

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 520H 9. API Well No. 30-015-53645
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 NENE / 805 FNL / 1005 FEL / LAT 32.106144 / LONG -104.1897 At proposed prod. zone SESE / 50 FSL / 990 FEL / LAT 32.064277 / LONG -104.190163		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. 580 feet 19. Proposed Depth 7967 feet / 23779 feet 20. BLM/BIA Bond No. in file FED:		21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3131 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 08/29/2022
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)



Approval Date: 03/16/2023

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- 53645	Pool Code 30216	Pool Name Hay Hollow; Bone Spring, North
Property Code 333880	Property Name FLAMING SNAIL FEDERAL COM	Well Number 520H
OGRID No. 229137	Operator Name COG OPERATING, LLC	Elevation 3131.2'

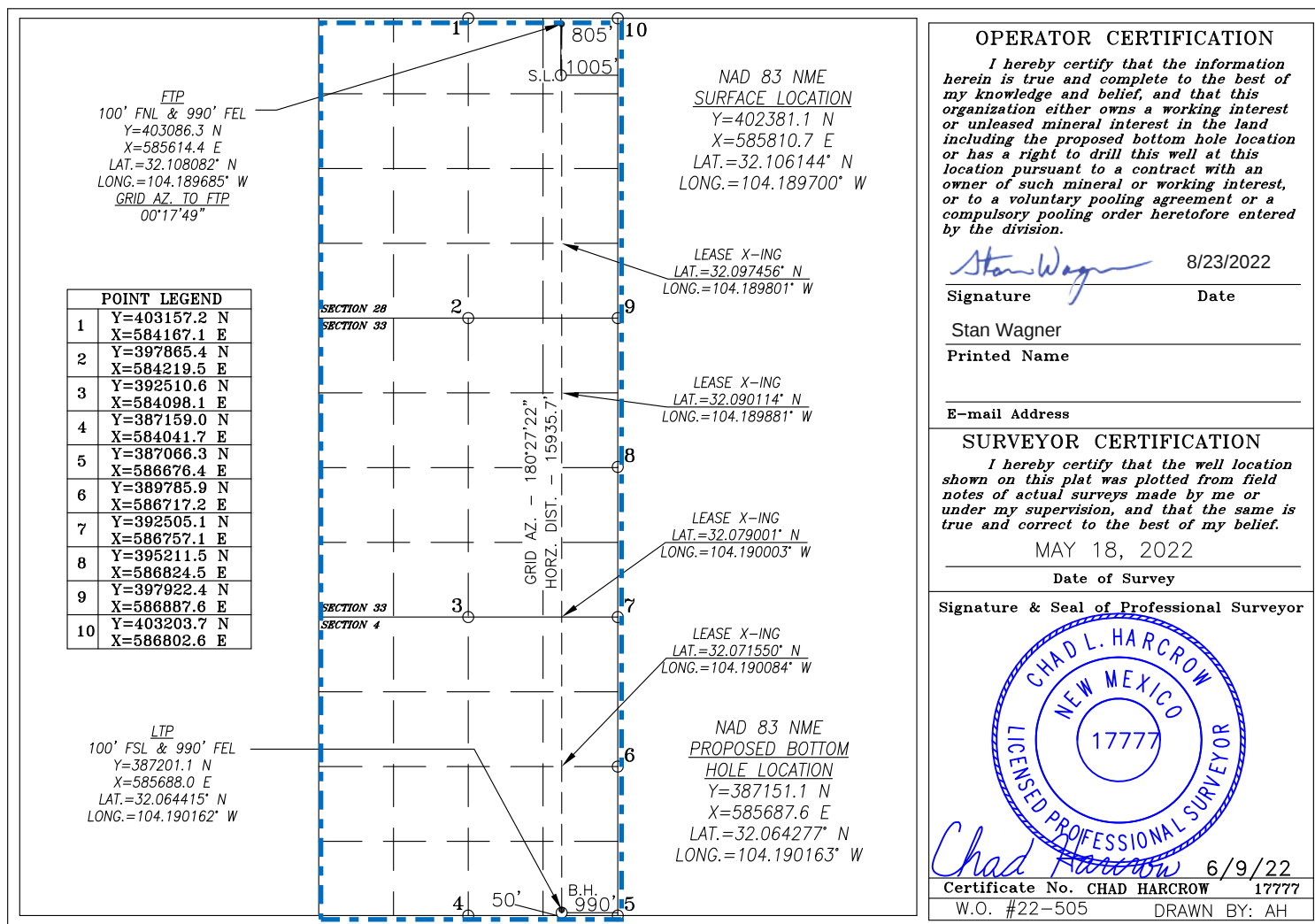
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	25-S	27-E		805	NORTH	1005	EAST	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
P	4	26-S	27-E		50	SOUTH	990	EAST	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



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 Production LLC

OGRID: 229137

Date: 08/22/2022

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
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: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

If Operator checks this box, Operator will select one of the following:

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

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

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

Section 4 - Notices

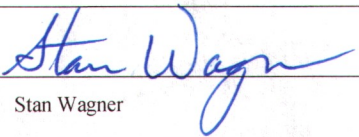
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

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

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

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

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

Signature: 
Printed Name: Stan Wagner
Title: Regulatory Advisor
E-mail Address: stan.s.wagner@conocophillips.com
Date: 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 #520H

1. Geologic Formations

TVD of target	7,967' EOL	Pilot hole depth	NA
MD at TD:	23,779'	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	521	Salt	
Base of Salt	1942	Salt	
Lamar	2173	Salt Water	
Bell Canyon	2220	Salt Water	
Cherry Canyon	3027	Oil/Gas	
Brushy Canyon	4141	Oil/Gas	
Bone Spring Lime	5721	Oil/Gas	
1st Bone Spring Sand	6661	Oil/Gas	
2nd Bone Spring Sand	7163	Oil/Gas	
Charkey	7937	Oil/Gas	
3rd Bone Spring Sand	8497	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	485	13.375"	54.5	J55	STC	5.09	2.93	19.45
12.25"	0	2195	9.625"	40	J55	LTC	2.23	1.29	5.92
8.75"	0	23,779	5.5"	17	P110	LTC	1.94	3.48	3.29
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 #520H

	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 #520H

3. Cementing Program

Casing	# Sk	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	100	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.	330	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	730	11.9	2.5	19	72	Lead: 50:50:10 H Blend
	3990	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	1,695'	20% OH in Lateral (KOP to EOL) – 25% OH in Vertical

COG Production LLC - Flaming Snail Federal Com #520H

4. Pressure Control Equipment

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

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
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 #520H

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 #520H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	3855 psi at 7967' TVD
Abnormal Temperature	NO 140 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

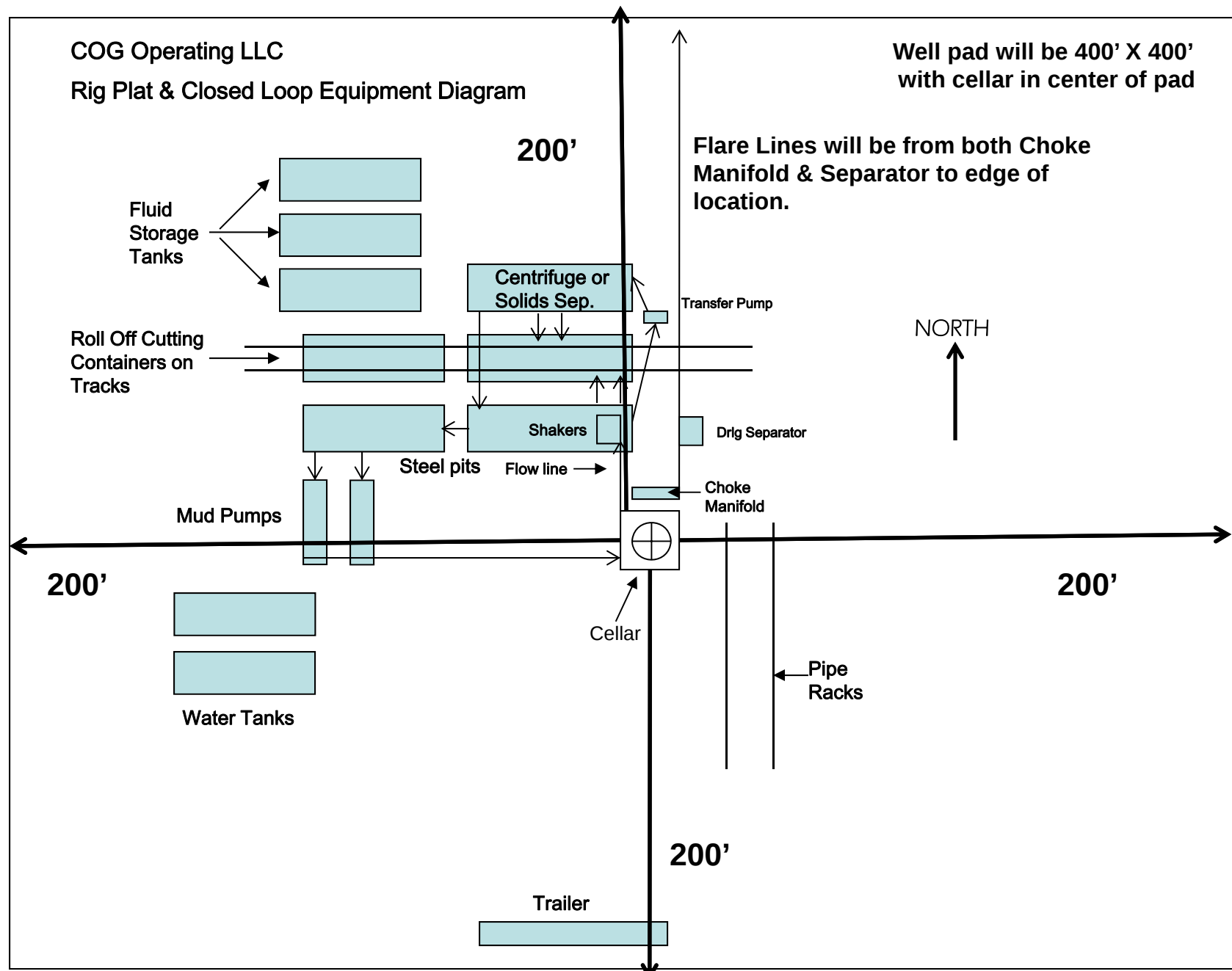


Exhibit 1

"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 #520H

OWB

PWP0

Anticollision Report

01 July, 2022

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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	7,459.0	PWP0 (OWB)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction
7,459.0	23,779.1	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	3,000.0	2,985.7	111.8	100.5	9.888	SF
*FLAMING SNAIL FED COM #701H - OWB - PWP0	3,037.5	3,022.6	111.6	100.4	9.929	CC, ES
*FLAMING SNAIL FED COM #702H - OWB - PWP0	3,600.0	3,586.8	49.5	37.5	4.128	SF
*FLAMING SNAIL FED COM #702H - OWB - PWP0	3,610.0	3,596.7	49.4	37.5	4.137	ES
*FLAMING SNAIL FED COM #702H - OWB - PWP0	3,635.1	3,621.6	49.3	37.5	4.172	CC
*FLAMING SNAIL FED COM #703H - OWB - PWP0	3,325.0	3,313.2	72.1	61.6	6.915	SF
*FLAMING SNAIL FED COM #703H - OWB - PWP0	3,372.7	3,360.3	71.7	61.3	6.919	CC, ES
*FLAMING SNAIL FED COM #704H - OWB - PWP0	2,900.0	2,921.0	119.3	109.2	11.867	SF
*FLAMING SNAIL FED COM #704H - OWB - PWP0	2,942.4	2,961.0	118.7	108.8	11.979	CC, ES
*FLAMING SNAIL FED COM #705H - OWB - PWP0	2,500.0	2,517.2	210.0	200.8	22.787	SF
*FLAMING SNAIL FED COM #705H - OWB - PWP0	2,537.5	2,551.7	209.8	200.6	22.824	CC, ES
*FLAMING SNAIL FED COM #706H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #707H - OWB - PWP0						Out of range
*FLAMING SNAIL FED COM #801H - OWB - PWP0	3,807.5	3,772.5	157.2	143.1	11.129	CC, ES, SF
*FLAMING SNAIL FED COM #802H - OWB - PWP0	4,320.3	4,281.6	145.0	130.8	10.209	CC, ES
*FLAMING SNAIL FED COM #802H - OWB - PWP0	7,900.0	7,804.4	258.8	231.3	9.430	SF
*FLAMING SNAIL FED COM #803H - OWB - PWP0	3,183.7	3,139.7	303.4	292.7	28.424	CC
*FLAMING SNAIL FED COM #803H - OWB - PWP0	3,200.0	3,155.6	303.4	292.7	28.366	ES
*FLAMING SNAIL FED COM #803H - OWB - PWP0	4,085.0	4,021.5	356.1	342.9	26.948	SF
*FLAMING SNAIL FED COM #804H - OWB - PWP0						Out of range
CICADA UNIT #14H - OWB - AWP						Out of range
CICADA UNIT #15H - OWB - AWP						Out of range
CICADA UNIT #16H - OWB - AWP						Out of range
CICADA UNIT #17H - OWB - AWP						Out of range
FLAMING SNAIL FEDERAL COM #501H - OWB - PWP0	2,000.0	1,999.7	30.0	23.4	4.560	CC, ES
FLAMING SNAIL FEDERAL COM #501H - OWB - PWP0	23,779.1	23,465.3	784.2	538.9	3.197	SF
FLAMING SNAIL FEDERAL COM #502H - OWB - PWP0	1,995.2	1,995.6	29.9	23.3	4.546	CC
FLAMING SNAIL FEDERAL COM #502H - OWB - PWP0	2,000.0	2,000.4	29.9	23.3	4.544	ES
FLAMING SNAIL FEDERAL COM #502H - OWB - PWP0	23,779.1	23,377.7	729.5	483.7	2.968	SF
FLAMING SNAIL FEDERAL COM #503H - OWB - PWP0						Out of range
LEONARDO BKL FEDERAL COM #1 - OWB - AWP	9,749.6	7,933.8	981.5	725.0	3.828	CC, ES, SF
WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AW						Out of range

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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						

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	23,779.1	24,422.9				Out of Range @TD
*FLAMING SNAIL FED COM #702H - OWB - PWP0	23,779.1	24,369.6				Out of Range @TD
*FLAMING SNAIL FED COM #703H - OWB - PWP0	23,779.1	24,381.8				Out of Range @TD
*FLAMING SNAIL FED COM #704H - OWB - PWP0	23,779.1	24,378.8				Out of Range @TD
*FLAMING SNAIL FED COM #705H - OWB - PWP0	23,779.1	24,429.2				Out of Range @TD
*FLAMING SNAIL FED COM #706H - OWB - PWP0	23,779.1	24,346.1				Out of Range @TD
*FLAMING SNAIL FED COM #707H - OWB - PWP0	23,779.1	24,239.9				Out of Range @TD
*FLAMING SNAIL FED COM #801H - OWB - PWP0	23,779.1	25,570.8				Out of Range @TD
*FLAMING SNAIL FED COM #802H - OWB - PWP0	23,779.1	25,500.7				Out of Range @TD
*FLAMING SNAIL FED COM #803H - OWB - PWP0	23,779.1	25,812.8				Out of Range @TD
*FLAMING SNAIL FED COM #804H - OWB - PWP0	23,779.1	25,412.6				Out of Range @TD
CICADA UNIT #14H - OWB - AWP	23,779.1	8,094.7				Out of Range @TD
CICADA UNIT #15H - OWB - AWP	23,779.1	8,131.5				Out of Range @TD
CICADA UNIT #16H - OWB - AWP	23,779.1	8,144.4				Out of Range @TD
CICADA UNIT #17H - OWB - AWP	23,779.1	8,054.0				Out of Range @TD
FLAMING SNAIL FEDERAL COM #501H - OWB - PWP0	23,779.1	23,465.3	784.2	538.9	3.197	SF
FLAMING SNAIL FEDERAL COM #502H - OWB - PWP0	23,779.1	23,377.7	729.5	483.7	2.968	SF
FLAMING SNAIL FEDERAL COM #503H - OWB - PWP0	23,779.1	23,316.1				Out of Range @TD
LEONARDO BKL FEDERAL COM #1 - OWB - AWP	23,779.1	7,940.8				Out of Range @TD
WHITE CITY 21 25 27 FEDERAL COM #6H - OWB - AW	23,779.1	7,022.0				Out of Range @TD

Offset Design:	FLAMING SNAIL FED COM PROJECT - *FLAMING SNAIL FED COM #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program:	0-Standard Keeper 104, 8474-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	
0.0	0.0	10.8	10.8	3.0	3.0	12.06	202.8	43.3	207.4					
95.0	95.0	105.8	105.8	3.0	3.0	12.06	202.8	43.3	207.4	201.4	6.00	34.564		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8474-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)					
100.0	100.0	110.8	110.8	3.0	3.0	12.06	202.8	43.3	207.4	201.4	6.00	34.563	
190.0	190.0	200.8	200.8	3.0	3.0	12.06	202.8	43.3	207.4	201.4	6.01	34.513	
200.0	200.0	210.8	210.8	3.0	3.0	12.06	202.8	43.3	207.4	201.4	6.01	34.505	
285.0	285.0	295.8	295.8	3.0	3.0	12.06	202.8	43.3	207.4	201.4	6.03	34.405	
300.0	300.0	310.8	310.8	3.0	3.0	12.06	202.8	43.3	207.4	201.4	6.03	34.383	
380.0	380.0	390.8	390.8	3.0	3.0	12.06	202.8	43.3	207.4	201.4	6.06	34.241	
400.0	400.0	410.8	410.8	3.0	3.0	12.06	202.8	43.3	207.4	201.3	6.06	34.199	
475.0	475.0	485.8	485.8	3.0	3.1	12.06	202.8	43.3	207.4	201.3	6.10	34.023	
500.0	500.0	510.8	510.8	3.1	3.1	12.06	202.8	43.3	207.4	201.3	6.11	33.958	
570.0	570.0	580.8	580.8	3.1	3.1	12.06	202.8	43.3	207.4	201.3	6.14	33.755	
600.0	600.0	610.8	610.8	3.1	3.1	12.06	202.8	43.3	207.4	201.2	6.16	33.661	
665.0	665.0	675.8	675.8	3.1	3.1	12.06	202.8	43.3	207.4	201.2	6.20	33.441	
700.0	700.0	710.8	710.8	3.1	3.1	12.06	202.8	43.3	207.4	201.2	6.23	33.314	
760.0	760.0	770.8	770.8	3.1	3.1	12.06	202.8	43.3	207.4	201.1	6.27	33.083	
800.0	800.0	810.8	810.8	3.2	3.2	12.06	202.8	43.3	207.4	201.1	6.30	32.921	
855.0	855.0	865.8	865.8	3.2	3.2	12.06	202.8	43.3	207.4	201.1	6.35	32.688	
900.0	900.0	910.8	910.8	3.2	3.2	12.06	202.8	43.3	207.4	201.0	6.38	32.489	
950.0	950.0	960.8	960.8	3.2	3.2	12.06	202.8	43.3	207.4	201.0	6.43	32.259	
1,000.0	1,000.0	1,010.8	1,010.8	3.2	3.2	12.06	202.8	43.3	207.4	200.9	6.48	32.021	
1,045.0	1,045.0	1,055.8	1,055.8	3.3	3.3	12.06	202.8	43.3	207.4	200.9	6.52	31.800	
1,100.0	1,100.0	1,110.8	1,110.8	3.3	3.3	12.06	202.8	43.3	207.4	200.8	6.58	31.524	
1,140.0	1,140.0	1,150.8	1,150.8	3.3	3.3	12.06	202.8	43.3	207.4	200.8	6.62	31.318	
1,200.0	1,200.0	1,210.8	1,210.8	3.4	3.4	12.06	202.8	43.3	207.4	200.7	6.69	31.002	
1,235.0	1,235.0	1,245.8	1,245.8	3.4	3.4	12.06	202.8	43.3	207.4	200.7	6.73	30.815	
1,300.0	1,300.0	1,310.8	1,310.8	3.4	3.4	12.06	202.8	43.3	207.4	200.6	6.81	30.461	
1,330.0	1,330.0	1,340.8	1,340.8	3.4	3.4	12.06	202.8	43.3	207.4	200.6	6.85	30.296	
1,400.0	1,400.0	1,410.8	1,410.8	3.5	3.5	12.06	202.8	43.3	207.4	200.5	6.94	29.906	
1,425.0	1,425.0	1,435.8	1,435.8	3.5	3.5	12.06	202.8	43.3	207.4	200.4	6.97	29.765	
1,500.0	1,500.0	1,510.8	1,510.8	3.5	3.6	12.06	202.8	43.3	207.4	200.3	7.07	29.340	
1,520.0	1,520.0	1,530.8	1,530.8	3.6	3.6	12.06	202.8	43.3	207.4	200.3	7.10	29.226	
1,600.0	1,600.0	1,610.8	1,610.8	3.6	3.6	12.06	202.8	43.3	207.4	200.2	7.21	28.768	
1,615.0	1,615.0	1,625.8	1,625.8	3.6	3.6	12.06	202.8	43.3	207.4	200.2	7.23	28.682	
1,700.0	1,700.0	1,710.8	1,710.8	3.7	3.7	12.06	202.8	43.3	207.4	200.1	7.36	28.193	
1,710.0	1,710.0	1,720.8	1,720.8	3.7	3.7	12.06	202.8	43.3	207.4	200.0	7.37	28.136	
1,800.0	1,800.0	1,810.8	1,810.8	3.8	3.8	12.06	202.8	43.3	207.4	199.9	7.51	27.618	
1,805.0	1,805.0	1,815.8	1,815.8	3.8	3.8	12.06	202.8	43.3	207.4	199.9	7.52	27.589	
1,900.0	1,900.0	1,910.8	1,910.8	3.9	3.9	12.06	202.8	43.3	207.4	199.7	7.67	27.046	
1,995.0	1,995.0	2,005.8	2,005.8	3.9	3.9	12.06	202.8	43.3	207.4	199.6	7.82	26.507	
2,000.0	2,000.0	2,010.8	2,010.8	3.9	3.9	12.06	202.8	43.3	207.4	199.6	7.83	26.479	
2,090.0	2,090.0	2,100.8	2,100.8	4.1	4.0	11.87	202.8	43.3	206.0	197.9	8.11	25.407	
2,100.0	2,100.0	2,110.8	2,110.8	4.2	4.0	11.89	202.8	43.3	205.7	197.6	8.14	25.264	
2,185.0	2,184.9	2,195.7	2,195.7	4.7	4.1	12.16	202.8	43.3	201.6	192.8	8.78	22.953	
2,200.0	2,199.8	2,210.6	2,210.6	4.8	4.1	12.22	202.8	43.3	200.6	191.7	8.90	22.531	
2,280.0	2,279.6	2,290.4	2,290.4	5.3	4.2	12.67	202.8	43.3	194.0	184.6	9.46	20.514	
2,300.0	2,299.5	2,310.3	2,310.3	5.4	4.2	12.81	202.8	43.3	192.1	182.5	9.60	20.003	
2,375.0	2,373.9	2,384.7	2,384.7	5.9	4.3	13.46	202.8	43.3	183.5	173.4	10.09	18.181	
2,400.0	2,398.7	2,409.5	2,409.5	6.0	4.3	13.72	202.8	43.3	180.2	169.9	10.26	17.567	
2,470.0	2,467.9	2,478.7	2,478.7	6.4	4.4	14.62	202.8	43.3	169.9	159.2	10.69	15.895	
2,500.0	2,497.5	2,508.0	2,508.0	6.5	4.4	15.09	202.8	43.4	165.1	154.2	10.88	15.175	
2,565.0	2,561.3	2,569.6	2,569.6	6.8	4.4	16.50	203.2	44.1	154.1	142.9	11.14	13.833	
2,575.2	2,571.4	2,579.3	2,579.2	6.8	4.5	16.79	203.3	44.3	152.3	141.1	11.18	13.625	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #701H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8474-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 Factor	
2,600.0	2,595.6	2,602.7	2,602.7	6.8	4.5	17.53	203.7	45.0	148.1	136.9	11.22	13.199
2,660.0	2,654.4	2,659.7	2,659.6	6.9	4.5	19.73	204.9	47.3	138.7	127.4	11.31	12.266
2,700.0	2,693.6	2,697.7	2,697.5	7.0	4.5	21.55	205.9	49.4	133.0	121.7	11.35	11.717
2,755.0	2,747.5	2,750.0	2,749.7	7.1	4.6	24.53	207.8	53.1	126.2	114.8	11.42	11.049
2,800.0	2,791.6	2,792.8	2,792.3	7.1	4.6	27.39	209.6	56.7	121.5	110.0	11.45	10.607
2,850.0	2,840.6	2,840.4	2,839.6	7.2	4.6	31.01	212.0	61.3	117.3	105.9	11.46	10.235
2,900.0	2,889.6	2,887.9	2,886.7	7.3	4.7	35.04	214.7	66.7	114.4	103.0	11.44	10.005
2,945.0	2,933.7	2,931.7	2,930.1	7.4	4.7	39.02	217.5	72.1	112.9	101.5	11.39	9.909
3,000.0	2,987.6	2,985.7	2,983.6	7.5	4.7	44.04	220.9	78.8	111.8	100.5	11.31	9.888 SF
3,037.5	3,024.4	3,022.6	3,020.1	7.6	4.7	47.50	223.3	83.4	111.6	100.4	11.24	9.929 CC, ES
3,040.0	3,026.8	3,025.1	3,022.5	7.6	4.7	47.73	223.4	83.7	111.6	100.4	11.24	9.934
3,100.0	3,085.6	3,084.0	3,081.0	7.7	4.8	53.25	227.1	91.0	112.2	101.1	11.11	10.098
3,135.0	3,119.9	3,118.5	3,115.0	7.8	4.8	56.43	229.3	95.3	113.0	102.0	11.04	10.242
3,200.0	3,183.6	3,182.4	3,178.3	8.0	4.9	62.18	233.4	103.2	115.5	104.6	10.90	10.593
3,230.0	3,213.0	3,211.9	3,207.5	8.0	4.9	64.74	235.2	106.8	117.1	106.2	10.85	10.786
3,300.0	3,281.6	3,280.7	3,275.7	8.2	4.9	70.43	239.6	115.4	121.5	110.8	10.76	11.297
3,325.0	3,306.1	3,305.2	3,300.0	8.3	5.0	72.36	241.1	118.4	123.4	112.7	10.74	11.495
3,400.0	3,379.6	3,379.0	3,373.0	8.5	5.0	77.80	245.8	127.6	129.9	119.1	10.71	12.122
3,420.0	3,399.2	3,398.6	3,392.5	8.5	5.0	79.16	247.0	130.0	131.8	121.0	10.72	12.294
3,500.0	3,477.6	3,477.3	3,470.4	8.7	5.1	84.21	252.0	139.7	140.1	129.3	10.78	12.995
3,515.0	3,492.3	3,492.0	3,485.0	8.8	5.1	85.09	252.9	141.6	141.8	131.0	10.80	13.127
3,600.0	3,575.6	3,575.6	3,567.7	9.0	5.2	89.70	258.2	151.9	151.9	140.9	10.95	13.871
3,610.0	3,585.4	3,585.4	3,577.5	9.0	5.2	90.20	258.8	153.2	153.1	142.1	10.97	13.958
3,700.0	3,673.5	3,673.9	3,665.1	9.3	5.3	94.38	264.4	164.1	164.8	153.6	11.19	14.725
3,705.0	3,678.4	3,678.8	3,670.0	9.3	5.3	94.60	264.8	164.7	165.5	154.3	11.21	14.767
3,800.0	3,771.5	3,772.2	3,762.4	9.6	5.3	98.37	270.7	176.3	178.7	167.2	11.50	15.547
3,895.0	3,864.6	3,865.6	3,854.9	9.8	5.4	101.62	276.6	187.9	192.6	180.8	11.82	16.295
3,900.0	3,869.5	3,870.5	3,859.8	9.8	5.4	101.77	276.9	188.5	193.3	181.5	11.84	16.334
3,990.0	3,957.7	3,959.0	3,947.4	10.1	5.5	104.42	282.5	199.5	207.0	194.8	12.17	17.012
4,000.0	3,967.5	3,968.8	3,957.1	10.1	5.5	104.70	283.1	200.7	208.6	196.4	12.21	17.086
4,085.0	4,050.8	4,052.4	4,039.9	10.4	5.6	106.86	288.4	211.0	221.9	209.3	12.54	17.698
4,100.0	4,065.5	4,067.2	4,054.5	10.4	5.6	107.22	289.3	212.9	224.2	211.6	12.59	17.804
4,180.0	4,143.9	4,145.8	4,132.4	10.7	5.7	109.00	294.3	222.6	237.0	224.1	12.92	18.354
4,200.0	4,163.5	4,165.5	4,151.9	10.8	5.7	109.41	295.5	225.1	240.3	227.3	13.00	18.488
4,275.0	4,237.0	4,239.2	4,224.9	11.0	5.8	110.87	300.2	234.2	252.5	239.2	13.30	18.980
4,300.0	4,261.5	4,263.8	4,249.2	11.1	5.8	111.33	301.7	237.2	256.6	243.2	13.41	19.141
4,370.0	4,330.1	4,332.6	4,317.4	11.3	5.9	112.53	306.1	245.8	268.2	254.5	13.70	19.579
4,400.0	4,359.5	4,362.1	4,346.6	11.4	5.9	113.02	308.0	249.4	273.2	259.4	13.83	19.762
4,465.0	4,423.2	4,426.0	4,409.8	11.6	6.0	114.01	312.0	257.4	284.1	270.0	14.10	20.150
4,500.0	4,457.5	4,460.4	4,443.9	11.7	6.0	114.51	314.2	261.6	290.0	275.8	14.25	20.354
4,560.0	4,516.3	4,519.4	4,502.3	11.9	6.0	115.33	317.9	268.9	300.2	285.7	14.51	20.695
4,600.0	4,555.5	4,558.7	4,541.3	12.0	6.1	115.84	320.4	273.8	307.0	292.3	14.68	20.917
4,655.0	4,609.4	4,612.8	4,594.8	12.2	6.1	116.52	323.8	280.5	316.4	301.5	14.91	21.215
4,700.0	4,653.5	4,657.0	4,638.6	12.4	6.2	117.04	326.6	286.0	324.1	309.0	15.11	21.453
4,750.0	4,702.4	4,706.2	4,687.3	12.5	6.2	117.59	329.7	292.1	332.7	317.4	15.33	21.711
4,800.0	4,751.4	4,755.3	4,736.0	12.7	6.3	118.11	332.8	298.2	341.4	325.8	15.54	21.962
4,845.0	4,795.5	4,799.6	4,779.8	12.8	6.3	118.56	335.6	303.7	349.2	333.4	15.74	22.183
4,900.0	4,849.4	4,853.6	4,833.3	13.0	6.4	119.08	339.1	310.4	358.7	342.7	15.98	22.446
4,940.0	4,888.6	4,893.0	4,872.3	13.1	6.4	119.44	341.5	315.3	365.7	349.5	16.16	22.633
5,000.0	4,947.4	4,952.0	4,930.7	13.4	6.5	119.96	345.3	322.6	376.2	359.7	16.42	22.906
5,035.0	4,981.7	4,986.4	4,964.8	13.5	6.5	120.25	347.4	326.8	382.3	365.7	16.58	23.061

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #701H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 8474-MWD+IFR1+FDIR						Rule Assigned:					Offset Well Error: 3.0 usft	
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	
5,100.0	5,045.4	5,050.3	5,028.0	13.7	6.6	120.76	351.5	334.8	393.7	376.8	16.87	23.343		
5,130.0	5,074.8	5,079.8	5,057.2	13.8	6.6	120.98	353.4	338.4	398.9	381.9	17.00	23.469		
5,200.0	5,143.4	5,148.6	5,125.4	14.0	6.7	121.49	357.7	346.9	411.3	393.9	17.31	23.758		
5,225.0	5,167.9	5,173.1	5,149.7	14.1	6.7	121.67	359.3	350.0	415.7	398.2	17.42	23.858		
5,300.0	5,241.4	5,246.9	5,222.7	14.4	6.8	122.16	363.9	359.1	428.9	411.1	17.76	24.152		
5,320.0	5,261.0	5,266.5	5,242.2	14.4	6.8	122.29	365.2	361.6	432.4	414.6	17.85	24.229		
5,400.0	5,339.4	5,345.2	5,320.1	14.7	6.9	122.79	370.1	371.3	446.6	428.4	18.21	24.527		
5,415.0	5,354.1	5,359.9	5,334.7	14.8	6.9	122.87	371.1	373.1	449.3	431.0	18.28	24.581		
5,500.0	5,437.4	5,443.5	5,417.5	15.1	7.0	123.36	376.4	383.5	464.3	445.7	18.66	24.883		
5,510.0	5,447.2	5,453.3	5,427.2	15.1	7.0	123.41	377.0	384.7	466.1	447.4	18.71	24.918		
5,600.0	5,535.4	5,541.8	5,514.8	15.4	7.1	123.89	382.6	395.7	482.1	463.0	19.12	25.222		
5,605.0	5,540.3	5,546.7	5,519.7	15.4	7.1	123.91	382.9	396.3	483.0	463.9	19.14	25.238		
5,700.0	5,633.4	5,640.1	5,612.2	15.8	7.2	124.38	388.8	407.9	500.0	480.4	19.57	25.543		
5,795.0	5,726.5	5,733.5	5,704.6	16.1	7.3	124.82	394.7	419.5	516.9	496.9	20.01	25.834		
5,800.0	5,731.4	5,738.4	5,709.5	16.1	7.4	124.84	395.0	420.1	517.8	497.8	20.03	25.849		
5,822.7	5,753.6	5,760.8	5,731.6	16.2	7.4	124.94	396.4	422.8	521.9	501.7	20.14	25.917		
5,890.0	5,819.7	5,827.0	5,797.2	16.4	7.5	125.35	400.6	431.1	533.5	513.0	20.45	26.093		
5,900.0	5,829.5	5,836.9	5,807.0	16.5	7.5	125.40	401.2	432.3	535.1	514.6	20.49	26.115		
5,985.0	5,913.5	5,920.8	5,890.1	16.8	7.6	125.65	406.5	442.7	548.3	527.4	20.89	26.252		
6,000.0	5,928.3	5,935.7	5,904.8	16.9	7.6	125.67	407.5	444.5	550.5	529.5	20.96	26.268		
6,080.0	6,007.7	6,014.9	5,983.3	17.3	7.7	125.66	412.5	454.3	561.3	540.0	21.32	26.324		
6,100.0	6,027.6	6,034.8	6,002.9	17.4	7.7	125.63	413.7	456.8	563.8	542.4	21.41	26.329		
6,175.0	6,102.3	6,109.1	6,076.6	17.7	7.8	125.39	418.5	466.0	572.5	550.8	21.75	26.324		
6,200.0	6,127.2	6,134.0	6,101.2	17.9	7.8	125.27	420.0	469.1	575.2	553.3	21.86	26.312		
6,270.0	6,197.1	6,203.4	6,170.0	18.2	7.9	124.85	424.4	477.7	582.0	559.8	22.16	26.258		
6,300.0	6,227.1	6,233.2	6,199.4	18.3	7.9	124.63	426.3	481.4	584.6	562.3	22.29	26.224		
6,365.0	6,292.0	6,297.6	6,263.3	18.6	8.0	124.06	430.4	489.4	589.8	567.2	22.57	26.135		
6,398.0	6,325.0	6,330.3	6,295.6	18.8	8.0	124.00	432.4	493.4	592.1	569.4	22.71	26.078		
6,400.0	6,327.0	6,332.3	6,297.6	18.8	8.0	123.98	432.6	493.7	592.3	569.5	22.71	26.075		
6,460.0	6,387.0	6,391.7	6,356.4	18.9	8.1	123.28	436.3	501.1	596.4	573.4	22.95	25.982		
6,500.0	6,427.0	6,431.3	6,395.6	19.1	8.2	122.82	438.8	506.0	599.2	576.1	23.11	25.922		
6,555.0	6,482.0	6,485.8	6,449.6	19.2	8.2	122.20	442.3	512.7	603.1	579.7	23.34	25.840		
6,600.0	6,527.0	6,530.3	6,493.7	19.4	8.3	121.69	445.1	518.2	606.3	582.8	23.53	25.774		
6,650.0	6,577.0	6,579.9	6,542.7	19.5	8.3	121.14	448.2	524.4	610.0	586.3	23.73	25.702		
6,700.0	6,627.0	6,629.4	6,591.8	19.7	8.4	120.59	451.4	530.5	613.7	589.8	23.94	25.632		
6,745.0	6,672.0	6,673.9	6,635.9	19.8	8.4	120.10	454.2	536.0	617.1	593.0	24.13	25.570		
6,800.0	6,727.0	6,728.4	6,689.8	20.0	8.5	119.51	457.6	542.8	621.3	597.0	24.37	25.497		
6,840.0	6,767.0	6,768.0	6,729.1	20.1	8.6	119.09	460.1	547.7	624.5	599.9	24.54	25.444		
6,900.0	6,827.0	6,827.4	6,787.9	20.3	8.6	118.46	463.9	555.1	629.2	604.4	24.80	25.367		
6,935.0	6,862.0	6,862.1	6,822.2	20.4	8.7	118.10	466.1	559.4	632.0	607.0	24.96	25.324		
7,000.0	6,927.0	6,926.4	6,886.0	20.6	8.8	117.44	470.1	567.4	637.2	612.0	25.24	25.244		
7,030.0	6,957.0	6,956.2	6,915.4	20.7	8.8	117.14	472.0	571.0	639.7	614.3	25.38	25.209		
7,100.0	7,027.0	7,028.3	6,986.9	20.9	8.9	116.42	476.5	579.8	645.4	619.7	25.70	25.114		
7,125.0	7,052.0	7,054.9	7,013.3	21.0	8.9	116.18	478.1	582.9	647.3	621.5	25.82	25.074		
7,200.0	7,127.0	7,134.9	7,092.6	21.2	9.0	115.50	482.5	591.5	652.8	626.6	26.17	24.944		
7,220.0	7,147.0	7,156.3	7,113.9	21.3	9.0	115.33	483.5	593.6	654.2	627.9	26.26	24.906		
7,300.0	7,227.0	7,241.9	7,199.0	21.6	9.1	114.73	487.5	601.4	659.2	632.6	26.64	24.743		
7,315.0	7,242.0	7,258.0	7,215.1	21.6	9.1	114.63	488.2	602.7	660.1	633.4	26.71	24.711		
7,400.0	7,327.0	7,349.3	7,306.0	21.9	9.3	114.11	491.7	609.6	664.5	637.4	27.11	24.514		
7,410.0	7,337.0	7,360.0	7,316.8	21.9	9.3	114.05	492.1	610.3	665.0	637.9	27.14	24.505		
7,459.0	7,386.0	7,412.8	7,369.4	22.0	9.3	113.81	493.7	613.6	667.2	639.9	27.28	24.458		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #701H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8474-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		Between Centres (usft)	Between Ellipses (usft)	Factor	
							+N/-S (usft)	+E/-W (usft)				
7,500.0	7,427.0	7,456.9	7,413.4	22.0	9.4	-66.86	494.9	616.0	668.2	640.8	27.33	24.449
7,505.0	7,432.0	7,462.3	7,418.8	22.0	9.4	-66.91	495.1	616.3	668.2	640.9	27.34	24.443
7,550.0	7,476.7	7,510.3	7,466.8	22.1	9.4	-67.58	496.2	618.5	667.6	640.2	27.41	24.359
7,600.0	7,525.6	7,563.0	7,519.4	22.3	9.5	-68.79	497.3	620.5	665.3	637.8	27.49	24.204
7,650.0	7,573.5	7,614.6	7,571.0	22.5	9.5	-70.47	498.1	622.1	661.3	633.7	27.56	23.992
7,695.0	7,615.4	7,659.9	7,616.2	22.6	9.6	-72.36	498.6	623.2	656.6	628.9	27.63	23.761
7,700.0	7,620.0	7,664.8	7,621.2	22.6	9.6	-72.59	498.7	623.3	656.0	628.3	27.64	23.733
7,750.0	7,664.7	7,713.2	7,669.6	22.8	9.7	-75.08	499.0	624.0	649.7	622.0	27.72	23.438
7,790.0	7,698.9	7,750.4	7,706.8	22.9	9.7	-77.29	499.2	624.3	644.3	616.6	27.79	23.188
7,800.0	7,707.3	7,759.5	7,715.9	22.9	9.7	-77.87	499.2	624.3	643.0	615.2	27.81	23.123
7,850.0	7,747.4	7,801.8	7,758.2	23.1	9.7	-80.78	499.2	624.4	636.3	608.3	27.90	22.802
7,885.0	7,773.9	7,828.3	7,784.7	23.2	9.8	-82.76	499.2	624.4	632.0	604.0	27.98	22.586
7,900.0	7,784.8	7,839.2	7,795.6	23.2	9.8	-83.61	499.2	624.4	630.3	602.3	28.02	22.496
7,950.0	7,819.1	7,873.6	7,829.9	23.3	9.8	-86.34	499.2	624.4	625.7	597.6	28.17	22.209
7,980.0	7,838.2	7,892.6	7,849.0	23.4	9.8	-87.87	499.2	624.4	623.9	595.6	28.29	22.053
8,000.0	7,850.2	7,904.6	7,861.0	23.4	9.9	-88.83	499.2	624.4	623.1	594.8	28.38	21.958
8,026.3	7,865.1	7,919.5	7,875.9	23.4	9.9	-90.00	499.2	624.4	622.8	594.3	28.51	21.845
8,050.0	7,877.7	7,932.1	7,888.5	23.5	9.9	-90.95	499.2	624.4	623.1	594.5	28.64	21.758
8,075.0	7,890.0	7,944.5	7,900.8	23.5	9.9	-91.83	499.2	624.4	624.2	595.4	28.79	21.681
8,100.0	7,901.4	7,955.9	7,912.2	23.5	9.9	-92.57	499.2	624.4	626.1	597.1	28.95	21.624
8,150.0	7,921.3	7,975.8	7,932.1	23.6	9.9	-93.60	499.2	624.4	632.4	603.1	29.31	21.574
8,170.0	7,928.1	7,982.6	7,938.9	23.6	9.9	-93.83	499.2	624.4	635.9	606.5	29.47	21.581
8,200.0	7,937.1	7,991.5	7,947.9	23.6	10.0	-93.96	499.2	624.4	642.3	612.6	29.71	21.622
8,250.0	7,948.7	8,003.1	7,959.5	23.6	10.0	-93.58	499.2	624.4	655.9	625.8	30.12	21.778
8,265.0	7,951.3	8,005.8	7,962.1	23.7	10.0	-93.31	499.2	624.4	660.7	630.5	30.24	21.846
8,300.0	7,956.0	8,010.4	7,966.8	23.7	10.0	-92.41	499.2	624.4	673.1	642.6	30.53	22.047
8,350.0	7,958.9	8,013.4	7,969.7	23.7	10.0	-90.44	499.2	624.4	693.6	662.7	30.92	22.429
8,358.7	7,959.0	8,013.5	7,969.8	23.7	10.0	-90.01	499.2	624.4	697.5	666.5	30.99	22.507
8,360.0	7,959.0	8,013.5	7,969.8	23.7	10.0	-90.02	499.2	624.4	698.0	667.1	31.00	22.519
8,400.0	7,959.0	8,013.5	7,969.8	23.7	10.0	-90.02	499.2	624.4	717.0	685.7	31.29	22.917
8,455.0	7,959.0	8,013.5	7,969.8	23.7	10.0	-90.02	499.2	624.4	745.8	714.1	31.66	23.559
8,500.0	7,959.1	8,013.5	7,969.9	23.7	10.0	-90.02	499.2	624.4	771.5	739.5	31.93	24.165
8,550.0	7,959.1	8,013.6	7,969.9	23.7	10.0	-90.02	499.2	624.4	802.0	769.8	32.20	24.908
8,600.0	7,959.1	8,013.6	7,969.9	23.7	10.0	-90.03	499.2	624.4	834.4	802.0	32.44	25.725
8,645.0	7,959.1	8,013.6	7,969.9	23.7	10.0	-90.03	499.2	624.4	865.0	832.4	32.63	26.512
8,700.0	7,959.2	8,013.6	7,970.0	23.7	10.0	-90.03	499.2	624.4	904.0	871.2	32.83	27.539
8,740.0	7,959.2	8,013.7	7,970.0	23.7	10.0	-90.03	499.2	624.4	933.4	900.5	32.96	28.322
8,800.0	7,959.2	8,013.7	7,970.0	23.7	10.0	-90.04	499.2	624.4	979.0	945.8	33.13	29.553

