9.9	13.4	-107.23	419.3	-145.8	404.2	382.4	21.78	18.556		
3,895.0	3,850.0	3,818.5	3,812.3	10.1	13.8	-109.69	426.4	-152.3	420.9	398.4	22.51	18.702		
3,900.0	3,854.8	3,823.3	3,817.1	10.2	13.8	-109.82	426.7	-152.6	421.8	399.3	22.54	18.711		
3,990.0	3,942.0	3,910.3	3,903.6	10.4	14.1	-111.97	433.4	-158.7	438.4	415.1	23.22	18.875		
4,000.0	3,951.7	3,919.9	3,913.2	10.4	14.1	-112.20	434.2	-159.4	440.2	416.9	23.30	18.895		
4,085.0	4,033.9	4,002.1	3,994.9	10.7	14.4	-114.08	440.5	-165.2	456.4	432.5	23.94	19.069		
4,100.0	4,048.5	4,016.6	4,009.4	10.8	14.5	-114.40	441.7	-166.2	459.3	435.3	24.05	19.101		
4,180.0	4,125.9	4,093.9	4,086.2	11.0	14.7	-116.03	447.6	-171.7	475.1	450.4	24.64	19.278		
4,200.0	4,145.3	4,113.2	4,105.5	11.1	14.8	-116.42	449.1	-173.0	479.1	454.3	24.79	19.323		
4,275.0	4,217.9	4,185.7	4,177.6	11.3	15.1	-117.84	454.7	-178.1	494.2	468.9	25.35	19.498		
4,300.0	4,242.1	4,209.9	4,201.6	11.4	15.1	-118.29	456.6	-179.8	499.4	473.8	25.53	19.558		
4,370.0	4,309.9	4,277.5	4,268.9	11.6	15.4	-119.51	461.8	-184.6	513.8	487.8	26.05	19.728		
4,400.0	4,338.9	4,306.5	4,297.7	11.7	15.5	-120.01	464.1	-186.6	520.1	493.8	26.27	19.802		
4,465.0	4,401.8	4,369.3	4,360.2	11.9	15.7	-121.06	468.9	-191.1	533.8	507.1	26.74	19.962		
4,500.0	4,435.7	4,403.1	4,393.8	12.0	15.8	-121.60	471.5	-193.4	541.3	514.3	27.00	20.050		
4,560.0	4,493.8	4,461.1	4,451.5	12.2	16.0	-122.50	476.0	-197.5	554.2	526.7	27.43	20.201		
4,600.0	4,532.5	4,499.8	4,489.9	12.3	16.2	-123.07	479.0	-200.2	562.8	535.1	27.72	20.301		
4,655.0	4,585.8	4,552.9	4,542.8	12.5	16.4	-123.84	483.1	-204.0	574.8	546.7	28.12	20.440		
4,700.0	4,629.4	4,596.4	4,586.0	12.7	16.5	-124.44	486.4	-207.0	584.7	556.3	28.45	20.554		
4,750.0	4,677.8	4,644.7	4,634.1	12.8	16.7	-125.08	490.2	-210.5	595.8	567.0	28.81	20.680		
4,800.0	4,726.2	4,693.1	4,682.1	13.0	16.9	-125.71	493.9	-213.9	606.9	577.7	29.17	20.805		
4,845.0	4,769.7	4,736.5	4,725.4	13.1	17.0	-126.25	497.3	-216.9	617.0	587.5	29.50	20.918		
4,900.0	4,823.0	4,789.7	4,778.2	13.3	17.2	-126.88	501.4	-220.7	629.4	599.5	29.89	21.055		
4,940.0	4,861.7	4,828.4	4,816.7	13.5	17.3	-127.33	504.4	-223.4	638.4	608.2	30.18	21.154		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #805H - OWB - PWP0													Offset Site Error:	0.0 usft	
Survey Program:		0-MWD+IFR1+FDIR						Rule Assigned:						Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Minimum Separation		Warning			
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside									
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Ellipses (usft)	Separation (usft)	Factor			
5,000.0	4,919.8	4,886.3	4,874.4	13.7	17.5	-127.98	508.8	-227.5	652.1	621.5	30.61	21.302			
5,035.0	4,953.7	4,920.2	4,908.0	13.8	17.7	-128.35	511.5	-229.8	660.1	629.2	30.86	21.387			
5,100.0	5,016.6	4,983.0	4,970.5	14.0	17.9	-129.01	516.3	-234.3	675.0	643.7	31.33	21.545			
5,130.0	5,045.6	5,012.0	4,999.3	14.1	18.0	-129.30	518.5	-236.3	681.9	650.3	31.54	21.617			
5,200.0	5,113.4	5,079.6	5,066.6	14.4	18.2	-129.97	523.8	-241.1	698.1	666.0	32.05	21.784			
5,225.0	5,137.6	5,103.8	5,090.6	14.4	18.3	-130.20	525.6	-242.8	703.9	671.7	32.23	21.843			
5,300.0	5,210.2	5,176.3	5,162.7	14.7	18.6	-130.87	531.2	-247.9	721.4	688.6	32.76	22.018			
5,320.0	5,229.6	5,195.6	5,181.9	14.8	18.6	-131.04	532.7	-249.2	726.0	693.1	32.91	22.064			
5,400.0	5,307.0	5,272.9	5,258.8	15.0	18.9	-131.71	538.7	-254.7	744.8	711.3	33.48	22.247			
5,415.0	5,321.6	5,287.4	5,273.2	15.1	19.0	-131.83	539.8	-255.7	748.3	714.8	33.59	22.281			
5,500.0	5,403.9	5,369.5	5,354.9	15.4	19.3	-132.50	546.2	-261.5	768.4	734.2	34.19	22.471			
5,510.0	5,413.5	5,379.2	5,364.5	15.4	19.3	-132.58	546.9	-262.2	770.8	736.5	34.27	22.494			
5,600.0	5,500.7	5,466.2	5,451.0	15.7	19.6	-133.24	553.6	-268.3	792.1	757.2	34.91	22.690			
5,605.0	5,505.5	5,471.0	5,455.8	15.8	19.6	-133.28	554.0	-268.6	793.3	758.4	34.95	22.701			
5,700.0	5,597.5	5,562.8	5,547.1	16.1	20.0	-133.95	561.1	-275.1	815.9	780.3	35.63	22.904			
5,795.0	5,689.5	5,654.6	5,638.4	16.4	20.3	-134.58	568.2	-281.6	838.7	802.4	36.31	23.101			
5,800.0	5,694.3	5,659.5	5,643.3	16.5	20.3	-134.61	568.6	-281.9	839.9	803.6	36.34	23.111			
5,890.0	5,781.4	5,746.4	5,729.8	16.8	20.6	-135.17	575.3	-288.0	861.5	824.5	36.99	23.294			
5,900.0	5,791.1	5,756.1	5,739.4	16.8	20.7	-135.23	576.0	-288.7	863.9	826.9	37.06	23.314			
5,985.0	5,873.4	5,838.3	5,821.1	17.1	20.9	-135.74	582.4	-294.5	884.5	846.8	37.67	23.482			
6,000.0	5,887.9	5,852.7	5,835.5	17.2	21.0	-135.83	583.5	-295.5	888.1	850.3	37.77	23.511			
6,080.0	5,965.4	5,930.1	5,912.4	17.5	21.3	-136.28	589.5	-301.0	907.5	869.1	38.35	23.665			
6,100.0	5,984.7	5,949.4	5,931.6	17.5	21.3	-136.39	591.0	-302.3	912.3	873.8	38.49	23.703			
6,175.0	6,057.4	6,026.6	6,008.4	17.8	21.6	-136.83	596.7	-307.6	930.4	891.3	39.06	23.821			
6,193.8	6,075.6	6,046.6	6,028.3	17.9	21.7	-136.95	598.1	-308.9	934.9	895.7	39.21	23.845			
6,200.0	6,081.6	6,053.2	6,034.9	17.9	21.7	-137.01	598.6	-309.3	936.3	897.1	39.25	23.853			
6,270.0	6,149.6	6,128.0	6,109.4	18.2	22.0	-137.64	603.2	-313.5	951.9	912.1	39.81	23.911			
6,300.0	6,178.8	6,160.2	6,141.5	18.3	22.1	-137.90	605.0	-315.2	958.1	918.0	40.05	23.922			
6,365.0	6,242.5	6,230.3	6,211.4	18.6	22.4	-138.41	608.4	-318.3	970.4	929.7	40.62	23.889			
6,400.0	6,276.9	6,268.1	6,249.2	18.8	22.5	-138.66	610.0	-319.7	976.3	935.4	40.93	23.856			
6,460.0	6,336.0	6,333.3	6,314.3	19.0	22.7	-139.06	612.3	-321.8	985.6	944.2	41.45	23.780			
6,500.0	6,375.5	6,376.9	6,357.9	19.2	22.9	-139.30	613.6	-323.0	991.1	949.3	41.79	23.713			
6,555.0	6,430.0	6,436.9	6,417.9	19.5	23.1	-139.61	614.9	-324.1	997.7	955.4	42.26	23.605			
7,500.0	7,343.7	7,363.4	7,344.4	22.1	26.4	86.89	616.1	-325.3	998.7	951.5	47.24	21.142			
7,505.0	7,347.6	7,367.3	7,348.3	22.1	26.4	87.05	616.1	-325.3	998.5	951.3	47.24	21.135			
7,550.0	7,380.9	7,400.6	7,381.6	22.2	26.5	88.49	616.1	-325.3	996.9	949.6	47.29	21.082			
7,600.0	7,415.1	7,434.8	7,415.8	22.3	26.6	89.99	616.1	-325.3	996.3	948.9	47.32	21.055			
7,600.4	7,415.3	7,435.0	7,416.0	22.3	26.6	90.00	616.1	-325.3	996.3	948.9	47.32	21.054			
7,650.0	7,445.9	7,465.6	7,446.6	22.4	26.7	91.31	616.1	-325.3	997.0	949.7	47.33	21.065			
7,695.0	7,470.6	7,490.4	7,471.3	22.5	26.8	92.28	616.1	-325.3	999.2	951.9	47.33	21.111			
7,700.0	7,473.2	7,492.9	7,473.9	22.5	26.8	92.37	616.1	-325.3	999.5	952.2	47.33	21.118			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #806H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9428-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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)				
0.0	0.0	0.7	0.7	3.0	3.0	-16.56	336.1	-100.0	350.6					
95.0	95.0	95.7	95.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.00	58.434		
100.0	100.0	100.7	100.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.00	58.433		
190.0	190.0	190.7	190.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.01	58.357		
200.0	200.0	200.7	200.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.01	58.343		
285.0	285.0	285.7	285.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.03	58.184		
300.0	300.0	300.7	300.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.03	58.148		
380.0	380.0	380.7	380.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.05	57.919		
400.0	400.0	400.7	400.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.6	6.06	57.852		
475.0	475.0	475.7	475.7	3.0	3.0	-16.56	336.1	-100.0	350.6	344.5	6.09	57.565		
500.0	500.0	500.7	500.7	3.1	3.1	-16.56	336.1	-100.0	350.6	344.5	6.10	57.458		
570.0	570.0	570.7	570.7	3.1	3.1	-16.56	336.1	-100.0	350.6	344.5	6.14	57.129		
600.0	600.0	600.7	600.7	3.1	3.1	-16.56	336.1	-100.0	350.6	344.5	6.15	56.974		
665.0	665.0	665.7	665.7	3.1	3.1	-16.56	336.1	-100.0	350.6	344.4	6.19	56.614		
700.0	700.0	700.7	700.7	3.1	3.1	-16.56	336.1	-100.0	350.6	344.4	6.22	56.407		
760.0	760.0	760.7	760.7	3.1	3.1	-16.56	336.1	-100.0	350.6	344.4	6.26	56.029		
800.0	800.0	800.7	800.7	3.2	3.2	-16.56	336.1	-100.0	350.6	344.4	6.29	55.763		
855.0	855.0	855.7	855.7	3.2	3.2	-16.56	336.1	-100.0	350.6	344.3	6.33	55.380		
900.0	900.0	900.7	900.7	3.2	3.2	-16.56	336.1	-100.0	350.6	344.3	6.37	55.052		
950.0	950.0	950.7	950.7	3.2	3.2	-16.56	336.1	-100.0	350.6	344.2	6.41	54.673		
1,000.0	1,000.0	1,000.7	1,000.7	3.2	3.2	-16.56	336.1	-100.0	350.6	344.2	6.46	54.282		
1,045.0	1,045.0	1,045.7	1,045.7	3.3	3.3	-16.56	336.1	-100.0	350.6	344.1	6.50	53.918		
1,100.0	1,100.0	1,100.7	1,100.7	3.3	3.3	-16.56	336.1	-100.0	350.6	344.1	6.56	53.462		
1,140.0	1,140.0	1,140.7	1,140.7	3.3	3.3	-16.56	336.1	-100.0	350.6	344.0	6.60	53.121		
1,200.0	1,200.0	1,200.7	1,200.7	3.4	3.4	-16.56	336.1	-100.0	350.6	344.0	6.67	52.600		
1,235.0	1,235.0	1,235.7	1,235.7	3.4	3.4	-16.56	336.1	-100.0	350.6	343.9	6.71	52.290		
1,300.0	1,300.0	1,300.7	1,300.7	3.4	3.4	-16.56	336.1	-100.0	350.6	343.9	6.78	51.705		
1,330.0	1,330.0	1,330.7	1,330.7	3.4	3.4	-16.56	336.1	-100.0	350.6	343.8	6.82	51.431		
1,400.0	1,400.0	1,400.7	1,400.7	3.5	3.5	-16.56	336.1	-100.0	350.6	343.7	6.90	50.784		
1,425.0	1,425.0	1,425.7	1,425.7	3.5	3.5	-16.56	336.1	-100.0	350.6	343.7	6.94	50.551		
1,500.0	1,500.0	1,500.7	1,500.7	3.5	3.5	-16.56	336.1	-100.0	350.6	343.6	7.03	49.845		
1,520.0	1,520.0	1,520.7	1,520.7	3.6	3.6	-16.56	336.1	-100.0	350.6	343.6	7.06	49.655		
1,600.0	1,600.0	1,600.7	1,600.7	3.6	3.6	-16.56	336.1	-100.0	350.6	343.5	7.17	48.893		
1,615.0	1,615.0	1,615.7	1,615.7	3.6	3.6	-16.56	336.1	-100.0	350.6	343.4	7.19	48.750		
1,700.0	1,700.0	1,700.7	1,700.7	3.7	3.7	-16.56	336.1	-100.0	350.6	343.3	7.31	47.935		
1,710.0	1,710.0	1,710.7	1,710.7	3.7	3.7	-16.56	336.1	-100.0	350.6	343.3	7.33	47.840		
1,800.0	1,800.0	1,800.7	1,800.7	3.8	3.8	-16.56	336.1	-100.0	350.6	343.2	7.46	46.977		
1,805.0	1,805.0	1,805.7	1,805.7	3.8	3.8	-16.56	336.1	-100.0	350.6	343.2	7.47	46.929		
1,900.0	1,900.0	1,900.7	1,900.7	3.9	3.9	-16.56	336.1	-100.0	350.6	343.0	7.62	46.021		
1,995.0	1,995.0	1,995.7	1,995.7	3.9	3.9	-16.56	336.1	-100.0	350.6	342.9	7.77	45.120		
2,000.0	2,000.0	2,000.7	2,000.7	3.9	3.9	-16.56	336.1	-100.0	350.6	342.9	7.78	45.073		
2,090.0	2,090.0	2,090.7	2,090.7	4.0	4.0	-56.55	336.1	-100.0	349.9	341.9	7.91	44.210		
2,100.0	2,100.0	2,100.7	2,100.7	4.1	4.0	-56.60	336.1	-100.0	349.7	341.8	7.92	44.130		
2,185.0	2,184.9	2,185.6	2,185.6	4.5	4.1	-57.22	336.1	-100.0	347.4	339.3	8.08	42.979		
2,200.0	2,199.8	2,200.5	2,200.5	4.6	4.1	-57.37	336.1	-100.0	346.8	338.7	8.10	42.810		
2,280.0	2,279.6	2,280.3	2,280.3	5.1	4.2	-58.37	336.1	-100.0	343.3	335.0	8.25	41.600		
2,300.0	2,299.5	2,300.2	2,300.2	5.2	4.2	-58.68	336.1	-100.0	342.2	333.9	8.28	41.308		
2,375.0	2,373.9	2,374.6	2,374.6	5.6	4.3	-60.03	336.1	-100.0	337.7	329.3	8.42	40.105		
2,400.0	2,398.7	2,399.4	2,399.4	5.8	4.3	-60.55	336.1	-100.0	336.0	327.5	8.46	39.716		
2,470.0	2,467.9	2,468.6	2,468.6	6.2	4.4	-62.22	336.1	-100.0	330.9	322.3	8.58	38.577		
2,500.0	2,497.5	2,498.2	2,498.2	6.3	4.4	-63.04	336.1	-100.0	328.5	319.9	8.62	38.107		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #806H - OWB - PWP0													Offset Site Error:	0.0 usft	
Survey Program:		0-Standard Keeper 104, 9428-MWD+IFR1+FDIR					Rule Assigned:							Offset Well Error:	3.0 usft
Reference	Offset	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)	Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
2,565.0	2,561.3	2,557.6	2,557.6	6.7	4.4	-64.94	336.3	-100.5	323.6	314.9	8.70	37.176			
2,600.0	2,595.6	2,589.4	2,589.4	6.9	4.5	-66.13	336.5	-101.3	321.3	312.5	8.74	36.737			
2,660.0	2,654.2	2,643.4	2,643.3	7.2	4.5	-68.41	337.2	-103.4	317.9	309.1	8.81	36.086			
2,700.0	2,693.1	2,679.1	2,679.0	7.4	4.5	-70.11	337.8	-105.3	316.1	307.3	8.85	35.734			
2,725.1	2,717.4	2,700.0	2,699.8	7.4	4.5	-71.16	338.2	-106.6	315.3	306.5	8.87	35.539			
2,755.0	2,746.3	2,727.8	2,727.6	7.4	4.5	-72.60	338.9	-108.6	314.7	305.8	8.91	35.320			
2,782.0	2,772.5	2,751.6	2,751.3	7.5	4.5	-73.86	339.5	-110.5	314.5	305.6	8.95	35.156 CC, ES			
2,800.0	2,789.9	2,767.4	2,767.0	7.5	4.6	-74.71	339.9	-111.8	314.6	305.6	8.97	35.062			
2,850.0	2,838.3	2,811.2	2,810.6	7.6	4.6	-77.09	341.3	-116.0	315.7	306.6	9.07	34.802			
2,900.0	2,886.7	2,854.6	2,853.7	7.7	4.6	-79.50	342.8	-120.8	318.2	309.0	9.18	34.646			
2,945.0	2,930.3	2,893.5	2,892.3	7.8	4.6	-81.68	344.4	-125.6	321.5	312.2	9.31	34.548			
3,000.0	2,983.5	2,944.9	2,943.2	7.9	4.7	-84.52	346.6	-132.4	326.8	317.4	9.48	34.476			
3,040.0	3,022.2	2,982.7	2,980.6	8.0	4.7	-86.56	348.2	-137.4	331.3	321.7	9.62	34.420			
3,100.0	3,080.3	3,039.5	3,036.8	8.1	4.7	-89.51	350.6	-145.0	338.8	328.9	9.85	34.381			
3,135.0	3,114.2	3,072.6	3,069.6	8.2	4.7	-91.18	352.0	-149.3	343.6	333.6	10.00	34.369 SF			
3,200.0	3,177.1	3,134.0	3,130.5	8.3	4.8	-94.17	354.6	-157.5	353.3	343.0	10.27	34.404			
3,230.0	3,206.2	3,162.4	3,158.6	8.4	4.8	-95.49	355.9	-161.2	358.1	347.7	10.40	34.433			
3,300.0	3,274.0	3,228.6	3,224.1	8.5	4.8	-98.46	358.7	-170.0	370.1	359.4	10.71	34.563			
3,325.0	3,298.2	3,252.3	3,247.5	8.6	4.9	-99.47	359.7	-173.1	374.6	363.8	10.82	34.621			
3,400.0	3,370.8	3,323.2	3,317.8	8.8	4.9	-102.39	362.7	-182.5	388.9	377.7	11.16	34.856			
3,420.0	3,390.1	3,342.1	3,336.5	8.8	4.9	-103.13	363.5	-185.0	392.9	381.6	11.25	34.928			
3,500.0	3,467.6	3,417.8	3,411.4	9.0	5.0	-105.96	366.8	-195.1	409.4	397.8	11.61	35.269			
3,515.0	3,482.1	3,431.9	3,425.5	9.1	5.0	-106.47	367.4	-196.9	412.6	400.9	11.68	35.338			
3,600.0	3,564.4	3,512.3	3,505.1	9.3	5.0	-109.20	370.8	-207.6	431.4	419.3	12.06	35.780			
3,610.0	3,574.1	3,521.8	3,514.4	9.3	5.0	-109.51	371.2	-208.8	433.7	421.6	12.10	35.835			
3,700.0	3,661.2	3,606.9	3,598.7	9.6	5.1	-112.14	374.9	-220.1	454.7	442.2	12.50	36.367			
3,705.0	3,666.1	3,611.6	3,603.4	9.6	5.1	-112.28	375.1	-220.7	455.9	443.3	12.52	36.398			
3,800.0	3,758.0	3,701.5	3,692.4	9.9	5.2	-114.80	378.9	-232.6	479.0	466.1	12.94	37.012			
3,895.0	3,850.0	3,791.3	3,781.3	10.1	5.3	-117.09	382.7	-244.5	503.0	489.6	13.36	37.661			
3,900.0	3,854.8	3,796.0	3,786.0	10.2	5.3	-117.21	382.9	-245.2	504.3	490.9	13.38	37.696			
3,990.0	3,942.0	3,881.2	3,870.3	10.4	5.3	-119.18	386.6	-256.4	527.7	513.9	13.77	38.333			
4,000.0	3,951.7	3,890.6	3,879.7	10.4	5.3	-119.39	387.0	-257.7	530.3	516.5	13.81	38.405			
4,085.0	4,033.9	3,971.0	3,959.3	10.7	5.4	-121.09	390.4	-268.3	553.0	538.8	14.17	39.019			
4,100.0	4,048.5	3,985.2	3,973.3	10.8	5.4	-121.38	391.0	-270.2	557.0	542.8	14.24	39.128			
4,180.0	4,125.9	4,060.8	4,048.2	11.0	5.5	-122.84	394.2	-280.2	578.8	564.3	14.58	39.709			
4,200.0	4,145.3	4,079.8	4,067.0	11.1	5.5	-123.19	395.1	-282.7	584.3	569.7	14.66	39.856			
4,275.0	4,217.9	4,150.7	4,137.2	11.3	5.6	-124.44	398.1	-292.1	605.2	590.2	14.98	40.399			
4,300.0	4,242.1	4,174.3	4,160.6	11.4	5.6	-124.84	399.1	-295.3	612.1	597.1	15.08	40.580			
4,370.0	4,309.9	4,240.5	4,226.2	11.6	5.7	-125.91	401.9	-304.0	631.9	616.5	15.38	41.082			
4,400.0	4,338.9	4,268.9	4,254.3	11.7	5.7	-126.35	403.1	-307.8	640.4	624.9	15.51	41.296			
4,465.0	4,401.8	4,330.4	4,315.1	11.9	5.7	-127.26	405.8	-315.9	659.0	643.2	15.78	41.754			
4,500.0	4,435.7	4,363.5	4,347.9	12.0	5.8	-127.73	407.2	-320.3	669.1	653.1	15.93	41.999			
4,560.0	4,493.8	4,420.2	4,404.1	12.2	5.8	-128.51	409.6	-327.8	686.4	670.2	16.18	42.413			
4,600.0	4,532.5	4,458.0	4,441.6	12.3	5.9	-129.00	411.2	-332.8	698.0	681.7	16.35	42.686			
4,655.0	4,585.8	4,510.1	4,493.1	12.5	5.9	-129.66	413.4	-339.7	714.1	697.5	16.59	43.056			
4,700.0	4,629.4	4,552.6	4,535.2	12.7	6.0	-130.18	415.3	-345.4	727.3	710.5	16.78	43.355			
4,750.0	4,677.8	4,599.9	4,582.1	12.8	6.0	-130.73	417.3	-351.6	742.1	725.1	16.99	43.681			
4,800.0	4,726.2	4,647.2	4,628.9	13.0	6.0	-131.26	419.3	-357.9	756.9	739.7	17.20	44.004			
4,845.0	4,769.7	4,689.7	4,671.0	13.1	6.1	-131.72	421.1	-363.5	770.2	752.8	17.39	44.288			
4,900.0	4,823.0	4,741.8	4,722.5	13.3	6.1	-132.26	423.3	-370.4	786.6	769.0	17.63	44.631			
4,940.0	4,861.7	4,779.6	4,760.0	13.5	6.2	-132.65	425.0	-375.4	798.6	780.8	17.80	44.876			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #806H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9428-MWD+IFR1+FDIR													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor		
5,000.0	4,919.8	4,836.3	4,816.2	13.7	6.2	-133.20	427.4	-382.9	816.6	798.6	18.05	45.238		
5,035.0	4,953.7	4,869.4	4,849.0	13.8	6.3	-133.51	428.8	-387.3	827.2	809.0	18.20	45.444		
5,100.0	5,016.6	4,930.9	4,909.8	14.0	6.3	-134.06	431.4	-395.5	846.8	828.3	18.48	45.822		
5,130.0	5,045.6	4,959.3	4,937.9	14.1	6.4	-134.31	432.6	-399.2	855.9	837.3	18.61	45.993		
5,200.0	5,113.4	5,025.5	5,003.5	14.4	6.4	-134.87	435.5	-408.0	877.1	858.2	18.91	46.385		
5,225.0	5,137.6	5,049.1	5,026.9	14.4	6.5	-135.06	436.5	-411.1	884.7	865.7	19.02	46.522		
5,300.0	5,210.2	5,120.0	5,097.1	14.7	6.5	-135.62	439.5	-420.5	907.6	888.3	19.34	46.926		
5,320.0	5,229.6	5,138.9	5,115.9	14.8	6.5	-135.77	440.3	-423.0	913.7	894.3	19.43	47.031		
5,400.0	5,307.0	5,214.6	5,190.8	15.0	6.6	-136.33	443.5	-433.0	938.2	918.5	19.77	47.446		
5,415.0	5,321.6	5,228.8	5,204.8	15.1	6.6	-136.43	444.1	-434.9	942.8	923.0	19.84	47.522		
5,500.0	5,403.9	5,309.2	5,284.4	15.4	6.7	-136.99	447.6	-445.6	969.0	948.8	20.21	47.945		
5,510.0	5,413.5	5,318.6	5,293.8	15.4	6.7	-137.06	448.0	-446.8	972.1	951.8	20.25	47.993		
5,600.0	5,500.7	5,403.7	5,378.1	15.7	6.8	-137.61	451.6	-458.1	999.8	979.2	20.65	48.423		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #504H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7065-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Warning							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
							+N/-S (usft)	+E/-W (usft)					
0.0	0.0	0.9	0.9	3.0	3.0	-90.95	-1.0	-60.0	60.0				
95.0	95.0	95.9	95.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.00	10.001	
100.0	100.0	100.9	100.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.00	10.001	
190.0	190.0	190.9	190.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.00	9.997	
200.0	200.0	200.9	200.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.00	9.996	
285.0	285.0	285.9	285.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.01	9.988	
300.0	300.0	300.9	300.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.01	9.986	
380.0	380.0	380.9	380.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.02	9.975	
400.0	400.0	400.9	400.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.02	9.971	
475.0	475.0	475.9	475.9	3.0	3.0	-90.95	-1.0	-60.0	60.0	54.0	6.03	9.956	
500.0	500.0	500.9	500.9	3.1	3.1	-90.95	-1.0	-60.0	60.0	54.0	6.03	9.950	
570.0	570.0	570.9	570.9	3.1	3.1	-90.95	-1.0	-60.0	60.0	54.0	6.04	9.933	
600.0	600.0	600.9	600.9	3.1	3.1	-90.95	-1.0	-60.0	60.0	54.0	6.05	9.925	
665.0	665.0	665.9	665.9	3.1	3.1	-90.95	-1.0	-60.0	60.0	53.9	6.06	9.905	
700.0	700.0	700.9	700.9	3.1	3.1	-90.95	-1.0	-60.0	60.0	53.9	6.07	9.894	
760.0	760.0	760.9	760.9	3.1	3.1	-90.95	-1.0	-60.0	60.0	53.9	6.08	9.873	
800.0	800.0	800.9	800.9	3.2	3.2	-90.95	-1.0	-60.0	60.0	53.9	6.09	9.858	
855.0	855.0	855.9	855.9	3.2	3.2	-90.95	-1.0	-60.0	60.0	53.9	6.10	9.836	
900.0	900.0	900.9	900.9	3.2	3.2	-90.95	-1.0	-60.0	60.0	53.9	6.11	9.817	
950.0	950.0	950.9	950.9	3.2	3.2	-90.95	-1.0	-60.0	60.0	53.9	6.13	9.795	
1,000.0	1,000.0	1,000.9	1,000.9	3.2	3.2	-90.95	-1.0	-60.0	60.0	53.9	6.14	9.772	
1,045.0	1,045.0	1,045.9	1,045.9	3.3	3.3	-90.95	-1.0	-60.0	60.0	53.9	6.15	9.751	
1,100.0	1,100.0	1,100.9	1,100.9	3.3	3.3	-90.95	-1.0	-60.0	60.0	53.8	6.17	9.723	
1,140.0	1,140.0	1,140.9	1,140.9	3.3	3.3	-90.95	-1.0	-60.0	60.0	53.8	6.19	9.702	
1,200.0	1,200.0	1,200.9	1,200.9	3.4	3.4	-90.95	-1.0	-60.0	60.0	53.8	6.21	9.669	
1,235.0	1,235.0	1,235.9	1,235.9	3.4	3.4	-90.95	-1.0	-60.0	60.0	53.8	6.22	9.650	
1,300.0	1,300.0	1,300.9	1,300.9	3.4	3.4	-90.95	-1.0	-60.0	60.0	53.8	6.24	9.612	
1,330.0	1,330.0	1,330.9	1,330.9	3.4	3.4	-90.95	-1.0	-60.0	60.0	53.8	6.25	9.594	
1,400.0	1,400.0	1,400.9	1,400.9	3.5	3.5	-90.95	-1.0	-60.0	60.0	53.7	6.28	9.551	
1,425.0	1,425.0	1,425.9	1,425.9	3.5	3.5	-90.95	-1.0	-60.0	60.0	53.7	6.29	9.535	
1,500.0	1,500.0	1,500.9	1,500.9	3.5	3.5	-90.95	-1.0	-60.0	60.0	53.7	6.33	9.486	
1,520.0	1,520.0	1,520.9	1,520.9	3.6	3.6	-90.95	-1.0	-60.0	60.0	53.7	6.34	9.472	
1,600.0	1,600.0	1,600.9	1,600.9	3.6	3.6	-90.95	-1.0	-60.0	60.0	53.6	6.37	9.418	
1,615.0	1,615.0	1,615.9	1,615.9	3.6	3.6	-90.95	-1.0	-60.0	60.0	53.6	6.38	9.407	
1,700.0	1,700.0	1,700.9	1,700.9	3.7	3.7	-90.95	-1.0	-60.0	60.0	53.6	6.42	9.347	
1,710.0	1,710.0	1,710.9	1,710.9	3.7	3.7	-90.95	-1.0	-60.0	60.0	53.6	6.43	9.340	
1,800.0	1,800.0	1,800.9	1,800.9	3.8	3.8	-90.95	-1.0	-60.0	60.0	53.5	6.47	9.273	
1,805.0	1,805.0	1,805.9	1,805.9	3.8	3.8	-90.95	-1.0	-60.0	60.0	53.5	6.47	9.269	
1,900.0	1,900.0	1,900.9	1,900.9	3.9	3.9	-90.95	-1.0	-60.0	60.0	53.5	6.52	9.197	
1,995.0	1,995.0	1,995.9	1,995.9	3.9	3.9	-90.95	-1.0	-60.0	60.0	53.4	6.58	9.123	
1,996.0	1,996.0	1,996.9	1,996.9	3.9	3.9	-90.95	-1.0	-60.0	60.0	53.4	6.58	9.122 CC	
2,000.0	2,000.0	2,000.9	2,000.9	3.9	3.9	-90.95	-1.0	-60.0	60.0	53.4	6.58	9.118 ES, SF	
2,090.0	2,090.0	2,089.8	2,089.8	4.0	4.1	-130.63	0.1	-60.8	61.8	55.0	6.77	9.123	
2,100.0	2,100.0	2,100.0	2,100.0	4.1	4.1	-130.61	0.4	-61.0	62.2	55.4	6.79	9.153	
2,185.0	2,184.9	2,183.4	2,183.3	4.5	4.7	-130.35	3.7	-63.5	67.3	60.0	7.37	9.132	
2,200.0	2,199.8	2,198.1	2,198.0	4.6	4.8	-130.30	4.5	-64.1	68.6	61.1	7.49	9.156	
2,280.0	2,279.6	2,276.6	2,276.1	5.1	5.3	-129.97	9.8	-67.9	76.8	68.7	8.03	9.560	
2,300.0	2,299.5	2,296.1	2,295.6	5.2	5.4	-129.88	11.3	-69.0	79.2	71.1	8.17	9.696	
2,375.0	2,373.9	2,369.0	2,368.0	5.6	5.8	-129.55	18.1	-74.0	90.0	81.3	8.67	10.377	
2,400.0	2,398.7	2,393.2	2,392.0	5.8	5.9	-129.44	20.7	-75.9	94.1	85.2	8.84	10.639	
2,470.0	2,467.9	2,460.7	2,458.7	6.2	6.3	-129.12	28.8	-81.9	107.0	97.7	9.31	11.492	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #504H - OWB - PWP0														Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7065-MWD+IFR1+MS						Rule Assigned:						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)	Distance Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
2,500.0	2,497.5	2,489.4	2,487.0	6.3	6.5	-128.99	32.6	-84.7	113.1	103.6	9.51	11.892			
2,565.0	2,561.3	2,551.2	2,547.8	6.7	6.8	-128.70	41.6	-91.3	127.6	117.7	9.94	12.844			
2,600.0	2,595.6	2,584.2	2,580.2	6.9	7.0	-128.55	46.9	-95.1	136.2	126.0	10.17	13.389			
2,660.0	2,654.2	2,640.4	2,635.1	7.2	7.2	-128.30	56.5	-102.2	151.9	141.4	10.56	14.386			
2,700.0	2,693.1	2,677.6	2,671.3	7.4	7.4	-128.13	63.3	-107.2	163.2	152.4	10.82	15.080			
2,725.1	2,717.4	2,700.9	2,693.9	7.4	7.5	-128.02	67.8	-110.5	170.7	159.7	10.93	15.614			
2,755.0	2,746.3	2,729.3	2,721.5	7.4	7.6	-128.04	73.3	-114.5	179.6	168.6	11.04	16.266			
2,800.0	2,789.9	2,772.3	2,763.2	7.5	7.7	-128.07	81.7	-120.7	193.1	181.9	11.21	17.222			
2,850.0	2,838.3	2,820.0	2,809.5	7.6	7.9	-128.10	91.0	-127.5	208.1	196.7	11.42	18.219			
2,900.0	2,886.7	2,867.7	2,855.7	7.7	7.9	-128.12	100.3	-134.3	223.1	211.5	11.63	19.177			
2,945.0	2,930.3	2,910.6	2,897.4	7.8	8.0	-128.14	108.7	-140.5	236.6	224.8	11.84	19.987			
3,000.0	2,983.5	2,963.1	2,948.3	7.9	8.1	-128.17	118.9	-148.0	253.1	241.0	12.09	20.928			
3,040.0	3,022.2	3,001.2	2,985.3	8.0	8.2	-128.18	126.4	-153.5	265.1	252.8	12.28	21.577			
3,100.0	3,080.3	3,058.5	3,040.9	8.1	8.3	-128.20	137.5	-161.6	283.1	270.5	12.58	22.500			
3,135.0	3,114.2	3,091.9	3,073.3	8.2	8.4	-128.21	144.0	-166.4	293.6	280.8	12.76	23.011			
3,200.0	3,177.1	3,153.9	3,133.4	8.3	8.5	-128.22	156.1	-175.3	313.1	300.0	13.09	23.910			
3,230.0	3,206.2	3,182.5	3,161.2	8.4	8.6	-128.23	161.7	-179.4	322.1	308.8	13.25	24.302			
3,300.0	3,274.0	3,249.3	3,226.0	8.5	8.7	-128.24	174.7	-189.0	343.0	329.4	13.63	25.173			
3,325.0	3,298.2	3,273.1	3,249.1	8.6	8.8	-128.25	179.4	-192.4	350.5	336.8	13.77	25.466			
3,400.0	3,370.8	3,344.7	3,318.6	8.8	9.0	-128.26	193.3	-202.6	373.0	358.9	14.18	26.304			
3,420.0	3,390.1	3,363.7	3,337.1	8.8	9.0	-128.27	197.1	-205.3	379.0	364.7	14.30	26.515			
3,500.0	3,467.6	3,440.1	3,411.1	9.0	9.2	-128.28	212.0	-216.3	403.0	388.3	14.75	27.319			
3,515.0	3,482.1	3,454.4	3,425.0	9.1	9.2	-128.28	214.7	-218.3	407.5	392.7	14.84	27.461			
3,600.0	3,564.4	3,535.5	3,503.7	9.3	9.4	-128.29	230.6	-229.9	433.0	417.7	15.34	28.230			
3,610.0	3,574.1	3,545.0	3,512.9	9.3	9.5	-128.29	232.4	-231.3	436.0	420.6	15.40	28.315			
3,700.0	3,661.2	3,630.8	3,596.3	9.6	9.7	-128.30	249.2	-243.6	463.0	447.1	15.94	29.049			
3,705.0	3,666.1	3,635.6	3,600.9	9.6	9.7	-128.30	250.1	-244.3	464.5	448.5	15.97	29.087			
3,800.0	3,758.0	3,726.2	3,688.8	9.9	9.9	-128.31	267.8	-257.2	493.0	476.4	16.55	29.787			
3,895.0	3,850.0	3,816.9	3,776.8	10.1	10.2	-128.32	285.4	-270.2	521.5	504.3	17.14	30.422			
3,900.0	3,854.8	3,821.6	3,781.4	10.2	10.2	-128.32	286.4	-270.9	523.0	505.8	17.17	30.453			
3,990.0	3,942.0	3,907.5	3,864.7	10.4	10.5	-128.33	303.1	-283.2	550.0	532.2	17.74	30.999			
4,000.0	3,951.7	3,917.0	3,873.9	10.4	10.5	-128.33	305.0	-284.5	553.0	535.2	17.81	31.056			
4,085.0	4,033.9	3,998.1	3,952.6	10.7	10.7	-128.34	320.8	-296.1	578.5	560.1	18.35	31.524			
4,100.0	4,048.5	4,012.4	3,966.5	10.8	10.8	-128.34	323.6	-298.2	583.0	564.5	18.45	31.603			
4,180.0	4,125.9	4,088.8	4,040.6	11.0	11.0	-128.34	338.5	-309.1	606.9	588.0	18.96	32.004			
4,200.0	4,145.3	4,107.8	4,059.1	11.1	11.1	-128.34	342.2	-311.8	612.9	593.8	19.09	32.100			
4,275.0	4,217.9	4,179.4	4,128.5	11.3	11.3	-128.35	356.2	-322.1	635.4	615.8	19.59	32.443			
4,300.0	4,242.1	4,203.2	4,151.6	11.4	11.3	-128.35	360.8	-325.5	642.9	623.2	19.75	32.553			
4,370.0	4,309.9	4,270.0	4,216.4	11.6	11.5	-128.35	373.8	-335.1	663.9	643.7	20.21	32.845			
4,400.0	4,338.9	4,298.6	4,244.2	11.7	11.6	-128.35	379.4	-339.1	672.9	652.5	20.41	32.966			
4,465.0	4,401.8	4,360.6	4,304.4	11.9	11.8	-128.36	391.5	-348.0	692.4	671.6	20.85	33.215			
4,500.0	4,435.7	4,394.0	4,336.8	12.0	11.9	-128.36	398.0	-352.8	702.9	681.8	21.08	33.345			
4,560.0	4,493.8	4,451.3	4,392.3	12.2	12.1	-128.36	409.2	-361.0	720.9	699.4	21.48	33.556			
4,600.0	4,532.5	4,489.4	4,429.3	12.3	12.2	-128.36	416.6	-366.5	732.9	711.1	21.75	33.691			
4,655.0	4,585.8	4,541.9	4,480.2	12.5	12.4	-128.37	426.9	-374.0	749.4	727.3	22.13	33.870			
4,700.0	4,629.4	4,584.8	4,521.9	12.7	12.6	-128.37	435.2	-380.1	762.9	740.5	22.43	34.010			
4,750.0	4,677.8	4,632.5	4,568.2	12.8	12.7	-128.37	444.5	-386.9	777.9	755.1	22.77	34.160			
4,800.0	4,726.2	4,680.2	4,614.5	13.0	12.9	-128.37	453.8	-393.8	792.9	769.8	23.11	34.304			
4,845.0	4,769.7	4,723.2	4,656.1	13.1	13.0	-128.37	462.2	-399.9	806.4	782.9	23.42	34.428			
4,900.0	4,823.0	4,775.6	4,707.0	13.3	13.2	-128.37	472.5	-407.4	822.9	799.1	23.80	34.575			
4,940.0	4,861.7	4,813.8	4,744.0	13.5	13.3	-128.38	479.9	-412.9	834.9	810.8	24.08	34.677			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #504H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7065-MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference	Rule Assigned:													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)						
5,000.0	4,919.8	4,871.0	4,799.6	13.7	13.5	-128.38	491.1	-421.1	852.9	828.4	24.49	34.825		
5,035.0	4,953.7	4,904.4	4,832.0	13.8	13.6	-128.38	497.6	-425.9	863.3	838.6	24.73	34.909		
5,100.0	5,016.6	4,966.4	4,892.1	14.0	13.8	-128.38	509.7	-434.7	882.8	857.7	25.18	35.058		
5,130.0	5,045.6	4,995.0	4,919.9	14.1	13.9	-128.38	515.2	-438.8	891.8	866.4	25.39	35.124		
5,200.0	5,113.4	5,061.8	4,984.7	14.4	14.1	-128.38	528.3	-448.4	912.8	887.0	25.88	35.273		
5,225.0	5,137.6	5,085.7	5,007.8	14.4	14.2	-128.38	532.9	-451.8	920.3	894.3	26.05	35.324		
5,300.0	5,210.2	5,157.2	5,077.3	14.7	14.5	-128.39	546.9	-462.0	942.8	916.2	26.58	35.473		
5,320.0	5,229.6	5,176.3	5,095.8	14.8	14.5	-128.39	550.6	-464.8	948.8	922.1	26.72	35.512		
5,400.0	5,307.0	5,252.6	5,169.8	15.0	14.8	-128.39	565.5	-475.7	972.8	945.5	27.28	35.660		
5,415.0	5,321.6	5,266.9	5,183.7	15.1	14.8	-128.39	568.3	-477.7	977.3	949.9	27.39	35.687		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Factor		
0.0	0.0	0.7	0.7	3.0	3.0	-90.95	-0.5	-30.0	30.0				
95.0	95.0	95.7	95.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.00	5.001	
100.0	100.0	100.7	100.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.00	5.001	
190.0	190.0	190.7	190.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.00	4.999	
200.0	200.0	200.7	200.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.00	4.998	
285.0	285.0	285.7	285.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.01	4.994	
300.0	300.0	300.7	300.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.01	4.993	
380.0	380.0	380.7	380.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.02	4.987	
400.0	400.0	400.7	400.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.02	4.986	
475.0	475.0	475.7	475.7	3.0	3.0	-90.95	-0.5	-30.0	30.0	24.0	6.03	4.978	
500.0	500.0	500.7	500.7	3.1	3.1	-90.95	-0.5	-30.0	30.0	24.0	6.03	4.975	
570.0	570.0	570.7	570.7	3.1	3.1	-90.95	-0.5	-30.0	30.0	24.0	6.04	4.966	
600.0	600.0	600.7	600.7	3.1	3.1	-90.95	-0.5	-30.0	30.0	24.0	6.05	4.962	
665.0	665.0	665.7	665.7	3.1	3.1	-90.95	-0.5	-30.0	30.0	23.9	6.06	4.953	
700.0	700.0	700.7	700.7	3.1	3.1	-90.95	-0.5	-30.0	30.0	23.9	6.07	4.947	
760.0	760.0	760.7	760.7	3.1	3.1	-90.95	-0.5	-30.0	30.0	23.9	6.08	4.936	
800.0	800.0	800.7	800.7	3.2	3.2	-90.95	-0.5	-30.0	30.0	23.9	6.09	4.929	
855.0	855.0	855.7	855.7	3.2	3.2	-90.95	-0.5	-30.0	30.0	23.9	6.10	4.918	
900.0	900.0	900.7	900.7	3.2	3.2	-90.95	-0.5	-30.0	30.0	23.9	6.11	4.909	
950.0	950.0	950.7	950.7	3.2	3.2	-90.95	-0.5	-30.0	30.0	23.9	6.13	4.898	
1,000.0	1,000.0	1,000.7	1,000.7	3.2	3.2	-90.95	-0.5	-30.0	30.0	23.9	6.14	4.886	
1,045.0	1,045.0	1,045.7	1,045.7	3.3	3.3	-90.95	-0.5	-30.0	30.0	23.8	6.15	4.875	
1,100.0	1,100.0	1,100.7	1,100.7	3.3	3.3	-90.95	-0.5	-30.0	30.0	23.8	6.17	4.861	
1,140.0	1,140.0	1,140.7	1,140.7	3.3	3.3	-90.95	-0.5	-30.0	30.0	23.8	6.19	4.851	
1,200.0	1,200.0	1,200.7	1,200.7	3.4	3.4	-90.95	-0.5	-30.0	30.0	23.8	6.21	4.835	
1,235.0	1,235.0	1,235.7	1,235.7	3.4	3.4	-90.95	-0.5	-30.0	30.0	23.8	6.22	4.825	
1,300.0	1,300.0	1,300.7	1,300.7	3.4	3.4	-90.95	-0.5	-30.0	30.0	23.8	6.24	4.806	
1,330.0	1,330.0	1,330.7	1,330.7	3.4	3.4	-90.95	-0.5	-30.0	30.0	23.7	6.25	4.797	
1,400.0	1,400.0	1,400.7	1,400.7	3.5	3.5	-90.95	-0.5	-30.0	30.0	23.7	6.28	4.775	
1,425.0	1,425.0	1,425.7	1,425.7	3.5	3.5	-90.95	-0.5	-30.0	30.0	23.7	6.29	4.767	
1,500.0	1,500.0	1,500.7	1,500.7	3.5	3.5	-90.95	-0.5	-30.0	30.0	23.7	6.33	4.743	
1,520.0	1,520.0	1,520.7	1,520.7	3.6	3.6	-90.95	-0.5	-30.0	30.0	23.7	6.33	4.736	
1,600.0	1,600.0	1,600.7	1,600.7	3.6	3.6	-90.95	-0.5	-30.0	30.0	23.6	6.37	4.709	
1,615.0	1,615.0	1,615.7	1,615.7	3.6	3.6	-90.95	-0.5	-30.0	30.0	23.6	6.38	4.704	
1,700.0	1,700.0	1,700.7	1,700.7	3.7	3.7	-90.95	-0.5	-30.0	30.0	23.6	6.42	4.673	
1,710.0	1,710.0	1,710.7	1,710.7	3.7	3.7	-90.95	-0.5	-30.0	30.0	23.6	6.43	4.670	
1,800.0	1,800.0	1,800.7	1,800.7	3.8	3.8	-90.95	-0.5	-30.0	30.0	23.5	6.47	4.637	
1,805.0	1,805.0	1,805.7	1,805.7	3.8	3.8	-90.95	-0.5	-30.0	30.0	23.5	6.47	4.635	
1,900.0	1,900.0	1,900.7	1,900.7	3.9	3.9	-90.95	-0.5	-30.0	30.0	23.5	6.52	4.599	
1,995.0	1,995.0	1,995.7	1,995.7	3.9	3.9	-90.95	-0.5	-30.0	30.0	23.4	6.58	4.561	
1,995.1	1,995.1	1,995.8	1,995.8	3.9	3.9	-90.95	-0.5	-30.0	30.0	23.4	6.58	4.561 CC	
2,000.0	2,000.0	2,000.7	2,000.7	3.9	3.9	-90.95	-0.5	-30.0	30.0	23.4	6.58	4.559 ES	
2,090.0	2,090.0	2,090.6	2,090.5	4.0	4.1	-130.08	0.9	-30.2	31.1	24.4	6.74	4.614	
2,100.0	2,100.0	2,100.5	2,100.5	4.1	4.2	-129.94	1.2	-30.3	31.4	24.6	6.76	4.639	
2,185.0	2,184.9	2,185.3	2,185.2	4.5	4.7	-128.31	5.4	-30.9	34.7	27.5	7.24	4.797	
2,200.0	2,199.8	2,200.3	2,200.1	4.6	4.8	-127.97	6.4	-31.0	35.5	28.2	7.33	4.847	
2,280.0	2,279.6	2,279.9	2,279.4	5.1	5.3	-126.05	13.0	-32.0	40.8	33.1	7.74	5.281	
2,300.0	2,299.5	2,299.7	2,299.2	5.2	5.4	-125.56	15.0	-32.3	42.5	34.6	7.84	5.417	
2,375.0	2,373.9	2,374.1	2,373.1	5.6	5.9	-123.80	23.6	-33.6	49.5	41.3	8.21	6.036	
2,400.0	2,398.7	2,398.9	2,397.6	5.8	6.0	-123.25	26.9	-34.1	52.3	43.9	8.33	6.270	
2,470.0	2,467.9	2,468.0	2,465.9	6.2	6.4	-121.83	37.2	-35.6	60.8	52.1	8.68	7.002	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS							Rule Assigned:				Offset Well Error:	3.0 usft
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
2,500.0	2,497.5	2,497.5	2,495.0	6.3	6.5	-121.28	42.1	-36.4	64.9	56.0	8.83	7.342		
2,565.0	2,561.3	2,561.4	2,557.8	6.7	6.7	-120.21	53.7	-38.1	74.6	65.4	9.17	8.133		
2,600.0	2,595.6	2,595.9	2,591.7	6.9	6.7	-119.92	60.2	-39.1	80.2	70.8	9.36	8.562		
2,660.0	2,654.2	2,655.1	2,649.8	7.2	6.8	-120.02	71.4	-40.7	90.3	80.5	9.73	9.279		
2,700.0	2,693.1	2,694.4	2,688.4	7.4	6.9	-120.41	78.8	-41.8	97.4	87.4	9.99	9.741		
2,725.1	2,717.4	2,719.2	2,712.7	7.4	6.9	-120.76	83.5	-42.5	102.0	91.8	10.12	10.077		
2,755.0	2,746.3	2,748.5	2,741.5	7.4	7.0	-121.28	89.0	-43.4	107.5	97.2	10.27	10.471		
2,800.0	2,789.9	2,792.7	2,784.8	7.5	7.0	-121.97	97.4	-44.6	115.9	105.4	10.49	11.044		
2,850.0	2,838.3	2,841.8	2,833.0	7.6	7.1	-122.63	106.6	-46.0	125.2	114.4	10.76	11.634		
2,900.0	2,886.7	2,890.9	2,881.2	7.7	7.2	-123.20	115.9	-47.4	134.5	123.5	11.03	12.197		
2,945.0	2,930.3	2,935.1	2,924.6	7.8	7.3	-123.65	124.2	-48.6	142.9	131.6	11.28	12.667		
3,000.0	2,983.5	2,989.1	2,977.7	7.9	7.4	-124.13	134.4	-50.1	153.2	141.6	11.59	13.215		
3,040.0	3,022.2	3,028.4	3,016.2	8.0	7.5	-124.44	141.9	-51.2	160.6	148.8	11.82	13.589		
3,100.0	3,080.3	3,087.3	3,074.1	8.1	7.6	-124.85	153.0	-52.9	171.9	159.7	12.17	14.124		
3,135.0	3,114.2	3,121.7	3,107.8	8.2	7.7	-125.07	159.5	-53.9	178.4	166.0	12.37	14.418		
3,200.0	3,177.1	3,185.5	3,170.5	8.3	7.9	-125.44	171.5	-55.7	190.6	177.8	12.76	14.937		
3,230.0	3,206.2	3,215.0	3,199.4	8.4	7.9	-125.59	177.1	-56.5	196.2	183.3	12.94	15.163		
3,300.0	3,274.0	3,283.7	3,266.9	8.5	8.1	-125.92	190.1	-58.4	209.3	195.9	13.36	15.664		
3,325.0	3,298.2	3,308.3	3,291.0	8.6	8.2	-126.02	194.7	-59.1	214.0	200.5	13.52	15.833		
3,400.0	3,370.8	3,382.0	3,363.3	8.8	8.3	-126.32	208.6	-61.2	228.1	214.1	13.98	16.315		
3,420.0	3,390.1	3,401.6	3,382.6	8.8	8.4	-126.39	212.3	-61.7	231.8	217.7	14.10	16.437		
3,500.0	3,467.6	3,480.2	3,459.7	9.0	8.6	-126.66	227.1	-63.9	246.8	232.2	14.60	16.900		
3,515.0	3,482.1	3,494.9	3,474.2	9.1	8.6	-126.70	229.9	-64.4	249.6	234.9	14.70	16.982		
3,600.0	3,564.4	3,578.4	3,556.1	9.3	8.9	-126.95	245.7	-66.7	265.6	250.3	15.24	17.425		
3,610.0	3,574.1	3,588.2	3,565.8	9.3	8.9	-126.98	247.5	-67.0	267.5	252.1	15.31	17.475		
3,700.0	3,661.2	3,676.6	3,652.5	9.6	9.1	-127.20	264.2	-69.5	284.3	268.5	15.89	17.900		
3,705.0	3,666.1	3,681.5	3,657.3	9.6	9.2	-127.21	265.1	-69.6	285.3	269.4	15.92	17.922		
3,800.0	3,758.0	3,774.8	3,748.9	9.9	9.4	-127.42	282.7	-72.2	303.1	286.6	16.54	18.328		
3,895.0	3,850.0	3,868.1	3,840.5	10.1	9.7	-127.61	300.4	-74.9	321.0	303.8	17.17	18.698		
3,900.0	3,854.8	3,873.0	3,845.3	10.2	9.7	-127.62	301.3	-75.0	321.9	304.7	17.20	18.717		
3,990.0	3,942.0	3,961.4	3,932.1	10.4	10.0	-127.78	318.0	-77.5	338.8	321.0	17.80	19.035		
4,000.0	3,951.7	3,971.3	3,941.8	10.4	10.0	-127.79	319.8	-77.8	340.7	322.8	17.87	19.069		
4,085.0	4,033.9	4,054.7	4,023.7	10.7	10.2	-127.93	335.6	-80.1	356.6	338.2	18.44	19.344		
4,100.0	4,048.5	4,069.5	4,038.2	10.8	10.3	-127.95	338.4	-80.5	359.5	340.9	18.54	19.391		
4,180.0	4,125.9	4,148.0	4,115.3	11.0	10.5	-128.06	353.2	-82.7	374.5	355.4	19.08	19.627		
4,200.0	4,145.3	4,167.7	4,134.6	11.1	10.6	-128.09	356.9	-83.3	378.3	359.0	19.22	19.684		
4,275.0	4,217.9	4,241.3	4,206.9	11.3	10.8	-128.19	370.8	-85.4	392.3	372.6	19.73	19.888		
4,300.0	4,242.1	4,265.9	4,231.0	11.4	10.9	-128.22	375.4	-86.1	397.0	377.1	19.90	19.953		
4,370.0	4,309.9	4,334.6	4,298.5	11.6	11.1	-128.30	388.4	-88.0	410.2	389.8	20.38	20.127		
4,400.0	4,338.9	4,364.1	4,327.4	11.7	11.2	-128.33	394.0	-88.8	415.8	395.2	20.59	20.199		
4,465.0	4,401.8	4,428.0	4,390.1	11.9	11.4	-128.40	406.0	-90.6	428.0	407.0	21.04	20.349		
4,500.0	4,435.7	4,462.3	4,423.8	12.0	11.5	-128.44	412.5	-91.6	434.6	413.3	21.28	20.426		
4,560.0	4,493.8	4,521.3	4,481.7	12.2	11.7	-128.50	423.6	-93.3	445.9	424.2	21.69	20.553		
4,600.0	4,532.5	4,560.5	4,520.2	12.3	11.8	-128.54	431.0	-94.4	453.4	431.4	21.97	20.635		
4,655.0	4,585.8	4,614.6	4,573.2	12.5	12.0	-128.59	441.2	-95.9	463.8	441.4	22.36	20.743		
4,700.0	4,629.4	4,658.8	4,616.6	12.7	12.2	-128.63	449.6	-97.1	472.2	449.5	22.67	20.828		
4,750.0	4,677.8	4,707.9	4,664.8	12.8	12.3	-128.67	458.9	-98.5	481.6	458.6	23.02	20.919		
4,800.0	4,726.2	4,757.0	4,713.0	13.0	12.5	-128.71	468.1	-99.9	491.0	467.6	23.37	21.006		
4,845.0	4,769.7	4,801.2	4,756.4	13.1	12.6	-128.74	476.5	-101.1	499.5	475.8	23.69	21.082		
4,900.0	4,823.0	4,855.2	4,809.5	13.3	12.8	-128.79	486.7	-102.7	509.8	485.7	24.08	21.172		
4,940.0	4,861.7	4,894.5	4,848.0	13.5	12.9	-128.81	494.1	-103.8	517.3	493.0	24.36	21.235		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Factor		
5,000.0	4,919.8	4,953.4	4,905.9	13.7	13.1	-128.86	505.2	-105.4	528.6	503.8	24.79	21.326	
5,035.0	4,953.7	4,987.8	4,939.6	13.8	13.3	-128.88	511.7	-106.4	535.2	510.1	25.03	21.377	
5,100.0	5,016.6	5,051.6	5,002.3	14.0	13.5	-128.92	523.7	-108.2	547.4	521.9	25.50	21.469	
5,130.0	5,045.6	5,081.1	5,031.2	14.1	13.6	-128.94	529.3	-109.0	553.0	527.3	25.71	21.510	
5,200.0	5,113.4	5,149.8	5,098.7	14.4	13.8	-128.98	542.3	-111.0	566.2	540.0	26.21	21.603	
5,225.0	5,137.6	5,174.4	5,122.8	14.4	13.9	-129.00	546.9	-111.6	570.9	544.5	26.39	21.635	
5,300.0	5,210.2	5,248.1	5,195.1	14.7	14.1	-129.04	560.8	-113.7	585.0	558.1	26.92	21.728	
5,320.0	5,229.6	5,267.7	5,214.4	14.8	14.2	-129.05	564.5	-114.3	588.8	561.7	27.07	21.752	
5,400.0	5,307.0	5,346.3	5,291.5	15.0	14.5	-129.10	579.4	-116.5	603.8	576.2	27.64	21.845	
5,415.0	5,321.6	5,361.0	5,306.0	15.1	14.5	-129.10	582.1	-116.9	606.6	578.9	27.75	21.862	
5,500.0	5,403.9	5,444.5	5,387.9	15.4	14.8	-129.15	597.9	-119.2	622.6	594.2	28.36	21.954	
5,510.0	5,413.5	5,454.3	5,397.6	15.4	14.8	-129.15	599.7	-119.5	624.5	596.0	28.43	21.965	
5,600.0	5,500.7	5,542.7	5,484.3	15.7	15.2	-129.19	616.4	-122.0	641.4	612.3	29.08	22.057	
5,605.0	5,505.5	5,547.6	5,489.1	15.8	15.2	-129.20	617.4	-122.1	642.3	613.2	29.11	22.062	
5,700.0	5,597.5	5,640.9	5,580.7	16.1	15.5	-129.24	635.0	-124.8	660.2	630.4	29.80	22.154	
5,795.0	5,689.5	5,734.2	5,672.3	16.4	15.8	-129.28	652.6	-127.4	678.1	647.6	30.49	22.241	
5,800.0	5,694.3	5,739.1	5,677.1	16.5	15.8	-129.28	653.5	-127.5	679.0	648.5	30.52	22.245	
5,890.0	5,781.4	5,827.5	5,763.9	16.8	16.1	-129.32	670.2	-130.0	695.9	664.7	31.18	22.323	
5,900.0	5,791.1	5,837.3	5,773.6	16.8	16.2	-129.32	672.0	-130.3	697.8	666.6	31.25	22.331	
5,985.0	5,873.4	5,921.4	5,856.1	17.1	16.5	-129.36	687.8	-132.7	713.8	681.9	31.86	22.400	
6,000.0	5,887.9	5,936.4	5,870.8	17.2	16.5	-129.38	690.5	-133.1	716.6	684.6	31.97	22.411	
6,080.0	5,965.4	6,016.3	5,949.5	17.5	16.8	-129.50	704.5	-135.1	731.5	698.9	32.56	22.462	
6,100.0	5,984.7	6,036.3	5,969.2	17.5	16.9	-129.55	707.8	-135.6	735.2	702.4	32.71	22.474	
6,175.0	6,057.4	6,111.3	6,043.2	17.8	17.1	-129.76	719.6	-137.4	748.9	715.7	33.27	22.513	
6,193.8	6,075.6	6,130.1	6,061.8	17.9	17.2	-129.82	722.4	-137.8	752.4	719.0	33.41	22.522	
6,200.0	6,081.6	6,136.2	6,067.9	17.9	17.2	-129.86	723.3	-137.9	753.5	720.1	33.45	22.525	
6,270.0	6,149.6	6,206.3	6,137.2	18.2	17.5	-130.26	733.1	-139.4	765.6	731.6	33.98	22.533	
6,300.0	6,178.8	6,236.4	6,167.1	18.3	17.6	-130.42	737.1	-140.0	770.4	736.2	34.20	22.527	
6,365.0	6,242.5	6,301.7	6,231.9	18.6	17.8	-130.71	745.2	-141.2	780.1	745.4	34.73	22.463	
6,400.0	6,276.9	6,337.0	6,266.9	18.8	17.9	-130.85	749.3	-141.8	784.9	749.9	35.01	22.418	
6,460.0	6,336.0	6,397.5	6,327.0	19.0	18.1	-131.06	758.8	-142.8	792.4	756.9	35.49	22.327	
6,500.0	6,375.5	6,437.9	6,367.2	19.2	18.2	-131.18	759.8	-143.4	796.9	761.1	35.81	22.254	
6,555.0	6,430.0	6,493.5	6,422.6	19.5	18.4	-131.31	764.8	-144.1	802.5	766.3	36.24	22.142	
6,600.0	6,474.7	6,539.1	6,468.0	19.7	18.6	-131.39	768.5	-144.7	806.5	769.9	36.60	22.038	
6,650.0	6,524.4	6,589.7	6,518.6	19.9	18.8	-131.46	772.2	-145.2	810.3	773.3	36.98	21.911	
6,700.0	6,574.2	6,640.5	6,569.2	20.1	18.9	-131.50	775.5	-145.7	813.5	776.1	37.37	21.772	
6,745.0	6,619.1	6,686.2	6,614.8	20.3	19.1	-131.52	778.1	-146.1	815.9	778.2	37.71	21.638	
6,800.0	6,674.1	6,742.0	6,670.6	20.6	19.3	-131.52	780.7	-146.5	818.0	779.9	38.12	21.460	
6,840.0	6,714.0	6,782.7	6,711.3	20.8	19.4	-131.50	782.3	-146.7	819.1	780.7	38.41	21.323	
6,900.0	6,774.0	6,843.7	6,772.2	21.0	19.6	-131.43	784.2	-147.0	820.0	781.2	38.86	21.104	
6,919.0	6,793.0	6,863.0	6,791.5	21.1	19.7	-91.62	784.6	-147.1	820.1	781.1	38.98	21.041	
6,935.0	6,809.0	6,879.3	6,807.8	21.1	19.7	-91.60	785.0	-147.1	820.2	781.1	39.08	20.988	
7,000.0	6,874.0	6,945.5	6,874.0	21.3	19.9	-91.54	785.8	-147.3	820.3	780.8	39.49	20.772	
7,030.0	6,904.0	6,976.0	6,904.5	21.3	20.0	-91.53	786.0	-147.3	820.3	780.6	39.64	20.694	
7,106.0	6,980.0	7,052.2	6,980.7	21.5	20.3	-91.52	786.0	-147.3	820.3	780.3	40.01	20.502	
7,125.0	6,999.0	7,071.2	6,999.7	21.5	20.3	88.00	786.0	-147.3	820.3	780.2	40.07	20.470	
7,150.0	7,024.0	7,096.2	7,024.7	21.5	20.4	88.10	786.0	-147.3	820.2	780.1	40.15	20.428	
7,200.0	7,073.6	7,145.8	7,074.3	21.5	20.6	88.54	786.0	-147.3	820.1	779.8	40.30	20.349	
7,220.0	7,093.3	7,165.5	7,094.0	21.6	20.6	88.79	786.0	-147.3	820.0	779.6	40.35	20.320	
7,250.0	7,122.5	7,194.7	7,123.2	21.6	20.7	89.26	786.0	-147.3	819.9	779.4	40.43	20.280	
7,288.8	7,159.8	7,231.9	7,160.5	21.7	20.9	90.00	786.0	-147.3	819.8	779.3	40.51	20.236	

