

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

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

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No.
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
13. State		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		
Office		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
 Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)



Additional Operator Remarks

Location of Well

0. SHL: SESW / 445 FSL / 1430 FWL / TWSP: 26S / RANGE: 31E / SECTION: 24 / LAT: 32.0221274 / LONG: -103.7355591 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 100 FSL / 2026 FWL / TWSP: 26S / RANGE: 31E / SECTION: 24 / LAT: 32.0211926 / LONG: -103.7336304 (TVD: 11631 feet, MD: 11732 feet)

BHL: NESW / 2590 FSL / 1938 FWL / TWSP: 26S / RANGE: 31E / SECTION: 12 / LAT: 32.0573166 / LONG: -103.7340349 (TVD: 11779 feet, MD: 24774 feet)

BLM Point of Contact

Name: JANET D ESTES

Title: ADJUDICATOR

Phone: (575) 234-6233

Email: JESTES@BLM.GOV

District I

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

District II

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

District III

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

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-015-	2 Pool Code 98081	3 Pool Name Zia Hills; Wolfcamp
4 Property Code	5 Property Name ZIA HILLS UNIT 2431 WC	6 Well Number 705H
7 OGRID No. 217817	8 Operator Name CONOCOPHILLIPS COMPANY	9 Elevation 3176.41'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	24	26-S	31-E		445'	SOUTH	1430'	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	12	26-S	31-E		2590'	SOUTH	1938'	WEST	EDDY

12 Dedicated Acres 800	13 Joint or Infill Infill	14 Consolidation Code Unit	15 Order No. R-20080
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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.

16 Unit Boundary SURFACE HOLE LOCATION (SHL) NEW MEXICO EAST - NAD 83 X=726597.33 LAT.= 32.02212743° N Y=372301.25 LONG.= 103.73555917° W 445' FSL, 1430' FWL - SECTION 24 FIRST TAKE POINT (FTP) NEW MEXICO EAST - NAD 83 X=727196.96 LAT.= 32.02119267° N Y=371964.52 LONG.= 103.73363045° W 100' FSL, 2026' FWL - SECTION 24 LAST TAKE POINT (LTP) NEW MEXICO EAST - NAD 83 X=726998.95 LAT.= 32.05717916° N Y=385054.95 LONG.= 103.73403496° W 2540' FSL, 1938' FWL - SECTION 12 BOTTOM HOLE LOCATION (BHL) NEW MEXICO EAST - NAD 83 X=726998.68 LAT.= 32.05731660° N Y=385104.95 LONG.= 103.73403493° W 2590' FSL, 1938' FWL - SECTION 12	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Stan Wagner</i> 11/14/22 Signature Date Stan Wagner Printed Name E-mail Address 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 10/20/2022 Date of Survey <i>Charles L. Jurica</i> Signature and Seal of Professional Surveyor 25490 Certificate Number
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State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: ConocoPhillips Company

OGRID: 217817

Date: 11/08/2022

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Zia Hills Unit 2431 WC 701H	30-015-	M-24-26S-31E	445 FSL & 1310 FWL	± 695	± 2728	± 1621
Zia Hills Unit 2431 WC 702H	30-015-	N-24-26S-31E	445 FSL & 1340 FWL	± 572	± 2246	± 1335
Zia Hills Unit 2431 WC 703H	30-015-	N-24-26S-31E	445 FSL & 1370 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2431 WC 704H	30-015-	N-24-26S-31E	445 FSL & 1400 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2431 WC 705H	30-015-	N-24-26S-31E	445 FSL & 1430 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2431 WC 706H	30-015-	N-24-26S-31E	445 FSL & 1460 FWL	± 818	± 3209	± 1907

IV. Central Delivery Point Name: Zia Hills Unit 2431 WC East Facility SWSW 24-26S-31E [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Zia Hills Unit 2431 WC	Pending	± 2/1/2024	± 25 days from spud	TBD	TBD	TBD
701H, 702H, 703H, 704H, 705H, 706H						

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

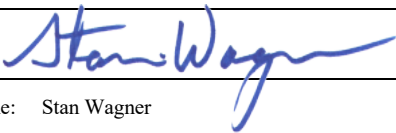
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

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

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

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

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

Signature: 
Printed Name: Stan Wagner
Title: Regulatory Advisor
E-mail Address: stan.s.wagner@conocophillips.com
Date: 11/08/2022
Phone: 432-253-9685
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment

How Operator will size separation equipment to optimize gas capture:

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

VII. Operational Practices

Actions Operator will take to comply with the requirements below:

B. Drilling Operations

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

C. Completion Operations

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

D. Venting and flaring during production operations

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

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

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

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

F. Measurement of vented and flared natural gas.

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

VIII. Best Management Practices

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

ConocoPhillips Company - Zia Hills Unit 2431 WC 705H

1. Geologic Formations

TVD of target	11,779' EOL	Pilot hole depth	NA
MD at TD:	24,774'	Deepest expected fresh water:	317'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1038	Water	
Top of Salt	1487	Salt	
Base of Salt	3967	Salt	
Lamar	4189	Salt Water	
Bell Canyon	4227	Salt Water	
Cherry Canyon	5106	Oil/Gas	
Brushy Canyon	6519	Oil/Gas	
Bone Spring Lime	8163	Oil/Gas	
1st Bone Spring Sand	9201	Oil/Gas	
2nd Bone Spring Sand	9860	Oil/Gas	
3rd Bone Spring Sand	11040	Oil/Gas	
Wolfcamp	11401	Oil/Gas	
Wolfcamp A	11622	Target	
Wolfcamp B	11920	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	1350	10.75"	45.5	J55	BTC	3.38	1.11	11.64	12.96
9.875"	0	8500	7.625"	29.7	L80-ICY	BTC	1.45	1.13	2.88	2.90
8.750"	8500	11132	7.625"	29.7	P110-ICY	W513	1.38	1.71	3.23	1.94
6.75"	0	10632	5.5"	23	P110-CY	BTC	2.10	2.48	2.98	2.98
6.75"	10632	24,774	5.5"	23	P110-CY	W441	1.90	2.24	2.69	2.44
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

Intermediate casing will be kept at least 1/3 full while running casing to mitigate collapse. Surface burst based on 0.7 frac gradient at the shoe with Gas Gradient 0.1 psi/ft to surface and
All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

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

ConocoPhillips Company - Zia Hills Unit 2431 WC 705H

	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 - Zia Hills Unit 2431 WC 705H

3. Cementing Program

Casing	# Sk	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	644	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	810	10.3	3.3	22	24	Halliburton tunded light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	667	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

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	10,632'	35% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Zia Hills Unit 2431 WC 705H

4. Pressure Control Equipment

N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.
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BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	x	Tested to:
9-7/8"	13-5/8"	5M	Annular	x	2500psi
			Blind Ram	x	5000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		
6-3/4"	13-5/8"	10M	5M Annular	x	5000psi
			Blind Ram	x	10000psi
			Pipe Ram	x	
			Double Ram	x	
			Other*		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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

Y	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

ConocoPhillips Company - Zia Hills Unit 2431 WC 705H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 9.2	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 12.5	35-45	<20

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

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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6. Logging and Testing Procedures

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

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

ConocoPhillips Company - Zia Hills Unit 2431 WC 705H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	7660 psi at 11779' TVD
Abnormal Temperature	NO 175 Deg. F.

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

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

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

N H₂S is present

Y H₂S Plan attached

8. Other Facets of Operation

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

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

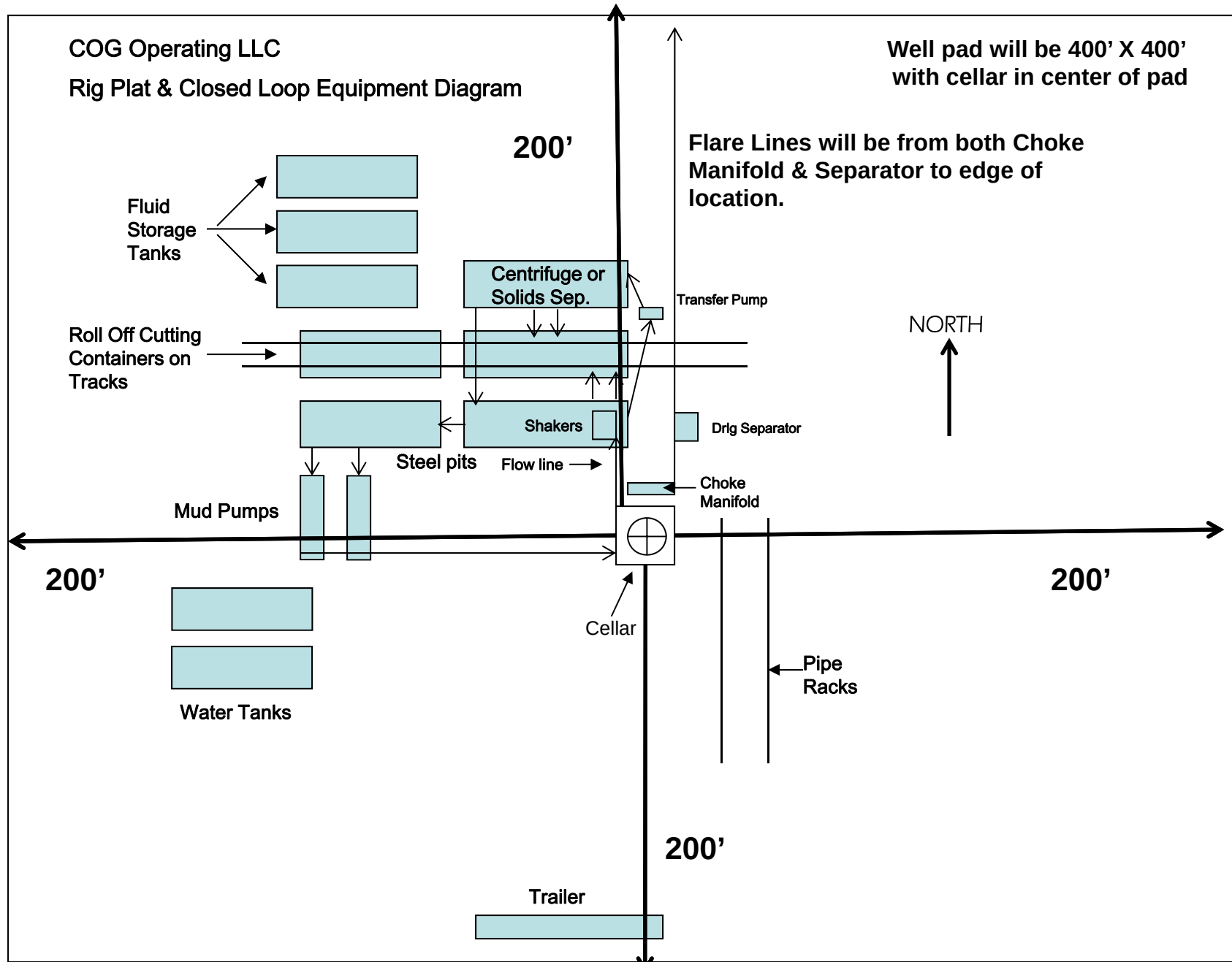


Exhibit 1

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

DELAWARE BASIN EAST

**BULLDOG PROSPECT (NM-E)
ZIA HILLS UNIT 2431 PROJECT
ZIA HILLS UNIT 2431 WC #705H**

**OWB
PWP0**

Anticollision Report

07 November, 2022

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference	PWP0		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 2,677.5usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	11/7/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	1,000.0	PWP0 (OWB)	r.5 SDI_KPR_WL_NS-CT	SDI Keeper Wireline Gyrocomp-Initialzd Cont. rev.5	
1,000.0	11,252.0	PWP0 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5	
11,252.0	24,774.6	PWP0 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction rev.5	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
ZIA HILLS UNIT 1932 PROJECT						
SUMIDEROS 12 W1PA FEDERAL COM #2H - OWB - AWP	24,034.8	13,272.0	2,382.9	2,246.2	17.433	CC
SUMIDEROS 12 W1PA FEDERAL COM #2H - OWB - AW	24,100.0	13,305.7	2,383.1	2,245.5	17.326	ES
SUMIDEROS 12 W1PA FEDERAL COM #2H - OWB - AW	24,774.6	13,686.6	2,438.8	2,292.8	16.712	SF
ZIA HILLS UNIT 2331 PROJECT						
GOLDEN SPUR FEDERAL #1H (P&A) - ST01 - AWP	9,071.0	13,450.0	431.4	373.1	7.402	CC, ES, SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	22,500.0	16,703.1	2,292.8	2,118.6	13.159	SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	24,774.6	14,437.3	2,269.7	2,108.3	14.065	CC, ES
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	23,500.0	20,589.6	2,652.1	2,402.4	10.620	SF
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	24,774.6	19,387.7	2,610.6	2,370.0	10.849	CC, ES
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	22,153.6	21,996.3	2,408.1	2,240.8	14.393	CC, ES
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	22,200.0	21,996.3	2,408.5	2,241.1	14.381	SF
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	22,151.3	21,875.5	2,017.6	1,849.2	11.978	CC, ES
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	22,200.0	21,875.5	2,018.2	1,849.7	11.973	SF
ZIA HILLS UNIT 2431 PROJECT						
SNAPPING 12 1 FEDERAL #332H - OWB - AWP	24,774.6	11,429.0	590.3	472.5	5.012	CC, ES, SF
SNAPPING 12 1 FEDERAL #621H - OWB - AWP	24,774.6	11,550.3	1,399.3	1,260.4	10.077	CC, ES, SF
SNAPPING 12 1 FEDERAL #711H - OWB - AWP	24,774.6	11,715.5	618.5	480.8	4.492	CC, ES, SF
SNAPPING 12 1 FEDERAL #712H - OWB - AWP	24,774.6	11,829.4	301.7	170.8	2.305	CC, ES, SF
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	1,000.0	998.8	119.7	111.7	14.979	CC, ES
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	24,774.6	24,795.0	1,608.0	1,401.9	7.804	SF
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0	1,000.0	999.2	89.7	81.7	11.227	CC, ES
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0	24,774.6	24,606.9	1,218.9	1,014.3	5.958	SF
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0	1,000.0	999.1	59.8	51.9	7.491	CC, ES
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0	24,774.6	24,740.9	804.0	601.1	3.964	SF
ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0	1,000.0	999.5	29.8	21.7	3.679	CC, ES
ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0	24,774.6	24,577.9	439.0	234.9	2.151	SF
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0	1,000.0	999.7	30.4	22.4	3.799	CC
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0	1,200.0	1,197.7	31.0	22.1	3.487	ES
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0	24,729.5	24,586.9	410.6	202.6	1.975	Advise and Monitor, SF

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

TD Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
ZIA HILLS UNIT 1932 PROJECT						
SUMIDEROS 12 W1PA FEDERAL COM #2H - OWB - AW	24,774.6	13,686.6	2,438.8	2,292.8	16.712	SF
ZIA HILLS UNIT 2331 PROJECT						
GOLDEN SPUR FEDERAL #1H (P&A) - ST01 - AWP	24,774.6	13,450.0				Out of Range @TD
SHETLAND 11 FEDERAL #734H - OWB - PWP0	24,774.6	14,437.3	2,269.7	2,108.3	14.065	CC, ES
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	24,774.6	19,387.7	2,610.6	2,370.0	10.849	CC, ES
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	24,774.6	21,996.3				Out of Range @TD
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	24,774.6	21,875.5				Out of Range @TD
ZIA HILLS UNIT 2431 PROJECT						
SNAPPING 12 1 FEDERAL #332H - OWB - AWP	24,774.6	11,429.0	590.3	472.5	5.012	CC, ES, SF
SNAPPING 12 1 FEDERAL #621H - OWB - AWP	24,774.6	11,550.3	1,399.3	1,260.4	10.077	CC, ES, SF
SNAPPING 12 1 FEDERAL #711H - OWB - AWP	24,774.6	11,715.5	618.5	480.8	4.492	CC, ES, SF
SNAPPING 12 1 FEDERAL #712H - OWB - AWP	24,774.6	11,829.4	301.7	170.8	2.305	CC, ES, SF
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	24,774.6	24,795.0	1,608.0	1,401.9	7.804	SF
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0	24,774.6	24,606.9	1,218.9	1,014.3	5.958	SF
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0	24,774.6	24,740.9	804.0	601.1	3.964	SF
ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0	24,774.6	24,577.9	439.0	234.9	2.151	SF
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0	24,774.6	24,586.9	413.0	204.5	1.981	Advise and Monitor

Offset Design: ZIA HILLS UNIT 1932 PROJECT - SUMIDEROS 12 W1PA FEDERAL COM #2H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program: 136-MWD - OWSG R1, 1290-MWD - OWSG R1, 4379-MWD - OWSG R1, 11947-MWD - OWSG R1													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Rule Assigned:	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Tooface (°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)	(usft)		
21,200.0	11,779.0	11,404.8	11,324.1	76.4	29.5	79.28	10,334.8	2,841.0	2,668.2	2,571.6	96.57	27.631		
21,300.0	11,779.0	11,421.0	11,337.6	77.1	29.6	79.58	10,343.7	2,839.6	2,629.6	2,531.3	98.23	26.768		
21,400.0	11,779.0	11,435.9	11,349.7	77.8	29.6	79.86	10,352.3	2,838.3	2,593.9	2,494.0	99.89	25.967		
21,500.0	11,779.0	11,452.0	11,362.5	78.6	29.6	80.15	10,362.0	2,837.0	2,561.2	2,459.7	101.52	25.229		
21,600.0	11,779.0	11,464.0	11,386.9	79.3	29.7	80.71	10,382.5	2,834.5	2,531.6	2,428.5	103.05	24.565		
21,700.0	11,779.0	11,499.2	11,398.0	80.0	29.7	80.96	10,392.8	2,833.3	2,504.9	2,400.3	104.61	23.946		
21,800.0	11,779.0	11,531.7	11,420.5	80.7	29.8	81.48	10,416.2	2,830.7	2,481.4	2,375.3	106.06	23.396		
21,900.0	11,779.0	11,578.0	11,449.4	81.4	29.8	82.15	10,452.0	2,826.7	2,460.5	2,353.1	107.41	22.907		
22,000.0	11,779.0	11,610.0	11,468.0	82.2	29.9	82.58	10,477.9	2,824.0	2,442.2	2,333.4	108.77	22.454		
22,100.0	11,779.0	11,652.9	11,491.6	82.9	29.9	83.13	10,513.6	2,820.6	2,426.4	2,316.4	110.05	22.049		
22,200.0	11,779.0	11,690.6	11,511.0	83.6	30.0	83.58	10,545.9	2,818.1	2,413.5	2,302.2	111.30	21.684		
22,300.0	11,779.0	11,736.0	11,532.6	84.4	30.1	84.09	10,585.7	2,815.6	2,403.0	2,290.5	112.50	21.361		
22,400.0	11,779.0	11,767.0	11,546.3	85.1	30.1	84.41	10,613.4	2,814.4	2,395.3	2,281.6	113.65	21.075		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 1932 PROJECT - SUMIDEROS 12 W1PA FEDERAL COM #2H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 136-MWD - OWSG R1, 1290-MWD - OWSG R1, 4379-MWD - OWSG R1, 11947-MWD - OWSG R1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		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)	Minimum Separation (usft)	Separation Factor	
22,500.0	11,779.0	11,817.2	11,566.9	85.8	30.2	84.91	10,659.2	2,813.2	2,390.2	2,275.4	114.76	20.827	
22,600.0	11,779.0	11,885.5	11,593.0	86.5	31.4	85.53	10,722.4	2,812.6	2,387.1	2,271.2	115.86	20.604	
22,700.0	11,779.0	11,978.0	11,623.4	87.3	35.0	86.26	10,809.7	2,811.6	2,385.0	2,268.0	116.91	20.399	
22,775.8	11,779.0	12,010.0	11,631.4	87.8	35.0	86.45	10,840.6	2,811.4	2,384.3	2,266.7	117.65	20.266	
22,800.0	11,779.0	12,018.5	11,633.2	88.0	35.0	86.50	10,848.9	2,811.4	2,384.4	2,266.5	117.88	20.228	
22,900.0	11,779.0	12,073.0	11,643.1	88.7	35.1	86.73	10,902.5	2,812.1	2,386.1	2,267.3	118.84	20.078	
23,000.0	11,779.0	12,147.2	11,651.9	89.5	35.2	86.95	10,976.1	2,814.2	2,389.6	2,269.7	119.88	19.934	
23,100.0	11,779.0	12,418.3	11,669.7	90.2	35.7	87.38	11,246.5	2,813.5	2,391.9	2,270.0	121.92	19.619	
23,200.0	11,779.0	12,514.0	11,670.3	90.9	35.9	87.39	11,342.1	2,808.9	2,388.6	2,265.2	123.33	19.368	
23,300.0	11,779.0	12,605.9	11,668.2	91.7	36.3	87.34	11,433.8	2,804.8	2,385.7	2,260.9	124.78	19.119	
23,400.0	11,779.0	12,658.6	11,667.5	92.4	36.5	87.32	11,486.5	2,803.0	2,383.7	2,257.7	126.00	18.919	
23,441.1	11,779.0	12,679.8	11,667.7	92.7	36.6	87.32	11,507.8	2,802.5	2,383.5	2,257.0	126.49	18.844	
23,500.0	11,779.0	12,703.0	11,668.1	93.1	36.7	87.33	11,530.9	2,802.3	2,383.9	2,256.7	127.12	18.753	
23,600.0	11,779.0	12,798.0	11,671.3	93.9	37.2	87.41	11,625.8	2,802.5	2,385.4	2,256.7	128.67	18.538	
23,700.0	11,779.0	12,958.0	11,676.4	94.6	38.3	87.54	11,785.8	2,801.8	2,386.6	2,255.7	130.91	18.232	
23,800.0	11,779.0	13,051.9	11,678.0	95.3	39.0	87.57	11,879.5	2,798.8	2,384.9	2,252.3	132.59	17.987	
23,900.0	11,779.0	13,191.9	11,675.5	96.1	40.3	87.51	12,019.6	2,795.8	2,384.8	2,250.0	134.78	17.693	
24,000.0	11,779.0	13,272.0	11,673.6	96.8	41.1	87.46	12,099.5	2,793.3	2,383.1	2,246.7	136.43	17.468	
24,034.8	11,779.0	13,272.0	11,673.6	97.1	41.1	87.46	12,099.5	2,793.3	2,382.9	2,246.2	136.69	17.433 CC	
24,100.0	11,779.0	13,305.7	11,672.4	97.5	41.4	87.44	12,133.3	2,792.7	2,383.1	2,245.5	137.54	17.326 ES	
24,200.0	11,779.0	13,367.0	11,669.5	98.3	42.1	87.37	12,194.4	2,794.0	2,386.2	2,247.3	138.93	17.176	
24,300.0	11,779.0	13,367.0	11,669.5	99.0	42.1	87.37	12,194.4	2,794.0	2,391.3	2,251.8	139.44	17.149	
24,400.0	11,779.0	13,425.8	11,668.4	99.8	42.6	87.35	12,253.1	2,797.5	2,399.0	2,258.3	140.70	17.050	
24,500.0	11,779.0	13,501.7	11,671.5	100.5	43.4	87.43	12,328.7	2,803.9	2,408.7	2,266.5	142.20	16.938	
24,600.0	11,779.0	13,592.2	11,674.4	101.2	44.4	87.51	12,418.8	2,811.3	2,418.3	2,274.3	143.95	16.799	
24,700.0	11,779.0	13,651.0	11,675.0	102.0	45.0	87.53	12,477.3	2,817.0	2,429.3	2,284.1	145.17	16.734	
24,774.6	11,779.0	13,686.6	11,674.7	102.5	45.4	87.53	12,512.7	2,821.0	2,438.8	2,292.8	145.92	16.712 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - GOLDEN SPUR FEDERAL #1H (P&A) - ST01 - AWP													Offset Site Error: 0.0 usft
Survey Program: 100-SDI_KPR_WL_NS-CT, 8346-MWD - OWSG R1													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside		Offset Wellbore Centre		Distance		Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
6,500.0	6,453.5	13,450.0	9,024.2	25.1	79.8	104.38		-759.8	378.5	2,606.8	2,557.0	49.86	52.286
6,600.0	6,553.4	13,450.0	9,024.2	25.4	79.8	101.60		-759.8	378.5	2,508.3	2,458.2	50.10	50.069
6,700.0	6,653.3	13,450.0	9,024.2	25.7	79.8	98.89		-759.8	378.5	2,409.9	2,359.6	50.34	47.875
6,800.0	6,753.3	13,450.0	9,024.2	26.0	79.8	96.24		-759.8	378.5	2,311.6	2,261.1	50.58	45.704
6,900.0	6,853.2	13,450.0	9,024.2	26.3	79.8	93.69		-759.8	378.5	2,213.5	2,162.7	50.82	43.557
7,000.0	6,953.2	13,450.0	9,024.2	26.6	79.8	91.23		-759.8	378.5	2,115.5	2,064.4	51.06	41.435
7,100.0	7,053.2	13,450.0	9,024.2	26.8	79.8	88.89		-759.8	378.5	2,017.7	1,966.4	51.29	39.338
7,200.0	7,153.2	13,450.0	9,024.2	26.9	79.8	-149.05		-759.8	378.5	1,920.1	1,868.6	51.52	37.269
7,300.0	7,253.2	13,450.0	9,024.2	26.9	79.8	-149.05		-759.8	378.5	1,822.8	1,771.1	51.76	35.220
7,400.0	7,353.2	13,450.0	9,024.2	26.9	79.8	-149.05		-759.8	378.5	1,725.8	1,673.8	52.00	33.192
7,500.0	7,453.2	13,450.0	9,024.2	26.9	79.8	-149.05		-759.8	378.5	1,629.2	1,577.0	52.24	31.186
7,600.0	7,553.2	13,450.0	9,024.2	27.0	79.8	-149.05		-759.8	378.5	1,533.0	1,480.5	52.49	29.203
7,700.0	7,653.2	13,450.0	9,024.2	27.0	79.8	-149.05		-759.8	378.5	1,437.3	1,384.6	52.75	27.245
7,800.0	7,753.2	13,450.0	9,024.2	27.0	79.8	-149.05		-759.8	378.5	1,342.3	1,289.2	53.02	25.314
7,900.0	7,853.2	13,450.0	9,024.2	27.0	79.8	-149.05		-759.8	378.5	1,248.0	1,194.7	53.30	23.413
8,000.0	7,953.2	13,450.0	9,024.2	27.0	79.8	-149.05		-759.8	378.5	1,154.7	1,101.1	53.60	21.543
8,100.0	8,053.2	13,450.0	9,024.2	27.1	79.8	-149.05		-759.8	378.5	1,062.6	1,008.7	53.91	19.711
8,200.0	8,153.2	13,450.0	9,024.2	27.1	79.8	-149.05		-759.8	378.5	972.0	917.8	54.24	17.922
8,300.0	8,253.2	13,450.0	9,024.2	27.1	79.8	-149.05		-759.8	378.5	883.5	828.9	54.59	16.185
8,400.0	8,353.2	13,450.0	9,024.2	27.1	79.8	-149.05		-759.8	378.5	797.7	742.8	54.98	14.510
8,500.0	8,453.2	13,450.0	9,024.2	27.1	79.8	-149.05		-759.8	378.5	715.7	660.3	55.41	12.916
8,600.0	8,553.2	13,450.0	9,024.2	27.2	79.8	-149.05		-759.8	378.5	638.7	582.8	55.89	11.428
8,700.0	8,653.2	13,450.0	9,024.2	27.2	79.8	-149.05		-759.8	378.5	569.0	512.6	56.43	10.083
8,800.0	8,753.2	13,450.0	9,024.2	27.2	79.8	-149.05		-759.8	378.5	509.5	452.5	57.02	8.936
8,900.0	8,853.2	13,450.0	9,024.2	27.2	79.8	-149.05		-759.8	378.5	464.1	406.5	57.59	8.059
9,000.0	8,953.2	13,450.0	9,024.2	27.3	79.8	-149.05		-759.8	378.5	437.2	379.2	58.06	7.531
9,071.0	9,024.2	13,450.0	9,024.2	27.3	79.8	-149.05		-759.8	378.5	431.4	373.1	58.28	7.402 CC, ES, SF
9,100.0	9,053.2	13,450.0	9,024.2	27.3	79.8	-149.05		-759.8	378.5	432.4	374.0	58.35	7.410
9,200.0	9,153.2	13,450.0	9,024.2	27.3	79.8	-149.05		-759.8	378.5	450.3	391.8	58.46	7.702
9,300.0	9,253.2	13,450.0	9,024.2	27.3	79.8	-149.05		-759.8	378.5	488.4	429.9	58.47	8.352
9,400.0	9,353.2	13,450.0	9,024.2	27.4	79.8	-149.05		-759.8	378.5	542.5	484.1	58.46	9.280
9,500.0	9,453.2	13,450.0	9,024.2	27.4	79.8	-149.05		-759.8	378.5	608.4	549.9	58.48	10.403
9,600.0	9,553.2	13,450.0	9,024.2	27.4	79.8	-149.05		-759.8	378.5	682.6	624.0	58.54	11.659
9,700.0	9,653.2	13,450.0	9,024.2	27.4	79.8	-149.05		-759.8	378.5	762.7	704.0	58.66	13.002
9,800.0	9,753.2	13,450.0	9,024.2	27.4	79.8	-149.05		-759.8	378.5	847.0	788.2	58.81	14.402
9,900.0	9,853.2	13,450.0	9,024.2	27.5	79.8	-149.05		-759.8	378.5	934.5	875.5	59.00	15.838
10,000.0	9,953.2	13,450.0	9,024.2	27.5	79.8	-149.05		-759.8	378.5	1,024.2	965.0	59.22	17.296
10,100.0	10,053.2	13,450.0	9,024.2	27.5	79.8	-149.05		-759.8	378.5	1,115.7	1,056.3	59.46	18.766
10,200.0	10,153.2	13,450.0	9,024.2	27.6	79.8	-149.05		-759.8	378.5	1,208.6	1,148.9	59.71	20.241
10,300.0	10,253.2	13,450.0	9,024.2	27.6	79.8	-149.05		-759.8	378.5	1,302.5	1,242.5	59.98	21.717
10,400.0	10,353.2	13,450.0	9,024.2	27.6	79.8	-149.05		-759.8	378.5	1,397.2	1,337.0	60.25	23.189
10,500.0	10,453.2	13,450.0	9,024.2	27.6	79.8	-149.05		-759.8	378.5	1,492.7	1,432.1	60.54	24.655
10,600.0	10,553.2	13,450.0	9,024.2	27.7	79.8	-149.05		-759.8	378.5	1,588.7	1,527.8	60.84	26.113
10,700.0	10,653.2	13,450.0	9,024.2	27.7	79.8	-149.05		-759.8	378.5	1,685.1	1,624.0	61.14	27.562
10,800.0	10,753.2	13,450.0	9,024.2	27.7	79.8	-149.05		-759.8	378.5	1,782.0	1,720.5	61.45	29.000
10,900.0	10,853.2	13,450.0	9,024.2	27.7	79.8	-149.05		-759.8	378.5	1,879.1	1,817.4	61.76	30.425
11,000.0	10,953.2	13,450.0	9,024.2	27.8	79.8	-149.05		-759.8	378.5	1,976.6	1,914.5	62.08	31.839
11,100.0	11,053.2	13,450.0	9,024.2	27.8	79.8	-149.05		-759.8	378.5	2,074.3	2,011.9	62.41	33.239
11,200.0	11,153.2	13,450.0	9,024.2	27.8	79.8	-149.05		-759.8	378.5	2,172.2	2,109.5	62.74	34.625
11,300.0	11,253.1	13,450.0	9,024.2	27.8	79.8	-128.96		-759.8	378.5	2,270.6	2,207.5	63.10	35.986
11,400.0	11,351.6	13,450.0	9,024.2	27.9	79.8	-46.13		-759.8	378.5	2,370.0	2,306.6	63.40	37.381
11,500.0	11,445.6	13,450.0	9,024.2	27.9	79.8	-19.79		-759.8	378.5	2,467.9	2,404.2	63.66	38.764

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - GOLDEN SPUR FEDERAL #1H (P&A) - ST01 - AWP													Offset Site Error:	0.0 usft
Survey Program: 100-SDI_KPR_WL_NS-CT, 8346-MWD - OWSG R1													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
11,600.0	11,532.3	13,450.0	9,024.2	28.0	79.8	-12.29	-759.8	378.5	2,561.6	2,497.7	63.88	40.102		
11,700.0	11,609.2	13,450.0	9,024.2	28.0	79.8	-8.97	-759.8	378.5	2,649.0	2,584.9	64.04	41.367		