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8534-MWD+IFR1+FDIR												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)					
0.0	0.0	10.8	10.8	3.0	3.0	3.76	202.9	13.3	203.3				
95.0	95.0	105.8	105.8	3.0	3.0	3.76	202.9	13.3	203.3	197.3	6.00	33.879	
100.0	100.0	110.8	110.8	3.0	3.0	3.76	202.9	13.3	203.3	197.3	6.00	33.878	
190.0	190.0	200.8	200.8	3.0	3.0	3.76	202.9	13.3	203.3	197.3	6.01	33.828	
200.0	200.0	210.8	210.8	3.0	3.0	3.76	202.9	13.3	203.3	197.3	6.01	33.819	
285.0	285.0	295.8	295.8	3.0	3.0	3.76	202.9	13.3	203.3	197.3	6.03	33.718	
300.0	300.0	310.8	310.8	3.0	3.0	3.76	202.9	13.3	203.3	197.3	6.03	33.696	
380.0	380.0	390.8	390.8	3.0	3.0	3.76	202.9	13.3	203.3	197.2	6.06	33.553	
400.0	400.0	410.8	410.8	3.0	3.0	3.76	202.9	13.3	203.3	197.2	6.07	33.511	
475.0	475.0	485.8	485.8	3.0	3.1	3.76	202.9	13.3	203.3	197.2	6.10	33.334	
500.0	500.0	510.8	510.8	3.1	3.1	3.76	202.9	13.3	203.3	197.2	6.11	33.268	
570.0	570.0	580.8	580.8	3.1	3.1	3.76	202.9	13.3	203.3	197.1	6.15	33.064	
600.0	600.0	610.8	610.8	3.1	3.1	3.76	202.9	13.3	203.3	197.1	6.17	32.969	
665.0	665.0	675.8	675.8	3.1	3.1	3.76	202.9	13.3	203.3	197.1	6.21	32.747	
700.0	700.0	710.8	710.8	3.1	3.1	3.76	202.9	13.3	203.3	197.1	6.23	32.620	
760.0	760.0	770.8	770.8	3.1	3.1	3.76	202.9	13.3	203.3	197.0	6.28	32.388	
800.0	800.0	810.8	810.8	3.2	3.2	3.76	202.9	13.3	203.3	197.0	6.31	32.225	
855.0	855.0	865.8	865.8	3.2	3.2	3.76	202.9	13.3	203.3	196.9	6.35	31.991	
900.0	900.0	910.8	910.8	3.2	3.2	3.76	202.9	13.3	203.3	196.9	6.39	31.790	
950.0	950.0	960.8	960.8	3.2	3.2	3.76	202.9	13.3	203.3	196.9	6.44	31.560	
1,000.0	1,000.0	1,010.8	1,010.8	3.2	3.2	3.76	202.9	13.3	203.3	196.8	6.49	31.321	
1,045.0	1,045.0	1,055.8	1,055.8	3.3	3.3	3.76	202.9	13.3	203.3	196.8	6.54	31.100	
1,100.0	1,100.0	1,110.8	1,110.8	3.3	3.3	3.76	202.9	13.3	203.3	196.7	6.60	30.823	
1,140.0	1,140.0	1,150.8	1,150.8	3.3	3.3	3.76	202.9	13.3	203.3	196.7	6.64	30.617	
1,200.0	1,200.0	1,210.8	1,210.8	3.4	3.4	3.76	202.9	13.3	203.3	196.6	6.71	30.301	
1,235.0	1,235.0	1,245.8	1,245.8	3.4	3.4	3.76	202.9	13.3	203.3	196.5	6.75	30.114	
1,300.0	1,300.0	1,310.8	1,310.8	3.4	3.4	3.76	202.9	13.3	203.3	196.5	6.83	29.761	
1,330.0	1,330.0	1,340.8	1,340.8	3.4	3.4	3.76	202.9	13.3	203.3	196.4	6.87	29.595	
1,400.0	1,400.0	1,410.8	1,410.8	3.5	3.5	3.76	202.9	13.3	203.3	196.3	6.96	29.206	
1,425.0	1,425.0	1,435.8	1,435.8	3.5	3.5	3.76	202.9	13.3	203.3	196.3	6.99	29.066	
1,500.0	1,500.0	1,510.8	1,510.8	3.5	3.6	3.76	202.9	13.3	203.3	196.2	7.10	28.642	
1,520.0	1,520.0	1,530.8	1,530.8	3.6	3.6	3.76	202.9	13.3	203.3	196.2	7.13	28.528	
1,600.0	1,600.0	1,610.8	1,610.8	3.6	3.6	3.76	202.9	13.3	203.3	196.1	7.24	28.072	
1,615.0	1,615.0	1,625.8	1,625.8	3.6	3.6	3.76	202.9	13.3	203.3	196.0	7.26	27.986	
1,700.0	1,700.0	1,710.8	1,710.8	3.7	3.7	3.76	202.9	13.3	203.3	195.9	7.39	27.500	
1,710.0	1,710.0	1,720.8	1,720.8	3.7	3.7	3.76	202.9	13.3	203.3	195.9	7.41	27.443	
1,800.0	1,800.0	1,810.8	1,810.8	3.8	3.8	3.76	202.9	13.3	203.3	195.7	7.55	26.929	
1,805.0	1,805.0	1,815.8	1,815.8	3.8	3.8	3.76	202.9	13.3	203.3	195.7	7.56	26.900	
1,900.0	1,900.0	1,910.8	1,910.8	3.9	3.9	3.76	202.9	13.3	203.3	195.6	7.71	26.361	
1,995.0	1,995.0	2,005.8	2,005.8	3.9	3.9	3.76	202.9	13.3	203.3	195.4	7.87	25.827	
2,000.0	2,000.0	2,010.8	2,010.8	3.9	3.9	3.76	202.9	13.3	203.3	195.4	7.88	25.799	
2,090.0	2,090.0	2,100.8	2,100.8	4.1	4.0	3.51	202.9	13.3	201.9	193.7	8.15	24.759	
2,100.0	2,100.0	2,110.8	2,110.8	4.2	4.0	3.52	202.9	13.3	201.6	193.4	8.19	24.622	
2,185.0	2,184.9	2,195.7	2,195.7	4.7	4.1	3.60	202.9	13.3	197.3	188.5	8.81	22.396	
2,200.0	2,199.8	2,210.6	2,210.6	4.8	4.1	3.62	202.9	13.3	196.3	187.4	8.93	21.991	
2,280.0	2,279.6	2,290.4	2,290.4	5.3	4.2	3.75	202.9	13.3	189.7	180.2	9.48	20.014	
2,300.0	2,299.5	2,310.3	2,310.3	5.4	4.2	3.80	202.9	13.3	187.6	178.0	9.62	19.510	
2,375.0	2,373.9	2,384.7	2,384.7	5.9	4.3	4.00	202.9	13.3	178.8	168.7	10.10	17.699	
2,400.0	2,398.7	2,409.5	2,409.5	6.0	4.3	4.08	202.9	13.3	175.5	165.2	10.27	17.086	
2,470.0	2,467.9	2,478.7	2,478.7	6.4	4.4	4.36	202.9	13.3	164.9	154.2	10.71	15.403	
2,500.0	2,497.5	2,507.9	2,507.9	6.5	4.4	4.50	202.9	13.3	159.9	149.0	10.90	14.673	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8534-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	
2,565.0	2,561.3	2,568.8	2,568.8	6.8	4.5	4.97	203.6	13.7	148.7	137.5	11.18	13.299	
2,575.2	2,571.4	2,578.4	2,578.4	6.8	4.5	5.07	203.8	13.8	147.0	135.7	11.23	13.087	
2,600.0	2,595.6	2,600.0	2,600.0	6.8	4.5	5.31	204.5	14.1	142.8	131.5	11.28	12.652	
2,660.0	2,654.4	2,658.3	2,658.2	6.9	4.5	6.14	206.9	15.1	133.4	122.0	11.42	11.678	
2,700.0	2,693.6	2,696.2	2,696.1	7.0	4.6	6.83	209.0	16.1	127.8	116.3	11.51	11.100	
2,755.0	2,747.5	2,748.6	2,748.2	7.1	4.6	7.99	212.7	17.7	121.0	109.3	11.66	10.377	
2,800.0	2,791.6	2,793.1	2,792.7	7.1	4.7	9.13	216.3	19.3	115.8	104.0	11.78	9.834	
2,850.0	2,840.6	2,842.7	2,842.1	7.2	4.7	10.53	220.2	21.1	110.2	98.3	11.92	9.244	
2,900.0	2,889.6	2,892.3	2,891.5	7.3	4.8	12.07	224.2	22.8	104.6	92.5	12.06	8.675	
2,945.0	2,933.7	2,937.0	2,936.0	7.4	4.8	13.61	227.7	24.4	99.7	87.5	12.18	8.179	
3,000.0	2,987.6	2,991.6	2,990.3	7.5	4.8	15.70	232.0	26.3	93.7	81.4	12.34	7.598	
3,040.0	3,026.8	3,031.2	3,029.9	7.6	4.9	17.40	235.2	27.8	89.5	77.0	12.44	7.192	
3,100.0	3,085.6	3,090.8	3,089.2	7.7	4.9	20.26	239.9	29.9	83.3	70.7	12.59	6.615	
3,135.0	3,119.9	3,125.5	3,123.7	7.8	5.0	22.13	242.7	31.1	79.8	67.1	12.67	6.297	
3,200.0	3,183.6	3,190.0	3,188.0	8.0	5.0	26.06	247.8	33.4	73.6	60.8	12.80	5.748	
3,230.0	3,213.0	3,219.7	3,217.6	8.0	5.1	28.11	250.2	34.4	70.8	58.0	12.84	5.514	
3,300.0	3,281.6	3,289.2	3,286.8	8.2	5.1	33.52	255.7	36.9	64.8	51.9	12.90	5.024	
3,325.0	3,306.1	3,314.0	3,311.5	8.3	5.2	35.69	257.7	37.8	62.8	49.9	12.90	4.869	
3,400.0	3,379.6	3,388.4	3,385.6	8.5	5.2	43.06	263.6	40.4	57.4	44.6	12.82	4.482	
3,420.0	3,399.2	3,408.2	3,405.4	8.5	5.3	45.25	265.2	41.1	56.2	43.4	12.77	4.399	
3,500.0	3,477.6	3,487.6	3,484.5	8.7	5.3	54.92	271.5	43.9	52.1	39.6	12.50	4.171	
3,515.0	3,492.3	3,502.5	3,499.3	8.8	5.4	56.89	272.7	44.5	51.5	39.1	12.43	4.147	
3,600.0	3,575.6	3,586.8	3,583.3	9.0	5.4	68.70	279.4	47.5	49.5	37.5	11.99	4.128 SF	
3,610.0	3,585.4	3,596.7	3,593.2	9.0	5.5	70.14	280.2	47.8	49.4	37.5	11.94	4.137 ES	
3,635.1	3,609.9	3,621.6	3,618.0	9.1	5.5	73.77	282.2	48.7	49.3	37.5	11.81	4.172 CC	
3,700.0	3,673.5	3,686.0	3,682.1	9.3	5.5	83.08	287.3	51.0	50.0	38.4	11.57	4.318	
3,705.0	3,678.4	3,691.0	3,687.1	9.3	5.5	83.78	287.7	51.2	50.1	38.5	11.56	4.332	
3,800.0	3,771.5	3,785.2	3,781.0	9.6	5.6	96.38	295.2	54.5	53.5	41.9	11.53	4.637	
3,895.0	3,864.6	3,879.5	3,874.9	9.8	5.7	107.06	302.7	57.8	59.1	47.2	11.87	4.981	
3,900.0	3,869.5	3,884.4	3,879.8	9.8	5.8	107.56	303.1	58.0	59.5	47.6	11.89	5.000	
3,990.0	3,957.7	3,973.7	3,968.8	10.1	5.8	115.65	310.2	61.2	66.4	54.0	12.42	5.350	
4,000.0	3,967.5	3,983.6	3,978.6	10.1	5.9	116.44	311.0	61.5	67.3	54.8	12.48	5.390	
4,085.0	4,050.8	4,068.0	4,062.6	10.4	5.9	122.42	317.7	64.5	75.0	61.9	13.05	5.744	
4,100.0	4,065.5	4,082.9	4,077.5	10.4	6.0	123.35	318.9	65.1	76.4	63.2	13.15	5.808	
4,180.0	4,143.9	4,162.2	4,156.5	10.7	6.1	127.77	325.2	67.9	84.3	70.6	13.69	6.159	
4,200.0	4,163.5	4,182.1	4,176.3	10.8	6.1	128.75	326.8	68.6	86.4	72.5	13.82	6.249	
4,275.0	4,237.0	4,256.5	4,250.4	11.0	6.2	132.03	332.8	71.2	94.2	79.9	14.30	6.589	
4,300.0	4,261.5	4,281.3	4,275.1	11.1	6.2	133.00	334.7	72.1	96.9	82.5	14.46	6.703	
4,370.0	4,330.1	4,350.7	4,344.3	11.3	6.3	135.46	340.3	74.6	104.6	89.7	14.89	7.023	
4,400.0	4,359.5	4,380.5	4,374.0	11.4	6.3	136.41	342.6	75.6	107.9	92.8	15.07	7.161	
4,465.0	4,423.2	4,445.0	4,438.2	11.6	6.4	138.27	347.8	77.9	115.2	99.8	15.45	7.457	
4,500.0	4,457.5	4,479.7	4,472.8	11.7	6.4	139.18	350.5	79.1	119.2	103.6	15.65	7.616	
4,560.0	4,516.3	4,539.2	4,532.1	11.9	6.5	140.60	355.3	81.2	126.1	110.1	15.99	7.886	
4,600.0	4,555.5	4,578.9	4,571.6	12.0	6.5	141.46	358.4	82.6	130.8	114.5	16.21	8.064	
4,655.0	4,609.4	4,633.5	4,626.0	12.2	6.6	142.56	362.8	84.6	137.2	120.7	16.52	8.306	
4,700.0	4,653.5	4,678.1	4,670.5	12.4	6.6	143.38	366.3	86.2	142.5	125.7	16.76	8.501	
4,750.0	4,702.4	4,727.7	4,719.9	12.5	6.7	144.22	370.3	87.9	148.4	131.3	17.02	8.715	
4,800.0	4,751.4	4,777.3	4,769.3	12.7	6.7	145.00	374.2	89.7	154.3	137.0	17.29	8.926	
4,845.0	4,795.5	4,822.0	4,813.8	12.8	6.8	145.65	377.8	91.3	159.7	142.1	17.52	9.112	
4,900.0	4,849.4	4,876.5	4,868.1	13.0	6.8	146.39	382.1	93.2	166.2	148.4	17.80	9.337	
4,940.0	4,888.6	4,916.2	4,907.7	13.1	6.9	146.89	385.3	94.6	171.0	153.0	18.01	9.497	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #702H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-Standard Keeper 104, 8534-MWD+IFR1+FDIR							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		
5,000.0	4,947.4	4,975.7	4,967.0	13.4	7.0	147.59	390.0	96.7	178.3	159.9	18.31	9.734		
5,035.0	4,981.7	5,010.5	5,001.5	13.5	7.0	147.98	392.8	98.0	182.5	164.0	18.49	9.869		
5,100.0	5,045.4	5,075.0	5,065.8	13.7	7.1	148.65	397.9	100.2	190.4	171.5	18.82	10.116		
5,130.0	5,074.8	5,104.7	5,095.4	13.8	7.1	148.94	400.3	101.3	194.0	175.0	18.97	10.228		
5,200.0	5,143.4	5,174.2	5,164.6	14.0	7.2	149.57	405.8	103.8	202.5	183.2	19.31	10.485		
5,225.0	5,167.9	5,199.0	5,189.3	14.1	7.2	149.79	407.8	104.6	205.5	186.1	19.44	10.574		
5,300.0	5,241.4	5,273.4	5,263.5	14.4	7.3	150.39	413.7	107.3	214.7	194.9	19.81	10.839		
5,320.0	5,261.0	5,293.2	5,283.2	14.4	7.3	150.55	415.3	108.0	217.1	197.2	19.91	10.908		
5,400.0	5,339.4	5,372.6	5,362.3	14.7	7.4	151.13	421.6	110.8	226.9	206.6	20.30	11.179		
5,415.0	5,354.1	5,387.5	5,377.1	14.8	7.4	151.23	422.8	111.3	228.8	208.4	20.37	11.229		
5,500.0	5,437.4	5,471.8	5,461.1	15.1	7.5	151.78	429.5	114.3	239.2	218.4	20.79	11.507		
5,510.0	5,447.2	5,481.7	5,471.0	15.1	7.5	151.85	430.3	114.7	240.4	219.6	20.84	11.539		
5,600.0	5,535.4	5,571.0	5,559.9	15.4	7.6	152.38	437.4	117.8	251.5	230.2	21.27	11.822		
5,605.0	5,540.3	5,576.0	5,564.9	15.4	7.7	152.41	437.8	118.0	252.1	230.8	21.30	11.837		
5,700.0	5,633.4	5,670.2	5,658.8	15.8	7.8	152.92	445.3	121.4	263.8	242.1	21.76	12.124		
5,795.0	5,726.5	5,764.5	5,752.7	16.1	7.9	153.38	452.8	124.7	275.5	253.3	22.22	12.401		
5,800.0	5,731.4	5,769.4	5,757.6	16.1	7.9	153.41	453.2	124.9	276.1	253.9	22.24	12.415		
5,822.7	5,753.6	5,792.0	5,780.1	16.2	7.9	153.51	455.0	125.7	279.0	256.6	22.35	12.480		
5,890.0	5,819.7	5,858.8	5,846.6	16.4	8.0	153.81	460.3	128.0	286.6	263.9	22.68	12.636		
5,900.0	5,829.5	5,868.7	5,856.6	16.5	8.0	153.84	461.1	128.4	287.6	264.9	22.73	12.654		
5,985.0	5,913.5	5,952.8	5,940.3	16.8	8.1	153.96	467.8	131.4	294.9	271.8	23.17	12.728		
6,000.0	5,928.3	5,967.3	5,954.8	16.9	8.1	153.97	468.9	131.9	296.0	272.8	23.25	12.733		
6,080.0	6,007.7	6,044.5	6,031.8	17.3	8.2	153.98	474.2	134.2	301.1	277.5	23.66	12.727		
6,100.0	6,027.6	6,063.9	6,051.1	17.4	8.2	153.97	475.3	134.7	302.2	278.4	23.76	12.718		
6,175.0	6,102.3	6,136.3	6,123.4	17.7	8.3	153.94	479.2	136.5	305.5	281.4	24.14	12.658		
6,200.0	6,127.2	6,160.5	6,147.5	17.9	8.3	153.92	480.3	137.0	306.3	282.1	24.26	12.628		
6,270.0	6,197.1	6,228.1	6,215.1	18.2	8.4	153.84	482.9	138.1	308.0	283.4	24.59	12.525		
6,300.0	6,227.1	6,257.1	6,244.0	18.3	8.5	153.80	483.8	138.5	308.4	283.7	24.73	12.470		
6,365.0	6,292.0	6,319.9	6,306.8	18.6	8.5	153.69	485.3	139.2	308.7	283.7	25.03	12.333		
6,398.0	6,325.0	6,351.8	6,338.7	18.8	8.6	153.90	485.8	139.4	308.5	283.3	25.18	12.252		
6,400.0	6,327.0	6,353.7	6,340.7	18.8	8.6	153.90	485.8	139.4	308.5	283.3	25.19	12.248		
6,460.0	6,387.0	6,411.7	6,398.7	18.9	8.6	153.82	486.3	139.6	308.1	282.7	25.40	12.128		
6,494.7	6,421.8	6,445.6	6,432.6	19.0	8.7	153.82	486.3	139.6	308.1	282.5	25.54	12.063		
6,500.0	6,427.0	6,450.9	6,437.8	19.1	8.7	153.82	486.3	139.6	308.1	282.5	25.56	12.052		
6,555.0	6,482.0	6,505.9	6,492.8	19.2	8.8	153.82	486.3	139.6	308.1	282.3	25.79	11.944		
6,600.0	6,527.0	6,550.9	6,537.8	19.4	8.8	153.82	486.3	139.6	308.1	282.1	25.98	11.857		
6,650.0	6,577.0	6,600.9	6,587.8	19.5	8.9	153.82	486.3	139.6	308.1	281.9	26.19	11.762		
6,700.0	6,627.0	6,650.9	6,637.8	19.7	8.9	153.82	486.3	139.6	308.1	281.7	26.40	11.668		
6,745.0	6,672.0	6,695.9	6,682.8	19.8	9.0	153.82	486.3	139.6	308.1	281.5	26.59	11.584		
6,800.0	6,727.0	6,750.9	6,737.8	20.0	9.1	153.82	486.3	139.6	308.1	281.2	26.83	11.483		
6,840.0	6,767.0	6,790.9	6,777.8	20.1	9.1	153.82	486.3	139.6	308.1	281.1	27.00	11.411		
6,900.0	6,827.0	6,850.9	6,837.8	20.3	9.2	153.82	486.3	139.6	308.1	280.8	27.25	11.304		
6,935.0	6,862.0	6,885.9	6,872.8	20.4	9.2	153.82	486.3	139.6	308.1	280.7	27.40	11.242		
7,000.0	6,927.0	6,950.9	6,937.8	20.6	9.3	153.82	486.3	139.6	308.1	280.4	27.68	11.129		
7,030.0	6,957.0	6,980.9	6,967.8	20.7	9.3	153.82	486.3	139.6	308.1	280.3	27.81	11.078		
7,100.0	7,027.0	7,050.9	7,037.8	20.9	9.4	153.82	486.3	139.6	308.1	280.0	28.11	10.959		
7,125.0	7,052.0	7,075.9	7,062.8	21.0	9.5	153.82	486.3	139.6	308.1	279.9	28.22	10.917		
7,200.0	7,127.0	7,150.9	7,137.8	21.2	9.5	153.82	486.3	139.6	308.1	279.5	28.54	10.794		
7,220.0	7,147.0	7,170.9	7,157.8	21.3	9.6	153.82	486.3	139.6	308.1	279.4	28.63	10.761		
7,300.0	7,227.0	7,250.9	7,237.8	21.6	9.7	153.82	486.3	139.6	308.1	279.1	28.98	10.632		
7,315.0	7,242.0	7,265.9	7,252.8	21.6	9.7	153.82	486.3	139.6	308.1	279.0	29.04	10.609		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #702H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8534-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
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S	+E/-W	Between Centres	Between Ellipses	(usft)	Warning
							(usft)	(usft)	(usft)	(usft)		
7,400.0	7,327.0	7,350.9	7,337.8	21.9	9.8	153.82	486.3	139.6	308.1	278.7	29.41	10.475
7,410.0	7,337.0	7,360.9	7,347.8	21.9	9.8	153.82	486.3	139.6	308.1	278.6	29.44	10.466
7,459.0	7,386.0	7,409.9	7,396.8	22.0	9.9	153.82	486.3	139.6	308.1	278.5	29.57	10.418
7,500.0	7,427.0	7,450.9	7,437.8	22.0	9.9	-26.82	486.3	139.6	306.8	277.1	29.62	10.355
7,505.0	7,432.0	7,455.9	7,442.8	22.0	9.9	-26.87	486.3	139.6	306.4	276.8	29.64	10.338
7,550.0	7,476.7	7,500.5	7,487.5	22.1	10.0	-27.55	486.3	139.6	301.6	271.9	29.76	10.135
7,600.0	7,525.6	7,549.5	7,536.4	22.3	10.0	-28.89	486.3	139.6	292.8	262.9	29.88	9.798
7,650.0	7,573.5	7,597.4	7,584.3	22.5	10.1	-30.94	486.3	139.6	280.2	250.3	29.93	9.362
7,695.0	7,615.4	7,639.3	7,626.2	22.6	10.1	-33.53	486.3	139.6	266.1	236.2	29.91	8.897
7,700.0	7,620.0	7,643.9	7,630.8	22.6	10.1	-33.87	486.3	139.6	264.4	234.5	29.90	8.841
7,750.0	7,664.7	7,688.6	7,675.5	22.8	10.2	-37.90	486.3	139.6	245.6	215.8	29.77	8.250
7,790.0	7,698.9	7,722.8	7,709.7	22.9	10.2	-42.12	486.3	139.6	228.8	199.2	29.55	7.743
7,800.0	7,707.3	7,731.1	7,718.1	22.9	10.3	-43.33	486.3	139.6	224.4	194.9	29.48	7.613
7,850.0	7,747.4	7,771.3	7,758.2	23.1	10.3	-50.44	486.3	139.6	201.8	172.8	28.99	6.960
7,885.0	7,773.9	7,797.7	7,784.7	23.2	10.3	-56.51	486.3	139.6	185.7	157.2	28.50	6.518
7,900.0	7,784.8	7,808.6	7,795.6	23.2	10.4	-59.37	486.3	139.6	179.0	150.8	28.25	6.337
7,950.0	7,819.1	7,843.0	7,829.9	23.3	10.4	-69.82	486.3	139.6	158.4	131.1	27.32	5.799
7,980.0	7,838.2	7,862.0	7,849.0	23.4	10.4	-76.41	486.3	139.6	148.5	121.6	26.81	5.537
8,000.0	7,850.2	7,874.0	7,861.0	23.4	10.4	-80.75	486.3	139.6	143.4	116.8	26.61	5.389
8,046.1	7,875.7	7,899.5	7,886.5	23.5	10.5	-90.00	486.3	139.6	138.1	111.2	26.92	5.131
8,050.0	7,877.7	7,901.5	7,888.5	23.5	10.5	-90.71	486.3	139.6	138.2	111.2	27.01	5.116
8,075.0	7,890.0	7,913.9	7,900.8	23.5	10.5	-94.93	486.3	139.6	140.4	112.6	27.76	5.057
8,100.0	7,901.4	7,925.3	7,912.2	23.5	10.5	-98.51	486.3	139.6	146.0	117.3	28.74	5.081
8,150.0	7,921.3	7,945.2	7,932.1	23.6	10.5	-103.53	486.3	139.6	166.6	135.9	30.71	5.426
8,170.0	7,928.1	7,952.0	7,938.9	23.6	10.5	-104.71	486.3	139.6	177.8	146.5	31.36	5.671
8,200.0	7,937.1	7,961.0	7,947.9	23.6	10.5	-105.58	486.3	139.6	197.1	165.0	32.15	6.132
8,250.0	7,948.7	7,972.5	7,959.5	23.6	10.6	-104.52	486.3	139.6	234.3	201.3	33.03	7.093
8,265.0	7,951.3	7,975.2	7,962.1	23.7	10.6	-103.56	486.3	139.6	246.4	213.2	33.22	7.417
8,300.0	7,956.0	7,979.8	7,966.8	23.7	10.6	-100.07	486.3	139.6	275.8	242.2	33.55	8.221
8,350.0	7,958.9	7,982.8	7,969.7	23.7	10.6	-91.88	486.3	139.6	319.9	286.1	33.84	9.454
8,358.7	7,959.0	7,982.9	7,969.8	23.7	10.6	-90.06	486.3	139.6	327.8	293.9	33.88	9.676
8,360.0	7,959.0	7,982.9	7,969.8	23.7	10.6	-90.06	486.3	139.6	329.0	295.1	33.88	9.709
8,400.0	7,959.0	7,982.9	7,969.8	23.7	10.6	-90.07	486.3	139.6	365.7	331.7	34.01	10.751
8,455.0	7,959.0	7,982.9	7,969.8	23.7	10.6	-90.08	486.3	139.6	417.1	383.0	34.12	12.224
8,500.0	7,959.1	7,982.9	7,969.9	23.7	10.6	-90.09	486.3	139.6	459.8	425.6	34.18	13.454
8,550.0	7,959.1	7,983.0	7,969.9	23.7	10.6	-90.11	486.3	139.6	507.7	473.5	34.22	14.838
8,600.0	7,959.1	7,983.0	7,969.9	23.7	10.6	-90.12	486.3	139.6	556.0	521.8	34.24	16.238
8,645.0	7,959.1	7,983.0	7,969.9	23.7	10.6	-90.13	486.3	139.6	599.7	565.5	34.26	17.506
8,700.0	7,959.2	7,983.1	7,970.0	23.7	10.6	-90.14	486.3	139.6	653.4	619.1	34.27	19.066
8,740.0	7,959.2	7,983.1	7,970.0	23.7	10.6	-90.15	486.3	139.6	692.5	658.2	34.27	20.206
8,800.0	7,959.2	7,983.1	7,970.0	23.7	10.6	-90.16	486.3	139.6	751.4	717.1	34.28	21.921
8,835.0	7,959.2	7,983.1	7,970.0	23.7	10.6	-90.17	486.3	139.6	785.8	751.5	34.28	22.925
8,900.0	7,959.3	7,983.2	7,970.1	23.7	10.6	-90.18	486.3	139.6	849.9	815.6	34.28	24.793
8,930.0	7,959.3	7,983.2	7,970.1	23.7	10.6	-90.19	486.3	139.6	879.5	845.2	34.28	25.656
9,000.0	7,959.3	7,983.2	7,970.1	23.8	10.6	-90.20	486.3	139.6	948.7	914.4	34.28	27.674
9,025.0	7,959.3	7,983.2	7,970.1	23.8	10.6	-90.21	486.3	139.6	973.4	939.2	34.28	28.396

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8446-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		
0.0	0.0	10.8	10.8	3.0	3.0	-4.69	202.9	-16.7	203.6				
95.0	95.0	105.8	105.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.6	6.00	33.926	
100.0	100.0	110.8	110.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.6	6.00	33.925	
190.0	190.0	200.8	200.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.6	6.01	33.875	
200.0	200.0	210.8	210.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.6	6.01	33.866	
285.0	285.0	295.8	295.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.6	6.03	33.766	
300.0	300.0	310.8	310.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.5	6.03	33.743	
380.0	380.0	390.8	390.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.5	6.06	33.600	
400.0	400.0	410.8	410.8	3.0	3.0	-4.69	202.9	-16.7	203.6	197.5	6.07	33.558	
475.0	475.0	485.8	485.8	3.0	3.1	-4.69	202.9	-16.7	203.6	197.5	6.10	33.381	
500.0	500.0	510.8	510.8	3.1	3.1	-4.69	202.9	-16.7	203.6	197.5	6.11	33.315	
570.0	570.0	580.8	580.8	3.1	3.1	-4.69	202.9	-16.7	203.6	197.4	6.15	33.111	
600.0	600.0	610.8	610.8	3.1	3.1	-4.69	202.9	-16.7	203.6	197.4	6.17	33.016	
665.0	665.0	675.8	675.8	3.1	3.1	-4.69	202.9	-16.7	203.6	197.4	6.21	32.795	
700.0	700.0	710.8	710.8	3.1	3.1	-4.69	202.9	-16.7	203.6	197.3	6.23	32.667	
760.0	760.0	770.8	770.8	3.1	3.1	-4.69	202.9	-16.7	203.6	197.3	6.28	32.435	
800.0	800.0	810.8	810.8	3.2	3.2	-4.69	202.9	-16.7	203.6	197.3	6.31	32.272	
855.0	855.0	865.8	865.8	3.2	3.2	-4.69	202.9	-16.7	203.6	197.2	6.35	32.038	
900.0	900.0	910.8	910.8	3.2	3.2	-4.69	202.9	-16.7	203.6	197.2	6.39	31.838	
950.0	950.0	960.8	960.8	3.2	3.2	-4.69	202.9	-16.7	203.6	197.1	6.44	31.607	
1,000.0	1,000.0	1,010.8	1,010.8	3.2	3.2	-4.69	202.9	-16.7	203.6	197.1	6.49	31.369	
1,045.0	1,045.0	1,055.8	1,055.8	3.3	3.3	-4.69	202.9	-16.7	203.6	197.0	6.54	31.148	
1,100.0	1,100.0	1,110.8	1,110.8	3.3	3.3	-4.69	202.9	-16.7	203.6	197.0	6.59	30.870	
1,140.0	1,140.0	1,150.8	1,150.8	3.3	3.3	-4.69	202.9	-16.7	203.6	196.9	6.64	30.664	
1,200.0	1,200.0	1,210.8	1,210.8	3.4	3.4	-4.69	202.9	-16.7	203.6	196.9	6.71	30.348	
1,235.0	1,235.0	1,245.8	1,245.8	3.4	3.4	-4.69	202.9	-16.7	203.6	196.8	6.75	30.161	
1,300.0	1,300.0	1,310.8	1,310.8	3.4	3.4	-4.69	202.9	-16.7	203.6	196.8	6.83	29.808	
1,330.0	1,330.0	1,340.8	1,340.8	3.4	3.4	-4.69	202.9	-16.7	203.6	196.7	6.87	29.643	
1,400.0	1,400.0	1,410.8	1,410.8	3.5	3.5	-4.69	202.9	-16.7	203.6	196.6	6.96	29.253	
1,425.0	1,425.0	1,435.8	1,435.8	3.5	3.5	-4.69	202.9	-16.7	203.6	196.6	6.99	29.113	
1,500.0	1,500.0	1,510.8	1,510.8	3.5	3.6	-4.69	202.9	-16.7	203.6	196.5	7.10	28.689	
1,520.0	1,520.0	1,530.8	1,530.8	3.6	3.6	-4.69	202.9	-16.7	203.6	196.5	7.12	28.575	
1,600.0	1,600.0	1,610.8	1,610.8	3.6	3.6	-4.69	202.9	-16.7	203.6	196.3	7.24	28.119	
1,615.0	1,615.0	1,625.8	1,625.8	3.6	3.6	-4.69	202.9	-16.7	203.6	196.3	7.26	28.033	
1,700.0	1,700.0	1,710.8	1,710.8	3.7	3.7	-4.69	202.9	-16.7	203.6	196.2	7.39	27.546	
1,710.0	1,710.0	1,720.8	1,720.8	3.7	3.7	-4.69	202.9	-16.7	203.6	196.2	7.41	27.489	
1,800.0	1,800.0	1,810.8	1,810.8	3.8	3.8	-4.69	202.9	-16.7	203.6	196.0	7.55	26.975	
1,805.0	1,805.0	1,815.8	1,815.8	3.8	3.8	-4.69	202.9	-16.7	203.6	196.0	7.56	26.946	
1,900.0	1,900.0	1,910.8	1,910.8	3.9	3.9	-4.69	202.9	-16.7	203.6	195.9	7.71	26.406	
1,995.0	1,995.0	2,005.8	2,005.8	3.9	3.9	-4.69	202.9	-16.7	203.6	195.7	7.87	25.872	
2,000.0	2,000.0	2,010.8	2,010.8	3.9	3.9	-4.69	202.9	-16.7	203.6	195.7	7.88	25.844	
2,090.0	2,090.0	2,100.8	2,100.8	4.1	4.0	-5.01	202.9	-16.7	202.2	194.0	8.14	24.836	
2,100.0	2,100.0	2,110.8	2,110.8	4.2	4.0	-5.02	202.9	-16.7	201.8	193.7	8.17	24.706	
2,185.0	2,184.9	2,195.7	2,195.7	4.7	4.1	-5.13	202.9	-16.7	197.6	188.9	8.76	22.566	
2,200.0	2,199.8	2,210.6	2,210.6	4.8	4.1	-5.16	202.9	-16.7	196.6	187.8	8.87	22.177	
2,280.0	2,279.6	2,290.4	2,290.4	5.3	4.2	-5.35	202.9	-16.7	190.0	180.6	9.38	20.245	
2,300.0	2,299.5	2,310.3	2,310.3	5.4	4.2	-5.42	202.9	-16.7	188.0	178.4	9.52	19.752	
2,375.0	2,373.9	2,384.7	2,384.7	5.9	4.3	-5.70	202.9	-16.7	179.2	169.2	9.97	17.965	
2,400.0	2,398.7	2,409.5	2,409.5	6.0	4.3	-5.82	202.9	-16.7	175.8	165.7	10.13	17.360	
2,470.0	2,467.9	2,478.7	2,478.7	6.4	4.4	-6.21	202.9	-16.7	165.3	154.8	10.53	15.691	
2,500.0	2,497.5	2,507.9	2,507.9	6.5	4.4	-6.42	202.9	-16.7	160.3	149.6	10.71	14.968	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #703H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8446-MWD+IFR1+FDIR											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Separation	Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)		
2,565.0	2,561.3	2,569.4	2,569.4	6.8	4.5	-7.15	203.5	-17.3	149.0	138.0	10.96	13.599
2,575.2	2,571.4	2,579.1	2,579.1	6.8	4.5	-7.32	203.6	-17.5	147.2	136.2	10.99	13.388
2,600.0	2,595.6	2,602.6	2,602.5	6.8	4.5	-7.76	204.1	-18.0	142.9	131.8	11.04	12.947
2,660.0	2,654.4	2,659.5	2,659.5	6.9	4.5	-9.16	205.9	-19.9	133.1	122.0	11.12	11.975
2,700.0	2,693.6	2,697.6	2,697.5	7.0	4.6	-10.39	207.5	-21.7	127.2	116.0	11.16	11.397
2,755.0	2,747.5	2,750.1	2,749.8	7.1	4.6	-12.50	210.3	-24.7	119.8	108.6	11.21	10.686
2,800.0	2,791.6	2,794.6	2,794.1	7.1	4.6	-14.61	212.9	-27.6	114.3	103.1	11.24	10.167
2,850.0	2,840.6	2,844.0	2,843.3	7.2	4.7	-17.19	215.8	-30.8	108.4	97.1	11.26	9.619
2,900.0	2,889.6	2,893.4	2,892.5	7.3	4.7	-20.06	218.7	-33.9	102.7	91.4	11.27	9.111
2,945.0	2,933.7	2,937.8	2,936.8	7.4	4.7	-22.93	221.3	-36.8	97.8	86.5	11.25	8.687
3,000.0	2,987.6	2,992.1	2,990.9	7.5	4.8	-26.82	224.5	-40.3	92.2	81.0	11.21	8.224
3,040.0	3,026.8	3,031.7	3,030.3	7.6	4.8	-29.95	226.8	-42.8	88.4	77.2	11.15	7.925
3,100.0	3,085.6	3,090.9	3,089.3	7.7	4.9	-35.13	230.3	-46.7	83.3	72.2	11.03	7.546
3,135.0	3,119.9	3,125.5	3,123.8	7.8	4.9	-38.44	232.3	-48.9	80.6	69.7	10.95	7.365
3,200.0	3,183.6	3,189.7	3,187.7	8.0	5.0	-45.13	236.1	-53.0	76.5	65.8	10.76	7.113
3,230.0	3,213.0	3,219.4	3,217.2	8.0	5.0	-48.43	237.8	-54.9	75.0	64.4	10.67	7.032
3,300.0	3,281.6	3,288.5	3,286.1	8.2	5.0	-56.58	241.9	-59.4	72.6	62.1	10.47	6.928
3,325.0	3,306.1	3,313.2	3,310.7	8.3	5.1	-59.60	243.3	-61.0	72.1	61.6	10.42	6.915 SF
3,372.7	3,352.8	3,360.3	3,357.7	8.4	5.1	-65.44	246.1	-64.0	71.7	61.3	10.36	6.919 CC, ES
3,400.0	3,379.6	3,387.3	3,384.5	8.5	5.1	-68.78	247.7	-65.7	71.8	61.4	10.35	6.936
3,420.0	3,399.2	3,407.0	3,404.2	8.5	5.1	-71.22	248.9	-67.0	72.0	61.7	10.36	6.954
3,500.0	3,477.6	3,486.1	3,483.0	8.7	5.2	-80.69	253.5	-72.1	74.4	63.8	10.53	7.062
3,515.0	3,492.3	3,500.9	3,497.7	8.8	5.2	-82.39	254.4	-73.0	75.0	64.4	10.58	7.088
3,600.0	3,575.6	3,584.9	3,581.4	9.0	5.3	-91.41	259.3	-78.4	79.9	68.9	10.98	7.277
3,610.0	3,585.4	3,594.7	3,591.2	9.0	5.3	-92.39	259.9	-79.1	80.6	69.6	11.04	7.304
3,700.0	3,673.5	3,683.6	3,679.8	9.3	5.4	-100.48	265.1	-84.8	87.9	76.3	11.59	7.587
3,705.0	3,678.4	3,688.6	3,684.7	9.3	5.4	-100.89	265.4	-85.1	88.4	76.7	11.62	7.605
3,800.0	3,771.5	3,782.4	3,778.2	9.6	5.5	-107.92	270.9	-91.2	97.7	85.5	12.24	7.987
3,895.0	3,864.6	3,876.3	3,871.7	9.8	5.6	-113.66	276.4	-97.2	108.3	95.5	12.84	8.434
3,900.0	3,869.5	3,881.2	3,876.6	9.8	5.6	-113.93	276.7	-97.5	108.9	96.0	12.87	8.459
3,990.0	3,957.7	3,970.1	3,965.2	10.1	5.7	-118.35	282.0	-103.2	119.8	106.4	13.42	8.926
4,000.0	3,967.5	3,980.0	3,975.0	10.1	5.7	-118.79	282.5	-103.9	121.0	107.6	13.48	8.979
4,085.0	4,050.8	4,064.0	4,058.6	10.4	5.8	-122.20	287.5	-109.3	131.9	118.0	13.97	9.444
4,100.0	4,065.5	4,078.8	4,073.4	10.4	5.8	-122.75	288.3	-110.2	133.9	119.8	14.05	9.528
4,180.0	4,143.9	4,157.8	4,152.1	10.7	5.9	-125.40	293.0	-115.3	144.5	130.1	14.49	9.977
4,200.0	4,163.5	4,177.6	4,171.8	10.8	5.9	-126.01	294.1	-116.6	147.3	132.7	14.59	10.090
4,275.0	4,237.0	4,251.6	4,245.6	11.0	6.0	-128.09	298.5	-121.4	157.5	142.6	14.98	10.514
4,300.0	4,261.5	4,276.3	4,270.2	11.1	6.0	-128.72	300.0	-122.9	161.0	145.9	15.11	10.655
4,370.0	4,330.1	4,345.5	4,339.1	11.3	6.1	-130.36	304.0	-127.4	170.8	155.4	15.46	11.048
4,400.0	4,359.5	4,375.1	4,368.6	11.4	6.1	-131.00	305.8	-129.3	175.1	159.5	15.61	11.216
4,465.0	4,423.2	4,439.3	4,432.6	11.6	6.1	-132.30	309.5	-133.4	184.3	168.4	15.93	11.575
4,500.0	4,457.5	4,473.9	4,467.0	11.7	6.2	-132.95	311.6	-135.7	189.4	173.3	16.09	11.766
4,560.0	4,516.3	4,533.2	4,526.1	11.9	6.2	-133.98	315.0	-139.5	198.0	181.7	16.38	12.091
4,600.0	4,555.5	4,572.7	4,565.4	12.0	6.3	-134.62	317.4	-142.0	203.8	187.3	16.57	12.304
4,655.0	4,609.4	4,627.0	4,619.6	12.2	6.3	-135.44	320.6	-145.5	211.9	195.0	16.82	12.593
4,700.0	4,653.5	4,671.5	4,663.8	12.4	6.4	-136.06	323.2	-148.4	218.5	201.4	17.03	12.827
4,750.0	4,702.4	4,720.9	4,713.1	12.5	6.4	-136.72	326.1	-151.6	225.8	208.6	17.26	13.082
4,800.0	4,751.4	4,770.3	4,762.3	12.7	6.5	-137.33	329.0	-154.7	233.2	215.7	17.49	13.333
4,845.0	4,795.5	4,814.7	4,806.5	12.8	6.5	-137.85	331.6	-157.6	239.9	222.2	17.70	13.555
4,900.0	4,849.4	4,869.0	4,860.7	13.0	6.6	-138.44	334.8	-161.1	248.0	230.1	17.95	13.822
4,940.0	4,888.6	4,908.6	4,900.0	13.1	6.6	-138.85	337.1	-163.6	254.0	235.9	18.13	14.013

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #703H - OWB - PWP0														Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 8446-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	4,947.4	4,967.8	4,959.1	13.4	6.7	-139.43	340.6	-167.4	263.0	244.6	18.40	14.294			
5,035.0	4,981.7	5,002.4	4,993.5	13.5	6.7	-139.75	342.6	-169.7	268.2	249.7	18.56	14.455			
5,100.0	5,045.4	5,066.6	5,057.5	13.7	6.8	-140.31	346.4	-173.8	278.0	259.1	18.85	14.748			
5,130.0	5,074.8	5,096.2	5,087.0	13.8	6.9	-140.56	348.1	-175.7	282.5	263.5	18.98	14.882			
5,200.0	5,143.4	5,165.4	5,155.9	14.0	6.9	-141.11	352.2	-180.2	293.0	273.7	19.29	15.186			
5,225.0	5,167.9	5,190.1	5,180.5	14.1	7.0	-141.29	353.7	-181.8	296.8	277.4	19.41	15.293			
5,300.0	5,241.4	5,264.2	5,254.3	14.4	7.0	-141.82	358.0	-186.5	308.1	288.4	19.74	15.607			
5,320.0	5,261.0	5,283.9	5,274.0	14.4	7.1	-141.96	359.2	-187.8	311.1	291.3	19.83	15.690			
5,400.0	5,339.4	5,363.0	5,352.7	14.7	7.1	-142.47	363.8	-192.9	323.3	303.1	20.19	16.012			
5,415.0	5,354.1	5,377.8	5,367.5	14.8	7.2	-142.56	364.7	-193.8	325.5	305.3	20.25	16.072			
5,500.0	5,437.4	5,461.7	5,451.1	15.1	7.3	-143.06	369.6	-199.2	338.4	317.8	20.63	16.402			
5,510.0	5,447.2	5,471.6	5,461.0	15.1	7.3	-143.12	370.2	-199.9	340.0	319.3	20.68	16.440			
5,600.0	5,535.4	5,560.5	5,549.5	15.4	7.4	-143.60	375.4	-205.6	353.6	332.6	21.08	16.776			
5,605.0	5,540.3	5,565.5	5,554.4	15.4	7.4	-143.63	375.7	-205.9	354.4	333.3	21.10	16.794			
5,700.0	5,633.4	5,659.3	5,647.9	15.8	7.5	-144.09	381.2	-212.0	368.9	347.4	21.53	17.136			
5,795.0	5,726.5	5,753.2	5,741.4	16.1	7.6	-144.53	386.7	-218.0	383.4	361.4	21.95	17.465			
5,800.0	5,731.4	5,758.1	5,746.3	16.1	7.6	-144.55	387.0	-218.3	384.1	362.2	21.97	17.482			
5,822.7	5,753.6	5,780.6	5,768.7	16.2	7.6	-144.65	388.4	-219.8	387.6	365.5	22.07	17.562			
5,890.0	5,819.7	5,847.1	5,835.0	16.4	7.7	-144.98	392.3	-224.0	397.3	374.9	22.37	17.760			
5,900.0	5,829.5	5,857.0	5,844.9	16.5	7.7	-145.01	392.8	-224.7	398.6	376.2	22.41	17.785			
5,985.0	5,913.5	5,941.4	5,929.0	16.8	7.8	-145.18	397.8	-230.1	408.7	385.8	22.85	17.883			
6,000.0	5,928.3	5,956.3	5,943.8	16.9	7.8	-145.18	398.7	-231.1	410.3	387.3	22.93	17.891			
6,080.0	6,007.7	6,036.0	6,023.2	17.3	7.9	-145.10	403.4	-236.2	417.6	394.2	23.35	17.879			
6,100.0	6,027.6	6,055.9	6,043.0	17.4	7.9	-145.05	404.5	-237.5	419.1	395.7	23.46	17.866			
6,175.0	6,102.3	6,130.7	6,117.5	17.7	8.0	-144.75	408.9	-242.3	423.9	400.0	23.84	17.782			
6,200.0	6,127.2	6,155.7	6,142.4	17.9	8.0	-144.62	410.4	-243.9	425.1	401.2	23.96	17.742			
6,270.0	6,197.1	6,225.5	6,212.0	18.2	8.1	-144.15	414.5	-248.4	427.7	403.4	24.30	17.603			
6,300.0	6,227.1	6,255.4	6,241.8	18.3	8.2	-143.90	416.3	-250.3	428.3	403.9	24.44	17.529			
6,365.0	6,292.0	6,320.3	6,306.4	18.6	8.2	-143.27	420.1	-254.5	429.0	404.2	24.72	17.351			
6,398.0	6,325.0	6,353.1	6,339.1	18.8	8.3	-142.63	422.0	-256.6	428.9	404.0	24.87	17.247			
6,400.0	6,327.0	6,355.1	6,341.1	18.8	8.3	-142.60	422.1	-256.7	428.8	404.0	24.87	17.242			
6,460.0	6,387.0	6,414.9	6,400.7	18.9	8.3	-141.91	425.6	-260.6	428.4	403.4	25.05	17.100			
6,500.0	6,427.0	6,454.8	6,440.4	19.1	8.4	-141.45	428.0	-263.1	428.2	403.0	25.17	17.007			
6,555.0	6,482.0	6,509.6	6,494.9	19.2	8.5	-140.81	431.2	-266.7	427.9	402.5	25.35	16.878			
6,600.0	6,527.0	6,554.4	6,539.6	19.4	8.5	-140.29	433.8	-269.6	427.7	402.2	25.49	16.775			
6,650.0	6,577.0	6,604.2	6,589.2	19.5	8.6	-139.70	436.8	-272.8	427.5	401.8	25.66	16.662			
6,700.0	6,627.0	6,654.0	6,638.8	19.7	8.6	-139.12	439.7	-276.0	427.3	401.5	25.82	16.552			
6,745.0	6,672.0	6,698.8	6,683.5	19.8	8.7	-138.60	442.3	-278.9	427.3	401.3	25.96	16.456			
6,800.0	6,727.0	6,753.6	6,738.1	20.0	8.7	-137.96	445.5	-282.4	427.2	401.1	26.14	16.341			
6,830.8	6,757.8	6,784.3	6,768.6	20.1	8.8	-137.60	447.3	-284.4	427.2	400.9	26.24	16.277			
6,840.0	6,767.0	6,793.5	6,777.8	20.1	8.8	-137.49	447.9	-284.9	427.2	400.9	26.28	16.259			
6,900.0	6,827.0	6,853.2	6,837.3	20.3	8.9	-136.79	451.4	-288.8	427.2	400.8	26.47	16.138			
6,935.0	6,862.0	6,888.1	6,872.0	20.4	8.9	-136.39	453.4	-291.0	427.3	400.7	26.59	16.070			
7,000.0	6,927.0	6,952.9	6,936.6	20.6	9.0	-135.63	457.2	-295.2	427.4	400.6	26.81	15.946			
7,030.0	6,957.0	6,982.8	6,966.3	20.7	9.0	-135.28	459.0	-297.1	427.5	400.6	26.91	15.890			
7,100.0	7,027.0	7,052.5	7,035.8	20.9	9.1	-134.47	463.1	-301.6	427.8	400.7	27.14	15.762			
7,125.0	7,052.0	7,077.4	7,060.6	21.0	9.1	-134.18	464.6	-303.2	428.0	400.7	27.23	15.718			
7,200.0	7,127.0	7,152.1	7,135.0	21.2	9.2	-133.31	469.0	-308.0	428.4	400.9	27.48	15.587			
7,220.0	7,147.0	7,172.0	7,154.9	21.3	9.2	-133.08	470.1	-309.3	428.5	401.0	27.55	15.553			
7,300.0	7,227.0	7,251.7	7,234.3	21.6	9.3	-132.15	474.8	-314.4	429.1	401.3	27.83	15.420			
7,315.0	7,242.0	7,266.7	7,249.2	21.6	9.4	-131.98	475.7	-315.4	429.3	401.4	27.88	15.396			