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 WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor	
7,300.0	7,170.3	7,242.5	7,171.0	21.7	20.9	90.24	786.0	-147.3	819.8	779.3	40.53	20.226
7,315.0	7,184.4	7,256.6	7,185.1	21.7	20.9	90.57	786.0	-147.3	819.8	779.3	40.56	20.213
7,350.0	7,216.7	7,288.9	7,217.4	21.8	21.0	91.42	786.0	-147.3	820.1	779.5	40.62	20.191
7,400.0	7,261.3	7,333.5	7,262.0	21.9	21.2	92.73	786.0	-147.3	821.0	780.3	40.68	20.183
7,410.0	7,270.0	7,342.2	7,270.7	21.9	21.2	93.00	786.0	-147.3	821.3	780.6	40.69	20.185
7,450.0	7,303.7	7,375.9	7,304.4	22.0	21.3	94.10	786.0	-147.3	822.9	782.2	40.72	20.207
7,500.0	7,343.7	7,415.9	7,344.4	22.1	21.4	95.45	786.0	-147.3	826.0	785.3	40.72	20.284
7,505.0	7,347.6	7,419.7	7,348.3	22.1	21.4	95.58	786.0	-147.3	826.4	785.7	40.72	20.297
7,550.0	7,380.9	7,457.9	7,386.4	22.2	21.5	96.91	785.6	-147.3	830.7	790.1	40.66	20.433
7,600.0	7,415.1	7,508.1	7,436.4	22.3	21.6	98.62	781.7	-147.3	836.8	796.3	40.57	20.626
7,650.0	7,445.9	7,562.8	7,490.4	22.4	21.8	100.38	772.4	-147.4	844.2	803.7	40.49	20.848
7,695.0	7,470.6	7,617.1	7,542.7	22.5	22.0	102.04	758.1	-147.5	851.8	811.4	40.42	21.074
7,700.0	7,473.2	7,623.5	7,548.7	22.5	22.0	102.23	756.1	-147.6	852.7	812.3	40.41	21.101
7,750.0	7,496.8	7,691.7	7,612.0	22.6	22.2	104.20	730.5	-147.8	862.1	821.8	40.31	21.388
7,790.0	7,512.8	7,753.3	7,666.0	22.6	22.4	105.88	701.2	-148.0	870.0	829.8	40.20	21.642
7,800.0	7,516.4	7,769.8	7,680.0	22.6	22.5	106.32	692.3	-148.1	872.1	831.9	40.17	21.709
7,850.0	7,531.9	7,840.3	7,736.3	22.7	22.7	107.88	649.9	-148.5	882.0	842.0	40.03	22.031
7,885.0	7,540.3	7,933.2	7,802.2	22.7	22.9	110.23	584.6	-149.0	888.7	848.8	39.87	22.292
7,900.0	7,543.2	7,966.9	7,823.3	22.7	22.9	110.92	558.4	-149.3	891.4	851.6	39.82	22.387
7,950.0	7,550.3	8,091.0	7,886.8	22.7	23.1	113.08	452.0	-150.2	899.2	859.5	39.74	22.627
7,980.0	7,552.4	8,173.9	7,915.8	22.8	23.2	114.12	374.5	-150.9	902.7	862.9	39.81	22.674
8,000.0	7,553.0	8,232.0	7,929.3	22.8	23.2	114.66	318.0	-151.4	904.5	864.5	39.94	22.648
8,006.7	7,553.0	8,252.0	7,932.6	22.8	23.2	114.80	298.3	-151.5	904.9	864.9	39.99	22.630
8,075.0	7,552.9	8,376.6	7,939.1	22.8	23.2	115.18	174.0	-152.6	905.9	865.6	40.34	22.455
8,100.0	7,552.9	8,401.6	7,939.2	22.8	23.2	115.19	149.0	-152.8	905.9	865.6	40.38	22.435
8,170.0	7,552.8	8,471.6	7,939.4	22.9	23.2	115.21	79.0	-153.4	906.1	865.5	40.53	22.358
8,200.0	7,552.8	8,501.6	7,939.4	22.9	23.2	115.21	49.0	-153.7	906.1	865.5	40.59	22.325
8,265.0	7,552.7	8,566.6	7,939.6	23.0	23.2	115.23	-15.9	-154.3	906.2	865.5	40.76	22.234
8,300.0	7,552.6	8,601.6	7,939.7	23.0	23.2	115.23	-50.9	-154.6	906.3	865.4	40.85	22.185
8,360.0	7,552.6	8,661.6	7,939.9	23.0	23.2	115.25	-110.9	-155.1	906.4	865.3	41.04	22.084
8,400.0	7,552.5	8,701.6	7,940.0	23.1	23.2	115.26	-150.9	-155.4	906.5	865.3	41.17	22.017
8,455.0	7,552.4	8,756.6	7,940.1	23.1	23.2	115.27	-205.9	-155.9	906.5	865.2	41.38	21.910
8,500.0	7,552.4	8,801.6	7,940.2	23.2	23.2	115.28	-250.9	-156.3	906.6	865.1	41.55	21.822
8,550.0	7,552.3	8,851.6	7,940.4	23.2	23.3	115.29	-300.9	-156.7	906.7	864.9	41.76	21.713
8,600.0	7,552.3	8,901.6	7,940.5	23.3	23.3	115.30	-350.9	-157.2	906.8	864.8	41.97	21.604
8,645.0	7,552.2	8,946.6	7,940.6	23.4	23.3	115.31	-395.9	-157.6	906.9	864.7	42.19	21.496
8,700.0	7,552.1	9,001.6	7,940.8	23.4	23.3	115.32	-450.9	-158.0	907.0	864.5	42.45	21.365
8,740.0	7,552.1	9,041.6	7,940.9	23.5	23.3	115.33	-490.9	-158.4	907.0	864.4	42.66	21.260
8,800.0	7,552.0	9,101.6	7,941.1	23.6	23.3	115.35	-550.9	-158.9	907.1	864.1	42.98	21.106
8,835.0	7,552.0	9,136.6	7,941.1	23.7	23.3	115.35	-585.9	-159.2	907.2	864.0	43.18	21.008
8,900.0	7,551.9	9,201.6	7,941.3	23.8	23.3	115.37	-650.9	-159.8	907.3	863.7	43.56	20.830
8,930.0	7,551.9	9,231.6	7,941.4	23.8	23.3	115.38	-680.9	-160.0	907.3	863.6	43.74	20.742
9,000.0	7,551.8	9,301.6	7,941.6	24.0	23.3	115.39	-750.9	-160.6	907.5	863.3	44.18	20.540
9,025.0	7,551.7	9,326.6	7,941.7	24.0	23.3	115.40	-775.9	-160.9	907.5	863.2	44.35	20.464
9,100.0	7,551.6	9,401.5	7,941.9	24.2	23.4	115.41	-850.9	-161.5	907.6	862.8	44.85	20.239
9,120.0	7,551.6	9,421.5	7,941.9	24.3	23.4	115.42	-870.9	-161.7	907.7	862.7	44.99	20.176
9,200.0	7,551.5	9,501.5	7,942.1	24.5	23.4	115.44	-950.9	-162.4	907.8	862.2	45.56	19.927
9,215.0	7,551.5	9,516.5	7,942.2	24.5	23.4	115.44	-965.9	-162.5	907.8	862.2	45.67	19.879
9,300.0	7,551.4	9,601.5	7,942.4	24.7	23.5	115.46	-1,050.9	-163.2	908.0	861.7	46.31	19.608
9,310.0	7,551.4	9,611.5	7,942.4	24.8	23.5	115.46	-1,060.9	-163.3	908.0	861.6	46.38	19.575
9,400.0	7,551.3	9,701.5	7,942.7	25.0	23.7	115.48	-1,150.9	-164.1	908.1	861.1	47.09	19.284

