

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. 30-015-54436
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)



Approval Date: 11/17/2023

Additional Operator Remarks

Location of Well

0. SHL: SESE / 70 FSL / 1060 FEL / TWSP: 26S / RANGE: 31E / SECTION: 23 / LAT: 32.0210566 / LONG: -103.7435883 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 100 FSL / 1262 FEL / TWSP: 26S / RANGE: 31E / SECTION: 23 / LAT: 32.0211379 / LONG: -103.7442391 (TVD: 11496 feet, MD: 11546 feet)

BHL: NENE / 50 FNL / 1262 FEL / TWSP: 26S / RANGE: 31E / SECTION: 14 / LAT: 32.0500428 / LONG: -103.7443649 (TVD: 11708 feet, MD: 21956 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- 54436		2 Pool Code 98081	3 Pool Name Zia Hills; Wolfcamp
4 Property Code 331845	5 Property Name ZIA HILLS UNIT 2331 WC		6 Well Number 710H
7 OGRID No. 217817	8 Operator Name CONOCOPHILLIPS COMPANY		9 Elevation 3164.56'

¹⁰ Surface Location

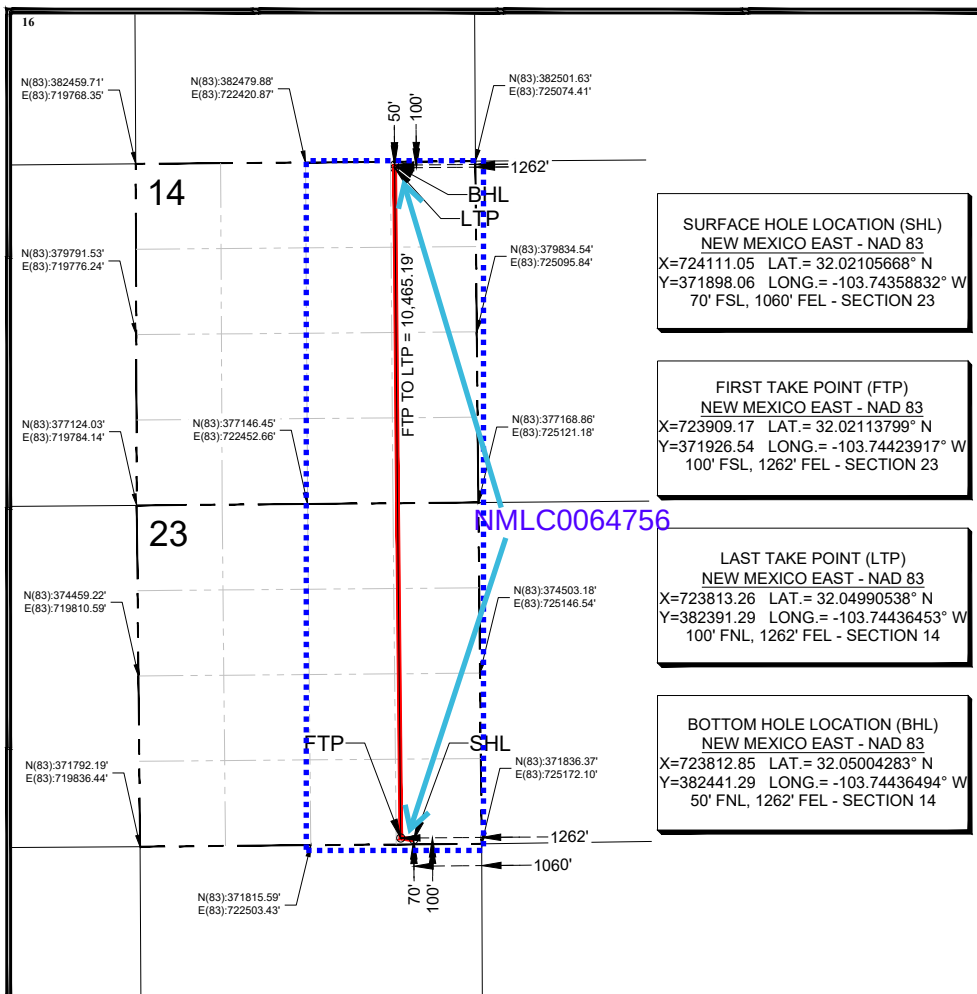
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	23	26-S	31-E		70'	SOUTH	1060'	EAST	EDDY

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
A	14	26-S	31-E		50'	NORTH	1262'	EAST	EDDY

12 Dedicated Acres 640	13 Joint or Infill	14 Consolidation Code	15 Order No.
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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.



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.

Signature Mayte Reyes Date 12/18/2022

Mayte Reyes

Printed Name _____

mayte.x.reyes@cop.com

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.

Date of Survey 10/21/2022

Signature and Seal of Professional Surveyor

Certificate Number

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: CONOCOPHILLIPS **OGRID:** 217817 **Date:** 12 / 18 / 22

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 2331 WC 710H	30-015-	P-23-26S-31E	70' FSL & 1060' FEL 50' FNL & 1262 FEL	± 2245	± 6736	± 5165

IV. Central Delivery Point Name: _____ [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 2331 WC 710H	Pending	5/20/2024	± 25 days from spud	9/17/2024	9/27/2024	10/2/2024

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.

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

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: Mayte Reyes
Title: Sr. Regulatory Coordinator
E-mail Address: mayte.x.reyes@conocophillips.com
Date: 12/18/2022
Phone: 575-748-6945
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

ConocoPhillips Company - Zia Hills Unit 2331 WC 710H

1. Geologic Formations

TVD of target	11,708' EOL	Pilot hole depth	NA
MD at TD:	21,956'	Deepest expected fresh water:	405'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1057	Water	
Top of Salt	1448	Salt	
Base of Salt	3918	Salt	
Lamar	4137	Salt Water	
Bell Canyon	4162	Salt Water	
Cherry Canyon	5072	Oil/Gas	
Brushy Canyon	6465	Oil/Gas	
BSPG	8117	Oil/Gas	
BS1S	9153	Oil/Gas	
BS2S	9803	Oil/Gas	
BS3C	10276	Oil/Gas	
BS3S	10972	Oil/Gas	
WFMP	11356	Oil/Gas	
Wolfcamp A Shale	11708	Target Oil/Gas	
WFMP B	11883	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	1398	10.75"	45.5	J55	BTC	3.27	1.08	11.24	12.51
9.875"	0	8500	7.625"	29.7	L80-ICY	TXP BTC	1.42	1.14	2.88	2.88
8.750"	8500	11,100	7.625"	29.7	P110-ICY	W513	1.36	1.72	3.24	1.94
6.75"	0	10600	5.5"	23	P110-CY	TXP BTC	2.11	2.49	2.99	2.99
6.75"	10600	21,956	5.5"	23	P110-CY	W441	1.91	2.26	2.71	2.46
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 at least 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 2331 WC 710H

	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 2331 WC 710H

3. Cementing Program

Casing	# Sk	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	667	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Inter.	810	10.5	3.5	22.3	24	NeoCem
Stage 1	250	16.4	1.08	4.52	7	Tail: Class H
Prod	589	12.5	1.67	10.7	72	Lead: 50:50:10 H Blend
	895	13.2	1.43	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	10,600'	35% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Zia Hills Unit 2331 WC 710H

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	2500psi
			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 2331 WC 710H

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 - 9.4	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	12 - 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 2331 WC 710H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	7615 psi at 11708' 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

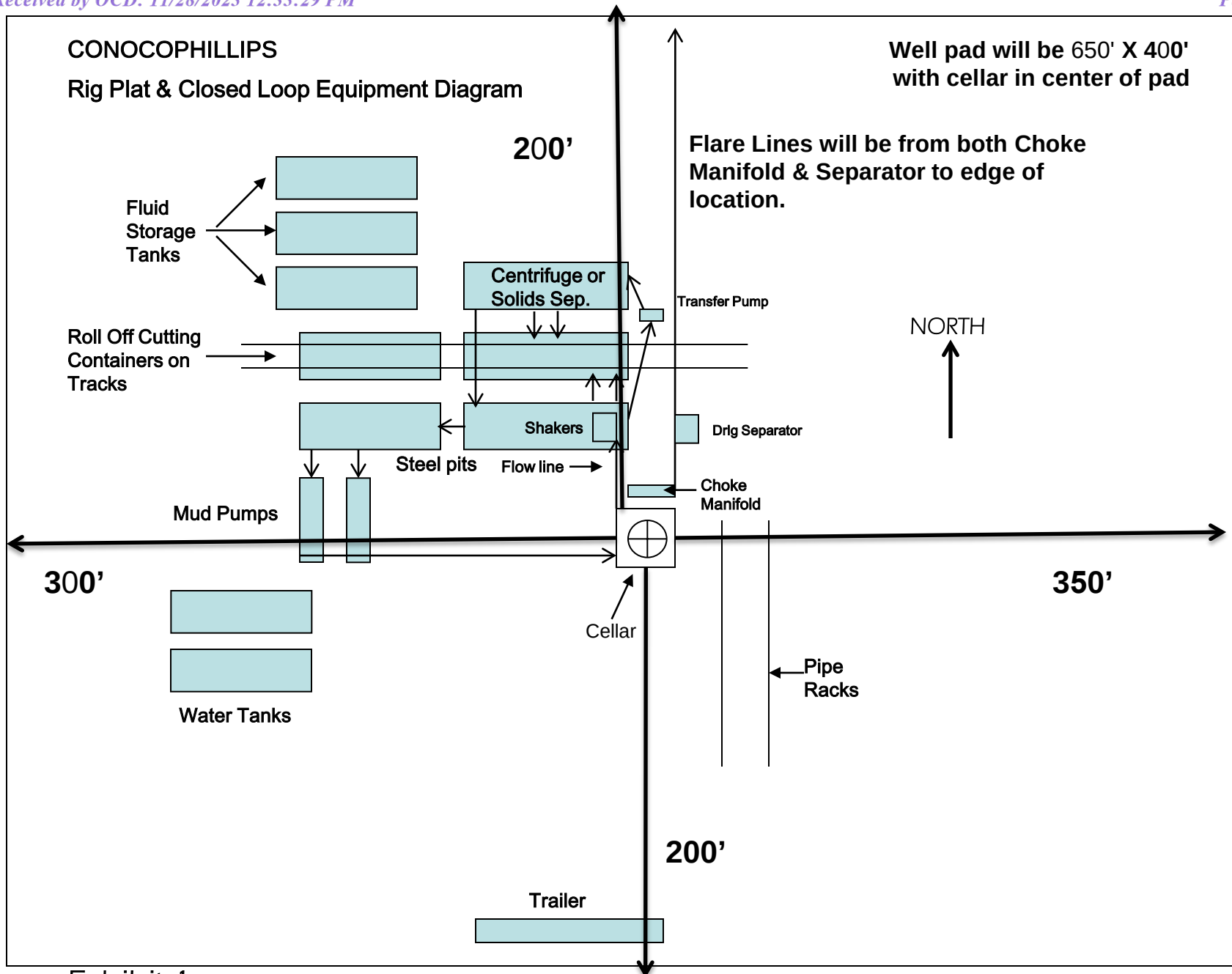


Exhibit 1

DELAWARE BASIN EAST

**BULLDOG PROSPECT (NM-E)
ZIA HILLS UNIT 2331 PROJECT
ZIA HILLS UNIT 2331 WC #710H**

**OWB
PWP0**

Anticollision Report

16 November, 2022

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 95.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,320.0usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	11/16/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	3,000.0	PWP0 (OWB)	r.5 SDI_KPR_ADK	SDI Keeper ADK rev.5
3,000.0	11,155.9	PWP0 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5
11,155.9	21,956.2	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
Offset Well - Wellbore - Design						
ZIA HILLS UNIT 2331 PROJECT						
GOLDEN SPUR 25 FBS #3H (P&A) - OWB - AWP						Out of range
SHETLAND 11 FEDERAL #332H - OWB - PWP0						Out of range
SHETLAND 11 FEDERAL #714H - OWB - PWP0	21,956.2	16,466.2	478.5	363.5	4.162	CC, ES, SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	21,956.2	16,703.1	1,041.8	880.9	6.474	CC, ES, SF
SHETLAND 11-2 FEDERAL STATE COM #712H - OWB						Out of range
SHETLAND 11-2 FEDERAL STATE COM #732H - OWB						Out of range
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	21,956.2	21,907.0	582.7	339.1	2.392	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #613H - OWB	21,956.2	22,089.0	393.9	140.0	1.552	Advise and Monitor, CC, ES,
SHETLAND 2-11 STATE FEDERAL COM #713H - OWB	21,956.2	21,917.2	1,090.4	844.4	4.433	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #733H - OWB	21,956.2	22,097.6	621.4	431.4	3.271	CC, ES, SF
ZHU 2331 WC #4H - OWB - AWP						Out of range
ZHU 2331 WC #5H - OWB - AWP						Out of range
ZHU 2331 WC #6H - OWB - AWP (PH)						Out of range
ZHU 2331 WC #6H - ST01 - AWP						Out of range
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	1,000.0	999.0	89.9	81.8	11.176	CC, ES
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	21,956.2	21,905.4	1,245.2	1,073.6	7.256	SF
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	2,000.0	1,999.0	59.9	48.5	5.265	CC, ES
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	21,956.2	22,037.0	822.6	654.6	4.897	SF
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	2,500.0	2,499.0	30.1	16.8	2.273	CC, ES, SF
ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0	2,000.0	1,999.0	30.0	18.6	2.633	CC, ES, SF
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	2,000.0	1,999.0	60.4	49.0	5.310	CC, ES
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	21,956.2	21,984.9	821.4	654.8	4.929	SF
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	1,500.0	1,499.0	90.4	80.8	9.393	CC
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	1,520.0	1,518.4	90.5	80.8	9.324	ES
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	21,956.2	21,863.9	1,244.1	1,075.8	7.394	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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
ZIA HILLS UNIT 2431 PROJECT						
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0						Out of range
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0						Out of range
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0						Out of range
ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0						Out of range
ZIA HILLS UNIT 2431 WC #705H - OWB - PWP0						Out of range
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0						Out of range

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

TD Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)		Separation Factor	Warning
Offset Well - Wellbore - Design				Between Ellipses (usft)		
ZIA HILLS UNIT 2331 PROJECT						
GOLDEN SPUR 25 FBS #3H (P&A) - OWB - AWP	21,956.2	14,160.0				Out of Range @TD
SHETLAND 11 FEDERAL #332H - OWB - PWP0	21,956.2	11,300.0				Out of Range @TD
SHETLAND 11 FEDERAL #714H - OWB - PWP0	21,956.2	16,466.2	478.5	363.5	4.162	CC, ES, SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	21,956.2	16,703.1	1,041.8	880.9	6.474	CC, ES, SF
SHETLAND 11-2 FEDERAL STATE COM #712H - OWB	21,956.2	11,701.0				Out of Range @TD
SHETLAND 11-2 FEDERAL STATE COM #732H - OWB	21,956.2	11,950.3				Out of Range @TD
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	21,956.2	21,907.0	582.7	339.1	2.392	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #613H - OWB	21,956.2	22,089.0	393.9	140.0	1.552	Advise and Monitor, CC, ES,
SHETLAND 2-11 STATE FEDERAL COM #713H - OWB	21,956.2	21,917.2	1,090.4	844.4	4.433	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #733H - OWB	21,956.2	22,097.6	621.4	431.4	3.271	CC, ES, SF
ZHU 2331 WC #4H - OWB - AWP	21,956.2	21,931.7				Out of Range @TD
ZHU 2331 WC #5H - OWB - AWP	21,956.2	21,930.7				Out of Range @TD
ZHU 2331 WC #6H - OWB - AWP (PH)	21,956.2	11,369.9				Out of Range @TD
ZHU 2331 WC #6H - ST01 - AWP	21,956.2	22,002.2				Out of Range @TD
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	21,956.2	21,905.4	1,245.2	1,073.6	7.256	SF
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	21,956.2	22,037.0	822.6	654.6	4.897	SF
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	21,956.2	21,760.3	449.0	282.9	2.703	
ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0	21,956.2	21,724.9	448.4	283.8	2.724	
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	21,956.2	21,984.9	821.4	654.8	4.929	SF
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	21,956.2	21,863.9	1,244.1	1,075.8	7.394	SF
ZIA HILLS UNIT 2431 PROJECT						
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	21,956.2	22,158.7				Out of Range @TD
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0	21,956.2	21,972.5				Out of Range @TD
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0	21,956.2	22,108.9				Out of Range @TD
ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0	21,956.2	21,947.8				Out of Range @TD
ZIA HILLS UNIT 2431 WC #705H - OWB - PWP0	21,956.2	22,147.0				Out of Range @TD
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0	21,956.2	22,015.1				Out of Range @TD