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - SHETLAND 11 FEDERAL #734H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-MWD - OWSG R1												Offset Well Error:	10.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
21,200.0	11,779.0	16,703.1	11,883.7	76.4	88.8	-92.62	10,526.6	-1,854.3	2,651.4	2,504.1	147.35	17.994	
21,300.0	11,779.0	16,703.1	11,883.7	77.1	88.8	-92.62	10,526.6	-1,854.3	2,602.6	2,452.6	150.03	17.347	
21,400.0	11,779.0	16,703.1	11,883.7	77.8	88.8	-92.62	10,526.6	-1,854.3	2,556.8	2,404.1	152.69	16.744	
21,500.0	11,779.0	16,703.1	11,883.7	78.6	88.8	-92.62	10,526.6	-1,854.3	2,514.1	2,358.8	155.32	16.187	
21,600.0	11,779.0	16,703.1	11,883.7	79.3	88.8	-92.62	10,526.6	-1,854.3	2,474.8	2,316.9	157.88	15.675	
21,700.0	11,779.0	16,703.1	11,883.7	80.0	88.8	-92.62	10,526.6	-1,854.3	2,438.9	2,278.5	160.36	15.209	
21,800.0	11,779.0	16,703.1	11,883.7	80.7	88.8	-92.62	10,526.6	-1,854.3	2,406.6	2,243.9	162.72	14.789	
21,900.0	11,779.0	16,703.1	11,883.7	81.4	88.8	-92.62	10,526.6	-1,854.3	2,378.1	2,213.1	164.96	14.416	
22,000.0	11,779.0	16,703.1	11,883.7	82.2	88.8	-92.62	10,526.6	-1,854.3	2,353.5	2,186.5	167.03	14.090	
22,100.0	11,779.0	16,703.1	11,883.7	82.9	88.8	-92.62	10,526.6	-1,854.3	2,332.9	2,164.0	168.92	13.811	
22,200.0	11,779.0	16,703.1	11,883.7	83.6	88.8	-92.62	10,526.6	-1,854.3	2,316.5	2,145.9	170.61	13.578	
22,300.0	11,779.0	16,703.1	11,883.7	84.4	88.8	-92.62	10,526.6	-1,854.3	2,304.3	2,132.2	172.06	13.392	
22,400.0	11,779.0	16,703.1	11,883.7	85.1	88.8	-92.62	10,526.6	-1,854.3	2,296.4	2,123.1	173.28	13.252	
22,500.0	11,779.0	16,703.1	11,883.7	85.8	88.8	-92.62	10,526.6	-1,854.3	2,292.8	2,118.6	174.24	13.159 SF	
22,600.0	11,779.0	16,611.8	11,883.7	86.5	87.5	-92.62	10,617.9	-1,854.8	2,291.8	2,118.1	173.67	13.196	
22,700.0	11,779.0	16,511.8	11,883.7	87.3	86.0	-92.62	10,717.9	-1,855.3	2,290.8	2,117.8	172.97	13.243	
22,800.0	11,779.0	16,411.8	11,883.7	88.0	84.6	-92.62	10,817.9	-1,855.8	2,289.7	2,117.5	172.28	13.290	
22,900.0	11,779.0	16,311.8	11,883.7	88.7	83.2	-92.62	10,917.9	-1,856.3	2,288.7	2,117.1	171.61	13.337	
23,000.0	11,779.0	16,211.8	11,883.7	89.5	81.8	-92.62	11,017.8	-1,856.7	2,287.7	2,116.8	170.94	13.383	
23,100.0	11,779.0	16,111.8	11,883.7	90.2	80.4	-92.63	11,117.8	-1,857.2	2,286.7	2,116.4	170.28	13.429	
23,200.0	11,779.0	16,011.8	11,883.7	90.9	79.0	-92.63	11,217.8	-1,857.7	2,285.7	2,116.1	169.63	13.475	
23,300.0	11,779.0	15,911.8	11,883.7	91.7	77.7	-92.63	11,317.8	-1,858.2	2,284.7	2,115.7	168.99	13.519	
23,400.0	11,779.0	15,811.8	11,883.7	92.4	76.3	-92.63	11,417.8	-1,858.7	2,283.7	2,115.3	168.37	13.564	
23,500.0	11,779.0	15,711.8	11,883.7	93.1	75.0	-92.63	11,517.8	-1,859.2	2,282.6	2,114.9	167.75	13.607	
23,600.0	11,779.0	15,611.8	11,883.7	93.9	73.6	-92.63	11,617.8	-1,859.7	2,281.6	2,114.5	167.15	13.650	
23,700.0	11,779.0	15,511.8	11,883.7	94.6	72.3	-92.63	11,717.8	-1,860.2	2,280.6	2,114.0	166.57	13.692	
23,800.0	11,779.0	15,411.8	11,883.7	95.3	71.0	-92.63	11,817.8	-1,860.7	2,279.6	2,113.6	166.00	13.733	
23,900.0	11,779.0	15,311.8	11,883.7	96.1	69.7	-92.63	11,917.8	-1,861.1	2,278.6	2,113.1	165.44	13.773	
24,000.0	11,779.0	15,211.9	11,883.7	96.8	68.4	-92.64	12,017.8	-1,861.6	2,277.6	2,112.7	164.90	13.812	
24,100.0	11,779.0	15,111.9	11,883.7	97.5	67.2	-92.64	12,117.8	-1,862.1	2,276.6	2,112.2	164.38	13.850	
24,200.0	11,779.0	15,011.9	11,883.7	98.3	65.9	-92.64	12,217.8	-1,862.6	2,275.5	2,111.7	163.87	13.886	
24,300.0	11,779.0	14,911.9	11,883.7	99.0	64.7	-92.64	12,317.8	-1,863.1	2,274.5	2,111.1	163.39	13.921	
24,400.0	11,779.0	14,811.9	11,883.7	99.8	63.5	-92.64	12,417.8	-1,863.6	2,273.5	2,110.6	162.92	13.955	
24,500.0	11,779.0	14,711.9	11,883.7	100.5	62.3	-92.64	12,517.8	-1,864.1	2,272.5	2,110.0	162.48	13.987	
24,600.0	11,779.0	14,611.9	11,883.7	101.2	61.2	-92.64	12,617.7	-1,864.6	2,271.5	2,109.4	162.05	14.017	
24,700.0	11,779.0	14,511.9	11,883.7	102.0	60.1	-92.64	12,717.7	-1,865.1	2,270.5	2,108.8	161.65	14.045	
24,774.6	11,779.0	14,437.3	11,883.7	102.5	59.2	-92.64	12,792.3	-1,865.4	2,269.7	2,108.3	161.37	14.065 CC, ES	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - SHETLAND 2-11 STATE FEDERAL COM #333H - OWB - AWP													Offset Site Error:	0.0 usft	
Survey Program:		226-MWD		Offset			Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Offset Well Error:	10.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
23,100.0	11,779.0	20,898.0	11,405.0	90.2	162.9	-81.94	11,267.8	-2,217.1	2,674.1	2,422.9	251.21	10.645			
23,200.0	11,779.0	20,813.2	11,407.7	90.9	161.6	-81.99	11,352.5	-2,213.3	2,667.7	2,417.0	250.72	10.640			
23,300.0	11,779.0	20,724.8	11,409.7	91.7	160.2	-82.01	11,440.7	-2,209.7	2,661.8	2,411.7	250.14	10.641			
23,400.0	11,779.0	20,658.0	11,410.9	92.4	159.2	-82.03	11,507.5	-2,207.0	2,656.4	2,406.4	249.96	10.627			
23,500.0	11,779.0	20,589.6	11,411.2	93.1	158.1	-82.02	11,575.8	-2,205.0	2,652.1	2,402.4	249.72	10.620 SF			
23,600.0	11,779.0	20,515.2	11,410.0	93.9	157.0	-81.99	11,650.3	-2,204.1	2,649.5	2,400.2	249.34	10.626			
23,700.0	11,779.0	20,421.0	11,408.0	94.6	155.5	-81.94	11,744.4	-2,203.1	2,647.3	2,398.7	248.61	10.648			
23,800.0	11,779.0	20,327.3	11,405.5	95.3	154.0	-81.88	11,838.1	-2,202.4	2,645.4	2,397.5	247.88	10.672			
23,900.0	11,779.0	20,206.5	11,401.8	96.1	152.1	-81.79	11,958.8	-2,201.2	2,643.4	2,396.7	246.69	10.715			
24,000.0	11,779.0	20,062.3	11,397.9	96.8	149.9	-81.69	12,102.9	-2,197.9	2,640.1	2,395.1	245.06	10.774			
24,100.0	11,779.0	19,926.2	11,398.3	97.5	147.8	-81.68	12,238.9	-2,192.5	2,634.4	2,390.9	243.56	10.816			
24,200.0	11,779.0	19,845.9	11,398.7	98.3	146.5	-81.67	12,319.1	-2,189.4	2,629.1	2,386.0	243.14	10.813			
24,300.0	11,779.0	19,764.3	11,399.0	99.0	145.3	-81.67	12,400.6	-2,186.9	2,624.6	2,381.9	242.69	10.814			
24,400.0	11,779.0	19,670.7	11,399.1	99.8	143.8	-81.66	12,494.3	-2,184.6	2,620.6	2,378.5	242.02	10.828			
24,500.0	11,779.0	19,577.8	11,400.8	100.5	142.4	-81.68	12,587.1	-2,182.5	2,616.6	2,375.2	241.36	10.841			
24,600.0	11,779.0	19,516.0	11,401.6	101.2	141.4	-81.69	12,648.9	-2,181.4	2,613.4	2,372.1	241.24	10.833			
24,700.0	11,779.0	19,439.3	11,403.4	102.0	140.2	-81.73	12,725.5	-2,181.2	2,611.3	2,370.4	240.84	10.842			
24,774.6	11,779.0	19,387.7	11,405.7	102.5	139.4	-81.78	12,777.1	-2,181.8	2,610.6	2,370.0	240.63	10.849 CC, ES			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11195-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Rule Assigned:							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	8.4	3.0	3.0	-99.42	-402.7	-2,425.8	2,459.1				
100.0	100.0	91.6	100.0	3.0	3.0	-99.42	-402.7	-2,425.8	2,459.0	2,453.0	6.04	407.264	
200.0	200.0	191.6	200.0	3.2	3.1	-99.42	-402.7	-2,425.8	2,459.0	2,452.8	6.23	394.956	
300.0	300.0	291.6	300.0	3.3	3.2	-99.42	-402.7	-2,425.8	2,459.0	2,452.6	6.43	382.538	
400.0	400.0	391.6	400.0	3.4	3.3	-99.42	-402.7	-2,425.8	2,459.0	2,452.4	6.64	370.512	
500.0	500.0	491.6	500.0	3.5	3.4	-99.42	-402.7	-2,425.8	2,459.0	2,452.2	6.85	358.866	
600.0	600.0	591.6	600.0	3.6	3.5	-99.42	-402.7	-2,425.8	2,459.0	2,452.0	7.07	347.623	
700.0	700.0	691.6	700.0	3.8	3.7	-99.42	-402.7	-2,425.8	2,459.0	2,451.7	7.30	336.804	
800.0	800.0	791.6	800.0	3.9	3.8	-99.42	-402.7	-2,425.8	2,459.0	2,451.5	7.53	326.420	
900.0	900.0	891.6	900.0	4.0	4.0	-99.42	-402.7	-2,425.8	2,459.0	2,451.3	7.77	316.476	
1,000.0	1,000.0	991.6	1,000.0	4.1	4.1	-99.42	-402.7	-2,425.8	2,459.0	2,451.0	8.01	306.969	
1,100.0	1,100.0	1,091.6	1,100.0	4.3	4.3	137.59	-402.7	-2,425.8	2,460.3	2,452.0	8.32	295.733	
1,200.0	1,199.8	1,191.4	1,199.8	4.6	4.5	137.62	-402.7	-2,425.8	2,464.2	2,455.5	8.72	282.478	
1,300.0	1,299.5	1,291.1	1,299.5	4.9	4.7	137.66	-402.7	-2,425.8	2,470.6	2,461.5	9.14	270.363	
1,400.0	1,398.7	1,390.3	1,398.7	5.2	4.9	137.73	-402.7	-2,425.8	2,479.7	2,470.1	9.57	259.195	
1,500.0	1,497.7	1,489.3	1,497.7	5.5	5.1	137.95	-402.7	-2,425.8	2,490.1	2,480.1	9.96	250.098	
1,600.0	1,596.8	1,588.4	1,596.8	5.7	5.3	138.16	-402.7	-2,425.8	2,500.5	2,490.1	10.40	240.445	
1,700.0	1,695.8	1,687.4	1,695.8	6.0	5.4	138.37	-402.7	-2,425.8	2,510.9	2,500.1	10.80	232.512	
1,800.0	1,794.8	1,786.4	1,794.8	6.3	5.5	138.58	-402.7	-2,425.8	2,521.3	2,510.1	11.20	225.144	
1,900.0	1,893.8	1,885.4	1,893.8	6.7	5.7	138.79	-402.7	-2,425.8	2,531.8	2,520.2	11.61	218.149	
2,000.0	1,992.9	1,984.5	1,992.9	7.0	5.8	138.99	-402.7	-2,425.8	2,542.4	2,530.4	12.02	211.518	
2,100.0	2,091.9	2,436.9	2,443.6	7.4	6.6	139.83	-402.2	-2,392.8	2,544.6	2,531.3	13.31	191.172	
2,200.0	2,190.9	2,536.5	2,542.3	7.7	6.8	140.00	-402.0	-2,379.0	2,541.4	2,527.5	13.82	183.856	
2,300.0	2,289.9	2,636.2	2,641.0	8.1	7.1	140.16	-401.8	-2,365.1	2,538.2	2,523.8	14.36	176.734	
2,400.0	2,389.0	2,735.9	2,739.7	8.4	7.3	140.33	-401.6	-2,351.2	2,535.0	2,520.1	14.92	169.854	
2,500.0	2,488.0	2,835.5	2,838.4	8.8	7.6	140.50	-401.4	-2,337.4	2,531.9	2,516.3	15.51	163.245	
2,600.0	2,587.0	2,935.2	2,937.1	9.2	7.9	140.67	-401.2	-2,323.5	2,528.7	2,512.6	16.11	156.926	
2,700.0	2,686.1	3,034.9	3,035.8	9.6	8.2	140.84	-401.0	-2,309.6	2,525.6	2,508.9	16.74	150.904	
2,800.0	2,785.1	3,134.6	3,134.5	10.0	8.5	141.01	-400.8	-2,295.8	2,522.5	2,505.2	17.38	145.180	
2,900.0	2,884.1	3,234.2	3,233.2	10.4	8.8	141.18	-400.5	-2,281.9	2,519.5	2,501.5	18.03	139.751	
3,000.0	2,983.1	3,333.9	3,331.9	10.8	9.1	141.35	-400.3	-2,268.0	2,516.4	2,497.8	18.69	134.607	
3,100.0	3,082.2	3,433.6	3,430.6	11.2	9.4	141.52	-400.1	-2,254.1	2,513.4	2,494.1	19.37	129.738	
3,200.0	3,181.2	3,533.2	3,529.3	11.6	9.8	141.69	-399.9	-2,240.3	2,510.4	2,490.4	20.06	125.131	
3,300.0	3,280.2	3,632.9	3,628.0	12.0	10.1	141.86	-399.7	-2,226.4	2,507.5	2,486.7	20.76	120.774	
3,400.0	3,379.2	3,732.6	3,726.7	12.4	10.5	142.03	-399.5	-2,212.5	2,504.5	2,483.1	21.47	116.652	
3,500.0	3,478.3	3,832.3	3,825.4	12.8	10.9	142.21	-399.3	-2,198.7	2,501.6	2,479.4	22.19	112.752	
3,600.0	3,577.3	3,931.9	3,924.1	13.2	11.2	142.38	-399.1	-2,184.8	2,498.7	2,475.8	22.91	109.060	
3,700.0	3,676.3	4,031.6	4,022.8	13.6	11.6	142.55	-398.9	-2,170.9	2,495.8	2,472.2	23.64	105.564	
3,800.0	3,775.3	4,131.3	4,121.5	14.0	12.0	142.73	-398.7	-2,157.1	2,493.0	2,468.6	24.38	102.251	
3,900.0	3,874.4	4,231.0	4,220.2	14.4	12.3	142.90	-398.5	-2,143.2	2,490.1	2,465.0	25.13	99.109	
4,000.0	3,973.4	4,330.6	4,318.9	14.8	12.7	143.07	-398.3	-2,129.3	2,487.3	2,461.4	25.87	96.128	
4,100.0	4,072.4	4,430.3	4,417.6	15.2	13.1	143.25	-398.1	-2,115.4	2,484.5	2,457.9	26.63	93.298	
4,200.0	4,171.5	4,530.0	4,516.3	15.7	13.5	143.42	-397.9	-2,101.6	2,481.8	2,454.4	27.39	90.607	
4,300.0	4,270.5	4,629.6	4,615.0	16.1	13.9	143.60	-397.7	-2,087.7	2,479.0	2,450.9	28.16	88.049	
4,400.0	4,369.5	4,729.3	4,713.7	16.5	14.3	143.78	-397.5	-2,073.8	2,476.3	2,447.4	28.92	85.613	
4,500.0	4,468.5	4,829.0	4,812.4	16.9	14.7	143.95	-397.3	-2,060.0	2,473.6	2,443.9	29.70	83.293	
4,600.0	4,567.6	4,928.7	4,911.1	17.3	15.1	144.13	-397.1	-2,046.1	2,471.0	2,440.5	30.47	81.082	
4,700.0	4,666.6	5,028.3	5,009.8	17.8	15.5	144.30	-396.9	-2,032.2	2,468.3	2,437.1	31.26	78.971	
4,800.0	4,765.6	5,128.0	5,108.6	18.2	15.9	144.48	-396.7	-2,018.3	2,465.7	2,433.6	32.04	76.956	
4,900.0	4,864.6	5,227.7	5,207.3	18.6	16.3	144.66	-396.5	-2,004.5	2,463.1	2,430.3	32.83	75.030	
5,000.0	4,963.7	5,327.3	5,306.0	19.0	16.7	144.84	-396.3	-1,990.6	2,460.5	2,426.9	33.62	73.189	
5,100.0	5,062.7	5,420.7	5,398.4	19.4	17.1	145.01	-396.1	-1,977.6	2,458.0	2,423.6	34.38	71.495	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK_1500-r.5 MWD+IFR1_11195-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)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,161.7	5,500.0	5,477.0	19.9	17.4	145.15	-395.9	-1,966.9	2,455.9	2,420.8	35.08	70.006	
5,300.0	5,260.7	5,590.1	5,566.3	20.3	17.7	145.31	-395.8	-1,955.3	2,454.5	2,418.6	35.83	68.499	
5,400.0	5,359.8	5,672.2	5,647.8	20.7	18.1	145.46	-395.6	-1,945.4	2,453.8	2,417.3	36.55	67.141	
5,434.5	5,394.0	5,700.0	5,675.4	20.9	18.2	145.51	-395.6	-1,942.1	2,453.8	2,417.0	36.79	66.694	
5,500.0	5,458.8	5,754.3	5,729.4	21.1	18.4	145.61	-395.5	-1,936.0	2,453.9	2,416.6	37.26	65.863	
5,600.0	5,557.8	5,836.4	5,811.1	21.5	18.7	145.76	-395.3	-1,927.2	2,454.6	2,416.7	37.94	64.695	
5,700.0	5,657.0	5,918.6	5,892.8	22.0	19.0	145.90	-395.2	-1,919.1	2,455.4	2,416.8	38.64	63.553	
5,800.0	5,756.3	6,000.0	5,973.9	22.4	19.3	146.03	-395.1	-1,911.5	2,456.2	2,416.9	39.31	62.478	
5,900.0	5,855.6	6,082.9	6,056.5	22.8	19.6	146.15	-395.0	-1,904.5	2,457.0	2,417.0	39.98	61.452	
6,000.0	5,955.1	6,165.1	6,138.4	23.2	19.9	146.26	-394.9	-1,898.0	2,457.8	2,417.2	40.63	60.487	
6,100.0	6,054.6	6,247.3	6,220.4	23.6	20.2	146.37	-394.8	-1,892.2	2,458.6	2,417.4	41.27	59.576	
6,200.0	6,154.3	6,329.6	6,302.5	24.0	20.5	146.46	-394.8	-1,886.9	2,459.4	2,417.6	41.89	58.715	
6,300.0	6,254.0	6,411.8	6,384.6	24.3	20.8	146.55	-394.7	-1,882.3	2,460.3	2,417.8	42.49	57.904	
6,400.0	6,353.7	6,500.0	6,472.7	24.7	21.1	146.63	-394.6	-1,877.9	2,461.1	2,418.0	43.10	57.107	
6,500.0	6,453.5	6,576.4	6,549.0	25.1	21.3	146.69	-394.6	-1,874.7	2,461.9	2,418.3	43.63	56.431	
6,600.0	6,553.4	6,658.6	6,631.2	25.4	21.6	146.75	-394.5	-1,871.8	2,462.7	2,418.5	44.16	55.767	
6,700.0	6,653.3	6,740.9	6,713.4	25.7	21.8	146.79	-394.5	-1,869.5	2,463.5	2,418.8	44.67	55.153	
6,800.0	6,753.3	6,823.2	6,795.7	26.0	22.1	146.83	-394.5	-1,867.8	2,464.2	2,419.1	45.14	54.591	
6,900.0	6,853.2	6,900.0	6,872.5	26.3	22.3	146.86	-394.5	-1,866.7	2,465.0	2,419.5	45.55	54.111	
7,000.0	6,953.2	6,987.8	6,960.3	26.6	22.4	146.88	-394.5	-1,866.2	2,465.8	2,419.8	45.95	53.665	
7,100.0	7,053.2	7,080.7	7,053.2	26.8	22.5	146.89	-394.5	-1,866.1	2,466.4	2,420.2	46.19	53.400	
7,200.0	7,153.2	7,180.7	7,153.2	26.9	22.5	-90.11	-394.5	-1,866.1	2,466.4	2,420.2	46.25	53.323	
7,300.0	7,253.2	7,280.7	7,253.2	26.9	22.6	-90.11	-394.5	-1,866.1	2,466.4	2,420.1	46.31	53.259	
7,400.0	7,353.2	7,380.7	7,353.2	26.9	22.6	-90.11	-394.5	-1,866.1	2,466.4	2,420.1	46.37	53.194	
7,500.0	7,453.2	7,480.7	7,453.2	26.9	22.6	-90.11	-394.5	-1,866.1	2,466.4	2,420.0	46.42	53.129	
7,600.0	7,553.2	7,580.7	7,553.2	27.0	22.7	-90.11	-394.5	-1,866.1	2,466.4	2,420.0	46.48	53.064	
7,700.0	7,653.2	7,680.7	7,653.2	27.0	22.7	-90.11	-394.5	-1,866.1	2,466.4	2,419.9	46.54	52.998	
7,800.0	7,753.2	7,780.7	7,753.2	27.0	22.7	-90.11	-394.5	-1,866.1	2,466.4	2,419.8	46.60	52.931	
7,900.0	7,853.2	7,880.7	7,853.2	27.0	22.8	-90.11	-394.5	-1,866.1	2,466.4	2,419.8	46.66	52.865	
8,000.0	7,953.2	7,980.7	7,953.2	27.0	22.8	-90.11	-394.5	-1,866.1	2,466.4	2,419.7	46.72	52.797	
8,100.0	8,053.2	8,080.7	8,053.2	27.1	22.8	-90.11	-394.5	-1,866.1	2,466.4	2,419.7	46.77	52.730	
8,200.0	8,153.2	8,180.7	8,153.2	27.1	22.9	-90.11	-394.5	-1,866.1	2,466.4	2,419.6	46.84	52.662	
8,300.0	8,253.2	8,280.7	8,253.2	27.1	22.9	-90.11	-394.5	-1,866.1	2,466.4	2,419.5	46.90	52.594	
8,400.0	8,353.2	8,380.7	8,353.2	27.1	23.0	-90.11	-394.5	-1,866.1	2,466.4	2,419.5	46.96	52.525	
8,500.0	8,453.2	8,480.7	8,453.2	27.1	23.0	-90.11	-394.5	-1,866.1	2,466.4	2,419.4	47.02	52.456	
8,600.0	8,553.2	8,580.7	8,553.2	27.2	23.0	-90.11	-394.5	-1,866.1	2,466.4	2,419.4	47.08	52.387	
8,700.0	8,653.2	8,680.7	8,653.2	27.2	23.1	-90.11	-394.5	-1,866.1	2,466.4	2,419.3	47.14	52.317	
8,800.0	8,753.2	8,780.7	8,753.2	27.2	23.1	-90.11	-394.5	-1,866.1	2,466.4	2,419.2	47.21	52.247	
8,900.0	8,853.2	8,880.7	8,853.2	27.2	23.1	-90.11	-394.5	-1,866.1	2,466.4	2,419.2	47.27	52.177	
9,000.0	8,953.2	8,980.7	8,953.2	27.3	23.2	-90.11	-394.5	-1,866.1	2,466.4	2,419.1	47.33	52.106	
9,100.0	9,053.2	9,080.7	9,053.2	27.3	23.2	-90.11	-394.5	-1,866.1	2,466.4	2,419.0	47.40	52.035	
9,200.0	9,153.2	9,180.7	9,153.2	27.3	23.3	-90.11	-394.5	-1,866.1	2,466.4	2,419.0	47.46	51.964	
9,300.0	9,253.2	9,280.7	9,253.2	27.3	23.3	-90.11	-394.5	-1,866.1	2,466.4	2,418.9	47.53	51.892	
9,400.0	9,353.2	9,380.7	9,353.2	27.4	23.3	-90.11	-394.5	-1,866.1	2,466.4	2,418.8	47.60	51.820	
9,500.0	9,453.2	9,480.7	9,453.2	27.4	23.4	-90.11	-394.5	-1,866.1	2,466.4	2,418.8	47.66	51.748	
9,600.0	9,553.2	9,580.7	9,553.2	27.4	23.4	-90.11	-394.5	-1,866.1	2,466.4	2,418.7	47.73	51.675	
9,700.0	9,653.2	9,680.7	9,653.2	27.4	23.5	-90.11	-394.5	-1,866.1	2,466.4	2,418.6	47.80	51.602	
9,800.0	9,753.2	9,780.7	9,753.2	27.4	23.5	-90.11	-394.5	-1,866.1	2,466.4	2,418.6	47.86	51.529	
9,900.0	9,853.2	9,880.7	9,853.2	27.5	23.5	-90.11	-394.5	-1,866.1	2,466.4	2,418.5	47.93	51.456	
10,000.0	9,953.2	9,980.7	9,953.2	27.5	23.6	-90.11	-394.5	-1,866.1	2,466.4	2,418.4	48.00	51.382	
10,100.0	10,053.2	10,080.7	10,053.2	27.5	23.6	-90.11	-394.5	-1,866.1	2,466.4	2,418.4	48.07	51.308	
10,200.0	10,153.2	10,180.7	10,153.2	27.6	23.7	-90.11	-394.5	-1,866.1	2,466.4	2,418.3	48.14	51.234	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11195-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Highside	Rule Assigned:				Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,300.0	10,253.2	10,280.7	10,253.2	27.6	23.7	-90.11	-394.5	-1,866.1	2,466.4	2,418.2	48.21	51.159	
10,400.0	10,353.2	10,380.7	10,353.2	27.6	23.8	-90.11	-394.5	-1,866.1	2,466.4	2,418.2	48.28	51.084	
10,500.0	10,453.2	10,480.7	10,453.2	27.6	23.8	-90.11	-394.5	-1,866.1	2,466.4	2,418.1	48.35	51.009	
10,600.0	10,553.2	10,580.7	10,553.2	27.7	23.8	-90.11	-394.5	-1,866.1	2,466.4	2,418.0	48.42	50.934	
10,700.0	10,653.2	10,680.7	10,653.2	27.7	23.9	-90.11	-394.5	-1,866.1	2,466.4	2,417.9	48.50	50.859	
10,800.0	10,753.2	10,780.7	10,753.2	27.7	23.9	-90.11	-394.5	-1,866.1	2,466.4	2,417.9	48.57	50.783	
10,900.0	10,853.2	10,880.7	10,853.2	27.7	24.0	-90.11	-394.5	-1,866.1	2,466.4	2,417.8	48.64	50.707	
11,000.0	10,953.2	10,980.7	10,953.2	27.8	24.0	-90.11	-394.5	-1,866.1	2,466.4	2,417.7	48.71	50.631	
11,100.0	11,053.2	11,080.7	11,053.2	27.8	24.1	-90.11	-394.5	-1,866.1	2,466.4	2,417.6	48.79	50.554	
11,200.0	11,153.2	11,180.7	11,153.2	27.8	24.1	-90.11	-394.5	-1,866.1	2,466.4	2,417.6	48.86	50.484	
11,300.0	11,253.1	11,276.2	11,248.1	27.8	24.1	-89.07	-385.3	-1,866.2	2,466.5	2,417.6	48.89	50.445	
11,400.0	11,351.6	11,369.3	11,337.1	27.9	24.1	-88.80	-358.3	-1,866.4	2,466.6	2,417.6	48.93	50.412	
11,500.0	11,445.6	11,459.8	11,416.9	27.9	24.1	-88.49	-316.1	-1,866.8	2,466.6	2,417.7	48.94	50.396	
11,600.0	11,532.3	11,547.6	11,485.5	28.0	24.1	-88.17	-261.5	-1,867.3	2,466.7	2,417.7	48.94	50.398	
11,700.0	11,609.2	11,632.8	11,541.4	28.0	24.2	-87.84	-197.3	-1,867.9	2,466.8	2,417.9	48.93	50.411	
11,800.0	11,673.7	11,715.5	11,584.0	28.1	24.2	-87.51	-126.5	-1,868.6	2,467.0	2,418.0	48.92	50.428	
11,900.0	11,724.1	11,796.1	11,613.0	28.1	24.2	-87.20	-51.5	-1,869.2	2,467.1	2,418.2	48.91	50.441	
12,000.0	11,758.7	11,875.0	11,628.9	28.2	24.3	-86.90	25.7	-1,869.9	2,467.3	2,418.4	48.92	50.437	
12,100.0	11,776.5	11,957.3	11,632.4	28.3	24.4	-86.63	107.9	-1,870.7	2,467.5	2,418.5	48.98	50.380	
12,200.0	11,779.0	12,057.2	11,632.4	28.3	24.5	-86.59	207.8	-1,871.6	2,467.0	2,417.9	49.19	50.149	
12,300.0	11,779.0	12,157.2	11,632.4	28.4	24.7	-86.59	307.8	-1,872.5	2,466.5	2,417.0	49.47	49.855	
12,400.0	11,779.0	12,257.2	11,632.4	28.5	24.9	-86.59	407.8	-1,873.4	2,465.9	2,416.1	49.80	49.520	
12,500.0	11,779.0	12,357.2	11,632.4	28.7	25.1	-86.59	507.8	-1,874.3	2,465.3	2,415.1	50.16	49.145	
12,600.0	11,779.0	12,457.2	11,632.4	28.8	25.3	-86.59	607.8	-1,875.2	2,464.7	2,414.1	50.57	48.734	
12,700.0	11,779.0	12,557.2	11,632.4	29.0	25.6	-86.59	707.8	-1,876.1	2,464.1	2,413.1	51.03	48.289	
12,800.0	11,779.0	12,657.2	11,632.4	29.1	25.9	-86.59	807.8	-1,877.1	2,463.5	2,412.0	51.52	47.814	
12,900.0	11,779.0	12,757.2	11,632.4	29.3	26.2	-86.59	907.8	-1,878.0	2,462.9	2,410.8	52.06	47.312	
13,000.0	11,779.0	12,857.2	11,632.4	29.5	26.5	-86.59	1,007.8	-1,878.9	2,462.3	2,409.7	52.63	46.785	
13,100.0	11,779.0	12,957.2	11,632.4	29.7	26.8	-86.59	1,107.8	-1,879.8	2,461.7	2,408.5	53.24	46.236	
13,200.0	11,779.0	13,057.2	11,632.4	30.0	27.1	-86.59	1,207.8	-1,880.7	2,461.1	2,407.2	53.89	45.670	
13,300.0	11,779.0	13,157.2	11,632.4	30.2	27.5	-86.58	1,307.8	-1,881.6	2,460.5	2,406.0	54.57	45.087	
13,400.0	11,779.0	13,257.2	11,632.4	30.5	27.9	-86.58	1,407.7	-1,882.5	2,459.9	2,404.6	55.29	44.492	
13,500.0	11,779.0	13,357.2	11,632.4	30.7	28.3	-86.58	1,507.7	-1,883.4	2,459.3	2,403.3	56.04	43.887	
13,600.0	11,779.0	13,457.2	11,632.4	31.0	28.7	-86.58	1,607.7	-1,884.3	2,458.7	2,401.9	56.82	43.274	
13,700.0	11,779.0	13,557.2	11,632.4	31.3	29.1	-86.58	1,707.7	-1,885.2	2,458.2	2,400.5	57.63	42.655	
13,800.0	11,779.0	13,657.2	11,632.4	31.6	29.5	-86.58	1,807.7	-1,886.2	2,457.6	2,399.1	58.47	42.033	
13,900.0	11,779.0	13,757.2	11,632.4	32.0	30.0	-86.58	1,907.7	-1,887.1	2,457.0	2,397.6	59.33	41.410	
14,000.0	11,779.0	13,857.2	11,632.4	32.3	30.5	-86.58	2,007.7	-1,888.0	2,456.4	2,396.2	60.23	40.786	
14,100.0	11,779.0	13,957.2	11,632.4	32.7	30.9	-86.58	2,107.7	-1,888.9	2,455.8	2,394.6	61.14	40.164	
14,200.0	11,779.0	14,057.2	11,632.4	33.0	31.4	-86.58	2,207.7	-1,889.8	2,455.2	2,393.1	62.09	39.545	
14,300.0	11,779.0	14,157.2	11,632.4	33.4	31.9	-86.58	2,307.7	-1,890.7	2,454.6	2,391.5	63.05	38.931	
14,400.0	11,779.0	14,257.2	11,632.4	33.8	32.4	-86.58	2,407.7	-1,891.6	2,454.0	2,390.0	64.04	38.322	
14,500.0	11,779.0	14,357.2	11,632.4	34.2	32.9	-86.57	2,507.7	-1,892.5	2,453.4	2,388.4	65.04	37.719	
14,600.0	11,779.0	14,457.2	11,632.4	34.7	33.5	-86.57	2,607.7	-1,893.4	2,452.8	2,386.7	66.07	37.123	
14,700.0	11,779.0	14,557.2	11,632.4	35.1	34.0	-86.57	2,707.7	-1,894.4	2,452.2	2,385.1	67.12	36.535	
14,800.0	11,779.0	14,657.2	11,632.4	35.5	34.5	-86.57	2,807.7	-1,895.3	2,451.6	2,383.5	68.18	35.956	
14,900.0	11,779.0	14,757.2	11,632.4	36.0	35.1	-86.57	2,907.7	-1,896.2	2,451.0	2,381.8	69.27	35.386	
15,000.0	11,779.0	14,857.2	11,632.4	36.5	35.7	-86.57	3,007.7	-1,897.1	2,450.5	2,380.1	70.36	34.825	
15,100.0	11,779.0	14,957.2	11,632.4	37.0	36.2	-86.57	3,107.6	-1,898.0	2,449.9	2,378.4	71.48	34.274	
15,200.0	11,779.0	15,057.2	11,632.4	37.4	36.8	-86.57	3,207.6	-1,898.9	2,449.3	2,376.7	72.61	33.732	
15,300.0	11,779.0	15,157.2	11,632.4	37.9	37.4	-86.57	3,307.6	-1,899.8	2,448.7	2,374.9	73.75	33.201	
15,400.0	11,779.0	15,257.2	11,632.4	38.5	38.0	-86.57	3,407.6	-1,900.7	2,448.1	2,373.2	74.91	32.680	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11195-r.5 MWD+IFR1+MS							Rule Assigned:						Offset Well Error: 3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,500.0	11,779.0	15,357.2	11,632.4	39.0	38.6	-86.57	3,507.6	-1,901.6	2,447.5	2,371.4	76.08	32.169	
15,600.0	11,779.0	15,457.2	11,632.4	39.5	39.2	-86.57	3,607.6	-1,902.5	2,446.9	2,369.6	77.26	31.669	
15,700.0	11,779.0	15,557.2	11,632.4	40.0	39.8	-86.56	3,707.6	-1,903.5	2,446.3	2,367.8	78.46	31.179	
15,800.0	11,779.0	15,657.2	11,632.4	40.6	40.4	-86.56	3,807.6	-1,904.4	2,445.7	2,366.0	79.67	30.700	
15,900.0	11,779.0	15,757.2	11,632.4	41.1	41.0	-86.56	3,907.6	-1,905.3	2,445.1	2,364.2	80.88	30.230	
16,000.0	11,779.0	15,857.2	11,632.4	41.7	41.6	-86.56	4,007.6	-1,906.2	2,444.5	2,362.4	82.11	29.771	
16,100.0	11,779.0	15,957.2	11,632.4	42.3	42.2	-86.56	4,107.6	-1,907.1	2,443.9	2,360.6	83.35	29.322	
16,200.0	11,779.0	16,057.1	11,632.4	42.9	42.9	-86.56	4,207.6	-1,908.0	2,443.3	2,358.7	84.60	28.883	
16,300.0	11,779.0	16,157.1	11,632.4	43.4	43.5	-86.56	4,307.6	-1,908.9	2,442.7	2,356.9	85.85	28.453	
16,400.0	11,779.0	16,257.1	11,632.4	44.0	44.1	-86.56	4,407.6	-1,909.8	2,442.2	2,355.0	87.12	28.033	
16,500.0	11,779.0	16,357.1	11,632.4	44.6	44.8	-86.56	4,507.6	-1,910.7	2,441.6	2,353.2	88.39	27.623	
16,600.0	11,779.0	16,457.1	11,632.4	45.2	45.4	-86.56	4,607.6	-1,911.7	2,441.0	2,351.3	89.67	27.221	
16,700.0	11,779.0	16,557.1	11,632.4	45.8	46.1	-86.56	4,707.6	-1,912.6	2,440.4	2,349.4	90.96	26.829	
16,800.0	11,779.0	16,657.1	11,632.4	46.4	46.7	-86.56	4,807.5	-1,913.5	2,439.8	2,347.5	92.26	26.446	
16,900.0	11,779.0	16,757.1	11,632.4	47.1	47.4	-86.55	4,907.5	-1,914.4	2,439.2	2,345.6	93.56	26.071	
17,000.0	11,779.0	16,857.1	11,632.4	47.7	48.0	-86.55	5,007.5	-1,915.3	2,438.6	2,343.7	94.87	25.705	
17,100.0	11,779.0	16,957.1	11,632.4	48.3	48.7	-86.55	5,107.5	-1,916.2	2,438.0	2,341.8	96.19	25.347	
17,200.0	11,779.0	17,057.1	11,632.4	48.9	49.4	-86.55	5,207.5	-1,917.1	2,437.4	2,339.9	97.51	24.997	
17,300.0	11,779.0	17,157.1	11,632.4	49.6	50.0	-86.55	5,307.5	-1,918.0	2,436.8	2,338.0	98.84	24.655	
17,400.0	11,779.0	17,257.1	11,632.4	50.2	50.7	-86.55	5,407.5	-1,918.9	2,436.2	2,336.1	100.17	24.321	
17,500.0	11,779.0	17,357.1	11,632.4	50.9	51.4	-86.55	5,507.5	-1,919.8	2,435.6	2,334.1	101.51	23.994	
17,600.0	11,779.0	17,457.1	11,632.4	51.5	52.1	-86.55	5,607.5	-1,920.8	2,435.0	2,332.2	102.85	23.675	
17,700.0	11,779.0	17,557.1	11,632.4	52.2	52.7	-86.55	5,707.5	-1,921.7	2,434.4	2,330.2	104.20	23.362	
17,800.0	11,779.0	17,657.1	11,632.4	52.8	53.4	-86.55	5,807.5	-1,922.6	2,433.9	2,328.3	105.56	23.057	
17,900.0	11,779.0	17,757.1	11,632.4	53.5	54.1	-86.55	5,907.5	-1,923.5	2,433.3	2,326.3	106.92	22.758	
18,000.0	11,779.0	17,857.1	11,632.4	54.1	54.8	-86.55	6,007.5	-1,924.4	2,432.7	2,324.4	108.28	22.466	
18,100.0	11,779.0	17,957.1	11,632.4	54.8	55.5	-86.54	6,107.5	-1,925.3	2,432.1	2,322.4	109.65	22.180	
18,200.0	11,779.0	18,057.1	11,632.4	55.5	56.2	-86.54	6,207.5	-1,926.2	2,431.5	2,320.5	111.02	21.901	
18,300.0	11,779.0	18,157.1	11,632.4	56.1	56.9	-86.54	6,307.5	-1,927.1	2,430.9	2,318.5	112.40	21.627	
18,400.0	11,779.0	18,257.1	11,632.4	56.8	57.5	-86.54	6,407.5	-1,928.0	2,430.3	2,316.5	113.78	21.360	
18,500.0	11,779.0	18,357.1	11,632.4	57.5	58.2	-86.54	6,507.4	-1,928.9	2,429.7	2,314.5	115.16	21.098	
18,600.0	11,779.0	18,457.1	11,632.4	58.2	58.9	-86.54	6,607.4	-1,929.9	2,429.1	2,312.6	116.55	20.842	
18,700.0	11,779.0	18,557.1	11,632.4	58.8	59.6	-86.54	6,707.4	-1,930.8	2,428.5	2,310.6	117.94	20.591	
18,800.0	11,779.0	18,657.1	11,632.4	59.5	60.3	-86.54	6,807.4	-1,931.7	2,427.9	2,308.6	119.34	20.345	
18,900.0	11,779.0	18,757.1	11,632.4	60.2	61.0	-86.54	6,907.4	-1,932.6	2,427.3	2,306.6	120.73	20.105	
19,000.0	11,779.0	18,857.1	11,632.4	60.9	61.7	-86.54	7,007.4	-1,933.5	2,426.7	2,304.6	122.14	19.869	
19,100.0	11,779.0	18,957.1	11,632.4	61.6	62.4	-86.54	7,107.4	-1,934.4	2,426.1	2,302.6	123.54	19.639	
19,200.0	11,779.0	19,057.1	11,632.4	62.3	63.1	-86.54	7,207.4	-1,935.3	2,425.6	2,300.6	124.95	19.413	
19,300.0	11,779.0	19,157.1	11,632.4	63.0	63.9	-86.53	7,307.4	-1,936.2	2,425.0	2,298.6	126.36	19.192	
19,400.0	11,779.0	19,257.1	11,632.4	63.7	64.6	-86.53	7,407.4	-1,937.1	2,424.4	2,296.6	127.77	18.975	
19,500.0	11,779.0	19,357.1	11,632.4	64.4	65.3	-86.53	7,507.4	-1,938.1	2,423.8	2,294.6	129.18	18.762	
19,600.0	11,779.0	19,457.1	11,632.4	65.1	66.0	-86.53	7,607.4	-1,939.0	2,423.2	2,292.6	130.60	18.554	
19,700.0	11,779.0	19,557.1	11,632.4	65.8	66.7	-86.53	7,707.4	-1,939.9	2,422.6	2,290.6	132.02	18.350	
19,800.0	11,779.0	19,657.1	11,632.4	66.5	67.4	-86.53	7,807.4	-1,940.8	2,422.0	2,288.6	133.44	18.150	
19,900.0	11,779.0	19,757.1	11,632.4	67.2	68.1	-86.53	7,907.4	-1,941.7	2,421.4	2,286.5	134.87	17.954	
20,000.0	11,779.0	19,857.1	11,632.4	67.9	68.8	-86.53	8,007.4	-1,942.6	2,420.8	2,284.5	136.29	17.762	
20,100.0	11,779.0	19,957.1	11,632.4	68.6	69.5	-86.53	8,107.4	-1,943.5	2,420.2	2,282.5	137.72	17.573	
20,200.0	11,779.0	20,057.1	11,632.4	69.3	70.3	-86.53	8,207.3	-1,944.4	2,419.6	2,280.5	139.15	17.388	
20,300.0	11,779.0	20,157.1	11,632.4	70.0	71.0	-86.53	8,307.3	-1,945.3	2,419.0	2,278.4	140.59	17.207	
20,400.0	11,779.0	20,257.1	11,632.4	70.7	71.7	-86.52	8,407.3	-1,946.2	2,418.4	2,276.4	142.02	17.029	
20,500.0	11,779.0	20,357.1	11,632.4	71.4	72.4	-86.52	8,507.3	-1,947.2	2,417.9	2,274.4	143.46	16.854	
20,600.0	11,779.0	20,457.1	11,632.4	72.1	73.1	-86.52	8,607.3	-1,948.1	2,417.3	2,272.4	144.90	16.683	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11195-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
20,700.0	11,779.0	20,557.1	11,632.4	72.8	73.9	-86.52	8,707.3	-1,949.0	2,416.7	2,270.3	146.34	16.514		
20,800.0	11,779.0	20,657.1	11,632.4	73.5	74.6	-86.52	8,807.3	-1,949.9	2,416.1	2,268.3	147.78	16.349		
20,900.0	11,779.0	20,757.1	11,632.4	74.2	75.3	-86.52	8,907.3	-1,950.8	2,415.5	2,266.3	149.22	16.187		
21,000.0	11,779.0	20,857.1	11,632.4	75.0	76.0	-86.52	9,007.3	-1,951.7	2,414.9	2,264.2	150.67	16.028		
21,100.0	11,779.0	20,957.1	11,632.4	75.7	76.8	-86.52	9,107.3	-1,952.6	2,414.3	2,262.2	152.12	15.871		
21,200.0	11,779.0	21,057.1	11,632.4	76.4	77.5	-86.52	9,207.3	-1,953.5	2,413.7	2,260.1	153.57	15.718		
21,300.0	11,779.0	21,157.1	11,632.4	77.1	78.2	-86.52	9,307.3	-1,954.4	2,413.1	2,258.1	155.02	15.567		
21,400.0	11,779.0	21,257.1	11,632.4	77.8	78.9	-86.52	9,407.3	-1,955.3	2,412.5	2,256.0	156.47	15.418		
21,500.0	11,779.0	21,357.1	11,632.4	78.6	79.7	-86.52	9,507.3	-1,956.3	2,411.9	2,254.0	157.92	15.273		
21,600.0	11,779.0	21,457.1	11,632.4	79.3	80.4	-86.51	9,607.3	-1,957.2	2,411.3	2,252.0	159.38	15.130		
21,700.0	11,779.0	21,557.1	11,632.4	80.0	81.1	-86.51	9,707.3	-1,958.1	2,410.7	2,249.9	160.83	14.989		
21,800.0	11,779.0	21,657.1	11,632.4	80.7	81.8	-86.51	9,807.3	-1,959.0	2,410.1	2,247.9	162.29	14.851		
21,900.0	11,779.0	21,757.0	11,632.4	81.4	82.6	-86.51	9,907.2	-1,959.9	2,409.6	2,245.8	163.75	14.715		
22,000.0	11,779.0	21,857.0	11,632.4	82.2	83.3	-86.51	10,007.2	-1,960.8	2,409.0	2,243.8	165.21	14.581		
22,100.0	11,779.0	21,957.0	11,632.4	82.9	84.0	-86.51	10,107.2	-1,961.7	2,408.4	2,241.7	166.67	14.450		
22,153.6	11,779.0	21,996.3	11,632.4	83.3	84.3	-86.51	10,146.5	-1,962.1	2,408.1	2,240.8	167.31	14.393 CC, ES		
22,200.0	11,779.0	21,996.3	11,632.4	83.6	84.3	-86.51	10,146.5	-1,962.1	2,408.5	2,241.1	167.48	14.381 SF		
22,300.0	11,779.0	21,996.3	11,632.4	84.4	84.3	-86.51	10,146.5	-1,962.1	2,412.5	2,244.9	167.67	14.389		
22,400.0	11,779.0	21,996.3	11,632.4	85.1	84.3	-86.51	10,146.5	-1,962.1	2,420.7	2,253.1	167.60	14.443		
22,500.0	11,779.0	21,996.3	11,632.4	85.8	84.3	-86.51	10,146.5	-1,962.1	2,432.9	2,265.6	167.29	14.543		
22,600.0	11,779.0	21,996.3	11,632.4	86.5	84.3	-86.51	10,146.5	-1,962.1	2,449.1	2,282.4	166.75	14.687		
22,700.0	11,779.0	21,996.3	11,632.4	87.3	84.3	-86.51	10,146.5	-1,962.1	2,469.3	2,303.3	165.99	14.876		
22,800.0	11,779.0	21,996.3	11,632.4	88.0	84.3	-86.51	10,146.5	-1,962.1	2,493.3	2,328.3	165.02	15.109		
22,900.0	11,779.0	21,996.3	11,632.4	88.7	84.3	-86.51	10,146.5	-1,962.1	2,521.1	2,357.3	163.86	15.386		
23,000.0	11,779.0	21,996.3	11,632.4	89.5	84.3	-86.51	10,146.5	-1,962.1	2,552.5	2,390.0	162.53	15.705		
23,100.0	11,779.0	21,996.3	11,632.4	90.2	84.3	-86.51	10,146.5	-1,962.1	2,587.4	2,426.3	161.06	16.065		
23,200.0	11,779.0	21,996.3	11,632.4	90.9	84.3	-86.51	10,146.5	-1,962.1	2,625.6	2,466.2	159.45	16.467		
23,300.0	11,779.0	21,996.3	11,632.4	91.7	84.3	-86.51	10,146.5	-1,962.1	2,667.1	2,509.3	157.74	16.908		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11092-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	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)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	8.4	3.0	3.0	-99.54	-402.5	-2,395.8	2,429.4				
100.0	100.0	91.6	100.0	3.0	3.0	-99.54	-402.5	-2,395.8	2,429.4	2,423.4	6.04	402.360	
200.0	200.0	191.6	200.0	3.2	3.1	-99.54	-402.5	-2,395.8	2,429.4	2,423.2	6.23	390.200	
300.0	300.0	291.6	300.0	3.3	3.2	-99.54	-402.5	-2,395.8	2,429.4	2,423.0	6.43	377.931	
400.0	400.0	391.6	400.0	3.4	3.3	-99.54	-402.5	-2,395.8	2,429.4	2,422.8	6.64	366.049	
500.0	500.0	491.6	500.0	3.5	3.4	-99.54	-402.5	-2,395.8	2,429.4	2,422.6	6.85	354.542	
600.0	600.0	591.6	600.0	3.6	3.5	-99.54	-402.5	-2,395.8	2,429.4	2,422.4	7.07	343.434	
700.0	700.0	691.6	700.0	3.8	3.7	-99.54	-402.5	-2,395.8	2,429.4	2,422.1	7.30	332.744	
800.0	800.0	791.6	800.0	3.9	3.8	-99.54	-402.5	-2,395.8	2,429.4	2,421.9	7.53	322.484	
900.0	900.0	891.6	900.0	4.0	4.0	-99.54	-402.5	-2,395.8	2,429.4	2,421.7	7.77	312.659	
1,000.0	1,000.0	991.6	1,000.0	4.1	4.1	-99.54	-402.5	-2,395.8	2,429.4	2,421.4	8.01	303.266	
1,100.0	1,100.0	1,091.6	1,100.0	4.3	4.3	137.47	-402.5	-2,395.8	2,430.7	2,422.4	8.32	292.175	
1,200.0	1,199.8	1,191.4	1,199.8	4.6	4.5	137.50	-402.5	-2,395.8	2,434.6	2,425.9	8.72	279.092	
1,300.0	1,299.5	1,291.1	1,299.5	4.9	4.7	137.56	-402.5	-2,395.8	2,441.0	2,431.9	9.14	267.136	
1,400.0	1,398.7	1,390.3	1,398.7	5.2	4.9	137.62	-402.5	-2,395.8	2,450.0	2,440.5	9.57	256.118	
1,500.0	1,497.7	1,489.3	1,497.7	5.5	5.1	137.84	-402.5	-2,395.8	2,460.4	2,450.4	9.96	247.142	
1,600.0	1,596.8	2,035.8	2,041.0	5.7	6.3	138.86	-401.9	-2,345.8	2,461.6	2,450.1	11.54	213.390	
1,700.0	1,695.8	2,156.5	2,159.5	6.0	6.5	139.05	-401.6	-2,322.9	2,453.1	2,441.1	12.07	203.293	
1,800.0	1,794.8	2,255.9	2,257.1	6.3	6.8	139.21	-401.3	-2,303.9	2,444.6	2,432.0	12.63	193.595	
1,900.0	1,893.8	2,355.3	2,354.7	6.7	7.1	139.36	-401.1	-2,285.0	2,436.2	2,422.9	13.22	184.330	
2,000.0	1,992.9	2,454.7	2,452.3	7.0	7.5	139.52	-400.8	-2,266.0	2,427.7	2,413.9	13.83	175.539	
2,100.0	2,091.9	2,554.1	2,549.9	7.4	7.8	139.68	-400.6	-2,247.0	2,419.2	2,404.8	14.47	167.242	
2,200.0	2,190.9	2,653.6	2,647.5	7.7	8.1	139.84	-400.3	-2,228.1	2,410.8	2,395.7	15.12	159.439	
2,300.0	2,289.9	2,753.0	2,745.1	8.1	8.5	140.00	-400.1	-2,209.1	2,402.4	2,386.6	15.79	152.120	
2,400.0	2,389.0	2,852.4	2,842.7	8.4	8.9	140.16	-399.8	-2,190.1	2,394.0	2,377.5	16.48	145.264	
2,500.0	2,488.0	2,951.8	2,940.3	8.8	9.3	140.33	-399.6	-2,171.2	2,385.6	2,368.4	17.18	138.847	
2,600.0	2,587.0	3,051.2	3,037.8	9.2	9.6	140.49	-399.3	-2,152.2	2,377.3	2,359.4	17.90	132.844	
2,700.0	2,686.1	3,150.6	3,135.4	9.6	10.0	140.66	-399.1	-2,133.2	2,368.9	2,350.3	18.62	127.226	