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0													Offset Site Error: 0.0 usft				
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-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				
9,405.0	7,551.3	9,706.5	7,942.7	25.0	23.7	115.48	-1,155.9	-164.2	908.2	861.0	47.13	19.267					
9,500.0	7,551.1	9,801.5	7,942.9	25.4	24.0	115.50	-1,250.9	-165.0	908.3	860.4	47.92	18.956					
9,595.0	7,551.0	9,896.5	7,943.2	25.7	24.3	115.52	-1,345.9	-165.8	908.5	859.7	48.73	18.642					
9,600.0	7,551.0	9,901.5	7,943.2	25.7	24.3	115.53	-1,350.9	-165.9	908.5	859.7	48.78	18.625					
9,690.0	7,550.9	9,991.5	7,943.4	26.0	24.7	115.55	-1,440.9	-166.6	908.6	859.1	49.58	18.327					
9,700.0	7,550.9	10,001.5	7,943.5	26.1	24.7	115.55	-1,450.9	-166.7	908.7	859.0	49.67	18.294					
9,785.0	7,550.8	10,086.5	7,943.7	26.4	25.1	115.57	-1,535.9	-167.5	908.8	858.3	50.45	18.013					
9,800.0	7,550.8	10,101.5	7,943.7	26.5	25.2	115.57	-1,550.9	-167.6	908.8	858.2	50.59	17.964					
9,880.0	7,550.7	10,181.5	7,944.0	26.8	25.5	115.59	-1,630.9	-168.3	909.0	857.6	51.35	17.700					
9,900.0	7,550.7	10,201.5	7,944.0	26.9	25.6	115.59	-1,650.9	-168.5	909.0	857.5	51.54	17.635					
9,975.0	7,550.6	10,276.5	7,944.2	27.2	26.0	115.61	-1,725.9	-169.1	909.1	856.8	52.28	17.390					
10,000.0	7,550.5	10,301.5	7,944.3	27.3	26.1	115.61	-1,750.9	-169.3	909.2	856.6	52.52	17.309					
10,070.0	7,550.4	10,371.5	7,944.5	27.6	26.4	115.63	-1,820.9	-169.9	909.3	856.1	53.23	17.083					
10,100.0	7,550.4	10,401.5	7,944.5	27.7	26.6	115.64	-1,850.9	-170.2	909.3	855.8	53.53	16.987					
10,165.0	7,550.3	10,466.5	7,944.7	28.0	26.9	115.65	-1,915.9	-170.8	909.5	855.3	54.20	16.779					
10,200.0	7,550.3	10,501.5	7,944.8	28.2	27.1	115.66	-1,950.9	-171.1	909.5	854.9	54.56	16.669					
10,260.0	7,550.2	10,561.5	7,945.0	28.5	27.4	115.67	-2,010.8	-171.6	909.6	854.4	55.19	16.480					
10,300.0	7,550.2	10,601.5	7,945.1	28.7	27.6	115.68	-2,050.8	-171.9	909.7	854.1	55.62	16.356					
10,355.0	7,550.1	10,656.5	7,945.2	28.9	27.9	115.69	-2,105.8	-172.4	909.8	853.6	56.21	16.186					
10,400.0	7,550.0	10,701.5	7,945.3	29.2	28.1	115.70	-2,150.8	-172.8	909.9	853.2	56.69	16.049					
10,450.0	7,550.0	10,751.5	7,945.5	29.4	28.4	115.71	-2,200.8	-173.2	909.9	852.7	57.24	15.896					
10,500.0	7,549.9	10,801.5	7,945.6	29.7	28.6	115.73	-2,250.8	-173.7	910.0	852.2	57.79	15.747					
10,545.0	7,549.8	10,846.5	7,945.7	29.9	28.9	115.74	-2,295.8	-174.1	910.1	851.8	58.29	15.612					
10,600.0	7,549.8	10,901.5	7,945.9	30.2	29.2	115.75	-2,350.8	-174.5	910.2	851.3	58.91	15.451					
10,640.0	7,549.7	10,941.5	7,946.0	30.4	29.4	115.76	-2,390.8	-174.9	910.3	850.9	59.36	15.334					
10,700.0	7,549.7	11,001.5	7,946.2	30.7	29.8	115.77	-2,450.8	-175.4	910.4	850.3	60.05	15.161					
10,735.0	7,549.6	11,036.5	7,946.2	30.9	29.9	115.78	-2,485.8	-175.7	910.4	850.0	60.45	15.061					
10,800.0	7,549.5	11,101.5	7,946.4	31.2	30.3	115.79	-2,550.8	-176.3	910.5	849.3	61.20	14.878					
10,830.0	7,549.5	11,131.5	7,946.5	31.4	30.5	115.80	-2,580.8	-176.5	910.6	849.0	61.55	14.794					
10,900.0	7,549.4	11,201.5	7,946.7	31.8	30.9	115.81	-2,650.8	-177.1	910.7	848.3	62.37	14.602					
10,925.0	7,549.4	11,226.5	7,946.8	31.9	31.0	115.82	-2,675.8	-177.4	910.8	848.1	62.67	14.533					
11,000.0	7,549.3	11,301.5	7,947.0	32.4	31.5	115.84	-2,750.8	-178.0	910.9	847.3	63.56	14.332					
11,020.0	7,549.3	11,321.5	7,947.0	32.5	31.6	115.84	-2,770.8	-178.2	910.9	847.1	63.80	14.279					
11,100.0	7,549.2	11,401.5	7,947.2	32.9	32.1	115.86	-2,850.8	-178.9	911.1	846.3	64.76	14.069					
11,115.0	7,549.1	11,416.5	7,947.3	33.0	32.2	115.86	-2,865.8	-179.0	911.1	846.1	64.94	14.030					
11,200.0	7,549.0	11,501.5	7,947.5	33.5	32.7	115.88	-2,950.8	-179.7	911.2	845.3	65.97	13.812					
11,210.0	7,549.0	11,511.5	7,947.5	33.6	32.7	115.88	-2,960.8	-179.8	911.2	845.2	66.09	13.787					
11,300.0	7,548.9	11,601.5	7,947.8	34.1	33.3	115.90	-3,050.8	-180.6	911.4	844.2	67.20	13.562					
11,305.0	7,548.9	11,606.5	7,947.8	34.1	33.3	115.90	-3,055.8	-180.7	911.4	844.2	67.26	13.550					
11,400.0	7,548.8	11,701.5	7,948.0	34.7	33.9	115.93	-3,150.8	-181.5	911.6	843.1	68.44	13.319					
11,495.0	7,548.7	11,796.5	7,948.3	35.2	34.5	115.95	-3,245.8	-182.3	911.7	842.1	69.63	13.094					
11,500.0	7,548.7	11,801.5	7,948.3	35.3	34.5	115.95	-3,250.8	-182.3	911.8	842.1	69.69	13.082					
11,590.0	7,548.6	11,891.5	7,948.5	35.8	35.1	115.97	-3,340.8	-183.1	911.9	841.1	70.83	12.874					
11,600.0	7,548.5	11,901.5	7,948.6	35.9	35.1	115.97	-3,350.8	-183.2	911.9	841.0	70.96	12.852					
11,685.0	7,548.4	11,986.5	7,948.8	36.4	35.7	115.99	-3,435.8	-183.9	912.1	840.0	72.04	12.660					
11,700.0	7,548.4	12,001.5	7,948.8	36.5	35.8	115.99	-3,450.8	-184.1	912.1	839.9	72.23	12.627					
11,780.0	7,548.3	12,081.5	7,949.0	37.0	36.3	116.01	-3,530.8	-184.8	912.2	839.0	73.26	12.452					
11,800.0	7,548.3	12,101.5	7,949.1	37.1	36.4	116.01	-3,550.8	-184.9	912.3	838.8	73.52	12.409					
11,875.0	7,548.2	12,176.5	7,949.3	37.6	36.9	116.03	-3,625.8	-185.6	912.4	837.9	74.49	12.249					
11,900.0	7,548.2	12,201.5	7,949.4	37.7	37.0	116.04	-3,650.8	-185.8	912.4	837.6	74.81	12.196					
11,970.0	7,548.1	12,271.5	7,949.6	38.2	37.5	116.05	-3,720.8	-186.4	912.6	836.8	75.73	12.051					