Offset Design: ZIA HILLS UNIT 2331 PROJECT - SHETLAND 11 FEDERAL #714H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: O-MWD													Offset Well Error: 10.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
21,090.0	11,625.0	16,466.2	11,736.9	76.0	88.0	95.79	10,925.3	-27.7	1,287.8	1,209.9	77.90	16.531	
21,100.0	11,625.0	16,466.2	11,736.9	76.1	88.0	95.79	10,925.3	-27.7	1,278.0	1,200.0	78.03	16.380	
21,185.0	11,625.0	16,466.2	11,736.9	76.7	88.0	95.79	10,925.3	-27.7	1,195.1	1,116.0	79.19	15.092	
21,200.0	11,625.0	16,466.2	11,736.9	76.8	88.0	95.79	10,925.3	-27.7	1,180.5	1,101.1	79.41	14.866	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - SHETLAND 11 FEDERAL #714H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	10.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	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)			Warning	
21,280.0	11,625.0	16,466.2	11,736.9	77.4	88.0	95.79	10,925.3	-27.7	1,102.9	1,022.1	80.74	13.659		
21,300.0	11,625.0	16,466.2	11,736.9	77.6	88.0	95.79	10,925.3	-27.7	1,083.5	1,002.4	81.11	13.358		
21,375.0	11,625.0	16,466.2	11,736.9	78.1	88.0	95.79	10,925.3	-27.7	1,011.2	928.5	82.65	12.234		
21,400.0	11,625.0	16,466.2	11,736.9	78.3	88.0	95.79	10,925.3	-27.7	987.1	903.9	83.22	11.861		
21,470.0	11,625.0	16,466.2	11,736.9	78.8	88.0	95.79	10,925.3	-27.7	920.1	835.0	85.03	10.821		
21,500.0	11,625.0	16,466.2	11,736.9	79.1	88.0	95.79	10,925.3	-27.7	891.5	805.6	85.90	10.378		
21,565.0	11,625.0	16,466.2	11,736.9	79.5	88.0	95.79	10,925.3	-27.7	829.9	741.8	88.05	9.425		
21,600.0	11,625.0	16,466.2	11,736.9	79.8	88.0	95.79	10,925.3	-27.7	796.9	707.6	89.37	8.917		
21,660.0	11,625.0	16,466.2	11,736.9	80.3	88.0	95.79	10,925.3	-27.7	740.9	648.9	91.97	8.056		
21,700.0	11,625.0	16,466.2	11,736.9	80.6	88.0	95.79	10,925.3	-27.7	703.9	609.9	93.97	7.490		
21,755.0	11,625.0	16,466.2	11,736.9	81.0	88.0	95.79	10,925.3	-27.7	653.6	556.4	97.15	6.728		
21,800.0	11,625.0	16,466.2	11,736.9	81.3	88.0	95.79	10,925.3	-27.7	613.0	512.8	100.19	6.119		
21,850.0	11,625.0	16,466.2	11,736.9	81.7	88.0	95.79	10,925.3	-27.7	568.8	464.6	104.13	5.462		
21,900.0	11,625.0	16,466.2	11,736.9	82.0	88.0	95.79	10,925.3	-27.7	525.5	416.8	108.76	4.832		
21,945.0	11,625.0	16,466.2	11,736.9	82.4	88.0	95.79	10,925.3	-27.7	487.7	374.1	113.63	4.292		
21,956.2	11,625.0	16,466.2	11,736.9	82.5	88.0	95.79	10,925.3	-27.7	478.5	363.5	114.96	4.162	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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
21,470.0	11,625.0	16,703.1	11,962.0	78.8	88.8	105.08	10,929.7	631.9	1,304.4	1,168.9	135.49	9.627		
21,500.0	11,625.0	16,703.1	11,962.0	79.1	88.8	105.08	10,929.7	631.9	1,284.5	1,147.4	137.03	9.374		
21,565.0	11,625.0	16,703.1	11,962.0	79.5	88.8	105.08	10,929.7	631.9	1,242.6	1,102.2	140.42	8.849		
21,600.0	11,625.0	16,703.1	11,962.0	79.8	88.8	105.08	10,929.7	631.9	1,220.9	1,078.6	142.29	8.580		
21,660.0	11,625.0	16,703.1	11,962.0	80.3	88.8	105.08	10,929.7	631.9	1,185.1	1,039.6	145.52	8.144		
21,700.0	11,625.0	16,703.1	11,962.0	80.6	88.8	105.08	10,929.7	631.9	1,162.4	1,014.7	147.68	7.871		
21,755.0	11,625.0	16,703.1	11,962.0	81.0	88.8	105.08	10,929.7	631.9	1,132.7	982.1	150.66	7.518		
21,800.0	11,625.0	16,703.1	11,962.0	81.3	88.8	105.08	10,929.7	631.9	1,109.9	956.8	153.07	7.251		
21,850.0	11,625.0	16,703.1	11,962.0	81.7	88.8	105.08	10,929.7	631.9	1,086.1	930.4	155.69	6.976		
21,900.0	11,625.0	16,703.1	11,962.0	82.0	88.8	105.08	10,929.7	631.9	1,064.2	906.0	158.22	6.726		
21,945.0	11,625.0	16,703.1	11,962.0	82.4	88.8	105.08	10,929.7	631.9	1,046.1	885.7	160.40	6.522		
21,956.2	11,625.0	16,703.1	11,962.0	82.5	88.8	105.08	10,929.7	631.9	1,041.8	880.9	160.92	6.474	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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	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:	Offset 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 Well Error:	10.0 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)			
20,900.0	11,625.0	21,907.0	11,495.6	74.6	178.7	63.82	10,664.4	211.7	1,314.4	1,186.5	127.82	10.283	
20,995.0	11,625.0	21,907.0	11,495.6	75.3	178.7	63.82	10,664.4	211.7	1,229.4	1,095.8	133.55	9.206	
21,000.0	11,625.0	21,907.0	11,495.6	75.3	178.7	63.82	10,664.4	211.7	1,224.9	1,091.1	133.87	9.150	
21,090.0	11,625.0	21,907.0	11,495.6	76.0	178.7	63.82	10,664.4	211.7	1,146.0	1,005.8	140.13	8.178	
21,100.0	11,625.0	21,907.0	11,495.6	76.1	178.7	63.82	10,664.4	211.7	1,137.3	996.4	140.88	8.073	
21,185.0	11,625.0	21,907.0	11,495.6	76.7	178.7	63.82	10,664.4	211.7	1,064.5	916.8	147.72	7.206	
21,200.0	11,625.0	21,907.0	11,495.6	76.8	178.7	63.82	10,664.4	211.7	1,051.9	902.8	149.02	7.059	
21,280.0	11,625.0	21,907.0	11,495.6	77.4	178.7	63.82	10,664.4	211.7	985.5	829.0	156.45	6.299	
21,300.0	11,625.0	21,907.0	11,495.6	77.6	178.7	63.82	10,664.4	211.7	969.2	810.8	158.45	6.117	
21,375.0	11,625.0	21,907.0	11,495.6	78.1	178.7	63.82	10,664.4	211.7	909.5	743.1	166.47	5.464	
21,400.0	11,625.0	21,907.0	11,495.6	78.3	178.7	63.82	10,664.4	211.7	890.1	720.8	169.33	5.257	
21,470.0	11,625.0	21,907.0	11,495.6	78.8	178.7	63.82	10,664.4	211.7	837.5	659.6	177.86	4.709	
21,500.0	11,625.0	21,907.0	11,495.6	79.1	178.7	63.82	10,664.4	211.7	815.7	633.9	181.74	4.488	
21,565.0	11,625.0	21,907.0	11,495.6	79.5	178.7	63.82	10,664.4	211.7	770.4	579.8	190.58	4.042	
21,600.0	11,625.0	21,907.0	11,495.6	79.8	178.7	63.82	10,664.4	211.7	747.2	551.6	195.57	3.821	
21,660.0	11,625.0	21,907.0	11,495.6	80.3	178.7	63.82	10,664.4	211.7	709.7	505.3	204.38	3.473	
21,700.0	11,625.0	21,907.0	11,495.6	80.6	178.7	63.82	10,664.4	211.7	686.5	476.1	210.36	3.263	
21,755.0	11,625.0	21,907.0	11,495.6	81.0	178.7	63.82	10,664.4	211.7	657.2	438.6	218.56	3.007	
21,800.0	11,625.0	21,907.0	11,495.6	81.3	178.7	63.82	10,664.4	211.7	635.8	410.7	225.09	2.825	
21,850.0	11,625.0	21,907.0	11,495.6	81.7	178.7	63.82	10,664.4	211.7	615.0	383.1	231.90	2.652	
21,900.0	11,625.0	21,907.0	11,495.6	82.0	178.7	63.82	10,664.4	211.7	597.7	359.7	238.00	2.511	
21,945.0	11,625.0	21,907.0	11,495.6	82.4	178.7	63.82	10,664.4	211.7	585.3	342.7	242.61	2.412	
21,956.2	11,625.0	21,907.0	11,495.6	82.5	178.7	63.82	10,664.4	211.7	582.7	339.1	243.61	2.392 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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	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:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - SHETLAND 2-11 STATE FEDERAL COM #613H - OWB - AWP													Offset Site Error: 0.0 usft
Survey Program: 226-MWD													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)			
20,800.0	11,625.0	22,089.0	11,669.7	73.8	179.6	-78.36	10,629.3	-670.7	1,314.4	1,203.4	110.96	11.846	
20,805.0	11,625.0	22,089.0	11,669.7	73.9	179.6	-78.36	10,629.3	-670.7	1,309.6	1,198.4	111.14	11.783	
20,900.0	11,625.0	22,089.0	11,669.7	74.6	179.6	-78.36	10,629.3	-670.7	1,219.0	1,104.1	114.94	10.606	
20,995.0	11,625.0	22,089.0	11,669.7	75.3	179.6	-78.36	10,629.3	-670.7	1,129.1	1,009.7	119.43	9.454	
21,000.0	11,625.0	22,089.0	11,669.7	75.3	179.6	-78.36	10,629.3	-670.7	1,124.4	1,004.7	119.69	9.395	
21,090.0	11,625.0	22,089.0	11,669.7	76.0	179.6	-78.36	10,629.3	-670.7	1,040.2	915.4	124.79	8.335	
21,100.0	11,625.0	22,089.0	11,669.7	76.1	179.6	-78.36	10,629.3	-670.7	1,030.9	905.5	125.42	8.219	
21,185.0	11,625.0	22,089.0	11,669.7	76.7	179.6	-78.36	10,629.3	-670.7	952.4	821.1	131.26	7.256	
21,200.0	11,625.0	22,089.0	11,669.7	76.8	179.6	-78.36	10,629.3	-670.7	938.7	806.3	132.40	7.090	
21,280.0	11,625.0	22,089.0	11,669.7	77.4	179.6	-78.36	10,629.3	-670.7	866.1	727.0	139.11	6.226	
21,300.0	11,625.0	22,089.0	11,669.7	77.6	179.6	-78.36	10,629.3	-670.7	848.2	707.2	140.97	6.017	
21,375.0	11,625.0	22,089.0	11,669.7	78.1	179.6	-78.36	10,629.3	-670.7	781.9	633.2	148.72	5.258	
21,400.0	11,625.0	22,089.0	11,669.7	78.3	179.6	-78.36	10,629.3	-670.7	760.2	608.6	151.59	5.014	
21,470.0	11,625.0	22,089.0	11,669.7	78.8	179.6	-78.36	10,629.3	-670.7	700.4	539.9	160.53	4.363	
21,500.0	11,625.0	22,089.0	11,669.7	79.1	179.6	-78.36	10,629.3	-670.7	675.4	510.7	164.79	4.099	
21,565.0	11,625.0	22,089.0	11,669.7	79.5	179.6	-78.36	10,629.3	-670.7	622.8	447.8	175.00	3.559	
21,600.0	11,625.0	22,089.0	11,669.7	79.8	179.6	-78.36	10,629.3	-670.7	595.5	414.4	181.09	3.288	
21,660.0	11,625.0	22,089.0	11,669.7	80.3	179.6	-78.36	10,629.3	-670.7	550.7	358.2	192.48	2.861	
21,700.0	11,625.0	22,089.0	11,669.7	80.6	179.6	-78.36	10,629.3	-670.7	522.5	321.8	200.73	2.603	
21,755.0	11,625.0	22,089.0	11,669.7	81.0	179.6	-78.36	10,629.3	-670.7	486.4	273.7	212.74	2.287	
21,800.0	11,625.0	22,089.0	11,669.7	81.3	179.6	-78.36	10,629.3	-670.7	459.7	236.8	222.91	2.063	
21,850.0	11,625.0	22,089.0	11,669.7	81.7	179.6	-78.36	10,629.3	-670.7	433.7	199.6	234.08	1.853 Advise and Monitor	
21,900.0	11,625.0	22,089.0	11,669.7	82.0	179.6	-78.36	10,629.3	-670.7	412.0	167.6	244.40	1.686 Advise and Monitor	
21,945.0	11,625.0	22,089.0	11,669.7	82.4	179.6	-78.36	10,629.3	-670.7	396.9	144.7	252.20	1.574 Advise and Monitor	
21,956.2	11,625.0	22,089.0	11,669.7	82.5	179.6	-78.36	10,629.3	-670.7	393.9	140.0	253.83	1.552 Advise and Monitor, 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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - SHETLAND 2-11 STATE FEDERAL COM #713H - 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		Rule Assigned:				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
21,565.0	11,625.0	21,917.2	11,800.0	79.5	175.0	-92.99	10,913.9	-1,316.6	1,284.1	1,069.3	214.82	5.978		
21,600.0	11,625.0	21,917.2	11,800.0	79.8	175.0	-92.99	10,913.9	-1,316.6	1,263.1	1,045.3	217.77	5.800		
21,660.0	11,625.0	21,917.2	11,800.0	80.3	175.0	-92.99	10,913.9	-1,316.6	1,228.5	1,005.7	222.83	5.513		
21,700.0	11,625.0	21,917.2	11,800.0	80.6	175.0	-92.99	10,913.9	-1,316.6	1,206.5	980.3	226.18	5.334		
21,755.0	11,625.0	21,917.2	11,800.0	81.0	175.0	-92.99	10,913.9	-1,316.6	1,177.9	947.1	230.74	5.105		
21,800.0	11,625.0	21,917.2	11,800.0	81.3	175.0	-92.99	10,913.9	-1,316.6	1,155.8	921.4	234.39	4.931		
21,850.0	11,625.0	21,917.2	11,800.0	81.7	175.0	-92.99	10,913.9	-1,316.6	1,133.0	894.6	238.32	4.754		
21,900.0	11,625.0	21,917.2	11,800.0	82.0	175.0	-92.99	10,913.9	-1,316.6	1,111.9	869.8	242.06	4.593		
21,945.0	11,625.0	21,917.2	11,800.0	82.4	175.0	-92.99	10,913.9	-1,316.6	1,094.5	849.2	245.24	4.463		
21,956.2	11,625.0	21,917.2	11,800.0	82.5	175.0	-92.99	10,913.9	-1,316.6	1,090.4	844.4	246.00	4.433	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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - SHETLAND 2-11 STATE FEDERAL COM #733H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	10.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
21,185.0	11,625.0	22,097.6	12,034.9	76.7	173.7	-126.71	10,919.3	-687.1	1,259.2	1,142.5	116.69	10.791	
21,200.0	11,625.0	22,097.6	12,034.9	76.8	173.7	-126.71	10,919.3	-687.1	1,245.3	1,127.9	117.41	10.607	
21,280.0	11,625.0	22,097.6	12,034.9	77.4	173.7	-126.71	10,919.3	-687.1	1,172.0	1,050.4	121.56	9.641	
21,300.0	11,625.0	22,097.6	12,034.9	77.6	173.7	-126.71	10,919.3	-687.1	1,153.8	1,031.1	122.68	9.405	
21,375.0	11,625.0	22,097.6	12,034.9	78.1	173.7	-126.71	10,919.3	-687.1	1,086.1	958.9	127.24	8.536	
21,400.0	11,625.0	22,097.6	12,034.9	78.3	173.7	-126.71	10,919.3	-687.1	1,063.7	934.9	128.89	8.253	
21,470.0	11,625.0	22,097.6	12,034.9	78.8	173.7	-126.71	10,919.3	-687.1	1,001.9	867.9	133.91	7.482	
21,500.0	11,625.0	22,097.6	12,034.9	79.1	173.7	-126.71	10,919.3	-687.1	975.7	839.4	136.25	7.161	
21,565.0	11,625.0	22,097.6	12,034.9	79.5	173.7	-126.71	10,919.3	-687.1	919.7	778.0	141.75	6.488	
21,600.0	11,625.0	22,097.6	12,034.9	79.8	173.7	-126.71	10,919.3	-687.1	890.1	745.1	144.98	6.140	
21,660.0	11,625.0	22,097.6	12,034.9	80.3	173.7	-126.71	10,919.3	-687.1	840.3	689.3	150.98	5.566	
21,700.0	11,625.0	22,097.6	12,034.9	80.6	173.7	-126.71	10,919.3	-687.1	807.9	652.5	155.32	5.201	
21,755.0	11,625.0	22,097.6	12,034.9	81.0	173.7	-126.71	10,919.3	-687.1	764.4	602.7	161.78	4.725	
21,800.0	11,625.0	22,097.6	12,034.9	81.3	173.7	-126.71	10,919.3	-687.1	730.1	562.6	167.48	4.359	
21,850.0	11,625.0	22,097.6	12,034.9	81.7	173.7	-126.71	10,919.3	-687.1	693.3	519.1	174.25	3.979	
21,900.0	11,625.0	22,097.6	12,034.9	82.0	173.7	-126.71	10,919.3	-687.1	658.3	476.8	181.46	3.628	
21,945.0	11,625.0	22,097.6	12,034.9	82.4	173.7	-126.71	10,919.3	-687.1	628.5	440.3	188.25	3.339	
21,956.2	11,625.0	22,097.6	12,034.9	82.5	173.7	-126.71	10,919.3	-687.1	621.4	431.4	189.98	3.271	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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK_1000-r.5 MWD+IFR1_11107-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.41	-0.6	-89.8	89.9				
95.0	95.0	94.0	94.0	3.0	3.0	-90.41	-0.6	-89.8	89.9	83.8	6.03	14.913	
100.0	100.0	99.0	99.0	3.0	3.0	-90.41	-0.6	-89.8	89.9	83.8	6.03	14.904	
190.0	190.0	189.0	189.0	3.1	3.1	-90.41	-0.6	-89.8	89.9	83.7	6.15	14.607	
200.0	200.0	199.0	199.0	3.1	3.1	-90.41	-0.6	-89.8	89.9	83.7	6.17	14.561	
285.0	285.0	284.0	284.0	3.2	3.2	-90.41	-0.6	-89.8	89.9	83.5	6.31	14.240	
300.0	300.0	299.0	299.0	3.2	3.2	-90.41	-0.6	-89.8	89.9	83.5	6.34	14.176	
380.0	380.0	379.0	379.0	3.3	3.3	-90.41	-0.6	-89.8	89.9	83.4	6.49	13.851	
400.0	400.0	399.0	399.0	3.3	3.3	-90.41	-0.6	-89.8	89.9	83.3	6.53	13.764	
475.0	475.0	474.0	474.0	3.4	3.4	-90.41	-0.6	-89.8	89.9	83.2	6.68	13.445	
500.0	500.0	499.0	499.0	3.4	3.4	-90.41	-0.6	-89.8	89.9	83.1	6.74	13.334	
570.0	570.0	569.0	569.0	3.5	3.5	-90.41	-0.6	-89.8	89.9	83.0	6.90	13.029	
600.0	600.0	599.0	599.0	3.5	3.5	-90.41	-0.6	-89.8	89.9	82.9	6.97	12.895	
665.0	665.0	664.0	664.0	3.6	3.6	-90.41	-0.6	-89.8	89.9	82.7	7.13	12.610	
700.0	700.0	699.0	699.0	3.7	3.7	-90.41	-0.6	-89.8	89.9	82.6	7.21	12.455	
760.0	760.0	759.0	759.0	3.8	3.8	-90.41	-0.6	-89.8	89.9	82.5	7.37	12.193	
800.0	800.0	799.0	799.0	3.8	3.8	-90.41	-0.6	-89.8	89.9	82.4	7.48	12.018	
855.0	855.0	854.0	854.0	3.9	3.9	-90.41	-0.6	-89.8	89.9	82.2	7.63	11.783	
900.0	900.0	899.0	899.0	4.0	4.0	-90.41	-0.6	-89.8	89.9	82.1	7.75	11.591	
950.0	950.0	949.0	949.0	4.1	4.1	-90.41	-0.6	-89.8	89.9	82.0	7.89	11.382	
1,000.0	1,000.0	999.0	999.0	4.2	4.2	-90.41	-0.6	-89.8	89.9	81.8	8.04	11.176 CC, ES	
1,045.0	1,045.0	1,042.7	1,042.7	4.2	4.2	-90.41	-0.6	-90.2	90.2	82.0	8.21	10.981	
1,100.0	1,100.0	1,096.0	1,095.9	4.3	4.3	-90.40	-0.6	-91.5	91.5	83.1	8.43	10.858	
1,140.0	1,140.0	1,134.7	1,134.6	4.4	4.4	-90.40	-0.7	-93.0	93.1	84.5	8.60	10.829	
1,200.0	1,200.0	1,192.7	1,192.5	4.5	4.6	-90.40	-0.7	-96.3	96.5	87.7	8.86	10.893	
1,235.0	1,235.0	1,226.4	1,226.2	4.6	4.7	-90.39	-0.7	-98.8	99.1	90.1	9.02	10.990	
1,300.0	1,300.0	1,288.9	1,288.4	4.7	4.9	-90.38	-0.7	-104.4	104.9	95.6	9.31	11.275	
1,330.0	1,330.0	1,317.7	1,317.0	4.7	4.9	-90.38	-0.7	-107.4	108.1	98.7	9.44	11.450	
1,400.0	1,400.0	1,384.5	1,383.4	4.9	5.2	-90.37	-0.7	-115.6	116.7	106.9	9.76	11.953	
1,425.0	1,425.0	1,408.3	1,406.9	4.9	5.3	-90.36	-0.8	-118.9	120.1	110.2	9.88	12.162	
1,500.0	1,500.0	1,479.3	1,477.1	5.1	5.5	-90.35	-0.8	-129.9	131.7	121.5	10.23	12.877	
1,520.0	1,520.0	1,500.0	1,497.5	5.1	5.6	-90.35	-0.8	-133.4	135.1	124.8	10.34	13.063	
1,600.0	1,600.0	1,573.0	1,569.2	5.3	5.8	-90.34	-0.9	-147.0	150.0	139.3	10.70	14.012	
1,615.0	1,615.0	1,587.0	1,582.9	5.3	5.9	-90.34	-0.9	-149.8	153.0	142.2	10.77	14.199	
1,700.0	1,700.0	1,669.4	1,663.5	5.5	6.1	-90.33	-0.9	-166.9	170.6	159.4	11.18	15.263	
1,710.0	1,710.0	1,679.2	1,673.1	5.5	6.2	-90.32	-1.0	-168.9	172.7	161.5	11.23	15.383	
1,800.0	1,800.0	1,767.2	1,759.2	5.7	6.5	-90.32	-1.0	-187.2	191.4	179.7	11.67	16.399	
1,805.0	1,805.0	1,772.1	1,764.0	5.7	6.5	-90.32	-1.0	-188.2	192.4	180.8	11.70	16.453	
1,900.0	1,900.0	1,865.1	1,854.9	5.9	6.8	-90.31	-1.1	-207.6	212.2	200.0	12.19	17.414	
1,995.0	1,995.0	1,958.0	1,945.8	6.1	7.1	-90.30	-1.2	-226.9	232.0	219.3	12.69	18.278	
2,000.0	2,000.0	1,962.9	1,950.6	6.1	7.1	-90.30	-1.2	-227.9	233.0	220.3	12.72	18.321	
2,090.0	2,090.0	2,050.9	2,036.7	6.3	7.4	-90.30	-1.3	-246.2	251.7	238.5	13.21	19.056	
2,100.0	2,100.0	2,060.7	2,046.2	6.3	7.5	-90.29	-1.3	-248.2	253.8	240.5	13.26	19.133	
2,185.0	2,185.0	2,143.8	2,127.6	6.5	7.8	-90.29	-1.3	-265.5	271.5	257.7	13.74	19.758	
2,200.0	2,200.0	2,158.5	2,141.9	6.5	7.8	-90.29	-1.4	-268.6	274.6	260.7	13.82	19.862	
2,280.0	2,280.0	2,236.7	2,218.5	6.7	8.1	-90.29	-1.4	-284.8	291.2	276.9	14.28	20.393	
2,300.0	2,300.0	2,256.3	2,237.6	6.7	8.2	-90.29	-1.4	-288.9	295.4	281.0	14.40	20.518	
2,375.0	2,375.0	2,329.7	2,309.3	6.9	8.5	-90.28	-1.5	-304.2	311.0	296.1	14.83	20.968	
2,400.0	2,400.0	2,354.1	2,333.3	6.9	8.6	-90.28	-1.5	-309.2	316.2	301.2	14.98	21.110	
2,470.0	2,470.0	2,422.6	2,400.2	7.1	8.9	-90.28	-1.6	-323.5	330.7	315.3	15.39	21.490	
2,500.0	2,500.0	2,451.9	2,428.9	7.2	9.0	-90.28	-1.6	-329.6	336.9	321.4	15.57	21.645	
2,565.0	2,565.0	2,515.5	2,491.1	7.3	9.3	-90.28	-1.7	-342.8	350.5	334.5	15.95	21.967	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	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	Warning
2,600.0	2,600.0	2,549.8	2,524.6	7.4	9.4	-90.28	-1.7	-349.9	357.7	341.6	16.16	22.131	
2,660.0	2,660.0	2,608.4	2,582.0	7.5	9.6	-90.27	-1.7	-362.1	370.2	353.7	16.53	22.401	
2,700.0	2,700.0	2,647.6	2,620.3	7.6	9.8	-90.27	-1.8	-370.3	378.5	361.8	16.77	22.573	
2,755.0	2,755.0	2,701.4	2,672.9	7.7	10.0	-90.27	-1.8	-381.4	390.0	372.9	17.10	22.799	
2,800.0	2,800.0	2,745.4	2,716.0	7.8	10.2	-90.27	-1.8	-390.6	399.3	381.9	17.38	22.976	
2,850.0	2,850.0	2,794.3	2,763.8	7.9	10.4	-90.27	-1.9	-400.8	409.7	392.0	17.69	23.165	
2,900.0	2,900.0	2,843.2	2,811.7	8.0	10.6	-90.27	-1.9	-410.9	420.1	402.1	18.00	23.345	
2,945.0	2,945.0	2,887.2	2,854.7	8.1	10.8	-90.27	-2.0	-420.1	429.5	411.2	18.27	23.501	
3,000.0	3,000.0	2,941.0	2,907.3	8.3	11.0	-90.27	-2.0	-431.3	440.9	422.3	18.62	23.683	
3,040.0	3,040.0	2,980.2	2,945.7	8.3	11.2	-1.23	-2.0	-439.4	448.9	430.1	18.87	23.798	
3,100.0	3,100.0	3,039.2	3,003.3	8.4	11.5	-1.23	-2.1	-451.7	460.0	440.7	19.24	23.913	
3,135.0	3,134.9	3,073.7	3,037.1	8.4	11.6	-1.23	-2.1	-458.8	465.8	446.4	19.45	23.953	
3,200.0	3,199.8	3,137.9	3,099.9	8.5	11.9	-1.24	-2.2	-472.2	475.6	455.8	19.84	23.968	
3,230.0	3,229.8	3,167.7	3,129.0	8.5	12.0	-1.24	-2.2	-478.4	479.6	459.6	20.00	23.984	
3,250.0	3,249.7	3,187.5	3,148.4	8.5	12.1	-1.24	-2.2	-482.5	482.2	462.1	20.10	23.985	
3,300.0	3,299.5	3,237.1	3,197.0	8.5	12.3	-1.25	-2.3	-492.8	488.2	467.9	20.36	23.977	
3,325.0	3,324.4	3,261.9	3,221.3	8.5	12.4	-1.26	-2.3	-498.0	491.3	470.8	20.51	23.953	
3,400.0	3,399.1	3,336.4	3,294.1	8.6	12.8	-1.27	-2.3	-513.5	500.4	479.5	20.95	23.882	
3,420.0	3,419.0	3,356.2	3,313.5	8.6	12.9	-1.28	-2.4	-517.6	502.9	481.8	21.08	23.860	
3,500.0	3,498.7	3,435.6	3,391.2	8.7	13.2	-1.29	-2.4	-534.1	512.6	491.1	21.56	23.772	
3,515.0	3,513.7	3,450.5	3,405.7	8.7	13.3	-1.29	-2.4	-537.2	514.5	492.8	21.66	23.753	
3,600.0	3,598.4	3,534.9	3,488.2	8.8	13.7	-1.31	-2.5	-554.7	524.8	502.6	22.19	23.650	
3,610.0	3,608.3	3,544.8	3,497.9	8.8	13.7	-1.31	-2.5	-556.8	526.0	503.8	22.25	23.637	
3,700.0	3,698.0	3,634.1	3,585.3	8.9	14.1	-1.33	-2.6	-575.4	537.0	514.2	22.83	23.519	
3,705.0	3,703.0	3,639.1	3,590.2	8.9	14.1	-1.33	-2.6	-576.4	537.6	514.7	22.87	23.512	
3,800.0	3,797.6	3,733.4	3,682.4	9.0	14.5	-1.34	-2.7	-596.0	549.2	525.7	23.49	23.380	
3,895.0	3,892.2	3,827.7	3,774.6	9.1	15.0	-1.36	-2.8	-615.6	560.8	536.6	24.13	23.242	
3,900.0	3,897.2	3,832.7	3,779.5	9.1	15.0	-1.36	-2.8	-616.6	561.4	537.2	24.16	23.235	
3,990.0	3,986.9	3,922.0	3,866.9	9.3	15.4	-1.37	-2.8	-635.2	572.4	547.6	24.78	23.101	
4,000.0	3,996.8	3,931.9	3,876.6	9.3	15.4	-1.37	-2.8	-637.3	573.6	548.7	24.84	23.086	
4,085.0	4,081.5	4,016.3	3,959.1	9.5	15.8	-1.38	-2.9	-654.8	583.9	558.5	25.44	22.957	
4,100.0	4,096.4	4,031.2	3,973.7	9.5	15.9	-1.39	-2.9	-657.9	585.8	560.2	25.54	22.935	
4,180.0	4,176.1	4,110.6	4,051.3	9.7	16.2	-1.40	-3.0	-674.4	595.5	569.4	26.10	22.812	
4,200.0	4,196.1	4,130.4	4,070.7	9.8	16.3	-1.40	-3.0	-678.6	598.0	571.7	26.25	22.782	
4,275.0	4,270.8	4,204.9	4,143.6	10.0	16.7	-1.41	-3.1	-694.0	607.1	580.3	26.78	22.667	
4,300.0	4,295.7	4,229.7	4,167.8	10.0	16.8	-1.41	-3.1	-699.2	610.1	583.2	26.96	22.629	
4,370.0	4,365.4	4,299.2	4,235.8	10.2	17.1	-1.42	-3.1	-713.6	618.7	591.2	27.47	22.521	
4,400.0	4,395.3	4,328.9	4,264.9	10.3	17.2	-1.42	-3.2	-719.8	622.3	594.6	27.69	22.476	
4,465.0	4,460.1	4,393.4	4,328.0	10.5	17.5	-1.43	-3.2	-733.2	630.3	602.1	28.17	22.376	
4,500.0	4,494.9	4,428.2	4,362.0	10.6	17.7	-1.44	-3.3	-740.5	634.5	606.1	28.42	22.324	
4,560.0	4,554.7	4,487.7	4,420.3	10.7	18.0	-1.44	-3.3	-752.8	641.8	613.0	28.87	22.233	
4,600.0	4,594.5	4,527.4	4,459.1	10.8	18.2	-1.45	-3.3	-761.1	646.7	617.5	29.17	22.173	
4,655.0	4,649.3	4,582.0	4,512.5	11.0	18.4	-1.45	-3.4	-772.4	653.4	623.8	29.58	22.091	
4,700.0	4,694.2	4,626.7	4,556.2	11.1	18.6	-1.46	-3.4	-781.7	658.9	629.0	29.92	22.025	
4,750.0	4,744.0	4,676.3	4,604.7	11.3	18.8	-1.46	-3.5	-792.0	665.0	634.7	30.29	21.951	
4,800.0	4,793.8	4,725.9	4,653.3	11.4	19.1	-1.47	-3.5	-802.4	671.1	640.4	30.67	21.879	
4,845.0	4,838.6	4,770.6	4,696.9	11.5	19.3	-1.47	-3.5	-811.7	676.6	645.6	31.02	21.814	
4,900.0	4,893.4	4,825.2	4,750.3	11.7	19.5	-1.48	-3.6	-823.0	683.3	651.8	31.44	21.736	
4,940.0	4,933.3	4,864.9	4,789.2	11.8	19.7	-1.48	-3.6	-831.3	688.2	656.4	31.74	21.679	
5,000.0	4,993.0	4,924.5	4,847.4	12.0	20.0	-1.49	-3.7	-843.6	695.5	663.3	32.20	21.595	
5,035.0	5,027.9	4,959.2	4,881.4	12.1	20.1	-1.49	-3.7	-850.9	699.7	667.3	32.48	21.546	