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8446-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)			
7,400.0	7,327.0	7,351.3	7,333.5	21.9	9.5	-131.00	480.7	-320.9	430.1	401.9	28.18	15.261	
7,410.0	7,337.0	7,361.3	7,343.4	21.9	9.5	-130.89	481.3	-321.5	430.2	402.0	28.20	15.255	
7,459.0	7,386.0	7,410.1	7,392.1	22.0	9.5	-130.32	484.1	-324.6	430.7	402.4	28.29	15.224	
7,500.0	7,427.0	7,450.8	7,432.6	22.0	9.6	49.87	486.5	-327.3	430.2	401.9	28.30	15.201	
7,505.0	7,432.0	7,455.8	7,437.6	22.0	9.6	49.98	486.8	-327.6	430.0	401.7	28.31	15.191	
7,550.0	7,476.7	7,500.2	7,481.8	22.1	9.6	51.25	489.4	-330.4	427.2	398.8	28.36	15.064	
7,600.0	7,525.6	7,549.1	7,530.6	22.3	9.7	53.26	492.0	-333.3	421.6	393.2	28.40	14.847	
7,650.0	7,573.5	7,596.9	7,578.3	22.5	9.7	55.89	494.3	-335.8	413.8	385.4	28.41	14.569	
7,695.0	7,615.4	7,638.8	7,620.0	22.6	9.8	58.80	496.1	-337.7	405.2	376.9	28.37	14.283	
7,700.0	7,620.0	7,643.3	7,624.6	22.6	9.8	59.15	496.3	-337.9	404.2	375.9	28.37	14.249	
7,750.0	7,664.7	7,688.0	7,669.2	22.8	9.9	63.03	497.9	-339.7	393.3	365.0	28.30	13.898	
7,790.0	7,698.9	7,722.4	7,703.5	22.9	9.9	66.52	499.0	-340.9	384.0	355.8	28.22	13.609	
7,800.0	7,707.3	7,730.7	7,711.9	22.9	9.9	67.44	499.3	-341.2	381.7	353.5	28.20	13.536	
7,850.0	7,747.4	7,771.1	7,752.2	23.1	10.0	72.27	500.3	-342.4	370.3	342.2	28.09	13.183	
7,885.0	7,773.9	7,797.9	7,778.9	23.2	10.0	75.78	501.0	-343.1	362.9	334.9	28.02	12.951	
7,900.0	7,784.8	7,808.9	7,790.0	23.2	10.0	77.30	501.2	-343.3	360.0	332.0	28.00	12.858	
7,950.0	7,819.1	7,843.8	7,824.9	23.3	10.0	82.26	501.8	-344.0	351.9	323.9	27.96	12.587	
7,980.0	7,838.2	7,863.2	7,844.3	23.4	10.1	85.09	502.1	-344.3	348.6	320.6	27.98	12.459	
8,000.0	7,850.2	7,875.6	7,856.6	23.4	10.1	86.87	502.3	-344.5	347.1	319.1	28.01	12.393	
8,028.6	7,866.4	7,892.2	7,873.3	23.4	10.1	89.23	502.4	-344.7	346.4	318.3	28.10	12.327	
8,050.0	7,877.7	7,903.9	7,884.9	23.5	10.1	90.83	502.6	-344.8	346.8	318.6	28.19	12.303	
8,075.0	7,890.0	7,916.7	7,897.7	23.5	10.1	92.50	502.7	-344.9	348.6	320.3	28.33	12.305	
8,100.0	7,901.4	7,928.6	7,909.6	23.5	10.1	93.92	502.7	-345.0	351.8	323.3	28.50	12.343	
8,150.0	7,921.3	7,949.3	7,930.4	23.6	10.2	95.95	502.8	-345.1	362.6	333.6	28.94	12.530	
8,170.0	7,928.1	7,956.5	7,937.5	23.6	10.2	96.43	502.9	-345.2	368.5	339.4	29.13	12.650	
8,200.0	7,937.1	7,966.0	7,947.0	23.6	10.2	96.77	502.9	-345.2	379.2	349.7	29.44	12.878	
8,250.0	7,948.7	7,978.3	7,959.4	23.6	10.2	96.27	502.9	-345.2	401.3	371.4	29.97	13.390	
8,265.0	7,951.3	7,981.2	7,962.2	23.7	10.2	95.85	502.9	-345.2	409.0	378.8	30.13	13.574	
8,300.0	7,956.0	7,985.7	7,966.8	23.7	10.2	94.26	502.9	-345.2	428.3	397.9	30.47	14.056	
8,350.0	7,958.9	7,988.7	7,969.7	23.7	10.2	90.78	502.9	-345.2	459.4	428.5	30.92	14.859	
8,358.7	7,959.0	7,988.7	7,969.8	23.7	10.2	90.03	502.9	-345.2	465.2	434.2	30.99	15.011	
8,360.0	7,959.0	7,988.7	7,969.8	23.7	10.2	90.03	502.9	-345.2	466.0	435.0	31.00	15.034	
8,400.0	7,959.0	7,988.8	7,969.8	23.7	10.2	90.03	502.9	-345.2	493.6	462.4	31.29	15.775	
8,455.0	7,959.0	7,988.8	7,969.8	23.7	10.2	90.03	502.9	-345.2	534.2	502.5	31.64	16.883	
8,500.0	7,959.1	7,988.8	7,969.9	23.7	10.2	90.04	502.9	-345.2	569.2	537.3	31.87	17.857	
8,550.0	7,959.1	7,988.8	7,969.9	23.7	10.2	90.04	502.9	-345.2	609.6	577.5	32.09	18.994	
8,600.0	7,959.1	7,988.9	7,969.9	23.7	10.2	90.05	502.9	-345.2	651.3	619.0	32.27	20.182	
8,645.0	7,959.1	7,988.9	7,969.9	23.7	10.2	90.05	502.9	-345.2	689.8	657.4	32.41	21.286	
8,700.0	7,959.2	7,988.9	7,970.0	23.7	10.2	90.06	502.9	-345.2	737.9	705.3	32.54	22.674	
8,740.0	7,959.2	7,988.9	7,970.0	23.7	10.2	90.06	502.9	-345.2	773.4	740.8	32.63	23.704	
8,800.0	7,959.2	7,989.0	7,970.0	23.7	10.2	90.06	502.9	-345.2	827.5	794.7	32.73	25.279	
8,835.0	7,959.2	7,989.0	7,970.0	23.7	10.2	90.07	502.9	-345.2	859.4	826.6	32.79	26.211	
8,900.0	7,959.3	7,989.0	7,970.1	23.7	10.2	90.07	502.9	-345.2	919.2	886.4	32.87	27.964	
8,930.0	7,959.3	7,989.0	7,970.1	23.7	10.2	90.08	502.9	-345.2	947.1	914.2	32.91	28.782	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #704H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8495-MWD+IFR1+FDIR													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		
0.0	0.0	44.8	44.8	3.0	3.0	-12.95	202.9	-46.7	208.2					
95.0	95.0	139.8	139.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.00	34.693		
100.0	100.0	144.8	144.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.00	34.692		
190.0	190.0	234.8	234.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.01	34.632		
200.0	200.0	244.8	244.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.01	34.622		
285.0	285.0	329.8	329.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.03	34.514		
300.0	300.0	344.8	344.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.04	34.490		
380.0	380.0	424.8	424.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.06	34.340		
400.0	400.0	444.8	444.8	3.0	3.0	-12.95	202.9	-46.7	208.2	202.2	6.07	34.297		
475.0	475.0	519.8	519.8	3.0	3.1	-12.95	202.9	-46.7	208.2	202.1	6.10	34.114		
500.0	500.0	544.8	544.8	3.1	3.1	-12.95	202.9	-46.7	208.2	202.1	6.12	34.046		
570.0	570.0	614.8	614.8	3.1	3.1	-12.95	202.9	-46.7	208.2	202.1	6.15	33.837		
600.0	600.0	644.8	644.8	3.1	3.1	-12.95	202.9	-46.7	208.2	202.1	6.17	33.740		
665.0	665.0	709.8	709.8	3.1	3.1	-12.95	202.9	-46.7	208.2	202.0	6.21	33.515		
700.0	700.0	744.8	744.8	3.1	3.1	-12.95	202.9	-46.7	208.2	202.0	6.24	33.385		
760.0	760.0	804.8	804.8	3.1	3.2	-12.95	202.9	-46.7	208.2	201.9	6.28	33.151		
800.0	800.0	844.8	844.8	3.2	3.2	-12.95	202.9	-46.7	208.2	201.9	6.31	32.986		
855.0	855.0	899.8	899.8	3.2	3.2	-12.95	202.9	-46.7	208.2	201.9	6.36	32.749		
900.0	900.0	944.8	944.8	3.2	3.2	-12.95	202.9	-46.7	208.2	201.8	6.40	32.547		
950.0	950.0	994.8	994.8	3.2	3.2	-12.95	202.9	-46.7	208.2	201.8	6.44	32.314		
1,000.0	1,000.0	1,044.8	1,044.8	3.2	3.3	-12.95	202.9	-46.7	208.2	201.7	6.49	32.074		
1,045.0	1,045.0	1,089.8	1,089.8	3.3	3.3	-12.95	202.9	-46.7	208.2	201.7	6.54	31.851		
1,100.0	1,100.0	1,144.8	1,144.8	3.3	3.3	-12.95	202.9	-46.7	208.2	201.6	6.60	31.572		
1,140.0	1,140.0	1,184.8	1,184.8	3.3	3.3	-12.95	202.9	-46.7	208.2	201.6	6.64	31.365		
1,200.0	1,200.0	1,244.8	1,244.8	3.4	3.4	-12.95	202.9	-46.7	208.2	201.5	6.71	31.047		
1,235.0	1,235.0	1,279.8	1,279.8	3.4	3.4	-12.95	202.9	-46.7	208.2	201.5	6.75	30.858		
1,300.0	1,300.0	1,344.8	1,344.8	3.4	3.4	-12.95	202.9	-46.7	208.2	201.4	6.83	30.503		
1,330.0	1,330.0	1,374.8	1,374.8	3.4	3.5	-12.95	202.9	-46.7	208.2	201.4	6.86	30.337		
1,400.0	1,400.0	1,444.8	1,444.8	3.5	3.5	-12.95	202.9	-46.7	208.2	201.3	6.95	29.945		
1,425.0	1,425.0	1,469.8	1,469.8	3.5	3.5	-12.95	202.9	-46.7	208.2	201.2	6.99	29.804		
1,500.0	1,500.0	1,544.8	1,544.8	3.5	3.6	-12.95	202.9	-46.7	208.2	201.1	7.09	29.378		
1,520.0	1,520.0	1,564.8	1,564.8	3.6	3.6	-12.95	202.9	-46.7	208.2	201.1	7.12	29.263		
1,600.0	1,600.0	1,644.8	1,644.8	3.6	3.7	-12.95	202.9	-46.7	208.2	201.0	7.23	28.804		
1,615.0	1,615.0	1,659.8	1,659.8	3.6	3.7	-12.95	202.9	-46.7	208.2	201.0	7.25	28.718		
1,700.0	1,700.0	1,744.8	1,744.8	3.7	3.7	-12.95	202.9	-46.7	208.2	200.8	7.38	28.228		
1,710.0	1,710.0	1,754.8	1,754.8	3.7	3.7	-12.95	202.9	-46.7	208.2	200.8	7.39	28.171		
1,800.0	1,800.0	1,844.8	1,844.8	3.8	3.8	-12.95	202.9	-46.7	208.2	200.7	7.53	27.653		
1,805.0	1,805.0	1,849.8	1,849.8	3.8	3.8	-12.95	202.9	-46.7	208.2	200.7	7.54	27.624		
1,900.0	1,900.0	1,944.8	1,944.8	3.9	3.9	-12.95	202.9	-46.7	208.2	200.5	7.69	27.080		
1,995.0	1,995.0	2,039.8	2,039.8	3.9	4.0	-12.95	202.9	-46.7	208.2	200.4	7.85	26.541		
2,000.0	2,000.0	2,044.8	2,044.8	3.9	4.0	-12.95	202.9	-46.7	208.2	200.4	7.85	26.513		
2,090.0	2,090.0	2,134.8	2,134.8	4.1	4.1	-13.32	202.9	-46.7	206.8	198.7	8.10	25.540		
2,100.0	2,100.0	2,144.8	2,144.8	4.2	4.1	-13.35	202.9	-46.7	206.5	198.4	8.12	25.419		
2,185.0	2,184.9	2,229.7	2,229.7	4.7	4.1	-13.64	202.9	-46.7	202.4	193.8	8.66	23.378		
2,200.0	2,199.8	2,244.6	2,244.6	4.8	4.2	-13.71	202.9	-46.7	201.4	192.7	8.75	23.010		
2,280.0	2,279.6	2,324.4	2,324.4	5.3	4.2	-14.21	202.9	-46.7	194.9	185.7	9.22	21.140		
2,300.0	2,299.5	2,344.3	2,344.3	5.4	4.2	-14.37	202.9	-46.7	193.0	183.6	9.34	20.664		
2,375.0	2,373.9	2,418.7	2,418.7	5.9	4.3	-15.09	202.9	-46.7	184.4	174.7	9.75	18.926		
2,400.0	2,398.7	2,443.5	2,443.5	6.0	4.3	-15.39	202.9	-46.7	181.2	171.3	9.88	18.339		
2,470.0	2,467.9	2,512.3	2,512.3	6.4	4.4	-16.39	202.9	-46.7	171.0	160.8	10.23	16.725		
2,500.0	2,497.5	2,540.9	2,540.9	6.5	4.4	-16.97	203.0	-46.9	166.3	156.0	10.36	16.052		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8495-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)			
2,565.0	2,561.3	2,602.8	2,602.8	6.8	4.5	-18.75	203.5	-48.4	155.8	145.3	10.53	14.792	
2,575.2	2,571.4	2,612.6	2,612.5	6.8	4.5	-19.11	203.6	-48.8	154.1	143.6	10.55	14.603	
2,600.0	2,595.6	2,636.1	2,636.1	6.8	4.5	-20.02	203.9	-49.7	150.1	139.5	10.56	14.215	
2,660.0	2,654.4	2,693.2	2,693.1	6.9	4.5	-22.68	205.0	-52.8	141.1	130.5	10.55	13.377	
2,700.0	2,693.6	2,731.3	2,731.0	7.0	4.5	-24.83	205.8	-55.5	135.7	125.2	10.51	12.908	
2,755.0	2,747.5	2,783.6	2,783.1	7.1	4.6	-28.32	207.3	-60.0	129.3	118.8	10.44	12.383	
2,800.0	2,791.6	2,826.3	2,825.6	7.1	4.6	-31.62	208.7	-64.3	125.0	114.6	10.35	12.081	
2,850.0	2,840.6	2,873.7	2,872.6	7.2	4.6	-35.73	210.5	-69.8	121.4	111.2	10.21	11.889	
2,900.0	2,889.6	2,921.0	2,919.5	7.3	4.6	-40.23	212.6	-76.0	119.3	109.2	10.05	11.867 SF	
2,942.4	2,931.1	2,961.0	2,959.0	7.4	4.7	-44.26	214.5	-81.8	118.7	108.8	9.91	11.979 CC, ES	
2,945.0	2,933.7	2,963.4	2,961.4	7.4	4.7	-44.52	214.6	-82.2	118.7	108.8	9.90	11.990	
3,000.0	2,987.6	3,015.8	3,013.0	7.5	4.7	-49.95	217.4	-90.6	119.8	110.1	9.72	12.322	
3,040.0	3,026.8	3,054.8	3,051.4	7.6	4.7	-53.95	219.5	-97.0	121.5	111.9	9.62	12.626	
3,100.0	3,085.6	3,113.3	3,109.1	7.7	4.8	-59.70	222.7	-106.7	125.1	115.6	9.53	13.129	
3,135.0	3,119.9	3,147.5	3,142.7	7.8	4.8	-62.89	224.5	-112.3	127.9	118.3	9.52	13.433	
3,200.0	3,183.6	3,210.9	3,205.2	8.0	4.8	-68.45	228.0	-122.8	133.9	124.4	9.56	14.007	
3,230.0	3,213.0	3,240.2	3,234.0	8.0	4.8	-70.85	229.6	-127.6	137.1	127.5	9.61	14.269	
3,300.0	3,281.6	3,308.5	3,301.2	8.2	4.9	-76.01	233.3	-138.9	145.5	135.7	9.78	14.873	
3,325.0	3,306.1	3,332.9	3,325.3	8.3	4.9	-77.72	234.6	-142.9	148.7	138.9	9.86	15.086	
3,400.0	3,379.6	3,406.0	3,397.3	8.5	5.0	-82.40	238.5	-155.0	159.2	149.1	10.13	15.719	
3,420.0	3,399.2	3,425.5	3,416.5	8.5	5.0	-83.55	239.6	-158.2	162.2	152.0	10.21	15.887	
3,500.0	3,477.6	3,503.6	3,493.4	8.7	5.0	-87.75	243.8	-171.1	174.7	164.1	10.55	16.558	
3,515.0	3,492.3	3,518.2	3,507.8	8.8	5.1	-88.47	244.6	-173.5	177.1	166.5	10.62	16.683	
3,600.0	3,575.6	3,601.2	3,589.5	9.0	5.1	-92.22	249.1	-187.2	191.4	180.4	11.00	17.395	
3,610.0	3,585.4	3,610.9	3,599.1	9.0	5.1	-92.62	249.7	-188.8	193.1	182.1	11.05	17.479	
3,700.0	3,673.5	3,698.7	3,685.6	9.3	5.2	-95.96	254.4	-203.3	209.0	197.6	11.47	18.231	
3,705.0	3,678.4	3,703.6	3,690.4	9.3	5.2	-96.13	254.7	-204.1	210.0	198.5	11.49	18.273	
3,800.0	3,771.5	3,796.3	3,781.7	9.6	5.3	-99.12	259.7	-219.4	227.5	215.5	11.93	19.060	
3,895.0	3,864.6	3,889.0	3,872.9	9.8	5.4	-101.67	264.7	-234.6	245.5	233.1	12.38	19.836	
3,900.0	3,869.5	3,893.9	3,877.8	9.8	5.4	-101.80	265.0	-235.5	246.4	234.0	12.40	19.877	
3,990.0	3,957.7	3,981.7	3,964.2	10.1	5.4	-103.88	269.8	-249.9	263.9	251.1	12.81	20.596	
4,000.0	3,967.5	3,991.4	3,973.8	10.1	5.4	-104.10	270.3	-251.5	265.9	253.0	12.86	20.675	
4,085.0	4,050.8	4,074.4	4,055.5	10.4	5.5	-105.80	274.8	-265.2	282.7	269.4	13.25	21.336	
4,100.0	4,065.5	4,089.0	4,069.9	10.4	5.5	-106.08	275.6	-267.6	285.7	272.4	13.32	21.451	
4,180.0	4,143.9	4,167.1	4,146.8	10.7	5.6	-107.49	279.8	-280.5	301.7	288.0	13.68	22.053	
4,200.0	4,163.5	4,186.6	4,166.0	10.8	5.6	-107.81	280.9	-283.7	305.8	292.0	13.77	22.201	
4,275.0	4,237.0	4,259.7	4,238.1	11.0	5.7	-108.97	284.9	-295.8	321.0	306.9	14.11	22.746	
4,300.0	4,261.5	4,284.1	4,262.1	11.1	5.7	-109.33	286.2	-299.8	326.1	311.9	14.22	22.924	
4,370.0	4,330.1	4,352.4	4,329.4	11.3	5.8	-110.29	289.9	-311.1	340.4	325.9	14.54	23.413	
4,400.0	4,359.5	4,381.7	4,358.2	11.4	5.8	-110.67	291.5	-315.9	346.6	331.9	14.68	23.618	
4,465.0	4,423.2	4,445.1	4,420.6	11.6	5.9	-111.46	294.9	-326.4	360.0	345.1	14.97	24.053	
4,500.0	4,457.5	4,479.3	4,454.3	11.7	5.9	-111.86	296.8	-332.0	367.3	352.2	15.13	24.283	
4,560.0	4,516.3	4,537.8	4,511.9	11.9	6.0	-112.51	299.9	-341.7	379.8	364.4	15.40	24.667	
4,600.0	4,555.5	4,576.8	4,550.4	12.0	6.0	-112.92	302.1	-348.1	388.1	372.5	15.57	24.918	
4,655.0	4,609.4	4,630.5	4,603.2	12.2	6.1	-113.46	305.0	-357.0	399.6	383.8	15.82	25.255	
4,700.0	4,653.5	4,674.4	4,646.4	12.4	6.1	-113.88	307.4	-364.2	409.0	393.0	16.02	25.525	
4,750.0	4,702.4	4,723.2	4,694.5	12.5	6.2	-114.32	310.0	-372.3	419.5	403.3	16.25	25.817	
4,800.0	4,751.4	4,772.0	4,742.5	12.7	6.2	-114.74	312.6	-380.3	430.1	413.6	16.48	26.103	
4,845.0	4,795.5	4,815.9	4,785.8	12.8	6.3	-115.10	315.0	-387.5	439.6	422.9	16.68	26.354	
4,900.0	4,849.4	4,869.5	4,838.6	13.0	6.3	-115.52	317.9	-396.4	451.2	434.2	16.93	26.654	
4,940.0	4,888.6	4,908.6	4,877.0	13.1	6.4	-115.81	320.1	-402.8	459.6	442.5	17.11	26.867	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #704H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 8495-MWD+IFR1+FDIR													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	4,947.4	4,967.1	4,934.7	13.4	6.4	-116.23		323.2	-412.5	472.4	455.0	17.38	27.178	
5,035.0	4,981.7	5,001.3	4,968.3	13.5	6.5	-116.47		325.1	-418.1	479.8	462.3	17.54	27.356	
5,100.0	5,045.4	5,064.7	5,030.8	13.7	6.5	-116.88		328.5	-428.6	493.6	475.8	17.84	27.677	
5,130.0	5,074.8	5,094.0	5,059.6	13.8	6.6	-117.07		330.1	-433.4	500.0	482.0	17.97	27.822	
5,200.0	5,143.4	5,162.3	5,126.9	14.0	6.6	-117.48		333.8	-444.7	514.9	496.6	18.29	28.151	
5,225.0	5,167.9	5,186.6	5,150.9	14.1	6.7	-117.62		335.1	-448.7	520.3	501.8	18.41	28.266	
5,300.0	5,241.4	5,259.8	5,223.0	14.4	6.7	-118.03		339.1	-460.8	536.3	517.5	18.75	28.601	
5,320.0	5,261.0	5,279.3	5,242.2	14.4	6.8	-118.14		340.2	-464.0	540.6	521.7	18.84	28.689	
5,400.0	5,339.4	5,357.4	5,319.0	14.7	6.9	-118.54		344.4	-476.9	557.7	538.5	19.21	29.030	
5,415.0	5,354.1	5,372.0	5,333.5	14.8	6.9	-118.61		345.2	-479.3	560.9	541.6	19.28	29.092	
5,500.0	5,437.4	5,455.0	5,415.1	15.1	7.0	-119.01		349.7	-493.0	579.1	559.4	19.67	29.436	
5,510.0	5,447.2	5,464.7	5,424.7	15.1	7.0	-119.06		350.2	-494.6	581.3	561.5	19.72	29.476	
5,600.0	5,535.4	5,552.5	5,511.2	15.4	7.1	-119.45		355.0	-509.1	600.6	580.5	20.14	29.823	
5,605.0	5,540.3	5,557.4	5,516.0	15.4	7.1	-119.47		355.3	-509.9	601.7	581.5	20.16	29.842	
5,700.0	5,633.4	5,650.1	5,607.3	15.8	7.2	-119.85		360.3	-525.2	622.1	601.5	20.61	30.190	
5,795.0	5,726.5	5,742.8	5,698.6	16.1	7.3	-120.22		365.3	-540.4	642.6	621.5	21.05	30.522	
5,800.0	5,731.4	5,747.7	5,703.4	16.1	7.3	-120.23		365.6	-541.3	643.6	622.6	21.08	30.539	
5,822.7	5,753.6	5,769.8	5,725.2	16.2	7.3	-120.32		366.8	-544.9	648.5	627.3	21.18	30.623	
5,890.0	5,819.7	5,835.6	5,790.0	16.4	7.4	-120.74		370.3	-555.8	662.6	641.1	21.49	30.839	
5,900.0	5,829.5	5,845.4	5,799.6	16.5	7.4	-120.79		370.9	-557.4	664.7	643.1	21.53	30.867	
5,985.0	5,913.5	5,928.7	5,881.7	16.8	7.5	-121.11		375.4	-571.1	681.2	659.3	21.96	31.016	
6,000.0	5,928.3	5,943.5	5,896.2	16.9	7.6	-121.14		376.2	-573.6	684.0	662.0	22.04	31.036	
6,080.0	6,007.7	6,022.2	5,973.7	17.3	7.6	-121.22		380.5	-586.5	698.2	675.8	22.45	31.102	
6,100.0	6,027.6	6,041.9	5,993.1	17.4	7.7	-121.21		381.5	-589.8	701.6	679.0	22.55	31.110	
6,175.0	6,102.3	6,115.8	6,065.9	17.7	7.8	-121.09		385.5	-602.0	713.6	690.7	22.93	31.128	
6,200.0	6,127.2	6,140.4	6,090.2	17.9	7.8	-121.02		386.9	-606.0	717.4	694.4	23.05	31.125	
6,270.0	6,197.1	6,209.5	6,158.2	18.2	7.9	-120.73		390.6	-617.4	727.5	704.1	23.39	31.105	
6,300.0	6,227.1	6,239.1	6,187.3	18.3	7.9	-120.58		392.2	-622.3	731.5	708.0	23.53	31.088	
6,365.0	6,292.0	6,303.1	6,250.4	18.6	8.0	-120.17		395.7	-632.9	739.8	716.0	23.83	31.044	
6,398.0	6,325.0	6,335.6	6,282.4	18.8	8.0	-119.64		397.5	-638.2	743.8	719.8	23.98	31.013	
6,400.0	6,327.0	6,337.6	6,284.4	18.8	8.0	-119.62		397.6	-638.6	744.0	720.0	23.99	31.014	
6,460.0	6,387.0	6,396.7	6,342.6	18.9	8.1	-119.04		400.8	-648.3	751.1	726.9	24.22	31.011	
6,500.0	6,427.0	6,436.1	6,381.4	19.1	8.2	-118.66		402.9	-654.8	755.9	731.5	24.38	31.009	
6,555.0	6,482.0	6,490.3	6,434.7	19.2	8.2	-118.14		405.9	-663.7	762.5	737.9	24.60	30.998	
6,600.0	6,527.0	6,534.6	6,478.3	19.4	8.3	-117.72		408.3	-671.1	767.9	743.2	24.78	30.989	
6,650.0	6,577.0	6,583.8	6,526.8	19.5	8.4	-117.26		410.9	-679.2	774.1	749.1	24.99	30.979	
6,700.0	6,627.0	6,633.1	6,575.3	19.7	8.4	-116.81		413.6	-687.3	780.2	755.0	25.19	30.970	
6,745.0	6,672.0	6,677.4	6,619.0	19.8	8.5	-116.41		416.0	-694.6	785.8	760.4	25.38	30.962	
6,800.0	6,727.0	6,731.5	6,672.3	20.0	8.6	-115.93		418.9	-703.5	792.7	767.1	25.61	30.954	
6,840.0	6,767.0	6,770.9	6,711.1	20.1	8.6	-115.58		421.1	-710.0	797.7	771.9	25.78	30.948	
6,900.0	6,827.0	6,830.0	6,769.3	20.3	8.7	-115.07		424.3	-719.8	805.3	779.3	26.03	30.940	
6,935.0	6,862.0	6,864.5	6,803.2	20.4	8.7	-114.78		426.2	-725.5	809.8	783.6	26.18	30.935	
7,000.0	6,927.0	6,928.5	6,866.3	20.6	8.8	-114.25		429.6	-736.0	818.1	791.7	26.45	30.927	
7,030.0	6,957.0	6,958.0	6,895.4	20.7	8.9	-114.00		431.2	-740.9	822.0	795.4	26.58	30.924	
7,100.0	7,027.0	7,030.6	6,966.9	20.9	9.0	-113.42		435.1	-752.8	831.1	804.2	26.90	30.898	
7,125.0	7,052.0	7,058.3	6,994.2	21.0	9.0	-113.21		436.6	-757.1	834.2	807.2	27.02	30.876	
7,200.0	7,127.0	7,141.6	7,076.5	21.2	9.1	-112.62		440.6	-769.5	843.0	815.7	27.38	30.792	
7,220.0	7,147.0	7,163.9	7,098.5	21.3	9.1	-112.47		441.7	-772.6	845.3	817.8	27.47	30.766	
7,300.0	7,227.0	7,253.3	7,187.1	21.6	9.2	-111.94		445.5	-784.2	853.7	825.8	27.86	30.641	
7,315.0	7,242.0	7,270.1	7,203.7	21.6	9.3	-111.84		446.2	-786.3	855.1	827.2	27.93	30.614	
7,400.0	7,327.0	7,365.5	7,298.5	21.9	9.4	-111.36		449.7	-797.0	862.9	834.5	28.34	30.445	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #704H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-Standard Keeper 104, 8495-MWD+IFR1+FDIR													Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
7,410.0	7,337.0	7,376.8	7,309.7	21.9	9.4	-111.31	450.1	-798.2	863.7	835.4	28.37	30.442		
7,459.0	7,386.0	7,432.0	7,364.6	22.0	9.5	-111.07	451.8	-803.6	867.6	839.1	28.52	30.424		
7,500.0	7,427.0	7,478.2	7,410.5	22.0	9.5	68.53	453.2	-807.7	870.1	841.5	28.58	30.446		
7,505.0	7,432.0	7,483.8	7,416.1	22.0	9.5	68.56	453.4	-808.2	870.3	841.7	28.59	30.443		
7,550.0	7,476.7	7,534.1	7,466.3	22.1	9.6	69.00	454.7	-812.3	871.4	842.7	28.67	30.396		
7,600.0	7,525.6	7,589.3	7,521.4	22.3	9.6	69.91	456.0	-816.3	870.8	842.1	28.75	30.293		
7,650.0	7,573.5	7,643.4	7,575.3	22.5	9.7	71.21	457.1	-819.7	868.6	839.8	28.81	30.154		
7,695.0	7,615.4	7,690.7	7,622.5	22.6	9.7	72.70	458.0	-822.3	865.4	836.6	28.85	30.002		
7,700.0	7,620.0	7,695.9	7,627.7	22.6	9.7	72.88	458.1	-822.5	865.0	836.2	28.85	29.984		
7,750.0	7,664.7	7,746.5	7,678.2	22.8	9.8	74.87	458.8	-824.8	860.3	831.5	28.88	29.794		
7,790.0	7,698.9	7,785.3	7,717.0	22.9	9.8	76.65	459.3	-826.3	856.0	827.1	28.89	29.633		
7,800.0	7,707.3	7,794.8	7,726.5	22.9	9.8	77.11	459.4	-826.6	854.9	826.0	28.89	29.592		
7,850.0	7,747.4	7,840.4	7,772.1	23.1	9.9	79.53	459.9	-828.0	849.1	820.2	28.89	29.388		
7,885.0	7,773.9	7,870.6	7,802.3	23.2	9.9	81.27	460.1	-828.7	845.1	816.2	28.89	29.250		
7,900.0	7,784.8	7,883.0	7,814.7	23.2	9.9	82.02	460.2	-829.0	843.4	814.5	28.89	29.194		
7,950.0	7,819.1	7,922.4	7,854.0	23.3	10.0	84.48	460.4	-829.6	838.3	809.4	28.88	29.027		
7,980.0	7,838.2	7,944.2	7,875.9	23.4	10.0	85.90	460.5	-829.8	835.8	806.9	28.88	28.943		
8,000.0	7,850.2	7,958.0	7,889.7	23.4	10.0	86.80	460.5	-829.9	834.3	805.4	28.87	28.895		
8,050.0	7,877.7	7,989.8	7,921.5	23.5	10.0	88.87	460.5	-830.0	831.9	803.0	28.88	28.804		
8,075.0	7,890.0	8,003.2	7,934.8	23.5	10.0	89.72	460.5	-830.0	831.4	802.5	28.89	28.780		
8,084.5	7,894.5	8,007.6	7,939.3	23.5	10.0	90.00	460.5	-830.0	831.3	802.4	28.89	28.776		
8,100.0	7,901.4	8,014.6	7,946.2	23.5	10.0	90.42	460.5	-830.0	831.4	802.5	28.89	28.775		
8,150.0	7,921.3	8,034.4	7,966.1	23.6	10.1	91.47	460.5	-830.0	833.5	804.5	28.93	28.808		
8,170.0	7,928.1	8,041.2	7,972.9	23.6	10.1	91.75	460.5	-830.0	835.0	806.1	28.96	28.837		
8,200.0	7,937.1	8,050.2	7,981.9	23.6	10.1	92.02	460.5	-830.0	838.2	809.2	29.00	28.902		
8,250.0	7,948.7	8,061.8	7,993.5	23.6	10.1	92.03	460.5	-830.0	845.8	816.7	29.10	29.063		
8,265.0	7,951.3	8,064.4	7,996.1	23.7	10.1	91.92	460.5	-830.0	848.6	819.5	29.14	29.125		
8,300.0	7,956.0	8,069.1	8,000.8	23.7	10.1	91.45	460.5	-830.0	856.3	827.0	29.23	29.294		
8,350.0	7,958.9	8,072.1	8,003.7	23.7	10.1	90.28	460.5	-830.0	869.6	840.2	29.38	29.594		
8,358.7	7,959.0	8,072.1	8,003.8	23.7	10.1	90.01	460.5	-830.0	872.2	842.7	29.41	29.654		
8,360.0	7,959.0	8,072.1	8,003.8	23.7	10.1	90.01	460.5	-830.0	872.6	843.1	29.42	29.663		
8,400.0	7,959.0	8,072.1	8,003.8	23.7	10.1	90.01	460.5	-830.0	885.5	856.0	29.55	29.963		
8,455.0	7,959.0	8,072.2	8,003.8	23.7	10.1	90.01	460.5	-830.0	905.9	876.2	29.77	30.434		
8,500.0	7,959.1	8,072.2	8,003.9	23.7	10.1	90.01	460.5	-830.0	924.8	894.8	29.95	30.880		
8,550.0	7,959.1	8,072.2	8,003.9	23.7	10.1	90.02	460.5	-830.0	947.7	917.6	30.16	31.425		
8,600.0	7,959.1	8,072.3	8,003.9	23.7	10.1	90.02	460.5	-830.0	972.7	942.4	30.37	32.034		
8,645.0	7,959.1	8,072.3	8,003.9	23.7	10.1	90.02	460.5	-830.0	996.8	966.3	30.56	32.624		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 Between Centres (usft)		Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)						
0.0	0.0	44.8	44.8	3.0	3.0	-20.68	202.8	-76.5	216.8					
95.0	95.0	139.8	139.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.8	6.00	36.117		
100.0	100.0	144.8	144.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.8	6.00	36.116		
190.0	190.0	234.8	234.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.8	6.01	36.058		
200.0	200.0	244.8	244.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.8	6.01	36.048		
285.0	285.0	329.8	329.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.7	6.03	35.941		
300.0	300.0	344.8	344.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.7	6.04	35.918		
380.0	380.0	424.8	424.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.7	6.06	35.770		
400.0	400.0	444.8	444.8	3.0	3.0	-20.68	202.8	-76.5	216.8	210.7	6.07	35.728		
475.0	475.0	519.8	519.8	3.0	3.1	-20.68	202.8	-76.5	216.8	210.7	6.10	35.547		
500.0	500.0	544.8	544.8	3.1	3.1	-20.68	202.8	-76.5	216.8	210.7	6.11	35.480		
570.0	570.0	614.8	614.8	3.1	3.1	-20.68	202.8	-76.5	216.8	210.6	6.15	35.274		
600.0	600.0	644.8	644.8	3.1	3.1	-20.68	202.8	-76.5	216.8	210.6	6.16	35.179		
665.0	665.0	709.8	709.8	3.1	3.1	-20.68	202.8	-76.5	216.8	210.6	6.20	34.956		
700.0	700.0	744.8	744.8	3.1	3.1	-20.68	202.8	-76.5	216.8	210.5	6.22	34.828		
760.0	760.0	804.8	804.8	3.1	3.2	-20.68	202.8	-76.5	216.8	210.5	6.27	34.595		
800.0	800.0	844.8	844.8	3.2	3.2	-20.68	202.8	-76.5	216.8	210.5	6.30	34.432		
855.0	855.0	899.8	899.8	3.2	3.2	-20.68	202.8	-76.5	216.8	210.4	6.34	34.197		
900.0	900.0	944.8	944.8	3.2	3.2	-20.68	202.8	-76.5	216.8	210.4	6.38	33.997		
950.0	950.0	994.8	994.8	3.2	3.2	-20.68	202.8	-76.5	216.8	210.3	6.42	33.765		
1,000.0	1,000.0	1,044.8	1,044.8	3.2	3.3	-20.68	202.8	-76.5	216.8	210.3	6.47	33.526		
1,045.0	1,045.0	1,089.8	1,089.8	3.3	3.3	-20.68	202.8	-76.5	216.8	210.3	6.51	33.305		
1,100.0	1,100.0	1,144.8	1,144.8	3.3	3.3	-20.68	202.8	-76.5	216.8	210.2	6.56	33.026		
1,140.0	1,140.0	1,184.8	1,184.8	3.3	3.3	-20.68	202.8	-76.5	216.8	210.2	6.60	32.819		
1,200.0	1,200.0	1,244.8	1,244.8	3.4	3.4	-20.68	202.8	-76.5	216.8	210.1	6.67	32.502		
1,235.0	1,235.0	1,279.8	1,279.8	3.4	3.4	-20.68	202.8	-76.5	216.8	210.1	6.71	32.313		
1,300.0	1,300.0	1,344.8	1,344.8	3.4	3.4	-20.68	202.8	-76.5	216.8	210.0	6.78	31.958		
1,330.0	1,330.0	1,374.8	1,374.8	3.4	3.5	-20.68	202.8	-76.5	216.8	209.9	6.82	31.791		
1,400.0	1,400.0	1,444.8	1,444.8	3.5	3.5	-20.68	202.8	-76.5	216.8	209.9	6.90	31.398		
1,425.0	1,425.0	1,469.8	1,469.8	3.5	3.5	-20.68	202.8	-76.5	216.8	209.8	6.94	31.256		
1,500.0	1,500.0	1,544.8	1,544.8	3.5	3.6	-20.68	202.8	-76.5	216.8	209.7	7.03	30.827		
1,520.0	1,520.0	1,564.8	1,564.8	3.6	3.6	-20.68	202.8	-76.5	216.8	209.7	7.06	30.712		
1,600.0	1,600.0	1,644.8	1,644.8	3.6	3.7	-20.68	202.8	-76.5	216.8	209.6	7.17	30.249		
1,615.0	1,615.0	1,659.8	1,659.8	3.6	3.7	-20.68	202.8	-76.5	216.8	209.6	7.19	30.162		
1,700.0	1,700.0	1,744.8	1,744.8	3.7	3.7	-20.68	202.8	-76.5	216.8	209.5	7.31	29.667		
1,710.0	1,710.0	1,754.8	1,754.8	3.7	3.7	-20.68	202.8	-76.5	216.8	209.4	7.32	29.609		
1,800.0	1,800.0	1,844.8	1,844.8	3.8	3.8	-20.68	202.8	-76.5	216.8	209.3	7.45	29.084		
1,805.0	1,805.0	1,849.8	1,849.8	3.8	3.8	-20.68	202.8	-76.5	216.8	209.3	7.46	29.055		
1,900.0	1,900.0	1,944.8	1,944.8	3.9	3.9	-20.68	202.8	-76.5	216.8	209.2	7.61	28.503		
1,902.5	1,902.5	1,947.3	1,947.3	3.9	3.9	-20.68	202.8	-76.5	216.8	209.2	7.61	28.489		
1,995.0	1,995.0	2,038.3	2,038.3	3.9	4.0	-20.74	202.9	-76.8	216.9	209.2	7.74	28.006		
2,000.0	2,000.0	2,043.1	2,043.1	3.9	4.0	-20.75	202.9	-76.9	216.9	209.2	7.75	27.986		
2,090.0	2,090.0	2,129.5	2,129.5	4.1	4.0	-21.74	203.4	-79.4	217.1	209.1	7.95	27.319		
2,100.0	2,100.0	2,139.1	2,139.1	4.2	4.0	-21.87	203.5	-79.9	217.0	209.1	7.96	27.254		
2,185.0	2,184.9	2,220.5	2,220.3	4.7	4.0	-23.42	204.4	-84.9	216.1	207.7	8.37	25.815		
2,200.0	2,199.8	2,234.8	2,234.6	4.8	4.1	-23.77	204.7	-86.0	215.8	207.4	8.44	25.581		
2,280.0	2,279.6	2,310.9	2,310.3	5.3	4.1	-26.06	206.1	-93.1	214.2	205.5	8.75	24.490		
2,300.0	2,299.5	2,329.9	2,329.2	5.4	4.1	-26.74	206.5	-95.2	213.8	205.0	8.82	24.242		
2,375.0	2,373.9	2,400.0	2,398.7	5.9	4.1	-29.66	208.2	-103.9	212.1	203.0	9.03	23.488		
2,400.0	2,398.7	2,424.1	2,422.6	6.0	4.1	-30.80	208.9	-107.3	211.5	202.4	9.09	23.282		
2,470.0	2,467.9	2,489.4	2,487.0	6.4	4.2	-34.29	210.9	-117.5	210.3	201.1	9.19	22.882		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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		Offset Wellbore Centre			Rule Assigned:				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)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
2,500.0	2,497.5	2,517.2	2,514.4	6.5	4.2	-35.94	211.8	-122.2	210.0	200.8	9.22	22.787	SF	
2,537.5	2,534.3	2,551.7	2,548.3	6.7	4.2	-38.12	213.1	-128.5	209.8	200.6	9.19	22.824	CC, ES	
2,565.0	2,561.3	2,577.0	2,573.1	6.8	4.2	-39.81	214.0	-133.4	209.9	200.8	9.17	22.900		
2,575.2	2,571.4	2,586.3	2,582.3	6.8	4.2	-40.45	214.4	-135.2	210.0	200.9	9.16	22.939		
2,600.0	2,595.6	2,609.0	2,604.4	6.8	4.2	-42.03	215.3	-139.8	210.4	201.3	9.10	23.122		
2,660.0	2,654.4	2,663.5	2,657.5	6.9	4.3	-45.90	217.6	-151.6	212.9	203.9	8.97	23.723		
2,700.0	2,693.6	2,700.0	2,693.1	7.0	4.3	-48.52	219.3	-160.0	215.7	206.8	8.90	24.247		
2,755.0	2,747.5	2,752.3	2,743.8	7.1	4.3	-52.19	221.8	-172.4	220.7	211.9	8.82	25.022		
2,800.0	2,791.6	2,795.5	2,785.7	7.1	4.4	-55.10	223.8	-182.7	225.5	216.8	8.78	25.674		
2,850.0	2,840.6	2,843.5	2,832.3	7.2	4.4	-58.19	226.0	-194.1	231.6	222.8	8.78	26.383		
2,900.0	2,889.6	2,891.5	2,878.9	7.3	4.4	-61.12	228.3	-205.5	238.3	229.5	8.80	27.080		
2,945.0	2,933.7	2,934.7	2,920.8	7.4	4.5	-63.63	230.3	-215.7	244.8	236.0	8.85	27.677		
3,000.0	2,987.6	2,987.5	2,972.0	7.5	4.5	-66.52	232.8	-228.3	253.5	244.6	8.93	28.378		
3,040.0	3,026.8	3,025.9	3,009.3	7.6	4.5	-68.50	234.6	-237.4	260.2	251.2	9.02	28.858		
3,100.0	3,085.6	3,083.5	3,065.2	7.7	4.6	-71.29	237.3	-251.0	270.8	261.6	9.16	29.546		
3,135.0	3,119.9	3,117.1	3,097.8	7.8	4.6	-72.83	238.9	-259.0	277.2	268.0	9.26	29.926		
3,200.0	3,183.6	3,179.5	3,158.3	8.0	4.6	-75.50	241.8	-273.8	289.7	280.2	9.47	30.603		
3,230.0	3,213.0	3,208.3	3,186.3	8.0	4.7	-76.66	243.2	-280.7	295.7	286.1	9.57	30.902		
3,300.0	3,281.6	3,275.5	3,251.5	8.2	4.7	-79.19	246.3	-296.6	310.0	300.2	9.82	31.577		
3,325.0	3,306.1	3,299.5	3,274.7	8.3	4.7	-80.04	247.4	-302.3	315.3	305.4	9.91	31.810		
3,400.0	3,379.6	3,371.5	3,344.6	8.5	4.8	-82.44	250.8	-319.4	331.5	321.3	10.20	32.490		
3,420.0	3,399.2	3,390.7	3,363.2	8.5	4.8	-83.04	251.7	-323.9	335.9	325.6	10.28	32.667		
3,500.0	3,477.6	3,467.5	3,437.7	8.7	4.9	-85.29	255.3	-342.2	353.9	343.3	10.61	33.357		
3,515.0	3,492.3	3,481.9	3,451.7	8.8	4.9	-85.69	256.0	-345.6	357.3	346.6	10.67	33.484		
3,600.0	3,575.6	3,563.5	3,530.9	9.0	5.0	-87.81	259.8	-365.0	377.0	366.0	11.03	34.186		
3,610.0	3,585.4	3,573.1	3,540.2	9.0	5.0	-88.04	260.3	-367.2	379.4	368.3	11.07	34.267		
3,700.0	3,673.5	3,659.5	3,624.0	9.3	5.1	-90.04	264.3	-387.7	400.8	389.3	11.46	34.981		
3,705.0	3,678.4	3,664.3	3,628.7	9.3	5.1	-90.14	264.6	-388.9	402.0	390.5	11.48	35.020		
3,800.0	3,771.5	3,755.5	3,717.2	9.6	5.2	-92.02	268.8	-410.5	425.0	413.1	11.89	35.743		
3,895.0	3,864.6	3,846.7	3,805.6	9.8	5.3	-93.70	273.1	-432.2	448.5	436.2	12.31	36.436		
3,900.0	3,869.5	3,851.5	3,810.3	9.8	5.3	-93.79	273.3	-433.3	449.7	437.4	12.33	36.472		
3,990.0	3,957.7	3,937.8	3,894.1	10.1	5.4	-95.23	277.4	-453.8	472.3	459.6	12.73	37.101		
4,000.0	3,967.5	3,947.4	3,903.4	10.1	5.4	-95.38	277.8	-456.1	474.8	462.0	12.77	37.169		
4,085.0	4,050.8	4,029.0	3,982.6	10.4	5.5	-96.60	281.7	-475.4	496.4	483.2	13.15	37.736		
4,100.0	4,065.5	4,043.4	3,996.6	10.4	5.5	-96.81	282.3	-478.9	500.2	487.0	13.22	37.834		
4,180.0	4,143.9	4,120.2	4,071.1	10.7	5.6	-97.85	285.9	-497.1	520.7	507.1	13.58	38.343		
4,200.0	4,163.5	4,139.4	4,089.7	10.8	5.6	-98.10	286.9	-501.6	525.9	512.2	13.67	38.467		
4,275.0	4,237.0	4,211.4	4,159.6	11.0	5.7	-98.99	290.2	-518.7	545.3	531.3	14.01	38.921		
4,300.0	4,261.5	4,235.4	4,182.9	11.1	5.7	-99.27	291.4	-524.4	551.8	537.6	14.12	39.068		
4,370.0	4,330.1	4,302.6	4,248.1	11.3	5.8	-100.03	294.5	-540.4	570.0	555.6	14.44	39.470		
4,400.0	4,359.5	4,331.4	4,276.0	11.4	5.9	-100.34	295.9	-547.2	577.9	563.3	14.58	39.638		
4,465.0	4,423.2	4,393.8	4,336.6	11.6	5.9	-100.99	298.8	-562.0	594.9	580.0	14.88	39.993		
4,500.0	4,457.5	4,427.4	4,369.2	11.7	6.0	-101.32	300.4	-570.0	604.1	589.1	15.04	40.178		
4,560.0	4,516.3	4,485.0	4,425.0	11.9	6.1	-101.87	303.1	-583.7	619.9	604.6	15.31	40.488		
4,600.0	4,555.5	4,523.4	4,462.3	12.0	6.1	-102.22	304.9	-592.8	630.5	615.0	15.50	40.689		
4,655.0	4,609.4	4,576.2	4,513.5	12.2	6.2	-102.68	307.3	-605.3	645.1	629.4	15.75	40.958		
4,700.0	4,653.5	4,619.4	4,555.4	12.4	6.2	-103.04	309.4	-615.6	657.1	641.1	15.96	41.171		
4,750.0	4,702.4	4,667.4	4,602.0	12.5	6.3	-103.43	311.6	-626.9	670.4	654.2	16.19	41.402		
4,800.0	4,751.4	4,715.4	4,648.6	12.7	6.4	-103.80	313.9	-638.3	683.7	667.3	16.43	41.627		
4,845.0	4,795.5	4,758.6	4,690.5	12.8	6.4	-104.13	315.9	-648.6	695.8	679.1	16.64	41.823		
4,900.0	4,849.4	4,811.4	4,741.7	13.0	6.5	-104.51	318.4	-661.1	710.5	693.6	16.89	42.057		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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:		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		
4,940.0	4,888.6	4,849.8	4,779.0	13.1	6.6	-104.78	320.2	-670.2	721.2	704.2	17.08	42.222	
5,000.0	4,947.4	4,907.4	4,834.9	13.4	6.6	-105.16	322.9	-683.9	737.4	720.0	17.37	42.462	
5,035.0	4,981.7	4,941.0	4,867.5	13.5	6.7	-105.38	324.5	-691.9	746.8	729.3	17.53	42.598	
5,100.0	5,045.4	5,003.4	4,928.0	13.7	6.8	-105.77	327.4	-706.7	764.3	746.5	17.84	42.845	
5,130.0	5,074.8	5,032.2	4,955.9	13.8	6.8	-105.95	328.7	-713.5	772.4	754.4	17.98	42.954	
5,200.0	5,143.4	5,099.4	5,021.1	14.0	6.9	-106.34	331.9	-729.5	791.3	773.0	18.32	43.204	
5,225.0	5,167.9	5,123.4	5,044.4	14.1	7.0	-106.47	333.0	-735.2	798.1	779.7	18.44	43.291	
5,300.0	5,241.4	5,195.4	5,114.3	14.4	7.1	-106.87	336.4	-752.2	818.4	799.6	18.80	43.543	
5,320.0	5,261.0	5,214.6	5,132.9	14.4	7.1	-106.97	337.3	-756.8	823.9	805.0	18.89	43.608	
5,400.0	5,339.4	5,291.3	5,207.4	14.7	7.2	-107.36	340.9	-775.0	845.6	826.3	19.28	43.862	
5,415.0	5,354.1	5,305.7	5,221.4	14.8	7.2	-107.43	341.6	-778.4	849.7	830.3	19.35	43.908	
5,500.0	5,437.4	5,387.3	5,300.6	15.1	7.4	-107.83	345.4	-797.8	872.8	853.0	19.76	44.162	
5,510.0	5,447.2	5,396.9	5,309.9	15.1	7.4	-107.87	345.9	-800.1	875.5	855.7	19.81	44.191	
5,600.0	5,535.4	5,483.3	5,393.7	15.4	7.5	-108.27	349.9	-820.6	900.0	879.8	20.25	44.445	
5,605.0	5,540.3	5,488.1	5,398.4	15.4	7.5	-108.29	350.1	-821.7	901.4	881.1	20.28	44.458	
5,700.0	5,633.4	5,579.3	5,486.9	15.8	7.7	-108.68	354.4	-843.4	927.3	906.6	20.74	44.710	
5,795.0	5,726.5	5,670.5	5,575.3	16.1	7.9	-109.05	358.7	-865.0	953.3	932.1	21.21	44.948	
5,800.0	5,731.4	5,675.3	5,580.0	16.1	7.9	-109.06	358.9	-866.2	954.7	933.4	21.23	44.960	
5,822.7	5,753.6	5,697.1	5,601.2	16.2	7.9	-109.15	359.9	-871.3	960.9	939.6	21.34	45.023	
5,890.0	5,819.7	5,761.8	5,663.9	16.4	8.0	-109.71	363.0	-886.7	979.1	957.4	21.67	45.188	
5,900.0	5,829.5	5,771.5	5,673.3	16.5	8.0	-109.78	363.4	-889.0	981.7	960.0	21.71	45.210	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #801H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9475-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	4.8	4.8	3.0	3.0	-2.78	342.8	-16.6	343.2					
95.0	95.0	99.8	99.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.2	6.00	57.195		
100.0	100.0	104.8	104.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.2	6.00	57.193		
190.0	190.0	194.8	194.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.2	6.01	57.112		
200.0	200.0	204.8	204.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.2	6.01	57.097		
285.0	285.0	289.8	289.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.2	6.03	56.930		
300.0	300.0	304.8	304.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.2	6.03	56.893		
380.0	380.0	384.8	384.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.1	6.06	56.653		
400.0	400.0	404.8	404.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.1	6.07	56.583		
475.0	475.0	479.8	479.8	3.0	3.0	-2.78	342.8	-16.6	343.2	337.1	6.10	56.285		
500.0	500.0	504.8	504.8	3.1	3.1	-2.78	342.8	-16.6	343.2	337.1	6.11	56.174		
570.0	570.0	574.8	574.8	3.1	3.1	-2.78	342.8	-16.6	343.2	337.1	6.15	55.832		
600.0	600.0	604.8	604.8	3.1	3.1	-2.78	342.8	-16.6	343.2	337.0	6.16	55.672		
665.0	665.0	669.8	669.8	3.1	3.1	-2.78	342.8	-16.6	343.2	337.0	6.21	55.299		
700.0	700.0	704.8	704.8	3.1	3.1	-2.78	342.8	-16.6	343.2	337.0	6.23	55.084		
760.0	760.0	764.8	764.8	3.1	3.1	-2.78	342.8	-16.6	343.2	336.9	6.28	54.694		
800.0	800.0	804.8	804.8	3.2	3.2	-2.78	342.8	-16.6	343.2	336.9	6.31	54.419		
855.0	855.0	859.8	859.8	3.2	3.2	-2.78	342.8	-16.6	343.2	336.9	6.35	54.024		
900.0	900.0	904.8	904.8	3.2	3.2	-2.78	342.8	-16.6	343.2	336.8	6.39	53.687		
950.0	950.0	954.8	954.8	3.2	3.2	-2.78	342.8	-16.6	343.2	336.8	6.44	53.298		
1,000.0	1,000.0	1,004.8	1,004.8	3.2	3.2	-2.78	342.8	-16.6	343.2	336.7	6.49	52.895		
1,045.0	1,045.0	1,049.8	1,049.8	3.3	3.3	-2.78	342.8	-16.6	343.2	336.7	6.53	52.523		
1,100.0	1,100.0	1,104.8	1,104.8	3.3	3.3	-2.78	342.8	-16.6	343.2	336.6	6.59	52.055		
1,140.0	1,140.0	1,144.8	1,144.8	3.3	3.3	-2.78	342.8	-16.6	343.2	336.6	6.64	51.707		
1,200.0	1,200.0	1,204.8	1,204.8	3.4	3.4	-2.78	342.8	-16.6	343.2	336.5	6.71	51.174		
1,235.0	1,235.0	1,239.8	1,239.8	3.4	3.4	-2.78	342.8	-16.6	343.2	336.5	6.75	50.857		
1,300.0	1,300.0	1,304.8	1,304.8	3.4	3.4	-2.78	342.8	-16.6	343.2	336.4	6.83	50.261		
1,330.0	1,330.0	1,334.8	1,334.8	3.4	3.4	-2.78	342.8	-16.6	343.2	336.3	6.87	49.982		
1,400.0	1,400.0	1,404.8	1,404.8	3.5	3.5	-2.78	342.8	-16.6	343.2	336.2	6.96	49.325		
1,425.0	1,425.0	1,429.8	1,429.8	3.5	3.5	-2.78	342.8	-16.6	343.2	336.2	6.99	49.088		
1,500.0	1,500.0	1,504.8	1,504.8	3.5	3.6	-2.78	342.8	-16.6	343.2	336.1	7.10	48.372		
1,520.0	1,520.0	1,524.8	1,524.8	3.6	3.6	-2.78	342.8	-16.6	343.2	336.1	7.12	48.180		
1,600.0	1,600.0	1,604.8	1,604.8	3.6	3.6	-2.78	342.8	-16.6	343.2	336.0	7.24	47.409		
1,615.0	1,615.0	1,619.8	1,619.8	3.6	3.6	-2.78	342.8	-16.6	343.2	335.9	7.26	47.265		
1,700.0	1,700.0	1,704.8	1,704.8	3.7	3.7	-2.78	342.8	-16.6	343.2	335.8	7.39	46.443		
1,710.0	1,710.0	1,714.8	1,714.8	3.7	3.7	-2.78	342.8	-16.6	343.2	335.8	7.41	46.346		
1,800.0	1,800.0	1,804.8	1,804.8	3.8	3.8	-2.78	342.8	-16.6	343.2	335.7	7.55	45.478		
1,805.0	1,805.0	1,809.8	1,809.8	3.8	3.8	-2.78	342.8	-16.6	343.2	335.7	7.55	45.430		
1,900.0	1,900.0	1,904.8	1,904.8	3.9	3.9	-2.78	342.8	-16.6	343.2	335.5	7.71	44.518		
1,995.0	1,995.0	1,999.8	1,999.8	3.9	3.9	-2.78	342.8	-16.6	343.2	335.3	7.87	43.616		
2,000.0	2,000.0	2,004.8	2,004.8	3.9	3.9	-2.78	342.8	-16.6	343.2	335.3	7.88	43.568		
2,090.0	2,090.0	2,094.8	2,094.8	4.1	4.0	-3.07	342.8	-16.6	341.8	333.7	8.14	41.971		
2,100.0	2,100.0	2,104.8	2,104.8	4.2	4.0	-3.08	342.8	-16.6	341.5	333.3	8.17	41.776		
2,185.0	2,184.9	2,189.7	2,189.7	4.7	4.1	-3.12	342.8	-16.6	337.2	328.5	8.77	38.444		
2,200.0	2,199.8	2,204.6	2,204.6	4.8	4.1	-3.13	342.8	-16.6	336.2	327.4	8.88	37.852		
2,280.0	2,279.6	2,284.4	2,284.4	5.3	4.2	-3.20	342.8	-16.6	329.6	320.1	9.41	35.023		
2,300.0	2,299.5	2,304.3	2,304.3	5.4	4.2	-3.22	342.8	-16.6	327.5	318.0	9.54	34.316		
2,375.0	2,373.9	2,378.7	2,378.7	5.9	4.3	-3.32	342.8	-16.6	318.7	308.7	10.01	31.831		
2,400.0	2,398.7	2,403.5	2,403.5	6.0	4.3	-3.36	342.8	-16.6	315.4	305.2	10.17	31.004		
2,470.0	2,467.9	2,472.7	2,472.7	6.4	4.4	-3.49	342.8	-16.6	304.8	294.2	10.59	28.780		
2,500.0	2,497.5	2,502.2	2,502.2	6.5	4.4	-3.55	342.8	-16.6	299.8	289.0	10.77	27.828		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #801H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-Standard Keeper 104, 9475-MWD+IFR1+FDIR													Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance			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)	Ellipses (usft)	Minimum Separation (usft)		Separation Factor	
2,565.0	2,561.3	2,563.8	2,563.8	6.8	4.4	-3.58	343.1	-16.0	288.0	277.0	11.03	26.102		
2,575.2	2,571.4	2,573.4	2,573.4	6.8	4.5	-3.56	343.2	-15.8	286.1	275.0	11.08	25.829		
2,600.0	2,595.6	2,596.9	2,596.9	6.8	4.5	-3.49	343.5	-15.2	281.4	270.3	11.13	25.288		
2,660.0	2,654.4	2,653.8	2,653.7	6.9	4.5	-3.14	344.6	-12.9	270.5	259.2	11.25	24.045		
2,700.0	2,693.6	2,691.8	2,691.6	7.0	4.5	-2.76	345.5	-10.8	263.4	252.1	11.33	23.247		
2,755.0	2,747.5	2,744.0	2,743.7	7.1	4.6	-2.04	347.2	-7.2	254.1	242.6	11.47	22.156		
2,800.0	2,791.6	2,786.8	2,786.3	7.1	4.6	-1.26	348.9	-3.7	246.7	235.2	11.58	21.303		
2,850.0	2,840.6	2,834.3	2,833.5	7.2	4.6	-0.17	351.1	1.0	239.0	227.3	11.72	20.387		
2,900.0	2,889.6	2,881.7	2,880.6	7.3	4.6	1.16	353.6	6.4	231.7	219.9	11.87	19.524		
2,945.0	2,933.7	2,925.2	2,923.7	7.4	4.7	2.58	356.1	11.8	225.6	213.6	12.01	18.782		
3,000.0	2,987.6	2,979.3	2,977.2	7.5	4.7	4.47	359.3	18.6	218.3	206.1	12.18	17.918		
3,040.0	3,026.8	3,018.6	3,016.1	7.6	4.7	5.92	361.6	23.6	213.2	200.8	12.31	17.311		
3,100.0	3,085.6	3,077.5	3,074.5	7.7	4.8	8.22	365.1	31.0	205.7	193.2	12.51	16.450		
3,135.0	3,119.9	3,111.9	3,108.5	7.8	4.8	9.64	367.1	35.3	201.6	188.9	12.62	15.970		
3,200.0	3,183.6	3,175.7	3,171.7	8.0	4.8	12.44	370.9	43.4	194.2	181.3	12.83	15.134		
3,230.0	3,213.0	3,205.2	3,200.9	8.0	4.9	13.80	372.6	47.1	190.9	178.0	12.93	14.770		
3,300.0	3,281.6	3,273.9	3,269.0	8.2	4.9	17.14	376.7	55.7	183.8	170.6	13.14	13.985		
3,325.0	3,306.1	3,298.5	3,293.3	8.3	4.9	18.40	378.1	58.8	181.4	168.2	13.22	13.724		
3,400.0	3,379.6	3,372.2	3,366.3	8.5	5.0	22.36	382.5	68.1	174.8	161.4	13.43	13.016		
3,420.0	3,399.2	3,391.8	3,385.7	8.5	5.0	23.46	383.6	70.6	173.2	159.7	13.48	12.845		
3,500.0	3,477.6	3,470.4	3,463.6	8.7	5.1	28.07	388.3	80.5	167.5	153.8	13.68	12.241		
3,515.0	3,492.3	3,485.1	3,478.1	8.8	5.1	28.96	389.1	82.4	166.5	152.8	13.71	12.142		
3,600.0	3,575.6	3,568.6	3,560.8	9.0	5.1	34.21	394.1	92.9	162.0	148.1	13.88	11.667		
3,610.0	3,585.4	3,578.4	3,570.5	9.0	5.2	34.85	394.6	94.1	161.5	147.6	13.90	11.621		
3,700.0	3,673.5	3,666.9	3,658.1	9.3	5.2	40.70	399.9	105.3	158.5	144.5	14.03	11.300		
3,705.0	3,678.4	3,671.8	3,663.0	9.3	5.2	41.03	400.1	105.9	158.4	144.4	14.03	11.287		
3,800.0	3,771.5	3,765.1	3,755.4	9.6	5.3	47.37	405.7	117.7	157.2	143.1	14.12	11.134		
3,807.5	3,778.9	3,772.5	3,762.7	9.6	5.3	47.88	406.1	118.6	157.2	143.1	14.13	11.129 CC, ES, SF		
3,895.0	3,864.6	3,858.4	3,847.8	9.8	5.4	53.73	411.2	129.4	158.1	143.9	14.18	11.151		
3,900.0	3,869.5	3,863.3	3,852.6	9.8	5.4	54.06	411.4	130.0	158.2	144.0	14.18	11.157		
3,990.0	3,957.7	3,951.7	3,940.2	10.1	5.5	59.95	416.7	141.2	160.9	146.7	14.21	11.320		
4,000.0	3,967.5	3,961.5	3,949.9	10.1	5.5	60.59	417.2	142.4	161.3	147.1	14.22	11.345		
4,085.0	4,050.8	4,045.0	4,032.6	10.4	5.6	65.89	422.2	152.9	165.6	151.3	14.26	11.614		
4,100.0	4,065.5	4,059.8	4,047.2	10.4	5.6	66.79	423.0	154.8	166.5	152.2	14.27	11.670		
4,180.0	4,143.9	4,138.3	4,125.0	10.7	5.6	71.46	427.7	164.7	172.0	157.7	14.33	12.006		
4,200.0	4,163.5	4,158.0	4,144.4	10.8	5.7	72.57	428.8	167.2	173.6	159.2	14.35	12.098		
4,275.0	4,237.0	4,231.7	4,217.4	11.0	5.7	76.59	433.2	176.5	180.0	165.6	14.44	12.469		
4,300.0	4,261.5	4,256.2	4,241.7	11.1	5.8	77.86	434.6	179.6	182.3	167.9	14.47	12.600		
4,370.0	4,330.1	4,325.0	4,309.8	11.3	5.8	81.27	438.7	188.2	189.3	174.7	14.59	12.979		
4,400.0	4,359.5	4,354.4	4,339.0	11.4	5.9	82.65	440.4	191.9	192.5	177.9	14.64	13.147		
4,465.0	4,423.2	4,418.3	4,402.2	11.6	5.9	85.49	444.2	200.0	199.8	185.0	14.78	13.517		
4,500.0	4,457.5	4,452.7	4,436.3	11.7	6.0	86.93	446.2	204.3	203.9	189.0	14.86	13.720		
4,560.0	4,516.3	4,511.6	4,494.6	11.9	6.0	89.28	449.7	211.8	211.2	196.2	15.02	14.069		
4,600.0	4,555.5	4,550.9	4,533.5	12.0	6.0	90.76	452.0	216.7	216.3	201.2	15.13	14.303		
4,655.0	4,609.4	4,604.9	4,587.0	12.2	6.1	92.68	455.2	223.5	223.5	208.3	15.29	14.624		
4,700.0	4,653.5	4,649.1	4,630.8	12.4	6.1	94.16	457.8	229.1	229.6	214.2	15.43	14.886		
4,750.0	4,702.4	4,698.2	4,679.4	12.5	6.2	95.72	460.7	235.3	236.5	221.0	15.59	15.175		
4,800.0	4,751.4	4,747.3	4,728.1	12.7	6.2	97.19	463.6	241.5	243.6	227.9	15.76	15.462		
4,845.0	4,795.5	4,791.5	4,771.8	12.8	6.3	98.44	466.2	247.0	250.1	234.2	15.91	15.718		
4,900.0	4,849.4	4,845.6	4,825.3	13.0	6.3	99.88	469.4	253.9	258.2	242.1	16.11	16.027		
4,940.0	4,888.6	4,884.9	4,864.2	13.1	6.4	100.88	471.7	258.8	264.2	248.0	16.26	16.249		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #801H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9475-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)			
5,000.0	4,947.4	4,943.8	4,922.6	13.4	6.5	102.29	475.2	266.2	273.3	256.9	16.49	16.577	
5,035.0	4,981.7	4,978.2	4,956.6	13.5	6.5	103.07	477.2	270.6	278.7	262.1	16.63	16.766	
5,100.0	5,045.4	5,042.0	5,019.9	13.7	6.6	104.44	481.0	278.6	288.9	272.0	16.88	17.112	
5,130.0	5,074.8	5,071.5	5,049.1	13.8	6.6	105.04	482.7	282.3	293.6	276.6	17.00	17.269	
5,200.0	5,143.4	5,140.2	5,117.1	14.0	6.7	106.37	486.8	291.0	304.8	287.5	17.29	17.629	
5,225.0	5,167.9	5,164.8	5,141.5	14.1	6.7	106.83	488.2	294.1	308.8	291.4	17.39	17.756	
5,300.0	5,241.4	5,238.5	5,214.4	14.4	6.8	108.12	492.6	303.4	321.0	303.3	17.71	18.129	
5,320.0	5,261.0	5,258.1	5,233.9	14.4	6.8	108.44	493.7	305.9	324.3	306.5	17.79	18.227	
5,400.0	5,339.4	5,336.7	5,311.7	14.7	6.9	109.69	498.4	315.8	337.5	319.3	18.13	18.611	
5,415.0	5,354.1	5,351.4	5,326.3	14.8	6.9	109.91	499.2	317.6	340.0	321.8	18.20	18.682	
5,500.0	5,437.4	5,434.9	5,409.0	15.1	7.0	111.12	504.2	328.1	354.2	335.6	18.57	19.076	
5,510.0	5,447.2	5,444.7	5,418.7	15.1	7.0	111.25	504.7	329.4	355.9	337.2	18.61	19.121	
5,600.0	5,535.4	5,533.1	5,506.2	15.4	7.1	112.42	510.0	340.5	371.1	352.1	19.01	19.523	
5,605.0	5,540.3	5,538.1	5,511.1	15.4	7.1	112.48	510.2	341.1	371.9	352.9	19.03	19.545	
5,700.0	5,633.4	5,631.4	5,603.5	15.8	7.2	113.61	515.7	352.9	388.1	368.7	19.45	19.953	
5,795.0	5,726.5	5,724.7	5,695.9	16.1	7.3	114.64	521.3	364.7	404.5	384.6	19.88	20.347	
5,800.0	5,731.4	5,729.6	5,700.8	16.1	7.3	114.69	521.5	365.3	405.4	385.5	19.90	20.367	
5,822.7	5,753.6	5,751.9	5,722.9	16.2	7.3	114.93	522.9	368.1	409.3	389.3	20.00	20.460	
5,890.0	5,819.7	5,818.1	5,788.4	16.4	7.4	115.71	526.8	376.4	420.6	400.3	20.31	20.713	
5,900.0	5,829.5	5,828.0	5,798.2	16.5	7.4	115.80	527.3	377.7	422.3	401.9	20.35	20.747	
5,985.0	5,913.5	5,911.9	5,881.3	16.8	7.5	116.41	532.3	388.3	435.5	414.8	20.74	21.001	
6,000.0	5,928.3	5,926.7	5,895.9	16.9	7.5	116.48	533.2	390.1	437.8	417.0	20.81	21.039	
6,080.0	6,007.7	6,005.9	5,974.4	17.3	7.6	116.70	537.8	400.1	449.1	427.9	21.17	21.214	
6,100.0	6,027.6	6,025.7	5,994.0	17.4	7.6	116.71	539.0	402.6	451.7	430.5	21.26	21.249	
6,175.0	6,102.3	6,100.1	6,067.6	17.7	7.7	116.61	543.4	412.0	461.2	439.6	21.59	21.358	
6,200.0	6,127.2	6,124.9	6,092.2	17.9	7.8	116.52	544.9	415.1	464.2	442.4	21.71	21.384	
6,270.0	6,197.1	6,194.3	6,161.0	18.2	7.8	116.16	549.0	423.9	472.0	449.9	22.01	21.439	
6,300.0	6,227.1	6,224.1	6,190.4	18.3	7.9	115.95	550.7	427.6	475.1	452.9	22.15	21.451	
6,365.0	6,292.0	6,288.5	6,254.2	18.6	8.0	115.39	554.5	435.7	481.4	459.0	22.43	21.463	
6,398.0	6,325.0	6,321.2	6,286.6	18.8	8.0	115.32	556.4	439.9	484.4	461.9	22.57	21.459	
6,400.0	6,327.0	6,323.2	6,288.6	18.8	8.0	115.30	556.6	440.1	484.6	462.0	22.58	21.459	
6,460.0	6,387.0	6,382.6	6,347.4	18.9	8.1	114.55	560.1	447.6	490.0	467.2	22.84	21.451	
6,500.0	6,427.0	6,422.2	6,386.6	19.1	8.1	114.06	562.4	452.6	493.7	470.6	23.02	21.447	
6,555.0	6,482.0	6,476.7	6,440.6	19.2	8.2	113.40	565.6	459.5	498.7	475.5	23.26	21.440	
6,600.0	6,527.0	6,521.2	6,484.7	19.4	8.2	112.87	568.2	465.1	502.9	479.5	23.46	21.435	
6,650.0	6,577.0	6,570.8	6,533.7	19.5	8.3	112.28	571.2	471.3	507.6	484.0	23.69	21.430	
6,700.0	6,627.0	6,620.3	6,582.8	19.7	8.3	111.72	574.1	477.6	512.4	488.5	23.91	21.427	
6,745.0	6,672.0	6,664.8	6,626.9	19.8	8.4	111.21	576.7	483.2	516.7	492.6	24.12	21.424	
6,800.0	6,727.0	6,719.3	6,680.8	20.0	8.5	110.61	579.9	490.0	522.1	497.7	24.37	21.421	
6,840.0	6,767.0	6,758.9	6,720.1	20.1	8.5	110.18	582.3	495.0	526.0	501.4	24.56	21.420	
6,900.0	6,827.0	6,818.3	6,778.9	20.3	8.6	109.54	585.8	502.5	531.9	507.1	24.84	21.419	
6,935.0	6,862.0	6,853.0	6,813.2	20.4	8.6	109.18	587.8	506.9	535.4	510.4	25.00	21.419	
7,000.0	6,927.0	6,917.3	6,877.0	20.6	8.7	108.51	591.6	515.0	542.0	516.7	25.30	21.419	
7,030.0	6,957.0	6,947.1	6,906.4	20.7	8.7	108.21	593.4	518.7	545.0	519.6	25.44	21.420	
7,100.0	7,027.0	7,016.4	6,975.0	20.9	8.8	107.52	597.5	527.5	552.2	526.4	25.78	21.423	
7,125.0	7,052.0	7,041.1	6,999.5	21.0	8.9	107.28	598.9	530.6	554.8	528.9	25.89	21.424	
7,200.0	7,127.0	7,115.4	7,073.1	21.2	8.9	106.56	603.3	540.0	562.6	536.3	26.25	21.429	
7,220.0	7,147.0	7,135.2	7,092.7	21.3	9.0	106.38	604.5	542.5	564.7	538.3	26.35	21.431	
7,300.0	7,227.0	7,214.4	7,171.1	21.6	9.1	105.64	609.1	552.5	573.1	546.4	26.73	21.439	
7,315.0	7,242.0	7,229.3	7,185.9	21.6	9.1	105.51	610.0	554.3	574.7	547.9	26.80	21.440	
7,400.0	7,327.0	7,313.5	7,269.2	21.9	9.2	104.76	615.0	564.9	583.7	556.5	27.21	21.450	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #801H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9475-MWD+IFR1+FDIR											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum Separation		Separation	Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)		
7,410.0	7,337.0	7,323.4	7,279.0	21.9	9.2	104.67	615.6	566.2	584.8	557.6	27.24	21.466
7,459.0	7,386.0	7,371.9	7,327.1	22.0	9.3	104.25	618.4	572.3	590.1	562.7	27.39	21.543
7,500.0	7,427.0	7,414.8	7,369.6	22.0	9.3	-76.32	620.9	577.6	594.1	566.7	27.47	21.630
7,505.0	7,432.0	7,420.2	7,374.9	22.0	9.3	-76.36	621.2	578.3	594.6	567.1	27.48	21.638
7,550.0	7,476.7	7,468.1	7,422.4	22.1	9.4	-76.94	623.8	583.9	597.9	570.3	27.58	21.681
7,600.0	7,525.6	7,520.6	7,474.5	22.3	9.4	-78.02	626.5	589.6	600.6	572.9	27.70	21.683
7,650.0	7,573.5	7,571.9	7,525.5	22.5	9.5	-79.52	628.9	594.8	602.4	574.6	27.83	21.648
7,695.0	7,615.4	7,616.7	7,570.1	22.6	9.6	-81.16	630.9	598.9	603.6	575.6	27.96	21.590
7,700.0	7,620.0	7,621.6	7,575.0	22.6	9.6	-81.36	631.1	599.4	603.7	575.7	27.97	21.583
7,750.0	7,664.7	7,669.5	7,622.7	22.8	9.6	-83.46	633.0	603.4	604.9	576.7	28.13	21.501
7,790.0	7,698.9	7,706.3	7,659.3	22.9	9.7	-85.27	634.3	606.3	606.0	577.8	28.28	21.430
7,800.0	7,707.3	7,715.2	7,668.2	22.9	9.7	-85.73	634.7	607.0	606.4	578.1	28.32	21.413
7,850.0	7,747.4	7,758.3	7,711.1	23.1	9.7	-88.03	636.1	610.0	608.7	580.2	28.54	21.333
7,885.0	7,773.9	7,786.8	7,739.5	23.2	9.8	-89.60	637.0	611.9	611.2	582.5	28.71	21.289
7,900.0	7,784.8	7,798.5	7,751.2	23.2	9.8	-90.25	637.3	612.6	612.5	583.7	28.79	21.275
7,950.0	7,819.1	7,835.5	7,788.2	23.3	9.8	-92.26	638.3	614.8	618.0	589.0	29.08	21.256
7,980.0	7,838.2	7,856.0	7,808.7	23.4	9.8	-93.32	638.8	615.9	622.5	593.2	29.27	21.269
8,000.0	7,850.2	7,869.0	7,821.6	23.4	9.9	-93.94	639.1	616.5	626.0	596.6	29.40	21.290
8,050.0	7,877.7	7,898.7	7,851.3	23.5	9.9	-95.18	639.8	617.9	636.6	606.8	29.76	21.393
8,075.0	7,890.0	7,912.1	7,864.7	23.5	9.9	-95.59	640.1	618.5	643.0	613.1	29.94	21.475
8,100.0	7,901.4	7,924.4	7,877.0	23.5	9.9	-95.86	640.3	619.0	650.2	620.1	30.13	21.579
8,150.0	7,921.3	7,945.8	7,898.4	23.6	9.9	-95.90	640.7	619.9	666.9	636.4	30.51	21.857
8,170.0	7,928.1	7,953.2	7,905.7	23.6	9.9	-95.72	640.8	620.2	674.5	643.9	30.67	21.996
8,200.0	7,937.1	7,962.8	7,915.3	23.6	10.0	-95.21	641.0	620.5	686.9	656.0	30.89	22.236
8,250.0	7,948.7	7,975.1	7,927.6	23.6	10.0	-93.74	641.2	620.9	709.8	678.6	31.25	22.716
8,265.0	7,951.3	7,977.8	7,930.3	23.7	10.0	-93.13	641.2	621.0	717.3	685.9	31.35	22.880
8,300.0	7,956.0	7,982.5	7,935.0	23.7	10.0	-91.42	641.3	621.2	735.6	704.0	31.57	23.296
8,350.0	7,958.9	7,985.1	7,937.6	23.7	10.0	-88.23	641.3	621.2	763.8	731.9	31.87	23.968
8,358.7	7,959.0	7,985.0	7,937.5	23.7	10.0	-87.59	641.3	621.2	768.9	737.0	31.91	24.094
8,360.0	7,959.0	7,985.0	7,937.5	23.7	10.0	-87.59	641.3	621.2	769.7	737.8	31.92	24.113
8,400.0	7,959.0	7,984.3	7,936.8	23.7	10.0	-87.52	641.3	621.2	794.1	762.0	32.12	24.721
8,455.0	7,959.0	7,983.4	7,935.9	23.7	10.0	-87.44	641.3	621.2	829.7	797.3	32.38	25.627
8,500.0	7,959.1	7,982.6	7,935.1	23.7	10.0	-87.37	641.3	621.2	860.3	827.7	32.55	26.427
8,550.0	7,959.1	7,981.8	7,934.3	23.7	10.0	-87.29	641.3	621.1	895.7	863.0	32.73	27.365
8,600.0	7,959.1	7,980.9	7,933.4	23.7	10.0	-87.21	641.3	621.1	932.5	899.6	32.89	28.355
8,645.0	7,959.1	7,980.1	7,932.6	23.7	10.0	-87.13	641.3	621.1	966.6	933.6	33.01	29.283