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Separation Factor		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,000.0	7,548.0	12,301.5	7,949.6	38.4	37.7	116.06	-3,750.8	-186.7	912.6	836.5	76.12	11.990	
12,065.0	7,548.0	12,366.5	7,949.8	38.8	38.1	116.07	-3,815.8	-187.2	912.7	835.8	76.97	11.858	
12,100.0	7,547.9	12,401.5	7,949.9	39.0	38.3	116.08	-3,850.8	-187.6	912.8	835.4	77.43	11.789	
12,160.0	7,547.8	12,461.5	7,950.1	39.4	38.7	116.09	-3,910.8	-188.1	912.9	834.7	78.22	11.671	
12,200.0	7,547.8	12,501.5	7,950.2	39.6	39.0	116.10	-3,950.8	-188.4	913.0	834.2	78.75	11.593	
12,255.0	7,547.7	12,556.5	7,950.3	40.0	39.3	116.11	-4,005.8	-188.9	913.1	833.6	79.48	11.488	
12,300.0	7,547.7	12,601.5	7,950.4	40.3	39.6	116.12	-4,050.8	-189.3	913.1	833.1	80.08	11.403	
12,350.0	7,547.6	12,651.5	7,950.6	40.6	40.0	116.14	-4,100.7	-189.7	913.2	832.5	80.75	11.310	
12,400.0	7,547.5	12,701.5	7,950.7	40.9	40.3	116.15	-4,150.7	-190.2	913.3	831.9	81.41	11.218	
12,445.0	7,547.5	12,746.5	7,950.8	41.2	40.6	116.16	-4,195.7	-190.5	913.4	831.4	82.02	11.137	
12,500.0	7,547.4	12,801.5	7,951.0	41.6	41.0	116.17	-4,250.7	-191.0	913.5	830.7	82.76	11.038	
12,540.0	7,547.4	12,841.5	7,951.1	41.8	41.2	116.18	-4,290.7	-191.4	913.6	830.3	83.30	10.968	
12,600.0	7,547.3	12,901.5	7,951.2	42.2	41.6	116.19	-4,350.7	-191.9	913.7	829.6	84.11	10.863	
12,635.0	7,547.3	12,936.5	7,951.3	42.5	41.9	116.20	-4,385.7	-192.2	913.7	829.1	84.58	10.803	
12,700.0	7,547.2	13,001.5	7,951.5	42.9	42.3	116.21	-4,450.7	-192.8	913.8	828.4	85.46	10.693	
12,730.0	7,547.1	13,031.5	7,951.6	43.1	42.5	116.22	-4,480.7	-193.0	913.9	828.0	85.87	10.643	
12,800.0	7,547.1	13,101.5	7,951.8	43.6	43.0	116.23	-4,550.7	-193.6	914.0	827.2	86.82	10.527	
12,825.0	7,547.0	13,126.5	7,951.9	43.7	43.1	116.24	-4,575.7	-193.8	914.1	826.9	87.17	10.486	
12,900.0	7,546.9	13,201.5	7,952.1	44.2	43.6	116.26	-4,650.7	-194.5	914.2	826.0	88.19	10.366	
12,920.0	7,546.9	13,221.5	7,952.1	44.4	43.8	116.26	-4,670.7	-194.7	914.2	825.8	88.47	10.334	
13,000.0	7,546.8	13,301.5	7,952.3	44.9	44.3	116.28	-4,750.7	-195.4	914.4	824.8	89.57	10.209	
13,015.0	7,546.8	13,316.5	7,952.4	45.0	44.4	116.28	-4,765.7	-195.5	914.4	824.6	89.77	10.186	
13,100.0	7,546.7	13,401.5	7,952.6	45.6	45.0	116.30	-4,850.7	-196.2	914.5	823.6	90.95	10.056	
13,110.0	7,546.7	13,411.5	7,952.6	45.6	45.1	116.30	-4,860.7	-196.3	914.6	823.5	91.08	10.041	
13,200.0	7,546.6	13,501.5	7,952.9	46.2	45.7	116.32	-4,950.7	-197.1	914.7	822.4	92.33	9.907	
13,205.0	7,546.5	13,506.5	7,952.9	46.3	45.7	116.32	-4,955.7	-197.1	914.7	822.3	92.40	9.900	
13,300.0	7,546.4	13,601.5	7,953.1	46.9	46.4	116.34	-5,050.7	-198.0	914.9	821.2	93.72	9.762	
13,395.0	7,546.3	13,696.5	7,953.4	47.6	47.0	116.37	-5,145.7	-198.8	915.1	820.0	95.04	9.628	
13,400.0	7,546.3	13,701.5	7,953.4	47.6	47.1	116.37	-5,150.7	-198.8	915.1	820.0	95.11	9.621	
13,490.0	7,546.2	13,791.5	7,953.6	48.2	47.7	116.39	-5,240.7	-199.6	915.2	818.9	96.37	9.497	
13,500.0	7,546.2	13,801.5	7,953.7	48.3	47.8	116.39	-5,250.7	-199.7	915.2	818.7	96.51	9.483	
13,585.0	7,546.1	13,886.5	7,953.9	48.9	48.4	116.41	-5,335.7	-200.4	915.4	817.7	97.70	9.369	
13,600.0	7,546.1	13,901.5	7,953.9	49.0	48.5	116.41	-5,350.7	-200.6	915.4	817.5	97.91	9.349	
13,680.0	7,546.0	13,981.5	7,954.1	49.5	49.0	116.43	-5,430.7	-201.3	915.6	816.5	99.04	9.245	
13,700.0	7,545.9	14,001.5	7,954.2	49.7	49.2	116.43	-5,450.7	-201.4	915.6	816.3	99.32	9.219	
13,775.0	7,545.8	14,076.5	7,954.4	50.2	49.7	116.45	-5,525.7	-202.1	915.7	815.3	100.38	9.123	
13,800.0	7,545.8	14,101.5	7,954.5	50.4	49.9	116.45	-5,550.7	-202.3	915.8	815.0	100.73	9.091	
13,870.0	7,545.7	14,171.5	7,954.7	50.8	50.3	116.47	-5,620.7	-202.9	915.9	814.2	101.72	9.004	
13,900.0	7,545.7	14,201.5	7,954.7	51.1	50.6	116.48	-5,650.7	-203.2	915.9	813.8	102.14	8.967	
13,965.0	7,545.6	14,266.5	7,954.9	51.5	51.0	116.49	-5,715.7	-203.7	916.1	813.0	103.06	8.888	
14,000.0	7,545.6	14,301.5	7,955.0	51.7	51.3	116.50	-5,750.7	-204.0	916.1	812.6	103.56	8.846	
14,060.0	7,545.5	14,361.5	7,955.2	52.2	51.7	116.51	-5,810.7	-204.6	916.2	811.8	104.41	8.775	
14,100.0	7,545.4	14,401.5	7,955.3	52.4	52.0	116.52	-5,850.7	-204.9	916.3	811.3	104.98	8.728	
14,155.0	7,545.4	14,456.5	7,955.4	52.8	52.3	116.53	-5,905.7	-205.4	916.4	810.6	105.77	8.664	
14,200.0	7,545.3	14,501.5	7,955.5	53.1	52.7	116.54	-5,950.7	-205.8	916.5	810.1	106.41	8.613	
14,250.0	7,545.3	14,551.5	7,955.7	53.5	53.0	116.55	-6,000.7	-206.2	916.6	809.4	107.12	8.556	
14,300.0	7,545.2	14,601.5	7,955.8	53.8	53.4	116.56	-6,050.7	-206.6	916.6	808.8	107.83	8.501	
14,345.0	7,545.1	14,646.5	7,955.9	54.2	53.7	116.57	-6,095.6	-207.0	916.7	808.3	108.48	8.451	
14,400.0	7,545.1	14,701.5	7,956.1	54.5	54.1	116.59	-6,150.6	-207.5	916.8	807.6	109.27	8.391	
14,440.0	7,545.0	14,741.5	7,956.2	54.8	54.4	116.59	-6,190.6	-207.9	916.9	807.1	109.84	8.348	
14,500.0	7,544.9	14,801.5	7,956.3	55.3	54.8	116.61	-6,250.6	-208.4	917.0	806.3	110.70	8.284	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor	
14,535.0	7,544.9	14,836.5	7,956.4	55.5	55.0	116.62	-6,285.6	-208.7	917.1	805.9	111.20	8.247
14,600.0	7,544.8	14,901.5	7,956.6	56.0	55.5	116.63	-6,350.6	-209.3	917.2	805.0	112.14	8.179
14,630.0	7,544.8	14,931.5	7,956.7	56.2	55.7	116.64	-6,380.6	-209.5	917.2	804.7	112.57	8.148
14,700.0	7,544.7	15,001.5	7,956.9	56.7	56.2	116.65	-6,450.6	-210.1	917.4	803.8	113.58	8.077
14,725.0	7,544.7	15,026.5	7,956.9	56.8	56.4	116.66	-6,475.6	-210.3	917.4	803.5	113.94	8.052
14,800.0	7,544.6	15,101.5	7,957.1	57.4	56.9	116.67	-6,550.6	-211.0	917.5	802.5	115.02	7.977
14,820.0	7,544.5	15,121.5	7,957.2	57.5	57.1	116.68	-6,570.6	-211.2	917.6	802.3	115.31	7.958
14,900.0	7,544.4	15,201.5	7,957.4	58.1	57.6	116.69	-6,650.6	-211.9	917.7	801.3	116.46	7.880
14,915.0	7,544.4	15,216.5	7,957.5	58.2	57.8	116.70	-6,665.6	-212.0	917.7	801.1	116.68	7.866
15,000.0	7,544.3	15,301.5	7,957.7	58.8	58.4	116.72	-6,750.6	-212.7	917.9	800.0	117.91	7.785
15,010.0	7,544.3	15,311.5	7,957.7	58.9	58.4	116.72	-6,760.6	-212.8	917.9	799.9	118.05	7.775
15,100.0	7,544.2	15,401.5	7,958.0	59.5	59.1	116.74	-6,850.6	-213.6	918.1	798.7	119.36	7.692
15,105.0	7,544.2	15,406.5	7,958.0	59.5	59.1	116.74	-6,855.6	-213.6	918.1	798.6	119.43	7.687
15,200.0	7,544.1	15,501.5	7,958.2	60.2	59.8	116.76	-6,950.6	-214.5	918.2	797.4	120.81	7.601
15,295.0	7,544.0	15,596.5	7,958.5	60.9	60.5	116.78	-7,045.6	-215.3	918.4	796.2	122.19	7.516
15,300.0	7,543.9	15,601.5	7,958.5	60.9	60.5	116.78	-7,050.6	-215.3	918.4	796.2	122.26	7.512
15,390.0	7,543.8	15,691.5	7,958.7	61.6	61.2	116.80	-7,140.6	-216.1	918.6	795.0	123.57	7.434
15,400.0	7,543.8	15,701.5	7,958.8	61.7	61.2	116.80	-7,150.6	-216.2	918.6	794.9	123.72	7.425
15,485.0	7,543.7	15,786.5	7,959.0	62.3	61.9	116.82	-7,235.6	-216.9	918.8	793.8	124.96	7.353
15,500.0	7,543.7	15,801.5	7,959.0	62.4	62.0	116.83	-7,250.6	-217.1	918.8	793.6	125.18	7.340
15,580.0	7,543.6	15,881.5	7,959.2	62.9	62.5	116.84	-7,330.6	-217.8	918.9	792.6	126.34	7.273
15,600.0	7,543.6	15,901.5	7,959.3	63.1	62.7	116.85	-7,350.6	-217.9	919.0	792.3	126.64	7.257
15,675.0	7,543.5	15,976.5	7,959.5	63.6	63.2	116.86	-7,425.6	-218.6	919.1	791.4	127.73	7.195
15,700.0	7,543.5	16,001.5	7,959.6	63.8	63.4	116.87	-7,450.6	-218.8	919.1	791.0	128.10	7.175
15,770.0	7,543.4	16,071.5	7,959.8	64.3	63.9	116.88	-7,520.6	-219.4	919.3	790.1	129.12	7.119
15,800.0	7,543.3	16,101.5	7,959.8	64.5	64.1	116.89	-7,550.6	-219.7	919.3	789.8	129.56	7.096
15,865.0	7,543.2	16,166.5	7,960.0	65.0	64.6	116.91	-7,615.6	-220.2	919.4	788.9	130.51	7.045
15,900.0	7,543.2	16,201.5	7,960.1	65.3	64.9	116.91	-7,650.6	-220.5	919.5	788.5	131.03	7.018
15,960.0	7,543.1	16,261.5	7,960.3	65.7	65.3	116.93	-7,710.6	-221.1	919.6	787.7	131.91	6.972
16,000.0	7,543.1	16,301.5	7,960.4	66.0	65.6	116.93	-7,750.6	-221.4	919.7	787.2	132.49	6.941
16,055.0	7,543.0	16,356.5	7,960.5	66.4	66.0	116.95	-7,805.6	-221.9	919.8	786.5	133.30	6.900
16,100.0	7,543.0	16,401.5	7,960.6	66.7	66.3	116.96	-7,850.6	-222.3	919.9	785.9	133.96	6.866
16,150.0	7,542.9	16,451.5	7,960.8	67.1	66.7	116.97	-7,900.6	-222.7	919.9	785.2	134.70	6.830
16,200.0	7,542.8	16,501.5	7,960.9	67.4	67.0	116.98	-7,950.6	-223.1	920.0	784.6	135.43	6.793
16,245.0	7,542.8	16,546.5	7,961.0	67.8	67.4	116.99	-7,995.6	-223.5	920.1	784.0	136.10	6.761
16,300.0	7,542.7	16,601.5	7,961.2	68.2	67.8	117.00	-8,050.6	-224.0	920.2	783.3	136.91	6.722
16,340.0	7,542.7	16,641.5	7,961.3	68.4	68.1	117.01	-8,090.6	-224.4	920.3	782.8	137.50	6.693
16,400.0	7,542.6	16,701.5	7,961.4	68.9	68.5	117.02	-8,150.6	-224.9	920.4	782.0	138.38	6.651
16,435.0	7,542.5	16,736.5	7,961.5	69.1	68.8	117.03	-8,185.5	-225.2	920.5	781.6	138.90	6.627
16,500.0	7,542.5	16,801.5	7,961.7	69.6	69.2	117.04	-8,250.5	-225.7	920.6	780.7	139.85	6.582
16,530.0	7,542.4	16,831.5	7,961.8	69.8	69.5	117.05	-8,280.5	-226.0	920.6	780.3	140.30	6.562
16,600.0	7,542.3	16,901.5	7,962.0	70.3	70.0	117.06	-8,350.5	-226.6	920.8	779.4	141.33	6.515
16,625.0	7,542.3	16,926.5	7,962.0	70.5	70.2	117.07	-8,375.5	-226.8	920.8	779.1	141.70	6.498
16,700.0	7,542.2	17,001.5	7,962.2	71.1	70.7	117.09	-8,450.5	-227.5	920.9	778.1	142.81	6.449
16,720.0	7,542.2	17,021.5	7,962.3	71.2	70.8	117.09	-8,470.5	-227.7	921.0	777.9	143.10	6.436
16,800.0	7,542.1	17,101.5	7,962.5	71.8	71.4	117.11	-8,550.5	-228.4	921.1	776.8	144.29	6.384
16,815.0	7,542.1	17,116.5	7,962.6	71.9	71.5	117.11	-8,565.5	-228.5	921.1	776.6	144.51	6.374
16,900.0	7,542.0	17,201.5	7,962.8	72.5	72.2	117.13	-8,650.5	-229.2	921.3	775.5	145.77	6.320
16,910.0	7,542.0	17,211.5	7,962.8	72.6	72.2	117.13	-8,660.5	-229.3	921.3	775.4	145.92	6.314
17,000.0	7,541.8	17,301.5	7,963.1	73.3	72.9	117.15	-8,750.5	-230.1	921.5	774.2	147.25	6.258
17,005.0	7,541.8	17,306.5	7,963.1	73.3	72.9	117.15	-8,755.5	-230.1	921.5	774.2	147.32	6.255