5,100.0	5,092.6	5,023.7	4,944.5	12.3	20.4	-1.50	-3.7	-864.3	707.7	674.7	32.98	21.458	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
5,130.0	5,122.5	5,053.5	4,973.6	12.4	20.6	-1.50	-3.8	-870.5	711.3	678.1	33.21	21.419	
5,187.7	5,180.0	5,110.7	5,029.6	12.6	20.8	-1.51	-3.8	-882.4	718.3	684.7	33.65	21.345	
5,200.0	5,192.3	5,123.0	5,041.6	12.6	20.9	-1.51	-3.8	-884.9	719.9	686.1	33.74	21.333	
5,225.0	5,217.2	5,147.8	5,065.9	12.7	21.0	-1.51	-3.9	-890.1	723.0	689.1	33.94	21.304	
5,300.0	5,292.0	5,222.1	5,138.5	12.9	21.4	-1.52	-3.9	-905.5	733.1	698.6	34.52	21.238	
5,320.0	5,311.9	5,241.9	5,157.9	13.0	21.5	-1.52	-3.9	-909.6	736.0	701.3	34.67	21.227	
5,400.0	5,391.8	5,320.9	5,235.3	13.2	21.8	-1.53	-4.0	-926.1	748.1	712.8	35.28	21.204	
5,415.0	5,406.8	5,335.8	5,249.7	13.2	21.9	-1.53	-4.0	-929.2	750.5	715.1	35.39	21.205	
5,500.0	5,491.7	5,419.5	5,331.7	13.5	22.3	-1.53	-4.1	-946.6	764.8	728.8	36.03	21.230	
5,510.0	5,501.7	5,429.4	5,341.3	13.5	22.3	-1.53	-4.1	-948.6	766.6	730.5	36.10	21.237	
5,600.0	5,591.7	5,517.8	5,427.8	13.7	22.7	-1.53	-4.2	-967.0	783.3	746.5	36.74	21.318	
5,605.0	5,596.7	5,522.7	5,432.6	13.7	22.8	-1.53	-4.2	-968.0	784.2	747.5	36.77	21.327	
5,687.7	5,679.4	5,603.7	5,511.9	13.8	23.1	-90.56	-4.2	-984.9	800.8	763.6	37.27	21.488	
5,700.0	5,691.7	5,615.8	5,523.6	13.8	23.2	-90.56	-4.2	-987.4	803.4	766.1	37.33	21.522	
5,795.0	5,786.7	5,708.7	5,614.5	13.9	23.6	-90.55	-4.3	-1,006.7	823.2	785.3	37.82	21.763	
5,800.0	5,791.7	5,713.6	5,619.3	13.9	23.6	-90.55	-4.3	-1,007.7	824.2	786.3	37.85	21.776	
5,890.0	5,881.7	5,801.6	5,705.4	13.9	24.1	-90.54	-4.4	-1,026.0	842.9	804.6	38.32	21.998	
5,900.0	5,891.7	5,811.4	5,715.0	13.9	24.1	-90.54	-4.4	-1,028.0	845.0	806.6	38.37	22.022	
5,985.0	5,976.7	5,894.5	5,796.3	14.0	24.5	-90.54	-4.5	-1,045.3	862.7	823.8	38.81	22.226	
6,000.0	5,991.7	5,909.2	5,810.7	14.0	24.6	-90.53	-4.5	-1,048.4	865.8	826.9	38.89	22.261	
6,080.0	6,071.7	5,987.5	5,887.2	14.0	24.9	-90.53	-4.6	-1,064.7	882.4	843.1	39.31	22.447	
6,100.0	6,091.7	6,007.0	5,906.3	14.0	25.0	-90.53	-4.6	-1,068.7	886.6	847.2	39.41	22.493	
6,175.0	6,166.7	6,080.4	5,978.1	14.1	25.4	-90.52	-4.6	-1,084.0	902.2	862.4	39.81	22.663	
6,200.0	6,191.7	6,104.8	6,002.0	14.1	25.5	-90.52	-4.7	-1,089.1	907.4	867.4	39.94	22.719	
6,270.0	6,261.7	6,173.3	6,069.0	14.1	25.8	-90.52	-4.7	-1,103.3	921.9	881.6	40.30	22.874	
6,300.0	6,291.7	6,202.7	6,097.7	14.2	25.9	-90.51	-4.7	-1,109.4	928.2	887.7	40.46	22.939	
6,365.0	6,356.7	6,266.2	6,159.9	14.2	26.2	-90.51	-4.8	-1,122.6	941.7	900.9	40.80	23.078	
6,400.0	6,391.7	6,300.5	6,193.4	14.2	26.4	-90.51	-4.8	-1,129.7	948.9	908.0	40.99	23.153	
6,460.0	6,451.7	6,359.2	6,250.8	14.2	26.7	-90.50	-4.9	-1,141.9	961.4	920.1	41.30	23.278	
6,500.0	6,491.7	6,398.3	6,289.1	14.3	26.8	-90.50	-4.9	-1,150.1	969.7	928.2	41.51	23.360	
6,555.0	6,546.7	6,452.1	6,341.7	14.3	27.1	-90.50	-4.9	-1,161.2	981.2	939.4	41.80	23.472	
6,600.0	6,591.7	6,496.1	6,384.7	14.3	27.3	-90.50	-5.0	-1,170.4	990.5	948.5	42.04	23.563	
6,650.0	6,641.7	6,545.0	6,432.6	14.4	27.5	-90.49	-5.0	-1,180.6	1,000.9	958.6	42.30	23.665	
6,700.0	6,691.7	6,596.9	6,483.4	14.4	27.8	-90.49	-5.1	-1,191.3	1,011.3	968.7	42.57	23.756	
6,745.0	6,736.7	6,645.3	6,530.7	14.4	28.0	-90.49	-5.1	-1,201.1	1,020.4	977.6	42.83	23.825	
6,800.0	6,791.7	6,704.5	6,588.7	14.4	28.3	-90.48	-5.1	-1,212.9	1,031.3	988.2	43.15	23.903	
6,840.0	6,831.7	6,747.6	6,631.1	14.5	28.5	-90.48	-5.2	-1,221.2	1,039.1	995.7	43.38	23.955	
6,900.0	6,891.7	6,812.4	6,694.7	14.5	28.8	-90.48	-5.2	-1,233.5	1,050.4	1,006.7	43.72	24.028	
6,935.0	6,926.7	6,850.3	6,731.9	14.5	28.9	-90.48	-5.3	-1,240.5	1,056.9	1,013.0	43.92	24.067	
7,000.0	6,991.7	6,920.8	6,801.3	14.5	29.3	-90.48	-5.3	-1,253.2	1,068.6	1,024.3	44.28	24.132	
7,030.0	7,021.7	6,953.4	6,833.3	14.6	29.4	-90.47	-5.3	-1,258.9	1,073.9	1,029.4	44.45	24.160	
7,100.0	7,091.7	7,029.5	6,908.3	14.6	29.7	-90.47	-5.4	-1,272.0	1,085.9	1,041.0	44.84	24.218	
7,125.0	7,116.7	7,056.8	6,935.2	14.6	29.9	-90.47	-5.4	-1,276.5	1,090.0	1,045.1	44.98	24.237	
7,200.0	7,191.7	7,138.6	7,016.0	14.7	30.2	-90.47	-5.5	-1,289.8	1,102.2	1,056.8	45.39	24.285	
7,220.0	7,211.7	7,160.4	7,037.5	14.7	30.3	-90.47	-5.5	-1,293.2	1,105.4	1,059.9	45.49	24.296	
7,300.0	7,291.7	7,248.0	7,124.1	14.7	30.7	-90.46	-5.5	-1,306.6	1,117.6	1,071.7	45.93	24.335	
7,315.0	7,306.7	7,264.4	7,140.3	14.7	30.8	-90.46	-5.5	-1,309.1	1,119.8	1,073.8	46.01	24.341	
7,400.0	7,391.7	7,357.7	7,232.6	14.8	31.2	-90.46	-5.6	-1,322.5	1,132.0	1,085.6	46.46	24.368	
7,410.0	7,401.7	7,368.7	7,243.5	14.8	31.2	-90.46	-5.6	-1,324.0	1,133.4	1,086.9	46.51	24.370	
7,500.0	7,491.7	7,467.7	7,341.6	14.8	31.7	-90.46	-5.6	-1,337.3	1,145.5	1,098.5	46.98	24.385	
7,505.0	7,496.7	7,473.2	7,347.1	14.8	31.7	-90.46	-5.7	-1,338.0	1,146.2	1,099.2	47.00	24.385	
7,600.0	7,591.7	7,578.0	7,451.1	14.9	32.1	-90.45	-5.7	-1,351.1	1,158.0	1,110.6	47.49	24.387	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-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		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,695.0	7,686.7	7,683.1	7,555.4	14.9	32.6	-90.45	-5.8	-1,363.3	1,169.1	1,121.1	47.96	24.376	
7,700.0	7,691.7	7,688.6	7,560.9	14.9	32.6	-90.45	-5.8	-1,363.9	1,169.6	1,121.6	47.98	24.375	
7,790.0	7,781.7	7,788.3	7,660.0	15.0	33.0	-90.45	-5.8	-1,374.5	1,179.2	1,130.8	48.42	24.352	
7,800.0	7,791.7	7,799.4	7,671.1	15.0	33.0	-90.45	-5.8	-1,375.7	1,180.2	1,131.8	48.47	24.348	
7,885.0	7,876.7	7,893.7	7,765.0	15.1	33.4	-90.45	-5.8	-1,384.8	1,188.5	1,139.6	48.88	24.316	
7,900.0	7,891.7	7,910.4	7,781.5	15.1	33.5	-90.45	-5.8	-1,386.4	1,189.9	1,140.9	48.95	24.310	
7,980.0	7,971.7	7,999.4	7,870.2	15.1	33.8	-90.45	-5.9	-1,394.2	1,196.9	1,147.6	49.32	24.270	
8,000.0	7,991.7	8,021.6	7,892.3	15.1	33.9	-90.45	-5.9	-1,396.0	1,198.6	1,149.2	49.41	24.259	
8,075.0	8,066.7	8,105.1	7,975.6	15.2	34.2	-90.44	-5.9	-1,402.6	1,204.5	1,154.7	49.75	24.212	
8,100.0	8,091.7	8,133.0	8,003.4	15.2	34.3	-90.44	-5.9	-1,404.6	1,206.3	1,156.4	49.85	24.196	
8,170.0	8,161.7	8,211.1	8,081.3	15.2	34.6	-90.44	-5.9	-1,410.0	1,211.1	1,161.0	50.16	24.146	
8,200.0	8,191.7	8,244.6	8,114.7	15.2	34.7	-90.44	-5.9	-1,412.2	1,213.0	1,162.8	50.28	24.123	
8,265.0	8,256.7	8,317.1	8,187.1	15.3	35.0	-90.44	-6.0	-1,416.5	1,216.9	1,166.3	50.56	24.070	
8,300.0	8,291.7	8,356.2	8,226.2	15.3	35.1	-90.44	-6.0	-1,418.6	1,218.8	1,168.1	50.70	24.041	
8,360.0	8,351.7	8,423.3	8,293.2	15.3	35.4	-90.44	-6.0	-1,422.0	1,221.8	1,170.9	50.94	23.986	
8,400.0	8,391.7	8,468.0	8,337.9	15.4	35.5	-90.44	-6.0	-1,424.0	1,223.6	1,172.5	51.09	23.949	
8,455.0	8,446.7	8,529.6	8,399.3	15.4	35.7	-90.44	-6.0	-1,426.5	1,225.8	1,174.5	51.30	23.895	
8,500.0	8,491.7	8,579.9	8,449.7	15.4	35.9	-90.44	-6.0	-1,428.3	1,227.5	1,176.0	51.47	23.850	
8,550.0	8,541.7	8,635.9	8,505.6	15.5	36.0	-90.44	-6.0	-1,430.0	1,229.0	1,177.4	51.64	23.799	
8,600.0	8,591.7	8,691.9	8,561.6	15.5	36.2	-90.44	-6.0	-1,431.5	1,230.3	1,178.5	51.81	23.745	
8,645.0	8,636.7	8,742.3	8,612.0	15.5	36.3	-90.44	-6.0	-1,432.6	1,231.3	1,179.3	51.96	23.698	
8,700.0	8,691.7	8,803.9	8,673.6	15.5	36.5	-90.44	-6.0	-1,433.6	1,232.2	1,180.1	52.13	23.638	
8,740.0	8,731.7	8,848.7	8,718.4	15.6	36.6	-90.44	-6.0	-1,434.1	1,232.7	1,180.4	52.23	23.599	
8,800.0	8,791.7	8,916.0	8,785.6	15.6	36.8	-90.44	-6.0	-1,434.6	1,233.1	1,180.7	52.37	23.544	
8,835.0	8,826.7	8,955.2	8,824.9	15.6	36.8	-90.44	-6.0	-1,434.7	1,233.2	1,180.7	52.42	23.527	
8,900.0	8,891.7	9,021.0	8,890.7	15.7	36.8	-90.44	-6.0	-1,434.7	1,233.2	1,180.7	52.47	23.504	
8,930.0	8,921.7	9,051.0	8,920.7	15.7	36.8	-90.44	-6.0	-1,434.7	1,233.2	1,180.7	52.49	23.494	
9,000.0	8,991.7	9,121.0	8,990.7	15.7	36.8	-90.44	-6.0	-1,434.7	1,233.2	1,180.6	52.55	23.468	
9,025.0	9,016.7	9,146.0	9,015.7	15.7	36.8	-90.44	-6.0	-1,434.7	1,233.2	1,180.6	52.57	23.459	
9,100.0	9,091.7	9,221.0	9,090.7	15.8	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.5	52.63	23.432	
9,120.0	9,111.7	9,241.0	9,110.7	15.8	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.5	52.64	23.425	
9,200.0	9,191.7	9,321.0	9,190.7	15.8	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.5	52.71	23.396	
9,215.0	9,206.7	9,336.0	9,205.7	15.9	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.4	52.72	23.391	
9,300.0	9,291.7	9,421.0	9,290.7	15.9	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.4	52.79	23.360	
9,310.0	9,301.7	9,431.0	9,300.7	15.9	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.4	52.80	23.356	
9,400.0	9,391.7	9,521.0	9,390.7	16.0	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.3	52.87	23.324	
9,405.0	9,396.7	9,526.0	9,395.7	16.0	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.3	52.88	23.322	
9,500.0	9,491.7	9,621.0	9,490.7	16.0	36.9	-90.44	-6.0	-1,434.7	1,233.2	1,180.2	52.95	23.287	
9,595.0	9,586.7	9,716.0	9,585.7	16.1	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,180.1	53.03	23.253	
9,600.0	9,591.7	9,721.0	9,590.7	16.1	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,180.1	53.04	23.251	
9,690.0	9,681.7	9,811.0	9,680.7	16.1	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,180.0	53.11	23.218	
9,700.0	9,691.7	9,821.0	9,690.7	16.2	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,180.0	53.12	23.214	
9,785.0	9,776.7	9,906.0	9,775.7	16.2	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,180.0	53.19	23.184	
9,800.0	9,791.7	9,921.0	9,790.7	16.2	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,180.0	53.20	23.178	
9,880.0	9,871.7	10,001.0	9,870.7	16.3	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,179.9	53.27	23.149	
9,900.0	9,891.7	10,021.0	9,890.7	16.3	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,179.9	53.29	23.142	
9,975.0	9,966.7	10,096.0	9,965.7	16.3	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,179.8	53.35	23.114	
10,000.0	9,991.7	10,121.0	9,990.7	16.3	37.0	-90.44	-6.0	-1,434.7	1,233.2	1,179.8	53.37	23.105	
10,070.0	10,061.7	10,191.0	10,060.7	16.4	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.7	53.43	23.080	
10,100.0	10,091.7	10,221.0	10,090.7	16.4	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.7	53.46	23.069	
10,165.0	10,156.7	10,286.0	10,155.7	16.4	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.6	53.51	23.045	
10,200.0	10,191.7	10,321.0	10,190.7	16.5	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.6	53.54	23.032	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-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 (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
10,260.0	10,251.7	10,381.0	10,250.7	16.5	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.6	53.59	23.010		
10,300.0	10,291.7	10,421.0	10,290.7	16.5	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.5	53.63	22.995		
10,355.0	10,346.7	10,476.0	10,345.7	16.6	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.5	53.67	22.975		
10,400.0	10,391.7	10,521.0	10,390.7	16.6	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.4	53.71	22.959		
10,450.0	10,441.7	10,571.0	10,440.7	16.6	37.1	-90.44	-6.0	-1,434.7	1,233.2	1,179.4	53.75	22.941		
10,500.0	10,491.7	10,621.0	10,490.7	16.7	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.4	53.80	22.922		
10,545.0	10,536.7	10,666.0	10,535.7	16.7	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.3	53.84	22.906		
10,600.0	10,591.7	10,721.0	10,590.7	16.7	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.3	53.88	22.886		
10,640.0	10,631.7	10,761.0	10,630.7	16.7	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.2	53.92	22.871		
10,700.0	10,691.7	10,821.0	10,690.7	16.8	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.2	53.97	22.849		
10,735.0	10,726.7	10,856.0	10,725.7	16.8	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.2	54.00	22.836		
10,800.0	10,791.7	10,921.0	10,790.7	16.8	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.1	54.06	22.812		
10,830.0	10,821.7	10,951.0	10,820.7	16.9	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.1	54.08	22.801		
10,900.0	10,891.7	11,021.0	10,890.7	16.9	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.0	54.14	22.776		
10,925.0	10,916.7	11,046.0	10,915.7	16.9	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.0	54.17	22.766		
10,932.1	10,923.7	11,053.1	10,922.7	16.9	37.2	-90.44	-6.0	-1,434.7	1,233.2	1,179.0	54.17	22.764		
11,000.0	10,991.7	11,121.0	10,990.6	17.0	37.3	-90.43	-5.8	-1,434.7	1,233.2	1,178.9	54.23	22.740		
11,020.0	11,011.7	11,140.8	11,010.5	17.0	37.3	-90.38	-4.8	-1,434.7	1,233.2	1,178.9	54.24	22.734		
11,100.0	11,091.7	11,218.5	11,087.2	17.0	37.3	-89.84	7.0	-1,434.8	1,233.3	1,178.9	54.32	22.705		
11,115.0	11,106.7	11,232.5	11,100.8	17.0	37.3	-89.68	10.4	-1,434.8	1,233.3	1,179.0	54.33	22.700		
11,155.9	11,147.5	11,269.6	11,136.2	17.1	37.3	-89.16	21.4	-1,434.9	1,233.6	1,179.2	54.37	22.688		
11,175.0	11,166.7	11,286.5	11,151.9	17.1	37.3	-88.36	27.3	-1,435.0	1,233.7	1,179.3	54.39	22.684		
11,200.0	11,191.6	11,308.2	11,172.0	17.1	37.3	-88.00	35.8	-1,435.1	1,234.0	1,179.6	54.41	22.680		
11,210.0	11,201.6	11,316.8	11,179.8	17.1	37.3	-87.86	39.4	-1,435.1	1,234.1	1,179.7	54.42	22.678		
11,225.0	11,216.4	11,329.7	11,191.3	17.1	37.3	-87.64	45.0	-1,435.1	1,234.3	1,179.9	54.44	22.675		
11,250.0	11,241.1	11,350.0	11,209.3	17.1	37.3	-87.30	54.5	-1,435.2	1,234.7	1,180.2	54.47	22.669		
11,275.0	11,265.4	11,371.8	11,228.1	17.1	37.3	-86.95	65.6	-1,435.3	1,235.1	1,180.6	54.49	22.666		
11,300.0	11,289.5	11,392.5	11,245.5	17.1	37.3	-86.61	76.9	-1,435.4	1,235.5	1,181.0	54.52	22.661		
11,305.0	11,294.3	11,396.7	11,248.9	17.1	37.3	-86.54	79.2	-1,435.5	1,235.6	1,181.1	54.53	22.661		
11,325.0	11,313.2	11,413.0	11,262.2	17.1	37.3	-86.28	88.8	-1,435.5	1,236.0	1,181.4	54.55	22.657		
11,350.0	11,336.4	11,433.4	11,278.2	17.1	37.3	-85.96	101.3	-1,435.7	1,236.5	1,181.9	54.59	22.652		
11,375.0	11,359.1	11,453.5	11,293.5	17.1	37.3	-85.65	114.3	-1,435.8	1,237.0	1,182.4	54.62	22.647		
11,400.0	11,381.2	11,475.0	11,309.3	17.1	37.3	-85.33	129.0	-1,435.9	1,237.5	1,182.9	54.65	22.644		
11,425.0	11,402.6	11,493.2	11,322.1	17.1	37.3	-85.06	141.9	-1,436.0	1,238.1	1,183.4	54.69	22.636		
11,450.0	11,423.4	11,512.8	11,335.3	17.1	37.3	-84.78	156.4	-1,436.2	1,238.6	1,183.9	54.73	22.630		
11,475.0	11,443.4	11,532.3	11,347.9	17.1	37.3	-84.51	171.3	-1,436.3	1,239.1	1,184.4	54.77	22.623		
11,495.0	11,458.9	11,550.0	11,358.7	17.1	37.3	-84.28	185.2	-1,436.4	1,239.6	1,184.8	54.80	22.620		
11,500.0	11,462.6	11,550.0	11,358.7	17.1	37.3	-84.27	185.2	-1,436.4	1,239.7	1,184.9	54.82	22.613		
11,525.0	11,481.0	11,571.0	11,370.9	17.1	37.3	-84.01	202.3	-1,436.6	1,240.2	1,185.4	54.86	22.607		
11,550.0	11,498.4	11,590.1	11,381.4	17.1	37.3	-83.78	218.3	-1,436.7	1,240.7	1,185.8	54.90	22.598		
11,575.0	11,514.9	11,609.2	11,391.2	17.1	37.3	-83.56	234.7	-1,436.9	1,241.2	1,186.3	54.95	22.588		
11,590.0	11,524.3	11,620.6	11,396.7	17.1	37.3	-83.44	244.6	-1,437.0	1,241.5	1,186.5	54.98	22.582		
11,600.0	11,530.3	11,628.1	11,400.2	17.1	37.3	-83.36	251.3	-1,437.0	1,241.7	1,186.7	55.00	22.577		
11,625.0	11,544.7	11,647.0	11,408.6	17.2	37.3	-83.17	268.2	-1,437.2	1,242.2	1,187.1	55.05	22.566		
11,650.0	11,558.1	11,665.8	11,416.3	17.2	37.3	-83.00	285.4	-1,437.3	1,242.6	1,187.5	55.10	22.553		
11,675.0	11,570.3	11,684.5	11,423.2	17.2	37.3	-82.84	302.8	-1,437.5	1,243.0	1,187.9	55.15	22.540		
11,685.0	11,574.8	11,692.0	11,425.8	17.2	37.3	-82.78	309.8	-1,437.6	1,243.2	1,188.0	55.17	22.534		
11,700.0	11,581.3	11,703.2	11,429.5	17.2	37.4	-82.70	320.4	-1,437.7	1,243.4	1,188.2	55.20	22.526		
11,725.0	11,591.2	11,721.8	11,435.0	17.2	37.4	-82.57	338.1	-1,437.8	1,243.7	1,188.5	55.25	22.510		
11,750.0	11,599.8	11,740.4	11,439.9	17.3	37.4	-82.46	356.1	-1,438.0	1,244.0	1,188.7	55.30	22.494		
11,775.0	11,607.2	11,758.9	11,444.0	17.3	37.4	-82.37	374.1	-1,438.1	1,244.3	1,188.9	55.36	22.477		
11,780.0	11,608.5	11,762.6	11,444.7	17.3	37.4	-82.35	377.8	-1,438.2	1,244.3	1,188.9	55.37	22.474		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,800.0	11,613.3	11,775.0	11,447.0	17.3	37.4	-82.30	389.9	-1,438.3	1,244.5	1,189.1	55.41	22.459	
11,825.0	11,618.2	11,795.9	11,450.1	17.3	37.4	-82.23	410.6	-1,438.5	1,244.6	1,189.2	55.46	22.441	
11,850.0	11,621.7	11,814.4	11,452.1	17.4	37.4	-82.19	428.9	-1,438.6	1,244.7	1,189.2	55.52	22.421	
11,875.0	11,624.0	11,832.8	11,453.4	17.4	37.4	-82.16	447.3	-1,438.8	1,244.8	1,189.2	55.57	22.401	
11,900.0	11,625.0	11,851.2	11,454.0	17.4	37.4	-82.15	465.8	-1,439.0	1,244.8	1,189.2	55.62	22.380	
11,905.9	11,625.0	11,855.6	11,454.0	17.5	37.4	-82.15	470.1	-1,439.0	1,244.8	1,189.2	55.63	22.375	
11,908.5	11,625.0	11,857.7	11,454.0	17.5	37.4	-82.15	472.2	-1,439.0	1,244.8	1,189.2	55.64	22.373	
11,970.0	11,625.0	11,919.2	11,454.0	17.6	37.5	-82.15	533.8	-1,439.6	1,244.8	1,189.0	55.80	22.308	
12,000.0	11,625.0	11,949.2	11,454.0	17.6	37.5	-82.15	563.8	-1,439.9	1,244.8	1,189.0	55.89	22.275	
12,065.0	11,625.0	12,014.2	11,454.0	17.8	37.6	-82.15	628.8	-1,440.5	1,244.8	1,188.8	56.09	22.195	
12,100.0	11,625.0	12,049.2	11,454.0	17.8	37.6	-82.15	663.8	-1,440.8	1,244.8	1,188.6	56.20	22.150	
12,160.0	11,625.0	12,109.2	11,454.0	18.0	37.7	-82.15	723.7	-1,441.3	1,244.8	1,188.4	56.41	22.067	
12,200.0	11,625.0	12,149.2	11,454.0	18.1	37.7	-82.15	763.7	-1,441.7	1,244.9	1,188.3	56.56	22.010	
12,255.0	11,625.0	12,204.2	11,454.0	18.2	37.8	-82.15	818.7	-1,442.2	1,244.9	1,188.1	56.78	21.925	
12,300.0	11,625.0	12,249.2	11,454.0	18.4	37.9	-82.15	863.7	-1,442.6	1,244.9	1,187.9	56.96	21.854	
12,350.0	11,625.0	12,299.2	11,454.0	18.5	38.0	-82.15	913.7	-1,443.1	1,244.9	1,187.7	57.18	21.771	
12,400.0	11,625.0	12,349.2	11,454.0	18.7	38.0	-82.15	963.7	-1,443.5	1,244.9	1,187.5	57.41	21.685	
12,445.0	11,625.0	12,394.2	11,454.0	18.8	38.1	-82.15	1,008.7	-1,443.9	1,244.9	1,187.2	57.62	21.604	
12,500.0	11,625.0	12,449.2	11,454.0	19.0	38.2	-82.15	1,063.7	-1,444.4	1,244.9	1,187.0	57.89	21.504	
12,540.0	11,625.0	12,489.2	11,454.0	19.1	38.3	-82.15	1,103.7	-1,444.8	1,244.9	1,186.8	58.10	21.427	
12,600.0	11,625.0	12,549.2	11,454.0	19.4	38.4	-82.15	1,163.7	-1,445.3	1,244.9	1,186.5	58.41	21.311	
12,635.0	11,625.0	12,584.2	11,454.0	19.5	38.4	-82.15	1,198.7	-1,445.7	1,244.9	1,186.3	58.61	21.241	
12,700.0	11,625.0	12,649.2	11,454.0	19.7	38.6	-82.15	1,263.7	-1,446.3	1,244.9	1,185.9	58.97	21.109	
12,730.0	11,625.0	12,679.2	11,454.0	19.8	38.6	-82.15	1,293.7	-1,446.5	1,244.9	1,185.7	59.15	21.045	
12,800.0	11,625.0	12,749.2	11,454.0	20.1	38.8	-82.15	1,363.7	-1,447.2	1,244.9	1,185.3	59.57	20.897	
12,825.0	11,625.0	12,774.2	11,454.0	20.2	38.8	-82.15	1,388.7	-1,447.4	1,244.9	1,185.1	59.73	20.843	
12,900.0	11,625.0	12,849.2	11,454.0	20.5	39.0	-82.15	1,463.7	-1,448.1	1,244.9	1,184.7	60.20	20.678	
12,920.0	11,625.0	12,869.2	11,454.0	20.6	39.0	-82.15	1,483.7	-1,448.3	1,244.9	1,184.5	60.33	20.633	
13,000.0	11,625.0	12,949.2	11,454.0	21.0	39.2	-82.15	1,563.7	-1,449.0	1,244.9	1,184.0	60.87	20.453	
13,015.0	11,625.0	12,964.2	11,454.0	21.1	39.3	-82.15	1,578.7	-1,449.1	1,244.9	1,183.9	60.97	20.418	
13,100.0	11,625.0	13,049.2	11,454.0	21.4	39.5	-82.15	1,663.7	-1,449.9	1,244.9	1,183.3	61.56	20.222	
13,110.0	11,625.0	13,059.2	11,454.0	21.5	39.5	-82.15	1,673.7	-1,450.0	1,244.9	1,183.3	61.63	20.198	
13,200.0	11,625.0	13,149.2	11,454.0	21.9	39.7	-82.15	1,763.7	-1,450.8	1,244.9	1,182.6	62.29	19.986	
13,205.0	11,625.0	13,154.2	11,454.0	21.9	39.8	-82.15	1,768.7	-1,450.9	1,244.9	1,182.6	62.32	19.974	
13,300.0	11,625.0	13,249.2	11,454.0	22.4	40.0	-82.15	1,863.7	-1,451.7	1,244.9	1,181.8	63.04	19.747	
13,395.0	11,625.0	13,344.2	11,454.0	22.9	40.3	-82.15	1,958.7	-1,452.6	1,244.9	1,181.1	63.78	19.517	
13,400.0	11,625.0	13,349.2	11,454.0	22.9	40.3	-82.15	1,963.7	-1,452.6	1,244.9	1,181.1	63.82	19.505	
13,490.0	11,625.0	13,439.2	11,454.0	23.4	40.6	-82.15	2,053.7	-1,453.5	1,244.9	1,180.3	64.55	19.286	
13,500.0	11,625.0	13,449.2	11,454.0	23.4	40.6	-82.15	2,063.7	-1,453.5	1,244.9	1,180.3	64.63	19.261	
13,585.0	11,625.0	13,534.2	11,454.0	23.9	40.9	-82.15	2,148.7	-1,454.3	1,244.9	1,179.6	65.34	19.053	
13,600.0	11,625.0	13,549.2	11,454.0	24.0	40.9	-82.15	2,163.7	-1,454.5	1,244.9	1,179.4	65.47	19.016	
13,680.0	11,625.0	13,629.2	11,454.0	24.4	41.2	-82.15	2,243.7	-1,455.2	1,244.9	1,178.8	66.15	18.819	
13,700.0	11,625.0	13,649.2	11,454.0	24.5	41.2	-82.15	2,263.7	-1,455.4	1,244.9	1,178.6	66.32	18.770	
13,775.0	11,625.0	13,724.2	11,454.0	24.9	41.5	-82.15	2,338.7	-1,456.0	1,244.9	1,177.9	66.98	18.585	
13,800.0	11,625.0	13,749.2	11,454.0	25.1	41.6	-82.15	2,363.7	-1,456.3	1,244.9	1,177.7	67.21	18.524	
13,870.0	11,625.0	13,819.2	11,454.0	25.5	41.8	-82.15	2,433.7	-1,456.9	1,244.9	1,177.1	67.84	18.352	
13,900.0	11,625.0	13,849.2	11,454.0	25.6	41.9	-82.15	2,463.7	-1,457.2	1,244.9	1,176.8	68.11	18.279	
13,965.0	11,625.0	13,914.2	11,454.0	26.0	42.2	-82.15	2,528.7	-1,457.8	1,244.9	1,176.2	68.71	18.119	
14,000.0	11,625.0	13,949.2	11,454.0	26.2	42.3	-82.15	2,563.7	-1,458.1	1,244.9	1,175.9	69.03	18.034	
14,060.0	11,625.0	14,009.2	11,454.0	26.6	42.5	-82.15	2,623.7	-1,458.6	1,244.9	1,175.3	69.60	17.888	
14,100.0	11,625.0	14,049.2	11,454.0	26.8	42.7	-82.15	2,663.7	-1,459.0	1,244.9	1,174.9	69.98	17.791	
14,155.0	11,625.0	14,104.2	11,454.0	27.1	42.9	-82.15	2,718.7	-1,459.5	1,244.9	1,174.4	70.50	17.657	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	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	Warning
14,200.0	11,625.0	14,149.2	11,454.0	27.4	43.0	-82.15	2,763.7	-1,459.9	1,244.9	1,174.0	70.94	17.549	
