

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

1. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No.
2. Name of Operator		6. If Indian, Allottee or Tribe Name
3a. Address	3b. Phone No. (include area code)	7. If Unit of CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		8. Well Name and No.
		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice 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.	Office	

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.

(Instructions on page 2)

Additional Information

Location of Well

0. SHL: NENE / 505 FNL / 1035 FEL / TWSP: 25S / RANGE: 27E / SECTION: 28 / LAT: 32.106967 / LONG: -104.189811 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 330 FNL / 2090 FEL / TWSP: 25S / RANGE: 27E / SECTION: 28 / LAT: 32.1074 / LONG: -104.193227 (TVD: 9702 feet, MD: 9953 feet)

PPP: SESE / 1319 FSL / 2090 FEL / TWSP: 25S / RANGE: 27E / SECTION: 28 / LAT: 32.097399 / LONG: -104.193339 (TVD: 9768 feet, MD: 13584 feet)

PPP: NWNE / 2639 FSL / 2090 FEL / TWSP: 25S / RANGE: 27E / SECTION: 33 / LAT: 32.086379 / LONG: -104.193463 (TVD: 9771 feet, MD: 17544 feet)

PPP: NWNE / 1 FNL / 2090 FEL / TWSP: 26S / RANGE: 27E / SECTION: 4 / LAT: 32.079011 / LONG: -104.193545 (TVD: 9773 feet, MD: 20184 feet)

BHL: SWSE / 200 FSL / 2090 FEL / TWSP: 26S / RANGE: 27E / SECTION: 4 / LAT: 32.0648 / LONG: -104.193705 (TVD: 9777 feet, MD: 25430 feet)

CONFIDENTIAL

SEC28-T25S-R27E_FLAMING SNAIL FED COM_Eddy__CONOCOPHILLIPS COMPANY_45670_JS

FLAMING SNAIL FED COM

13 3/8		surface csg in a		17 1/2		inch hole.		Design Factors				Surface		
Segment	#/ft	Grade		Coupling		Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	54.50			J 55	BTC		36.41	5.75	2.53	430	15	4.38	11.08	23,435
"B"					BTC						0			0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500					Tail Cmt		does not	circ to sfc.		Totals:	430			23,435
Comparison of Proposed to Minimum Required Cement Volumes														
Hole Size	Annular Volume	1 Stage Cmt Sx		1 Stage CuFt Cmt		Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
17 1/2	0.6946	510		790		299	164	8.80	623	2M				1.56

Proposed						Design Factors			Int 1			
9 5/8	casing inside the	13 3/8										
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	40.00	L 80	BTC	11.01	2.86	1.2	2,080	5	2.09	4.96	83,200	
"B"							0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500							Totals:	2,080			83,200	
The cement volume(s) are intended to achieve a top of				0	ft from surface or a		430				overlap.	
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg	
12 1/4	0.3132	600	894	673	33	10.00	2751	3M			0.81	
D V Tool(s):							sum of sx	Σ CuFt			Σ%excess	
t by stage % :							#VALUE!	#VALUE!	600	894		33
Class 'H' tail cmt yld > 1.20												

7 5/8		Liner w/top @		1880		Design Factors				Liner			
Segment	#/ft	Grade		Coupling		Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	P 110		W-513		2.60	1.12	1.33	7,307	2	1.90	1.94	217,018
"B"				0.00					0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,021									Totals:		7,307		217,018
The cement volume(s) are intended to achieve a top of						4020	ft from surface or a		-1940		overlap.		
Hole	Annular	1 Stage		1 Stage		Min	1 Stage	Drilling	Calc			Min Dist	
Size	Volume	Cmt Sx		CuFt Cmt		Cu Ft	% Excess	Mud Wt	MASP			BOPE	Hole-Cplg
8 3/4	0.1005	290		782		519	51	10.00	4971			5M	0.56
Class 'C' tail cmt yld > 1.35				MASP is within 10% of 5000psig, need exrta equip?									
Keep Casing Full,													

Tail cmt		casing inside the		7 5/8		Design Factors				Prod 1			
Segment	#/ft	Grade		Coupling		Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	23.00	P 110		BTC		3.21	2.22	1.73	8,987	2	2.49	3.19	206,701
"B"	23.00	P 110		W-441		7.41	1.87	2.04	16,101	2	2.92	2.92	370,323
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,977									Totals:	25,088	577,024		
The cement volume(s) are intended to achieve a top of						8987	ft from surface or a		200			overlap.	
Hole Size	Annular Volume	1 Stage Cmt Sx		1 Stage CuFt Cmt		Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE		Min Dist Hole-Cplg	
6 3/4	0.0835	1630		2243		1347	67	14.00				0.43	
Class 'H' tail cmt yld > 1.20				Capitan Reef est top XXXX.				MASP is within 10% of 5000psig, need exrta equip?					

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CONOCOPHILLIPS COMPANY
WELL NAME & NO.:	FLAMING SNAIL FED COM 805H
SURFACE HOLE FOOTAGE:	557'N & 1619'/W
BOTTOM HOLE FOOTAGE:	200'S & 1880'/W
LOCATION:	Section 28 T.25 S., R.27 E., NMP
COUNTY:	Eddy County, New Mexico

All other COAs still apply.

Contingency Casing Design:

1. The **13-3/8** inch surface casing shall be set at approximately **350 feet per BLM Geologist** (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) 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 or potash.
 - ❖ 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. **Keep casing full during run for collapse safety factor.** The minimum required fill of cement behind the **7-5/8** inch intermediate liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

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

4. 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.
 - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system)

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

BOPE Break Testing Variance

Initial and 21 Day Testing of 10K BOP's:

Component	High Test Pressure	Low Test Pressure	Duration
Annular Preventer	5,000 psig	250 psig	10 min
Rams	5,000 psig	250 psig	10 min
Manifold	5,000 psig	250 psig	10 min
Wellhead	1,500 psig	-	10 min
Upper / Lower / Kelly Valves	5,000 psig	250 psig	10 min
TIW safety valves / Dart	5,000 psig	250 psig	10 min
Standpipe and mud line to pumps	5,000 psig	250 psig	10 min
Surface Casing (with 8.4 ppg fluid)	1,500 psig	-	30 min

*Equipment satisfies 10M BOPE but break test variance applies to 5M system

COG Production LLC formally requests variance from the minimum standards for well control equipment testing of Onshore Order No. 2 (item III.A.2.a.i) to allow break/shell testing of blowout preventor (BOP) and blowout prevention equipment (BOPE) during batch drilling operations of the intermediate hole section. This variance only applies to 5M BOPE or less formation.

Initial testing of the BOP will be conducted, verifying all components of BOP, BOPE, and choke manifold meet the minimum and maximum anticipated surface pressure (MASP) in accordance with API RP 53 and Onshore Order No. 2, reference table above. Once initial test pressures are achieved, shell testing of the BOP and choke manifold would be conducted within the time limit from initial test to the congruent 21-day test. A complete pressure test of the BOPE components will be completed no later than 21 days following the completion of the initial pressure test or latest complete BOP pressure test date succeeding the initial test, per API RP 53 (6.5.3.4.1 (d)).

BOP and BOPE Testing

- Minimum of Class 3 stack arrangement with one set of blind/blind shear rams and pipe rams shall be installed for a 5K pressure rated system per API RP 53 (6.1.2.9)
 - Classification - COP minimum of Class 3 arrangement apply for all Delaware Basin area wells.
 - Arrangement - Annular preventer, upper pipe rams, blind rams, mud cross, lower pipe rams
- Complete BOP and BOPE test performed at initial installation on well pad.
 - Initial test performed on well with deepest planned intermediate hole section (allowable 200' TVD variance between intermediate hole sections)
 - Annular preventer tested to 100 percent of MASP, or 70 percent of rated working pressure (RWP), whichever is greater.
 - Notify BLM 4 Hrs. prior to testing
- Complete BOP and BOPE test every 21 days in accordance with API RP 53 (6.5.3.4.1 (d)).
- BOP/BOPE shell test (inclusive of manifold shell test) performed during batch drilling operations during rig transition between wells (within the 21-day time limit per API RP 53).
- Function test BOP elements per API RP 53 (6.5.3.1).
 - Required on (1) initial installation of stack, (2) every 7 days, (3) after repair/replacement of any control components
 - Alternate between drillers panel and remote panel

Securing the Wellhead

- Prior to moving rig off check for flow
 - Ensure floats are holding, casing is full of kill mud and backside is static.
- Secure the well with sleeve/plug with BPV
- Disconnect BOP from the wellhead and walk with the rig to another well on the pad.
 - Utilizing BOP wrangler/cradle, maintaining control and upright position of the BOP during movement
- Once BOP is separated from wellhead the Temporary Abandonment (TA) cap will be installed per Wellhead vendor procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.
- Test TA cap to 5,000 psi for 10 min.

COG Production LLC believes that the combination of drilling fluid inside the casing, abandonment plug with BPV, casing and annular valves and the TA cap provide multiple barriers to ensure complete closure of the wellbore prior to skidding/walking the rig.

Break Testing

- Skid rig over the next well on pad and center over wellhead, N/U BOP with the use of the BOP quick connect.
- Shell test the BOP and choke manifold to 5,000 psig and 250 psig. Hold each test for 10 minutes.
 - In accordance with API RP 53 (6.5.3.4.1(b)) BOP shell test will satisfy pressure test of quick connect seals
 - Notify BLM 4 hours prior to testing
- RWP of BOP quick connect is 10K (Certificate of Conformance attached)

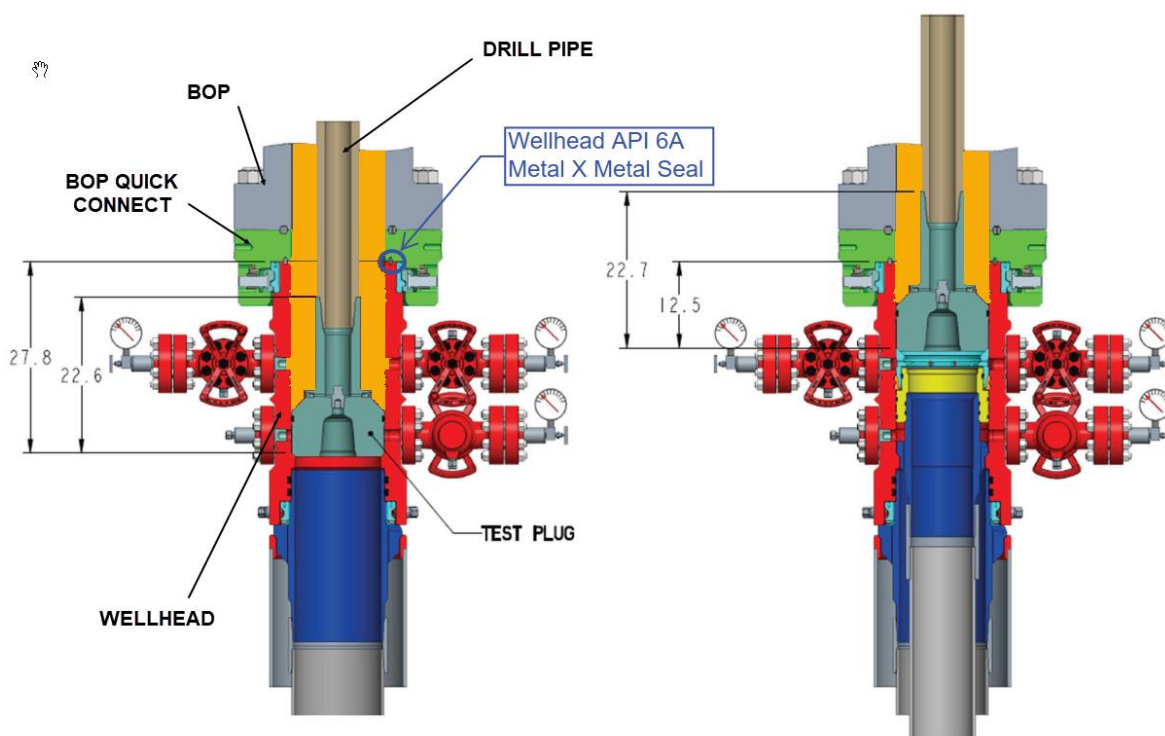


Figure 1: Test plug installed (The orange sections above indicate the areas exposed to the pressure test)

Example Well Control Plan Content

A. Well Control Component Table

This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the BOP nipped up to the wellhead.

Intermediate hole section, 5M requirement

Component	RWP
Pack-off	10M
Casing Wellhead Valves	10M
Annular Wellhead Valves	5M
TA Plug	10M
Float Valves	5M
2" 1502 Lo-Torque Valves	10M

B. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while circulating.

General Procedure

1. Sound alarm (alert crew).
2. Shut down pumps.
3. Shut-in Well (close valves to rig pits and open valve to rig choke line. Rig choke will already be in the closed position).
4. Confirm shut in.
5. Notify tool pusher/company representative.
6. Read and record the following:
 - a. SICP (Shut in Casing Pressure) and AP (Annular Pressure)
 - b. Pit gain
 - c. Time
 - d. Regroup and identify forward plan to continue circulating out kick via rig choke and mud/gas separator. Circulate and adjust mud density as needed to control well.

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

WELL LOCATION INFORMATION

API Number 30-015-54668	Pool Code 98220	Pool Name Purple Sage; Wolfcamp (Gas)
Property Code 333880	Property Name FLAMING SNAIL FEDERAL COM	Well Number 803H
OGRID No. 229137	Operator Name COG OPERATING LLC	Ground Level Elevation 3124.7'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	28	25-S	27-E		505 FNL	1035 FEL	32.106967°N	104.189811°W	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
0	4	26-S	27-E		200 FSL	1993 FEL	32.064790°N	104.193392°W	EDDY

Dedicated Acres 1950	Infill or Defining Well Infill	Defining Well API 30-015-54649	Overlapping Spacing Unit (Y/N)	Consolidation Code Com
Order Numbers.			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	28	25-S	27-E		505 FNL	1035 FEL	32.106967°N	104.189811°W	EDDY

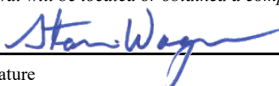
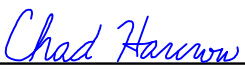
First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	28	25-S	27-E		330 FNL	1993 FEL	32.107405°N	104.192913°W	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
0	4	26-S	27-E		330 FSL	1993 FEL	32.065148°N	104.193388°W	EDDY

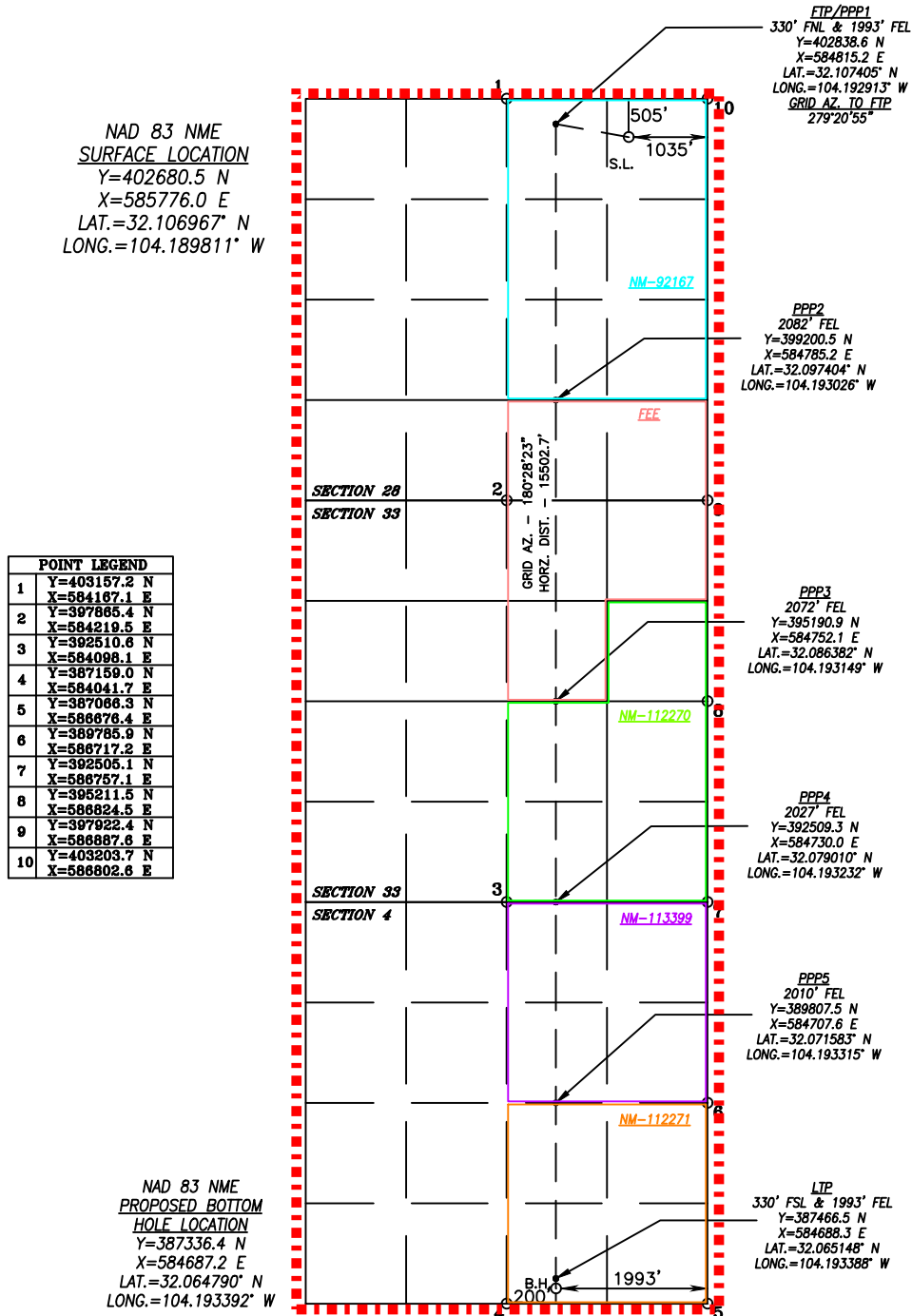
Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation
---	--	------------------------

OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i>		SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>	
 Signature Date		 Signature and Seal of Professional Surveyor	
Printed Name Stan Wagner		Certificate Number 17777	
Email Address		Date of Survey MAY 3, 2022	
		W.O.#24-1033 DRAWN BY: WN PAGE 1 OF 2	

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

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

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



DELAWARE BASIN WEST

ATLAS PROSPECT (DBW)

FLAMING SNAIL FED COM PROJECT

FLAMING SNAIL FEDERAL COM 803H

OWB

Plan: PWP0

Standard Planning Report

11 November, 2024

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project	ATLAS PROSPECT (DBW)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Well	FLAMING SNAIL FEDERAL COM 803H			
Well Position	+N/-S	0.0 usft	Northing:	402,623.10 usft
	+E/-W	0.0 usft	Easting:	544,592.50 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft
Grid Convergence:		0.08 °		
			Latitude:	32° 6' 24.643 N
			Longitude:	104° 11' 21.541 W
			Ground Level:	3,124.7 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	12/1/2023	6.78	59.68	47,317.56958837

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	184.06

Plan Survey Tool Program	Date	11/11/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	25,250.5 PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR	
			OWSG MWD + IFR1 + SAG +	

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	10.00	282.40	1,997.5	9.3	-42.5	2.00	2.00	0.00	282.40	
2,600.0	10.00	282.40	2,588.4	31.7	-144.3	0.00	0.00	0.00	0.00	
2,836.5	14.73	281.91	2,819.3	42.3	-193.8	2.00	2.00	-0.21	-1.50	
5,136.1	14.73	281.91	5,043.4	163.0	-765.8	0.00	0.00	0.00	0.00	
6,608.9	0.00	0.00	6,500.0	201.9	-950.0	1.00	-1.00	0.00	180.00	
9,431.4	0.00	0.00	9,322.5	201.9	-950.0	0.00	0.00	0.00	0.00	
10,181.4	90.00	180.51	9,800.0	-275.5	-954.2	12.00	12.00	0.00	180.51	
10,781.4	90.00	180.51	9,800.0	-875.5	-959.6	0.00	0.00	0.00	0.00	
11,032.4	90.00	178.00	9,800.0	-1,126.5	-956.3	1.00	0.00	-1.00	-90.00	
11,442.4	90.00	182.10	9,800.0	-1,536.4	-956.7	1.00	0.00	1.00	90.00	
11,742.4	90.00	182.10	9,800.0	-1,836.2	-967.7	0.00	0.00	0.00	0.00	
11,901.9	90.00	180.51	9,800.0	-1,995.6	-971.3	1.00	0.00	-1.00	-90.01	
25,250.5	90.00	180.51	9,800.0	-15,343.7	-1,089.0	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	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
Start Build 2.00									
1,600.0	2.00	282.40	1,600.0	0.4	-1.7	-0.3	2.00	2.00	0.00
1,700.0	4.00	282.40	1,699.8	1.5	-6.8	-1.0	2.00	2.00	0.00
1,800.0	6.00	282.40	1,799.5	3.4	-15.3	-2.3	2.00	2.00	0.00
1,900.0	8.00	282.40	1,898.7	6.0	-27.2	-4.0	2.00	2.00	0.00
2,000.0	10.00	282.40	1,997.5	9.3	-42.5	-6.3	2.00	2.00	0.00
Start 600.0 hold at 2000.0 MD									
2,100.0	10.00	282.40	2,095.9	13.1	-59.5	-8.8	0.00	0.00	0.00
2,200.0	10.00	282.40	2,194.4	16.8	-76.4	-11.4	0.00	0.00	0.00
2,300.0	10.00	282.40	2,292.9	20.5	-93.4	-13.9	0.00	0.00	0.00
2,400.0	10.00	282.40	2,391.4	24.3	-110.3	-16.4	0.00	0.00	0.00
2,500.0	10.00	282.40	2,489.9	28.0	-127.3	-18.9	0.00	0.00	0.00
2,600.0	10.00	282.40	2,588.4	31.7	-144.3	-21.4	0.00	0.00	0.00
Start DLS 2.00 TFO -1.50									
2,700.0	12.00	282.15	2,686.5	35.8	-162.9	-24.1	2.00	2.00	-0.25
2,800.0	14.00	281.97	2,783.9	40.5	-184.9	-27.3	2.00	2.00	-0.18
2,836.5	14.73	281.91	2,819.3	42.3	-193.8	-28.5	2.00	2.00	-0.15
Start 2299.7 hold at 2836.5 MD									
2,900.0	14.73	281.91	2,880.7	45.7	-209.6	-30.7	0.00	0.00	0.00
3,000.0	14.73	281.91	2,977.4	50.9	-234.4	-34.2	0.00	0.00	0.00
3,100.0	14.73	281.91	3,074.1	56.2	-259.3	-37.7	0.00	0.00	0.00
3,200.0	14.73	281.91	3,170.9	61.4	-284.2	-41.1	0.00	0.00	0.00
3,300.0	14.73	281.91	3,267.6	66.7	-309.1	-44.6	0.00	0.00	0.00
3,400.0	14.73	281.91	3,364.3	71.9	-333.9	-48.1	0.00	0.00	0.00
3,500.0	14.73	281.91	3,461.0	77.2	-358.8	-51.6	0.00	0.00	0.00
3,600.0	14.73	281.91	3,557.7	82.4	-383.7	-55.0	0.00	0.00	0.00
3,700.0	14.73	281.91	3,654.4	87.7	-408.6	-58.5	0.00	0.00	0.00
3,800.0	14.73	281.91	3,751.1	92.9	-433.4	-62.0	0.00	0.00	0.00
3,900.0	14.73	281.91	3,847.9	98.2	-458.3	-65.5	0.00	0.00	0.00
4,000.0	14.73	281.91	3,944.6	103.4	-483.2	-68.9	0.00	0.00	0.00
4,100.0	14.73	281.91	4,041.3	108.7	-508.1	-72.4	0.00	0.00	0.00
4,200.0	14.73	281.91	4,138.0	113.9	-532.9	-75.9	0.00	0.00	0.00
4,300.0	14.73	281.91	4,234.7	119.2	-557.8	-79.4	0.00	0.00	0.00
4,400.0	14.73	281.91	4,331.4	124.4	-582.7	-82.8	0.00	0.00	0.00
4,500.0	14.73	281.91	4,428.1	129.6	-607.6	-86.3	0.00	0.00	0.00
4,600.0	14.73	281.91	4,524.9	134.9	-632.4	-89.8	0.00	0.00	0.00
4,700.0	14.73	281.91	4,621.6	140.1	-657.3	-93.3	0.00	0.00	0.00
4,800.0	14.73	281.91	4,718.3	145.4	-682.2	-96.7	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	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)
4,900.0	14.73	281.91	4,815.0	150.6	-707.1	-100.2	0.00	0.00	0.00
5,000.0	14.73	281.91	4,911.7	155.9	-731.9	-103.7	0.00	0.00	0.00
5,100.0	14.73	281.91	5,008.4	161.1	-756.8	-107.2	0.00	0.00	0.00
5,136.1	14.73	281.91	5,043.4	163.0	-765.8	-108.4	0.00	0.00	0.00
Start Drop -1.00									
5,200.0	14.09	281.91	5,105.2	166.3	-781.4	-110.6	1.00	-1.00	0.00
5,300.0	13.09	281.91	5,202.4	171.2	-804.3	-113.8	1.00	-1.00	0.00
5,400.0	12.09	281.91	5,300.0	175.7	-825.7	-116.8	1.00	-1.00	0.00
5,500.0	11.09	281.91	5,398.0	179.8	-845.3	-119.5	1.00	-1.00	0.00
5,600.0	10.09	281.91	5,496.3	183.6	-863.3	-122.0	1.00	-1.00	0.00
5,700.0	9.09	281.91	5,594.9	187.0	-879.6	-124.3	1.00	-1.00	0.00
5,800.0	8.09	281.91	5,693.8	190.1	-894.2	-126.3	1.00	-1.00	0.00
5,900.0	7.09	281.91	5,792.9	192.9	-907.1	-128.2	1.00	-1.00	0.00
6,000.0	6.09	281.91	5,892.2	195.2	-918.4	-129.7	1.00	-1.00	0.00
6,100.0	5.09	281.91	5,991.7	197.2	-927.9	-131.1	1.00	-1.00	0.00
6,200.0	4.09	281.91	6,091.4	198.9	-935.7	-132.1	1.00	-1.00	0.00
6,300.0	3.09	281.91	6,191.2	200.2	-941.9	-133.0	1.00	-1.00	0.00
6,400.0	2.09	281.91	6,291.1	201.1	-946.3	-133.6	1.00	-1.00	0.00
6,500.0	1.09	281.91	6,391.1	201.7	-949.0	-134.0	1.00	-1.00	0.00
6,608.9	0.00	0.00	6,500.0	201.9	-950.0	-134.1	1.00	-1.00	71.69
Start 2822.5 hold at 6608.9 MD									
6,700.0	0.00	0.00	6,591.1	201.9	-950.0	-134.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,691.1	201.9	-950.0	-134.1	0.00	0.00	0.00
6,900.0	0.00	0.00	6,791.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,000.0	0.00	0.00	6,891.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,100.0	0.00	0.00	6,991.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,200.0	0.00	0.00	7,091.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,300.0	0.00	0.00	7,191.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,400.0	0.00	0.00	7,291.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,500.0	0.00	0.00	7,391.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,491.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,700.0	0.00	0.00	7,591.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,800.0	0.00	0.00	7,691.1	201.9	-950.0	-134.1	0.00	0.00	0.00
7,900.0	0.00	0.00	7,791.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,000.0	0.00	0.00	7,891.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,100.0	0.00	0.00	7,991.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,200.0	0.00	0.00	8,091.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,191.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,400.0	0.00	0.00	8,291.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,391.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,600.0	0.00	0.00	8,491.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,700.0	0.00	0.00	8,591.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,800.0	0.00	0.00	8,691.1	201.9	-950.0	-134.1	0.00	0.00	0.00
8,900.0	0.00	0.00	8,791.1	201.9	-950.0	-134.1	0.00	0.00	0.00
9,000.0	0.00	0.00	8,891.1	201.9	-950.0	-134.1	0.00	0.00	0.00
9,100.0	0.00	0.00	8,991.1	201.9	-950.0	-134.1	0.00	0.00	0.00
9,200.0	0.00	0.00	9,091.1	201.9	-950.0	-134.1	0.00	0.00	0.00
9,300.0	0.00	0.00	9,191.1	201.9	-950.0	-134.1	0.00	0.00	0.00
9,400.0	0.00	0.00	9,291.1	201.9	-950.0	-134.1	0.00	0.00	0.00
9,431.4	0.00	0.00	9,322.5	201.9	-950.0	-134.1	0.00	0.00	0.00
Start Build 12.00									
9,450.0	2.23	180.51	9,341.1	201.5	-950.0	-133.8	12.00	12.00	0.00
9,475.0	5.23	180.51	9,366.0	199.9	-950.0	-132.2	12.00	12.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	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)
9,500.0	8.23	180.51	9,390.8	197.0	-950.0	-129.2	12.00	12.00	0.00
9,525.0	11.23	180.51	9,415.5	192.8	-950.1	-125.0	12.00	12.00	0.00
9,550.0	14.23	180.51	9,439.9	187.3	-950.1	-119.5	12.00	12.00	0.00
9,575.0	17.23	180.51	9,463.9	180.5	-950.2	-112.8	12.00	12.00	0.00
9,600.0	20.23	180.51	9,487.6	172.4	-950.3	-104.7	12.00	12.00	0.00
9,625.0	23.23	180.51	9,510.8	163.2	-950.3	-95.5	12.00	12.00	0.00
9,650.0	26.23	180.51	9,533.5	152.7	-950.4	-85.1	12.00	12.00	0.00
9,675.0	29.23	180.51	9,555.6	141.1	-950.5	-73.5	12.00	12.00	0.00
9,700.0	32.23	180.51	9,577.1	128.3	-950.7	-60.7	12.00	12.00	0.00
9,725.0	35.23	180.51	9,597.9	114.5	-950.8	-46.9	12.00	12.00	0.00
9,750.0	38.23	180.51	9,618.0	99.5	-950.9	-31.9	12.00	12.00	0.00
9,775.0	41.23	180.51	9,637.2	83.5	-951.1	-16.0	12.00	12.00	0.00
9,800.0	44.23	180.51	9,655.5	66.6	-951.2	0.9	12.00	12.00	0.00
9,825.0	47.23	180.51	9,673.0	48.7	-951.4	18.8	12.00	12.00	0.00
9,850.0	50.23	180.51	9,689.5	29.9	-951.5	37.6	12.00	12.00	0.00
9,875.0	53.23	180.51	9,705.0	10.3	-951.7	57.1	12.00	12.00	0.00
9,900.0	56.23	180.51	9,719.4	-10.1	-951.9	77.5	12.00	12.00	0.00
9,925.0	59.23	180.51	9,732.7	-31.3	-952.1	98.6	12.00	12.00	0.00
9,950.0	62.23	180.51	9,745.0	-53.1	-952.3	120.4	12.00	12.00	0.00
9,975.0	65.23	180.51	9,756.0	-75.5	-952.5	142.7	12.00	12.00	0.00
10,000.0	68.23	180.51	9,765.9	-98.5	-952.7	165.7	12.00	12.00	0.00
10,025.0	71.23	180.51	9,774.6	-121.9	-952.9	189.1	12.00	12.00	0.00
10,050.0	74.23	180.51	9,782.0	-145.8	-953.1	212.9	12.00	12.00	0.00
10,075.0	77.23	180.51	9,788.2	-170.0	-953.3	237.1	12.00	12.00	0.00
10,100.0	80.23	180.51	9,793.0	-194.5	-953.5	261.5	12.00	12.00	0.00
10,125.0	83.23	180.51	9,796.6	-219.3	-953.7	286.2	12.00	12.00	0.00
10,150.0	86.23	180.51	9,798.9	-244.1	-954.0	311.1	12.00	12.00	0.00
10,175.0	89.23	180.51	9,799.9	-269.1	-954.2	336.0	12.00	12.00	0.00
10,181.4	90.00	180.51	9,800.0	-275.5	-954.2	342.4	12.00	12.00	0.00
Start 600.0 hold at 10181.4 MD									
10,200.0	90.00	180.51	9,800.0	-294.1	-954.4	361.0	0.00	0.00	0.00
10,300.0	90.00	180.51	9,800.0	-394.1	-955.3	460.8	0.00	0.00	0.00
10,400.0	90.00	180.51	9,800.0	-494.1	-956.2	560.6	0.00	0.00	0.00
10,500.0	90.00	180.51	9,800.0	-594.1	-957.1	660.4	0.00	0.00	0.00
10,600.0	90.00	180.51	9,800.0	-694.1	-958.0	760.2	0.00	0.00	0.00
10,700.0	90.00	180.51	9,800.0	-794.1	-958.9	860.0	0.00	0.00	0.00
10,781.4	90.00	180.51	9,800.0	-875.5	-959.6	941.3	0.00	0.00	0.00
Start DLS 1.00 TFO -90.00									
10,800.0	90.00	180.32	9,800.0	-894.1	-959.7	959.8	1.00	0.00	-1.00
10,900.0	90.00	179.32	9,800.0	-994.1	-959.4	1,059.5	1.00	0.00	-1.00
11,000.0	90.00	178.32	9,800.0	-1,094.1	-957.4	1,159.1	1.00	0.00	-1.00
11,032.4	90.00	178.00	9,800.0	-1,126.5	-956.3	1,191.4	1.00	0.00	-1.00
Start Turn 1.00									
11,100.0	90.00	178.68	9,800.0	-1,194.0	-954.4	1,258.6	1.00	0.00	1.00
11,200.0	90.00	179.68	9,800.0	-1,294.0	-952.9	1,358.2	1.00	0.00	1.00
11,300.0	90.00	180.68	9,800.0	-1,394.0	-953.2	1,458.0	1.00	0.00	1.00
11,400.0	90.00	181.68	9,800.0	-1,494.0	-955.3	1,557.9	1.00	0.00	1.00
11,442.4	90.00	182.10	9,800.0	-1,536.4	-956.7	1,600.3	1.00	0.00	1.00
Start 300.0 hold at 11442.4 MD									
11,500.0	90.00	182.10	9,800.0	-1,593.9	-958.8	1,657.8	0.00	0.00	0.00
11,600.0	90.00	182.10	9,800.0	-1,693.9	-962.5	1,757.8	0.00	0.00	0.00
11,700.0	90.00	182.10	9,800.0	-1,793.8	-966.1	1,857.7	0.00	0.00	0.00
11,742.4	90.00	182.10	9,800.0	-1,836.2	-967.7	1,900.1	0.00	0.00	0.00
Start DLS 1.00 TFO -90.01									