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #802H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9442-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	4.8	4.8	3.0	3.0	-7.75	342.8	-46.6	346.0					
95.0	95.0	99.8	99.8	3.0	3.0	-7.75	342.8	-46.6	346.0	340.0	6.00	57.656		
100.0	100.0	104.8	104.8	3.0	3.0	-7.75	342.8	-46.6	346.0	340.0	6.00	57.655		
190.0	190.0	194.8	194.8	3.0	3.0	-7.75	342.8	-46.6	346.0	340.0	6.01	57.574		
200.0	200.0	204.8	204.8	3.0	3.0	-7.75	342.8	-46.6	346.0	340.0	6.01	57.559		
285.0	285.0	289.8	289.8	3.0	3.0	-7.75	342.8	-46.6	346.0	339.9	6.03	57.393		
300.0	300.0	304.8	304.8	3.0	3.0	-7.75	342.8	-46.6	346.0	339.9	6.03	57.355		
380.0	380.0	384.8	384.8	3.0	3.0	-7.75	342.8	-46.6	346.0	339.9	6.06	57.117		
400.0	400.0	404.8	404.8	3.0	3.0	-7.75	342.8	-46.6	346.0	339.9	6.06	57.047		
475.0	475.0	479.8	479.8	3.0	3.0	-7.75	342.8	-46.6	346.0	339.9	6.10	56.750		
500.0	500.0	504.8	504.8	3.1	3.1	-7.75	342.8	-46.6	346.0	339.9	6.11	56.639		
570.0	570.0	574.8	574.8	3.1	3.1	-7.75	342.8	-46.6	346.0	339.8	6.15	56.298		
600.0	600.0	604.8	604.8	3.1	3.1	-7.75	342.8	-46.6	346.0	339.8	6.16	56.138		
665.0	665.0	669.8	669.8	3.1	3.1	-7.75	342.8	-46.6	346.0	339.8	6.20	55.766		
700.0	700.0	704.8	704.8	3.1	3.1	-7.75	342.8	-46.6	346.0	339.7	6.23	55.552		
760.0	760.0	764.8	764.8	3.1	3.1	-7.75	342.8	-46.6	346.0	339.7	6.27	55.162		
800.0	800.0	804.8	804.8	3.2	3.2	-7.75	342.8	-46.6	346.0	339.7	6.30	54.888		
855.0	855.0	859.8	859.8	3.2	3.2	-7.75	342.8	-46.6	346.0	339.6	6.35	54.494		
900.0	900.0	904.8	904.8	3.2	3.2	-7.75	342.8	-46.6	346.0	339.6	6.39	54.157		
950.0	950.0	954.8	954.8	3.2	3.2	-7.75	342.8	-46.6	346.0	339.5	6.43	53.768		
1,000.0	1,000.0	1,004.8	1,004.8	3.2	3.2	-7.75	342.8	-46.6	346.0	339.5	6.48	53.366		
1,045.0	1,045.0	1,049.8	1,049.8	3.3	3.3	-7.75	342.8	-46.6	346.0	339.4	6.53	52.994		
1,100.0	1,100.0	1,104.8	1,104.8	3.3	3.3	-7.75	342.8	-46.6	346.0	339.4	6.59	52.526		
1,140.0	1,140.0	1,144.8	1,144.8	3.3	3.3	-7.75	342.8	-46.6	346.0	339.3	6.63	52.178		
1,200.0	1,200.0	1,204.8	1,204.8	3.4	3.4	-7.75	342.8	-46.6	346.0	339.3	6.70	51.646		
1,235.0	1,235.0	1,239.8	1,239.8	3.4	3.4	-7.75	342.8	-46.6	346.0	339.2	6.74	51.329		
1,300.0	1,300.0	1,304.8	1,304.8	3.4	3.4	-7.75	342.8	-46.6	346.0	339.2	6.82	50.733		
1,330.0	1,330.0	1,334.8	1,334.8	3.4	3.4	-7.75	342.8	-46.6	346.0	339.1	6.86	50.454		
1,400.0	1,400.0	1,404.8	1,404.8	3.5	3.5	-7.75	342.8	-46.6	346.0	339.0	6.95	49.796		
1,425.0	1,425.0	1,429.8	1,429.8	3.5	3.5	-7.75	342.8	-46.6	346.0	339.0	6.98	49.559		
1,500.0	1,500.0	1,504.8	1,504.8	3.5	3.6	-7.75	342.8	-46.6	346.0	338.9	7.08	48.842		
1,520.0	1,520.0	1,524.8	1,524.8	3.6	3.6	-7.75	342.8	-46.6	346.0	338.9	7.11	48.650		
1,600.0	1,600.0	1,604.8	1,604.8	3.6	3.6	-7.75	342.8	-46.6	346.0	338.7	7.23	47.878		
1,615.0	1,615.0	1,619.8	1,619.8	3.6	3.6	-7.75	342.8	-46.6	346.0	338.7	7.25	47.733		
1,700.0	1,700.0	1,704.8	1,704.8	3.7	3.7	-7.75	342.8	-46.6	346.0	338.6	7.38	46.909		
1,710.0	1,710.0	1,714.8	1,714.8	3.7	3.7	-7.75	342.8	-46.6	346.0	338.6	7.39	46.812		
1,800.0	1,800.0	1,804.8	1,804.8	3.8	3.8	-7.75	342.8	-46.6	346.0	338.4	7.53	45.941		
1,805.0	1,805.0	1,809.8	1,809.8	3.8	3.8	-7.75	342.8	-46.6	346.0	338.4	7.54	45.893		
1,900.0	1,900.0	1,904.8	1,904.8	3.9	3.9	-7.75	342.8	-46.6	346.0	338.3	7.69	44.979		
1,995.0	1,995.0	1,999.8	1,999.8	3.9	3.9	-7.75	342.8	-46.6	346.0	338.1	7.85	44.073		
2,000.0	2,000.0	2,004.8	2,004.8	3.9	3.9	-7.75	342.8	-46.6	346.0	338.1	7.86	44.026		
2,090.0	2,090.0	2,094.8	2,094.8	4.1	4.0	-8.06	342.8	-46.6	344.6	336.5	8.12	42.458		
2,100.0	2,100.0	2,104.8	2,104.8	4.2	4.0	-8.07	342.8	-46.6	344.2	336.1	8.14	42.271		
2,185.0	2,184.9	2,189.7	2,189.7	4.7	4.1	-8.18	342.8	-46.6	340.1	331.3	8.71	39.021		
2,200.0	2,199.8	2,204.6	2,204.6	4.8	4.1	-8.21	342.8	-46.6	339.1	330.2	8.82	38.446		
2,280.0	2,279.6	2,284.4	2,284.4	5.3	4.2	-8.39	342.8	-46.6	332.4	323.1	9.32	35.660		
2,300.0	2,299.5	2,304.3	2,304.3	5.4	4.2	-8.45	342.8	-46.6	330.4	321.0	9.45	34.963		
2,375.0	2,373.9	2,378.7	2,378.7	5.9	4.3	-8.71	342.8	-46.6	321.7	311.8	9.90	32.503		
2,400.0	2,398.7	2,403.5	2,403.5	6.0	4.3	-8.81	342.8	-46.6	318.4	308.3	10.05	31.683		
2,470.0	2,467.9	2,472.7	2,472.7	6.4	4.4	-9.15	342.8	-46.6	307.9	297.5	10.45	29.474		
2,500.0	2,497.5	2,500.0	2,500.0	6.5	4.4	-9.30	342.8	-46.6	302.9	292.3	10.62	28.531		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #802H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9442-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 Factor	
2,565.0	2,561.3	2,560.7	2,560.6	6.8	4.4	-9.76	343.3	-47.0	291.7	280.8	10.87	26.837
2,575.2	2,571.4	2,569.9	2,569.9	6.8	4.5	-9.85	343.5	-47.1	289.9	279.0	10.91	26.577
2,600.0	2,595.6	2,592.2	2,592.2	6.8	4.5	-10.06	344.0	-47.5	285.7	274.7	10.96	26.073
2,660.0	2,654.4	2,646.6	2,646.6	6.9	4.5	-10.67	345.8	-48.9	276.1	265.0	11.06	24.959
2,700.0	2,693.6	2,683.0	2,682.9	7.0	4.6	-11.16	347.5	-50.1	270.3	259.2	11.13	24.287
2,755.0	2,747.5	2,733.2	2,732.9	7.1	4.6	-11.93	350.4	-52.3	263.1	251.9	11.23	23.425
2,800.0	2,791.6	2,776.3	2,775.9	7.1	4.6	-12.68	353.4	-54.5	257.8	246.5	11.31	22.786
2,850.0	2,840.6	2,825.8	2,825.2	7.2	4.7	-13.57	356.9	-57.0	252.0	240.6	11.41	22.082
2,900.0	2,889.6	2,875.3	2,874.5	7.3	4.7	-14.52	360.4	-59.6	246.3	234.8	11.51	21.398
2,945.0	2,933.7	2,919.9	2,918.9	7.4	4.8	-15.40	363.5	-61.9	241.3	229.7	11.61	20.789
3,000.0	2,987.6	2,974.3	2,973.2	7.5	4.8	-16.53	367.3	-64.7	235.2	223.4	11.72	20.069
3,040.0	3,026.8	3,013.9	3,012.6	7.6	4.8	-17.39	370.1	-66.8	230.8	219.0	11.80	19.553
3,100.0	3,085.6	3,073.3	3,071.8	7.7	4.9	-18.75	374.3	-69.8	224.3	212.4	11.93	18.807
3,135.0	3,119.9	3,108.0	3,106.3	7.8	4.9	-19.57	376.7	-71.6	220.6	208.6	12.00	18.380
3,200.0	3,183.6	3,172.4	3,170.4	8.0	5.0	-21.18	381.2	-75.0	213.8	201.6	12.13	17.617
3,230.0	3,213.0	3,202.1	3,200.0	8.0	5.0	-21.96	383.3	-76.5	210.7	198.5	12.20	17.273
3,300.0	3,281.6	3,271.4	3,269.1	8.2	5.1	-23.86	388.2	-80.1	203.7	191.3	12.34	16.504
3,325.0	3,306.1	3,296.1	3,293.7	8.3	5.1	-24.57	389.9	-81.4	201.2	188.8	12.39	16.238
3,400.0	3,379.6	3,370.4	3,367.7	8.5	5.2	-26.80	395.1	-85.2	194.1	181.5	12.54	15.474
3,420.0	3,399.2	3,390.2	3,387.4	8.5	5.2	-27.43	396.5	-86.2	192.2	179.7	12.58	15.278
3,500.0	3,477.6	3,469.4	3,466.3	8.7	5.3	-30.04	402.0	-90.3	185.1	172.3	12.74	14.530
3,515.0	3,492.3	3,484.2	3,481.1	8.8	5.3	-30.55	403.1	-91.1	183.8	171.0	12.76	14.396
3,600.0	3,575.6	3,568.4	3,565.0	9.0	5.4	-33.59	409.0	-95.5	176.7	163.8	12.92	13.675
3,610.0	3,585.4	3,578.3	3,574.8	9.0	5.4	-33.97	409.7	-96.0	175.9	162.9	12.94	13.594
3,700.0	3,673.5	3,667.4	3,663.6	9.3	5.5	-37.48	415.9	-100.6	169.1	156.0	13.09	12.912
3,705.0	3,678.4	3,672.4	3,668.5	9.3	5.5	-37.68	416.3	-100.8	168.7	155.6	13.10	12.876
3,800.0	3,771.5	3,766.4	3,762.2	9.6	5.6	-41.71	422.9	-105.7	162.3	149.0	13.26	12.242
3,895.0	3,864.6	3,860.5	3,856.0	9.8	5.7	-46.03	429.5	-110.6	156.8	143.3	13.41	11.692
3,900.0	3,869.5	3,865.4	3,860.9	9.8	5.7	-46.27	429.8	-110.8	156.5	143.1	13.41	11.666
3,990.0	3,957.7	3,954.6	3,949.7	10.1	5.8	-50.64	436.1	-115.4	152.2	138.6	13.56	11.226
4,000.0	3,967.5	3,964.5	3,959.5	10.1	5.8	-51.14	436.8	-116.0	151.8	138.2	13.57	11.182
4,085.0	4,050.8	4,048.6	4,043.4	10.4	5.8	-55.50	442.7	-120.3	148.7	135.0	13.71	10.841
4,100.0	4,065.5	4,063.5	4,058.2	10.4	5.9	-56.28	443.7	-121.1	148.2	134.5	13.74	10.787
4,180.0	4,143.9	4,142.7	4,137.1	10.7	5.9	-60.54	449.3	-125.2	146.3	132.4	13.89	10.533
4,200.0	4,163.5	4,162.5	4,156.8	10.8	6.0	-61.63	450.7	-126.2	145.9	132.0	13.93	10.478
4,275.0	4,237.0	4,236.7	4,230.8	11.0	6.0	-65.71	455.9	-130.0	145.1	131.0	14.09	10.297
4,300.0	4,261.5	4,261.5	4,255.4	11.1	6.1	-67.08	457.6	-131.3	145.0	130.8	14.15	10.247
4,320.3	4,281.4	4,281.6	4,275.4	11.1	6.1	-68.20	459.0	-132.4	145.0	130.8	14.20	10.209 CC, ES
4,370.0	4,330.1	4,330.8	4,324.5	11.3	6.1	-70.92	462.5	-134.9	145.1	130.8	14.33	10.129
4,400.0	4,359.5	4,360.5	4,354.1	11.4	6.2	-72.56	464.5	-136.5	145.4	131.0	14.41	10.089
4,465.0	4,423.2	4,424.9	4,418.2	11.6	6.2	-76.09	469.1	-139.8	146.4	131.8	14.61	10.021
4,500.0	4,457.5	4,459.5	4,452.7	11.7	6.3	-77.97	471.5	-141.6	147.1	132.4	14.72	9.996
4,560.0	4,516.3	4,518.9	4,511.9	11.9	6.3	-81.13	475.6	-144.6	148.8	133.9	14.93	9.968
4,600.0	4,555.5	4,558.5	4,551.3	12.0	6.4	-83.20	478.4	-146.7	150.2	135.1	15.08	9.961
4,655.0	4,609.4	4,613.0	4,605.6	12.2	6.5	-85.97	482.2	-149.5	152.4	137.1	15.29	9.965
4,700.0	4,653.5	4,657.5	4,650.0	12.4	6.5	-88.19	485.4	-151.8	154.4	139.0	15.48	9.979
4,750.0	4,702.4	4,707.0	4,699.3	12.5	6.6	-90.57	488.8	-154.4	157.0	141.3	15.69	10.005
4,800.0	4,751.4	4,756.5	4,748.6	12.7	6.6	-92.88	492.3	-156.9	159.8	143.9	15.92	10.041
4,845.0	4,795.5	4,801.1	4,793.0	12.8	6.7	-94.88	495.4	-159.2	162.6	146.4	16.12	10.082
4,900.0	4,849.4	4,855.6	4,847.2	13.0	6.7	-97.24	499.3	-162.1	166.2	149.8	16.39	10.142
4,940.0	4,888.6	4,895.2	4,886.7	13.1	6.8	-98.89	502.0	-164.1	169.0	152.4	16.58	10.193

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #802H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9442-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)				
5,000.0	4,947.4	4,954.6	4,945.9	13.4	6.8	-101.27	506.2	-167.2	173.5	156.6	16.88	10.277		
5,035.0	4,981.7	4,989.2	4,980.4	13.5	6.9	-102.59	508.6	-169.0	176.2	159.2	17.06	10.331		
5,100.0	5,045.4	5,053.6	5,044.5	13.7	6.9	-104.95	513.1	-172.3	181.6	164.2	17.39	10.439		
5,130.0	5,074.8	5,083.3	5,074.1	13.8	7.0	-106.00	515.2	-173.9	184.1	166.6	17.55	10.493		
5,200.0	5,143.4	5,152.6	5,143.1	14.0	7.0	-108.32	520.1	-177.4	190.4	172.4	17.92	10.624		
5,225.0	5,167.9	5,177.3	5,167.8	14.1	7.1	-109.11	521.8	-178.7	192.6	174.6	18.05	10.674		
5,300.0	5,241.4	5,251.6	5,241.8	14.4	7.2	-111.38	527.0	-182.6	199.7	181.3	18.45	10.828		
5,320.0	5,261.0	5,271.4	5,261.5	14.4	7.2	-111.96	528.4	-183.6	201.7	183.1	18.55	10.871		
5,400.0	5,339.4	5,350.6	5,340.4	14.7	7.3	-114.16	534.0	-187.7	209.6	190.6	18.98	11.046		
5,415.0	5,354.1	5,365.5	5,355.2	14.8	7.3	-114.56	535.0	-188.5	211.1	192.1	19.06	11.080		
5,500.0	5,437.4	5,449.6	5,439.0	15.1	7.4	-116.69	540.9	-192.8	220.0	200.5	19.51	11.276		
5,510.0	5,447.2	5,459.5	5,448.9	15.1	7.4	-116.93	541.6	-193.3	221.0	201.5	19.56	11.299		
5,600.0	5,535.4	5,548.6	5,537.7	15.4	7.5	-118.99	547.9	-197.9	230.7	210.7	20.04	11.514		
5,605.0	5,540.3	5,553.6	5,542.6	15.4	7.5	-119.10	548.2	-198.2	231.2	211.2	20.06	11.526		
5,700.0	5,633.4	5,647.7	5,636.3	15.8	7.6	-121.08	554.8	-203.1	241.8	221.2	20.56	11.757		
5,795.0	5,726.5	5,741.7	5,730.0	16.1	7.7	-122.90	561.4	-207.9	252.6	231.5	21.06	11.992		
5,800.0	5,731.4	5,746.7	5,734.9	16.1	7.7	-122.99	561.8	-208.2	253.1	232.0	21.09	12.004		
5,822.7	5,753.6	5,769.2	5,757.4	16.2	7.8	-123.40	563.3	-209.3	255.8	234.6	21.20	12.063		
5,890.0	5,819.7	5,835.9	5,823.8	16.4	7.8	-124.55	568.0	-212.8	263.1	241.6	21.54	12.217		
5,900.0	5,829.5	5,845.8	5,833.7	16.5	7.8	-124.69	568.7	-213.3	264.2	242.6	21.59	12.237		
5,985.0	5,913.5	5,930.4	5,917.9	16.8	7.9	-125.60	574.6	-217.7	272.1	250.1	22.04	12.348		
6,000.0	5,928.3	5,945.3	5,932.8	16.9	8.0	-125.70	575.7	-218.5	273.4	251.3	22.12	12.362		
6,080.0	6,007.7	6,025.1	6,012.3	17.3	8.1	-126.03	581.3	-222.6	279.3	256.8	22.53	12.399		
6,100.0	6,027.6	6,045.0	6,032.2	17.4	8.1	-126.05	582.7	-223.6	280.6	258.0	22.63	12.401		
6,175.0	6,102.3	6,119.9	6,106.8	17.7	8.2	-125.91	587.9	-227.5	284.7	261.7	22.98	12.387		
6,200.0	6,127.2	6,144.9	6,131.6	17.9	8.2	-125.79	589.7	-228.8	285.8	262.7	23.10	12.373		
6,270.0	6,197.1	6,214.8	6,201.3	18.2	8.3	-125.26	594.6	-232.4	288.2	264.8	23.40	12.317		
6,300.0	6,227.1	6,244.7	6,231.1	18.3	8.3	-124.94	596.7	-233.9	289.0	265.5	23.53	12.284		
6,365.0	6,292.0	6,309.5	6,295.7	18.6	8.4	-124.08	601.2	-237.3	290.0	266.3	23.78	12.200		
6,398.0	6,325.0	6,342.4	6,328.4	18.8	8.4	-123.27	603.5	-239.0	290.3	266.4	23.90	12.148		
6,400.0	6,327.0	6,344.4	6,330.4	18.8	8.4	-123.24	603.7	-239.1	290.3	266.4	23.90	12.146		
6,460.0	6,387.0	6,404.2	6,390.0	18.9	8.5	-122.21	607.9	-242.2	290.6	266.6	24.07	12.076		
6,500.0	6,427.0	6,444.2	6,429.8	19.1	8.5	-121.55	610.6	-244.2	290.9	266.7	24.18	12.029		
6,555.0	6,482.0	6,499.3	6,484.8	19.2	8.6	-120.74	613.9	-246.7	291.3	266.9	24.36	11.960		
6,600.0	6,527.0	6,544.5	6,529.8	19.4	8.7	-120.15	616.4	-248.5	291.6	267.1	24.50	11.901		
6,650.0	6,577.0	6,594.7	6,579.9	19.5	8.7	-119.57	618.7	-250.2	291.9	267.3	24.67	11.834		
6,700.0	6,627.0	6,644.9	6,630.1	19.7	8.8	-119.08	620.7	-251.7	292.3	267.4	24.84	11.766		
6,745.0	6,672.0	6,690.2	6,675.4	19.8	8.8	-118.72	622.3	-252.8	292.5	267.5	25.00	11.702		
6,800.0	6,727.0	6,745.5	6,730.7	20.0	8.9	-118.37	623.7	-253.9	292.7	267.6	25.19	11.622		
6,840.0	6,767.0	6,785.8	6,771.0	20.1	9.0	-118.18	624.5	-254.5	292.9	267.6	25.33	11.561		
6,900.0	6,827.0	6,846.3	6,831.4	20.3	9.0	-117.99	625.3	-255.0	293.0	267.5	25.56	11.466		
6,935.0	6,862.0	6,881.5	6,866.7	20.4	9.1	-117.94	625.5	-255.2	293.1	267.4	25.69	11.407		
7,000.0	6,927.0	6,946.7	6,931.8	20.6	9.1	-117.93	625.5	-255.2	293.1	267.1	25.94	11.297		
7,030.0	6,957.0	6,976.7	6,961.8	20.7	9.2	-117.93	625.5	-255.2	293.1	267.0	26.06	11.246		
7,100.0	7,027.0	7,046.7	7,031.8	20.9	9.3	-117.93	625.5	-255.2	293.1	266.7	26.33	11.129		
7,125.0	7,052.0	7,071.7	7,056.8	21.0	9.3	-117.93	625.5	-255.2	293.1	266.6	26.43	11.088		
7,200.0	7,127.0	7,146.7	7,131.8	21.2	9.4	-117.93	625.5	-255.2	293.1	266.3	26.72	10.966		
7,220.0	7,147.0	7,166.7	7,151.8	21.3	9.4	-117.93	625.5	-255.2	293.1	266.3	26.80	10.934		
7,300.0	7,227.0	7,246.7	7,231.8	21.6	9.5	-117.93	625.5	-255.2	293.1	265.9	27.12	10.807		
7,315.0	7,242.0	7,261.7	7,246.8	21.6	9.5	-117.93	625.5	-255.2	293.1	265.9	27.18	10.784		
7,400.0	7,327.0	7,346.7	7,331.8	21.9	9.6	-117.93	625.5	-255.2	293.1	265.6	27.51	10.652		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #802H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-Standard Keeper 104, 9442-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	
7,410.0	7,337.0	7,356.7	7,341.8	21.9	9.6	-117.93	625.5	-255.2	293.1	265.5	27.53	10.643		
7,459.0	7,386.0	7,405.7	7,390.8	22.0	9.7	-117.93	625.5	-255.2	293.1	265.4	27.65	10.600		
7,500.0	7,427.0	7,446.7	7,431.8	22.0	9.7	61.93	625.5	-255.2	292.4	264.7	27.66	10.569		
7,505.0	7,432.0	7,451.7	7,436.8	22.0	9.7	62.01	625.5	-255.2	292.2	264.5	27.67	10.561		
7,550.0	7,476.7	7,496.3	7,481.5	22.1	9.8	63.16	625.5	-255.2	289.7	262.0	27.68	10.465		
7,600.0	7,525.6	7,545.3	7,530.4	22.3	9.9	65.33	625.5	-255.2	285.3	257.6	27.66	10.313		
7,650.0	7,573.5	7,593.2	7,578.3	22.5	9.9	68.44	625.5	-255.2	279.5	251.9	27.59	10.130		
7,695.0	7,615.4	7,635.1	7,620.2	22.6	10.0	72.00	625.5	-255.2	273.6	246.1	27.48	9.953		
7,700.0	7,620.0	7,639.7	7,624.8	22.6	10.0	72.44	625.5	-255.2	272.9	245.4	27.47	9.934		
7,750.0	7,664.7	7,684.4	7,669.5	22.8	10.0	77.20	625.5	-255.2	266.4	239.0	27.34	9.743		
7,790.0	7,698.9	7,718.6	7,703.7	22.9	10.1	81.43	625.5	-255.2	262.0	234.7	27.26	9.609		
7,800.0	7,707.3	7,726.9	7,712.1	22.9	10.1	82.53	625.5	-255.2	261.0	233.8	27.25	9.579		
7,850.0	7,747.4	7,767.1	7,752.2	23.1	10.1	88.10	625.5	-255.2	258.1	230.8	27.26	9.467		
7,867.2	7,760.5	7,780.2	7,765.3	23.1	10.1	90.00	625.5	-255.2	257.8	230.5	27.30	9.444		
7,885.0	7,773.9	7,793.5	7,778.7	23.2	10.1	91.94	625.5	-255.2	258.1	230.7	27.37	9.432		
7,900.0	7,784.8	7,804.4	7,789.6	23.2	10.2	93.53	625.5	-255.2	258.8	231.3	27.44	9.430 SF		
7,950.0	7,819.1	7,838.8	7,823.9	23.3	10.2	98.45	625.5	-255.2	264.4	236.5	27.83	9.499		
7,980.0	7,838.2	7,857.8	7,843.0	23.4	10.2	101.01	625.5	-255.2	270.4	242.3	28.16	9.604		
8,000.0	7,850.2	7,869.8	7,855.0	23.4	10.2	102.52	625.5	-255.2	275.7	247.3	28.41	9.704		
8,050.0	7,877.7	7,897.3	7,882.5	23.5	10.3	105.52	625.5	-255.2	293.1	264.0	29.11	10.068		
8,075.0	7,890.0	7,909.7	7,894.8	23.5	10.3	106.55	625.5	-255.2	304.0	274.5	29.47	10.315		
8,100.0	7,901.4	7,921.1	7,906.2	23.5	10.3	107.26	625.5	-255.2	316.4	286.5	29.84	10.604		
8,150.0	7,921.3	7,941.0	7,926.1	23.6	10.3	107.60	625.5	-255.2	345.0	314.5	30.51	11.306		
8,170.0	7,928.1	7,947.8	7,932.9	23.6	10.3	107.31	625.5	-255.2	357.8	327.0	30.76	11.630		
8,200.0	7,937.1	7,956.7	7,941.9	23.6	10.3	106.38	625.5	-255.2	378.2	347.1	31.10	12.159		
8,250.0	7,948.7	7,968.3	7,953.5	23.6	10.4	103.42	625.5	-255.2	415.1	383.5	31.59	13.140		
8,265.0	7,951.3	7,971.0	7,956.1	23.7	10.4	102.16	625.5	-255.2	426.7	395.0	31.71	13.456		
8,300.0	7,956.0	7,975.6	7,960.8	23.7	10.4	98.50	625.5	-255.2	454.9	422.9	31.97	14.226		
8,350.0	7,958.9	7,978.6	7,963.7	23.7	10.4	91.48	625.5	-255.2	496.8	464.5	32.27	15.393		
8,358.7	7,959.0	7,978.7	7,963.8	23.7	10.4	90.05	625.5	-255.2	504.2	471.9	32.32	15.602		
8,360.0	7,959.0	7,978.7	7,963.8	23.7	10.4	90.05	625.5	-255.2	505.3	473.0	32.32	15.634		
8,400.0	7,959.0	7,978.7	7,963.8	23.7	10.4	90.05	625.5	-255.2	540.1	507.6	32.50	16.617		
8,455.0	7,959.0	7,978.7	7,963.8	23.7	10.4	90.06	625.5	-255.2	589.0	556.3	32.71	18.009		
8,500.0	7,959.1	7,978.7	7,963.9	23.7	10.4	90.07	625.5	-255.2	629.8	597.0	32.84	19.179		
8,550.0	7,959.1	7,978.8	7,963.9	23.7	10.4	90.07	625.5	-255.2	675.7	642.8	32.96	20.501		
8,600.0	7,959.1	7,978.8	7,963.9	23.7	10.4	90.08	625.5	-255.2	722.2	689.1	33.06	21.845		
8,645.0	7,959.1	7,978.8	7,963.9	23.7	10.4	90.08	625.5	-255.2	764.4	731.3	33.14	23.069		
8,700.0	7,959.2	7,978.8	7,964.0	23.7	10.4	90.09	625.5	-255.2	816.4	783.2	33.21	24.580		
8,740.0	7,959.2	7,978.9	7,964.0	23.7	10.4	90.09	625.5	-255.2	854.4	821.2	33.26	25.688		
8,800.0	7,959.2	7,978.9	7,964.0	23.7	10.4	90.10	625.5	-255.2	911.8	878.5	33.32	27.362		
8,835.0	7,959.2	7,978.9	7,964.0	23.7	10.4	90.10	625.5	-255.2	945.5	912.1	33.36	28.344		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #803H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9563-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
0.0	0.0	4.8	4.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1				
95.0	95.0	99.8	99.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.1	6.00	58.512	
100.0	100.0	104.8	104.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.1	6.00	58.511	
190.0	190.0	194.8	194.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.1	6.01	58.430	
200.0	200.0	204.8	204.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.1	6.01	58.416	
285.0	285.0	289.8	289.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.1	6.03	58.250	
300.0	300.0	304.8	304.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.1	6.03	58.213	
380.0	380.0	384.8	384.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.1	6.06	57.976	
400.0	400.0	404.8	404.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.0	6.06	57.907	
475.0	475.0	479.8	479.8	3.0	3.0	-12.61	-12.61	342.6	-76.6	351.1	345.0	6.09	57.612	
500.0	500.0	504.8	504.8	3.1	3.1	-12.61	-12.61	342.6	-76.6	351.1	345.0	6.11	57.502	
570.0	570.0	574.8	574.8	3.1	3.1	-12.61	-12.61	342.6	-76.6	351.1	345.0	6.14	57.162	
600.0	600.0	604.8	604.8	3.1	3.1	-12.61	-12.61	342.6	-76.6	351.1	345.0	6.16	57.003	
665.0	665.0	669.8	669.8	3.1	3.1	-12.61	-12.61	342.6	-76.6	351.1	344.9	6.20	56.633	
700.0	700.0	704.8	704.8	3.1	3.1	-12.61	-12.61	342.6	-76.6	351.1	344.9	6.22	56.420	
760.0	760.0	764.8	764.8	3.1	3.1	-12.61	-12.61	342.6	-76.6	351.1	344.8	6.27	56.032	
800.0	800.0	804.8	804.8	3.2	3.2	-12.61	-12.61	342.6	-76.6	351.1	344.8	6.30	55.759	
855.0	855.0	859.8	859.8	3.2	3.2	-12.61	-12.61	342.6	-76.6	351.1	344.8	6.34	55.366	
900.0	900.0	904.8	904.8	3.2	3.2	-12.61	-12.61	342.6	-76.6	351.1	344.7	6.38	55.030	
950.0	950.0	954.8	954.8	3.2	3.2	-12.61	-12.61	342.6	-76.6	351.1	344.7	6.43	54.643	
1,000.0	1,000.0	1,004.8	1,004.8	3.2	3.2	-12.61	-12.61	342.6	-76.6	351.1	344.6	6.47	54.242	
1,045.0	1,045.0	1,049.8	1,049.8	3.3	3.3	-12.61	-12.61	342.6	-76.6	351.1	344.6	6.52	53.871	
1,100.0	1,100.0	1,104.8	1,104.8	3.3	3.3	-12.61	-12.61	342.6	-76.6	351.1	344.5	6.57	53.404	
1,140.0	1,140.0	1,144.8	1,144.8	3.3	3.3	-12.61	-12.61	342.6	-76.6	351.1	344.5	6.62	53.056	
1,200.0	1,200.0	1,204.8	1,204.8	3.4	3.4	-12.61	-12.61	342.6	-76.6	351.1	344.4	6.68	52.524	
1,235.0	1,235.0	1,239.8	1,239.8	3.4	3.4	-12.61	-12.61	342.6	-76.6	351.1	344.4	6.73	52.208	
1,300.0	1,300.0	1,304.8	1,304.8	3.4	3.4	-12.61	-12.61	342.6	-76.6	351.1	344.3	6.80	51.611	
1,330.0	1,330.0	1,334.8	1,334.8	3.4	3.4	-12.61	-12.61	342.6	-76.6	351.1	344.3	6.84	51.332	
1,400.0	1,400.0	1,404.8	1,404.8	3.5	3.5	-12.61	-12.61	342.6	-76.6	351.1	344.2	6.93	50.674	
1,425.0	1,425.0	1,429.8	1,429.8	3.5	3.5	-12.61	-12.61	342.6	-76.6	351.1	344.1	6.96	50.436	
1,500.0	1,500.0	1,504.8	1,504.8	3.5	3.6	-12.61	-12.61	342.6	-76.6	351.1	344.0	7.06	49.718	
1,520.0	1,520.0	1,524.8	1,524.8	3.6	3.6	-12.61	-12.61	342.6	-76.6	351.1	344.0	7.09	49.525	
1,600.0	1,600.0	1,604.8	1,604.8	3.6	3.6	-12.61	-12.61	342.6	-76.6	351.1	343.9	7.20	48.751	
1,615.0	1,615.0	1,619.8	1,619.8	3.6	3.6	-12.61	-12.61	342.6	-76.6	351.1	343.9	7.22	48.606	
1,700.0	1,700.0	1,704.8	1,704.8	3.7	3.7	-12.61	-12.61	342.6	-76.6	351.1	343.8	7.35	47.779	
1,710.0	1,710.0	1,714.8	1,714.8	3.7	3.7	-12.61	-12.61	342.6	-76.6	351.1	343.7	7.36	47.682	
1,800.0	1,800.0	1,804.8	1,804.8	3.8	3.8	-12.61	-12.61	342.6	-76.6	351.1	343.6	7.50	46.807	
1,805.0	1,805.0	1,809.8	1,809.8	3.8	3.8	-12.61	-12.61	342.6	-76.6	351.1	343.6	7.51	46.759	
1,900.0	1,900.0	1,904.8	1,904.8	3.9	3.9	-12.61	-12.61	342.6	-76.6	351.1	343.5	7.66	45.840	
1,995.0	1,995.0	1,999.8	1,999.8	3.9	3.9	-12.61	-12.61	342.6	-76.6	351.1	343.3	7.81	44.928	
2,000.0	2,000.0	2,004.5	2,004.5	3.9	3.9	-12.61	-12.61	342.6	-76.6	351.1	343.3	7.82	44.887	
2,090.0	2,090.0	2,088.9	2,088.9	4.1	4.0	-13.13	-13.13	343.1	-77.9	350.5	342.5	8.05	43.555	
2,100.0	2,100.0	2,100.0	2,100.0	4.2	4.0	-13.19	-13.19	343.2	-78.3	350.4	342.3	8.07	43.399	
2,185.0	2,184.9	2,177.8	2,177.7	4.7	4.0	-13.87	-13.87	344.5	-81.8	348.5	340.0	8.57	40.671	
2,200.0	2,199.8	2,191.8	2,191.7	4.8	4.0	-14.03	-14.03	344.8	-82.7	348.1	339.4	8.66	40.203	
2,280.0	2,279.6	2,266.4	2,266.0	5.3	4.1	-15.12	-15.12	346.9	-88.3	345.2	336.1	9.08	38.023	
2,300.0	2,299.5	2,285.0	2,284.5	5.4	4.1	-15.45	-15.45	347.5	-90.0	344.4	335.2	9.18	37.496	
2,375.0	2,373.9	2,354.4	2,353.5	5.9	4.1	-16.90	-16.90	350.1	-97.2	340.8	331.3	9.53	35.742	
2,400.0	2,398.7	2,377.5	2,376.4	6.0	4.1	-17.45	-17.45	351.1	-100.0	339.5	329.8	9.65	35.186	
2,470.0	2,467.9	2,441.8	2,440.0	6.4	4.2	-19.22	-19.22	354.3	-108.6	335.6	325.7	9.93	33.791	
2,500.0	2,497.5	2,470.6	2,468.5	6.5	4.2	-20.11	-20.11	355.8	-112.8	333.8	323.8	10.05	33.224	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #803H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9563-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		
2,565.0	2,561.3	2,534.4	2,531.5	6.8	4.2	-22.18	359.2	-122.2	329.3	319.1	10.19	32.309		
2,575.2	2,571.4	2,544.4	2,541.4	6.8	4.2	-22.52	359.8	-123.7	328.5	318.3	10.21	32.164		
2,600.0	2,595.6	2,568.6	2,565.3	6.8	4.3	-23.34	361.1	-127.2	326.5	316.3	10.22	31.940		
2,660.0	2,654.4	2,627.3	2,623.3	6.9	4.3	-25.35	364.2	-135.9	322.2	311.9	10.25	31.436		
2,700.0	2,693.6	2,666.4	2,661.9	7.0	4.3	-26.73	366.3	-141.6	319.5	309.2	10.26	31.129		
2,755.0	2,747.5	2,720.2	2,715.1	7.1	4.4	-28.65	369.2	-149.5	316.1	305.8	10.29	30.710		
2,800.0	2,791.6	2,764.3	2,758.6	7.1	4.4	-30.25	371.5	-156.0	313.6	303.3	10.32	30.399		
2,850.0	2,840.6	2,813.2	2,806.9	7.2	4.4	-32.06	374.1	-163.2	311.2	300.8	10.35	30.065		
2,900.0	2,889.6	2,862.1	2,855.2	7.3	4.5	-33.89	376.8	-170.4	309.0	298.6	10.38	29.765		
2,945.0	2,933.7	2,906.1	2,898.7	7.4	4.5	-35.56	379.1	-176.8	307.4	297.0	10.42	29.505		
3,000.0	2,987.6	2,959.9	2,951.8	7.5	4.5	-37.62	382.0	-184.8	305.8	295.3	10.46	29.220		
3,040.0	3,026.8	2,999.1	2,990.5	7.6	4.6	-39.13	384.1	-190.5	304.9	294.4	10.50	29.023		
3,100.0	3,085.6	3,057.8	3,048.5	7.7	4.6	-41.41	387.2	-199.1	303.9	293.3	10.57	28.758		
3,135.0	3,119.9	3,092.0	3,082.3	7.8	4.6	-42.75	389.1	-204.2	303.6	293.0	10.61	28.610		
3,183.7	3,167.6	3,139.7	3,129.4	7.9	4.7	-44.61	391.6	-211.2	303.4	292.7	10.67	28.424 CC		
3,200.0	3,183.6	3,155.6	3,145.1	8.0	4.7	-45.23	392.5	-213.5	303.4	292.7	10.70	28.366 ES		
3,230.0	3,213.0	3,185.0	3,174.1	8.0	4.7	-46.38	394.0	-217.8	303.6	292.8	10.74	28.259		
3,300.0	3,281.6	3,253.5	3,241.7	8.2	4.8	-49.04	397.7	-227.9	304.4	293.5	10.86	28.036		
3,325.0	3,306.1	3,277.9	3,265.9	8.3	4.8	-49.99	399.0	-231.5	304.8	293.9	10.90	27.960		
3,400.0	3,379.6	3,351.3	3,338.4	8.5	4.8	-52.82	402.9	-242.3	306.7	295.6	11.05	27.758		
3,420.0	3,399.2	3,370.9	3,357.7	8.5	4.9	-53.56	404.0	-245.2	307.3	296.2	11.09	27.707		
3,500.0	3,477.6	3,449.1	3,435.0	8.7	4.9	-56.52	408.2	-256.7	310.4	299.1	11.28	27.525		
3,515.0	3,492.3	3,463.8	3,449.5	8.8	4.9	-57.07	408.9	-258.8	311.1	299.7	11.31	27.493		
3,600.0	3,575.6	3,547.0	3,531.6	9.0	5.0	-60.13	413.4	-271.0	315.4	303.9	11.54	27.334		
3,610.0	3,585.4	3,556.8	3,541.3	9.0	5.0	-60.48	413.9	-272.5	316.0	304.4	11.57	27.316		
3,700.0	3,673.5	3,644.8	3,628.3	9.3	5.1	-63.61	418.6	-285.4	321.7	309.8	11.83	27.182		
3,705.0	3,678.4	3,649.7	3,633.1	9.3	5.1	-63.78	418.9	-286.1	322.0	310.1	11.85	27.175		
3,800.0	3,771.5	3,742.6	3,724.9	9.6	5.2	-66.95	423.9	-299.8	329.1	316.9	12.16	27.068		
3,895.0	3,864.6	3,835.6	3,816.7	9.8	5.3	-69.99	428.8	-313.5	337.2	324.7	12.49	26.995		
3,900.0	3,869.5	3,840.5	3,821.5	9.8	5.3	-70.15	429.1	-314.2	337.7	325.1	12.51	26.993		
3,990.0	3,957.7	3,928.5	3,908.5	10.1	5.4	-72.88	433.8	-327.1	346.2	333.4	12.84	26.956		
4,000.0	3,967.5	3,938.3	3,918.2	10.1	5.4	-73.18	434.3	-328.6	347.2	334.3	12.88	26.954		
4,085.0	4,050.8	4,021.5	4,000.3	10.4	5.5	-75.62	438.8	-340.8	356.1	342.9	13.21	26.948 SF		
4,100.0	4,065.5	4,036.2	4,014.8	10.4	5.5	-76.04	439.6	-343.0	357.7	344.5	13.27	26.950		
4,180.0	4,143.9	4,114.4	4,092.1	10.7	5.6	-78.21	443.8	-354.5	366.8	353.2	13.60	26.971		
4,200.0	4,163.5	4,134.0	4,111.4	10.8	5.6	-78.74	444.8	-357.3	369.1	355.4	13.68	26.979		
4,275.0	4,237.0	4,207.4	4,183.9	11.0	5.6	-80.66	448.7	-368.1	378.2	364.2	14.00	27.021		
4,300.0	4,261.5	4,231.8	4,208.0	11.1	5.7	-81.28	450.0	-371.7	381.3	367.2	14.10	27.039		
4,370.0	4,330.1	4,300.3	4,275.7	11.3	5.7	-82.96	453.7	-381.8	390.2	375.8	14.40	27.096		
4,400.0	4,359.5	4,329.7	4,304.7	11.4	5.8	-83.66	455.3	-386.1	394.1	379.6	14.53	27.125		
4,465.0	4,423.2	4,393.3	4,367.5	11.6	5.8	-85.13	458.7	-395.5	402.9	388.0	14.81	27.193		
4,500.0	4,457.5	4,427.5	4,401.3	11.7	5.9	-85.89	460.5	-400.5	407.7	392.7	14.97	27.234		
4,560.0	4,516.3	4,486.2	4,459.3	11.9	5.9	-87.16	463.7	-409.1	416.1	400.8	15.23	27.310		
4,600.0	4,555.5	4,525.3	4,497.9	12.0	6.0	-87.98	465.7	-414.9	421.8	406.3	15.41	27.364		
4,655.0	4,609.4	4,579.2	4,551.1	12.2	6.0	-89.07	468.6	-422.8	429.7	414.1	15.66	27.442		
4,700.0	4,653.5	4,623.2	4,594.6	12.4	6.1	-89.93	471.0	-429.2	436.4	420.5	15.86	27.510		
4,750.0	4,702.4	4,672.1	4,642.9	12.5	6.1	-90.86	473.6	-436.4	443.9	427.8	16.09	27.588		
4,800.0	4,751.4	4,721.0	4,691.2	12.7	6.2	-91.76	476.2	-443.6	451.5	435.2	16.32	27.669		
4,845.0	4,795.5	4,765.0	4,734.7	12.8	6.2	-92.54	478.6	-450.1	458.4	441.9	16.52	27.744		
4,900.0	4,849.4	4,818.9	4,787.8	13.0	6.3	-93.47	481.4	-458.0	467.0	450.2	16.77	27.839		
4,940.0	4,888.6	4,858.0	4,826.5	13.1	6.3	-94.12	483.5	-463.8	473.3	456.4	16.96	27.910		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #803H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9563-MWD+IFR1+MS												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)			
5,000.0	4,947.4	4,916.7	4,884.5	13.4	6.4	-95.07	486.7	-472.4	482.9	465.7	17.24	28.018	
5,035.0	4,981.7	4,950.9	4,918.3	13.5	6.4	-95.61	488.5	-477.4	488.6	471.2	17.40	28.082	
5,100.0	5,045.4	5,014.5	4,981.1	13.7	6.5	-96.57	491.9	-486.8	499.2	481.5	17.70	28.202	
5,130.0	5,074.8	5,043.9	5,010.1	13.8	6.5	-97.00	493.5	-491.1	504.1	486.3	17.84	28.258	
5,200.0	5,143.4	5,112.4	5,077.7	14.0	6.6	-97.98	497.2	-501.2	515.7	497.6	18.17	28.391	
5,225.0	5,167.9	5,136.8	5,101.9	14.1	6.7	-98.31	498.5	-504.8	519.9	501.7	18.28	28.438	
5,300.0	5,241.4	5,210.2	5,174.4	14.4	6.7	-99.29	502.4	-515.5	532.6	514.0	18.63	28.582	
5,320.0	5,261.0	5,229.8	5,193.7	14.4	6.8	-99.55	503.4	-518.4	536.0	517.3	18.73	28.620	
5,400.0	5,339.4	5,308.0	5,271.0	14.7	6.8	-100.53	507.6	-529.9	549.7	530.6	19.11	28.774	
5,415.0	5,354.1	5,322.7	5,285.5	14.8	6.9	-100.71	508.4	-532.1	552.3	533.2	19.18	28.803	
5,500.0	5,437.4	5,405.9	5,367.6	15.1	7.0	-101.69	512.9	-544.3	567.1	547.5	19.58	28.966	
5,510.0	5,447.2	5,415.7	5,377.3	15.1	7.0	-101.81	513.4	-545.7	568.9	549.2	19.63	28.985	
5,600.0	5,535.4	5,503.7	5,464.3	15.4	7.1	-102.79	518.1	-558.7	584.7	564.6	20.05	29.157	
5,605.0	5,540.3	5,508.6	5,469.1	15.4	7.1	-102.84	518.4	-559.4	585.6	565.5	20.08	29.166	
5,700.0	5,633.4	5,601.6	5,560.9	15.8	7.2	-103.82	523.3	-573.1	602.5	581.9	20.53	29.346	
5,795.0	5,726.5	5,694.5	5,652.7	16.1	7.3	-104.75	528.3	-586.7	619.5	598.5	20.98	29.523	
5,800.0	5,731.4	5,699.4	5,657.5	16.1	7.3	-104.79	528.6	-587.5	620.4	599.4	21.01	29.532	
5,822.7	5,753.6	5,721.6	5,679.5	16.2	7.3	-105.01	529.8	-590.7	624.5	603.4	21.11	29.579	
5,890.0	5,819.7	5,787.6	5,744.6	16.4	7.4	-105.79	533.3	-600.4	636.5	615.1	21.43	29.705	
5,900.0	5,829.5	5,797.4	5,754.3	16.5	7.4	-105.89	533.8	-601.9	638.3	616.8	21.47	29.722	
5,985.0	5,913.5	5,881.0	5,836.9	16.8	7.5	-106.62	538.3	-614.1	652.8	630.9	21.89	29.819	
6,000.0	5,928.3	5,895.8	5,851.5	16.9	7.5	-106.72	539.1	-616.3	655.3	633.3	21.97	29.832	
6,080.0	6,007.7	5,974.7	5,929.4	17.3	7.6	-107.14	543.3	-627.9	668.2	645.8	22.36	29.883	
6,100.0	6,027.6	5,994.4	5,948.9	17.4	7.7	-107.22	544.3	-630.8	671.3	648.9	22.46	29.891	
6,175.0	6,102.3	6,068.6	6,022.2	17.7	7.8	-107.38	548.3	-641.7	682.7	659.9	22.82	29.913	
6,200.0	6,127.2	6,093.3	6,046.6	17.9	7.8	-107.40	549.6	-645.4	686.4	663.4	22.94	29.915	
6,270.0	6,197.1	6,162.5	6,115.0	18.2	7.9	-107.36	553.3	-655.5	696.3	673.0	23.28	29.914	
6,300.0	6,227.1	6,192.2	6,144.3	18.3	7.9	-107.29	554.9	-659.9	700.4	677.0	23.42	29.908	
6,365.0	6,292.0	6,256.4	6,207.7	18.6	8.0	-107.08	558.4	-669.3	709.0	685.3	23.72	29.893	
6,398.0	6,325.0	6,289.0	6,239.9	18.8	8.0	-106.65	560.1	-674.1	713.2	689.3	23.87	29.880	
6,400.0	6,327.0	6,291.0	6,241.9	18.8	8.0	-106.63	560.2	-674.4	713.4	689.6	23.88	29.881	
6,460.0	6,387.0	6,350.3	6,300.4	18.9	8.1	-106.19	563.4	-683.1	721.0	696.9	24.13	29.886	
6,500.0	6,427.0	6,389.8	6,339.4	19.1	8.2	-105.90	565.5	-688.9	726.1	701.8	24.29	29.889	
6,555.0	6,482.0	6,444.1	6,393.1	19.2	8.2	-105.51	568.4	-696.9	733.1	708.6	24.53	29.885	
6,600.0	6,527.0	6,488.6	6,437.0	19.4	8.3	-105.19	570.8	-703.5	738.9	714.2	24.73	29.883	
6,650.0	6,577.0	6,537.9	6,485.8	19.5	8.3	-104.85	573.4	-710.7	745.3	720.4	24.94	29.880	
6,700.0	6,627.0	6,587.3	6,534.5	19.7	8.4	-104.51	576.1	-718.0	751.8	726.6	25.16	29.877	
6,745.0	6,672.0	6,631.8	6,578.4	19.8	8.5	-104.21	578.4	-724.5	757.6	732.2	25.36	29.875	
6,800.0	6,727.0	6,686.1	6,632.1	20.0	8.5	-103.85	581.4	-732.5	764.8	739.2	25.60	29.873	
6,840.0	6,767.0	6,725.6	6,671.1	20.1	8.6	-103.59	583.5	-738.3	770.0	744.2	25.78	29.871	
6,900.0	6,827.0	6,784.9	6,729.7	20.3	8.7	-103.21	586.6	-747.0	777.9	751.8	26.04	29.868	
6,935.0	6,862.0	6,819.4	6,763.8	20.4	8.7	-102.99	588.5	-752.1	782.5	756.3	26.20	29.867	
7,000.0	6,927.0	6,883.6	6,827.2	20.6	8.8	-102.59	591.9	-761.5	791.0	764.5	26.49	29.865	
7,030.0	6,957.0	6,913.3	6,856.5	20.7	8.8	-102.41	593.5	-765.9	795.0	768.4	26.62	29.864	
7,100.0	7,027.0	6,982.4	6,924.8	20.9	8.9	-101.99	597.2	-776.1	804.3	777.4	26.93	29.862	
7,125.0	7,052.0	7,007.1	6,949.1	21.0	9.0	-101.84	598.5	-779.7	807.6	780.6	27.05	29.862	
7,200.0	7,127.0	7,081.2	7,022.3	21.2	9.1	-101.41	602.5	-790.6	817.7	790.3	27.38	29.860	
7,220.0	7,147.0	7,100.9	7,041.8	21.3	9.1	-101.30	603.5	-793.5	820.3	792.9	27.47	29.860	
7,300.0	7,227.0	7,179.9	7,119.9	21.6	9.2	-100.85	607.8	-805.1	831.1	803.3	27.83	29.859	
7,315.0	7,242.0	7,194.8	7,134.5	21.6	9.2	-100.77	608.6	-807.3	833.1	805.2	27.90	29.859	
7,400.0	7,327.0	7,278.7	7,217.4	21.9	9.3	-100.31	613.1	-819.6	844.6	816.3	28.29	29.858	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #803H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 9563-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		
7,410.0	7,337.0	7,288.6	7,227.2	21.9	9.3	-100.25	613.6	-821.1	846.0	817.6	28.31	29.877	
7,459.0	7,386.0	7,337.0	7,275.0	22.0	9.4	-100.00	616.2	-828.2	852.6	824.2	28.45	29.970	
7,500.0	7,427.0	7,377.4	7,314.9	22.0	9.5	79.33	618.3	-834.1	857.9	829.4	28.50	30.105	
7,505.0	7,432.0	7,382.3	7,319.7	22.0	9.5	79.32	618.6	-834.8	858.5	830.0	28.50	30.120	
7,550.0	7,476.7	7,426.1	7,363.0	22.1	9.5	79.37	620.9	-841.3	863.7	835.2	28.56	30.244	
7,600.0	7,525.6	7,473.9	7,410.2	22.3	9.6	79.73	623.5	-848.3	868.9	840.3	28.61	30.367	
7,650.0	7,573.5	7,520.5	7,456.2	22.5	9.7	80.35	626.0	-855.2	873.6	844.9	28.66	30.482	
7,695.0	7,615.4	7,561.0	7,496.3	22.6	9.7	81.09	628.2	-861.1	877.6	848.9	28.69	30.583	
7,700.0	7,620.0	7,565.4	7,500.6	22.6	9.7	81.18	628.4	-861.8	878.0	849.3	28.70	30.595	
7,750.0	7,664.7	7,608.4	7,543.1	22.8	9.8	82.17	630.7	-868.1	882.4	853.6	28.73	30.712	
7,790.0	7,698.9	7,641.2	7,575.4	22.9	9.8	83.02	632.5	-872.9	886.0	857.2	28.75	30.814	
7,800.0	7,707.3	7,649.1	7,583.2	22.9	9.8	83.23	632.9	-874.1	886.9	858.2	28.76	30.841	
7,850.0	7,747.4	7,687.2	7,620.8	23.1	9.9	84.31	634.9	-879.7	892.1	863.3	28.79	30.988	
7,885.0	7,773.9	7,712.1	7,645.5	23.2	9.9	85.02	636.2	-883.3	896.1	867.3	28.81	31.104	
7,900.0	7,784.8	7,722.4	7,655.6	23.2	9.9	85.31	636.8	-884.8	898.0	869.2	28.82	31.158	
7,950.0	7,819.1	7,754.4	7,687.2	23.3	10.0	86.16	638.5	-889.5	905.1	876.2	28.86	31.358	
7,980.0	7,838.2	7,772.0	7,704.6	23.4	10.0	86.57	639.5	-892.1	910.0	881.1	28.89	31.492	
8,000.0	7,850.2	7,783.0	7,715.5	23.4	10.0	86.80	640.0	-893.7	913.5	884.6	28.92	31.590	
8,050.0	7,877.7	7,808.0	7,740.2	23.5	10.1	87.14	641.4	-897.4	923.6	894.6	28.99	31.859	
8,075.0	7,890.0	7,819.1	7,751.1	23.5	10.1	87.18	642.0	-899.0	929.3	900.2	29.03	32.008	
8,100.0	7,901.4	7,829.2	7,761.1	23.5	10.1	87.13	642.5	-900.5	935.4	906.4	29.08	32.168	
8,150.0	7,921.3	7,846.4	7,778.1	23.6	10.1	86.72	643.4	-903.1	949.2	920.0	29.19	32.518	
8,170.0	7,928.1	7,852.1	7,783.8	23.6	10.1	86.43	643.7	-903.9	955.2	926.0	29.24	32.668	
8,200.0	7,937.1	7,859.5	7,791.0	23.6	10.1	85.87	644.1	-905.0	964.8	935.5	29.32	32.909	
8,250.0	7,948.7	7,868.4	7,799.8	23.6	10.1	84.55	644.6	-906.3	982.3	952.9	29.46	33.343	
8,265.0	7,951.3	7,870.2	7,801.6	23.7	10.1	84.06	644.7	-906.6	987.9	958.4	29.51	33.481	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0														Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-MWD+IFR1+MS						Rule Assigned:						Offset Well Error: 3.0 usft	
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			
0.0	0.0	0.0	0.0	3.0	3.0	89.05	0.5	30.0	30.0						
95.0	95.0	94.7	94.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.00	5.001			
100.0	100.0	99.7	99.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.00	5.001			
190.0	190.0	189.7	189.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.00	4.999			
200.0	200.0	199.7	199.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.00	4.998			
285.0	285.0	284.7	284.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.01	4.994			
300.0	300.0	299.7	299.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.01	4.993			
380.0	380.0	379.7	379.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.02	4.987			
400.0	400.0	399.7	399.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.02	4.986			
475.0	475.0	474.7	474.7	3.0	3.0	89.05	0.5	30.0	30.0	24.0	6.03	4.978			
500.0	500.0	499.7	499.7	3.1	3.1	89.05	0.5	30.0	30.0	24.0	6.03	4.975			
570.0	570.0	569.7	569.7	3.1	3.1	89.05	0.5	30.0	30.0	24.0	6.04	4.967			
600.0	600.0	599.7	599.7	3.1	3.1	89.05	0.5	30.0	30.0	24.0	6.05	4.962			
665.0	665.0	664.7	664.7	3.1	3.1	89.05	0.5	30.0	30.0	23.9	6.06	4.953			
700.0	700.0	699.7	699.7	3.1	3.1	89.05	0.5	30.0	30.0	23.9	6.07	4.947			
760.0	760.0	759.7	759.7	3.1	3.1	89.05	0.5	30.0	30.0	23.9	6.08	4.937			
800.0	800.0	799.7	799.7	3.2	3.2	89.05	0.5	30.0	30.0	23.9	6.09	4.929			
855.0	855.0	854.7	854.7	3.2	3.2	89.05	0.5	30.0	30.0	23.9	6.10	4.918			
900.0	900.0	899.7	899.7	3.2	3.2	89.05	0.5	30.0	30.0	23.9	6.11	4.909			
950.0	950.0	949.7	949.7	3.2	3.2	89.05	0.5	30.0	30.0	23.9	6.13	4.898			
1,000.0	1,000.0	999.7	999.7	3.2	3.2	89.05	0.5	30.0	30.0	23.9	6.14	4.886			
1,045.0	1,045.0	1,044.7	1,044.7	3.3	3.3	89.05	0.5	30.0	30.0	23.9	6.15	4.875			
1,100.0	1,100.0	1,099.7	1,099.7	3.3	3.3	89.05	0.5	30.0	30.0	23.8	6.17	4.862			
1,140.0	1,140.0	1,139.7	1,139.7	3.3	3.3	89.05	0.5	30.0	30.0	23.8	6.18	4.851			
1,200.0	1,200.0	1,199.7	1,199.7	3.4	3.4	89.05	0.5	30.0	30.0	23.8	6.21	4.835			
1,235.0	1,235.0	1,234.7	1,234.7	3.4	3.4	89.05	0.5	30.0	30.0	23.8	6.22	4.825			
1,300.0	1,300.0	1,299.7	1,299.7	3.4	3.4	89.05	0.5	30.0	30.0	23.8	6.24	4.806			
1,330.0	1,330.0	1,329.7	1,329.7	3.4	3.4	89.05	0.5	30.0	30.0	23.7	6.25	4.797			
1,400.0	1,400.0	1,399.7	1,399.7	3.5	3.5	89.05	0.5	30.0	30.0	23.7	6.28	4.775			
1,425.0	1,425.0	1,424.7	1,424.7	3.5	3.5	89.05	0.5	30.0	30.0	23.7	6.29	4.768			
1,500.0	1,500.0	1,499.7	1,499.7	3.5	3.5	89.05	0.5	30.0	30.0	23.7	6.33	4.743			
1,520.0	1,520.0	1,519.7	1,519.7	3.6	3.6	89.05	0.5	30.0	30.0	23.7	6.33	4.736			
1,600.0	1,600.0	1,599.7	1,599.7	3.6	3.6	89.05	0.5	30.0	30.0	23.6	6.37	4.709			
1,615.0	1,615.0	1,614.7	1,614.7	3.6	3.6	89.05	0.5	30.0	30.0	23.6	6.38	4.704			
1,700.0	1,700.0	1,699.7	1,699.7	3.7	3.7	89.05	0.5	30.0	30.0	23.6	6.42	4.674			
1,710.0	1,710.0	1,709.7	1,709.7	3.7	3.7	89.05	0.5	30.0	30.0	23.6	6.42	4.670			
1,800.0	1,800.0	1,799.7	1,799.7	3.8	3.8	89.05	0.5	30.0	30.0	23.5	6.47	4.637			
1,805.0	1,805.0	1,804.7	1,804.7	3.8	3.8	89.05	0.5	30.0	30.0	23.5	6.47	4.635			
1,900.0	1,900.0	1,899.7	1,899.7	3.9	3.9	89.05	0.5	30.0	30.0	23.5	6.52	4.599			
1,995.0	1,995.0	1,994.7	1,994.7	3.9	3.9	89.05	0.5	30.0	30.0	23.4	6.58	4.562			
2,000.0	2,000.0	1,999.7	1,999.7	3.9	3.9	89.05	0.5	30.0	30.0	23.4	6.58	4.560 CC, ES			
2,090.0	2,090.0	2,089.1	2,089.1	4.1	4.0	89.39	1.6	30.9	30.9	24.1	6.75	4.573			
2,100.0	2,100.0	2,099.0	2,099.0	4.2	4.1	89.53	1.8	31.1	31.1	24.3	6.77	4.590			
2,185.0	2,184.9	2,183.4	2,183.3	4.7	4.5	91.14	5.1	33.7	33.7	26.4	7.26	4.643			
2,200.0	2,199.8	2,198.3	2,198.1	4.8	4.6	91.48	5.8	34.3	34.3	27.0	7.35	4.672			
2,280.0	2,279.6	2,277.5	2,277.1	5.3	5.0	93.48	10.9	38.5	38.6	30.8	7.76	4.971			
2,300.0	2,299.5	2,297.3	2,296.8	5.4	5.2	94.00	12.5	39.7	39.8	32.0	7.86	5.072			
2,375.0	2,373.9	2,371.5	2,370.5	5.9	5.6	95.91	19.2	45.2	45.5	37.3	8.20	5.545			
2,400.0	2,398.7	2,396.2	2,394.9	6.0	5.8	96.51	21.7	47.2	47.6	39.3	8.32	5.729			
2,470.0	2,467.9	2,465.2	2,463.2	6.4	6.1	98.09	29.8	53.8	54.5	45.8	8.63	6.312			
2,500.0	2,497.5	2,494.7	2,492.3	6.5	6.3	98.70	33.6	56.9	57.7	49.0	8.76	6.587			