14,250.0	11,625.0	14,199.2	11,454.0	27.7	43.2	-82.15	2,813.7	-1,460.4	1,244.9	1,173.5	71.43	17.429	
14,300.0	11,625.0	14,249.2	11,454.0	28.0	43.4	-82.15	2,863.7	-1,460.8	1,244.9	1,173.0	71.92	17.309	
14,345.0	11,625.0	14,294.2	11,454.0	28.3	43.6	-82.15	2,908.7	-1,461.2	1,244.9	1,172.6	72.37	17.202	
14,400.0	11,625.0	14,349.2	11,454.0	28.6	43.8	-82.15	2,963.7	-1,461.7	1,244.9	1,172.0	72.92	17.072	
14,440.0	11,625.0	14,389.2	11,454.0	28.8	44.0	-82.15	3,003.7	-1,462.1	1,244.9	1,171.6	73.33	16.978	
14,500.0	11,625.0	14,449.2	11,454.0	29.2	44.2	-82.15	3,063.7	-1,462.7	1,244.9	1,171.0	73.94	16.838	
14,535.0	11,625.0	14,484.2	11,454.0	29.4	44.4	-82.15	3,098.7	-1,463.0	1,244.9	1,170.6	74.30	16.756	
14,600.0	11,625.0	14,549.2	11,454.0	29.8	44.7	-82.15	3,163.6	-1,463.6	1,244.9	1,170.0	74.97	16.606	
14,630.0	11,625.0	14,579.2	11,454.0	30.0	44.8	-82.15	3,193.6	-1,463.8	1,244.9	1,169.7	75.28	16.537	
14,700.0	11,625.0	14,649.2	11,454.0	30.5	45.1	-82.15	3,263.6	-1,464.5	1,244.9	1,168.9	76.02	16.377	
14,725.0	11,625.0	14,674.2	11,454.0	30.6	45.2	-82.15	3,288.6	-1,464.7	1,244.9	1,168.7	76.28	16.320	
14,800.0	11,625.0	14,749.2	11,454.0	31.1	45.5	-82.15	3,363.6	-1,465.4	1,244.9	1,167.9	77.08	16.151	
14,820.0	11,625.0	14,769.2	11,454.0	31.2	45.6	-82.15	3,383.6	-1,465.6	1,244.9	1,167.6	77.30	16.106	
14,900.0	11,625.0	14,849.2	11,454.0	31.7	46.0	-82.15	3,463.6	-1,466.3	1,244.9	1,166.8	78.16	15.928	
14,915.0	11,625.0	14,864.2	11,454.0	31.8	46.0	-82.15	3,478.6	-1,466.4	1,244.9	1,166.6	78.32	15.895	
15,000.0	11,625.0	14,949.2	11,454.0	32.4	46.4	-82.15	3,563.6	-1,467.2	1,245.0	1,165.7	79.25	15.709	
15,010.0	11,625.0	14,959.2	11,454.0	32.5	46.5	-82.15	3,573.6	-1,467.3	1,245.0	1,165.6	79.36	15.687	
15,100.0	11,625.0	15,049.2	11,454.0	33.0	46.9	-82.15	3,663.6	-1,468.1	1,245.0	1,164.6	80.36	15.493	
15,105.0	11,625.0	15,054.2	11,454.0	33.1	46.9	-82.15	3,668.6	-1,468.2	1,245.0	1,164.5	80.41	15.482	
15,200.0	11,625.0	15,149.2	11,454.0	33.7	47.4	-82.15	3,763.6	-1,469.0	1,245.0	1,163.5	81.47	15.281	
15,295.0	11,625.0	15,244.2	11,454.0	34.3	47.8	-82.15	3,858.6	-1,469.9	1,245.0	1,162.4	82.55	15.082	
15,300.0	11,625.0	15,249.2	11,454.0	34.4	47.8	-82.15	3,863.6	-1,469.9	1,245.0	1,162.4	82.60	15.072	
15,390.0	11,625.0	15,339.2	11,454.0	35.0	48.3	-82.15	3,953.6	-1,470.8	1,245.0	1,161.3	83.63	14.887	
15,400.0	11,625.0	15,349.2	11,454.0	35.0	48.3	-82.15	3,963.6	-1,470.9	1,245.0	1,161.2	83.74	14.866	
15,485.0	11,625.0	15,434.2	11,454.0	35.6	48.7	-82.15	4,048.6	-1,471.6	1,245.0	1,160.2	84.72	14.695	
15,500.0	11,625.0	15,449.2	11,454.0	35.7	48.8	-82.15	4,063.6	-1,471.8	1,245.0	1,160.1	84.90	14.665	
15,580.0	11,625.0	15,529.2	11,454.0	36.2	49.2	-82.15	4,143.6	-1,472.5	1,245.0	1,159.1	85.83	14.506	
15,600.0	11,625.0	15,549.2	11,454.0	36.4	49.3	-82.15	4,163.6	-1,472.7	1,245.0	1,158.9	86.06	14.466	
15,675.0	11,625.0	15,624.2	11,454.0	36.9	49.7	-82.15	4,238.6	-1,473.4	1,245.0	1,158.0	86.94	14.320	
15,700.0	11,625.0	15,649.2	11,454.0	37.1	49.8	-82.15	4,263.6	-1,473.6	1,245.0	1,157.7	87.23	14.272	
15,770.0	11,625.0	15,719.2	11,454.0	37.5	50.2	-82.15	4,333.6	-1,474.2	1,245.0	1,156.9	88.06	14.138	
15,800.0	11,625.0	15,749.2	11,454.0	37.7	50.3	-82.15	4,363.6	-1,474.5	1,245.0	1,156.6	88.42	14.081	
15,865.0	11,625.0	15,814.2	11,454.0	38.2	50.7	-82.15	4,428.6	-1,475.1	1,245.0	1,155.8	89.19	13.959	
15,900.0	11,625.0	15,849.2	11,454.0	38.4	50.8	-82.15	4,463.6	-1,475.4	1,245.0	1,155.4	89.61	13.893	
15,960.0	11,625.0	15,909.2	11,454.0	38.8	51.1	-82.15	4,523.6	-1,476.0	1,245.0	1,154.7	90.33	13.783	
16,000.0	11,625.0	15,949.2	11,454.0	39.1	51.4	-82.15	4,563.6	-1,476.3	1,245.0	1,154.2	90.81	13.710	
16,055.0	11,625.0	16,004.2	11,454.0	39.5	51.6	-82.15	4,618.6	-1,476.8	1,245.0	1,153.5	91.48	13.610	
16,100.0	11,625.0	16,049.2	11,454.0	39.8	51.9	-82.15	4,663.6	-1,477.2	1,245.0	1,153.0	92.02	13.529	
16,150.0	11,625.0	16,099.2	11,454.0	40.1	52.2	-82.15	4,713.6	-1,477.7	1,245.0	1,152.4	92.63	13.440	
16,200.0	11,625.0	16,149.2	11,454.0	40.5	52.4	-82.15	4,763.6	-1,478.1	1,245.0	1,151.8	93.24	13.352	
16,245.0	11,625.0	16,194.2	11,454.0	40.8	52.7	-82.15	4,808.6	-1,478.6	1,245.0	1,151.2	93.79	13.274	
16,300.0	11,625.0	16,249.2	11,454.0	41.2	53.0	-82.15	4,863.6	-1,479.1	1,245.0	1,150.5	94.47	13.179	
16,340.0	11,625.0	16,289.2	11,454.0	41.5	53.2	-82.15	4,903.6	-1,479.4	1,245.0	1,150.0	94.96	13.110	
16,400.0	11,625.0	16,349.2	11,454.0	41.9	53.5	-82.15	4,963.6	-1,480.0	1,245.0	1,149.3	95.71	13.008	
16,435.0	11,625.0	16,384.2	11,454.0	42.1	53.7	-82.15	4,998.6	-1,480.3	1,245.0	1,148.9	96.14	12.950	
16,500.0	11,625.0	16,449.2	11,454.0	42.6	54.1	-82.15	5,063.6	-1,480.9	1,245.0	1,148.1	96.95	12.842	
16,530.0	11,625.0	16,479.2	11,454.0	42.8	54.2	-82.15	5,093.6	-1,481.2	1,245.0	1,147.7	97.33	12.792	
16,600.0	11,625.0	16,549.2	11,454.0	43.3	54.6	-82.15	5,163.6	-1,481.8	1,245.0	1,146.8	98.20	12.678	
16,625.0	11,625.0	16,574.2	11,454.0	43.4	54.8	-82.15	5,188.6	-1,482.0	1,245.0	1,146.5	98.52	12.638	
16,700.0	11,625.0	16,649.2	11,454.0	44.0	55.2	-82.15	5,263.6	-1,482.7	1,245.0	1,145.6	99.46	12.518	
16,720.0	11,625.0	16,669.2	11,454.0	44.1	55.3	-82.15	5,283.6	-1,482.9	1,245.0	1,145.3	99.71	12.486	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-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	
16,800.0	11,625.0	16,749.2	11,454.0	44.7	55.7	-82.15	5,363.6	-1,483.6	1,245.0	1,144.3	100.73	12.360	
16,815.0	11,625.0	16,764.2	11,454.0	44.8	55.8	-82.15	5,378.6	-1,483.7	1,245.0	1,144.1	100.92	12.337	
16,900.0	11,625.0	16,849.2	11,454.0	45.4	56.3	-82.15	5,463.6	-1,484.5	1,245.0	1,143.0	102.00	12.206	
16,910.0	11,625.0	16,859.2	11,454.0	45.5	56.4	-82.15	5,473.6	-1,484.6	1,245.0	1,142.9	102.13	12.191	
17,000.0	11,625.0	16,949.2	11,454.0	46.1	56.9	-82.15	5,563.5	-1,485.4	1,245.0	1,141.7	103.28	12.055	
17,005.0	11,625.0	16,954.2	11,454.0	46.1	56.9	-82.15	5,568.5	-1,485.5	1,245.0	1,141.7	103.34	12.048	
17,100.0	11,625.0	17,049.2	11,454.0	46.8	57.5	-82.15	5,663.5	-1,486.3	1,245.0	1,140.5	104.56	11.907	
17,195.0	11,625.0	17,144.2	11,454.0	47.5	58.0	-82.15	5,758.5	-1,487.2	1,245.0	1,139.2	105.79	11.769	
17,200.0	11,625.0	17,149.2	11,454.0	47.5	58.1	-82.15	5,763.5	-1,487.3	1,245.0	1,139.2	105.85	11.762	
17,290.0	11,625.0	17,239.2	11,454.0	48.2	58.6	-82.15	5,853.5	-1,488.1	1,245.0	1,138.0	107.02	11.634	
17,300.0	11,625.0	17,249.2	11,454.0	48.2	58.6	-82.15	5,863.5	-1,488.2	1,245.0	1,137.9	107.15	11.620	
17,385.0	11,625.0	17,334.2	11,454.0	48.8	59.1	-82.15	5,948.5	-1,488.9	1,245.0	1,136.8	108.26	11.501	
17,400.0	11,625.0	17,349.2	11,454.0	48.9	59.2	-82.15	5,963.5	-1,489.1	1,245.0	1,136.6	108.45	11.480	
17,480.0	11,625.0	17,429.2	11,454.0	49.5	59.7	-82.15	6,043.5	-1,489.8	1,245.0	1,135.5	109.50	11.371	
17,500.0	11,625.0	17,449.2	11,454.0	49.7	59.8	-82.15	6,063.5	-1,490.0	1,245.0	1,135.3	109.76	11.343	
17,575.0	11,625.0	17,524.2	11,454.0	50.2	60.3	-82.15	6,138.5	-1,490.7	1,245.0	1,134.3	110.74	11.243	
17,600.0	11,625.0	17,549.2	11,454.0	50.4	60.4	-82.15	6,163.5	-1,490.9	1,245.0	1,134.0	111.07	11.209	
17,670.0	11,625.0	17,619.2	11,454.0	50.9	60.8	-82.15	6,233.5	-1,491.5	1,245.1	1,133.1	111.99	11.117	
17,700.0	11,625.0	17,649.2	11,454.0	51.1	61.0	-82.15	6,263.5	-1,491.8	1,245.1	1,132.7	112.39	11.078	
17,765.0	11,625.0	17,714.2	11,454.0	51.6	61.4	-82.15	6,328.5	-1,492.4	1,245.1	1,131.8	113.25	10.994	
17,800.0	11,625.0	17,749.2	11,454.0	51.8	61.6	-82.15	6,363.5	-1,492.7	1,245.1	1,131.3	113.71	10.949	
17,860.0	11,625.0	17,809.2	11,454.0	52.3	62.0	-82.15	6,423.5	-1,493.3	1,245.1	1,130.5	114.51	10.873	
17,900.0	11,625.0	17,849.2	11,454.0	52.5	62.2	-82.15	6,463.5	-1,493.6	1,245.1	1,130.0	115.04	10.823	
17,955.0	11,625.0	17,904.2	11,454.0	52.9	62.6	-82.15	6,518.5	-1,494.1	1,245.1	1,129.3	115.77	10.754	
18,000.0	11,625.0	17,949.2	11,454.0	53.3	62.9	-82.15	6,563.5	-1,494.5	1,245.1	1,128.7	116.37	10.699	
18,050.0	11,625.0	17,999.2	11,454.0	53.6	63.2	-82.15	6,613.5	-1,495.0	1,245.1	1,128.0	117.04	10.638	
18,100.0	11,625.0	18,049.2	11,454.0	54.0	63.5	-82.15	6,663.5	-1,495.5	1,245.1	1,127.4	117.71	10.578	
18,145.0	11,625.0	18,094.2	11,454.0	54.3	63.8	-82.15	6,708.5	-1,495.9	1,245.1	1,126.8	118.31	10.524	
18,200.0	11,625.0	18,149.2	11,454.0	54.7	64.1	-82.15	6,763.5	-1,496.4	1,245.1	1,126.0	119.05	10.458	
18,240.0	11,625.0	18,189.2	11,454.0	55.0	64.3	-82.15	6,803.5	-1,496.7	1,245.1	1,125.5	119.59	10.411	
18,300.0	11,625.0	18,249.2	11,454.0	55.4	64.7	-82.15	6,863.5	-1,497.3	1,245.1	1,124.7	120.40	10.342	
18,335.0	11,625.0	18,284.2	11,454.0	55.7	64.9	-82.15	6,898.5	-1,497.6	1,245.1	1,124.2	120.87	10.301	
18,400.0	11,625.0	18,349.2	11,454.0	56.2	65.3	-82.15	6,963.5	-1,498.2	1,245.1	1,123.3	121.74	10.227	
18,430.0	11,625.0	18,379.2	11,454.0	56.4	65.5	-82.15	6,993.5	-1,498.5	1,245.1	1,122.9	122.15	10.193	
18,500.0	11,625.0	18,449.2	11,454.0	56.9	66.0	-82.15	7,063.5	-1,499.1	1,245.1	1,122.0	123.10	10.115	
18,525.0	11,625.0	18,474.2	11,454.0	57.1	66.1	-82.15	7,088.5	-1,499.3	1,245.1	1,121.6	123.44	10.087	
18,600.0	11,625.0	18,549.2	11,454.0	57.6	66.6	-82.15	7,163.5	-1,500.0	1,245.1	1,120.6	124.45	10.004	
18,620.0	11,625.0	18,569.2	11,454.0	57.8	66.7	-82.15	7,183.5	-1,500.2	1,245.1	1,120.4	124.73	9.983	
18,700.0	11,625.0	18,649.2	11,454.0	58.4	67.2	-82.15	7,263.5	-1,500.9	1,245.1	1,119.3	125.82	9.896	
18,715.0	11,625.0	18,664.2	11,454.0	58.5	67.3	-82.15	7,278.5	-1,501.1	1,245.1	1,119.1	126.02	9.880	
18,800.0	11,625.0	18,749.2	11,454.0	59.1	67.9	-82.15	7,363.5	-1,501.8	1,245.1	1,117.9	127.18	9.790	
18,810.0	11,625.0	18,759.2	11,454.0	59.2	67.9	-82.15	7,373.5	-1,501.9	1,245.1	1,117.8	127.32	9.780	
18,900.0	11,625.0	18,849.2	11,454.0	59.8	68.5	-82.15	7,463.5	-1,502.7	1,245.1	1,116.5	128.55	9.686	
18,905.0	11,625.0	18,854.2	11,454.0	59.9	68.5	-82.15	7,468.5	-1,502.8	1,245.1	1,116.5	128.62	9.681	
19,000.0	11,625.0	18,949.2	11,454.0	60.6	69.2	-82.15	7,563.5	-1,503.7	1,245.1	1,115.2	129.92	9.584	
19,095.0	11,625.0	19,044.2	11,454.0	61.3	69.8	-82.15	7,658.5	-1,504.5	1,245.1	1,113.9	131.22	9.488	
19,100.0	11,625.0	19,049.2	11,454.0	61.3	69.8	-82.15	7,663.5	-1,504.6	1,245.1	1,113.8	131.29	9.483	
19,190.0	11,625.0	19,139.2	11,454.0	61.9	70.4	-82.15	7,753.5	-1,505.4	1,245.1	1,112.6	132.53	9.395	
19,200.0	11,625.0	19,149.2	11,454.0	62.0	70.4	-82.15	7,763.5	-1,505.5	1,245.1	1,112.4	132.67	9.385	
19,285.0	11,625.0	19,234.2	11,454.0	62.6	71.0	-82.15	7,848.5	-1,506.3	1,245.1	1,111.3	133.84	9.303	
19,300.0	11,625.0	19,249.2	11,454.0	62.8	71.1	-82.15	7,863.5	-1,506.4	1,245.1	1,111.1	134.05	9.288	
19,380.0	11,625.0	19,329.2	11,454.0	63.3	71.6	-82.15	7,943.5	-1,507.1	1,245.1	1,110.0	135.16	9.212	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-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)		
19,400.0	11,625.0	19,349.2	11,454.0	63.5	71.7	-82.15	7,963.4	-1,507.3	1,245.1	1,109.7	135.44	9.193	
19,475.0	11,625.0	19,424.2	11,454.0	64.0	72.2	-82.15	8,038.4	-1,508.0	1,245.1	1,108.6	136.47	9.123	
19,500.0	11,625.0	19,449.2	11,454.0	64.2	72.4	-82.15	8,063.4	-1,508.2	1,245.1	1,108.3	136.82	9.100	
19,570.0	11,625.0	19,519.2	11,454.0	64.7	72.9	-82.15	8,133.4	-1,508.9	1,245.1	1,107.3	137.79	9.036	
19,600.0	11,625.0	19,549.2	11,454.0	65.0	73.0	-82.15	8,163.4	-1,509.1	1,245.1	1,106.9	138.21	9.009	
19,665.0	11,625.0	19,614.2	11,454.0	65.4	73.5	-82.15	8,228.4	-1,509.7	1,245.1	1,106.0	139.12	8.950	
19,700.0	11,625.0	19,649.2	11,454.0	65.7	73.7	-82.15	8,263.4	-1,510.0	1,245.1	1,105.5	139.60	8.919	
19,760.0	11,625.0	19,709.2	11,454.0	66.1	74.1	-82.15	8,323.4	-1,510.6	1,245.1	1,104.7	140.44	8.866	
19,800.0	11,625.0	19,749.2	11,454.0	66.4	74.4	-82.15	8,363.4	-1,511.0	1,245.1	1,104.1	141.00	8.831	
19,855.0	11,625.0	19,804.2	11,454.0	66.8	74.7	-82.15	8,418.4	-1,511.5	1,245.1	1,103.4	141.77	8.783	
19,900.0	11,625.0	19,849.2	11,454.0	67.2	75.0	-82.15	8,463.4	-1,511.9	1,245.1	1,102.7	142.40	8.744	
19,950.0	11,625.0	19,899.2	11,454.0	67.5	75.4	-82.15	8,513.4	-1,512.3	1,245.1	1,102.0	143.10	8.701	
20,000.0	11,625.0	19,949.2	11,454.0	67.9	75.7	-82.15	8,563.4	-1,512.8	1,245.1	1,101.3	143.80	8.659	
20,045.0	11,625.0	19,994.2	11,454.0	68.3	76.0	-82.15	8,608.4	-1,513.2	1,245.1	1,100.7	144.43	8.621	
20,100.0	11,625.0	20,049.2	11,454.0	68.7	76.4	-82.15	8,663.4	-1,513.7	1,245.1	1,099.9	145.20	8.575	
20,140.0	11,625.0	20,089.2	11,454.0	69.0	76.6	-82.15	8,703.4	-1,514.0	1,245.1	1,099.4	145.76	8.542	
20,200.0	11,625.0	20,149.2	11,454.0	69.4	77.0	-82.15	8,763.4	-1,514.6	1,245.1	1,098.5	146.60	8.493	
20,235.0	11,625.0	20,184.2	11,454.0	69.7	77.3	-82.15	8,798.4	-1,514.9	1,245.1	1,098.0	147.10	8.465	
20,300.0	11,625.0	20,249.2	11,454.0	70.1	77.7	-82.15	8,863.4	-1,515.5	1,245.1	1,097.1	148.01	8.413	
20,330.0	11,625.0	20,279.2	11,454.0	70.4	77.9	-82.15	8,893.4	-1,515.8	1,245.1	1,096.7	148.43	8.389	
20,400.0	11,625.0	20,349.2	11,454.0	70.9	78.4	-82.15	8,963.4	-1,516.4	1,245.1	1,095.7	149.42	8.333	
20,425.0	11,625.0	20,374.2	11,454.0	71.1	78.5	-82.15	8,988.4	-1,516.6	1,245.2	1,095.4	149.77	8.314	
20,500.0	11,625.0	20,449.2	11,454.0	71.6	79.0	-82.15	9,063.4	-1,517.3	1,245.2	1,094.3	150.83	8.255	
20,520.0	11,625.0	20,469.2	11,454.0	71.8	79.2	-82.15	9,083.4	-1,517.5	1,245.2	1,094.0	151.11	8.240	
20,600.0	11,625.0	20,549.2	11,454.0	72.4	79.7	-82.15	9,163.4	-1,518.2	1,245.2	1,092.9	152.25	8.179	
20,615.0	11,625.0	20,564.2	11,454.0	72.5	79.8	-82.15	9,178.4	-1,518.4	1,245.2	1,092.7	152.46	8.167	
20,700.0	11,625.0	20,649.2	11,454.0	73.1	80.4	-82.15	9,263.4	-1,519.2	1,245.2	1,091.5	153.66	8.103	
20,710.0	11,625.0	20,659.2	11,454.0	73.2	80.4	-82.15	9,273.4	-1,519.2	1,245.2	1,091.4	153.80	8.096	
20,800.0	11,625.0	20,749.2	11,454.0	73.8	81.1	-82.15	9,363.4	-1,520.1	1,245.2	1,090.1	155.08	8.029	
20,805.0	11,625.0	20,754.2	11,454.0	73.9	81.1	-82.15	9,368.4	-1,520.1	1,245.2	1,090.0	155.15	8.026	
20,900.0	11,625.0	20,849.2	11,454.0	74.6	81.7	-82.15	9,463.4	-1,521.0	1,245.2	1,088.7	156.50	7.956	
20,995.0	11,625.0	20,944.2	11,454.0	75.3	82.4	-82.15	9,558.4	-1,521.8	1,245.2	1,087.3	157.85	7.888	
21,000.0	11,625.0	20,949.2	11,454.0	75.3	82.4	-82.15	9,563.4	-1,521.9	1,245.2	1,087.3	157.92	7.885	
21,090.0	11,625.0	21,039.2	11,454.0	76.0	83.0	-82.15	9,653.4	-1,522.7	1,245.2	1,086.0	159.20	7.821	
21,100.0	11,625.0	21,049.2	11,454.0	76.1	83.1	-82.15	9,663.4	-1,522.8	1,245.2	1,085.8	159.34	7.814	
21,185.0	11,625.0	21,134.2	11,454.0	76.7	83.7	-82.15	9,748.4	-1,523.6	1,245.2	1,084.6	160.56	7.755	
21,200.0	11,625.0	21,149.2	11,454.0	76.8	83.8	-82.15	9,763.4	-1,523.7	1,245.2	1,084.4	160.77	7.745	
21,280.0	11,625.0	21,229.2	11,454.0	77.4	84.3	-82.15	9,843.4	-1,524.4	1,245.2	1,083.3	161.91	7.690	
21,300.0	11,625.0	21,249.2	11,454.0	77.6	84.5	-82.15	9,863.4	-1,524.6	1,245.2	1,083.0	162.20	7.677	
21,375.0	11,625.0	21,324.2	11,454.0	78.1	85.0	-82.15	9,938.4	-1,525.3	1,245.2	1,081.9	163.27	7.627	
21,400.0	11,625.0	21,349.2	11,454.0	78.3	85.1	-82.15	9,963.4	-1,525.5	1,245.2	1,081.6	163.63	7.610	
21,470.0	11,625.0	21,419.2	11,454.0	78.8	85.6	-82.15	10,033.4	-1,526.2	1,245.2	1,080.6	164.63	7.564	
21,500.0	11,625.0	21,449.2	11,454.0	79.1	85.8	-82.15	10,063.4	-1,526.4	1,245.2	1,080.1	165.06	7.544	
21,565.0	11,625.0	21,514.2	11,454.0	79.5	86.3	-82.15	10,128.4	-1,527.0	1,245.2	1,079.2	165.99	7.502	
21,600.0	11,625.0	21,549.2	11,454.0	79.8	86.5	-82.15	10,163.4	-1,527.4	1,245.2	1,078.7	166.49	7.479	
21,660.0	11,625.0	21,609.2	11,454.0	80.3	86.9	-82.15	10,223.4	-1,527.9	1,245.2	1,077.8	167.35	7.441	
21,700.0	11,625.0	21,649.2	11,454.0	80.6	87.2	-82.15	10,263.4	-1,528.3	1,245.2	1,077.3	167.92	7.415	
21,755.0	11,625.0	21,704.2	11,454.0	81.0	87.6	-82.15	10,318.4	-1,528.8	1,245.2	1,076.5	168.71	7.381	
21,800.0	11,625.0	21,749.2	11,454.0	81.3	87.9	-82.15	10,363.3	-1,529.2	1,245.2	1,075.8	169.36	7.352	
21,850.0	11,625.0	21,799.2	11,454.0	81.7	88.2	-82.15	10,413.3	-1,529.6	1,245.2	1,075.1	170.08	7.321	
21,900.0	11,625.0	21,849.2	11,454.0	82.0	88.6	-82.15	10,463.3	-1,530.1	1,245.2	1,074.4	170.80	7.291	
21,945.0	11,625.0	21,894.2	11,454.0	82.4	88.9	-82.15	10,508.3	-1,530.5	1,245.2	1,073.8	171.44	7.263	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0														Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 1000-r.5 MWD+IFR1, 11107-r.5 MWD+IFR1+MS														Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Warning			
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)				
21,956.2	11,625.0	21,905.4	11,454.0	82.5	89.0	-82.15	10,519.6	-1,530.6	1,245.2	1,073.6	171.60	7.256 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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.39	-0.4	-59.9	59.9				
95.0	95.0	94.0	94.0	3.0	3.0	-90.39	-0.4	-59.9	59.9	53.9	6.03	9.942	
100.0	100.0	99.0	99.0	3.0	3.0	-90.39	-0.4	-59.9	59.9	53.9	6.03	9.936	
190.0	190.0	189.0	189.0	3.1	3.1	-90.39	-0.4	-59.9	59.9	53.8	6.15	9.738	
200.0	200.0	199.0	199.0	3.1	3.1	-90.39	-0.4	-59.9	59.9	53.7	6.17	9.707	
285.0	285.0	284.0	284.0	3.2	3.2	-90.39	-0.4	-59.9	59.9	53.6	6.31	9.494	
300.0	300.0	299.0	299.0	3.2	3.2	-90.39	-0.4	-59.9	59.9	53.6	6.34	9.451	
380.0	380.0	379.0	379.0	3.3	3.3	-90.39	-0.4	-59.9	59.9	53.4	6.49	9.234	
400.0	400.0	399.0	399.0	3.3	3.3	-90.39	-0.4	-59.9	59.9	53.4	6.53	9.176	
475.0	475.0	474.0	474.0	3.4	3.4	-90.39	-0.4	-59.9	59.9	53.2	6.68	8.963	
500.0	500.0	499.0	499.0	3.4	3.4	-90.39	-0.4	-59.9	59.9	53.2	6.74	8.889	
570.0	570.0	569.0	569.0	3.5	3.5	-90.39	-0.4	-59.9	59.9	53.0	6.90	8.686	
600.0	600.0	599.0	599.0	3.5	3.5	-90.39	-0.4	-59.9	59.9	52.9	6.97	8.597	
665.0	665.0	664.0	664.0	3.6	3.6	-90.39	-0.4	-59.9	59.9	52.8	7.13	8.406	
700.0	700.0	699.0	699.0	3.7	3.7	-90.39	-0.4	-59.9	59.9	52.7	7.21	8.303	
760.0	760.0	759.0	759.0	3.8	3.8	-90.39	-0.4	-59.9	59.9	52.5	7.37	8.129	
800.0	800.0	799.0	799.0	3.8	3.8	-90.39	-0.4	-59.9	59.9	52.4	7.48	8.012	
855.0	855.0	854.0	854.0	3.9	3.9	-90.39	-0.4	-59.9	59.9	52.3	7.63	7.855	
900.0	900.0	899.0	899.0	4.0	4.0	-90.39	-0.4	-59.9	59.9	52.1	7.75	7.727	
950.0	950.0	949.0	949.0	4.1	4.1	-90.39	-0.4	-59.9	59.9	52.0	7.89	7.588	
1,000.0	1,000.0	999.0	999.0	4.2	4.2	-90.39	-0.4	-59.9	59.9	51.9	8.04	7.451	
1,045.0	1,045.0	1,044.0	1,044.0	4.2	4.2	-90.39	-0.4	-59.9	59.9	51.7	8.17	7.329	
1,100.0	1,100.0	1,099.0	1,099.0	4.3	4.3	-90.39	-0.4	-59.9	59.9	51.6	8.34	7.183	
1,140.0	1,140.0	1,139.0	1,139.0	4.4	4.4	-90.39	-0.4	-59.9	59.9	51.4	8.46	7.080	
1,200.0	1,200.0	1,199.0	1,199.0	4.5	4.5	-90.39	-0.4	-59.9	59.9	51.3	8.65	6.927	
1,235.0	1,235.0	1,234.0	1,234.0	4.6	4.6	-90.39	-0.4	-59.9	59.9	51.1	8.76	6.840	
1,300.0	1,300.0	1,299.0	1,299.0	4.7	4.7	-90.39	-0.4	-59.9	59.9	50.9	8.97	6.681	
1,330.0	1,330.0	1,329.0	1,329.0	4.7	4.7	-90.39	-0.4	-59.9	59.9	50.8	9.06	6.610	
1,400.0	1,400.0	1,399.0	1,399.0	4.9	4.9	-90.39	-0.4	-59.9	59.9	50.6	9.29	6.447	
1,425.0	1,425.0	1,424.0	1,424.0	4.9	4.9	-90.39	-0.4	-59.9	59.9	50.5	9.37	6.390	
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	-90.39	-0.4	-59.9	59.9	50.3	9.63	6.223	
1,520.0	1,520.0	1,519.0	1,519.0	5.1	5.1	-90.39	-0.4	-59.9	59.9	50.2	9.69	6.180	
1,600.0	1,600.0	1,599.0	1,599.0	5.3	5.3	-90.39	-0.4	-59.9	59.9	49.9	9.96	6.011	
1,615.0	1,615.0	1,614.0	1,614.0	5.3	5.3	-90.39	-0.4	-59.9	59.9	49.9	10.02	5.980	
1,700.0	1,700.0	1,699.0	1,699.0	5.5	5.5	-90.39	-0.4	-59.9	59.9	49.6	10.31	5.810	
1,710.0	1,710.0	1,709.0	1,709.0	5.5	5.5	-90.39	-0.4	-59.9	59.9	49.6	10.35	5.790	
1,800.0	1,800.0	1,799.0	1,799.0	5.7	5.7	-90.39	-0.4	-59.9	59.9	49.2	10.66	5.619	
1,805.0	1,805.0	1,804.0	1,804.0	5.7	5.7	-90.39	-0.4	-59.9	59.9	49.2	10.68	5.609	
1,900.0	1,900.0	1,899.0	1,899.0	5.9	5.9	-90.39	-0.4	-59.9	59.9	48.9	11.02	5.437	
1,995.0	1,995.0	1,994.0	1,994.0	6.1	6.1	-90.39	-0.4	-59.9	59.9	48.5	11.36	5.274	
2,000.0	2,000.0	1,999.0	1,999.0	6.1	6.1	-90.39	-0.4	-59.9	59.9	48.5	11.38	5.265 CC, ES	
2,090.0	2,090.0	2,087.2	2,087.1	6.3	6.2	-90.39	-0.4	-61.2	61.3	49.5	11.73	5.224	
2,100.0	2,100.0	2,096.9	2,096.9	6.3	6.2	-90.39	-0.4	-61.5	61.6	49.8	11.77	5.234	
2,185.0	2,185.0	2,180.0	2,179.9	6.5	6.3	-90.37	-0.4	-65.6	65.7	53.6	12.09	5.431	
2,200.0	2,200.0	2,194.6	2,194.5	6.5	6.3	-90.37	-0.4	-66.5	66.7	54.5	12.15	5.486	
2,280.0	2,280.0	2,272.5	2,272.1	6.7	6.4	-90.35	-0.4	-72.8	73.2	60.7	12.46	5.871	
2,300.0	2,300.0	2,291.9	2,291.4	6.7	6.5	-90.34	-0.4	-74.8	75.1	62.6	12.54	5.991	
2,375.0	2,375.0	2,364.4	2,363.4	6.9	6.5	-90.33	-0.5	-83.0	83.7	70.9	12.84	6.519	
2,400.0	2,400.0	2,388.4	2,387.2	6.9	6.6	-90.32	-0.5	-86.2	87.0	74.1	12.94	6.722	
2,470.0	2,470.0	2,455.5	2,453.6	7.1	6.8	-90.30	-0.5	-96.0	97.3	84.0	13.23	7.353	
2,500.0	2,500.0	2,484.1	2,481.8	7.2	6.9	-90.29	-0.5	-100.7	102.2	88.8	13.35	7.652	
2,565.0	2,565.0	2,545.7	2,542.5	7.3	7.0	-90.28	-0.5	-111.7	113.8	100.2	13.59	8.374	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-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
2,600.0	2,600.0	2,578.9	2,575.0	7.4	7.1	-90.27	-0.6	-118.2	120.6	106.9	13.71	8.798	
2,660.0	2,660.0	2,637.7	2,632.6	7.5	7.2	-90.26	-0.6	-129.9	132.6	118.6	13.96	9.500	
2,700.0	2,700.0	2,676.9	2,671.0	7.6	7.3	-90.26	-0.6	-137.7	140.5	126.4	14.13	9.944	
2,755.0	2,755.0	2,730.8	2,723.8	7.7	7.5	-90.25	-0.6	-148.5	151.5	137.1	14.39	10.532	
2,800.0	2,800.0	2,774.9	2,767.0	7.8	7.6	-90.24	-0.7	-157.3	160.5	145.9	14.60	10.995	
2,850.0	2,850.0	2,823.9	2,815.0	7.9	7.7	-90.24	-0.7	-167.0	170.5	155.6	14.84	11.490	
2,900.0	2,900.0	2,872.9	2,863.0	8.0	7.9	-90.23	-0.7	-176.8	180.4	165.3	15.08	11.965	
2,945.0	2,945.0	2,917.0	2,906.2	8.1	8.0	-90.23	-0.7	-185.6	189.4	174.1	15.30	12.377	
3,000.0	3,000.0	2,970.9	2,959.1	8.3	8.2	-90.23	-0.8	-196.3	200.4	184.8	15.58	12.861	