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Factor	
17,100.0	7,541.7	17,401.5	7,963.3	74.0	73.6	117.17	-8,850.5	-231.0	921.7	772.9	148.73	6.197	
17,195.0	7,541.6	17,496.5	7,963.6	74.7	74.3	117.19	-8,945.5	-231.8	921.8	771.7	150.14	6.140	
17,200.0	7,541.6	17,501.5	7,963.6	74.7	74.4	117.19	-8,950.5	-231.8	921.8	771.6	150.22	6.137	
17,290.0	7,541.5	17,591.5	7,963.8	75.4	75.0	117.21	-9,040.5	-232.6	922.0	770.4	151.55	6.084	
17,300.0	7,541.5	17,601.5	7,963.9	75.5	75.1	117.22	-9,050.5	-232.7	922.0	770.3	151.70	6.078	
17,385.0	7,541.4	17,686.5	7,964.1	76.1	75.7	117.23	-9,135.5	-233.4	922.2	769.2	152.97	6.029	
17,400.0	7,541.3	17,701.5	7,964.1	76.2	75.8	117.24	-9,150.5	-233.6	922.2	769.0	153.19	6.020	
17,480.0	7,541.2	17,781.5	7,964.3	76.8	76.4	117.26	-9,230.5	-234.3	922.3	768.0	154.38	5.975	
17,500.0	7,541.2	17,801.5	7,964.4	76.9	76.6	117.26	-9,250.5	-234.4	922.4	767.7	154.68	5.963	
17,575.0	7,541.1	17,876.5	7,964.6	77.5	77.1	117.28	-9,325.5	-235.1	922.5	766.7	155.79	5.921	
17,600.0	7,541.1	17,901.5	7,964.7	77.7	77.3	117.28	-9,350.5	-235.3	922.6	766.4	156.16	5.908	
17,670.0	7,541.0	17,971.5	7,964.8	78.2	77.8	117.30	-9,420.5	-235.9	922.7	765.5	157.21	5.869	
17,700.0	7,541.0	18,001.5	7,964.9	78.4	78.1	117.30	-9,450.5	-236.2	922.7	765.1	157.65	5.853	
17,765.0	7,540.9	18,066.5	7,965.1	78.9	78.5	117.32	-9,515.5	-236.7	922.9	764.2	158.62	5.818	
17,800.0	7,540.8	18,101.5	7,965.2	79.1	78.8	117.32	-9,550.5	-237.0	922.9	763.8	159.14	5.799	
17,860.0	7,540.8	18,161.5	7,965.4	79.6	79.2	117.34	-9,610.5	-237.6	923.0	763.0	160.04	5.768	
17,900.0	7,540.7	18,201.5	7,965.5	79.9	79.5	117.35	-9,650.5	-237.9	923.1	762.5	160.64	5.747	
17,955.0	7,540.7	18,256.5	7,965.6	80.3	79.9	117.36	-9,705.5	-238.4	923.2	761.7	161.46	5.718	
18,000.0	7,540.6	18,301.5	7,965.7	80.6	80.3	117.37	-9,750.5	-238.8	923.3	761.2	162.13	5.695	
18,050.0	7,540.5	18,351.5	7,965.9	81.0	80.6	117.38	-9,800.5	-239.2	923.4	760.5	162.87	5.669	
18,100.0	7,540.5	18,401.5	7,966.0	81.3	81.0	117.39	-9,850.5	-239.6	923.5	759.8	163.62	5.644	
18,145.0	7,540.4	18,446.5	7,966.1	81.7	81.3	117.40	-9,895.5	-240.0	923.5	759.3	164.29	5.621	
18,200.0	7,540.3	18,501.5	7,966.3	82.1	81.8	117.41	-9,950.5	-240.5	923.6	758.5	165.12	5.594	
18,240.0	7,540.3	18,541.5	7,966.4	82.4	82.1	117.42	-9,990.5	-240.9	923.7	758.0	165.71	5.574	
18,300.0	7,540.2	18,601.5	7,966.5	82.8	82.5	117.43	-10,050.5	-241.4	923.8	757.2	166.61	5.545	
18,335.0	7,540.2	18,636.5	7,966.6	83.1	82.8	117.44	-10,085.5	-241.7	923.9	756.8	167.13	5.528	
18,400.0	7,540.1	18,701.5	7,966.8	83.6	83.2	117.45	-10,150.5	-242.2	924.0	755.9	168.11	5.497	
18,430.0	7,540.1	18,731.5	7,966.9	83.8	83.5	117.46	-10,180.4	-242.5	924.1	755.5	168.56	5.482	
18,500.0	7,540.0	18,801.5	7,967.1	84.3	84.0	117.48	-10,250.4	-243.1	924.2	754.6	169.60	5.449	
18,525.0	7,539.9	18,826.5	7,967.1	84.5	84.2	117.48	-10,275.4	-243.3	924.2	754.3	169.98	5.437	
18,600.0	7,539.9	18,901.5	7,967.3	85.0	84.7	117.50	-10,350.4	-244.0	924.4	753.3	171.10	5.403	
18,620.0	7,539.8	18,921.5	7,967.4	85.2	84.9	117.50	-10,370.4	-244.2	924.4	753.0	171.40	5.393	
18,700.0	7,539.7	19,001.5	7,967.6	85.8	85.5	117.52	-10,450.4	-244.8	924.6	752.0	172.60	5.357	
18,715.0	7,539.7	19,016.5	7,967.7	85.9	85.6	117.52	-10,465.4	-245.0	924.6	751.8	172.82	5.350	
18,800.0	7,539.6	19,101.5	7,967.9	86.5	86.2	117.54	-10,550.4	-245.7	924.7	750.6	174.10	5.312	
18,810.0	7,539.6	19,111.5	7,967.9	86.6	86.3	117.54	-10,560.4	-245.8	924.8	750.5	174.25	5.307	
18,900.0	7,539.5	19,201.5	7,968.1	87.3	87.0	117.56	-10,650.4	-246.6	924.9	749.3	175.60	5.267	
18,905.0	7,539.5	19,206.5	7,968.2	87.3	87.0	117.56	-10,655.4	-246.6	924.9	749.3	175.67	5.265	
19,000.0	7,539.4	19,301.5	7,968.4	88.0	87.7	117.58	-10,750.4	-247.4	925.1	748.0	177.10	5.224	
19,095.0	7,539.2	19,396.5	7,968.7	88.7	88.4	117.60	-10,845.4	-248.3	925.3	746.8	178.53	5.183	
19,100.0	7,539.2	19,401.5	7,968.7	88.7	88.4	117.60	-10,850.4	-248.3	925.3	746.7	178.60	5.181	
19,190.0	7,539.1	19,491.5	7,968.9	89.4	89.1	117.62	-10,940.4	-249.1	925.5	745.5	179.95	5.143	
19,200.0	7,539.1	19,501.5	7,969.0	89.5	89.2	117.63	-10,950.4	-249.2	925.5	745.4	180.10	5.139	
19,285.0	7,539.0	19,586.5	7,969.2	90.1	89.8	117.64	-11,035.4	-249.9	925.6	744.2	181.38	5.103	
19,300.0	7,539.0	19,601.5	7,969.2	90.2	89.9	117.65	-11,050.4	-250.1	925.7	744.1	181.61	5.097	
19,380.0	7,538.9	19,681.5	7,969.4	90.8	90.5	117.66	-11,130.4	-250.7	925.8	743.0	182.81	5.064	
19,400.0	7,538.9	19,701.5	7,969.5	91.0	90.7	117.67	-11,150.4	-250.9	925.8	742.7	183.11	5.056	
19,475.0	7,538.8	19,776.5	7,969.7	91.5	91.2	117.69	-11,225.4	-251.6	926.0	741.7	184.24	5.026	
19,500.0	7,538.7	19,801.5	7,969.8	91.7	91.4	117.69	-11,250.4	-251.8	926.0	741.4	184.61	5.016	
19,570.0	7,538.6	19,871.5	7,969.9	92.2	91.9	117.71	-11,320.4	-252.4	926.2	740.5	185.67	4.988	
19,600.0	7,538.6	19,901.5	7,970.0	92.5	92.2	117.71	-11,350.4	-252.7	926.2	740.1	186.12	4.976	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
19,665.0	7,538.5	19,966.5	7,970.2	92.9	92.6	117.73	-11,415.4	-253.2	926.3	739.2	187.10	4.951	
19,700.0	7,538.5	20,001.5	7,970.3	93.2	92.9	117.73	-11,450.4	-253.5	926.4	738.8	187.62	4.937	
19,760.0	7,538.4	20,061.5	7,970.5	93.6	93.4	117.75	-11,510.4	-254.0	926.5	738.0	188.53	4.914	
19,800.0	7,538.4	20,101.5	7,970.6	93.9	93.7	117.75	-11,550.4	-254.4	926.6	737.4	189.13	4.899	
19,855.0	7,538.3	20,156.5	7,970.7	94.4	94.1	117.77	-11,605.4	-254.9	926.7	736.7	189.96	4.878	
19,900.0	7,538.2	20,201.5	7,970.8	94.7	94.4	117.78	-11,650.4	-255.3	926.8	736.1	190.64	4.861	
19,950.0	7,538.2	20,251.5	7,971.0	95.1	94.8	117.79	-11,700.4	-255.7	926.9	735.5	191.39	4.843	
20,000.0	7,538.1	20,301.5	7,971.1	95.4	95.2	117.80	-11,750.4	-256.1	926.9	734.8	192.14	4.824	
20,045.0	7,538.1	20,346.5	7,971.2	95.8	95.5	117.81	-11,795.4	-256.5	927.0	734.2	192.82	4.808	
20,100.0	7,538.0	20,401.5	7,971.4	96.2	95.9	117.82	-11,850.4	-257.0	927.1	733.5	193.65	4.788	
20,140.0	7,537.9	20,441.5	7,971.5	96.5	96.2	117.83	-11,890.4	-257.3	927.2	732.9	194.25	4.773	
20,200.0	7,537.9	20,501.5	7,971.6	96.9	96.6	117.84	-11,950.4	-257.9	927.3	732.2	195.16	4.752	
20,235.0	7,537.8	20,536.5	7,971.7	97.2	96.9	117.85	-11,985.4	-258.2	927.4	731.7	195.69	4.739	
20,300.0	7,537.7	20,601.5	7,971.9	97.7	97.4	117.86	-12,050.4	-258.7	927.5	730.8	196.67	4.716	
20,330.0	7,537.7	20,631.5	7,972.0	97.9	97.6	117.87	-12,080.4	-259.0	927.6	730.4	197.12	4.706	
20,400.0	7,537.6	20,701.5	7,972.2	98.4	98.1	117.88	-12,150.4	-259.6	927.7	729.5	198.18	4.681	
20,425.0	7,537.6	20,726.5	7,972.2	98.6	98.3	117.89	-12,175.4	-259.8	927.7	729.2	198.55	4.672	
20,500.0	7,537.5	20,801.5	7,972.4	99.2	98.9	117.90	-12,250.3	-260.5	927.9	728.2	199.69	4.647	
20,520.0	7,537.5	20,821.5	7,972.5	99.3	99.0	117.91	-12,270.3	-260.6	927.9	727.9	199.99	4.640	
20,600.0	7,537.4	20,901.5	7,972.7	99.9	99.6	117.93	-12,350.3	-261.3	928.1	726.9	201.20	4.613	
20,615.0	7,537.4	20,916.5	7,972.7	100.0	99.7	117.93	-12,365.3	-261.5	928.1	726.7	201.42	4.608	
20,700.0	7,537.2	21,001.5	7,973.0	100.7	100.4	117.95	-12,450.3	-262.2	928.2	725.5	202.71	4.579	
20,710.0	7,537.2	21,011.5	7,973.0	100.7	100.5	117.95	-12,460.3	-262.3	928.3	725.4	202.86	4.576	
20,800.0	7,537.1	21,101.5	7,973.2	101.4	101.1	117.97	-12,550.3	-263.1	928.4	724.2	204.22	4.546	
20,805.0	7,537.1	21,106.5	7,973.3	101.4	101.2	117.97	-12,555.3	-263.1	928.4	724.1	204.30	4.545	
20,900.0	7,537.0	21,201.5	7,973.5	102.1	101.9	117.99	-12,650.3	-263.9	928.6	722.9	205.73	4.514	
20,995.0	7,536.9	21,296.5	7,973.8	102.9	102.6	118.01	-12,745.3	-264.8	928.8	721.6	207.17	4.483	
21,000.0	7,536.9	21,301.5	7,973.8	102.9	102.6	118.01	-12,750.3	-264.8	928.8	721.5	207.24	4.482	
21,090.0	7,536.8	21,391.5	7,974.0	103.6	103.3	118.03	-12,840.3	-265.6	929.0	720.4	208.61	4.453	
21,100.0	7,536.8	21,401.5	7,974.0	103.6	103.4	118.03	-12,850.3	-265.7	929.0	720.2	208.76	4.450	
21,185.0	7,536.6	21,486.5	7,974.3	104.3	104.0	118.05	-12,935.3	-266.4	929.1	719.1	210.04	4.424	
21,200.0	7,536.6	21,501.5	7,974.3	104.4	104.1	118.05	-12,950.3	-266.5	929.2	718.9	210.27	4.419	
21,280.0	7,536.5	21,581.5	7,974.5	105.0	104.7	118.07	-13,030.3	-267.2	929.3	717.8	211.48	4.394	
21,300.0	7,536.5	21,601.5	7,974.6	105.1	104.9	118.08	-13,050.3	-267.4	929.4	717.6	211.78	4.388	
21,375.0	7,536.4	21,676.5	7,974.8	105.7	105.4	118.09	-13,125.3	-268.1	929.5	716.6	212.92	4.365	
21,400.0	7,536.4	21,701.5	7,974.9	105.9	105.6	118.10	-13,150.3	-268.3	929.5	716.2	213.30	4.358	
21,470.0	7,536.3	21,771.5	7,975.0	106.4	106.2	118.11	-13,220.3	-268.9	929.7	715.3	214.36	4.337	
21,500.0	7,536.3	21,801.5	7,975.1	106.6	106.4	118.12	-13,250.3	-269.2	929.7	714.9	214.81	4.328	
21,565.0	7,536.2	21,866.5	7,975.3	107.1	106.9	118.13	-13,315.3	-269.7	929.8	714.0	215.80	4.309	
21,600.0	7,536.1	21,901.5	7,975.4	107.4	107.1	118.14	-13,350.3	-270.0	929.9	713.6	216.33	4.299	
21,660.0	7,536.1	21,961.5	7,975.6	107.8	107.6	118.15	-13,410.3	-270.5	930.0	712.8	217.24	4.281	
21,700.0	7,536.0	22,001.5	7,975.7	108.1	107.9	118.16	-13,450.3	-270.9	930.1	712.3	217.84	4.270	
21,755.0	7,535.9	22,056.5	7,975.8	108.5	108.3	118.17	-13,505.3	-271.4	930.2	711.5	218.68	4.254	
21,800.0	7,535.9	22,101.5	7,975.9	108.9	108.6	118.18	-13,550.3	-271.8	930.3	710.9	219.36	4.241	
21,850.0	7,535.8	22,151.5	7,976.1	109.3	109.0	118.19	-13,600.3	-272.2	930.4	710.3	220.12	4.227	
21,900.0	7,535.8	22,201.5	7,976.2	109.6	109.4	118.20	-13,650.3	-272.6	930.5	709.6	220.87	4.213	
21,945.0	7,535.7	22,246.5	7,976.3	110.0	109.7	118.21	-13,695.3	-273.0	930.6	709.0	221.56	4.200	
22,000.0	7,535.6	22,301.5	7,976.5	110.4	110.1	118.22	-13,750.3	-273.5	930.7	708.3	222.39	4.185	
22,040.0	7,535.6	22,341.4	7,976.6	110.7	110.4	118.23	-13,790.3	-273.8	930.7	707.7	223.00	4.174	
22,100.0	7,535.5	22,401.4	7,976.7	111.1	110.9	118.25	-13,850.3	-274.4	930.8	706.9	223.91	4.157	
22,135.0	7,535.5	22,436.4	7,976.8	111.4	111.2	118.25	-13,885.3	-274.7	930.9	706.5	224.44	4.148	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #521H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7438-MWD+IFR1+MS											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation Factor	
22,200.0	7,535.4	22,501.4	7,977.0	111.9	111.6	118.27	-13,950.3	-275.2	931.0	705.6	225.42	4.130
22,230.0	7,535.3	22,531.4	7,977.1	112.1	111.9	118.27	-13,980.3	-275.5	931.1	705.2	225.88	4.122
22,300.0	7,535.3	22,601.4	7,977.3	112.6	112.4	118.29	-14,050.3	-276.1	931.2	704.3	226.94	4.103
22,325.0	7,535.2	22,626.4	7,977.3	112.8	112.6	118.29	-14,075.3	-276.3	931.3	703.9	227.32	4.097
22,400.0	7,535.1	22,701.4	7,977.5	113.4	113.1	118.31	-14,150.3	-277.0	931.4	702.9	228.46	4.077
22,420.0	7,535.1	22,721.4	7,977.6	113.5	113.3	118.31	-14,170.3	-277.1	931.4	702.7	228.76	4.072
22,500.0	7,535.0	22,801.4	7,977.8	114.1	113.9	118.33	-14,250.3	-277.8	931.6	701.6	229.98	4.051
22,515.0	7,535.0	22,816.4	7,977.8	114.2	114.0	118.33	-14,265.2	-278.0	931.6	701.4	230.21	4.047
22,600.0	7,534.9	22,901.4	7,978.1	114.9	114.6	118.35	-14,350.2	-278.7	931.8	700.3	231.50	4.025
22,610.0	7,534.9	22,911.4	7,978.1	115.0	114.7	118.35	-14,360.2	-278.8	931.8	700.2	231.65	4.022
22,700.0	7,534.8	23,001.4	7,978.3	115.6	115.4	118.37	-14,450.2	-279.6	932.0	699.0	233.02	4.000
22,705.0	7,534.8	23,006.4	7,978.4	115.7	115.4	118.37	-14,455.2	-279.6	932.0	698.9	233.09	3.998
22,800.0	7,534.6	23,101.4	7,978.6	116.4	116.2	118.39	-14,550.2	-280.4	932.2	697.6	234.54	3.974
22,895.0	7,534.5	23,196.4	7,978.9	117.1	116.9	118.41	-14,645.2	-281.3	932.3	696.4	235.98	3.951
22,900.0	7,534.5	23,201.4	7,978.9	117.1	116.9	118.42	-14,650.2	-281.3	932.3	696.3	236.05	3.950
22,990.0	7,534.4	23,291.4	7,979.1	117.8	117.6	118.43	-14,740.2	-282.1	932.5	695.1	237.42	3.928
23,000.0	7,534.4	23,301.4	7,979.1	117.9	117.7	118.44	-14,750.2	-282.2	932.5	695.0	237.57	3.925
23,085.0	7,534.3	23,386.4	7,979.4	118.5	118.3	118.45	-14,835.2	-282.9	932.7	693.8	238.87	3.905
23,100.0	7,534.3	23,401.4	7,979.4	118.6	118.4	118.46	-14,850.2	-283.0	932.7	693.6	239.10	3.901
23,180.0	7,534.2	23,481.4	7,979.6	119.2	119.0	118.47	-14,930.2	-283.7	932.9	692.6	240.31	3.882
23,200.0	7,534.1	23,501.4	7,979.7	119.4	119.2	118.48	-14,950.2	-283.9	932.9	692.3	240.62	3.877
23,266.1	7,534.1	23,567.5	7,979.9	119.9	119.7	118.49	-15,016.3	-284.5	933.0	691.4	241.62	3.862
23,275.0	7,534.1	23,576.4	7,979.9	120.0	119.7	118.49	-15,025.2	-284.6	933.1	691.3	241.76	3.859
23,300.0	7,534.0	23,601.4	7,980.0	120.1	119.9	118.50	-15,050.2	-284.8	933.1	691.0	242.14	3.854
23,316.1	7,534.0	23,617.5	7,980.0	120.3	120.0	118.50	-15,066.3	-284.9	933.1	690.7	242.38	3.850 SF