2,800.0	2,785.1	3,250.0	3,233.0	10.0	10.4	140.83	-398.8	-2,114.3	2,360.6	2,341.3	19.35	121.967	
2,900.0	2,884.1	3,349.5	3,330.6	10.4	10.8	140.99	-398.6	-2,095.3	2,352.3	2,332.2	20.10	117.040	
3,000.0	2,983.1	3,448.9	3,428.2	10.8	11.2	141.16	-398.3	-2,076.3	2,344.0	2,323.2	20.85	112.422	
3,100.0	3,082.2	3,548.3	3,525.8	11.2	11.7	141.33	-398.1	-2,057.4	2,335.8	2,314.2	21.61	108.088	
3,200.0	3,181.2	3,647.7	3,623.4	11.6	12.1	141.51	-397.9	-2,038.4	2,327.6	2,305.2	22.38	104.016	
3,300.0	3,280.2	3,747.1	3,721.0	12.0	12.5	141.68	-397.6	-2,019.4	2,319.4	2,296.2	23.15	100.187	
3,400.0	3,379.2	3,846.5	3,818.6	12.4	12.9	141.85	-397.4	-2,000.5	2,311.2	2,287.2	23.93	96.583	
3,500.0	3,478.3	3,946.0	3,916.1	12.8	13.3	142.03	-397.1	-1,981.5	2,303.0	2,278.3	24.71	93.186	
3,600.0	3,577.3	4,045.4	4,013.7	13.2	13.8	142.21	-396.9	-1,962.5	2,294.8	2,269.3	25.50	89.980	
3,700.0	3,676.3	4,144.8	4,111.3	13.6	14.2	142.38	-396.6	-1,943.6	2,286.7	2,260.4	26.30	86.951	
3,800.0	3,775.3	4,244.2	4,208.9	14.0	14.6	142.56	-396.4	-1,924.6	2,278.6	2,251.5	27.10	84.087	
3,900.0	3,874.4	4,343.6	4,306.5	14.4	15.1	142.74	-396.1	-1,905.6	2,270.5	2,242.6	27.90	81.375	
4,000.0	3,973.4	4,443.0	4,404.1	14.8	15.5	142.92	-395.9	-1,886.6	2,262.5	2,233.8	28.71	78.805	
4,100.0	4,072.4	4,542.4	4,501.7	15.2	15.9	143.11	-395.6	-1,867.7	2,254.4	2,224.9	29.52	76.366	
4,200.0	4,171.5	4,641.9	4,599.3	15.7	16.4	143.29	-395.4	-1,848.7	2,246.4	2,216.1	30.34	74.049	
4,300.0	4,270.5	4,741.3	4,696.9	16.1	16.8	143.48	-395.1	-1,829.7	2,238.4	2,207.3	31.16	71.846	
4,400.0	4,369.5	4,840.7	4,794.4	16.5	17.3	143.66	-394.9	-1,810.8	2,230.5	2,198.5	31.98	69.749	
4,500.0	4,468.5	4,940.1	4,892.0	16.9	17.7	143.85	-394.6	-1,791.8	2,222.5	2,189.7	32.80	67.752	
4,600.0	4,567.6	5,039.5	4,989.6	17.3	18.1	144.04	-394.4	-1,772.8	2,214.6	2,181.0	33.63	65.847	
4,700.0	4,666.6	5,138.9	5,087.2	17.8	18.6	144.23	-394.1	-1,753.9	2,206.7	2,172.3	34.46	64.029	
4,800.0	4,765.6	5,238.4	5,184.8	18.2	19.0	144.43	-393.9	-1,734.9	2,198.9	2,163.6	35.30	62.293	
4,900.0	4,864.6	5,337.8	5,282.4	18.6	19.5	144.62	-393.6	-1,715.9	2,191.0	2,154.9	36.14	60.633	
5,000.0	4,963.7	5,437.2	5,380.0	19.0	19.9	144.82	-393.4	-1,697.0	2,183.2	2,146.2	36.98	59.044	
5,100.0	5,062.7	5,536.6	5,477.6	19.4	20.4	145.01	-393.1	-1,678.0	2,175.4	2,137.6	37.82	57.523	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11092-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)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,161.7	5,636.0	5,575.2	19.9	20.8	145.21	-392.9	-1,659.0	2,167.6	2,129.0	38.66	56.065	
5,300.0	5,260.7	5,735.4	5,672.7	20.3	21.3	145.41	-392.6	-1,640.1	2,159.9	2,120.4	39.51	54.667	
5,400.0	5,359.8	5,834.8	5,770.3	20.7	21.7	145.61	-392.4	-1,621.1	2,152.2	2,111.8	40.36	53.325	
5,500.0	5,458.8	5,934.3	5,867.9	21.1	22.2	145.81	-392.1	-1,602.1	2,144.5	2,103.3	41.21	52.036	
5,600.0	5,557.8	6,033.7	5,965.5	21.5	22.6	146.00	-391.9	-1,583.2	2,136.7	2,094.7	42.04	50.822	
5,700.0	5,657.0	6,133.1	6,063.1	22.0	23.1	146.17	-391.6	-1,564.2	2,128.3	2,085.4	42.88	49.628	
5,800.0	5,756.3	6,200.0	6,128.8	22.4	23.4	146.27	-391.5	-1,551.7	2,119.7	2,076.1	43.57	48.645	
5,900.0	5,855.6	6,282.5	6,210.0	22.8	23.7	146.38	-391.3	-1,537.2	2,111.5	2,067.2	44.32	47.638	
6,000.0	5,955.1	6,355.2	6,281.8	23.2	24.0	146.48	-391.1	-1,525.5	2,103.9	2,058.9	45.01	46.741	
6,100.0	6,054.6	6,428.1	6,353.9	23.6	24.4	146.56	-391.0	-1,514.6	2,096.9	2,051.2	45.68	45.902	
6,200.0	6,154.3	6,500.0	6,425.1	24.0	24.7	146.64	-390.9	-1,504.8	2,090.4	2,044.1	46.33	45.124	
6,300.0	6,254.0	6,574.2	6,498.8	24.3	25.0	146.71	-390.7	-1,495.6	2,084.5	2,037.6	46.96	44.392	
6,400.0	6,353.7	6,647.4	6,571.5	24.7	25.3	146.78	-390.6	-1,487.5	2,079.2	2,031.6	47.56	43.718	
6,500.0	6,453.5	6,720.7	6,644.4	25.1	25.6	146.83	-390.5	-1,480.3	2,074.4	2,026.2	48.14	43.093	
6,600.0	6,553.4	6,800.0	6,723.4	25.4	25.9	146.88	-390.5	-1,473.5	2,070.1	2,021.4	48.72	42.491	
6,700.0	6,653.3	6,867.4	6,790.7	25.7	26.1	146.92	-390.4	-1,468.6	2,066.4	2,017.2	49.20	41.997	
6,800.0	6,753.3	6,940.9	6,864.0	26.0	26.4	146.95	-390.3	-1,464.2	2,063.3	2,013.6	49.69	41.525	
6,900.0	6,853.2	7,014.4	6,937.4	26.3	26.6	146.97	-390.3	-1,460.8	2,060.7	2,010.5	50.13	41.103	
7,000.0	6,953.2	7,100.0	7,023.0	26.6	26.9	146.99	-390.3	-1,457.9	2,058.7	2,008.1	50.60	40.685	
7,100.0	7,053.2	7,161.5	7,084.5	26.8	27.1	146.99	-390.2	-1,456.6	2,057.1	2,006.3	50.86	40.450	
7,200.0	7,153.2	7,235.1	7,158.1	26.9	27.2	-90.01	-390.2	-1,456.0	2,056.3	2,005.4	50.95	40.357	
7,240.9	7,194.1	7,271.1	7,194.1	26.9	27.2	-90.01	-390.2	-1,456.0	2,056.3	2,005.3	50.96	40.348	
7,300.0	7,253.2	7,330.2	7,253.2	26.9	27.2	-90.01	-390.2	-1,456.0	2,056.3	2,005.3	50.99	40.329	
7,400.0	7,353.2	7,430.2	7,353.2	26.9	27.2	-90.01	-390.2	-1,456.0	2,056.3	2,005.2	51.04	40.291	
7,500.0	7,453.2	7,530.2	7,453.2	26.9	27.3	-90.01	-390.2	-1,456.0	2,056.3	2,005.2	51.09	40.252	
7,600.0	7,553.2	7,630.2	7,553.2	27.0	27.3	-90.01	-390.2	-1,456.0	2,056.3	2,005.1	51.13	40.213	
7,700.0	7,653.2	7,730.2	7,653.2	27.0	27.3	-90.01	-390.2	-1,456.0	2,056.3	2,005.1	51.18	40.174	
7,800.0	7,753.2	7,830.2	7,753.2	27.0	27.4	-90.01	-390.2	-1,456.0	2,056.3	2,005.0	51.24	40.134	
7,900.0	7,853.2	7,930.2	7,853.2	27.0	27.4	-90.01	-390.2	-1,456.0	2,056.3	2,005.0	51.29	40.094	
8,000.0	7,953.2	8,030.2	7,953.2	27.0	27.4	-90.01	-390.2	-1,456.0	2,056.3	2,004.9	51.34	40.054	
8,100.0	8,053.2	8,130.2	8,053.2	27.1	27.4	-90.01	-390.2	-1,456.0	2,056.3	2,004.9	51.39	40.013	
8,200.0	8,153.2	8,230.2	8,153.2	27.1	27.5	-90.01	-390.2	-1,456.0	2,056.3	2,004.8	51.44	39.973	
8,300.0	8,253.2	8,330.2	8,253.2	27.1	27.5	-90.01	-390.2	-1,456.0	2,056.3	2,004.8	51.50	39.932	
8,400.0	8,353.2	8,430.2	8,353.2	27.1	27.5	-90.01	-390.2	-1,456.0	2,056.3	2,004.7	51.55	39.890	
8,500.0	8,453.2	8,530.2	8,453.2	27.1	27.6	-90.01	-390.2	-1,456.0	2,056.3	2,004.7	51.60	39.849	
8,600.0	8,553.2	8,630.2	8,553.2	27.2	27.6	-90.01	-390.2	-1,456.0	2,056.3	2,004.6	51.66	39.807	
8,700.0	8,653.2	8,730.2	8,653.2	27.2	27.6	-90.01	-390.2	-1,456.0	2,056.3	2,004.6	51.71	39.765	
8,800.0	8,753.2	8,830.2	8,753.2	27.2	27.7	-90.01	-390.2	-1,456.0	2,056.3	2,004.5	51.77	39.723	
8,900.0	8,853.2	8,930.2	8,853.2	27.2	27.7	-90.01	-390.2	-1,456.0	2,056.3	2,004.5	51.82	39.680	
9,000.0	8,953.2	9,030.2	8,953.2	27.3	27.7	-90.01	-390.2	-1,456.0	2,056.3	2,004.4	51.88	39.637	
9,100.0	9,053.2	9,130.2	9,053.2	27.3	27.7	-90.01	-390.2	-1,456.0	2,056.3	2,004.3	51.93	39.594	
9,200.0	9,153.2	9,230.2	9,153.2	27.3	27.8	-90.01	-390.2	-1,456.0	2,056.3	2,004.3	51.99	39.550	
9,300.0	9,253.2	9,330.2	9,253.2	27.3	27.8	-90.01	-390.2	-1,456.0	2,056.3	2,004.2	52.05	39.507	
9,400.0	9,353.2	9,430.2	9,353.2	27.4	27.8	-90.01	-390.2	-1,456.0	2,056.3	2,004.2	52.11	39.463	
9,500.0	9,453.2	9,530.2	9,453.2	27.4	27.9	-90.01	-390.2	-1,456.0	2,056.3	2,004.1	52.16	39.419	
9,600.0	9,553.2	9,630.2	9,553.2	27.4	27.9	-90.01	-390.2	-1,456.0	2,056.3	2,004.1	52.22	39.374	
9,700.0	9,653.2	9,730.2	9,653.2	27.4	27.9	-90.01	-390.2	-1,456.0	2,056.3	2,004.0	52.28	39.330	
9,800.0	9,753.2	9,830.2	9,753.2	27.4	28.0	-90.01	-390.2	-1,456.0	2,056.3	2,003.9	52.34	39.285	
9,900.0	9,853.2	9,930.2	9,853.2	27.5	28.0	-90.01	-390.2	-1,456.0	2,056.3	2,003.9	52.40	39.240	
10,000.0	9,953.2	10,030.2	9,953.2	27.5	28.0	-90.01	-390.2	-1,456.0	2,056.3	2,003.8	52.46	39.195	
10,100.0	10,053.2	10,130.2	10,053.2	27.5	28.1	-90.01	-390.2	-1,456.0	2,056.3	2,003.8	52.52	39.149	
10,200.0	10,153.2	10,230.2	10,153.2	27.6	28.1	-90.01	-390.2	-1,456.0	2,056.3	2,003.7	52.59	39.103	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK_1500-r.5 MWD+IFR1, 11092-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Highside	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)	Minimum Separation (usft)	Separation Factor	
10,300.0	10,253.2	10,330.2	10,253.2	27.6	28.1	-90.01	-390.2	-1,456.0	2,056.3	2,003.6	52.65	39.058	
10,400.0	10,353.2	10,430.2	10,353.2	27.6	28.2	-90.01	-390.2	-1,456.0	2,056.3	2,003.6	52.71	39.011	
10,500.0	10,453.2	10,530.2	10,453.2	27.6	28.2	-90.01	-390.2	-1,456.0	2,056.3	2,003.5	52.77	38.965	
10,600.0	10,553.2	10,630.2	10,553.2	27.7	28.2	-90.01	-390.2	-1,456.0	2,056.3	2,003.4	52.84	38.918	
10,700.0	10,653.2	10,730.2	10,653.2	27.7	28.3	-90.01	-390.2	-1,456.0	2,056.3	2,003.4	52.90	38.872	
10,800.0	10,753.2	10,830.2	10,753.2	27.7	28.3	-90.01	-390.2	-1,456.0	2,056.3	2,003.3	52.96	38.825	
10,900.0	10,853.2	10,930.2	10,853.2	27.7	28.3	-90.01	-390.2	-1,456.0	2,056.3	2,003.3	53.03	38.777	
11,000.0	10,953.2	11,030.2	10,953.2	27.8	28.4	-90.01	-390.2	-1,456.0	2,056.3	2,003.2	53.09	38.733	
11,003.2	10,956.4	11,033.4	10,956.4	27.8	28.4	-90.01	-390.2	-1,456.0	2,056.3	2,003.2	53.09	38.732	
11,100.0	11,053.2	11,127.3	11,050.1	27.8	28.4	-89.89	-385.8	-1,456.0	2,056.3	2,003.2	53.14	38.694	
11,200.0	11,153.2	11,218.2	11,138.4	27.8	28.4	-89.30	-364.9	-1,456.2	2,056.7	2,003.5	53.24	38.630	
11,300.0	11,253.1	11,300.0	11,213.2	27.8	28.4	-87.50	-332.1	-1,456.5	2,057.9	2,004.6	53.32	38.599	
11,400.0	11,351.6	11,375.0	11,276.0	27.9	28.4	-86.48	-291.2	-1,456.9	2,059.8	2,006.5	53.32	38.631	
11,500.0	11,445.6	11,446.2	11,329.0	27.9	28.4	-85.50	-243.8	-1,457.3	2,062.2	2,009.0	53.26	38.718	
11,600.0	11,532.3	11,514.3	11,372.6	28.0	28.4	-84.56	-191.5	-1,457.8	2,065.0	2,011.8	53.15	38.849	
11,700.0	11,609.2	11,579.8	11,407.1	28.0	28.5	-83.70	-135.8	-1,458.3	2,067.9	2,014.9	53.01	39.007	
11,800.0	11,673.7	11,643.5	11,433.0	28.1	28.5	-82.93	-77.7	-1,458.8	2,070.7	2,017.8	52.86	39.176	
11,900.0	11,724.1	11,705.6	11,450.6	28.1	28.5	-82.26	-18.2	-1,459.3	2,073.3	2,020.6	52.70	39.342	
12,000.0	11,758.7	11,766.6	11,460.2	28.2	28.6	-81.72	42.0	-1,459.9	2,075.4	2,022.9	52.56	39.490	
12,100.0	11,776.5	11,836.5	11,462.4	28.3	28.6	-81.31	111.8	-1,460.5	2,077.0	2,024.5	52.50	39.560	
12,200.0	11,779.0	11,936.4	11,462.4	28.3	28.8	-81.23	211.7	-1,461.4	2,076.7	2,024.0	52.70	39.407	
12,300.0	11,779.0	12,036.4	11,462.4	28.4	28.9	-81.23	311.7	-1,462.3	2,076.2	2,023.2	52.96	39.204	
12,400.0	11,779.0	12,136.4	11,462.4	28.5	29.1	-81.23	411.7	-1,463.2	2,075.6	2,022.3	53.26	38.972	
12,500.0	11,779.0	12,236.4	11,462.4	28.7	29.2	-81.22	511.7	-1,464.1	2,075.0	2,021.4	53.60	38.712	
12,600.0	11,779.0	12,336.4	11,462.4	28.8	29.4	-81.22	611.7	-1,465.0	2,074.4	2,020.4	53.98	38.425	
12,700.0	11,779.0	12,436.4	11,462.4	29.0	29.7	-81.22	711.7	-1,465.9	2,073.8	2,019.4	54.41	38.115	
12,800.0	11,779.0	12,536.4	11,462.4	29.1	29.9	-81.22	811.7	-1,466.8	2,073.2	2,018.3	54.87	37.782	
12,900.0	11,779.0	12,636.4	11,462.4	29.3	30.2	-81.21	911.7	-1,467.7	2,072.6	2,017.2	55.38	37.428	
13,000.0	11,779.0	12,736.4	11,462.4	29.5	30.4	-81.21	1,011.7	-1,468.6	2,072.0	2,016.1	55.92	37.056	
13,100.0	11,779.0	12,836.4	11,462.4	29.7	30.7	-81.21	1,111.7	-1,469.5	2,071.4	2,014.9	56.49	36.668	
13,200.0	11,779.0	12,936.4	11,462.4	30.0	31.0	-81.21	1,211.7	-1,470.4	2,070.8	2,013.7	57.10	36.264	
13,300.0	11,779.0	13,036.4	11,462.4	30.2	31.3	-81.20	1,311.6	-1,471.3	2,070.2	2,012.5	57.75	35.849	
13,400.0	11,779.0	13,136.4	11,462.4	30.5	31.7	-81.20	1,411.6	-1,472.2	2,069.6	2,011.2	58.43	35.422	
13,500.0	11,779.0	13,236.4	11,462.4	30.7	32.0	-81.20	1,511.6	-1,473.1	2,069.0	2,009.9	59.14	34.986	
13,600.0	11,779.0	13,336.4	11,462.4	31.0	32.4	-81.20	1,611.6	-1,474.0	2,068.4	2,008.5	59.88	34.543	
13,700.0	11,779.0	13,436.4	11,462.4	31.3	32.8	-81.19	1,711.6	-1,474.9	2,067.8	2,007.2	60.65	34.095	
13,800.0	11,779.0	13,536.4	11,462.4	31.6	33.2	-81.19	1,811.6	-1,475.8	2,067.2	2,005.8	61.45	33.642	
13,900.0	11,779.0	13,636.4	11,462.4	32.0	33.6	-81.19	1,911.6	-1,476.7	2,066.6	2,004.4	62.28	33.185	
14,000.0	11,779.0	13,736.4	11,462.4	32.3	34.0	-81.19	2,011.6	-1,477.6	2,066.0	2,002.9	63.13	32.728	
14,100.0	11,779.0	13,836.4	11,462.4	32.7	34.4	-81.18	2,111.6	-1,478.5	2,065.4	2,001.4	64.01	32.270	
14,200.0	11,779.0	13,936.4	11,462.4	33.0	34.9	-81.18	2,211.6	-1,479.4	2,064.9	1,999.9	64.91	31.812	
14,300.0	11,779.0	14,036.4	11,462.4	33.4	35.3	-81.18	2,311.6	-1,480.4	2,064.3	1,998.4	65.83	31.356	
14,400.0	11,779.0	14,136.4	11,462.4	33.8	35.8	-81.18	2,411.6	-1,481.3	2,063.7	1,996.9	66.78	30.902	
14,500.0	11,779.0	14,236.4	11,462.4	34.2	36.2	-81.17	2,511.6	-1,482.2	2,063.1	1,995.3	67.75	30.451	
14,600.0	11,779.0	14,336.4	11,462.4	34.7	36.7	-81.17	2,611.6	-1,483.1	2,062.5	1,993.7	68.74	30.004	
14,700.0	11,779.0	14,436.4	11,462.4	35.1	37.2	-81.17	2,711.6	-1,484.0	2,061.9	1,992.1	69.75	29.562	
14,800.0	11,779.0	14,536.4	11,462.4	35.5	37.7	-81.16	2,811.6	-1,484.9	2,061.3	1,990.5	70.78	29.124	
14,900.0	11,779.0	14,636.4	11,462.4	36.0	38.2	-81.16	2,911.6	-1,485.8	2,060.7	1,988.9	71.82	28.692	
15,000.0	11,779.0	14,736.4	11,462.4	36.5	38.7	-81.16	3,011.5	-1,486.7	2,060.1	1,987.2	72.88	28.266	
15,100.0	11,779.0	14,836.4	11,462.4	37.0	39.3	-81.16	3,111.5	-1,487.6	2,059.5	1,985.5	73.96	27.846	
15,200.0	11,779.0	14,936.4	11,462.4	37.4	39.8	-81.15	3,211.5	-1,488.5	2,058.9	1,983.9	75.06	27.432	
15,300.0	11,779.0	15,036.4	11,462.4	37.9	40.3	-81.15	3,311.5	-1,489.4	2,058.3	1,982.2	76.16	27.024	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program:		0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11092-r.5 MWD+IFR1+MS						Rule Assigned:				Offset Well Error: 3.0 usft		
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,400.0	11,779.0	15,136.4	11,462.4	38.5	40.9	-81.15	3,411.5	-1,490.3	2,057.7	1,980.4	77.29	26.624		
15,500.0	11,779.0	15,236.4	11,462.4	39.0	41.4	-81.15	3,511.5	-1,491.2	2,057.1	1,978.7	78.43	26.230		
15,600.0	11,779.0	15,336.4	11,462.4	39.5	42.0	-81.14	3,611.5	-1,492.1	2,056.5	1,977.0	79.58	25.844		
15,700.0	11,779.0	15,436.4	11,462.4	40.0	42.6	-81.14	3,711.5	-1,493.0	2,055.9	1,975.2	80.74	25.464		
15,800.0	11,779.0	15,536.4	11,462.4	40.6	43.1	-81.14	3,811.5	-1,493.9	2,055.3	1,973.4	81.91	25.092		
15,900.0	11,779.0	15,636.4	11,462.4	41.1	43.7	-81.14	3,911.5	-1,494.8	2,054.7	1,971.6	83.10	24.726		
16,000.0	11,779.0	15,736.4	11,462.4	41.7	44.3	-81.13	4,011.5	-1,495.7	2,054.2	1,969.9	84.30	24.368		
16,100.0	11,779.0	15,836.4	11,462.4	42.3	44.9	-81.13	4,111.5	-1,496.6	2,053.6	1,968.1	85.51	24.017		
16,200.0	11,779.0	15,936.3	11,462.4	42.9	45.5	-81.13	4,211.5	-1,497.5	2,053.0	1,966.2	86.72	23.673		
16,300.0	11,779.0	16,036.3	11,462.4	43.4	46.1	-81.13	4,311.5	-1,498.4	2,052.4	1,964.4	87.95	23.335		
16,400.0	11,779.0	16,136.3	11,462.4	44.0	46.7	-81.12	4,411.5	-1,499.3	2,051.8	1,962.6	89.19	23.005		
16,500.0	11,779.0	16,236.3	11,462.4	44.6	47.3	-81.12	4,511.5	-1,500.2	2,051.2	1,960.7	90.43	22.682		
16,600.0	11,779.0	16,336.3	11,462.4	45.2	47.9	-81.12	4,611.5	-1,501.1	2,050.6	1,958.9	91.69	22.365		
16,700.0	11,779.0	16,436.3	11,462.4	45.8	48.5	-81.12	4,711.4	-1,502.0	2,050.0	1,957.0	92.95	22.055		
16,800.0	11,779.0	16,536.3	11,462.4	46.4	49.1	-81.11	4,811.4	-1,502.9	2,049.4	1,955.2	94.22	21.751		
16,900.0	11,779.0	16,636.3	11,462.4	47.1	49.8	-81.11	4,911.4	-1,503.8	2,048.8	1,953.3	95.50	21.454		
17,000.0	11,779.0	16,736.3	11,462.4	47.7	50.4	-81.11	5,011.4	-1,504.7	2,048.2	1,951.4	96.78	21.163		
17,100.0	11,779.0	16,836.3	11,462.4	48.3	51.0	-81.11	5,111.4	-1,505.6	2,047.6	1,949.5	98.08	20.878		
17,200.0	11,779.0	16,936.3	11,462.4	48.9	51.7	-81.10	5,211.4	-1,506.5	2,047.0	1,947.6	99.38	20.599		
17,300.0	11,779.0	17,036.3	11,462.4	49.6	52.3	-81.10	5,311.4	-1,507.4	2,046.4	1,945.7	100.68	20.326		
17,400.0	11,779.0	17,136.3	11,462.4	50.2	52.9	-81.10	5,411.4	-1,508.3	2,045.8	1,943.8	101.99	20.059		
17,500.0	11,779.0	17,236.3	11,462.4	50.9	53.6	-81.09	5,511.4	-1,509.2	2,045.2	1,941.9	103.31	19.797		
17,600.0	11,779.0	17,336.3	11,462.4	51.5	54.2	-81.09	5,611.4	-1,510.1	2,044.6	1,940.0	104.63	19.541		
17,700.0	11,779.0	17,436.3	11,462.4	52.2	54.9	-81.09	5,711.4	-1,511.0	2,044.0	1,938.1	105.96	19.290		
17,800.0	11,779.0	17,536.3	11,462.4	52.8	55.5	-81.09	5,811.4	-1,511.9	2,043.5	1,936.2	107.30	19.045		
17,900.0	11,779.0	17,636.3	11,462.4	53.5	56.2	-81.08	5,911.4	-1,512.8	2,042.9	1,934.2	108.64	18.805		
18,000.0	11,779.0	17,736.3	11,462.4	54.1	56.9	-81.08	6,011.4	-1,513.7	2,042.3	1,932.3	109.98	18.569		
18,100.0	11,779.0	17,836.3	11,462.4	54.8	57.5	-81.08	6,111.4	-1,514.6	2,041.7	1,930.3	111.33	18.339		
18,200.0	11,779.0	17,936.3	11,462.4	55.5	58.2	-81.08	6,211.4	-1,515.6	2,041.1	1,928.4	112.68	18.114		
18,300.0	11,779.0	18,036.3	11,462.4	56.1	58.9	-81.07	6,311.4	-1,516.5	2,040.5	1,926.4	114.04	17.893		
18,400.0	11,779.0	18,136.3	11,462.4	56.8	59.5	-81.07	6,411.3	-1,517.4	2,039.9	1,924.5	115.40	17.676		
18,500.0	11,779.0	18,236.3	11,462.4	57.5	60.2	-81.07	6,511.3	-1,518.3	2,039.3	1,922.5	116.77	17.464		
18,600.0	11,779.0	18,336.3	11,462.4	58.2	60.9	-81.07	6,611.3	-1,519.2	2,038.7	1,920.6	118.14	17.257		
18,700.0	11,779.0	18,436.3	11,462.4	58.8	61.5	-81.06	6,711.3	-1,520.1	2,038.1	1,918.6	119.51	17.053		
18,800.0	11,779.0	18,536.3	11,462.4	59.5	62.2	-81.06	6,811.3	-1,521.0	2,037.5	1,916.6	120.89	16.854		
18,900.0	11,779.0	18,636.3	11,462.4	60.2	62.9	-81.06	6,911.3	-1,521.9	2,036.9	1,914.6	122.27	16.659		
19,000.0	11,779.0	18,736.3	11,462.4	60.9	63.6	-81.06	7,011.3	-1,522.8	2,036.3	1,912.7	123.66	16.468		
19,100.0	11,779.0	18,836.3	11,462.4	61.6	64.3	-81.05	7,111.3	-1,523.7	2,035.7	1,910.7	125.04	16.280		
19,200.0	11,779.0	18,936.3	11,462.4	62.3	65.0	-81.05	7,211.3	-1,524.6	2,035.1	1,908.7	126.44	16.096		
19,300.0	11,779.0	19,036.3	11,462.4	63.0	65.6	-81.05	7,311.3	-1,525.5	2,034.5	1,906.7	127.83	15.916		
19,400.0	11,779.0	19,136.3	11,462.4	63.7	66.3	-81.05	7,411.3	-1,526.4	2,033.9	1,904.7	129.23	15.739		
19,500.0	11,779.0	19,236.3	11,462.4	64.4	67.0	-81.04	7,511.3	-1,527.3	2,033.4	1,902.7	130.63	15.566		
19,600.0	11,779.0	19,336.3	11,462.4	65.1	67.7	-81.04	7,611.3	-1,528.2	2,032.8	1,900.7	132.03	15.396		
19,700.0	11,779.0	19,436.3	11,462.4	65.8	68.4	-81.04	7,711.3	-1,529.1	2,032.2	1,898.7	133.44	15.229		
19,800.0	11,779.0	19,536.3	11,462.4	66.5	69.1	-81.03	7,811.3	-1,530.0	2,031.6	1,896.7	134.85	15.066		
19,900.0	11,779.0	19,636.3	11,462.4	67.2	69.8	-81.03	7,911.3	-1,530.9	2,031.0	1,894.7	136.26	14.905		
20,000.0	11,779.0	19,736.3	11,462.4	67.9	70.5	-81.03	8,011.3	-1,531.8	2,030.4	1,892.7	137.67	14.748		
20,100.0	11,779.0	19,836.3	11,462.4	68.6	71.2	-81.03	8,111.2	-1,532.7	2,029.8	1,890.7	139.09	14.594		
20,200.0	11,779.0	19,936.3	11,462.4	69.3	71.9	-81.02	8,211.2	-1,533.6	2,029.2	1,888.7	140.51	14.442		
20,300.0	11,779.0	20,036.3	11,462.4	70.0	72.6	-81.02	8,311.2	-1,534.5	2,028.6	1,886.7	141.93	14.293		
20,400.0	11,779.0	20,136.3	11,462.4	70.7	73.3	-81.02	8,411.2	-1,535.4	2,028.0	1,884.7	143.35	14.147		
20,500.0	11,779.0	20,236.3	11,462.4	71.4	74.0	-81.02	8,511.2	-1,536.3	2,027.4	1,882.6	144.78	14.004		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1500-r.5 MWD+IFR1, 11092-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
20,600.0	11,779.0	20,336.3	11,462.4	72.1	74.7	-81.01	8,611.2	-1,537.2	2,026.8	1,880.6	146.20	13.863		
20,700.0	11,779.0	20,436.3	11,462.4	72.8	75.4	-81.01	8,711.2	-1,538.1	2,026.2	1,878.6	147.63	13.725		
20,800.0	11,779.0	20,536.3	11,462.4	73.5	76.1	-81.01	8,811.2	-1,539.0	2,025.6	1,876.6	149.06	13.589		
20,900.0	11,779.0	20,636.3	11,462.4	74.2	76.8	-81.01	8,911.2	-1,539.9	2,025.0	1,874.5	150.50	13.456		
21,000.0	11,779.0	20,736.3	11,462.4	75.0	77.5	-81.00	9,011.2	-1,540.8	2,024.4	1,872.5	151.93	13.325		
21,100.0	11,779.0	20,836.3	11,462.4	75.7	78.3	-81.00	9,111.2	-1,541.7	2,023.8	1,870.5	153.37	13.196		
21,200.0	11,779.0	20,936.3	11,462.4	76.4	79.0	-81.00	9,211.2	-1,542.6	2,023.2	1,868.4	154.81	13.069		
21,300.0	11,779.0	21,036.3	11,462.4	77.1	79.7	-80.99	9,311.2	-1,543.5	2,022.7	1,866.4	156.25	12.945		
21,400.0	11,779.0	21,136.3	11,462.4	77.8	80.4	-80.99	9,411.2	-1,544.4	2,022.1	1,864.4	157.69	12.823		
21,500.0	11,779.0	21,236.3	11,462.4	78.6	81.1	-80.99	9,511.2	-1,545.3	2,021.5	1,862.3	159.13	12.703		
21,600.0	11,779.0	21,336.3	11,462.4	79.3	81.8	-80.99	9,611.2	-1,546.2	2,020.9	1,860.3	160.58	12.585		
21,700.0	11,779.0	21,436.2	11,462.4	80.0	82.5	-80.98	9,711.2	-1,547.1	2,020.3	1,858.3	162.02	12.469		
21,800.0	11,779.0	21,536.2	11,462.4	80.7	83.3	-80.98	9,811.1	-1,548.0	2,019.7	1,856.2	163.47	12.355		
21,900.0	11,779.0	21,636.2	11,462.4	81.4	84.0	-80.98	9,911.1	-1,548.9	2,019.1	1,854.2	164.92	12.243		
22,000.0	11,779.0	21,736.2	11,462.4	82.2	84.7	-80.98	10,011.1	-1,549.8	2,018.5	1,852.1	166.37	12.132		
22,100.0	11,779.0	21,836.2	11,462.4	82.9	85.4	-80.97	10,111.1	-1,550.8	2,017.9	1,850.1	167.83	12.024		
22,151.3	11,779.0	21,875.5	11,462.4	83.3	85.7	-80.97	10,150.4	-1,551.1	2,017.6	1,849.2	168.44	11.978 CC, ES		
22,200.0	11,779.0	21,875.5	11,462.4	83.6	85.7	-80.97	10,150.4	-1,551.1	2,018.2	1,849.7	168.56	11.973 SF		
22,300.0	11,779.0	21,875.5	11,462.4	84.4	85.7	-80.97	10,150.4	-1,551.1	2,023.1	1,854.6	168.55	12.003		
22,400.0	11,779.0	21,875.5	11,462.4	85.1	85.7	-80.97	10,150.4	-1,551.1	2,032.9	1,864.7	168.19	12.087		
22,500.0	11,779.0	21,875.5	11,462.4	85.8	85.7	-80.97	10,150.4	-1,551.1	2,047.5	1,880.1	167.48	12.225		
22,600.0	11,779.0	21,875.5	11,462.4	86.5	85.7	-80.97	10,150.4	-1,551.1	2,066.9	1,900.5	166.46	12.417		
22,700.0	11,779.0	21,875.5	11,462.4	87.3	85.7	-80.97	10,150.4	-1,551.1	2,090.9	1,925.8	165.14	12.662		
22,800.0	11,779.0	21,875.5	11,462.4	88.0	85.7	-80.97	10,150.4	-1,551.1	2,119.4	1,955.8	163.56	12.958		
22,900.0	11,779.0	21,875.5	11,462.4	88.7	85.7	-80.97	10,150.4	-1,551.1	2,152.1	1,990.3	161.75	13.305		
23,000.0	11,779.0	21,875.5	11,462.4	89.5	85.7	-80.97	10,150.4	-1,551.1	2,188.9	2,029.1	159.75	13.702		
23,100.0	11,779.0	21,875.5	11,462.4	90.2	85.7	-80.97	10,150.4	-1,551.1	2,229.5	2,072.0	157.59	14.148		
23,200.0	11,779.0	21,875.5	11,462.4	90.9	85.7	-80.97	10,150.4	-1,551.1	2,273.9	2,118.6	155.31	14.641		
23,300.0	11,779.0	21,875.5	11,462.4	91.7	85.7	-80.97	10,150.4	-1,551.1	2,321.7	2,168.8	152.93	15.182		
23,400.0	11,779.0	21,875.5	11,462.4	92.4	85.7	-80.97	10,150.4	-1,551.1	2,372.8	2,222.3	150.49	15.767		
23,500.0	11,779.0	21,875.5	11,462.4	93.1	85.7	-80.97	10,150.4	-1,551.1	2,426.9	2,278.9	148.01	16.397		
23,600.0	11,779.0	21,875.5	11,462.4	93.9	85.7	-80.97	10,150.4	-1,551.1	2,483.9	2,338.4	145.52	17.069		
23,700.0	11,779.0	21,875.5	11,462.4	94.6	85.7	-80.97	10,150.4	-1,551.1	2,543.5	2,400.5	143.03	17.783		
23,800.0	11,779.0	21,875.5	11,462.4	95.3	85.7	-80.97	10,150.4	-1,551.1	2,605.6	2,465.0	140.57	18.536		
23,900.0	11,779.0	21,875.5	11,462.4	96.1	85.7	-80.97	10,150.4	-1,551.1	2,670.0	2,531.8	138.14	19.328		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - SNAPPING 12 1 FEDERAL #332H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 179-MWD - OWSG R1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
22,400.0	11,779.0	11,144.0	11,071.2	85.1	38.9	-0.82	12,956.5	389.4	2,625.1	2,551.3	73.78	35.581	
22,500.0	11,779.0	11,144.0	11,071.2	85.8	38.9	-0.82	12,956.5	389.4	2,528.9	2,454.5	74.40	33.990	
22,600.0	11,779.0	11,144.0	11,071.2	86.5	38.9	-0.82	12,956.5	389.4	2,433.1	2,358.0	75.08	32.407	
22,700.0	11,779.0	11,144.0	11,071.2	87.3	38.9	-0.82	12,956.5	389.4	2,337.6	2,261.8	75.82	30.831	
22,800.0	11,779.0	11,144.0	11,071.2	88.0	38.9	-0.82	12,956.5	389.4	2,242.5	2,165.9	76.63	29.263	
22,900.0	11,779.0	11,144.0	11,071.2	88.7	38.9	-0.82	12,956.5	389.4	2,147.8	2,070.3	77.53	27.705	
23,000.0	11,779.0	11,144.0	11,071.2	89.5	38.9	-0.82	12,956.5	389.4	2,053.7	1,975.2	78.51	26.158	
23,100.0	11,779.0	11,144.0	11,071.2	90.2	38.9	-0.82	12,956.5	389.4	1,960.1	1,880.5	79.60	24.623	
23,200.0	11,779.0	11,144.0	11,071.2	90.9	38.9	-0.82	12,956.5	389.4	1,867.2	1,786.4	80.82	23.104	
23,300.0	11,779.0	11,144.0	11,071.2	91.7	38.9	-0.82	12,956.5	389.4	1,775.1	1,692.9	82.17	21.603	
23,400.0	11,779.0	11,144.0	11,071.2	92.4	38.9	-0.82	12,956.5	389.4	1,683.9	1,600.2	83.68	20.122	
23,500.0	11,779.0	11,183.9	11,108.0	93.1	39.0	-0.90	12,971.8	388.8	1,591.5	1,507.3	84.21	18.898	
23,600.0	11,779.0	11,193.9	11,117.1	93.9	39.0	-0.93	12,976.1	388.5	1,501.3	1,415.6	85.70	17.519	
23,700.0	11,779.0	11,239.0	11,156.5	94.6	39.2	-1.19	12,997.8	386.0	1,413.7	1,327.5	86.17	16.407	
23,800.0	11,779.0	11,239.0	11,156.5	95.3	39.2	-1.19	12,997.8	386.0	1,324.6	1,236.3	88.30	15.002	
23,900.0	11,779.0	11,239.0	11,156.5	96.1	39.2	-1.19	12,997.8	386.0	1,237.3	1,146.5	90.73	13.636	
24,000.0	11,779.0	11,239.0	11,156.5	96.8	39.2	-1.19	12,997.8	386.0	1,151.9	1,058.4	93.51	12.319	
24,100.0	11,779.0	11,239.0	11,156.5	97.5	39.2	-1.19	12,997.8	386.0	1,069.2	972.5	96.67	11.060	
24,200.0	11,779.0	11,239.0	11,156.5	98.3	39.2	-1.19	12,997.8	386.0	989.6	889.3	100.26	9.871	
24,300.0	11,779.0	11,290.0	11,197.9	99.0	39.3	-1.59	13,027.4	382.3	909.0	807.5	101.59	8.948	
24,400.0	11,779.0	11,335.0	11,230.6	99.8	39.4	-1.99	13,058.1	379.0	835.2	731.8	103.41	8.076	
24,500.0	11,779.0	11,335.0	11,230.6	100.5	39.4	-1.99	13,058.1	379.0	762.6	654.4	108.24	7.046	
24,600.0	11,779.0	11,362.9	11,249.1	101.2	39.5	-2.23	13,078.8	377.0	695.7	583.9	111.82	6.222	
24,700.0	11,779.0	11,399.4	11,271.9	102.0	39.6	-2.52	13,107.3	375.0	633.4	518.2	115.21	5.498	
24,774.6	11,779.0	11,429.0	11,289.0	102.5	39.6	-2.71	13,131.3	373.7	590.3	472.5	117.78	5.012 CC, ES, SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - SNAPPING 12 1 FEDERAL #621H - OWB - AWP													Offset Site Error:	0.0 usft	
Survey Program:		180-MWD - OWSG R1				Rule Assigned:								Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance				Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
22,700.0	11,779.0	11,117.0	11,047.1	87.3	38.9	-60.67	12,912.5	-902.4	2,662.0	2,566.6	95.37	27.911			
22,800.0	11,779.0	11,117.0	11,047.1	88.0	38.9	-60.67	12,912.5	-902.4	2,579.9	2,482.9	96.94	26.612			
22,900.0	11,779.0	11,117.0	11,047.1	88.7	38.9	-60.67	12,912.5	-902.4	2,499.0	2,400.4	98.60	25.344			
23,000.0	11,779.0	11,161.5	11,089.5	89.5	39.0	-62.09	12,925.6	-901.8	2,417.1	2,317.0	100.12	24.143			
23,100.0	11,779.0	11,167.5	11,095.1	90.2	39.0	-62.28	12,927.7	-901.8	2,338.6	2,236.6	101.92	22.946			
23,200.0	11,779.0	11,212.0	11,135.5	90.9	39.2	-63.68	12,946.4	-900.9	2,263.4	2,159.9	103.53	21.863			
23,300.0	11,779.0	11,212.0	11,135.5	91.7	39.2	-63.68	12,946.4	-900.9	2,187.6	2,082.0	105.55	20.725			
23,400.0	11,779.0	11,212.0	11,135.5	92.4	39.2	-63.68	12,946.4	-900.9	2,113.8	2,006.1	107.69	19.629			
23,500.0	11,779.0	11,212.0	11,135.5	93.1	39.2	-63.68	12,946.4	-900.9	2,042.2	1,932.3	109.92	18.579			
23,600.0	11,779.0	11,212.0	11,135.5	93.9	39.2	-63.68	12,946.4	-900.9	1,973.1	1,860.9	112.26	17.577			
23,700.0	11,779.0	11,212.0	11,135.5	94.6	39.2	-63.68	12,946.4	-900.9	1,906.8	1,792.1	114.68	16.627			
23,800.0	11,779.0	11,212.0	11,135.5	95.3	39.2	-63.68	12,946.4	-900.9	1,843.5	1,726.3	117.19	15.731			
23,900.0	11,779.0	11,250.1	11,168.5	96.1	39.3	-64.83	12,965.5	-900.1	1,782.3	1,662.9	119.41	14.926			
24,000.0	11,779.0	11,268.5	11,183.9	96.8	39.3	-65.38	12,975.5	-899.6	1,724.6	1,602.8	121.87	14.152			
24,100.0	11,779.0	11,307.0	11,215.0	97.5	39.4	-66.50	12,998.1	-898.4	1,670.6	1,546.4	124.14	13.457			
24,200.0	11,779.0	11,307.0	11,215.0	98.3	39.4	-66.50	12,998.1	-898.4	1,619.6	1,492.8	126.83	12.770			
24,300.0	11,779.0	11,344.6	11,243.9	99.0	39.5	-67.55	13,022.2	-897.0	1,572.4	1,443.3	129.11	12.179			
24,400.0	11,779.0	11,380.7	11,270.1	99.8	39.6	-68.52	13,046.9	-895.0	1,528.9	1,397.6	131.36	11.639			
24,500.0	11,779.0	11,403.0	11,285.5	100.5	39.6	-69.09	13,063.0	-893.6	1,489.2	1,355.5	133.69	11.140			
24,600.0	11,779.0	11,457.5	11,321.2	101.2	39.8	-70.42	13,103.9	-890.1	1,453.0	1,317.4	135.62	10.714			
24,700.0	11,779.0	11,498.0	11,346.2	102.0	39.9	-71.38	13,135.8	-887.9	1,421.0	1,283.4	137.60	10.327			
24,774.6	11,779.0	11,550.3	11,377.4	102.5	40.0	-72.60	13,177.7	-885.2	1,399.3	1,260.4	138.86	10.077	CC, ES, SF		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - SNAPPING 12 1 FEDERAL #711H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 180-MWD - OWSG R1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
22,300.0	11,779.0	11,450.5	11,344.9	84.4	41.1	-51.77	12,878.4	-150.4	2,652.3	2,573.7	78.60	33.745	
22,400.0	11,779.0	11,453.1	11,347.5	85.1	41.1	-51.94	12,878.9	-150.4	2,556.0	2,476.8	79.26	32.250	
22,500.0	11,779.0	11,455.9	11,350.3	85.8	41.1	-52.11	12,879.4	-150.3	2,460.0	2,380.0	79.96	30.764	
22,600.0	11,779.0	11,499.0	11,392.2	86.5	41.2	-54.89	12,889.3	-149.7	2,366.3	2,285.8	80.57	29.371	
22,700.0	11,779.0	11,499.0	11,392.2	87.3	41.2	-54.89	12,889.3	-149.7	2,270.6	2,189.3	81.38	27.901	
22,800.0	11,779.0	11,499.0	11,392.2	88.0	41.2	-54.89	12,889.3	-149.7	2,175.3	2,093.1	82.27	26.441	
22,900.0	11,779.0	11,499.0	11,392.2	88.7	41.2	-54.89	12,889.3	-149.7	2,080.5	1,997.2	83.25	24.992	
23,000.0	11,779.0	11,499.0	11,392.2	89.5	41.2	-54.89	12,889.3	-149.7	1,986.1	1,901.8	84.32	23.554	
23,100.0	11,779.0	11,499.0	11,392.2	90.2	41.2	-54.89	12,889.3	-149.7	1,892.3	1,806.8	85.51	22.130	
23,200.0	11,779.0	11,499.0	11,392.2	90.9	41.2	-54.89	12,889.3	-149.7	1,799.2	1,712.4	86.82	20.722	
23,300.0	11,779.0	11,499.0	11,392.2	91.7	41.2	-54.89	12,889.3	-149.7	1,706.8	1,618.6	88.29	19.332	
23,400.0	11,779.0	11,499.0	11,392.2	92.4	41.2	-54.89	12,889.3	-149.7	1,615.4	1,525.5	89.93	17.963	
23,500.0	11,779.0	11,499.0	11,392.2	93.1	41.2	-54.89	12,889.3	-149.7	1,525.1	1,433.3	91.77	16.618	
23,600.0	11,779.0	11,499.0	11,392.2	93.9	41.2	-54.89	12,889.3	-149.7	1,436.0	1,342.2	93.84	15.302	
23,700.0	11,779.0	11,499.0	11,392.2	94.6	41.2	-54.89	12,889.3	-149.7	1,348.5	1,252.3	96.18	14.021	
23,800.0	11,779.0	11,499.0	11,392.2	95.3	41.2	-54.89	12,889.3	-149.7	1,262.8	1,164.0	98.81	12.779	
23,900.0	11,779.0	11,533.2	11,424.7	96.1	41.3	-57.20	12,899.9	-149.5	1,177.7	1,076.6	101.15	11.643	
24,000.0	11,779.0	11,544.4	11,435.2	96.8	41.3	-57.97	12,903.9	-149.4	1,095.8	991.5	104.24	10.513	
24,100.0	11,779.0	11,557.2	11,447.0	97.5	41.4	-58.86	12,908.8	-149.4	1,016.7	909.0	107.68	9.441	
24,200.0	11,779.0	11,594.0	11,480.2	98.3	41.5	-61.45	12,924.6	-149.3	941.6	830.6	110.99	8.484	
24,300.0	11,779.0	11,594.0	11,480.2	99.0	41.5	-61.45	12,924.6	-149.3	869.4	753.8	115.60	7.521	
24,400.0	11,779.0	11,594.0	11,480.2	99.8	41.5	-61.45	12,924.6	-149.3	803.1	682.5	120.62	6.658	
24,500.0	11,779.0	11,629.8	11,511.1	100.5	41.5	-63.99	12,942.6	-149.4	742.5	617.4	125.10	5.935	
24,600.0	11,779.0	11,655.6	11,532.6	101.2	41.6	-65.83	12,957.0	-149.7	689.6	559.6	129.97	5.306	
24,700.0	11,779.0	11,689.0	11,558.9	102.0	41.7	-68.17	12,977.5	-150.4	645.3	510.8	134.57	4.796	
24,774.6	11,779.0	11,715.5	11,578.7	102.5	41.7	-69.99	12,995.1	-151.0	618.5	480.8	137.68	4.492 CC, ES, SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - SNAPPING 12 1 FEDERAL #712H - OWB - AWP													Offset Site Error:	0.0 usft	
Survey Program:		179-MWD - OWSG R1		Offset				Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
22,300.0	11,779.0	11,620.0	11,537.2	84.4	41.0	48.42	12,892.3	673.1	2,585.3	2,514.0	71.23	36.294			
22,400.0	11,779.0	11,620.0	11,537.2	85.1	41.0	48.42	12,892.3	673.1	2,486.3	2,414.8	71.48	34.783			
22,500.0	11,779.0	11,620.0	11,537.2	85.8	41.0	48.42	12,892.3	673.1	2,387.4	2,315.7	71.75	33.275			
22,600.0	11,779.0	11,620.0	11,537.2	86.5	41.0	48.42	12,892.3	673.1	2,288.6	2,216.6	72.04	31.771			
22,700.0	11,779.0	11,620.0	11,537.2	87.3	41.0	48.42	12,892.3	673.1	2,190.0	2,117.6	72.35	30.269			
22,800.0	11,779.0	11,620.0	11,537.2	88.0	41.0	48.42	12,892.3	673.1	2,091.4	2,018.7	72.69	28.770			
22,900.0	11,779.0	11,620.0	11,537.2	88.7	41.0	48.42	12,892.3	673.1	1,993.0	1,920.0	73.08	27.274			
23,000.0	11,779.0	11,620.0	11,537.2	89.5	41.0	48.42	12,892.3	673.1	1,894.8	1,821.3	73.50	25.779			
23,100.0	11,779.0	11,620.0	11,537.2	90.2	41.0	48.42	12,892.3	673.1	1,796.8	1,722.8	73.98	24.286			
23,200.0	11,779.0	11,620.0	11,537.2	90.9	41.0	48.42	12,892.3	673.1	1,699.0	1,624.4	74.53	22.795			
23,300.0	11,779.0	11,620.0	11,537.2	91.7	41.0	48.42	12,892.3	673.1	1,601.5	1,526.3	75.16	21.306			
23,400.0	11,779.0	11,620.0	11,537.2	92.4	41.0	48.42	12,892.3	673.1	1,504.2	1,428.3	75.90	19.818			
23,500.0	11,779.0	11,620.0	11,537.2	93.1	41.0	48.42	12,892.3	673.1	1,407.4	1,330.7	76.77	18.332			
23,600.0	11,779.0	11,652.5	11,569.4	93.9	41.1	52.39	12,897.2	672.6	1,310.1	1,232.9	77.27	16.955			
23,700.0	11,779.0	11,659.8	11,576.5	94.6	41.1	53.33	12,898.4	672.4	1,213.9	1,135.6	78.28	15.506			
23,800.0	11,779.0	11,667.8	11,584.4	95.3	41.1	54.40	12,899.9	672.3	1,118.1	1,038.6	79.49	14.066			
23,900.0	11,779.0	11,676.7	11,593.1	96.1	41.1	55.62	12,901.6	672.0	1,023.1	942.1	80.95	12.638			
24,000.0	11,779.0	11,686.6	11,602.8	96.8	41.2	57.01	12,903.5	671.8	928.8	846.1	82.74	11.225			
24,100.0	11,779.0	11,715.0	11,630.5	97.5	41.3	61.24	12,909.8	670.8	836.0	751.6	84.43	9.901			
24,200.0	11,779.0	11,715.0	11,630.5	98.3	41.3	61.24	12,909.8	670.8	744.0	656.3	87.64	8.489			
24,300.0	11,779.0	11,715.0	11,630.5	99.0	41.3	61.24	12,909.8	670.8	654.3	562.4	91.91	7.119			
24,400.0	11,779.0	11,736.6	11,651.4	99.8	41.3	64.67	12,915.4	669.9	567.3	470.8	96.51	5.879			
24,500.0	11,779.0	11,753.6	11,667.6	100.5	41.4	67.49	12,920.4	669.0	484.7	381.6	103.03	4.704			
24,600.0	11,779.0	11,775.0	11,687.7	101.2	41.4	71.16	12,927.4	667.6	408.3	296.7	111.57	3.660			
24,700.0	11,779.0	11,810.0	11,719.9	102.0	41.5	77.43	12,940.8	664.7	341.9	220.2	121.71	2.809			
24,774.6	11,779.0	11,829.4	11,737.3	102.5	41.6	81.00	12,949.1	662.7	301.7	170.8	130.88	2.305 CC, ES, SF			