3,040.0	3,040.0	3,010.1	2,997.5	8.3	8.3	-1.19	-0.8	-204.2	208.1	192.3	15.78	13.184	
3,100.0	3,100.0	3,069.2	3,055.4	8.4	8.5	-1.19	-0.8	-215.9	218.6	202.5	16.09	13.586	
3,135.0	3,134.9	3,103.7	3,089.3	8.4	8.6	-1.19	-0.8	-222.8	224.1	207.9	16.26	13.782	
3,200.0	3,199.8	3,168.1	3,152.3	8.5	8.8	-1.20	-0.9	-235.7	233.4	216.8	16.60	14.061	
3,230.0	3,229.8	3,197.8	3,181.5	8.5	8.9	-1.21	-0.9	-241.6	237.1	220.4	16.72	14.181	
3,250.0	3,249.7	3,217.7	3,200.9	8.5	9.0	-1.22	-0.9	-245.5	239.5	222.6	16.81	14.248	
3,300.0	3,299.5	3,267.4	3,249.6	8.5	9.1	-1.24	-0.9	-255.4	245.1	228.1	17.02	14.400	
3,325.0	3,324.4	3,292.2	3,274.0	8.5	9.2	-1.24	-0.9	-260.4	247.9	230.8	17.15	14.460	
3,400.0	3,399.1	3,366.7	3,347.0	8.6	9.5	-1.27	-1.0	-275.3	256.4	238.9	17.53	14.629	
3,420.0	3,419.0	3,386.6	3,366.5	8.6	9.6	-1.27	-1.0	-279.2	258.7	241.1	17.64	14.670	
3,500.0	3,498.7	3,466.1	3,444.3	8.7	9.9	-1.30	-1.0	-295.1	267.8	249.7	18.06	14.824	
3,515.0	3,513.7	3,481.0	3,459.0	8.7	9.9	-1.30	-1.0	-298.0	269.5	251.3	18.15	14.850	
3,600.0	3,598.4	3,565.4	3,541.7	8.8	10.2	-1.33	-1.1	-314.9	279.1	260.5	18.62	14.989	
3,610.0	3,608.3	3,575.4	3,551.4	8.8	10.3	-1.33	-1.1	-316.9	280.2	261.5	18.68	15.004	
3,700.0	3,698.0	3,664.8	3,639.1	8.9	10.6	-1.35	-1.1	-334.7	290.4	271.2	19.20	15.128	
3,705.0	3,703.0	3,669.8	3,643.9	8.9	10.6	-1.35	-1.1	-335.7	291.0	271.7	19.23	15.134	
3,800.0	3,797.6	3,764.2	3,736.4	9.0	11.0	-1.37	-1.2	-354.5	301.7	281.9	19.79	15.243	
3,895.0	3,892.2	3,858.6	3,828.9	9.1	11.4	-1.40	-1.2	-373.3	312.5	292.1	20.38	15.333	
3,900.0	3,897.2	3,863.5	3,833.8	9.1	11.4	-1.40	-1.2	-374.3	313.1	292.6	20.41	15.338	
3,990.0	3,986.9	3,952.9	3,921.4	9.3	11.7	-1.41	-1.3	-392.1	323.2	302.3	20.98	15.407	
4,000.0	3,996.8	3,962.9	3,931.2	9.3	11.8	-1.42	-1.3	-394.1	324.4	303.3	21.04	15.415	
4,085.0	4,081.5	4,047.3	4,013.9	9.5	12.1	-1.43	-1.3	-410.9	334.0	312.4	21.59	15.467	
4,100.0	4,096.4	4,062.2	4,028.5	9.5	12.2	-1.44	-1.3	-413.9	335.7	314.0	21.69	15.476	
4,180.0	4,176.1	4,141.7	4,106.4	9.7	12.5	-1.45	-1.4	-429.8	344.8	322.5	22.22	15.515	
4,200.0	4,196.1	4,161.6	4,125.9	9.8	12.6	-1.45	-1.4	-433.7	347.0	324.7	22.35	15.524	
4,275.0	4,270.8	4,236.1	4,198.9	10.0	12.9	-1.47	-1.4	-448.6	355.5	332.7	22.86	15.552	
4,300.0	4,295.7	4,260.9	4,223.2	10.0	13.0	-1.47	-1.5	-453.5	358.3	335.3	23.03	15.560	
4,370.0	4,365.4	4,330.5	4,291.4	10.2	13.3	-1.48	-1.5	-467.4	366.3	342.8	23.51	15.579	
4,400.0	4,395.3	4,360.3	4,320.6	10.3	13.4	-1.48	-1.5	-473.3	369.7	345.9	23.72	15.586	
4,465.0	4,460.1	4,424.9	4,383.9	10.5	13.7	-1.49	-1.5	-486.2	377.0	352.9	24.17	15.598	
4,500.0	4,494.9	4,459.7	4,418.0	10.6	13.8	-1.50	-1.6	-493.2	381.0	356.6	24.42	15.604	
4,560.0	4,554.7	4,519.3	4,476.4	10.7	14.1	-1.51	-1.6	-505.0	387.8	362.9	24.84	15.611	
4,600.0	4,594.5	4,559.0	4,515.3	10.8	14.2	-1.51	-1.6	-513.0	392.3	367.2	25.12	15.615	
4,655.0	4,649.3	4,613.7	4,568.9	11.0	14.5	-1.52	-1.6	-523.9	398.5	373.0	25.52	15.617	
4,700.0	4,694.2	4,658.4	4,612.7	11.1	14.7	-1.53	-1.7	-532.8	403.6	377.8	25.84	15.619	
4,750.0	4,744.0	4,708.1	4,661.4	11.3	14.9	-1.53	-1.7	-542.7	409.3	383.1	26.21	15.619	
4,800.0	4,793.8	4,757.7	4,710.1	11.4	15.1	-1.54	-1.7	-552.6	415.0	388.4	26.57	15.618	
4,845.0	4,838.6	4,802.4	4,753.9	11.5	15.3	-1.54	-1.7	-561.5	420.1	393.2	26.90	15.615	
4,900.0	4,893.4	4,857.1	4,807.4	11.7	15.5	-1.55	-1.8	-572.4	426.3	399.0	27.30	15.612	
4,940.0	4,933.3	4,896.8	4,846.4	11.8	15.7	-1.55	-1.8	-580.3	430.8	403.2	27.60	15.609	
5,000.0	4,993.0	4,956.4	4,904.8	12.0	16.0	-1.56	-1.8	-592.2	437.6	409.6	28.05	15.603	
5,035.0	5,027.9	4,991.2	4,938.9	12.1	16.1	-1.56	-1.8	-599.1	441.6	413.3	28.31	15.598	
5,100.0	5,092.6	5,055.8	5,002.1	12.3	16.4	-1.57	-1.9	-612.0	448.9	420.1	28.80	15.590	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,130.0	5,122.5	5,085.6	5,031.4	12.4	16.5	-1.57	-1.9	-617.9	452.3	423.3	29.02	15.587	
5,187.7	5,180.0	5,142.9	5,087.5	12.6	16.8	-1.58	-1.9	-629.4	458.9	429.4	29.45	15.581	
5,200.0	5,192.3	5,155.2	5,099.5	12.6	16.8	-1.58	-1.9	-631.8	460.3	430.7	29.54	15.583	
5,225.0	5,217.2	5,180.0	5,123.8	12.7	16.9	-1.58	-1.9	-636.8	463.2	433.5	29.72	15.584	
5,300.0	5,292.0	5,254.4	5,196.7	12.9	17.3	-1.59	-2.0	-651.6	472.7	442.4	30.29	15.606	
5,320.0	5,311.9	5,274.2	5,216.2	13.0	17.4	-1.59	-2.0	-655.5	475.4	444.9	30.44	15.618	
5,400.0	5,391.8	5,353.4	5,293.7	13.2	17.7	-1.59	-2.0	-671.3	486.8	455.8	31.03	15.688	
5,415.0	5,406.8	5,368.2	5,308.3	13.2	17.8	-1.59	-2.0	-674.3	489.1	457.9	31.14	15.706	
5,500.0	5,491.7	5,452.1	5,390.5	13.5	18.1	-1.59	-2.1	-691.0	502.7	470.9	31.75	15.830	
5,510.0	5,501.7	5,462.0	5,400.2	13.5	18.2	-1.59	-2.1	-693.0	504.3	472.5	31.82	15.848	
5,600.0	5,591.7	5,550.6	5,487.0	13.7	18.6	-1.59	-2.1	-710.6	520.2	487.8	32.45	16.032	
5,605.0	5,596.7	5,555.5	5,491.8	13.7	18.6	-1.59	-2.1	-711.6	521.2	488.7	32.48	16.046	
5,687.7	5,679.4	5,636.6	5,571.3	13.8	19.0	-90.61	-2.2	-727.8	537.1	504.1	32.96	16.294	
5,700.0	5,691.7	5,648.7	5,583.1	13.8	19.0	-90.61	-2.2	-730.2	539.5	506.5	33.02	16.341	
5,795.0	5,786.7	5,741.8	5,674.3	13.9	19.4	-90.59	-2.2	-748.8	558.4	525.0	33.49	16.674	
5,800.0	5,791.7	5,746.7	5,679.1	13.9	19.5	-90.59	-2.2	-749.7	559.4	525.9	33.52	16.691	
5,890.0	5,881.7	5,834.9	5,765.6	13.9	19.8	-90.58	-2.3	-767.3	577.4	543.4	33.97	16.996	
5,900.0	5,891.7	5,844.7	5,775.2	13.9	19.9	-90.58	-2.3	-769.3	579.4	545.4	34.02	17.030	
5,985.0	5,976.7	5,928.0	5,856.8	14.0	20.3	-90.56	-2.3	-785.9	596.3	561.9	34.45	17.310	
6,000.0	5,991.7	5,942.7	5,871.2	14.0	20.3	-90.56	-2.3	-788.8	599.3	564.8	34.53	17.358	
6,080.0	6,071.7	6,021.0	5,948.0	14.0	20.7	-90.55	-2.4	-804.4	615.3	580.3	34.93	17.614	
6,100.0	6,091.7	6,040.6	5,967.2	14.0	20.8	-90.55	-2.4	-808.3	619.3	584.2	35.03	17.676	
6,175.0	6,166.7	6,114.1	6,039.2	14.1	21.1	-90.54	-2.4	-823.0	634.2	598.8	35.41	17.909	
6,200.0	6,191.7	6,138.6	6,063.2	14.1	21.2	-90.54	-2.4	-827.9	639.2	603.6	35.54	17.985	
6,270.0	6,261.7	6,207.2	6,130.5	14.1	21.5	-90.53	-2.5	-841.6	653.1	617.2	35.90	18.196	
6,300.0	6,291.7	6,236.6	6,159.3	14.2	21.7	-90.52	-2.5	-847.4	659.1	623.1	36.05	18.284	
6,365.0	6,356.7	6,300.3	6,221.7	14.2	21.9	-90.52	-2.5	-860.1	672.1	635.7	36.38	18.474	
6,400.0	6,391.7	6,334.6	6,255.3	14.2	22.1	-90.51	-2.5	-867.0	679.1	642.5	36.56	18.575	
6,460.0	6,451.7	6,393.4	6,312.9	14.2	22.4	-90.51	-2.6	-878.7	691.0	654.2	36.86	18.745	
6,500.0	6,491.7	6,432.6	6,351.3	14.3	22.5	-90.50	-2.6	-886.5	699.0	661.9	37.07	18.857	
6,555.0	6,546.7	6,486.5	6,404.1	14.3	22.8	-90.50	-2.6	-897.2	710.0	672.6	37.35	19.008	
6,600.0	6,591.7	6,530.6	6,447.3	14.3	23.0	-90.49	-2.7	-906.0	718.9	681.4	37.57	19.133	
6,650.0	6,641.7	6,584.9	6,500.5	14.4	23.2	-90.49	-2.7	-916.7	728.8	690.9	37.85	19.252	
6,700.0	6,691.7	6,641.2	6,555.9	14.4	23.5	-90.48	-2.7	-927.3	738.1	700.0	38.15	19.351	
6,745.0	6,736.7	6,692.1	6,605.9	14.4	23.7	-90.48	-2.7	-936.3	746.2	707.8	38.41	19.427	
6,800.0	6,791.7	6,754.4	6,667.4	14.4	24.0	-90.47	-2.8	-946.8	755.4	716.7	38.72	19.509	
6,840.0	6,831.7	6,800.0	6,712.3	14.5	24.2	-90.47	-2.8	-954.1	761.8	722.9	38.95	19.560	
6,900.0	6,891.7	6,868.4	6,780.1	14.5	24.5	-90.47	-2.8	-964.3	770.8	731.5	39.28	19.625	
6,935.0	6,926.7	6,908.5	6,819.7	14.5	24.6	-90.46	-2.8	-969.9	775.7	736.2	39.46	19.655	
7,000.0	6,991.7	6,983.1	6,893.7	14.5	24.9	-90.46	-2.8	-979.6	784.1	744.3	39.81	19.699	
7,030.0	7,021.7	7,017.6	6,928.0	14.6	25.1	-90.46	-2.9	-983.8	787.8	747.8	39.96	19.714	
7,100.0	7,091.7	7,098.3	7,008.2	14.6	25.4	-90.46	-2.9	-992.7	795.5	755.2	40.31	19.735	
7,125.0	7,116.7	7,127.2	7,036.9	14.6	25.5	-90.45	-2.9	-995.7	798.0	757.6	40.43	19.739	
7,200.0	7,191.7	7,214.1	7,123.4	14.7	25.9	-90.45	-2.9	-1,003.6	804.9	764.1	40.78	19.736	
7,220.0	7,211.7	7,237.3	7,146.5	14.7	25.9	-90.45	-2.9	-1,005.5	806.5	765.6	40.87	19.733	
7,300.0	7,291.7	7,330.2	7,239.2	14.7	26.3	-90.45	-2.9	-1,012.1	812.2	771.0	41.22	19.706	
7,315.0	7,306.7	7,347.6	7,256.6	14.7	26.3	-90.45	-2.9	-1,013.2	813.1	771.9	41.28	19.699	
7,400.0	7,391.7	7,446.6	7,355.5	14.8	26.7	-90.45	-2.9	-1,018.3	817.5	775.9	41.61	19.646	
7,410.0	7,401.7	7,458.3	7,367.1	14.8	26.7	-90.45	-2.9	-1,018.8	818.0	776.3	41.65	19.639	
7,500.0	7,491.7	7,563.2	7,472.0	14.8	27.0	-90.44	-3.0	-1,022.1	820.8	778.9	41.96	19.564	
7,505.0	7,496.7	7,569.1	7,477.8	14.8	27.1	-90.44	-3.0	-1,022.3	820.9	779.0	41.97	19.560	
7,600.0	7,591.7	7,680.0	7,588.7	14.9	27.3	-90.44	-3.0	-1,023.6	822.1	779.9	42.15	19.503	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	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
7,695.0	7,686.7	7,776.9	7,685.7	14.9	27.3	-90.44	-3.0	-1,023.6	822.1	779.9	42.24	19.464	
7,700.0	7,691.7	7,781.9	7,690.7	14.9	27.3	-90.44	-3.0	-1,023.6	822.1	779.9	42.24	19.462	
7,790.0	7,781.7	7,871.9	7,780.7	15.0	27.3	-90.44	-3.0	-1,023.6	822.1	779.8	42.32	19.426	
7,800.0	7,791.7	7,881.9	7,790.7	15.0	27.3	-90.44	-3.0	-1,023.6	822.1	779.8	42.33	19.422	
7,885.0	7,876.7	7,966.9	7,875.7	15.1	27.3	-90.44	-3.0	-1,023.6	822.1	779.7	42.40	19.389	
7,900.0	7,891.7	7,981.9	7,890.7	15.1	27.4	-90.44	-3.0	-1,023.6	822.1	779.7	42.41	19.383	
7,980.0	7,971.7	8,061.9	7,970.7	15.1	27.4	-90.44	-3.0	-1,023.6	822.1	779.6	42.48	19.352	
8,000.0	7,991.7	8,081.9	7,990.7	15.1	27.4	-90.44	-3.0	-1,023.6	822.1	779.6	42.50	19.344	
8,075.0	8,066.7	8,156.9	8,065.7	15.2	27.4	-90.44	-3.0	-1,023.6	822.1	779.5	42.56	19.314	
8,100.0	8,091.7	8,181.9	8,090.7	15.2	27.4	-90.44	-3.0	-1,023.6	822.1	779.5	42.59	19.304	
8,170.0	8,161.7	8,251.9	8,160.7	15.2	27.4	-90.44	-3.0	-1,023.6	822.1	779.4	42.65	19.277	
8,200.0	8,191.7	8,281.9	8,190.7	15.2	27.4	-90.44	-3.0	-1,023.6	822.1	779.4	42.67	19.265	
8,265.0	8,256.7	8,346.9	8,255.7	15.3	27.5	-90.44	-3.0	-1,023.6	822.1	779.4	42.73	19.239	
8,300.0	8,291.7	8,381.9	8,290.7	15.3	27.5	-90.44	-3.0	-1,023.6	822.1	779.3	42.76	19.226	
8,360.0	8,351.7	8,441.9	8,350.7	15.3	27.5	-90.44	-3.0	-1,023.6	822.1	779.3	42.81	19.202	
8,400.0	8,391.7	8,481.9	8,390.7	15.4	27.5	-90.44	-3.0	-1,023.6	822.1	779.2	42.85	19.186	
8,455.0	8,446.7	8,536.9	8,445.7	15.4	27.5	-90.44	-3.0	-1,023.6	822.1	779.2	42.90	19.164	
8,500.0	8,491.7	8,581.9	8,490.7	15.4	27.5	-90.44	-3.0	-1,023.6	822.1	779.2	42.94	19.147	
8,550.0	8,541.7	8,631.9	8,540.7	15.5	27.5	-90.44	-3.0	-1,023.6	822.1	779.1	42.98	19.127	
8,600.0	8,591.7	8,681.9	8,590.7	15.5	27.6	-90.44	-3.0	-1,023.6	822.1	779.1	43.03	19.107	
8,645.0	8,636.7	8,726.9	8,635.7	15.5	27.6	-90.44	-3.0	-1,023.6	822.1	779.0	43.07	19.089	
8,700.0	8,691.7	8,781.9	8,690.7	15.5	27.6	-90.44	-3.0	-1,023.6	822.1	779.0	43.11	19.068	
8,740.0	8,731.7	8,821.9	8,730.7	15.6	27.6	-90.44	-3.0	-1,023.6	822.1	778.9	43.15	19.052	
8,800.0	8,791.7	8,881.9	8,790.7	15.6	27.6	-90.44	-3.0	-1,023.6	822.1	778.9	43.20	19.028	
8,835.0	8,826.7	8,916.9	8,825.7	15.6	27.6	-90.44	-3.0	-1,023.6	822.1	778.9	43.24	19.014	
8,900.0	8,891.7	8,981.9	8,890.7	15.7	27.6	-90.44	-3.0	-1,023.6	822.1	778.8	43.29	18.989	
8,930.0	8,921.7	9,011.9	8,920.7	15.7	27.6	-90.44	-3.0	-1,023.6	822.1	778.8	43.32	18.977	
9,000.0	8,991.7	9,081.9	8,990.7	15.7	27.7	-90.44	-3.0	-1,023.6	822.1	778.7	43.38	18.949	
9,025.0	9,016.7	9,106.9	9,015.7	15.7	27.7	-90.44	-3.0	-1,023.6	822.1	778.7	43.41	18.939	
9,100.0	9,091.7	9,181.9	9,090.7	15.8	27.7	-90.44	-3.0	-1,023.6	822.1	778.6	43.48	18.910	
9,120.0	9,111.7	9,201.9	9,110.7	15.8	27.7	-90.44	-3.0	-1,023.6	822.1	778.6	43.49	18.902	
9,200.0	9,191.7	9,281.9	9,190.7	15.8	27.7	-90.44	-3.0	-1,023.6	822.1	778.5	43.57	18.870	
9,215.0	9,206.7	9,296.9	9,205.7	15.9	27.7	-90.44	-3.0	-1,023.6	822.1	778.5	43.58	18.864	
9,300.0	9,291.7	9,381.9	9,290.7	15.9	27.8	-90.44	-3.0	-1,023.6	822.1	778.4	43.66	18.830	
9,310.0	9,301.7	9,391.9	9,300.7	15.9	27.8	-90.44	-3.0	-1,023.6	822.1	778.4	43.67	18.826	
9,400.0	9,391.7	9,481.9	9,390.7	16.0	27.8	-90.44	-3.0	-1,023.6	822.1	778.3	43.75	18.791	
9,405.0	9,396.7	9,486.9	9,395.7	16.0	27.8	-90.44	-3.0	-1,023.6	822.1	778.3	43.75	18.789	
9,500.0	9,491.7	9,581.9	9,490.7	16.0	27.8	-90.44	-3.0	-1,023.6	822.1	778.3	43.84	18.751	
9,595.0	9,586.7	9,676.9	9,585.7	16.1	27.8	-90.44	-3.0	-1,023.6	822.1	778.2	43.93	18.714	
9,600.0	9,591.7	9,681.9	9,590.7	16.1	27.9	-90.44	-3.0	-1,023.6	822.1	778.2	43.93	18.712	
9,690.0	9,681.7	9,771.9	9,680.7	16.1	27.9	-90.44	-3.0	-1,023.6	822.1	778.1	44.02	18.676	
9,700.0	9,691.7	9,781.9	9,690.7	16.2	27.9	-90.44	-3.0	-1,023.6	822.1	778.1	44.03	18.672	
9,785.0	9,776.7	9,866.9	9,775.7	16.2	27.9	-90.44	-3.0	-1,023.6	822.1	778.0	44.11	18.639	
9,800.0	9,791.7	9,881.9	9,790.7	16.2	27.9	-90.44	-3.0	-1,023.6	822.1	778.0	44.12	18.633	
9,880.0	9,871.7	9,961.9	9,870.7	16.3	27.9	-90.44	-3.0	-1,023.6	822.1	777.9	44.20	18.601	
9,900.0	9,891.7	9,981.9	9,890.7	16.3	27.9	-90.44	-3.0	-1,023.6	822.1	777.9	44.22	18.593	
9,975.0	9,966.7	10,056.9	9,965.7	16.3	28.0	-90.44	-3.0	-1,023.6	822.1	777.8	44.29	18.563	
10,000.0	9,991.7	10,081.9	9,990.7	16.3	28.0	-90.44	-3.0	-1,023.6	822.1	777.8	44.31	18.554	
10,070.0	10,061.7	10,151.9	10,060.7	16.4	28.0	-90.44	-3.0	-1,023.6	822.1	777.7	44.38	18.526	
10,100.0	10,091.7	10,181.9	10,090.7	16.4	28.0	-90.44	-3.0	-1,023.6	822.1	777.7	44.40	18.514	
10,165.0	10,156.7	10,246.9	10,155.7	16.4	28.0	-90.44	-3.0	-1,023.6	822.1	777.6	44.47	18.488	
10,200.0	10,191.7	10,281.9	10,190.7	16.5	28.0	-90.44	-3.0	-1,023.6	822.1	777.6	44.50	18.475	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-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
10,260.0	10,251.7	10,341.9	10,250.7	16.5	28.1	-90.44	-3.0	-1,023.6	822.1	777.5	44.56	18.451	
10,300.0	10,291.7	10,381.9	10,290.7	16.5	28.1	-90.44	-3.0	-1,023.6	822.1	777.5	44.59	18.435	
10,355.0	10,346.7	10,436.9	10,345.7	16.6	28.1	-90.44	-3.0	-1,023.6	822.1	777.4	44.65	18.413	
10,400.0	10,391.7	10,481.9	10,390.7	16.6	28.1	-90.44	-3.0	-1,023.6	822.1	777.4	44.69	18.396	
10,450.0	10,441.7	10,531.9	10,440.7	16.6	28.1	-90.44	-3.0	-1,023.6	822.1	777.4	44.74	18.376	
10,500.0	10,491.7	10,581.9	10,490.7	16.7	28.1	-90.44	-3.0	-1,023.6	822.1	777.3	44.79	18.356	
10,545.0	10,536.7	10,626.9	10,535.7	16.7	28.2	-90.44	-3.0	-1,023.6	822.1	777.3	44.83	18.338	
10,600.0	10,591.7	10,681.9	10,590.7	16.7	28.2	-90.44	-3.0	-1,023.6	822.1	777.2	44.88	18.317	
10,640.0	10,631.7	10,721.9	10,630.7	16.7	28.2	-90.44	-3.0	-1,023.6	822.1	777.2	44.92	18.301	
10,700.0	10,691.7	10,781.9	10,690.7	16.8	28.2	-90.44	-3.0	-1,023.6	822.1	777.1	44.98	18.277	
10,735.0	10,726.7	10,816.9	10,725.7	16.8	28.2	-90.44	-3.0	-1,023.6	822.1	777.1	45.01	18.264	
10,800.0	10,791.7	10,881.9	10,790.7	16.8	28.2	-90.44	-3.0	-1,023.6	822.1	777.0	45.08	18.238	
10,830.0	10,821.7	10,911.9	10,820.7	16.9	28.2	-90.44	-3.0	-1,023.6	822.1	777.0	45.11	18.226	
10,900.0	10,891.7	10,981.9	10,890.7	16.9	28.3	-90.44	-3.0	-1,023.6	822.1	776.9	45.17	18.199	
10,925.0	10,916.7	11,006.9	10,915.7	16.9	28.3	-90.44	-3.0	-1,023.6	822.1	776.9	45.20	18.189	
11,000.0	10,991.7	11,081.9	10,990.7	17.0	28.3	-90.44	-3.0	-1,023.6	822.1	776.8	45.27	18.159	
11,020.0	11,011.7	11,101.9	11,010.7	17.0	28.3	-90.44	-3.0	-1,023.6	822.1	776.8	45.29	18.152	
11,100.0	11,091.7	11,181.9	11,090.7	17.0	28.3	-90.44	-3.0	-1,023.6	822.1	776.7	45.37	18.120	
11,115.0	11,106.7	11,196.9	11,105.7	17.0	28.3	-90.44	-3.0	-1,023.6	822.1	776.7	45.38	18.116	
11,155.9	11,147.5	11,237.8	11,146.5	17.1	28.3	-90.44	-3.0	-1,023.6	822.1	776.7	45.40	18.109	
11,175.0	11,166.7	11,256.9	11,165.6	17.1	28.3	-89.92	-2.6	-1,023.6	822.1	776.7	45.40	18.108	
11,200.0	11,191.6	11,281.8	11,190.5	17.1	28.4	-89.92	-0.9	-1,023.6	822.1	776.7	45.40	18.107	
11,210.0	11,201.6	11,291.8	11,200.4	17.1	28.4	-89.92	0.1	-1,023.7	822.1	776.7	45.40	18.106	
11,225.0	11,216.4	11,306.7	11,215.3	17.1	28.4	-89.93	2.0	-1,023.7	822.1	776.7	45.41	18.105	
11,250.0	11,241.1	11,331.7	11,239.9	17.1	28.4	-89.93	6.2	-1,023.7	822.1	776.7	45.41	18.104	
11,275.0	11,265.4	11,356.6	11,264.2	17.1	28.4	-89.93	11.8	-1,023.8	822.1	776.7	45.41	18.102	
11,300.0	11,289.5	11,381.6	11,288.2	17.1	28.4	-89.93	18.5	-1,023.8	822.1	776.7	45.42	18.100	
11,305.0	11,294.3	11,386.6	11,292.9	17.1	28.4	-89.93	20.0	-1,023.8	822.1	776.7	45.42	18.100	
11,325.0	11,313.2	11,406.5	11,311.8	17.1	28.4	-89.93	26.5	-1,023.9	822.1	776.7	45.42	18.099	
11,350.0	11,336.4	11,431.5	11,335.0	17.1	28.4	-89.93	35.8	-1,024.0	822.1	776.7	45.43	18.097	
11,375.0	11,359.1	11,456.4	11,357.6	17.1	28.4	-89.93	46.2	-1,024.1	822.1	776.7	45.43	18.095	
11,400.0	11,381.2	11,481.4	11,379.7	17.1	28.4	-89.93	57.8	-1,024.2	822.1	776.7	45.44	18.092	
11,425.0	11,402.6	11,506.3	11,401.1	17.1	28.4	-89.94	70.6	-1,024.3	822.1	776.7	45.45	18.089	
11,450.0	11,423.4	11,531.3	11,421.9	17.1	28.4	-89.94	84.4	-1,024.4	822.1	776.6	45.46	18.086	
11,475.0	11,443.4	11,556.2	11,441.9	17.1	28.4	-89.94	99.3	-1,024.6	822.1	776.6	45.47	18.082	
11,495.0	11,458.9	11,576.2	11,457.3	17.1	28.4	-89.94	112.0	-1,024.7	822.1	776.6	45.47	18.078	
11,500.0	11,462.6	11,581.2	11,461.1	17.1	28.4	-89.94	115.3	-1,024.7	822.1	776.6	45.48	18.077	
11,525.0	11,481.0	11,606.1	11,479.4	17.1	28.4	-89.95	132.2	-1,024.9	822.1	776.6	45.49	18.072	
11,550.0	11,498.4	11,631.1	11,496.9	17.1	28.4	-89.95	150.1	-1,025.0	822.1	776.6	45.50	18.066	
11,575.0	11,514.9	11,656.0	11,513.3	17.1	28.4	-89.95	168.8	-1,025.2	822.1	776.6	45.52	18.059	
11,590.0	11,524.3	11,671.0	11,522.7	17.1	28.4	-89.95	180.5	-1,025.3	822.1	776.6	45.53	18.055	
11,600.0	11,530.3	11,681.0	11,528.8	17.1	28.4	-89.95	188.4	-1,025.4	822.1	776.6	45.54	18.051	
11,625.0	11,544.7	11,706.0	11,543.2	17.2	28.4	-89.96	208.8	-1,025.6	822.1	776.5	45.56	18.043	
11,650.0	11,558.1	11,730.9	11,556.6	17.2	28.4	-89.96	229.9	-1,025.8	822.1	776.5	45.59	18.033	
11,675.0	11,570.3	11,755.9	11,568.8	17.2	28.4	-89.96	251.6	-1,025.9	822.1	776.5	45.62	18.021	
11,685.0	11,574.8	11,765.9	11,573.4	17.2	28.4	-89.97	260.5	-1,026.0	822.1	776.5	45.63	18.016	
11,700.0	11,581.3	11,780.9	11,579.9	17.2	28.4	-89.97	274.0	-1,026.2	822.1	776.5	45.65	18.009	
11,725.0	11,591.2	11,805.9	11,589.8	17.2	28.5	-89.97	297.0	-1,026.4	822.1	776.4	45.68	17.995	
11,750.0	11,599.8	11,830.8	11,598.4	17.3	28.5	-89.98	320.4	-1,026.6	822.1	776.4	45.72	17.980	
11,775.0	11,607.2	11,855.8	11,605.9	17.3	28.5	-89.98	344.2	-1,026.8	822.1	776.3	45.77	17.964	
11,780.0	11,608.5	11,860.8	11,607.2	17.3	28.5	-89.98	349.0	-1,026.8	822.1	776.3	45.77	17.960	
11,800.0	11,613.3	11,880.8	11,612.1	17.3	28.5	-89.98	368.4	-1,027.0	822.1	776.3	45.81	17.946	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	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	Warning
11,825.0	11,618.2	11,905.8	11,617.0	17.3	28.5	-89.99	392.9	-1,027.2	822.1	776.3	45.86	17.927	
11,850.0	11,621.7	11,930.8	11,620.6	17.4	28.5	-89.99	417.6	-1,027.5	822.1	776.2	45.91	17.906	
11,875.0	11,624.0	11,955.8	11,622.9	17.4	28.6	-90.00	442.5	-1,027.7	822.1	776.1	45.97	17.884	
11,900.0	11,625.0	11,980.8	11,623.9	17.4	28.6	-90.00	467.5	-1,027.9	822.1	776.1	46.03	17.861	
11,905.9	11,625.0	11,986.6	11,624.0	17.5	28.6	-90.00	473.4	-1,028.0	822.1	776.1	46.04	17.855	
11,970.0	11,625.0	12,050.8	11,624.0	17.6	28.7	-90.00	537.5	-1,028.6	822.1	775.9	46.23	17.782	
12,000.0	11,625.0	12,080.8	11,624.0	17.6	28.7	-90.00	567.5	-1,028.8	822.1	775.8	46.32	17.747	
12,065.0	11,625.0	12,145.8	11,624.0	17.8	28.8	-90.00	632.5	-1,029.4	822.1	775.6	46.55	17.661	
12,100.0	11,625.0	12,180.8	11,624.0	17.8	28.8	-90.00	667.5	-1,029.7	822.1	775.4	46.68	17.614	
12,160.0	11,625.0	12,240.8	11,624.0	18.0	28.9	-90.00	727.5	-1,030.3	822.1	775.2	46.91	17.524	
12,200.0	11,625.0	12,280.8	11,624.0	18.1	29.0	-90.00	767.5	-1,030.7	822.1	775.1	47.08	17.464	
12,255.0	11,625.0	12,335.8	11,624.0	18.2	29.1	-90.00	822.5	-1,031.2	822.1	774.8	47.32	17.374	
12,300.0	11,625.0	12,380.8	11,624.0	18.4	29.2	-90.00	867.5	-1,031.6	822.1	774.6	47.52	17.300	
12,350.0	11,625.0	12,430.8	11,624.0	18.5	29.3	-90.00	917.5	-1,032.0	822.1	774.4	47.77	17.211	
12,400.0	11,625.0	12,480.8	11,624.0	18.7	29.4	-90.00	967.5	-1,032.5	822.1	774.1	48.02	17.122	
12,445.0	11,625.0	12,525.8	11,624.0	18.8	29.5	-90.00	1,012.5	-1,032.9	822.1	773.9	48.26	17.037	
12,500.0	11,625.0	12,580.8	11,624.0	19.0	29.6	-90.00	1,067.5	-1,033.4	822.1	773.6	48.55	16.932	
12,540.0	11,625.0	12,620.8	11,624.0	19.1	29.7	-90.00	1,107.5	-1,033.8	822.1	773.4	48.78	16.853	
12,600.0	11,625.0	12,680.8	11,624.0	19.4	29.8	-90.00	1,167.5	-1,034.3	822.1	773.0	49.13	16.732	
12,635.0	11,625.0	12,715.8	11,624.0	19.5	29.9	-90.00	1,202.5	-1,034.6	822.1	772.8	49.35	16.660	
12,700.0	11,625.0	12,780.8	11,624.0	19.7	30.1	-90.00	1,267.5	-1,035.2	822.2	772.4	49.76	16.524	
12,730.0	11,625.0	12,810.8	11,624.0	19.8	30.1	-90.00	1,297.5	-1,035.5	822.2	772.2	49.95	16.459	
12,800.0	11,625.0	12,880.8	11,624.0	20.1	30.3	-90.00	1,367.5	-1,036.1	822.2	771.7	50.42	16.307	
12,825.0	11,625.0	12,905.8	11,624.0	20.2	30.4	-90.00	1,392.5	-1,036.4	822.2	771.6	50.59	16.252	
12,900.0	11,625.0	12,980.8	11,624.0	20.5	30.6	-90.00	1,467.5	-1,037.0	822.2	771.0	51.12	16.084	
12,920.0	11,625.0	13,000.8	11,624.0	20.6	30.7	-90.00	1,487.5	-1,037.2	822.2	770.9	51.26	16.039	
13,000.0	11,625.0	13,080.8	11,624.0	21.0	30.9	-90.00	1,567.5	-1,037.9	822.2	770.3	51.85	15.857	
13,015.0	11,625.0	13,095.8	11,624.0	21.1	30.9	-90.00	1,582.5	-1,038.1	822.2	770.2	51.96	15.822	
13,100.0	11,625.0	13,180.8	11,624.0	21.4	31.2	-90.00	1,667.5	-1,038.9	822.2	769.5	52.62	15.625	
13,110.0	11,625.0	13,190.8	11,624.0	21.5	31.2	-90.00	1,677.5	-1,039.0	822.2	769.5	52.70	15.602	
13,200.0	11,625.0	13,280.8	11,624.0	21.9	31.5	-90.00	1,767.4	-1,039.8	822.2	768.8	53.42	15.391	