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - LEONARDO BKL FEDERAL COM #1 - OWB - AWP												Offset Site Error: 0.0 usft		
Survey Program: 250-INC-ONLY													Offset Well Error: 10.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned: 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		
8,930.0	7,551.9	7,495.6	7,491.1	23.8	219.6	-89.81	-1,099.1	1,565.9	994.6	753.7	240.84	4.130		
9,000.0	7,551.8	7,496.1	7,491.6	24.0	219.7	-89.84	-1,099.1	1,565.9	968.4	727.2	241.20	4.015		
9,025.0	7,551.7	7,496.3	7,491.8	24.0	219.7	-89.86	-1,099.1	1,565.9	960.1	718.8	241.34	3.978		
9,100.0	7,551.6	7,496.8	7,492.3	24.2	219.7	-89.89	-1,099.1	1,565.9	938.8	697.0	241.81	3.882		
9,120.0	7,551.6	7,496.9	7,492.5	24.3	219.7	-89.90	-1,099.1	1,565.9	934.1	692.1	241.94	3.861		
9,200.0	7,551.5	7,497.5	7,493.0	24.5	219.7	-89.94	-1,099.1	1,565.9	919.2	676.7	242.51	3.790		
9,215.0	7,551.5	7,497.6	7,493.2	24.5	219.7	-89.94	-1,099.1	1,565.9	917.2	674.5	242.62	3.780		
9,300.0	7,551.4	7,498.3	7,493.8	24.7	219.7	-89.98	-1,099.1	1,565.9	910.2	667.0	243.26	3.742		
9,310.0	7,551.4	7,498.4	7,493.9	24.8	219.7	-89.99	-1,099.1	1,565.9	909.9	666.6	243.34	3.739		
9,332.1	7,551.4	7,498.5	7,494.0	24.8	219.7	-90.00	-1,099.1	1,565.9	909.7	666.2	243.51	3.736	CC, ES, SF	
9,400.0	7,551.3	7,499.0	7,494.5	25.0	219.7	-90.03	-1,099.1	1,565.9	912.2	668.2	244.01	3.738		
9,405.0	7,551.3	7,499.1	7,494.6	25.0	219.7	-90.03	-1,099.1	1,565.9	912.6	668.5	244.05	3.739		
9,500.0	7,551.1	7,499.8	7,495.3	25.4	219.8	-90.08	-1,099.1	1,565.9	925.0	680.3	244.72	3.780		
9,595.0	7,551.0	7,500.5	7,496.0	25.7	219.8	-90.12	-1,099.1	1,565.9	946.9	701.6	245.31	3.860		
9,600.0	7,551.0	7,500.5	7,496.0	25.7	219.8	-90.12	-1,099.1	1,565.9	948.3	702.9	245.33	3.865		
9,690.0	7,550.9	7,501.2	7,496.7	26.0	219.8	-90.17	-1,099.1	1,565.9	977.5	731.7	245.80	3.977		
9,700.0	7,550.9	7,501.3	7,496.8	26.1	219.8	-90.17	-1,099.1	1,565.9	981.2	735.4	245.85	3.991		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AWP													Offset Site Error: 0.0 usft	
Survey Program: 430-MWD								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)	
3,300.0	3,274.0	3,233.6	3,233.3	8.5	16.6	-37.32	1,166.2	207.9	987.1	964.5	22.60	43.671		
3,325.0	3,298.2	3,258.0	3,257.7	8.6	16.7	-37.55	1,166.3	207.9	982.2	959.4	22.74	43.196		
3,400.0	3,370.8	3,331.0	3,330.8	8.8	16.9	-38.22	1,166.5	207.8	967.3	944.2	23.14	41.806		
3,420.0	3,390.1	3,350.5	3,350.2	8.8	17.0	-38.41	1,166.5	207.8	963.4	940.1	23.25	41.441		
3,500.0	3,467.6	3,428.9	3,428.6	9.0	17.2	-39.16	1,166.6	207.7	947.7	924.0	23.62	40.127		
3,515.0	3,482.1	3,443.7	3,443.4	9.1	17.2	-39.31	1,166.6	207.7	944.7	921.0	23.68	39.894		
3,600.0	3,564.4	3,527.2	3,526.9	9.3	17.4	-40.14	1,166.6	207.7	928.1	904.1	24.05	38.597		
3,610.0	3,574.1	3,537.0	3,536.7	9.3	17.4	-40.24	1,166.6	207.7	926.2	902.1	24.09	38.446		
3,700.0	3,661.2	3,624.2	3,624.0	9.6	17.7	-41.15	1,166.5	207.6	908.7	884.3	24.48	37.118		
3,705.0	3,666.1	3,629.0	3,628.8	9.6	17.7	-41.21	1,166.5	207.6	907.8	883.3	24.50	37.045		
3,800.0	3,758.0	3,720.5	3,720.2	9.9	17.9	-42.20	1,166.4	207.5	889.7	864.8	24.92	35.695		
3,895.0	3,850.0	3,812.7	3,812.5	10.1	18.2	-43.25	1,166.3	207.4	871.9	846.5	25.36	34.378		
3,900.0	3,854.8	3,817.6	3,817.3	10.2	18.2	-43.31	1,166.3	207.4	871.0	845.6	25.39	34.310		
3,990.0	3,942.0	3,905.5	3,905.2	10.4	18.4	-44.35	1,166.2	207.2	854.3	828.5	25.81	33.097		
4,000.0	3,951.7	3,915.3	3,915.0	10.4	18.4	-44.46	1,166.2	207.2	852.5	826.6	25.86	32.965		
4,085.0	4,033.9	3,997.8	3,997.5	10.7	18.7	-45.49	1,166.0	207.0	837.0	810.7	26.27	31.863		
4,100.0	4,048.5	4,012.3	4,012.1	10.8	18.7	-45.67	1,165.9	207.0	834.3	808.0	26.34	31.673		
4,180.0	4,125.9	4,089.7	4,089.4	11.0	18.9	-46.67	1,165.7	206.8	820.0	793.3	26.73	30.680		
4,200.0	4,145.3	4,109.1	4,108.8	11.1	19.0	-46.93	1,165.7	206.7	816.5	789.7	26.83	30.437		
4,275.0	4,217.9	4,181.7	4,181.4	11.3	19.2	-47.91	1,165.5	206.5	803.4	776.2	27.20	29.538		
4,300.0	4,242.1	4,205.9	4,205.6	11.4	19.3	-48.24	1,165.4	206.4	799.1	771.8	27.32	29.245		
4,370.0	4,309.9	4,273.7	4,273.4	11.6	19.5	-49.20	1,165.2	206.1	787.1	759.5	27.68	28.437		
4,400.0	4,338.9	4,302.8	4,302.5	11.7	19.6	-49.61	1,165.2	206.0	782.1	754.3	27.83	28.099		
4,465.0	4,401.8	4,365.5	4,365.2	11.9	19.8	-50.53	1,165.0	205.8	771.3	743.1	28.17	27.378		
4,500.0	4,435.7	4,399.2	4,398.9	12.0	19.9	-51.04	1,164.9	205.7	765.6	737.2	28.36	26.998		
4,560.0	4,493.8	4,457.0	4,456.7	12.2	20.0	-51.92	1,164.7	205.5	755.9	727.2	28.68	26.361		
4,600.0	4,532.5	4,495.5	4,495.2	12.3	20.2	-52.51	1,164.7	205.4	749.6	720.7	28.89	25.947		
4,655.0	4,585.8	4,548.7	4,548.4	12.5	20.3	-53.35	1,164.6	205.3	741.1	711.9	29.19	25.386		
4,700.0	4,629.4	4,592.3	4,592.0	12.7	20.5	-54.05	1,164.5	205.2	734.2	704.7	29.44	24.936		
4,750.0	4,677.8	4,640.7	4,640.4	12.8	20.6	-54.85	1,164.4	205.0	726.7	697.0	29.73	24.446		
4,800.0	4,726.2	4,689.2	4,688.9	13.0	20.8	-55.66	1,164.3	204.8	719.3	689.3	30.01	23.969		
4,845.0	4,769.7	4,732.5	4,732.2	13.1	20.9	-56.41	1,164.2	204.7	712.8	682.5	30.28	23.543		
4,900.0	4,823.0	4,785.1	4,784.9	13.3	21.0	-57.32	1,164.1	204.5	705.1	674.5	30.61	23.032		
4,940.0	4,861.7	4,823.4	4,823.2	13.5	21.1	-58.00	1,164.1	204.4	699.6	668.7	30.86	22.670		
5,000.0	4,919.8	4,880.9	4,880.6	13.7	21.3	-59.02	1,164.1	204.3	691.6	660.4	31.23	22.143		
5,035.0	4,953.7	4,914.7	4,914.4	13.8	21.4	-59.63	1,164.1	204.3	687.1	655.6	31.45	21.849		
5,100.0	5,016.6	4,978.1	4,977.8	14.0	21.5	-60.80	1,164.2	204.3	678.9	647.1	31.83	21.331		
5,130.0	5,045.6	5,012.2	5,011.9	14.1	21.7	-61.43	1,164.2	204.4	675.1	643.1	32.01	21.089		
5,200.0	5,113.4	5,113.0	5,112.7	14.4	22.2	-63.41	1,161.1	205.0	664.6	632.1	32.49	20.454		
5,225.0	5,137.6	5,151.2	5,150.7	14.4	22.5	-64.22	1,158.5	205.5	660.1	627.4	32.69	20.194		
5,300.0	5,210.2	5,235.8	5,235.0	14.7	22.9	-66.12	1,150.4	206.9	644.8	611.6	33.19	19.427		
5,320.0	5,229.6	5,254.8	5,253.8	14.8	23.0	-66.56	1,148.6	207.2	640.7	607.4	33.32	19.229		
5,400.0	5,307.0	5,329.6	5,328.3	15.0	23.2	-68.35	1,141.1	208.4	625.0	591.1	33.81	18.483		
5,415.0	5,321.6	5,343.6	5,342.2	15.1	23.3	-68.70	1,139.7	208.6	622.1	588.2	33.90	18.350		
5,500.0	5,403.9	5,422.5	5,420.8	15.4	23.5	-70.72	1,131.9	209.6	606.4	572.0	34.41	17.622		
5,510.0	5,413.5	5,431.8	5,430.0	15.4	23.5	-70.97	1,131.0	209.7	604.7	570.2	34.48	17.539		
5,600.0	5,500.7	5,515.2	5,513.0	15.7	23.8	-73.22	1,123.0	210.6	589.4	554.4	35.03	16.824		
5,605.0	5,505.5	5,519.8	5,517.6	15.8	23.8	-73.35	1,122.6	210.7	588.6	553.5	35.07	16.785		
5,700.0	5,597.5	5,608.6	5,606.0	16.1	24.0	-75.86	1,114.3	211.5	574.0	538.3	35.67	16.089		
5,795.0	5,689.5	5,697.8	5,694.8	16.4	24.3	-78.51	1,106.0	212.2	560.7	524.4	36.31	15.445		
5,800.0	5,694.3	5,702.4	5,699.4	16.5	24.3	-78.65	1,105.6	212.2	560.1	523.7	36.34	15.412		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program: 430-MWD													Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis (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
5,890.0	5,781.4	5,785.0	5,781.7	16.8	24.6	-81.17		1,098.4	213.0	549.1	512.1	36.96	14.855	
5,900.0	5,791.1	5,793.9	5,790.6	16.8	24.6	-81.44		1,097.7	213.1	548.0	511.0	37.03	14.797	
5,985.0	5,873.4	5,870.2	5,866.6	17.1	24.8	-83.81		1,091.7	213.7	539.6	502.0	37.64	14.336	
6,000.0	5,887.9	5,884.1	5,880.4	17.2	24.9	-84.24		1,090.7	213.8	538.3	500.6	37.75	14.260	
6,080.0	5,965.4	5,958.7	5,954.8	17.5	25.1	-86.57		1,085.6	214.4	532.2	493.8	38.34	13.880	
6,100.0	5,984.7	5,978.3	5,974.4	17.5	25.1	-87.19		1,084.3	214.5	530.8	492.3	38.49	13.789	
6,175.0	6,057.4	6,051.2	6,047.1	17.8	25.4	-89.59		1,078.7	214.7	526.1	487.1	39.07	13.465	
6,193.8	6,075.6	6,068.7	6,064.5	17.9	25.4	-90.18		1,077.3	214.8	525.1	485.9	39.22	13.388	
6,200.0	6,081.6	6,074.4	6,070.3	17.9	25.4	-90.37		1,076.9	214.8	524.8	485.5	39.27	13.364	
6,270.0	6,149.6	6,140.1	6,135.8	18.2	25.6	-92.39		1,072.0	215.0	521.7	481.8	39.82	13.101	
6,300.0	6,178.8	6,167.2	6,162.8	18.3	25.7	-93.18		1,070.2	215.1	520.6	480.6	40.05	12.999	
6,365.0	6,242.5	6,226.0	6,221.5	18.6	25.9	-94.78		1,066.4	215.1	519.0	478.5	40.56	12.797	
6,400.0	6,276.9	6,260.9	6,256.3	18.8	26.0	-95.67		1,064.4	215.0	518.5	477.6	40.84	12.694	
6,460.0	6,336.0	6,323.3	6,318.6	19.0	26.2	-97.20		1,060.1	215.0	517.3	476.0	41.33	12.516	
6,500.0	6,375.5	6,360.9	6,356.0	19.2	26.3	-98.07		1,057.4	215.0	516.6	474.9	41.65	12.403	
6,555.0	6,430.0	6,411.4	6,406.4	19.5	26.5	-99.11		1,054.2	215.0	515.9	473.8	42.07	12.262	
6,600.0	6,474.7	6,455.2	6,450.2	19.7	26.6	-99.91		1,051.8	215.0	515.6	473.2	42.43	12.153	
6,650.0	6,524.4	6,505.7	6,500.6	19.9	26.8	-100.75		1,048.9	214.9	515.1	472.3	42.82	12.031	
6,700.0	6,574.2	6,556.1	6,550.9	20.1	26.9	-101.50		1,045.8	214.9	514.5	471.3	43.20	11.909	
6,745.0	6,619.1	6,601.5	6,596.3	20.3	27.1	-102.07		1,043.2	215.0	513.8	470.3	43.55	11.799	
6,800.0	6,674.1	6,656.0	6,650.7	20.6	27.2	-102.62		1,040.4	215.3	512.8	468.8	43.95	11.666	
6,840.0	6,714.0	6,695.2	6,689.9	20.8	27.3	-102.95		1,038.3	215.5	511.9	467.7	44.24	11.571	
6,900.0	6,774.0	6,753.8	6,748.4	21.0	27.5	-103.30		1,035.5	215.8	510.6	465.9	44.66	11.432	
6,919.0	6,793.0	6,772.3	6,766.8	21.1	27.6	-63.60		1,034.6	215.9	510.1	465.4	44.79	11.390	
6,935.0	6,809.0	6,787.9	6,782.5	21.1	27.6	-63.66		1,033.9	216.0	509.8	464.9	44.89	11.355	
7,000.0	6,874.0	6,847.6	6,842.0	21.3	27.8	-63.88		1,031.7	216.1	508.5	463.2	45.29	11.228	
7,030.0	6,904.0	6,874.3	6,868.8	21.3	27.9	-63.95		1,031.0	216.1	508.3	462.8	45.43	11.188	
7,056.4	6,930.4	6,897.8	6,892.3	21.4	28.0	-63.99		1,030.6	216.0	508.2	462.6	45.54	11.158 CC	
7,106.0	6,980.0	6,946.2	6,940.7	21.5	28.1	-64.07		1,030.1	215.6	508.2	462.5	45.79	11.101 ES	
7,125.0	6,999.0	6,964.9	6,959.4	21.5	28.2	115.42		1,029.9	215.5	508.4	462.6	45.85	11.089	
7,150.0	7,024.0	6,990.0	6,984.5	21.5	28.3	115.47		1,029.6	215.3	509.1	463.2	45.93	11.084 SF	
7,200.0	7,073.6	7,022.0	7,016.4	21.5	28.4	115.55		1,030.0	214.9	512.5	466.6	45.95	11.153	
7,220.0	7,093.3	7,037.9	7,032.3	21.6	28.4	115.69		1,030.7	214.7	514.8	468.9	45.97	11.200	
7,250.0	7,122.5	7,054.0	7,048.4	21.6	28.5	115.72		1,031.9	214.3	519.5	473.6	45.91	11.314	
7,300.0	7,170.3	7,086.0	7,080.1	21.7	28.6	116.00		1,035.9	213.7	530.1	484.2	45.84	11.564	
7,315.0	7,184.4	7,096.5	7,090.5	21.7	28.6	116.15		1,037.7	213.6	534.0	488.2	45.82	11.653	
7,350.0	7,216.7	7,117.0	7,110.5	21.8	28.7	116.30		1,041.9	213.3	544.6	498.8	45.74	11.905	
7,400.0	7,261.3	7,134.6	7,127.6	21.9	28.8	115.64		1,046.2	213.0	563.3	517.8	45.49	12.381	
7,410.0	7,270.0	7,138.3	7,131.1	21.9	28.8	115.48		1,047.2	213.0	567.5	522.1	45.45	12.487	
7,450.0	7,303.7	7,149.0	7,141.4	22.0	28.8	114.38		1,050.3	212.7	586.1	540.9	45.22	12.963	
7,500.0	7,343.7	7,168.8	7,160.2	22.1	28.9	113.12		1,056.5	212.2	612.9	567.8	45.08	13.595	
7,505.0	7,347.6	7,170.3	7,161.6	22.1	28.9	112.93		1,057.0	212.2	615.8	570.7	45.06	13.664	
7,550.0	7,380.9	7,181.0	7,171.6	22.2	28.9	110.71		1,060.6	211.9	643.2	598.3	44.89	14.326	
7,600.0	7,415.1	7,191.2	7,181.2	22.3	28.9	107.49		1,064.3	211.6	676.5	631.8	44.76	15.115	
7,650.0	7,445.9	7,197.7	7,187.2	22.4	29.0	103.18		1,066.7	211.4	712.6	667.9	44.65	15.961	
7,695.0	7,470.6	7,201.5	7,190.7	22.5	29.0	98.41		1,068.2	211.3	746.9	702.3	44.59	16.752	
7,700.0	7,473.2	7,201.8	7,190.9	22.5	29.0	97.83		1,068.3	211.3	750.8	706.2	44.58	16.841	
7,750.0	7,496.8	7,203.7	7,192.7	22.6	29.0	91.49		1,069.0	211.3	790.6	746.1	44.56	17.741	
7,790.0	7,512.8	7,213.0	7,201.2	22.6	29.0	86.95		1,072.8	211.0	823.5	778.7	44.75	18.402	
7,800.0	7,516.4	7,213.0	7,201.2	22.6	29.0	85.48		1,072.8	211.0	831.7	787.0	44.76	18.583	
7,850.0	7,531.9	7,201.9	7,191.1	22.7	29.0	76.69		1,068.4	211.3	873.3	828.6	44.67	19.551	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:		FLAMING SNAIL FED COM PROJECT - WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AWP											Offset Site Error:		0.0 usft	
Survey Program:		430-MWD											Offset Well Error:		3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Rule Assigned:							
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside			Distance	Distance	Minimum	Separation	Warning			
Depth	Depth	Depth	Depth			Tooface	+N/-S	+E/-W	Between	Between	Separation	Factor				
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Ellipses	(usft)					
7,885.0	7,540.3	7,199.9	7,189.2	22.7	29.0	71.26	1,067.6	211.4	902.7	857.9	44.74	20.175				
7,900.0	7,543.2	7,198.8	7,188.2	22.7	29.0	68.95	1,067.1	211.4	915.3	870.5	44.78	20.439				
7,950.0	7,550.3	7,194.3	7,184.1	22.7	29.0	61.54	1,065.5	211.5	957.2	912.2	44.93	21.304				
7,980.0	7,552.4	7,181.0	7,171.6	22.8	28.9	56.54	1,060.6	211.9	982.3	937.4	44.88	21.888				
8,000.0	7,553.0	7,181.0	7,171.6	22.8	28.9	54.16	1,060.6	211.9	998.7	953.7	44.99	22.199				

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3187.3usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3187.3usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to *KB=30ft @ 3187.3usft

Offset Depths are relative to Offset Datum

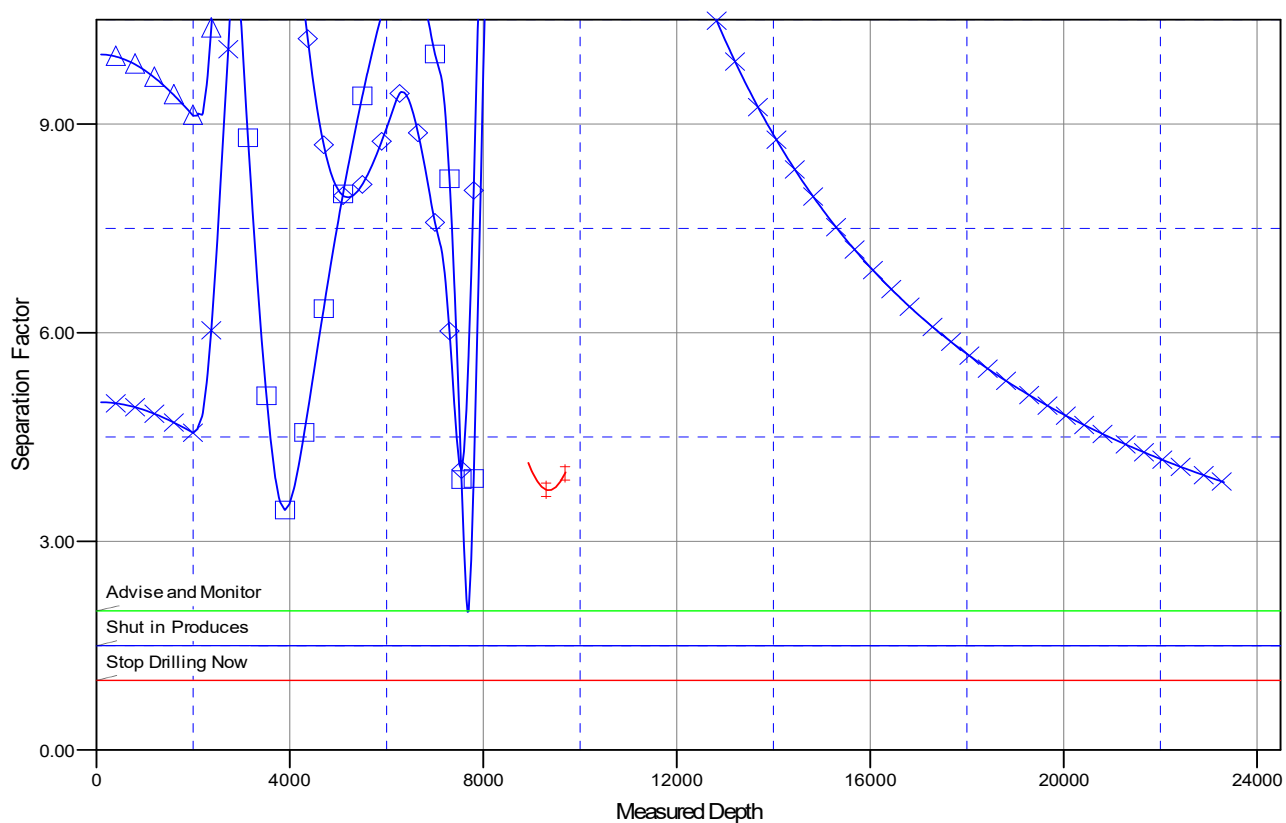
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: FLAMING SNAIL FEDERAL COM #503H

Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30

Grid Convergence at Surface is: 0.07°

Separation Factor Plot



LEGEND

FLAMING SNAIL FEDERAL COM #503H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #504H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #505H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #506H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #507H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #508H, OWB, PWP0 V0

FLAMING SNAIL FEDERAL COM #509H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #510H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #511H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #512H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #513H, OWB, PWP0 V0
 FLAMING SNAIL FEDERAL COM #514H, OWB, PWP0 V0

FLAMING SNAIL FEDERAL COM #521H, OWB, PWP0 V0
 LEONARDO BKL FEDERAL COM #1, OWB, AWP V0
 WHITE CITY 21 25 27 FEDERAL COM #6H, OWB, AWP V0

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

DELAWARE BASIN WEST

ATLAS PROSPECT (NM-E)

FLAMING SNAIL FED COM PROJECT

FLAMING SNAIL FEDERAL COM #503H

OWB

Plan: PWP0

Standard Planning Report

01 July, 2022

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project	ATLAS 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		FLAMING SNAIL FED COM PROJECT			
Site Position:		Northing:	403,021.72 usft	Latitude:	32° 6' 28.642 N
From:	Map	Easting:	540,311.87 usft	Longitude:	104° 12' 11.304 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.07 °

Well	FLAMING SNAIL FEDERAL COM #503H					
Well Position	+N/-S	-793.2 usft	Northing:	402,228.50 usft	Latitude:	32° 6' 20.770 N
	+E/-W	1,756.1 usft	Easting:	542,068.00 usft	Longitude:	104° 11' 50.898 W
Position Uncertainty		3.0 usft	Wellhead Elevation:		Ground Level:	3,157.3 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	1/1/2023	6.86	59.70	47,405.67397194

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	177.97	

Plan Survey Tool Program	Date	7/1/2022			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	2,000.0 PWP0 (OWB)	Standard Keeper 104		
			Standard Wireline Keeper ver 1		
2	2,000.0	7,106.0 PWP0 (OWB)	MWD+IFR1+MS		
			OWSG MWD + IFR1 + Multi-St		
3	7,106.0	23,316.1 PWP0 (OWB)	MWD+IFR1+MS		
			OWSG MWD + IFR1 + Multi-St		