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	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)
11,800.0	90.00	181.52	9,800.0	-1,893.7	-969.5	1,957.6	1.00	0.00	-1.00
11,901.9	90.00	180.51	9,800.0	-1,995.6	-971.3	2,059.4	1.00	0.00	-1.00
Start 13348.6 hold at 11901.9 MD									
12,000.0	90.00	180.51	9,800.0	-2,093.7	-972.2	2,157.3	0.00	0.00	0.00
12,100.0	90.00	180.51	9,800.0	-2,193.7	-973.1	2,257.1	0.00	0.00	0.00
12,200.0	90.00	180.51	9,800.0	-2,293.7	-973.9	2,356.9	0.00	0.00	0.00
12,300.0	90.00	180.51	9,800.0	-2,393.7	-974.8	2,456.7	0.00	0.00	0.00
12,400.0	90.00	180.51	9,800.0	-2,493.7	-975.7	2,556.5	0.00	0.00	0.00
12,500.0	90.00	180.51	9,800.0	-2,593.7	-976.6	2,656.3	0.00	0.00	0.00
12,600.0	90.00	180.51	9,800.0	-2,693.7	-977.5	2,756.1	0.00	0.00	0.00
12,700.0	90.00	180.51	9,800.0	-2,793.7	-978.3	2,855.9	0.00	0.00	0.00
12,800.0	90.00	180.51	9,800.0	-2,893.7	-979.2	2,955.8	0.00	0.00	0.00
12,900.0	90.00	180.51	9,800.0	-2,993.7	-980.1	3,055.6	0.00	0.00	0.00
13,000.0	90.00	180.51	9,800.0	-3,093.7	-981.0	3,155.4	0.00	0.00	0.00
13,100.0	90.00	180.51	9,800.0	-3,193.7	-981.9	3,255.2	0.00	0.00	0.00
13,200.0	90.00	180.51	9,800.0	-3,293.7	-982.7	3,355.0	0.00	0.00	0.00
13,300.0	90.00	180.51	9,800.0	-3,393.7	-983.6	3,454.8	0.00	0.00	0.00
13,400.0	90.00	180.51	9,800.0	-3,493.7	-984.5	3,554.6	0.00	0.00	0.00
13,500.0	90.00	180.51	9,800.0	-3,593.7	-985.4	3,654.4	0.00	0.00	0.00
13,600.0	90.00	180.51	9,800.0	-3,693.7	-986.3	3,754.2	0.00	0.00	0.00
13,700.0	90.00	180.51	9,800.0	-3,793.7	-987.2	3,854.0	0.00	0.00	0.00
13,800.0	90.00	180.51	9,800.0	-3,893.6	-988.0	3,953.8	0.00	0.00	0.00
13,900.0	90.00	180.51	9,800.0	-3,993.6	-988.9	4,053.6	0.00	0.00	0.00
14,000.0	90.00	180.51	9,800.0	-4,093.6	-989.8	4,153.4	0.00	0.00	0.00
14,100.0	90.00	180.51	9,800.0	-4,193.6	-990.7	4,253.3	0.00	0.00	0.00
14,200.0	90.00	180.51	9,800.0	-4,293.6	-991.6	4,353.1	0.00	0.00	0.00
14,300.0	90.00	180.51	9,800.0	-4,393.6	-992.4	4,452.9	0.00	0.00	0.00
14,400.0	90.00	180.51	9,800.0	-4,493.6	-993.3	4,552.7	0.00	0.00	0.00
14,500.0	90.00	180.51	9,800.0	-4,593.6	-994.2	4,652.5	0.00	0.00	0.00
14,600.0	90.00	180.51	9,800.0	-4,693.6	-995.1	4,752.3	0.00	0.00	0.00
14,700.0	90.00	180.51	9,800.0	-4,793.6	-996.0	4,852.1	0.00	0.00	0.00
14,800.0	90.00	180.51	9,800.0	-4,893.6	-996.9	4,951.9	0.00	0.00	0.00
14,900.0	90.00	180.51	9,800.0	-4,993.6	-997.7	5,051.7	0.00	0.00	0.00
15,000.0	90.00	180.51	9,800.0	-5,093.6	-998.6	5,151.5	0.00	0.00	0.00
15,100.0	90.00	180.51	9,800.0	-5,193.6	-999.5	5,251.3	0.00	0.00	0.00
15,200.0	90.00	180.51	9,800.0	-5,293.6	-1,000.4	5,351.1	0.00	0.00	0.00
15,300.0	90.00	180.51	9,800.0	-5,393.6	-1,001.3	5,450.9	0.00	0.00	0.00
15,400.0	90.00	180.51	9,800.0	-5,493.6	-1,002.1	5,550.7	0.00	0.00	0.00
15,500.0	90.00	180.51	9,800.0	-5,593.6	-1,003.0	5,650.6	0.00	0.00	0.00
15,600.0	90.00	180.51	9,800.0	-5,693.6	-1,003.9	5,750.4	0.00	0.00	0.00
15,700.0	90.00	180.51	9,800.0	-5,793.6	-1,004.8	5,850.2	0.00	0.00	0.00
15,800.0	90.00	180.51	9,800.0	-5,893.6	-1,005.7	5,950.0	0.00	0.00	0.00
15,900.0	90.00	180.51	9,800.0	-5,993.6	-1,006.6	6,049.8	0.00	0.00	0.00
16,000.0	90.00	180.51	9,800.0	-6,093.6	-1,007.4	6,149.6	0.00	0.00	0.00
16,100.0	90.00	180.51	9,800.0	-6,193.6	-1,008.3	6,249.4	0.00	0.00	0.00
16,200.0	90.00	180.51	9,800.0	-6,293.6	-1,009.2	6,349.2	0.00	0.00	0.00
16,300.0	90.00	180.51	9,800.0	-6,393.6	-1,010.1	6,449.0	0.00	0.00	0.00
16,400.0	90.00	180.51	9,800.0	-6,493.5	-1,011.0	6,548.8	0.00	0.00	0.00
16,500.0	90.00	180.51	9,800.0	-6,593.5	-1,011.8	6,648.6	0.00	0.00	0.00
16,600.0	90.00	180.51	9,800.0	-6,693.5	-1,012.7	6,748.4	0.00	0.00	0.00
16,700.0	90.00	180.51	9,800.0	-6,793.5	-1,013.6	6,848.2	0.00	0.00	0.00
16,800.0	90.00	180.51	9,800.0	-6,893.5	-1,014.5	6,948.1	0.00	0.00	0.00
16,900.0	90.00	180.51	9,800.0	-6,993.5	-1,015.4	7,047.9	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	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)	
17,000.0	90.00	180.51	9,800.0	-7,093.5	-1,016.3	7,147.7	0.00	0.00	0.00	
17,100.0	90.00	180.51	9,800.0	-7,193.5	-1,017.1	7,247.5	0.00	0.00	0.00	
17,200.0	90.00	180.51	9,800.0	-7,293.5	-1,018.0	7,347.3	0.00	0.00	0.00	
17,300.0	90.00	180.51	9,800.0	-7,393.5	-1,018.9	7,447.1	0.00	0.00	0.00	
17,400.0	90.00	180.51	9,800.0	-7,493.5	-1,019.8	7,546.9	0.00	0.00	0.00	
17,500.0	90.00	180.51	9,800.0	-7,593.5	-1,020.7	7,646.7	0.00	0.00	0.00	
17,600.0	90.00	180.51	9,800.0	-7,693.5	-1,021.5	7,746.5	0.00	0.00	0.00	
17,700.0	90.00	180.51	9,800.0	-7,793.5	-1,022.4	7,846.3	0.00	0.00	0.00	
17,800.0	90.00	180.51	9,800.0	-7,893.5	-1,023.3	7,946.1	0.00	0.00	0.00	
17,900.0	90.00	180.51	9,800.0	-7,993.5	-1,024.2	8,045.9	0.00	0.00	0.00	
18,000.0	90.00	180.51	9,800.0	-8,093.5	-1,025.1	8,145.7	0.00	0.00	0.00	
18,100.0	90.00	180.51	9,800.0	-8,193.5	-1,026.0	8,245.6	0.00	0.00	0.00	
18,200.0	90.00	180.51	9,800.0	-8,293.5	-1,026.8	8,345.4	0.00	0.00	0.00	
18,300.0	90.00	180.51	9,800.0	-8,393.5	-1,027.7	8,445.2	0.00	0.00	0.00	
18,400.0	90.00	180.51	9,800.0	-8,493.5	-1,028.6	8,545.0	0.00	0.00	0.00	
18,500.0	90.00	180.51	9,800.0	-8,593.5	-1,029.5	8,644.8	0.00	0.00	0.00	
18,600.0	90.00	180.51	9,800.0	-8,693.5	-1,030.4	8,744.6	0.00	0.00	0.00	
18,700.0	90.00	180.51	9,800.0	-8,793.5	-1,031.2	8,844.4	0.00	0.00	0.00	
18,800.0	90.00	180.51	9,800.0	-8,893.5	-1,032.1	8,944.2	0.00	0.00	0.00	
18,900.0	90.00	180.51	9,800.0	-8,993.4	-1,033.0	9,044.0	0.00	0.00	0.00	
19,000.0	90.00	180.51	9,800.0	-9,093.4	-1,033.9	9,143.8	0.00	0.00	0.00	
19,100.0	90.00	180.51	9,800.0	-9,193.4	-1,034.8	9,243.6	0.00	0.00	0.00	
19,200.0	90.00	180.51	9,800.0	-9,293.4	-1,035.7	9,343.4	0.00	0.00	0.00	
19,300.0	90.00	180.51	9,800.0	-9,393.4	-1,036.5	9,443.2	0.00	0.00	0.00	
19,400.0	90.00	180.51	9,800.0	-9,493.4	-1,037.4	9,543.1	0.00	0.00	0.00	
19,500.0	90.00	180.51	9,800.0	-9,593.4	-1,038.3	9,642.9	0.00	0.00	0.00	
19,600.0	90.00	180.51	9,800.0	-9,693.4	-1,039.2	9,742.7	0.00	0.00	0.00	
19,700.0	90.00	180.51	9,800.0	-9,793.4	-1,040.1	9,842.5	0.00	0.00	0.00	
19,800.0	90.00	180.51	9,800.0	-9,893.4	-1,040.9	9,942.3	0.00	0.00	0.00	
19,900.0	90.00	180.51	9,800.0	-9,993.4	-1,041.8	10,042.1	0.00	0.00	0.00	
20,000.0	90.00	180.51	9,800.0	-10,093.4	-1,042.7	10,141.9	0.00	0.00	0.00	
20,100.0	90.00	180.51	9,800.0	-10,193.4	-1,043.6	10,241.7	0.00	0.00	0.00	
20,200.0	90.00	180.51	9,800.0	-10,293.4	-1,044.5	10,341.5	0.00	0.00	0.00	
20,300.0	90.00	180.51	9,800.0	-10,393.4	-1,045.4	10,441.3	0.00	0.00	0.00	
20,400.0	90.00	180.51	9,800.0	-10,493.4	-1,046.2	10,541.1	0.00	0.00	0.00	
20,500.0	90.00	180.51	9,800.0	-10,593.4	-1,047.1	10,640.9	0.00	0.00	0.00	
20,600.0	90.00	180.51	9,800.0	-10,693.4	-1,048.0	10,740.7	0.00	0.00	0.00	
20,700.0	90.00	180.51	9,800.0	-10,793.4	-1,048.9	10,840.6	0.00	0.00	0.00	
20,800.0	90.00	180.51	9,800.0	-10,893.4	-1,049.8	10,940.4	0.00	0.00	0.00	
20,900.0	90.00	180.51	9,800.0	-10,993.4	-1,050.6	11,040.2	0.00	0.00	0.00	
21,000.0	90.00	180.51	9,800.0	-11,093.4	-1,051.5	11,140.0	0.00	0.00	0.00	
21,100.0	90.00	180.51	9,800.0	-11,193.4	-1,052.4	11,239.8	0.00	0.00	0.00	
21,200.0	90.00	180.51	9,800.0	-11,293.4	-1,053.3	11,339.6	0.00	0.00	0.00	
21,300.0	90.00	180.51	9,800.0	-11,393.4	-1,054.2	11,439.4	0.00	0.00	0.00	
21,400.0	90.00	180.51	9,800.0	-11,493.4	-1,055.0	11,539.2	0.00	0.00	0.00	
21,500.0	90.00	180.51	9,800.0	-11,593.3	-1,055.9	11,639.0	0.00	0.00	0.00	
21,600.0	90.00	180.51	9,800.0	-11,693.3	-1,056.8	11,738.8	0.00	0.00	0.00	
21,700.0	90.00	180.51	9,800.0	-11,793.3	-1,057.7	11,838.6	0.00	0.00	0.00	
21,800.0	90.00	180.51	9,800.0	-11,893.3	-1,058.6	11,938.4	0.00	0.00	0.00	
21,900.0	90.00	180.51	9,800.0	-11,993.3	-1,059.5	12,038.2	0.00	0.00	0.00	
22,000.0	90.00	180.51	9,800.0	-12,093.3	-1,060.3	12,138.1	0.00	0.00	0.00	
22,100.0	90.00	180.51	9,800.0	-12,193.3	-1,061.2	12,237.9	0.00	0.00	0.00	
22,200.0	90.00	180.51	9,800.0	-12,293.3	-1,062.1	12,337.7	0.00	0.00	0.00	
22,300.0	90.00	180.51	9,800.0	-12,393.3	-1,063.0	12,437.5	0.00	0.00	0.00	

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	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)	
22,400.0	90.00	180.51	9,800.0	-12,493.3	-1,063.9	12,537.3	0.00	0.00	0.00	
22,500.0	90.00	180.51	9,800.0	-12,593.3	-1,064.7	12,637.1	0.00	0.00	0.00	
22,600.0	90.00	180.51	9,800.0	-12,693.3	-1,065.6	12,736.9	0.00	0.00	0.00	
22,700.0	90.00	180.51	9,800.0	-12,793.3	-1,066.5	12,836.7	0.00	0.00	0.00	
22,800.0	90.00	180.51	9,800.0	-12,893.3	-1,067.4	12,936.5	0.00	0.00	0.00	
22,900.0	90.00	180.51	9,800.0	-12,993.3	-1,068.3	13,036.3	0.00	0.00	0.00	
23,000.0	90.00	180.51	9,800.0	-13,093.3	-1,069.2	13,136.1	0.00	0.00	0.00	
23,100.0	90.00	180.51	9,800.0	-13,193.3	-1,070.0	13,235.9	0.00	0.00	0.00	
23,200.0	90.00	180.51	9,800.0	-13,293.3	-1,070.9	13,335.7	0.00	0.00	0.00	
23,300.0	90.00	180.51	9,800.0	-13,393.3	-1,071.8	13,435.6	0.00	0.00	0.00	
23,400.0	90.00	180.51	9,800.0	-13,493.3	-1,072.7	13,535.4	0.00	0.00	0.00	
23,500.0	90.00	180.51	9,800.0	-13,593.3	-1,073.6	13,635.2	0.00	0.00	0.00	
23,600.0	90.00	180.51	9,800.0	-13,693.3	-1,074.4	13,735.0	0.00	0.00	0.00	
23,700.0	90.00	180.51	9,800.0	-13,793.3	-1,075.3	13,834.8	0.00	0.00	0.00	
23,800.0	90.00	180.51	9,800.0	-13,893.3	-1,076.2	13,934.6	0.00	0.00	0.00	
23,900.0	90.00	180.51	9,800.0	-13,993.3	-1,077.1	14,034.4	0.00	0.00	0.00	
24,000.0	90.00	180.51	9,800.0	-14,093.3	-1,078.0	14,134.2	0.00	0.00	0.00	
24,100.0	90.00	180.51	9,800.0	-14,193.2	-1,078.9	14,234.0	0.00	0.00	0.00	
24,200.0	90.00	180.51	9,800.0	-14,293.2	-1,079.7	14,333.8	0.00	0.00	0.00	
24,300.0	90.00	180.51	9,800.0	-14,393.2	-1,080.6	14,433.6	0.00	0.00	0.00	
24,400.0	90.00	180.51	9,800.0	-14,493.2	-1,081.5	14,533.4	0.00	0.00	0.00	
24,500.0	90.00	180.51	9,800.0	-14,593.2	-1,082.4	14,633.2	0.00	0.00	0.00	
24,600.0	90.00	180.51	9,800.0	-14,693.2	-1,083.3	14,733.1	0.00	0.00	0.00	
24,700.0	90.00	180.51	9,800.0	-14,793.2	-1,084.1	14,832.9	0.00	0.00	0.00	
24,800.0	90.00	180.51	9,800.0	-14,893.2	-1,085.0	14,932.7	0.00	0.00	0.00	
24,900.0	90.00	180.51	9,800.0	-14,993.2	-1,085.9	15,032.5	0.00	0.00	0.00	
25,000.0	90.00	180.51	9,800.0	-15,093.2	-1,086.8	15,132.3	0.00	0.00	0.00	
25,100.0	90.00	180.51	9,800.0	-15,193.2	-1,087.7	15,232.1	0.00	0.00	0.00	
25,200.0	90.00	180.51	9,800.0	-15,293.2	-1,088.6	15,331.9	0.00	0.00	0.00	
25,250.5	90.00	180.51	9,800.0	-15,343.7	-1,089.0	15,382.3	0.00	0.00	0.00	
TD at 25250.5										

Design Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting			
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude	
FTP_FLAMING SNAIL F	0.00	0.00	9,800.0	158.2	-960.6	402,781.30	543,631.87	32° 6' 26.221 N	104° 11' 32.707 W	
- plan misses target center by 167.9usft at 9826.5usft MD (9674.0 TVD, 47.6 N, -951.4 E)										
- Circle (radius 50.0)										
PBHL_FLAMING SNAIL	0.03	180.51	9,800.0	-15,343.7	-1,089.0	387,279.40	543,503.50	32° 3' 52.807 N	104° 11' 34.434 W	
- plan hits target center										
- Rectangle (sides W100.0 H15,502.2 D20.0)										
LTP_FLAMING SNAIL F	90.00	180.51	9,800.0	-15,213.7	-1,087.9	387,409.40	543,504.60	32° 3' 54.093 N	104° 11' 34.420 W	
- plan hits target center										
- Circle (radius 50.0)										

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Company:	DELAWARE BASIN WEST	TVD Reference:	KB @ 3156.7usft
Project:	ATLAS PROSPECT (DBW)	MD Reference:	KB @ 3156.7usft
Site:	FLAMING SNAIL FED COM PROJECT	North Reference:	Grid
Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
25,430.5		5-1/2" Production Casing	5-1/2	6-3/4

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	Start Build 2.00
2,000.0	1,997.5	9.3	-42.5	Start 600.0 hold at 2000.0 MD
2,600.0	2,588.4	31.7	-144.3	Start DLS 2.00 TFO -1.50
2,836.5	2,819.3	42.3	-193.8	Start 2299.7 hold at 2836.5 MD
5,136.1	5,043.4	163.0	-765.8	Start Drop -1.00
6,608.9	6,500.0	201.9	-950.0	Start 2822.5 hold at 6608.9 MD
9,431.4	9,322.5	201.9	-950.0	Start Build 12.00
10,181.4	9,800.0	-275.5	-954.2	Start 600.0 hold at 10181.4 MD
10,781.4	9,800.0	-875.5	-959.6	Start DLS 1.00 TFO -90.00
11,032.4	9,800.0	-1,126.5	-956.3	Start Turn 1.00
11,442.4	9,800.0	-1,536.4	-956.7	Start 300.0 hold at 11442.4 MD
11,742.4	9,800.0	-1,836.2	-967.7	Start DLS 1.00 TFO -90.01
11,901.9	9,800.0	-1,995.6	-971.3	Start 13348.6 hold at 11901.9 MD
25,250.5	9,800.0	-15,343.7	-1,089.0	TD at 25250.5

ConocoPhillips Company - Flaming Snail Federal Com 803H

1. Geologic Formations

TVD of target	9,800' EOL	Pilot hole depth	NA
MD at TD:	25,250'	Deepest expected fresh water:	28'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	40	Water	
Top of Salt	527	Salt	
Base of Salt	1938	Salt	
Lamar	2168	Salt Water	
Bell Canyon	2217	Salt Water	
Cherry Canyon	3017	Oil/Gas	
Brushy Canyon	4117	Oil/Gas	
Bone Spring	5704	Oil/Gas	
1st Bone Spring Sand	6637	Oil/Gas	
2nd Bone Spring Sand	7148	Oil/Gas	
3rd Bone Spring Sand	8465	Oil/Gas	
Wolfcamp	8795	Oil/Gas	
Wolfcamp C	9626	Target	
0		Not Penetrated	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
14.75"	0	380	10.75"	45.5	J55	BTC	12.02	15.44	41.35	41.35
9.875"	0	9600	8.625"	32	P110-ICY	W441	4.44	1.45	3.72	3.02
7.875"	0	9400	5.5"	23	P110-CY	BTC	3.31	2.36	3.37	3.37
7.875"	9400	25,250	5.5"	23	P110-CY	W441	3.31	2.36	3.23	2.94
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

2b. Contingency Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
17.50"	0	380	13.375"	54.5	J55	BTC	6.50	11.77	41.19	43.89
12.25"	0	2070	9.625"	40	L80-IC	BTC	3.60	1.41	11.06	11.44
8.75"	1870	9600	7.625"	29.7	P110-ICY	W513	8.18	1.80	3.75	2.25
6.75"	0	9400	5.5"	23	P110-CY	BTC	3.31	2.36	3.37	3.37
6.75"	9400	25,250	5.5"	23	P110-CY	W441	3.31	2.36	3.23	2.94
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

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

All casing strings will be tested in accordance with 43 CFR Part 3170 Subpart 3172

Contingency program will be run if large water flows are encountered.