13,205.0	11,625.0	13,285.8	11,624.0	21.9	31.6	-90.00	1,772.4	-1,039.8	822.2	768.7	53.46	15.379	
13,300.0	11,625.0	13,380.8	11,624.0	22.4	31.9	-90.00	1,867.4	-1,040.7	822.2	767.9	54.25	15.155	
13,395.0	11,625.0	13,475.8	11,624.0	22.9	32.2	-90.00	1,962.4	-1,041.6	822.2	767.1	55.07	14.930	
13,400.0	11,625.0	13,480.8	11,624.0	22.9	32.3	-90.00	1,967.4	-1,041.6	822.2	767.1	55.11	14.918	
13,490.0	11,625.0	13,570.8	11,624.0	23.4	32.6	-90.00	2,057.4	-1,042.4	822.2	766.3	55.91	14.705	
13,500.0	11,625.0	13,580.8	11,624.0	23.4	32.6	-90.00	2,067.4	-1,042.5	822.2	766.2	56.00	14.682	
13,585.0	11,625.0	13,665.8	11,624.0	23.9	33.0	-90.00	2,152.4	-1,043.3	822.2	765.4	56.78	14.480	
13,600.0	11,625.0	13,680.8	11,624.0	24.0	33.0	-90.00	2,167.4	-1,043.4	822.2	765.3	56.92	14.445	
13,680.0	11,625.0	13,760.8	11,624.0	24.4	33.3	-90.00	2,247.4	-1,044.1	822.2	764.5	57.67	14.257	
13,700.0	11,625.0	13,780.8	11,624.0	24.5	33.4	-90.00	2,267.4	-1,044.3	822.2	764.3	57.86	14.210	
13,775.0	11,625.0	13,855.8	11,624.0	24.9	33.7	-90.00	2,342.4	-1,045.0	822.2	763.6	58.58	14.035	
13,800.0	11,625.0	13,880.8	11,624.0	25.1	33.8	-90.00	2,367.4	-1,045.2	822.2	763.4	58.82	13.977	
13,870.0	11,625.0	13,950.8	11,624.0	25.5	34.1	-90.00	2,437.4	-1,045.9	822.2	762.7	59.52	13.815	
13,900.0	11,625.0	13,980.8	11,624.0	25.6	34.3	-90.00	2,467.4	-1,046.2	822.2	762.4	59.81	13.746	
13,965.0	11,625.0	14,045.8	11,624.0	26.0	34.5	-90.00	2,532.4	-1,046.7	822.2	761.7	60.47	13.597	
14,000.0	11,625.0	14,080.8	11,624.0	26.2	34.7	-90.00	2,567.4	-1,047.1	822.2	761.4	60.82	13.518	
14,060.0	11,625.0	14,140.8	11,624.0	26.6	35.0	-90.00	2,627.4	-1,047.6	822.2	760.8	61.44	13.382	
14,100.0	11,625.0	14,180.8	11,624.0	26.8	35.1	-90.00	2,667.4	-1,048.0	822.2	760.4	61.85	13.293	
14,155.0	11,625.0	14,235.8	11,624.0	27.1	35.4	-90.00	2,722.4	-1,048.5	822.2	759.8	62.43	13.170	
14,200.0	11,625.0	14,280.8	11,624.0	27.4	35.6	-90.00	2,767.4	-1,048.9	822.2	759.3	62.90	13.071	
14,250.0	11,625.0	14,330.8	11,624.0	27.7	35.8	-90.00	2,817.4	-1,049.3	822.2	758.8	63.44	12.961	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-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	
14,300.0	11,625.0	14,380.8	11,624.0	28.0	36.1	-90.00	2,867.4	-1,049.8	822.2	758.2	63.97	12.853	
14,345.0	11,625.0	14,425.8	11,624.0	28.3	36.3	-90.00	2,912.4	-1,050.2	822.2	757.8	64.46	12.756	
14,400.0	11,625.0	14,480.8	11,624.0	28.6	36.5	-90.00	2,967.4	-1,050.7	822.2	757.2	65.06	12.638	
14,440.0	11,625.0	14,520.8	11,624.0	28.8	36.7	-90.00	3,007.4	-1,051.1	822.2	756.7	65.50	12.553	
14,500.0	11,625.0	14,580.8	11,624.0	29.2	37.0	-90.00	3,067.4	-1,051.6	822.2	756.1	66.16	12.427	
14,535.0	11,625.0	14,615.8	11,624.0	29.4	37.2	-90.00	3,102.4	-1,051.9	822.2	755.7	66.55	12.355	
14,600.0	11,625.0	14,680.8	11,624.0	29.8	37.5	-90.00	3,167.4	-1,052.5	822.2	755.0	67.28	12.221	
14,630.0	11,625.0	14,710.8	11,624.0	30.0	37.7	-90.00	3,197.4	-1,052.8	822.2	754.6	67.62	12.159	
14,700.0	11,625.0	14,780.8	11,624.0	30.5	38.0	-90.00	3,267.4	-1,053.5	822.2	753.8	68.42	12.018	
14,725.0	11,625.0	14,805.8	11,624.0	30.6	38.2	-90.00	3,292.4	-1,053.7	822.2	753.5	68.70	11.968	
14,800.0	11,625.0	14,880.8	11,624.0	31.1	38.6	-90.00	3,367.4	-1,054.4	822.2	752.7	69.57	11.820	
14,820.0	11,625.0	14,900.8	11,624.0	31.2	38.7	-90.00	3,387.4	-1,054.5	822.2	752.4	69.80	11.780	
14,900.0	11,625.0	14,980.8	11,624.0	31.7	39.1	-90.00	3,467.4	-1,055.3	822.2	751.5	70.73	11.625	
14,915.0	11,625.0	14,995.8	11,624.0	31.8	39.2	-90.00	3,482.4	-1,055.4	822.2	751.3	70.90	11.597	
15,000.0	11,625.0	15,080.8	11,624.0	32.4	39.6	-90.00	3,567.4	-1,056.2	822.3	750.3	71.91	11.435	
15,010.0	11,625.0	15,090.8	11,624.0	32.5	39.7	-90.00	3,577.4	-1,056.3	822.3	750.2	72.02	11.416	
15,100.0	11,625.0	15,180.8	11,624.0	33.0	40.1	-90.00	3,667.4	-1,057.1	822.3	749.2	73.09	11.249	
15,105.0	11,625.0	15,185.8	11,624.0	33.1	40.2	-90.00	3,672.4	-1,057.1	822.3	749.1	73.15	11.240	
15,200.0	11,625.0	15,280.8	11,624.0	33.7	40.7	-90.00	3,767.4	-1,058.0	822.3	748.0	74.30	11.067	
15,295.0	11,625.0	15,375.8	11,624.0	34.3	41.2	-90.00	3,862.4	-1,058.9	822.3	746.8	75.45	10.899	
15,300.0	11,625.0	15,380.8	11,624.0	34.4	41.2	-90.00	3,867.4	-1,058.9	822.3	746.8	75.51	10.890	
15,390.0	11,625.0	15,470.8	11,624.0	35.0	41.7	-90.00	3,957.4	-1,059.7	822.3	745.7	76.61	10.733	
15,400.0	11,625.0	15,480.8	11,624.0	35.0	41.8	-90.00	3,967.4	-1,059.8	822.3	745.5	76.73	10.716	
15,485.0	11,625.0	15,565.8	11,624.0	35.6	42.3	-90.00	4,052.4	-1,060.6	822.3	744.5	77.78	10.572	
15,500.0	11,625.0	15,580.8	11,624.0	35.7	42.4	-90.00	4,067.4	-1,060.7	822.3	744.3	77.96	10.547	
15,580.0	11,625.0	15,660.8	11,624.0	36.2	42.8	-90.00	4,147.3	-1,061.5	822.3	743.3	78.96	10.414	
15,600.0	11,625.0	15,680.8	11,624.0	36.4	42.9	-90.00	4,167.3	-1,061.7	822.3	743.1	79.21	10.381	
15,675.0	11,625.0	15,755.8	11,624.0	36.9	43.4	-90.00	4,242.3	-1,062.3	822.3	742.1	80.15	10.260	
15,700.0	11,625.0	15,780.8	11,624.0	37.1	43.5	-90.00	4,267.3	-1,062.6	822.3	741.8	80.46	10.220	
15,770.0	11,625.0	15,850.8	11,624.0	37.5	43.9	-90.00	4,337.3	-1,063.2	822.3	740.9	81.34	10.109	
15,800.0	11,625.0	15,880.8	11,624.0	37.7	44.1	-90.00	4,367.3	-1,063.5	822.3	740.6	81.72	10.062	
15,865.0	11,625.0	15,945.8	11,624.0	38.2	44.5	-90.00	4,432.3	-1,064.1	822.3	739.7	82.55	9.961	
15,900.0	11,625.0	15,980.8	11,624.0	38.4	44.7	-90.00	4,467.3	-1,064.4	822.3	739.3	82.99	9.908	
15,960.0	11,625.0	16,040.8	11,624.0	38.8	45.0	-90.00	4,527.3	-1,064.9	822.3	738.5	83.76	9.817	
16,000.0	11,625.0	16,080.8	11,624.0	39.1	45.3	-90.00	4,567.3	-1,065.3	822.3	738.0	84.27	9.758	
16,055.0	11,625.0	16,135.8	11,624.0	39.5	45.6	-90.00	4,622.3	-1,065.8	822.3	737.3	84.98	9.677	
16,100.0	11,625.0	16,180.8	11,624.0	39.8	45.9	-90.00	4,667.3	-1,066.2	822.3	736.7	85.56	9.611	
16,150.0	11,625.0	16,230.8	11,624.0	40.1	46.2	-90.00	4,717.3	-1,066.7	822.3	736.1	86.20	9.539	
16,200.0	11,625.0	16,280.8	11,624.0	40.5	46.5	-90.00	4,767.3	-1,067.1	822.3	735.5	86.85	9.468	
16,245.0	11,625.0	16,325.8	11,624.0	40.8	46.7	-90.00	4,812.3	-1,067.5	822.3	734.9	87.44	9.405	
16,300.0	11,625.0	16,380.8	11,624.0	41.2	47.1	-90.00	4,867.3	-1,068.0	822.3	734.2	88.15	9.328	
16,340.0	11,625.0	16,420.8	11,624.0	41.5	47.3	-90.00	4,907.3	-1,068.4	822.3	733.6	88.68	9.273	
16,400.0	11,625.0	16,480.8	11,624.0	41.9	47.7	-90.00	4,967.3	-1,069.0	822.3	732.9	89.46	9.192	
16,435.0	11,625.0	16,515.8	11,624.0	42.1	47.9	-90.00	5,002.3	-1,069.3	822.3	732.4	89.92	9.145	
16,500.0	11,625.0	16,580.8	11,624.0	42.6	48.3	-90.00	5,067.3	-1,069.9	822.3	731.5	90.78	9.059	
16,530.0	11,625.0	16,610.8	11,624.0	42.8	48.5	-90.00	5,097.3	-1,070.1	822.3	731.1	91.17	9.019	
16,600.0	11,625.0	16,680.8	11,624.0	43.3	48.9	-90.00	5,167.3	-1,070.8	822.3	730.2	92.10	8.929	
16,625.0	11,625.0	16,705.8	11,624.0	43.4	49.1	-90.00	5,192.3	-1,071.0	822.3	729.9	92.43	8.897	
16,700.0	11,625.0	16,780.8	11,624.0	44.0	49.6	-90.00	5,267.3	-1,071.7	822.3	728.9	93.43	8.802	
16,720.0	11,625.0	16,800.8	11,624.0	44.1	49.7	-90.00	5,287.3	-1,071.9	822.3	728.6	93.69	8.777	
16,800.0	11,625.0	16,880.8	11,624.0	44.7	50.2	-90.00	5,367.3	-1,072.6	822.3	727.6	94.76	8.678	
16,815.0	11,625.0	16,895.8	11,624.0	44.8	50.3	-90.00	5,382.3	-1,072.7	822.3	727.4	94.96	8.660	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-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)			
16,900.0	11,625.0	16,980.8	11,624.0	45.4	50.8	-90.00	5,467.3	-1,073.5	822.3	726.2	96.10	8.557	
16,910.0	11,625.0	16,990.8	11,624.0	45.5	50.9	-90.00	5,477.3	-1,073.6	822.3	726.1	96.23	8.545	
17,000.0	11,625.0	17,080.8	11,624.0	46.1	51.5	-90.00	5,567.3	-1,074.4	822.3	724.9	97.44	8.439	
17,005.0	11,625.0	17,085.8	11,624.0	46.1	51.5	-90.00	5,572.3	-1,074.5	822.3	724.8	97.51	8.433	
17,100.0	11,625.0	17,180.8	11,624.0	46.8	52.1	-90.00	5,667.3	-1,075.3	822.3	723.6	98.79	8.324	
17,195.0	11,625.0	17,275.8	11,624.0	47.5	52.7	-90.00	5,762.3	-1,076.2	822.3	722.3	100.08	8.217	
17,200.0	11,625.0	17,280.8	11,624.0	47.5	52.7	-90.00	5,767.3	-1,076.2	822.3	722.2	100.15	8.212	
17,290.0	11,625.0	17,370.8	11,624.0	48.2	53.3	-90.00	5,857.3	-1,077.1	822.4	721.0	101.37	8.112	
17,300.0	11,625.0	17,380.8	11,624.0	48.2	53.4	-90.00	5,867.3	-1,077.2	822.4	720.8	101.50	8.102	
17,385.0	11,625.0	17,465.8	11,624.0	48.8	53.9	-90.00	5,952.3	-1,077.9	822.4	719.7	102.66	8.010	
17,400.0	11,625.0	17,480.8	11,624.0	48.9	54.0	-90.00	5,967.3	-1,078.1	822.4	719.5	102.87	7.994	
17,480.0	11,625.0	17,560.8	11,624.0	49.5	54.5	-90.00	6,047.3	-1,078.8	822.4	718.4	103.96	7.910	
17,500.0	11,625.0	17,580.8	11,624.0	49.7	54.7	-90.00	6,067.3	-1,079.0	822.4	718.1	104.24	7.889	
17,575.0	11,625.0	17,655.8	11,624.0	50.2	55.2	-90.00	6,142.3	-1,079.7	822.4	717.1	105.27	7.812	
17,600.0	11,625.0	17,680.8	11,624.0	50.4	55.3	-90.00	6,167.3	-1,079.9	822.4	716.8	105.61	7.787	
17,670.0	11,625.0	17,750.8	11,624.0	50.9	55.8	-90.00	6,237.3	-1,080.5	822.4	715.8	106.57	7.716	
17,700.0	11,625.0	17,780.8	11,624.0	51.1	56.0	-90.00	6,267.3	-1,080.8	822.4	715.4	106.99	7.687	
17,765.0	11,625.0	17,845.8	11,624.0	51.6	56.4	-90.00	6,332.3	-1,081.4	822.4	714.5	107.88	7.623	
17,800.0	11,625.0	17,880.8	11,624.0	51.8	56.6	-90.00	6,367.3	-1,081.7	822.4	714.0	108.37	7.589	
17,860.0	11,625.0	17,940.8	11,624.0	52.3	57.0	-90.00	6,427.3	-1,082.3	822.4	713.2	109.20	7.531	
17,900.0	11,625.0	17,980.8	11,624.0	52.5	57.3	-90.00	6,467.3	-1,082.6	822.4	712.6	109.75	7.493	
17,955.0	11,625.0	18,035.8	11,624.0	52.9	57.7	-90.00	6,522.2	-1,083.1	822.4	711.9	110.51	7.441	
18,000.0	11,625.0	18,080.8	11,624.0	53.3	58.0	-90.00	6,567.2	-1,083.5	822.4	711.2	111.14	7.400	
18,050.0	11,625.0	18,130.8	11,624.0	53.6	58.3	-90.00	6,617.2	-1,084.0	822.4	710.5	111.83	7.354	
18,100.0	11,625.0	18,180.8	11,624.0	54.0	58.6	-90.00	6,667.2	-1,084.5	822.4	709.9	112.53	7.308	
18,145.0	11,625.0	18,225.8	11,624.0	54.3	58.9	-90.00	6,712.2	-1,084.9	822.4	709.2	113.16	7.268	
18,200.0	11,625.0	18,280.8	11,624.0	54.7	59.3	-90.00	6,767.2	-1,085.4	822.4	708.5	113.93	7.219	
18,240.0	11,625.0	18,320.8	11,624.0	55.0	59.6	-90.00	6,807.2	-1,085.7	822.4	707.9	114.48	7.183	
18,300.0	11,625.0	18,380.8	11,624.0	55.4	60.0	-90.00	6,867.2	-1,086.3	822.4	707.1	115.32	7.131	
18,335.0	11,625.0	18,415.8	11,624.0	55.7	60.2	-90.00	6,902.2	-1,086.6	822.4	706.6	115.81	7.101	
18,400.0	11,625.0	18,480.8	11,624.0	56.2	60.7	-90.00	6,967.2	-1,087.2	822.4	705.7	116.72	7.046	
18,430.0	11,625.0	18,510.8	11,624.0	56.4	60.9	-90.00	6,997.2	-1,087.5	822.4	705.3	117.15	7.020	
18,500.0	11,625.0	18,580.8	11,624.0	56.9	61.3	-90.00	7,067.2	-1,088.1	822.4	704.3	118.13	6.962	
18,525.0	11,625.0	18,605.8	11,624.0	57.1	61.5	-90.00	7,092.2	-1,088.3	822.4	703.9	118.48	6.941	
18,600.0	11,625.0	18,680.8	11,624.0	57.6	62.0	-90.00	7,167.2	-1,089.0	822.4	702.9	119.54	6.880	
18,620.0	11,625.0	18,700.8	11,624.0	57.8	62.1	-90.00	7,187.2	-1,089.2	822.4	702.6	119.82	6.864	
18,700.0	11,625.0	18,780.8	11,624.0	58.4	62.7	-90.00	7,267.2	-1,089.9	822.4	701.5	120.95	6.800	
18,715.0	11,625.0	18,795.8	11,624.0	58.5	62.8	-90.00	7,282.2	-1,090.1	822.4	701.3	121.16	6.788	
18,800.0	11,625.0	18,880.8	11,624.0	59.1	63.4	-90.00	7,367.2	-1,090.8	822.4	700.1	122.36	6.721	
18,810.0	11,625.0	18,890.8	11,624.0	59.2	63.4	-90.00	7,377.2	-1,090.9	822.4	699.9	122.50	6.714	
18,900.0	11,625.0	18,980.8	11,624.0	59.8	64.1	-90.00	7,467.2	-1,091.8	822.4	698.6	123.78	6.644	
18,905.0	11,625.0	18,985.8	11,624.0	59.9	64.1	-90.00	7,472.2	-1,091.8	822.4	698.6	123.85	6.641	
19,000.0	11,625.0	19,080.8	11,624.0	60.6	64.7	-90.00	7,567.2	-1,092.7	822.4	697.2	125.19	6.569	
19,095.0	11,625.0	19,175.8	11,624.0	61.3	65.4	-90.00	7,662.2	-1,093.5	822.4	695.9	126.54	6.499	
19,100.0	11,625.0	19,180.8	11,624.0	61.3	65.4	-90.00	7,667.2	-1,093.6	822.4	695.8	126.61	6.496	
19,190.0	11,625.0	19,270.8	11,624.0	61.9	66.0	-90.00	7,757.2	-1,094.4	822.4	694.5	127.90	6.431	
19,200.0	11,625.0	19,280.8	11,624.0	62.0	66.1	-90.00	7,767.2	-1,094.5	822.4	694.4	128.04	6.423	
19,285.0	11,625.0	19,365.8	11,624.0	62.6	66.7	-90.00	7,852.2	-1,095.3	822.4	693.2	129.25	6.363	
19,300.0	11,625.0	19,380.8	11,624.0	62.8	66.8	-90.00	7,867.2	-1,095.4	822.4	693.0	129.46	6.353	
19,380.0	11,625.0	19,460.8	11,624.0	63.3	67.4	-90.00	7,947.2	-1,096.1	822.4	691.8	130.60	6.297	
19,400.0	11,625.0	19,480.8	11,624.0	63.5	67.5	-90.00	7,967.2	-1,096.3	822.4	691.6	130.89	6.283	
19,475.0	11,625.0	19,555.8	11,624.0	64.0	68.0	-90.00	8,042.2	-1,097.0	822.4	690.5	131.96	6.232	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Distance		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	Warning
19,500.0	11,625.0	19,580.8	11,624.0	64.2	68.2	-90.00	8,067.2	-1,097.2	822.4	690.1	132.32	6.216	
19,570.0	11,625.0	19,650.8	11,624.0	64.7	68.7	-90.00	8,137.2	-1,097.9	822.4	689.1	133.32	6.169	
19,600.0	11,625.0	19,680.8	11,624.0	65.0	68.9	-90.00	8,167.2	-1,098.1	822.5	688.7	133.75	6.149	
19,665.0	11,625.0	19,745.8	11,624.0	65.4	69.3	-90.00	8,232.2	-1,098.7	822.5	687.8	134.68	6.107	
19,700.0	11,625.0	19,780.8	11,624.0	65.7	69.6	-90.00	8,267.2	-1,099.0	822.5	687.3	135.19	6.084	
19,760.0	11,625.0	19,840.8	11,624.0	66.1	70.0	-90.00	8,327.2	-1,099.6	822.5	686.4	136.05	6.045	
19,800.0	11,625.0	19,880.8	11,624.0	66.4	70.3	-90.00	8,367.2	-1,100.0	822.5	685.8	136.62	6.020	
19,855.0	11,625.0	19,935.8	11,624.0	66.8	70.7	-90.00	8,422.2	-1,100.5	822.5	685.0	137.41	5.985	
19,900.0	11,625.0	19,980.8	11,624.0	67.2	71.0	-90.00	8,467.2	-1,100.9	822.5	684.4	138.06	5.957	
19,950.0	11,625.0	20,030.8	11,624.0	67.5	71.3	-90.00	8,517.2	-1,101.3	822.5	683.7	138.78	5.926	
20,000.0	11,625.0	20,080.8	11,624.0	67.9	71.7	-90.00	8,567.2	-1,101.8	822.5	683.0	139.50	5.896	
20,045.0	11,625.0	20,125.8	11,624.0	68.3	72.0	-90.00	8,612.2	-1,102.2	822.5	682.3	140.15	5.869	
20,100.0	11,625.0	20,180.8	11,624.0	68.7	72.4	-90.00	8,667.2	-1,102.7	822.5	681.5	140.94	5.836	
20,140.0	11,625.0	20,220.8	11,624.0	69.0	72.7	-90.00	8,707.2	-1,103.1	822.5	681.0	141.52	5.812	
20,200.0	11,625.0	20,280.8	11,624.0	69.4	73.1	-90.00	8,767.2	-1,103.6	822.5	680.1	142.39	5.776	
20,235.0	11,625.0	20,315.8	11,624.0	69.7	73.3	-90.00	8,802.2	-1,103.9	822.5	679.6	142.89	5.756	
20,300.0	11,625.0	20,380.8	11,624.0	70.1	73.8	-90.00	8,867.2	-1,104.5	822.5	678.7	143.83	5.718	
20,330.0	11,625.0	20,410.8	11,624.0	70.4	74.0	-90.00	8,897.2	-1,104.8	822.5	678.2	144.26	5.701	
20,400.0	11,625.0	20,480.8	11,624.0	70.9	74.5	-90.00	8,967.1	-1,105.4	822.5	677.2	145.28	5.661	
20,425.0	11,625.0	20,505.8	11,624.0	71.1	74.7	-90.00	8,992.1	-1,105.7	822.5	676.8	145.64	5.647	
20,500.0	11,625.0	20,580.8	11,624.0	71.6	75.2	-90.00	9,067.1	-1,106.3	822.5	675.8	146.73	5.606	
20,520.0	11,625.0	20,600.8	11,624.0	71.8	75.3	-90.00	9,087.1	-1,106.5	822.5	675.5	147.02	5.595	
20,600.0	11,625.0	20,680.8	11,624.0	72.4	75.9	-90.00	9,167.1	-1,107.3	822.5	674.3	148.18	5.551	
20,615.0	11,625.0	20,695.8	11,624.0	72.5	76.0	-90.00	9,182.1	-1,107.4	822.5	674.1	148.39	5.543	
20,700.0	11,625.0	20,780.8	11,624.0	73.1	76.6	-90.00	9,267.1	-1,108.2	822.5	672.9	149.63	5.497	
20,710.0	11,625.0	20,790.8	11,624.0	73.2	76.7	-90.00	9,277.1	-1,108.3	822.5	672.7	149.77	5.492	
20,800.0	11,625.0	20,880.8	11,624.0	73.8	77.3	-90.00	9,367.1	-1,109.1	822.5	671.4	151.08	5.444	
20,805.0	11,625.0	20,885.8	11,624.0	73.9	77.4	-90.00	9,372.1	-1,109.1	822.5	671.4	151.15	5.442	
20,900.0	11,625.0	20,980.8	11,624.0	74.6	78.0	-90.00	9,467.1	-1,110.0	822.5	670.0	152.53	5.392	
20,995.0	11,625.0	21,075.8	11,624.0	75.3	78.7	-90.00	9,562.1	-1,110.9	822.5	668.6	153.92	5.344	
21,000.0	11,625.0	21,080.8	11,624.0	75.3	78.7	-90.00	9,567.1	-1,110.9	822.5	668.5	153.99	5.341	
21,090.0	11,625.0	21,170.8	11,624.0	76.0	79.4	-90.00	9,657.1	-1,111.7	822.5	667.2	155.30	5.296	
21,100.0	11,625.0	21,180.8	11,624.0	76.1	79.5	-90.00	9,667.1	-1,111.8	822.5	667.1	155.45	5.291	
21,185.0	11,625.0	21,265.8	11,624.0	76.7	80.1	-90.00	9,752.1	-1,112.6	822.5	665.8	156.69	5.249	
21,200.0	11,625.0	21,280.8	11,624.0	76.8	80.2	-90.00	9,767.1	-1,112.7	822.5	665.6	156.91	5.242	
21,280.0	11,625.0	21,360.8	11,624.0	77.4	80.7	-90.00	9,847.1	-1,113.5	822.5	664.5	158.07	5.203	
21,300.0	11,625.0	21,380.8	11,624.0	77.6	80.9	-90.00	9,867.1	-1,113.6	822.5	664.2	158.37	5.194	
21,375.0	11,625.0	21,455.8	11,624.0	78.1	81.4	-90.00	9,942.1	-1,114.3	822.5	663.1	159.46	5.158	
21,400.0	11,625.0	21,480.8	11,624.0	78.3	81.6	-90.00	9,967.1	-1,114.5	822.5	662.7	159.83	5.146	
21,470.0	11,625.0	21,550.8	11,624.0	78.8	82.1	-90.00	10,037.1	-1,115.2	822.5	661.7	160.85	5.114	
21,500.0	11,625.0	21,580.8	11,624.0	79.1	82.3	-90.00	10,067.1	-1,115.5	822.5	661.2	161.29	5.100	
21,565.0	11,625.0	21,645.8	11,624.0	79.5	82.8	-90.00	10,132.1	-1,116.1	822.5	660.3	162.24	5.070	
21,600.0	11,625.0	21,680.8	11,624.0	79.8	83.0	-90.00	10,167.1	-1,116.4	822.5	659.8	162.75	5.054	
21,660.0	11,625.0	21,740.8	11,624.0	80.3	83.5	-90.00	10,227.1	-1,116.9	822.5	658.9	163.63	5.027	
21,700.0	11,625.0	21,780.8	11,624.0	80.6	83.7	-90.00	10,267.1	-1,117.3	822.5	658.3	164.22	5.009	
21,755.0	11,625.0	21,835.8	11,624.0	81.0	84.1	-90.00	10,322.1	-1,117.8	822.5	657.5	165.02	4.984	
21,800.0	11,625.0	21,880.8	11,624.0	81.3	84.5	-90.00	10,367.1	-1,118.2	822.5	656.9	165.68	4.965	
21,850.0	11,625.0	21,930.8	11,624.0	81.7	84.8	-90.00	10,417.1	-1,118.7	822.5	656.1	166.42	4.943	
21,900.0	11,625.0	21,980.8	11,624.0	82.0	85.2	-90.00	10,467.1	-1,119.1	822.6	655.4	167.15	4.921	
21,945.0	11,625.0	22,025.8	11,624.0	82.4	85.5	-90.00	10,512.1	-1,119.5	822.6	654.7	167.81	4.902	
21,956.2	11,625.0	22,037.0	11,624.0	82.5	85.6	-90.00	10,523.3	-1,119.6	822.6	654.6	167.97	4.897 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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	3.0	3.0	-90.42	-0.2	-30.1	30.1					
95.0	95.0	94.0	94.0	3.0	3.0	-90.42	-0.2	-30.1	30.1	24.0	6.03	4.991		
100.0	100.0	99.0	99.0	3.0	3.0	-90.42	-0.2	-30.1	30.1	24.0	6.03	4.988		
190.0	190.0	189.0	189.0	3.1	3.1	-90.42	-0.2	-30.1	30.1	23.9	6.15	4.888		
200.0	200.0	199.0	199.0	3.1	3.1	-90.42	-0.2	-30.1	30.1	23.9	6.17	4.873		
285.0	285.0	284.0	284.0	3.2	3.2	-90.42	-0.2	-30.1	30.1	23.8	6.31	4.766		
300.0	300.0	299.0	299.0	3.2	3.2	-90.42	-0.2	-30.1	30.1	23.7	6.34	4.744		
380.0	380.0	379.0	379.0	3.3	3.3	-90.42	-0.2	-30.1	30.1	23.6	6.49	4.636		
400.0	400.0	399.0	399.0	3.3	3.3	-90.42	-0.2	-30.1	30.1	23.5	6.53	4.606		
475.0	475.0	474.0	474.0	3.4	3.4	-90.42	-0.2	-30.1	30.1	23.4	6.68	4.500		
500.0	500.0	499.0	499.0	3.4	3.4	-90.42	-0.2	-30.1	30.1	23.3	6.74	4.462		
570.0	570.0	569.0	569.0	3.5	3.5	-90.42	-0.2	-30.1	30.1	23.2	6.90	4.360		
600.0	600.0	599.0	599.0	3.5	3.5	-90.42	-0.2	-30.1	30.1	23.1	6.97	4.316		
665.0	665.0	664.0	664.0	3.6	3.6	-90.42	-0.2	-30.1	30.1	22.9	7.13	4.220		
700.0	700.0	699.0	699.0	3.7	3.7	-90.42	-0.2	-30.1	30.1	22.9	7.21	4.168		
760.0	760.0	759.0	759.0	3.8	3.8	-90.42	-0.2	-30.1	30.1	22.7	7.37	4.081		
800.0	800.0	799.0	799.0	3.8	3.8	-90.42	-0.2	-30.1	30.1	22.6	7.48	4.022		
855.0	855.0	854.0	854.0	3.9	3.9	-90.42	-0.2	-30.1	30.1	22.4	7.63	3.943		
900.0	900.0	899.0	899.0	4.0	4.0	-90.42	-0.2	-30.1	30.1	22.3	7.75	3.879		
950.0	950.0	949.0	949.0	4.1	4.1	-90.42	-0.2	-30.1	30.1	22.2	7.89	3.809		
1,000.0	1,000.0	999.0	999.0	4.2	4.2	-90.42	-0.2	-30.1	30.1	22.0	8.04	3.740		
1,045.0	1,045.0	1,044.0	1,044.0	4.2	4.2	-90.42	-0.2	-30.1	30.1	21.9	8.17	3.679		
1,100.0	1,100.0	1,099.0	1,099.0	4.3	4.3	-90.42	-0.2	-30.1	30.1	21.7	8.34	3.606		
1,140.0	1,140.0	1,139.0	1,139.0	4.4	4.4	-90.42	-0.2	-30.1	30.1	21.6	8.46	3.554		
1,200.0	1,200.0	1,199.0	1,199.0	4.5	4.5	-90.42	-0.2	-30.1	30.1	21.4	8.65	3.477		
1,235.0	1,235.0	1,234.0	1,234.0	4.6	4.6	-90.42	-0.2	-30.1	30.1	21.3	8.76	3.433		
1,300.0	1,300.0	1,299.0	1,299.0	4.7	4.7	-90.42	-0.2	-30.1	30.1	21.1	8.97	3.354		
1,330.0	1,330.0	1,329.0	1,329.0	4.7	4.7	-90.42	-0.2	-30.1	30.1	21.0	9.06	3.318		
1,400.0	1,400.0	1,399.0	1,399.0	4.9	4.9	-90.42	-0.2	-30.1	30.1	20.8	9.29	3.236		
1,425.0	1,425.0	1,424.0	1,424.0	4.9	4.9	-90.42	-0.2	-30.1	30.1	20.7	9.37	3.208		
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	-90.42	-0.2	-30.1	30.1	20.4	9.63	3.124		
1,520.0	1,520.0	1,519.0	1,519.0	5.1	5.1	-90.42	-0.2	-30.1	30.1	20.4	9.69	3.102		
1,600.0	1,600.0	1,599.0	1,599.0	5.3	5.3	-90.42	-0.2	-30.1	30.1	20.1	9.96	3.018		
1,615.0	1,615.0	1,614.0	1,614.0	5.3	5.3	-90.42	-0.2	-30.1	30.1	20.1	10.02	3.002		
1,700.0	1,700.0	1,699.0	1,699.0	5.5	5.5	-90.42	-0.2	-30.1	30.1	19.8	10.31	2.917		
1,710.0	1,710.0	1,709.0	1,709.0	5.5	5.5	-90.42	-0.2	-30.1	30.1	19.7	10.35	2.907		
1,800.0	1,800.0	1,799.0	1,799.0	5.7	5.7	-90.42	-0.2	-30.1	30.1	19.4	10.66	2.821		
1,805.0	1,805.0	1,804.0	1,804.0	5.7	5.7	-90.42	-0.2	-30.1	30.1	19.4	10.68	2.816		
1,900.0	1,900.0	1,899.0	1,899.0	5.9	5.9	-90.42	-0.2	-30.1	30.1	19.1	11.02	2.730		
1,995.0	1,995.0	1,994.0	1,994.0	6.1	6.1	-90.42	-0.2	-30.1	30.1	18.7	11.36	2.648		
2,000.0	2,000.0	1,999.0	1,999.0	6.1	6.1	-90.42	-0.2	-30.1	30.1	18.7	11.38	2.643		
2,090.0	2,090.0	2,089.0	2,089.0	6.3	6.3	-90.42	-0.2	-30.1	30.1	18.4	11.70	2.569		
2,100.0	2,100.0	2,099.0	2,099.0	6.3	6.3	-90.42	-0.2	-30.1	30.1	18.3	11.74	2.561		
2,185.0	2,185.0	2,184.0	2,184.0	6.5	6.5	-90.42	-0.2	-30.1	30.1	18.0	12.05	2.495		
2,200.0	2,200.0	2,199.0	2,199.0	6.5	6.5	-90.42	-0.2	-30.1	30.1	18.0	12.11	2.484		
2,280.0	2,280.0	2,279.0	2,279.0	6.7	6.7	-90.42	-0.2	-30.1	30.1	17.7	12.40	2.424		
2,300.0	2,300.0	2,299.0	2,299.0	6.7	6.7	-90.42	-0.2	-30.1	30.1	17.6	12.48	2.410		
2,375.0	2,375.0	2,374.0	2,374.0	6.9	6.9	-90.42	-0.2	-30.1	30.1	17.3	12.76	2.357		
2,400.0	2,400.0	2,399.0	2,399.0	6.9	6.9	-90.42	-0.2	-30.1	30.1	17.2	12.85	2.340		