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0													Offset Site Error: 0.0 usft		
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-MWD+IFR1+MS						Rule Assigned:					Offset Well Error: 3.0 usft		
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	2,558.6	2,555.1	6.8	6.6	99.90	42.6	64.2	65.5	56.5	9.06	7.232			
2,575.2	2,571.4	2,568.6	2,564.9	6.8	6.7	100.07	44.2	65.5	66.8	57.7	9.11	7.338			
2,600.0	2,595.6	2,592.9	2,588.7	6.8	6.8	100.45	47.9	68.6	70.1	60.9	9.23	7.595			
2,660.0	2,654.4	2,651.6	2,646.0	6.9	7.1	100.68	57.8	76.5	78.4	68.8	9.56	8.197			
2,700.0	2,693.6	2,690.7	2,684.0	7.0	7.3	100.39	64.8	82.2	84.2	74.4	9.81	8.585			
2,755.0	2,747.5	2,744.9	2,736.6	7.1	7.5	99.77	75.0	90.5	92.5	82.4	10.15	9.118			
2,800.0	2,791.6	2,789.4	2,779.8	7.1	7.6	99.32	83.3	97.3	99.3	88.9	10.42	9.535			
2,850.0	2,840.6	2,838.8	2,827.7	7.2	7.7	98.90	92.6	104.8	106.9	96.2	10.70	9.992			
2,900.0	2,889.6	2,888.2	2,875.7	7.3	7.8	98.53	101.9	112.4	114.5	103.5	10.97	10.434			
2,945.0	2,933.7	2,932.7	2,918.9	7.4	7.9	98.23	110.2	119.2	121.3	110.0	11.22	10.807			
3,000.0	2,987.6	2,987.1	2,971.6	7.5	8.0	97.92	120.5	127.5	129.6	118.1	11.53	11.239			
3,040.0	3,026.8	3,026.6	3,010.0	7.6	8.1	97.71	127.9	133.5	135.6	123.9	11.76	11.534			
3,100.0	3,085.6	3,085.9	3,067.5	7.7	8.2	97.43	139.0	142.5	144.7	132.6	12.11	11.954			
3,135.0	3,119.9	3,120.5	3,101.1	7.8	8.3	97.29	145.5	147.8	150.0	137.7	12.31	12.185			
3,200.0	3,183.6	3,184.8	3,163.4	8.0	8.4	97.04	157.6	157.6	159.9	147.2	12.70	12.590			
3,230.0	3,213.0	3,214.4	3,192.2	8.0	8.5	96.94	163.1	162.1	164.4	151.6	12.88	12.767			
3,300.0	3,281.6	3,283.6	3,259.3	8.2	8.6	96.72	176.1	172.7	175.1	161.8	13.31	13.156			
3,325.0	3,306.1	3,308.3	3,283.3	8.3	8.7	96.65	180.8	176.5	178.8	165.4	13.46	13.288			
3,400.0	3,379.6	3,382.4	3,355.2	8.5	8.9	96.45	194.7	187.8	190.2	176.3	13.92	13.661			
3,420.0	3,399.2	3,402.2	3,374.4	8.5	8.9	96.40	198.4	190.8	193.3	179.2	14.05	13.755			
3,500.0	3,477.6	3,481.3	3,451.1	8.7	9.1	96.22	213.3	202.9	205.4	190.8	14.55	14.112			
3,515.0	3,492.3	3,496.1	3,465.5	8.8	9.2	96.18	216.0	205.1	207.7	193.0	14.65	14.176			
3,600.0	3,575.6	3,580.1	3,547.0	9.0	9.4	96.02	231.8	217.9	220.6	205.4	15.19	14.516			
3,610.0	3,585.4	3,590.0	3,556.6	9.0	9.4	96.00	233.7	219.4	222.1	206.8	15.26	14.554			
3,700.0	3,673.5	3,678.9	3,642.9	9.3	9.6	95.84	250.4	233.0	235.7	219.9	15.84	14.879			
3,705.0	3,678.4	3,683.9	3,647.7	9.3	9.6	95.83	251.3	233.8	236.5	220.6	15.88	14.897			
3,800.0	3,771.5	3,777.8	3,738.8	9.6	9.9	95.69	268.9	248.1	250.9	234.4	16.50	15.206			
3,895.0	3,864.6	3,871.7	3,829.9	9.8	10.2	95.56	286.6	262.4	265.3	248.2	17.13	15.488			
3,900.0	3,869.5	3,876.6	3,834.7	9.8	10.2	95.55	287.5	263.2	266.1	248.9	17.17	15.502			
3,990.0	3,957.7	3,965.6	3,921.0	10.1	10.4	95.44	304.2	276.8	279.8	262.0	17.77	15.744			
4,000.0	3,967.5	3,975.5	3,930.6	10.1	10.5	95.43	306.1	278.3	281.3	263.4	17.84	15.770			
4,085.0	4,050.8	4,059.5	4,012.1	10.4	10.7	95.34	321.8	291.1	294.2	275.8	18.41	15.978			
4,100.0	4,065.5	4,074.3	4,026.5	10.4	10.8	95.32	324.6	293.3	296.5	277.9	18.51	16.013			
4,180.0	4,143.9	4,153.4	4,103.2	10.7	11.0	95.24	339.5	305.4	308.6	289.5	19.06	16.191			
4,200.0	4,163.5	4,173.1	4,122.4	10.8	11.1	95.23	343.2	308.4	311.6	292.4	19.20	16.234			
4,275.0	4,237.0	4,247.3	4,194.4	11.0	11.3	95.16	357.1	319.7	323.0	303.3	19.71	16.387			
4,300.0	4,261.5	4,272.0	4,218.3	11.1	11.4	95.14	361.8	323.5	326.8	306.9	19.88	16.436			
4,370.0	4,330.1	4,341.2	4,285.5	11.3	11.6	95.08	374.7	334.1	337.5	317.1	20.37	16.568			
4,400.0	4,359.5	4,370.8	4,314.2	11.4	11.7	95.06	380.3	338.6	342.0	321.4	20.58	16.621			
4,465.0	4,423.2	4,435.1	4,376.6	11.6	11.9	95.01	392.4	348.4	351.9	330.9	21.03	16.733			
4,500.0	4,457.5	4,469.7	4,410.1	11.7	12.0	94.98	398.9	353.7	357.2	335.9	21.27	16.791			
4,560.0	4,516.3	4,529.0	4,467.7	11.9	12.2	94.94	410.0	362.7	366.3	344.6	21.69	16.887			
4,600.0	4,555.5	4,568.5	4,506.0	12.0	12.3	94.91	417.4	368.7	372.4	350.4	21.97	16.948			
4,655.0	4,609.4	4,622.9	4,558.8	12.2	12.5	94.88	427.6	377.0	380.7	358.4	22.36	17.028			
4,700.0	4,653.5	4,667.3	4,601.9	12.4	12.6	94.85	436.0	383.8	387.6	364.9	22.68	17.092			
4,750.0	4,702.4	4,716.8	4,649.9	12.5	12.8	94.82	445.3	391.4	395.2	372.1	23.03	17.160			
4,800.0	4,751.4	4,766.2	4,697.8	12.7	12.9	94.79	454.6	398.9	402.8	379.4	23.38	17.225			
4,845.0	4,795.5	4,810.7	4,741.0	12.8	13.1	94.77	462.9	405.7	409.6	385.9	23.70	17.281			
4,900.0	4,849.4	4,865.0	4,793.7	13.0	13.3	94.74	473.1	414.0	417.9	393.9	24.09	17.348			
4,940.0	4,888.6	4,904.6	4,832.1	13.1	13.4	94.72	480.5	420.0	424.0	399.6	24.38	17.395			
5,000.0	4,947.4	4,963.9	4,889.6	13.4	13.6	94.69	491.7	429.1	433.1	408.3	24.80	17.462			

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre		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)		
5,035.0	4,981.7	4,998.5	4,923.2	13.5	13.7	94.67	498.2	434.3	438.4	413.4	25.05	17.501	
5,100.0	5,045.4	5,062.7	4,985.6	13.7	13.9	94.64	510.2	444.1	448.3	422.8	25.52	17.569	
5,130.0	5,074.8	5,092.4	5,014.3	13.8	14.0	94.63	515.8	448.7	452.9	427.1	25.73	17.599	
5,200.0	5,143.4	5,161.5	5,081.5	14.0	14.3	94.60	528.8	459.2	463.5	437.3	26.23	17.668	
5,225.0	5,167.9	5,186.2	5,105.4	14.1	14.4	94.59	533.4	463.0	467.3	440.9	26.41	17.691	
5,300.0	5,241.4	5,260.4	5,177.4	14.4	14.6	94.56	547.4	474.3	478.7	451.7	26.95	17.760	
5,320.0	5,261.0	5,280.1	5,196.5	14.4	14.7	94.55	551.1	477.3	481.7	454.6	27.10	17.778	
5,400.0	5,339.4	5,359.2	5,273.3	14.7	14.9	94.52	565.9	489.4	493.9	466.2	27.67	17.846	
5,415.0	5,354.1	5,374.0	5,287.6	14.8	15.0	94.51	568.7	491.6	496.2	468.4	27.78	17.859	
5,500.0	5,437.4	5,458.1	5,369.2	15.1	15.3	94.48	584.5	504.5	509.1	480.7	28.40	17.927	
5,510.0	5,447.2	5,467.9	5,378.8	15.1	15.3	94.48	586.3	506.0	510.6	482.1	28.47	17.935	
5,600.0	5,535.4	5,556.9	5,465.1	15.4	15.6	94.45	603.0	519.5	524.3	495.1	29.12	18.003	
5,605.0	5,540.3	5,561.8	5,469.9	15.4	15.6	94.45	604.0	520.3	525.0	495.9	29.16	18.007	
5,700.0	5,633.4	5,655.7	5,561.0	15.8	16.0	94.42	621.6	534.6	539.4	509.6	29.85	18.074	
5,795.0	5,726.5	5,749.6	5,652.1	16.1	16.3	94.39	639.2	548.9	553.9	523.3	30.54	18.138	
5,800.0	5,731.4	5,754.6	5,656.9	16.1	16.3	94.39	640.2	549.7	554.6	524.1	30.57	18.141	
5,822.7	5,753.6	5,777.0	5,678.7	16.2	16.4	94.38	644.4	553.1	558.1	527.4	30.74	18.157	
5,890.0	5,819.7	5,843.5	5,743.2	16.4	16.6	94.49	656.9	563.3	568.2	537.0	31.22	18.200	
5,900.0	5,829.5	5,853.4	5,752.8	16.5	16.7	94.49	658.7	564.8	569.7	538.4	31.30	18.205	
5,985.0	5,913.5	5,937.4	5,834.2	16.8	17.0	94.37	674.5	577.6	582.4	550.5	31.92	18.246	
6,000.0	5,928.3	5,952.2	5,848.6	16.9	17.0	94.32	677.3	579.9	584.6	552.6	32.03	18.251	
6,080.0	6,007.7	6,031.1	5,925.2	17.3	17.3	93.97	692.1	591.9	596.4	563.7	32.63	18.279	
6,100.0	6,027.6	6,050.8	5,944.3	17.4	17.4	93.85	695.8	594.9	599.3	566.5	32.78	18.284	
6,175.0	6,102.3	6,124.5	6,015.8	17.7	17.6	93.30	709.6	606.1	610.2	576.9	33.34	18.305	
6,200.0	6,127.2	6,149.1	6,039.6	17.9	17.7	93.08	714.3	609.9	613.9	580.4	33.52	18.312	
6,270.0	6,197.1	6,227.9	6,116.4	18.2	18.0	92.33	728.2	621.3	623.6	589.5	34.12	18.278	
6,300.0	6,227.1	6,261.9	6,149.6	18.3	18.2	92.00	733.8	625.7	627.4	593.0	34.38	18.249	
6,365.0	6,292.0	6,335.8	6,222.2	18.6	18.5	91.27	744.7	634.6	635.0	600.1	34.96	18.164	
6,398.0	6,325.0	6,373.5	6,259.3	18.8	18.7	91.18	749.7	638.7	638.5	603.3	35.26	18.109	
6,400.0	6,327.0	6,375.8	6,261.6	18.8	18.7	91.15	750.0	639.0	638.7	603.5	35.28	18.106	
6,460.0	6,387.0	6,444.7	6,329.7	18.9	19.0	90.41	758.2	645.6	644.5	608.6	35.81	17.998	
6,500.0	6,427.0	6,491.0	6,375.5	19.1	19.2	89.98	763.0	649.5	647.8	611.7	36.15	17.918	
6,555.0	6,482.0	6,554.8	6,439.0	19.2	19.5	89.49	768.6	654.1	651.8	615.2	36.62	17.798	
6,600.0	6,527.0	6,607.3	6,491.2	19.4	19.8	89.16	772.4	657.2	654.5	617.5	37.00	17.690	
6,650.0	6,577.0	6,665.8	6,549.5	19.5	20.0	88.87	775.8	659.9	656.9	619.5	37.40	17.563	
6,700.0	6,627.0	6,724.4	6,608.1	19.7	20.3	88.66	778.2	661.9	658.6	620.8	37.79	17.427	
6,745.0	6,672.0	6,777.3	6,661.0	19.8	20.5	88.54	779.7	663.0	659.6	621.5	38.14	17.297	
6,800.0	6,727.0	6,842.0	6,725.6	20.0	20.7	88.48	780.4	663.6	660.1	621.6	38.51	17.143	
6,840.0	6,767.0	6,883.1	6,766.7	20.1	20.8	88.48	780.4	663.6	660.1	621.4	38.76	17.032	
6,900.0	6,827.0	6,943.1	6,826.7	20.3	21.0	88.48	780.4	663.6	660.1	621.0	39.13	16.868	
6,935.0	6,862.0	6,978.1	6,861.7	20.4	21.1	88.48	780.4	663.6	660.1	620.8	39.36	16.774	
7,000.0	6,927.0	7,043.1	6,926.7	20.6	21.3	88.48	780.4	663.6	660.1	620.4	39.77	16.600	
7,030.0	6,957.0	7,073.1	6,956.7	20.7	21.4	88.48	780.4	663.6	660.1	620.2	39.96	16.520	
7,100.0	7,027.0	7,143.9	7,027.5	20.9	21.5	88.51	780.0	663.6	660.1	619.8	40.30	16.378	
7,125.0	7,052.0	7,169.9	7,053.4	21.0	21.5	88.64	778.5	663.6	660.1	619.7	40.38	16.348	
7,200.0	7,127.0	7,246.2	7,128.8	21.2	21.6	89.61	767.3	663.5	659.8	619.2	40.57	16.264	
7,220.0	7,147.0	7,265.9	7,148.1	21.3	21.7	90.01	762.7	663.5	659.8	619.1	40.61	16.245	
7,240.3	7,167.3	7,285.6	7,167.0	21.4	21.7	90.45	757.6	663.4	659.7	619.1	40.66	16.226	
7,300.0	7,227.0	7,341.1	7,219.5	21.6	21.8	92.02	739.5	663.3	660.0	619.2	40.79	16.182	
7,315.0	7,242.0	7,354.5	7,231.9	21.6	21.8	92.47	734.4	663.2	660.2	619.4	40.82	16.175	
7,400.0	7,327.0	7,425.0	7,294.9	21.9	22.0	95.20	702.8	663.0	662.8	621.8	40.98	16.174	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-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		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,410.0	7,337.0	7,432.8	7,301.6	21.9	22.0	95.54	698.9	663.0	663.3	622.3	40.98	16.186	
7,459.0	7,386.0	7,468.8	7,331.9	22.0	22.1	97.22	679.4	662.8	666.5	625.6	40.96	16.272	
7,500.0	7,427.0	7,500.0	7,357.1	22.0	22.1	-81.40	661.0	662.7	670.2	629.3	40.86	16.401	
7,505.0	7,432.0	7,500.0	7,357.1	22.0	22.1	-81.35	661.0	662.7	670.7	629.8	40.86	16.415	
7,550.0	7,476.7	7,531.8	7,381.7	22.1	22.2	-79.43	640.9	662.5	675.4	634.7	40.74	16.580	
7,600.0	7,525.6	7,565.5	7,406.5	22.3	22.3	-77.40	618.1	662.3	681.4	640.8	40.60	16.785	
7,650.0	7,573.5	7,600.0	7,430.5	22.5	22.3	-75.38	593.3	662.1	687.9	647.5	40.44	17.010	
7,695.0	7,615.4	7,627.9	7,448.8	22.6	22.4	-73.74	572.3	661.9	694.1	653.8	40.30	17.225	
7,700.0	7,620.0	7,631.1	7,450.9	22.6	22.4	-73.55	569.8	661.9	694.8	654.5	40.28	17.249	
7,750.0	7,664.7	7,663.3	7,470.5	22.8	22.5	-71.76	544.3	661.7	701.9	661.8	40.12	17.497	
7,790.0	7,698.9	7,688.8	7,485.0	22.9	22.5	-70.40	523.4	661.6	707.7	667.7	39.99	17.696	
7,800.0	7,707.3	7,700.0	7,491.1	22.9	22.5	-69.92	513.9	661.5	709.2	669.2	39.97	17.744	
7,850.0	7,747.4	7,726.6	7,504.8	23.1	22.6	-68.49	491.2	661.3	716.3	676.4	39.82	17.989	
7,885.0	7,773.9	7,750.0	7,516.0	23.2	22.6	-67.42	470.6	661.1	721.1	681.4	39.73	18.152	
7,900.0	7,784.8	7,750.0	7,516.0	23.2	22.6	-67.23	470.6	661.1	723.2	683.6	39.68	18.225	
7,950.0	7,819.1	7,788.8	7,532.6	23.3	22.6	-65.72	435.5	660.9	729.8	690.2	39.59	18.433	
7,980.0	7,838.2	7,800.0	7,537.0	23.4	22.6	-65.13	425.2	660.8	733.6	694.1	39.54	18.552	
8,000.0	7,850.2	7,819.6	7,544.1	23.4	22.7	-64.53	407.0	660.6	736.0	696.4	39.52	18.622	
8,050.0	7,877.7	7,850.0	7,554.0	23.5	22.7	-63.48	378.2	660.4	741.6	702.1	39.49	18.781	
8,075.0	7,890.0	7,865.5	7,558.4	23.5	22.7	-63.01	363.4	660.3	744.2	704.7	39.49	18.848	
8,100.0	7,901.4	7,880.7	7,562.3	23.5	22.7	-62.57	348.7	660.2	746.7	707.2	39.49	18.906	
8,150.0	7,921.3	7,911.0	7,569.0	23.6	22.8	-61.80	319.1	659.9	751.0	711.5	39.54	18.993	
8,170.0	7,928.1	7,923.2	7,571.3	23.6	22.8	-61.53	307.2	659.8	752.6	713.0	39.57	19.017	
8,200.0	7,937.1	7,950.0	7,575.3	23.6	22.8	-61.09	280.6	659.6	754.7	715.1	39.61	19.052	
8,250.0	7,948.7	7,971.5	7,577.6	23.6	22.8	-60.69	259.3	659.5	757.5	717.7	39.77	19.048	
8,265.0	7,951.3	7,980.5	7,578.4	23.7	22.8	-60.57	250.3	659.4	758.2	718.4	39.82	19.042	
8,300.0	7,956.0	8,000.0	7,579.5	23.7	22.8	-60.36	230.8	659.2	759.5	719.6	39.95	19.012	
8,350.0	7,958.9	8,036.3	7,580.0	23.7	22.8	-60.15	194.5	658.9	760.7	720.6	40.12	18.962	
8,358.7	7,959.0	8,045.0	7,580.0	23.7	22.8	-60.14	185.8	658.9	760.7	720.6	40.13	18.956	
8,360.0	7,959.0	8,046.3	7,579.9	23.7	22.8	-60.14	184.5	658.9	760.7	720.6	40.13	18.955	
8,400.0	7,959.0	8,086.3	7,579.9	23.7	22.9	-60.13	144.5	658.6	760.8	720.6	40.20	18.926	
8,455.0	7,959.0	8,141.3	7,579.7	23.7	22.9	-60.12	89.5	658.1	760.9	720.6	40.31	18.874	
8,500.0	7,959.1	8,186.3	7,579.6	23.7	22.9	-60.11	44.5	657.8	760.9	720.5	40.41	18.831	
8,550.0	7,959.1	8,236.3	7,579.5	23.7	23.0	-60.10	-5.5	657.4	761.0	720.5	40.54	18.772	
8,600.0	7,959.1	8,286.3	7,579.4	23.7	23.0	-60.09	-55.5	657.0	761.1	720.4	40.67	18.712	
8,645.0	7,959.1	8,331.3	7,579.3	23.7	23.0	-60.09	-100.5	656.6	761.1	720.3	40.82	18.648	
8,700.0	7,959.2	8,386.3	7,579.1	23.7	23.1	-60.08	-155.5	656.2	761.2	720.2	41.00	18.568	
8,740.0	7,959.2	8,426.3	7,579.0	23.7	23.1	-60.07	-195.5	655.9	761.3	720.1	41.15	18.503	
8,800.0	7,959.2	8,486.3	7,578.9	23.7	23.2	-60.06	-255.4	655.4	761.4	720.0	41.37	18.402	
8,835.0	7,959.2	8,521.3	7,578.8	23.7	23.2	-60.05	-290.4	655.1	761.4	719.9	41.52	18.338	
8,900.0	7,959.3	8,586.3	7,578.7	23.7	23.3	-60.04	-355.4	654.6	761.5	719.7	41.80	18.216	
8,930.0	7,959.3	8,616.3	7,578.6	23.7	23.3	-60.03	-385.4	654.3	761.6	719.6	41.95	18.155	
9,000.0	7,959.3	8,686.3	7,578.4	23.8	23.4	-60.02	-455.4	653.8	761.7	719.4	42.29	18.012	
9,025.0	7,959.3	8,711.3	7,578.4	23.8	23.5	-60.01	-480.4	653.6	761.7	719.3	42.42	17.957	
9,100.0	7,959.4	8,786.3	7,578.2	23.8	23.6	-60.00	-555.4	653.0	761.8	719.0	42.82	17.791	
9,120.0	7,959.4	8,806.3	7,578.1	23.8	23.6	-60.00	-575.4	652.8	761.8	718.9	42.93	17.745	
9,200.0	7,959.4	8,886.3	7,577.9	23.8	23.8	-59.98	-655.4	652.2	762.0	718.6	43.40	17.556	
9,215.0	7,959.4	8,901.3	7,577.9	23.8	23.8	-59.98	-670.4	652.1	762.0	718.5	43.49	17.520	
9,300.0	7,959.5	8,986.3	7,577.7	23.9	24.0	-59.96	-755.4	651.4	762.1	718.1	44.03	17.309	
9,310.0	7,959.5	8,996.3	7,577.7	23.9	24.0	-59.96	-765.4	651.3	762.1	718.0	44.09	17.284	
9,400.0	7,959.5	9,086.3	7,577.5	23.9	24.2	-59.94	-855.4	650.6	762.3	717.6	44.70	17.052	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program:		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-MWD+IFR1+MS							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	
9,405.0	7,959.5	9,091.3	7,577.4	23.9	24.2	-59.94	-860.4	650.6	762.3	717.5	44.74	17.039		
9,500.0	7,959.6	9,186.3	7,577.2	24.0	24.4	-59.92	-955.4	649.8	762.4	717.0	45.41	16.787		
9,595.0	7,959.6	9,281.3	7,577.0	24.1	24.7	-59.91	-1,050.4	649.1	762.5	716.4	46.13	16.530		
9,600.0	7,959.6	9,286.3	7,577.0	24.1	24.7	-59.91	-1,055.4	649.0	762.5	716.4	46.17	16.516		
9,690.0	7,959.7	9,376.3	7,576.8	24.2	24.9	-59.89	-1,145.4	648.3	762.7	715.8	46.88	16.268		
9,700.0	7,959.7	9,386.3	7,576.7	24.3	25.0	-59.89	-1,155.4	648.2	762.7	715.7	46.96	16.240		
9,785.0	7,959.7	9,471.3	7,576.5	24.4	25.3	-59.87	-1,240.4	647.6	762.8	715.2	47.67	16.003		
9,800.0	7,959.7	9,486.3	7,576.5	24.5	25.3	-59.87	-1,255.4	647.4	762.8	715.0	47.79	15.961		
9,880.0	7,959.8	9,566.3	7,576.3	24.7	25.6	-59.85	-1,335.4	646.8	763.0	714.5	48.48	15.736		
9,900.0	7,959.8	9,586.3	7,576.3	24.7	25.6	-59.85	-1,355.4	646.6	763.0	714.3	48.66	15.681		
9,975.0	7,959.8	9,661.3	7,576.1	25.0	25.9	-59.83	-1,430.4	646.0	763.1	713.8	49.33	15.469		
10,000.0	7,959.9	9,686.3	7,576.0	25.0	26.0	-59.83	-1,455.4	645.8	763.1	713.6	49.55	15.400		
10,070.0	7,959.9	9,756.3	7,575.9	25.3	26.3	-59.82	-1,525.4	645.3	763.2	713.0	50.20	15.203		
10,100.0	7,959.9	9,786.3	7,575.8	25.4	26.4	-59.81	-1,555.4	645.1	763.3	712.8	50.48	15.120		
10,165.0	7,959.9	9,851.3	7,575.6	25.7	26.7	-59.80	-1,620.4	644.5	763.4	712.3	51.10	14.937		
10,200.0	7,960.0	9,886.3	7,575.5	25.8	26.8	-59.79	-1,655.4	644.3	763.4	712.0	51.44	14.841		
10,260.0	7,960.0	9,946.3	7,575.4	26.1	27.1	-59.78	-1,715.4	643.8	763.5	711.5	52.03	14.674		
10,300.0	7,960.0	9,986.3	7,575.3	26.3	27.2	-59.77	-1,755.4	643.5	763.6	711.1	52.43	14.565		
10,355.0	7,960.0	10,041.3	7,575.2	26.5	27.5	-59.76	-1,810.4	643.0	763.7	710.7	52.98	14.413		
10,400.0	7,960.1	10,086.3	7,575.1	26.7	27.7	-59.75	-1,855.4	642.7	763.7	710.3	53.44	14.292		
10,450.0	7,960.1	10,136.3	7,574.9	27.0	27.9	-59.75	-1,905.4	642.3	763.8	709.8	53.96	14.156		
10,500.0	7,960.1	10,186.3	7,574.8	27.2	28.1	-59.74	-1,955.4	641.9	763.9	709.4	54.48	14.022		
10,545.0	7,960.1	10,231.3	7,574.7	27.4	28.3	-59.73	-2,000.4	641.5	763.9	709.0	54.95	13.902		
10,600.0	7,960.2	10,286.3	7,574.6	27.7	28.6	-59.72	-2,055.4	641.1	764.0	708.5	55.54	13.757		
10,640.0	7,960.2	10,326.3	7,574.5	27.9	28.8	-59.71	-2,095.4	640.8	764.1	708.1	55.97	13.652		
10,700.0	7,960.2	10,386.3	7,574.3	28.2	29.1	-59.70	-2,155.4	640.3	764.2	707.5	56.62	13.497		
10,735.0	7,960.2	10,421.3	7,574.3	28.4	29.3	-59.69	-2,190.4	640.0	764.2	707.2	57.00	13.406		
10,800.0	7,960.3	10,486.3	7,574.1	28.7	29.6	-59.68	-2,255.4	639.5	764.3	706.6	57.72	13.241		
10,830.0	7,960.3	10,516.3	7,574.0	28.9	29.7	-59.67	-2,285.4	639.3	764.4	706.3	58.06	13.165		
10,900.0	7,960.3	10,586.3	7,573.9	29.3	30.1	-59.66	-2,355.4	638.7	764.5	705.6	58.85	12.991		
10,925.0	7,960.3	10,611.3	7,573.8	29.4	30.2	-59.66	-2,380.4	638.5	764.5	705.4	59.13	12.929		
11,000.0	7,960.4	10,686.3	7,573.6	29.8	30.6	-59.64	-2,455.4	637.9	764.6	704.6	59.99	12.746		
11,020.0	7,960.4	10,706.3	7,573.6	29.9	30.7	-59.64	-2,475.4	637.8	764.6	704.4	60.22	12.698		
11,100.0	7,960.4	10,786.3	7,573.4	30.4	31.2	-59.62	-2,555.4	637.1	764.8	703.6	61.15	12.507		
11,115.0	7,960.4	10,801.3	7,573.4	30.5	31.3	-59.62	-2,570.4	637.0	764.8	703.5	61.32	12.472		
11,200.0	7,960.5	10,886.3	7,573.2	31.0	31.7	-59.60	-2,655.4	636.3	764.9	702.6	62.32	12.273		
11,210.0	7,960.5	10,896.3	7,573.1	31.0	31.8	-59.60	-2,665.4	636.2	764.9	702.5	62.44	12.250		
11,300.0	7,960.5	10,986.3	7,572.9	31.5	32.3	-59.59	-2,755.4	635.5	765.1	701.5	63.51	12.046		
11,305.0	7,960.5	10,991.3	7,572.9	31.6	32.3	-59.58	-2,760.4	635.5	765.1	701.5	63.57	12.034		
11,400.0	7,960.6	11,086.3	7,572.7	32.1	32.8	-59.57	-2,855.3	634.7	765.2	700.5	64.72	11.823		
11,495.0	7,960.6	11,181.3	7,572.4	32.7	33.4	-59.55	-2,950.3	634.0	765.3	699.5	65.88	11.617		
11,500.0	7,960.6	11,186.3	7,572.4	32.7	33.4	-59.55	-2,955.3	633.9	765.3	699.4	65.94	11.607		
11,590.0	7,960.7	11,276.3	7,572.2	33.3	33.9	-59.53	-3,045.3	633.2	765.5	698.4	67.05	11.417		
11,600.0	7,960.7	11,286.3	7,572.2	33.3	34.0	-59.53	-3,055.3	633.1	765.5	698.3	67.17	11.396		
11,685.0	7,960.7	11,371.3	7,572.0	33.8	34.5	-59.51	-3,140.3	632.5	765.6	697.4	68.23	11.221		
11,700.0	7,960.7	11,386.3	7,572.0	33.9	34.6	-59.51	-3,155.3	632.4	765.6	697.2	68.42	11.190		
11,780.0	7,960.8	11,466.3	7,571.8	34.4	35.1	-59.50	-3,235.3	631.7	765.8	696.3	69.43	11.030		
11,800.0	7,960.8	11,486.3	7,571.7	34.5	35.2	-59.49	-3,255.3	631.6	765.8	696.1	69.68	10.991		
11,875.0	7,960.8	11,561.3	7,571.5	35.0	35.7	-59.48	-3,330.3	631.0	765.9	695.3	70.63	10.844		
11,900.0	7,960.8	11,586.3	7,571.5	35.2	35.8	-59.47	-3,355.3	630.8	765.9	695.0	70.95	10.796		
11,970.0	7,960.9	11,656.3	7,571.3	35.6	36.2	-59.46	-3,425.3	630.2	766.0	694.2	71.84	10.663		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-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	7,960.9	11,686.3	7,571.2	35.8	36.4	-59.45	-3,455.3	630.0	766.1	693.9	72.23	10.607	
12,065.0	7,960.9	11,751.3	7,571.1	36.2	36.8	-59.44	-3,520.3	629.5	766.2	693.1	73.06	10.486	
12,100.0	7,960.9	11,786.3	7,571.0	36.4	37.0	-59.44	-3,555.3	629.2	766.2	692.7	73.52	10.423	
12,160.0	7,961.0	11,846.3	7,570.9	36.8	37.4	-59.42	-3,615.3	628.7	766.3	692.0	74.30	10.315	
12,200.0	7,961.0	11,886.3	7,570.8	37.0	37.7	-59.42	-3,655.3	628.4	766.4	691.6	74.82	10.244	
12,255.0	7,961.0	11,941.3	7,570.6	37.4	38.0	-59.41	-3,710.3	627.9	766.5	690.9	75.54	10.147	
12,300.0	7,961.0	11,986.3	7,570.5	37.7	38.3	-59.40	-3,755.3	627.6	766.5	690.4	76.12	10.070	
12,350.0	7,961.1	12,036.3	7,570.4	38.0	38.6	-59.39	-3,805.3	627.2	766.6	689.8	76.78	9.984	
12,400.0	7,961.1	12,086.3	7,570.3	38.3	38.9	-59.38	-3,855.3	626.8	766.7	689.2	77.44	9.900	
12,445.0	7,961.1	12,131.3	7,570.2	38.6	39.2	-59.37	-3,900.3	626.4	766.8	688.7	78.04	9.825	
12,500.0	7,961.1	12,186.3	7,570.0	39.0	39.6	-59.36	-3,955.3	626.0	766.8	688.1	78.77	9.736	
12,540.0	7,961.2	12,226.3	7,569.9	39.2	39.8	-59.35	-3,995.3	625.7	766.9	687.6	79.30	9.671	
12,600.0	7,961.2	12,286.3	7,569.8	39.6	40.2	-59.34	-4,055.3	625.2	767.0	686.9	80.10	9.575	
12,635.0	7,961.2	12,321.3	7,569.7	39.9	40.4	-59.34	-4,090.3	624.9	767.0	686.5	80.57	9.520	
12,700.0	7,961.3	12,386.3	7,569.6	40.3	40.8	-59.32	-4,155.3	624.4	767.1	685.7	81.44	9.420	
12,730.0	7,961.3	12,416.3	7,569.5	40.5	41.0	-59.32	-4,185.3	624.2	767.2	685.3	81.84	9.374	
12,800.0	7,961.3	12,486.3	7,569.3	41.0	41.5	-59.30	-4,255.3	623.6	767.3	684.5	82.79	9.268	
12,825.0	7,961.3	12,511.3	7,569.3	41.1	41.7	-59.30	-4,280.3	623.4	767.3	684.2	83.13	9.231	
12,900.0	7,961.4	12,586.3	7,569.1	41.6	42.2	-59.29	-4,355.3	622.8	767.4	683.3	84.14	9.121	
12,920.0	7,961.4	12,606.3	7,569.0	41.8	42.3	-59.28	-4,375.3	622.7	767.5	683.0	84.41	9.092	
13,000.0	7,961.4	12,686.3	7,568.8	42.3	42.8	-59.27	-4,455.3	622.0	767.6	682.1	85.50	8.977	
13,015.0	7,961.4	12,701.3	7,568.8	42.4	42.9	-59.26	-4,470.3	621.9	767.6	681.9	85.71	8.956	
13,100.0	7,961.5	12,786.3	7,568.6	43.0	43.5	-59.25	-4,555.3	621.2	767.7	680.9	86.87	8.838	
13,110.0	7,961.5	12,796.3	7,568.6	43.0	43.5	-59.25	-4,565.3	621.2	767.7	680.7	87.01	8.824	
13,200.0	7,961.5	12,886.3	7,568.4	43.6	44.1	-59.23	-4,655.3	620.4	767.9	679.6	88.24	8.702	
13,205.0	7,961.5	12,891.3	7,568.4	43.7	44.2	-59.23	-4,660.3	620.4	767.9	679.6	88.31	8.695	
13,300.0	7,961.6	12,986.3	7,568.1	44.3	44.8	-59.21	-4,755.3	619.6	768.0	678.4	89.62	8.570	
13,395.0	7,961.6	13,081.3	7,567.9	45.0	45.5	-59.19	-4,850.3	618.9	768.2	677.2	90.93	8.448	
13,400.0	7,961.6	13,086.3	7,567.9	45.0	45.5	-59.19	-4,855.3	618.9	768.2	677.2	91.00	8.441	
13,490.0	7,961.7	13,176.3	7,567.7	45.6	46.1	-59.18	-4,945.3	618.1	768.3	676.1	92.25	8.328	
13,500.0	7,961.7	13,186.3	7,567.6	45.7	46.2	-59.17	-4,955.3	618.1	768.3	675.9	92.39	8.316	
13,585.0	7,961.7	13,271.3	7,567.4	46.3	46.7	-59.16	-5,040.3	617.4	768.5	674.9	93.58	8.212	
13,600.0	7,961.7	13,286.3	7,567.4	46.4	46.8	-59.16	-5,055.3	617.3	768.5	674.7	93.78	8.194	
13,680.0	7,961.8	13,366.3	7,567.2	46.9	47.4	-59.14	-5,135.3	616.6	768.6	673.7	94.90	8.099	
13,700.0	7,961.8	13,386.3	7,567.2	47.1	47.5	-59.14	-5,155.3	616.5	768.6	673.4	95.18	8.075	
13,775.0	7,961.8	13,461.3	7,567.0	47.6	48.0	-59.12	-5,230.3	615.9	768.7	672.5	96.23	7.988	
13,800.0	7,961.8	13,486.3	7,566.9	47.7	48.2	-59.12	-5,255.3	615.7	768.8	672.2	96.58	7.960	
13,870.0	7,961.9	13,556.3	7,566.8	48.2	48.7	-59.10	-5,325.3	615.1	768.9	671.3	97.57	7.880	
13,900.0	7,961.9	13,586.3	7,566.7	48.4	48.9	-59.10	-5,355.3	614.9	768.9	670.9	97.99	7.847	
13,965.0	7,961.9	13,651.3	7,566.5	48.9	49.3	-59.09	-5,420.3	614.4	769.0	670.1	98.91	7.775	
14,000.0	7,961.9	13,686.3	7,566.5	49.1	49.6	-59.08	-5,455.2	614.1	769.1	669.7	99.40	7.737	
14,060.0	7,962.0	13,746.3	7,566.3	49.6	50.0	-59.07	-5,515.2	613.6	769.2	668.9	100.25	7.673	
14,100.0	7,962.0	13,786.3	7,566.2	49.8	50.3	-59.06	-5,555.2	613.3	769.2	668.4	100.82	7.630	
14,155.0	7,962.0	13,841.3	7,566.1	50.2	50.7	-59.05	-5,610.2	612.9	769.3	667.7	101.60	7.572	
14,200.0	7,962.0	13,886.3	7,566.0	50.5	51.0	-59.04	-5,655.2	612.5	769.4	667.1	102.23	7.526	
14,250.0	7,962.1	13,936.3	7,565.9	50.9	51.3	-59.03	-5,705.2	612.1	769.5	666.5	102.94	7.474	
14,300.0	7,962.1	13,986.3	7,565.7	51.2	51.7	-59.03	-5,755.2	611.7	769.5	665.9	103.66	7.424	
14,345.0	7,962.1	14,031.3	7,565.6	51.5	52.0	-59.02	-5,800.2	611.4	769.6	665.3	104.30	7.379	
14,400.0	7,962.1	14,086.3	7,565.5	51.9	52.4	-59.01	-5,855.2	610.9	769.7	664.6	105.08	7.325	
14,440.0	7,962.2	14,126.3	7,565.4	52.2	52.6	-59.00	-5,895.2	610.6	769.7	664.1	105.65	7.286	
14,500.0	7,962.2	14,186.3	7,565.3	52.6	53.1	-58.99	-5,955.2	610.1	769.8	663.3	106.51	7.228	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-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
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S	+E/-W	Between Centres	Between Ellipses	(usft)	Warning
							(usft)	(usft)	(usft)	(usft)		
14,535.0	7,962.2	14,221.3	7,565.2	52.9	53.3	-58.98	-5,990.2	609.8	769.9	662.9	107.01	7.195
14,600.0	7,962.2	14,286.3	7,565.0	53.3	53.8	-58.97	-6,055.2	609.3	770.0	662.0	107.94	7.133
14,630.0	7,962.3	14,316.3	7,564.9	53.6	54.0	-58.96	-6,085.2	609.1	770.0	661.7	108.37	7.105
14,700.0	7,962.3	14,386.3	7,564.8	54.1	54.5	-58.95	-6,155.2	608.5	770.1	660.8	109.38	7.041
14,725.0	7,962.3	14,411.3	7,564.7	54.2	54.6	-58.95	-6,180.2	608.3	770.2	660.4	109.73	7.018
14,800.0	7,962.3	14,486.3	7,564.5	54.8	55.2	-58.93	-6,255.2	607.7	770.3	659.5	110.81	6.951
14,820.0	7,962.4	14,506.3	7,564.5	54.9	55.3	-58.93	-6,275.2	607.6	770.3	659.2	111.10	6.933
14,900.0	7,962.4	14,586.3	7,564.3	55.5	55.9	-58.91	-6,355.2	606.9	770.4	658.2	112.25	6.863
14,915.0	7,962.4	14,601.3	7,564.3	55.6	56.0	-58.91	-6,370.2	606.8	770.5	658.0	112.47	6.850
15,000.0	7,962.4	14,686.3	7,564.1	56.2	56.6	-58.90	-6,455.2	606.2	770.6	656.9	113.70	6.778
15,010.0	7,962.5	14,696.3	7,564.0	56.3	56.6	-58.89	-6,465.2	606.1	770.6	656.8	113.84	6.769
15,100.0	7,962.5	14,786.3	7,563.8	56.9	57.3	-58.88	-6,555.2	605.4	770.7	655.6	115.14	6.694
15,105.0	7,962.5	14,791.3	7,563.8	56.9	57.3	-58.88	-6,560.2	605.3	770.7	655.5	115.21	6.690
15,200.0	7,962.5	14,886.3	7,563.6	57.6	58.0	-58.86	-6,655.2	604.6	770.9	654.3	116.59	6.612
15,295.0	7,962.6	14,981.3	7,563.4	58.3	58.7	-58.84	-6,750.2	603.8	771.0	653.1	117.97	6.536
15,300.0	7,962.6	14,986.3	7,563.3	58.3	58.7	-58.84	-6,755.2	603.8	771.0	653.0	118.04	6.532
15,390.0	7,962.6	15,076.3	7,563.1	59.0	59.3	-58.82	-6,845.2	603.1	771.2	651.8	119.35	6.462
15,400.0	7,962.7	15,086.3	7,563.1	59.0	59.4	-58.82	-6,855.2	603.0	771.2	651.7	119.49	6.454
15,485.0	7,962.7	15,171.3	7,562.9	59.7	60.0	-58.81	-6,940.2	602.3	771.3	650.6	120.73	6.389
15,500.0	7,962.7	15,186.3	7,562.9	59.8	60.1	-58.80	-6,955.2	602.2	771.3	650.4	120.95	6.377
15,580.0	7,962.7	15,266.3	7,562.7	60.3	60.7	-58.79	-7,035.2	601.5	771.5	649.4	122.12	6.318
15,600.0	7,962.8	15,286.3	7,562.6	60.5	60.8	-58.78	-7,055.2	601.4	771.5	649.1	122.41	6.303
15,675.0	7,962.8	15,361.3	7,562.4	61.0	61.4	-58.77	-7,130.2	600.8	771.6	648.1	123.50	6.248
15,700.0	7,962.8	15,386.3	7,562.4	61.2	61.6	-58.77	-7,155.2	600.6	771.6	647.8	123.87	6.230
15,770.0	7,962.8	15,456.3	7,562.2	61.7	62.1	-58.75	-7,225.2	600.0	771.8	646.9	124.89	6.180
15,800.0	7,962.9	15,486.3	7,562.1	61.9	62.3	-58.75	-7,255.2	599.8	771.8	646.5	125.33	6.158
15,865.0	7,962.9	15,551.3	7,562.0	62.4	62.7	-58.74	-7,320.2	599.3	771.9	645.6	126.28	6.113
15,900.0	7,962.9	15,586.3	7,561.9	62.6	63.0	-58.73	-7,355.2	599.0	772.0	645.2	126.79	6.088
15,960.0	7,962.9	15,646.3	7,561.8	63.1	63.4	-58.72	-7,415.2	598.5	772.0	644.4	127.67	6.047
16,000.0	7,963.0	15,686.3	7,561.7	63.4	63.7	-58.71	-7,455.2	598.2	772.1	643.8	128.26	6.020
16,055.0	7,963.0	15,741.3	7,561.5	63.8	64.1	-58.70	-7,510.2	597.8	772.2	643.1	129.06	5.983
16,100.0	7,963.0	15,786.3	7,561.4	64.1	64.4	-58.69	-7,555.2	597.4	772.3	642.5	129.72	5.953
16,150.0	7,963.0	15,836.3	7,561.3	64.5	64.8	-58.68	-7,605.2	597.0	772.3	641.9	130.46	5.920
16,200.0	7,963.1	15,886.3	7,561.2	64.8	65.2	-58.67	-7,655.2	596.6	772.4	641.2	131.19	5.888
16,245.0	7,963.1	15,931.3	7,561.1	65.1	65.5	-58.67	-7,700.2	596.3	772.5	640.6	131.85	5.859
16,300.0	7,963.1	15,986.3	7,560.9	65.5	65.9	-58.66	-7,755.2	595.8	772.6	639.9	132.66	5.823
16,340.0	7,963.1	16,026.3	7,560.8	65.8	66.2	-58.65	-7,795.2	595.5	772.6	639.4	133.25	5.798
16,400.0	7,963.2	16,086.3	7,560.7	66.3	66.6	-58.64	-7,855.2	595.0	772.7	638.6	134.14	5.761
16,435.0	7,963.2	16,121.3	7,560.6	66.5	66.9	-58.63	-7,890.2	594.8	772.8	638.1	134.65	5.739
16,500.0	7,963.2	16,186.3	7,560.5	67.0	67.3	-58.62	-7,955.2	594.2	772.9	637.3	135.61	5.699
16,530.0	7,963.2	16,216.3	7,560.4	67.2	67.6	-58.61	-7,985.2	594.0	772.9	636.9	136.05	5.681
16,600.0	7,963.3	16,286.3	7,560.2	67.7	68.1	-58.60	-8,055.1	593.5	773.0	635.9	137.08	5.639
16,625.0	7,963.3	16,311.3	7,560.2	67.9	68.2	-58.60	-8,080.1	593.3	773.1	635.6	137.45	5.624
16,700.0	7,963.3	16,386.3	7,560.0	68.5	68.8	-58.58	-8,155.1	592.7	773.2	634.6	138.56	5.580
16,720.0	7,963.3	16,406.3	7,559.9	68.6	68.9	-58.58	-8,175.1	592.5	773.2	634.3	138.86	5.568
16,800.0	7,963.4	16,486.3	7,559.7	69.2	69.5	-58.56	-8,255.1	591.9	773.3	633.3	140.04	5.522
16,815.0	7,963.4	16,501.3	7,559.7	69.3	69.6	-58.56	-8,270.1	591.7	773.3	633.1	140.26	5.514
16,900.0	7,963.4	16,586.3	7,559.5	69.9	70.2	-58.54	-8,355.1	591.1	773.5	632.0	141.52	5.465
16,910.0	7,963.4	16,596.3	7,559.5	70.0	70.3	-58.54	-8,365.1	591.0	773.5	631.8	141.67	5.460
17,000.0	7,963.5	16,686.3	7,559.3	70.7	71.0	-58.53	-8,455.1	590.3	773.6	630.6	143.00	5.410
17,005.0	7,963.5	16,691.3	7,559.3	70.7	71.0	-58.53	-8,460.1	590.2	773.6	630.6	143.07	5.407