The 5 1/2" W441 casing will be run back 200' into the intermediate casing to ensure the coupling OD clearance is greater than .422" for the cement bond tie in.

December 3, 2024

1

ConocoPhillips Company - Flaming Snail Federal Com 803H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

ConocoPhillips Company - Flaming Snail Federal Com 803H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	190	12.8	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. Stage 1	340	10.3	3.3	22	24	Halliburton tuned light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	590	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	2460	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

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

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results

Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
Production	9,100'	20% OH in Lateral (KOP to EOL)

3b. Contingency Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	230	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
Int. #1	210	12.8	1.75	9.21	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	390	14.8	1.35	6.6	8	Tail: Class C + 2% CaCl ₂
Inter. #2 (Liner)	300	10.5	3.3	22	24	Tuned light
	90	14.8	1.35	6.6	8	Tail: Class H
Prod	420	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	1190	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

Contingency program will be run if large water flows are encountered.

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
2 nd Intermediate	1,870'	20%
Production	9,350'	20% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Flaming Snail Federal Com 803H

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
Y	A variance is requested for the use of BOPE break testing on intermediate skids (in accordance with the 30 day full BOPE test requirements).

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
12-1/4" or 9-7/8"	13-5/8"	5M	Annular	x	2500psi
			Blind Ram	x	5000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		
6-3/4"	13-5/8"	10M	5M Annular	x	5000psi
			Blind Ram	x	10000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR Part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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

Y	Formation integrity test will be performed per Onshore Order #2.
Y	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 43 CFR Part 3170 Subpart 3172.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per 43 CFR Part 3170 Subpart 3172 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.

ConocoPhillips Company - Flaming Snail Federal Com 803H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.4 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	10.6 - 14	35-45	<20

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

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

5b. Contingency Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.4 - 8.8	28-34	N/C
Surf csg	9-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
9-5/8" Int shoe	7-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	10.6 - 14	35-45	<20

6. Logging and Testing Procedures

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

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

ConocoPhillips Company - Flaming Snail Federal Com 803H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	7135 psi at 9800' TVD
Abnormal Temperature	NO 155 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 43 CFR Part 3170 Subpart 3176. 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

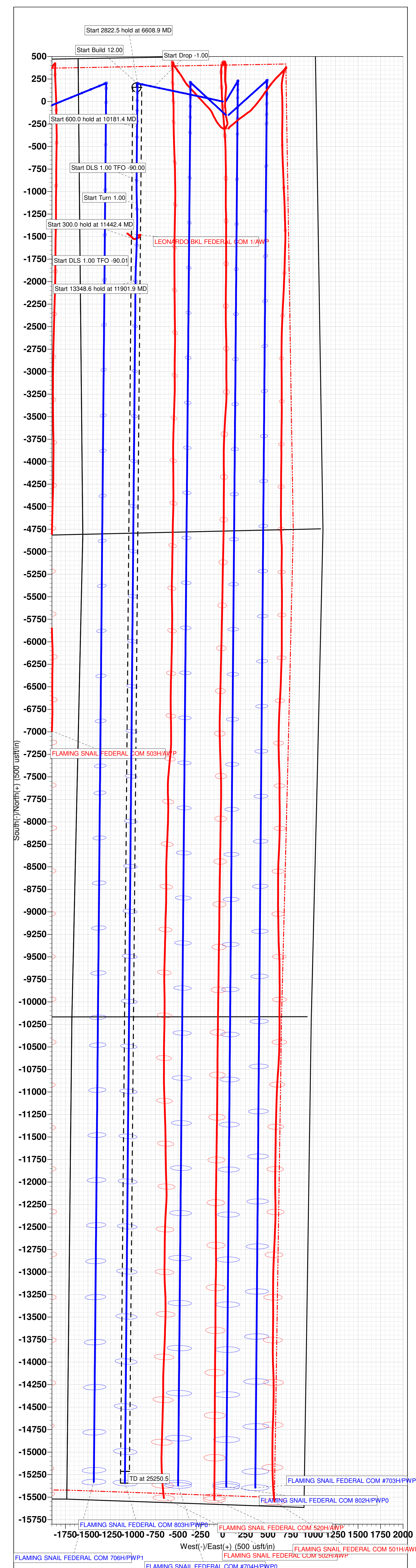
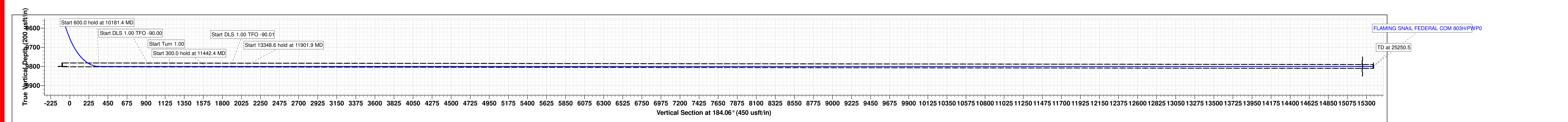
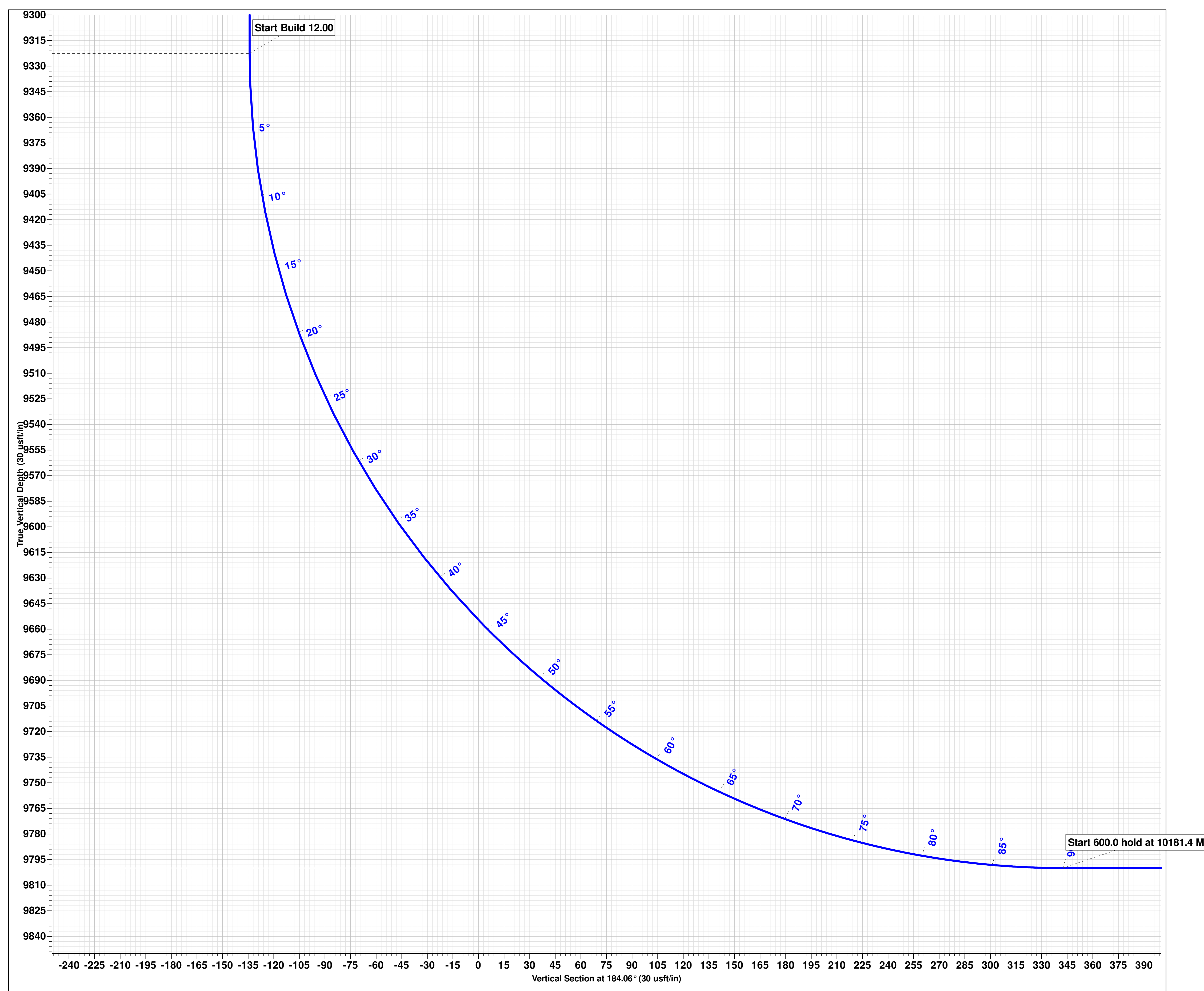
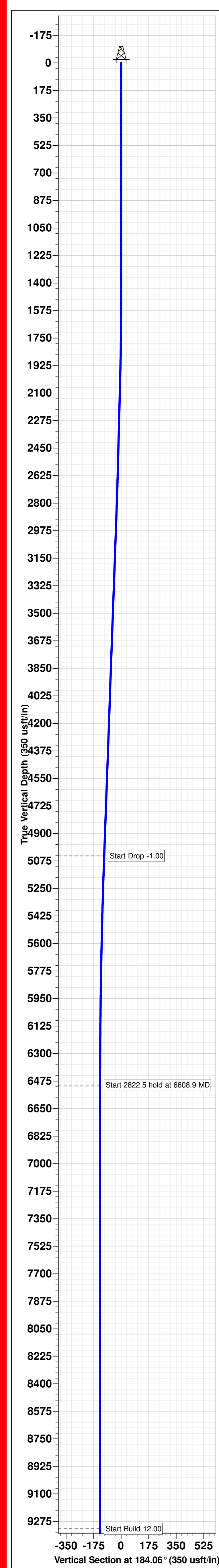
Y	Is it a walking operation?
Y	Is casing pre-set?

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



Project: ATLAS PROSPECT (DBW)
Site: FLAMING SNAIL FED COM PROJECT
Well: FLAMING SNAIL FEDERAL COM 803H
Wellbore: OWB
Design: PWP0

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSept
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0
2000.0	10.00	282.40	1997.5	9.3	-42.5	2.00	282.40	-6.3
2600.0	10.00	282.40	2598.4	31.7	-144.3	0.00	0.00	-21.4
2836.5	14.73	281.91	2818.3	42.3	-19.8	2.00	-1.50	28.5
5136.1	14.73	281.91	5043.4	163.0	-765.8	0.00	0.00	-108.4
6608.9	0.00	0.00	6500.0	201.9	-950.0	1.00	180.00	-134.1
9431.4	0.00	0.00	9322.5	201.9	-950.0	0.00	0.00	-134.1
10181.4	90.00	180.51	9800.0	-275.5	-954.2	12.00	180.51	342.4
10781.4	90.00	180.51	9800.0	-875.5	-959.6	0.00	0.00	941.3
11032.4	90.00	178.00	9800.0	-1126.5	-955.3	0.00	-90.00	1181.4
11442.4	90.00	182.10	9800.0	-1536.4	-956.7	1.00	90.00	1600.3
11742.4	90.00	182.10	9800.0	-1836.2	-967.7	0.00	0.00	1900.1
11901.9	90.00	180.51	9800.0	-1995.6	-971.3	1.00	-90.01	2059.4
25250.5	90.00	180.51	9800.0	-15343.7	-1089.0	0.00	0.00	15382.3



DELAWARE BASIN WEST

ATLAS PROSPECT (DBW)

FLAMING SNAIL FED COM PROJECT

FLAMING SNAIL FEDERAL COM 803H

OWB

PWP0

Anticollision Report

11 November, 2024

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian 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 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Max. Cent. Dist. of 1,000.0usft or Max. SF of 3	Error Surface:	Combined Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Added to Error Values

Survey Tool Program		Date	11/11/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	25,250.5	PWP0 (OWB)	r.5 MWD+IFR1+SAG+FDIR	OWSG MWD + IFR1 + SAG + FDIR Corr.	

Summary						
	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name Offset Well - Wellbore - Design						
FLAMING SNAIL FED COM PROJECT						
FLAMING SNAIL FEDERAL COM #703H - OWB - PWP0	1,506.4	1,511.2	161.4	151.5	16.321 CC, ES	
FLAMING SNAIL FEDERAL COM #703H - OWB - PWP0	1,800.0	1,807.6	167.5	156.5	15.271 SF	
FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0	2,752.3	2,776.6	84.0	67.8	5.187 CC, ES	
FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0	25,250.5	24,404.5	998.4	768.3	4.340 SF	
FLAMING SNAIL FEDERAL COM 501H - OWB - AWP	1,387.6	1,402.1	264.3	255.8	31.277 CC	
FLAMING SNAIL FEDERAL COM 501H - OWB - AWP	1,400.0	1,413.7	264.3	255.8	31.176 ES	
FLAMING SNAIL FEDERAL COM 501H - OWB - AWP	1,600.0	1,604.7	272.7	263.7	30.294 SF	
FLAMING SNAIL FEDERAL COM 502H - OWB - AWP	2,884.4	2,898.4	88.6	68.5	4.410 CC	
FLAMING SNAIL FEDERAL COM 502H - OWB - AWP	3,000.0	3,014.2	89.7	67.8	4.096 ES	
FLAMING SNAIL FEDERAL COM 502H - OWB - AWP	3,100.0	3,114.2	92.3	69.2	3.998 SF	
FLAMING SNAIL FEDERAL COM 503H - OWB - AWP	7,492.5	7,652.4	909.6	879.3	30.025 CC	
FLAMING SNAIL FEDERAL COM 503H - OWB - AWP	7,500.0	7,656.7	909.6	879.3	30.003 ES	
FLAMING SNAIL FEDERAL COM 503H - OWB - AWP	7,600.0	7,707.6	914.1	883.5	29.875 SF	
FLAMING SNAIL FEDERAL COM 520H - OWB - AWP	2,560.2	2,597.0	248.4	234.1	17.398 CC, ES	
FLAMING SNAIL FEDERAL COM 520H - OWB - AWP	2,700.0	2,732.7	252.1	237.3	17.056 SF	
FLAMING SNAIL FEDERAL COM 706H - OWB - PWP1	8,505.0	8,588.9	347.0	314.6	10.703 CC, ES	
FLAMING SNAIL FEDERAL COM 706H - OWB - PWP1	25,250.5	24,453.2	899.4	729.0	5.278 SF	
FLAMING SNAIL FEDERAL COM 802H - OWB - PWP0	1,500.0	1,500.0	29.9	20.1	3.035 CC, ES, SF	
LEONARDO BKL FEDERAL COM 1 - OWB - AWP	11,423.3	9,756.2	49.4	18.1	1.576 Caution - Monitor Closely, CC, ES, SF	

Offset Design:	FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program:	0-r.5 MWD+IFR1, 8585-r.5 MWD+IFR1												Offset Well Error:	0.0 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
0.0	0.0	4.6	4.6	0.0	0.0	157.30	-148.9	62.3	161.4					
100.0	100.0	104.6	104.6	0.8	0.8	157.30	-148.9	62.3	161.4	159.4	2.05	78.615		
200.0	200.0	204.6	204.6	1.4	1.5	157.30	-148.9	62.3	161.4	158.0	3.36	47.993		
300.0	300.0	304.6	304.6	1.9	1.9	157.30	-148.9	62.3	161.4	157.2	4.24	38.040		
400.0	400.0	404.6	404.6	2.2	2.3	157.30	-148.9	62.3	161.4	156.5	4.96	32.558		
500.0	500.0	504.6	504.6	2.6	2.6	157.30	-148.9	62.3	161.4	155.8	5.58	28.941		
600.0	600.0	604.6	604.6	2.8	2.9	157.30	-148.9	62.3	161.4	155.3	6.13	26.317		
700.0	700.0	704.6	704.6	3.1	3.1	157.30	-148.9	62.3	161.4	154.8	6.64	24.296		
800.0	800.0	804.6	804.6	3.3	3.4	157.30	-148.9	62.3	161.4	154.3	7.12	22.676		

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #703H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 8585-r.5 MWD+IFR1													Offset Well Error:	0.0 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
900.0	900.0	904.6	904.6	3.6	3.6	157.30	-148.9	62.3	161.4	153.8	7.56	21.337		
1,000.0	1,000.0	1,004.6	1,004.6	3.8	3.8	157.30	-148.9	62.3	161.4	153.4	7.99	20.206		
1,100.0	1,100.0	1,104.6	1,104.6	4.0	4.0	157.30	-148.9	62.3	161.4	153.0	8.39	19.234		
1,200.0	1,200.0	1,204.6	1,204.6	4.2	4.2	157.30	-148.9	62.3	161.4	152.6	8.78	18.385		
1,300.0	1,300.0	1,304.6	1,304.6	4.4	4.4	157.30	-148.9	62.3	161.4	152.3	9.15	17.636		
1,400.0	1,400.0	1,404.6	1,404.6	4.6	4.6	157.30	-148.9	62.3	161.4	151.9	9.51	16.968		
1,500.0	1,500.0	1,504.7	1,504.7	4.7	4.7	157.29	-148.9	62.3	161.4	151.5	9.86	16.363		
1,506.4	1,506.4	1,511.2	1,511.2	4.8	4.8	-125.11	-148.9	62.3	161.4	151.5	9.89	16.321 CC, ES		
1,600.0	1,600.0	1,606.5	1,606.4	5.0	5.0	-126.27	-147.6	63.8	161.8	151.6	10.24	15.803		
1,700.0	1,699.8	1,707.6	1,707.5	5.3	5.3	-129.59	-143.9	67.9	163.5	152.9	10.60	15.422		
1,800.0	1,799.5	1,807.6	1,807.0	5.5	5.6	-134.79	-137.9	74.6	167.5	156.5	10.97	15.271 SF		
1,900.0	1,898.7	1,905.8	1,904.5	5.7	5.9	-141.41	-129.7	83.6	175.2	163.9	11.35	15.445		
2,000.0	1,997.5	2,001.8	1,999.2	6.0	6.2	-148.75	-119.6	94.9	188.5	176.7	11.75	16.035		
2,100.0	2,095.9	2,095.6	2,091.3	6.1	6.5	-156.13	-107.7	108.2	206.8	194.7	12.12	17.065		
2,200.0	2,194.4	2,188.8	2,182.3	6.3	6.7	-162.87	-94.2	123.2	229.0	216.6	12.44	18.408		
2,300.0	2,292.9	2,282.7	2,273.9	6.4	7.0	-168.53	-80.4	138.5	254.0	241.2	12.83	19.793		
2,400.0	2,391.4	2,376.5	2,365.5	6.6	7.3	-173.18	-66.6	153.8	281.0	267.8	13.25	21.214		
2,500.0	2,489.9	2,470.4	2,457.0	6.7	7.7	-177.04	-52.9	169.1	309.6	295.9	13.68	22.631		
2,600.0	2,588.4	2,564.3	2,548.6	6.9	8.0	179.75	-39.1	184.5	339.2	325.1	14.13	24.012		
2,700.0	2,686.5	2,657.6	2,639.7	7.1	8.3	177.29	-25.4	199.7	371.3	356.7	14.65	25.345		
2,800.0	2,783.9	2,749.7	2,729.6	7.4	8.7	175.19	-11.9	214.7	407.3	392.2	15.18	26.834		
2,836.5	2,819.3	2,783.0	2,762.1	7.4	8.8	174.50	-7.0	220.2	421.4	406.1	15.34	27.477		
2,900.0	2,880.7	2,840.9	2,818.5	7.5	9.0	173.36	1.5	229.6	446.4	430.8	15.62	28.587		
3,000.0	2,977.4	2,932.0	2,907.4	7.7	9.4	171.81	14.8	244.5	486.0	469.9	16.10	30.194		
3,100.0	3,074.1	3,023.0	2,996.2	7.8	9.7	170.49	28.2	259.3	525.9	509.3	16.59	31.704		
3,200.0	3,170.9	3,114.1	3,085.1	8.0	10.1	169.35	41.5	274.2	566.0	548.9	17.09	33.122		
3,300.0	3,267.6	3,205.2	3,173.9	8.2	10.5	168.36	54.9	289.0	606.2	588.6	17.60	34.453		
3,400.0	3,364.3	3,296.3	3,262.8	8.4	10.9	167.49	68.2	303.9	646.6	628.5	18.11	35.700		
3,500.0	3,461.0	3,387.3	3,351.6	8.6	11.2	166.73	81.6	318.7	687.1	668.4	18.64	36.869		
3,600.0	3,557.7	3,478.4	3,440.5	8.8	11.6	166.05	94.9	333.6	727.7	708.5	19.17	37.965		
3,700.0	3,654.4	3,569.5	3,529.3	9.0	12.0	165.44	108.3	348.5	768.3	748.6	19.70	38.995		
3,800.0	3,751.1	3,660.5	3,618.2	9.1	12.4	164.89	121.6	363.3	809.0	788.8	20.25	39.961		
3,900.0	3,847.9	3,751.6	3,707.0	9.3	12.8	164.39	135.0	378.2	849.8	829.0	20.79	40.881		
4,000.0	3,944.6	3,850.2	3,803.3	9.5	13.3	163.92	149.2	394.0	890.4	869.0	21.39	41.626		
4,100.0	4,041.3	3,955.0	3,906.0	9.7	13.7	163.54	163.2	409.6	929.9	907.8	22.03	42.202		
4,200.0	4,138.0	4,061.3	4,010.5	9.9	14.2	163.26	176.2	424.0	968.0	945.3	22.65	42.735		