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside Toolface	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)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	1.2	3.0	3.0	-90.77	-1.6	-119.7	119.7				
100.0	100.0	98.8	100.0	3.0	3.0	-90.77	-1.6	-119.7	119.7	113.6	6.05	19.777	
200.0	200.0	198.8	200.0	3.2	3.1	-90.77	-1.6	-119.7	119.7	113.4	6.29	19.012	
300.0	300.0	298.8	300.0	3.3	3.3	-90.77	-1.6	-119.7	119.7	113.1	6.53	18.324	
400.0	400.0	398.8	400.0	3.4	3.4	-90.77	-1.6	-119.7	119.7	112.9	6.76	17.707	
500.0	500.0	498.8	500.0	3.5	3.5	-90.77	-1.6	-119.7	119.7	112.7	6.98	17.148	
600.0	600.0	598.8	600.0	3.6	3.6	-90.77	-1.6	-119.7	119.7	112.5	7.19	16.639	
700.0	700.0	698.8	700.0	3.8	3.8	-90.77	-1.6	-119.7	119.7	112.3	7.40	16.173	
800.0	800.0	798.8	800.0	3.9	3.9	-90.77	-1.6	-119.7	119.7	112.1	7.60	15.744	
900.0	900.0	898.8	900.0	4.0	4.0	-90.77	-1.6	-119.7	119.7	111.9	7.80	15.347	
1,000.0	1,000.0	998.8	1,000.0	4.1	4.1	-90.77	-1.6	-119.7	119.7	111.7	7.99	14.979 CC, ES	
1,100.0	1,100.0	1,098.8	1,100.0	4.3	4.2	146.68	-1.6	-119.7	121.1	112.9	8.26	14.664	
1,200.0	1,199.8	1,198.6	1,199.8	4.6	4.4	147.94	-1.6	-119.7	125.5	116.9	8.63	14.552	
1,300.0	1,299.5	1,298.3	1,299.5	4.9	4.5	149.86	-1.6	-119.7	133.0	124.0	9.01	14.764	
1,400.0	1,398.7	1,397.5	1,398.7	5.2	4.6	152.19	-1.6	-119.7	143.7	134.3	9.42	15.261	
1,500.0	1,497.7	1,496.5	1,497.7	5.5	4.7	154.57	-1.6	-119.7	156.2	146.4	9.77	15.988	
1,600.0	1,596.8	1,592.1	1,593.3	5.7	4.8	156.33	-2.0	-120.7	169.8	159.7	10.15	16.724	
1,700.0	1,695.8	1,687.1	1,688.2	6.0	5.0	157.41	-3.4	-123.9	185.7	175.1	10.62	17.482	
1,800.0	1,794.8	1,781.5	1,782.4	6.3	5.1	157.93	-5.7	-129.2	203.6	192.5	11.11	18.333	
1,900.0	1,893.8	1,875.1	1,875.7	6.7	5.3	158.03	-8.8	-136.6	223.5	211.9	11.60	19.267	
2,000.0	1,992.9	1,968.0	1,968.0	7.0	5.6	157.81	-12.8	-146.0	245.4	233.3	12.11	20.267	
2,100.0	2,091.9	2,059.9	2,059.1	7.4	5.8	157.34	-17.6	-157.4	269.3	256.7	12.63	21.322	
2,200.0	2,190.9	2,150.9	2,148.9	7.7	6.1	156.72	-23.2	-170.6	295.1	282.0	13.16	22.422	
2,300.0	2,289.9	2,241.3	2,237.8	8.1	6.3	155.98	-29.6	-185.7	322.9	309.2	13.66	23.630	
2,400.0	2,389.0	2,337.0	2,331.8	8.4	6.6	155.23	-36.7	-202.5	351.5	337.3	14.23	24.699	
2,500.0	2,488.0	2,432.7	2,425.8	8.8	6.9	154.60	-43.9	-219.3	380.2	365.3	14.85	25.606	
2,600.0	2,587.0	2,528.4	2,519.7	9.2	7.3	154.05	-51.0	-236.1	408.9	393.4	15.48	26.414	
2,700.0	2,686.1	2,624.2	2,613.7	9.6	7.6	153.58	-58.2	-252.9	437.6	421.5	16.13	27.136	
2,800.0	2,785.1	2,719.9	2,707.6	10.0	8.0	153.16	-65.3	-269.7	466.4	449.6	16.79	27.781	
2,900.0	2,884.1	2,815.6	2,801.6	10.4	8.3	152.79	-72.4	-286.5	495.2	477.7	17.46	28.360	
3,000.0	2,983.1	2,911.3	2,895.6	10.8	8.7	152.47	-79.6	-303.3	524.0	505.8	18.14	28.881	
3,100.0	3,082.2	3,007.1	2,989.5	11.2	9.1	152.17	-86.7	-320.2	552.8	534.0	18.83	29.351	
3,200.0	3,181.2	3,102.8	3,083.5	11.6	9.4	151.91	-93.8	-337.0	581.6	562.1	19.53	29.776	
3,300.0	3,280.2	3,198.5	3,177.5	12.0	9.8	151.67	-101.0	-353.8	610.5	590.2	20.24	30.161	
3,400.0	3,379.2	3,294.2	3,271.4	12.4	10.2	151.45	-108.1	-370.6	639.3	618.4	20.95	30.512	
3,500.0	3,478.3	3,389.9	3,365.4	12.8	10.6	151.26	-115.3	-387.4	668.2	646.5	21.67	30.832	
3,600.0	3,577.3	3,485.7	3,459.4	13.2	11.0	151.07	-122.4	-404.2	697.0	674.6	22.39	31.124	
3,700.0	3,676.3	3,581.4	3,553.3	13.6	11.4	150.91	-129.5	-421.0	725.9	702.8	23.12	31.392	
3,800.0	3,775.3	3,677.1	3,647.3	14.0	11.8	150.75	-136.7	-437.8	754.8	730.9	23.86	31.639	
3,900.0	3,874.4	3,772.8	3,741.2	14.4	12.3	150.61	-143.8	-454.7	783.6	759.0	24.59	31.866	
4,000.0	3,973.4	3,868.6	3,835.2	14.8	12.7	150.47	-150.9	-471.5	812.5	787.2	25.33	32.076	
4,100.0	4,072.4	3,964.3	3,929.2	15.2	13.1	150.35	-158.1	-488.3	841.4	815.3	26.07	32.270	
4,200.0	4,171.5	4,060.0	4,023.1	15.7	13.5	150.23	-165.2	-505.1	870.3	843.5	26.82	32.450	
4,300.0	4,270.5	4,155.7	4,117.1	16.1	13.9	150.12	-172.3	-521.9	899.2	871.6	27.57	32.617	
4,400.0	4,369.5	4,251.4	4,211.1	16.5	14.3	150.02	-179.5	-538.7	928.1	899.8	28.32	32.773	
4,500.0	4,468.5	4,347.2	4,305.0	16.9	14.8	149.93	-186.6	-555.5	957.0	927.9	29.07	32.918	
4,600.0	4,567.6	4,442.9	4,399.0	17.3	15.2	149.84	-193.8	-572.3	985.9	956.0	29.83	33.053	
4,700.0	4,666.6	4,538.6	4,493.0	17.8	15.6	149.75	-200.9	-589.2	1,014.8	984.2	30.58	33.180	
4,800.0	4,765.6	4,634.3	4,586.9	18.2	16.0	149.67	-208.0	-606.0	1,043.7	1,012.3	31.34	33.299	
4,900.0	4,864.6	4,730.1	4,680.9	18.6	16.5	149.60	-215.2	-622.8	1,072.6	1,040.5	32.10	33.411	
5,000.0	4,963.7	4,825.8	4,774.9	19.0	16.9	149.52	-222.3	-639.6	1,101.5	1,068.6	32.86	33.516	
5,100.0	5,062.7	4,921.5	4,868.8	19.4	17.3	149.46	-229.4	-656.4	1,130.4	1,096.8	33.63	33.615	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-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	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,161.7	5,017.2	4,962.8	19.9	17.7	149.39	-236.6	-673.2	1,159.3	1,124.9	34.39	33.708	
5,300.0	5,260.7	5,112.9	5,056.7	20.3	18.2	149.33	-243.7	-690.0	1,188.2	1,153.0	35.16	33.796	
5,400.0	5,359.8	5,208.7	5,150.7	20.7	18.6	149.27	-250.8	-706.8	1,217.1	1,181.2	35.93	33.879	
5,500.0	5,458.8	5,304.4	5,244.7	21.1	19.0	149.22	-258.0	-723.7	1,246.0	1,209.3	36.69	33.957	
5,600.0	5,557.8	5,400.1	5,338.7	21.5	19.5	149.20	-265.1	-740.5	1,274.8	1,237.4	37.44	34.048	
5,700.0	5,657.0	5,496.1	5,432.9	22.0	19.9	149.20	-272.3	-757.3	1,302.9	1,264.7	38.21	34.102	
5,800.0	5,756.3	5,592.2	5,527.2	22.4	20.3	149.19	-279.4	-774.2	1,330.4	1,291.4	38.97	34.140	
5,900.0	5,855.6	5,688.6	5,621.8	22.8	20.8	149.15	-286.6	-791.1	1,357.1	1,317.3	39.72	34.162	
6,000.0	5,955.1	5,785.1	5,716.6	23.2	21.2	149.10	-293.8	-808.1	1,383.0	1,342.6	40.48	34.170	
6,100.0	6,054.6	5,881.8	5,811.5	23.6	21.7	149.03	-301.0	-825.1	1,408.3	1,367.1	41.22	34.164	
6,200.0	6,154.3	5,978.7	5,906.6	24.0	22.1	148.95	-308.3	-842.1	1,432.9	1,390.9	41.96	34.147	
6,300.0	6,254.0	6,082.7	6,008.7	24.3	22.6	148.84	-315.9	-860.2	1,456.6	1,413.8	42.74	34.083	
6,400.0	6,353.7	6,192.9	6,117.1	24.7	23.1	148.72	-323.7	-878.6	1,478.8	1,435.2	43.55	33.955	
6,500.0	6,453.5	6,303.8	6,226.3	25.1	23.6	148.59	-331.2	-896.1	1,499.4	1,455.1	44.36	33.805	
6,600.0	6,553.4	6,415.2	6,336.3	25.4	24.1	148.47	-338.2	-912.7	1,518.5	1,473.4	45.14	33.637	
6,700.0	6,653.3	6,527.2	6,447.0	25.7	24.5	148.34	-344.9	-928.4	1,536.0	1,490.1	45.91	33.454	
6,800.0	6,753.3	6,639.7	6,558.3	26.0	25.0	148.21	-351.1	-943.1	1,551.9	1,505.2	46.66	33.257	
6,900.0	6,853.2	6,752.6	6,670.2	26.3	25.5	148.08	-357.0	-956.9	1,566.1	1,518.8	47.39	33.050	
7,000.0	6,953.2	6,865.9	6,782.7	26.6	26.0	147.94	-362.4	-969.7	1,578.8	1,530.7	48.08	32.836	
7,100.0	7,053.2	6,979.6	6,895.7	26.8	26.4	147.80	-367.5	-981.6	1,589.8	1,541.1	48.73	32.626	
7,200.0	7,153.2	7,093.6	7,009.0	26.9	26.9	-89.36	-372.1	-992.4	1,599.3	1,550.1	49.21	32.503	
7,300.0	7,253.2	7,207.8	7,122.8	26.9	27.4	-89.51	-376.2	-1,002.2	1,607.9	1,558.3	49.66	32.380	
7,400.0	7,353.2	7,322.3	7,236.8	26.9	27.8	-89.65	-380.0	-1,011.0	1,615.6	1,565.5	50.10	32.250	
7,500.0	7,453.2	7,436.9	7,351.1	26.9	28.2	-89.77	-383.2	-1,018.8	1,622.3	1,571.8	50.52	32.112	
7,600.0	7,553.2	7,551.6	7,465.6	27.0	28.6	-89.87	-386.1	-1,025.5	1,628.2	1,577.2	50.93	31.968	
7,700.0	7,653.2	7,666.5	7,580.4	27.0	29.0	-89.95	-388.5	-1,031.1	1,633.1	1,581.7	51.32	31.818	
7,800.0	7,753.2	7,781.6	7,695.3	27.0	29.4	-90.02	-390.4	-1,035.7	1,637.1	1,585.4	51.70	31.665	
7,900.0	7,853.2	7,896.7	7,810.3	27.0	29.8	-90.07	-392.0	-1,039.3	1,640.2	1,588.1	52.05	31.510	
8,000.0	7,953.2	8,011.8	7,925.4	27.0	30.1	-90.11	-393.0	-1,041.7	1,642.3	1,589.9	52.37	31.357	
8,100.0	8,053.2	8,127.0	8,040.6	27.1	30.4	-90.13	-393.6	-1,043.2	1,643.5	1,590.9	52.65	31.214	
8,200.0	8,153.2	8,239.6	8,153.2	27.1	30.6	-90.14	-393.8	-1,043.5	1,643.8	1,591.0	52.83	31.118	
8,300.0	8,253.2	8,339.6	8,253.2	27.1	30.6	-90.14	-393.8	-1,043.5	1,643.8	1,591.0	52.86	31.096	
8,400.0	8,353.2	8,439.6	8,353.2	27.1	30.6	-90.14	-393.8	-1,043.5	1,643.8	1,590.9	52.91	31.071	
8,500.0	8,453.2	8,539.6	8,453.2	27.1	30.6	-90.14	-393.8	-1,043.5	1,643.8	1,590.9	52.95	31.045	
8,600.0	8,553.2	8,639.6	8,553.2	27.2	30.6	-90.14	-393.8	-1,043.5	1,643.8	1,590.9	52.99	31.020	
8,700.0	8,653.2	8,739.6	8,653.2	27.2	30.6	-90.14	-393.8	-1,043.5	1,643.8	1,590.8	53.04	30.994	
8,800.0	8,753.2	8,839.6	8,753.2	27.2	30.7	-90.14	-393.8	-1,043.5	1,643.8	1,590.8	53.08	30.968	
8,900.0	8,853.2	8,939.6	8,853.2	27.2	30.7	-90.14	-393.8	-1,043.5	1,643.8	1,590.7	53.13	30.941	
9,000.0	8,953.2	9,039.6	8,953.2	27.3	30.7	-90.14	-393.8	-1,043.5	1,643.8	1,590.7	53.17	30.915	
9,100.0	9,053.2	9,139.6	9,053.2	27.3	30.7	-90.14	-393.8	-1,043.5	1,643.8	1,590.6	53.22	30.888	
9,200.0	9,153.2	9,239.6	9,153.2	27.3	30.7	-90.14	-393.8	-1,043.5	1,643.8	1,590.6	53.27	30.861	
9,300.0	9,253.2	9,339.6	9,253.2	27.3	30.8	-90.14	-393.8	-1,043.5	1,643.8	1,590.5	53.31	30.834	
9,400.0	9,353.2	9,439.6	9,353.2	27.4	30.8	-90.14	-393.8	-1,043.5	1,643.8	1,590.5	53.36	30.806	
9,500.0	9,453.2	9,539.6	9,453.2	27.4	30.8	-90.14	-393.8	-1,043.5	1,643.8	1,590.4	53.41	30.779	
9,600.0	9,553.2	9,639.6	9,553.2	27.4	30.8	-90.14	-393.8	-1,043.5	1,643.8	1,590.4	53.46	30.751	
9,700.0	9,653.2	9,739.6	9,653.2	27.4	30.8	-90.14	-393.8	-1,043.5	1,643.8	1,590.3	53.51	30.723	
9,800.0	9,753.2	9,839.6	9,753.2	27.4	30.9	-90.14	-393.8	-1,043.5	1,643.8	1,590.3	53.56	30.694	
9,900.0	9,853.2	9,939.6	9,853.2	27.5	30.9	-90.14	-393.8	-1,043.5	1,643.8	1,590.2	53.61	30.666	
10,000.0	9,953.2	10,039.6	9,953.2	27.5	30.9	-90.14	-393.8	-1,043.5	1,643.8	1,590.2	53.66	30.637	
10,100.0	10,053.2	10,139.6	10,053.2	27.5	30.9	-90.14	-393.8	-1,043.5	1,643.8	1,590.1	53.71	30.608	
10,200.0	10,153.2	10,239.6	10,153.2	27.6	31.0	-90.14	-393.8	-1,043.5	1,643.8	1,590.1	53.76	30.579	
10,300.0	10,253.2	10,339.6	10,253.2	27.6	31.0	-90.14	-393.8	-1,043.5	1,643.8	1,590.0	53.81	30.550	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		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)	Minimum Separation (usft)	Separation Factor	
10,400.0	10,353.2	10,439.6	10,353.2	27.6	31.0	-90.14	-393.8	-1,043.5	1,643.8	1,590.0	53.86	30.520	
10,500.0	10,453.2	10,539.6	10,453.2	27.6	31.0	-90.14	-393.8	-1,043.5	1,643.8	1,589.9	53.91	30.491	
10,600.0	10,553.2	10,639.6	10,553.2	27.7	31.0	-90.14	-393.8	-1,043.5	1,643.8	1,589.9	53.97	30.461	
10,700.0	10,653.2	10,739.6	10,653.2	27.7	31.1	-90.14	-393.8	-1,043.5	1,643.8	1,589.8	54.02	30.431	
10,800.0	10,753.2	10,839.6	10,753.2	27.7	31.1	-90.14	-393.8	-1,043.5	1,643.8	1,589.8	54.07	30.400	
10,900.0	10,853.2	10,939.6	10,853.2	27.7	31.1	-90.14	-393.8	-1,043.5	1,643.8	1,589.7	54.13	30.370	
11,000.0	10,953.2	11,039.6	10,953.2	27.8	31.1	-90.14	-393.8	-1,043.5	1,643.8	1,589.7	54.18	30.339	
11,100.0	11,053.2	11,139.6	11,053.2	27.8	31.2	-90.14	-393.8	-1,043.5	1,643.8	1,589.6	54.24	30.308	
11,200.0	11,153.2	11,239.6	11,153.2	27.8	31.2	-90.14	-393.8	-1,043.5	1,643.8	1,589.6	54.29	30.278	
11,300.0	11,253.1	11,338.2	11,251.7	27.8	31.2	-89.27	-391.7	-1,043.5	1,643.8	1,589.5	54.32	30.263	
11,400.0	11,351.6	11,435.4	11,347.4	27.9	31.2	-89.27	-375.3	-1,043.8	1,643.8	1,589.5	54.33	30.258	
11,500.0	11,445.6	11,532.6	11,439.0	27.9	31.2	-89.30	-343.0	-1,044.1	1,643.7	1,589.4	54.32	30.259	
11,600.0	11,532.3	11,630.0	11,523.9	28.0	31.3	-89.35	-295.6	-1,044.7	1,643.6	1,589.3	54.31	30.264	
11,700.0	11,609.2	11,727.5	11,599.7	28.0	31.3	-89.41	-234.4	-1,045.5	1,643.4	1,589.1	54.30	30.267	
11,800.0	11,673.7	11,825.3	11,664.2	28.1	31.3	-89.50	-161.1	-1,046.4	1,643.2	1,588.9	54.30	30.263	
11,900.0	11,724.1	11,923.4	11,715.4	28.1	31.4	-89.60	-77.5	-1,047.4	1,642.9	1,588.6	54.32	30.246	
12,000.0	11,758.7	12,021.9	11,751.8	28.2	31.4	-89.71	13.9	-1,048.5	1,642.6	1,588.3	54.38	30.209	
12,100.0	11,776.5	12,120.9	11,772.0	28.3	31.5	-89.83	110.6	-1,049.7	1,642.4	1,587.9	54.47	30.150	
12,200.0	11,779.0	12,220.4	11,776.2	28.3	31.6	-89.90	210.0	-1,051.0	1,642.1	1,587.5	54.62	30.064	
12,300.0	11,779.0	12,320.4	11,776.2	28.4	31.7	-89.90	310.0	-1,052.2	1,641.8	1,587.0	54.83	29.946	
12,400.0	11,779.0	12,420.4	11,776.2	28.5	31.8	-89.90	410.0	-1,053.4	1,641.5	1,586.5	55.07	29.807	
12,500.0	11,779.0	12,520.4	11,776.2	28.7	32.0	-89.90	510.0	-1,054.7	1,641.3	1,585.9	55.36	29.646	
12,600.0	11,779.0	12,620.4	11,776.2	28.8	32.1	-89.90	610.0	-1,055.9	1,641.0	1,585.3	55.69	29.465	
12,700.0	11,779.0	12,720.4	11,776.2	29.0	32.3	-89.90	710.0	-1,057.1	1,640.7	1,584.7	56.06	29.266	
12,800.0	11,779.0	12,820.4	11,776.2	29.1	32.5	-89.90	809.9	-1,058.4	1,640.5	1,584.0	56.47	29.049	
12,900.0	11,779.0	12,920.4	11,776.2	29.3	32.7	-89.90	909.9	-1,059.6	1,640.2	1,583.3	56.92	28.816	
13,000.0	11,779.0	13,020.4	11,776.2	29.5	32.9	-89.90	1,009.9	-1,060.8	1,639.9	1,582.5	57.40	28.568	
13,100.0	11,779.0	13,120.4	11,776.2	29.7	33.1	-89.90	1,109.9	-1,062.1	1,639.6	1,581.7	57.93	28.306	
13,200.0	11,779.0	13,220.4	11,776.2	30.0	33.3	-89.90	1,209.9	-1,063.3	1,639.4	1,580.9	58.48	28.032	
13,300.0	11,779.0	13,320.4	11,776.2	30.2	33.6	-89.90	1,309.9	-1,064.5	1,639.1	1,580.0	59.07	27.746	
13,400.0	11,779.0	13,420.4	11,776.2	30.5	33.9	-89.90	1,409.9	-1,065.8	1,638.8	1,579.1	59.70	27.452	
13,500.0	11,779.0	13,520.4	11,776.2	30.7	34.1	-89.90	1,509.9	-1,067.0	1,638.6	1,578.2	60.36	27.148	
13,600.0	11,779.0	13,620.4	11,776.2	31.0	34.4	-89.90	1,609.9	-1,068.2	1,638.3	1,577.2	61.04	26.838	
13,700.0	11,779.0	13,720.4	11,776.2	31.3	34.7	-89.90	1,709.9	-1,069.5	1,638.0	1,576.3	61.76	26.521	
13,800.0	11,779.0	13,820.4	11,776.2	31.6	35.0	-89.90	1,809.9	-1,070.7	1,637.7	1,575.2	62.51	26.200	
13,900.0	11,779.0	13,920.4	11,776.2	32.0	35.4	-89.90	1,909.9	-1,071.9	1,637.5	1,574.2	63.29	25.874	
14,000.0	11,779.0	14,020.4	11,776.2	32.3	35.7	-89.90	2,009.9	-1,073.2	1,637.2	1,573.1	64.09	25.546	
14,100.0	11,779.0	14,120.4	11,776.2	32.7	36.1	-89.90	2,109.8	-1,074.4	1,636.9	1,572.0	64.92	25.216	
14,200.0	11,779.0	14,220.4	11,776.2	33.0	36.4	-89.90	2,209.8	-1,075.6	1,636.7	1,570.9	65.77	24.884	
14,300.0	11,779.0	14,320.4	11,776.2	33.4	36.8	-89.90	2,309.8	-1,076.9	1,636.4	1,569.7	66.65	24.553	
14,400.0	11,779.0	14,420.4	11,776.2	33.8	37.2	-89.90	2,409.8	-1,078.1	1,636.1	1,568.6	67.55	24.221	
14,500.0	11,779.0	14,520.4	11,776.2	34.2	37.6	-89.90	2,509.8	-1,079.3	1,635.8	1,567.4	68.47	23.891	
14,600.0	11,779.0	14,620.4	11,776.2	34.7	38.0	-89.90	2,609.8	-1,080.6	1,635.6	1,566.2	69.42	23.562	
14,700.0	11,779.0	14,720.4	11,776.2	35.1	38.4	-89.90	2,709.8	-1,081.8	1,635.3	1,564.9	70.38	23.235	
14,800.0	11,779.0	14,820.4	11,776.2	35.5	38.9	-89.90	2,809.8	-1,083.0	1,635.0	1,563.7	71.37	22.910	
14,900.0	11,779.0	14,920.4	11,776.2	36.0	39.3	-89.90	2,909.8	-1,084.3	1,634.8	1,562.4	72.37	22.589	
15,000.0	11,779.0	15,020.4	11,776.2	36.5	39.8	-89.90	3,009.8	-1,085.5	1,634.5	1,561.1	73.39	22.271	
15,100.0	11,779.0	15,120.4	11,776.2	37.0	40.2	-89.90	3,109.8	-1,086.7	1,634.2	1,559.8	74.43	21.957	
15,200.0	11,779.0	15,220.4	11,776.2	37.4	40.7	-89.90	3,209.8	-1,087.9	1,633.9	1,558.5	75.48	21.646	
15,300.0	11,779.0	15,320.4	11,776.2	37.9	41.2	-89.90	3,309.7	-1,089.2	1,633.7	1,557.1	76.56	21.340	
15,400.0	11,779.0	15,420.4	11,776.2	38.5	41.7	-89.90	3,409.7	-1,090.4	1,633.4	1,555.8	77.64	21.037	
15,500.0	11,779.0	15,520.4	11,776.2	39.0	42.2	-89.90	3,509.7	-1,091.6	1,633.1	1,554.4	78.74	20.740	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS								Rule Assigned:					Offset Well Error:	3.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,600.0	11,779.0	15,620.4	11,776.2	39.5	42.7	-89.90	3,609.7	-1,092.9	1,632.9	1,553.0	79.86	20.447		
15,700.0	11,779.0	15,720.4	11,776.2	40.0	43.2	-89.90	3,709.7	-1,094.1	1,632.6	1,551.6	80.99	20.159		
15,800.0	11,779.0	15,820.4	11,776.2	40.6	43.7	-89.90	3,809.7	-1,095.3	1,632.3	1,550.2	82.13	19.875		
15,900.0	11,779.0	15,920.4	11,776.2	41.1	44.2	-89.90	3,909.7	-1,096.6	1,632.0	1,548.8	83.28	19.597		
16,000.0	11,779.0	16,020.4	11,776.2	41.7	44.8	-89.90	4,009.7	-1,097.8	1,631.8	1,547.3	84.45	19.323		
16,100.0	11,779.0	16,120.4	11,776.2	42.3	45.3	-89.90	4,109.7	-1,099.0	1,631.5	1,545.9	85.62	19.054		
16,200.0	11,779.0	16,220.4	11,776.2	42.9	45.9	-89.90	4,209.7	-1,100.3	1,631.2	1,544.4	86.81	18.790		
16,300.0	11,779.0	16,320.4	11,776.2	43.4	46.4	-89.90	4,309.7	-1,101.5	1,631.0	1,542.9	88.01	18.531		
16,400.0	11,779.0	16,420.4	11,776.2	44.0	47.0	-89.90	4,409.7	-1,102.7	1,630.7	1,541.5	89.22	18.277		
16,500.0	11,779.0	16,520.4	11,776.2	44.6	47.5	-89.90	4,509.7	-1,104.0	1,630.4	1,540.0	90.44	18.028		
16,600.0	11,779.0	16,620.4	11,776.2	45.2	48.1	-89.90	4,609.6	-1,105.2	1,630.1	1,538.5	91.66	17.784		
16,700.0	11,779.0	16,720.4	11,776.2	45.8	48.7	-89.90	4,709.6	-1,106.4	1,629.9	1,537.0	92.90	17.544		
16,800.0	11,779.0	16,820.4	11,776.2	46.4	49.3	-89.90	4,809.6	-1,107.7	1,629.6	1,535.5	94.14	17.310		
16,900.0	11,779.0	16,920.4	11,776.2	47.1	49.9	-89.90	4,909.6	-1,108.9	1,629.3	1,533.9	95.40	17.079		
17,000.0	11,779.0	17,020.4	11,776.2	47.7	50.4	-89.90	5,009.6	-1,110.1	1,629.1	1,532.4	96.66	16.854		
17,100.0	11,779.0	17,120.4	11,776.2	48.3	51.0	-89.90	5,109.6	-1,111.4	1,628.8	1,530.9	97.93	16.633		
17,200.0	11,779.0	17,220.4	11,776.2	48.9	51.6	-89.90	5,209.6	-1,112.6	1,628.5	1,529.3	99.20	16.416		
17,300.0	11,779.0	17,320.4	11,776.2	49.6	52.2	-89.90	5,309.6	-1,113.8	1,628.2	1,527.8	100.48	16.204		
17,400.0	11,779.0	17,420.4	11,776.2	50.2	52.9	-89.90	5,409.6	-1,115.1	1,628.0	1,526.2	101.77	15.996		
17,500.0	11,779.0	17,520.4	11,776.2	50.9	53.5	-89.90	5,509.6	-1,116.3	1,627.7	1,524.6	103.07	15.792		
17,600.0	11,779.0	17,620.4	11,776.2	51.5	54.1	-89.90	5,609.6	-1,117.5	1,627.4	1,523.1	104.37	15.593		
17,700.0	11,779.0	17,720.4	11,776.2	52.2	54.7	-89.90	5,709.6	-1,118.8	1,627.2	1,521.5	105.68	15.397		
17,800.0	11,779.0	17,820.4	11,776.2	52.8	55.3	-89.90	5,809.5	-1,120.0	1,626.9	1,519.9	106.99	15.205		
17,900.0	11,779.0	17,920.4	11,776.2	53.5	56.0	-89.90	5,909.5	-1,121.2	1,626.6	1,518.3	108.31	15.018		
18,000.0	11,779.0	18,020.4	11,776.2	54.1	56.6	-89.90	6,009.5	-1,122.5	1,626.3	1,516.7	109.64	14.834		
18,100.0	11,779.0	18,120.4	11,776.2	54.8	57.2	-89.90	6,109.5	-1,123.7	1,626.1	1,515.1	110.97	14.653		
18,200.0	11,779.0	18,220.4	11,776.2	55.5	57.9	-89.90	6,209.5	-1,124.9	1,625.8	1,513.5	112.30	14.477		
18,300.0	11,779.0	18,320.4	11,776.2	56.1	58.5	-89.90	6,309.5	-1,126.2	1,625.5	1,511.9	113.64	14.304		
18,400.0	11,779.0	18,420.4	11,776.2	56.8	59.2	-89.90	6,409.5	-1,127.4	1,625.3	1,510.3	114.99	14.134		
18,500.0	11,779.0	18,520.4	11,776.2	57.5	59.8	-89.90	6,509.5	-1,128.6	1,625.0	1,508.6	116.34	13.968		
18,600.0	11,779.0	18,620.4	11,776.2	58.2	60.5	-89.90	6,609.5	-1,129.9	1,624.7	1,507.0	117.69	13.805		
18,700.0	11,779.0	18,720.4	11,776.2	58.8	61.1	-89.90	6,709.5	-1,131.1	1,624.4	1,505.4	119.05	13.645		
18,800.0	11,779.0	18,820.4	11,776.2	59.5	61.8	-89.90	6,809.5	-1,132.3	1,624.2	1,503.8	120.41	13.488		
18,900.0	11,779.0	18,920.4	11,776.2	60.2	62.4	-89.90	6,909.5	-1,133.6	1,623.9	1,502.1	121.78	13.335		
19,000.0	11,779.0	19,020.4	11,776.2	60.9	63.1	-89.90	7,009.5	-1,134.8	1,623.6	1,500.5	123.15	13.184		
19,100.0	11,779.0	19,120.4	11,776.2	61.6	63.8	-89.90	7,109.4	-1,136.0	1,623.4	1,498.8	124.52	13.037		
19,200.0	11,779.0	19,220.4	11,776.2	62.3	64.4	-89.90	7,209.4	-1,137.3	1,623.1	1,497.2	125.90	12.892		
19,300.0	11,779.0	19,320.4	11,776.2	63.0	65.1	-89.90	7,309.4	-1,138.5	1,622.8	1,495.5	127.28	12.750		
19,400.0	11,779.0	19,420.4	11,776.2	63.7	65.8	-89.90	7,409.4	-1,139.7	1,622.5	1,493.9	128.66	12.611		
19,500.0	11,779.0	19,520.4	11,776.2	64.4	66.4	-89.90	7,509.4	-1,141.0	1,622.3	1,492.2	130.05	12.474		
19,600.0	11,779.0	19,620.4	11,776.2	65.1	67.1	-89.90	7,609.4	-1,142.2	1,622.0	1,490.6	131.44	12.340		
19,700.0	11,779.0	19,720.4	11,776.2	65.8	67.8	-89.90	7,709.4	-1,143.4	1,621.7	1,488.9	132.83	12.209		
19,800.0	11,779.0	19,820.4	11,776.2	66.5	68.5	-89.90	7,809.4	-1,144.7	1,621.5	1,487.2	134.23	12.080		
19,900.0	11,779.0	19,920.4	11,776.2	67.2	69.2	-89.90	7,909.4	-1,145.9	1,621.2	1,485.6	135.63	11.953		
20,000.0	11,779.0	20,020.4	11,776.2	67.9	69.8	-89.90	8,009.4	-1,147.1	1,620.9	1,483.9	137.03	11.829		
20,100.0	11,779.0	20,120.4	11,776.2	68.6	70.5	-89.90	8,109.4	-1,148.4	1,620.6	1,482.2	138.43	11.707		
20,200.0	11,779.0	20,220.4	11,776.2	69.3	71.2	-89.90	8,209.4	-1,149.6	1,620.4	1,480.5	139.84	11.587		
20,300.0	11,779.0	20,320.4	11,776.2	70.0	71.9	-89.90	8,309.3	-1,150.8	1,620.1	1,478.9	141.25	11.470		
20,400.0	11,779.0	20,420.4	11,776.2	70.7	72.6	-89.90	8,409.3	-1,152.1	1,619.8	1,477.2	142.66	11.354		
20,500.0	11,779.0	20,520.4	11,776.2	71.4	73.3	-89.90	8,509.3	-1,153.3	1,619.6	1,475.5	144.07	11.241		
20,600.0	11,779.0	20,620.4	11,776.2	72.1	74.0	-89.90	8,609.3	-1,154.5	1,619.3	1,473.8	145.49	11.130		
20,700.0	11,779.0	20,720.4	11,776.2	72.8	74.7	-89.90	8,709.3	-1,155.8	1,619.0	1,472.1	146.91	11.020		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
20,800.0	11,779.0	20,820.4	11,776.2	73.5	75.4	-89.90	8,809.3	-1,157.0	1,618.7	1,470.4	148.33	10.913	
20,900.0	11,779.0	20,920.4	11,776.2	74.2	76.1	-89.90	8,909.3	-1,158.2	1,618.5	1,468.7	149.75	10.808	
21,000.0	11,779.0	21,020.4	11,776.2	75.0	76.8	-89.90	9,009.3	-1,159.5	1,618.2	1,467.0	151.18	10.704	
21,100.0	11,779.0	21,120.4	11,776.2	75.7	77.5	-89.90	9,109.3	-1,160.7	1,617.9	1,465.3	152.61	10.602	
21,200.0	11,779.0	21,220.4	11,776.2	76.4	78.2	-89.90	9,209.3	-1,161.9	1,617.7	1,463.6	154.04	10.502	
21,300.0	11,779.0	21,320.4	11,776.2	77.1	78.9	-89.90	9,309.3	-1,163.1	1,617.4	1,461.9	155.47	10.403	
21,400.0	11,779.0	21,420.4	11,776.2	77.8	79.6	-89.90	9,409.3	-1,164.4	1,617.1	1,460.2	156.90	10.307	
21,500.0	11,779.0	21,520.4	11,776.2	78.6	80.3	-89.90	9,509.3	-1,165.6	1,616.8	1,458.5	158.33	10.212	
21,600.0	11,779.0	21,620.4	11,776.2	79.3	81.0	-89.90	9,609.2	-1,166.8	1,616.6	1,456.8	159.77	10.118	
21,700.0	11,779.0	21,720.4	11,776.2	80.0	81.7	-89.90	9,709.2	-1,168.1	1,616.3	1,455.1	161.21	10.026	
21,800.0	11,779.0	21,820.4	11,776.2	80.7	82.4	-89.90	9,809.2	-1,169.3	1,616.0	1,453.4	162.65	9.936	
21,900.0	11,779.0	21,920.4	11,776.2	81.4	83.1	-89.90	9,909.2	-1,170.5	1,615.8	1,451.7	164.09	9.847	
22,000.0	11,779.0	22,020.4	11,776.2	82.2	83.8	-89.90	10,009.2	-1,171.8	1,615.5	1,450.0	165.53	9.759	
22,100.0	11,779.0	22,120.4	11,776.2	82.9	84.5	-89.90	10,109.2	-1,173.0	1,615.2	1,448.2	166.98	9.673	
22,200.0	11,779.0	22,220.4	11,776.2	83.6	85.2	-89.90	10,209.2	-1,174.2	1,614.9	1,446.5	168.42	9.589	
22,300.0	11,779.0	22,320.4	11,776.2	84.4	85.9	-89.90	10,309.2	-1,175.5	1,614.7	1,444.8	169.87	9.505	
22,400.0	11,779.0	22,420.4	11,776.2	85.1	86.7	-89.90	10,409.2	-1,176.7	1,614.4	1,443.1	171.32	9.423	
22,500.0	11,779.0	22,520.4	11,776.2	85.8	87.4	-89.90	10,509.2	-1,177.9	1,614.1	1,441.4	172.77	9.343	
22,600.0	11,779.0	22,620.4	11,776.2	86.5	88.1	-89.90	10,609.2	-1,179.2	1,613.9	1,439.6	174.22	9.263	
22,700.0	11,779.0	22,720.4	11,776.2	87.3	88.8	-89.90	10,709.2	-1,180.4	1,613.6	1,437.9	175.67	9.185	
22,800.0	11,779.0	22,820.4	11,776.2	88.0	89.5	-89.90	10,809.1	-1,181.6	1,613.3	1,436.2	177.12	9.108	
22,900.0	11,779.0	22,920.4	11,776.2	88.7	90.2	-89.90	10,909.1	-1,182.9	1,613.0	1,434.5	178.58	9.033	
23,000.0	11,779.0	23,020.4	11,776.2	89.5	91.0	-89.90	11,009.1	-1,184.1	1,612.8	1,432.7	180.04	8.958	
23,100.0	11,779.0	23,120.4	11,776.2	90.2	91.7	-89.90	11,109.1	-1,185.3	1,612.5	1,431.0	181.49	8.885	
23,200.0	11,779.0	23,220.4	11,776.2	90.9	92.4	-89.90	11,209.1	-1,186.6	1,612.2	1,429.3	182.95	8.812	
23,300.0	11,779.0	23,320.4	11,776.2	91.7	93.1	-89.90	11,309.1	-1,187.8	1,612.0	1,427.5	184.41	8.741	
23,400.0	11,779.0	23,420.4	11,776.2	92.4	93.8	-89.90	11,409.1	-1,189.0	1,611.7	1,425.8	185.87	8.671	
23,500.0	11,779.0	23,520.4	11,776.2	93.1	94.6	-89.90	11,509.1	-1,190.3	1,611.4	1,424.1	187.33	8.602	
23,600.0	11,779.0	23,620.4	11,776.2	93.9	95.3	-89.90	11,609.1	-1,191.5	1,611.1	1,422.3	188.80	8.534	
23,700.0	11,779.0	23,720.4	11,776.2	94.6	96.0	-89.90	11,709.1	-1,192.7	1,610.9	1,420.6	190.26	8.467	
23,800.0	11,779.0	23,820.4	11,776.2	95.3	96.7	-89.90	11,809.1	-1,194.0	1,610.6	1,418.9	191.73	8.401	
23,900.0	11,779.0	23,920.4	11,776.2	96.1	97.5	-89.90	11,909.1	-1,195.2	1,610.3	1,417.1	193.19	8.335	
24,000.0	11,779.0	24,020.4	11,776.2	96.8	98.2	-89.90	12,009.1	-1,196.4	1,610.1	1,415.4	194.66	8.271	
24,100.0	11,779.0	24,120.4	11,776.2	97.5	98.9	-89.90	12,109.0	-1,197.7	1,609.8	1,413.7	196.13	8.208	
24,200.0	11,779.0	24,220.4	11,776.2	98.3	99.6	-89.90	12,209.0	-1,198.9	1,609.5	1,411.9	197.60	8.145	
24,300.0	11,779.0	24,320.4	11,776.2	99.0	100.4	-89.90	12,309.0	-1,200.1	1,609.2	1,410.2	199.07	8.084	
24,400.0	11,779.0	24,420.4	11,776.2	99.8	101.1	-89.90	12,409.0	-1,201.4	1,609.0	1,408.4	200.54	8.023	
24,500.0	11,779.0	24,520.4	11,776.2	100.5	101.8	-89.90	12,509.0	-1,202.6	1,608.7	1,406.7	202.01	7.964	
24,600.0	11,779.0	24,620.4	11,776.2	101.2	102.5	-89.90	12,609.0	-1,203.8	1,608.4	1,405.0	203.48	7.905	
24,700.0	11,779.0	24,720.4	11,776.2	102.0	103.3	-89.90	12,709.0	-1,205.1	1,608.2	1,403.2	204.95	7.846	
24,774.6	11,779.0	24,795.0	11,776.2	102.5	103.8	-89.90	12,783.6	-1,206.0	1,608.0	1,401.9	206.05	7.804 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside Toolface	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)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.8	3.0	3.0	-90.83	-1.3	-89.7	89.7				
100.0	100.0	99.2	100.0	3.0	3.0	-90.83	-1.3	-89.7	89.7	83.6	6.05	14.824	
200.0	200.0	199.2	200.0	3.2	3.2	-90.83	-1.3	-89.7	89.7	83.4	6.30	14.249	
300.0	300.0	299.2	300.0	3.3	3.3	-90.83	-1.3	-89.7	89.7	83.2	6.53	13.734	
400.0	400.0	399.2	400.0	3.4	3.4	-90.83	-1.3	-89.7	89.7	82.9	6.76	13.271	
500.0	500.0	499.2	500.0	3.5	3.5	-90.83	-1.3	-89.7	89.7	82.7	6.98	12.853	
600.0	600.0	599.2	600.0	3.6	3.6	-90.83	-1.3	-89.7	89.7	82.5	7.19	12.471	
700.0	700.0	699.2	700.0	3.8	3.8	-90.83	-1.3	-89.7	89.7	82.3	7.40	12.122	
800.0	800.0	799.2	800.0	3.9	3.9	-90.83	-1.3	-89.7	89.7	82.1	7.60	11.800	
900.0	900.0	899.2	900.0	4.0	4.0	-90.83	-1.3	-89.7	89.7	81.9	7.80	11.503	
1,000.0	1,000.0	999.2	1,000.0	4.1	4.1	-90.83	-1.3	-89.7	89.7	81.7	7.99	11.227 CC, ES	
1,100.0	1,100.0	1,096.6	1,097.4	4.3	4.3	146.14	-2.3	-91.0	92.5	84.2	8.33	11.103	
1,200.0	1,199.8	1,193.6	1,194.3	4.6	4.6	146.05	-5.1	-95.0	101.0	92.1	8.85	11.414	
1,300.0	1,299.5	1,289.7	1,290.0	4.9	4.9	145.90	-9.9	-101.5	115.1	105.7	9.37	12.278	
1,400.0	1,398.7	1,384.3	1,384.0	5.2	5.2	145.71	-16.4	-110.5	134.7	124.8	9.91	13.595	
1,500.0	1,497.7	1,481.1	1,479.8	5.5	5.4	145.65	-24.3	-121.4	157.5	147.1	10.37	15.184	
1,600.0	1,596.8	1,578.5	1,576.2	5.7	5.7	145.60	-32.3	-132.3	180.2	169.4	10.85	16.612	
1,700.0	1,695.8	1,675.8	1,672.7	6.0	6.0	145.56	-40.3	-143.3	203.0	191.7	11.36	17.876	
1,800.0	1,794.8	1,773.2	1,769.1	6.3	6.3	145.53	-48.2	-154.3	225.8	213.9	11.89	18.997	
1,900.0	1,893.8	1,870.6	1,865.5	6.7	6.6	145.50	-56.2	-165.2	248.6	236.2	12.44	19.990	
2,000.0	1,992.9	1,967.9	1,961.9	7.0	6.9	145.48	-64.1	-176.2	271.4	258.4	13.00	20.871	
2,100.0	2,091.9	2,065.3	2,058.3	7.4	7.2	145.46	-72.1	-187.2	294.2	280.6	13.59	21.654	
2,200.0	2,190.9	2,162.7	2,154.8	7.7	7.6	145.44	-80.1	-198.1	317.0	302.8	14.18	22.352	
2,300.0	2,289.9	2,260.1	2,251.2	8.1	7.9	145.43	-88.0	-209.1	339.8	325.0	14.79	22.975	
2,400.0	2,389.0	2,357.4	2,347.6	8.4	8.3	145.42	-96.0	-220.0	362.5	347.1	15.41	23.533	
2,500.0	2,488.0	2,454.8	2,444.0	8.8	8.7	145.41	-104.0	-231.0	385.3	369.3	16.03	24.035	
2,600.0	2,587.0	2,552.2	2,540.4	9.2	9.0	145.40	-111.9	-242.0	408.1	391.5	16.67	24.487	
2,700.0	2,686.1	2,649.5	2,636.9	9.6	9.4	145.39	-119.9	-252.9	430.9	413.6	17.31	24.896	
2,800.0	2,785.1	2,746.9	2,733.3	10.0	9.8	145.38	-127.9	-263.9	453.7	435.7	17.96	25.266	
2,900.0	2,884.1	2,844.3	2,829.7	10.4	10.1	145.37	-135.8	-274.9	476.5	457.9	18.61	25.602	
3,000.0	2,983.1	2,941.6	2,926.1	10.8	10.5	145.37	-143.8	-285.8	499.3	480.0	19.27	25.909	
3,100.0	3,082.2	3,039.0	3,022.6	11.2	10.9	145.36	-151.8	-296.8	522.1	502.1	19.93	26.189	
3,200.0	3,181.2	3,136.4	3,119.0	11.6	11.3	145.36	-159.7	-307.7	544.9	524.2	20.60	26.446	
3,300.0	3,280.2	3,233.7	3,215.4	12.0	11.7	145.35	-167.7	-318.7	567.6	546.4	21.27	26.681	
3,400.0	3,379.2	3,331.1	3,311.8	12.4	12.1	145.35	-175.7	-329.7	590.4	568.5	21.95	26.898	
3,500.0	3,478.3	3,428.5	3,408.2	12.8	12.5	145.34	-183.6	-340.6	613.2	590.6	22.63	27.098	
3,600.0	3,577.3	3,525.8	3,504.7	13.2	12.9	145.34	-191.6	-351.6	636.0	612.7	23.31	27.284	
3,700.0	3,676.3	3,623.2	3,601.1	13.6	13.3	145.34	-199.6	-362.6	658.8	634.8	24.00	27.455	
3,800.0	3,775.3	3,720.6	3,697.5	14.0	13.7	145.33	-207.5	-373.5	681.6	656.9	24.68	27.614	
3,900.0	3,874.4	3,818.0	3,793.9	14.4	14.1	145.33	-215.5	-384.5	704.4	679.0	25.37	27.763	
4,000.0	3,973.4	3,915.3	3,890.3	14.8	14.5	145.33	-223.5	-395.5	727.2	701.1	26.06	27.901	
4,100.0	4,072.4	4,012.7	3,986.8	15.2	14.9	145.32	-231.4	-406.4	749.9	723.2	26.76	28.030	
4,200.0	4,171.5	4,110.1	4,083.2	15.7	15.3	145.32	-239.4	-417.4	772.7	745.3	27.45	28.150	
4,300.0	4,270.5	4,207.4	4,179.6	16.1	15.7	145.32	-247.3	-428.3	795.5	767.4	28.15	28.263	
4,400.0	4,369.5	4,304.8	4,276.0	16.5	16.1	145.32	-255.3	-439.3	818.3	789.5	28.84	28.370	
4,500.0	4,468.5	4,402.2	4,372.5	16.9	16.5	145.32	-263.3	-450.3	841.1	811.5	29.54	28.469	
4,600.0	4,567.6	4,499.5	4,468.9	17.3	16.9	145.31	-271.2	-461.2	863.9	833.6	30.24	28.563	
4,700.0	4,666.6	4,596.9	4,565.3	17.8	17.3	145.31	-279.2	-472.2	886.7	855.7	30.95	28.651	
4,800.0	4,765.6	4,694.3	4,661.7	18.2	17.7	145.31	-287.2	-483.2	909.5	877.8	31.65	28.735	
4,900.0	4,864.6	4,791.6	4,758.1	18.6	18.1	145.31	-295.1	-494.1	932.2	899.9	32.35	28.815	
5,000.0	4,963.7	4,889.0	4,854.6	19.0	18.6	145.31	-303.1	-505.1	955.0	922.0	33.06	28.888	
5,100.0	5,062.7	4,986.4	4,951.0	19.4	19.0	145.30	-311.1	-516.0	977.8	944.1	33.77	28.959	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.0	5,161.7	5,083.8	5,047.4	19.9	19.4	145.30	-319.0	-527.0	1,000.6	966.1	34.47	29.026	
5,300.0	5,260.7	5,181.1	5,143.8	20.3	19.8	145.30	-327.0	-538.0	1,023.4	988.2	35.18	29.089	
5,400.0	5,359.8	5,281.7	5,243.5	20.7	20.2	145.30	-335.2	-549.2	1,046.1	1,010.2	35.89	29.146	
5,500.0	5,458.8	5,387.2	5,348.1	21.1	20.6	145.33	-343.3	-560.4	1,068.2	1,031.6	36.65	29.149	
5,600.0	5,557.8	5,493.1	5,453.2	21.5	21.1	145.41	-350.9	-570.8	1,089.5	1,052.1	37.38	29.147	
5,700.0	5,657.0	5,599.5	5,558.9	22.0	21.5	145.52	-357.9	-580.5	1,109.4	1,071.3	38.12	29.101	
5,800.0	5,756.3	5,706.3	5,665.1	22.4	21.9	145.63	-364.4	-589.4	1,127.8	1,088.9	38.85	29.028	
5,900.0	5,855.6	5,813.6	5,771.9	22.8	22.4	145.73	-370.3	-597.6	1,144.8	1,105.2	39.57	28.930	
6,000.0	5,955.1	5,921.2	5,879.2	23.2	22.8	145.83	-375.7	-605.0	1,160.3	1,120.0	40.27	28.810	
6,100.0	6,054.6	6,029.2	5,986.9	23.6	23.2	145.92	-380.5	-611.6	1,174.3	1,133.3	40.96	28.669	
6,200.0	6,154.3	6,137.6	6,095.0	24.0	23.6	146.01	-384.7	-617.3	1,186.8	1,145.2	41.63	28.509	
6,300.0	6,254.0	6,246.2	6,203.4	24.3	23.9	146.10	-388.3	-622.3	1,197.9	1,155.6	42.28	28.332	
6,400.0	6,353.7	6,355.0	6,312.1	24.7	24.3	146.19	-391.3	-626.4	1,207.4	1,164.5	42.91	28.141	
6,500.0	6,453.5	6,464.1	6,421.1	25.1	24.7	146.27	-393.7	-629.7	1,215.5	1,172.0	43.51	27.936	
6,600.0	6,553.4	6,573.4	6,530.3	25.4	25.0	146.35	-395.4	-632.2	1,222.1	1,178.0	44.08	27.722	
6,700.0	6,653.3	6,682.8	6,639.7	25.7	25.3	146.43	-396.6	-633.8	1,227.1	1,182.5	44.62	27.503	
6,800.0	6,753.3	6,792.2	6,749.2	26.0	25.5	146.51	-397.2	-634.6	1,230.7	1,185.6	45.10	27.287	
6,900.0	6,853.2	6,896.3	6,853.2	26.3	25.6	146.59	-397.3	-634.7	1,232.9	1,187.5	45.40	27.157	
7,000.0	6,953.2	6,996.3	6,953.2	26.6	25.6	146.63	-397.3	-634.7	1,234.3	1,188.6	45.65	27.039	
7,100.0	7,053.2	7,096.3	7,053.2	26.8	25.6	146.65	-397.3	-634.7	1,235.0	1,189.1	45.87	26.926	
7,200.0	7,153.2	7,196.3	7,153.2	26.9	25.6	-90.34	-397.3	-634.7	1,235.0	1,189.1	45.92	26.894	
7,300.0	7,253.2	7,296.3	7,253.2	26.9	25.7	-90.34	-397.3	-634.7	1,235.0	1,189.1	45.97	26.868	
7,400.0	7,353.2	7,396.3	7,353.2	26.9	25.7	-90.34	-397.3	-634.7	1,235.0	1,189.0	46.01	26.842	
7,500.0	7,453.2	7,496.3	7,453.2	26.9	25.7	-90.34	-397.3	-634.7	1,235.0	1,189.0	46.05	26.816	
7,600.0	7,553.2	7,596.3	7,553.2	27.0	25.7	-90.34	-397.3	-634.7	1,235.0	1,188.9	46.10	26.790	
7,700.0	7,653.2	7,696.3	7,653.2	27.0	25.7	-90.34	-397.3	-634.7	1,235.0	1,188.9	46.15	26.763	
7,800.0	7,753.2	7,796.3	7,753.2	27.0	25.8	-90.34	-397.3	-634.7	1,235.0	1,188.8	46.19	26.736	
7,900.0	7,853.2	7,896.3	7,853.2	27.0	25.8	-90.34	-397.3	-634.7	1,235.0	1,188.8	46.24	26.709	
8,000.0	7,953.2	7,996.3	7,953.2	27.0	25.8	-90.34	-397.3	-634.7	1,235.0	1,188.7	46.29	26.682	
8,100.0	8,053.2	8,096.3	8,053.2	27.1	25.8	-90.34	-397.3	-634.7	1,235.0	1,188.7	46.33	26.654	
8,200.0	8,153.2	8,196.3	8,153.2	27.1	25.9	-90.34	-397.3	-634.7	1,235.0	1,188.6	46.38	26.626	
8,300.0	8,253.2	8,296.3	8,253.2	27.1	25.9	-90.34	-397.3	-634.7	1,235.0	1,188.6	46.43	26.598	
8,400.0	8,353.2	8,396.3	8,353.2	27.1	25.9	-90.34	-397.3	-634.7	1,235.0	1,188.5	46.48	26.570	
8,500.0	8,453.2	8,496.3	8,453.2	27.1	25.9	-90.34	-397.3	-634.7	1,235.0	1,188.5	46.53	26.541	
8,600.0	8,553.2	8,596.3	8,553.2	27.2	26.0	-90.34	-397.3	-634.7	1,235.0	1,188.4	46.58	26.513	
8,700.0	8,653.2	8,696.3	8,653.2	27.2	26.0	-90.34	-397.3	-634.7	1,235.0	1,188.4	46.63	26.484	
8,800.0	8,753.2	8,796.3	8,753.2	27.2	26.0	-90.34	-397.3	-634.7	1,235.0	1,188.3	46.68	26.454	
8,900.0	8,853.2	8,896.3	8,853.2	27.2	26.0	-90.34	-397.3	-634.7	1,235.0	1,188.3	46.74	26.425	
9,000.0	8,953.2	8,996.3	8,953.2	27.3	26.1	-90.34	-397.3	-634.7	1,235.0	1,188.2	46.79	26.395	
9,100.0	9,053.2	9,096.3	9,053.2	27.3	26.1	-90.34	-397.3	-634.7	1,235.0	1,188.2	46.84	26.365	
9,200.0	9,153.2	9,196.3	9,153.2	27.3	26.1	-90.34	-397.3	-634.7	1,235.0	1,188.1	46.90	26.335	
9,300.0	9,253.2	9,296.3	9,253.2	27.3	26.1	-90.34	-397.3	-634.7	1,235.0	1,188.1	46.95	26.305	
9,400.0	9,353.2	9,396.3	9,353.2	27.4	26.2	-90.34	-397.3	-634.7	1,235.0	1,188.0	47.01	26.274	
9,500.0	9,453.2	9,496.3	9,453.2	27.4	26.2	-90.34	-397.3	-634.7	1,235.0	1,188.0	47.06	26.243	
9,600.0	9,553.2	9,596.3	9,553.2	27.4	26.2	-90.34	-397.3	-634.7	1,235.0	1,187.9	47.12	26.212	
9,700.0	9,653.2	9,696.3	9,653.2	27.4	26.2	-90.34	-397.3	-634.7	1,235.0	1,187.8	47.17	26.181	
9,800.0	9,753.2	9,796.3	9,753.2	27.4	26.3	-90.34	-397.3	-634.7	1,235.0	1,187.8	47.23	26.150	
9,900.0	9,853.2	9,896.3	9,853.2	27.5	26.3	-90.34	-397.3	-634.7	1,235.0	1,187.7	47.29	26.118	
10,000.0	9,953.2	9,996.3	9,953.2	27.5	26.3	-90.34	-397.3	-634.7	1,235.0	1,187.7	47.34	26.086	
10,100.0	10,053.2	10,096.3	10,053.2	27.5	26.3	-90.34	-397.3	-634.7	1,235.0	1,187.6	47.40	26.054	
10,200.0	10,153.2	10,196.3	10,153.2	27.6	26.4	-90.34	-397.3	-634.7	1,235.0	1,187.6	47.46	26.022	
10,300.0	10,253.2	10,296.3	10,253.2	27.6	26.4	-90.34	-397.3	-634.7	1,235.0	1,187.5	47.52	25.990	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,400.0	10,353.2	10,396.3	10,353.2	27.6	26.4	-90.34	-397.3	-634.7	1,235.0	1,187.4	47.58	25.957	
10,500.0	10,453.2	10,496.3	10,453.2	27.6	26.5	-90.34	-397.3	-634.7	1,235.0	1,187.4	47.64	25.924	
10,600.0	10,553.2	10,596.3	10,553.2	27.7	26.5	-90.34	-397.3	-634.7	1,235.0	1,187.3	47.70	25.891	
10,700.0	10,653.2	10,696.3	10,653.2	27.7	26.5	-90.34	-397.3	-634.7	1,235.0	1,187.3	47.76	25.858	
10,800.0	10,753.2	10,796.3	10,753.2	27.7	26.5	-90.34	-397.3	-634.7	1,235.0	1,187.2	47.82	25.825	
10,900.0	10,853.2	10,896.3	10,853.2	27.7	26.6	-90.34	-397.3	-634.7	1,235.0	1,187.1	47.88	25.792	
11,000.0	10,953.2	10,996.3	10,953.2	27.8	26.6	-90.34	-397.3	-634.7	1,235.0	1,187.1	47.95	25.758	
11,015.8	10,969.0	11,012.1	10,969.0	27.8	26.6	-90.34	-397.3	-634.7	1,235.0	1,187.1	47.96	25.753	
11,100.0	11,053.2	11,096.2	11,053.2	27.8	26.6	-90.34	-397.2	-634.7	1,235.0	1,187.0	48.01	25.726	
11,200.0	11,153.2	11,193.7	11,150.2	27.8	26.7	-89.94	-388.6	-634.8	1,235.1	1,187.1	48.05	25.707	
11,300.0	11,253.1	11,286.3	11,239.7	27.8	26.7	-88.04	-365.2	-635.1	1,235.7	1,187.6	48.05	25.717	
11,400.0	11,351.6	11,375.2	11,320.9	27.9	26.7	-86.95	-329.6	-635.5	1,236.7	1,188.6	48.03	25.745	
11,500.0	11,445.6	11,461.2	11,393.5	27.9	26.8	-85.94	-283.5	-636.1	1,237.9	1,189.9	48.01	25.784	
11,600.0	11,532.3	11,545.1	11,456.8	28.0	26.8	-85.05	-228.5	-636.8	1,239.3	1,191.4	47.99	25.824	
11,700.0	11,609.2	11,627.3	11,510.4	28.0	26.9	-84.28	-166.4	-637.6	1,240.7	1,192.8	47.99	25.855	
11,800.0	11,673.7	11,708.0	11,553.9	28.1	26.9	-83.66	-98.4	-638.5	1,242.0	1,194.0	48.01	25.869	
11,900.0	11,724.1	11,787.8	11,587.1	28.1	27.0	-83.21	-26.0	-639.4	1,242.9	1,194.8	48.06	25.860	
12,000.0	11,758.7	11,866.9	11,609.8	28.2	27.0	-82.92	49.8	-640.4	1,243.5	1,195.3	48.15	25.826	
12,100.0	11,776.5	11,950.0	11,622.1	28.3	27.1	-82.81	131.9	-641.5	1,243.6	1,195.3	48.27	25.764	
12,200.0	11,779.0	12,032.3	11,623.7	28.3	27.2	-82.83	214.1	-642.5	1,243.4	1,194.9	48.43	25.673	
12,300.0	11,779.0	12,132.3	11,623.5	28.4	27.3	-82.82	314.1	-643.8	1,243.2	1,194.5	48.66	25.547	
12,400.0	11,779.0	12,232.3	11,623.3	28.5	27.4	-82.81	414.1	-645.1	1,243.0	1,194.0	48.94	25.397	
12,500.0	11,779.0	12,332.3	11,623.2	28.7	27.5	-82.80	514.1	-646.4	1,242.8	1,193.5	49.27	25.225	
12,600.0	11,779.0	12,432.3	11,623.0	28.8	27.6	-82.79	614.1	-647.7	1,242.6	1,192.9	49.64	25.033	
12,700.0	11,779.0	12,532.3	11,622.8	29.0	27.8	-82.78	714.1	-648.9	1,242.4	1,192.3	50.05	24.822	
12,800.0	11,779.0	12,632.3	11,622.6	29.1	28.0	-82.77	814.1	-650.2	1,242.2	1,191.7	50.51	24.594	
12,900.0	11,779.0	12,732.3	11,622.5	29.3	28.2	-82.76	914.1	-651.5	1,242.0	1,191.0	51.01	24.350	
13,000.0	11,779.0	12,832.3	11,622.3	29.5	28.4	-82.75	1,014.1	-652.8	1,241.8	1,190.2	51.54	24.091	
13,100.0	11,779.0	12,932.3	11,622.1	29.7	28.6	-82.74	1,114.0	-654.1	1,241.6	1,189.5	52.12	23.820	
13,200.0	11,779.0	13,032.3	11,622.0	30.0	28.8	-82.73	1,214.0	-655.4	1,241.4	1,188.7	52.74	23.538	
13,300.0	11,779.0	13,132.3	11,621.8	30.2	29.0	-82.72	1,314.0	-656.7	1,241.2	1,187.8	53.39	23.247	
13,400.0	11,779.0	13,232.3	11,621.6	30.5	29.3	-82.72	1,414.0	-657.9	1,241.0	1,186.9	54.08	22.947	
13,500.0	11,779.0	13,332.3	11,621.4	30.7	29.6	-82.71	1,514.0	-659.2	1,240.8	1,186.0	54.80	22.641	
13,600.0	11,779.0	13,432.3	11,621.3	31.0	29.9	-82.70	1,614.0	-660.5	1,240.6	1,185.1	55.56	22.330	
13,700.0	11,779.0	13,532.3	11,621.1	31.3	30.2	-82.69	1,714.0	-661.8	1,240.4	1,184.1	56.35	22.015	
13,800.0	11,779.0	13,632.3	11,620.9	31.6	30.5	-82.68	1,814.0	-663.1	1,240.2	1,183.1	57.16	21.697	
13,900.0	11,779.0	13,732.3	11,620.7	32.0	30.8	-82.67	1,914.0	-664.4	1,240.0	1,182.0	58.01	21.377	
14,000.0	11,779.0	13,832.3	11,620.6	32.3	31.2	-82.66	2,014.0	-665.6	1,239.8	1,180.9	58.88	21.057	
14,100.0	11,779.0	13,932.3	11,620.4	32.7	31.6	-82.65	2,114.0	-666.9	1,239.6	1,179.9	59.78	20.737	
14,200.0	11,779.0	14,032.3	11,620.2	33.0	31.9	-82.64	2,213.9	-668.2	1,239.4	1,178.7	60.70	20.418	
14,300.0	11,779.0	14,132.3	11,620.0	33.4	32.3	-82.63	2,313.9	-669.5	1,239.2	1,177.6	61.65	20.100	
14,400.0	11,779.0	14,232.3	11,619.9	33.8	32.7	-82.62	2,413.9	-670.8	1,239.0	1,176.4	62.62	19.785	
14,500.0	11,779.0	14,332.3	11,619.7	34.2	33.2	-82.61	2,513.9	-672.1	1,238.8	1,175.2	63.62	19.473	
14,600.0	11,779.0	14,432.3	11,619.5	34.7	33.6	-82.60	2,613.9	-673.3	1,238.7	1,174.0	64.63	19.165	
14,700.0	11,779.0	14,532.3	11,619.3	35.1	34.0	-82.59	2,713.9	-674.6	1,238.5	1,172.8	65.67	18.860	
14,800.0	11,779.0	14,632.3	11,619.2	35.5	34.5	-82.59	2,813.9	-675.9	1,238.3	1,171.5	66.72	18.559	
14,900.0	11,779.0	14,732.3	11,619.0	36.0	35.0	-82.58	2,913.9	-677.2	1,238.1	1,170.3	67.79	18.263	
15,000.0	11,779.0	14,832.3	11,618.8	36.5	35.5	-82.57	3,013.9	-678.5	1,237.9	1,169.0	68.88	17.972	
15,100.0	11,779.0	14,932.3	11,618.6	37.0	36.0	-82.56	3,113.9	-679.8	1,237.7	1,167.7	69.98	17.685	
15,200.0	11,779.0	15,032.3	11,618.5	37.4	36.5	-82.55	3,213.9	-681.1	1,237.5	1,166.4	71.10	17.404	
15,300.0	11,779.0	15,132.3	11,618.3	37.9	37.0	-82.54	3,313.9	-682.3	1,237.3	1,165.0	72.24	17.127	
15,400.0	11,779.0	15,232.3	11,618.1	38.5	37.5	-82.53	3,413.8	-683.6	1,237.1	1,163.7	73.39	16.856	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,500.0	11,779.0	15,332.3	11,617.9	39.0	38.0	-82.52	3,513.8	-684.9	1,236.9	1,162.3	74.55	16.590	
15,600.0	11,779.0	15,432.3	11,617.8	39.5	38.6	-82.51	3,613.8	-686.2	1,236.7	1,161.0	75.73	16.330	
15,700.0	11,779.0	15,532.3	11,617.6	40.0	39.1	-82.50	3,713.8	-687.5	1,236.5	1,159.6	76.92	16.075	