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-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	
17,100.0	7,963.5	16,786.3	7,559.0	71.4	71.7	-58.51	-8,555.1	589.5	773.8	629.3	144.48	5.356		
17,195.0	7,963.6	16,881.3	7,558.8	72.1	72.4	-58.49	-8,650.1	588.7	773.9	628.0	145.89	5.305		
17,200.0	7,963.6	16,886.3	7,558.8	72.1	72.4	-58.49	-8,655.1	588.7	773.9	628.0	145.97	5.302		
17,290.0	7,963.6	16,976.3	7,558.6	72.8	73.1	-58.47	-8,745.1	588.0	774.1	626.8	147.30	5.255		
17,300.0	7,963.6	16,986.3	7,558.6	72.9	73.2	-58.47	-8,755.1	587.9	774.1	626.6	147.45	5.250		
17,385.0	7,963.7	17,071.3	7,558.3	73.5	73.8	-58.46	-8,840.1	587.2	774.2	625.5	148.71	5.206		
17,400.0	7,963.7	17,086.3	7,558.3	73.6	73.9	-58.45	-8,855.1	587.1	774.2	625.3	148.94	5.198		
17,480.0	7,963.7	17,166.3	7,558.1	74.2	74.5	-58.44	-8,935.1	586.5	774.4	624.2	150.13	5.158		
17,500.0	7,963.7	17,186.3	7,558.1	74.3	74.6	-58.43	-8,955.1	586.3	774.4	624.0	150.43	5.148		
17,575.0	7,963.8	17,261.3	7,557.9	74.9	75.2	-58.42	-9,030.1	585.7	774.5	623.0	151.54	5.111		
17,600.0	7,963.8	17,286.3	7,557.8	75.1	75.4	-58.42	-9,055.1	585.5	774.5	622.6	151.91	5.099		
17,670.0	7,963.8	17,356.3	7,557.7	75.6	75.9	-58.40	-9,125.1	585.0	774.7	621.7	152.96	5.065		
17,700.0	7,963.8	17,386.3	7,557.6	75.8	76.1	-58.40	-9,155.1	584.7	774.7	621.3	153.40	5.050		
17,765.0	7,963.9	17,451.3	7,557.4	76.3	76.6	-58.39	-9,220.1	584.2	774.8	620.4	154.37	5.019		
17,800.0	7,963.9	17,486.3	7,557.4	76.5	76.8	-58.38	-9,255.1	583.9	774.9	620.0	154.89	5.002		
17,860.0	7,963.9	17,546.3	7,557.2	77.0	77.3	-58.37	-9,315.1	583.4	774.9	619.2	155.79	4.974		
17,900.0	7,963.9	17,586.3	7,557.1	77.3	77.6	-58.36	-9,355.1	583.1	775.0	618.6	156.39	4.956		
17,955.0	7,964.0	17,641.3	7,557.0	77.7	78.0	-58.35	-9,410.1	582.7	775.1	617.9	157.21	4.930		
18,000.0	7,964.0	17,686.3	7,556.9	78.0	78.3	-58.34	-9,455.1	582.3	775.2	617.3	157.88	4.910		
18,050.0	7,964.0	17,736.3	7,556.8	78.4	78.7	-58.33	-9,505.1	581.9	775.2	616.6	158.63	4.887		
18,100.0	7,964.1	17,786.3	7,556.6	78.7	79.0	-58.33	-9,555.1	581.5	775.3	615.9	159.37	4.865		
18,145.0	7,964.1	17,831.3	7,556.5	79.1	79.4	-58.32	-9,600.1	581.2	775.4	615.3	160.04	4.845		
18,200.0	7,964.1	17,886.3	7,556.4	79.5	79.8	-58.31	-9,655.1	580.7	775.5	614.6	160.87	4.821		
18,240.0	7,964.1	17,926.3	7,556.3	79.8	80.1	-58.30	-9,695.1	580.4	775.5	614.1	161.46	4.803		
18,300.0	7,964.2	17,986.3	7,556.2	80.2	80.5	-58.29	-9,755.1	580.0	775.6	613.3	162.36	4.777		
18,335.0	7,964.2	18,021.3	7,556.1	80.5	80.8	-58.28	-9,790.1	579.7	775.7	612.8	162.89	4.762		
18,400.0	7,964.2	18,086.3	7,555.9	81.0	81.2	-58.27	-9,855.1	579.2	775.8	611.9	163.86	4.734		
18,430.0	7,964.2	18,116.3	7,555.8	81.2	81.5	-58.26	-9,885.1	578.9	775.8	611.5	164.31	4.722		
18,500.0	7,964.3	18,186.3	7,555.7	81.7	82.0	-58.25	-9,955.1	578.4	775.9	610.6	165.36	4.692		
18,525.0	7,964.3	18,211.3	7,555.6	81.9	82.2	-58.25	-9,980.1	578.2	776.0	610.2	165.73	4.682		
18,600.0	7,964.3	18,286.3	7,555.4	82.4	82.7	-58.23	-10,055.1	577.6	776.1	609.2	166.85	4.651		
18,620.0	7,964.3	18,306.3	7,555.4	82.6	82.9	-58.23	-10,075.1	577.4	776.1	609.0	167.15	4.643		
18,700.0	7,964.4	18,386.3	7,555.2	83.2	83.5	-58.22	-10,155.1	576.8	776.2	607.9	168.35	4.611		
18,715.0	7,964.4	18,401.3	7,555.2	83.3	83.6	-58.21	-10,170.1	576.7	776.3	607.7	168.58	4.605		
18,800.0	7,964.4	18,486.3	7,555.0	83.9	84.2	-58.20	-10,255.1	576.0	776.4	606.5	169.85	4.571		
18,810.0	7,964.4	18,496.3	7,554.9	84.0	84.3	-58.20	-10,265.1	575.9	776.4	606.4	170.00	4.567		
18,900.0	7,964.5	18,586.3	7,554.7	84.7	84.9	-58.18	-10,355.1	575.2	776.5	605.2	171.35	4.532		
18,905.0	7,964.5	18,591.3	7,554.7	84.7	85.0	-58.18	-10,360.1	575.2	776.5	605.1	171.43	4.530		
19,000.0	7,964.5	18,686.3	7,554.5	85.4	85.7	-58.16	-10,455.1	574.4	776.7	603.8	172.86	4.493		
19,095.0	7,964.6	18,781.3	7,554.3	86.1	86.4	-58.14	-10,550.1	573.6	776.8	602.6	174.28	4.457		
19,100.0	7,964.6	18,786.3	7,554.2	86.2	86.4	-58.14	-10,555.1	573.6	776.9	602.5	174.36	4.455		
19,190.0	7,964.6	18,876.3	7,554.0	86.8	87.1	-58.13	-10,645.0	572.9	777.0	601.3	175.71	4.422		
19,200.0	7,964.6	18,886.3	7,554.0	86.9	87.2	-58.12	-10,655.0	572.8	777.0	601.1	175.86	4.418		
19,285.0	7,964.7	18,971.3	7,553.8	87.5	87.8	-58.11	-10,740.0	572.1	777.1	600.0	177.14	4.387		
19,300.0	7,964.7	18,986.3	7,553.8	87.6	87.9	-58.11	-10,755.0	572.0	777.2	599.8	177.37	4.382		
19,380.0	7,964.7	19,066.3	7,553.6	88.2	88.5	-58.09	-10,835.0	571.4	777.3	598.7	178.57	4.353		
19,400.0	7,964.7	19,086.3	7,553.5	88.4	88.6	-58.09	-10,855.0	571.2	777.3	598.4	178.87	4.346		
19,475.0	7,964.8	19,161.3	7,553.3	88.9	89.2	-58.07	-10,930.0	570.6	777.4	597.4	180.00	4.319		
19,500.0	7,964.8	19,186.3	7,553.3	89.1	89.4	-58.07	-10,955.0	570.4	777.5	597.1	180.37	4.310		
19,570.0	7,964.8	19,256.3	7,553.1	89.6	89.9	-58.06	-11,025.0	569.9	777.6	596.1	181.43	4.286		
19,600.0	7,964.8	19,286.3	7,553.0	89.9	90.1	-58.05	-11,055.0	569.6	777.6	595.7	181.88	4.275		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-MWD+IFR1+MS						Rule Assigned:					Offset Well Error: 3.0 usft	
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	
19,665.0	7,964.9	19,351.3	7,552.9	90.4	90.6	-58.04	-11,120.0	569.1	777.7	594.9	182.86	4.253		
19,700.0	7,964.9	19,386.3	7,552.8	90.6	90.9	-58.03	-11,155.0	568.8	777.8	594.4	183.39	4.241		
19,760.0	7,964.9	19,446.3	7,552.7	91.1	91.3	-58.02	-11,215.0	568.4	777.9	593.6	184.29	4.221		
19,800.0	7,964.9	19,486.3	7,552.6	91.4	91.6	-58.02	-11,255.0	568.0	777.9	593.0	184.89	4.207		
19,855.0	7,965.0	19,541.3	7,552.4	91.8	92.0	-58.01	-11,310.0	567.6	778.0	592.3	185.72	4.189		
19,900.0	7,965.0	19,586.3	7,552.3	92.1	92.4	-58.00	-11,355.0	567.3	778.1	591.7	186.40	4.174		
19,950.0	7,965.0	19,636.3	7,552.2	92.5	92.7	-57.99	-11,405.0	566.9	778.2	591.0	187.16	4.158		
20,000.0	7,965.0	19,686.3	7,552.1	92.9	93.1	-57.98	-11,455.0	566.5	778.2	590.3	187.91	4.142		
20,045.0	7,965.1	19,731.3	7,552.0	93.2	93.4	-57.97	-11,500.0	566.1	778.3	589.7	188.59	4.127		
20,100.0	7,965.1	19,786.3	7,551.9	93.6	93.8	-57.96	-11,555.0	565.7	778.4	589.0	189.42	4.109		
20,140.0	7,965.1	19,826.3	7,551.8	93.9	94.1	-57.95	-11,595.0	565.3	778.5	588.4	190.02	4.097		
20,200.0	7,965.1	19,886.3	7,551.6	94.3	94.6	-57.94	-11,655.0	564.9	778.6	587.6	190.93	4.078		
20,235.0	7,965.2	19,921.3	7,551.5	94.6	94.9	-57.94	-11,690.0	564.6	778.6	587.2	191.46	4.067		
20,300.0	7,965.2	19,986.3	7,551.4	95.1	95.3	-57.92	-11,755.0	564.1	778.7	586.3	192.44	4.047		
20,330.0	7,965.2	20,016.3	7,551.3	95.3	95.6	-57.92	-11,785.0	563.8	778.8	585.9	192.89	4.037		
20,400.0	7,965.2	20,086.3	7,551.1	95.8	96.1	-57.91	-11,855.0	563.3	778.9	584.9	193.95	4.016		
20,425.0	7,965.3	20,111.3	7,551.1	96.0	96.3	-57.90	-11,880.0	563.1	778.9	584.6	194.33	4.008		
20,500.0	7,965.3	20,186.3	7,550.9	96.6	96.8	-57.89	-11,955.0	562.5	779.0	583.6	195.46	3.986		
20,520.0	7,965.3	20,206.3	7,550.8	96.7	97.0	-57.88	-11,975.0	562.3	779.1	583.3	195.76	3.980		
20,600.0	7,965.4	20,286.3	7,550.7	97.3	97.6	-57.87	-12,055.0	561.7	779.2	582.2	196.97	3.956		
20,615.0	7,965.4	20,301.3	7,550.6	97.4	97.7	-57.87	-12,070.0	561.6	779.2	582.0	197.20	3.951		
20,700.0	7,965.4	20,386.3	7,550.4	98.1	98.3	-57.85	-12,155.0	560.9	779.3	580.8	198.48	3.926		
20,710.0	7,965.4	20,396.3	7,550.4	98.2	98.4	-57.85	-12,165.0	560.8	779.3	580.7	198.64	3.923		
20,800.0	7,965.5	20,486.3	7,550.2	98.8	99.1	-57.83	-12,255.0	560.1	779.5	579.5	200.00	3.897		
20,805.0	7,965.5	20,491.3	7,550.2	98.9	99.1	-57.83	-12,260.0	560.1	779.5	579.4	200.07	3.896		
20,900.0	7,965.5	20,586.3	7,549.9	99.6	99.8	-57.82	-12,355.0	559.3	779.6	578.1	201.51	3.869		
20,995.0	7,965.6	20,681.3	7,549.7	100.3	100.5	-57.80	-12,450.0	558.6	779.8	576.8	202.95	3.842		
21,000.0	7,965.6	20,686.3	7,549.7	100.3	100.6	-57.80	-12,455.0	558.5	779.8	576.8	203.02	3.841		
21,090.0	7,965.6	20,776.3	7,549.5	101.0	101.2	-57.78	-12,545.0	557.8	779.9	575.6	204.39	3.816		
21,100.0	7,965.6	20,786.3	7,549.5	101.1	101.3	-57.78	-12,555.0	557.7	780.0	575.4	204.54	3.813		
21,185.0	7,965.7	20,871.3	7,549.3	101.7	101.9	-57.76	-12,640.0	557.0	780.1	574.3	205.83	3.790		
21,200.0	7,965.7	20,886.3	7,549.2	101.8	102.1	-57.76	-12,655.0	556.9	780.1	574.1	206.05	3.786		
21,280.0	7,965.7	20,966.3	7,549.0	102.4	102.7	-57.75	-12,735.0	556.3	780.2	573.0	207.27	3.764		
21,300.0	7,965.7	20,986.3	7,549.0	102.6	102.8	-57.74	-12,755.0	556.1	780.3	572.7	207.57	3.759		
21,375.0	7,965.8	21,061.3	7,548.8	103.1	103.4	-57.73	-12,830.0	555.5	780.4	571.7	208.71	3.739		
21,400.0	7,965.8	21,086.3	7,548.7	103.3	103.5	-57.73	-12,855.0	555.3	780.4	571.3	209.08	3.733		
21,470.0	7,965.8	21,156.3	7,548.6	103.8	104.1	-57.71	-12,925.0	554.8	780.5	570.4	210.15	3.714		
21,500.0	7,965.8	21,186.3	7,548.5	104.1	104.3	-57.71	-12,955.0	554.5	780.6	570.0	210.60	3.706		
21,565.0	7,965.9	21,251.3	7,548.3	104.6	104.8	-57.70	-13,020.0	554.0	780.7	569.1	211.59	3.690		
21,600.0	7,965.9	21,286.3	7,548.3	104.8	105.0	-57.69	-13,055.0	553.8	780.7	568.6	212.12	3.681		
21,660.0	7,965.9	21,346.3	7,548.1	105.3	105.5	-57.68	-13,115.0	553.3	780.8	567.8	213.03	3.665		
21,700.0	7,965.9	21,386.3	7,548.0	105.6	105.8	-57.67	-13,155.0	553.0	780.9	567.3	213.63	3.655		
21,755.0	7,965.9	21,441.3	7,547.9	106.0	106.2	-57.66	-13,209.9	552.5	781.0	566.5	214.47	3.641		
21,800.0	7,966.0	21,486.3	7,547.8	106.3	106.5	-57.65	-13,254.9	552.2	781.0	565.9	215.15	3.630		
21,850.0	7,966.0	21,536.3	7,547.7	106.7	106.9	-57.64	-13,304.9	551.8	781.1	565.2	215.91	3.618		
21,900.0	7,966.0	21,586.3	7,547.5	107.1	107.3	-57.64	-13,354.9	551.4	781.2	564.5	216.67	3.606		
21,945.0	7,966.0	21,631.3	7,547.4	107.4	107.6	-57.63	-13,399.9	551.0	781.3	563.9	217.35	3.595		
22,000.0	7,966.1	21,686.3	7,547.3	107.8	108.0	-57.62	-13,454.9	550.6	781.4	563.2	218.19	3.581		
22,040.0	7,966.1	21,726.3	7,547.2	108.1	108.3	-57.61	-13,494.9	550.3	781.4	562.6	218.79	3.571		
22,100.0	7,966.1	21,786.3	7,547.1	108.6	108.8	-57.60	-13,554.9	549.8	781.5	561.8	219.71	3.557		
22,135.0	7,966.1	21,821.3	7,547.0	108.8	109.1	-57.59	-13,589.9	549.5	781.6	561.3	220.24	3.549		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #501H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7123-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	7,966.2	21,886.3	7,546.8	109.3	109.5	-57.58	-13,654.9	549.0	781.7	560.4	221.22	3.533
22,230.0	7,966.2	21,916.3	7,546.8	109.5	109.8	-57.58	-13,684.9	548.8	781.7	560.0	221.68	3.526
22,300.0	7,966.2	21,986.3	7,546.6	110.1	110.3	-57.56	-13,754.9	548.2	781.8	559.1	222.74	3.510
22,325.0	7,966.2	22,011.3	7,546.5	110.3	110.5	-57.56	-13,779.9	548.0	781.9	558.7	223.12	3.504
22,400.0	7,966.3	22,086.3	7,546.3	110.8	111.0	-57.55	-13,854.9	547.4	782.0	557.7	224.26	3.487
22,420.0	7,966.3	22,106.3	7,546.3	111.0	111.2	-57.54	-13,874.9	547.2	782.0	557.5	224.57	3.482
22,500.0	7,966.3	22,186.3	7,546.1	111.6	111.8	-57.53	-13,954.9	546.6	782.1	556.4	225.78	3.464
22,515.0	7,966.3	22,201.3	7,546.1	111.7	111.9	-57.52	-13,969.9	546.5	782.2	556.2	226.01	3.461
22,600.0	7,966.4	22,286.3	7,545.9	112.3	112.5	-57.51	-14,054.9	545.8	782.3	555.0	227.30	3.442
22,610.0	7,966.4	22,296.3	7,545.8	112.4	112.6	-57.51	-14,064.9	545.7	782.3	554.9	227.46	3.439
22,700.0	7,966.4	22,386.3	7,545.6	113.1	113.3	-57.49	-14,154.9	545.0	782.5	553.6	228.82	3.419
22,705.0	7,966.4	22,391.3	7,545.6	113.1	113.3	-57.49	-14,159.9	545.0	782.5	553.6	228.90	3.418
22,800.0	7,966.5	22,486.3	7,545.4	113.8	114.0	-57.47	-14,254.9	544.2	782.6	552.3	230.35	3.398
22,895.0	7,966.5	22,581.3	7,545.2	114.5	114.8	-57.46	-14,349.9	543.5	782.8	551.0	231.79	3.377
22,900.0	7,966.5	22,586.3	7,545.1	114.6	114.8	-57.46	-14,354.9	543.4	782.8	550.9	231.87	3.376
22,990.0	7,966.6	22,676.3	7,544.9	115.3	115.5	-57.44	-14,444.9	542.7	782.9	549.7	233.24	3.357
23,000.0	7,966.6	22,686.3	7,544.9	115.3	115.5	-57.44	-14,454.9	542.6	782.9	549.5	233.39	3.355
23,085.0	7,966.6	22,771.2	7,544.7	116.0	116.2	-57.42	-14,539.9	542.0	783.1	548.4	234.68	3.337
23,100.0	7,966.6	22,786.2	7,544.7	116.1	116.3	-57.42	-14,554.9	541.8	783.1	548.2	234.91	3.334
23,180.0	7,966.7	22,866.2	7,544.5	116.7	116.9	-57.41	-14,634.9	541.2	783.2	547.1	236.13	3.317
23,200.0	7,966.7	22,886.2	7,544.4	116.8	117.0	-57.40	-14,654.9	541.1	783.2	546.8	236.43	3.313
23,275.0	7,966.7	22,961.2	7,544.3	117.4	117.6	-57.39	-14,729.9	540.5	783.4	545.8	237.57	3.297
23,300.0	7,966.8	22,986.2	7,544.2	117.6	117.8	-57.38	-14,754.9	540.3	783.4	545.4	237.96	3.292
23,370.0	7,966.8	23,056.2	7,544.0	118.1	118.3	-57.37	-14,824.9	539.7	783.5	544.5	239.02	3.278
23,400.0	7,966.8	23,086.2	7,544.0	118.3	118.6	-57.37	-14,854.9	539.5	783.6	544.1	239.48	3.272
23,465.0	7,966.8	23,151.2	7,543.8	118.8	119.0	-57.35	-14,919.9	538.9	783.7	543.2	240.47	3.259
23,500.0	7,966.9	23,186.2	7,543.7	119.1	119.3	-57.35	-14,954.9	538.7	783.7	542.7	241.00	3.252
23,560.0	7,966.9	23,246.2	7,543.6	119.5	119.8	-57.34	-15,014.9	538.2	783.8	541.9	241.92	3.240
23,600.0	7,966.9	23,286.2	7,543.5	119.9	120.1	-57.33	-15,054.9	537.9	783.9	541.4	242.53	3.232
23,655.0	7,966.9	23,341.2	7,543.3	120.3	120.5	-57.32	-15,109.9	537.4	784.0	540.6	243.36	3.221
23,700.0	7,967.0	23,386.2	7,543.2	120.6	120.8	-57.31	-15,154.9	537.1	784.0	540.0	244.05	3.213
23,729.1	7,967.0	23,415.3	7,543.2	120.8	121.0	-57.31	-15,183.9	536.9	784.1	539.6	244.49	3.207
23,750.0	7,967.0	23,436.2	7,543.1	121.0	121.2	-57.30	-15,204.9	536.7	784.1	539.3	244.81	3.203
23,779.1	7,967.0	23,465.3	7,543.0	121.2	121.4	-57.30	-15,233.9	536.5	784.2	538.9	245.25	3.197 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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0														Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.0	0.0	0.4	0.4	3.0	3.0	-91.15	-0.6	-29.9	29.9						
95.0	95.0	95.4	95.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.00	4.984			
100.0	100.0	100.4	100.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.00	4.984			
190.0	190.0	190.4	190.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.00	4.982			
200.0	200.0	200.4	200.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.00	4.982			
285.0	285.0	285.4	285.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.01	4.978			
300.0	300.0	300.4	300.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.01	4.977			
380.0	380.0	380.4	380.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.02	4.971			
400.0	400.0	400.4	400.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.02	4.969			
475.0	475.0	475.4	475.4	3.0	3.0	-91.15	-0.6	-29.9	29.9	23.9	6.03	4.962			
500.0	500.0	500.4	500.4	3.1	3.1	-91.15	-0.6	-29.9	29.9	23.9	6.03	4.959			
570.0	570.0	570.4	570.4	3.1	3.1	-91.15	-0.6	-29.9	29.9	23.9	6.04	4.950			
600.0	600.0	600.4	600.4	3.1	3.1	-91.15	-0.6	-29.9	29.9	23.9	6.05	4.946			
665.0	665.0	665.4	665.4	3.1	3.1	-91.15	-0.6	-29.9	29.9	23.8	6.06	4.936			
700.0	700.0	700.4	700.4	3.1	3.1	-91.15	-0.6	-29.9	29.9	23.8	6.07	4.931			
760.0	760.0	760.4	760.4	3.1	3.1	-91.15	-0.6	-29.9	29.9	23.8	6.08	4.920			
800.0	800.0	800.4	800.4	3.2	3.2	-91.15	-0.6	-29.9	29.9	23.8	6.09	4.913			
855.0	855.0	855.4	855.4	3.2	3.2	-91.15	-0.6	-29.9	29.9	23.8	6.10	4.902			
900.0	900.0	900.4	900.4	3.2	3.2	-91.15	-0.6	-29.9	29.9	23.8	6.11	4.893			
950.0	950.0	950.4	950.4	3.2	3.2	-91.15	-0.6	-29.9	29.9	23.8	6.13	4.882			
1,000.0	1,000.0	1,000.4	1,000.4	3.2	3.2	-91.15	-0.6	-29.9	29.9	23.8	6.14	4.870			
1,045.0	1,045.0	1,045.4	1,045.4	3.3	3.3	-91.15	-0.6	-29.9	29.9	23.8	6.15	4.859			
1,100.0	1,100.0	1,100.4	1,100.4	3.3	3.3	-91.15	-0.6	-29.9	29.9	23.7	6.17	4.846			
1,140.0	1,140.0	1,140.4	1,140.4	3.3	3.3	-91.15	-0.6	-29.9	29.9	23.7	6.19	4.835			
1,200.0	1,200.0	1,200.4	1,200.4	3.4	3.4	-91.15	-0.6	-29.9	29.9	23.7	6.21	4.819			
1,235.0	1,235.0	1,235.4	1,235.4	3.4	3.4	-91.15	-0.6	-29.9	29.9	23.7	6.22	4.809			
1,300.0	1,300.0	1,300.4	1,300.4	3.4	3.4	-91.15	-0.6	-29.9	29.9	23.7	6.24	4.790			
1,330.0	1,330.0	1,330.4	1,330.4	3.4	3.4	-91.15	-0.6	-29.9	29.9	23.7	6.25	4.781			
1,400.0	1,400.0	1,400.4	1,400.4	3.5	3.5	-91.15	-0.6	-29.9	29.9	23.6	6.28	4.760			
1,425.0	1,425.0	1,425.4	1,425.4	3.5	3.5	-91.15	-0.6	-29.9	29.9	23.6	6.29	4.752			
1,500.0	1,500.0	1,500.4	1,500.4	3.5	3.5	-91.15	-0.6	-29.9	29.9	23.6	6.33	4.727			
1,520.0	1,520.0	1,520.4	1,520.4	3.6	3.6	-91.15	-0.6	-29.9	29.9	23.6	6.34	4.721			
1,600.0	1,600.0	1,600.4	1,600.4	3.6	3.6	-91.15	-0.6	-29.9	29.9	23.5	6.37	4.694			
1,615.0	1,615.0	1,615.4	1,615.4	3.6	3.6	-91.15	-0.6	-29.9	29.9	23.5	6.38	4.688			
1,700.0	1,700.0	1,700.4	1,700.4	3.7	3.7	-91.15	-0.6	-29.9	29.9	23.5	6.42	4.658			
1,710.0	1,710.0	1,710.4	1,710.4	3.7	3.7	-91.15	-0.6	-29.9	29.9	23.5	6.43	4.655			
1,800.0	1,800.0	1,800.4	1,800.4	3.8	3.8	-91.15	-0.6	-29.9	29.9	23.4	6.47	4.621			
1,805.0	1,805.0	1,805.4	1,805.4	3.8	3.8	-91.15	-0.6	-29.9	29.9	23.4	6.47	4.620			
1,900.0	1,900.0	1,900.4	1,900.4	3.9	3.9	-91.15	-0.6	-29.9	29.9	23.4	6.52	4.583			
1,995.0	1,995.0	1,995.4	1,995.4	3.9	3.9	-91.15	-0.6	-29.9	29.9	23.3	6.58	4.546			
1,995.2	1,995.2	1,995.6	1,995.6	3.9	3.9	-91.15	-0.6	-29.9	29.9	23.3	6.58	4.546 CC			
2,000.0	2,000.0	2,000.4	2,000.4	3.9	3.9	-91.15	-0.6	-29.9	29.9	23.3	6.58	4.544 ES			
2,090.0	2,090.0	2,089.9	2,089.8	4.1	4.1	-91.88	0.5	-30.7	30.8	24.1	6.65	4.622			
2,100.0	2,100.0	2,100.0	2,100.0	4.2	4.1	-91.98	0.8	-30.9	31.0	24.3	6.66	4.646			
2,185.0	2,184.9	2,184.2	2,184.1	4.7	4.7	-93.21	4.2	-33.4	33.5	26.6	6.87	4.876			
2,200.0	2,199.8	2,199.1	2,199.0	4.8	4.8	-93.47	5.0	-34.0	34.1	27.2	6.91	4.937			
2,280.0	2,279.6	2,278.5	2,278.0	5.3	5.3	-95.02	10.3	-37.9	38.1	31.0	7.15	5.331			
2,300.0	2,299.5	2,298.3	2,297.8	5.4	5.4	-95.42	11.9	-39.1	39.4	32.1	7.22	5.451			
2,375.0	2,373.9	2,372.6	2,371.5	5.9	5.8	-96.92	18.9	-44.2	44.7	37.2	7.50	5.960			
2,400.0	2,398.7	2,397.3	2,396.0	6.0	6.0	-97.40	21.6	-46.1	46.8	39.2	7.61	6.151			
2,470.0	2,467.9	2,466.4	2,464.3	6.4	6.3	-98.65	30.0	-52.2	53.3	45.3	7.92	6.729			

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-MWD+IFR1+MS						Rule Assigned:					Offset Well Error: 3.0 usft	
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	
2,500.0	2,497.5	2,496.0	2,493.5	6.5	6.5	-99.14	34.0	-55.2	56.4	48.3	8.05	6.997		
2,565.0	2,561.3	2,560.0	2,556.4	6.8	6.8	-100.10	43.5	-62.1	63.7	55.4	8.35	7.635		
2,575.2	2,571.4	2,570.0	2,566.3	6.8	6.9	-100.24	45.0	-63.2	65.0	56.6	8.39	7.741		
2,600.0	2,595.6	2,594.3	2,590.1	6.8	7.0	-100.54	49.0	-66.1	68.1	59.6	8.49	8.014		
2,660.0	2,654.4	2,653.2	2,647.6	6.9	7.3	-100.56	59.3	-73.6	75.9	67.1	8.74	8.684		
2,700.0	2,693.6	2,692.4	2,685.6	7.0	7.5	-100.14	66.6	-79.0	81.4	72.5	8.90	9.148		
2,755.0	2,747.5	2,746.3	2,738.0	7.1	7.6	-99.19	77.4	-86.9	89.3	80.2	9.13	9.781		
2,800.0	2,791.6	2,790.8	2,781.0	7.1	7.7	-98.43	86.4	-93.4	95.9	86.6	9.34	10.274		
2,850.0	2,840.6	2,840.3	2,828.9	7.2	7.8	-97.71	96.4	-100.7	103.3	93.7	9.58	10.780		
2,900.0	2,889.6	2,889.7	2,876.8	7.3	7.8	-97.08	106.4	-108.1	110.6	100.8	9.83	11.254		
2,945.0	2,933.7	2,934.2	2,919.9	7.4	7.9	-96.58	115.4	-114.6	117.2	107.2	10.06	11.650		
3,000.0	2,987.6	2,988.6	2,972.5	7.5	8.0	-96.04	126.4	-122.7	125.3	115.0	10.36	12.102		
3,040.0	3,026.8	3,028.2	3,010.8	7.6	8.1	-95.70	134.4	-128.5	131.2	120.6	10.58	12.407		
3,100.0	3,085.6	3,087.5	3,068.2	7.7	8.2	-95.23	146.4	-137.3	140.1	129.2	10.91	12.836		
3,135.0	3,119.9	3,122.1	3,101.8	7.8	8.3	-94.98	153.4	-142.4	145.3	134.1	11.11	13.069		
3,200.0	3,183.6	3,186.4	3,164.0	8.0	8.5	-94.56	166.4	-151.9	154.9	143.4	11.49	13.473		
3,230.0	3,213.0	3,216.1	3,192.7	8.0	8.5	-94.39	172.4	-156.2	159.3	147.6	11.67	13.648		
3,300.0	3,281.6	3,285.3	3,259.7	8.2	8.7	-94.02	186.4	-166.5	169.7	157.6	12.09	14.028		
3,325.0	3,306.1	3,310.0	3,283.7	8.3	8.7	-93.90	191.4	-170.1	173.4	161.1	12.25	14.155		
3,400.0	3,379.6	3,384.2	3,355.5	8.5	8.9	-93.56	206.4	-181.1	184.5	171.8	12.71	14.511		
3,420.0	3,399.2	3,403.9	3,374.6	8.5	9.0	-93.48	210.4	-184.0	187.4	174.6	12.84	14.601		
3,500.0	3,477.6	3,483.1	3,451.2	8.7	9.2	-93.17	226.4	-195.7	199.3	185.9	13.34	14.934		
3,515.0	3,492.3	3,497.9	3,465.6	8.8	9.2	-93.12	229.4	-197.9	201.5	188.1	13.44	14.994		
3,600.0	3,575.6	3,581.9	3,546.9	9.0	9.4	-92.83	246.4	-210.3	214.1	200.1	13.99	15.306		
3,610.0	3,585.4	3,591.8	3,556.5	9.0	9.5	-92.80	248.4	-211.7	215.6	201.5	14.05	15.341		
3,700.0	3,673.5	3,680.8	3,642.7	9.3	9.7	-92.54	266.4	-224.9	228.9	214.3	14.64	15.635		
3,705.0	3,678.4	3,685.8	3,647.5	9.3	9.7	-92.53	267.4	-225.6	229.7	215.0	14.68	15.650		
3,800.0	3,771.5	3,779.7	3,738.4	9.6	10.0	-92.28	286.4	-239.5	243.8	228.5	15.31	15.925		
3,895.0	3,864.6	3,873.7	3,829.4	9.8	10.3	-92.07	305.4	-253.4	257.9	241.9	15.95	16.171		
3,900.0	3,869.5	3,878.6	3,834.1	9.8	10.3	-92.06	306.4	-254.1	258.6	242.6	15.98	16.183		
3,990.0	3,957.7	3,967.6	3,920.3	10.1	10.5	-91.87	324.4	-267.2	272.0	255.4	16.59	16.392		
4,000.0	3,967.5	3,977.5	3,929.9	10.1	10.6	-91.85	326.4	-268.7	273.5	256.8	16.66	16.414		
4,085.0	4,050.8	4,061.6	4,011.3	10.4	10.8	-91.70	343.4	-281.1	286.1	268.8	17.24	16.590		
4,100.0	4,065.5	4,076.4	4,025.6	10.4	10.9	-91.67	346.4	-283.3	288.3	271.0	17.35	16.620		
4,180.0	4,143.9	4,155.5	4,102.2	10.7	11.1	-91.54	362.4	-295.0	300.2	282.3	17.90	16.770		
4,200.0	4,163.5	4,175.3	4,121.4	10.8	11.2	-91.51	366.4	-297.9	303.2	285.1	18.04	16.805		
4,275.0	4,237.0	4,249.4	4,193.2	11.0	11.4	-91.39	381.4	-308.9	314.3	295.7	18.56	16.932		
4,300.0	4,261.5	4,274.2	4,217.1	11.1	11.5	-91.36	386.4	-312.5	318.0	299.3	18.74	16.973		
4,370.0	4,330.1	4,343.4	4,284.1	11.3	11.7	-91.26	400.4	-322.7	328.4	309.2	19.23	17.080		
4,400.0	4,359.5	4,373.0	4,312.8	11.4	11.8	-91.22	406.4	-327.1	332.9	313.4	19.44	17.124		
4,465.0	4,423.2	4,437.3	4,375.1	11.6	12.0	-91.14	419.4	-336.6	342.5	322.6	19.90	17.214		
4,500.0	4,457.5	4,471.9	4,408.6	11.7	12.1	-91.10	426.3	-341.7	347.7	327.6	20.14	17.261		
4,560.0	4,516.3	4,531.3	4,466.0	11.9	12.3	-91.03	438.3	-350.5	356.6	336.1	20.57	17.337		
4,600.0	4,555.5	4,570.8	4,504.3	12.0	12.4	-90.98	446.3	-356.3	362.6	341.7	20.85	17.386		
4,655.0	4,609.4	4,625.2	4,557.0	12.2	12.6	-90.92	457.3	-364.4	370.7	349.5	21.25	17.450		
4,700.0	4,653.5	4,669.7	4,600.0	12.4	12.8	-90.88	466.3	-370.9	377.4	355.9	21.57	17.500		
4,750.0	4,702.4	4,719.2	4,647.9	12.5	12.9	-90.83	476.3	-378.2	384.9	362.9	21.93	17.554		
4,800.0	4,751.4	4,768.6	4,695.8	12.7	13.1	-90.78	486.3	-385.5	392.3	370.0	22.28	17.605		
4,845.0	4,795.5	4,813.1	4,738.9	12.8	13.2	-90.74	495.3	-392.1	399.0	376.4	22.61	17.649		
4,900.0	4,849.4	4,867.5	4,791.5	13.0	13.4	-90.69	506.3	-400.2	407.2	384.2	23.00	17.701		
4,940.0	4,888.6	4,907.0	4,829.8	13.1	13.6	-90.66	514.3	-406.0	413.1	389.8	23.29	17.737		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre		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)	Factor		
5,000.0	4,947.4	4,966.4	4,887.2	13.4	13.8	-90.61	526.3	-414.8	422.0	398.3	23.72	17.789		
5,035.0	4,981.7	5,001.0	4,920.8	13.5	13.9	-90.58	533.3	-419.9	427.2	403.2	23.98	17.818		
5,100.0	5,045.4	5,065.3	4,983.0	13.7	14.1	-90.53	546.3	-429.4	436.9	412.4	24.45	17.870		
5,130.0	5,074.8	5,094.9	5,011.7	13.8	14.2	-90.51	552.3	-433.7	441.3	416.7	24.66	17.893		
5,200.0	5,143.4	5,164.1	5,078.7	14.0	14.4	-90.46	566.3	-444.0	451.7	426.6	25.17	17.945		
5,225.0	5,167.9	5,188.9	5,102.7	14.1	14.5	-90.44	571.3	-447.6	455.5	430.1	25.35	17.963		
5,300.0	5,241.4	5,263.0	5,174.5	14.4	14.8	-90.39	586.3	-458.6	466.6	440.7	25.90	18.015		
5,320.0	5,261.0	5,282.8	5,193.6	14.4	14.9	-90.38	590.3	-461.5	469.6	443.5	26.05	18.029		
5,400.0	5,339.4	5,361.9	5,270.2	14.7	15.1	-90.33	606.3	-473.2	481.5	454.8	26.63	18.080		
5,415.0	5,354.1	5,376.8	5,284.6	14.8	15.2	-90.32	609.3	-475.4	483.7	457.0	26.74	18.089		
5,500.0	5,437.4	5,460.8	5,365.9	15.1	15.5	-90.27	626.3	-487.8	496.3	469.0	27.36	18.140		
5,510.0	5,447.2	5,470.7	5,375.5	15.1	15.5	-90.26	628.3	-489.2	497.8	470.4	27.43	18.146		
5,600.0	5,535.4	5,559.7	5,461.7	15.4	15.8	-90.21	646.3	-502.4	511.2	483.1	28.09	18.196		
5,605.0	5,540.3	5,564.6	5,466.5	15.4	15.9	-90.21	647.3	-503.1	511.9	483.8	28.13	18.199		
5,700.0	5,633.4	5,658.6	5,557.4	15.8	16.2	-90.16	666.3	-517.0	526.1	497.2	28.83	18.249		
5,795.0	5,726.5	5,759.6	5,655.4	16.1	16.6	-90.17	686.2	-531.5	539.8	510.2	29.57	18.254		
5,800.0	5,731.4	5,765.2	5,660.8	16.1	16.6	-90.18	687.2	-532.2	540.5	510.9	29.61	18.251		
5,822.7	5,753.6	5,790.5	5,685.5	16.2	16.7	-90.23	691.7	-535.6	543.5	513.7	29.80	18.240		
5,890.0	5,819.7	5,865.5	5,758.9	16.4	17.0	-90.56	704.2	-544.6	551.7	521.4	30.34	18.183		
5,900.0	5,829.5	5,876.7	5,769.9	16.5	17.1	-90.60	705.9	-545.9	552.8	522.4	30.42	18.172		
5,985.0	5,913.5	5,971.9	5,863.6	16.8	17.5	-90.95	719.1	-555.6	561.5	530.4	31.10	18.056		
6,000.0	5,928.3	5,988.7	5,880.3	16.9	17.6	-91.01	721.2	-557.1	562.9	531.7	31.22	18.031		
6,080.0	6,007.7	6,078.6	5,969.4	17.3	18.0	-91.27	731.0	-564.2	569.3	537.5	31.84	17.881		
6,100.0	6,027.6	6,101.1	5,991.7	17.4	18.1	-91.33	733.1	-565.7	570.7	538.7	31.99	17.838		
6,175.0	6,102.3	6,185.6	6,075.9	17.7	18.5	-91.51	739.6	-570.5	575.0	542.5	32.55	17.663		
6,200.0	6,127.2	6,213.8	6,104.0	17.9	18.6	-91.56	741.4	-571.8	576.2	543.4	32.74	17.598		
6,270.0	6,197.1	6,292.9	6,182.9	18.2	19.0	-91.68	745.1	-574.5	578.6	545.4	33.24	17.404		
6,300.0	6,227.1	6,326.8	6,216.7	18.3	19.1	-91.72	746.1	-575.3	579.3	545.8	33.46	17.314		
6,365.0	6,292.0	6,400.2	6,290.2	18.6	19.5	-91.79	747.3	-576.2	580.1	546.2	33.91	17.107		
6,398.0	6,325.0	6,435.5	6,325.4	18.8	19.6	-91.52	747.4	-576.2	580.1	546.0	34.12	17.000		
6,400.0	6,327.0	6,437.5	6,327.4	18.8	19.6	-91.52	747.4	-576.2	580.1	546.0	34.14	16.994		
6,460.0	6,387.0	6,497.5	6,387.4	18.9	19.7	-91.52	747.4	-576.2	580.1	545.6	34.52	16.806		
6,500.0	6,427.0	6,537.5	6,427.4	19.1	19.8	-91.52	747.4	-576.2	580.1	545.3	34.78	16.681		
6,555.0	6,482.0	6,592.5	6,482.4	19.2	20.0	-91.52	747.4	-576.2	580.1	545.0	35.14	16.511		
6,600.0	6,527.0	6,637.5	6,527.4	19.4	20.1	-91.52	747.4	-576.2	580.1	544.7	35.43	16.373		
6,650.0	6,577.0	6,687.5	6,577.4	19.5	20.3	-91.52	747.4	-576.2	580.1	544.3	35.76	16.222		
6,700.0	6,627.0	6,737.5	6,627.4	19.7	20.4	-91.52	747.4	-576.2	580.1	544.0	36.09	16.074		
6,745.0	6,672.0	6,782.5	6,672.4	19.8	20.5	-91.52	747.4	-576.2	580.1	543.7	36.39	15.943		
6,800.0	6,727.0	6,837.5	6,727.4	20.0	20.7	-91.52	747.4	-576.2	580.1	543.4	36.75	15.785		
6,840.0	6,767.0	6,877.5	6,767.4	20.1	20.8	-91.52	747.4	-576.2	580.1	543.1	37.01	15.672		
6,900.0	6,827.0	6,937.5	6,827.4	20.3	21.0	-91.52	747.4	-576.2	580.1	542.7	37.41	15.506		
6,935.0	6,862.0	6,972.5	6,862.4	20.4	21.1	-91.52	747.4	-576.2	580.1	542.5	37.64	15.410		
7,000.0	6,927.0	7,037.5	6,927.4	20.6	21.3	-91.52	747.4	-576.2	580.1	542.0	38.08	15.235		
7,030.0	6,957.0	7,067.5	6,957.4	20.7	21.4	-91.52	747.4	-576.2	580.1	541.8	38.28	15.156		
7,033.0	6,960.1	7,070.5	6,960.5	20.7	21.4	-91.52	747.4	-576.2	580.1	541.8	38.30	15.148		
7,100.0	7,027.0	7,135.9	7,025.8	20.9	21.5	-91.68	745.8	-576.2	580.2	541.6	38.61	15.026		
7,125.0	7,052.0	7,159.8	7,049.6	21.0	21.6	-91.91	743.5	-576.2	580.3	541.6	38.70	14.994		
7,200.0	7,127.0	7,230.0	7,118.6	21.2	21.8	-93.13	731.1	-576.3	581.0	542.0	38.98	14.905		
7,220.0	7,147.0	7,248.0	7,136.1	21.3	21.9	-93.58	726.6	-576.4	581.3	542.3	39.05	14.885		
7,300.0	7,227.0	7,317.1	7,201.4	21.6	22.1	-95.77	704.1	-576.5	583.8	544.4	39.37	14.830		
7,315.0	7,242.0	7,329.4	7,212.7	21.6	22.2	-96.24	699.4	-576.6	584.5	545.1	39.42	14.826		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-MWD+IFR1+MS							Rule Assigned:				Offset Well Error: 3.0 usft	
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	
7,400.0	7,327.0	7,394.6	7,270.8	21.9	22.4	-99.09	669.9	-576.8	590.6	550.9	39.74	14.864		
7,410.0	7,337.0	7,400.0	7,275.5	21.9	22.4	-99.36	667.1	-576.8	591.6	551.9	39.75	14.885		
7,459.0	7,386.0	7,435.4	7,305.3	22.0	22.5	-101.17	648.2	-577.0	597.4	557.6	39.80	15.010		
7,500.0	7,427.0	7,462.2	7,327.2	22.0	22.6	76.40	632.5	-577.1	603.3	563.5	39.75	15.177		
7,505.0	7,432.0	7,465.5	7,329.8	22.0	22.6	76.16	630.6	-577.1	604.1	564.3	39.74	15.199		
7,550.0	7,476.7	7,500.0	7,356.6	22.1	22.7	73.80	608.9	-577.3	611.2	571.5	39.70	15.394		
7,600.0	7,525.6	7,526.3	7,376.2	22.3	22.8	71.80	591.2	-577.4	619.5	580.0	39.54	15.670		
7,650.0	7,573.5	7,557.7	7,398.4	22.5	22.8	69.65	569.1	-577.6	628.3	588.9	39.38	15.954		
7,695.0	7,615.4	7,585.7	7,417.2	22.6	22.9	67.82	548.4	-577.8	636.3	597.1	39.22	16.224		
7,700.0	7,620.0	7,588.8	7,419.2	22.6	22.9	67.62	546.0	-577.8	637.2	598.0	39.20	16.255		
7,750.0	7,664.7	7,619.5	7,438.5	22.8	23.0	65.73	522.1	-578.0	646.1	607.1	39.01	16.564		
7,790.0	7,698.9	7,650.0	7,456.3	22.9	23.0	64.14	497.4	-578.2	653.1	614.2	38.91	16.785		
7,800.0	7,707.3	7,650.0	7,456.3	22.9	23.0	63.99	497.4	-578.2	654.8	616.0	38.80	16.874		
7,850.0	7,747.4	7,680.3	7,472.7	23.1	23.1	62.39	472.0	-578.4	663.1	624.5	38.60	17.178		
7,885.0	7,773.9	7,700.0	7,482.7	23.2	23.1	61.40	454.9	-578.5	668.7	630.3	38.46	17.388		
7,900.0	7,784.8	7,710.3	7,487.6	23.2	23.1	60.95	445.9	-578.6	671.0	632.6	38.42	17.466		
7,950.0	7,819.1	7,740.2	7,501.1	23.3	23.1	59.67	419.2	-578.8	678.3	640.1	38.25	17.732		
7,980.0	7,838.2	7,750.0	7,505.2	23.4	23.1	59.12	410.3	-578.9	682.5	644.4	38.09	17.917		
8,000.0	7,850.2	7,770.0	7,513.1	23.4	23.2	58.55	392.0	-579.0	685.0	646.8	38.12	17.969		
8,050.0	7,877.7	7,800.0	7,523.8	23.5	23.2	57.59	363.9	-579.2	690.8	652.8	38.02	18.168		
8,075.0	7,890.0	7,814.4	7,528.4	23.5	23.2	57.17	350.2	-579.4	693.4	655.4	37.99	18.254		
8,100.0	7,901.4	7,829.2	7,532.7	23.5	23.2	56.79	336.1	-579.5	695.8	657.9	37.96	18.328		
8,150.0	7,921.3	7,850.0	7,538.2	23.6	23.2	56.22	316.0	-579.6	700.0	662.1	37.89	18.473		
8,170.0	7,928.1	7,870.4	7,542.9	23.6	23.2	55.94	296.2	-579.8	701.3	663.3	37.96	18.473		
8,200.0	7,937.1	7,888.0	7,546.4	23.6	23.3	55.67	278.9	-579.9	703.1	665.1	37.99	18.507		
8,250.0	7,948.7	7,917.4	7,551.0	23.6	23.3	55.34	249.9	-580.2	705.2	667.2	38.07	18.523		
8,265.0	7,951.3	7,926.2	7,552.1	23.7	23.3	55.27	241.2	-580.2	705.7	667.6	38.11	18.518		
8,300.0	7,956.0	7,950.0	7,554.4	23.7	23.3	55.16	217.5	-580.4	706.4	668.2	38.22	18.483		
8,350.0	7,958.9	7,976.1	7,555.7	23.7	23.3	55.15	191.5	-580.6	706.5	668.1	38.37	18.411		
8,358.7	7,959.0	7,981.2	7,555.9	23.7	23.3	55.16	186.4	-580.7	706.4	668.0	38.39	18.399		
8,360.0	7,959.0	7,981.9	7,555.9	23.7	23.3	55.16	185.6	-580.7	706.4	668.0	38.40	18.398		
8,380.0	7,959.0	7,994.3	7,556.0	23.7	23.3	55.17	173.3	-580.8	706.3	667.9	38.44	18.372		
8,400.0	7,959.0	8,013.2	7,556.0	23.7	23.3	55.17	154.3	-580.9	706.3	667.8	38.48	18.355		
8,455.0	7,959.0	8,068.2	7,555.9	23.7	23.3	55.16	99.3	-581.4	706.4	667.8	38.61	18.297		
8,500.0	7,959.1	8,113.2	7,555.8	23.7	23.3	55.15	54.3	-581.7	706.5	667.8	38.72	18.247		
8,550.0	7,959.1	8,163.2	7,555.7	23.7	23.3	55.14	4.3	-582.1	706.5	667.7	38.87	18.175		
8,600.0	7,959.1	8,213.2	7,555.6	23.7	23.3	55.13	-45.7	-582.5	706.6	667.6	39.03	18.103		
8,645.0	7,959.1	8,258.2	7,555.5	23.7	23.3	55.12	-90.7	-582.9	706.7	667.5	39.20	18.028		
8,700.0	7,959.2	8,313.2	7,555.4	23.7	23.3	55.12	-145.7	-583.3	706.8	667.4	39.41	17.935		
8,740.0	7,959.2	8,353.2	7,555.3	23.7	23.4	55.11	-185.7	-583.6	706.8	667.2	39.58	17.859		
8,800.0	7,959.2	8,413.2	7,555.2	23.7	23.4	55.10	-245.7	-584.1	706.9	667.1	39.84	17.745		
8,835.0	7,959.2	8,448.2	7,555.1	23.7	23.4	55.09	-280.7	-584.4	707.0	667.0	40.01	17.672		
8,900.0	7,959.3	8,513.2	7,555.0	23.7	23.4	55.08	-345.7	-584.9	707.1	666.7	40.32	17.536		
8,930.0	7,959.3	8,543.2	7,554.9	23.7	23.4	55.08	-375.7	-585.1	707.1	666.6	40.48	17.468		
9,000.0	7,959.3	8,613.2	7,554.8	23.8	23.4	55.06	-445.7	-585.7	707.2	666.3	40.86	17.309		
9,025.0	7,959.3	8,638.2	7,554.7	23.8	23.4	55.06	-470.7	-585.9	707.2	666.2	41.00	17.248		
9,100.0	7,959.4	8,713.2	7,554.6	23.8	23.5	55.05	-545.7	-586.5	707.3	665.9	41.44	17.067		
9,120.0	7,959.4	8,733.2	7,554.5	23.8	23.5	55.04	-565.7	-586.6	707.4	665.8	41.57	17.016		
9,200.0	7,959.4	8,813.2	7,554.3	23.8	23.5	55.03	-645.7	-587.3	707.5	665.4	42.08	16.813		
9,215.0	7,959.4	8,828.2	7,554.3	23.8	23.5	55.03	-660.7	-587.4	707.5	665.3	42.18	16.773		
9,300.0	7,959.5	8,913.2	7,554.1	23.9	23.6	55.01	-745.7	-588.1	707.6	664.9	42.76	16.549		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre		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)		
9,310.0	7,959.5	8,923.2	7,554.1	23.9	23.6	55.01	-755.7	-588.2	707.7	664.8	42.83	16.521	
9,400.0	7,959.5	9,013.2	7,553.9	23.9	23.6	55.00	-845.7	-588.9	707.8	664.3	43.49	16.276	
9,405.0	7,959.5	9,018.2	7,553.9	23.9	23.6	55.00	-850.7	-588.9	707.8	664.3	43.53	16.262	
9,500.0	7,959.6	9,113.2	7,553.7	24.0	23.7	54.98	-945.7	-589.7	707.9	663.7	44.25	15.997	
9,595.0	7,959.6	9,208.2	7,553.6	24.1	23.8	54.96	-1,040.7	-590.4	708.1	663.1	45.02	15.728	
9,600.0	7,959.6	9,213.2	7,553.5	24.1	23.8	54.96	-1,045.7	-590.5	708.1	663.0	45.06	15.714	
9,690.0	7,959.7	9,303.2	7,553.4	24.2	24.0	54.95	-1,135.7	-591.2	708.2	662.4	45.82	15.456	
9,700.0	7,959.7	9,313.2	7,553.3	24.3	24.0	54.95	-1,145.7	-591.3	708.2	662.3	45.91	15.428	
9,785.0	7,959.7	9,398.2	7,553.2	24.4	24.1	54.93	-1,230.7	-591.9	708.3	661.7	46.65	15.183	
9,800.0	7,959.7	9,413.2	7,553.1	24.5	24.2	54.93	-1,245.7	-592.0	708.4	661.6	46.79	15.140	
9,880.0	7,959.8	9,493.2	7,553.0	24.7	24.4	54.92	-1,325.7	-592.7	708.5	661.0	47.52	14.910	
9,900.0	7,959.8	9,513.2	7,552.9	24.7	24.4	54.91	-1,345.7	-592.8	708.5	660.8	47.70	14.853	
9,975.0	7,959.8	9,588.2	7,552.8	25.0	24.6	54.90	-1,420.7	-593.4	708.6	660.2	48.41	14.639	
10,000.0	7,959.9	9,613.2	7,552.7	25.0	24.7	54.90	-1,445.7	-593.6	708.7	660.0	48.65	14.568	
10,070.0	7,959.9	9,683.2	7,552.6	25.3	24.9	54.89	-1,515.6	-594.2	708.8	659.4	49.33	14.369	
10,100.0	7,959.9	9,713.2	7,552.5	25.4	25.0	54.88	-1,545.6	-594.4	708.8	659.2	49.62	14.284	
10,165.0	7,959.9	9,778.2	7,552.4	25.7	25.2	54.87	-1,610.6	-595.0	708.9	658.6	50.27	14.101	
10,200.0	7,960.0	9,813.2	7,552.3	25.8	25.4	54.86	-1,645.6	-595.2	709.0	658.3	50.63	14.004	
10,260.0	7,960.0	9,873.2	7,552.2	26.1	25.6	54.85	-1,705.6	-595.7	709.0	657.8	51.24	13.837	
10,300.0	7,960.0	9,913.2	7,552.1	26.3	25.8	54.85	-1,745.6	-596.0	709.1	657.4	51.66	13.727	
10,355.0	7,960.0	9,968.2	7,552.0	26.5	26.0	54.84	-1,800.6	-596.5	709.2	656.9	52.24	13.577	
10,400.0	7,960.1	10,013.2	7,551.9	26.7	26.2	54.83	-1,845.6	-596.8	709.2	656.5	52.71	13.455	
10,450.0	7,960.1	10,063.2	7,551.8	27.0	26.5	54.82	-1,895.6	-597.2	709.3	656.1	53.25	13.321	
10,500.0	7,960.1	10,113.2	7,551.7	27.2	26.7	54.81	-1,945.6	-597.6	709.4	655.6	53.79	13.188	
10,545.0	7,960.1	10,158.2	7,551.6	27.4	26.9	54.81	-1,990.6	-598.0	709.5	655.2	54.28	13.069	
10,600.0	7,960.2	10,213.2	7,551.5	27.7	27.2	54.80	-2,045.6	-598.4	709.5	654.6	54.89	12.926	
10,640.0	7,960.2	10,253.2	7,551.4	27.9	27.4	54.79	-2,085.6	-598.7	709.6	654.3	55.34	12.823	
10,700.0	7,960.2	10,313.2	7,551.3	28.2	27.7	54.78	-2,145.6	-599.2	709.7	653.7	56.01	12.670	
10,735.0	7,960.2	10,348.2	7,551.3	28.4	27.9	54.77	-2,180.6	-599.5	709.7	653.3	56.41	12.581	
10,800.0	7,960.3	10,413.2	7,551.1	28.7	28.2	54.76	-2,245.6	-600.0	709.8	652.7	57.15	12.420	
10,830.0	7,960.3	10,443.2	7,551.1	28.9	28.4	54.76	-2,275.6	-600.2	709.9	652.4	57.50	12.345	
10,900.0	7,960.3	10,513.2	7,550.9	29.3	28.7	54.75	-2,345.6	-600.8	710.0	651.7	58.31	12.175	
10,925.0	7,960.3	10,538.2	7,550.9	29.4	28.9	54.74	-2,370.6	-601.0	710.0	651.4	58.61	12.115	
11,000.0	7,960.4	10,613.2	7,550.7	29.8	29.3	54.73	-2,445.6	-601.6	710.1	650.6	59.49	11.937	
11,020.0	7,960.4	10,633.2	7,550.7	29.9	29.4	54.73	-2,465.6	-601.8	710.2	650.4	59.73	11.890	
11,100.0	7,960.4	10,713.2	7,550.5	30.4	29.9	54.71	-2,545.6	-602.4	710.3	649.6	60.68	11.704	
11,115.0	7,960.4	10,728.2	7,550.5	30.5	29.9	54.71	-2,560.6	-602.5	710.3	649.4	60.87	11.670	
11,200.0	7,960.5	10,813.2	7,550.3	31.0	30.4	54.70	-2,645.6	-603.2	710.4	648.5	61.89	11.478	
11,210.0	7,960.5	10,823.2	7,550.3	31.0	30.5	54.70	-2,655.6	-603.3	710.4	648.4	62.02	11.456	
11,300.0	7,960.5	10,913.2	7,550.1	31.5	31.0	54.68	-2,745.6	-604.0	710.6	647.5	63.12	11.258	
11,305.0	7,960.5	10,918.2	7,550.1	31.6	31.0	54.68	-2,750.6	-604.0	710.6	647.4	63.18	11.247	
11,400.0	7,960.6	11,013.2	7,549.9	32.1	31.6	54.66	-2,845.6	-604.8	710.7	646.4	64.35	11.044	
11,495.0	7,960.6	11,108.2	7,549.7	32.7	32.2	54.65	-2,940.6	-605.5	710.9	645.3	65.54	10.846	
11,500.0	7,960.6	11,113.2	7,549.7	32.7	32.2	54.65	-2,945.6	-605.6	710.9	645.3	65.60	10.836	
11,590.0	7,960.7	11,203.2	7,549.5	33.3	32.7	54.63	-3,035.6	-606.3	711.0	644.3	66.74	10.653	
11,600.0	7,960.7	11,213.2	7,549.5	33.3	32.8	54.63	-3,045.6	-606.4	711.0	644.1	66.87	10.633	
11,685.0	7,960.7	11,298.2	7,549.3	33.8	33.3	54.62	-3,130.6	-607.0	711.1	643.2	67.95	10.466	
11,700.0	7,960.7	11,313.2	7,549.3	33.9	33.4	54.61	-3,145.6	-607.2	711.2	643.0	68.14	10.437	
11,780.0	7,960.8	11,393.2	7,549.2	34.4	33.9	54.60	-3,225.6	-607.8	711.3	642.1	69.17	10.283	
11,800.0	7,960.8	11,413.2	7,549.1	34.5	34.0	54.60	-3,245.6	-608.0	711.3	641.9	69.43	10.246	
11,875.0	7,960.8	11,488.2	7,549.0	35.0	34.5	54.58	-3,320.6	-608.6	711.4	641.0	70.40	10.106	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-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
11,900.0	7,960.8	11,513.2	7,548.9	35.2	34.7	54.58	54.58	-3,345.6	-608.7	711.5	640.7	70.72	10.060	
11,970.0	7,960.9	11,583.2	7,548.8	35.6	35.1	54.57	54.57	-3,415.6	-609.3	711.6	639.9	71.63	9.933	
12,000.0	7,960.9	11,613.2	7,548.7	35.8	35.3	54.56	54.56	-3,445.6	-609.5	711.6	639.6	72.03	9.880	
12,065.0	7,960.9	11,678.2	7,548.6	36.2	35.7	54.55	54.55	-3,510.6	-610.1	711.7	638.8	72.88	9.765	
12,100.0	7,960.9	11,713.2	7,548.5	36.4	35.9	54.55	54.55	-3,545.6	-610.3	711.7	638.4	73.34	9.705	
12,160.0	7,961.0	11,773.2	7,548.4	36.8	36.3	54.54	54.54	-3,605.6	-610.8	711.8	637.7	74.13	9.602	
12,200.0	7,961.0	11,813.2	7,548.3	37.0	36.6	54.53	54.53	-3,645.6	-611.1	711.9	637.2	74.66	9.535	
12,255.0	7,961.0	11,868.2	7,548.2	37.4	36.9	54.52	54.52	-3,700.6	-611.6	712.0	636.6	75.39	9.443	
12,300.0	7,961.0	11,913.2	7,548.1	37.7	37.2	54.51	54.51	-3,745.6	-611.9	712.0	636.0	75.99	9.370	
12,350.0	7,961.1	11,963.2	7,548.0	38.0	37.5	54.51	54.51	-3,795.6	-612.3	712.1	635.5	76.66	9.289	
12,400.0	7,961.1	12,013.2	7,547.9	38.3	37.9	54.50	54.50	-3,845.6	-612.7	712.2	634.9	77.33	9.209	
12,445.0	7,961.1	12,058.2	7,547.8	38.6	38.2	54.49	54.49	-3,890.6	-613.1	712.3	634.3	77.94	9.139	
12,500.0	7,961.1	12,113.2	7,547.7	39.0	38.5	54.48	54.48	-3,945.6	-613.5	712.3	633.7	78.68	9.054	
12,540.0	7,961.2	12,153.2	7,547.6	39.2	38.8	54.47	54.47	-3,985.6	-613.8	712.4	633.2	79.22	8.993	
12,600.0	7,961.2	12,213.2	7,547.5	39.6	39.2	54.46	54.46	-4,045.6	-614.3	712.5	632.4	80.03	8.902	
12,635.0	7,961.2	12,248.2	7,547.4	39.9	39.4	54.46	54.46	-4,080.6	-614.6	712.5	632.0	80.51	8.850	
12,700.0	7,961.3	12,313.2	7,547.3	40.3	39.8	54.45	54.45	-4,145.6	-615.1	712.6	631.2	81.39	8.755	
12,730.0	7,961.3	12,343.2	7,547.2	40.5	40.0	54.44	54.44	-4,175.6	-615.4	712.7	630.9	81.80	8.712	
12,800.0	7,961.3	12,413.2	7,547.1	41.0	40.5	54.43	54.43	-4,245.5	-615.9	712.8	630.0	82.76	8.613	
12,825.0	7,961.3	12,438.2	7,547.0	41.1	40.7	54.43	54.43	-4,270.5	-616.1	712.8	629.7	83.10	8.577	
12,900.0	7,961.4	12,513.2	7,546.9	41.6	41.2	54.41	54.41	-4,345.5	-616.7	712.9	628.8	84.13	8.474	
12,920.0	7,961.4	12,533.2	7,546.9	41.8	41.3	54.41	54.41	-4,365.5	-616.9	713.0	628.5	84.41	8.446	
13,000.0	7,961.4	12,613.2	7,546.7	42.3	41.8	54.40	54.40	-4,445.5	-617.5	713.1	627.6	85.51	8.339	
13,015.0	7,961.4	12,628.2	7,546.7	42.4	41.9	54.40	54.40	-4,460.5	-617.6	713.1	627.4	85.72	8.319	
13,100.0	7,961.5	12,713.2	7,546.5	43.0	42.5	54.38	54.38	-4,545.5	-618.3	713.2	626.3	86.90	8.208	
13,110.0	7,961.5	12,723.2	7,546.5	43.0	42.6	54.38	54.38	-4,555.5	-618.4	713.2	626.2	87.03	8.195	
13,200.0	7,961.5	12,813.2	7,546.3	43.6	43.2	54.37	54.37	-4,645.5	-619.1	713.4	625.1	88.29	8.080	
13,205.0	7,961.5	12,818.2	7,546.3	43.7	43.2	54.36	54.36	-4,650.5	-619.1	713.4	625.0	88.35	8.074	
13,300.0	7,961.6	12,913.2	7,546.1	44.3	43.9	54.35	54.35	-4,745.5	-619.9	713.5	623.8	89.68	7.956	
13,395.0	7,961.6	13,008.2	7,545.9	45.0	44.5	54.33	54.33	-4,840.5	-620.6	713.7	622.6	91.01	7.842	
13,400.0	7,961.6	13,013.2	7,545.9	45.0	44.6	54.33	54.33	-4,845.5	-620.7	713.7	622.6	91.08	7.836	
13,490.0	7,961.7	13,103.2	7,545.7	45.6	45.2	54.32	54.32	-4,935.5	-621.4	713.8	621.5	92.34	7.730	
13,500.0	7,961.7	13,113.2	7,545.7	45.7	45.3	54.32	54.32	-4,945.5	-621.5	713.8	621.3	92.48	7.718	
13,585.0	7,961.7	13,198.2	7,545.5	46.3	45.8	54.30	54.30	-5,030.5	-622.1	713.9	620.3	93.68	7.621	
13,600.0	7,961.7	13,213.2	7,545.5	46.4	46.0	54.30	54.30	-5,045.5	-622.3	714.0	620.1	93.89	7.604	
13,680.0	7,961.8	13,293.2	7,545.3	46.9	46.5	54.29	54.29	-5,125.5	-622.9	714.1	619.1	95.02	7.515	
13,700.0	7,961.8	13,313.2	7,545.3	47.1	46.6	54.28	54.28	-5,145.5	-623.1	714.1	618.8	95.30	7.493	
13,775.0	7,961.8	13,388.2	7,545.1	47.6	47.2	54.27	54.27	-5,220.5	-623.7	714.2	617.9	96.37	7.412	
13,800.0	7,961.8	13,413.2	7,545.1	47.7	47.3	54.27	54.27	-5,245.5	-623.9	714.3	617.5	96.72	7.385	
13,870.0	7,961.9	13,483.2	7,544.9	48.2	47.8	54.25	54.25	-5,315.5	-624.4	714.4	616.6	97.71	7.311	
13,900.0	7,961.9	13,513.2	7,544.9	48.4	48.0	54.25	54.25	-5,345.5	-624.7	714.4	616.3	98.14	7.279	
13,965.0	7,961.9	13,578.2	7,544.7	48.9	48.5	54.24	54.24	-5,410.5	-625.2	714.5	615.4	99.07	7.212	
14,000.0	7,961.9	13,613.2	7,544.7	49.1	48.7	54.23	54.23	-5,445.5	-625.4	714.6	615.0	99.56	7.177	
14,060.0	7,962.0	13,673.2	7,544.6	49.6	49.2	54.22	54.22	-5,505.5	-625.9	714.6	614.2	100.42	7.117	
14,100.0	7,962.0	13,713.2	7,544.5	49.8	49.4	54.22	54.22	-5,545.5	-626.2	714.7	613.7	100.99	7.077	
14,155.0	7,962.0	13,768.2	7,544.4	50.2	49.8	54.21	54.21	-5,600.5	-626.7	714.8	613.0	101.78	7.023	
14,200.0	7,962.0	13,813.2	7,544.3	50.5	50.1	54.20	54.20	-5,645.5	-627.0	714.9	612.4	102.42	6.979	
14,250.0	7,962.1	13,863.2	7,544.2	50.9	50.5	54.19	54.19	-5,695.5	-627.4	714.9	611.8	103.14	6.932	
14,300.0	7,962.1	13,913.2	7,544.1	51.2	50.8	54.18	54.18	-5,745.5	-627.8	715.0	611.1	103.86	6.885	
14,345.0	7,962.1	13,958.2	7,544.0	51.5	51.2	54.18	54.18	-5,790.5	-628.2	715.1	610.6	104.50	6.843	
14,400.0	7,962.1	14,013.2	7,543.9	51.9	51.6	54.17	54.17	-5,845.5	-628.6	715.2	609.9	105.29	6.792	