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 8570-r.5 MWD+IFR1													Offset Well Error: 0.0 usft
Reference	Offset	Semi Major Axis	Distance	Rule Assigned:									
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)	No-Go Distance (usft)	Separation Factor	Warning
0.0	0.0	4.6	4.6	0.0	0.0	167.80	-149.4	32.3	152.9				
100.0	100.0	104.6	104.6	0.8	0.8	167.80	-149.4	32.3	152.9	150.8	2.05	74.448	
200.0	200.0	204.6	204.6	1.4	1.5	167.80	-149.4	32.3	152.9	149.5	3.36	45.448	
300.0	300.0	304.6	304.6	1.9	1.9	167.80	-149.4	32.3	152.9	148.6	4.24	36.023	
400.0	400.0	404.6	404.6	2.2	2.3	167.80	-149.4	32.3	152.9	147.9	4.96	30.832	
500.0	500.0	504.6	504.6	2.6	2.6	167.80	-149.4	32.3	152.9	147.3	5.58	27.407	
600.0	600.0	604.6	604.6	2.8	2.9	167.80	-149.4	32.3	152.9	146.7	6.13	24.922	
700.0	700.0	704.6	704.6	3.1	3.1	167.80	-149.4	32.3	152.9	146.2	6.64	23.008	
800.0	800.0	804.6	804.6	3.3	3.4	167.80	-149.4	32.3	152.9	145.7	7.12	21.474	
900.0	900.0	904.6	904.6	3.6	3.6	167.80	-149.4	32.3	152.9	145.3	7.56	20.206	
1,000.0	1,000.0	1,004.6	1,004.6	3.8	3.8	167.80	-149.4	32.3	152.9	144.9	7.99	19.135	
1,100.0	1,100.0	1,104.6	1,104.6	4.0	4.0	167.80	-149.4	32.3	152.9	144.5	8.39	18.214	
1,200.0	1,200.0	1,204.6	1,204.6	4.2	4.2	167.80	-149.4	32.3	152.9	144.1	8.78	17.411	
1,300.0	1,300.0	1,304.6	1,304.6	4.4	4.4	167.80	-149.4	32.3	152.9	143.7	9.15	16.701	
1,400.0	1,400.0	1,404.6	1,404.6	4.6	4.6	167.80	-149.4	32.3	152.9	143.3	9.51	16.068	
1,500.0	1,500.0	1,504.8	1,504.8	4.7	4.7	167.80	-149.4	32.3	152.8	143.0	9.86	15.495	
1,600.0	1,600.0	1,609.4	1,609.3	5.0	5.0	-114.79	-148.0	30.8	151.9	141.7	10.29	14.769	
1,700.0	1,699.8	1,713.8	1,713.6	5.3	5.3	-115.44	-144.0	26.4	149.5	138.8	10.70	13.977	
1,800.0	1,799.5	1,818.2	1,817.5	5.5	5.6	-116.60	-137.4	19.3	145.6	134.5	11.12	13.097	
1,900.0	1,898.7	1,922.4	1,920.8	5.7	5.9	-118.33	-128.3	9.4	140.3	128.8	11.56	12.138	
2,000.0	1,997.5	2,026.3	2,023.3	6.0	6.3	-120.74	-116.7	-3.1	133.8	121.8	12.01	11.135	
2,100.0	2,095.9	2,127.6	2,122.7	6.1	6.5	-123.26	-103.4	-17.7	125.7	113.3	12.42	10.123	
2,200.0	2,194.4	2,227.1	2,220.2	6.3	6.8	-125.99	-90.0	-32.1	117.6	104.7	12.90	9.110	
2,300.0	2,292.9	2,326.6	2,317.8	6.4	7.1	-129.12	-76.7	-46.6	109.7	96.3	13.42	8.174	
2,400.0	2,391.4	2,426.1	2,415.3	6.6	7.4	-132.72	-63.3	-61.1	102.3	88.3	13.98	7.316	
2,500.0	2,489.9	2,525.6	2,512.8	6.7	7.8	-136.86	-49.9	-75.6	95.3	80.7	14.57	6.542	
2,600.0	2,588.4	2,625.1	2,610.4	6.9	8.1	-141.62	-36.6	-90.1	88.9	73.7	15.18	5.856	
2,700.0	2,686.5	2,724.6	2,707.9	7.1	8.5	-147.53	-23.2	-104.6	84.6	68.8	15.84	5.340	
2,752.3	2,737.6	2,776.6	2,758.8	7.3	8.7	-151.33	-16.2	-112.2	84.0	67.8	16.19	5.187 CC, ES	
2,800.0	2,783.9	2,823.9	2,805.2	7.4	8.9	-155.08	-9.9	-119.1	84.5	68.0	16.50	5.124	
2,836.5	2,819.3	2,860.1	2,840.7	7.4	9.0	-158.03	-5.0	-124.4	85.7	69.0	16.68	5.137	
2,900.0	2,880.7	2,923.1	2,902.4	7.5	9.3	-163.16	3.4	-133.5	88.6	71.7	16.98	5.222	
3,000.0	2,977.4	3,022.2	2,999.6	7.7	9.6	-170.48	16.7	-148.0	94.6	77.2	17.41	5.436	
3,100.0	3,074.1	3,121.3	3,096.7	7.8	10.0	-176.86	30.0	-162.4	102.0	84.2	17.77	5.739	
3,200.0	3,170.9	3,220.4	3,193.9	8.0	10.4	177.67	43.3	-176.9	110.4	92.3	18.08	6.106	
3,300.0	3,267.6	3,319.6	3,291.0	8.2	10.9	173.00	56.6	-191.3	119.7	101.3	18.37	6.515	
3,400.0	3,364.3	3,418.7	3,388.2	8.4	11.3	169.03	70.0	-205.7	129.7	111.0	18.65	6.952	
3,500.0	3,461.0	3,517.8	3,485.4	8.6	11.7	165.63	83.3	-220.2	140.2	121.2	18.93	7.404	
3,600.0	3,557.7	3,616.9	3,582.5	8.8	12.1	162.71	96.6	-234.6	151.1	131.9	19.22	7.863	
3,700.0	3,654.4	3,716.1	3,679.7	9.0	12.5	160.19	109.9	-249.1	162.4	142.9	19.51	8.322	
3,800.0	3,751.1	3,815.2	3,776.9	9.1	12.9	158.00	123.2	-263.5	173.9	154.1	19.81	8.778	
3,900.0	3,847.9	3,914.1	3,873.8	9.3	13.4	156.09	136.5	-277.9	185.7	165.5	20.12	9.227	
4,000.0	3,944.6	4,011.4	3,969.3	9.5	13.8	154.66	148.9	-291.4	198.2	177.7	20.45	9.691	
4,100.0	4,041.3	4,108.5	4,065.0	9.7	14.2	153.79	160.1	-303.6	211.7	190.9	20.82	10.171	
4,200.0	4,138.0	4,205.4	4,160.7	9.9	14.6	153.36	170.3	-314.6	226.2	205.0	21.21	10.662	
4,300.0	4,234.7	4,302.0	4,256.4	10.1	15.0	153.32	179.4	-324.5	241.6	220.0	21.64	11.163	
4,400.0	4,331.4	4,398.4	4,352.1	10.3	15.4	153.60	187.3	-333.1	257.9	235.8	22.10	11.673	
4,500.0	4,428.1	4,494.4	4,447.5	10.5	15.8	154.12	194.1	-340.5	275.2	252.6	22.57	12.191	
4,600.0	4,524.9	4,590.0	4,542.8	10.7	16.1	154.84	199.8	-346.7	293.4	270.3	23.06	12.720	
4,700.0	4,621.6	4,685.1	4,637.7	11.0	16.5	155.72	204.4	-351.7	312.6	289.0	23.57	13.261	
4,800.0	4,718.3	4,779.7	4,732.1	11.2	16.8	156.72	208.0	-355.5	332.8	308.7	24.08	13.818	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 8570-r.5 MWD+IFR1													Offset Well Error: 0.0 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		No-Go Distance (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,900.0	4,815.0	4,873.8	4,826.2	11.4	17.1	157.81	210.4	-358.2	354.1	329.5	24.60	14.394	
5,000.0	4,911.7	4,967.3	4,919.6	11.6	17.3	158.95	211.8	-359.7	376.5	351.4	25.10	14.998	
5,100.0	5,008.4	5,060.7	5,013.0	11.8	17.5	160.15	212.2	-360.1	400.0	374.5	25.54	15.662	
5,136.1	5,043.4	5,095.7	5,048.0	11.9	17.5	160.58	212.2	-360.1	408.7	383.0	25.67	15.922	
5,200.0	5,105.2	5,157.5	5,109.8	12.0	17.5	161.35	212.2	-360.1	423.8	397.8	25.91	16.354	
5,300.0	5,202.4	5,254.7	5,207.0	12.2	17.6	162.38	212.2	-360.1	446.1	419.8	26.30	16.965	
5,400.0	5,300.0	5,352.3	5,304.6	12.4	17.6	163.25	212.2	-360.1	467.0	440.4	26.66	17.518	
5,500.0	5,398.0	5,450.3	5,402.6	12.6	17.7	163.98	212.2	-360.1	486.3	459.3	27.00	18.010	
5,600.0	5,496.3	5,548.6	5,500.9	12.8	17.8	164.61	212.2	-360.1	504.0	476.7	27.33	18.443	
5,700.0	5,594.9	5,647.2	5,599.5	13.0	17.8	165.14	212.2	-360.1	520.1	492.5	27.64	18.817	
5,800.0	5,693.8	5,746.0	5,698.4	13.2	17.9	165.58	212.2	-360.1	534.6	506.6	27.94	19.133	
5,900.0	5,792.9	5,845.2	5,797.5	13.4	17.9	165.96	212.2	-360.1	547.4	519.2	28.23	19.392	
6,000.0	5,892.2	5,944.5	5,896.8	13.6	18.0	166.27	212.2	-360.1	558.5	530.0	28.50	19.596	
6,100.0	5,991.7	6,044.0	5,996.3	13.7	18.0	166.53	212.2	-360.1	568.0	539.2	28.77	19.745	
6,200.0	6,091.4	6,143.7	6,096.0	13.9	18.1	166.73	212.2	-360.1	575.8	546.8	29.02	19.841	
6,300.0	6,191.2	6,243.5	6,195.8	14.1	18.2	166.88	212.2	-360.1	581.9	552.6	29.26	19.885	
6,400.0	6,291.1	6,343.4	6,295.7	14.2	18.2	166.99	212.2	-360.1	586.3	556.8	29.49	19.880	
6,500.0	6,391.1	6,443.4	6,395.7	14.4	18.3	167.06	212.2	-360.1	589.0	559.3	29.70	19.829	
6,600.0	6,491.1	6,543.3	6,495.7	14.5	18.3	167.09	212.2	-360.1	590.0	560.1	29.88	19.746	
6,608.9	6,500.0	6,552.3	6,504.6	14.5	18.3	89.00	212.2	-360.1	590.0	560.1	29.89	19.737	
6,700.0	6,591.1	6,643.4	6,595.7	14.5	18.4	89.00	212.2	-360.1	590.0	560.0	30.01	19.662	
6,800.0	6,691.1	6,743.4	6,695.7	14.6	18.5	89.00	212.2	-360.1	590.0	559.9	30.14	19.577	
6,900.0	6,791.1	6,843.4	6,795.7	14.7	18.5	89.00	212.2	-360.1	590.0	559.7	30.27	19.493	
7,000.0	6,891.1	6,943.4	6,895.7	14.7	18.6	89.00	212.2	-360.1	590.0	559.6	30.40	19.409	
7,100.0	6,991.1	7,043.4	6,995.7	14.8	18.6	89.00	212.2	-360.1	590.0	559.5	30.53	19.325	
7,200.0	7,091.1	7,143.4	7,095.7	14.9	18.7	89.00	212.2	-360.1	590.0	559.3	30.66	19.242	
7,300.0	7,191.1	7,243.4	7,195.7	14.9	18.8	89.00	212.2	-360.1	590.0	559.2	30.79	19.160	
7,400.0	7,291.1	7,343.4	7,295.7	15.0	18.8	89.00	212.2	-360.1	590.0	559.1	30.93	19.078	
7,500.0	7,391.1	7,443.4	7,395.7	15.1	18.9	89.00	212.2	-360.1	590.0	558.9	31.06	18.997	
7,600.0	7,491.1	7,543.4	7,495.7	15.1	18.9	89.00	212.2	-360.1	590.0	558.8	31.19	18.916	
7,700.0	7,591.1	7,643.4	7,595.7	15.2	19.0	89.00	212.2	-360.1	590.0	558.7	31.32	18.836	
7,800.0	7,691.1	7,743.4	7,695.7	15.3	19.1	89.00	212.2	-360.1	590.0	558.5	31.46	18.756	
7,900.0	7,791.1	7,843.4	7,795.7	15.3	19.1	89.00	212.2	-360.1	590.0	558.4	31.59	18.677	
8,000.0	7,891.1	7,943.4	7,895.7	15.4	19.2	89.00	212.2	-360.1	590.0	558.3	31.72	18.598	
8,100.0	7,991.1	8,043.4	7,995.7	15.4	19.2	89.00	212.2	-360.1	590.0	558.1	31.86	18.520	
8,200.0	8,091.1	8,143.4	8,095.7	15.5	19.3	89.00	212.2	-360.1	590.0	558.0	31.99	18.442	
8,300.0	8,191.1	8,243.4	8,195.7	15.6	19.4	89.00	212.2	-360.1	590.0	557.9	32.13	18.365	
8,400.0	8,291.1	8,343.4	8,295.7	15.6	19.4	89.00	212.2	-360.1	590.0	557.7	32.26	18.288	
8,500.0	8,391.1	8,443.4	8,395.7	15.7	19.5	89.00	212.2	-360.1	590.0	557.6	32.40	18.212	
8,600.0	8,491.1	8,543.4	8,495.7	15.8	19.5	89.00	212.2	-360.1	590.0	557.5	32.52	18.140	
8,700.0	8,591.1	8,645.2	8,597.2	15.8	19.6	89.57	206.3	-360.1	589.9	557.2	32.68	18.048	
8,747.6	8,638.7	8,692.3	8,643.3	15.9	19.6	90.51	196.7	-360.2	589.8	557.0	32.81	17.974	
8,800.0	8,691.1	8,741.4	8,690.1	15.9	19.6	91.95	181.8	-360.4	590.0	557.0	32.99	17.887	
8,900.0	8,791.1	8,825.0	8,765.4	16.0	19.6	95.44	145.8	-360.7	592.8	559.4	33.32	17.789	
9,000.0	8,891.1	8,894.6	8,822.5	16.0	19.7	99.23	106.2	-361.0	601.2	567.6	33.58	17.902	
9,100.0	8,991.1	8,950.0	8,863.5	16.1	19.7	102.73	68.9	-361.4	617.8	584.1	33.70	18.333	
9,200.0	9,091.1	9,000.0	8,896.6	16.2	19.8	106.16	31.5	-361.7	644.0	610.3	33.75	19.085	
9,300.0	9,191.1	9,033.0	8,916.2	16.2	19.8	108.52	4.9	-361.9	680.3	646.6	33.65	20.213	
9,400.0	9,291.1	9,063.0	8,932.4	16.3	19.8	110.71	-20.4	-362.2	725.9	692.3	33.59	21.609	
9,431.4	9,322.5	9,075.0	8,938.4	16.3	19.8	111.59	-30.7	-362.2	742.1	708.5	33.60	22.086	
9,450.0	9,341.1	9,075.0	8,938.4	16.3	19.8	-67.64	-30.7	-362.2	751.9	718.3	33.55	22.410	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 8570-r.5 MWD+IFR1												Offset Well Error:	0.0 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 +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
9,475.0	9,366.0	9,082.9	8,942.2	16.3	19.8	-65.37	-37.6	-362.3	765.1	731.6	33.53	22.816	
9,500.0	9,390.8	9,089.9	8,945.5	16.3	19.8	-63.23	-43.8	-362.4	778.3	744.8	33.51	23.229	
9,525.0	9,415.5	9,100.0	8,950.1	16.3	19.8	-60.98	-52.8	-362.4	791.5	758.0	33.50	23.628	
9,550.0	9,439.9	9,100.0	8,950.1	16.3	19.8	-59.38	-52.8	-362.4	804.6	771.2	33.44	24.065	
9,575.0	9,463.9	9,112.1	8,955.3	16.3	19.9	-57.19	-63.7	-362.5	817.5	784.1	33.44	24.447	
9,600.0	9,487.6	9,125.0	8,960.6	16.3	19.9	-55.10	-75.5	-362.6	830.3	796.8	33.45	24.823	
9,625.0	9,510.8	9,125.0	8,960.6	16.2	19.9	-53.70	-75.5	-362.6	842.7	809.3	33.39	25.237	
9,650.0	9,533.5	9,135.9	8,964.8	16.2	19.9	-51.91	-85.5	-362.7	854.9	821.5	33.39	25.602	
9,675.0	9,556.6	9,150.0	8,970.0	16.2	19.9	-50.11	-98.7	-362.8	866.8	833.4	33.41	25.947	
9,700.0	9,577.1	9,150.0	8,970.0	16.2	19.9	-48.94	-98.7	-362.8	878.2	844.9	33.36	26.326	
9,725.0	9,597.9	9,160.8	8,973.6	16.2	19.9	-47.48	-108.8	-362.9	889.4	856.0	33.36	26.656	
9,750.0	9,618.0	9,175.0	8,978.1	16.2	19.9	-46.03	-122.3	-363.1	900.1	866.7	33.38	26.964	
9,775.0	9,637.2	9,175.0	8,978.1	16.2	19.9	-45.07	-122.3	-363.1	910.3	876.9	33.34	27.299	
9,800.0	9,655.5	9,186.7	8,981.4	16.2	19.9	-43.89	-133.5	-363.2	920.1	886.7	33.36	27.583	
9,825.0	9,673.0	9,200.0	8,984.9	16.2	19.9	-42.78	-146.3	-363.3	929.3	896.0	33.37	27.848	
9,850.0	9,689.5	9,200.0	8,984.9	16.2	19.9	-42.03	-146.3	-363.3	938.1	904.8	33.34	28.135	
9,875.0	9,705.0	9,213.3	8,988.0	16.2	20.0	-41.09	-159.2	-363.4	946.3	912.9	33.36	28.364	
9,900.0	9,719.4	9,225.0	8,990.5	16.2	20.0	-40.28	-170.7	-363.5	953.9	920.6	33.37	28.583	
9,925.0	9,732.7	9,225.0	8,990.5	16.3	20.0	-39.70	-170.7	-363.5	961.1	927.7	33.35	28.818	
9,950.0	9,745.0	9,240.4	8,993.3	16.3	20.0	-38.99	-185.8	-363.6	967.5	934.1	33.38	28.988	
9,975.0	9,756.0	9,250.0	8,994.8	16.3	20.0	-38.43	-195.3	-363.7	973.4	940.0	33.38	29.159	
10,000.0	9,765.9	9,258.7	8,996.0	16.3	20.0	-37.94	-203.9	-363.8	978.7	945.3	33.39	29.314	
10,025.0	9,774.6	9,275.0	8,997.8	16.4	20.0	-37.46	-220.1	-363.9	983.4	950.0	33.41	29.430	
10,050.0	9,782.0	9,275.0	8,997.8	16.4	20.0	-37.17	-220.1	-363.9	987.3	953.9	33.39	29.572	
10,075.0	9,788.2	9,286.4	8,998.8	16.5	20.0	-36.86	-231.5	-364.0	990.7	957.3	33.40	29.663	
10,100.0	9,793.0	9,300.0	8,999.5	16.5	20.1	-36.60	-245.1	-364.1	993.4	960.0	33.41	29.730	
10,125.0	9,796.6	9,300.0	8,999.5	16.5	20.1	-36.45	-245.1	-364.1	995.5	962.1	33.38	29.820	
10,150.0	9,798.9	9,320.2	9,000.0	16.6	20.1	-36.30	-265.2	-364.3	996.9	963.5	33.42	29.831	
10,175.0	9,799.9	9,329.3	9,000.0	16.7	20.1	-36.25	-274.4	-364.4	997.6	964.2	33.42	29.854	
10,181.4	9,800.0	9,335.7	9,000.0	16.7	20.1	-36.24	-280.8	-364.5	997.6	964.2	33.43	29.843	
10,200.0	9,800.0	9,354.3	9,000.0	16.7	20.1	-36.24	-299.3	-364.6	997.6	964.2	33.47	29.810	
10,300.0	9,800.0	9,454.3	9,000.0	17.0	20.3	-36.24	-399.3	-365.5	997.6	963.9	33.72	29.588	
10,400.0	9,800.0	9,554.3	9,000.0	17.3	20.5	-36.24	-499.3	-366.4	997.6	963.6	34.03	29.314	
10,500.0	9,800.0	9,654.3	9,000.0	17.6	20.7	-36.24	-599.3	-367.3	997.6	963.2	34.41	28.993	
10,600.0	9,800.0	9,754.3	9,000.0	17.9	20.9	-36.24	-699.3	-368.2	997.6	962.8	34.85	28.630	
10,700.0	9,800.0	9,854.3	9,000.0	18.3	21.2	-36.24	-799.3	-369.1	997.6	962.3	35.34	28.230	
10,781.4	9,800.0	9,935.7	9,000.0	18.6	21.4	-36.24	-880.7	-369.8	997.6	961.9	35.78	27.885	
10,800.0	9,800.0	9,954.3	9,000.0	18.7	21.5	-36.24	-899.3	-369.9	997.6	961.7	35.88	27.804	
10,900.0	9,800.0	10,054.3	9,000.0	19.1	21.9	-36.18	-999.3	-370.8	996.9	960.4	36.48	27.327	
11,000.0	9,800.0	10,154.2	9,000.0	19.5	22.2	-36.03	-1,099.3	-371.7	995.2	958.1	37.13	26.802	
11,032.4	9,800.0	10,186.6	9,000.0	19.7	22.4	-35.96	-1,131.7	-372.0	994.4	957.1	37.35	26.626	
11,100.0	9,800.0	10,254.2	9,000.0	20.0	22.7	-35.86	-1,199.2	-372.6	992.9	955.1	37.82	26.255	
11,200.0	9,800.0	10,354.1	9,000.0	20.4	23.1	-35.76	-1,299.2	-373.5	991.5	953.0	38.56	25.717	
11,283.2	9,800.0	10,437.3	9,000.0	20.9	23.6	-35.73	-1,382.3	-374.2	991.2	952.0	39.20	25.284	
11,300.0	9,800.0	10,454.1	9,000.0	21.0	23.6	-35.73	-1,399.1	-374.4	991.2	951.9	39.34	25.199	
11,400.0	9,800.0	10,554.1	9,000.0	21.5	24.2	-35.78	-1,499.1	-375.3	991.9	951.7	40.16	24.701	
11,442.4	9,800.0	10,596.5	9,000.0	21.7	24.4	-35.83	-1,541.5	-375.6	992.5	952.0	40.51	24.499	
11,500.0	9,800.0	10,654.1	9,000.0	22.0	24.7	-35.90	-1,599.1	-376.1	993.4	952.4	41.01	24.225	
11,600.0	9,800.0	10,754.0	9,000.0	22.6	25.3	-36.03	-1,699.1	-377.0	995.1	953.2	41.91	23.745	
11,700.0	9,800.0	10,854.0	9,000.0	23.2	26.0	-36.16	-1,799.0	-377.9	996.7	953.9	42.84	23.266	
11,742.4	9,800.0	10,896.4	9,000.0	23.4	26.2	-36.21	-1,841.4	-378.3	997.4	954.2	43.24	23.067	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 8570-r.5 MWD+IFR1												Offset Well Error:	0.0 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
11,800.0	9,800.0	10,954.0	9,000.0	23.8	26.6	-36.28	-1,899.0	-378.8	998.2	954.4	43.80	22.791	
11,900.0	9,800.0	11,053.9	9,000.0	24.4	27.3	-36.33	-1,998.9	-379.7	998.7	953.9	44.79	22.299	
11,901.9	9,800.0	11,055.9	9,000.0	24.4	27.3	-36.33	-2,000.9	-379.7	998.7	953.9	44.81	22.289	
12,000.0	9,800.0	11,154.0	9,000.0	25.0	28.0	-36.33	-2,099.0	-380.6	998.7	952.9	45.80	21.805	
12,100.0	9,800.0	11,254.0	9,000.0	25.7	28.7	-36.33	-2,199.0	-381.5	998.7	951.9	46.84	21.321	
12,200.0	9,800.0	11,354.0	9,000.0	26.3	29.4	-36.33	-2,299.0	-382.3	998.7	950.8	47.90	20.848	
12,300.0	9,800.0	11,454.0	9,000.0	27.0	30.2	-36.33	-2,398.9	-383.2	998.7	949.7	48.99	20.386	
12,400.0	9,800.0	11,554.0	9,000.0	27.7	30.9	-36.33	-2,498.9	-384.1	998.7	948.6	50.09	19.937	
12,500.0	9,800.0	11,654.0	9,000.0	28.3	31.7	-36.33	-2,598.9	-385.0	998.7	947.5	51.22	19.499	
12,600.0	9,800.0	11,754.0	9,000.0	29.0	32.5	-36.33	-2,698.9	-385.9	998.7	946.3	52.36	19.074	
12,700.0	9,800.0	11,854.0	9,000.0	29.7	33.3	-36.33	-2,798.9	-386.8	998.7	945.2	53.52	18.661	
12,800.0	9,800.0	11,954.0	9,000.0	30.5	34.1	-36.33	-2,898.9	-387.7	998.7	944.0	54.69	18.261	
12,900.0	9,800.0	12,054.0	9,000.0	31.2	34.9	-36.33	-2,998.9	-388.5	998.7	942.8	55.88	17.872	
13,000.0	9,800.0	12,154.0	9,000.0	31.9	35.7	-36.33	-3,098.9	-389.4	998.7	941.6	57.08	17.496	
13,100.0	9,800.0	12,254.0	9,000.0	32.6	36.5	-36.33	-3,198.9	-390.3	998.7	940.4	58.29	17.132	
13,200.0	9,800.0	12,354.0	9,000.0	33.4	37.4	-36.32	-3,298.9	-391.2	998.7	939.1	59.52	16.778	
13,300.0	9,800.0	12,454.0	9,000.0	34.1	38.2	-36.32	-3,398.9	-392.1	998.7	937.9	60.76	16.437	
13,400.0	9,800.0	12,554.0	9,000.0	34.9	39.1	-36.32	-3,498.9	-393.0	998.7	936.7	62.01	16.106	
13,500.0	9,800.0	12,654.0	9,000.0	35.6	39.9	-36.32	-3,598.9	-393.9	998.7	935.4	63.27	15.785	
13,600.0	9,800.0	12,754.0	9,000.0	36.4	40.8	-36.32	-3,698.9	-394.7	998.7	934.1	64.53	15.475	
13,700.0	9,800.0	12,854.0	9,000.0	37.1	41.7	-36.32	-3,798.9	-395.6	998.7	932.8	65.81	15.175	
13,800.0	9,800.0	12,954.0	9,000.0	37.9	42.5	-36.32	-3,898.9	-396.5	998.7	931.6	67.09	14.884	
13,900.0	9,800.0	13,054.0	9,000.0	38.7	43.4	-36.32	-3,998.9	-397.4	998.7	930.3	68.39	14.603	
14,000.0	9,800.0	13,154.0	9,000.0	39.4	44.3	-36.32	-4,098.9	-398.3	998.6	929.0	69.69	14.330	
14,100.0	9,800.0	13,254.0	9,000.0	40.2	45.2	-36.32	-4,198.9	-399.2	998.6	927.7	70.99	14.067	
14,200.0	9,800.0	13,354.0	9,000.0	41.0	46.1	-36.32	-4,298.9	-400.1	998.6	926.3	72.31	13.811	
14,300.0	9,800.0	13,454.0	9,000.0	41.8	47.0	-36.32	-4,398.9	-400.9	998.6	925.0	73.63	13.563	
14,400.0	9,800.0	13,554.0	9,000.0	42.6	47.9	-36.32	-4,498.9	-401.8	998.6	923.7	74.95	13.323	
14,500.0	9,800.0	13,654.0	9,000.0	43.3	48.8	-36.32	-4,598.9	-402.7	998.6	922.4	76.28	13.091	
14,600.0	9,800.0	13,754.0	9,000.0	44.1	49.7	-36.32	-4,698.9	-403.6	998.6	921.0	77.62	12.865	
14,700.0	9,800.0	13,854.0	9,000.0	44.9	50.6	-36.32	-4,798.9	-404.5	998.6	919.7	78.96	12.647	
14,800.0	9,800.0	13,954.0	9,000.0	45.7	51.5	-36.32	-4,898.9	-405.4	998.6	918.3	80.31	12.435	
14,900.0	9,800.0	14,054.0	9,000.0	46.5	52.4	-36.32	-4,998.8	-406.3	998.6	917.0	81.66	12.229	
15,000.0	9,800.0	14,154.0	9,000.0	47.3	53.3	-36.32	-5,098.8	-407.1	998.6	915.6	83.02	12.029	
15,100.0	9,800.0	14,254.0	9,000.0	48.1	54.2	-36.32	-5,198.8	-408.0	998.6	914.2	84.38	11.835	
15,200.0	9,800.0	14,354.0	9,000.0	48.9	55.1	-36.32	-5,298.8	-408.9	998.6	912.9	85.74	11.647	
15,300.0	9,800.0	14,454.0	9,000.0	49.7	56.0	-36.32	-5,398.8	-409.8	998.6	911.5	87.11	11.464	
15,400.0	9,800.0	14,554.0	9,000.0	50.6	56.9	-36.32	-5,498.8	-410.7	998.6	910.1	88.48	11.287	
15,500.0	9,800.0	14,654.0	9,000.0	51.4	57.8	-36.32	-5,598.8	-411.6	998.6	908.8	89.85	11.114	
15,600.0	9,800.0	14,754.0	9,000.0	52.2	58.8	-36.32	-5,698.8	-412.5	998.6	907.4	91.23	10.946	
15,700.0	9,800.0	14,854.0	9,000.0	53.0	59.7	-36.32	-5,798.8	-413.3	998.6	906.0	92.61	10.783	
15,800.0	9,800.0	14,954.0	9,000.0	53.8	60.6	-36.32	-5,898.8	-414.2	998.6	904.6	93.99	10.624	
15,900.0	9,800.0	15,054.0	9,000.0	54.6	61.5	-36.32	-5,998.8	-415.1	998.6	903.2	95.38	10.470	
16,000.0	9,800.0	15,154.0	9,000.0	55.4	62.5	-36.32	-6,098.8	-416.0	998.6	901.8	96.77	10.320	
16,100.0	9,800.0	15,254.0	9,000.0	56.3	63.4	-36.32	-6,198.8	-416.9	998.6	900.4	98.16	10.173	
16,200.0	9,800.0	15,354.0	9,000.0	57.1	64.3	-36.32	-6,298.8	-417.8	998.6	899.0	99.55	10.031	
16,300.0	9,800.0	15,454.0	9,000.0	57.9	65.2	-36.32	-6,398.8	-418.7	998.6	897.6	100.95	9.892	
16,400.0	9,800.0	15,554.0	9,000.0	58.7	66.2	-36.32	-6,498.8	-419.5	998.6	896.2	102.35	9.757	
16,500.0	9,800.0	15,654.0	9,000.0	59.5	67.1	-36.32	-6,598.8	-420.4	998.6	894.8	103.75	9.625	
16,600.0	9,800.0	15,754.0	9,000.0	60.4	68.0	-36.32	-6,698.8	-421.3	998.6	893.4	105.15	9.497	
16,700.0	9,800.0	15,854.0	9,000.0	61.2	69.0	-36.32	-6,798.8	-422.2	998.6	892.0	106.56	9.371	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 8570-r.5 MWD+IFR1											Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		
16,800.0	9,800.0	15,954.0	9,000.0	62.0	69.9	-36.32	-6,898.8	-423.1	998.6	890.6	107.96	9.249
16,900.0	9,800.0	16,054.0	9,000.0	62.8	70.8	-36.32	-6,998.8	-424.0	998.6	889.2	109.37	9.130
17,000.0	9,800.0	16,154.0	9,000.0	63.7	71.8	-36.32	-7,098.8	-424.9	998.6	887.8	110.78	9.014
17,100.0	9,800.0	16,254.0	9,000.0	64.5	72.7	-36.32	-7,198.8	-425.7	998.6	886.4	112.19	8.900
17,200.0	9,800.0	16,354.0	9,000.0	65.3	73.6	-36.32	-7,298.8	-426.6	998.6	885.0	113.61	8.790
17,300.0	9,800.0	16,454.0	9,000.0	66.2	74.6	-36.32	-7,398.8	-427.5	998.6	883.5	115.02	8.681
17,400.0	9,800.0	16,554.0	9,000.0	67.0	75.5	-36.32	-7,498.7	-428.4	998.6	882.1	116.44	8.576
17,500.0	9,800.0	16,654.0	9,000.0	67.8	76.5	-36.32	-7,598.7	-429.3	998.6	880.7	117.86	8.473
17,600.0	9,800.0	16,754.0	9,000.0	68.7	77.4	-36.32	-7,698.7	-430.2	998.6	879.3	119.28	8.372
17,700.0	9,800.0	16,854.0	9,000.0	69.5	78.3	-36.32	-7,798.7	-431.1	998.6	877.9	120.70	8.273
17,800.0	9,800.0	16,954.0	9,000.0	70.3	79.3	-36.32	-7,898.7	-431.9	998.6	876.4	122.12	8.177
17,900.0	9,800.0	17,054.0	9,000.0	71.2	80.2	-36.32	-7,998.7	-432.8	998.6	875.0	123.55	8.082
18,000.0	9,800.0	17,154.0	9,000.0	72.0	81.2	-36.32	-8,098.7	-433.7	998.5	873.6	124.97	7.990
18,100.0	9,800.0	17,254.0	9,000.0	72.8	82.1	-36.32	-8,198.7	-434.6	998.5	872.1	126.40	7.900
18,200.0	9,800.0	17,354.0	9,000.0	73.7	83.0	-36.32	-8,298.7	-435.5	998.5	870.7	127.82	7.812
18,300.0	9,800.0	17,454.0	9,000.0	74.5	84.0	-36.32	-8,398.7	-436.4	998.5	869.3	129.25	7.725
18,400.0	9,800.0	17,554.0	9,000.0	75.3	84.9	-36.31	-8,498.7	-437.3	998.5	867.9	130.68	7.641
18,500.0	9,800.0	17,654.0	9,000.0	76.2	85.9	-36.31	-8,598.7	-438.2	998.5	866.4	132.11	7.558
18,600.0	9,800.0	17,754.0	9,000.0	77.0	86.8	-36.31	-8,698.7	-439.0	998.5	865.0	133.55	7.477
18,700.0	9,800.0	17,854.0	9,000.0	77.8	87.8	-36.31	-8,798.7	-439.9	998.5	863.6	134.98	7.398
18,800.0	9,800.0	17,954.0	9,000.0	78.7	88.7	-36.31	-8,898.7	-440.8	998.5	862.1	136.41	7.320
18,900.0	9,800.0	18,054.0	9,000.0	79.5	89.7	-36.31	-8,998.7	-441.7	998.5	860.7	137.85	7.244
19,000.0	9,800.0	18,154.0	9,000.0	80.4	90.6	-36.31	-9,098.7	-442.6	998.5	859.2	139.28	7.169
19,100.0	9,800.0	18,254.0	9,000.0	81.2	91.5	-36.31	-9,198.7	-443.5	998.5	857.8	140.72	7.096
19,200.0	9,800.0	18,354.0	9,000.0	82.0	92.5	-36.31	-9,298.7	-444.4	998.5	856.4	142.16	7.024
19,300.0	9,800.0	18,454.0	9,000.0	82.9	93.4	-36.31	-9,398.7	-445.2	998.5	854.9	143.59	6.954
19,400.0	9,800.0	18,554.0	9,000.0	83.7	94.4	-36.31	-9,498.7	-446.1	998.5	853.5	145.03	6.885
19,500.0	9,800.0	18,654.0	9,000.0	84.6	95.3	-36.31	-9,598.7	-447.0	998.5	852.0	146.47	6.817
19,600.0	9,800.0	18,754.0	9,000.0	85.4	96.3	-36.31	-9,698.7	-447.9	998.5	850.6	147.91	6.751
19,700.0	9,800.0	18,854.0	9,000.0	86.3	97.2	-36.31	-9,798.7	-448.8	998.5	849.2	149.35	6.686
19,800.0	9,800.0	18,954.0	9,000.0	87.1	98.2	-36.31	-9,898.7	-449.7	998.5	847.7	150.79	6.622
19,900.0	9,800.0	19,054.0	9,000.0	87.9	99.1	-36.31	-9,998.7	-450.6	998.5	846.3	152.24	6.559
20,000.0	9,800.0	19,154.0	9,000.0	88.8	100.1	-36.31	-10,098.6	-451.4	998.5	844.8	153.68	6.497
20,100.0	9,800.0	19,254.0	9,000.0	89.6	101.0	-36.31	-10,198.6	-452.3	998.5	843.4	155.12	6.437
20,200.0	9,800.0	19,354.0	9,000.0	90.5	102.0	-36.31	-10,298.6	-453.2	998.5	841.9	156.57	6.377
20,300.0	9,800.0	19,454.0	9,000.0	91.3	102.9	-36.31	-10,398.6	-454.1	998.5	840.5	158.01	6.319
20,400.0	9,800.0	19,554.0	9,000.0	92.2	103.9	-36.31	-10,498.6	-455.0	998.5	839.0	159.46	6.262
20,500.0	9,800.0	19,654.0	9,000.0	93.0	104.8	-36.31	-10,598.6	-455.9	998.5	837.6	160.90	6.206
20,600.0	9,800.0	19,754.0	9,000.0	93.8	105.8	-36.31	-10,698.6	-456.8	998.5	836.1	162.35	6.150
20,700.0	9,800.0	19,854.0	9,000.0	94.7	106.7	-36.31	-10,798.6	-457.6	998.5	834.7	163.80	6.096
20,800.0	9,800.0	19,954.0	9,000.0	95.5	107.7	-36.31	-10,898.6	-458.5	998.5	833.2	165.24	6.042
20,900.0	9,800.0	20,054.0	9,000.0	96.4	108.6	-36.31	-10,998.6	-459.4	998.5	831.8	166.69	5.990
21,000.0	9,800.0	20,154.0	9,000.0	97.2	109.6	-36.31	-11,098.6	-460.3	998.5	830.3	168.14	5.938
21,100.0	9,800.0	20,254.0	9,000.0	98.1	110.5	-36.31	-11,198.6	-461.2	998.5	828.9	169.59	5.888
21,200.0	9,800.0	20,354.0	9,000.0	98.9	111.5	-36.31	-11,298.6	-462.1	998.5	827.4	171.04	5.838
21,300.0	9,800.0	20,454.0	9,000.0	99.8	112.4	-36.31	-11,398.6	-463.0	998.5	826.0	172.49	5.789
21,400.0	9,800.0	20,554.0	9,000.0	100.6	113.4	-36.31	-11,498.6	-463.8	998.5	824.5	173.94	5.740
21,500.0	9,800.0	20,654.0	9,000.0	101.5	114.4	-36.31	-11,598.6	-464.7	998.5	823.1	175.39	5.693
21,600.0	9,800.0	20,754.0	9,000.0	102.3	115.3	-36.31	-11,698.6	-465.6	998.5	821.6	176.84	5.646
21,700.0	9,800.0	20,854.0	9,000.0	103.2	116.3	-36.31	-11,798.6	-466.5	998.5	820.2	178.29	5.600
21,800.0	9,800.0	20,954.0	9,000.0	104.0	117.2	-36.31	-11,898.6	-467.4	998.5	818.7	179.75	5.555