15,800.0	11,779.0	15,632.3	11,617.4	40.6	39.7	-82.49	3,813.8	-688.8	1,236.3	1,158.2	78.12	15.826	
15,900.0	11,779.0	15,732.3	11,617.3	41.1	40.3	-82.48	3,913.8	-690.0	1,236.1	1,156.8	79.33	15.581	
16,000.0	11,779.0	15,832.3	11,617.1	41.7	40.8	-82.47	4,013.8	-691.3	1,235.9	1,155.4	80.56	15.342	
16,100.0	11,779.0	15,932.3	11,616.9	42.3	41.4	-82.46	4,113.8	-692.6	1,235.7	1,153.9	81.79	15.109	
16,200.0	11,779.0	16,032.3	11,616.7	42.9	42.0	-82.45	4,213.8	-693.9	1,235.5	1,152.5	83.03	14.880	
16,300.0	11,779.0	16,132.3	11,616.6	43.4	42.6	-82.45	4,313.8	-695.2	1,235.3	1,151.0	84.28	14.657	
16,400.0	11,779.0	16,232.3	11,616.4	44.0	43.2	-82.44	4,413.8	-696.5	1,235.1	1,149.6	85.55	14.438	
16,500.0	11,779.0	16,332.3	11,616.2	44.6	43.8	-82.43	4,513.7	-697.7	1,234.9	1,148.1	86.82	14.225	
16,600.0	11,779.0	16,432.3	11,616.0	45.2	44.4	-82.42	4,613.7	-699.0	1,234.7	1,146.6	88.09	14.016	
16,700.0	11,779.0	16,532.3	11,615.9	45.8	45.0	-82.41	4,713.7	-700.3	1,234.5	1,145.2	89.38	13.812	
16,800.0	11,779.0	16,632.3	11,615.7	46.4	45.7	-82.40	4,813.7	-701.6	1,234.4	1,143.7	90.67	13.613	
16,900.0	11,779.0	16,732.3	11,615.5	47.1	46.3	-82.39	4,913.7	-702.9	1,234.2	1,142.2	91.98	13.418	
17,000.0	11,779.0	16,832.3	11,615.3	47.7	46.9	-82.38	5,013.7	-704.2	1,234.0	1,140.7	93.28	13.228	
17,100.0	11,779.0	16,932.3	11,615.2	48.3	47.6	-82.37	5,113.7	-705.5	1,233.8	1,139.2	94.60	13.042	
17,200.0	11,779.0	17,032.3	11,615.0	48.9	48.2	-82.36	5,213.7	-706.7	1,233.6	1,137.7	95.92	12.861	
17,300.0	11,779.0	17,132.3	11,614.8	49.6	48.9	-82.35	5,313.7	-708.0	1,233.4	1,136.1	97.25	12.683	
17,400.0	11,779.0	17,232.3	11,614.6	50.2	49.5	-82.34	5,413.7	-709.3	1,233.2	1,134.6	98.58	12.510	
17,500.0	11,779.0	17,332.3	11,614.5	50.9	50.2	-82.33	5,513.7	-710.6	1,233.0	1,133.1	99.92	12.340	
17,600.0	11,779.0	17,432.3	11,614.3	51.5	50.8	-82.32	5,613.6	-711.9	1,232.8	1,131.5	101.26	12.175	
17,700.0	11,779.0	17,532.3	11,614.1	52.2	51.5	-82.31	5,713.6	-713.2	1,232.6	1,130.0	102.61	12.013	
17,800.0	11,779.0	17,632.3	11,613.9	52.8	52.1	-82.30	5,813.6	-714.4	1,232.4	1,128.4	103.96	11.854	
17,900.0	11,779.0	17,732.3	11,613.8	53.5	52.8	-82.30	5,913.6	-715.7	1,232.2	1,126.9	105.32	11.700	
18,000.0	11,779.0	17,832.3	11,613.6	54.1	53.5	-82.29	6,013.6	-717.0	1,232.0	1,125.3	106.69	11.548	
18,100.0	11,779.0	17,932.3	11,613.4	54.8	54.2	-82.28	6,113.6	-718.3	1,231.8	1,123.8	108.05	11.400	
18,200.0	11,779.0	18,032.3	11,613.3	55.5	54.8	-82.27	6,213.6	-719.6	1,231.6	1,122.2	109.42	11.255	
18,300.0	11,779.0	18,132.3	11,613.1	56.1	55.5	-82.26	6,313.6	-720.9	1,231.4	1,120.6	110.80	11.114	
18,400.0	11,779.0	18,232.3	11,612.9	56.8	56.2	-82.25	6,413.6	-722.1	1,231.2	1,119.1	112.18	10.975	
18,500.0	11,779.0	18,332.3	11,612.7	57.5	56.9	-82.24	6,513.6	-723.4	1,231.0	1,117.5	113.57	10.840	
18,600.0	11,779.0	18,432.3	11,612.6	58.2	57.6	-82.23	6,613.6	-724.7	1,230.9	1,115.9	114.95	10.707	
18,700.0	11,779.0	18,532.3	11,612.4	58.8	58.2	-82.22	6,713.6	-726.0	1,230.7	1,114.3	116.34	10.578	
18,800.0	11,779.0	18,632.3	11,612.2	59.5	58.9	-82.21	6,813.5	-727.3	1,230.5	1,112.7	117.74	10.451	
18,900.0	11,779.0	18,732.3	11,612.0	60.2	59.6	-82.20	6,913.5	-728.6	1,230.3	1,111.1	119.14	10.327	
19,000.0	11,779.0	18,832.3	11,611.9	60.9	60.3	-82.19	7,013.5	-729.9	1,230.1	1,109.5	120.54	10.205	
19,100.0	11,779.0	18,932.3	11,611.7	61.6	61.0	-82.18	7,113.5	-731.1	1,229.9	1,107.9	121.94	10.086	
19,200.0	11,779.0	19,032.3	11,611.5	62.3	61.7	-82.17	7,213.5	-732.4	1,229.7	1,106.3	123.35	9.969	
19,300.0	11,779.0	19,132.3	11,611.3	63.0	62.4	-82.16	7,313.5	-733.7	1,229.5	1,104.7	124.76	9.855	
19,400.0	11,779.0	19,232.3	11,611.2	63.7	63.1	-82.15	7,413.5	-735.0	1,229.3	1,103.1	126.17	9.743	
19,500.0	11,779.0	19,332.3	11,611.0	64.4	63.8	-82.14	7,513.5	-736.3	1,229.1	1,101.5	127.59	9.633	
19,600.0	11,779.0	19,432.3	11,610.8	65.1	64.5	-82.13	7,613.5	-737.6	1,228.9	1,099.9	129.00	9.526	
19,700.0	11,779.0	19,532.3	11,610.6	65.8	65.2	-82.13	7,713.5	-738.8	1,228.7	1,098.3	130.43	9.421	
19,800.0	11,779.0	19,632.3	11,610.5	66.5	65.9	-82.12	7,813.5	-740.1	1,228.5	1,096.7	131.85	9.318	
19,900.0	11,779.0	19,732.3	11,610.3	67.2	66.6	-82.11	7,913.4	-741.4	1,228.3	1,095.1	133.27	9.217	
20,000.0	11,779.0	19,832.3	11,610.1	67.9	67.3	-82.10	8,013.4	-742.7	1,228.1	1,093.4	134.70	9.117	
20,100.0	11,779.0	19,932.3	11,609.9	68.6	68.0	-82.09	8,113.4	-744.0	1,227.9	1,091.8	136.13	9.020	
20,200.0	11,779.0	20,032.3	11,609.8	69.3	68.8	-82.08	8,213.4	-745.3	1,227.7	1,090.2	137.56	8.925	
20,300.0	11,779.0	20,132.3	11,609.6	70.0	69.5	-82.07	8,313.4	-746.5	1,227.6	1,088.6	139.00	8.831	
20,400.0	11,779.0	20,232.3	11,609.4	70.7	70.2	-82.06	8,413.4	-747.8	1,227.4	1,086.9	140.43	8.740	
20,500.0	11,779.0	20,332.3	11,609.3	71.4	70.9	-82.05	8,513.4	-749.1	1,227.2	1,085.3	141.87	8.650	
20,600.0	11,779.0	20,432.3	11,609.1	72.1	71.6	-82.04	8,613.4	-750.4	1,227.0	1,083.7	143.31	8.562	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
20,700.0	11,779.0	20,532.3	11,608.9	72.8	72.3	-82.03	8,713.4	-751.7	1,226.8	1,082.0	144.75	8.475	
20,800.0	11,779.0	20,632.3	11,608.7	73.5	73.1	-82.02	8,813.4	-753.0	1,226.6	1,080.4	146.20	8.390	
20,900.0	11,779.0	20,732.3	11,608.6	74.2	73.8	-82.01	8,913.4	-754.3	1,226.4	1,078.7	147.64	8.307	
21,000.0	11,779.0	20,832.3	11,608.4	75.0	74.5	-82.00	9,013.4	-755.5	1,226.2	1,077.1	149.09	8.225	
21,100.0	11,779.0	20,932.3	11,608.2	75.7	75.2	-81.99	9,113.3	-756.8	1,226.0	1,075.5	150.54	8.144	
21,200.0	11,779.0	21,032.3	11,608.0	76.4	75.9	-81.98	9,213.3	-758.1	1,225.8	1,073.8	151.99	8.065	
21,300.0	11,779.0	21,132.3	11,607.9	77.1	76.7	-81.97	9,313.3	-759.4	1,225.6	1,072.2	153.44	7.988	
21,400.0	11,779.0	21,232.3	11,607.7	77.8	77.4	-81.96	9,413.3	-760.7	1,225.4	1,070.5	154.89	7.911	
21,500.0	11,779.0	21,332.3	11,607.5	78.6	78.1	-81.95	9,513.3	-762.0	1,225.2	1,068.9	156.35	7.837	
21,600.0	11,779.0	21,432.3	11,607.3	79.3	78.8	-81.95	9,613.3	-763.2	1,225.0	1,067.2	157.80	7.763	
21,700.0	11,779.0	21,532.3	11,607.2	80.0	79.6	-81.94	9,713.3	-764.5	1,224.8	1,065.6	159.26	7.691	
21,800.0	11,779.0	21,632.3	11,607.0	80.7	80.3	-81.93	9,813.3	-765.8	1,224.6	1,063.9	160.72	7.620	
21,900.0	11,779.0	21,732.3	11,606.8	81.4	81.0	-81.92	9,913.3	-767.1	1,224.5	1,062.3	162.18	7.550	
22,000.0	11,779.0	21,832.3	11,606.6	82.2	81.7	-81.91	10,013.3	-768.4	1,224.3	1,060.6	163.64	7.481	
22,100.0	11,779.0	21,932.3	11,606.5	82.9	82.5	-81.90	10,113.3	-769.7	1,224.1	1,059.0	165.10	7.414	
22,200.0	11,779.0	22,032.3	11,606.3	83.6	83.2	-81.89	10,213.2	-771.0	1,223.9	1,057.3	166.57	7.348	
22,300.0	11,779.0	22,132.3	11,606.1	84.4	83.9	-81.88	10,313.2	-772.2	1,223.7	1,055.7	168.03	7.283	
22,400.0	11,779.0	22,232.3	11,605.9	85.1	84.7	-81.87	10,413.2	-773.5	1,223.5	1,054.0	169.50	7.218	
22,500.0	11,779.0	22,332.3	11,605.8	85.8	85.4	-81.86	10,513.2	-774.8	1,223.3	1,052.3	170.96	7.155	
22,600.0	11,779.0	22,432.3	11,605.6	86.5	86.1	-81.85	10,613.2	-776.1	1,223.1	1,050.7	172.43	7.093	
22,700.0	11,779.0	22,532.3	11,605.4	87.3	86.9	-81.84	10,713.2	-777.4	1,222.9	1,049.0	173.90	7.032	
22,800.0	11,779.0	22,632.3	11,605.2	88.0	87.6	-81.83	10,813.2	-778.7	1,222.7	1,047.3	175.37	6.972	
22,900.0	11,779.0	22,732.3	11,605.1	88.7	88.3	-81.82	10,913.2	-779.9	1,222.5	1,045.7	176.84	6.913	
23,000.0	11,779.0	22,832.3	11,604.9	89.5	89.1	-81.81	11,013.2	-781.2	1,222.3	1,044.0	178.31	6.855	
23,100.0	11,779.0	22,932.3	11,604.7	90.2	89.8	-81.80	11,113.2	-782.5	1,222.1	1,042.4	179.79	6.798	
23,200.0	11,779.0	23,032.3	11,604.6	90.9	90.5	-81.79	11,213.2	-783.8	1,221.9	1,040.7	181.26	6.741	
23,300.0	11,779.0	23,132.3	11,604.4	91.7	91.3	-81.78	11,313.1	-785.1	1,221.8	1,039.0	182.74	6.686	
23,400.0	11,779.0	23,232.3	11,604.2	92.4	92.0	-81.77	11,413.1	-786.4	1,221.6	1,037.3	184.21	6.631	
23,500.0	11,779.0	23,332.3	11,604.0	93.1	92.7	-81.76	11,513.1	-787.6	1,221.4	1,035.7	185.69	6.577	
23,600.0	11,779.0	23,432.3	11,603.9	93.9	93.5	-81.75	11,613.1	-788.9	1,221.2	1,034.0	187.17	6.525	
23,700.0	11,779.0	23,532.3	11,603.7	94.6	94.2	-81.74	11,713.1	-790.2	1,221.0	1,032.3	188.64	6.472	
23,800.0	11,779.0	23,632.3	11,603.5	95.3	95.0	-81.74	11,813.1	-791.5	1,220.8	1,030.7	190.12	6.421	
23,900.0	11,779.0	23,732.3	11,603.3	96.1	95.7	-81.73	11,913.1	-792.8	1,220.6	1,029.0	191.60	6.370	
24,000.0	11,779.0	23,832.3	11,603.2	96.8	96.4	-81.72	12,013.1	-794.1	1,220.4	1,027.3	193.08	6.321	
24,100.0	11,779.0	23,932.3	11,603.0	97.5	97.2	-81.71	12,113.1	-795.4	1,220.2	1,025.6	194.57	6.271	
24,200.0	11,779.0	24,032.3	11,602.8	98.3	97.9	-81.70	12,213.1	-796.6	1,220.0	1,024.0	196.05	6.223	
24,300.0	11,779.0	24,132.3	11,602.6	99.0	98.7	-81.69	12,313.1	-797.9	1,219.8	1,022.3	197.53	6.175	
24,400.0	11,779.0	24,232.3	11,602.5	99.8	99.4	-81.68	12,413.1	-799.2	1,219.6	1,020.6	199.02	6.128	
24,500.0	11,779.0	24,332.3	11,602.3	100.5	100.1	-81.67	12,513.0	-800.5	1,219.4	1,018.9	200.50	6.082	
24,600.0	11,779.0	24,432.3	11,602.1	101.2	100.9	-81.66	12,613.0	-801.8	1,219.3	1,017.3	201.98	6.036	
24,700.0	11,779.0	24,532.3	11,601.9	102.0	101.6	-81.65	12,713.0	-803.1	1,219.1	1,015.6	203.47	5.991	
24,774.6	11,779.0	24,606.9	11,601.8	102.5	102.2	-81.64	12,787.6	-804.0	1,218.9	1,014.3	204.58	5.958 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-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)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.9	3.0	3.0	-90.90	-0.9	-59.8	59.9				
100.0	100.0	99.1	100.0	3.0	3.0	-90.90	-0.9	-59.8	59.8	53.8	6.05	9.890	
200.0	200.0	199.1	200.0	3.2	3.2	-90.90	-0.9	-59.8	59.8	53.6	6.30	9.507	
300.0	300.0	299.1	300.0	3.3	3.3	-90.90	-0.9	-59.8	59.8	53.3	6.53	9.163	
400.0	400.0	399.1	400.0	3.4	3.4	-90.90	-0.9	-59.8	59.8	53.1	6.76	8.855	
500.0	500.0	499.1	500.0	3.5	3.5	-90.90	-0.9	-59.8	59.8	52.9	6.98	8.575	
600.0	600.0	599.1	600.0	3.6	3.6	-90.90	-0.9	-59.8	59.8	52.7	7.19	8.321	
700.0	700.0	699.1	700.0	3.8	3.8	-90.90	-0.9	-59.8	59.8	52.4	7.40	8.088	
800.0	800.0	799.1	800.0	3.9	3.9	-90.90	-0.9	-59.8	59.8	52.2	7.60	7.873	
900.0	900.0	899.1	900.0	4.0	4.0	-90.90	-0.9	-59.8	59.8	52.0	7.80	7.675	
1,000.0	1,000.0	999.1	1,000.0	4.1	4.1	-90.90	-0.9	-59.8	59.8	51.9	7.99	7.491	CC, ES
1,100.0	1,100.0	1,098.2	1,099.1	4.3	4.3	145.54	-2.5	-60.5	62.0	53.7	8.28	7.489	
1,200.0	1,199.8	1,197.1	1,197.8	4.6	4.6	144.02	-7.2	-62.4	68.4	59.7	8.74	7.832	
1,300.0	1,299.5	1,295.3	1,295.7	4.9	4.9	142.01	-15.0	-65.7	79.2	70.0	9.20	8.609	
1,400.0	1,398.7	1,392.7	1,392.4	5.2	5.2	139.93	-25.8	-70.2	94.4	84.7	9.67	9.758	
1,500.0	1,497.7	1,491.0	1,489.7	5.5	5.5	138.30	-38.4	-75.4	111.9	101.8	10.08	11.093	
1,600.0	1,596.8	1,589.4	1,587.2	5.7	5.8	137.10	-51.0	-80.7	129.4	118.9	10.51	12.312	
1,700.0	1,695.8	1,687.8	1,684.6	6.0	6.1	136.19	-63.7	-85.9	147.0	136.1	10.96	13.419	
1,800.0	1,794.8	1,786.3	1,782.1	6.3	6.4	135.47	-76.3	-91.2	164.7	153.3	11.42	14.424	
1,900.0	1,893.8	1,884.7	1,879.6	6.7	6.7	134.89	-89.0	-96.5	182.4	170.5	11.89	15.336	
2,000.0	1,992.9	1,983.1	1,977.0	7.0	7.0	134.42	-101.6	-101.7	200.0	187.7	12.37	16.164	
2,100.0	2,091.9	2,081.5	2,074.5	7.4	7.3	134.02	-114.2	-107.0	217.7	204.8	12.87	16.918	
2,200.0	2,190.9	2,179.9	2,171.9	7.7	7.7	133.68	-126.9	-112.3	235.4	222.0	13.37	17.605	
2,300.0	2,289.9	2,278.3	2,269.4	8.1	8.0	133.39	-139.5	-117.5	253.1	239.2	13.88	18.232	
2,400.0	2,389.0	2,376.7	2,366.8	8.4	8.4	133.14	-152.2	-122.8	270.8	256.4	14.40	18.806	
2,500.0	2,488.0	2,475.1	2,464.3	8.8	8.8	132.92	-164.8	-128.1	288.5	273.6	14.93	19.331	
2,600.0	2,587.0	2,573.6	2,561.7	9.2	9.1	132.72	-177.5	-133.3	306.3	290.8	15.46	19.814	
2,700.0	2,686.1	2,672.0	2,659.2	9.6	9.5	132.54	-190.1	-138.6	324.0	308.0	15.99	20.259	
2,800.0	2,785.1	2,770.4	2,756.7	10.0	9.9	132.39	-202.8	-143.8	341.7	325.2	16.53	20.669	
2,900.0	2,884.1	2,868.8	2,854.1	10.4	10.3	132.25	-215.4	-149.1	359.4	342.4	17.08	21.048	
3,000.0	2,983.1	2,967.2	2,951.6	10.8	10.7	132.12	-228.0	-154.4	377.2	359.5	17.63	21.399	
3,100.0	3,082.2	3,065.6	3,049.0	11.2	11.1	132.00	-240.7	-159.6	394.9	376.7	18.18	21.725	
3,200.0	3,181.2	3,164.0	3,146.5	11.6	11.4	131.90	-253.3	-164.9	412.6	393.9	18.73	22.028	
3,300.0	3,280.2	3,262.4	3,243.9	12.0	11.8	131.80	-266.0	-170.2	430.4	411.1	19.29	22.310	
3,400.0	3,379.2	3,360.9	3,341.4	12.4	12.2	131.71	-278.6	-175.4	448.1	428.2	19.85	22.573	
3,500.0	3,478.3	3,459.3	3,438.8	12.8	12.6	131.62	-291.3	-180.7	465.8	445.4	20.41	22.819	
3,600.0	3,577.3	3,557.7	3,536.3	13.2	13.0	131.55	-303.9	-186.0	483.6	462.6	20.98	23.050	
3,700.0	3,676.3	3,656.1	3,633.7	13.6	13.4	131.48	-316.6	-191.2	501.3	479.7	21.55	23.266	
3,800.0	3,775.3	3,754.5	3,731.2	14.0	13.8	131.41	-329.2	-196.5	519.0	496.9	22.12	23.469	
3,900.0	3,874.4	3,854.6	3,830.4	14.4	14.2	131.35	-342.0	-201.8	536.7	514.0	22.68	23.669	
4,000.0	3,973.4	3,953.3	3,934.2	14.8	14.7	131.41	-354.1	-206.8	553.6	530.3	23.27	23.795	
4,100.0	4,072.4	4,064.3	4,038.6	15.2	15.1	131.63	-364.4	-211.1	569.4	545.5	23.86	23.867	
4,200.0	4,171.5	4,169.6	4,143.5	15.7	15.5	131.98	-373.0	-214.7	584.1	559.6	24.43	23.904	
4,300.0	4,270.5	4,275.1	4,248.7	16.1	15.8	132.47	-379.9	-217.6	597.7	572.7	25.00	23.908	
4,400.0	4,369.5	4,380.7	4,354.2	16.5	16.2	133.08	-384.9	-219.7	610.2	584.7	25.55	23.887	
4,500.0	4,468.5	4,486.4	4,459.8	16.9	16.5	133.81	-388.2	-221.0	621.8	595.7	26.08	23.845	
4,600.0	4,567.6	4,592.1	4,565.5	17.3	16.8	134.66	-389.6	-221.6	632.4	605.9	26.58	23.796	
4,700.0	4,666.6	4,693.2	4,666.6	17.8	16.8	135.55	-389.7	-221.7	642.4	615.5	26.94	23.848	
4,800.0	4,765.6	4,792.2	4,765.6	18.2	16.9	136.41	-389.7	-221.7	652.4	625.1	27.30	23.897	
4,900.0	4,864.6	4,891.2	4,864.6	18.6	16.9	137.23	-389.7	-221.7	662.6	635.0	27.68	23.943	
5,000.0	4,963.7	4,990.3	4,963.7	19.0	16.9	138.03	-389.7	-221.7	673.0	644.9	28.06	23.985	
5,100.0	5,062.7	5,089.3	5,062.7	19.4	17.0	138.81	-389.7	-221.7	683.4	655.0	28.45	24.025	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside Toolface	Offset Wellbore Centre	Distance	Between Centres	Between Ellipses	Minimum Separation	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)	Minimum Separation (usft)	Separation Factor	
5,200.0	5,161.7	5,188.3	5,161.7	19.9	17.0	139.56	-389.7	-221.7	694.0	665.2	28.84	24.062	
5,300.0	5,260.7	5,287.3	5,260.7	20.3	17.0	140.29	-389.7	-221.7	704.7	675.5	29.24	24.098	
5,400.0	5,359.8	5,386.4	5,359.8	20.7	17.1	141.00	-389.7	-221.7	715.5	685.9	29.65	24.131	
5,500.0	5,458.8	5,485.4	5,458.8	21.1	17.1	141.69	-389.7	-221.7	726.4	696.4	30.06	24.163	
5,600.0	5,557.8	5,584.4	5,557.8	21.5	17.1	142.37	-389.7	-221.7	737.3	706.8	30.46	24.207	
5,700.0	5,657.0	5,683.6	5,657.0	22.0	17.2	143.01	-389.7	-221.7	747.7	716.8	30.87	24.216	
5,800.0	5,756.3	5,782.9	5,756.3	22.4	17.2	143.59	-389.7	-221.7	757.4	726.1	31.29	24.208	
5,900.0	5,855.6	5,882.2	5,855.6	22.8	17.2	144.11	-389.7	-221.7	766.5	734.8	31.70	24.182	
6,000.0	5,955.1	5,981.7	5,955.1	23.2	17.3	144.59	-389.7	-221.7	775.0	742.9	32.10	24.140	
6,100.0	6,054.6	6,081.2	6,054.6	23.6	17.3	145.01	-389.7	-221.7	782.7	750.2	32.50	24.083	
6,200.0	6,154.3	6,180.9	6,154.3	24.0	17.3	145.39	-389.7	-221.7	789.8	757.0	32.89	24.012	
6,300.0	6,254.0	6,280.6	6,254.0	24.3	17.4	145.73	-389.7	-221.7	796.3	763.0	33.28	23.927	
6,400.0	6,353.7	6,380.3	6,353.7	24.7	17.4	146.02	-389.7	-221.7	802.0	768.3	33.66	23.828	
6,500.0	6,453.5	6,480.1	6,453.5	25.1	17.4	146.27	-389.7	-221.7	807.0	773.0	34.02	23.719	
6,600.0	6,553.4	6,580.0	6,553.4	25.4	17.5	146.49	-389.7	-221.7	811.3	776.9	34.38	23.598	
6,700.0	6,653.3	6,679.9	6,653.3	25.7	17.5	146.66	-389.7	-221.7	814.9	780.1	34.72	23.468	
6,800.0	6,753.3	6,779.8	6,753.3	26.0	17.6	146.80	-389.7	-221.7	817.7	782.7	35.05	23.330	
6,900.0	6,853.2	6,879.8	6,853.2	26.3	17.6	146.91	-389.7	-221.7	819.9	784.5	35.36	23.185	
7,000.0	6,953.2	6,979.8	6,953.2	26.6	17.6	146.97	-389.7	-221.7	821.3	785.6	35.65	23.038	
7,100.0	7,053.2	7,079.8	7,053.2	26.8	17.7	147.01	-389.7	-221.7	821.9	786.0	35.90	22.897	
7,200.0	7,153.2	7,179.8	7,153.2	26.9	17.7	-89.99	-389.7	-221.7	822.0	786.0	35.98	22.843	
7,300.0	7,253.2	7,279.8	7,253.2	26.9	17.8	-89.99	-389.7	-221.7	822.0	785.9	36.06	22.796	
7,400.0	7,353.2	7,379.8	7,353.2	26.9	17.8	-89.99	-389.7	-221.7	822.0	785.9	36.13	22.750	
7,500.0	7,453.2	7,479.8	7,453.2	26.9	17.8	-89.99	-389.7	-221.7	822.0	785.8	36.21	22.703	
7,600.0	7,553.2	7,579.8	7,553.2	27.0	17.9	-89.99	-389.7	-221.7	822.0	785.7	36.28	22.656	
7,700.0	7,653.2	7,679.8	7,653.2	27.0	17.9	-89.99	-389.7	-221.7	822.0	785.6	36.36	22.608	
7,800.0	7,753.2	7,779.8	7,753.2	27.0	17.9	-89.99	-389.7	-221.7	822.0	785.6	36.43	22.561	
7,900.0	7,853.2	7,879.8	7,853.2	27.0	18.0	-89.99	-389.7	-221.7	822.0	785.5	36.51	22.513	
8,000.0	7,953.2	7,979.8	7,953.2	27.0	18.0	-89.99	-389.7	-221.7	822.0	785.4	36.59	22.466	
8,100.0	8,053.2	8,079.8	8,053.2	27.1	18.1	-89.99	-389.7	-221.7	822.0	785.3	36.67	22.418	
8,200.0	8,153.2	8,179.8	8,153.2	27.1	18.1	-89.99	-389.7	-221.7	822.0	785.2	36.75	22.370	
8,300.0	8,253.2	8,279.8	8,253.2	27.1	18.2	-89.99	-389.7	-221.7	822.0	785.2	36.82	22.322	
8,400.0	8,353.2	8,379.8	8,353.2	27.1	18.2	-89.99	-389.7	-221.7	822.0	785.1	36.90	22.274	
8,500.0	8,453.2	8,479.8	8,453.2	27.1	18.2	-89.99	-389.7	-221.7	822.0	785.0	36.98	22.226	
8,600.0	8,553.2	8,579.8	8,553.2	27.2	18.3	-89.99	-389.7	-221.7	822.0	784.9	37.06	22.177	
8,700.0	8,653.2	8,679.8	8,653.2	27.2	18.3	-89.99	-389.7	-221.7	822.0	784.8	37.15	22.129	
8,800.0	8,753.2	8,779.8	8,753.2	27.2	18.4	-89.99	-389.7	-221.7	822.0	784.8	37.23	22.080	
8,900.0	8,853.2	8,879.8	8,853.2	27.2	18.4	-89.99	-389.7	-221.7	822.0	784.7	37.31	22.031	
9,000.0	8,953.2	8,979.8	8,953.2	27.3	18.5	-89.99	-389.7	-221.7	822.0	784.6	37.39	21.983	
9,100.0	9,053.2	9,079.8	9,053.2	27.3	18.5	-89.99	-389.7	-221.7	822.0	784.5	37.48	21.934	
9,200.0	9,153.2	9,179.8	9,153.2	27.3	18.5	-89.99	-389.7	-221.7	822.0	784.4	37.56	21.885	
9,300.0	9,253.2	9,279.8	9,253.2	27.3	18.6	-89.99	-389.7	-221.7	822.0	784.4	37.64	21.836	
9,400.0	9,353.2	9,379.8	9,353.2	27.4	18.6	-89.99	-389.7	-221.7	822.0	784.3	37.73	21.787	
9,500.0	9,453.2	9,479.8	9,453.2	27.4	18.7	-89.99	-389.7	-221.7	822.0	784.2	37.81	21.738	
9,600.0	9,553.2	9,579.8	9,553.2	27.4	18.7	-89.99	-389.7	-221.7	822.0	784.1	37.90	21.689	
9,700.0	9,653.2	9,679.8	9,653.2	27.4	18.8	-89.99	-389.7	-221.7	822.0	784.0	37.99	21.640	
9,800.0	9,753.2	9,779.8	9,753.2	27.4	18.8	-89.99	-389.7	-221.7	822.0	783.9	38.07	21.590	
9,900.0	9,853.2	9,879.8	9,853.2	27.5	18.9	-89.99	-389.7	-221.7	822.0	783.8	38.16	21.541	
10,000.0	9,953.2	9,979.8	9,953.2	27.5	18.9	-89.99	-389.7	-221.7	822.0	783.7	38.25	21.492	
10,100.0	10,053.2	10,079.8	10,053.2	27.5	18.9	-89.99	-389.7	-221.7	822.0	783.7	38.34	21.442	
10,200.0	10,153.2	10,179.8	10,153.2	27.6	19.0	-89.99	-389.7	-221.7	822.0	783.6	38.42	21.393	
10,300.0	10,253.2	10,279.8	10,253.2	27.6	19.0	-89.99	-389.7	-221.7	822.0	783.5	38.51	21.344	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		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)	Minimum Separation (usft)	Separation Factor	Warning
10,400.0	10,353.2	10,379.8	10,353.2	27.6	19.1	-89.99	-389.7	-221.7	822.0	783.4	38.60	21.294	
10,500.0	10,453.2	10,479.8	10,453.2	27.6	19.1	-89.99	-389.7	-221.7	822.0	783.3	38.69	21.245	
10,600.0	10,553.2	10,579.8	10,553.2	27.7	19.2	-89.99	-389.7	-221.7	822.0	783.2	38.78	21.195	
10,700.0	10,653.2	10,679.8	10,653.2	27.7	19.2	-89.99	-389.7	-221.7	822.0	783.1	38.87	21.146	
10,800.0	10,753.2	10,779.8	10,753.2	27.7	19.3	-89.99	-389.7	-221.7	822.0	783.0	38.96	21.096	
10,900.0	10,853.2	10,879.8	10,853.2	27.7	19.3	-89.99	-389.7	-221.7	822.0	782.9	39.06	21.047	
11,000.0	10,953.2	10,979.8	10,953.2	27.8	19.4	-89.99	-389.7	-221.7	822.0	782.8	39.15	20.997	
11,100.0	11,053.2	11,079.8	11,053.2	27.8	19.4	-89.99	-389.7	-221.7	822.0	782.8	39.24	20.948	
11,200.0	11,153.2	11,179.8	11,153.2	27.8	19.5	-89.99	-389.7	-221.7	822.0	782.7	39.33	20.898	
11,300.0	11,253.1	11,278.8	11,252.2	27.8	19.5	-89.12	-387.7	-221.7	822.0	782.6	39.37	20.879	
11,400.0	11,351.6	11,376.9	11,348.7	27.9	19.6	-89.12	-371.1	-221.9	822.0	782.6	39.37	20.876	
11,500.0	11,445.6	11,474.9	11,441.0	27.9	19.8	-89.15	-338.4	-222.4	821.9	782.6	39.36	20.884	
11,600.0	11,532.3	11,573.0	11,526.4	28.0	19.9	-89.20	-290.4	-223.0	821.8	782.5	39.33	20.898	
11,700.0	11,609.2	11,671.3	11,602.5	28.0	20.0	-89.28	-228.4	-223.9	821.7	782.4	39.30	20.910	
11,800.0	11,673.7	11,769.7	11,667.0	28.1	20.1	-89.37	-154.2	-224.9	821.6	782.3	39.29	20.912	
11,900.0	11,724.1	11,868.4	11,718.0	28.1	20.2	-89.49	-69.8	-226.1	821.5	782.2	39.32	20.894	
12,000.0	11,758.7	11,967.4	11,753.8	28.2	20.3	-89.62	22.3	-227.3	821.4	782.0	39.40	20.847	
12,100.0	11,776.5	12,066.6	11,773.3	28.3	20.4	-89.77	119.4	-228.6	821.2	781.7	39.54	20.767	
12,200.0	11,779.0	12,166.3	11,776.9	28.3	20.4	-89.85	219.0	-230.0	821.1	781.3	39.76	20.652	
12,300.0	11,779.0	12,266.3	11,776.9	28.4	20.4	-89.85	319.0	-231.4	820.9	780.9	40.05	20.496	
12,400.0	11,779.0	12,366.3	11,776.9	28.5	20.5	-89.85	419.0	-232.7	820.8	780.4	40.41	20.311	
12,500.0	11,779.0	12,466.3	11,776.9	28.7	20.5	-89.85	519.0	-234.1	820.7	779.8	40.83	20.102	
12,600.0	11,779.0	12,566.3	11,776.9	28.8	20.6	-89.85	619.0	-235.5	820.5	779.2	41.29	19.870	
12,700.0	11,779.0	12,666.3	11,776.9	29.0	20.7	-89.85	719.0	-236.8	820.4	778.6	41.82	19.620	
12,800.0	11,779.0	12,766.3	11,776.9	29.1	20.8	-89.85	818.9	-238.2	820.3	777.9	42.39	19.352	
12,900.0	11,779.0	12,866.3	11,776.9	29.3	20.9	-89.85	918.9	-239.6	820.1	777.1	43.01	19.070	
13,000.0	11,779.0	12,966.3	11,776.9	29.5	21.0	-89.85	1,018.9	-240.9	820.0	776.3	43.67	18.777	
13,100.0	11,779.0	13,066.3	11,776.9	29.7	21.1	-89.85	1,118.9	-242.3	819.9	775.5	44.38	18.474	
13,200.0	11,779.0	13,166.3	11,776.9	30.0	21.2	-89.85	1,218.9	-243.7	819.7	774.6	45.13	18.165	
13,300.0	11,779.0	13,266.3	11,776.9	30.2	21.4	-89.85	1,318.9	-245.1	819.6	773.7	45.91	17.850	
13,400.0	11,779.0	13,366.3	11,776.9	30.5	21.6	-89.85	1,418.9	-246.4	819.4	772.7	46.74	17.532	
13,500.0	11,779.0	13,466.3	11,776.9	30.7	21.8	-89.85	1,518.9	-247.8	819.3	771.7	47.60	17.213	
13,600.0	11,779.0	13,566.3	11,776.9	31.0	22.1	-89.85	1,618.9	-249.2	819.2	770.7	48.49	16.894	
13,700.0	11,779.0	13,666.3	11,776.9	31.3	22.4	-89.85	1,718.9	-250.5	819.0	769.6	49.41	16.576	
13,800.0	11,779.0	13,766.3	11,776.9	31.6	22.7	-89.85	1,818.9	-251.9	818.9	768.5	50.36	16.261	
13,900.0	11,779.0	13,866.3	11,776.9	32.0	23.1	-89.85	1,918.8	-253.3	818.8	767.4	51.34	15.948	
14,000.0	11,779.0	13,966.3	11,776.9	32.3	23.5	-89.85	2,018.8	-254.6	818.6	766.3	52.34	15.640	
14,100.0	11,779.0	14,066.3	11,776.9	32.7	23.9	-89.85	2,118.8	-256.0	818.5	765.1	53.37	15.336	
14,200.0	11,779.0	14,166.3	11,776.9	33.0	24.4	-89.85	2,218.8	-257.4	818.4	763.9	54.42	15.038	
14,300.0	11,779.0	14,266.3	11,776.9	33.4	24.9	-89.85	2,318.8	-258.7	818.2	762.7	55.49	14.745	
14,400.0	11,779.0	14,366.3	11,776.9	33.8	25.4	-89.85	2,418.8	-260.1	818.1	761.5	56.59	14.458	
14,500.0	11,779.0	14,466.3	11,776.9	34.2	26.0	-89.85	2,518.8	-261.5	817.9	760.3	57.70	14.177	
14,600.0	11,779.0	14,566.3	11,776.9	34.7	26.6	-89.85	2,618.8	-262.8	817.8	759.0	58.83	13.902	
14,700.0	11,779.0	14,666.3	11,776.9	35.1	27.1	-89.85	2,718.8	-264.2	817.7	757.7	59.97	13.634	
14,800.0	11,779.0	14,766.3	11,776.9	35.5	27.7	-89.85	2,818.8	-265.6	817.5	756.4	61.14	13.372	
14,900.0	11,779.0	14,866.3	11,776.9	36.0	28.4	-89.85	2,918.7	-266.9	817.4	755.1	62.31	13.117	
15,000.0	11,779.0	14,966.3	11,776.9	36.5	29.0	-89.85	3,018.7	-268.3	817.3	753.8	63.51	12.869	
15,100.0	11,779.0	15,066.3	11,776.9	37.0	29.6	-89.85	3,118.7	-269.7	817.1	752.4	64.71	12.627	
15,200.0	11,779.0	15,166.3	11,776.9	37.4	30.2	-89.85	3,218.7	-271.0	817.0	751.1	65.93	12.391	
15,300.0	11,779.0	15,266.3	11,776.9	37.9	30.9	-89.85	3,318.7	-272.4	816.9	749.7	67.16	12.162	
15,400.0	11,779.0	15,366.3	11,776.9	38.5	31.5	-89.85	3,418.7	-273.8	816.7	748.3	68.41	11.939	
15,500.0	11,779.0	15,466.3	11,776.9	39.0	32.2	-89.85	3,518.7	-275.2	816.6	746.9	69.66	11.723	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,600.0	11,779.0	15,566.3	11,776.9	39.5	32.9	-89.85	3,618.7	-276.5	816.5	745.5	70.92	11.512	
15,700.0	11,779.0	15,666.3	11,776.9	40.0	33.5	-89.85	3,718.7	-277.9	816.3	744.1	72.20	11.307	
15,800.0	11,779.0	15,766.3	11,776.9	40.6	34.2	-89.85	3,818.7	-279.3	816.2	742.7	73.48	11.107	
15,900.0	11,779.0	15,866.3	11,776.9	41.1	34.9	-89.85	3,918.7	-280.6	816.0	741.3	74.77	10.913	
16,000.0	11,779.0	15,966.3	11,776.9	41.7	35.6	-89.85	4,018.6	-282.0	815.9	739.8	76.07	10.725	
16,100.0	11,779.0	16,066.3	11,776.9	42.3	36.3	-89.85	4,118.6	-283.4	815.8	738.4	77.38	10.542	
16,200.0	11,779.0	16,166.3	11,776.9	42.9	37.0	-89.85	4,218.6	-284.7	815.6	736.9	78.70	10.364	
16,300.0	11,779.0	16,266.3	11,776.9	43.4	37.7	-89.85	4,318.6	-286.1	815.5	735.5	80.02	10.191	
16,400.0	11,779.0	16,366.3	11,776.9	44.0	38.4	-89.85	4,418.6	-287.5	815.4	734.0	81.35	10.022	
16,500.0	11,779.0	16,466.3	11,776.9	44.6	39.1	-89.85	4,518.6	-288.8	815.2	732.5	82.69	9.859	
16,600.0	11,779.0	16,566.3	11,776.9	45.2	39.8	-89.85	4,618.6	-290.2	815.1	731.1	84.04	9.699	
16,700.0	11,779.0	16,666.3	11,776.9	45.8	40.5	-89.85	4,718.6	-291.6	815.0	729.6	85.39	9.544	
16,800.0	11,779.0	16,766.3	11,776.9	46.4	41.2	-89.85	4,818.6	-292.9	814.8	728.1	86.74	9.394	
16,900.0	11,779.0	16,866.3	11,776.9	47.1	41.9	-89.85	4,918.6	-294.3	814.7	726.6	88.10	9.247	
17,000.0	11,779.0	16,966.3	11,776.9	47.7	42.6	-89.85	5,018.5	-295.7	814.5	725.1	89.47	9.104	
17,100.0	11,779.0	17,066.3	11,776.9	48.3	43.3	-89.85	5,118.5	-297.0	814.4	723.6	90.84	8.965	
17,200.0	11,779.0	17,166.3	11,776.9	48.9	44.0	-89.85	5,218.5	-298.4	814.3	722.1	92.22	8.830	
17,300.0	11,779.0	17,266.3	11,776.9	49.6	44.8	-89.85	5,318.5	-299.8	814.1	720.5	93.60	8.698	
17,400.0	11,779.0	17,366.3	11,776.9	50.2	45.5	-89.85	5,418.5	-301.1	814.0	719.0	94.98	8.570	
17,500.0	11,779.0	17,466.3	11,776.9	50.9	46.2	-89.85	5,518.5	-302.5	813.9	717.5	96.37	8.445	
17,600.0	11,779.0	17,566.3	11,776.9	51.5	46.9	-89.85	5,618.5	-303.9	813.7	716.0	97.76	8.323	
17,700.0	11,779.0	17,666.3	11,776.9	52.2	47.6	-89.85	5,718.5	-305.3	813.6	714.4	99.16	8.205	
17,800.0	11,779.0	17,766.3	11,776.9	52.8	48.4	-89.85	5,818.5	-306.6	813.5	712.9	100.56	8.089	
17,900.0	11,779.0	17,866.3	11,776.9	53.5	49.1	-89.85	5,918.5	-308.0	813.3	711.4	101.97	7.976	
18,000.0	11,779.0	17,966.3	11,776.9	54.1	49.8	-89.85	6,018.5	-309.4	813.2	709.8	103.38	7.866	
18,100.0	11,779.0	18,066.3	11,776.9	54.8	50.6	-89.85	6,118.4	-310.7	813.1	708.3	104.79	7.759	
18,200.0	11,779.0	18,166.3	11,776.9	55.5	51.3	-89.85	6,218.4	-312.1	812.9	706.7	106.20	7.654	
18,300.0	11,779.0	18,266.3	11,776.9	56.1	52.0	-89.85	6,318.4	-313.5	812.8	705.2	107.62	7.552	
18,400.0	11,779.0	18,366.3	11,776.9	56.8	52.7	-89.85	6,418.4	-314.8	812.6	703.6	109.04	7.453	
18,500.0	11,779.0	18,466.3	11,776.9	57.5	53.5	-89.85	6,518.4	-316.2	812.5	702.0	110.46	7.355	
18,600.0	11,779.0	18,566.3	11,776.9	58.2	54.2	-89.85	6,618.4	-317.6	812.4	700.5	111.89	7.260	
18,700.0	11,779.0	18,666.3	11,776.9	58.8	54.9	-89.85	6,718.4	-318.9	812.2	698.9	113.32	7.168	
18,800.0	11,779.0	18,766.3	11,776.9	59.5	55.7	-89.85	6,818.4	-320.3	812.1	697.3	114.75	7.077	
18,900.0	11,779.0	18,866.3	11,776.9	60.2	56.4	-89.85	6,918.4	-321.7	812.0	695.8	116.18	6.989	
19,000.0	11,779.0	18,966.3	11,776.9	60.9	57.2	-89.85	7,018.4	-323.0	811.8	694.2	117.62	6.902	
19,100.0	11,779.0	19,066.3	11,776.9	61.6	57.9	-89.85	7,118.4	-324.4	811.7	692.6	119.06	6.818	
19,200.0	11,779.0	19,166.3	11,776.9	62.3	58.6	-89.85	7,218.3	-325.8	811.6	691.1	120.50	6.735	
19,300.0	11,779.0	19,266.3	11,776.9	63.0	59.4	-89.85	7,318.3	-327.1	811.4	689.5	121.94	6.654	
19,400.0	11,779.0	19,366.3	11,776.9	63.7	60.1	-89.85	7,418.3	-328.5	811.3	687.9	123.38	6.575	
19,500.0	11,779.0	19,466.3	11,776.9	64.4	60.9	-89.85	7,518.3	-329.9	811.1	686.3	124.83	6.498	
19,600.0	11,779.0	19,566.3	11,776.9	65.1	61.6	-89.85	7,618.3	-331.2	811.0	684.7	126.28	6.422	
19,700.0	11,779.0	19,666.3	11,776.9	65.8	62.3	-89.85	7,718.3	-332.6	810.9	683.1	127.73	6.348	
19,800.0	11,779.0	19,766.3	11,776.9	66.5	63.1	-89.85	7,818.3	-334.0	810.7	681.6	129.18	6.276	
19,900.0	11,779.0	19,866.3	11,776.9	67.2	63.8	-89.85	7,918.3	-335.4	810.6	680.0	130.64	6.205	
20,000.0	11,779.0	19,966.3	11,776.9	67.9	64.6	-89.85	8,018.3	-336.7	810.5	678.4	132.09	6.136	
20,100.0	11,779.0	20,066.3	11,776.9	68.6	65.3	-89.85	8,118.3	-338.1	810.3	676.8	133.55	6.068	
20,200.0	11,779.0	20,166.3	11,776.9	69.3	66.1	-89.85	8,218.2	-339.5	810.2	675.2	135.01	6.001	
20,300.0	11,779.0	20,266.3	11,776.9	70.0	66.8	-89.85	8,318.2	-340.8	810.1	673.6	136.47	5.936	
20,400.0	11,779.0	20,366.3	11,776.9	70.7	67.5	-89.85	8,418.2	-342.2	809.9	672.0	137.93	5.872	
20,500.0	11,779.0	20,466.3	11,776.9	71.4	68.3	-89.85	8,518.2	-343.6	809.8	670.4	139.39	5.809	
20,600.0	11,779.0	20,566.3	11,776.9	72.1	69.0	-89.85	8,618.2	-344.9	809.7	668.8	140.86	5.748	
20,700.0	11,779.0	20,666.3	11,776.9	72.8	69.8	-89.85	8,718.2	-346.3	809.5	667.2	142.32	5.688	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
20,800.0	11,779.0	20,766.3	11,776.9	73.5	70.5	-89.85	8,818.2	-347.7	809.4	665.6	143.79	5.629	
20,900.0	11,779.0	20,866.3	11,776.9	74.2	71.3	-89.85	8,918.2	-349.0	809.2	664.0	145.26	5.571	
21,000.0	11,779.0	20,966.3	11,776.9	75.0	72.0	-89.85	9,018.2	-350.4	809.1	662.4	146.73	5.514	
21,100.0	11,779.0	21,066.3	11,776.9	75.7	72.8	-89.85	9,118.2	-351.8	809.0	660.8	148.20	5.459	
21,200.0	11,779.0	21,166.3	11,776.9	76.4	73.5	-89.85	9,218.2	-353.1	808.8	659.2	149.67	5.404	
21,300.0	11,779.0	21,266.3	11,776.9	77.1	74.3	-89.85	9,318.1	-354.5	808.7	657.6	151.14	5.351	
21,400.0	11,779.0	21,366.3	11,776.9	77.8	75.0	-89.85	9,418.1	-355.9	808.6	655.9	152.62	5.298	
21,500.0	11,779.0	21,466.3	11,776.9	78.6	75.8	-89.85	9,518.1	-357.2	808.4	654.3	154.09	5.246	
21,600.0	11,779.0	21,566.3	11,776.9	79.3	76.5	-89.85	9,618.1	-358.6	808.3	652.7	155.57	5.196	
21,700.0	11,779.0	21,666.3	11,776.9	80.0	77.3	-89.85	9,718.1	-360.0	808.2	651.1	157.04	5.146	
21,800.0	11,779.0	21,766.3	11,776.9	80.7	78.0	-89.85	9,818.1	-361.3	808.0	649.5	158.52	5.097	
21,900.0	11,779.0	21,866.3	11,776.9	81.4	78.8	-89.85	9,918.1	-362.7	807.9	647.9	160.00	5.049	
22,000.0	11,779.0	21,966.3	11,776.9	82.2	79.5	-89.85	10,018.1	-364.1	807.7	646.3	161.48	5.002	
22,100.0	11,779.0	22,066.3	11,776.9	82.9	80.3	-89.85	10,118.1	-365.5	807.6	644.6	162.96	4.956	
22,200.0	11,779.0	22,166.3	11,776.9	83.6	81.0	-89.85	10,218.1	-366.8	807.5	643.0	164.44	4.910	
22,300.0	11,779.0	22,266.3	11,776.9	84.4	81.8	-89.85	10,318.0	-368.2	807.3	641.4	165.93	4.866	
22,400.0	11,779.0	22,366.3	11,776.9	85.1	82.5	-89.85	10,418.0	-369.6	807.2	639.8	167.41	4.822	
22,500.0	11,779.0	22,466.3	11,776.9	85.8	83.3	-89.85	10,518.0	-370.9	807.1	638.2	168.89	4.779	
22,600.0	11,779.0	22,566.3	11,776.9	86.5	84.0	-89.85	10,618.0	-372.3	806.9	636.6	170.38	4.736	
22,700.0	11,779.0	22,666.3	11,776.9	87.3	84.8	-89.85	10,718.0	-373.7	806.8	634.9	171.86	4.694	
22,800.0	11,779.0	22,766.3	11,776.9	88.0	85.5	-89.85	10,818.0	-375.0	806.7	633.3	173.35	4.653	
22,900.0	11,779.0	22,866.3	11,776.9	88.7	86.3	-89.85	10,918.0	-376.4	806.5	631.7	174.84	4.613	
23,000.0	11,779.0	22,966.3	11,776.9	89.5	87.0	-89.85	11,018.0	-377.8	806.4	630.1	176.32	4.573	
23,100.0	11,779.0	23,066.3	11,776.9	90.2	87.8	-89.85	11,118.0	-379.1	806.3	628.4	177.81	4.534	
23,200.0	11,779.0	23,166.3	11,776.9	90.9	88.5	-89.85	11,218.0	-380.5	806.1	626.8	179.30	4.496	
23,300.0	11,779.0	23,266.3	11,776.9	91.7	89.3	-89.85	11,318.0	-381.9	806.0	625.2	180.79	4.458	
23,400.0	11,779.0	23,366.3	11,776.9	92.4	90.1	-89.85	11,417.9	-383.2	805.8	623.6	182.28	4.421	
23,500.0	11,779.0	23,466.3	11,776.9	93.1	90.8	-89.85	11,517.9	-384.6	805.7	621.9	183.77	4.384	
23,600.0	11,779.0	23,566.3	11,776.9	93.9	91.6	-89.85	11,617.9	-386.0	805.6	620.3	185.26	4.348	
23,700.0	11,779.0	23,666.3	11,776.9	94.6	92.3	-89.85	11,717.9	-387.3	805.4	618.7	186.76	4.313	
23,800.0	11,779.0	23,766.3	11,776.9	95.3	93.1	-89.85	11,817.9	-388.7	805.3	617.0	188.25	4.278	
23,900.0	11,779.0	23,866.3	11,776.9	96.1	93.8	-89.85	11,917.9	-390.1	805.2	615.4	189.74	4.243	
24,000.0	11,779.0	23,966.3	11,776.9	96.8	94.6	-89.85	12,017.9	-391.4	805.0	613.8	191.24	4.210	
24,100.0	11,779.0	24,066.3	11,776.9	97.5	95.3	-89.85	12,117.9	-392.8	804.9	612.2	192.73	4.176	
24,200.0	11,779.0	24,166.3	11,776.9	98.3	96.1	-89.85	12,217.9	-394.2	804.8	610.5	194.23	4.143	
24,300.0	11,779.0	24,266.3	11,776.9	99.0	96.8	-89.85	12,317.9	-395.6	804.6	608.9	195.72	4.111	
24,400.0	11,779.0	24,366.3	11,776.9	99.8	97.6	-89.85	12,417.9	-396.9	804.5	607.3	197.22	4.079	
24,500.0	11,779.0	24,466.3	11,776.9	100.5	98.4	-89.85	12,517.8	-398.3	804.3	605.6	198.71	4.048	
24,600.0	11,779.0	24,566.3	11,776.9	101.2	99.1	-89.85	12,617.8	-399.7	804.2	604.0	200.21	4.017	
24,700.0	11,779.0	24,666.3	11,776.9	102.0	99.9	-89.85	12,717.8	-401.0	804.1	602.4	201.71	3.986	
24,774.6	11,779.0	24,740.9	11,776.9	102.5	100.4	-89.85	12,792.4	-402.0	804.0	601.1	202.82	3.964 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11080-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)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.5	3.0	3.0	-90.90	-0.5	-29.8	29.8				
100.0	100.0	99.5	100.0	3.0	3.0	-90.90	-0.5	-29.8	29.8	23.7	6.05	4.919	
200.0	200.0	199.5	200.0	3.2	3.2	-90.90	-0.5	-29.8	29.8	23.5	6.30	4.728	
300.0	300.0	299.5	300.0	3.3	3.3	-90.90	-0.5	-29.8	29.8	23.2	6.53	4.557	
400.0	400.0	399.5	400.0	3.4	3.4	-90.90	-0.5	-29.8	29.8	23.0	6.76	4.403	
500.0	500.0	499.5	500.0	3.5	3.5	-90.90	-0.5	-29.8	29.8	22.8	6.98	4.264	
600.0	600.0	599.5	600.0	3.6	3.6	-90.90	-0.5	-29.8	29.8	22.6	7.19	4.138	
700.0	700.0	699.5	700.0	3.8	3.8	-90.90	-0.5	-29.8	29.8	22.4	7.40	4.022	
800.0	800.0	799.5	800.0	3.9	3.9	-90.90	-0.5	-29.8	29.8	22.2	7.60	3.915	
900.0	900.0	899.5	900.0	4.0	4.0	-90.90	-0.5	-29.8	29.8	22.0	7.80	3.817	
1,000.0	1,000.0	999.5	1,000.0	4.1	4.2	-90.90	-0.5	-29.8	29.8	21.7	8.09	3.679 CC, ES	
1,100.0	1,100.0	1,100.0	1,100.5	4.3	4.5	145.03	-2.0	-28.9	30.4	21.9	8.46	3.592	
1,200.0	1,199.8	1,200.4	1,200.8	4.6	4.8	142.04	-6.6	-26.4	32.3	23.4	8.90	3.635	
1,300.0	1,299.5	1,300.8	1,300.7	4.9	5.1	137.78	-14.3	-22.1	35.8	26.4	9.31	3.841	
1,400.0	1,398.7	1,401.0	1,400.2	5.2	5.4	133.03	-25.0	-16.2	40.8	31.1	9.69	4.207	
1,500.0	1,497.7	1,500.8	1,499.0	5.5	5.6	129.01	-37.1	-9.4	46.8	36.8	10.02	4.668	
1,600.0	1,596.8	1,600.5	1,597.8	5.7	5.9	125.92	-49.3	-2.7	52.9	42.6	10.36	5.112	
1,700.0	1,695.8	1,700.3	1,696.6	6.0	6.2	123.47	-61.4	4.0	59.2	48.5	10.70	5.536	
1,800.0	1,794.8	1,800.1	1,795.4	6.3	6.5	121.50	-73.6	10.8	65.6	54.6	11.05	5.940	
1,900.0	1,893.8	1,899.9	1,894.2	6.7	6.8	119.88	-85.7	17.5	72.1	60.7	11.40	6.324	
2,000.0	1,992.9	1,999.6	1,993.0	7.0	7.1	118.53	-97.8	24.2	78.6	66.8	11.75	6.688	
2,100.0	2,091.9	2,099.4	2,091.8	7.4	7.5	117.38	-110.0	30.9	85.1	73.0	12.10	7.033	
2,200.0	2,190.9	2,199.2	2,190.6	7.7	7.8	116.40	-122.1	37.7	91.6	79.2	12.45	7.361	
2,300.0	2,289.9	2,299.0	2,289.4	8.1	8.2	115.55	-134.3	44.4	98.2	85.4	12.80	7.671	
2,400.0	2,389.0	2,398.7	2,388.2	8.4	8.5	114.80	-146.4	51.1	104.8	91.7	13.16	7.966	
2,500.0	2,488.0	2,498.5	2,487.0	8.8	8.9	114.15	-158.6	57.9	111.4	97.9	13.51	8.246	
2,600.0	2,587.0	2,598.3	2,585.8	9.2	9.3	113.56	-170.7	64.6	118.1	104.2	13.87	8.512	
2,700.0	2,686.1	2,698.1	2,684.6	9.6	9.7	113.04	-182.9	71.3	124.7	110.5	14.23	8.765	
2,800.0	2,785.1	2,797.8	2,783.4	10.0	10.0	112.57	-195.0	78.1	131.4	116.8	14.59	9.006	
2,900.0	2,884.1	2,897.6	2,882.2	10.4	10.4	112.15	-207.1	84.8	138.0	123.1	14.94	9.235	
3,000.0	2,983.1	2,997.4	2,981.0	10.8	10.8	111.77	-219.3	91.5	144.7	129.4	15.30	9.454	
3,100.0	3,082.2	3,097.1	3,079.8	11.2	11.2	111.42	-231.4	98.3	151.3	135.7	15.66	9.662	
3,200.0	3,181.2	3,196.9	3,178.6	11.6	11.6	111.10	-243.6	105.0	158.0	142.0	16.02	9.862	
3,300.0	3,280.2	3,296.7	3,277.4	12.0	12.0	110.80	-255.7	111.7	164.7	148.3	16.38	10.052	
3,400.0	3,379.2	3,396.5	3,376.2	12.4	12.4	110.53	-267.9	118.5	171.4	154.6	16.75	10.234	
3,500.0	3,478.3	3,496.2	3,475.0	12.8	12.8	110.28	-280.0	125.2	178.1	161.0	17.11	10.408	
3,600.0	3,577.3	3,596.0	3,573.8	13.2	13.2	110.05	-292.2	131.9	184.8	167.3	17.47	10.575	
3,700.0	3,676.3	3,695.8	3,672.6	13.6	13.6	109.83	-304.3	138.7	191.4	173.6	17.83	10.735	
3,800.0	3,775.3	3,795.6	3,771.4	14.0	14.0	109.63	-316.5	145.4	198.1	179.9	18.20	10.889	
3,900.0	3,874.4	3,895.3	3,870.3	14.4	14.4	109.44	-328.6	152.1	204.8	186.3	18.56	11.036	
4,000.0	3,973.4	3,995.1	3,969.1	14.8	14.9	109.26	-340.7	158.9	211.5	192.6	18.93	11.178	
4,100.0	4,072.4	4,095.3	4,068.3	15.2	15.3	109.20	-352.6	165.4	218.2	198.9	19.26	11.329	
4,200.0	4,171.5	4,195.6	4,167.9	15.7	15.7	109.57	-363.0	171.2	224.6	204.9	19.64	11.435	
4,300.0	4,270.5	4,295.9	4,267.7	16.1	16.0	110.34	-371.9	176.1	230.8	210.7	20.04	11.515	
4,400.0	4,369.5	4,396.1	4,367.6	16.5	16.4	111.50	-379.2	180.2	236.8	216.3	20.46	11.570	
4,500.0	4,468.5	4,496.1	4,467.4	16.9	16.8	113.01	-385.0	183.4	242.7	221.8	20.93	11.598	
4,600.0	4,567.6	4,595.9	4,567.0	17.3	17.1	114.84	-389.3	185.8	248.8	227.3	21.44	11.600	
4,700.0	4,666.6	4,695.5	4,666.5	17.8	17.4	116.97	-392.1	187.3	255.0	233.0	22.03	11.574	
4,800.0	4,765.6	4,794.6	4,765.7	18.2	17.7	119.36	-393.3	188.0	261.6	238.9	22.70	11.523	
4,900.0	4,864.6	4,893.6	4,864.6	18.6	17.7	121.91	-393.4	188.0	268.7	245.3	23.39	11.490	
5,000.0	4,963.7	4,992.6	4,963.7	19.0	17.7	124.34	-393.4	188.0	276.4	252.3	24.14	11.448	
5,100.0	5,062.7	5,091.7	5,062.7	19.4	17.8	126.64	-393.4	188.0	284.5	259.6	24.93	11.413	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11080-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)	Minimum Separation (usft)	Separation Factor	Warning
5,200.0	5,161.7	5,190.7	5,161.7	19.9	17.8	128.81	-393.4	188.0	293.1	267.4	25.74	11.388	
5,300.0	5,260.7	5,289.7	5,260.7	20.3	17.8	130.86	-393.4	188.0	302.1	275.5	26.55	11.375	
5,400.0	5,359.8	5,388.7	5,359.8	20.7	17.9	132.79	-393.4	188.0	311.4	284.0	27.38	11.375	
5,500.0	5,458.8	5,487.8	5,458.8	21.1	17.9	134.60	-393.4	188.0	321.1	292.9	28.20	11.387	
5,600.0	5,557.8	5,586.8	5,557.8	21.5	17.9	136.31	-393.4	188.0	330.9	301.9	28.98	11.418	
5,700.0	5,657.0	5,686.0	5,657.0	22.0	18.0	137.84	-393.4	188.0	340.5	310.7	29.75	11.442	
5,800.0	5,756.3	5,785.2	5,756.3	22.4	18.0	139.20	-393.4	188.0	349.6	319.1	30.49	11.466	
5,900.0	5,855.6	5,884.6	5,855.6	22.8	18.0	140.40	-393.4	188.0	358.2	327.0	31.18	11.487	
6,000.0	5,955.1	5,984.0	5,955.1	23.2	18.0	141.46	-393.4	188.0	366.3	334.4	31.84	11.503	
6,100.0	6,054.6	6,083.6	6,054.6	23.6	18.1	142.39	-393.4	188.0	373.8	341.3	32.46	11.513	
6,200.0	6,154.3	6,183.2	6,154.3	24.0	18.1	143.20	-393.4	188.0	380.7	347.6	33.05	11.517	
6,300.0	6,254.0	6,282.9	6,254.0	24.3	18.2	143.91	-393.4	188.0	386.9	353.3	33.61	11.513	
6,400.0	6,353.7	6,382.7	6,353.7	24.7	18.2	144.52	-393.4	188.0	392.5	358.4	34.13	11.501	
6,500.0	6,453.5	6,482.5	6,453.5	25.1	18.2	145.04	-393.4	188.0	397.5	362.8	34.62	11.480	
6,600.0	6,553.4	6,582.4	6,553.4	25.4	18.3	145.47	-393.4	188.0	401.7	366.6	35.08	11.451	
6,700.0	6,653.3	6,682.3	6,653.3	25.7	18.3	145.83	-393.4	188.0	405.2	369.7	35.51	11.413	
6,800.0	6,753.3	6,782.2	6,753.3	26.0	18.3	146.10	-393.4	188.0	408.1	372.2	35.90	11.367	
6,900.0	6,853.2	6,882.2	6,853.2	26.3	18.4	146.31	-393.4	188.0	410.2	373.9	36.26	11.314	
7,000.0	6,953.2	6,982.2	6,953.2	26.6	18.4	146.44	-393.4	188.0	411.6	375.0	36.57	11.254	
7,100.0	7,053.2	7,082.2	7,053.2	26.8	18.4	146.50	-393.4	188.0	412.2	375.4	36.83	11.193	
7,200.0	7,153.2	7,182.2	7,153.2	26.9	18.5	-90.49	-393.4	188.0	412.3	375.4	36.92	11.169	
7,300.0	7,253.2	7,282.2	7,253.2	26.9	18.5	-90.49	-393.4	188.0	412.3	375.3	36.99	11.148	
7,400.0	7,353.2	7,382.2	7,353.2	26.9	18.5	-90.49	-393.4	188.0	412.3	375.2	37.06	11.127	
7,500.0	7,453.2	7,482.2	7,453.2	26.9	18.6	-90.49	-393.4	188.0	412.3	375.2	37.13	11.105	
7,600.0	7,553.2	7,582.2	7,553.2	27.0	18.6	-90.49	-393.4	188.0	412.3	375.1	37.20	11.084	
7,700.0	7,653.2	7,682.2	7,653.2	27.0	18.7	-90.49	-393.4	188.0	412.3	375.0	37.27	11.063	
7,800.0	7,753.2	7,782.2	7,753.2	27.0	18.7	-90.49	-393.4	188.0	412.3	375.0	37.34	11.041	
7,900.0	7,853.2	7,882.2	7,853.2	27.0	18.7	-90.49	-393.4	188.0	412.3	374.9	37.42	11.019	