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program:		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-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		
14,440.0	7,962.2	14,053.2	7,543.8	52.2	51.8	54.16	-5,885.5	-628.9	715.2	609.3	105.87	6.756		
14,500.0	7,962.2	14,113.2	7,543.7	52.6	52.3	54.15	-5,945.5	-629.4	715.3	608.6	106.73	6.702		
14,535.0	7,962.2	14,148.2	7,543.6	52.9	52.5	54.15	-5,980.5	-629.7	715.4	608.1	107.24	6.671		
14,600.0	7,962.2	14,213.2	7,543.5	53.3	53.0	54.13	-6,045.5	-630.2	715.4	607.3	108.18	6.614		
14,630.0	7,962.3	14,243.2	7,543.4	53.6	53.2	54.13	-6,075.5	-630.5	715.5	606.9	108.61	6.588		
14,700.0	7,962.3	14,313.2	7,543.3	54.1	53.7	54.12	-6,145.5	-631.0	715.6	606.0	109.62	6.528		
14,725.0	7,962.3	14,338.2	7,543.2	54.2	53.9	54.11	-6,170.5	-631.2	715.6	605.7	109.98	6.507		
14,800.0	7,962.3	14,413.2	7,543.1	54.8	54.4	54.10	-6,245.5	-631.8	715.7	604.7	111.07	6.444		
14,820.0	7,962.4	14,433.2	7,543.0	54.9	54.5	54.10	-6,265.5	-632.0	715.8	604.4	111.36	6.428		
14,900.0	7,962.4	14,513.2	7,542.9	55.5	55.1	54.09	-6,345.5	-632.6	715.9	603.4	112.52	6.362		
14,915.0	7,962.4	14,528.2	7,542.8	55.6	55.2	54.08	-6,360.5	-632.7	715.9	603.2	112.74	6.350		
15,000.0	7,962.4	14,613.2	7,542.7	56.2	55.8	54.07	-6,445.5	-633.4	716.0	602.1	113.97	6.283		
15,010.0	7,962.5	14,623.2	7,542.6	56.3	55.9	54.07	-6,455.5	-633.5	716.1	601.9	114.12	6.275		
15,100.0	7,962.5	14,713.2	7,542.5	56.9	56.5	54.05	-6,545.5	-634.2	716.2	600.8	115.43	6.205		
15,105.0	7,962.5	14,718.2	7,542.4	56.9	56.6	54.05	-6,550.5	-634.2	716.2	600.7	115.50	6.201		
15,200.0	7,962.5	14,813.2	7,542.3	57.6	57.3	54.04	-6,645.5	-635.0	716.3	599.5	116.89	6.128		
15,295.0	7,962.6	14,908.2	7,542.1	58.3	57.9	54.02	-6,740.5	-635.7	716.5	598.2	118.27	6.058		
15,300.0	7,962.6	14,913.2	7,542.1	58.3	58.0	54.02	-6,745.5	-635.8	716.5	598.1	118.35	6.054		
15,390.0	7,962.6	15,003.2	7,541.9	59.0	58.6	54.01	-6,835.5	-636.5	716.6	597.0	119.66	5.989		
15,400.0	7,962.7	15,013.2	7,541.9	59.0	58.7	54.00	-6,845.5	-636.6	716.6	596.8	119.81	5.981		
15,485.0	7,962.7	15,098.2	7,541.7	59.7	59.3	53.99	-6,930.4	-637.3	716.8	595.7	121.05	5.921		
15,500.0	7,962.7	15,113.2	7,541.7	59.8	59.4	53.99	-6,945.4	-637.4	716.8	595.5	121.27	5.910		
15,580.0	7,962.7	15,193.2	7,541.5	60.3	60.0	53.97	-7,025.4	-638.0	716.9	594.5	122.45	5.855		
15,600.0	7,962.8	15,213.2	7,541.5	60.5	60.1	53.97	-7,045.4	-638.2	716.9	594.2	122.74	5.841		
15,675.0	7,962.8	15,288.2	7,541.3	61.0	60.7	53.96	-7,120.4	-638.8	717.1	593.2	123.84	5.790		
15,700.0	7,962.8	15,313.2	7,541.3	61.2	60.9	53.95	-7,145.4	-639.0	717.1	592.9	124.21	5.773		
15,770.0	7,962.8	15,383.2	7,541.1	61.7	61.4	53.94	-7,215.4	-639.5	717.2	592.0	125.24	5.727		
15,800.0	7,962.9	15,413.2	7,541.0	61.9	61.6	53.94	-7,245.4	-639.8	717.2	591.6	125.68	5.707		
15,865.0	7,962.9	15,478.2	7,540.9	62.4	62.1	53.93	-7,310.4	-640.3	717.3	590.7	126.63	5.665		
15,900.0	7,962.9	15,513.2	7,540.8	62.6	62.3	53.92	-7,345.4	-640.6	717.4	590.2	127.15	5.642		
15,960.0	7,962.9	15,573.2	7,540.7	63.1	62.7	53.91	-7,405.4	-641.0	717.5	589.4	128.03	5.604		
16,000.0	7,963.0	15,613.2	7,540.6	63.4	63.0	53.91	-7,445.4	-641.4	717.5	588.9	128.62	5.579		
16,055.0	7,963.0	15,668.2	7,540.5	63.8	63.4	53.90	-7,500.4	-641.8	717.6	588.2	129.43	5.544		
16,100.0	7,963.0	15,713.2	7,540.4	64.1	63.8	53.89	-7,545.4	-642.1	717.7	587.6	130.10	5.517		
16,150.0	7,963.0	15,763.2	7,540.3	64.5	64.1	53.88	-7,595.4	-642.5	717.8	586.9	130.84	5.486		
16,200.0	7,963.1	15,813.2	7,540.2	64.8	64.5	53.87	-7,645.4	-642.9	717.8	586.3	131.57	5.456		
16,245.0	7,963.1	15,858.2	7,540.2	65.1	64.8	53.87	-7,690.4	-643.3	717.9	585.7	132.24	5.429		
16,300.0	7,963.1	15,913.2	7,540.0	65.5	65.2	53.86	-7,745.4	-643.7	718.0	584.9	133.05	5.396		
16,340.0	7,963.1	15,953.2	7,540.0	65.8	65.5	53.85	-7,785.4	-644.1	718.0	584.4	133.64	5.373		
16,400.0	7,963.2	16,013.2	7,539.8	66.3	66.0	53.84	-7,845.4	-644.5	718.1	583.6	134.53	5.338		
16,435.0	7,963.2	16,048.2	7,539.8	66.5	66.2	53.83	-7,880.4	-644.8	718.2	583.1	135.05	5.318		
16,500.0	7,963.2	16,113.2	7,539.6	67.0	66.7	53.82	-7,945.4	-645.3	718.3	582.3	136.01	5.281		
16,530.0	7,963.2	16,143.2	7,539.6	67.2	66.9	53.82	-7,975.4	-645.6	718.3	581.9	136.46	5.264		
16,600.0	7,963.3	16,213.2	7,539.4	67.7	67.4	53.81	-8,045.4	-646.1	718.4	580.9	137.50	5.225		
16,625.0	7,963.3	16,238.2	7,539.4	67.9	67.6	53.80	-8,070.4	-646.3	718.5	580.6	137.87	5.211		
16,700.0	7,963.3	16,313.2	7,539.2	68.5	68.1	53.79	-8,145.4	-646.9	718.6	579.6	138.98	5.170		
16,720.0	7,963.3	16,333.2	7,539.2	68.6	68.3	53.79	-8,165.4	-647.1	718.6	579.3	139.28	5.160		
16,800.0	7,963.4	16,413.2	7,539.0	69.2	68.9	53.77	-8,245.4	-647.7	718.7	578.3	140.46	5.117		
16,815.0	7,963.4	16,428.2	7,539.0	69.3	69.0	53.77	-8,260.4	-647.8	718.8	578.1	140.69	5.109		
16,900.0	7,963.4	16,513.2	7,538.8	69.9	69.6	53.76	-8,345.4	-648.5	718.9	576.9	141.95	5.064		
16,910.0	7,963.4	16,523.2	7,538.8	70.0	69.7	53.76	-8,355.4	-648.6	718.9	576.8	142.10	5.059		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-MWD+IFR1+MS											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
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Warning
17,000.0	7,963.5	16,613.2	7,538.6	70.7	70.3	53.74	-8,445.4	-649.3	719.0	575.6	143.44	5.013
17,005.0	7,963.5	16,618.2	7,538.6	70.7	70.4	53.74	-8,450.4	-649.3	719.0	575.5	143.51	5.010
17,100.0	7,963.5	16,713.2	7,538.4	71.4	71.1	53.73	-8,545.4	-650.1	719.2	574.3	144.93	4.962
17,195.0	7,963.6	16,808.2	7,538.2	72.1	71.8	53.71	-8,640.4	-650.9	719.3	573.0	146.34	4.915
17,200.0	7,963.6	16,813.2	7,538.2	72.1	71.8	53.71	-8,645.4	-650.9	719.3	572.9	146.42	4.913
17,290.0	7,963.6	16,903.2	7,538.0	72.8	72.5	53.70	-8,735.4	-651.6	719.5	571.7	147.76	4.869
17,300.0	7,963.6	16,913.2	7,538.0	72.9	72.6	53.69	-8,745.4	-651.7	719.5	571.6	147.91	4.864
17,385.0	7,963.7	16,998.2	7,537.9	73.5	73.2	53.68	-8,830.4	-652.4	719.6	570.4	149.18	4.824
17,400.0	7,963.7	17,013.2	7,537.8	73.6	73.3	53.68	-8,845.4	-652.5	719.6	570.2	149.40	4.817
17,480.0	7,963.7	17,093.2	7,537.7	74.2	73.9	53.66	-8,925.4	-653.1	719.8	569.2	150.59	4.779
17,500.0	7,963.7	17,113.2	7,537.6	74.3	74.0	53.66	-8,945.4	-653.3	719.8	568.9	150.89	4.770
17,575.0	7,963.8	17,188.2	7,537.5	74.9	74.6	53.65	-9,020.4	-653.9	719.9	567.9	152.01	4.736
17,600.0	7,963.8	17,213.2	7,537.4	75.1	74.8	53.64	-9,045.4	-654.1	719.9	567.6	152.39	4.724
17,670.0	7,963.8	17,283.2	7,537.3	75.6	75.3	53.63	-9,115.4	-654.6	720.0	566.6	153.43	4.693
17,700.0	7,963.8	17,313.2	7,537.2	75.8	75.5	53.63	-9,145.4	-654.9	720.1	566.2	153.88	4.680
17,765.0	7,963.9	17,378.2	7,537.1	76.3	76.0	53.62	-9,210.4	-655.4	720.2	565.3	154.85	4.651
17,800.0	7,963.9	17,413.2	7,537.0	76.5	76.2	53.61	-9,245.4	-655.7	720.2	564.9	155.38	4.635
17,860.0	7,963.9	17,473.2	7,536.9	77.0	76.7	53.60	-9,305.4	-656.1	720.3	564.1	156.28	4.609
17,900.0	7,963.9	17,513.2	7,536.8	77.3	77.0	53.60	-9,345.4	-656.5	720.4	563.5	156.88	4.592
17,955.0	7,964.0	17,568.2	7,536.7	77.7	77.4	53.59	-9,400.4	-656.9	720.5	562.8	157.70	4.569
18,000.0	7,964.0	17,613.2	7,536.6	78.0	77.7	53.58	-9,445.4	-657.3	720.5	562.2	158.37	4.550
18,050.0	7,964.0	17,663.2	7,536.5	78.4	78.1	53.57	-9,495.4	-657.7	720.6	561.5	159.12	4.529
18,100.0	7,964.1	17,713.2	7,536.4	78.7	78.5	53.56	-9,545.4	-658.1	720.7	560.8	159.87	4.508
18,145.0	7,964.1	17,758.2	7,536.3	79.1	78.8	53.56	-9,590.4	-658.4	720.8	560.2	160.55	4.489
18,200.0	7,964.1	17,813.2	7,536.2	79.5	79.2	53.55	-9,645.4	-658.8	720.8	559.5	161.37	4.467
18,240.0	7,964.1	17,853.2	7,536.1	79.8	79.5	53.54	-9,685.3	-659.2	720.9	558.9	161.97	4.451
18,300.0	7,964.2	17,913.2	7,536.0	80.2	79.9	53.53	-9,745.3	-659.6	721.0	558.1	162.87	4.427
18,335.0	7,964.2	17,948.2	7,535.9	80.5	80.2	53.53	-9,780.3	-659.9	721.1	557.7	163.40	4.413
18,400.0	7,964.2	18,013.2	7,535.8	81.0	80.7	53.52	-9,845.3	-660.4	721.1	556.8	164.37	4.387
18,430.0	7,964.2	18,043.2	7,535.7	81.2	80.9	53.51	-9,875.3	-660.7	721.2	556.4	164.82	4.376
18,500.0	7,964.3	18,113.2	7,535.6	81.7	81.4	53.50	-9,945.3	-661.2	721.3	555.4	165.88	4.348
18,525.0	7,964.3	18,138.2	7,535.6	81.9	81.6	53.50	-9,970.3	-661.4	721.3	555.1	166.25	4.339
18,600.0	7,964.3	18,213.2	7,535.4	82.4	82.2	53.48	-10,045.3	-662.0	721.5	554.1	167.38	4.310
18,620.0	7,964.3	18,233.2	7,535.4	82.6	82.3	53.48	-10,065.3	-662.2	721.5	553.8	167.68	4.303
18,700.0	7,964.4	18,313.2	7,535.2	83.2	82.9	53.47	-10,145.3	-662.8	721.6	552.7	168.88	4.273
18,715.0	7,964.4	18,328.2	7,535.2	83.3	83.0	53.46	-10,160.3	-662.9	721.6	552.5	169.11	4.267
18,800.0	7,964.4	18,413.2	7,535.0	83.9	83.7	53.45	-10,245.3	-663.6	721.8	551.4	170.39	4.236
18,810.0	7,964.4	18,423.2	7,535.0	84.0	83.7	53.45	-10,255.3	-663.7	721.8	551.2	170.54	4.232
18,900.0	7,964.5	18,513.2	7,534.8	84.7	84.4	53.43	-10,345.3	-664.4	721.9	550.0	171.89	4.200
18,905.0	7,964.5	18,518.2	7,534.8	84.7	84.4	53.43	-10,350.3	-664.5	721.9	549.9	171.97	4.198
19,000.0	7,964.5	18,613.2	7,534.6	85.4	85.1	53.42	-10,445.3	-665.2	722.1	548.7	173.40	4.164
19,095.0	7,964.6	18,708.2	7,534.4	86.1	85.8	53.40	-10,540.3	-666.0	722.2	547.4	174.83	4.131
19,100.0	7,964.6	18,713.2	7,534.4	86.2	85.9	53.40	-10,545.3	-666.0	722.2	547.3	174.90	4.129
19,190.0	7,964.6	18,803.2	7,534.2	86.8	86.6	53.39	-10,635.3	-666.7	722.3	546.1	176.26	4.098
19,200.0	7,964.6	18,813.2	7,534.2	86.9	86.6	53.39	-10,645.3	-666.8	722.4	545.9	176.41	4.095
19,285.0	7,964.7	18,898.2	7,534.0	87.5	87.3	53.37	-10,730.3	-667.5	722.5	544.8	177.69	4.066
19,300.0	7,964.7	18,913.2	7,534.0	87.6	87.4	53.37	-10,745.3	-667.6	722.5	544.6	177.92	4.061
19,380.0	7,964.7	18,993.2	7,533.8	88.2	88.0	53.36	-10,825.3	-668.2	722.6	543.5	179.13	4.034
19,400.0	7,964.7	19,013.2	7,533.8	88.4	88.1	53.35	-10,845.3	-668.4	722.7	543.2	179.43	4.028
19,475.0	7,964.8	19,088.2	7,533.6	88.9	88.7	53.34	-10,920.3	-669.0	722.8	542.2	180.56	4.003
19,500.0	7,964.8	19,113.2	7,533.6	89.1	88.9	53.34	-10,945.3	-669.2	722.8	541.9	180.94	3.995

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-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		
19,570.0	7,964.8	19,183.2	7,533.5	89.6	89.4	53.33	-11,015.3	-669.7	722.9	540.9	181.99	3.972		
19,600.0	7,964.8	19,213.2	7,533.4	89.9	89.6	53.32	-11,045.3	-670.0	723.0	540.5	182.45	3.963		
19,665.0	7,964.9	19,278.2	7,533.3	90.4	90.1	53.31	-11,110.3	-670.5	723.1	539.6	183.43	3.942		
19,700.0	7,964.9	19,313.2	7,533.2	90.6	90.4	53.31	-11,145.3	-670.8	723.1	539.2	183.96	3.931		
19,760.0	7,964.9	19,373.2	7,533.1	91.1	90.8	53.30	-11,205.3	-671.3	723.2	538.3	184.86	3.912		
19,800.0	7,964.9	19,413.2	7,533.0	91.4	91.1	53.29	-11,245.3	-671.6	723.3	537.8	185.47	3.900		
19,855.0	7,965.0	19,468.2	7,532.9	91.8	91.5	53.28	-11,300.3	-672.0	723.4	537.1	186.30	3.883		
19,900.0	7,965.0	19,513.2	7,532.8	92.1	91.8	53.27	-11,345.3	-672.4	723.4	536.4	186.98	3.869		
19,950.0	7,965.0	19,563.2	7,532.7	92.5	92.2	53.27	-11,395.3	-672.8	723.5	535.8	187.74	3.854		
20,000.0	7,965.0	19,613.2	7,532.6	92.9	92.6	53.26	-11,445.3	-673.2	723.6	535.1	188.49	3.839		
20,045.0	7,965.1	19,658.2	7,532.5	93.2	92.9	53.25	-11,490.3	-673.5	723.6	534.5	189.17	3.825		
20,100.0	7,965.1	19,713.2	7,532.4	93.6	93.3	53.24	-11,545.3	-674.0	723.7	533.7	190.00	3.809		
20,140.0	7,965.1	19,753.2	7,532.3	93.9	93.6	53.24	-11,585.3	-674.3	723.8	533.2	190.61	3.797		
20,200.0	7,965.1	19,813.2	7,532.2	94.3	94.1	53.23	-11,645.3	-674.8	723.9	532.4	191.52	3.780		
20,235.0	7,965.2	19,848.2	7,532.1	94.6	94.4	53.22	-11,680.3	-675.0	723.9	531.9	192.05	3.770		
20,300.0	7,965.2	19,913.2	7,532.0	95.1	94.8	53.21	-11,745.3	-675.5	724.0	531.0	193.03	3.751		
20,330.0	7,965.2	19,943.2	7,531.9	95.3	95.1	53.20	-11,775.3	-675.8	724.1	530.6	193.48	3.742		
20,400.0	7,965.2	20,013.2	7,531.8	95.8	95.6	53.19	-11,845.3	-676.3	724.2	529.6	194.54	3.722		
20,425.0	7,965.3	20,038.2	7,531.7	96.0	95.8	53.19	-11,870.3	-676.5	724.2	529.3	194.92	3.715		
20,500.0	7,965.3	20,113.2	7,531.6	96.6	96.3	53.18	-11,945.3	-677.1	724.3	528.3	196.06	3.694		
20,520.0	7,965.3	20,133.2	7,531.5	96.7	96.5	53.17	-11,965.3	-677.3	724.4	528.0	196.36	3.689		
20,600.0	7,965.4	20,213.2	7,531.4	97.3	97.1	53.16	-12,045.3	-677.9	724.5	526.9	197.57	3.667		
20,615.0	7,965.4	20,228.2	7,531.3	97.4	97.2	53.16	-12,060.3	-678.1	724.5	526.7	197.80	3.663		
20,700.0	7,965.4	20,313.2	7,531.2	98.1	97.8	53.15	-12,145.3	-678.7	724.6	525.5	199.09	3.640		
20,710.0	7,965.4	20,323.2	7,531.2	98.2	97.9	53.14	-12,155.3	-678.8	724.7	525.4	199.24	3.637		
20,800.0	7,965.5	20,413.2	7,531.0	98.8	98.6	53.13	-12,245.3	-679.5	724.8	524.2	200.61	3.613		
20,805.0	7,965.5	20,418.2	7,531.0	98.9	98.6	53.13	-12,250.3	-679.6	724.8	524.1	200.68	3.612		
20,900.0	7,965.5	20,513.2	7,530.8	99.6	99.3	53.11	-12,345.2	-680.3	724.9	522.8	202.12	3.587		
20,995.0	7,965.6	20,608.2	7,530.6	100.3	100.0	53.10	-12,440.2	-681.1	725.1	521.5	203.56	3.562		
21,000.0	7,965.6	20,613.2	7,530.6	100.3	100.1	53.10	-12,445.2	-681.1	725.1	521.5	203.64	3.561		
21,090.0	7,965.6	20,703.2	7,530.4	101.0	100.8	53.08	-12,535.2	-681.8	725.2	520.2	205.00	3.538		
21,100.0	7,965.6	20,713.2	7,530.4	101.1	100.8	53.08	-12,545.2	-681.9	725.2	520.1	205.16	3.535		
21,185.0	7,965.7	20,798.2	7,530.2	101.7	101.5	53.07	-12,630.2	-682.6	725.4	518.9	206.45	3.514		
21,200.0	7,965.7	20,813.2	7,530.2	101.8	101.6	53.07	-12,645.2	-682.7	725.4	518.7	206.67	3.510		
21,280.0	7,965.7	20,893.2	7,530.0	102.4	102.2	53.05	-12,725.2	-683.3	725.5	517.6	207.89	3.490		
21,300.0	7,965.7	20,913.2	7,530.0	102.6	102.3	53.05	-12,745.2	-683.5	725.6	517.4	208.19	3.485		
21,375.0	7,965.8	20,988.2	7,529.8	103.1	102.9	53.04	-12,820.2	-684.1	725.7	516.3	209.33	3.467		
21,400.0	7,965.8	21,013.2	7,529.8	103.3	103.1	53.03	-12,845.2	-684.3	725.7	516.0	209.71	3.461		
21,470.0	7,965.8	21,083.2	7,529.6	103.8	103.6	53.02	-12,915.2	-684.9	725.8	515.0	210.77	3.444		
21,500.0	7,965.8	21,113.2	7,529.6	104.1	103.8	53.02	-12,945.2	-685.1	725.9	514.6	211.23	3.436		
21,565.0	7,965.9	21,178.2	7,529.4	104.6	104.3	53.01	-13,010.2	-685.6	726.0	513.7	212.22	3.421		
21,600.0	7,965.9	21,213.2	7,529.4	104.8	104.6	53.00	-13,045.2	-685.9	726.0	513.3	212.75	3.413		
21,660.0	7,965.9	21,273.2	7,529.2	105.3	105.0	52.99	-13,105.2	-686.4	726.1	512.4	213.66	3.398		
21,700.0	7,965.9	21,313.2	7,529.2	105.6	105.3	52.99	-13,145.2	-686.7	726.2	511.9	214.27	3.389		
21,755.0	7,965.9	21,368.2	7,529.0	106.0	105.7	52.98	-13,200.2	-687.1	726.3	511.1	215.10	3.376		
21,800.0	7,966.0	21,413.2	7,529.0	106.3	106.1	52.97	-13,245.2	-687.5	726.3	510.5	215.79	3.366		
21,850.0	7,966.0	21,463.2	7,528.9	106.7	106.5	52.96	-13,295.2	-687.9	726.4	509.8	216.55	3.354		
21,900.0	7,966.0	21,513.2	7,528.8	107.1	106.8	52.95	-13,345.2	-688.3	726.5	509.2	217.31	3.343		
21,945.0	7,966.0	21,558.2	7,528.7	107.4	107.2	52.95	-13,390.2	-688.6	726.5	508.5	217.99	3.333		
22,000.0	7,966.1	21,613.2	7,528.6	107.8	107.6	52.94	-13,445.2	-689.1	726.6	507.8	218.83	3.321		
22,040.0	7,966.1	21,653.2	7,528.5	108.1	107.9	52.93	-13,485.2	-689.4	726.7	507.2	219.44	3.312		

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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 #502H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-Standard Keeper 104, 2000-MWD+IFR1+MS, 7093-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	
22,100.0	7,966.1	21,713.2	7,528.4	108.6	108.3	52.92	-13,545.2	-689.9	726.8	506.4	220.35	3.298
22,135.0	7,966.1	21,748.2	7,528.3	108.8	108.6	52.92	-13,580.2	-690.1	726.8	505.9	220.88	3.291
22,200.0	7,966.2	21,813.2	7,528.2	109.3	109.1	52.91	-13,645.2	-690.7	726.9	505.1	221.87	3.276
22,230.0	7,966.2	21,843.2	7,528.1	109.5	109.3	52.90	-13,675.2	-690.9	727.0	504.6	222.33	3.270
22,300.0	7,966.2	21,913.2	7,528.0	110.1	109.8	52.89	-13,745.2	-691.5	727.1	503.7	223.39	3.255
22,325.0	7,966.2	21,938.2	7,527.9	110.3	110.0	52.89	-13,770.2	-691.7	727.1	503.3	223.77	3.249
22,400.0	7,966.3	22,013.2	7,527.7	110.8	110.6	52.87	-13,845.2	-692.2	727.2	502.3	224.92	3.233
22,420.0	7,966.3	22,033.2	7,527.7	111.0	110.7	52.87	-13,865.2	-692.4	727.3	502.0	225.22	3.229
22,500.0	7,966.3	22,113.2	7,527.5	111.6	111.3	52.86	-13,945.2	-693.0	727.4	501.0	226.44	3.212
22,515.0	7,966.3	22,128.2	7,527.5	111.7	111.5	52.86	-13,960.2	-693.2	727.4	500.7	226.67	3.209
22,600.0	7,966.4	22,213.2	7,527.3	112.3	112.1	52.84	-14,045.2	-693.8	727.5	499.6	227.96	3.192
22,610.0	7,966.4	22,223.2	7,527.3	112.4	112.2	52.84	-14,055.2	-693.9	727.6	499.4	228.11	3.189
22,700.0	7,966.4	22,313.2	7,527.1	113.1	112.9	52.83	-14,145.2	-694.6	727.7	498.2	229.48	3.171
22,705.0	7,966.4	22,318.2	7,527.1	113.1	112.9	52.83	-14,150.2	-694.7	727.7	498.1	229.56	3.170
22,800.0	7,966.5	22,413.2	7,526.9	113.8	113.6	52.81	-14,245.2	-695.4	727.9	496.8	231.01	3.151
22,895.0	7,966.5	22,508.2	7,526.8	114.5	114.3	52.80	-14,340.2	-696.2	728.0	495.5	232.45	3.132
22,900.0	7,966.5	22,513.2	7,526.7	114.6	114.4	52.80	-14,345.2	-696.2	728.0	495.5	232.53	3.131
22,990.0	7,966.6	22,603.2	7,526.6	115.3	115.0	52.78	-14,435.2	-696.9	728.1	494.2	233.90	3.113
23,000.0	7,966.6	22,613.2	7,526.5	115.3	115.1	52.78	-14,445.2	-697.0	728.2	494.1	234.06	3.111
23,085.0	7,966.6	22,698.2	7,526.4	116.0	115.8	52.77	-14,530.2	-697.7	728.3	492.9	235.35	3.094
23,100.0	7,966.6	22,713.2	7,526.3	116.1	115.9	52.76	-14,545.2	-697.8	728.3	492.7	235.58	3.092
23,180.0	7,966.7	22,793.2	7,526.2	116.7	116.5	52.75	-14,625.2	-698.5	728.4	491.6	236.80	3.076
23,200.0	7,966.7	22,813.2	7,526.1	116.8	116.6	52.75	-14,645.2	-698.6	728.5	491.4	237.10	3.072
23,275.0	7,966.7	22,888.2	7,526.0	117.4	117.2	52.74	-14,720.2	-699.2	728.6	490.3	238.25	3.058
23,300.0	7,966.8	22,913.2	7,525.9	117.6	117.4	52.73	-14,745.2	-699.4	728.6	490.0	238.63	3.053
23,370.0	7,966.8	22,983.2	7,525.8	118.1	117.9	52.72	-14,815.2	-700.0	728.7	489.0	239.70	3.040
23,400.0	7,966.8	23,013.2	7,525.7	118.3	118.1	52.72	-14,845.2	-700.2	728.8	488.6	240.15	3.035
23,465.0	7,966.8	23,078.2	7,525.6	118.8	118.6	52.71	-14,910.2	-700.7	728.9	487.7	241.15	3.023
23,500.0	7,966.9	23,113.2	7,525.5	119.1	118.9	52.70	-14,945.2	-701.0	728.9	487.2	241.68	3.016
23,560.0	7,966.9	23,173.2	7,525.4	119.5	119.3	52.69	-15,005.2	-701.5	729.0	486.4	242.59	3.005
23,600.0	7,966.9	23,213.2	7,525.3	119.9	119.6	52.68	-15,045.1	-701.8	729.1	485.9	243.20	2.998
23,655.0	7,966.9	23,268.2	7,525.2	120.3	120.0	52.68	-15,100.1	-702.2	729.2	485.1	244.04	2.988
23,700.0	7,967.0	23,313.2	7,525.1	120.6	120.4	52.67	-15,145.1	-702.6	729.2	484.5	244.73	2.980
23,729.1	7,967.0	23,342.2	7,525.1	120.8	120.6	52.66	-15,174.2	-702.8	729.3	484.1	245.17	2.975
23,750.0	7,967.0	23,363.2	7,525.0	121.0	120.8	52.66	-15,195.1	-703.0	729.3	483.8	245.49	2.971
23,779.1	7,967.0	23,377.7	7,525.0	121.2	120.9	52.66	-15,209.6	-703.1	729.5	483.7	245.79	2.968 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 #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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						Rule Assigned:				Offset Well Error:	10.0 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	
9,595.0	7,959.6	7,930.8	7,925.8	24.1	232.7	89.84	-1,192.8	-993.3	993.6	737.6	255.96	3.882		
9,600.0	7,959.6	7,930.9	7,925.9	24.1	232.7	89.85	-1,192.8	-993.3	992.8	736.8	255.97	3.878		
9,690.0	7,959.7	7,932.6	7,927.7	24.2	232.7	89.95	-1,192.9	-993.3	983.3	727.0	256.23	3.837		
9,700.0	7,959.7	7,932.8	7,927.9	24.3	232.7	89.96	-1,192.9	-993.3	982.7	726.5	256.26	3.835		
9,749.6	7,959.7	7,933.8	7,928.9	24.3	232.8	90.02	-1,192.9	-993.3	981.5	725.0	256.42	3.828	CC, ES, SF	
9,785.0	7,959.7	7,934.5	7,929.6	24.4	232.8	90.06	-1,192.9	-993.3	982.1	725.6	256.53	3.828		
9,800.0	7,959.7	7,934.8	7,929.9	24.5	232.8	90.08	-1,192.9	-993.3	982.8	726.2	256.58	3.830		
9,880.0	7,959.8	7,936.4	7,931.5	24.7	232.8	90.17	-1,192.9	-993.3	990.1	733.2	256.84	3.855		
9,900.0	7,959.8	7,936.9	7,931.9	24.7	232.8	90.20	-1,192.9	-993.3	992.9	736.0	256.91	3.865		

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

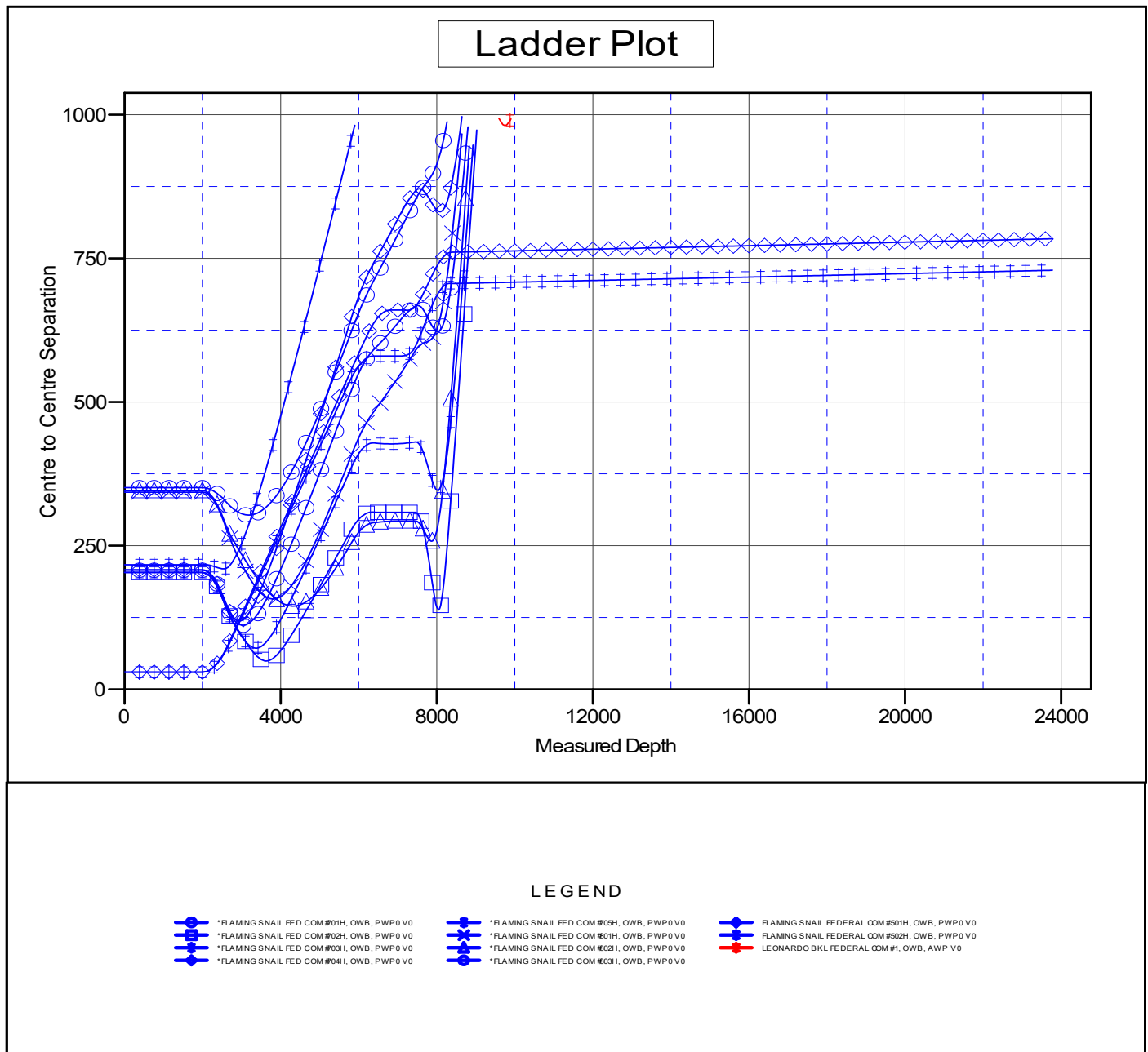
ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #520H
Project:	ATLAS PROSPECT (NM-E)	TVD Reference:	*KB=30ft @ 3161.2usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	*KB=30ft @ 3161.2usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM #520H	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 @ 3161.2usft
 Offset Depths are relative to Offset Datum
 Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: FLAMING SNAIL FEDERAL COM #520H
 Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
 Grid Convergence at Surface is: 0.08°



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 #520H

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 #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	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 #520H					
Well Position	+N/-S	-697.9 usft	Northing:	402,323.80 usft	Latitude:	32° 6' 21.680 N
	+E/-W	4,315.3 usft	Easting:	544,627.20 usft	Longitude:	104° 11' 21.142 W
Position Uncertainty		3.0 usft	Wellhead Elevation:		Ground Level:	3,131.2 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	1/1/2023	6.85	59.71	47,408.79889918