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM #704H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 8570-r.5 MWD+IFR1											Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance		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)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor
21,900.0	9,800.0	21,054.0	9,000.0	104.9	118.2	-36.31	-11,998.6	-468.3	998.5	817.3	181.20	5.510
22,000.0	9,800.0	21,154.0	9,000.0	105.7	119.1	-36.31	-12,098.6	-469.2	998.5	815.8	182.65	5.466
22,100.0	9,800.0	21,254.0	9,000.0	106.5	120.1	-36.31	-12,198.6	-470.0	998.4	814.3	184.11	5.423
22,200.0	9,800.0	21,354.0	9,000.0	107.4	121.0	-36.31	-12,298.6	-470.9	998.4	812.9	185.56	5.381
22,300.0	9,800.0	21,454.0	9,000.0	108.2	122.0	-36.31	-12,398.6	-471.8	998.4	811.4	187.01	5.339
22,400.0	9,800.0	21,554.0	9,000.0	109.1	122.9	-36.31	-12,498.6	-472.7	998.4	810.0	188.47	5.298
22,500.0	9,800.0	21,654.0	9,000.0	109.9	123.9	-36.31	-12,598.5	-473.6	998.4	808.5	189.92	5.257
22,600.0	9,800.0	21,754.0	9,000.0	110.8	124.9	-36.31	-12,698.5	-474.5	998.4	807.1	191.38	5.217
22,700.0	9,800.0	21,854.0	9,000.0	111.6	125.8	-36.31	-12,798.5	-475.4	998.4	805.6	192.83	5.178
22,800.0	9,800.0	21,954.0	9,000.0	112.5	126.8	-36.31	-12,898.5	-476.2	998.4	804.1	194.29	5.139
22,900.0	9,800.0	22,054.0	9,000.0	113.3	127.7	-36.31	-12,998.5	-477.1	998.4	802.7	195.75	5.101
23,000.0	9,800.0	22,154.0	9,000.0	114.2	128.7	-36.31	-13,098.5	-478.0	998.4	801.2	197.20	5.063
23,100.0	9,800.0	22,254.0	9,000.0	115.0	129.6	-36.31	-13,198.5	-478.9	998.4	799.8	198.66	5.026
23,200.0	9,800.0	22,354.0	9,000.0	115.9	130.6	-36.31	-13,298.5	-479.8	998.4	798.3	200.12	4.989
23,300.0	9,800.0	22,454.0	9,000.0	116.7	131.5	-36.31	-13,398.5	-480.7	998.4	796.8	201.57	4.953
23,400.0	9,800.0	22,554.0	9,000.0	117.6	132.5	-36.31	-13,498.5	-481.6	998.4	795.4	203.03	4.918
23,500.0	9,800.0	22,654.0	9,000.0	118.4	133.5	-36.30	-13,598.5	-482.4	998.4	793.9	204.49	4.882
23,600.0	9,800.0	22,754.0	9,000.0	119.3	134.4	-36.30	-13,698.5	-483.3	998.4	792.5	205.95	4.848
23,700.0	9,800.0	22,854.0	9,000.0	120.1	135.4	-36.30	-13,798.5	-484.2	998.4	791.0	207.40	4.814
23,800.0	9,800.0	22,954.0	9,000.0	121.0	136.3	-36.30	-13,898.5	-485.1	998.4	789.5	208.86	4.780
23,900.0	9,800.0	23,054.0	9,000.0	121.8	137.3	-36.30	-13,998.5	-486.0	998.4	788.1	210.32	4.747
24,000.0	9,800.0	23,154.0	9,000.0	122.7	138.2	-36.30	-14,098.5	-486.9	998.4	786.6	211.78	4.714
24,100.0	9,800.0	23,254.0	9,000.0	123.5	139.2	-36.30	-14,198.5	-487.8	998.4	785.2	213.24	4.682
24,200.0	9,800.0	23,354.0	9,000.0	124.4	140.1	-36.30	-14,298.5	-488.6	998.4	783.7	214.70	4.650
24,300.0	9,800.0	23,454.0	9,000.0	125.2	141.1	-36.30	-14,398.5	-489.5	998.4	782.2	216.16	4.619
24,400.0	9,800.0	23,554.0	9,000.0	126.1	142.1	-36.30	-14,498.5	-490.4	998.4	780.8	217.62	4.588
24,500.0	9,800.0	23,654.0	9,000.0	126.9	143.0	-36.30	-14,598.5	-491.3	998.4	779.3	219.08	4.557
24,600.0	9,800.0	23,754.0	9,000.0	127.8	144.0	-36.30	-14,698.5	-492.2	998.4	777.8	220.54	4.527
24,700.0	9,800.0	23,854.0	9,000.0	128.7	144.9	-36.30	-14,798.5	-493.1	998.4	776.4	222.00	4.497
24,800.0	9,800.0	23,954.0	9,000.0	129.5	145.9	-36.30	-14,898.5	-494.0	998.4	774.9	223.46	4.468
24,900.0	9,800.0	24,054.0	9,000.0	130.4	146.8	-36.30	-14,998.5	-494.8	998.4	773.5	224.92	4.439
25,000.0	9,800.0	24,154.0	9,000.0	131.2	147.8	-36.30	-15,098.5	-495.7	998.4	772.0	226.39	4.410
25,100.0	9,800.0	24,254.0	9,000.0	132.1	148.8	-36.30	-15,198.4	-496.6	998.4	770.5	227.85	4.382
25,200.0	9,800.0	24,354.0	9,000.0	132.9	149.7	-36.30	-15,298.4	-497.5	998.4	769.1	229.31	4.354
25,250.5	9,800.0	24,404.5	9,000.0	133.3	150.2	-36.30	-15,348.9	-498.0	998.4	768.3	230.05	4.340 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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 501H - OWB - AWP													Offset Site Error: 0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 6969-r.5 MWD+IFR1+MS, 8009-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Distance	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)	No-Go Distance (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	3.0	167.78	-298.8	64.7	305.7				
100.0	100.0	99.1	99.1	0.8	3.0	167.83	-299.0	64.5	305.9	301.0	4.87	62.867	
200.0	200.0	199.0	199.0	1.4	3.1	167.94	-299.4	64.0	306.2	301.0	5.21	58.716	
300.0	300.0	301.9	301.9	1.9	3.1	168.11	-299.5	63.1	306.1	300.6	5.54	55.234	
400.0	400.0	402.4	402.3	2.2	3.1	168.30	-299.1	61.9	305.4	299.6	5.85	52.208	
500.0	500.0	502.2	502.2	2.6	3.2	168.51	-298.6	60.7	304.7	298.6	6.15	49.585	
600.0	600.0	609.1	609.1	2.8	3.2	168.37	-296.8	61.1	303.1	296.7	6.44	47.062	
700.0	700.0	715.9	715.6	3.1	3.2	167.19	-291.1	66.2	298.9	292.2	6.72	44.452	
800.0	800.0	819.8	818.7	3.3	3.2	165.13	-282.4	75.0	292.8	285.8	7.00	41.844	
900.0	900.0	920.7	918.5	3.6	3.3	162.49	-272.5	86.0	286.4	279.1	7.26	39.418	
1,000.0	1,000.0	1,022.3	1,018.2	3.8	3.3	158.77	-260.3	101.1	279.8	272.3	7.52	37.201	
1,100.0	1,100.0	1,122.4	1,115.7	4.0	3.4	154.27	-246.1	118.6	273.6	265.8	7.77	35.198	
1,200.0	1,200.0	1,220.4	1,211.0	4.2	3.5	149.51	-231.4	136.2	268.7	260.7	8.02	33.528	
1,300.0	1,300.0	1,318.7	1,306.8	4.4	3.5	144.81	-216.8	152.9	265.4	257.2	8.25	32.170	
1,387.6	1,387.6	1,402.1	1,387.8	4.5	3.6	140.60	-204.2	167.7	264.3	255.8	8.45	31.277 CC	
1,400.0	1,400.0	1,413.7	1,399.1	4.6	3.6	140.00	-202.5	169.9	264.3	255.8	8.48	31.176 ES	
1,500.0	1,500.0	1,507.8	1,490.5	4.7	3.7	135.12	-188.6	187.8	266.4	257.7	8.70	30.620	
1,600.0	1,600.0	1,604.7	1,584.7	5.0	3.8	-152.13	-175.4	206.3	272.7	263.7	9.00	30.294 SF	
1,700.0	1,699.8	1,702.1	1,679.7	5.3	4.0	-156.76	-162.8	223.7	283.8	274.5	9.31	30.465	
1,800.0	1,799.5	1,797.3	1,772.3	5.5	4.1	-161.37	-149.4	241.4	300.0	290.4	9.64	31.121	
1,900.0	1,898.7	1,889.7	1,861.8	5.7	4.2	-165.74	-135.7	259.4	321.9	311.9	9.97	32.267	
2,000.0	1,997.5	1,980.9	1,950.3	6.0	4.3	-169.56	-122.8	277.5	349.5	339.2	10.31	33.891	
2,100.0	2,095.9	2,081.2	2,047.8	6.1	4.5	-173.15	-109.5	296.7	379.8	369.2	10.59	35.859	
2,200.0	2,194.4	2,194.1	2,158.3	6.3	4.7	-176.47	-93.8	313.9	407.3	396.4	10.90	37.379	
2,300.0	2,292.9	2,292.5	2,254.9	6.4	4.8	-178.91	-79.8	326.2	433.1	422.0	11.17	38.790	
2,400.0	2,391.4	2,378.8	2,339.4	6.6	5.0	179.05	-66.8	337.9	460.4	449.0	11.42	40.324	
2,500.0	2,489.9	2,472.5	2,430.9	6.7	5.1	176.96	-51.9	351.6	489.1	477.4	11.70	41.819	
2,600.0	2,588.4	2,563.6	2,519.5	6.9	5.3	174.95	-35.8	365.5	518.8	506.8	11.98	43.310	
2,700.0	2,686.5	2,659.0	2,611.9	7.1	5.4	173.09	-17.3	380.4	551.0	538.7	12.36	44.588	
2,800.0	2,783.9	2,756.6	2,706.6	7.4	5.6	171.42	0.8	394.7	586.1	573.4	12.75	45.982	
2,836.5	2,819.3	2,791.2	2,740.4	7.4	5.7	170.87	7.2	399.6	599.6	586.8	12.84	46.697	
2,900.0	2,880.7	2,847.7	2,795.3	7.5	5.8	170.01	17.7	407.6	623.7	610.7	13.00	47.980	
3,000.0	2,977.4	2,927.2	2,872.2	7.7	5.9	168.77	33.8	419.9	663.0	649.8	13.27	49.964	
3,100.0	3,074.1	3,033.1	2,974.4	7.8	6.1	167.26	55.7	436.2	702.7	689.0	13.63	51.548	
3,200.0	3,170.9	3,139.8	3,078.4	8.0	6.3	166.11	75.4	449.8	740.0	726.0	13.99	52.907	
3,300.0	3,267.6	3,231.1	3,167.6	8.2	6.5	165.27	91.8	460.7	776.6	762.3	14.30	54.318	
3,400.0	3,364.3	3,300.0	3,234.6	8.4	6.6	164.64	104.8	470.1	815.1	800.5	14.55	56.015	
3,500.0	3,461.0	3,391.9	3,323.6	8.6	6.8	163.79	123.1	483.8	855.1	840.2	14.89	57.441	
3,600.0	3,557.7	3,499.5	3,428.1	8.8	7.0	162.93	144.0	498.7	894.0	878.7	15.27	58.540	
3,700.0	3,654.4	3,576.9	3,503.3	9.0	7.2	162.38	158.8	509.1	932.8	917.2	15.56	59.935	
3,800.0	3,751.1	3,684.8	3,608.0	9.1	7.4	161.62	180.2	524.2	972.3	956.3	15.96	60.919	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 502H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program: 96-r.5 SDI_KPR_WL_NS-CT, 521-r.5 MWD+IFR1+MS, 7125-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		No-Go		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)	Between Ellipses (usft)	Distance (usft)	Factor		
0.0	0.0	0.9	0.9	0.0	3.0	179.08	-299.9	4.8	299.9					
100.0	100.0	99.9	99.9	0.8	3.0	179.14	-300.1	4.5	300.1	295.3	4.86	61.739		
200.0	200.0	201.3	201.3	1.4	3.1	179.24	-300.2	4.0	300.2	295.0	5.21	57.620		
300.0	300.0	302.1	302.1	1.9	3.1	179.25	-299.9	3.9	299.9	294.4	5.54	54.155		
400.0	400.0	402.6	402.6	2.2	3.4	179.30	-299.4	3.7	299.4	293.3	6.17	48.510		
500.0	500.0	503.2	503.2	2.6	4.0	179.52	-298.8	2.5	298.8	291.7	7.13	41.921		
600.0	600.0	603.7	603.6	2.8	4.3	179.97	-297.9	0.2	297.9	290.3	7.67	38.861		
700.0	700.0	708.9	708.8	3.1	4.6	-179.17	-296.2	-4.3	296.3	288.2	8.08	36.692		
800.0	800.0	815.9	815.4	3.3	4.9	-177.73	-291.9	-11.6	292.5	284.0	8.51	34.390		
900.0	900.0	924.6	923.4	3.6	5.2	-175.70	-284.4	-21.4	286.1	277.2	8.91	32.128		
1,000.0	1,000.0	1,033.1	1,030.7	3.8	5.5	-173.28	-273.2	-32.2	276.7	267.5	9.27	29.837		
1,100.0	1,100.0	1,136.3	1,132.5	4.0	5.9	-170.56	-259.6	-43.1	265.1	255.4	9.65	27.464		
1,200.0	1,200.0	1,236.2	1,230.8	4.2	6.2	-167.61	-245.5	-53.9	253.2	243.2	10.01	25.290		
1,300.0	1,300.0	1,337.2	1,330.1	4.4	6.5	-164.32	-230.6	-64.7	241.3	231.0	10.36	23.299		
1,400.0	1,400.0	1,435.7	1,426.9	4.6	6.8	-160.91	-215.4	-74.6	229.4	218.7	10.70	21.445		
1,500.0	1,500.0	1,534.7	1,524.5	4.7	7.2	-157.67	-200.9	-82.5	218.4	207.4	11.03	19.809		
1,600.0	1,600.0	1,635.3	1,623.6	5.0	7.6	-77.02	-185.4	-90.7	207.2	195.8	11.37	18.222		
1,700.0	1,699.8	1,738.3	1,724.3	5.3	8.0	-73.54	-166.7	-101.5	194.4	182.8	11.66	16.673		
1,800.0	1,799.5	1,841.0	1,824.3	5.5	8.4	-70.35	-145.5	-111.7	178.9	167.0	11.94	14.983		
1,900.0	1,898.7	1,937.5	1,918.3	5.7	8.8	-68.23	-125.5	-120.1	162.1	149.8	12.27	13.209		
2,000.0	1,997.5	2,033.0	2,011.3	6.0	9.2	-66.51	-106.5	-129.9	145.8	133.1	12.69	11.489		
2,100.0	2,095.9	2,127.7	2,103.2	6.1	9.6	-63.33	-87.7	-143.6	131.4	118.4	13.01	10.097		
2,200.0	2,194.4	2,223.5	2,195.7	6.3	10.0	-58.55	-69.4	-160.4	120.3	107.0	13.29	9.056		
2,300.0	2,292.9	2,323.1	2,291.8	6.4	10.5	-52.51	-50.6	-178.7	111.1	97.6	13.59	8.179		
2,400.0	2,391.4	2,422.0	2,387.2	6.6	10.9	-45.42	-31.7	-196.7	103.0	89.0	14.03	7.343		
2,500.0	2,489.9	2,520.5	2,481.7	6.7	11.4	-36.25	-11.2	-215.5	96.9	82.1	14.77	6.564		
2,600.0	2,588.4	2,618.8	2,575.8	6.9	11.8	-25.94	9.5	-234.5	93.9	78.1	15.87	5.918		
2,700.0	2,686.5	2,717.7	2,670.8	7.1	12.3	-16.04	29.2	-253.5	92.3	75.1	17.25	5.351		
2,800.0	2,783.9	2,816.1	2,765.4	7.4	12.7	-6.48	48.6	-272.3	89.9	71.1	18.75	4.795		
2,836.5	2,819.3	2,851.5	2,799.3	7.4	12.9	-2.62	56.2	-279.2	89.0	69.7	19.31	4.612		
2,884.4	2,865.6	2,898.4	2,844.0	7.5	13.1	2.94	67.0	-288.5	88.6	68.5	20.10	4.410 CC		
2,900.0	2,880.7	2,914.0	2,858.9	7.5	13.2	4.82	70.6	-291.6	88.6	68.3	20.36	4.355		
3,000.0	2,977.4	3,014.2	2,954.7	7.7	13.7	16.49	92.9	-310.2	89.7	67.8	21.91	4.096 ES		
3,100.0	3,074.1	3,114.2	3,051.1	7.8	14.2	26.11	112.3	-328.6	92.3	69.2	23.08	3.998 SF		
3,200.0	3,170.9	3,212.4	3,146.0	8.0	14.6	34.66	130.6	-346.5	96.6	72.7	23.91	4.039		
3,300.0	3,267.6	3,310.3	3,240.1	8.2	15.1	42.83	150.6	-364.3	104.4	79.9	24.48	4.266		
3,400.0	3,364.3	3,410.4	3,336.5	8.4	15.6	49.76	170.4	-382.6	113.6	88.7	24.90	4.561		
3,500.0	3,461.0	3,507.3	3,430.0	8.6	16.0	55.58	189.2	-399.9	123.5	98.4	25.14	4.915		
3,600.0	3,557.7	3,603.3	3,522.1	8.8	16.5	61.26	211.0	-415.8	137.5	112.2	25.23	5.448		
3,700.0	3,654.4	3,701.0	3,615.9	9.0	17.0	66.47	233.9	-430.8	153.1	127.8	25.30	6.049		
3,800.0	3,751.1	3,800.6	3,711.7	9.1	17.4	71.34	257.4	-444.5	169.7	144.3	25.36	6.692		
3,900.0	3,847.9	3,901.1	3,808.9	9.3	17.9	75.43	279.3	-458.1	185.5	160.1	25.44	7.292		
4,000.0	3,944.6	4,001.5	3,906.1	9.5	18.4	78.88	300.2	-471.6	201.1	175.5	25.54	7.874		
4,100.0	4,041.3	4,103.7	4,005.4	9.7	18.8	81.86	320.0	-485.6	215.7	190.1	25.67	8.406		
4,200.0	4,138.0	4,208.1	4,107.3	9.9	19.3	84.72	337.9	-499.3	228.7	202.9	25.77	8.875		
4,300.0	4,234.7	4,305.0	4,202.5	10.1	19.8	87.69	353.0	-509.7	241.0	215.3	25.74	9.362		
4,400.0	4,331.4	4,413.9	4,309.9	10.3	20.3	91.27	368.1	-519.4	252.7	227.1	25.65	9.852		
4,500.0	4,428.1	4,516.1	4,411.0	10.5	20.7	94.36	379.2	-529.1	262.2	236.7	25.49	10.285		
4,600.0	4,524.9	4,614.9	4,509.1	10.7	21.1	97.61	388.5	-536.6	271.6	246.4	25.26	10.752		
4,700.0	4,621.6	4,714.1	4,607.8	11.0	21.5	101.03	397.0	-542.5	281.7	256.8	24.99	11.273		
4,800.0	4,718.3	4,813.9	4,707.1	11.2	21.9	104.42	404.7	-547.8	292.3	267.6	24.73	11.817		