8,000.0	7,953.2	7,982.2	7,953.2	27.0	18.8	-90.49	-393.4	188.0	412.3	374.8	37.49	10.998	
8,100.0	8,053.2	8,082.2	8,053.2	27.1	18.8	-90.49	-393.4	188.0	412.3	374.7	37.56	10.976	
8,200.0	8,153.2	8,182.2	8,153.2	27.1	18.9	-90.49	-393.4	188.0	412.3	374.7	37.64	10.954	
8,300.0	8,253.2	8,282.2	8,253.2	27.1	18.9	-90.49	-393.4	188.0	412.3	374.6	37.71	10.932	
8,400.0	8,353.2	8,382.2	8,353.2	27.1	18.9	-90.49	-393.4	188.0	412.3	374.5	37.79	10.910	
8,500.0	8,453.2	8,482.2	8,453.2	27.1	19.0	-90.49	-393.4	188.0	412.3	374.4	37.87	10.888	
8,600.0	8,553.2	8,582.2	8,553.2	27.2	19.0	-90.49	-393.4	188.0	412.3	374.4	37.94	10.866	
8,700.0	8,653.2	8,682.2	8,653.2	27.2	19.1	-90.49	-393.4	188.0	412.3	374.3	38.02	10.844	
8,800.0	8,753.2	8,782.2	8,753.2	27.2	19.1	-90.49	-393.4	188.0	412.3	374.2	38.10	10.822	
8,900.0	8,853.2	8,882.2	8,853.2	27.2	19.1	-90.49	-393.4	188.0	412.3	374.1	38.18	10.799	
9,000.0	8,953.2	8,982.2	8,953.2	27.3	19.2	-90.49	-393.4	188.0	412.3	374.0	38.26	10.777	
9,100.0	9,053.2	9,082.2	9,053.2	27.3	19.2	-90.49	-393.4	188.0	412.3	374.0	38.34	10.755	
9,200.0	9,153.2	9,182.2	9,153.2	27.3	19.3	-90.49	-393.4	188.0	412.3	373.9	38.42	10.732	
9,300.0	9,253.2	9,282.2	9,253.2	27.3	19.3	-90.49	-393.4	188.0	412.3	373.8	38.50	10.710	
9,400.0	9,353.2	9,382.2	9,353.2	27.4	19.3	-90.49	-393.4	188.0	412.3	373.7	38.58	10.687	
9,500.0	9,453.2	9,482.2	9,453.2	27.4	19.4	-90.49	-393.4	188.0	412.3	373.6	38.66	10.665	
9,600.0	9,553.2	9,582.2	9,553.2	27.4	19.4	-90.49	-393.4	188.0	412.3	373.6	38.74	10.642	
9,700.0	9,653.2	9,682.2	9,653.2	27.4	19.5	-90.49	-393.4	188.0	412.3	373.5	38.83	10.619	
9,800.0	9,753.2	9,782.2	9,753.2	27.4	19.5	-90.49	-393.4	188.0	412.3	373.4	38.91	10.597	
9,900.0	9,853.2	9,882.2	9,853.2	27.5	19.6	-90.49	-393.4	188.0	412.3	373.3	38.99	10.574	
10,000.0	9,953.2	9,982.2	9,953.2	27.5	19.6	-90.49	-393.4	188.0	412.3	373.2	39.08	10.551	
10,100.0	10,053.2	10,082.2	10,053.2	27.5	19.7	-90.49	-393.4	188.0	412.3	373.1	39.16	10.528	
10,200.0	10,153.2	10,182.2	10,153.2	27.6	19.7	-90.49	-393.4	188.0	412.3	373.1	39.25	10.506	
10,300.0	10,253.2	10,282.2	10,253.2	27.6	19.7	-90.49	-393.4	188.0	412.3	373.0	39.33	10.483	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11080-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,400.0	10,353.2	10,382.2	10,353.2	27.6	19.8	-90.49	-393.4	188.0	412.3	372.9	39.42	10.460	
10,500.0	10,453.2	10,482.2	10,453.2	27.6	19.8	-90.49	-393.4	188.0	412.3	372.8	39.50	10.437	
10,600.0	10,553.2	10,582.2	10,553.2	27.7	19.9	-90.49	-393.4	188.0	412.3	372.7	39.59	10.414	
10,700.0	10,653.2	10,682.2	10,653.2	27.7	19.9	-90.49	-393.4	188.0	412.3	372.6	39.68	10.391	
10,800.0	10,753.2	10,782.2	10,753.2	27.7	20.0	-90.49	-393.4	188.0	412.3	372.5	39.77	10.368	
10,900.0	10,853.2	10,882.2	10,853.2	27.7	20.0	-90.49	-393.4	188.0	412.3	372.5	39.85	10.345	
11,000.0	10,953.2	10,982.2	10,953.2	27.8	20.1	-90.49	-393.4	188.0	412.3	372.4	39.94	10.322	
11,007.4	10,960.6	10,989.6	10,960.6	27.8	20.1	-90.49	-393.4	188.0	412.3	372.4	39.95	10.321	
11,100.0	11,053.2	11,082.1	11,053.1	27.8	20.1	-90.42	-392.9	188.0	412.3	372.3	40.03	10.301	
11,200.0	11,153.2	11,179.8	11,149.9	27.8	20.2	-88.71	-380.6	187.8	412.6	372.1	40.51	10.184	
11,300.0	11,253.1	11,271.5	11,237.7	27.8	20.3	-84.31	-354.2	187.5	414.5	373.1	41.34	10.027	
11,400.0	11,351.6	11,359.1	11,316.5	27.9	20.4	-80.65	-316.3	186.9	418.2	376.2	41.95	9.968	
11,500.0	11,445.6	11,443.6	11,386.3	27.9	20.5	-77.32	-268.7	186.3	423.1	380.8	42.31	10.001	
11,600.0	11,532.3	11,525.8	11,446.7	28.0	20.6	-74.37	-213.1	185.5	428.7	386.2	42.45	10.099	
11,700.0	11,609.2	11,606.1	11,497.5	28.0	20.7	-71.88	-151.0	184.6	434.3	391.8	42.44	10.233	
11,800.0	11,673.7	11,684.9	11,538.4	28.1	20.8	-69.86	-83.7	183.6	439.4	397.1	42.31	10.385	
11,900.0	11,724.1	11,762.7	11,569.3	28.1	20.8	-68.35	-12.4	182.6	443.6	401.5	42.09	10.540	
12,000.0	11,758.7	11,839.7	11,590.2	28.2	20.9	-67.34	61.6	181.5	446.5	404.7	41.78	10.688	
12,100.0	11,776.5	11,916.3	11,600.9	28.3	20.9	-66.85	137.4	180.5	448.0	406.6	41.38	10.824	
12,200.0	11,779.0	12,003.3	11,602.5	28.3	21.0	-66.80	224.4	179.2	448.0	406.8	41.24	10.865	
12,300.0	11,779.0	12,103.3	11,602.5	28.4	21.0	-66.80	324.4	177.8	448.0	406.4	41.53	10.785	
12,400.0	11,779.0	12,203.3	11,602.5	28.5	21.1	-66.79	424.3	176.4	447.9	406.0	41.89	10.693	
12,500.0	11,779.0	12,303.3	11,602.5	28.7	21.2	-66.79	524.3	174.9	447.8	405.5	42.29	10.588	
12,600.0	11,779.0	12,403.3	11,602.5	28.8	21.2	-66.78	624.3	173.5	447.8	405.0	42.75	10.473	
12,700.0	11,779.0	12,503.3	11,602.5	29.0	21.3	-66.78	724.3	172.1	447.7	404.4	43.26	10.348	
12,800.0	11,779.0	12,603.3	11,602.5	29.1	21.4	-66.78	824.3	170.7	447.6	403.8	43.82	10.215	
12,900.0	11,779.0	12,703.3	11,602.5	29.3	21.5	-66.77	924.3	169.2	447.5	403.1	44.42	10.074	
13,000.0	11,779.0	12,803.3	11,602.5	29.5	21.7	-66.77	1,024.3	167.8	447.5	402.4	45.07	9.928	
13,100.0	11,779.0	12,903.3	11,602.5	29.7	21.8	-66.76	1,124.3	166.4	447.4	401.6	45.76	9.776	
13,200.0	11,779.0	13,003.3	11,602.5	30.0	22.0	-66.76	1,224.3	165.0	447.3	400.8	46.49	9.621	
13,300.0	11,779.0	13,103.3	11,602.5	30.2	22.2	-66.76	1,324.3	163.5	447.2	400.0	47.26	9.463	
13,400.0	11,779.0	13,203.3	11,602.5	30.5	22.4	-66.75	1,424.2	162.1	447.2	399.1	48.07	9.302	
13,500.0	11,779.0	13,303.3	11,602.5	30.7	22.6	-66.75	1,524.2	160.7	447.1	398.2	48.91	9.141	
13,600.0	11,779.0	13,403.3	11,602.5	31.0	22.9	-66.74	1,624.2	159.3	447.0	397.2	49.79	8.979	
13,700.0	11,779.0	13,503.3	11,602.5	31.3	23.2	-66.74	1,724.2	157.8	447.0	396.3	50.69	8.817	
13,800.0	11,779.0	13,603.3	11,602.5	31.6	23.5	-66.74	1,824.2	156.4	446.9	395.3	51.63	8.656	
13,900.0	11,779.0	13,703.3	11,602.5	32.0	23.9	-66.73	1,924.2	155.0	446.8	394.2	52.59	8.496	
14,000.0	11,779.0	13,803.3	11,602.5	32.3	24.3	-66.73	2,024.2	153.6	446.7	393.2	53.58	8.338	
14,100.0	11,779.0	13,903.3	11,602.5	32.7	24.7	-66.73	2,124.2	152.1	446.7	392.1	54.59	8.182	
14,200.0	11,779.0	14,003.3	11,602.5	33.0	25.1	-66.72	2,224.2	150.7	446.6	391.0	55.63	8.028	
14,300.0	11,779.0	14,103.3	11,602.5	33.4	25.6	-66.72	2,324.2	149.3	446.5	389.8	56.69	7.877	
14,400.0	11,779.0	14,203.3	11,602.5	33.8	26.1	-66.71	2,424.1	147.9	446.5	388.7	57.77	7.728	
14,500.0	11,779.0	14,303.3	11,602.5	34.2	26.6	-66.71	2,524.1	146.4	446.4	387.5	58.87	7.582	
14,600.0	11,779.0	14,403.3	11,602.5	34.7	27.2	-66.71	2,624.1	145.0	446.3	386.3	59.99	7.440	
14,700.0	11,779.0	14,503.3	11,602.5	35.1	27.7	-66.70	2,724.1	143.6	446.2	385.1	61.13	7.300	
14,800.0	11,779.0	14,603.3	11,602.5	35.5	28.3	-66.70	2,824.1	142.2	446.2	383.9	62.28	7.164	
14,900.0	11,779.0	14,703.3	11,602.5	36.0	28.9	-66.69	2,924.1	140.7	446.1	382.6	63.45	7.031	
15,000.0	11,779.0	14,803.3	11,602.5	36.5	29.5	-66.69	3,024.1	139.3	446.0	381.4	64.63	6.901	
15,100.0	11,779.0	14,903.3	11,602.5	37.0	30.1	-66.69	3,124.1	137.9	446.0	380.1	65.83	6.774	
15,200.0	11,779.0	15,003.3	11,602.5	37.4	30.7	-66.68	3,224.1	136.4	445.9	378.8	67.05	6.650	
15,300.0	11,779.0	15,103.3	11,602.5	37.9	31.4	-66.68	3,324.1	135.0	445.8	377.5	68.27	6.530	
15,400.0	11,779.0	15,203.3	11,602.5	38.5	32.0	-66.67	3,424.0	133.6	445.7	376.2	69.51	6.413	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11080-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,500.0	11,779.0	15,303.3	11,602.5	39.0	32.7	-66.67	3,524.0	132.2	445.7	374.9	70.76	6.299	
15,600.0	11,779.0	15,403.3	11,602.5	39.5	33.3	-66.67	3,624.0	130.7	445.6	373.6	72.01	6.188	
15,700.0	11,779.0	15,503.3	11,602.5	40.0	34.0	-66.66	3,724.0	129.3	445.5	372.2	73.28	6.079	
15,800.0	11,779.0	15,603.3	11,602.5	40.6	34.6	-66.66	3,824.0	127.9	445.5	370.9	74.56	5.974	
15,900.0	11,779.0	15,703.3	11,602.5	41.1	35.3	-66.65	3,924.0	126.5	445.4	369.5	75.85	5.872	
16,000.0	11,779.0	15,803.3	11,602.5	41.7	36.0	-66.65	4,024.0	125.0	445.3	368.2	77.15	5.772	
16,100.0	11,779.0	15,903.3	11,602.5	42.3	36.7	-66.65	4,124.0	123.6	445.2	366.8	78.45	5.675	
16,200.0	11,779.0	16,003.3	11,602.5	42.9	37.3	-66.64	4,224.0	122.2	445.2	365.4	79.77	5.581	
16,300.0	11,779.0	16,103.3	11,602.5	43.4	38.0	-66.64	4,323.9	120.8	445.1	364.0	81.09	5.489	
16,400.0	11,779.0	16,203.3	11,602.5	44.0	38.7	-66.63	4,423.9	119.3	445.0	362.6	82.42	5.399	
16,500.0	11,779.0	16,303.3	11,602.5	44.6	39.4	-66.63	4,523.9	117.9	444.9	361.2	83.75	5.313	
16,600.0	11,779.0	16,403.3	11,602.5	45.2	40.1	-66.63	4,623.9	116.5	444.9	359.8	85.10	5.228	
16,700.0	11,779.0	16,503.3	11,602.5	45.8	40.8	-66.62	4,723.9	115.1	444.8	358.4	86.45	5.145	
16,800.0	11,779.0	16,603.3	11,602.5	46.4	41.5	-66.62	4,823.9	113.6	444.7	356.9	87.80	5.065	
16,900.0	11,779.0	16,703.3	11,602.5	47.1	42.2	-66.61	4,923.9	112.2	444.7	355.5	89.16	4.987	
17,000.0	11,779.0	16,803.3	11,602.5	47.7	42.9	-66.61	5,023.9	110.8	444.6	354.1	90.53	4.911	
17,100.0	11,779.0	16,903.3	11,602.5	48.3	43.6	-66.61	5,123.9	109.4	444.5	352.6	91.90	4.837	
17,200.0	11,779.0	17,003.3	11,602.5	48.9	44.3	-66.60	5,223.9	107.9	444.4	351.2	93.27	4.765	
17,300.0	11,779.0	17,103.3	11,602.5	49.6	45.1	-66.60	5,323.8	106.5	444.4	349.7	94.65	4.695	
17,400.0	11,779.0	17,203.3	11,602.5	50.2	45.8	-66.59	5,423.8	105.1	444.3	348.3	96.04	4.626	
17,500.0	11,779.0	17,303.3	11,602.5	50.9	46.5	-66.59	5,523.8	103.7	444.2	346.8	97.43	4.560	
17,600.0	11,779.0	17,403.3	11,602.5	51.5	47.2	-66.59	5,623.8	102.2	444.2	345.3	98.82	4.494	
17,700.0	11,779.0	17,503.3	11,602.5	52.2	47.9	-66.58	5,723.8	100.8	444.1	343.9	100.22	4.431	
17,800.0	11,779.0	17,603.3	11,602.5	52.8	48.6	-66.58	5,823.8	99.4	444.0	342.4	101.62	4.369	
17,900.0	11,779.0	17,703.3	11,602.5	53.5	49.4	-66.57	5,923.8	98.0	443.9	340.9	103.03	4.309	
18,000.0	11,779.0	17,803.3	11,602.5	54.1	50.1	-66.57	6,023.8	96.5	443.9	339.4	104.44	4.250	
18,100.0	11,779.0	17,903.3	11,602.5	54.8	50.8	-66.57	6,123.8	95.1	443.8	337.9	105.85	4.193	
18,200.0	11,779.0	18,003.3	11,602.5	55.5	51.5	-66.56	6,223.8	93.7	443.7	336.5	107.27	4.137	
18,300.0	11,779.0	18,103.3	11,602.5	56.1	52.3	-66.56	6,323.7	92.2	443.7	335.0	108.69	4.082	
18,400.0	11,779.0	18,203.3	11,602.5	56.8	53.0	-66.55	6,423.7	90.8	443.6	333.5	110.11	4.029	
18,500.0	11,779.0	18,303.3	11,602.5	57.5	53.7	-66.55	6,523.7	89.4	443.5	332.0	111.53	3.976	
18,600.0	11,779.0	18,403.3	11,602.5	58.2	54.5	-66.55	6,623.7	88.0	443.4	330.5	112.96	3.926	
18,700.0	11,779.0	18,503.3	11,602.5	58.8	55.2	-66.54	6,723.7	86.5	443.4	329.0	114.39	3.876	
18,800.0	11,779.0	18,603.3	11,602.5	59.5	55.9	-66.54	6,823.7	85.1	443.3	327.5	115.83	3.827	
18,900.0	11,779.0	18,703.3	11,602.5	60.2	56.7	-66.53	6,923.7	83.7	443.2	326.0	117.26	3.780	
19,000.0	11,779.0	18,803.3	11,602.5	60.9	57.4	-66.53	7,023.7	82.3	443.1	324.4	118.70	3.733	
19,100.0	11,779.0	18,903.3	11,602.5	61.6	58.1	-66.52	7,123.7	80.8	443.1	322.9	120.14	3.688	
19,200.0	11,779.0	19,003.3	11,602.5	62.3	58.9	-66.52	7,223.7	79.4	443.0	321.4	121.58	3.644	
19,300.0	11,779.0	19,103.3	11,602.5	63.0	59.6	-66.52	7,323.6	78.0	442.9	319.9	123.03	3.600	
19,400.0	11,779.0	19,203.3	11,602.5	63.7	60.3	-66.51	7,423.6	76.6	442.9	318.4	124.48	3.558	
19,500.0	11,779.0	19,303.3	11,602.5	64.4	61.1	-66.51	7,523.6	75.1	442.8	316.9	125.93	3.516	
19,600.0	11,779.0	19,403.3	11,602.5	65.1	61.8	-66.50	7,623.6	73.7	442.7	315.3	127.38	3.476	
19,700.0	11,779.0	19,503.3	11,602.5	65.8	62.6	-66.50	7,723.6	72.3	442.6	313.8	128.83	3.436	
19,800.0	11,779.0	19,603.3	11,602.5	66.5	63.3	-66.50	7,823.6	70.9	442.6	312.3	130.28	3.397	
19,900.0	11,779.0	19,703.3	11,602.5	67.2	64.0	-66.49	7,923.6	69.4	442.5	310.8	131.74	3.359	
20,000.0	11,779.0	19,803.3	11,602.5	67.9	64.8	-66.49	8,023.6	68.0	442.4	309.2	133.20	3.322	
20,100.0	11,779.0	19,903.3	11,602.5	68.6	65.5	-66.48	8,123.6	66.6	442.4	307.7	134.66	3.285	
20,200.0	11,779.0	20,003.3	11,602.5	69.3	66.3	-66.48	8,223.6	65.2	442.3	306.2	136.12	3.249	
20,300.0	11,779.0	20,103.3	11,602.5	70.0	67.0	-66.48	8,323.5	63.7	442.2	304.6	137.59	3.214	
20,400.0	11,779.0	20,203.3	11,602.5	70.7	67.7	-66.47	8,423.5	62.3	442.1	303.1	139.05	3.180	
20,500.0	11,779.0	20,303.3	11,602.5	71.4	68.5	-66.47	8,523.5	60.9	442.1	301.6	140.52	3.146	
20,600.0	11,779.0	20,403.3	11,602.5	72.1	69.2	-66.46	8,623.5	59.5	442.0	300.0	141.98	3.113	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11080-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)	Minimum Separation (usft)	Separation Factor	Warning
20,700.0	11,779.0	20,503.3	11,602.5	72.8	70.0	-66.46	8,723.5	58.0	441.9	298.5	143.45	3.081	
20,800.0	11,779.0	20,603.3	11,602.5	73.5	70.7	-66.46	8,823.5	56.6	441.9	296.9	144.92	3.049	
20,900.0	11,779.0	20,703.3	11,602.5	74.2	71.5	-66.45	8,923.5	55.2	441.8	295.4	146.40	3.018	
21,000.0	11,779.0	20,803.3	11,602.5	75.0	72.2	-66.45	9,023.5	53.8	441.7	293.8	147.87	2.987	
21,100.0	11,779.0	20,903.3	11,602.5	75.7	73.0	-66.44	9,123.5	52.3	441.6	292.3	149.34	2.957	
21,200.0	11,779.0	21,003.3	11,602.5	76.4	73.7	-66.44	9,223.4	50.9	441.6	290.7	150.82	2.928	
21,300.0	11,779.0	21,103.3	11,602.5	77.1	74.5	-66.44	9,323.4	49.5	441.5	289.2	152.30	2.899	
21,400.0	11,779.0	21,203.3	11,602.5	77.8	75.2	-66.43	9,423.4	48.0	441.4	287.7	153.77	2.871	
21,500.0	11,779.0	21,303.3	11,602.5	78.6	75.9	-66.43	9,523.4	46.6	441.4	286.1	155.25	2.843	
21,600.0	11,779.0	21,403.3	11,602.5	79.3	76.7	-66.42	9,623.4	45.2	441.3	284.5	156.73	2.815	
21,700.0	11,779.0	21,503.3	11,602.5	80.0	77.4	-66.42	9,723.4	43.8	441.2	283.0	158.21	2.789	
21,800.0	11,779.0	21,603.3	11,602.5	80.7	78.2	-66.42	9,823.4	42.3	441.1	281.4	159.70	2.762	
21,900.0	11,779.0	21,703.3	11,602.5	81.4	78.9	-66.41	9,923.4	40.9	441.1	279.9	161.18	2.736	
22,000.0	11,779.0	21,803.3	11,602.5	82.2	79.7	-66.41	10,023.4	39.5	441.0	278.3	162.66	2.711	
22,100.0	11,779.0	21,903.3	11,602.5	82.9	80.4	-66.40	10,123.4	38.1	440.9	276.8	164.15	2.686	
22,200.0	11,779.0	22,003.3	11,602.5	83.6	81.2	-66.40	10,223.3	36.6	440.9	275.2	165.63	2.662	
22,300.0	11,779.0	22,103.3	11,602.5	84.4	81.9	-66.40	10,323.3	35.2	440.8	273.7	167.12	2.637	
22,400.0	11,779.0	22,203.3	11,602.5	85.1	82.7	-66.39	10,423.3	33.8	440.7	272.1	168.61	2.614	
22,500.0	11,779.0	22,303.3	11,602.5	85.8	83.4	-66.39	10,523.3	32.4	440.6	270.5	170.10	2.591	
22,600.0	11,779.0	22,403.3	11,602.5	86.5	84.2	-66.38	10,623.3	30.9	440.6	269.0	171.59	2.568	
22,700.0	11,779.0	22,503.3	11,602.5	87.3	84.9	-66.38	10,723.3	29.5	440.5	267.4	173.08	2.545	
22,800.0	11,779.0	22,603.3	11,602.5	88.0	85.7	-66.37	10,823.3	28.1	440.4	265.9	174.57	2.523	
22,900.0	11,779.0	22,703.3	11,602.5	88.7	86.4	-66.37	10,923.3	26.7	440.3	264.3	176.06	2.501	
23,000.0	11,779.0	22,803.3	11,602.5	89.5	87.2	-66.37	11,023.3	25.2	440.3	262.7	177.55	2.480	
23,100.0	11,779.0	22,903.3	11,602.5	90.2	88.0	-66.36	11,123.3	23.8	440.2	261.2	179.04	2.459	
23,200.0	11,779.0	23,003.3	11,602.5	90.9	88.7	-66.36	11,223.2	22.4	440.1	259.6	180.54	2.438	
23,300.0	11,779.0	23,103.3	11,602.5	91.7	89.5	-66.35	11,323.2	21.0	440.1	258.0	182.03	2.418	
23,400.0	11,779.0	23,203.3	11,602.5	92.4	90.2	-66.35	11,423.2	19.5	440.0	256.5	183.53	2.397	
23,500.0	11,779.0	23,303.3	11,602.5	93.1	91.0	-66.35	11,523.2	18.1	439.9	254.9	185.02	2.378	
23,600.0	11,779.0	23,403.3	11,602.5	93.9	91.7	-66.34	11,623.2	16.7	439.8	253.3	186.52	2.358	
23,700.0	11,779.0	23,503.3	11,602.5	94.6	92.5	-66.34	11,723.2	15.3	439.8	251.8	188.01	2.339	
23,800.0	11,779.0	23,603.3	11,602.5	95.3	93.2	-66.33	11,823.2	13.8	439.7	250.2	189.51	2.320	
23,900.0	11,779.0	23,703.3	11,602.5	96.1	94.0	-66.33	11,923.2	12.4	439.6	248.6	191.01	2.302	
24,000.0	11,779.0	23,803.3	11,602.5	96.8	94.7	-66.33	12,023.2	11.0	439.6	247.1	192.51	2.283	
24,100.0	11,779.0	23,903.3	11,602.5	97.5	95.5	-66.32	12,123.2	9.6	439.5	245.5	194.01	2.265	
24,200.0	11,779.0	24,003.3	11,602.5	98.3	96.2	-66.32	12,223.1	8.1	439.4	243.9	195.51	2.248	
24,300.0	11,779.0	24,103.3	11,602.5	99.0	97.0	-66.31	12,323.1	6.7	439.3	242.3	197.01	2.230	
24,400.0	11,779.0	24,203.3	11,602.5	99.8	97.7	-66.31	12,423.1	5.3	439.3	240.8	198.51	2.213	
24,500.0	11,779.0	24,303.3	11,602.5	100.5	98.5	-66.31	12,523.1	3.8	439.2	239.2	200.01	2.196	
24,600.0	11,779.0	24,403.3	11,602.5	101.2	99.3	-66.30	12,623.1	2.4	439.1	237.6	201.51	2.179	
24,700.0	11,779.0	24,503.3	11,602.5	102.0	100.0	-66.30	12,723.1	1.0	439.1	236.0	203.01	2.163	
24,774.6	11,779.0	24,577.9	11,602.5	102.5	100.6	-66.29	12,797.7	-0.1	439.0	234.9	204.13	2.151 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+MS, 11118-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)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.3	3.0	3.0	89.09	0.5	30.3	30.4				
100.0	100.0	99.7	100.0	3.0	3.0	89.09	0.5	30.3	30.4	24.3	6.05	5.016	
200.0	200.0	199.7	200.0	3.2	3.2	89.09	0.5	30.3	30.4	24.1	6.30	4.821	
300.0	300.0	299.7	300.0	3.3	3.3	89.09	0.5	30.3	30.4	23.8	6.53	4.647	
400.0	400.0	399.7	400.0	3.4	3.4	89.09	0.5	30.3	30.4	23.6	6.76	4.491	
500.0	500.0	499.7	500.0	3.5	3.5	89.09	0.5	30.3	30.4	23.4	6.98	4.349	
600.0	600.0	599.7	600.0	3.6	3.6	89.09	0.5	30.3	30.4	23.2	7.19	4.220	
700.0	700.0	699.7	700.0	3.8	3.8	89.09	0.5	30.3	30.4	23.0	7.40	4.102	
800.0	800.0	799.7	800.0	3.9	3.9	89.09	0.5	30.3	30.4	22.8	7.60	3.993	
900.0	900.0	899.7	900.0	4.0	4.0	89.09	0.5	30.3	30.4	22.6	7.80	3.892	
1,000.0	1,000.0	999.7	1,000.0	4.1	4.1	89.09	0.5	30.3	30.4	22.4	7.99	3.799 CC	
1,100.0	1,100.0	1,098.7	1,099.0	4.3	4.3	-34.52	-0.1	31.9	30.5	22.1	8.36	3.650	
1,200.0	1,199.8	1,197.7	1,197.9	4.6	4.5	-36.32	-2.0	36.7	31.0	22.1	8.88	3.487 ES	
1,300.0	1,299.5	1,296.8	1,296.5	4.9	4.8	-39.18	-5.0	44.7	31.9	22.5	9.40	3.389	
1,400.0	1,398.7	1,395.7	1,394.8	5.2	5.2	-42.91	-9.3	55.8	33.2	23.3	9.89	3.356	
1,500.0	1,497.7	1,494.7	1,492.5	5.5	5.5	-45.27	-14.8	70.1	36.3	26.0	10.35	3.511	
1,600.0	1,596.8	1,594.4	1,590.6	5.7	5.8	-45.43	-21.1	86.6	41.4	30.6	10.80	3.836	
1,700.0	1,695.8	1,694.2	1,688.9	6.0	6.1	-45.52	-27.5	103.2	46.5	35.2	11.31	4.116	
1,800.0	1,794.8	1,794.1	1,787.2	6.3	6.4	-45.60	-33.9	119.8	51.7	39.8	11.84	4.363	
1,900.0	1,893.8	1,894.0	1,885.4	6.7	6.7	-45.66	-40.2	136.4	56.8	44.4	12.39	4.582	
2,000.0	1,992.9	1,993.8	1,983.7	7.0	7.1	-45.71	-46.6	153.0	61.9	48.9	12.96	4.775	
2,100.0	2,091.9	2,093.7	2,082.0	7.4	7.4	-45.75	-53.0	169.6	67.0	53.5	13.55	4.948	
2,200.0	2,190.9	2,193.6	2,180.3	7.7	7.8	-45.78	-59.3	186.2	72.1	58.0	14.14	5.101	
2,300.0	2,289.9	2,293.4	2,278.5	8.1	8.2	-45.82	-65.7	202.8	77.3	62.5	14.75	5.237	
2,400.0	2,389.0	2,393.3	2,376.8	8.4	8.6	-45.84	-72.1	219.4	82.4	67.0	15.37	5.360	
2,500.0	2,488.0	2,493.2	2,475.1	8.8	9.0	-45.87	-78.4	235.9	87.5	71.5	16.00	5.470	
2,600.0	2,587.0	2,593.0	2,573.4	9.2	9.4	-45.89	-84.8	252.5	92.6	76.0	16.63	5.569	
2,700.0	2,686.1	2,692.9	2,671.6	9.6	9.8	-45.91	-91.2	269.1	97.7	80.5	17.27	5.658	
2,800.0	2,785.1	2,792.8	2,769.9	10.0	10.2	-45.93	-97.5	285.7	102.9	84.9	17.92	5.740	
2,900.0	2,884.1	2,892.6	2,868.2	10.4	10.6	-45.94	-103.9	302.3	108.0	89.4	18.58	5.813	
3,000.0	2,983.1	2,992.5	2,966.5	10.8	11.0	-45.96	-110.3	318.9	113.1	93.9	19.23	5.881	
3,100.0	3,082.2	3,092.4	3,064.7	11.2	11.4	-45.97	-116.7	335.5	118.2	98.3	19.90	5.942	
3,200.0	3,181.2	3,192.3	3,163.0	11.6	11.9	-45.98	-123.0	352.1	123.3	102.8	20.56	5.998	
3,300.0	3,280.2	3,292.1	3,261.3	12.0	12.3	-45.99	-129.4	368.7	128.5	107.2	21.23	6.050	
3,400.0	3,379.2	3,392.0	3,359.6	12.4	12.7	-46.00	-135.8	385.3	133.6	111.7	21.91	6.098	
3,500.0	3,478.3	3,491.9	3,457.8	12.8	13.2	-46.01	-142.1	401.9	138.7	116.1	22.58	6.142	
3,600.0	3,577.3	3,591.7	3,556.1	13.2	13.6	-46.02	-148.5	418.4	143.8	120.6	23.26	6.182	
3,700.0	3,676.3	3,691.6	3,654.4	13.6	14.0	-46.03	-154.9	435.0	149.0	125.0	23.95	6.220	
3,800.0	3,775.3	3,791.5	3,752.7	14.0	14.5	-46.04	-161.2	451.6	154.1	129.4	24.63	6.255	
3,900.0	3,874.4	3,891.3	3,850.9	14.4	14.9	-46.04	-167.6	468.2	159.2	133.9	25.32	6.288	
4,000.0	3,973.4	3,991.2	3,949.2	14.8	15.3	-46.05	-174.0	484.8	164.3	138.3	26.01	6.319	
4,100.0	4,072.4	4,091.1	4,047.5	15.2	15.8	-46.06	-180.3	501.4	169.4	142.7	26.70	6.347	
4,200.0	4,171.5	4,190.9	4,145.8	15.7	16.2	-46.06	-186.7	518.0	174.6	147.2	27.39	6.374	
4,300.0	4,270.5	4,290.8	4,244.0	16.1	16.7	-46.07	-193.1	534.6	179.7	151.6	28.08	6.399	
4,400.0	4,369.5	4,390.7	4,342.3	16.5	17.1	-46.07	-199.4	551.2	184.8	156.0	28.78	6.422	
4,500.0	4,468.5	4,490.5	4,440.6	16.9	17.5	-46.08	-205.8	567.8	189.9	160.5	29.47	6.444	
4,600.0	4,567.6	4,590.4	4,538.9	17.3	18.0	-46.08	-212.2	584.4	195.0	164.9	30.17	6.465	
4,700.0	4,666.6	4,690.3	4,637.1	17.8	18.4	-46.09	-218.5	600.9	200.2	169.3	30.87	6.485	
4,800.0	4,765.6	4,790.2	4,735.4	18.2	18.9	-46.09	-224.9	617.5	205.3	173.7	31.57	6.503	
4,900.0	4,864.6	4,890.0	4,833.7	18.6	19.3	-46.09	-231.3	634.1	210.4	178.1	32.27	6.521	
5,000.0	4,963.7	4,989.9	4,932.0	19.0	19.8	-46.10	-237.7	650.7	215.5	182.6	32.97	6.537	
5,100.0	5,062.7	5,089.8	5,030.2	19.4	20.2	-46.10	-244.0	667.3	220.6	187.0	33.67	6.553	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+MS, 11118-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		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)	Minimum Separation (usft)	Separation Factor	
5,200.0	5,161.7	5,189.6	5,128.5	19.9	20.7	-46.11	-250.4	683.9	225.8	191.4	34.37	6.568	
5,300.0	5,260.7	5,289.5	5,226.8	20.3	21.1	-46.11	-256.8	700.5	230.9	195.8	35.08	6.582	
5,400.0	5,359.8	5,389.4	5,325.1	20.7	21.6	-46.11	-263.1	717.1	236.0	200.2	35.78	6.596	
5,500.0	5,458.8	5,489.2	5,423.3	21.1	22.0	-46.11	-269.5	733.7	241.1	204.6	36.49	6.609	
5,600.0	5,557.8	5,589.1	5,521.6	21.5	22.5	-46.10	-275.9	750.3	246.4	209.2	37.18	6.627	
5,700.0	5,657.0	5,688.9	5,619.8	22.0	22.9	-45.97	-282.2	766.8	252.1	214.2	37.93	6.647	
5,800.0	5,756.3	5,788.7	5,718.0	22.4	23.4	-45.71	-288.6	783.4	258.5	219.8	38.72	6.676	
5,900.0	5,855.6	5,888.5	5,816.2	22.8	23.8	-45.33	-295.0	800.0	265.5	226.0	39.56	6.712	
6,000.0	5,955.1	5,988.1	5,914.3	23.2	24.3	-44.85	-301.3	816.5	273.2	232.7	40.43	6.756	
6,100.0	6,054.6	6,087.7	6,012.3	23.6	24.7	-44.27	-307.7	833.1	281.4	240.1	41.34	6.808	
6,200.0	6,154.3	6,188.6	6,111.6	24.0	25.1	-43.61	-314.0	849.7	290.2	248.0	42.26	6.867	
6,300.0	6,254.0	6,290.4	6,211.9	24.3	25.6	-42.95	-320.2	865.7	299.0	255.8	43.20	6.922	
6,400.0	6,353.7	6,392.3	6,312.5	24.7	26.0	-42.31	-326.0	880.8	307.7	263.6	44.12	6.974	
6,500.0	6,453.5	6,494.3	6,413.3	25.1	26.5	-41.68	-331.5	895.2	316.3	271.3	45.03	7.024	
6,600.0	6,553.4	6,596.3	6,514.4	25.4	26.9	-41.05	-336.7	908.7	324.8	278.9	45.92	7.073	
6,700.0	6,653.3	6,698.5	6,615.6	25.7	27.4	-40.43	-341.6	921.4	333.2	286.4	46.80	7.121	
6,800.0	6,753.3	6,800.7	6,717.0	26.0	27.8	-39.82	-346.1	933.2	341.6	294.0	47.65	7.169	
6,900.0	6,853.2	6,903.1	6,818.7	26.3	28.2	-39.22	-350.3	944.3	349.9	301.4	48.49	7.216	
7,000.0	6,953.2	7,005.5	6,920.5	26.6	28.6	-38.62	-354.2	954.4	358.1	308.8	49.29	7.265	
7,100.0	7,053.2	7,108.0	7,022.5	26.8	29.0	-38.02	-357.8	963.8	366.2	316.2	50.05	7.317	
7,200.0	7,153.2	7,210.6	7,124.7	26.9	29.4	85.58	-361.1	972.3	374.1	323.5	50.64	7.388	
7,300.0	7,253.2	7,313.3	7,227.2	26.9	29.8	86.11	-364.0	979.9	381.4	330.2	51.19	7.451	
7,400.0	7,353.2	7,416.2	7,329.8	26.9	30.2	86.56	-366.6	986.7	387.8	336.1	51.69	7.503	
7,500.0	7,453.2	7,519.2	7,432.6	26.9	30.6	86.95	-368.9	992.7	393.4	341.3	52.15	7.544	
7,600.0	7,553.2	7,622.3	7,535.6	27.0	30.9	87.26	-370.9	997.7	398.3	345.7	52.58	7.575	
7,700.0	7,653.2	7,725.6	7,638.7	27.0	31.3	87.52	-372.5	1,002.0	402.3	349.3	52.97	7.595	
7,800.0	7,753.2	7,828.8	7,741.9	27.0	31.6	87.73	-373.8	1,005.3	405.5	352.2	53.32	7.605	
7,900.0	7,853.2	7,932.2	7,845.2	27.0	31.9	87.88	-374.7	1,007.8	407.9	354.2	53.63	7.605	
8,000.0	7,953.2	8,035.5	7,948.6	27.0	32.2	87.97	-375.4	1,009.4	409.4	355.5	53.89	7.597	
8,100.0	8,053.2	8,138.9	8,052.0	27.1	32.4	88.01	-375.6	1,010.2	410.1	356.1	54.06	7.586	
8,200.0	8,153.2	8,240.2	8,153.2	27.1	32.4	88.02	-375.7	1,010.2	410.2	356.1	54.11	7.580	
8,300.0	8,253.2	8,340.2	8,253.2	27.1	32.4	88.02	-375.7	1,010.2	410.2	356.0	54.16	7.574	
8,400.0	8,353.2	8,440.2	8,353.2	27.1	32.5	88.02	-375.7	1,010.2	410.2	356.0	54.20	7.568	
8,500.0	8,453.2	8,540.2	8,453.2	27.1	32.5	88.02	-375.7	1,010.2	410.2	355.9	54.24	7.562	
8,600.0	8,553.2	8,640.2	8,553.2	27.2	32.5	88.02	-375.7	1,010.2	410.2	355.9	54.29	7.556	
8,700.0	8,653.2	8,740.2	8,653.2	27.2	32.5	88.02	-375.7	1,010.2	410.2	355.8	54.33	7.550	
8,800.0	8,753.2	8,840.2	8,753.2	27.2	32.5	88.02	-375.7	1,010.2	410.2	355.8	54.37	7.543	
8,900.0	8,853.2	8,940.2	8,853.2	27.2	32.6	88.02	-375.7	1,010.2	410.2	355.7	54.42	7.537	
9,000.0	8,953.2	9,040.2	8,953.2	27.3	32.6	88.02	-375.7	1,010.2	410.2	355.7	54.47	7.531	
9,100.0	9,053.2	9,140.2	9,053.2	27.3	32.6	88.02	-375.7	1,010.2	410.2	355.7	54.51	7.524	
9,200.0	9,153.2	9,240.2	9,153.2	27.3	32.6	88.02	-375.7	1,010.2	410.2	355.6	54.56	7.518	
9,300.0	9,253.2	9,340.2	9,253.2	27.3	32.6	88.02	-375.7	1,010.2	410.2	355.6	54.60	7.512	
9,400.0	9,353.2	9,440.2	9,353.2	27.4	32.7	88.02	-375.7	1,010.2	410.2	355.5	54.65	7.505	
9,500.0	9,453.2	9,540.2	9,453.2	27.4	32.7	88.02	-375.7	1,010.2	410.2	355.5	54.70	7.498	
9,600.0	9,553.2	9,640.2	9,553.2	27.4	32.7	88.02	-375.7	1,010.2	410.2	355.4	54.75	7.492	
9,700.0	9,653.2	9,740.2	9,653.2	27.4	32.7	88.02	-375.7	1,010.2	410.2	355.4	54.80	7.485	
9,800.0	9,753.2	9,840.2	9,753.2	27.4	32.7	88.02	-375.7	1,010.2	410.2	355.3	54.85	7.478	
9,900.0	9,853.2	9,940.2	9,853.2	27.5	32.8	88.02	-375.7	1,010.2	410.2	355.3	54.90	7.472	
10,000.0	9,953.2	10,040.2	9,953.2	27.5	32.8	88.02	-375.7	1,010.2	410.2	355.2	54.95	7.465	
10,100.0	10,053.2	10,140.2	10,053.2	27.5	32.8	88.02	-375.7	1,010.2	410.2	355.2	55.00	7.458	
10,200.0	10,153.2	10,240.2	10,153.2	27.6	32.8	88.02	-375.7	1,010.2	410.2	355.1	55.05	7.451	
10,300.0	10,253.2	10,340.2	10,253.2	27.6	32.8	88.02	-375.7	1,010.2	410.2	355.1	55.10	7.444	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+MS, 11118-r.5 MWD+IFR1+MS						Rule Assigned:				Offset Well Error:	3.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	10,353.2	10,440.2	10,353.2	27.6	32.9	88.02	-375.7	1,010.2	410.2	355.0	55.15	7.437		
10,500.0	10,453.2	10,540.2	10,453.2	27.6	32.9	88.02	-375.7	1,010.2	410.2	355.0	55.20	7.430		
10,600.0	10,553.2	10,640.2	10,553.2	27.7	32.9	88.02	-375.7	1,010.2	410.2	354.9	55.26	7.423		
10,700.0	10,653.2	10,740.2	10,653.2	27.7	32.9	88.02	-375.7	1,010.2	410.2	354.9	55.31	7.416		
10,800.0	10,753.2	10,840.2	10,753.2	27.7	33.0	88.02	-375.7	1,010.2	410.2	354.8	55.36	7.409		
10,900.0	10,853.2	10,940.2	10,853.2	27.7	33.0	88.02	-375.7	1,010.2	410.2	354.8	55.42	7.402		
11,000.0	10,953.2	11,040.2	10,953.2	27.8	33.0	88.02	-375.7	1,010.2	410.2	354.7	55.47	7.394		
11,007.7	10,960.9	11,047.8	10,960.9	27.8	33.0	88.02	-375.7	1,010.2	410.2	354.7	55.48	7.394		
11,100.0	11,053.2	11,139.9	11,052.9	27.8	33.0	87.96	-375.3	1,010.2	410.2	354.7	55.50	7.390		
11,200.0	11,153.2	11,237.0	11,149.2	27.8	33.0	86.31	-363.4	1,010.0	410.6	355.6	55.00	7.464		
11,300.0	11,253.1	11,328.3	11,236.7	27.8	33.0	83.69	-337.6	1,009.6	412.7	358.7	53.94	7.650		
11,400.0	11,351.6	11,415.5	11,315.4	27.9	33.1	80.08	-300.3	1,008.9	416.5	363.4	53.06	7.850		
11,500.0	11,445.6	11,500.0	11,385.4	27.9	33.1	76.81	-253.2	1,008.0	421.4	368.9	52.56	8.017		
11,600.0	11,532.3	11,581.9	11,446.0	28.0	33.1	73.94	-198.1	1,007.1	426.8	374.3	52.52	8.127		
11,700.0	11,609.2	11,662.1	11,497.1	28.0	33.1	71.53	-136.4	1,005.9	432.2	379.3	52.89	8.171		
11,800.0	11,673.7	11,741.0	11,538.4	28.1	33.2	69.60	-69.4	1,004.7	437.0	383.4	53.63	8.149		
11,900.0	11,724.1	11,818.8	11,569.9	28.1	33.2	68.17	1.7	1,003.5	440.8	386.2	54.62	8.070		
12,000.0	11,758.7	11,900.0	11,592.1	28.2	33.3	67.22	79.8	1,002.1	443.4	387.8	55.58	7.977		
12,100.0	11,776.5	11,972.6	11,602.4	28.3	33.3	66.84	151.6	1,000.8	444.3	387.3	57.00	7.796		
12,200.0	11,779.0	12,058.7	11,604.3	28.3	33.4	66.83	237.6	999.2	444.1	386.3	57.78	7.686		
12,300.0	11,779.0	12,158.7	11,604.3	28.4	33.5	66.82	337.6	997.4	443.8	385.8	57.99	7.654		
12,400.0	11,779.0	12,258.7	11,604.3	28.5	33.6	66.80	437.5	995.6	443.6	385.3	58.23	7.617		
12,500.0	11,779.0	12,358.7	11,604.3	28.7	33.7	66.79	537.5	993.8	443.3	384.8	58.52	7.575		
12,600.0	11,779.0	12,458.7	11,604.3	28.8	33.9	66.77	637.5	992.0	443.0	384.2	58.85	7.528		
12,700.0	11,779.0	12,558.7	11,604.3	29.0	34.0	66.76	737.5	990.2	442.7	383.5	59.22	7.477		
12,800.0	11,779.0	12,658.7	11,604.3	29.1	34.2	66.74	837.5	988.4	442.5	382.9	59.62	7.422		
12,900.0	11,779.0	12,758.7	11,604.3	29.3	34.4	66.73	937.5	986.6	442.2	382.1	60.06	7.363		
13,000.0	11,779.0	12,858.7	11,604.3	29.5	34.6	66.71	1,037.4	984.8	441.9	381.4	60.54	7.300		
13,100.0	11,779.0	12,958.7	11,604.3	29.7	34.8	66.70	1,137.4	983.0	441.7	380.6	61.05	7.235		
13,200.0	11,779.0	13,058.7	11,604.3	30.0	35.1	66.68	1,237.4	981.2	441.4	379.8	61.60	7.166		
13,300.0	11,779.0	13,158.7	11,604.3	30.2	35.3	66.67	1,337.4	979.4	441.1	379.0	62.18	7.095		
13,400.0	11,779.0	13,258.7	11,604.3	30.5	35.6	66.65	1,437.4	977.6	440.9	378.1	62.79	7.021		
13,500.0	11,779.0	13,358.7	11,604.3	30.7	35.8	66.64	1,537.4	975.8	440.6	377.2	63.43	6.946		
13,600.0	11,779.0	13,458.7	11,604.3	31.0	36.1	66.62	1,637.3	974.1	440.3	376.2	64.11	6.869		
13,700.0	11,779.0	13,558.7	11,604.3	31.3	36.4	66.61	1,737.3	972.3	440.1	375.2	64.81	6.790		
13,800.0	11,779.0	13,658.7	11,604.3	31.6	36.7	66.59	1,837.3	970.5	439.8	374.2	65.54	6.710		
13,900.0	11,779.0	13,758.7	11,604.3	32.0	37.0	66.58	1,937.3	968.7	439.5	373.2	66.30	6.629		
14,000.0	11,779.0	13,858.7	11,604.3	32.3	37.4	66.56	2,037.3	966.9	439.2	372.2	67.09	6.547		
14,100.0	11,779.0	13,958.7	11,604.3	32.7	37.7	66.55	2,137.3	965.1	439.0	371.1	67.90	6.465		
14,200.0	11,779.0	14,058.7	11,604.3	33.0	38.0	66.53	2,237.2	963.3	438.7	370.0	68.74	6.382		
14,300.0	11,779.0	14,158.7	11,604.3	33.4	38.4	66.52	2,337.2	961.5	438.4	368.8	69.60	6.300		
14,400.0	11,779.0	14,258.7	11,604.3	33.8	38.8	66.50	2,437.2	959.7	438.2	367.7	70.48	6.217		
14,500.0	11,779.0	14,358.7	11,604.3	34.2	39.2	66.49	2,537.2	957.9	437.9	366.5	71.39	6.134		
14,600.0	11,779.0	14,458.7	11,604.3	34.7	39.6	66.47	2,637.2	956.1	437.6	365.3	72.32	6.052		
14,700.0	11,779.0	14,558.7	11,604.3	35.1	40.0	66.46	2,737.2	954.3	437.4	364.1	73.26	5.970		
14,800.0	11,779.0	14,658.7	11,604.3	35.5	40.4	66.44	2,837.1	952.5	437.1	362.9	74.23	5.888		
14,900.0	11,779.0	14,758.7	11,604.3	36.0	40.8	66.42	2,937.1	950.7	436.8	361.6	75.22	5.808		
15,000.0	11,779.0	14,858.7	11,604.3	36.5	41.3	66.41	3,037.1	948.9	436.6	360.3	76.22	5.728		
15,100.0	11,779.0	14,958.7	11,604.3	37.0	41.7	66.39	3,137.1	947.1	436.3	359.0	77.24	5.648		
15,200.0	11,779.0	15,058.7	11,604.3	37.4	42.2	66.38	3,237.1	945.3	436.0	357.7	78.28	5.570		
15,300.0	11,779.0	15,158.7	11,604.3	37.9	42.6	66.36	3,337.1	943.5	435.8	356.4	79.34	5.492		
15,400.0	11,779.0	15,258.7	11,604.3	38.5	43.1	66.35	3,437.0	941.7	435.5	355.1	80.41	5.416		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+MS, 11118-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		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)	Minimum Separation (usft)	Separation Factor	
15,500.0	11,779.0	15,358.6	11,604.3	39.0	43.6	66.33	3,537.0	939.9	435.2	353.7	81.49	5.341	
15,600.0	11,779.0	15,458.6	11,604.3	39.5	44.1	66.32	3,637.0	938.1	434.9	352.4	82.59	5.266	
15,700.0	11,779.0	15,558.6	11,604.3	40.0	44.6	66.30	3,737.0	936.3	434.7	351.0	83.70	5.193	
15,800.0	11,779.0	15,658.6	11,604.3	40.6	45.1	66.29	3,837.0	934.5	434.4	349.6	84.83	5.121	
15,900.0	11,779.0	15,758.6	11,604.3	41.1	45.6	66.27	3,937.0	932.7	434.1	348.2	85.97	5.050	
16,000.0	11,779.0	15,858.6	11,604.3	41.7	46.1	66.25	4,036.9	930.9	433.9	346.8	87.12	4.980	
16,100.0	11,779.0	15,958.6	11,604.3	42.3	46.6	66.24	4,136.9	929.1	433.6	345.3	88.28	4.911	
16,200.0	11,779.0	16,058.6	11,604.3	42.9	47.1	66.22	4,236.9	927.3	433.3	343.9	89.46	4.844	
16,300.0	11,779.0	16,158.6	11,604.3	43.4	47.7	66.21	4,336.9	925.5	433.1	342.4	90.64	4.778	
16,400.0	11,779.0	16,258.6	11,604.3	44.0	48.2	66.19	4,436.9	923.7	432.8	341.0	91.84	4.713	
16,500.0	11,779.0	16,358.6	11,604.3	44.6	48.8	66.18	4,536.9	921.9	432.5	339.5	93.04	4.649	
16,600.0	11,779.0	16,458.6	11,604.3	45.2	49.3	66.16	4,636.8	920.1	432.3	338.0	94.26	4.586	
16,700.0	11,779.0	16,558.6	11,604.3	45.8	49.9	66.14	4,736.8	918.3	432.0	336.5	95.48	4.524	
16,800.0	11,779.0	16,658.6	11,604.3	46.4	50.5	66.13	4,836.8	916.5	431.7	335.0	96.72	4.464	
16,900.0	11,779.0	16,758.6	11,604.3	47.1	51.0	66.11	4,936.8	914.7	431.5	333.5	97.96	4.404	
17,000.0	11,779.0	16,858.6	11,604.3	47.7	51.6	66.10	5,036.8	912.9	431.2	332.0	99.21	4.346	
17,100.0	11,779.0	16,958.6	11,604.3	48.3	52.2	66.08	5,136.8	911.1	430.9	330.5	100.47	4.289	
17,200.0	11,779.0	17,058.6	11,604.3	48.9	52.8	66.06	5,236.7	909.3	430.7	328.9	101.73	4.233	
17,300.0	11,779.0	17,158.6	11,604.3	49.6	53.4	66.05	5,336.7	907.5	430.4	327.4	103.01	4.178	
17,400.0	11,779.0	17,258.6	11,604.3	50.2	54.0	66.03	5,436.7	905.7	430.1	325.8	104.29	4.124	
17,500.0	11,779.0	17,358.6	11,604.3	50.9	54.6	66.02	5,536.7	903.9	429.8	324.3	105.57	4.072	
17,600.0	11,779.0	17,458.6	11,604.3	51.5	55.2	66.00	5,636.7	902.1	429.6	322.7	106.87	4.020	
17,700.0	11,779.0	17,558.6	11,604.3	52.2	55.8	65.99	5,736.7	900.4	429.3	321.1	108.17	3.969	
17,800.0	11,779.0	17,658.6	11,604.3	52.8	56.4	65.97	5,836.6	898.6	429.0	319.6	109.47	3.919	
17,900.0	11,779.0	17,758.6	11,604.3	53.5	57.0	65.95	5,936.6	896.8	428.8	318.0	110.79	3.870	
18,000.0	11,779.0	17,858.6	11,604.3	54.1	57.6	65.94	6,036.6	895.0	428.5	316.4	112.10	3.822	
18,100.0	11,779.0	17,958.6	11,604.3	54.8	58.3	65.92	6,136.6	893.2	428.2	314.8	113.43	3.775	
18,200.0	11,779.0	18,058.6	11,604.3	55.5	58.9	65.90	6,236.6	891.4	428.0	313.2	114.76	3.729	
18,300.0	11,779.0	18,158.6	11,604.3	56.1	59.5	65.89	6,336.6	889.6	427.7	311.6	116.09	3.684	
18,400.0	11,779.0	18,258.6	11,604.3	56.8	60.2	65.87	6,436.5	887.8	427.4	310.0	117.43	3.640	
18,500.0	11,779.0	18,358.6	11,604.3	57.5	60.8	65.86	6,536.5	886.0	427.2	308.4	118.77	3.597	
18,600.0	11,779.0	18,458.6	11,604.3	58.2	61.5	65.84	6,636.5	884.2	426.9	306.8	120.12	3.554	
18,700.0	11,779.0	18,558.6	11,604.3	58.8	62.1	65.82	6,736.5	882.4	426.6	305.2	121.47	3.512	
18,800.0	11,779.0	18,658.6	11,604.3	59.5	62.7	65.81	6,836.5	880.6	426.4	303.5	122.83	3.471	
18,900.0	11,779.0	18,758.6	11,604.3	60.2	63.4	65.79	6,936.5	878.8	426.1	301.9	124.19	3.431	
19,000.0	11,779.0	18,858.6	11,604.3	60.9	64.0	65.78	7,036.4	877.0	425.8	300.3	125.56	3.392	
19,100.0	11,779.0	18,958.6	11,604.3	61.6	64.7	65.76	7,136.4	875.2	425.6	298.6	126.93	3.353	
19,200.0	11,779.0	19,058.6	11,604.3	62.3	65.4	65.74	7,236.4	873.4	425.3	297.0	128.30	3.315	
19,300.0	11,779.0	19,158.6	11,604.3	63.0	66.0	65.73	7,336.4	871.6	425.0	295.4	129.68	3.278	
19,400.0	11,779.0	19,258.6	11,604.3	63.7	66.7	65.71	7,436.4	869.8	424.8	293.7	131.06	3.241	
19,500.0	11,779.0	19,358.6	11,604.3	64.4	67.3	65.69	7,536.4	868.0	424.5	292.1	132.44	3.205	
19,600.0	11,779.0	19,458.6	11,604.3	65.1	68.0	65.68	7,636.3	866.2	424.2	290.4	133.83	3.170	
19,700.0	11,779.0	19,558.6	11,604.3	65.8	68.7	65.66	7,736.3	864.4	424.0	288.7	135.22	3.135	
19,800.0	11,779.0	19,658.6	11,604.3	66.5	69.4	65.65	7,836.3	862.6	423.7	287.1	136.61	3.101	
19,900.0	11,779.0	19,758.6	11,604.3	67.2	70.0	65.63	7,936.3	860.8	423.4	285.4	138.01	3.068	
20,000.0	11,779.0	19,858.6	11,604.3	67.9	70.7	65.61	8,036.3	859.0	423.2	283.7	139.41	3.035	
20,100.0	11,779.0	19,958.6	11,604.3	68.6	71.4	65.60	8,136.3	857.2	422.9	282.1	140.81	3.003	
20,200.0	11,779.0	20,058.6	11,604.3	69.3	72.1	65.58	8,236.2	855.4	422.6	280.4	142.22	2.972	
20,300.0	11,779.0	20,158.6	11,604.3	70.0	72.7	65.56	8,336.2	853.6	422.4	278.7	143.63	2.941	
20,400.0	11,779.0	20,258.6	11,604.3	70.7	73.4	65.55	8,436.2	851.8	422.1	277.1	145.04	2.910	
20,500.0	11,779.0	20,358.6	11,604.3	71.4	74.1	65.53	8,536.2	850.0	421.8	275.4	146.45	2.880	
20,600.0	11,779.0	20,458.6	11,604.3	72.1	74.8	65.51	8,636.2	848.2	421.6	273.7	147.87	2.851	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2431 PROJECT - ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1+MS, 11118-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		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)	Minimum Separation (usft)	Separation Factor	
20,700.0	11,779.0	20,558.6	11,604.3	72.8	75.5	65.50	8,736.2	846.4	421.3	272.0	149.29	2.822	
20,800.0	11,779.0	20,658.6	11,604.3	73.5	76.2	65.48	8,836.1	844.6	421.0	270.3	150.71	2.794	
20,900.0	11,779.0	20,758.6	11,604.3	74.2	76.9	65.46	8,936.1	842.8	420.8	268.6	152.13	2.766	
21,000.0	11,779.0	20,858.6	11,604.3	75.0	77.5	65.45	9,036.1	841.0	420.5	266.9	153.56	2.738	
21,100.0	11,779.0	20,958.6	11,604.3	75.7	78.2	65.43	9,136.1	839.2	420.2	265.2	154.99	2.711	
21,200.0	11,779.0	21,058.6	11,604.3	76.4	78.9	65.41	9,236.1	837.4	420.0	263.5	156.42	2.685	
21,300.0	11,779.0	21,158.6	11,604.3	77.1	79.6	65.40	9,336.1	835.6	419.7	261.8	157.85	2.659	
21,400.0	11,779.0	21,258.6	11,604.3	77.8	80.3	65.38	9,436.1	833.8	419.4	260.1	159.28	2.633	
21,500.0	11,779.0	21,358.6	11,604.3	78.6	81.0	65.36	9,536.0	832.0	419.2	258.4	160.72	2.608	
21,600.0	11,779.0	21,458.6	11,604.3	79.3	81.7	65.35	9,636.0	830.2	418.9	256.7	162.16	2.583	
21,700.0	11,779.0	21,558.6	11,604.3	80.0	82.4	65.33	9,736.0	828.4	418.6	255.0	163.59	2.559	
21,800.0	11,779.0	21,658.6	11,604.3	80.7	83.1	65.31	9,836.0	826.6	418.4	253.3	165.04	2.535	
21,900.0	11,779.0	21,758.6	11,604.3	81.4	83.8	65.30	9,936.0	824.9	418.1	251.6	166.48	2.511	
22,000.0	11,779.0	21,858.6	11,604.3	82.2	84.5	65.28	10,036.0	823.1	417.8	249.9	167.92	2.488	
22,100.0	11,779.0	21,958.6	11,604.3	82.9	85.2	65.26	10,135.9	821.3	417.6	248.2	169.37	2.465	
22,200.0	11,779.0	22,058.6	11,604.3	83.6	85.9	65.25	10,235.9	819.5	417.3	246.5	170.82	2.443	
22,300.0	11,779.0	22,158.6	11,604.3	84.4	86.7	65.23	10,335.9	817.7	417.0	244.8	172.27	2.421	
22,400.0	11,779.0	22,258.6	11,604.3	85.1	87.4	65.21	10,435.9	815.9	416.8	243.0	173.72	2.399	
22,500.0	11,779.0	22,358.6	11,604.3	85.8	88.1	65.19	10,535.9	814.1	416.5	241.3	175.17	2.378	
22,600.0	11,779.0	22,458.6	11,604.3	86.5	88.8	65.18	10,635.9	812.3	416.2	239.6	176.63	2.357	
22,700.0	11,779.0	22,558.6	11,604.3	87.3	89.5	65.16	10,735.8	810.5	416.0	237.9	178.08	2.336	
22,800.0	11,779.0	22,658.6	11,604.3	88.0	90.2	65.14	10,835.8	808.7	415.7	236.2	179.54	2.315	
22,900.0	11,779.0	22,758.6	11,604.3	88.7	90.9	65.13	10,935.8	806.9	415.4	234.4	181.00	2.295	
23,000.0	11,779.0	22,858.6	11,604.3	89.5	91.6	65.11	11,035.8	805.1	415.2	232.7	182.46	2.275	
23,100.0	11,779.0	22,958.6	11,604.3	90.2	92.3	65.09	11,135.8	803.3	414.9	231.0	183.92	2.256	
23,200.0	11,779.0	23,058.6	11,604.3	90.9	93.1	65.07	11,235.8	801.5	414.6	229.2	185.38	2.237	
23,300.0	11,779.0	23,158.6	11,604.3	91.7	93.8	65.06	11,335.7	799.7	414.4	227.5	186.85	2.218	
23,400.0	11,779.0	23,258.6	11,604.3	92.4	94.5	65.04	11,435.7	797.9	414.1	225.8	188.31	2.199	
23,500.0	11,779.0	23,358.6	11,604.3	93.1	95.2	65.02	11,535.7	796.1	413.8	224.1	189.78	2.181	
23,600.0	11,779.0	23,458.6	11,604.3	93.9	95.9	65.01	11,635.7	794.3	413.6	222.3	191.25	2.162	
23,700.0	11,779.0	23,558.6	11,604.3	94.6	96.7	64.99	11,735.7	792.5	413.3	220.6	192.71	2.145	
23,800.0	11,779.0	23,658.6	11,604.3	95.3	97.4	64.97	11,835.7	790.7	413.0	218.8	194.18	2.127	
23,900.0	11,779.0	23,758.6	11,604.3	96.1	98.1	64.95	11,935.6	788.9	412.8	217.1	195.65	2.110	
24,000.0	11,779.0	23,858.6	11,604.3	96.8	98.8	64.94	12,035.6	787.1	412.5	215.4	197.13	2.093	
24,100.0	11,779.0	23,958.6	11,604.3	97.5	99.5	64.92	12,135.6	785.3	412.2	213.6	198.60	2.076	
24,200.0	11,779.0	24,058.6	11,604.3	98.3	100.3	64.90	12,235.6	783.5	412.0	211.9	200.07	2.059	
24,300.0	11,779.0	24,158.6	11,604.3	99.0	101.0	64.89	12,335.6	781.7	411.7	210.2	201.55	2.043	
24,400.0	11,779.0	24,258.6	11,604.3	99.8	101.7	64.87	12,435.6	779.9	411.4	208.4	203.02	2.027	
24,500.0	11,779.0	24,358.6	11,604.3	100.5	102.4	64.85	12,535.5	778.1	411.2	206.7	204.50	2.011	
24,600.0	11,779.0	24,458.6	11,604.3	101.2	103.2	64.83	12,635.5	776.3	410.9	204.9	205.98	1.995 Advise and Monitor	
24,700.0	11,779.0	24,558.6	11,604.3	102.0	103.9	64.82	12,735.5	774.5	410.6	203.2	207.46	1.979 Advise and Monitor	
24,729.5	11,779.0	24,586.9	11,604.3	102.2	104.1	64.81	12,763.8	774.0	410.6	202.6	207.92	1.975 Advise and Monitor, SF	
24,774.6	11,779.0	24,586.9	11,604.3	102.5	104.1	64.81	12,763.8	774.0	413.0	204.5	208.54	1.981 Advise and Monitor	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB 27 @ 3203.4usft