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,725.1	14.50	39.79	2,717.4	70.1	58.4	2.00	2.00	0.00	39.79	
6,193.8	14.50	39.79	6,075.6	737.7	614.3	0.00	0.00	0.00	0.00	
6,919.0	0.00	0.00	6,793.0	807.8	672.7	2.00	-2.00	0.00	180.00	
7,106.0	0.00	0.00	6,980.0	807.8	672.7	0.00	0.00	0.00	0.00	
8,006.7	90.07	180.50	7,553.0	234.2	667.7	10.00	10.00	-19.93	180.50	
23,266.1	90.07	180.50	7,534.1	-15,024.6	535.5	0.00	0.00	0.00	0.00	
23,316.1	90.07	180.50	7,534.0	-15,074.6	535.1	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
START BUILD 2.00									
2,100.0	2.00	39.79	2,100.0	1.3	1.1	-1.3	2.00	2.00	0.00
2,200.0	4.00	39.79	2,199.8	5.4	4.5	-5.2	2.00	2.00	0.00
2,300.0	6.00	39.79	2,299.5	12.1	10.0	-11.7	2.00	2.00	0.00
2,400.0	8.00	39.79	2,398.7	21.4	17.8	-20.8	2.00	2.00	0.00
2,500.0	10.00	39.79	2,497.5	33.4	27.9	-32.4	2.00	2.00	0.00
2,600.0	12.00	39.79	2,595.6	48.1	40.1	-46.7	2.00	2.00	0.00
2,700.0	14.00	39.79	2,693.1	65.4	54.5	-63.4	2.00	2.00	0.00
2,725.1	14.50	39.79	2,717.4	70.1	58.4	-68.0	2.00	2.00	0.00
START HOLD @ 2725.1 MD									
2,800.0	14.50	39.79	2,789.9	84.6	70.4	-82.0	0.00	0.00	0.00
2,900.0	14.50	39.79	2,886.7	103.8	86.4	-100.7	0.00	0.00	0.00
3,000.0	14.50	39.79	2,983.5	123.0	102.5	-119.3	0.00	0.00	0.00
3,100.0	14.50	39.79	3,080.3	142.3	118.5	-138.0	0.00	0.00	0.00
3,200.0	14.50	39.79	3,177.1	161.5	134.5	-156.7	0.00	0.00	0.00
3,300.0	14.50	39.79	3,274.0	180.8	150.5	-175.3	0.00	0.00	0.00
3,400.0	14.50	39.79	3,370.8	200.0	166.6	-194.0	0.00	0.00	0.00
3,500.0	14.50	39.79	3,467.6	219.3	182.6	-212.6	0.00	0.00	0.00
3,600.0	14.50	39.79	3,564.4	238.5	198.6	-231.3	0.00	0.00	0.00
3,700.0	14.50	39.79	3,661.2	257.8	214.6	-250.0	0.00	0.00	0.00
3,800.0	14.50	39.79	3,758.0	277.0	230.7	-268.6	0.00	0.00	0.00
3,900.0	14.50	39.79	3,854.8	296.2	246.7	-287.3	0.00	0.00	0.00
4,000.0	14.50	39.79	3,951.7	315.5	262.7	-306.0	0.00	0.00	0.00
4,100.0	14.50	39.79	4,048.5	334.7	278.7	-324.6	0.00	0.00	0.00
4,200.0	14.50	39.79	4,145.3	354.0	294.8	-343.3	0.00	0.00	0.00
4,300.0	14.50	39.79	4,242.1	373.2	310.8	-362.0	0.00	0.00	0.00
4,400.0	14.50	39.79	4,338.9	392.5	326.8	-380.6	0.00	0.00	0.00
4,500.0	14.50	39.79	4,435.7	411.7	342.8	-399.3	0.00	0.00	0.00
4,600.0	14.50	39.79	4,532.5	430.9	358.9	-417.9	0.00	0.00	0.00
4,700.0	14.50	39.79	4,629.4	450.2	374.9	-436.6	0.00	0.00	0.00
4,800.0	14.50	39.79	4,726.2	469.4	390.9	-455.3	0.00	0.00	0.00
4,900.0	14.50	39.79	4,823.0	488.7	406.9	-473.9	0.00	0.00	0.00
5,000.0	14.50	39.79	4,919.8	507.9	423.0	-492.6	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	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)
5,100.0	14.50	39.79	5,016.6	527.2	439.0	-511.3	0.00	0.00	0.00
5,200.0	14.50	39.79	5,113.4	546.4	455.0	-529.9	0.00	0.00	0.00
5,300.0	14.50	39.79	5,210.2	565.7	471.0	-548.6	0.00	0.00	0.00
5,400.0	14.50	39.79	5,307.0	584.9	487.1	-567.3	0.00	0.00	0.00
5,500.0	14.50	39.79	5,403.9	604.1	503.1	-585.9	0.00	0.00	0.00
5,600.0	14.50	39.79	5,500.7	623.4	519.1	-604.6	0.00	0.00	0.00
5,700.0	14.50	39.79	5,597.5	642.6	535.1	-623.2	0.00	0.00	0.00
5,800.0	14.50	39.79	5,694.3	661.9	551.2	-641.9	0.00	0.00	0.00
5,900.0	14.50	39.79	5,791.1	681.1	567.2	-660.6	0.00	0.00	0.00
6,000.0	14.50	39.79	5,887.9	700.4	583.2	-679.2	0.00	0.00	0.00
6,100.0	14.50	39.79	5,984.7	719.6	599.2	-697.9	0.00	0.00	0.00
6,193.8	14.50	39.79	6,075.6	737.7	614.3	-715.4	0.00	0.00	0.00
START DROP -2.00									
6,200.0	14.38	39.79	6,081.6	738.9	615.3	-716.6	2.00	-2.00	0.00
6,300.0	12.38	39.79	6,178.8	756.6	630.1	-733.8	2.00	-2.00	0.00
6,400.0	10.38	39.79	6,276.9	771.8	642.7	-748.5	2.00	-2.00	0.00
6,500.0	8.38	39.79	6,375.5	784.3	653.1	-760.7	2.00	-2.00	0.00
6,600.0	6.38	39.79	6,474.7	794.2	661.3	-770.2	2.00	-2.00	0.00
6,700.0	4.38	39.79	6,574.2	801.4	667.3	-777.2	2.00	-2.00	0.00
6,800.0	2.38	39.79	6,674.1	805.9	671.1	-781.6	2.00	-2.00	0.00
6,900.0	0.38	39.79	6,774.0	807.8	672.7	-783.4	2.00	-2.00	0.00
6,919.0	0.00	0.00	6,793.0	807.8	672.7	-783.4	2.00	-2.00	0.00
START HOLD @ 6919.0 MD									
7,000.0	0.00	0.00	6,874.0	807.8	672.7	-783.4	0.00	0.00	0.00
7,106.0	0.00	0.00	6,980.0	807.8	672.7	-783.4	0.00	0.00	0.00
START DLS 10.00 TFO 180.50									
7,150.0	4.40	180.50	7,024.0	806.1	672.7	-781.8	10.00	10.00	0.00
7,200.0	9.40	180.50	7,073.6	800.1	672.6	-775.8	10.00	10.00	0.00
7,250.0	14.40	180.50	7,122.5	789.8	672.5	-765.5	10.00	10.00	0.00
7,300.0	19.40	180.50	7,170.3	775.3	672.4	-750.9	10.00	10.00	0.00
7,350.0	24.40	180.50	7,216.7	756.6	672.3	-732.3	10.00	10.00	0.00
7,400.0	29.40	180.50	7,261.3	734.0	672.1	-709.7	10.00	10.00	0.00
7,450.0	34.40	180.50	7,303.7	707.6	671.8	-683.3	10.00	10.00	0.00
7,500.0	39.40	180.50	7,343.7	677.6	671.6	-653.4	10.00	10.00	0.00
7,550.0	44.40	180.50	7,380.9	644.2	671.3	-620.0	10.00	10.00	0.00
7,600.0	49.40	180.50	7,415.1	607.7	671.0	-583.6	10.00	10.00	0.00
7,650.0	54.40	180.50	7,445.9	568.4	670.6	-544.3	10.00	10.00	0.00
7,700.0	59.40	180.50	7,473.2	526.5	670.3	-502.4	10.00	10.00	0.00
7,750.0	64.40	180.50	7,496.8	482.4	669.9	-458.4	10.00	10.00	0.00
7,800.0	69.40	180.50	7,516.4	436.5	669.5	-412.4	10.00	10.00	0.00
7,850.0	74.40	180.50	7,531.9	389.0	669.1	-365.0	10.00	10.00	0.00
7,900.0	79.40	180.50	7,543.2	340.3	668.6	-316.3	10.00	10.00	0.00
7,950.0	84.40	180.50	7,550.3	290.8	668.2	-266.9	10.00	10.00	0.00
8,000.0	89.40	180.50	7,553.0	240.9	667.8	-217.0	10.00	10.00	0.00
8,006.7	90.07	180.50	7,553.0	234.2	667.7	-210.3	10.00	10.00	0.00
START HOLD @ 8006.7 MD									
8,100.0	90.07	180.50	7,552.9	140.9	666.9	-117.1	0.00	0.00	0.00
8,200.0	90.07	180.50	7,552.8	40.9	666.1	-17.2	0.00	0.00	0.00
8,300.0	90.07	180.50	7,552.6	-59.1	665.2	82.7	0.00	0.00	0.00
8,400.0	90.07	180.50	7,552.5	-159.1	664.3	182.6	0.00	0.00	0.00
8,500.0	90.07	180.50	7,552.4	-259.1	663.5	282.5	0.00	0.00	0.00
8,600.0	90.07	180.50	7,552.3	-359.1	662.6	382.4	0.00	0.00	0.00
8,700.0	90.07	180.50	7,552.1	-459.1	661.7	482.3	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	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)
8,800.0	90.07	180.50	7,552.0	-559.1	660.9	582.2	0.00	0.00	0.00
8,900.0	90.07	180.50	7,551.9	-659.1	660.0	682.1	0.00	0.00	0.00
9,000.0	90.07	180.50	7,551.8	-759.1	659.1	782.0	0.00	0.00	0.00
9,100.0	90.07	180.50	7,551.6	-859.1	658.3	881.9	0.00	0.00	0.00
9,200.0	90.07	180.50	7,551.5	-959.1	657.4	981.8	0.00	0.00	0.00
9,300.0	90.07	180.50	7,551.4	-1,059.1	656.5	1,081.7	0.00	0.00	0.00
9,400.0	90.07	180.50	7,551.3	-1,159.1	655.7	1,181.6	0.00	0.00	0.00
9,500.0	90.07	180.50	7,551.1	-1,259.1	654.8	1,281.5	0.00	0.00	0.00
9,600.0	90.07	180.50	7,551.0	-1,359.0	653.9	1,381.4	0.00	0.00	0.00
9,700.0	90.07	180.50	7,550.9	-1,459.0	653.1	1,481.3	0.00	0.00	0.00
9,800.0	90.07	180.50	7,550.8	-1,559.0	652.2	1,581.2	0.00	0.00	0.00
9,900.0	90.07	180.50	7,550.7	-1,659.0	651.3	1,681.1	0.00	0.00	0.00
10,000.0	90.07	180.50	7,550.5	-1,759.0	650.5	1,781.0	0.00	0.00	0.00
10,100.0	90.07	180.50	7,550.4	-1,859.0	649.6	1,880.9	0.00	0.00	0.00
10,200.0	90.07	180.50	7,550.3	-1,959.0	648.7	1,980.8	0.00	0.00	0.00
10,300.0	90.07	180.50	7,550.2	-2,059.0	647.9	2,080.7	0.00	0.00	0.00
10,400.0	90.07	180.50	7,550.0	-2,159.0	647.0	2,180.6	0.00	0.00	0.00
10,500.0	90.07	180.50	7,549.9	-2,259.0	646.1	2,280.5	0.00	0.00	0.00
10,600.0	90.07	180.50	7,549.8	-2,359.0	645.3	2,380.4	0.00	0.00	0.00
10,700.0	90.07	180.50	7,549.7	-2,459.0	644.4	2,480.3	0.00	0.00	0.00
10,800.0	90.07	180.50	7,549.5	-2,559.0	643.5	2,580.2	0.00	0.00	0.00
10,900.0	90.07	180.50	7,549.4	-2,659.0	642.7	2,680.1	0.00	0.00	0.00
11,000.0	90.07	180.50	7,549.3	-2,759.0	641.8	2,780.0	0.00	0.00	0.00
11,100.0	90.07	180.50	7,549.2	-2,859.0	640.9	2,879.9	0.00	0.00	0.00
11,200.0	90.07	180.50	7,549.0	-2,959.0	640.1	2,979.8	0.00	0.00	0.00
11,300.0	90.07	180.50	7,548.9	-3,059.0	639.2	3,079.7	0.00	0.00	0.00
11,400.0	90.07	180.50	7,548.8	-3,159.0	638.3	3,179.6	0.00	0.00	0.00
11,500.0	90.07	180.50	7,548.7	-3,259.0	637.5	3,279.5	0.00	0.00	0.00
11,600.0	90.07	180.50	7,548.5	-3,359.0	636.6	3,379.4	0.00	0.00	0.00
11,700.0	90.07	180.50	7,548.4	-3,459.0	635.7	3,479.3	0.00	0.00	0.00
11,800.0	90.07	180.50	7,548.3	-3,559.0	634.9	3,579.2	0.00	0.00	0.00
11,900.0	90.07	180.50	7,548.2	-3,659.0	634.0	3,679.1	0.00	0.00	0.00
12,000.0	90.07	180.50	7,548.0	-3,759.0	633.1	3,779.1	0.00	0.00	0.00
12,100.0	90.07	180.50	7,547.9	-3,859.0	632.3	3,879.0	0.00	0.00	0.00
12,200.0	90.07	180.50	7,547.8	-3,958.9	631.4	3,978.9	0.00	0.00	0.00
12,300.0	90.07	180.50	7,547.7	-4,058.9	630.5	4,078.8	0.00	0.00	0.00
12,400.0	90.07	180.50	7,547.5	-4,158.9	629.7	4,178.7	0.00	0.00	0.00
12,500.0	90.07	180.50	7,547.4	-4,258.9	628.8	4,278.6	0.00	0.00	0.00
12,600.0	90.07	180.50	7,547.3	-4,358.9	627.9	4,378.5	0.00	0.00	0.00
12,700.0	90.07	180.50	7,547.2	-4,458.9	627.1	4,478.4	0.00	0.00	0.00
12,800.0	90.07	180.50	7,547.1	-4,558.9	626.2	4,578.3	0.00	0.00	0.00
12,900.0	90.07	180.50	7,546.9	-4,658.9	625.3	4,678.2	0.00	0.00	0.00
13,000.0	90.07	180.50	7,546.8	-4,758.9	624.5	4,778.1	0.00	0.00	0.00
13,100.0	90.07	180.50	7,546.7	-4,858.9	623.6	4,878.0	0.00	0.00	0.00
13,200.0	90.07	180.50	7,546.6	-4,958.9	622.7	4,977.9	0.00	0.00	0.00
13,300.0	90.07	180.50	7,546.4	-5,058.9	621.9	5,077.8	0.00	0.00	0.00
13,400.0	90.07	180.50	7,546.3	-5,158.9	621.0	5,177.7	0.00	0.00	0.00
13,500.0	90.07	180.50	7,546.2	-5,258.9	620.1	5,277.6	0.00	0.00	0.00
13,600.0	90.07	180.50	7,546.1	-5,358.9	619.3	5,377.5	0.00	0.00	0.00
13,700.0	90.07	180.50	7,545.9	-5,458.9	618.4	5,477.4	0.00	0.00	0.00
13,800.0	90.07	180.50	7,545.8	-5,558.9	617.5	5,577.3	0.00	0.00	0.00
13,900.0	90.07	180.50	7,545.7	-5,658.9	616.7	5,677.2	0.00	0.00	0.00
14,000.0	90.07	180.50	7,545.6	-5,758.9	615.8	5,777.1	0.00	0.00	0.00
14,100.0	90.07	180.50	7,545.4	-5,858.9	614.9	5,877.0	0.00	0.00	0.00

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Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	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)	
14,200.0	90.07	180.50	7,545.3	-5,958.9	614.1	5,976.9	0.00	0.00	0.00	
14,300.0	90.07	180.50	7,545.2	-6,058.9	613.2	6,076.8	0.00	0.00	0.00	
14,400.0	90.07	180.50	7,545.1	-6,158.9	612.3	6,176.7	0.00	0.00	0.00	
14,500.0	90.07	180.50	7,544.9	-6,258.9	611.5	6,276.6	0.00	0.00	0.00	
14,600.0	90.07	180.50	7,544.8	-6,358.9	610.6	6,376.5	0.00	0.00	0.00	
14,700.0	90.07	180.50	7,544.7	-6,458.9	609.7	6,476.4	0.00	0.00	0.00	
14,800.0	90.07	180.50	7,544.6	-6,558.8	608.9	6,576.3	0.00	0.00	0.00	
14,900.0	90.07	180.50	7,544.4	-6,658.8	608.0	6,676.2	0.00	0.00	0.00	
15,000.0	90.07	180.50	7,544.3	-6,758.8	607.1	6,776.1	0.00	0.00	0.00	
15,100.0	90.07	180.50	7,544.2	-6,858.8	606.3	6,876.0	0.00	0.00	0.00	
15,200.0	90.07	180.50	7,544.1	-6,958.8	605.4	6,975.9	0.00	0.00	0.00	
15,300.0	90.07	180.50	7,543.9	-7,058.8	604.5	7,075.8	0.00	0.00	0.00	
15,400.0	90.07	180.50	7,543.8	-7,158.8	603.7	7,175.7	0.00	0.00	0.00	
15,500.0	90.07	180.50	7,543.7	-7,258.8	602.8	7,275.6	0.00	0.00	0.00	
15,600.0	90.07	180.50	7,543.6	-7,358.8	601.9	7,375.5	0.00	0.00	0.00	
15,700.0	90.07	180.50	7,543.5	-7,458.8	601.1	7,475.4	0.00	0.00	0.00	
15,800.0	90.07	180.50	7,543.3	-7,558.8	600.2	7,575.3	0.00	0.00	0.00	
15,900.0	90.07	180.50	7,543.2	-7,658.8	599.3	7,675.2	0.00	0.00	0.00	
16,000.0	90.07	180.50	7,543.1	-7,758.8	598.5	7,775.2	0.00	0.00	0.00	
16,100.0	90.07	180.50	7,543.0	-7,858.8	597.6	7,875.1	0.00	0.00	0.00	
16,200.0	90.07	180.50	7,542.8	-7,958.8	596.7	7,975.0	0.00	0.00	0.00	
16,300.0	90.07	180.50	7,542.7	-8,058.8	595.9	8,074.9	0.00	0.00	0.00	
16,400.0	90.07	180.50	7,542.6	-8,158.8	595.0	8,174.8	0.00	0.00	0.00	
16,500.0	90.07	180.50	7,542.5	-8,258.8	594.1	8,274.7	0.00	0.00	0.00	
16,600.0	90.07	180.50	7,542.3	-8,358.8	593.3	8,374.6	0.00	0.00	0.00	
16,700.0	90.07	180.50	7,542.2	-8,458.8	592.4	8,474.5	0.00	0.00	0.00	
16,800.0	90.07	180.50	7,542.1	-8,558.8	591.5	8,574.4	0.00	0.00	0.00	
16,900.0	90.07	180.50	7,542.0	-8,658.8	590.7	8,674.3	0.00	0.00	0.00	
17,000.0	90.07	180.50	7,541.8	-8,758.8	589.8	8,774.2	0.00	0.00	0.00	
17,100.0	90.07	180.50	7,541.7	-8,858.8	588.9	8,874.1	0.00	0.00	0.00	
17,200.0	90.07	180.50	7,541.6	-8,958.8	588.1	8,974.0	0.00	0.00	0.00	
17,300.0	90.07	180.50	7,541.5	-9,058.8	587.2	9,073.9	0.00	0.00	0.00	
17,400.0	90.07	180.50	7,541.3	-9,158.8	586.3	9,173.8	0.00	0.00	0.00	
17,500.0	90.07	180.50	7,541.2	-9,258.7	585.5	9,273.7	0.00	0.00	0.00	
17,600.0	90.07	180.50	7,541.1	-9,358.7	584.6	9,373.6	0.00	0.00	0.00	
17,700.0	90.07	180.50	7,541.0	-9,458.7	583.7	9,473.5	0.00	0.00	0.00	
17,800.0	90.07	180.50	7,540.8	-9,558.7	582.9	9,573.4	0.00	0.00	0.00	
17,900.0	90.07	180.50	7,540.7	-9,658.7	582.0	9,673.3	0.00	0.00	0.00	
18,000.0	90.07	180.50	7,540.6	-9,758.7	581.1	9,773.2	0.00	0.00	0.00	
18,100.0	90.07	180.50	7,540.5	-9,858.7	580.3	9,873.1	0.00	0.00	0.00	
18,200.0	90.07	180.50	7,540.3	-9,958.7	579.4	9,973.0	0.00	0.00	0.00	
18,300.0	90.07	180.50	7,540.2	-10,058.7	578.5	10,072.9	0.00	0.00	0.00	
18,400.0	90.07	180.50	7,540.1	-10,158.7	577.7	10,172.8	0.00	0.00	0.00	
18,500.0	90.07	180.50	7,540.0	-10,258.7	576.8	10,272.7	0.00	0.00	0.00	
18,600.0	90.07	180.50	7,539.9	-10,358.7	575.9	10,372.6	0.00	0.00	0.00	
18,700.0	90.07	180.50	7,539.7	-10,458.7	575.1	10,472.5	0.00	0.00	0.00	
18,800.0	90.07	180.50	7,539.6	-10,558.7	574.2	10,572.4	0.00	0.00	0.00	
18,900.0	90.07	180.50	7,539.5	-10,658.7	573.3	10,672.3	0.00	0.00	0.00	
19,000.0	90.07	180.50	7,539.4	-10,758.7	572.5	10,772.2	0.00	0.00	0.00	
19,100.0	90.07	180.50	7,539.2	-10,858.7	571.6	10,872.1	0.00	0.00	0.00	
19,200.0	90.07	180.50	7,539.1	-10,958.7	570.7	10,972.0	0.00	0.00	0.00	
19,300.0	90.07	180.50	7,539.0	-11,058.7	569.9	11,071.9	0.00	0.00	0.00	
19,400.0	90.07	180.50	7,538.9	-11,158.7	569.0	11,171.8	0.00	0.00	0.00	
19,500.0	90.07	180.50	7,538.7	-11,258.7	568.1	11,271.7	0.00	0.00	0.00	

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Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,600.0	90.07	180.50	7,538.6	-11,358.7	567.3	11,371.6	0.00	0.00	0.00
19,700.0	90.07	180.50	7,538.5	-11,458.7	566.4	11,471.5	0.00	0.00	0.00
19,800.0	90.07	180.50	7,538.4	-11,558.7	565.5	11,571.4	0.00	0.00	0.00
19,900.0	90.07	180.50	7,538.2	-11,658.7	564.7	11,671.3	0.00	0.00	0.00
20,000.0	90.07	180.50	7,538.1	-11,758.7	563.8	11,771.2	0.00	0.00	0.00
20,100.0	90.07	180.50	7,538.0	-11,858.6	562.9	11,871.2	0.00	0.00	0.00
20,200.0	90.07	180.50	7,537.9	-11,958.6	562.1	11,971.1	0.00	0.00	0.00
20,300.0	90.07	180.50	7,537.7	-12,058.6	561.2	12,071.0	0.00	0.00	0.00
20,400.0	90.07	180.50	7,537.6	-12,158.6	560.3	12,170.9	0.00	0.00	0.00
20,500.0	90.07	180.50	7,537.5	-12,258.6	559.5	12,270.8	0.00	0.00	0.00
20,600.0	90.07	180.50	7,537.4	-12,358.6	558.6	12,370.7	0.00	0.00	0.00
20,700.0	90.07	180.50	7,537.2	-12,458.6	557.7	12,470.6	0.00	0.00	0.00
20,800.0	90.07	180.50	7,537.1	-12,558.6	556.9	12,570.5	0.00	0.00	0.00
20,900.0	90.07	180.50	7,537.0	-12,658.6	556.0	12,670.4	0.00	0.00	0.00
21,000.0	90.07	180.50	7,536.9	-12,758.6	555.1	12,770.3	0.00	0.00	0.00
21,100.0	90.07	180.50	7,536.8	-12,858.6	554.3	12,870.2	0.00	0.00	0.00
21,200.0	90.07	180.50	7,536.6	-12,958.6	553.4	12,970.1	0.00	0.00	0.00
21,300.0	90.07	180.50	7,536.5	-13,058.6	552.5	13,070.0	0.00	0.00	0.00
21,400.0	90.07	180.50	7,536.4	-13,158.6	551.7	13,169.9	0.00	0.00	0.00
21,500.0	90.07	180.50	7,536.3	-13,258.6	550.8	13,269.8	0.00	0.00	0.00
21,600.0	90.07	180.50	7,536.1	-13,358.6	549.9	13,369.7	0.00	0.00	0.00
21,700.0	90.07	180.50	7,536.0	-13,458.6	549.1	13,469.6	0.00	0.00	0.00
21,800.0	90.07	180.50	7,535.9	-13,558.6	548.2	13,569.5	0.00	0.00	0.00
21,900.0	90.07	180.50	7,535.8	-13,658.6	547.3	13,669.4	0.00	0.00	0.00
22,000.0	90.07	180.50	7,535.6	-13,758.6	546.5	13,769.3	0.00	0.00	0.00
22,100.0	90.07	180.50	7,535.5	-13,858.6	545.6	13,869.2	0.00	0.00	0.00
22,200.0	90.07	180.50	7,535.4	-13,958.6	544.7	13,969.1	0.00	0.00	0.00
22,300.0	90.07	180.50	7,535.3	-14,058.6	543.9	14,069.0	0.00	0.00	0.00
22,400.0	90.07	180.50	7,535.1	-14,158.6	543.0	14,168.9	0.00	0.00	0.00
22,500.0	90.07	180.50	7,535.0	-14,258.6	542.1	14,268.8	0.00	0.00	0.00
22,600.0	90.07	180.50	7,534.9	-14,358.6	541.3	14,368.7	0.00	0.00	0.00
22,700.0	90.07	180.50	7,534.8	-14,458.5	540.4	14,468.6	0.00	0.00	0.00
22,800.0	90.07	180.50	7,534.6	-14,558.5	539.5	14,568.5	0.00	0.00	0.00
22,900.0	90.07	180.50	7,534.5	-14,658.5	538.7	14,668.4	0.00	0.00	0.00
23,000.0	90.07	180.50	7,534.4	-14,758.5	537.8	14,768.3	0.00	0.00	0.00
23,100.0	90.07	180.50	7,534.3	-14,858.5	536.9	14,868.2	0.00	0.00	0.00
23,200.0	90.07	180.50	7,534.1	-14,958.5	536.1	14,968.1	0.00	0.00	0.00
23,266.1	90.07	180.50	7,534.1	-15,024.6	535.5	15,034.1	0.00	0.00	0.00
START HOLD @ 23266.1 MD									
23,300.0	90.07	180.50	7,534.0	-15,058.5	535.2	15,068.0	0.00	0.00	0.00
23,316.1	90.07	180.50	7,534.0	-15,074.6	535.1	15,084.1	0.00	0.00	0.00
TD @ 23316.1 MD									

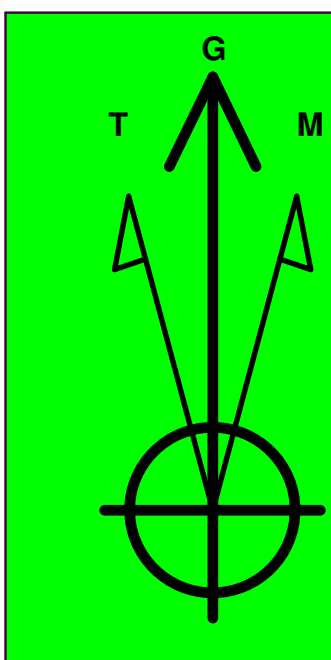
ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #503H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3187.3usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3187.3usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
VT (FLAMING SNAIL FE - plan hits target center - Point	0.00	0.00	6,980.0	807.8	672.7	403,036.31	542,740.70	32° 6' 28.756 N	104° 11' 43.065 W
PBHL (FLAMING SNAIL - plan hits target center - Rectangle (sides W100.0 H15,842.2 D20.0)	0.07	0.50	7,534.0	-15,074.6	535.1	387,153.90	542,603.10	32° 3' 51.576 N	104° 11' 44.900 W
LTP (FLAMING SNAIL F - plan hits target center - Point	0.00	0.00	7,534.1	-15,024.6	535.5	387,203.90	542,603.50	32° 3' 52.071 N	104° 11' 44.895 W
FTP (FLAMING SNAIL F - plan misses target center by 209.6usft at 7578.4usft MD (7400.7 TVD, 623.9 N, 671.1 E) - Circle (radius 50.0)	0.00	0.00	7,553.7	767.1	672.7	402,995.60	542,740.70	32° 6' 28.353 N	104° 11' 43.065 W

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
2,000.0	2,000.0	0.0	0.0	START BUILD 2.00	
2,725.1	2,717.4	70.1	58.4	START HOLD @ 2725.1 MD	
6,193.8	6,075.6	737.7	614.3	START DROP -2.00	
6,919.0	6,793.0	807.8	672.7	START HOLD @ 6919.0 MD	
7,106.0	6,980.0	807.8	672.7	START DLS 10.00 TFO 180.50	
8,006.7	7,553.0	234.2	667.7	START HOLD @ 8006.7 MD	
23,266.1	7,534.1	-15,024.6	535.5	START HOLD @ 23266.1 MD	
23,316.1	7,534.0	-15,074.6	535.1	TD @ 23316.1 MD	



Azimuths to Grid North
True North: -0.07°
Magnetic North: 6.79°

Magnetic Field
Strength: 47405.7nT
Dip Angle: 59.70°
Date: 1/1/2023
Model: BGGM2022