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 502H - OWB - AWP													Offset Site Error: 0.0 usft
Survey Program: 96-r.5 SDI_KPR_WL_NS-CT, 521-r.5 MWD+IFR1+MS, 7125-r.5 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
4,900.0	4,815.0	4,912.8	4,805.7	11.4	22.3	107.71	411.5	-552.4	303.4	278.9	24.51	12.378	
5,000.0	4,911.7	5,011.6	4,904.3	11.6	22.6	111.20	416.7	-555.1	315.2	290.9	24.30	12.970	
5,100.0	5,008.4	5,110.2	5,002.8	11.8	22.9	114.93	419.9	-555.7	327.8	303.7	24.13	13.586	
5,136.1	5,043.4	5,145.7	5,038.3	11.9	23.0	116.25	420.8	-555.8	332.6	308.5	24.07	13.817	
5,200.0	5,105.2	5,208.1	5,100.7	12.0	23.1	118.49	422.4	-556.0	341.1	317.1	24.02	14.205	
5,300.0	5,202.4	5,305.6	5,198.2	12.2	23.4	121.63	424.6	-556.2	354.7	330.7	24.05	14.751	
5,400.0	5,300.0	5,404.7	5,297.2	12.4	23.6	124.42	426.6	-556.3	368.1	344.0	24.16	15.238	
5,500.0	5,398.0	5,504.2	5,396.7	12.6	23.8	126.82	428.0	-556.7	380.7	356.4	24.33	15.649	
5,600.0	5,496.3	5,602.7	5,495.2	12.8	24.1	128.86	429.4	-557.1	392.6	368.1	24.54	16.002	
5,700.0	5,594.9	5,701.3	5,593.8	13.0	24.3	130.61	430.6	-557.5	403.8	379.1	24.77	16.302	
5,800.0	5,693.8	5,801.8	5,694.3	13.2	24.6	132.10	431.8	-557.9	414.1	389.1	25.03	16.546	
5,900.0	5,792.9	5,898.9	5,791.4	13.4	24.8	133.33	432.6	-558.3	423.3	398.0	25.28	16.746	
6,000.0	5,892.2	5,995.7	5,888.2	13.6	24.9	134.41	433.5	-557.8	432.2	406.7	25.51	16.940	
6,100.0	5,991.7	6,095.4	5,987.8	13.7	25.0	135.31	434.6	-557.1	440.3	414.5	25.75	17.100	
6,200.0	6,091.4	6,201.4	6,093.9	13.9	25.1	136.06	435.2	-556.9	446.5	420.5	25.99	17.176	
6,300.0	6,191.2	6,306.0	6,198.5	14.1	25.0	136.87	433.4	-556.9	450.1	423.9	26.24	17.152	
6,400.0	6,291.1	6,405.2	6,297.6	14.2	24.7	137.64	430.2	-556.5	452.1	425.7	26.46	17.086	
6,500.0	6,391.1	6,502.1	6,394.5	14.4	24.5	138.22	427.4	-555.9	453.3	426.7	26.65	17.010	
6,600.0	6,491.1	6,604.9	6,497.2	14.5	24.3	138.56	425.3	-555.6	453.3	426.4	26.84	16.888	
6,608.9	6,500.0	6,614.3	6,506.6	14.5	24.3	60.49	425.1	-555.6	453.2	426.3	26.86	16.873	
6,700.0	6,591.1	6,708.5	6,600.8	14.5	24.2	60.65	423.2	-556.4	451.6	424.6	27.01	16.720	
6,800.0	6,691.1	6,808.2	6,700.5	14.6	24.2	60.75	421.6	-557.7	449.7	422.5	27.18	16.546	
6,900.0	6,791.1	6,908.7	6,801.0	14.7	24.2	60.83	420.1	-559.1	447.8	420.4	27.36	16.363	
7,000.0	6,891.1	7,011.6	6,903.9	14.7	24.3	60.92	418.4	-560.7	445.6	417.9	27.67	16.107	
7,100.0	6,991.1	7,118.4	7,010.5	14.8	24.5	61.48	412.8	-561.8	442.2	414.0	28.21	15.677	
7,200.0	7,091.1	7,277.2	7,163.7	14.9	24.6	66.06	374.6	-561.0	431.6	402.4	29.16	14.800	
7,300.0	7,191.1	7,403.6	7,272.8	14.9	24.7	74.36	311.3	-559.3	413.7	382.9	30.77	13.443	
7,400.0	7,291.1	7,498.6	7,343.5	15.0	24.8	83.27	248.0	-559.4	396.6	364.0	32.59	12.170	
7,482.3	7,373.4	7,547.6	7,374.3	15.0	24.8	88.82	209.9	-559.1	391.0	357.6	33.39	11.710	
7,500.0	7,391.1	7,556.7	7,379.7	15.1	24.8	89.90	202.6	-558.9	391.3	357.8	33.48	11.687	
7,600.0	7,491.1	7,607.6	7,409.0	15.1	24.9	95.95	161.0	-557.6	403.2	369.5	33.64	11.985	
7,700.0	7,591.1	7,648.0	7,430.4	15.2	24.9	100.79	126.8	-556.1	432.3	399.3	32.97	13.111	
7,800.0	7,691.1	7,688.7	7,450.3	15.3	24.9	105.61	91.3	-554.4	476.6	444.5	32.13	14.832	
7,900.0	7,791.1	7,728.9	7,468.9	15.3	24.9	110.20	55.7	-552.7	532.6	501.2	31.34	16.993	
8,000.0	7,891.1	7,766.9	7,485.6	15.4	25.0	114.33	21.7	-551.3	597.1	566.5	30.66	19.476	
8,100.0	7,991.1	7,790.0	7,495.5	15.4	25.0	116.72	0.8	-550.5	668.2	638.3	29.89	22.356	
8,200.0	8,091.1	7,816.5	7,506.2	15.5	25.0	119.37	-23.4	-549.6	744.4	715.0	29.47	25.259	
8,300.0	8,191.1	7,838.0	7,513.9	15.6	25.0	121.47	-43.5	-549.0	825.1	796.0	29.18	28.281	
8,400.0	8,291.1	7,838.0	7,513.9	15.6	25.0	121.47	-43.5	-549.0	909.1	880.3	28.77	31.594	
8,500.0	8,391.1	7,864.2	7,522.3	15.7	25.0	123.94	-68.4	-548.5	995.3	966.5	28.83	34.519	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 503H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 7007-r.5 MWD+IFR1+MS, 8111-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		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)	No-Go Distance (usft)	Separation Factor	Warning
6,200.0	6,091.4	6,357.7	6,221.3	13.9	12.3	-3.57	343.6	-1,918.6	997.9	973.5	24.33	41.017	
6,300.0	6,191.2	6,446.3	6,307.9	14.1	12.5	-2.56	359.7	-1,908.3	982.8	958.1	24.64	39.888	
6,400.0	6,291.1	6,531.8	6,391.6	14.2	12.6	-1.64	374.1	-1,899.6	971.0	946.0	24.93	38.944	
6,500.0	6,391.1	6,619.0	6,477.5	14.4	12.8	-0.76	387.7	-1,891.9	962.4	937.2	25.20	38.183	
6,600.0	6,491.1	6,715.5	6,572.7	14.5	13.0	0.13	401.3	-1,884.5	956.6	931.2	25.42	37.631	
6,608.9	6,500.0	6,725.5	6,582.6	14.5	13.0	-77.88	402.4	-1,883.7	956.1	930.7	25.44	37.587	
6,700.0	6,591.1	6,814.4	6,670.9	14.5	13.2	-77.29	411.0	-1,877.4	951.7	926.1	25.57	37.215	
6,800.0	6,691.1	6,906.8	6,762.8	14.6	13.4	-76.85	417.3	-1,872.0	947.5	921.7	25.77	36.772	
6,900.0	6,791.1	6,999.7	6,855.6	14.7	14.2	-76.50	422.2	-1,867.6	944.1	917.4	26.71	35.351	
7,000.0	6,891.1	7,101.8	6,957.5	14.7	14.6	-76.24	425.6	-1,863.7	941.2	913.9	27.27	34.519	
7,100.0	6,991.1	7,218.0	7,072.8	14.8	16.2	-76.92	413.7	-1,861.9	937.3	908.5	28.75	32.595	
7,200.0	7,091.1	7,346.5	7,189.9	14.9	17.3	-80.07	362.1	-1,864.4	930.5	901.2	29.26	31.803	
7,300.0	7,191.1	7,496.3	7,314.2	14.9	17.7	-85.19	278.8	-1,863.6	921.0	891.3	29.64	31.070	
7,400.0	7,291.1	7,594.1	7,384.3	15.0	17.9	-89.44	210.8	-1,860.8	912.6	882.6	30.01	30.409	
7,492.5	7,383.6	7,652.4	7,420.0	15.1	18.1	-92.34	164.8	-1,858.8	909.6	879.3	30.29	30.025 CC	
7,500.0	7,391.1	7,656.7	7,422.4	15.1	18.1	-92.56	161.3	-1,858.7	909.6	879.3	30.32	30.003 ES	
7,600.0	7,491.1	7,707.6	7,449.7	15.1	18.2	-95.26	118.4	-1,856.9	914.1	883.5	30.60	29.875 SF	
7,700.0	7,591.1	7,748.0	7,469.4	15.2	18.3	-97.47	83.1	-1,855.5	926.8	896.0	30.83	30.066	
7,800.0	7,691.1	7,780.5	7,483.8	15.3	18.3	-99.29	54.0	-1,854.3	948.2	917.2	31.02	30.566	
7,900.0	7,791.1	7,807.0	7,494.7	15.3	18.3	-100.78	29.8	-1,853.5	978.1	946.9	31.18	31.368	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 520H - OWB - AWP													Offset Site Error: 0.0 usft
Survey Program: 26-r.5 SDI_KPR_ADK, 7433-r.5 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 +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
0.0	0.0	0.5	0.5	0.0	3.0	173.39	-299.3	34.7	301.3				
100.0	100.0	100.0	100.0	0.8	3.0	173.51	-299.4	34.1	301.4	296.5	4.86	62.013	
200.0	200.0	201.8	201.8	1.4	3.1	173.97	-299.4	31.6	301.1	295.9	5.20	57.879	
300.0	300.0	301.2	301.1	1.9	3.2	174.58	-299.5	28.4	300.8	295.3	5.54	54.288	
400.0	400.0	401.3	401.1	2.2	3.3	175.31	-299.6	24.6	300.6	294.7	5.88	51.158	
500.0	500.0	501.4	501.2	2.6	3.5	176.08	-299.7	20.5	300.4	294.2	6.21	48.382	
600.0	600.0	601.8	601.5	2.8	3.7	176.87	-299.8	16.4	300.2	293.7	6.54	45.904	
700.0	700.0	704.4	704.1	3.1	3.8	176.98	-299.1	15.8	299.5	292.6	6.88	43.531	
800.0	800.0	802.9	802.5	3.3	3.8	176.82	-298.0	16.5	298.5	291.3	7.22	41.326	
900.0	900.0	901.2	900.9	3.6	3.8	176.63	-297.7	17.5	298.2	290.6	7.56	39.466	
1,000.0	1,000.0	1,001.9	1,001.6	3.8	3.9	176.36	-297.3	18.9	297.9	290.0	7.89	37.772	
1,100.0	1,100.0	1,102.2	1,101.8	4.0	3.9	176.01	-296.9	20.7	297.6	289.4	8.22	36.216	
1,200.0	1,200.0	1,203.5	1,203.1	4.2	4.0	175.65	-296.1	22.5	297.0	288.4	8.55	34.714	
1,300.0	1,300.0	1,304.2	1,303.8	4.4	4.1	175.37	-295.1	23.9	296.1	287.2	8.90	33.259	
1,400.0	1,400.0	1,406.7	1,406.2	4.6	4.3	174.87	-293.2	26.3	294.4	285.2	9.26	31.798	
1,500.0	1,500.0	1,512.0	1,511.4	4.7	4.5	174.00	-289.8	30.5	291.6	282.0	9.63	30.290	
1,600.0	1,600.0	1,620.3	1,619.5	5.0	4.8	-109.83	-283.7	34.8	287.1	277.0	10.03	28.617	
1,700.0	1,699.8	1,725.0	1,723.7	5.3	5.1	-111.95	-274.5	38.3	280.7	270.2	10.46	26.841	
1,800.0	1,799.5	1,822.7	1,820.9	5.5	5.4	-114.97	-265.8	43.2	276.2	265.3	10.87	25.404	
1,900.0	1,898.7	1,927.9	1,925.3	5.7	5.8	-118.95	-254.8	48.1	272.7	261.4	11.31	24.116	
2,000.0	1,997.5	2,041.4	2,037.8	6.0	6.2	-123.61	-239.8	49.9	268.7	256.9	11.78	22.811	
2,100.0	2,095.9	2,141.4	2,136.6	6.1	6.5	-127.40	-224.2	47.2	263.3	251.0	12.24	21.499	
2,200.0	2,194.4	2,243.3	2,237.2	6.3	6.9	-131.28	-208.5	43.7	258.8	246.1	12.71	20.360	
2,300.0	2,292.9	2,342.3	2,334.7	6.4	7.3	-135.25	-191.8	40.0	254.1	241.0	13.17	19.289	
2,400.0	2,391.4	2,440.5	2,431.4	6.6	7.7	-139.33	-175.3	36.3	250.8	237.2	13.62	18.414	
2,500.0	2,489.9	2,538.9	2,528.4	6.7	8.1	-143.57	-158.5	33.0	248.9	234.8	14.04	17.724	
2,560.2	2,549.1	2,597.0	2,585.5	6.8	8.3	-146.19	-148.4	31.3	248.4	234.1	14.28	17.398 CC, ES	
2,600.0	2,588.4	2,634.8	2,622.6	6.9	8.5	-148.07	-141.4	31.0	248.6	234.2	14.42	17.248	
2,700.0	2,686.5	2,732.7	2,718.8	7.1	8.9	-152.93	-123.0	30.4	252.1	237.3	14.78	17.056 SF	
2,800.0	2,783.9	2,829.2	2,813.6	7.4	9.4	-157.73	-105.4	29.4	260.9	245.8	15.12	17.251	
2,836.5	2,819.3	2,864.5	2,848.4	7.4	9.5	-159.40	-99.2	28.9	265.4	250.2	15.20	17.452	
2,900.0	2,880.7	2,926.0	2,909.0	7.5	9.8	-162.24	-88.9	27.6	274.1	258.8	15.36	17.847	
3,000.0	2,977.4	3,025.8	3,007.2	7.7	10.3	-166.71	-71.0	25.5	288.6	273.0	15.64	18.454	
3,100.0	3,074.1	3,121.6	3,101.1	7.8	10.7	-170.83	-52.4	23.7	304.2	288.3	15.91	19.122	
3,200.0	3,170.9	3,210.3	3,188.0	8.0	11.1	-174.49	-34.5	23.5	322.8	306.6	16.16	19.976	
3,300.0	3,267.6	3,306.8	3,282.4	8.2	11.6	-178.17	-14.6	24.4	343.6	327.1	16.43	20.907	
3,400.0	3,364.3	3,403.2	3,376.9	8.4	12.1	178.66	4.7	25.1	365.5	348.7	16.73	21.839	
3,500.0	3,461.0	3,500.2	3,472.1	8.6	12.5	176.00	23.1	25.2	387.9	370.9	17.06	22.733	
3,600.0	3,557.7	3,589.4	3,559.5	8.8	13.0	173.65	41.1	26.0	411.8	394.4	17.39	23.684	
3,700.0	3,654.4	3,685.1	3,653.0	9.0	13.4	171.24	61.4	27.7	437.1	419.3	17.75	24.621	
3,800.0	3,751.1	3,780.2	3,746.1	9.1	13.9	169.25	80.5	29.3	462.9	444.8	18.14	25.528	
3,900.0	3,847.9	3,877.9	3,841.9	9.3	14.4	167.50	99.4	30.7	489.1	470.5	18.54	26.374	
4,000.0	3,944.6	3,973.9	3,936.3	9.5	14.8	166.03	117.4	31.7	515.2	496.2	18.96	27.178	
4,100.0	4,041.3	4,068.7	4,029.2	9.7	15.3	164.63	135.9	33.0	541.9	522.5	19.38	27.961	
4,200.0	4,138.0	4,171.2	4,129.7	9.9	15.8	163.22	156.3	33.9	568.5	548.6	19.85	28.639	
4,300.0	4,234.7	4,279.2	4,235.6	10.1	16.3	161.89	177.4	32.5	593.2	572.8	20.34	29.167	
4,400.0	4,331.4	4,380.3	4,335.0	10.3	16.8	160.92	195.4	30.2	617.0	596.2	20.79	29.684	
4,500.0	4,428.1	4,478.6	4,432.0	10.5	17.3	160.18	211.4	27.7	640.5	619.3	21.21	30.190	
4,600.0	4,524.9	4,567.6	4,519.7	10.7	17.7	159.54	226.0	25.7	664.5	642.8	21.62	30.735	
4,700.0	4,621.6	4,652.6	4,603.5	11.0	18.1	158.90	241.0	24.9	689.8	667.8	22.02	31.327	
4,800.0	4,718.3	4,745.3	4,694.5	11.2	18.6	158.17	258.4	25.1	716.6	694.2	22.47	31.892	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 520H - OWB - AWP													Offset Site Error:	0.0 usft	
Survey Program:		26-r.5 SDI_KPR_ADK, 7433-r.5 MWD+IFR1+MS					Rule Assigned:							Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Offset		Offset Wellbore Centre		Distance		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)	Between Ellipses (usft)	No-Go Distance (usft)	Factor			
4,900.0	4,815.0	4,840.8	4,788.3	11.4	19.1	157.48	276.3	25.4	743.7	720.7	22.94	32.422			
5,000.0	4,911.7	4,938.9	4,884.8	11.6	19.5	156.86	294.1	25.8	770.7	747.3	23.41	32.916			
5,100.0	5,008.4	5,036.9	4,981.2	11.8	20.0	156.32	311.3	25.9	797.4	773.5	23.89	33.383			
5,136.1	5,043.4	5,072.4	5,016.2	11.9	20.2	156.15	317.4	25.9	807.1	783.1	24.04	33.568			
5,200.0	5,105.2	5,130.0	5,072.9	12.0	20.5	155.95	327.1	26.1	824.0	799.7	24.31	33.897			
5,300.0	5,202.4	5,228.5	5,170.2	12.2	21.0	155.61	343.3	26.7	849.3	824.5	24.78	34.272			
5,400.0	5,300.0	5,330.6	5,271.1	12.4	21.4	155.31	358.8	27.2	872.8	847.5	25.26	34.554			
5,500.0	5,398.0	5,433.3	5,373.0	12.6	21.9	155.18	371.2	27.7	894.2	868.5	25.71	34.777			
5,600.0	5,496.3	5,535.8	5,474.9	12.8	22.4	155.07	382.4	28.1	913.6	887.4	26.15	34.934			
5,700.0	5,594.9	5,641.5	5,580.1	13.0	22.9	154.98	392.7	28.0	930.7	904.1	26.59	35.009			
5,800.0	5,693.8	5,744.2	5,682.4	13.2	23.3	154.91	401.5	27.6	945.8	918.8	27.00	35.034			
5,900.0	5,792.9	5,849.0	5,786.9	13.4	23.8	154.87	409.0	26.9	958.7	931.3	27.39	34.997			
6,000.0	5,892.2	5,952.5	5,890.3	13.6	24.2	154.85	415.1	25.9	969.5	941.7	27.77	34.912			
6,100.0	5,991.7	6,056.5	5,994.1	13.7	24.6	154.83	420.2	24.6	978.3	950.1	28.13	34.778			
6,200.0	6,091.4	6,162.0	6,099.6	13.9	25.0	154.82	424.2	23.1	984.9	956.5	28.47	34.601			
6,300.0	6,191.2	6,263.0	6,200.5	14.1	25.3	154.80	427.2	21.5	989.8	961.0	28.78	34.394			
6,400.0	6,291.1	6,372.0	6,309.4	14.2	25.6	154.80	429.1	19.5	992.5	963.4	29.06	34.150			
6,500.0	6,391.1	6,476.7	6,414.1	14.4	25.7	154.85	429.0	17.2	992.8	963.5	29.29	33.891			
6,600.0	6,491.1	6,578.4	6,515.8	14.5	25.8	154.87	428.6	14.8	991.4	961.9	29.50	33.604			
6,608.9	6,500.0	6,587.1	6,524.5	14.5	25.8	76.78	428.5	14.6	991.2	961.6	29.52	33.576			
6,700.0	6,591.1	6,677.2	6,614.5	14.5	25.9	76.76	428.3	12.2	988.8	959.1	29.68	33.319			
6,800.0	6,691.1	6,775.0	6,712.3	14.6	26.0	76.75	427.9	10.0	986.5	956.6	29.86	33.036			
6,900.0	6,791.1	6,877.7	6,815.0	14.7	26.1	76.75	427.4	7.6	984.1	954.0	30.06	32.741			
7,000.0	6,891.1	6,976.9	6,914.2	14.7	26.1	76.75	426.8	5.3	981.7	951.4	30.26	32.445			
7,100.0	6,991.1	7,075.3	7,012.5	14.8	26.2	76.76	426.1	3.0	979.2	948.8	30.46	32.147			
7,200.0	7,091.1	7,182.9	7,120.1	14.9	26.3	76.78	425.1	0.5	976.8	946.1	30.69	31.829			
7,300.0	7,191.1	7,276.9	7,214.1	14.9	26.3	76.81	424.2	-1.4	974.5	943.6	30.91	31.528			
7,400.0	7,291.1	7,389.0	7,326.1	15.0	26.4	76.93	421.6	-4.2	971.6	940.4	31.18	31.166			
7,500.0	7,391.1	7,550.3	7,486.5	15.1	26.6	77.63	407.9	-10.5	966.5	935.0	31.43	30.753			
7,600.0	7,491.1	7,682.3	7,611.0	15.1	26.8	79.97	366.6	-18.8	953.2	921.6	31.57	30.195			
7,700.0	7,591.1	7,759.8	7,678.5	15.2	26.8	82.24	328.6	-20.2	942.4	910.7	31.73	29.706			
7,800.0	7,691.1	7,843.7	7,744.2	15.3	26.9	85.41	276.6	-19.7	934.8	902.9	31.93	29.273			
7,899.6	7,790.7	7,908.0	7,791.2	15.3	27.0	88.11	232.7	-18.7	931.8	899.6	32.12	29.007			
7,900.0	7,791.1	7,908.0	7,791.2	15.3	27.0	88.11	232.7	-18.7	931.8	899.6	32.12	29.007			
8,000.0	7,891.1	7,959.1	7,825.1	15.4	27.0	90.45	194.5	-17.2	935.2	902.9	32.25	28.998			
8,100.0	7,991.1	8,004.0	7,851.6	15.4	27.1	92.67	158.3	-15.4	946.1	913.7	32.31	29.277			
8,200.0	8,091.1	8,052.6	7,877.5	15.5	27.1	95.16	117.3	-13.3	964.6	932.2	32.38	29.789			
8,300.0	8,191.1	8,097.0	7,899.2	15.6	27.1	97.49	78.6	-12.0	990.2	957.8	32.40	30.560			