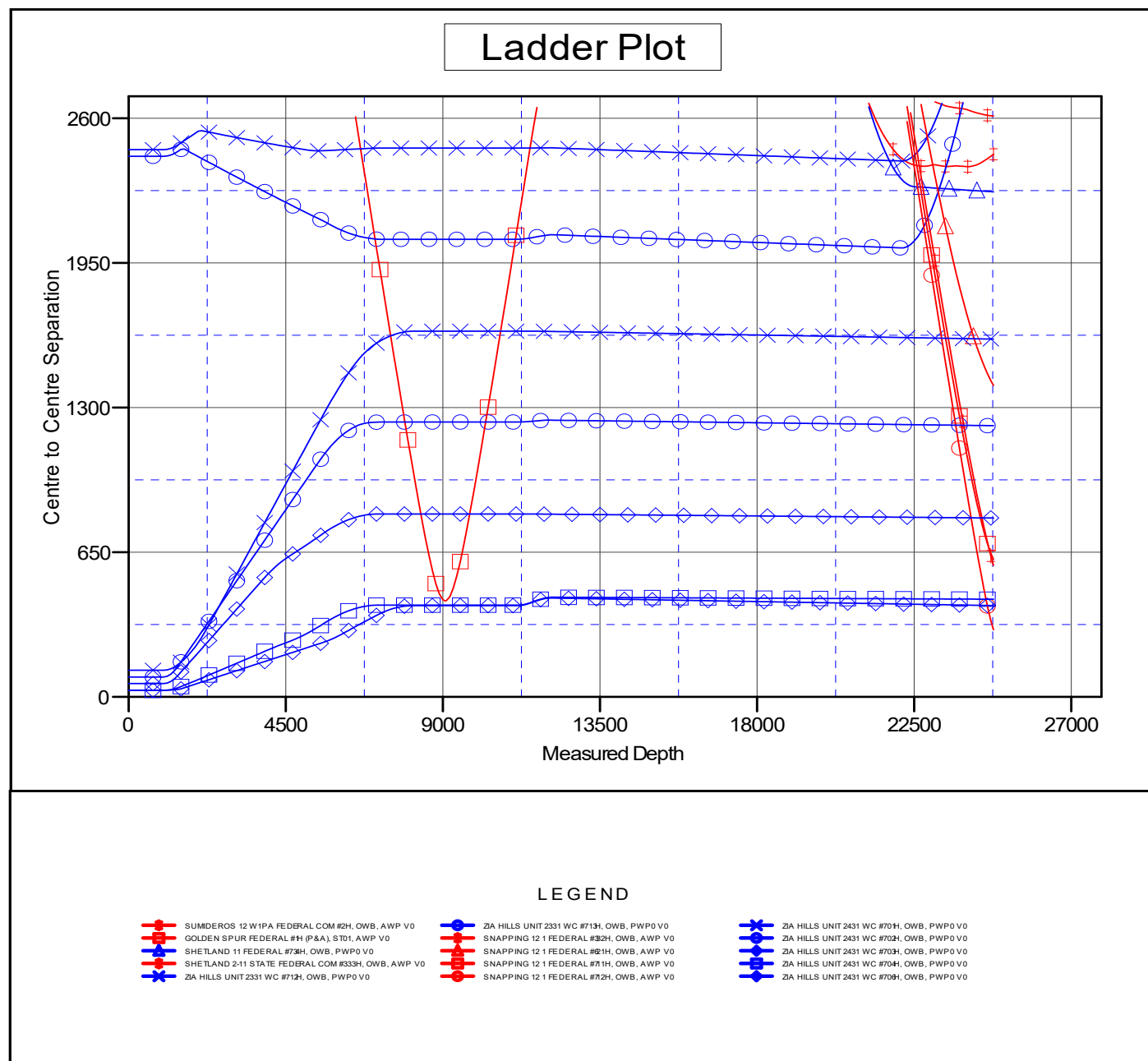
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ZIA HILLS UNIT 2431 WC #705H