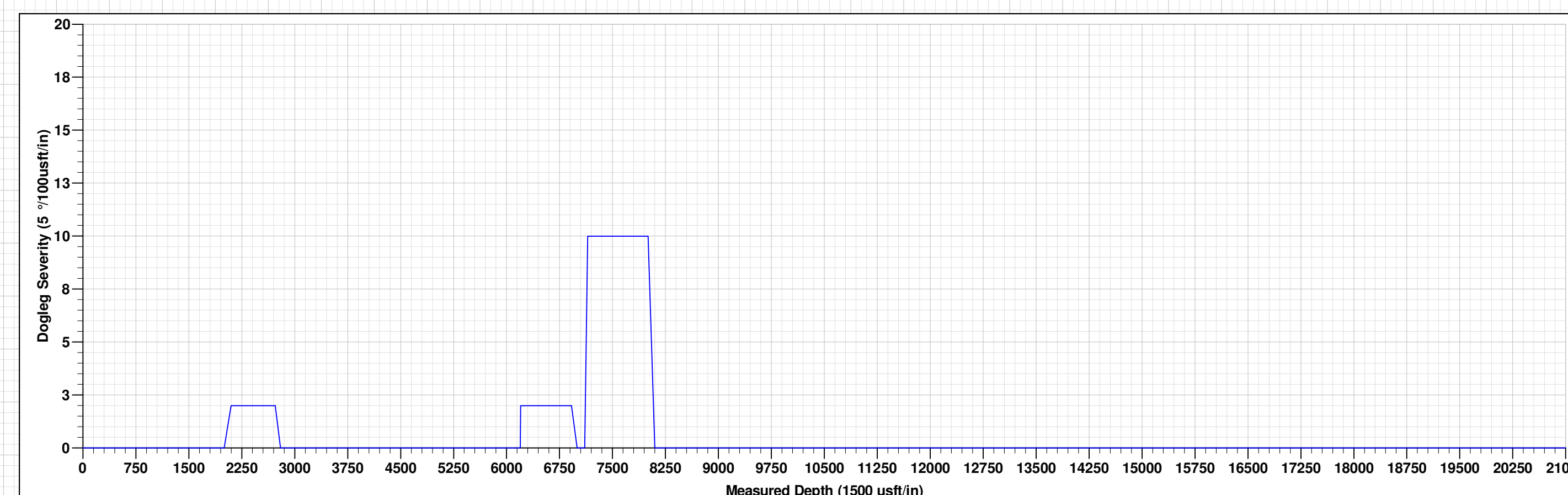
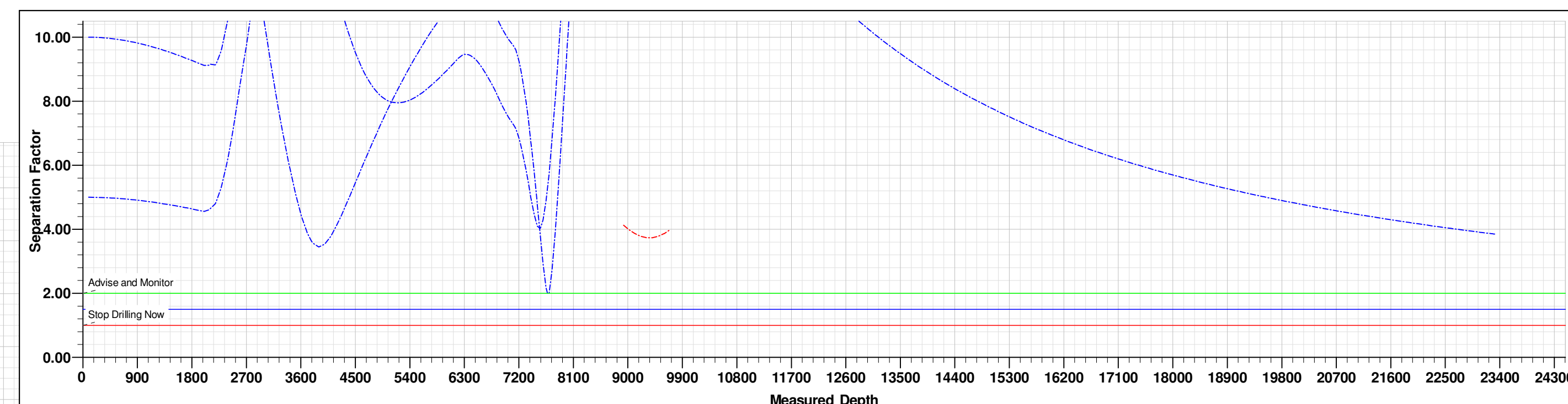
Project: ATLAS PROSPECT (NM-E)
Site: FLAMING SNAIL FED COM PROJECT
Well: FLAMING SNAIL FEDERAL COM #503H
Wellbore: OWB
Design: PWP0
GL: 3157.3
*KB=30ft @ 3187.3usft

WELL DETAILS: FLAMING SNAIL FEDERAL COM #503H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	402228.50	542068.00	32° 6' 20.770 N	104° 11' 50.898 W

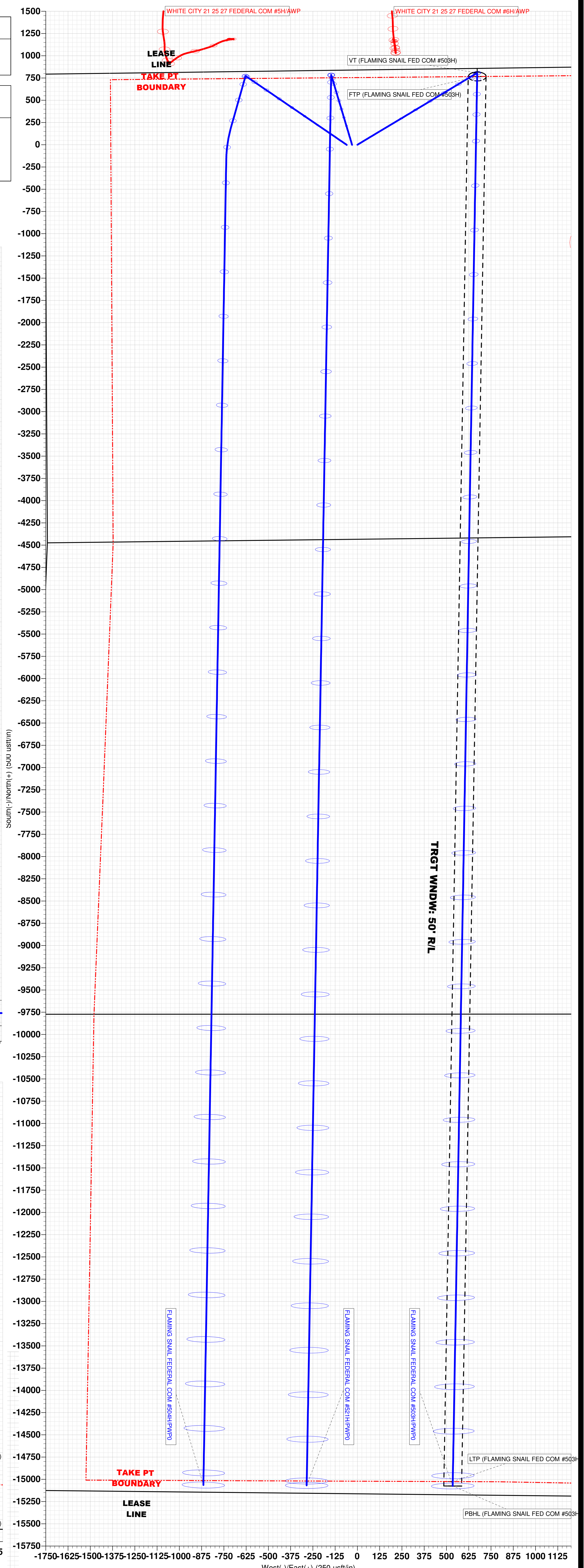
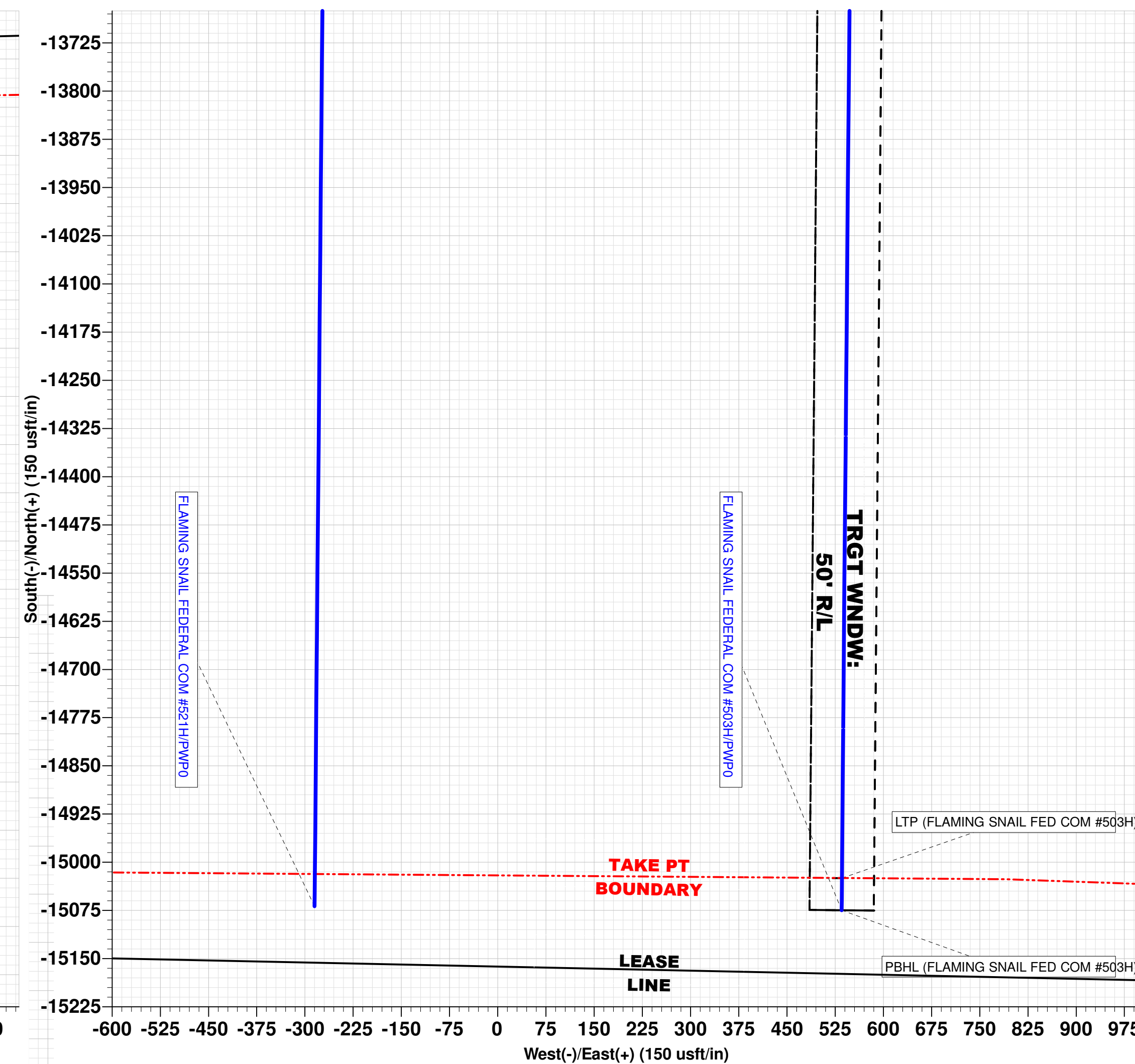
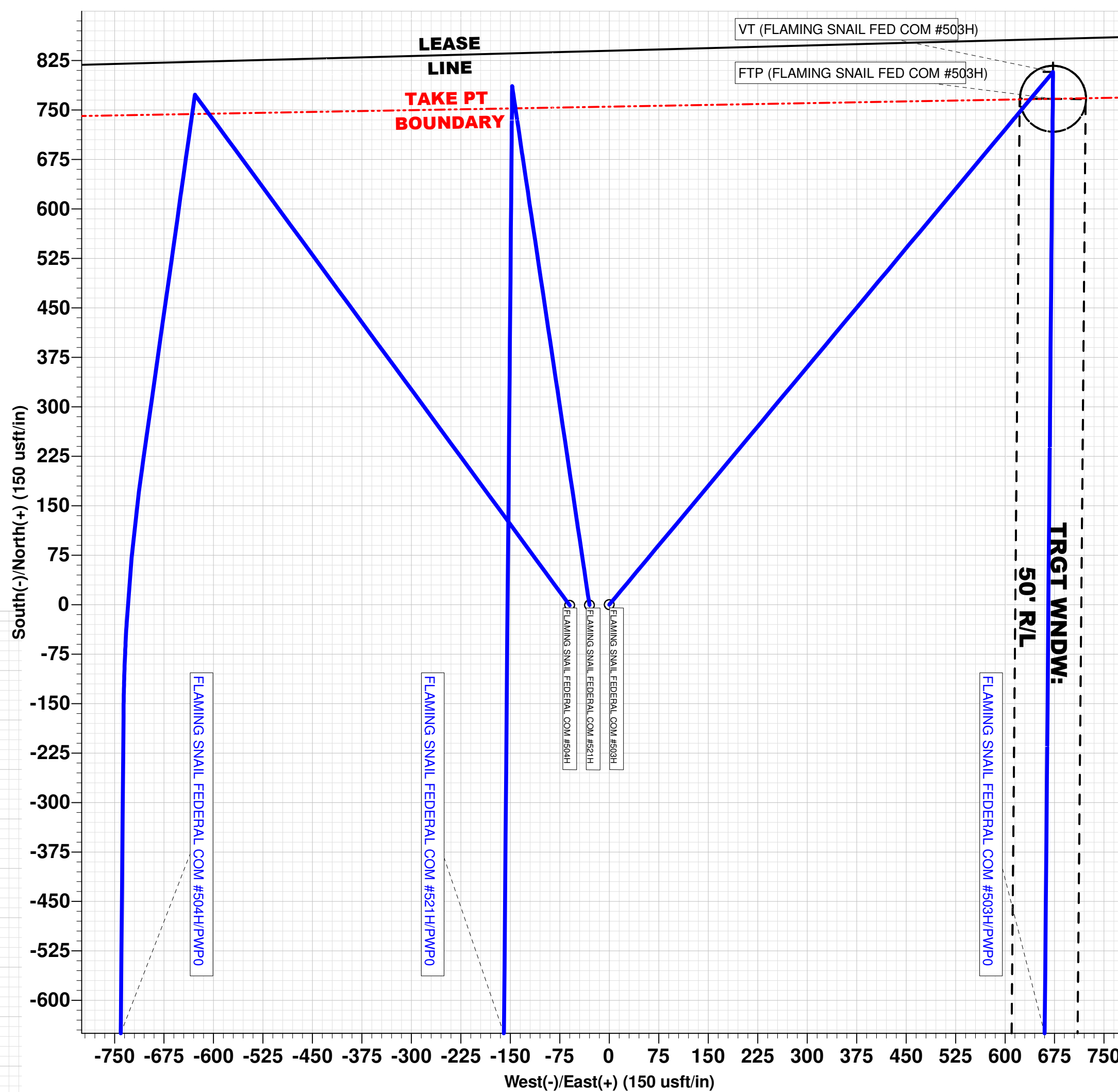
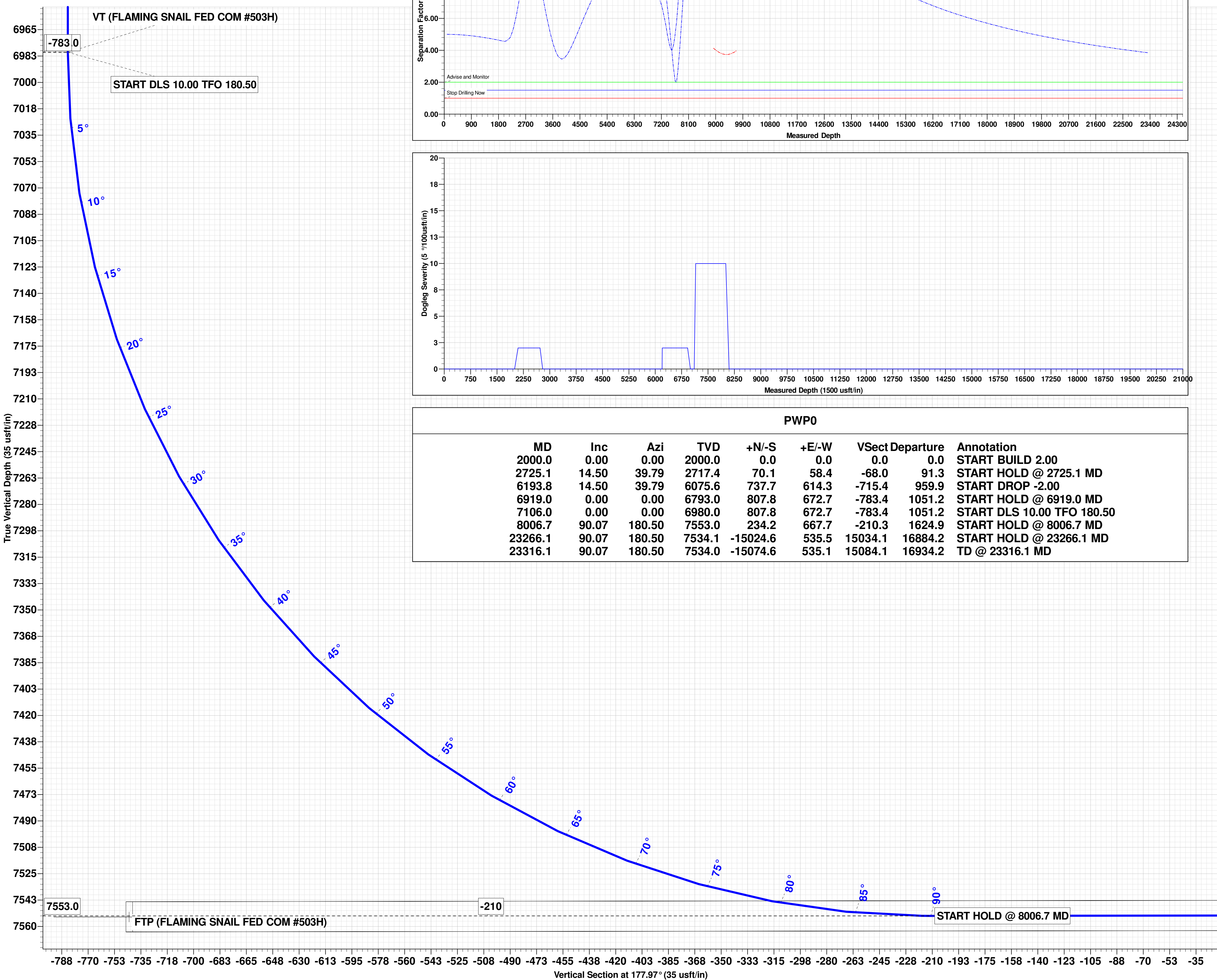
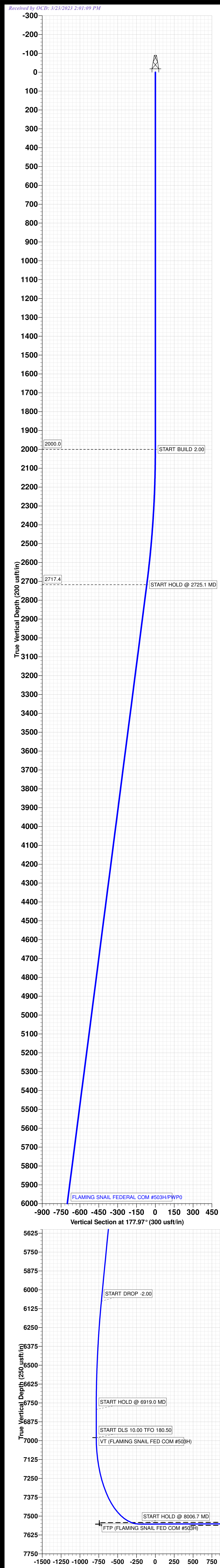
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
VT (FLAMING SNAIL FED COM #503H)	6980.0	807.8	672.7	403036.32	542740.70	Point
PBHL (FLAMING SNAIL FED COM #503H)	7534.0	-15074.6	535.1	387153.90	542603.10	Rectangle (Sides: L15842.2 W100.0)
LTP (FLAMING SNAIL FED COM #503H)	7534.1	-15024.6	535.5	387203.90	542603.50	Point
FTP (FLAMING SNAIL FED COM #503H)	7553.7	767.1	672.7	402995.60	542740.70	Circle (Radius: 50.0)



PWP0

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
2000.0	0.00	0.00	2000.0	0.0	0.0	0.0	0.0	START BUILD 2.00
2725.1	14.50	39.79	2717.4	70.1	58.4	-68.0	91.3	START HOLD @ 2725.1 MD
6193.8	14.50	39.79	6075.6	737.7	614.3	-715.4	959.9	START DROP -2.00
6919.0	0.00	0.00	6793.0	807.8	672.7	-783.4	1051.2	START HOLD @ 6919.0 MD
7106.0	0.00	0.00	6980.0	807.8	672.7	-783.4	1051.2	START DLS 10.00 TFO 180.50
8006.7	90.07	180.50	7553.0	234.2	667.7	-210.3	1624.9	START HOLD @ 8006.7 MD
23266.1	90.07	180.50	7534.1	-15024.6	535.5	15034.1	16884.2	START HOLD @ 23266.1 MD
23316.1	90.07	180.50	7534.0	-15074.6	535.1	15084.1	16934.2	TD @ 23316.1 MD



TRGT WNDW:
10' A/B

START HOLD @ 23266.1 MD
TD @ 23316.1 MD
LTP (FLAMING SNAIL FED COM #503H)
PBHL (FLAMING SNAIL FED COM #503H)
FLAMING SNAIL FEDERAL COM #503H/PWP0

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG
LEASE NO.:	NMNM092167
LOCATION:	Section 28, T.25 S., R.27 E., NMPPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Flaming Snail Fed Com 503H
SURFACE HOLE FOOTAGE:	957'/N & 1589'/W
BOTTOM HOLE FOOTAGE:	50'/S & 2390'/W

COA

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

A. HYDROGEN SULFIDE

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **350** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

- hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.
- Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**
- ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification. **Excess calculates to 23%. Additional cement maybe required.**

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.

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **3000 (3M)** psi.

Option 2:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- a. 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.
- b. Manufacturer representative shall install the test plug for the initial BOP test.
- c. 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.
- d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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

☒ Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing 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-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an

independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

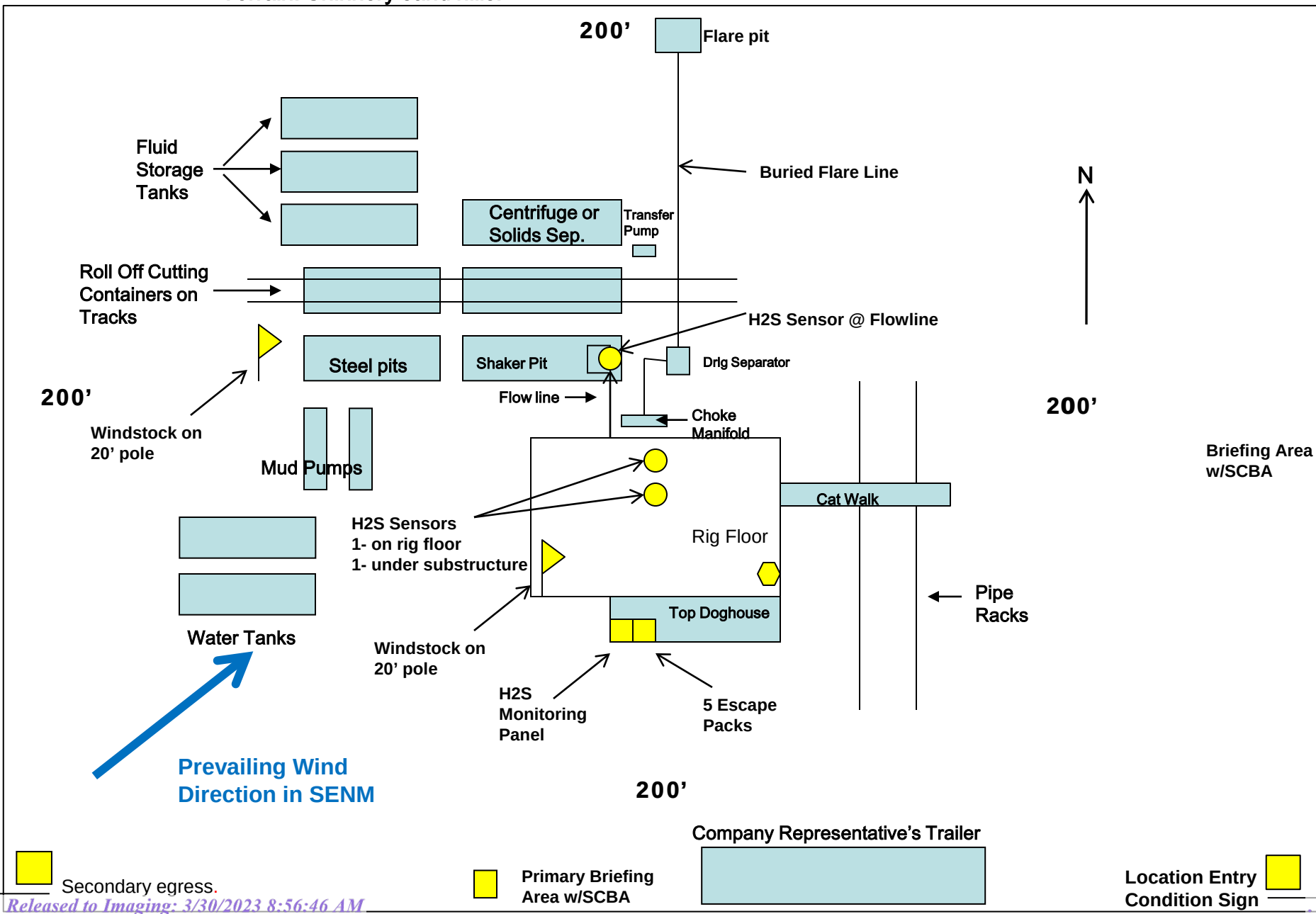
All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location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

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

ZS 122022

COG Operating LLC
H₂S Equipment Schematic
 Terrain: Shinnery sand hills.

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



COG OPERATING LLC
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

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

- a. The hazards and characteristics of hydrogen sulfide (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

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 200277

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 200277
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Will require administrative order for non-standard spacing unit	3/24/2023
kpickford	Notify OCD 24 hours prior to casing & cement	3/24/2023
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104	3/24/2023
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	3/24/2023
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	3/24/2023
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	3/24/2023