2,470.0	2,470.0	2,469.0	2,469.0	7.1	7.1	-90.42	-0.2	-30.1	30.1	17.0	13.11	2.293		
2,500.0	2,500.0	2,499.0	2,499.0	7.2	7.2	-90.42	-0.2	-30.1	30.1	16.8	13.23	2.273 CC, ES, SF		
2,565.0	2,565.0	2,563.3	2,563.3	7.3	7.2	-90.41	-0.2	-30.8	30.8	17.3	13.48	2.283		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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	
2,600.0	2,600.0	2,597.9	2,597.9	7.4	7.3	-90.39	-0.2	-31.7	31.8	18.2	13.61	2.333		
2,660.0	2,660.0	2,657.2	2,657.1	7.5	7.4	-90.36	-0.2	-34.4	34.4	20.6	13.83	2.489		
2,700.0	2,700.0	2,696.6	2,696.5	7.6	7.4	-90.34	-0.2	-36.8	36.9	22.9	13.98	2.640		
2,755.0	2,755.0	2,750.7	2,750.4	7.7	7.4	-90.30	-0.2	-41.0	41.2	27.0	14.18	2.905		
2,800.0	2,800.0	2,794.8	2,794.3	7.8	7.5	-90.27	-0.2	-45.2	45.5	31.1	14.34	3.170		
2,850.0	2,850.0	2,843.7	2,842.9	7.9	7.5	-90.23	-0.2	-50.7	51.0	36.5	14.53	3.512		
2,900.0	2,900.0	2,892.4	2,891.2	8.0	7.6	-90.20	-0.2	-56.9	57.4	42.7	14.72	3.903		
2,945.0	2,945.0	2,936.0	2,934.3	8.1	7.6	-90.18	-0.2	-63.2	63.9	49.1	14.85	4.305		
3,000.0	3,000.0	2,990.0	2,987.7	8.3	7.6	-90.15	-0.2	-71.6	72.5	57.5	15.02	4.827		
3,040.0	3,040.0	3,029.6	3,026.7	8.3	7.7	-1.11	-0.2	-77.8	78.5	63.3	15.17	5.173		
3,100.0	3,100.0	3,089.0	3,085.5	8.4	7.8	-1.11	-0.2	-87.1	86.4	71.0	15.40	5.609		
3,135.0	3,134.9	3,123.8	3,119.8	8.4	7.8	-1.11	-0.2	-92.5	90.5	74.9	15.54	5.820		
3,200.0	3,199.8	3,188.5	3,183.7	8.5	8.0	-1.13	-0.2	-102.6	96.9	81.1	15.80	6.130		
3,230.0	3,229.8	3,218.4	3,213.2	8.5	8.1	-1.15	-0.2	-107.3	99.3	83.4	15.89	6.249		
3,250.0	3,249.7	3,238.3	3,232.9	8.5	8.1	-1.16	-0.2	-110.4	100.8	84.8	15.96	6.315		
3,300.0	3,299.5	3,288.2	3,282.2	8.5	8.2	-1.19	-0.2	-118.2	104.3	88.2	16.12	6.469		
3,325.0	3,324.4	3,313.1	3,306.8	8.5	8.3	-1.20	-0.2	-122.1	106.0	89.8	16.22	6.536		
3,400.0	3,399.1	3,387.9	3,380.7	8.6	8.5	-1.25	-0.1	-133.9	111.3	94.7	16.53	6.732		
3,420.0	3,419.0	3,407.9	3,400.4	8.6	8.5	-1.26	-0.1	-137.0	112.6	96.0	16.61	6.781		
3,500.0	3,498.7	3,487.7	3,479.2	8.7	8.8	-1.30	-0.1	-149.5	118.2	101.3	16.96	6.970		
3,515.0	3,513.7	3,502.7	3,494.0	8.7	8.8	-1.30	-0.1	-151.8	119.3	102.2	17.03	7.004		
3,600.0	3,598.4	3,587.5	3,577.8	8.8	9.0	-1.34	-0.1	-165.1	125.2	107.8	17.43	7.185		
3,610.0	3,608.3	3,597.4	3,587.6	8.8	9.1	-1.34	-0.1	-166.6	125.9	108.4	17.47	7.205		
3,700.0	3,698.0	3,687.2	3,676.3	8.9	9.3	-1.38	-0.1	-180.7	132.2	114.3	17.92	7.377		
3,705.0	3,703.0	3,692.2	3,681.2	8.9	9.4	-1.38	-0.1	-181.4	132.5	114.6	17.94	7.386		
3,800.0	3,797.6	3,787.0	3,774.8	9.0	9.6	-1.41	-0.1	-196.3	139.2	120.7	18.43	7.549		
3,895.0	3,892.2	3,881.7	3,868.4	9.1	10.0	-1.44	-0.1	-211.1	145.8	126.8	18.95	7.695		
3,900.0	3,897.2	3,886.7	3,873.3	9.1	10.0	-1.45	-0.1	-211.9	146.1	127.2	18.97	7.702		
3,990.0	3,986.9	3,976.5	3,962.0	9.3	10.3	-1.47	-0.1	-225.9	152.4	132.9	19.48	7.826		
4,000.0	3,996.8	3,986.5	3,971.9	9.3	10.3	-1.48	-0.1	-227.5	153.1	133.6	19.53	7.839		
4,085.0	4,081.5	4,071.3	4,055.6	9.5	10.6	-1.50	-0.1	-240.7	159.0	139.0	20.02	7.943		
4,100.0	4,096.4	4,086.2	4,070.4	9.5	10.6	-1.50	-0.1	-243.1	160.1	140.0	20.11	7.961		
4,180.0	4,176.1	4,166.0	4,149.2	9.7	10.9	-1.52	-0.1	-255.6	165.7	145.1	20.59	8.048		
4,200.0	4,196.1	4,186.0	4,168.9	9.8	11.0	-1.53	-0.1	-258.7	167.1	146.4	20.71	8.069		
4,275.0	4,270.8	4,260.8	4,242.8	10.0	11.2	-1.54	-0.1	-270.4	172.3	151.1	21.17	8.141		
4,300.0	4,295.7	4,285.8	4,267.5	10.0	11.3	-1.55	0.0	-274.3	174.0	152.7	21.32	8.164		
4,370.0	4,365.4	4,355.6	4,336.4	10.2	11.6	-1.56	0.0	-285.2	178.9	157.2	21.76	8.224		
4,400.0	4,395.3	4,385.5	4,366.0	10.3	11.7	-1.57	0.0	-289.9	181.0	159.1	21.95	8.249		
4,465.0	4,460.1	4,450.4	4,430.0	10.5	11.9	-1.58	0.0	-300.0	185.6	163.2	22.36	8.299		
4,500.0	4,494.9	4,485.3	4,464.5	10.6	12.0	-1.59	0.0	-305.5	188.0	165.4	22.59	8.324		
4,560.0	4,554.7	4,545.1	4,523.6	10.7	12.3	-1.60	0.0	-314.9	192.2	169.2	22.98	8.365		
4,600.0	4,594.5	4,585.0	4,563.0	10.8	12.4	-1.61	0.0	-321.1	195.0	171.7	23.24	8.391		
4,655.0	4,649.3	4,639.9	4,617.2	11.0	12.6	-1.62	0.0	-329.7	198.8	175.2	23.60	8.424		
4,700.0	4,694.2	4,684.8	4,661.6	11.1	12.8	-1.62	0.0	-336.7	202.0	178.1	23.90	8.450		
4,750.0	4,744.0	4,734.7	4,710.8	11.3	13.0	-1.63	0.0	-344.5	205.5	181.2	24.24	8.476		
4,800.0	4,793.8	4,784.5	4,760.1	11.4	13.2	-1.64	0.0	-352.3	208.9	184.4	24.58	8.502		
4,845.0	4,838.6	4,829.4	4,804.4	11.5	13.3	-1.65	0.0	-359.3	212.1	187.2	24.88	8.523		
4,900.0	4,893.4	4,884.3	4,858.6	11.7	13.6	-1.65	0.0	-367.9	215.9	190.7	25.26	8.548		
4,940.0	4,933.3	4,924.2	4,898.0	11.8	13.7	-1.66	0.0	-374.2	218.7	193.2	25.54	8.564		
5,000.0	4,993.0	4,984.0	4,957.2	12.0	13.9	-1.67	0.0	-383.5	222.9	196.9	25.95	8.588		
5,035.0	5,027.9	5,019.0	4,991.6	12.1	14.1	-1.67	0.0	-389.0	225.3	199.1	26.20	8.601		
5,100.0	5,092.6	5,083.8	5,055.7	12.3	14.3	-1.68	0.0	-399.1	229.9	203.2	26.66	8.624		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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
5,130.0	5,122.5	5,113.7	5,085.2	12.4	14.4	-1.68	0.0	-403.8	232.0	205.1	26.86	8.635	
5,187.7	5,180.0	5,171.3	5,142.1	12.6	14.7	-1.69	0.0	-412.8	236.0	208.7	27.27	8.655	
5,200.0	5,192.3	5,183.6	5,154.2	12.6	14.7	-1.69	0.0	-414.7	236.9	209.5	27.35	8.661	
5,225.0	5,217.2	5,208.5	5,178.8	12.7	14.8	-1.69	0.1	-418.6	238.7	211.2	27.53	8.672	
5,300.0	5,292.0	5,283.2	5,252.7	12.9	15.1	-1.70	0.1	-430.3	244.9	216.9	28.06	8.730	
5,320.0	5,311.9	5,303.2	5,272.3	13.0	15.2	-1.70	0.1	-433.5	246.7	218.6	28.20	8.751	
5,400.0	5,391.8	5,382.8	5,351.0	13.2	15.5	-1.69	0.1	-445.9	254.7	226.0	28.75	8.859	
5,415.0	5,406.8	5,397.7	5,365.7	13.2	15.6	-1.69	0.1	-448.2	256.3	227.5	28.86	8.883	
5,500.0	5,491.7	5,482.1	5,449.1	13.5	15.9	-1.68	0.1	-461.4	266.3	236.8	29.44	9.045	
5,510.0	5,501.7	5,492.0	5,458.9	13.5	15.9	-1.67	0.1	-463.0	267.5	238.0	29.50	9.067	
5,600.0	5,591.7	5,581.2	5,547.0	13.7	16.3	-1.65	0.1	-477.0	279.5	249.4	30.09	9.289	
5,605.0	5,596.7	5,586.1	5,551.8	13.7	16.3	-1.65	0.1	-477.7	280.2	250.1	30.12	9.304	
5,687.7	5,679.4	5,667.9	5,632.6	13.8	16.7	-90.66	0.1	-490.5	292.6	262.0	30.57	9.571	
5,700.0	5,691.7	5,680.1	5,644.6	13.8	16.7	-90.65	0.1	-492.4	294.5	263.9	30.62	9.618	
5,795.0	5,786.7	5,773.9	5,737.3	13.9	17.1	-90.62	0.1	-507.1	309.4	278.3	31.06	9.961	
5,800.0	5,791.7	5,778.8	5,742.2	13.9	17.1	-90.62	0.1	-507.9	310.1	279.1	31.08	9.978	
5,890.0	5,881.7	5,867.7	5,830.0	13.9	17.5	-90.59	0.1	-521.8	324.2	292.7	31.50	10.293	
5,900.0	5,891.7	5,877.6	5,839.7	13.9	17.5	-90.59	0.1	-523.3	325.8	294.2	31.55	10.327	
5,985.0	5,976.7	5,961.6	5,922.6	14.0	17.9	-90.56	0.1	-536.5	339.1	307.1	31.94	10.615	
6,000.0	5,991.7	5,976.4	5,937.3	14.0	17.9	-90.56	0.1	-538.8	341.4	309.4	32.01	10.665	
6,080.0	6,071.7	6,059.1	6,019.0	14.0	18.3	-90.54	0.1	-551.4	353.7	321.2	32.41	10.912	
6,100.0	6,091.7	6,080.2	6,039.9	14.0	18.3	-90.53	0.1	-554.4	356.5	324.0	32.51	10.967	
6,175.0	6,166.7	6,159.5	6,118.5	14.1	18.7	-90.51	0.2	-565.2	366.7	333.8	32.88	11.152	
6,200.0	6,191.7	6,186.0	6,144.7	14.1	18.8	-90.51	0.2	-568.6	369.9	336.9	33.00	11.207	
6,270.0	6,261.7	6,260.4	6,218.6	14.1	19.1	-90.50	0.2	-577.3	378.1	344.8	33.34	11.342	
6,300.0	6,291.7	6,292.3	6,250.3	14.2	19.2	-90.49	0.2	-580.8	381.4	347.9	33.48	11.391	
6,365.0	6,356.7	6,361.6	6,319.3	14.2	19.4	-90.48	0.2	-587.7	387.9	354.1	33.77	11.484	
6,400.0	6,391.7	6,399.0	6,356.6	14.2	19.6	-90.48	0.2	-591.1	391.0	357.1	33.93	11.524	
6,460.0	6,451.7	6,463.2	6,420.6	14.2	19.8	-90.47	0.2	-596.3	395.9	361.7	34.19	11.580	
6,500.0	6,491.7	6,506.1	6,463.3	14.3	20.0	-90.47	0.2	-599.4	398.8	364.5	34.36	11.607	
6,555.0	6,546.7	6,565.1	6,522.2	14.3	20.2	-90.46	0.2	-603.2	402.3	367.7	34.58	11.634	
6,600.0	6,591.7	6,613.5	6,570.5	14.3	20.3	-90.46	0.2	-605.8	404.7	370.0	34.76	11.645	
6,650.0	6,641.7	6,667.2	6,624.2	14.4	20.5	-90.45	0.2	-608.2	407.0	372.1	34.94	11.649	
6,700.0	6,691.7	6,721.0	6,678.0	14.4	20.7	-90.45	0.2	-610.1	408.8	373.7	35.11	11.642	
6,745.0	6,736.7	6,769.5	6,726.4	14.4	20.8	-90.45	0.2	-611.4	410.0	374.7	35.26	11.628	
6,800.0	6,791.7	6,828.7	6,785.6	14.4	20.9	-90.45	0.2	-612.5	411.0	375.6	35.40	11.610	
6,840.0	6,831.7	6,871.8	6,828.7	14.5	21.0	-90.45	0.2	-612.8	411.3	375.8	35.47	11.597	
6,900.0	6,891.7	6,933.8	6,890.7	14.5	21.1	-90.45	0.2	-612.9	411.4	375.8	35.54	11.574	
6,935.0	6,926.7	6,968.8	6,925.7	14.5	21.1	-90.45	0.2	-612.9	411.4	375.8	35.57	11.564	
7,000.0	6,991.7	7,033.8	6,990.7	14.5	21.1	-90.45	0.2	-612.9	411.4	375.7	35.63	11.544	
7,030.0	7,021.7	7,063.8	7,020.7	14.6	21.1	-90.45	0.2	-612.9	411.4	375.7	35.66	11.536	
7,100.0	7,091.7	7,133.8	7,090.7	14.6	21.1	-90.45	0.2	-612.9	411.4	375.6	35.73	11.515	
7,125.0	7,116.7	7,158.8	7,115.7	14.6	21.1	-90.45	0.2	-612.9	411.4	375.6	35.75	11.507	
7,200.0	7,191.7	7,233.8	7,190.7	14.7	21.2	-90.45	0.2	-612.9	411.4	375.5	35.82	11.485	
7,220.0	7,211.7	7,253.8	7,210.7	14.7	21.2	-90.45	0.2	-612.9	411.4	375.5	35.84	11.479	
7,300.0	7,291.7	7,333.8	7,290.7	14.7	21.2	-90.45	0.2	-612.9	411.4	375.5	35.91	11.455	
7,315.0	7,306.7	7,348.8	7,305.7	14.7	21.2	-90.45	0.2	-612.9	411.4	375.4	35.92	11.451	
7,400.0	7,391.7	7,433.8	7,390.7	14.8	21.2	-90.45	0.2	-612.9	411.4	375.4	36.00	11.426	
7,410.0	7,401.7	7,443.8	7,400.7	14.8	21.2	-90.45	0.2	-612.9	411.4	375.4	36.01	11.423	
7,500.0	7,491.7	7,533.8	7,490.7	14.8	21.3	-90.45	0.2	-612.9	411.4	375.3	36.10	11.396	
7,505.0	7,496.7	7,538.8	7,495.7	14.8	21.3	-90.45	0.2	-612.9	411.4	375.3	36.10	11.394	
7,600.0	7,591.7	7,633.8	7,590.7	14.9	21.3	-90.45	0.2	-612.9	411.4	375.2	36.19	11.366	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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
7,695.0	7,686.7	7,728.8	7,685.7	14.9	21.3	-90.45	0.2	-612.9	411.4	375.1	36.28	11.338	
7,700.0	7,691.7	7,733.8	7,690.7	14.9	21.3	-90.45	0.2	-612.9	411.4	375.1	36.29	11.336	
7,790.0	7,781.7	7,823.8	7,780.7	15.0	21.4	-90.45	0.2	-612.9	411.4	375.0	36.37	11.310	
7,800.0	7,791.7	7,833.8	7,790.7	15.0	21.4	-90.45	0.2	-612.9	411.4	375.0	36.38	11.307	
7,885.0	7,876.7	7,918.8	7,875.7	15.1	21.4	-90.45	0.2	-612.9	411.4	374.9	36.46	11.282	
7,900.0	7,891.7	7,933.8	7,890.7	15.1	21.4	-90.45	0.2	-612.9	411.4	374.9	36.48	11.277	
7,980.0	7,971.7	8,013.8	7,970.7	15.1	21.4	-90.45	0.2	-612.9	411.4	374.8	36.56	11.253	
8,000.0	7,991.7	8,033.8	7,990.7	15.1	21.5	-90.45	0.2	-612.9	411.4	374.8	36.57	11.247	
8,075.0	8,066.7	8,108.8	8,065.7	15.2	21.5	-90.45	0.2	-612.9	411.4	374.7	36.65	11.225	
8,100.0	8,091.7	8,133.8	8,090.7	15.2	21.5	-90.45	0.2	-612.9	411.4	374.7	36.67	11.218	
8,170.0	8,161.7	8,203.8	8,160.7	15.2	21.5	-90.45	0.2	-612.9	411.4	374.6	36.74	11.197	
8,200.0	8,191.7	8,233.8	8,190.7	15.2	21.5	-90.45	0.2	-612.9	411.4	374.6	36.77	11.188	
8,265.0	8,256.7	8,298.8	8,255.7	15.3	21.6	-90.45	0.2	-612.9	411.4	374.5	36.83	11.169	
8,300.0	8,291.7	8,333.8	8,290.7	15.3	21.6	-90.45	0.2	-612.9	411.4	374.5	36.87	11.159	
8,360.0	8,351.7	8,393.8	8,350.7	15.3	21.6	-90.45	0.2	-612.9	411.4	374.4	36.92	11.141	
8,400.0	8,391.7	8,433.8	8,390.7	15.4	21.6	-90.45	0.2	-612.9	411.4	374.4	36.96	11.129	
8,455.0	8,446.7	8,488.8	8,445.7	15.4	21.6	-90.45	0.2	-612.9	411.4	374.3	37.02	11.113	
8,500.0	8,491.7	8,533.8	8,490.7	15.4	21.6	-90.45	0.2	-612.9	411.4	374.3	37.06	11.099	
8,550.0	8,541.7	8,583.8	8,540.7	15.5	21.7	-90.45	0.2	-612.9	411.4	374.3	37.11	11.085	
8,600.0	8,591.7	8,633.8	8,590.7	15.5	21.7	-90.45	0.2	-612.9	411.4	374.2	37.16	11.070	
8,645.0	8,636.7	8,678.8	8,635.7	15.5	21.7	-90.45	0.2	-612.9	411.4	374.2	37.21	11.057	
8,700.0	8,691.7	8,733.8	8,690.7	15.5	21.7	-90.45	0.2	-612.9	411.4	374.1	37.26	11.040	
8,740.0	8,731.7	8,773.8	8,730.7	15.6	21.7	-90.45	0.2	-612.9	411.4	374.1	37.30	11.029	
8,800.0	8,791.7	8,833.8	8,790.7	15.6	21.8	-90.45	0.2	-612.9	411.4	374.0	37.36	11.011	
8,835.0	8,826.7	8,868.8	8,825.7	15.6	21.8	-90.45	0.2	-612.9	411.4	374.0	37.40	11.001	
8,900.0	8,891.7	8,933.8	8,890.7	15.7	21.8	-90.45	0.2	-612.9	411.4	373.9	37.46	10.981	
8,930.0	8,921.7	8,963.8	8,920.7	15.7	21.8	-90.45	0.2	-612.9	411.4	373.9	37.49	10.973	
9,000.0	8,991.7	9,033.8	8,990.7	15.7	21.8	-90.45	0.2	-612.9	411.4	373.8	37.56	10.952	
9,025.0	9,016.7	9,058.8	9,015.7	15.7	21.9	-90.45	0.2	-612.9	411.4	373.8	37.59	10.945	
9,100.0	9,091.7	9,133.8	9,090.7	15.8	21.9	-90.45	0.2	-612.9	411.4	373.7	37.66	10.923	
9,120.0	9,111.7	9,153.8	9,110.7	15.8	21.9	-90.45	0.2	-612.9	411.4	373.7	37.68	10.917	
9,200.0	9,191.7	9,233.8	9,190.7	15.8	21.9	-90.45	0.2	-612.9	411.4	373.6	37.76	10.893	
9,215.0	9,206.7	9,248.8	9,205.7	15.9	21.9	-90.45	0.2	-612.9	411.4	373.6	37.78	10.889	
9,300.0	9,291.7	9,333.8	9,290.7	15.9	22.0	-90.45	0.2	-612.9	411.4	373.5	37.87	10.864	
9,310.0	9,301.7	9,343.8	9,300.7	15.9	22.0	-90.45	0.2	-612.9	411.4	373.5	37.88	10.861	
9,400.0	9,391.7	9,433.8	9,390.7	16.0	22.0	-90.45	0.2	-612.9	411.4	373.4	37.97	10.835	
9,405.0	9,396.7	9,438.8	9,395.7	16.0	22.0	-90.45	0.2	-612.9	411.4	373.4	37.97	10.833	
9,500.0	9,491.7	9,533.8	9,490.7	16.0	22.0	-90.45	0.2	-612.9	411.4	373.3	38.07	10.805	
9,595.0	9,586.7	9,628.8	9,585.7	16.1	22.1	-90.45	0.2	-612.9	411.4	373.2	38.17	10.778	
9,600.0	9,591.7	9,633.8	9,590.7	16.1	22.1	-90.45	0.2	-612.9	411.4	373.2	38.17	10.776	
9,690.0	9,681.7	9,723.8	9,680.7	16.1	22.1	-90.45	0.2	-612.9	411.4	373.1	38.27	10.750	
9,700.0	9,691.7	9,733.8	9,690.7	16.2	22.1	-90.45	0.2	-612.9	411.4	373.1	38.28	10.747	
9,785.0	9,776.7	9,818.8	9,775.7	16.2	22.2	-90.45	0.2	-612.9	411.4	373.0	38.37	10.722	
9,800.0	9,791.7	9,833.8	9,790.7	16.2	22.2	-90.45	0.2	-612.9	411.4	373.0	38.38	10.718	
9,880.0	9,871.7	9,913.8	9,870.7	16.3	22.2	-90.45	0.2	-612.9	411.4	372.9	38.46	10.695	
9,900.0	9,891.7	9,933.8	9,890.7	16.3	22.2	-90.45	0.2	-612.9	411.4	372.9	38.48	10.689	
9,975.0	9,966.7	10,008.8	9,965.7	16.3	22.2	-90.45	0.2	-612.9	411.4	372.8	38.56	10.667	
10,000.0	9,991.7	10,033.8	9,990.7	16.3	22.3	-90.45	0.2	-612.9	411.4	372.8	38.59	10.660	
10,070.0	10,061.7	10,103.8	10,060.7	16.4	22.3	-90.45	0.2	-612.9	411.4	372.7	38.66	10.640	
10,100.0	10,091.7	10,133.8	10,090.7	16.4	22.3	-90.45	0.2	-612.9	411.4	372.7	38.69	10.631	
10,165.0	10,156.7	10,198.8	10,155.7	16.4	22.3	-90.45	0.2	-612.9	411.4	372.6	38.76	10.612	
10,200.0	10,191.7	10,233.8	10,190.7	16.5	22.3	-90.45	0.2	-612.9	411.4	372.6	38.80	10.602	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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
10,260.0	10,251.7	10,293.8	10,250.7	16.5	22.4	-90.45	0.2	-612.9	411.4	372.5	38.86	10.585	
10,300.0	10,291.7	10,333.8	10,290.7	16.5	22.4	-90.45	0.2	-612.9	411.4	372.5	38.91	10.573	
10,355.0	10,346.7	10,388.8	10,345.7	16.6	22.4	-90.45	0.2	-612.9	411.4	372.4	38.96	10.558	
10,400.0	10,391.7	10,433.8	10,390.7	16.6	22.4	-90.45	0.2	-612.9	411.4	372.4	39.01	10.545	
10,450.0	10,441.7	10,483.8	10,440.7	16.6	22.4	-90.45	0.2	-612.9	411.4	372.3	39.07	10.530	
10,500.0	10,491.7	10,533.8	10,490.7	16.7	22.5	-90.45	0.2	-612.9	411.4	372.2	39.12	10.516	
10,545.0	10,536.7	10,578.8	10,535.7	16.7	22.5	-90.45	0.2	-612.9	411.4	372.2	39.17	10.503	
10,600.0	10,591.7	10,633.8	10,590.7	16.7	22.5	-90.45	0.2	-612.9	411.4	372.1	39.23	10.487	
10,640.0	10,631.7	10,673.8	10,630.7	16.7	22.5	-90.45	0.2	-612.9	411.4	372.1	39.27	10.476	
10,700.0	10,691.7	10,733.8	10,690.7	16.8	22.6	-90.45	0.2	-612.9	411.4	372.0	39.33	10.459	
10,735.0	10,726.7	10,768.8	10,725.7	16.8	22.6	-90.45	0.2	-612.9	411.4	372.0	39.37	10.449	
10,800.0	10,791.7	10,833.8	10,790.7	16.8	22.6	-90.45	0.2	-612.9	411.4	371.9	39.44	10.430	
10,830.0	10,821.7	10,863.8	10,820.7	16.9	22.6	-90.45	0.2	-612.9	411.4	371.9	39.47	10.421	
10,900.0	10,891.7	10,933.8	10,890.7	16.9	22.6	-90.45	0.2	-612.9	411.4	371.8	39.55	10.402	
10,925.0	10,916.7	10,958.8	10,915.7	16.9	22.7	-90.45	0.2	-612.9	411.4	371.8	39.58	10.394	
10,932.7	10,924.4	10,966.5	10,923.4	16.9	22.7	-90.45	0.2	-612.9	411.4	371.8	39.58	10.392	
11,000.0	10,991.7	11,033.7	10,990.7	17.0	22.7	-90.42	0.4	-612.9	411.4	371.7	39.65	10.376	
11,020.0	11,011.7	11,053.7	11,010.6	17.0	22.7	-90.28	1.4	-612.9	411.4	371.7	39.66	10.372	
11,100.0	11,091.7	11,131.5	11,087.4	17.0	22.7	-88.63	13.2	-613.0	411.6	371.9	39.73	10.359	
11,115.0	11,106.7	11,145.6	11,101.1	17.0	22.7	-88.15	16.7	-613.1	411.7	372.0	39.75	10.360	
11,155.9	11,147.5	11,182.8	11,136.5	17.1	22.7	-86.61	27.8	-613.2	412.4	372.7	39.78	10.369	
11,175.0	11,166.7	11,200.0	11,152.7	17.1	22.7	-85.24	33.9	-613.2	413.0	373.2	39.79	10.379	
11,200.0	11,191.6	11,221.4	11,172.4	17.1	22.7	-84.17	42.2	-613.3	413.8	374.0	39.80	10.395	
11,210.0	11,201.6	11,230.1	11,180.2	17.1	22.7	-83.74	45.8	-613.3	414.1	374.3	39.81	10.402	
11,225.0	11,216.4	11,242.9	11,191.8	17.1	22.7	-83.11	51.5	-613.4	414.7	374.9	39.82	10.413	
11,250.0	11,241.1	11,264.2	11,210.5	17.1	22.7	-82.07	61.5	-613.5	415.8	375.9	39.85	10.434	
11,275.0	11,265.4	11,285.2	11,228.6	17.1	22.7	-81.06	72.1	-613.6	416.9	377.1	39.88	10.456	
11,300.0	11,289.5	11,305.9	11,246.0	17.1	22.7	-80.07	83.5	-613.7	418.2	378.3	39.91	10.478	
11,305.0	11,294.3	11,310.0	11,249.4	17.1	22.7	-79.87	85.8	-613.7	418.5	378.6	39.92	10.483	
11,325.0	11,313.2	11,325.0	11,261.5	17.1	22.7	-79.16	94.6	-613.8	419.6	379.6	39.97	10.496	
11,350.0	11,336.4	11,346.8	11,278.7	17.1	22.7	-78.18	108.0	-613.9	421.0	381.0	40.01	10.522	
11,375.0	11,359.1	11,366.9	11,294.0	17.1	22.7	-77.28	121.0	-614.0	422.5	382.4	40.08	10.542	
11,400.0	11,381.2	11,386.9	11,308.7	17.1	22.7	-76.41	134.6	-614.1	424.0	383.9	40.15	10.560	
11,425.0	11,402.6	11,406.7	11,322.6	17.1	22.7	-75.58	148.7	-614.3	425.6	385.3	40.24	10.577	
11,450.0	11,423.4	11,425.0	11,334.9	17.1	22.7	-74.83	162.2	-614.4	427.2	386.8	40.35	10.587	
11,475.0	11,443.4	11,445.9	11,348.4	17.1	22.7	-74.03	178.2	-614.5	428.7	388.3	40.44	10.603	
11,495.0	11,458.9	11,461.4	11,357.9	17.1	22.7	-73.45	190.4	-614.6	430.0	389.4	40.52	10.610	
11,500.0	11,462.6	11,465.3	11,360.2	17.1	22.7	-73.31	193.5	-614.7	430.3	389.7	40.55	10.612	
11,525.0	11,481.0	11,484.6	11,371.4	17.1	22.8	-72.63	209.2	-614.8	431.8	391.1	40.67	10.618	
11,550.0	11,498.4	11,503.7	11,381.9	17.1	22.8	-71.99	225.3	-615.0	433.3	392.5	40.79	10.622	
11,575.0	11,514.9	11,525.0	11,392.7	17.1	22.8	-71.34	243.6	-615.1	434.8	393.9	40.90	10.631	
11,590.0	11,524.3	11,534.2	11,397.1	17.1	22.8	-71.05	251.6	-615.2	435.6	394.6	41.01	10.623	
11,600.0	11,530.3	11,541.7	11,400.6	17.1	22.8	-70.84	258.3	-615.3	436.1	395.1	41.06	10.622	
11,625.0	11,544.7	11,560.6	11,409.0	17.2	22.8	-70.32	275.3	-615.4	437.4	396.3	41.20	10.618	
11,650.0	11,558.1	11,579.4	11,416.6	17.2	22.8	-69.85	292.4	-615.6	438.7	397.3	41.34	10.612	
11,675.0	11,570.3	11,600.0	11,424.2	17.2	22.8	-69.39	311.6	-615.7	439.8	398.4	41.46	10.610	
11,685.0	11,574.8	11,605.7	11,426.1	17.2	22.8	-69.26	316.9	-615.8	440.3	398.7	41.53	10.601	
11,700.0	11,581.3	11,616.9	11,429.8	17.2	22.8	-69.04	327.5	-615.9	440.9	399.3	41.61	10.595	
11,725.0	11,591.2	11,635.5	11,435.3	17.2	22.8	-68.70	345.3	-616.0	441.8	400.1	41.74	10.584	
11,750.0	11,599.8	11,654.1	11,440.1	17.3	22.9	-68.40	363.2	-616.2	442.7	400.8	41.87	10.572	
11,775.0	11,607.2	11,675.0	11,444.7	17.3	22.9	-68.12	383.6	-616.4	443.4	401.4	41.98	10.563	
11,780.0	11,608.5	11,675.0	11,444.7	17.3	22.9	-68.11	383.6	-616.4	443.5	401.5	42.02	10.554	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,800.0	11,613.3	11,691.1	11,447.6	17.3	22.9	-67.94	399.5	-616.5	444.0	401.9	42.11	10.544	
11,825.0	11,618.2	11,709.6	11,450.2	17.3	22.9	-67.77	417.8	-616.7	444.5	402.2	42.21	10.529	
11,850.0	11,621.7	11,725.0	11,451.9	17.4	22.9	-67.66	433.1	-616.8	444.8	402.5	42.32	10.510	
11,875.0	11,624.0	11,746.5	11,453.4	17.4	23.0	-67.58	454.5	-617.0	445.0	402.6	42.40	10.496	
11,900.0	11,625.0	11,764.9	11,454.0	17.4	23.0	-67.55	472.9	-617.2	445.1	402.6	42.48	10.479	
11,905.9	11,625.0	11,769.6	11,454.0	17.5	23.0	-67.55	477.6	-617.2	445.1	402.6	42.49	10.475	
11,908.2	11,625.0	11,771.4	11,454.0	17.5	23.0	-67.55	479.4	-617.3	445.1	402.6	42.50	10.473	
11,970.0	11,625.0	11,833.3	11,454.0	17.6	23.1	-67.55	541.3	-617.8	445.1	402.4	42.69	10.427	
12,000.0	11,625.0	11,863.3	11,454.0	17.6	23.1	-67.55	571.3	-618.1	445.1	402.3	42.78	10.404	
12,065.0	11,625.0	11,928.3	11,454.0	17.8	23.2	-67.55	636.3	-618.7	445.1	402.1	43.01	10.348	
12,100.0	11,625.0	11,963.3	11,454.0	17.8	23.3	-67.55	671.3	-619.0	445.1	402.0	43.14	10.317	
12,160.0	11,625.0	12,023.3	11,454.0	18.0	23.4	-67.55	731.3	-619.5	445.1	401.7	43.39	10.259	
12,200.0	11,625.0	12,063.3	11,454.0	18.1	23.5	-67.55	771.3	-619.9	445.1	401.6	43.56	10.219	
12,236.5	11,625.0	12,099.7	11,454.0	18.2	23.5	-67.55	807.7	-620.2	445.1	401.4	43.72	10.181	
12,255.0	11,625.0	12,118.3	11,454.0	18.2	23.6	-67.55	826.2	-620.4	445.1	401.3	43.81	10.161	
12,300.0	11,625.0	12,163.3	11,454.0	18.4	23.7	-67.55	871.2	-620.8	445.1	401.1	44.02	10.112	
12,350.0	11,625.0	12,213.3	11,454.0	18.5	23.8	-67.55	921.2	-621.3	445.1	400.8	44.27	10.055	
12,400.0	11,625.0	12,263.3	11,454.0	18.7	23.9	-67.55	971.2	-621.7	445.1	400.6	44.53	9.996	
12,445.0	11,625.0	12,308.3	11,454.0	18.8	24.0	-67.55	1,016.2	-622.1	445.1	400.3	44.77	9.941	
12,500.0	11,625.0	12,363.3	11,454.0	19.0	24.2	-67.55	1,071.2	-622.6	445.1	400.0	45.09	9.873	
12,540.0	11,625.0	12,403.3	11,454.0	19.1	24.3	-67.55	1,111.2	-623.0	445.1	399.8	45.32	9.821	
12,600.0	11,625.0	12,463.3	11,454.0	19.4	24.5	-67.55	1,171.2	-623.5	445.1	399.4	45.69	9.742	
12,635.0	11,625.0	12,498.3	11,454.0	19.5	24.6	-67.55	1,206.2	-623.9	445.1	399.2	45.91	9.695	
12,700.0	11,625.0	12,563.3	11,454.0	19.7	24.8	-67.55	1,271.2	-624.4	445.1	398.8	46.33	9.607	
12,730.0	11,625.0	12,593.3	11,454.0	19.8	24.9	-67.55	1,301.2	-624.7	445.1	398.6	46.54	9.565	