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

Grid Convergence at Surface is: 0.32°



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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB 27 @ 3203.4usft
Reference Site:	ZIA HILLS UNIT 2431 PROJECT	MD Reference:	KB 27 @ 3203.4usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB 27 @ 3203.4usft

Offset Depths are relative to Offset Datum

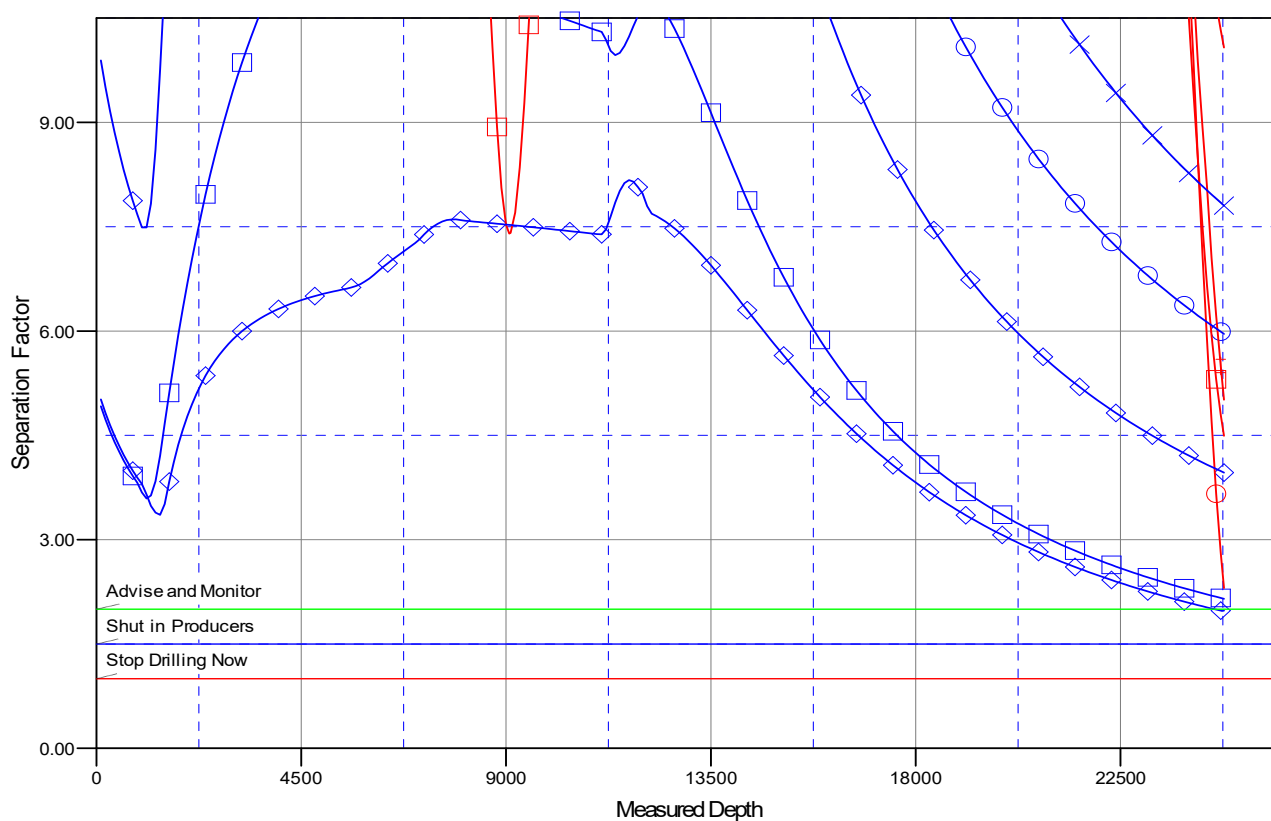
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ZIA HILLS UNIT 2431 WC #705H

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

Grid Convergence at Surface is: 0.32°

Separation Factor Plot



LEGEND

SUMDEROS 12 W1PA FEDERAL COM #2H, OWB, AWP V0	ZIA HILLS UNIT 2331 WC #713H, OWB, PWP0 V0	ZIA HILLS UNIT 2431 WC #701H, OWB, PWP0 V0
GOLDEN SPUR FEDERAL #H (P&A), ST01, AWP V0	SNAPPING 12 1 FEDERAL #32H, OWB, AWP V0	ZIA HILLS UNIT 2431 WC #702H, OWB, PWP0 V0
SHETLAND 11 FEDERAL #73H, OWB, PWP0 V0	SNAPPING 12 1 FEDERAL #21H, OWB, AWP V0	ZIA HILLS UNIT 2431 WC #703H, OWB, PWP0 V0
SHETLAND 2-11 STATE FEDERAL COM #333H, OWB, AWP V0	SNAPPING 12 1 FEDERAL #71H, OWB, AWP V0	ZIA HILLS UNIT 2431 WC #704H, OWB, PWP0 V0
ZIA HILLS UNIT 2331 WC #712H, OWB, PWP0 V0	SNAPPING 12 1 FEDERAL #72H, OWB, AWP V0	ZIA HILLS UNIT 2431 WC #705H, OWB, PWP0 V0

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

DELAWARE BASIN EAST

BULLDOG PROSPECT (NM-E)

ZIA HILLS UNIT 2431 PROJECT

ZIA HILLS UNIT 2431 WC #705H

OWB

Plan: PWP0

Standard Planning Report

07 November, 2022

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB 27 @ 3203.4usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB 27 @ 3203.4usft
Site:	ZIA HILLS UNIT 2431 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

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

Well	ZIA HILLS UNIT 2431 WC #705H			
Well Position	+N/-S	465.0 usft	Northing:	372,244.09 usft
	+E/-W	1,425.2 usft	Easting:	685,410.30 usft
Position Uncertainty		3.0 usft	Wellhead Elevation:	
			Latitude:	32° 1' 19.208 N
			Longitude:	103° 44' 6.314 W
			Ground Level:	3,176.4 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	12/31/2023	6.34	59.52	47,263.49018290

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	1.80

Plan Survey Tool Program	Date	11/7/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	1,000.0 PWP0 (OWB)	r.5 SDI_KPR_WL_NS-CT	SDI Keeper Wireline Gyrocomp
2	1,000.0	11,252.0 PWP0 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5
3	11,252.0	24,774.6 PWP0 (OWB)	r.5 MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-St

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	8.00	123.00	1,398.7	-15.2	23.4	2.00	2.00	0.00	123.00	
5,541.6	8.00	123.00	5,500.0	-329.1	506.8	0.00	0.00	0.00	0.00	
7,141.6	0.00	0.00	7,094.8	-389.9	600.3	0.50	-0.50	0.00	180.00	
11,252.8	0.00	0.00	11,206.0	-389.9	600.3	0.00	0.00	0.00	0.00	
12,152.8	90.00	359.14	11,779.0	183.0	591.7	10.00	10.00	-0.10	359.14	
24,774.6	90.00	359.14	11,779.0	12,803.4	401.8	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB 27 @ 3203.4usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB 27 @ 3203.4usft
Site:	ZIA HILLS UNIT 2431 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2431 WC #705H	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	2.00	123.00	1,100.0	-1.0	1.5	-0.9	2.00	2.00	0.00
1,200.0	4.00	123.00	1,199.8	-3.8	5.9	-3.6	2.00	2.00	0.00
1,300.0	6.00	123.00	1,299.5	-8.5	13.2	-8.1	2.00	2.00	0.00
1,400.0	8.00	123.00	1,398.7	-15.2	23.4	-14.4	2.00	2.00	0.00
1,500.0	8.00	123.00	1,497.7	-22.8	35.1	-21.7	0.00	0.00	0.00
1,600.0	8.00	123.00	1,596.8	-30.3	46.7	-28.9	0.00	0.00	0.00
1,700.0	8.00	123.00	1,695.8	-37.9	58.4	-36.1	0.00	0.00	0.00
1,800.0	8.00	123.00	1,794.8	-45.5	70.1	-43.3	0.00	0.00	0.00
1,900.0	8.00	123.00	1,893.8	-53.1	81.7	-50.5	0.00	0.00	0.00
2,000.0	8.00	123.00	1,992.9	-60.7	93.4	-57.7	0.00	0.00	0.00
2,100.0	8.00	123.00	2,091.9	-68.2	105.1	-64.9	0.00	0.00	0.00
2,200.0	8.00	123.00	2,190.9	-75.8	116.8	-72.1	0.00	0.00	0.00
2,300.0	8.00	123.00	2,289.9	-83.4	128.4	-79.3	0.00	0.00	0.00
2,400.0	8.00	123.00	2,389.0	-91.0	140.1	-86.5	0.00	0.00	0.00
2,500.0	8.00	123.00	2,488.0	-98.6	151.8	-93.8	0.00	0.00	0.00
2,600.0	8.00	123.00	2,587.0	-106.1	163.4	-101.0	0.00	0.00	0.00
2,700.0	8.00	123.00	2,686.1	-113.7	175.1	-108.2	0.00	0.00	0.00
2,800.0	8.00	123.00	2,785.1	-121.3	186.8	-115.4	0.00	0.00	0.00
2,900.0	8.00	123.00	2,884.1	-128.9	198.5	-122.6	0.00	0.00	0.00
3,000.0	8.00	123.00	2,983.1	-136.5	210.1	-129.8	0.00	0.00	0.00
3,100.0	8.00	123.00	3,082.2	-144.0	221.8	-137.0	0.00	0.00	0.00
3,200.0	8.00	123.00	3,181.2	-151.6	233.5	-144.2	0.00	0.00	0.00
3,300.0	8.00	123.00	3,280.2	-159.2	245.2	-151.4	0.00	0.00	0.00
3,400.0	8.00	123.00	3,379.2	-166.8	256.8	-158.6	0.00	0.00	0.00
3,500.0	8.00	123.00	3,478.3	-174.4	268.5	-165.9	0.00	0.00	0.00
3,600.0	8.00	123.00	3,577.3	-181.9	280.2	-173.1	0.00	0.00	0.00
3,700.0	8.00	123.00	3,676.3	-189.5	291.8	-180.3	0.00	0.00	0.00
3,800.0	8.00	123.00	3,775.3	-197.1	303.5	-187.5	0.00	0.00	0.00
3,900.0	8.00	123.00	3,874.4	-204.7	315.2	-194.7	0.00	0.00	0.00
4,000.0	8.00	123.00	3,973.4	-212.3	326.9	-201.9	0.00	0.00	0.00
4,100.0	8.00	123.00	4,072.4	-219.8	338.5	-209.1	0.00	0.00	0.00
4,200.0	8.00	123.00	4,171.5	-227.4	350.2	-216.3	0.00	0.00	0.00
4,300.0	8.00	123.00	4,270.5	-235.0	361.9	-223.5	0.00	0.00	0.00
4,400.0	8.00	123.00	4,369.5	-242.6	373.5	-230.7	0.00	0.00	0.00
4,500.0	8.00	123.00	4,468.5	-250.2	385.2	-238.0	0.00	0.00	0.00
4,600.0	8.00	123.00	4,567.6	-257.7	396.9	-245.2	0.00	0.00	0.00
4,700.0	8.00	123.00	4,666.6	-265.3	408.6	-252.4	0.00	0.00	0.00
4,800.0	8.00	123.00	4,765.6	-272.9	420.2	-259.6	0.00	0.00	0.00
4,900.0	8.00	123.00	4,864.6	-280.5	431.9	-266.8	0.00	0.00	0.00
5,000.0	8.00	123.00	4,963.7	-288.1	443.6	-274.0	0.00	0.00	0.00
5,100.0	8.00	123.00	5,062.7	-295.6	455.2	-281.2	0.00	0.00	0.00
5,200.0	8.00	123.00	5,161.7	-303.2	466.9	-288.4	0.00	0.00	0.00
5,300.0	8.00	123.00	5,260.7	-310.8	478.6	-295.6	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB 27 @ 3203.4usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB 27 @ 3203.4usft
Site:	ZIA HILLS UNIT 2431 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,400.0	8.00	123.00	5,359.8	-318.4	490.3	-302.8	0.00	0.00	0.00
5,500.0	8.00	123.00	5,458.8	-326.0	501.9	-310.1	0.00	0.00	0.00
5,541.6	8.00	123.00	5,500.0	-329.1	506.8	-313.1	0.00	0.00	0.00
5,600.0	7.71	123.00	5,557.8	-333.5	513.5	-317.2	0.50	-0.50	0.00
5,700.0	7.21	123.00	5,657.0	-340.5	524.4	-323.9	0.50	-0.50	0.00
5,800.0	6.71	123.00	5,756.3	-347.1	534.5	-330.2	0.50	-0.50	0.00
5,900.0	6.21	123.00	5,855.6	-353.3	544.0	-336.0	0.50	-0.50	0.00
6,000.0	5.71	123.00	5,955.1	-358.9	552.7	-341.4	0.50	-0.50	0.00
6,100.0	5.21	123.00	6,054.6	-364.1	560.6	-346.3	0.50	-0.50	0.00
6,200.0	4.71	123.00	6,154.3	-368.8	567.9	-350.8	0.50	-0.50	0.00
6,300.0	4.21	123.00	6,254.0	-373.0	574.4	-354.8	0.50	-0.50	0.00
6,400.0	3.71	123.00	6,353.7	-376.8	580.2	-358.4	0.50	-0.50	0.00
6,500.0	3.21	123.00	6,453.5	-380.1	585.3	-361.5	0.50	-0.50	0.00
6,600.0	2.71	123.00	6,553.4	-382.9	589.6	-364.2	0.50	-0.50	0.00
6,700.0	2.21	123.00	6,653.3	-385.2	593.2	-366.4	0.50	-0.50	0.00
6,800.0	1.71	123.00	6,753.3	-387.1	596.1	-368.2	0.50	-0.50	0.00
6,900.0	1.21	123.00	6,853.2	-388.5	598.2	-369.5	0.50	-0.50	0.00
7,000.0	0.71	123.00	6,953.2	-389.4	599.6	-370.4	0.50	-0.50	0.00
7,100.0	0.21	123.00	7,053.2	-389.8	600.3	-370.8	0.50	-0.50	0.00
7,141.6	0.00	0.00	7,094.8	-389.9	600.3	-370.8	0.50	-0.50	0.00
7,200.0	0.00	0.00	7,153.2	-389.9	600.3	-370.8	0.00	0.00	0.00
7,300.0	0.00	0.00	7,253.2	-389.9	600.3	-370.8	0.00	0.00	0.00
7,400.0	0.00	0.00	7,353.2	-389.9	600.3	-370.8	0.00	0.00	0.00
7,500.0	0.00	0.00	7,453.2	-389.9	600.3	-370.8	0.00	0.00	0.00
7,600.0	0.00	0.00	7,553.2	-389.9	600.3	-370.8	0.00	0.00	0.00
7,700.0	0.00	0.00	7,653.2	-389.9	600.3	-370.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,753.2	-389.9	600.3	-370.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,853.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,953.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,100.0	0.00	0.00	8,053.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,200.0	0.00	0.00	8,153.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,300.0	0.00	0.00	8,253.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,353.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,453.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,600.0	0.00	0.00	8,553.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,700.0	0.00	0.00	8,653.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,800.0	0.00	0.00	8,753.2	-389.9	600.3	-370.8	0.00	0.00	0.00
8,900.0	0.00	0.00	8,853.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,000.0	0.00	0.00	8,953.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,100.0	0.00	0.00	9,053.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,200.0	0.00	0.00	9,153.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,300.0	0.00	0.00	9,253.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,400.0	0.00	0.00	9,353.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,500.0	0.00	0.00	9,453.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,600.0	0.00	0.00	9,553.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,700.0	0.00	0.00	9,653.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,800.0	0.00	0.00	9,753.2	-389.9	600.3	-370.8	0.00	0.00	0.00
9,900.0	0.00	0.00	9,853.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,000.0	0.00	0.00	9,953.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,100.0	0.00	0.00	10,053.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,200.0	0.00	0.00	10,153.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,300.0	0.00	0.00	10,253.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,400.0	0.00	0.00	10,353.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,500.0	0.00	0.00	10,453.2	-389.9	600.3	-370.8	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB 27 @ 3203.4usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB 27 @ 3203.4usft
Site:	ZIA HILLS UNIT 2431 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,600.0	0.00	0.00	10,553.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,700.0	0.00	0.00	10,653.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,800.0	0.00	0.00	10,753.2	-389.9	600.3	-370.8	0.00	0.00	0.00
10,900.0	0.00	0.00	10,853.2	-389.9	600.3	-370.8	0.00	0.00	0.00
11,000.0	0.00	0.00	10,953.2	-389.9	600.3	-370.8	0.00	0.00	0.00
11,100.0	0.00	0.00	11,053.2	-389.9	600.3	-370.8	0.00	0.00	0.00
11,200.0	0.00	0.00	11,153.2	-389.9	600.3	-370.8	0.00	0.00	0.00
11,252.8	0.00	0.00	11,206.0	-389.9	600.3	-370.8	0.00	0.00	0.00
11,300.0	4.72	359.14	11,253.1	-387.9	600.3	-368.9	10.00	10.00	0.00
11,350.0	9.72	359.14	11,302.7	-381.6	600.2	-362.6	10.00	10.00	0.00
11,400.0	14.72	359.14	11,351.6	-371.0	600.0	-352.0	10.00	10.00	0.00
11,450.0	19.72	359.14	11,399.3	-356.3	599.8	-337.3	10.00	10.00	0.00
11,500.0	24.72	359.14	11,445.6	-337.4	599.5	-318.4	10.00	10.00	0.00
11,550.0	29.72	359.14	11,490.1	-314.5	599.2	-295.5	10.00	10.00	0.00
11,600.0	34.72	359.14	11,532.3	-287.8	598.8	-268.9	10.00	10.00	0.00
11,650.0	39.72	359.14	11,572.1	-257.6	598.3	-238.7	10.00	10.00	0.00
11,700.0	44.72	359.14	11,609.2	-224.0	597.8	-205.2	10.00	10.00	0.00
11,750.0	49.72	359.14	11,643.1	-187.3	597.3	-168.5	10.00	10.00	0.00
11,800.0	54.72	359.14	11,673.7	-147.8	596.7	-129.1	10.00	10.00	0.00
11,850.0	59.72	359.14	11,700.8	-105.8	596.0	-87.1	10.00	10.00	0.00
11,900.0	64.72	359.14	11,724.1	-61.6	595.4	-42.9	10.00	10.00	0.00
11,950.0	69.72	359.14	11,743.4	-15.5	594.7	3.1	10.00	10.00	0.00
12,000.0	74.72	359.14	11,758.7	32.1	594.0	50.7	10.00	10.00	0.00
12,050.0	79.72	359.14	11,769.8	80.8	593.2	99.4	10.00	10.00	0.00
12,100.0	84.72	359.14	11,776.5	130.3	592.5	148.8	10.00	10.00	0.00
12,152.8	90.00	359.14	11,779.0	183.0	591.7	201.5	10.00	10.00	0.00
12,200.0	90.00	359.14	11,779.0	230.2	591.0	248.7	0.00	0.00	0.00
12,300.0	90.00	359.14	11,779.0	330.2	589.5	348.6	0.00	0.00	0.00
12,400.0	90.00	359.14	11,779.0	430.2	588.0	448.4	0.00	0.00	0.00
12,500.0	90.00	359.14	11,779.0	530.2	586.5	548.3	0.00	0.00	0.00
12,600.0	90.00	359.14	11,779.0	630.2	585.0	648.2	0.00	0.00	0.00
12,700.0	90.00	359.14	11,779.0	730.2	583.5	748.1	0.00	0.00	0.00
12,800.0	90.00	359.14	11,779.0	830.2	582.0	848.0	0.00	0.00	0.00
12,900.0	90.00	359.14	11,779.0	930.2	580.5	947.9	0.00	0.00	0.00
13,000.0	90.00	359.14	11,779.0	1,030.1	579.0	1,047.8	0.00	0.00	0.00
13,100.0	90.00	359.14	11,779.0	1,130.1	577.5	1,147.7	0.00	0.00	0.00
13,200.0	90.00	359.14	11,779.0	1,230.1	576.0	1,247.6	0.00	0.00	0.00
13,300.0	90.00	359.14	11,779.0	1,330.1	574.4	1,347.5	0.00	0.00	0.00
13,400.0	90.00	359.14	11,779.0	1,430.1	572.9	1,447.4	0.00	0.00	0.00
13,500.0	90.00	359.14	11,779.0	1,530.1	571.4	1,547.3	0.00	0.00	0.00
13,600.0	90.00	359.14	11,779.0	1,630.1	569.9	1,647.2	0.00	0.00	0.00
13,700.0	90.00	359.14	11,779.0	1,730.1	568.4	1,747.0	0.00	0.00	0.00
13,800.0	90.00	359.14	11,779.0	1,830.1	566.9	1,846.9	0.00	0.00	0.00
13,900.0	90.00	359.14	11,779.0	1,930.0	565.4	1,946.8	0.00	0.00	0.00
14,000.0	90.00	359.14	11,779.0	2,030.0	563.9	2,046.7	0.00	0.00	0.00
14,100.0	90.00	359.14	11,779.0	2,130.0	562.4	2,146.6	0.00	0.00	0.00
14,200.0	90.00	359.14	11,779.0	2,230.0	560.9	2,246.5	0.00	0.00	0.00
14,300.0	90.00	359.14	11,779.0	2,330.0	559.4	2,346.4	0.00	0.00	0.00
14,400.0	90.00	359.14	11,779.0	2,430.0	557.9	2,446.3	0.00	0.00	0.00
14,500.0	90.00	359.14	11,779.0	2,530.0	556.4	2,546.2	0.00	0.00	0.00
14,600.0	90.00	359.14	11,779.0	2,630.0	554.9	2,646.1	0.00	0.00	0.00
14,700.0	90.00	359.14	11,779.0	2,730.0	553.4	2,746.0	0.00	0.00	0.00
14,800.0	90.00	359.14	11,779.0	2,829.9	551.9	2,845.9	0.00	0.00	0.00
14,900.0	90.00	359.14	11,779.0	2,929.9	550.4	2,945.8	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB 27 @ 3203.4usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB 27 @ 3203.4usft
Site:	ZIA HILLS UNIT 2431 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2431 WC #705H	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)
15,000.0	90.00	359.14	11,779.0	3,029.9	548.9	3,045.6	0.00	0.00	0.00
15,100.0	90.00	359.14	11,779.0	3,129.9	547.4	3,145.5	0.00	0.00	0.00
15,200.0	90.00	359.14	11,779.0	3,229.9	545.9	3,245.4	0.00	0.00	0.00
15,300.0	90.00	359.14	11,779.0	3,329.9	544.4	3,345.3	0.00	0.00	0.00
15,400.0	90.00	359.14	11,779.0	3,429.9	542.9	3,445.2	0.00	0.00	0.00
15,500.0	90.00	359.14	11,779.0	3,529.9	541.4	3,545.1	0.00	0.00	0.00
15,600.0	90.00	359.14	11,779.0	3,629.9	539.9	3,645.0	0.00	0.00	0.00
15,700.0	90.00	359.14	11,779.0	3,729.8	538.3	3,744.9	0.00	0.00	0.00
15,800.0	90.00	359.14	11,779.0	3,829.8	536.8	3,844.8	0.00	0.00	0.00
15,900.0	90.00	359.14	11,779.0	3,929.8	535.3	3,944.7	0.00	0.00	0.00
16,000.0	90.00	359.14	11,779.0	4,029.8	533.8	4,044.6	0.00	0.00	0.00
16,100.0	90.00	359.14	11,779.0	4,129.8	532.3	4,144.5	0.00	0.00	0.00
16,200.0	90.00	359.14	11,779.0	4,229.8	530.8	4,244.4	0.00	0.00	0.00
16,300.0	90.00	359.14	11,779.0	4,329.8	529.3	4,344.2	0.00	0.00	0.00
16,400.0	90.00	359.14	11,779.0	4,429.8	527.8	4,444.1	0.00	0.00	0.00
16,500.0	90.00	359.14	11,779.0	4,529.8	526.3	4,544.0	0.00	0.00	0.00
16,600.0	90.00	359.14	11,779.0	4,629.7	524.8	4,643.9	0.00	0.00	0.00
16,700.0	90.00	359.14	11,779.0	4,729.7	523.3	4,743.8	0.00	0.00	0.00
16,800.0	90.00	359.14	11,779.0	4,829.7	521.8	4,843.7	0.00	0.00	0.00
16,900.0	90.00	359.14	11,779.0	4,929.7	520.3	4,943.6	0.00	0.00	0.00
17,000.0	90.00	359.14	11,779.0	5,029.7	518.8	5,043.5	0.00	0.00	0.00
17,100.0	90.00	359.14	11,779.0	5,129.7	517.3	5,143.4	0.00	0.00	0.00
17,200.0	90.00	359.14	11,779.0	5,229.7	515.8	5,243.3	0.00	0.00	0.00
17,300.0	90.00	359.14	11,779.0	5,329.7	514.3	5,343.2	0.00	0.00	0.00
17,400.0	90.00	359.14	11,779.0	5,429.6	512.8	5,443.1	0.00	0.00	0.00
17,500.0	90.00	359.14	11,779.0	5,529.6	511.3	5,543.0	0.00	0.00	0.00
17,600.0	90.00	359.14	11,779.0	5,629.6	509.8	5,642.8	0.00	0.00	0.00
17,700.0	90.00	359.14	11,779.0	5,729.6	508.3	5,742.7	0.00	0.00	0.00
17,800.0	90.00	359.14	11,779.0	5,829.6	506.8	5,842.6	0.00	0.00	0.00
17,900.0	90.00	359.14	11,779.0	5,929.6	505.3	5,942.5	0.00	0.00	0.00
18,000.0	90.00	359.14	11,779.0	6,029.6	503.8	6,042.4	0.00	0.00	0.00
18,100.0	90.00	359.14	11,779.0	6,129.6	502.2	6,142.3	0.00	0.00	0.00
18,200.0	90.00	359.14	11,779.0	6,229.6	500.7	6,242.2	0.00	0.00	0.00
18,300.0	90.00	359.14	11,779.0	6,329.5	499.2	6,342.1	0.00	0.00	0.00
18,400.0	90.00	359.14	11,779.0	6,429.5	497.7	6,442.0	0.00	0.00	0.00
18,500.0	90.00	359.14	11,779.0	6,529.5	496.2	6,541.9	0.00	0.00	0.00
18,600.0	90.00	359.14	11,779.0	6,629.5	494.7	6,641.8	0.00	0.00	0.00
18,700.0	90.00	359.14	11,779.0	6,729.5	493.2	6,741.7	0.00	0.00	0.00
18,800.0	90.00	359.14	11,779.0	6,829.5	491.7	6,841.6	0.00	0.00	0.00
18,900.0	90.00	359.14	11,779.0	6,929.5	490.2	6,941.4	0.00	0.00	0.00
19,000.0	90.00	359.14	11,779.0	7,029.5	488.7	7,041.3	0.00	0.00	0.00
19,100.0	90.00	359.14	11,779.0	7,129.5	487.2	7,141.2	0.00	0.00	0.00
19,200.0	90.00	359.14	11,779.0	7,229.4	485.7	7,241.1	0.00	0.00	0.00
19,300.0	90.00	359.14	11,779.0	7,329.4	484.2	7,341.0	0.00	0.00	0.00
19,400.0	90.00	359.14	11,779.0	7,429.4	482.7	7,440.9	0.00	0.00	0.00
19,500.0	90.00	359.14	11,779.0	7,529.4	481.2	7,540.8	0.00	0.00	0.00
19,600.0	90.00	359.14	11,779.0	7,629.4	479.7	7,640.7	0.00	0.00	0.00
19,700.0	90.00	359.14	11,779.0	7,729.4	478.2	7,740.6	0.00	0.00	0.00
19,800.0	90.00	359.14	11,779.0	7,829.4	476.7	7,840.5	0.00	0.00	0.00
19,900.0	90.00	359.14	11,779.0	7,929.4	475.2	7,940.4	0.00	0.00	0.00
20,000.0	90.00	359.14	11,779.0	8,029.4	473.7	8,040.3	0.00	0.00	0.00
20,100.0	90.00	359.14	11,779.0	8,129.3	472.2	8,140.2	0.00	0.00	0.00
20,200.0	90.00	359.14	11,779.0	8,229.3	470.7	8,240.0	0.00	0.00	0.00
20,300.0	90.00	359.14	11,779.0	8,329.3	469.2	8,339.9	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB 27 @ 3203.4usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB 27 @ 3203.4usft
Site:	ZIA HILLS UNIT 2431 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

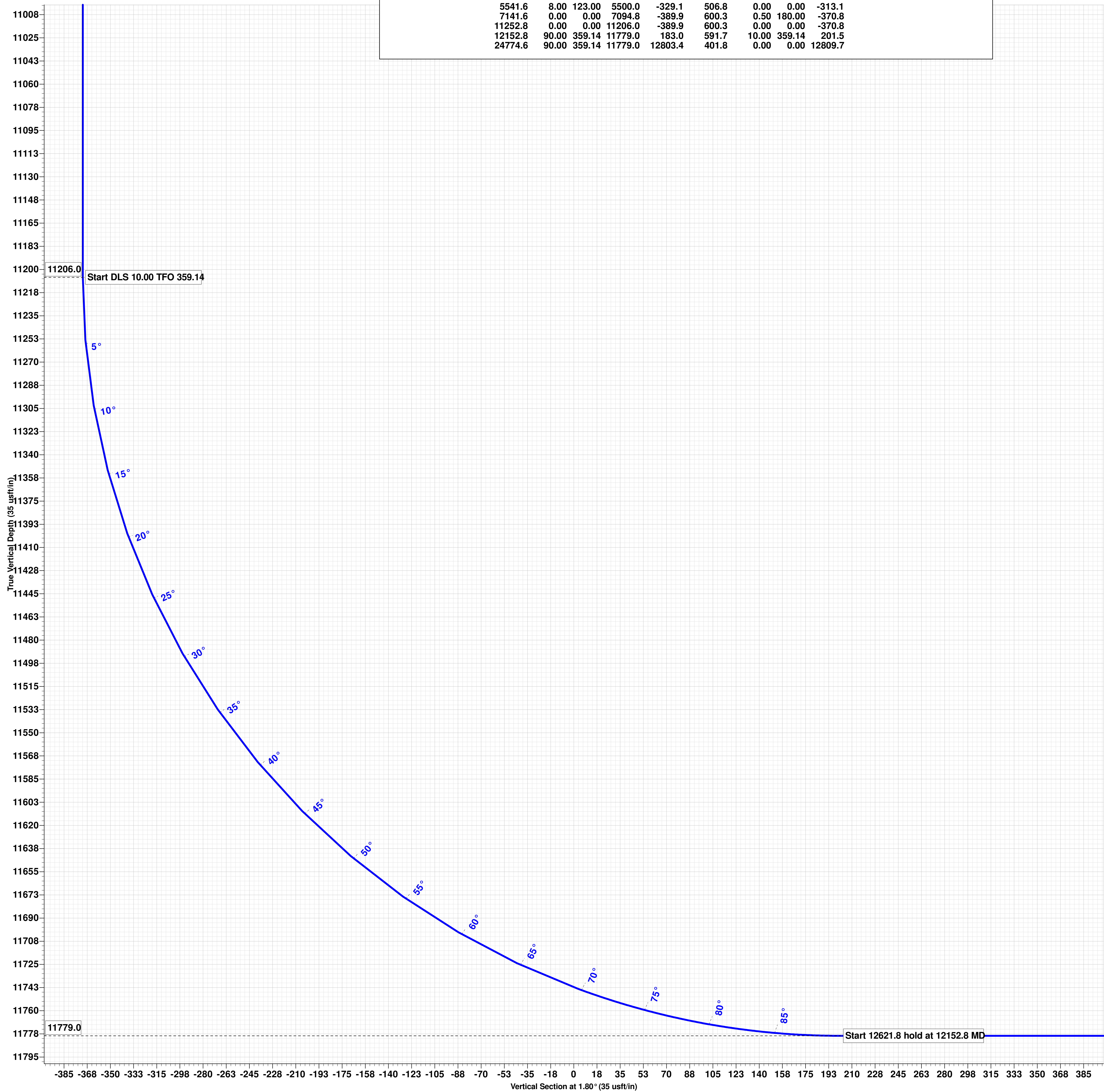
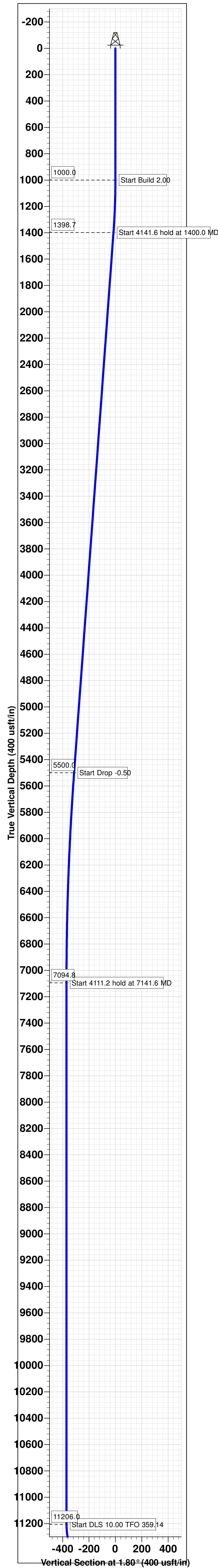
Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
20,400.0	90.00	359.14	11,779.0	8,429.3	467.7	8,439.8	0.00	0.00	0.00	
20,500.0	90.00	359.14	11,779.0	8,529.3	466.1	8,539.7	0.00	0.00	0.00	
20,600.0	90.00	359.14	11,779.0	8,629.3	464.6	8,639.6	0.00	0.00	0.00	
20,700.0	90.00	359.14	11,779.0	8,729.3	463.1	8,739.5	0.00	0.00	0.00	
20,800.0	90.00	359.14	11,779.0	8,829.3	461.6	8,839.4	0.00	0.00	0.00	
20,900.0	90.00	359.14	11,779.0	8,929.3	460.1	8,939.3	0.00	0.00	0.00	
21,000.0	90.00	359.14	11,779.0	9,029.2	458.6	9,039.2	0.00	0.00	0.00	
21,100.0	90.00	359.14	11,779.0	9,129.2	457.1	9,139.1	0.00	0.00	0.00	
21,200.0	90.00	359.14	11,779.0	9,229.2	455.6	9,239.0	0.00	0.00	0.00	
21,300.0	90.00	359.14	11,779.0	9,329.2	454.1	9,338.9	0.00	0.00	0.00	
21,400.0	90.00	359.14	11,779.0	9,429.2	452.6	9,438.8	0.00	0.00	0.00	
21,500.0	90.00	359.14	11,779.0	9,529.2	451.1	9,538.6	0.00	0.00	0.00	
21,600.0	90.00	359.14	11,779.0	9,629.2	449.6	9,638.5	0.00	0.00	0.00	
21,700.0	90.00	359.14	11,779.0	9,729.2	448.1	9,738.4	0.00	0.00	0.00	
21,800.0	90.00	359.14	11,779.0	9,829.2	446.6	9,838.3	0.00	0.00	0.00	
21,900.0	90.00	359.14	11,779.0	9,929.1	445.1	9,938.2	0.00	0.00	0.00	
22,000.0	90.00	359.14	11,779.0	10,029.1	443.6	10,038.1	0.00	0.00	0.00	
22,100.0	90.00	359.14	11,779.0	10,129.1	442.1	10,138.0	0.00	0.00	0.00	
22,200.0	90.00	359.14	11,779.0	10,229.1	440.6	10,237.9	0.00	0.00	0.00	
22,300.0	90.00	359.14	11,779.0	10,329.1	439.1	10,337.8	0.00	0.00	0.00	
22,400.0	90.00	359.14	11,779.0	10,429.1	437.6	10,437.7	0.00	0.00	0.00	
22,500.0	90.00	359.14	11,779.0	10,529.1	436.1	10,537.6	0.00	0.00	0.00	
22,600.0	90.00	359.14	11,779.0	10,629.1	434.6	10,637.5	0.00	0.00	0.00	
22,700.0	90.00	359.14	11,779.0	10,729.0	433.1	10,737.4	0.00	0.00	0.00	
22,800.0	90.00	359.14	11,779.0	10,829.0	431.6	10,837.2	0.00	0.00	0.00	
22,900.0	90.00	359.14	11,779.0	10,929.0	430.0	10,937.1	0.00	0.00	0.00	
23,000.0	90.00	359.14	11,779.0	11,029.0	428.5	11,037.0	0.00	0.00	0.00	
23,100.0	90.00	359.14	11,779.0	11,129.0	427.0	11,136.9	0.00	0.00	0.00	
23,200.0	90.00	359.14	11,779.0	11,229.0	425.5	11,236.8	0.00	0.00	0.00	
23,300.0	90.00	359.14	11,779.0	11,329.0	424.0	11,336.7	0.00	0.00	0.00	
23,400.0	90.00	359.14	11,779.0	11,429.0	422.5	11,436.6	0.00	0.00	0.00	
23,500.0	90.00	359.14	11,779.0	11,529.0	421.0	11,536.5	0.00	0.00	0.00	
23,600.0	90.00	359.14	11,779.0	11,628.9	419.5	11,636.4	0.00	0.00	0.00	
23,700.0	90.00	359.14	11,779.0	11,728.9	418.0	11,736.3	0.00	0.00	0.00	
23,800.0	90.00	359.14	11,779.0	11,828.9	416.5	11,836.2	0.00	0.00	0.00	
23,900.0	90.00	359.14	11,779.0	11,928.9	415.0	11,936.1	0.00	0.00	0.00	
24,000.0	90.00	359.14	11,779.0	12,028.9	413.5	12,036.0	0.00	0.00	0.00	
24,100.0	90.00	359.14	11,779.0	12,128.9	412.0	12,135.8	0.00	0.00	0.00	
24,200.0	90.00	359.14	11,779.0	12,228.9	410.5	12,235.7	0.00	0.00	0.00	
24,300.0	90.00	359.14	11,779.0	12,328.9	409.0	12,335.6	0.00	0.00	0.00	
24,400.0	90.00	359.14	11,779.0	12,428.9	407.5	12,435.5	0.00	0.00	0.00	
24,500.0	90.00	359.14	11,779.0	12,528.8	406.0	12,535.4	0.00	0.00	0.00	
24,600.0	90.00	359.14	11,779.0	12,628.8	404.5	12,635.3	0.00	0.00	0.00	
24,700.0	90.00	359.14	11,779.0	12,728.8	403.0	12,735.2	0.00	0.00	0.00	
24,774.6	90.00	359.14	11,779.0	12,803.4	401.8	12,809.7	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2431 WC #705H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB 27 @ 3203.4usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB 27 @ 3203.4usft
Site:	ZIA HILLS UNIT 2431 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2431 WC #705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
LTP (ZIA HILLS UNIT 24	0.00	0.00	11,779.0	12,753.4	402.1	384,997.49	685,812.42	32° 3' 25.395 N	103° 44' 0.821 W
- plan misses target center by 24.6usft at 24700.0usft MD (11779.0 TVD, 12728.8 N, 403.0 E)									
- Point									
FTP (ZIA HILLS UNIT 24	0.00	0.00	11,779.0	-336.7	599.6	371,907.37	686,009.91	32° 1' 15.843 N	103° 43' 59.371 W
- plan misses target center by 200.7usft at 11732.6usft MD (11631.7 TVD, -200.4 N, 597.5 E)									
- Circle (radius 50.0)									
PBHL (ZIA HILLS UNIT :	0.00	179.14	11,779.0	12,803.4	401.8	385,047.49	685,812.15	32° 3' 25.890 N	103° 44' 0.821 W
- plan hits target center									
- Rectangle (sides W100.0 H13,150.0 D20.0)									

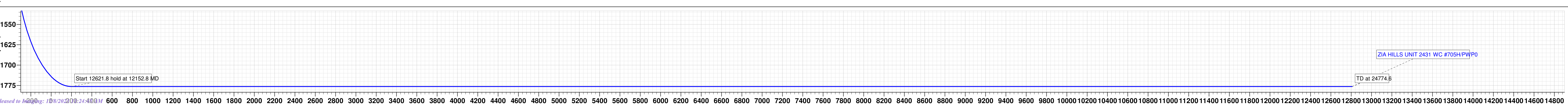
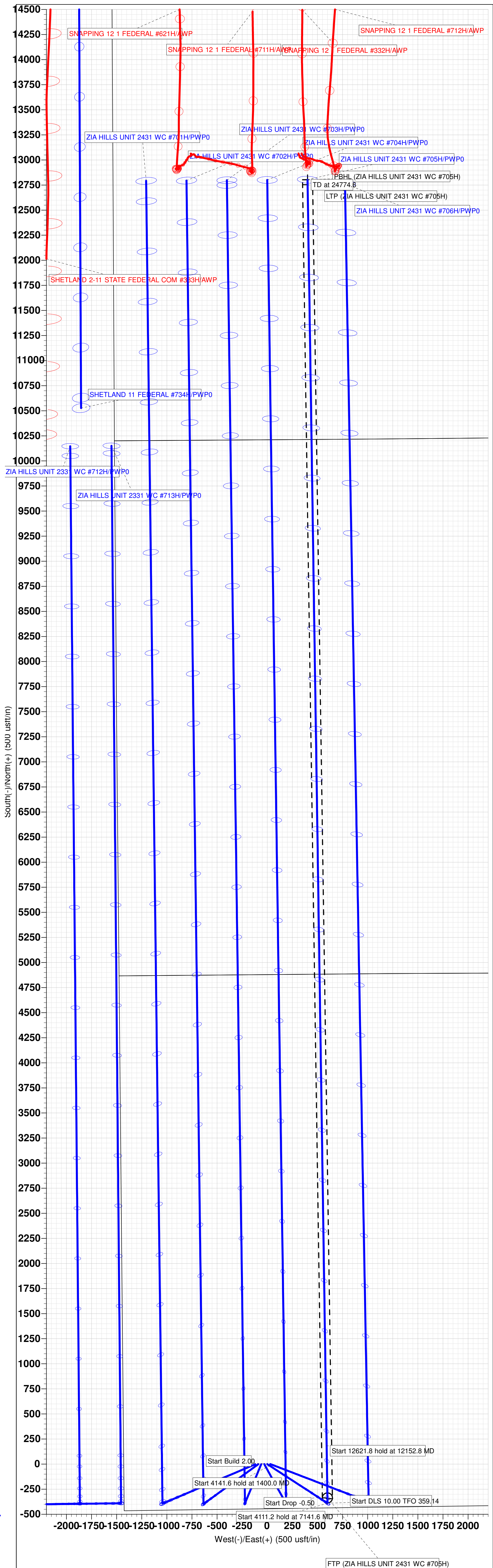


Project: BULLDOG PROSPECT (NM-E)
Site: ZIA HILLS UNIT 2431 PROJECT
Well: ZIA HILLS UNIT 2431 WC #705H
Wellbore: OWB
Design: PWP0
GL: 3176.4
KB 27 @ 3203.4usft

WELL DETAILS: ZIA HILLS UNIT 2431 WC #705H						
+N-S	+E-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	372244.09	685410.30	32° 1' 19.208 N	103° 44' 6.314 W	

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	Northing	Easting	
FTP (ZIA HILLS UNIT 2431 WC #705H)	11779.0	-336.7	599.6	371907.37	686009.91	
LTP (ZIA HILLS UNIT 2431 WC #705H)	11779.0	12753.4	402.1	384997.49	685812.42	
PBHL (ZIA HILLS UNIT 2431 WC #705H)	11779.0	12803.4	401.8	385047.49	685812.15	

SECTION DETAILS									
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
1400.0	8.00	123.00	1398.7	-15.2	23.4	2.00	123.00	-14.4	
5541.6	8.00	123.00	5500.0	-329.1	506.8	0.00	0.00	-313.1	
7141.6	0.00	0.00	7094.8	-389.9	600.3	0.50	180.00	-370.8	
11252.8	0.00	0.00	11206.0	-389.9	600.3	0.00	0.00	-370.8	
12152.8	90.00	359.14	11779.0	183.0	591.7	10.00	359.14	201.5	
24774.6	90.00	359.14	11779.0	12803.4	401.8	0.00	0.00	12809.7	



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	ConocoPhillips
LEASE NO.:	NMLC064756
LOCATION:	Section 24, T.26 S, R.31 E., NMPM
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Zia Hills Unit 2431 WC 705H
SURFACE HOLE FOOTAGE:	445'/S & 1430'/W
BOTTOM HOLE FOOTAGE:	2590'/S & 1938'/W

COA

H₂S	☒ Yes	☐ No		
Potash / WIPP	☒ None	☐ Secretary	☐ R-111-P	☐ WIPP
Cave / Karst	☐ Low	☒ Medium	☐ High	☐ Critical
Wellhead	☐ Conventional	☒ Multibowl	☐ Both	☐ Diverter
Cementing	☐ Primary Squeeze	☐ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☐ Break Testing	☐ Water Disposal	☐ COM	☒ Unit
Variance	☒ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	☐ Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
☐ Batch APD / Sundry				

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware Group** formation. As a result, the Hydrogen Sulfide area must meet all requirements from **43 CFR 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **1350** feet (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 7-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

 - ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. (This is not necessary for secondary recovery unit wells)

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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

☒ Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.

- BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

- c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
 - e. The results of the test shall be reported to the appropriate BLM office.

- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

ZS 11/1/2023

COG OPERATING LLC
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

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

- a. The hazards and characteristics of hydrogen sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- c. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

2. H₂S SAFETY EQUIPMENT AND SYSTEMS

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S. If H₂S greater than 100 ppm is encountered in the gas stream we will shut in and install H₂S equipment.

- a. Well Control Equipment:
 - Flare line.
 - Choke manifold with remotely operated choke.
 - Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
 - Auxiliary equipment to include: annular preventer, mud-gas separator, rotating head.

- b. Protective equipment for essential personnel:
Mark II Surviveair 30-minute units located in the dog house and at briefing areas.
- c. H2S detection and monitoring equipment:
2 - portable H2S monitor positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 ppm are reached.
- d. Visual warning systems:
Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location. Bilingual signs will be used, when appropriate. See example attached.
- e. Mud Program:
The mud program has been designed to minimize the volume of H2S circulated to the surface.
- f. Metallurgy:
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.
- g. Communication:
Company vehicles equipped with cellular telephone.

COG OPERATING LLC has conducted a review to determine if an H2S contingency plan is required for the above referenced well. We were able to conclude that any potential hazardous volume would be minimal. H2S concentrations of wells in this area from surface to TD are low enough; therefore, we do not believe that an H2S contingency plan is necessary.

W A R N I N G

**YOU ARE ENTERING AN H₂S AREA
AUTHORIZED PERSONNEL ONLY**

- 1. BEARDS OR CONTACT LENSES NOT ALLOWED***
- 2. HARD HATS REQUIRED***
- 3. SMOKING IN DESIGNATED AREAS ONLY***
- 4. BE WIND CONSCIOUS AT ALL TIMES***
- 5. CK WITH COG OPERATING LLC FOREMAN AT MAIN OFFICE***

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

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

EMERGENCY RESPONSE NUMBERS

	<u>OFFICE</u>
STATE POLICE	575-748-9718
EDDY COUNTY SHERIFF	575-746-2701
EMERGENCY MEDICAL SERVICES (AMBULANCE)	911 or 575-746-2701
EDDY COUNTY EMERGENCY MANAGEMENT (HARRY BURGESS)	575-887-9511
STATE EMERGENCY RESPONSE CENTER (SERC)	575-476-9620
CARLSBAD POLICE DEPARTMENT	575-885-2111
CARLSBAD FIRE DEPARTMENT	575-885-3125
NEW MEXICO OIL CONSERVATION DIVISION	575-748-1283
INDIAN FIRE & SAFETY	800-530-8693
HALLIBURTON SERVICES	800-844-8451

District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 288324

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 288324
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	12/8/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/8/2023
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	12/8/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	12/8/2023
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	12/8/2023
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	12/8/2023
ward.rikala	The SW/4-T26S-R31E is in the PurpleSage Wolfcamp Pool. This well can not be produced until a C-102 is received to the corrected acreage for the Zia Hills Wolfcamp Pool and a C-102 for the corrected acreage for the Purplesage Wolfcamp Pool.	12/8/2023