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 706H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+SAG+FDIR, 8589-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Distance	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)	No-Go Distance (usft)	Separation Factor	Warning
4,800.0	4,718.3	5,115.8	4,992.6	11.2	12.3	-18.31	67.9	-1,633.3	984.9	961.9	23.04	42.738	
4,900.0	4,815.0	5,203.8	5,077.6	11.4	12.5	-18.34	76.5	-1,612.2	937.3	913.9	23.43	40.006	
5,000.0	4,911.7	5,291.8	5,162.5	11.6	12.7	-18.37	85.0	-1,591.1	889.8	866.0	23.82	37.359	
5,100.0	5,008.4	5,379.7	5,247.5	11.8	12.9	-18.41	93.6	-1,570.0	842.2	818.0	24.20	34.796	
5,136.1	5,043.4	5,411.5	5,278.2	11.9	13.0	-18.42	96.7	-1,562.4	825.0	800.7	24.33	33.905	
5,200.0	5,105.2	5,467.9	5,332.6	12.0	13.1	-18.33	102.2	-1,548.8	795.0	770.4	24.57	32.357	
5,300.0	5,202.4	5,556.7	5,418.5	12.2	13.3	-18.16	110.8	-1,527.5	749.1	724.1	24.96	30.014	
5,400.0	5,300.0	5,646.3	5,505.0	12.4	13.5	-17.95	119.6	-1,506.1	704.7	679.3	25.35	27.801	
5,500.0	5,398.0	5,736.6	5,592.2	12.6	13.7	-17.68	128.4	-1,484.4	661.7	636.0	25.73	25.722	
5,600.0	5,496.3	5,821.6	5,674.4	12.8	13.9	-17.38	136.5	-1,464.3	620.6	594.5	26.11	23.772	
5,700.0	5,594.9	5,905.6	5,755.8	13.0	14.1	-17.06	144.2	-1,445.5	582.3	555.8	26.51	21.962	
5,800.0	5,693.8	5,991.0	5,839.0	13.2	14.2	-16.71	151.5	-1,427.4	546.8	519.9	26.91	20.317	
5,900.0	5,792.9	6,077.8	5,923.9	13.4	14.4	-16.34	158.5	-1,410.3	514.3	487.0	27.31	18.831	
6,000.0	5,892.2	6,166.0	6,010.3	13.6	14.6	-15.94	165.0	-1,394.1	484.7	457.0	27.70	17.500	
6,100.0	5,991.7	6,255.4	6,098.2	13.7	14.8	-15.51	171.2	-1,379.0	458.2	430.1	28.08	16.319	
6,200.0	6,091.4	6,345.9	6,187.4	13.9	15.0	-15.05	176.9	-1,365.0	434.8	406.3	28.45	15.284	
6,300.0	6,191.2	6,437.4	6,277.8	14.1	15.2	-14.56	182.1	-1,352.1	414.5	385.7	28.80	14.390	
6,400.0	6,291.1	6,529.7	6,369.3	14.2	15.4	-14.06	186.8	-1,340.5	397.4	368.2	29.15	13.633	
6,500.0	6,391.1	6,622.7	6,461.6	14.4	15.6	-13.55	191.0	-1,330.2	383.5	354.0	29.47	13.011	
6,600.0	6,491.1	6,716.3	6,554.7	14.5	15.7	-13.03	194.7	-1,321.2	372.8	343.0	29.75	12.529	
6,608.9	6,500.0	6,724.6	6,563.0	14.5	15.7	-91.07	195.0	-1,320.5	372.0	342.2	29.78	12.492	
6,700.0	6,591.1	6,810.2	6,648.3	14.5	15.9	-90.65	197.7	-1,313.6	364.6	334.6	29.98	12.161	
6,800.0	6,691.1	6,904.5	6,742.3	14.6	16.1	-90.26	200.3	-1,307.4	358.0	327.8	30.20	11.855	
6,900.0	6,791.1	7,000.0	6,837.7	14.7	16.2	-89.95	202.2	-1,302.6	353.0	322.6	30.41	11.607	
7,000.0	6,891.1	7,093.5	6,931.1	14.7	16.4	-89.73	203.5	-1,299.3	349.5	318.9	30.60	11.419	
7,100.0	6,991.1	7,188.1	7,025.7	14.8	16.5	-89.60	204.3	-1,297.4	347.5	316.7	30.78	11.288	
7,200.0	7,091.1	7,283.9	7,121.5	14.9	16.6	-89.57	204.5	-1,297.0	347.0	316.1	30.90	11.230	
7,300.0	7,191.1	7,383.9	7,221.5	14.9	16.6	-89.57	204.5	-1,297.0	347.0	316.0	31.01	11.190	
7,400.0	7,291.1	7,483.9	7,321.5	15.0	16.7	-89.57	204.5	-1,297.0	347.0	315.9	31.12	11.149	
7,500.0	7,391.1	7,583.9	7,421.5	15.1	16.7	-89.57	204.5	-1,297.0	347.0	315.7	31.24	11.107	
7,600.0	7,491.1	7,683.9	7,521.5	15.1	16.8	-89.57	204.5	-1,297.0	347.0	315.6	31.36	11.066	
7,700.0	7,591.1	7,783.9	7,621.5	15.2	16.8	-89.57	204.5	-1,297.0	347.0	315.5	31.47	11.025	
7,800.0	7,691.1	7,883.9	7,721.5	15.3	16.9	-89.57	204.5	-1,297.0	347.0	315.4	31.59	10.984	
7,900.0	7,791.1	7,983.9	7,821.5	15.3	16.9	-89.57	204.5	-1,297.0	347.0	315.3	31.71	10.943	
8,000.0	7,891.1	8,083.9	7,921.5	15.4	17.0	-89.57	204.5	-1,297.0	347.0	315.2	31.83	10.903	
8,100.0	7,991.1	8,183.9	8,021.5	15.4	17.1	-89.57	204.5	-1,297.0	347.0	315.0	31.94	10.862	
8,200.0	8,091.1	8,283.9	8,121.5	15.5	17.1	-89.57	204.5	-1,297.0	347.0	314.9	32.06	10.822	
8,300.0	8,191.1	8,383.9	8,221.5	15.6	17.2	-89.57	204.5	-1,297.0	347.0	314.8	32.18	10.782	
8,400.0	8,291.1	8,483.9	8,321.5	15.6	17.2	-89.57	204.5	-1,297.0	347.0	314.7	32.30	10.742	
8,500.0	8,391.1	8,583.9	8,421.5	15.7	17.3	-89.57	204.5	-1,297.0	347.0	314.6	32.42	10.704	
8,505.0	8,396.1	8,588.9	8,426.5	15.7	17.3	-89.57	204.5	-1,297.0	347.0	314.6	32.42	10.703 CC, ES	
8,600.0	8,491.1	8,683.0	8,520.1	15.8	17.3	-90.83	196.9	-1,297.0	347.1	314.6	32.51	10.677	
8,700.0	8,591.1	8,776.7	8,611.0	15.8	17.4	-94.57	174.2	-1,297.2	348.5	315.9	32.57	10.701	
8,800.0	8,691.1	8,861.2	8,688.8	15.9	17.5	-99.90	141.2	-1,297.5	354.3	321.7	32.57	10.880	
8,900.0	8,791.1	8,934.7	8,751.8	16.0	17.6	-105.78	103.6	-1,297.9	368.1	335.7	32.48	11.336	
9,000.0	8,891.1	9,000.0	8,803.4	16.0	17.6	-111.66	63.6	-1,298.2	392.9	360.5	32.36	12.141	
9,100.0	8,991.1	9,050.0	8,839.6	16.1	17.7	-116.37	29.1	-1,298.5	429.4	397.2	32.23	13.321	
9,200.0	9,091.1	9,100.0	8,872.7	16.2	17.8	-121.07	-8.3	-1,298.8	477.3	445.0	32.23	14.808	
9,300.0	9,191.1	9,131.2	8,891.6	16.2	17.8	-123.95	-33.1	-1,299.1	534.7	502.4	32.30	16.554	
9,400.0	9,291.1	9,162.8	8,909.4	16.3	17.9	-126.78	-59.2	-1,299.3	600.0	567.5	32.48	18.472	
9,431.4	9,322.5	9,171.7	8,914.1	16.3	17.9	-127.56	-66.8	-1,299.4	621.9	589.3	32.55	19.105	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 706H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+SAG+FDIR, 8589-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Distance	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)	No-Go Distance (usft)	Separation Factor	Warning
9,450.0	9,341.1	9,177.0	8,916.9	16.3	17.9	49.79	-71.2	-1,299.4	634.9	602.3	32.59	19.481	
9,475.0	9,366.0	9,184.2	8,920.6	16.3	17.9	47.07	-77.5	-1,299.5	652.3	619.6	32.65	19.977	
9,500.0	9,390.8	9,200.0	8,928.4	16.3	17.9	44.04	-91.2	-1,299.6	669.4	636.7	32.72	20.459	
9,525.0	9,415.5	9,200.0	8,928.4	16.3	17.9	42.23	-91.2	-1,299.6	685.9	653.2	32.78	20.927	
9,550.0	9,439.9	9,200.0	8,928.4	16.3	17.9	40.51	-91.2	-1,299.6	702.3	669.4	32.84	21.383	
9,575.0	9,463.9	9,216.0	8,936.0	16.3	17.9	38.18	-105.2	-1,299.7	718.0	685.1	32.92	21.812	
9,600.0	9,487.6	9,224.4	8,939.8	16.3	18.0	36.41	-112.8	-1,299.8	733.4	700.4	32.99	22.227	
9,625.0	9,510.8	9,233.1	8,943.6	16.2	18.0	34.79	-120.5	-1,299.8	748.2	715.1	33.07	22.623	
9,650.0	9,533.5	9,250.0	8,950.7	16.2	18.0	33.07	-135.9	-1,300.0	762.6	729.4	33.15	23.002	
9,675.0	9,555.6	9,250.0	8,950.7	16.2	18.0	32.02	-135.9	-1,300.0	776.2	743.0	33.24	23.355	
9,700.0	9,577.1	9,250.0	8,950.7	16.2	18.0	31.04	-135.9	-1,300.0	789.5	756.2	33.32	23.692	
9,725.0	9,597.9	9,269.2	8,958.2	16.2	18.0	29.71	-153.6	-1,300.1	801.9	768.4	33.41	24.002	
9,750.0	9,618.0	9,278.5	8,961.6	16.2	18.0	28.73	-162.3	-1,300.2	813.7	780.2	33.50	24.292	
9,775.0	9,637.2	9,300.0	8,969.0	16.2	18.1	27.63	-182.4	-1,300.4	825.1	791.5	33.58	24.570	
9,800.0	9,655.5	9,300.0	8,969.0	16.2	18.1	27.01	-182.4	-1,300.4	835.5	801.8	33.68	24.806	
9,825.0	9,673.0	9,300.0	8,969.0	16.2	18.1	26.42	-182.4	-1,300.4	845.3	811.6	33.78	25.026	
9,850.0	9,689.5	9,317.0	8,974.2	16.2	18.1	25.69	-198.6	-1,300.5	854.4	820.5	33.87	25.226	
9,875.0	9,705.0	9,326.8	8,977.1	16.2	18.1	25.12	-208.0	-1,300.6	862.8	828.8	33.96	25.402	
9,900.0	9,719.4	9,350.0	8,983.1	16.2	18.1	24.49	-230.4	-1,300.8	870.7	836.6	34.05	25.568	
9,925.0	9,732.7	9,350.0	8,983.1	16.3	18.1	24.15	-230.4	-1,300.8	877.3	843.2	34.16	25.685	
9,950.0	9,745.0	9,350.0	8,983.1	16.3	18.1	23.84	-230.4	-1,300.8	883.5	849.2	34.26	25.786	
9,975.0	9,756.0	9,366.6	8,986.9	16.3	18.2	23.47	-246.5	-1,300.9	888.8	854.4	34.36	25.870	
10,000.0	9,765.9	9,376.7	8,988.9	16.3	18.2	23.20	-256.4	-1,301.0	893.4	858.9	34.46	25.929	
10,025.0	9,774.6	9,400.0	8,993.0	16.4	18.2	22.92	-279.4	-1,301.2	897.4	862.9	34.54	25.979	
10,050.0	9,782.0	9,400.0	8,993.0	16.4	18.2	22.79	-279.4	-1,301.2	900.2	865.6	34.65	25.979	
10,075.0	9,788.2	9,400.0	8,993.0	16.5	18.2	22.69	-279.4	-1,301.2	902.5	867.7	34.76	25.964	
10,100.0	9,793.0	9,417.2	8,995.5	16.5	18.3	22.59	-296.4	-1,301.4	903.8	869.0	34.85	25.934	
10,125.0	9,796.6	9,427.4	8,996.6	16.5	18.3	22.56	-306.5	-1,301.5	904.5	869.5	34.95	25.879	
10,150.0	9,798.9	9,450.0	8,998.6	16.6	18.3	22.57	-329.0	-1,301.7	904.5	869.5	35.04	25.815	
10,175.0	9,799.9	9,450.0	8,998.6	16.7	18.3	22.62	-329.0	-1,301.7	903.3	868.2	35.14	25.704	
10,181.4	9,800.0	9,450.0	8,998.6	16.7	18.3	22.64	-329.0	-1,301.7	903.0	867.8	35.17	25.674	
10,200.0	9,800.0	9,450.0	8,998.6	16.7	18.3	22.64	-329.0	-1,301.7	902.0	866.7	35.24	25.593	
10,300.0	9,800.0	9,512.1	9,000.0	17.0	18.4	22.67	-391.1	-1,302.2	899.9	864.3	35.58	25.290	
10,400.0	9,800.0	9,612.1	9,000.0	17.3	18.6	22.67	-491.1	-1,303.1	899.9	864.0	35.88	25.084	
10,500.0	9,800.0	9,712.1	9,000.0	17.6	18.9	22.67	-591.1	-1,304.0	899.9	863.7	36.20	24.861	
10,600.0	9,800.0	9,812.1	9,000.0	17.9	19.1	22.67	-691.1	-1,304.8	899.9	863.4	36.55	24.623	
10,700.0	9,800.0	9,912.1	9,000.0	18.3	19.4	22.67	-791.1	-1,305.7	899.9	863.0	36.92	24.372	
10,781.4	9,800.0	9,993.5	9,000.0	18.6	19.7	22.67	-872.5	-1,306.4	899.9	862.7	37.25	24.161	
10,782.3	9,800.0	9,994.3	9,000.0	18.6	19.7	22.67	-873.3	-1,306.4	899.9	862.6	37.25	24.159	
10,800.0	9,800.0	10,012.1	9,000.0	18.7	19.7	22.67	-891.1	-1,306.6	899.9	862.6	37.32	24.112	
10,900.0	9,800.0	10,112.1	9,000.0	19.1	20.1	22.74	-991.0	-1,307.5	900.4	862.6	37.75	23.850	
11,000.0	9,800.0	10,212.0	9,000.0	19.5	20.5	22.90	-1,091.0	-1,308.4	901.5	863.3	38.21	23.594	
11,032.4	9,800.0	10,244.4	9,000.0	19.7	20.6	22.97	-1,123.4	-1,308.6	902.0	863.7	38.36	23.514	
11,100.0	9,800.0	10,311.9	9,000.0	20.0	20.9	23.13	-1,190.9	-1,309.2	903.0	864.3	38.69	23.342	
11,200.0	9,800.0	10,411.9	9,000.0	20.4	21.3	23.27	-1,290.9	-1,310.1	903.9	864.7	39.20	23.062	
11,300.0	9,800.0	10,511.9	9,000.0	21.0	21.7	23.31	-1,390.9	-1,311.0	904.2	864.4	39.73	22.760	
11,400.0	9,800.0	10,611.9	9,000.0	21.5	22.2	23.24	-1,490.9	-1,311.9	903.7	863.4	40.27	22.441	
11,442.4	9,800.0	10,654.3	9,000.0	21.7	22.4	23.17	-1,533.3	-1,312.2	903.3	862.8	40.50	22.303	
11,500.0	9,800.0	10,711.9	9,000.0	22.0	22.7	23.08	-1,590.8	-1,312.7	902.7	861.8	40.82	22.114	
11,600.0	9,800.0	10,811.8	9,000.0	22.6	23.2	22.92	-1,690.8	-1,313.6	901.6	860.2	41.39	21.782	
11,700.0	9,800.0	10,911.8	9,000.0	23.2	23.8	22.75	-1,790.7	-1,314.5	900.5	858.5	41.98	21.451	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 706H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+SAG+FDIR, 8589-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Distance	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)	No-Go Distance (usft)	Separation Factor	Warning
11,742.4	9,800.0	10,954.2	9,000.0	23.4	24.0	22.68	-1,833.1	-1,314.9	900.0	857.8	42.23	21.313	
11,800.0	9,800.0	11,011.8	9,000.0	23.8	24.3	22.61	-1,890.7	-1,315.4	899.5	857.0	42.57	21.128	
11,900.0	9,800.0	11,111.7	9,000.0	24.4	24.9	22.56	-1,990.7	-1,316.3	899.2	856.0	43.20	20.813	
11,901.9	9,800.0	11,113.7	9,000.0	24.4	24.9	22.56	-1,992.6	-1,316.3	899.2	856.0	43.22	20.807	
12,000.0	9,800.0	11,211.7	9,000.0	25.0	25.5	22.56	-2,090.7	-1,317.1	899.2	855.3	43.85	20.504	
12,100.0	9,800.0	11,311.7	9,000.0	25.7	26.1	22.56	-2,190.7	-1,318.0	899.2	854.7	44.52	20.197	
12,200.0	9,800.0	11,411.7	9,000.0	26.3	26.8	22.56	-2,290.7	-1,318.9	899.2	854.0	45.20	19.893	
12,300.0	9,800.0	11,511.7	9,000.0	27.0	27.4	22.56	-2,390.7	-1,319.8	899.2	853.3	45.89	19.592	
12,400.0	9,800.0	11,611.7	9,000.0	27.7	28.1	22.56	-2,490.7	-1,320.7	899.2	852.6	46.60	19.294	
12,500.0	9,800.0	11,711.7	9,000.0	28.3	28.7	22.56	-2,590.7	-1,321.5	899.2	851.8	47.32	19.000	
12,600.0	9,800.0	11,811.7	9,000.0	29.0	29.4	22.56	-2,690.7	-1,322.4	899.2	851.1	48.06	18.710	
12,700.0	9,800.0	11,911.7	9,000.0	29.7	30.1	22.56	-2,790.7	-1,323.3	899.2	850.4	48.80	18.425	
12,800.0	9,800.0	12,011.7	9,000.0	30.5	30.8	22.56	-2,890.7	-1,324.2	899.2	849.6	49.56	18.143	
12,900.0	9,800.0	12,111.7	9,000.0	31.2	31.5	22.56	-2,990.7	-1,325.0	899.2	848.8	50.33	17.867	
13,000.0	9,800.0	12,211.7	9,000.0	31.9	32.2	22.56	-3,090.6	-1,325.9	899.2	848.1	51.10	17.595	
13,100.0	9,800.0	12,311.7	9,000.0	32.6	32.9	22.56	-3,190.6	-1,326.8	899.2	847.3	51.89	17.328	
13,200.0	9,800.0	12,411.7	9,000.0	33.4	33.6	22.56	-3,290.6	-1,327.7	899.2	846.5	52.69	17.066	
13,300.0	9,800.0	12,511.7	9,000.0	34.1	34.4	22.56	-3,390.6	-1,328.6	899.2	845.7	53.49	16.809	
13,396.0	9,800.0	12,607.7	9,000.0	34.8	35.1	22.56	-3,486.6	-1,329.4	899.2	844.9	54.27	16.567	
13,400.0	9,800.0	12,611.7	9,000.0	34.9	35.1	22.56	-3,490.6	-1,329.4	899.2	844.9	54.31	16.557	
13,500.0	9,800.0	12,711.7	9,000.0	35.6	35.8	22.56	-3,590.6	-1,330.3	899.2	844.0	55.13	16.311	
13,600.0	9,800.0	12,811.7	9,000.0	36.4	36.6	22.56	-3,690.6	-1,331.2	899.2	843.2	55.96	16.069	
13,700.0	9,800.0	12,911.7	9,000.0	37.1	37.3	22.56	-3,790.6	-1,332.1	899.2	842.4	56.79	15.833	
13,800.0	9,800.0	13,011.7	9,000.0	37.9	38.1	22.56	-3,890.6	-1,332.9	899.2	841.5	57.64	15.601	
13,900.0	9,800.0	13,111.7	9,000.0	38.7	38.9	22.56	-3,990.6	-1,333.8	899.2	840.7	58.49	15.374	
14,000.0	9,800.0	13,211.7	9,000.0	39.4	39.6	22.56	-4,090.6	-1,334.7	899.2	839.8	59.34	15.152	
14,100.0	9,800.0	13,311.7	9,000.0	40.2	40.4	22.56	-4,190.6	-1,335.6	899.2	838.9	60.21	14.934	
14,200.0	9,800.0	13,411.7	9,000.0	41.0	41.2	22.56	-4,290.6	-1,336.5	899.2	838.1	61.08	14.722	
14,300.0	9,800.0	13,511.7	9,000.0	41.8	41.9	22.56	-4,390.6	-1,337.3	899.2	837.2	61.95	14.514	
14,400.0	9,800.0	13,611.7	9,000.0	42.6	42.7	22.56	-4,490.6	-1,338.2	899.2	836.3	62.83	14.310	
14,500.0	9,800.0	13,711.7	9,000.0	43.3	43.5	22.56	-4,590.6	-1,339.1	899.2	835.4	63.72	14.111	
14,600.0	9,800.0	13,811.7	9,000.0	44.1	44.3	22.56	-4,690.6	-1,340.0	899.2	834.5	64.61	13.917	
14,700.0	9,800.0	13,911.7	9,000.0	44.9	45.1	22.56	-4,790.6	-1,340.9	899.1	833.6	65.50	13.727	
14,800.0	9,800.0	14,011.7	9,000.0	45.7	45.9	22.56	-4,890.6	-1,341.7	899.1	832.7	66.40	13.540	
14,900.0	9,800.0	14,111.7	9,000.0	46.5	46.7	22.55	-4,990.6	-1,342.6	899.1	831.8	67.31	13.359	
15,000.0	9,800.0	14,211.7	9,000.0	47.3	47.5	22.55	-5,090.6	-1,343.5	899.1	830.9	68.22	13.181	
15,100.0	9,800.0	14,311.7	9,000.0	48.1	48.3	22.55	-5,190.6	-1,344.4	899.1	830.0	69.13	13.007	
15,200.0	9,800.0	14,411.7	9,000.0	48.9	49.1	22.55	-5,290.6	-1,345.2	899.1	829.1	70.05	12.836	
15,300.0	9,800.0	14,511.7	9,000.0	49.7	49.9	22.55	-5,390.6	-1,346.1	899.1	828.2	70.97	12.670	
15,400.0	9,800.0	14,611.7	9,000.0	50.6	50.7	22.55	-5,490.6	-1,347.0	899.1	827.2	71.89	12.507	
15,500.0	9,800.0	14,711.7	9,000.0	51.4	51.5	22.55	-5,590.6	-1,347.9	899.1	826.3	72.82	12.348	
15,600.0	9,800.0	14,811.7	9,000.0	52.2	52.3	22.55	-5,690.5	-1,348.8	899.1	825.4	73.75	12.192	
15,700.0	9,800.0	14,911.7	9,000.0	53.0	53.1	22.55	-5,790.5	-1,349.6	899.1	824.5	74.68	12.039	
15,800.0	9,800.0	15,011.7	9,000.0	53.8	53.9	22.55	-5,890.5	-1,350.5	899.1	823.5	75.62	11.890	
15,900.0	9,800.0	15,111.7	9,000.0	54.6	54.7	22.55	-5,990.5	-1,351.4	899.1	822.6	76.56	11.744	
16,000.0	9,800.0	15,211.7	9,000.0	55.4	55.5	22.55	-6,090.5	-1,352.3	899.1	821.6	77.50	11.601	
16,100.0	9,800.0	15,311.7	9,000.0	56.3	56.3	22.55	-6,190.5	-1,353.1	899.1	820.7	78.45	11.461	
16,200.0	9,800.0	15,411.7	9,000.0	57.1	57.2	22.55	-6,290.5	-1,354.0	899.1	819.7	79.40	11.324	
16,300.0	9,800.0	15,511.7	9,000.0	57.9	58.0	22.55	-6,390.5	-1,354.9	899.1	818.8	80.35	11.190	
16,400.0	9,800.0	15,611.7	9,000.0	58.7	58.8	22.55	-6,490.5	-1,355.8	899.1	817.8	81.30	11.059	
16,500.0	9,800.0	15,711.7	9,000.0	59.5	59.6	22.55	-6,590.5	-1,356.7	899.1	816.9	82.26	10.931	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 706H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+SAG+FDIR, 8589-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis	Distance	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)	No-Go Distance (usft)	Separation Factor	Warning
16,600.0	9,800.0	15,811.7	9,000.0	60.4	60.4	22.55	-6,690.5	-1,357.5	899.1	815.9	83.22	10.805	
16,700.0	9,800.0	15,911.7	9,000.0	61.2	61.3	22.55	-6,790.5	-1,358.4	899.1	815.0	84.18	10.681	
16,800.0	9,800.0	16,011.7	9,000.0	62.0	62.1	22.55	-6,890.5	-1,359.3	899.1	814.0	85.14	10.561	
16,900.0	9,800.0	16,111.7	9,000.0	62.8	62.9	22.55	-6,990.5	-1,360.2	899.1	813.0	86.10	10.442	
17,000.0	9,800.0	16,211.7	9,000.0	63.7	63.7	22.55	-7,090.5	-1,361.1	899.1	812.1	87.07	10.326	
17,100.0	9,800.0	16,311.7	9,000.0	64.5	64.6	22.55	-7,190.5	-1,361.9	899.1	811.1	88.04	10.213	
17,200.0	9,800.0	16,411.7	9,000.0	65.3	65.4	22.55	-7,290.5	-1,362.8	899.1	810.1	89.01	10.101	
17,300.0	9,800.0	16,511.7	9,000.0	66.2	66.2	22.55	-7,390.5	-1,363.7	899.1	809.1	89.98	9.992	
17,384.5	9,800.0	16,596.2	9,000.0	66.9	66.9	22.55	-7,475.0	-1,364.4	899.1	808.3	90.80	9.902	
17,400.0	9,800.0	16,604.1	9,000.0	67.0	67.0	22.56	-7,482.8	-1,364.6	899.2	808.2	91.00	9.881	
17,500.0	9,800.0	16,711.7	9,000.0	67.8	67.9	22.57	-7,590.5	-1,365.8	899.2	807.3	91.94	9.780	
17,600.0	9,800.0	16,811.7	9,000.0	68.7	68.7	22.57	-7,690.5	-1,366.6	899.2	806.3	92.92	9.678	
17,700.0	9,800.0	16,911.7	9,000.0	69.5	69.5	22.57	-7,790.5	-1,367.5	899.2	805.3	93.90	9.577	
17,800.0	9,800.0	17,011.7	9,000.0	70.3	70.4	22.57	-7,890.5	-1,368.4	899.2	804.4	94.88	9.478	
17,900.0	9,800.0	17,111.7	9,000.0	71.2	71.2	22.57	-7,990.5	-1,369.3	899.2	803.4	95.86	9.380	
18,000.0	9,800.0	17,211.7	9,000.0	72.0	72.0	22.57	-8,090.5	-1,370.2	899.2	802.4	96.85	9.285	
18,100.0	9,800.0	17,311.7	9,000.0	72.8	72.9	22.57	-8,190.5	-1,371.0	899.2	801.4	97.83	9.192	
18,200.0	9,800.0	17,411.7	9,000.0	73.7	73.7	22.57	-8,290.4	-1,371.9	899.2	800.4	98.82	9.100	
18,300.0	9,800.0	17,511.7	9,000.0	74.5	74.5	22.57	-8,390.4	-1,372.8	899.2	799.4	99.81	9.010	
18,400.0	9,800.0	17,611.7	9,000.0	75.3	75.4	22.57	-8,490.4	-1,373.7	899.2	798.4	100.79	8.921	
18,500.0	9,800.0	17,711.7	9,000.0	76.2	76.2	22.57	-8,590.4	-1,374.5	899.2	797.4	101.78	8.835	
18,600.0	9,800.0	17,811.7	9,000.0	77.0	77.0	22.57	-8,690.4	-1,375.4	899.2	796.5	102.78	8.749	
18,700.0	9,800.0	17,911.7	9,000.0	77.8	77.9	22.57	-8,790.4	-1,376.3	899.2	795.5	103.77	8.666	
18,800.0	9,800.0	18,011.7	9,000.0	78.7	78.7	22.57	-8,890.4	-1,377.2	899.2	794.5	104.76	8.583	
18,900.0	9,800.0	18,111.7	9,000.0	79.5	79.6	22.57	-8,990.4	-1,378.1	899.2	793.5	105.76	8.503	
19,000.0	9,800.0	18,211.7	9,000.0	80.4	80.4	22.56	-9,090.4	-1,378.9	899.2	792.5	106.75	8.423	
19,100.0	9,800.0	18,311.7	9,000.0	81.2	81.2	22.56	-9,190.4	-1,379.8	899.2	791.5	107.75	8.345	
19,200.0	9,800.0	18,411.7	9,000.0	82.0	82.1	22.56	-9,290.4	-1,380.7	899.2	790.5	108.75	8.269	
19,300.0	9,800.0	18,511.7	9,000.0	82.9	82.9	22.56	-9,390.4	-1,381.6	899.2	789.5	109.75	8.194	
19,400.0	9,800.0	18,611.7	9,000.0	83.7	83.8	22.56	-9,490.4	-1,382.4	899.2	788.5	110.75	8.120	
19,500.0	9,800.0	18,711.7	9,000.0	84.6	84.6	22.56	-9,590.4	-1,383.3	899.2	787.5	111.75	8.047	
19,600.0	9,800.0	18,811.7	9,000.0	85.4	85.4	22.56	-9,690.4	-1,384.2	899.2	786.5	112.75	7.975	
19,700.0	9,800.0	18,911.7	9,000.0	86.3	86.3	22.56	-9,790.4	-1,385.1	899.2	785.5	113.75	7.905	
19,800.0	9,800.0	19,011.7	9,000.0	87.1	87.1	22.56	-9,890.4	-1,386.0	899.2	784.5	114.76	7.836	
19,900.0	9,800.0	19,111.7	9,000.0	87.9	88.0	22.56	-9,990.4	-1,386.8	899.2	783.5	115.76	7.768	
19,988.3	9,800.0	19,200.0	9,000.0	88.7	88.7	22.56	-10,078.6	-1,387.6	899.2	782.6	116.65	7.709	
20,000.0	9,800.0	19,211.1	9,000.0	88.8	88.8	22.56	-10,089.7	-1,387.7	899.2	782.4	116.77	7.701	
20,100.0	9,800.0	19,311.7	9,000.0	89.6	89.6	22.57	-10,190.4	-1,388.8	899.3	781.5	117.78	7.635	
20,200.0	9,800.0	19,411.7	9,000.0	90.5	90.5	22.57	-10,290.4	-1,389.7	899.3	780.5	118.79	7.570	
20,300.0	9,800.0	19,511.7	9,000.0	91.3	91.3	22.57	-10,390.4	-1,390.5	899.3	779.5	119.80	7.507	
20,400.0	9,800.0	19,611.7	9,000.0	92.2	92.2	22.57	-10,490.4	-1,391.4	899.3	778.5	120.80	7.444	
20,500.0	9,800.0	19,711.7	9,000.0	93.0	93.0	22.57	-10,590.4	-1,392.3	899.3	777.5	121.81	7.382	
20,600.0	9,800.0	19,811.7	9,000.0	93.8	93.9	22.57	-10,690.4	-1,393.2	899.3	776.5	122.82	7.322	
20,700.0	9,800.0	19,911.7	9,000.0	94.7	94.7	22.57	-10,790.3	-1,394.0	899.3	775.4	123.83	7.262	
20,800.0	9,800.0	20,011.7	9,000.0	95.5	95.6	22.57	-10,890.3	-1,394.9	899.3	774.4	124.84	7.203	
20,900.0	9,800.0	20,111.7	9,000.0	96.4	96.4	22.57	-10,990.3	-1,395.8	899.3	773.4	125.86	7.145	
21,000.0	9,800.0	20,211.7	9,000.0	97.2	97.2	22.57	-11,090.3	-1,396.7	899.3	772.4	126.87	7.088	
21,100.0	9,800.0	20,311.7	9,000.0	98.1	98.1	22.57	-11,190.3	-1,397.6	899.3	771.4	127.88	7.032	
21,200.0	9,800.0	20,411.7	9,000.0	98.9	98.9	22.57	-11,290.3	-1,398.4	899.3	770.4	128.90	6.977	
21,300.0	9,800.0	20,511.7	9,000.0	99.8	99.8	22.57	-11,390.3	-1,399.3	899.3	769.4	129.91	6.922	
21,400.0	9,800.0	20,611.7	9,000.0	100.6	100.6	22.57	-11,490.3	-1,400.2	899.3	768.3	130.93	6.869	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 706H - OWB - PWP1												Offset Site Error:	0.0 usft
Survey Program:		0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+SAG+FDIR, 8589-r.5 MWD+IFR1+SAG+FDIR								Rule Assigned:		Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance		Separation Factor	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)			No-Go Distance (usft)
21,500.0	9,800.0	20,711.7	9,000.0	101.5	101.5	22.57	-11,590.3	-1,401.1	899.3	767.3	131.94	6.816	
21,600.0	9,800.0	20,811.7	9,000.0	102.3	102.3	22.57	-11,690.3	-1,402.0	899.3	766.3	132.96	6.764	
21,700.0	9,800.0	20,911.7	9,000.0	103.2	103.2	22.57	-11,790.3	-1,402.8	899.3	765.3	133.97	6.712	
21,800.0	9,800.0	21,011.7	9,000.0	104.0	104.0	22.57	-11,890.3	-1,403.7	899.3	764.3	134.99	6.662	
21,900.0	9,800.0	21,111.7	9,000.0	104.9	104.9	22.57	-11,990.3	-1,404.6	899.3	763.3	136.01	6.612	
22,000.0	9,800.0	21,211.7	9,000.0	105.7	105.7	22.57	-12,090.3	-1,405.5	899.3	762.2	137.03	6.563	
22,100.0	9,800.0	21,311.7	9,000.0	106.5	106.6	22.57	-12,190.3	-1,406.3	899.3	761.2	138.04	6.514	
22,200.0	9,800.0	21,411.7	9,000.0	107.4	107.4	22.57	-12,290.3	-1,407.2	899.3	760.2	139.06	6.467	
22,300.0	9,800.0	21,511.7	9,000.0	108.2	108.3	22.57	-12,390.3	-1,408.1	899.3	759.2	140.08	6.419	
22,400.0	9,800.0	21,611.7	9,000.0	109.1	109.1	22.57	-12,490.3	-1,409.0	899.3	758.2	141.10	6.373	
22,500.0	9,800.0	21,711.7	9,000.0	109.9	110.0	22.57	-12,590.3	-1,409.9	899.3	757.1	142.12	6.327	
22,600.0	9,800.0	21,811.7	9,000.0	110.8	110.8	22.57	-12,690.3	-1,410.7	899.3	756.1	143.14	6.282	
22,688.3	9,800.0	21,900.0	9,000.0	111.5	111.5	22.57	-12,778.5	-1,411.5	899.3	755.2	144.05	6.243	
22,700.0	9,800.0	21,911.0	9,000.0	111.6	111.6	22.57	-12,789.5	-1,411.6	899.3	755.1	144.17	6.237	
22,800.0	9,800.0	22,011.7	9,000.0	112.5	112.5	22.58	-12,890.3	-1,412.7	899.3	754.1	145.20	6.194	
22,900.0	9,800.0	22,111.7	9,000.0	113.3	113.3	22.58	-12,990.3	-1,413.6	899.3	753.1	146.22	6.150	
23,000.0	9,800.0	22,211.7	9,000.0	114.2	114.2	22.58	-13,090.3	-1,414.4	899.3	752.1	147.25	6.108	
23,100.0	9,800.0	22,311.7	9,000.0	115.0	115.0	22.58	-13,190.3	-1,415.3	899.3	751.1	148.27	6.065	
23,200.0	9,800.0	22,411.7	9,000.0	115.9	115.9	22.58	-13,290.3	-1,416.2	899.3	750.0	149.29	6.024	
23,300.0	9,800.0	22,511.7	9,000.0	116.7	116.7	22.58	-13,390.2	-1,417.1	899.3	749.0	150.32	5.983	
23,400.0	9,800.0	22,611.7	9,000.0	117.6	117.6	22.58	-13,490.2	-1,418.0	899.3	748.0	151.34	5.942	
23,500.0	9,800.0	22,711.7	9,000.0	118.4	118.4	22.58	-13,590.2	-1,418.8	899.3	747.0	152.37	5.902	
23,600.0	9,800.0	22,811.7	9,000.0	119.3	119.3	22.58	-13,690.2	-1,419.7	899.3	745.9	153.39	5.863	
23,700.0	9,800.0	22,911.7	9,000.0	120.1	120.1	22.58	-13,790.2	-1,420.6	899.3	744.9	154.42	5.824	
23,800.0	9,800.0	23,011.7	9,000.0	121.0	121.0	22.58	-13,890.2	-1,421.5	899.3	743.9	155.44	5.786	
23,900.0	9,800.0	23,111.7	9,000.0	121.8	121.8	22.58	-13,990.2	-1,422.3	899.3	742.8	156.47	5.748	
24,000.0	9,800.0	23,211.7	9,000.0	122.7	122.7	22.58	-14,090.2	-1,423.2	899.3	741.8	157.49	5.710	
24,100.0	9,800.0	23,311.7	9,000.0	123.5	123.5	22.58	-14,190.2	-1,424.1	899.3	740.8	158.52	5.673	
24,200.0	9,800.0	23,411.7	9,000.0	124.4	124.4	22.58	-14,290.2	-1,425.0	899.3	739.8	159.55	5.637	
24,300.0	9,800.0	23,511.7	9,000.0	125.2	125.2	22.58	-14,390.2	-1,425.9	899.3	738.7	160.58	5.601	
24,400.0	9,800.0	23,611.7	9,000.0	126.1	126.1	22.58	-14,490.2	-1,426.7	899.3	737.7	161.60	5.565	
24,500.0	9,800.0	23,711.7	9,000.0	126.9	126.9	22.58	-14,590.2	-1,427.6	899.3	736.7	162.63	5.530	
24,600.0	9,800.0	23,811.7	9,000.0	127.8	127.8	22.58	-14,690.2	-1,428.5	899.3	735.6	163.66	5.495	
24,700.0	9,800.0	23,911.7	9,000.0	128.7	128.6	22.58	-14,790.2	-1,429.4	899.3	734.6	164.69	5.461	
24,800.0	9,800.0	24,011.7	9,000.0	129.5	129.5	22.58	-14,890.2	-1,430.3	899.3	733.6	165.72	5.427	
24,900.0	9,800.0	24,111.7	9,000.0	130.4	130.4	22.57	-14,990.2	-1,431.1	899.3	732.6	166.75	5.393	
25,000.0	9,800.0	24,211.7	9,000.0	131.2	131.2	22.57	-15,090.2	-1,432.0	899.3	731.5	167.77	5.360	
25,088.2	9,800.0	24,300.0	9,000.0	132.0	132.0	22.57	-15,178.4	-1,432.8	899.3	730.6	168.68	5.331	
25,100.0	9,800.0	24,310.1	9,000.0	132.1	132.0	22.58	-15,188.5	-1,432.9	899.3	730.5	168.82	5.327	
25,200.0	9,800.0	24,411.7	9,000.0	132.9	132.9	22.58	-15,290.2	-1,433.9	899.3	729.5	169.84	5.295	
25,241.1	9,800.0	24,452.9	9,000.0	133.3	133.3	22.58	-15,331.3	-1,434.2	899.3	729.1	170.27	5.282	
25,250.5	9,800.0	24,453.2	9,000.0	133.3	133.3	22.58	-15,331.6	-1,434.2	899.4	729.0	170.41	5.278 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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 802H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1, 9341-r.5 MWD+IFR1													Offset Well Error: 0.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Distance	No-Go	Separation	Rule Assigned:		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Tooface (")	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	88.85	0.6	29.9	29.9	27.9	2.02	14.787	
100.0	100.0	100.0	100.0	0.8	0.8	88.85	0.6	29.9	29.9	26.6	3.34	8.946	
200.0	200.0	200.0	200.0	1.4	1.4	88.85	0.6	29.9	29.9	25.7	4.23	7.076	
300.0	300.0	300.0	300.0	1.9	1.9	88.85	0.6	29.9	29.9	25.0	4.94	6.050	
400.0	400.0	400.0	400.0	2.2	2.2	88.85	0.6	29.9	29.9	24.3	5.56	5.375	
500.0	500.0	500.0	500.0	2.6	2.6	88.85	0.6	29.9	29.9	23.8	6.12	4.885	
600.0	600.0	600.0	600.0	2.8	2.8	88.85	0.6	29.9	29.9	23.3	6.63	4.509	
700.0	700.0	700.0	700.0	3.1	3.1	88.85	0.6	29.9	29.9	22.8	7.11	4.207	
800.0	800.0	800.0	800.0	3.3	3.3	88.85	0.6	29.9	29.9	22.4	7.55	3.958	
900.0	900.0	900.0	900.0	3.6	3.6	88.85	0.6	29.9	29.9	21.9	7.98	3.748	
1,000.0	1,000.0	1,000.0	1,000.0	4.0	4.0	88.85	0.6	29.9	29.9	21.5	8.38	3.567	
1,100.0	1,100.0	1,100.0	1,100.0	4.2	4.2	88.85	0.6	29.9	29.9	21.1	8.77	3.410	
1,200.0	1,200.0	1,200.0	1,200.0	4.4	4.4	88.85	0.6	29.9	29.9	20.8	9.14	3.271	
1,300.0	1,300.0	1,300.0	1,300.0	4.6	4.6	88.85	0.6	29.9	29.9	20.4	9.50	3.146	
1,400.0	1,400.0	1,400.0	1,400.0	4.7	4.7	88.85	0.6	29.9	29.9	20.1	9.85	3.035 CC, ES, SF	
1,500.0	1,500.0	1,500.0	1,500.0	5.0	5.0	164.57	2.1	30.8	32.5	22.2	10.31	3.157	
1,600.0	1,600.0	1,599.4	1,599.4	5.3	5.3	160.42	6.5	33.4	40.6	29.8	10.74	3.777	
1,700.0	1,699.8	1,698.3	1,698.1	5.5	5.6	156.24	13.8	37.7	54.2	43.0	11.17	4.850	
1,800.0	1,799.5	1,796.2	1,795.7	5.7	5.7	153.03	23.7	43.6	73.3	61.8	11.51	6.368	
1,900.0	1,898.7	1,893.3	1,892.1	6.0	6.0	151.64	34.4	50.0	96.2	84.3	11.91	8.078	
2,000.0	1,997.5	1,990.6	1,988.6	6.1	6.2	151.34	45.1	56.3	120.7	108.4	12.26	9.839	
2,100.0	2,095.9	2,087.6	2,084.7	6.3	6.5	151.14	55.8	62.7	145.1	132.5	12.62	11.495	
2,200.0	2,194.4	2,184.5	2,180.9	6.4	6.8	150.99	66.4	69.0	169.5	156.5	12.99	13.047	
2,300.0	2,292.9	2,281.5	2,277.1	6.6	7.1	150.88	77.1	75.4	194.0	180.6	13.38	14.503	
2,400.0	2,391.4	2,378.5	2,373.2	6.7	7.4	150.80	87.8	81.8	218.4	204.6	13.76	15.867	
2,500.0	2,489.9	2,475.4	2,469.4	6.9	7.7	150.73	98.5	88.1	242.8	228.7	14.16	17.146	
2,600.0	2,588.4	2,572.4	2,565.6	7.1	8.0	150.86	109.1	94.4	268.8	254.2	14.62	18.388	
2,700.0	2,686.5	2,669.0	2,661.4	7.4	8.4	151.18	119.7	100.7	297.7	282.6	15.07	19.756	
2,800.0	2,783.9	2,764.7	2,756.3	7.4	8.5	151.33	123.5	103.0	309.0	293.8	15.20	20.332	
2,836.5	2,819.3	2,799.3	2,790.6	7.5	8.7	151.71	130.1	106.9	329.0	313.5	15.43	21.325	
2,900.0	2,880.7	2,859.6	2,850.4	7.7	9.0	152.21	140.6	113.1	360.5	344.6	15.83	22.772	
3,000.0	2,977.4	2,954.5	2,944.5	7.8	9.4	152.63	151.0	119.3	392.0	375.7	16.24	24.141	
3,100.0	3,074.1	3,049.3	3,038.6	8.0	9.7	152.99	161.5	125.6	423.5	406.9	16.65	25.436	
3,200.0	3,170.9	3,144.2	3,132.7	8.2	10.1	153.30	172.0	131.8	455.1	438.0	17.07	26.663	
3,300.0	3,267.6	3,239.1	3,226.8	8.4	10.4	153.57	182.4	138.0	486.6	469.2	17.48	27.837	
3,400.0	3,364.3	3,333.9	3,320.8	8.6	10.8	153.83	193.0	144.3	518.0	500.1	17.90	28.938	
3,500.0	3,461.0	3,432.1	3,418.3	8.8	11.2	154.20	202.6	150.0	548.4	530.1	18.36	29.875	
3,600.0	3,557.7	3,533.9	3,519.4	9.0	11.5	154.67	210.8	154.9	577.7	558.9	18.79	30.740	
3,700.0	3,654.4	3,636.4	3,621.4	9.1	11.9	155.22	217.4	158.8	605.8	586.6	19.21	31.533	
3,800.0	3,751.1	3,739.4	3,724.2	9.3	12.2	155.86	222.4	161.8	632.8	613.1	19.61	32.267	
3,900.0	3,847.9	3,843.1	3,827.7	9.5	12.6	156.56	225.9	163.8	658.6	638.7	19.99	32.956	
4,000.0	3,944.6	3,947.2	3,931.8	9.7	12.8	157.34	227.7	164.9	683.4	663.1	20.33	33.624	
4,100.0	4,041.3	4,051.8	4,036.3	9.9	13.0	158.15	228.0	165.1	707.3	686.7	20.59	34.352	
4,200.0	4,138.0	4,153.5	4,138.0	10.1	13.1	158.89	228.0	165.1	731.1	710.2	20.82	35.120	
4,300.0	4,234.7	4,250.2	4,234.7	10.3	13.1	159.58	228.0	165.1	754.9	733.9	21.05	35.869	
4,400.0	4,331.4	4,346.9	4,331.4	10.5	13.2	160.23	228.0	165.1	778.9	757.6	21.28	36.595	
4,500.0	4,428.1	4,443.6	4,428.1	10.7	13.3	160.84	228.0	165.1	803.0	781.4	21.53	37.300	
4,600.0	4,524.9	4,540.4	4,524.9	11.0	13.4	161.42	228.0	165.1	827.1	805.3	21.78	37.983	
4,700.0	4,621.6	4,637.1	4,621.6	11.2	13.4	161.96	228.0	165.1	851.3	829.3	22.03	38.645	
4,800.0	4,718.3	4,733.8	4,718.3	11.4	13.5	162.48	228.0	165.1	875.6	853.3	22.29	39.287	
4,900.0	4,815.0	4,830.5	4,815.0										