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	180.46

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	7,459.0 PWP0 (OWB)	MWD+IFR1+MS	
			OWSG MWD + IFR1 + Multi-St	
3	7,459.0	23,779.1 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 #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	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	
2,575.2	11.50	0.28	2,571.4	57.6	0.3	2.00	2.00	0.00	0.28	
5,822.7	11.50	0.28	5,753.6	705.2	3.4	0.00	0.00	0.00	0.00	
6,398.0	0.00	0.01	6,325.0	762.8	3.7	2.00	-2.00	0.00	180.00	
7,459.0	0.00	0.01	7,386.0	762.8	3.7	0.00	0.00	0.00	0.00	
8,358.7	89.97	180.46	7,959.0	190.2	-0.9	10.00	10.00	-19.96	180.46	
23,729.1	89.97	180.46	7,967.0	-15,179.7	-123.0	0.00	0.00	0.00	0.00	
23,779.1	89.97	180.46	7,967.0	-15,229.7	-123.4	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 #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	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	0.28	2,100.0	1.7	0.0	-1.7	2.00	2.00	0.00
2,200.0	4.00	0.28	2,199.8	7.0	0.0	-7.0	2.00	2.00	0.00
2,300.0	6.00	0.28	2,299.5	15.7	0.1	-15.7	2.00	2.00	0.00
2,400.0	8.00	0.28	2,398.7	27.9	0.1	-27.9	2.00	2.00	0.00
2,500.0	10.00	0.28	2,497.5	43.5	0.2	-43.5	2.00	2.00	0.00
2,575.2	11.50	0.28	2,571.4	57.6	0.3	-57.6	2.00	2.00	0.00
START HOLD @ 2575.2 MD									
2,600.0	11.50	0.28	2,595.6	62.5	0.3	-62.5	0.00	0.00	0.00
2,700.0	11.50	0.28	2,693.6	82.4	0.4	-82.4	0.00	0.00	0.00
2,800.0	11.50	0.28	2,791.6	102.4	0.5	-102.4	0.00	0.00	0.00
2,900.0	11.50	0.28	2,889.6	122.3	0.6	-122.3	0.00	0.00	0.00
3,000.0	11.50	0.28	2,987.6	142.3	0.7	-142.3	0.00	0.00	0.00
3,100.0	11.50	0.28	3,085.6	162.2	0.8	-162.2	0.00	0.00	0.00
3,200.0	11.50	0.28	3,183.6	182.2	0.9	-182.2	0.00	0.00	0.00
3,300.0	11.50	0.28	3,281.6	202.1	1.0	-202.1	0.00	0.00	0.00
3,400.0	11.50	0.28	3,379.6	222.1	1.1	-222.1	0.00	0.00	0.00
3,500.0	11.50	0.28	3,477.6	242.0	1.2	-242.0	0.00	0.00	0.00
3,600.0	11.50	0.28	3,575.6	261.9	1.3	-261.9	0.00	0.00	0.00
3,700.0	11.50	0.28	3,673.5	281.9	1.4	-281.9	0.00	0.00	0.00
3,800.0	11.50	0.28	3,771.5	301.8	1.5	-301.8	0.00	0.00	0.00
3,900.0	11.50	0.28	3,869.5	321.8	1.6	-321.8	0.00	0.00	0.00
4,000.0	11.50	0.28	3,967.5	341.7	1.7	-341.7	0.00	0.00	0.00
4,100.0	11.50	0.28	4,065.5	361.7	1.8	-361.7	0.00	0.00	0.00
4,200.0	11.50	0.28	4,163.5	381.6	1.9	-381.6	0.00	0.00	0.00
4,300.0	11.50	0.28	4,261.5	401.5	1.9	-401.6	0.00	0.00	0.00
4,400.0	11.50	0.28	4,359.5	421.5	2.0	-421.5	0.00	0.00	0.00
4,500.0	11.50	0.28	4,457.5	441.4	2.1	-441.4	0.00	0.00	0.00
4,600.0	11.50	0.28	4,555.5	461.4	2.2	-461.4	0.00	0.00	0.00
4,700.0	11.50	0.28	4,653.5	481.3	2.3	-481.3	0.00	0.00	0.00
4,800.0	11.50	0.28	4,751.4	501.3	2.4	-501.3	0.00	0.00	0.00
4,900.0	11.50	0.28	4,849.4	521.2	2.5	-521.2	0.00	0.00	0.00
5,000.0	11.50	0.28	4,947.4	541.2	2.6	-541.2	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	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	11.50	0.28	5,045.4	561.1	2.7	-561.1	0.00	0.00	0.00
5,200.0	11.50	0.28	5,143.4	581.0	2.8	-581.1	0.00	0.00	0.00
5,300.0	11.50	0.28	5,241.4	601.0	2.9	-601.0	0.00	0.00	0.00
5,400.0	11.50	0.28	5,339.4	620.9	3.0	-620.9	0.00	0.00	0.00
5,500.0	11.50	0.28	5,437.4	640.9	3.1	-640.9	0.00	0.00	0.00
5,600.0	11.50	0.28	5,535.4	660.8	3.2	-660.8	0.00	0.00	0.00
5,700.0	11.50	0.28	5,633.4	680.8	3.3	-680.8	0.00	0.00	0.00
5,800.0	11.50	0.28	5,731.4	700.7	3.4	-700.7	0.00	0.00	0.00
5,822.7	11.50	0.28	5,753.6	705.2	3.4	-705.3	0.00	0.00	0.00
START DROP -2.00									
5,900.0	9.96	0.28	5,829.5	719.6	3.5	-719.6	2.00	-2.00	0.00
6,000.0	7.96	0.28	5,928.3	735.2	3.6	-735.2	2.00	-2.00	0.00
6,100.0	5.96	0.28	6,027.6	747.3	3.6	-747.3	2.00	-2.00	0.00
6,200.0	3.96	0.28	6,127.2	756.0	3.7	-756.0	2.00	-2.00	0.00
6,300.0	1.96	0.28	6,227.1	761.1	3.7	-761.1	2.00	-2.00	0.00
6,398.0	0.00	0.01	6,325.0	762.8	3.7	-762.8	2.00	-2.00	0.00
START HOLD @ 6398.0 MD									
6,400.0	0.00	0.00	6,327.0	762.8	3.7	-762.8	0.00	0.00	0.00
6,500.0	0.00	0.00	6,427.0	762.8	3.7	-762.8	0.00	0.00	0.00
6,600.0	0.00	0.00	6,527.0	762.8	3.7	-762.8	0.00	0.00	0.00
6,700.0	0.00	0.00	6,627.0	762.8	3.7	-762.8	0.00	0.00	0.00
6,800.0	0.00	0.00	6,727.0	762.8	3.7	-762.8	0.00	0.00	0.00
6,900.0	0.00	0.00	6,827.0	762.8	3.7	-762.8	0.00	0.00	0.00
7,000.0	0.00	0.00	6,927.0	762.8	3.7	-762.8	0.00	0.00	0.00
7,100.0	0.00	0.00	7,027.0	762.8	3.7	-762.8	0.00	0.00	0.00
7,200.0	0.00	0.00	7,127.0	762.8	3.7	-762.8	0.00	0.00	0.00
7,300.0	0.00	0.00	7,227.0	762.8	3.7	-762.8	0.00	0.00	0.00
7,400.0	0.00	0.00	7,327.0	762.8	3.7	-762.8	0.00	0.00	0.00
7,459.0	0.00	0.00	7,386.0	762.8	3.7	-762.8	0.00	0.00	0.00
START DLS 10.00 TFO 180.46									
7,500.0	4.10	180.46	7,427.0	761.3	3.7	-761.3	10.00	10.00	0.00
7,550.0	9.10	180.46	7,476.7	755.6	3.6	-755.6	10.00	10.00	0.00
7,600.0	14.10	180.46	7,525.6	745.5	3.6	-745.5	10.00	10.00	0.00
7,650.0	19.10	180.46	7,573.5	731.3	3.4	-731.3	10.00	10.00	0.00
7,700.0	24.10	180.46	7,620.0	712.9	3.3	-712.9	10.00	10.00	0.00
7,750.0	29.10	180.46	7,664.7	690.5	3.1	-690.5	10.00	10.00	0.00
7,800.0	34.10	180.46	7,707.3	664.3	2.9	-664.3	10.00	10.00	0.00
7,850.0	39.10	180.46	7,747.4	634.5	2.7	-634.5	10.00	10.00	0.00
7,900.0	44.10	180.46	7,784.8	601.3	2.4	-601.3	10.00	10.00	0.00
7,950.0	49.10	180.46	7,819.1	565.0	2.1	-565.0	10.00	10.00	0.00
8,000.0	54.10	180.46	7,850.2	525.8	1.8	-525.8	10.00	10.00	0.00
8,050.0	59.10	180.46	7,877.7	484.1	1.5	-484.1	10.00	10.00	0.00
8,100.0	64.10	180.46	7,901.4	440.1	1.1	-440.1	10.00	10.00	0.00
8,150.0	69.10	180.46	7,921.3	394.3	0.8	-394.2	10.00	10.00	0.00
8,200.0	74.10	180.46	7,937.1	346.8	0.4	-346.8	10.00	10.00	0.00
8,250.0	79.10	180.46	7,948.7	298.2	0.0	-298.2	10.00	10.00	0.00
8,300.0	84.10	180.46	7,956.0	248.8	-0.4	-248.7	10.00	10.00	0.00
8,350.0	89.10	180.46	7,958.9	198.9	-0.8	-198.9	10.00	10.00	0.00
8,358.7	89.97	180.46	7,959.0	190.2	-0.9	-190.1	10.00	10.00	0.00
START HOLD @ 8358.7 MD									
8,400.0	89.97	180.46	7,959.0	148.9	-1.2	-148.9	0.00	0.00	0.00
8,500.0	89.97	180.46	7,959.1	48.9	-2.0	-48.9	0.00	0.00	0.00
8,600.0	89.97	180.46	7,959.1	-51.1	-2.8	51.1	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	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)
8,700.0	89.97	180.46	7,959.2	-151.1	-3.6	151.1	0.00	0.00	0.00
8,800.0	89.97	180.46	7,959.2	-251.1	-4.4	251.1	0.00	0.00	0.00
8,900.0	89.97	180.46	7,959.3	-351.1	-5.2	351.1	0.00	0.00	0.00
9,000.0	89.97	180.46	7,959.3	-451.1	-5.9	451.1	0.00	0.00	0.00
9,100.0	89.97	180.46	7,959.4	-551.1	-6.7	551.1	0.00	0.00	0.00
9,200.0	89.97	180.46	7,959.4	-651.1	-7.5	651.1	0.00	0.00	0.00
9,300.0	89.97	180.46	7,959.5	-751.1	-8.3	751.1	0.00	0.00	0.00
9,400.0	89.97	180.46	7,959.5	-851.1	-9.1	851.1	0.00	0.00	0.00
9,500.0	89.97	180.46	7,959.6	-951.1	-9.9	951.1	0.00	0.00	0.00
9,600.0	89.97	180.46	7,959.6	-1,051.1	-10.7	1,051.1	0.00	0.00	0.00
9,700.0	89.97	180.46	7,959.7	-1,151.1	-11.5	1,151.1	0.00	0.00	0.00
9,800.0	89.97	180.46	7,959.7	-1,251.1	-12.3	1,251.1	0.00	0.00	0.00
9,900.0	89.97	180.46	7,959.8	-1,351.1	-13.1	1,351.1	0.00	0.00	0.00
10,000.0	89.97	180.46	7,959.9	-1,451.1	-13.9	1,451.1	0.00	0.00	0.00
10,100.0	89.97	180.46	7,959.9	-1,551.1	-14.7	1,551.1	0.00	0.00	0.00
10,200.0	89.97	180.46	7,960.0	-1,651.1	-15.5	1,651.1	0.00	0.00	0.00
10,300.0	89.97	180.46	7,960.0	-1,751.1	-16.3	1,751.1	0.00	0.00	0.00
10,400.0	89.97	180.46	7,960.1	-1,851.1	-17.1	1,851.1	0.00	0.00	0.00
10,500.0	89.97	180.46	7,960.1	-1,951.1	-17.9	1,951.1	0.00	0.00	0.00
10,600.0	89.97	180.46	7,960.2	-2,051.1	-18.7	2,051.1	0.00	0.00	0.00
10,700.0	89.97	180.46	7,960.2	-2,151.1	-19.5	2,151.1	0.00	0.00	0.00
10,800.0	89.97	180.46	7,960.3	-2,251.1	-20.3	2,251.1	0.00	0.00	0.00
10,900.0	89.97	180.46	7,960.3	-2,351.1	-21.0	2,351.1	0.00	0.00	0.00
11,000.0	89.97	180.46	7,960.4	-2,451.1	-21.8	2,451.1	0.00	0.00	0.00
11,100.0	89.97	180.46	7,960.4	-2,551.0	-22.6	2,551.1	0.00	0.00	0.00
11,200.0	89.97	180.46	7,960.5	-2,651.0	-23.4	2,651.1	0.00	0.00	0.00
11,300.0	89.97	180.46	7,960.5	-2,751.0	-24.2	2,751.1	0.00	0.00	0.00
11,400.0	89.97	180.46	7,960.6	-2,851.0	-25.0	2,851.1	0.00	0.00	0.00
11,500.0	89.97	180.46	7,960.6	-2,951.0	-25.8	2,951.1	0.00	0.00	0.00
11,600.0	89.97	180.46	7,960.7	-3,051.0	-26.6	3,051.1	0.00	0.00	0.00
11,700.0	89.97	180.46	7,960.7	-3,151.0	-27.4	3,151.1	0.00	0.00	0.00
11,800.0	89.97	180.46	7,960.8	-3,251.0	-28.2	3,251.1	0.00	0.00	0.00
11,900.0	89.97	180.46	7,960.8	-3,351.0	-29.0	3,351.1	0.00	0.00	0.00
12,000.0	89.97	180.46	7,960.9	-3,451.0	-29.8	3,451.1	0.00	0.00	0.00
12,100.0	89.97	180.46	7,960.9	-3,551.0	-30.6	3,551.1	0.00	0.00	0.00
12,200.0	89.97	180.46	7,961.0	-3,651.0	-31.4	3,651.1	0.00	0.00	0.00
12,300.0	89.97	180.46	7,961.0	-3,751.0	-32.2	3,751.1	0.00	0.00	0.00
12,400.0	89.97	180.46	7,961.1	-3,851.0	-33.0	3,851.1	0.00	0.00	0.00
12,500.0	89.97	180.46	7,961.1	-3,951.0	-33.8	3,951.1	0.00	0.00	0.00
12,600.0	89.97	180.46	7,961.2	-4,051.0	-34.6	4,051.1	0.00	0.00	0.00
12,700.0	89.97	180.46	7,961.3	-4,151.0	-35.4	4,151.1	0.00	0.00	0.00
12,800.0	89.97	180.46	7,961.3	-4,251.0	-36.1	4,251.1	0.00	0.00	0.00
12,900.0	89.97	180.46	7,961.4	-4,351.0	-36.9	4,351.1	0.00	0.00	0.00
13,000.0	89.97	180.46	7,961.4	-4,451.0	-37.7	4,451.1	0.00	0.00	0.00
13,100.0	89.97	180.46	7,961.5	-4,551.0	-38.5	4,551.1	0.00	0.00	0.00
13,200.0	89.97	180.46	7,961.5	-4,651.0	-39.3	4,651.1	0.00	0.00	0.00
13,300.0	89.97	180.46	7,961.6	-4,751.0	-40.1	4,751.1	0.00	0.00	0.00
13,400.0	89.97	180.46	7,961.6	-4,851.0	-40.9	4,851.1	0.00	0.00	0.00
13,500.0	89.97	180.46	7,961.7	-4,951.0	-41.7	4,951.1	0.00	0.00	0.00
13,600.0	89.97	180.46	7,961.7	-5,051.0	-42.5	5,051.1	0.00	0.00	0.00
13,700.0	89.97	180.46	7,961.8	-5,151.0	-43.3	5,151.1	0.00	0.00	0.00
13,800.0	89.97	180.46	7,961.8	-5,251.0	-44.1	5,251.1	0.00	0.00	0.00
13,900.0	89.97	180.46	7,961.9	-5,351.0	-44.9	5,351.1	0.00	0.00	0.00
14,000.0	89.97	180.46	7,961.9	-5,451.0	-45.7	5,451.1	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	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)	
14,100.0	89.97	180.46	7,962.0	-5,551.0	-46.5	5,551.1	0.00	0.00	0.00	
14,200.0	89.97	180.46	7,962.0	-5,650.9	-47.3	5,651.1	0.00	0.00	0.00	
14,300.0	89.97	180.46	7,962.1	-5,750.9	-48.1	5,751.1	0.00	0.00	0.00	
14,400.0	89.97	180.46	7,962.1	-5,850.9	-48.9	5,851.1	0.00	0.00	0.00	
14,500.0	89.97	180.46	7,962.2	-5,950.9	-49.7	5,951.1	0.00	0.00	0.00	
14,600.0	89.97	180.46	7,962.2	-6,050.9	-50.5	6,051.1	0.00	0.00	0.00	
14,700.0	89.97	180.46	7,962.3	-6,150.9	-51.2	6,151.1	0.00	0.00	0.00	
14,800.0	89.97	180.46	7,962.3	-6,250.9	-52.0	6,251.1	0.00	0.00	0.00	
14,900.0	89.97	180.46	7,962.4	-6,350.9	-52.8	6,351.1	0.00	0.00	0.00	
15,000.0	89.97	180.46	7,962.4	-6,450.9	-53.6	6,451.1	0.00	0.00	0.00	
15,100.0	89.97	180.46	7,962.5	-6,550.9	-54.4	6,551.1	0.00	0.00	0.00	
15,200.0	89.97	180.46	7,962.5	-6,650.9	-55.2	6,651.1	0.00	0.00	0.00	
15,300.0	89.97	180.46	7,962.6	-6,750.9	-56.0	6,751.1	0.00	0.00	0.00	
15,400.0	89.97	180.46	7,962.7	-6,850.9	-56.8	6,851.1	0.00	0.00	0.00	
15,500.0	89.97	180.46	7,962.7	-6,950.9	-57.6	6,951.1	0.00	0.00	0.00	
15,600.0	89.97	180.46	7,962.8	-7,050.9	-58.4	7,051.1	0.00	0.00	0.00	
15,700.0	89.97	180.46	7,962.8	-7,150.9	-59.2	7,151.1	0.00	0.00	0.00	
15,800.0	89.97	180.46	7,962.9	-7,250.9	-60.0	7,251.1	0.00	0.00	0.00	
15,900.0	89.97	180.46	7,962.9	-7,350.9	-60.8	7,351.1	0.00	0.00	0.00	
16,000.0	89.97	180.46	7,963.0	-7,450.9	-61.6	7,451.1	0.00	0.00	0.00	
16,100.0	89.97	180.46	7,963.0	-7,550.9	-62.4	7,551.1	0.00	0.00	0.00	
16,200.0	89.97	180.46	7,963.1	-7,650.9	-63.2	7,651.1	0.00	0.00	0.00	
16,300.0	89.97	180.46	7,963.1	-7,750.9	-64.0	7,751.1	0.00	0.00	0.00	
16,400.0	89.97	180.46	7,963.2	-7,850.9	-64.8	7,851.1	0.00	0.00	0.00	
16,500.0	89.97	180.46	7,963.2	-7,950.9	-65.6	7,951.1	0.00	0.00	0.00	
16,600.0	89.97	180.46	7,963.3	-8,050.9	-66.3	8,051.1	0.00	0.00	0.00	
16,700.0	89.97	180.46	7,963.3	-8,150.9	-67.1	8,151.1	0.00	0.00	0.00	
16,800.0	89.97	180.46	7,963.4	-8,250.9	-67.9	8,251.1	0.00	0.00	0.00	
16,900.0	89.97	180.46	7,963.4	-8,350.9	-68.7	8,351.1	0.00	0.00	0.00	
17,000.0	89.97	180.46	7,963.5	-8,450.9	-69.5	8,451.1	0.00	0.00	0.00	
17,100.0	89.97	180.46	7,963.5	-8,550.9	-70.3	8,551.1	0.00	0.00	0.00	
17,200.0	89.97	180.46	7,963.6	-8,650.9	-71.1	8,651.1	0.00	0.00	0.00	
17,300.0	89.97	180.46	7,963.6	-8,750.9	-71.9	8,751.1	0.00	0.00	0.00	
17,400.0	89.97	180.46	7,963.7	-8,850.8	-72.7	8,851.1	0.00	0.00	0.00	
17,500.0	89.97	180.46	7,963.7	-8,950.8	-73.5	8,951.1	0.00	0.00	0.00	
17,600.0	89.97	180.46	7,963.8	-9,050.8	-74.3	9,051.1	0.00	0.00	0.00	
17,700.0	89.97	180.46	7,963.8	-9,150.8	-75.1	9,151.1	0.00	0.00	0.00	
17,800.0	89.97	180.46	7,963.9	-9,250.8	-75.9	9,251.1	0.00	0.00	0.00	
17,900.0	89.97	180.46	7,963.9	-9,350.8	-76.7	9,351.1	0.00	0.00	0.00	
18,000.0	89.97	180.46	7,964.0	-9,450.8	-77.5	9,451.1	0.00	0.00	0.00	
18,100.0	89.97	180.46	7,964.1	-9,550.8	-78.3	9,551.1	0.00	0.00	0.00	
18,200.0	89.97	180.46	7,964.1	-9,650.8	-79.1	9,651.1	0.00	0.00	0.00	
18,300.0	89.97	180.46	7,964.2	-9,750.8	-79.9	9,751.1	0.00	0.00	0.00	
18,400.0	89.97	180.46	7,964.2	-9,850.8	-80.6	9,851.1	0.00	0.00	0.00	
18,500.0	89.97	180.46	7,964.3	-9,950.8	-81.4	9,951.1	0.00	0.00	0.00	
18,600.0	89.97	180.46	7,964.3	-10,050.8	-82.2	10,051.1	0.00	0.00	0.00	
18,700.0	89.97	180.46	7,964.4	-10,150.8	-83.0	10,151.1	0.00	0.00	0.00	
18,800.0	89.97	180.46	7,964.4	-10,250.8	-83.8	10,251.1	0.00	0.00	0.00	
18,900.0	89.97	180.46	7,964.5	-10,350.8	-84.6	10,351.1	0.00	0.00	0.00	
19,000.0	89.97	180.46	7,964.5	-10,450.8	-85.4	10,451.1	0.00	0.00	0.00	
19,100.0	89.97	180.46	7,964.6	-10,550.8	-86.2	10,551.1	0.00	0.00	0.00	
19,200.0	89.97	180.46	7,964.6	-10,650.8	-87.0	10,651.1	0.00	0.00	0.00	
19,300.0	89.97	180.46	7,964.7	-10,750.8	-87.8	10,751.1	0.00	0.00	0.00	
19,400.0	89.97	180.46	7,964.7	-10,850.8	-88.6	10,851.1	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	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)
19,500.0	89.97	180.46	7,964.8	-10,950.8	-89.4	10,951.1	0.00	0.00	0.00
19,600.0	89.97	180.46	7,964.8	-11,050.8	-90.2	11,051.1	0.00	0.00	0.00
19,700.0	89.97	180.46	7,964.9	-11,150.8	-91.0	11,151.1	0.00	0.00	0.00
19,800.0	89.97	180.46	7,964.9	-11,250.8	-91.8	11,251.1	0.00	0.00	0.00
19,900.0	89.97	180.46	7,965.0	-11,350.8	-92.6	11,351.1	0.00	0.00	0.00
20,000.0	89.97	180.46	7,965.0	-11,450.8	-93.4	11,451.1	0.00	0.00	0.00
20,100.0	89.97	180.46	7,965.1	-11,550.8	-94.2	11,551.1	0.00	0.00	0.00
20,200.0	89.97	180.46	7,965.1	-11,650.8	-95.0	11,651.1	0.00	0.00	0.00
20,300.0	89.97	180.46	7,965.2	-11,750.8	-95.7	11,751.1	0.00	0.00	0.00
20,400.0	89.97	180.46	7,965.2	-11,850.8	-96.5	11,851.1	0.00	0.00	0.00
20,500.0	89.97	180.46	7,965.3	-11,950.7	-97.3	11,951.1	0.00	0.00	0.00
20,600.0	89.97	180.46	7,965.4	-12,050.7	-98.1	12,051.1	0.00	0.00	0.00
20,700.0	89.97	180.46	7,965.4	-12,150.7	-98.9	12,151.1	0.00	0.00	0.00
20,800.0	89.97	180.46	7,965.5	-12,250.7	-99.7	12,251.1	0.00	0.00	0.00
20,900.0	89.97	180.46	7,965.5	-12,350.7	-100.5	12,351.1	0.00	0.00	0.00
21,000.0	89.97	180.46	7,965.6	-12,450.7	-101.3	12,451.1	0.00	0.00	0.00
21,100.0	89.97	180.46	7,965.6	-12,550.7	-102.1	12,551.1	0.00	0.00	0.00
21,200.0	89.97	180.46	7,965.7	-12,650.7	-102.9	12,651.1	0.00	0.00	0.00
21,300.0	89.97	180.46	7,965.7	-12,750.7	-103.7	12,751.1	0.00	0.00	0.00
21,400.0	89.97	180.46	7,965.8	-12,850.7	-104.5	12,851.1	0.00	0.00	0.00
21,500.0	89.97	180.46	7,965.8	-12,950.7	-105.3	12,951.1	0.00	0.00	0.00
21,600.0	89.97	180.46	7,965.9	-13,050.7	-106.1	13,051.1	0.00	0.00	0.00
21,700.0	89.97	180.46	7,965.9	-13,150.7	-106.9	13,151.1	0.00	0.00	0.00
21,800.0	89.97	180.46	7,966.0	-13,250.7	-107.7	13,251.1	0.00	0.00	0.00
21,900.0	89.97	180.46	7,966.0	-13,350.7	-108.5	13,351.1	0.00	0.00	0.00
22,000.0	89.97	180.46	7,966.1	-13,450.7	-109.3	13,451.1	0.00	0.00	0.00
22,100.0	89.97	180.46	7,966.1	-13,550.7	-110.1	13,551.1	0.00	0.00	0.00
22,200.0	89.97	180.46	7,966.2	-13,650.7	-110.8	13,651.1	0.00	0.00	0.00
22,300.0	89.97	180.46	7,966.2	-13,750.7	-111.6	13,751.1	0.00	0.00	0.00
22,400.0	89.97	180.46	7,966.3	-13,850.7	-112.4	13,851.1	0.00	0.00	0.00
22,500.0	89.97	180.46	7,966.3	-13,950.7	-113.2	13,951.1	0.00	0.00	0.00
22,600.0	89.97	180.46	7,966.4	-14,050.7	-114.0	14,051.1	0.00	0.00	0.00
22,700.0	89.97	180.46	7,966.4	-14,150.7	-114.8	14,151.1	0.00	0.00	0.00
22,800.0	89.97	180.46	7,966.5	-14,250.7	-115.6	14,251.1	0.00	0.00	0.00
22,900.0	89.97	180.46	7,966.5	-14,350.7	-116.4	14,351.1	0.00	0.00	0.00
23,000.0	89.97	180.46	7,966.6	-14,450.7	-117.2	14,451.1	0.00	0.00	0.00
23,100.0	89.97	180.46	7,966.6	-14,550.7	-118.0	14,551.1	0.00	0.00	0.00
23,200.0	89.97	180.46	7,966.7	-14,650.7	-118.8	14,651.1	0.00	0.00	0.00
23,300.0	89.97	180.46	7,966.8	-14,750.7	-119.6	14,751.1	0.00	0.00	0.00
23,400.0	89.97	180.46	7,966.8	-14,850.7	-120.4	14,851.1	0.00	0.00	0.00
23,500.0	89.97	180.46	7,966.9	-14,950.7	-121.2	14,951.1	0.00	0.00	0.00
23,600.0	89.97	180.46	7,966.9	-15,050.7	-122.0	15,051.1	0.00	0.00	0.00
23,700.0	89.97	180.46	7,967.0	-15,150.6	-122.8	15,151.1	0.00	0.00	0.00
23,729.1	89.97	180.46	7,967.0	-15,179.7	-123.0	15,180.2	0.00	0.00	0.00
START HOLD @ 23729.1 MD									
23,779.1	89.97	180.46	7,967.0	-15,229.7	-123.4	15,230.2	0.00	0.00	0.00
TD @ 23779.1 MD									

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM #520H
Company:	DELAWARE BASIN WEST	TVD Reference:	*KB=30ft @ 3161.2usft
Project:	ATLAS PROSPECT (NM-E)	MD Reference:	*KB=30ft @ 3161.2usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM #520H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
VT (FLAMING SNAIL FE - plan hits target center - Point	0.00	0.00	7,386.0	762.8	3.7	403,086.60	544,630.90	32° 6' 29.229 N	104° 11' 21.087 W
FTP (FLAMING SNAIL F - plan misses target center by 198.1usft at 7944.7usft MD (7815.6 TVD, 569.0 N, 2.2 E) - Circle (radius 50.0)	0.00	0.00	7,959.5	705.1	3.7	403,028.90	544,630.90	32° 6' 28.658 N	104° 11' 21.088 W
LTP (FLAMING SNAIL F - plan hits target center - Point	0.00	0.00	7,967.0	-15,179.7	-123.0	387,144.10	544,504.20	32° 3' 51.455 N	104° 11' 22.807 W
PBHL (FLAMING SNAIL - plan hits target center - Rectangle (sides W100.0 H15,935.3 D20.0)	0.03	180.46	7,967.0	-15,229.7	-123.4	387,094.10	544,503.80	32° 3' 50.960 N	104° 11' 22.813 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	
2,575.2	2,571.4	57.6	0.3	START HOLD @ 2575.2 MD	
5,822.7	5,753.6	705.2	3.4	START DROP -2.00	
6,398.0	6,325.0	762.8	3.7	START HOLD @ 6398.0 MD	
7,459.0	7,386.0	762.8	3.7	START DLS 10.00 TFO 180.46	
8,358.7	7,959.0	190.2	-0.9	START HOLD @ 8358.7 MD	
23,729.1	7,967.0	-15,179.7	-123.0	START HOLD @ 23729.1 MD	
23,779.1	7,967.0	-15,229.7	-123.4	TD @ 23779.1 MD	

ConocoPhillips



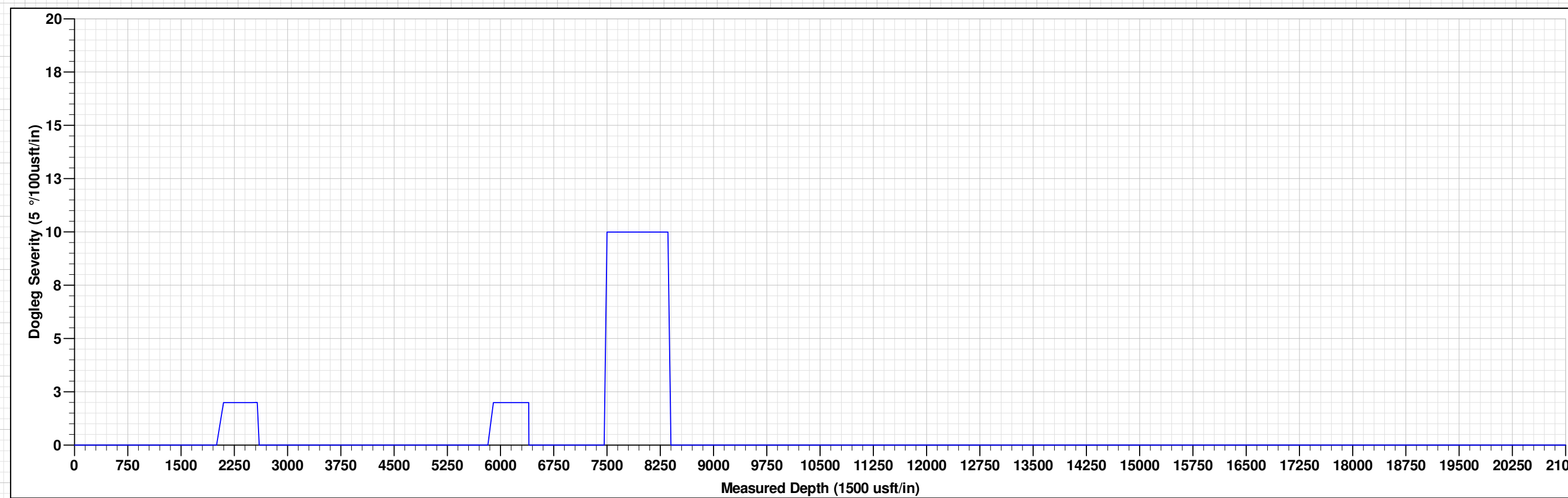
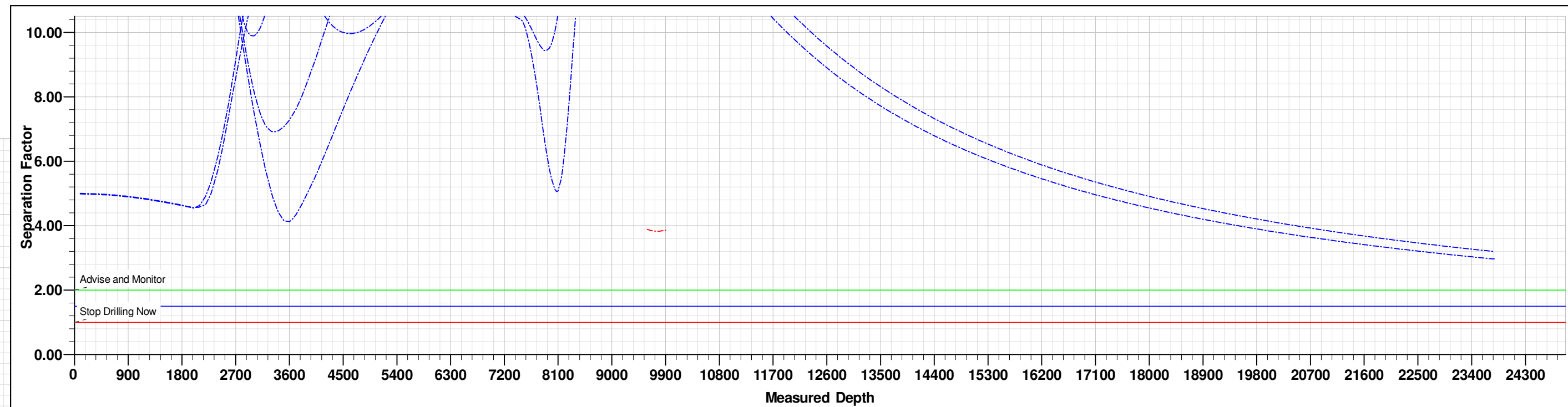
Project: ATLAS PROSPECT (NM-E)
Site: FLAMING SNAIL FED COM PROJECT
Well: FLAMING SNAIL FEDERAL COM #520H
Wellbore: OWB
Design: PWP0
GL: 3131.2
*KB=30ft @ 3161.2usft

WELL DETAILS: FLAMING SNAIL FEDERAL COM #520H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	402323.80	544627.20	32° 6' 21.680 N	104° 11' 21.142 W

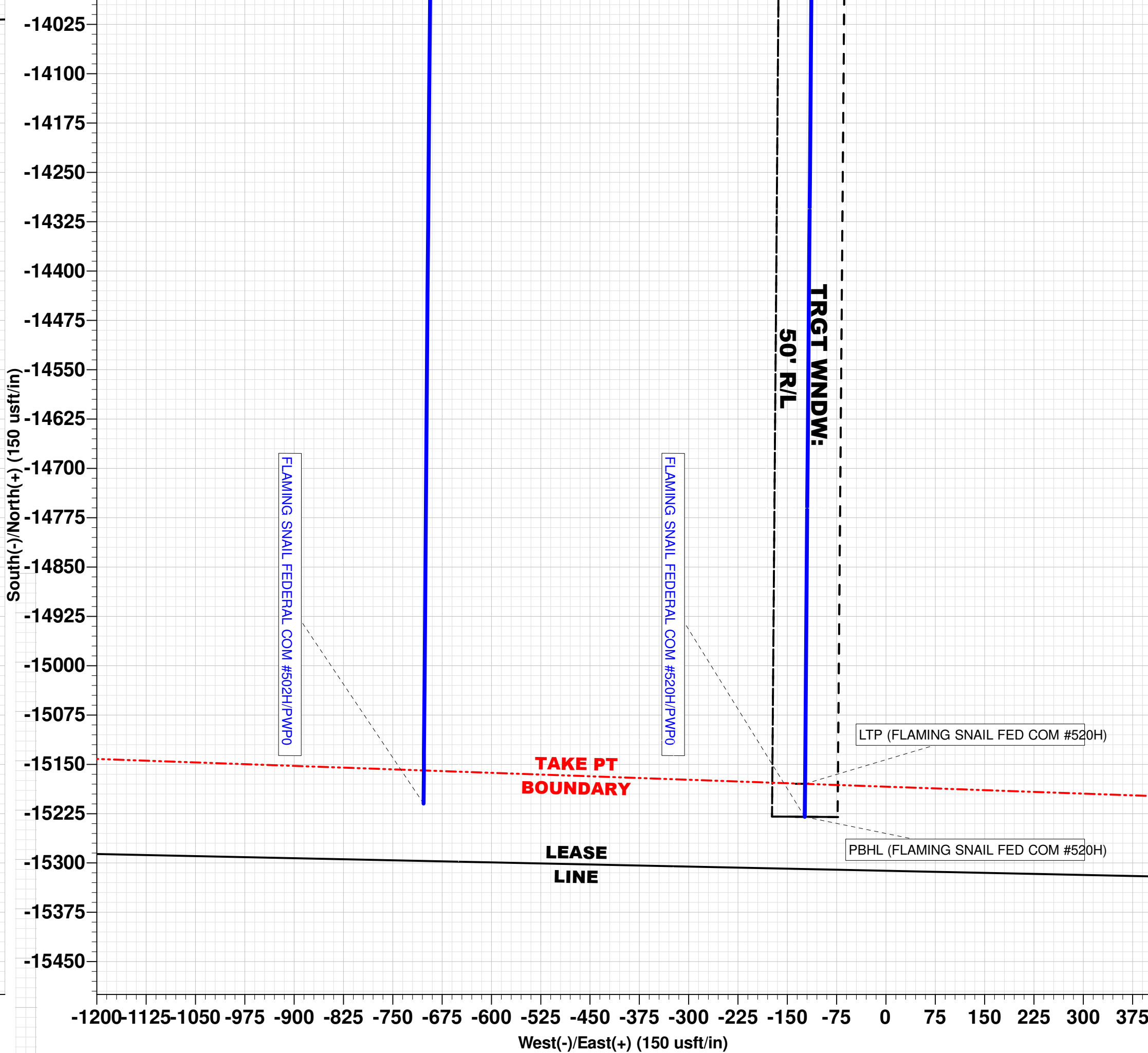
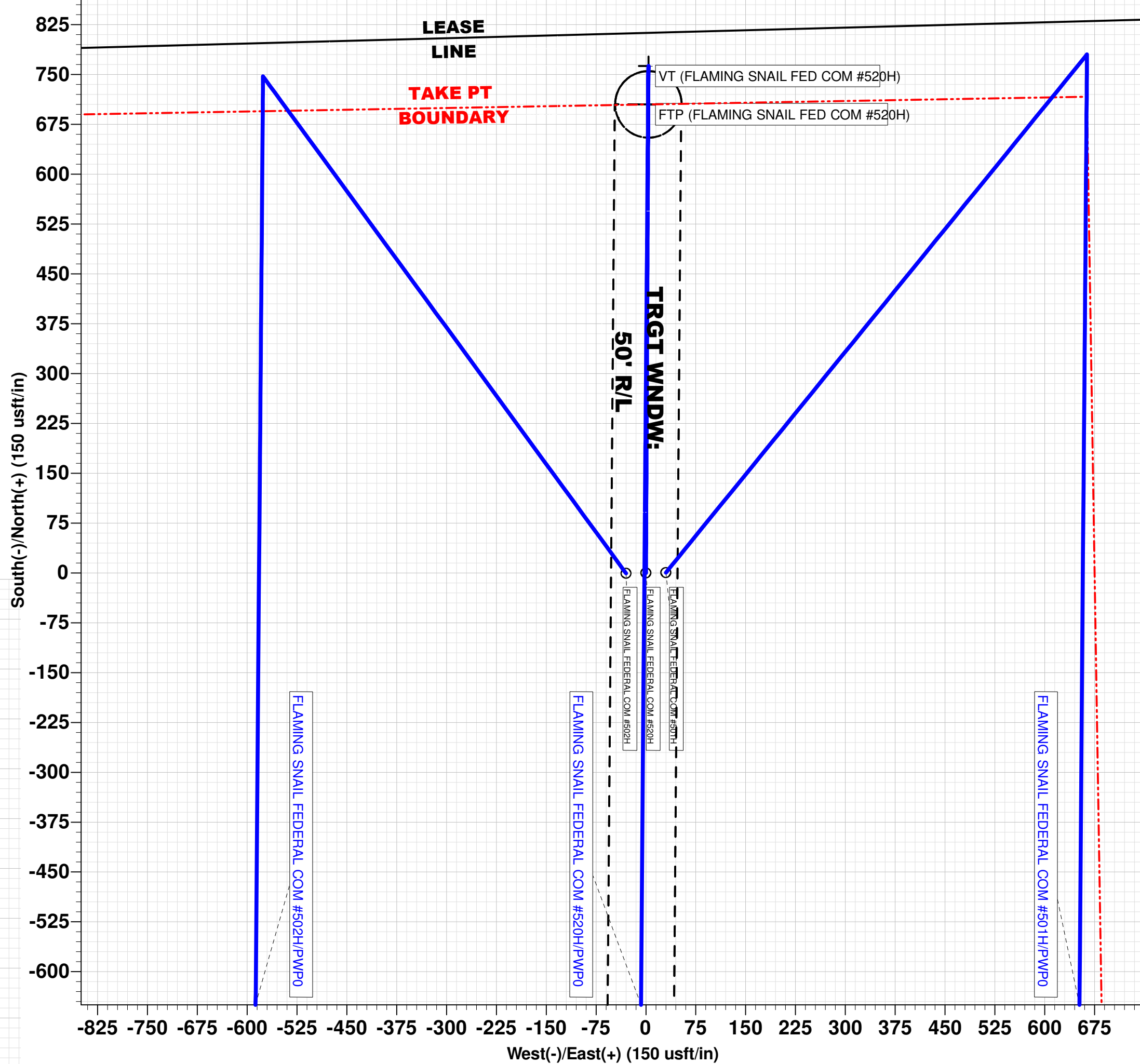
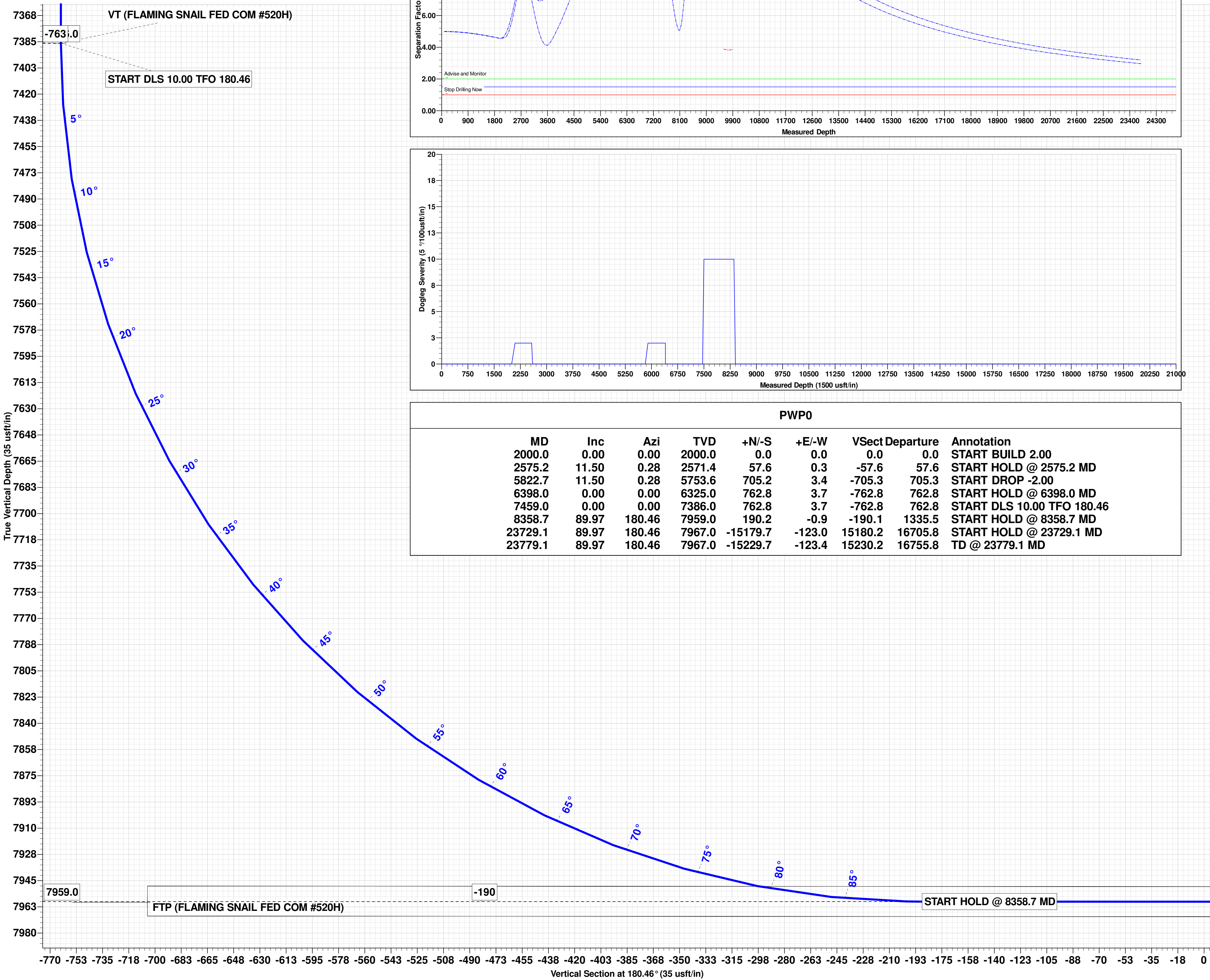
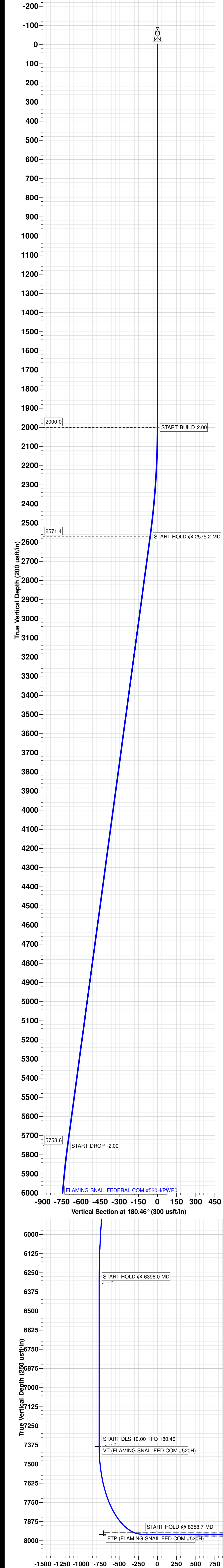
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
VT (FLAMING SNAIL FED COM #520H)	7385.0	762.8	3.7	403085.60	544630.90	Point
FTP (FLAMING SNAIL FED COM #520H)	7959.5	705.1	3.7	403028.90	544630.90	Circle (Radius: 50.0)
LTP (FLAMING SNAIL FED COM #520H)	7967.0	-15179.7	-123.0	387144.10	544504.20	Point
PBHL (FLAMING SNAIL FED COM #520H)	7967.0	-15229.7	-123.4	387094.10	544503.80	Rectangle (Sides: L1593.5 W100.0)

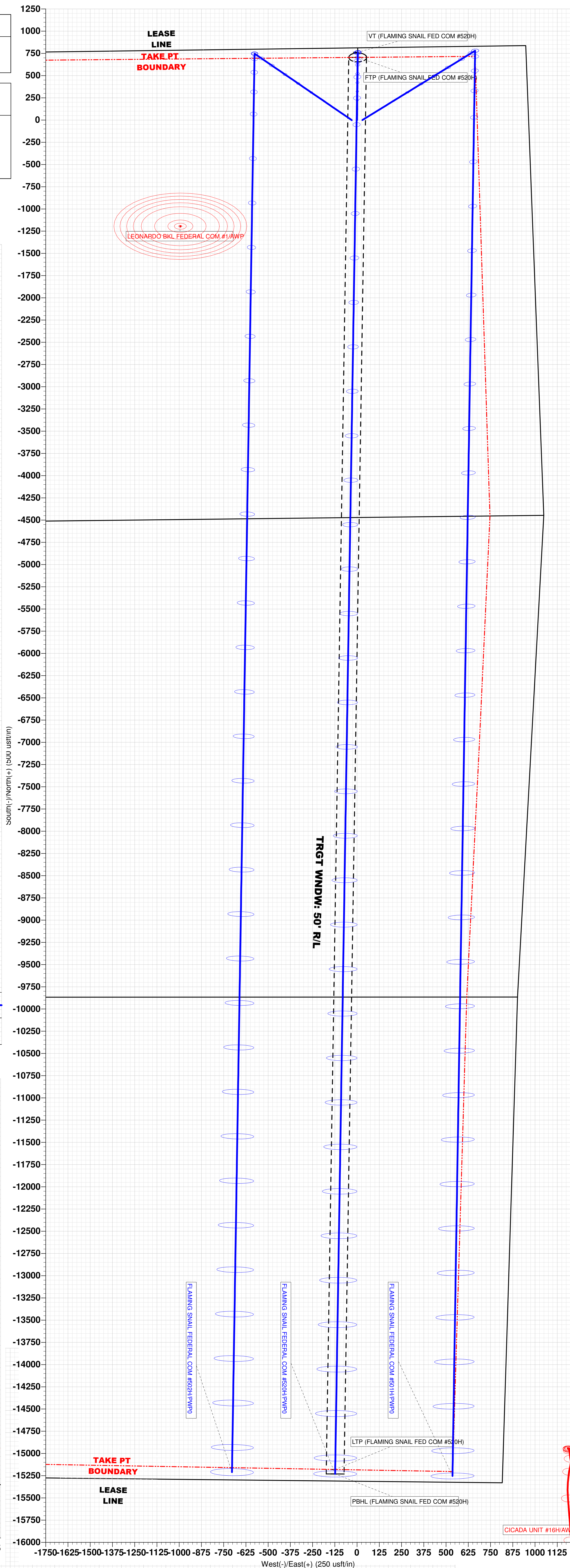


PWP0

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	START BUILD 2.00
2575.2	11.50	0.28	2571.4	57.6	0.3	-57.6	START HOLD @ 2575.2 MD
5822.7	11.50	0.28	5753.6	705.2	3.4	-705.3	START DROP -2.00
6398.0	0.00	0.00	6325.0	762.8	3.7	-762.8	START HOLD @ 6398.0 MD
7459.0	0.00	0.00	7386.0	762.8	3.7	-762.8	START DLS 10.00 TFO 180.46
8358.7	89.97	180.46	7959.0	190.2	-0.9	-190.1	START HOLD @ 8358.7 MD
23729.1	89.97	180.46	7967.0	-15179.7	-123.0	15180.2	START HOLD @ 23729.1 MD
23779.1	89.97	180.46	7967.0	-15229.7	-123.4	15230.2	TD @ 23779.1 MD



TRGT WNDW:
10' A/B



START HOLD @ 23729.1 MD
TD @ 23779.1 MD
LTP (FLAMING SNAIL FED COM #520H)
PBHL (FLAMING SNAIL FED COM #520H)
FLAMING SNAIL FEDERAL COM #520H/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 520H
SURFACE HOLE FOOTAGE:	805'/N & 1005'/E
BOTTOM HOLE FOOTAGE:	50'/S & 990'/E

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 22%. 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

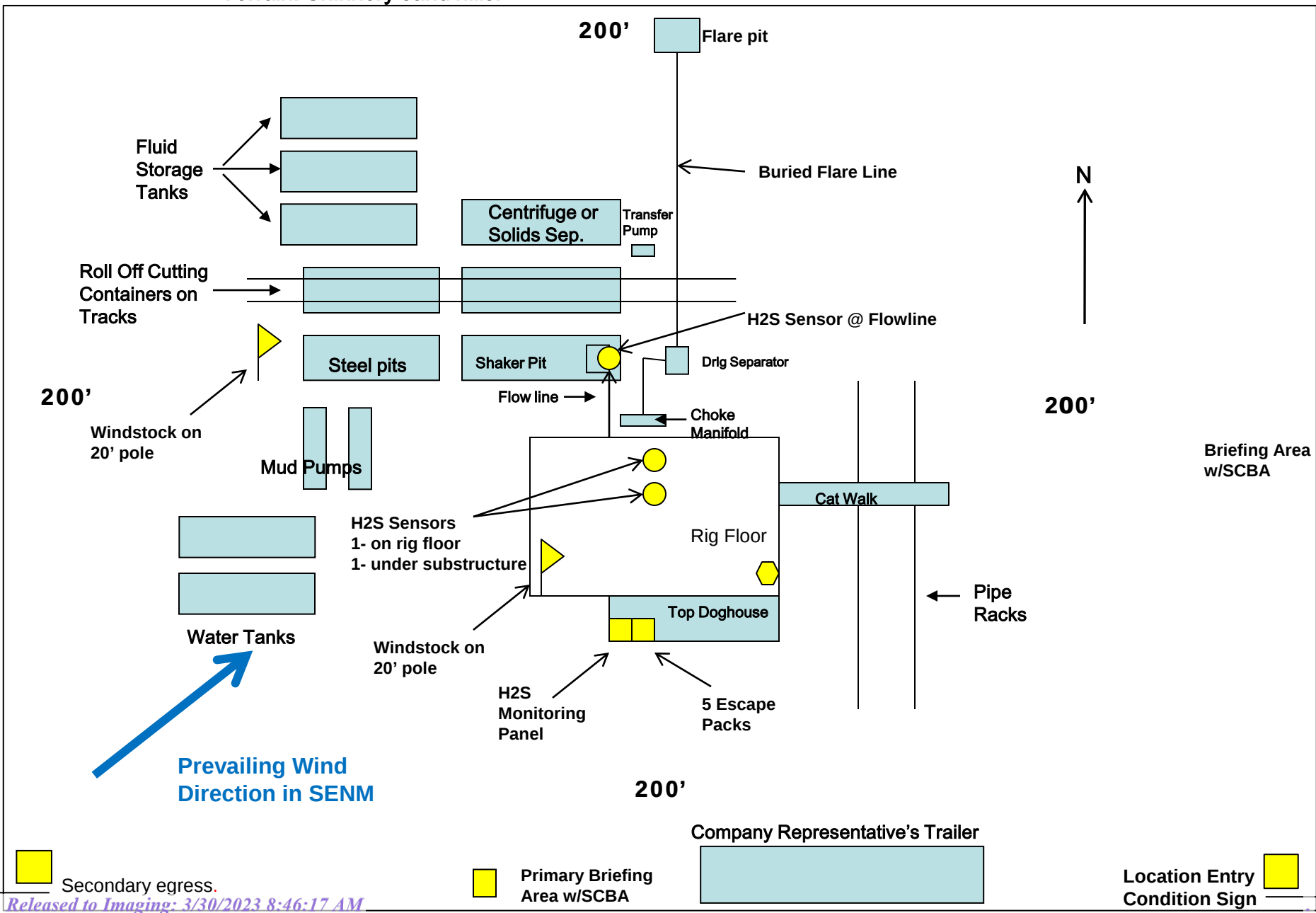
All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location 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 200123

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 200123
	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