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:	FLAMING SNAIL FED COM PROJECT - FLAMING SNAIL FEDERAL COM 802H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program:	0-r.5 MWD+IFR1, 9341-r.5 MWD+IFR1											Offset Well Error:	0.0 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)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	
5,000.0	4,911.7	4,927.2	4,911.7	11.6	13.6	162.96	228.0	165.1	899.9	877.4	22.55	39.910	
5,100.0	5,008.4	5,023.9	5,008.4	11.8	13.7	163.42	228.0	165.1	924.3	901.5	22.82	40.514	
5,136.1	5,043.4	5,058.9	5,043.4	11.9	13.7	163.58	228.0	165.1	933.2	910.3	22.90	40.754	
5,200.0	5,105.2	5,120.7	5,105.2	12.0	13.7	163.90	228.0	165.1	948.5	925.4	23.05	41.143	
5,300.0	5,202.4	5,217.9	5,202.4	12.2	13.8	164.34	228.0	165.1	971.1	947.8	23.32	41.635	
5,400.0	5,300.0	5,315.5	5,300.0	12.4	13.9	164.74	228.0	165.1	992.2	968.6	23.60	42.044	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN WEST	Local Co-ordinate Reference:	Well FLAMING SNAIL FEDERAL COM 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	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: 100-r.5 SDI_KPR_WL_NS-CT												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
10,500.0	9,800.0	9,769.3	9,767.7	17.6	7.9	107.22	-1,515.5	-1,005.6	922.7	898.8	23.90	38.608	
10,600.0	9,800.0	9,767.8	9,766.3	17.9	7.9	105.33	-1,515.5	-1,005.6	822.9	799.0	23.90	34.429	
10,700.0	9,800.0	9,766.4	9,764.9	18.3	7.9	103.41	-1,515.5	-1,005.5	723.0	699.1	23.90	30.257	
10,781.4	9,800.0	9,765.2	9,763.7	18.6	7.9	101.84	-1,515.6	-1,005.5	641.7	617.8	23.89	26.866	
10,800.0	9,800.0	9,765.0	9,763.4	18.7	7.9	100.94	-1,515.6	-1,005.5	623.2	599.3	23.88	26.094	
10,900.0	9,800.0	9,763.5	9,762.0	19.1	7.9	97.35	-1,515.6	-1,005.5	523.6	499.7	23.85	21.955	
11,000.0	9,800.0	9,762.1	9,760.6	19.5	7.9	95.01	-1,515.6	-1,005.5	424.3	400.5	23.77	17.851	
11,032.4	9,800.0	9,761.6	9,760.1	19.7	7.9	94.40	-1,515.6	-1,005.5	392.2	368.5	23.73	16.530	
11,100.0	9,800.0	9,760.7	9,759.1	20.0	7.9	93.76	-1,515.6	-1,005.5	325.6	302.0	23.63	13.779	
11,200.0	9,800.0	9,759.2	9,757.7	20.4	7.9	92.58	-1,515.6	-1,005.5	227.8	204.3	23.46	9.708	
11,300.0	9,800.0	9,757.8	9,756.3	21.0	7.9	91.17	-1,515.7	-1,005.4	132.4	108.9	23.44	5.647	
11,400.0	9,800.0	9,756.5	9,754.9	21.5	7.9	89.63	-1,515.7	-1,005.4	54.6	26.2	28.40	1.923 Caution - Monitor Closely	
11,423.3	9,800.0	9,756.2	9,754.6	21.6	7.9	89.26	-1,515.7	-1,005.4	49.4	18.1	31.36	1.576 Caution - Monitor Closely, CC, ES, SF	
11,442.4	9,800.0	9,755.9	9,754.4	21.7	7.9	88.97	-1,515.7	-1,005.4	53.0	20.9	32.02	1.654 Caution - Monitor Closely	
11,500.0	9,800.0	9,755.2	9,753.6	22.0	7.9	88.08	-1,515.7	-1,005.4	91.1	62.2	28.88	3.154	
11,600.0	9,800.0	9,753.8	9,752.3	22.6	7.9	86.55	-1,515.7	-1,005.4	183.3	156.9	26.40	6.942	
11,700.0	9,800.0	9,752.5	9,751.0	23.2	7.9	85.04	-1,515.7	-1,005.4	280.9	255.2	25.69	10.932	
11,742.4	9,800.0	9,752.0	9,750.4	23.4	7.9	84.40	-1,515.7	-1,005.4	322.7	297.2	25.54	12.634	
11,800.0	9,800.0	9,751.2	9,749.7	23.8	7.9	83.05	-1,515.7	-1,005.4	379.7	354.3	25.41	14.942	
11,900.0	9,800.0	9,750.0	9,748.5	24.4	7.9	79.96	-1,515.8	-1,005.3	479.2	453.9	25.31	18.934	
11,901.9	9,800.0	9,750.0	9,748.5	24.4	7.9	79.92	-1,515.8	-1,005.3	481.1	455.8	25.31	19.011	
12,000.0	9,800.0	9,748.6	9,747.0	25.0	7.9	77.88	-1,515.8	-1,005.3	578.9	553.7	25.28	22.900	
12,100.0	9,800.0	9,747.3	9,745.8	25.7	7.9	76.03	-1,515.8	-1,005.3	678.7	653.5	25.28	26.846	
12,200.0	9,800.0	9,746.0	9,744.5	26.3	7.9	74.22	-1,515.8	-1,005.3	778.6	753.3	25.31	30.768	
12,300.0	9,800.0	9,744.7	9,743.2	27.0	7.9	72.46	-1,515.8	-1,005.3	878.5	853.1	25.34	34.665	
12,400.0	9,800.0	9,743.5	9,741.9	27.7	7.9	70.75	-1,515.9	-1,005.3	978.4	953.0	25.39	38.536	

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3156.7usft

Offset Depths are relative to Offset Datum

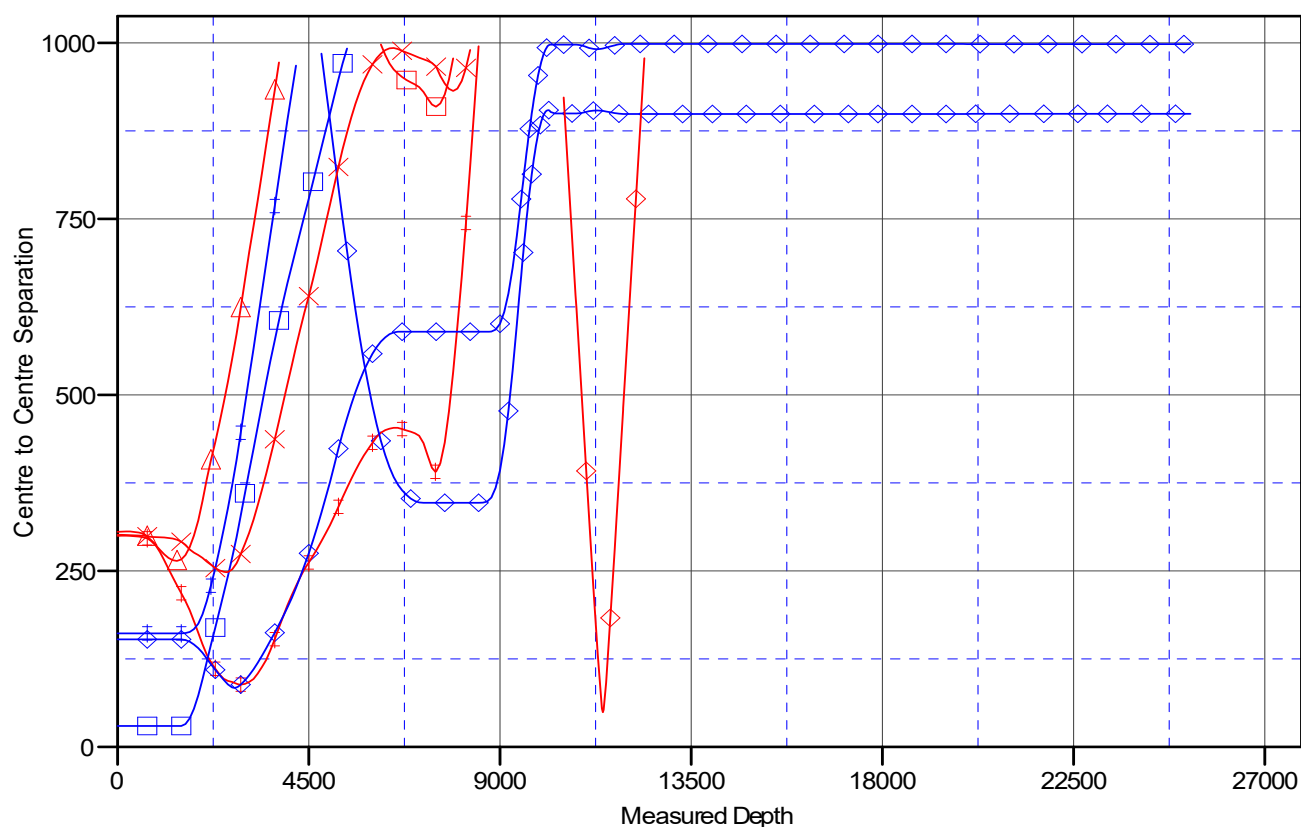
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: FLAMING SNAIL FEDERAL COM 803H

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

Grid Convergence at Surface is: 0.08°

Ladder Plot



LEGEND

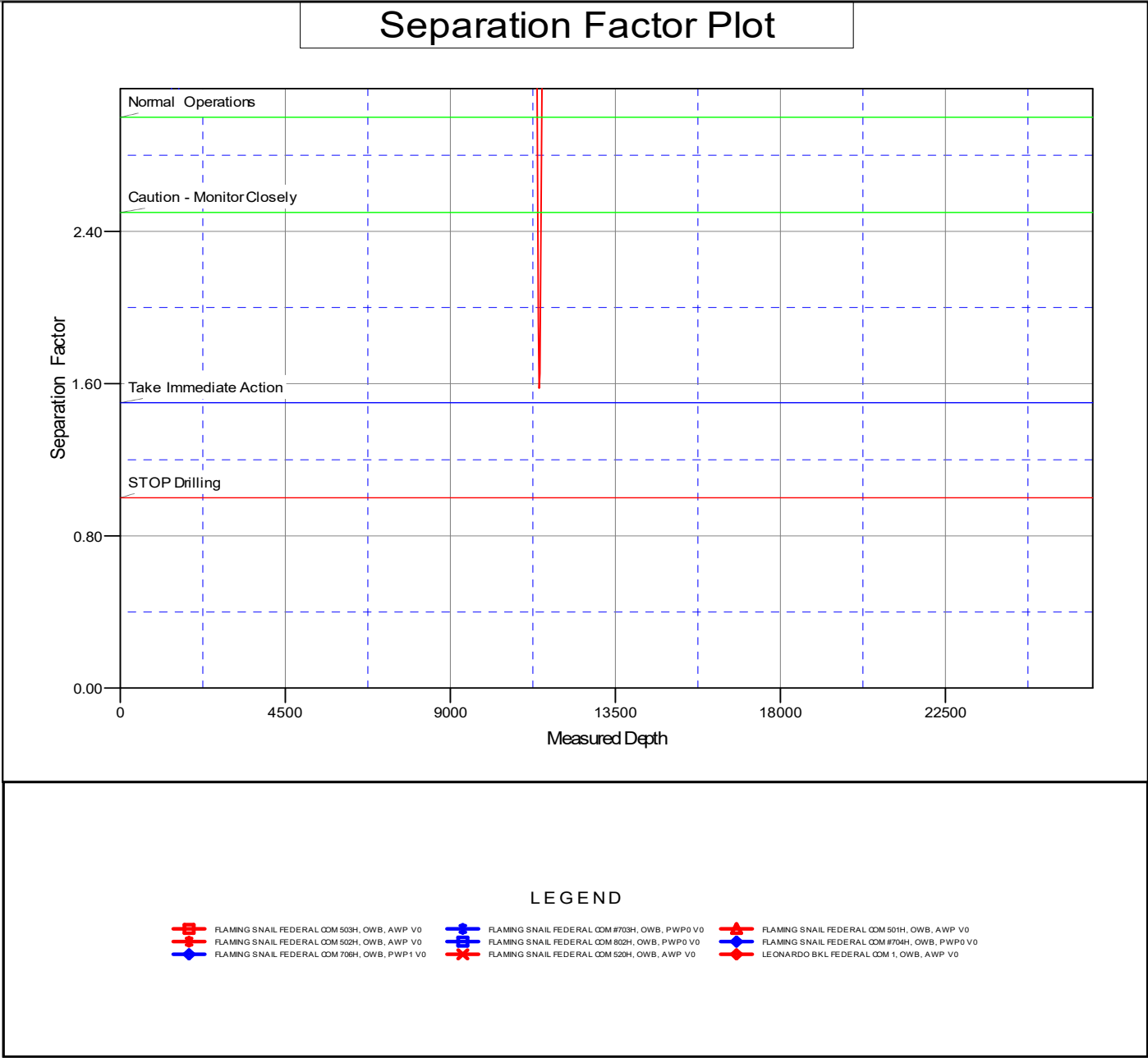
FLAMING SNAIL FEDERAL COM 503H, OWB, AWP V0	FLAMING SNAIL FEDERAL COM #703H, OWB, PWP0 V0	FLAMING SNAIL FEDERAL COM 501H, OWB, AWP V0
FLAMING SNAIL FEDERAL COM 502H, OWB, AWP V0	FLAMING SNAIL FEDERAL COM 802H, OWB, PWP0 V0	FLAMING SNAIL FEDERAL COM #704H, OWB, PWP0 V0
FLAMING SNAIL FEDERAL COM 706H, OWB, PWP1 V0	FLAMING SNAIL FEDERAL COM 520H, OWB, AWP V0	LEONARDO BKL FEDERAL COM 1, OWB, AWP V0

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 803H
Project:	ATLAS PROSPECT (DBW)	TVD Reference:	KB @ 3156.7usft
Reference Site:	FLAMING SNAIL FED COM PROJECT	MD Reference:	KB @ 3156.7usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	FLAMING SNAIL FEDERAL COM 803H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB @ 3156.7usft	Coordinates are relative to: FLAMING SNAIL FEDERAL COM 803H
Offset Depths are relative to Offset Datum	Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Central Meridian is 104° 20' 0.000 W	Grid Convergence at Surface is: 0.08°



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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 423522

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 423522
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.	10/6/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	10/6/2025