12,752.5	11,625.0	12,615.8	11,454.0	19.9	24.9	-67.55	1,323.8	-624.9	445.1	398.4	46.69	9.533	
12,800.0	11,625.0	12,663.3	11,454.0	20.1	25.1	-67.55	1,371.2	-625.4	445.1	398.1	47.02	9.466	
12,825.0	11,625.0	12,688.3	11,454.0	20.2	25.2	-67.55	1,396.2	-625.6	445.1	397.9	47.20	9.431	
12,900.0	11,625.0	12,763.3	11,454.0	20.5	25.4	-67.55	1,471.2	-626.3	445.1	397.4	47.75	9.323	
12,920.0	11,625.0	12,783.3	11,454.0	20.6	25.5	-67.55	1,491.2	-626.4	445.1	397.2	47.90	9.293	
13,000.0	11,625.0	12,863.3	11,454.0	21.0	25.8	-67.55	1,571.2	-627.2	445.1	396.6	48.51	9.176	
13,015.0	11,625.0	12,878.3	11,454.0	21.1	25.8	-67.55	1,586.2	-627.3	445.1	396.5	48.63	9.154	
13,031.1	11,625.0	12,894.4	11,454.0	21.1	25.9	-67.55	1,602.3	-627.5	445.1	396.4	48.75	9.130	
13,100.0	11,625.0	12,963.3	11,454.0	21.4	26.2	-67.55	1,671.2	-628.1	445.1	395.8	49.31	9.027	
13,110.0	11,625.0	12,973.3	11,454.0	21.5	26.2	-67.55	1,681.2	-628.2	445.1	395.7	49.39	9.012	
13,200.0	11,625.0	13,063.3	11,454.0	21.9	26.6	-67.55	1,771.2	-629.0	445.1	395.0	50.14	8.877	
13,205.0	11,625.0	13,068.3	11,454.0	21.9	26.6	-67.55	1,776.2	-629.0	445.1	394.9	50.18	8.870	
13,300.0	11,625.0	13,163.3	11,454.0	22.4	27.0	-67.55	1,871.2	-629.9	445.1	394.1	51.01	8.726	
13,395.0	11,625.0	13,258.3	11,454.0	22.9	27.4	-67.55	1,966.2	-630.8	445.1	393.3	51.86	8.583	
13,400.0	11,625.0	13,263.3	11,454.0	22.9	27.4	-67.55	1,971.2	-630.8	445.1	393.2	51.90	8.576	
13,490.0	11,625.0	13,353.3	11,454.0	23.4	27.8	-67.55	2,061.2	-631.6	445.1	392.4	52.74	8.440	
13,500.0	11,625.0	13,363.3	11,454.0	23.4	27.8	-67.55	2,071.2	-631.7	445.1	392.3	52.83	8.426	
13,585.0	11,625.0	13,448.3	11,454.0	23.9	28.2	-67.55	2,156.2	-632.5	445.1	391.5	53.64	8.298	
13,600.0	11,625.0	13,463.3	11,454.0	24.0	28.3	-67.55	2,171.2	-632.6	445.1	391.3	53.78	8.276	
13,680.0	11,625.0	13,543.3	11,454.0	24.4	28.6	-67.55	2,251.2	-633.3	445.1	390.5	54.56	8.158	
13,700.0	11,625.0	13,563.3	11,454.0	24.5	28.7	-67.55	2,271.2	-633.5	445.1	390.3	54.76	8.128	
13,775.0	11,625.0	13,638.3	11,454.0	24.9	29.1	-67.55	2,346.2	-634.2	445.1	389.6	55.51	8.018	
13,800.0	11,625.0	13,663.3	11,454.0	25.1	29.2	-67.55	2,371.2	-634.4	445.1	389.3	55.77	7.982	
13,870.0	11,625.0	13,733.3	11,454.0	25.5	29.6	-67.55	2,441.2	-635.1	445.1	388.6	56.48	7.880	
13,900.0	11,625.0	13,763.3	11,454.0	25.6	29.7	-67.55	2,471.2	-635.3	445.1	388.3	56.79	7.837	
13,965.0	11,625.0	13,828.3	11,454.0	26.0	30.0	-67.55	2,536.2	-635.9	445.1	387.6	57.47	7.745	
14,000.0	11,625.0	13,863.3	11,454.0	26.2	30.2	-67.55	2,571.2	-636.2	445.1	387.3	57.84	7.695	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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	
14,060.0	11,625.0	13,923.3	11,454.0	26.6	30.5	-67.55	2,631.2	-636.8	445.1	386.6	58.48	7.611	
14,100.0	11,625.0	13,963.3	11,454.0	26.8	30.7	-67.55	2,671.2	-637.2	445.1	386.2	58.91	7.555	
14,155.0	11,625.0	14,018.3	11,454.0	27.1	31.0	-67.55	2,726.2	-637.7	445.1	385.6	59.51	7.479	
14,200.0	11,625.0	14,063.3	11,454.0	27.4	31.2	-67.55	2,771.2	-638.1	445.1	385.1	60.00	7.418	
14,250.0	11,625.0	14,113.3	11,454.0	27.7	31.5	-67.55	2,821.2	-638.5	445.1	384.6	60.56	7.350	
14,300.0	11,625.0	14,163.3	11,454.0	28.0	31.8	-67.55	2,871.2	-639.0	445.1	384.0	61.11	7.283	
14,345.0	11,625.0	14,208.3	11,454.0	28.3	32.0	-67.55	2,916.2	-639.4	445.1	383.5	61.62	7.224	
14,400.0	11,625.0	14,263.3	11,454.0	28.6	32.3	-67.55	2,971.2	-639.9	445.1	382.9	62.24	7.151	
14,440.0	11,625.0	14,303.3	11,454.0	28.8	32.5	-67.55	3,011.2	-640.2	445.1	382.4	62.70	7.099	
14,500.0	11,625.0	14,363.3	11,454.0	29.2	32.9	-67.55	3,071.2	-640.8	445.1	381.7	63.38	7.022	
14,535.0	11,625.0	14,398.3	11,454.0	29.4	33.1	-67.55	3,106.2	-641.1	445.1	381.3	63.79	6.978	
14,600.0	11,625.0	14,463.3	11,454.0	29.8	33.4	-67.55	3,171.2	-641.7	445.1	380.6	64.54	6.896	
14,630.0	11,625.0	14,493.3	11,454.0	30.0	33.6	-67.55	3,201.2	-642.0	445.1	380.2	64.90	6.859	
14,700.0	11,625.0	14,563.3	11,454.0	30.5	34.0	-67.55	3,271.1	-642.6	445.1	379.4	65.72	6.773	
14,725.0	11,625.0	14,588.3	11,454.0	30.6	34.1	-67.55	3,296.1	-642.8	445.1	379.1	66.02	6.742	
14,800.0	11,625.0	14,663.3	11,454.0	31.1	34.6	-67.55	3,371.1	-643.5	445.1	378.2	66.91	6.652	
14,820.0	11,625.0	14,683.3	11,454.0	31.2	34.7	-67.55	3,391.1	-643.7	445.1	378.0	67.15	6.629	
14,900.0	11,625.0	14,763.3	11,454.0	31.7	35.1	-67.55	3,471.1	-644.4	445.1	377.0	68.11	6.535	
14,915.0	11,625.0	14,778.3	11,454.0	31.8	35.2	-67.55	3,486.1	-644.5	445.1	376.8	68.29	6.518	
15,000.0	11,625.0	14,863.3	11,454.0	32.4	35.7	-67.55	3,571.1	-645.3	445.1	375.8	69.33	6.420	
15,010.0	11,625.0	14,873.3	11,454.0	32.5	35.8	-67.55	3,581.1	-645.4	445.1	375.7	69.45	6.409	
15,082.0	11,625.0	14,945.3	11,454.0	32.9	36.2	-67.55	3,653.2	-646.1	445.1	374.8	70.34	6.328	
15,100.0	11,625.0	14,963.3	11,454.0	33.0	36.3	-67.55	3,671.1	-646.2	445.1	374.6	70.56	6.309	
15,105.0	11,625.0	14,968.3	11,454.0	33.1	36.3	-67.55	3,676.1	-646.3	445.1	374.5	70.62	6.303	
15,200.0	11,625.0	15,063.3	11,454.0	33.7	36.9	-67.55	3,771.1	-647.1	445.1	373.3	71.80	6.200	
15,295.0	11,625.0	15,158.3	11,454.0	34.3	37.5	-67.55	3,866.1	-648.0	445.1	372.1	72.99	6.099	
15,300.0	11,625.0	15,163.3	11,454.0	34.4	37.5	-67.55	3,871.1	-648.0	445.1	372.1	73.05	6.093	
15,390.0	11,625.0	15,253.3	11,454.0	35.0	38.1	-67.55	3,961.1	-648.9	445.1	370.9	74.18	6.000	
15,400.0	11,625.0	15,263.3	11,454.0	35.0	38.1	-67.55	3,971.1	-649.0	445.1	370.8	74.31	5.990	
15,485.0	11,625.0	15,348.3	11,454.0	35.6	38.7	-67.55	4,056.1	-649.7	445.1	369.7	75.39	5.904	
15,500.0	11,625.0	15,363.3	11,454.0	35.7	38.7	-67.55	4,071.1	-649.9	445.1	369.5	75.58	5.889	
15,580.0	11,625.0	15,443.3	11,454.0	36.2	39.2	-67.55	4,151.1	-650.6	445.1	368.5	76.60	5.810	
15,600.0	11,625.0	15,463.3	11,454.0	36.4	39.4	-67.55	4,171.1	-650.8	445.1	368.2	76.86	5.791	
15,675.0	11,625.0	15,538.3	11,454.0	36.9	39.8	-67.55	4,246.1	-651.4	445.1	367.3	77.83	5.719	
15,700.0	11,625.0	15,563.3	11,454.0	37.1	40.0	-67.55	4,271.1	-651.7	445.1	367.0	78.15	5.696	
15,770.0	11,625.0	15,633.3	11,454.0	37.5	40.4	-67.55	4,341.1	-652.3	445.1	366.1	79.06	5.630	
15,800.0	11,625.0	15,663.3	11,454.0	37.7	40.6	-67.55	4,371.1	-652.6	445.1	365.7	79.45	5.602	
15,865.0	11,625.0	15,728.3	11,454.0	38.2	41.0	-67.55	4,436.1	-653.2	445.1	364.8	80.30	5.543	
15,900.0	11,625.0	15,763.3	11,454.0	38.4	41.3	-67.55	4,471.1	-653.5	445.1	364.4	80.76	5.512	
15,901.4	11,625.0	15,764.6	11,454.0	38.4	41.3	-67.55	4,472.5	-653.5	445.1	364.3	80.77	5.511	
15,960.0	11,625.0	15,823.3	11,454.0	38.8	41.6	-67.55	4,531.1	-654.0	445.1	363.6	81.54	5.459	
16,000.0	11,625.0	15,863.3	11,454.0	39.1	41.9	-67.55	4,571.1	-654.4	445.1	363.0	82.07	5.424	
16,055.0	11,625.0	15,918.3	11,454.0	39.5	42.3	-67.55	4,626.1	-654.9	445.1	362.3	82.80	5.376	
16,100.0	11,625.0	15,963.3	11,454.0	39.8	42.5	-67.55	4,671.1	-655.3	445.1	361.7	83.39	5.338	
16,150.0	11,625.0	16,013.3	11,454.0	40.1	42.9	-67.55	4,721.1	-655.8	445.1	361.1	84.05	5.295	
16,200.0	11,625.0	16,063.3	11,454.0	40.5	43.2	-67.55	4,771.1	-656.2	445.1	360.4	84.72	5.254	
16,245.0	11,625.0	16,108.3	11,454.0	40.8	43.5	-67.55	4,816.1	-656.6	445.1	359.8	85.32	5.217	
16,300.0	11,625.0	16,163.3	11,454.0	41.2	43.8	-67.55	4,871.1	-657.1	445.1	359.1	86.06	5.172	
16,340.0	11,625.0	16,203.3	11,454.0	41.5	44.1	-67.55	4,911.1	-657.5	445.1	358.5	86.59	5.140	
16,400.0	11,625.0	16,263.3	11,454.0	41.9	44.5	-67.55	4,971.1	-658.0	445.1	357.7	87.40	5.093	
16,435.0	11,625.0	16,298.3	11,454.0	42.1	44.7	-67.55	5,006.1	-658.3	445.1	357.2	87.87	5.066	
16,492.2	11,625.0	16,355.5	11,454.0	42.5	45.1	-67.55	5,063.3	-658.9	445.1	356.5	88.64	5.022	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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)			
16,500.0	11,625.0	16,363.3	11,454.0	42.6	45.2	-67.55	5,071.1	-658.9	445.1	356.4	88.75	5.016	
16,530.0	11,625.0	16,393.3	11,454.0	42.8	45.4	-67.55	5,101.1	-659.2	445.1	356.0	89.15	4.993	
16,600.0	11,625.0	16,463.3	11,454.0	43.3	45.8	-67.55	5,171.1	-659.8	445.1	355.0	90.10	4.940	
16,625.0	11,625.0	16,488.3	11,454.0	43.4	46.0	-67.55	5,196.1	-660.1	445.1	354.7	90.44	4.922	
16,700.0	11,625.0	16,563.3	11,454.0	44.0	46.5	-67.55	5,271.1	-660.7	445.1	353.7	91.46	4.867	
16,720.0	11,625.0	16,583.3	11,454.0	44.1	46.6	-67.55	5,291.1	-660.9	445.1	353.4	91.73	4.852	
16,800.0	11,625.0	16,663.3	11,454.0	44.7	47.2	-67.55	5,371.1	-661.7	445.1	352.3	92.82	4.795	
16,815.0	11,625.0	16,678.3	11,454.0	44.8	47.3	-67.55	5,386.1	-661.8	445.1	352.1	93.03	4.785	
16,900.0	11,625.0	16,763.3	11,454.0	45.4	47.8	-67.55	5,471.1	-662.6	445.1	350.9	94.19	4.726	
16,910.0	11,625.0	16,773.3	11,454.0	45.5	47.9	-67.55	5,481.1	-662.7	445.1	350.8	94.33	4.719	
17,000.0	11,625.0	16,863.3	11,454.0	46.1	48.5	-67.55	5,571.1	-663.5	445.1	349.5	95.57	4.658	
17,005.0	11,625.0	16,868.3	11,454.0	46.1	48.5	-67.55	5,576.1	-663.5	445.1	349.5	95.64	4.654	
17,100.0	11,625.0	16,963.3	11,454.0	46.8	49.2	-67.55	5,671.1	-664.4	445.1	348.2	96.95	4.591	
17,195.0	11,625.0	17,058.3	11,454.0	47.5	49.8	-67.55	5,766.0	-665.2	445.1	346.8	98.26	4.530	
17,200.0	11,625.0	17,063.3	11,454.0	47.5	49.9	-67.55	5,771.0	-665.3	445.1	346.8	98.33	4.527	
17,290.0	11,625.0	17,153.3	11,454.0	48.2	50.5	-67.55	5,861.0	-666.1	445.1	345.5	99.58	4.470	
17,300.0	11,625.0	17,163.3	11,454.0	48.2	50.5	-67.55	5,871.0	-666.2	445.1	345.4	99.72	4.464	
17,385.0	11,625.0	17,248.3	11,454.0	48.8	51.1	-67.55	5,956.0	-667.0	445.1	344.2	100.90	4.411	
17,400.0	11,625.0	17,263.3	11,454.0	48.9	51.2	-67.55	5,971.0	-667.1	445.1	344.0	101.11	4.402	
17,480.0	11,625.0	17,343.3	11,454.0	49.5	51.8	-67.55	6,051.0	-667.8	445.1	342.9	102.23	4.354	
17,500.0	11,625.0	17,363.3	11,454.0	49.7	51.9	-67.55	6,071.0	-668.0	445.1	342.6	102.51	4.342	
17,575.0	11,625.0	17,438.3	11,454.0	50.2	52.4	-67.55	6,146.0	-668.7	445.1	341.6	103.56	4.298	
17,600.0	11,625.0	17,463.3	11,454.0	50.4	52.6	-67.55	6,171.0	-668.9	445.1	341.2	103.91	4.284	
17,670.0	11,625.0	17,533.3	11,454.0	50.9	53.1	-67.55	6,241.0	-669.6	445.1	340.2	104.89	4.244	
17,700.0	11,625.0	17,563.3	11,454.0	51.1	53.3	-67.55	6,271.0	-669.8	445.1	339.8	105.31	4.227	
17,765.0	11,625.0	17,628.3	11,454.0	51.6	53.7	-67.55	6,336.0	-670.4	445.1	338.9	106.23	4.190	
17,800.0	11,625.0	17,663.3	11,454.0	51.8	54.0	-67.55	6,371.0	-670.7	445.1	338.4	106.72	4.171	
17,812.1	11,625.0	17,675.4	11,454.0	51.9	54.1	-67.55	6,383.2	-670.8	445.1	338.2	106.89	4.164	
17,860.0	11,625.0	17,723.3	11,454.0	52.3	54.4	-67.55	6,431.0	-671.3	445.1	337.5	107.57	4.138	
17,900.0	11,625.0	17,763.3	11,454.0	52.5	54.7	-67.55	6,471.0	-671.6	445.1	337.0	108.13	4.116	
17,955.0	11,625.0	17,818.3	11,454.0	52.9	55.1	-67.55	6,526.0	-672.1	445.1	336.2	108.91	4.087	
18,000.0	11,625.0	17,863.3	11,454.0	53.3	55.4	-67.55	6,571.0	-672.5	445.1	335.6	109.54	4.063	
18,050.0	11,625.0	17,913.3	11,454.0	53.6	55.7	-67.55	6,621.0	-673.0	445.1	334.9	110.25	4.037	
18,100.0	11,625.0	17,963.3	11,454.0	54.0	56.1	-67.55	6,671.0	-673.5	445.1	334.1	110.96	4.011	
18,145.0	11,625.0	18,008.3	11,454.0	54.3	56.4	-67.55	6,716.0	-673.9	445.1	333.5	111.60	3.988	
18,200.0	11,625.0	18,063.3	11,454.0	54.7	56.8	-67.55	6,771.0	-674.4	445.1	332.7	112.38	3.961	
18,240.0	11,625.0	18,103.3	11,454.0	55.0	57.0	-67.55	6,811.0	-674.7	445.1	332.2	112.95	3.941	
18,300.0	11,625.0	18,163.3	11,454.0	55.4	57.5	-67.55	6,871.0	-675.3	445.1	331.3	113.80	3.911	
18,335.0	11,625.0	18,198.3	11,454.0	55.7	57.7	-67.55	6,906.0	-675.6	445.1	330.8	114.30	3.894	
18,400.0	11,625.0	18,263.3	11,454.0	56.2	58.2	-67.55	6,971.0	-676.2	445.1	329.9	115.23	3.863	
18,430.0	11,625.0	18,293.3	11,454.0	56.4	58.4	-67.55	7,001.0	-676.4	445.1	329.5	115.66	3.848	
18,500.0	11,625.0	18,363.3	11,454.0	56.9	58.9	-67.55	7,071.0	-677.1	445.1	328.5	116.66	3.815	
18,525.0	11,625.0	18,388.3	11,454.0	57.1	59.0	-67.55	7,096.0	-677.3	445.1	328.1	117.02	3.804	
18,600.0	11,625.0	18,463.3	11,454.0	57.6	59.6	-67.55	7,171.0	-678.0	445.1	327.0	118.09	3.769	
18,620.0	11,625.0	18,483.3	11,454.0	57.8	59.7	-67.55	7,191.0	-678.2	445.1	326.7	118.38	3.760	
18,700.0	11,625.0	18,563.3	11,454.0	58.4	60.3	-67.55	7,271.0	-678.9	445.1	325.6	119.52	3.724	
18,715.0	11,625.0	18,578.3	11,454.0	58.5	60.4	-67.55	7,286.0	-679.0	445.1	325.4	119.74	3.717	
18,800.0	11,625.0	18,663.3	11,454.0	59.1	61.0	-67.55	7,371.0	-679.8	445.1	324.1	120.96	3.680	
18,810.0	11,625.0	18,673.3	11,454.0	59.2	61.1	-67.55	7,381.0	-679.9	445.1	324.0	121.10	3.675	
18,900.0	11,625.0	18,763.3	11,454.0	59.8	61.7	-67.55	7,471.0	-680.7	445.1	322.7	122.40	3.637	
18,905.0	11,625.0	18,768.3	11,454.0	59.9	61.7	-67.55	7,476.0	-680.8	445.1	322.6	122.47	3.634	
18,935.7	11,625.0	18,798.9	11,454.0	60.1	62.0	-67.55	7,506.6	-681.0	445.1	322.2	122.91	3.621	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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)			
19,000.0	11,625.0	18,863.3	11,454.0	60.6	62.4	-67.55	7,571.0	-681.6	445.1	321.3	123.84	3.594	
19,095.0	11,625.0	18,958.3	11,454.0	61.3	63.1	-67.55	7,666.0	-682.5	445.1	319.9	125.21	3.555	
19,100.0	11,625.0	18,963.3	11,454.0	61.3	63.1	-67.55	7,671.0	-682.5	445.1	319.8	125.28	3.553	
19,190.0	11,625.0	19,053.3	11,454.0	61.9	63.8	-67.55	7,761.0	-683.3	445.1	318.5	126.58	3.516	
19,200.0	11,625.0	19,063.3	11,454.0	62.0	63.8	-67.55	7,771.0	-683.4	445.1	318.4	126.73	3.512	
19,285.0	11,625.0	19,148.3	11,454.0	62.6	64.4	-67.55	7,856.0	-684.2	445.1	317.2	127.96	3.479	
19,300.0	11,625.0	19,163.3	11,454.0	62.8	64.5	-67.55	7,871.0	-684.3	445.1	316.9	128.17	3.473	
19,380.0	11,625.0	19,243.3	11,454.0	63.3	65.1	-67.55	7,951.0	-685.1	445.1	315.8	129.33	3.442	
19,400.0	11,625.0	19,263.3	11,454.0	63.5	65.3	-67.55	7,971.0	-685.3	445.1	315.5	129.62	3.434	
19,475.0	11,625.0	19,338.3	11,454.0	64.0	65.8	-67.55	8,046.0	-685.9	445.1	314.4	130.71	3.405	
19,500.0	11,625.0	19,363.3	11,454.0	64.2	66.0	-67.55	8,071.0	-686.2	445.1	314.0	131.07	3.396	
19,570.0	11,625.0	19,433.3	11,454.0	64.7	66.5	-67.55	8,140.9	-686.8	445.1	313.0	132.09	3.370	
19,600.0	11,625.0	19,463.3	11,454.0	65.0	66.7	-67.55	8,170.9	-687.1	445.1	312.6	132.53	3.359	
19,665.0	11,625.0	19,528.3	11,454.0	65.4	67.2	-67.55	8,235.9	-687.7	445.1	311.6	133.47	3.335	
19,700.0	11,625.0	19,563.3	11,454.0	65.7	67.4	-67.55	8,270.9	-688.0	445.1	311.1	133.98	3.322	
19,760.0	11,625.0	19,623.3	11,454.0	66.1	67.8	-67.55	8,330.9	-688.5	445.1	310.3	134.85	3.301	
19,800.0	11,625.0	19,663.3	11,454.0	66.4	68.1	-67.55	8,370.9	-688.9	445.1	309.7	135.44	3.286	
19,855.0	11,625.0	19,718.3	11,454.0	66.8	68.5	-67.55	8,425.9	-689.4	445.1	308.9	136.24	3.267	
19,900.0	11,625.0	19,763.3	11,454.0	67.2	68.9	-67.55	8,470.9	-689.8	445.1	308.2	136.89	3.251	
19,950.0	11,625.0	19,813.3	11,454.0	67.5	69.2	-67.55	8,520.9	-690.2	445.1	307.5	137.62	3.234	
20,000.0	11,625.0	19,863.3	11,454.0	67.9	69.6	-67.55	8,570.9	-690.7	445.1	306.8	138.35	3.217	
20,045.0	11,625.0	19,908.3	11,454.0	68.3	69.9	-67.55	8,615.9	-691.1	445.1	306.1	139.01	3.202	
20,100.0	11,625.0	19,963.3	11,454.0	68.7	70.3	-67.55	8,670.9	-691.6	445.1	305.3	139.81	3.184	
20,140.0	11,625.0	20,003.3	11,454.0	69.0	70.6	-67.55	8,710.9	-692.0	445.1	304.7	140.40	3.170	
20,200.0	11,625.0	20,063.3	11,454.0	69.4	71.0	-67.55	8,770.9	-692.5	445.1	303.8	141.28	3.151	
20,235.0	11,625.0	20,098.3	11,454.0	69.7	71.3	-67.55	8,805.9	-692.8	445.1	303.3	141.79	3.139	
20,300.0	11,625.0	20,163.3	11,454.0	70.1	71.7	-67.55	8,870.9	-693.4	445.1	302.4	142.74	3.118	
20,330.0	11,625.0	20,193.3	11,454.0	70.4	72.0	-67.55	8,900.9	-693.7	445.1	301.9	143.18	3.109	
20,400.0	11,625.0	20,263.3	11,454.0	70.9	72.5	-67.55	8,970.9	-694.3	445.1	300.9	144.21	3.087	
20,425.0	11,625.0	20,288.3	11,454.0	71.1	72.7	-67.55	8,995.9	-694.6	445.1	300.5	144.57	3.079	
20,500.0	11,625.0	20,363.3	11,454.0	71.6	73.2	-67.55	9,070.9	-695.2	445.1	299.4	145.67	3.056	
20,520.0	11,625.0	20,383.3	11,454.0	71.8	73.3	-67.55	9,090.9	-695.4	445.1	299.1	145.97	3.049	
20,600.0	11,625.0	20,463.3	11,454.0	72.4	73.9	-67.55	9,170.9	-696.1	445.1	298.0	147.14	3.025	
20,615.0	11,625.0	20,478.3	11,454.0	72.5	74.0	-67.55	9,185.9	-696.3	445.1	297.7	147.36	3.021	
20,688.0	11,625.0	20,551.2	11,454.0	73.0	74.6	-67.55	9,258.9	-696.9	445.1	296.7	148.43	2.999	
20,700.0	11,625.0	20,563.3	11,454.0	73.1	74.7	-67.55	9,270.9	-697.1	445.1	296.5	148.61	2.995	
20,710.0	11,625.0	20,573.3	11,454.0	73.2	74.7	-67.55	9,280.9	-697.1	445.1	296.4	148.76	2.992	
20,800.0	11,625.0	20,663.3	11,454.0	73.8	75.4	-67.55	9,370.9	-698.0	445.1	295.0	150.08	2.966	
20,805.0	11,625.0	20,668.3	11,454.0	73.9	75.4	-67.55	9,375.9	-698.0	445.1	295.0	150.15	2.964	
20,900.0	11,625.0	20,763.3	11,454.0	74.6	76.1	-67.55	9,470.9	-698.9	445.1	293.6	151.55	2.937	
20,995.0	11,625.0	20,858.3	11,454.0	75.3	76.8	-67.55	9,565.9	-699.7	445.1	292.2	152.95	2.910	
21,000.0	11,625.0	20,863.3	11,454.0	75.3	76.8	-67.55	9,570.9	-699.8	445.1	292.1	153.02	2.909	
21,090.0	11,625.0	20,953.3	11,454.0	76.0	77.5	-67.55	9,660.9	-700.6	445.1	290.8	154.35	2.884	
21,100.0	11,625.0	20,963.3	11,454.0	76.1	77.6	-67.55	9,670.9	-700.7	445.1	290.6	154.50	2.881	
21,185.0	11,625.0	21,048.3	11,454.0	76.7	78.2	-67.55	9,755.9	-701.5	445.1	289.4	155.75	2.858	
21,200.0	11,625.0	21,063.3	11,454.0	76.8	78.3	-67.55	9,770.9	-701.6	445.1	289.1	155.97	2.854	
21,280.0	11,625.0	21,143.3	11,454.0	77.4	78.9	-67.55	9,850.9	-702.3	445.1	288.0	157.16	2.832	
21,300.0	11,625.0	21,163.3	11,454.0	77.6	79.0	-67.55	9,870.9	-702.5	445.1	287.7	157.45	2.827	
21,375.0	11,625.0	21,238.3	11,454.0	78.1	79.6	-67.55	9,945.9	-703.2	445.1	286.6	158.56	2.807	
21,400.0	11,625.0	21,263.3	11,454.0	78.3	79.8	-67.55	9,970.9	-703.4	445.1	286.2	158.93	2.801	
21,470.0	11,625.0	21,333.3	11,454.0	78.8	80.3	-67.55	10,040.9	-704.0	445.1	285.1	159.96	2.783	
21,500.0	11,625.0	21,363.3	11,454.0	79.1	80.5	-67.55	10,070.9	-704.3	445.1	284.7	160.41	2.775	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-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		
21,565.0	11,625.0	21,428.3	11,454.0	79.5	81.0	-67.55	10,135.9	-704.9	445.1	283.7	161.37	2.758		
21,600.0	11,625.0	21,463.3	11,454.0	79.8	81.2	-67.55	10,170.9	-705.2	445.1	283.2	161.89	2.750		
21,660.0	11,625.0	21,523.3	11,454.0	80.3	81.7	-67.55	10,230.9	-705.8	445.1	282.3	162.77	2.735		
21,700.0	11,625.0	21,563.3	11,454.0	80.6	82.0	-67.55	10,270.9	-706.1	445.1	281.7	163.37	2.725		
21,755.0	11,625.0	21,618.3	11,454.0	81.0	82.4	-67.55	10,325.9	-706.6	445.1	280.9	164.18	2.711		
21,800.0	11,625.0	21,663.3	11,454.0	81.3	82.7	-67.55	10,370.9	-707.0	445.1	280.3	164.85	2.700		
21,850.0	11,625.0	21,713.3	11,454.0	81.7	83.1	-67.55	10,420.9	-707.5	445.1	279.5	165.59	2.688		
21,857.3	11,625.0	21,720.5	11,454.0	81.7	83.1	-67.55	10,428.1	-707.6	445.1	279.4	165.70	2.686		
21,900.0	11,625.0	21,760.3	11,454.0	82.0	83.4	-67.55	10,467.9	-707.9	445.1	278.8	166.34	2.676		
21,945.0	11,625.0	21,760.3	11,454.0	82.4	83.4	-67.55	10,467.9	-707.9	447.7	281.3	166.36	2.691		
21,956.2	11,625.0	21,760.3	11,454.0	82.5	83.4	-67.55	10,467.9	-707.9	449.0	282.9	166.13	2.703		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	3.0	3.0	89.39	0.3	29.9	30.0					
95.0	95.0	94.0	94.0	3.0	3.0	89.39	0.3	29.9	30.0	23.9	6.03	4.971		
100.0	100.0	99.0	99.0	3.0	3.0	89.39	0.3	29.9	30.0	23.9	6.03	4.968		
190.0	190.0	189.0	189.0	3.1	3.1	89.39	0.3	29.9	30.0	23.8	6.15	4.869		
200.0	200.0	199.0	199.0	3.1	3.1	89.39	0.3	29.9	30.0	23.8	6.17	4.854		
285.0	285.0	284.0	284.0	3.2	3.2	89.39	0.3	29.9	30.0	23.6	6.31	4.747		
300.0	300.0	299.0	299.0	3.2	3.2	89.39	0.3	29.9	30.0	23.6	6.34	4.726		
380.0	380.0	379.0	379.0	3.3	3.3	89.39	0.3	29.9	30.0	23.5	6.49	4.617		
400.0	400.0	399.0	399.0	3.3	3.3	89.39	0.3	29.9	30.0	23.4	6.53	4.588		
475.0	475.0	474.0	474.0	3.4	3.4	89.39	0.3	29.9	30.0	23.3	6.68	4.482		
500.0	500.0	499.0	499.0	3.4	3.4	89.39	0.3	29.9	30.0	23.2	6.74	4.445		
570.0	570.0	569.0	569.0	3.5	3.5	89.39	0.3	29.9	30.0	23.1	6.90	4.343		
600.0	600.0	599.0	599.0	3.5	3.5	89.39	0.3	29.9	30.0	23.0	6.97	4.298		
665.0	665.0	664.0	664.0	3.6	3.6	89.39	0.3	29.9	30.0	22.8	7.13	4.203		
700.0	700.0	699.0	699.0	3.7	3.7	89.39	0.3	29.9	30.0	22.7	7.21	4.152		
760.0	760.0	759.0	759.0	3.8	3.8	89.39	0.3	29.9	30.0	22.6	7.37	4.064		
800.0	800.0	799.0	799.0	3.8	3.8	89.39	0.3	29.9	30.0	22.5	7.48	4.006		
855.0	855.0	854.0	854.0	3.9	3.9	89.39	0.3	29.9	30.0	22.3	7.63	3.928		
900.0	900.0	899.0	899.0	4.0	4.0	89.39	0.3	29.9	30.0	22.2	7.75	3.864		
950.0	950.0	949.0	949.0	4.1	4.1	89.39	0.3	29.9	30.0	22.1	7.89	3.794		
1,000.0	1,000.0	999.0	999.0	4.2	4.2	89.39	0.3	29.9	30.0	21.9	8.04	3.725		
1,045.0	1,045.0	1,044.0	1,044.0	4.2	4.2	89.39	0.3	29.9	30.0	21.8	8.17	3.665		
1,100.0	1,100.0	1,099.0	1,099.0	4.3	4.3	89.39	0.3	29.9	30.0	21.6	8.34	3.592		
1,140.0	1,140.0	1,139.0	1,139.0	4.4	4.4	89.39	0.3	29.9	30.0	21.5	8.46	3.540		
1,200.0	1,200.0	1,199.0	1,199.0	4.5	4.5	89.39	0.3	29.9	30.0	21.3	8.65	3.463		
1,235.0	1,235.0	1,234.0	1,234.0	4.6	4.6	89.39	0.3	29.9	30.0	21.2	8.76	3.420		
1,300.0	1,300.0	1,299.0	1,299.0	4.7	4.7	89.39	0.3	29.9	30.0	21.0	8.97	3.341		
1,330.0	1,330.0	1,329.0	1,329.0	4.7	4.7	89.39	0.3	29.9	30.0	20.9	9.06	3.305		
1,400.0	1,400.0	1,399.0	1,399.0	4.9	4.9	89.39	0.3	29.9	30.0	20.7	9.29	3.223		
1,425.0	1,425.0	1,424.0	1,424.0	4.9	4.9	89.39	0.3	29.9	30.0	20.6	9.37	3.195		
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	89.39	0.3	29.9	30.0	20.3	9.63	3.112		
1,520.0	1,520.0	1,519.0	1,519.0	5.1	5.1	89.39	0.3	29.9	30.0	20.3	9.69	3.090		
1,600.0	1,600.0	1,599.0	1,599.0	5.3	5.3	89.39	0.3	29.9	30.0	20.0	9.96	3.006		
1,615.0	1,615.0	1,614.0	1,614.0	5.3	5.3	89.39	0.3	29.9	30.0	19.9	10.02	2.990		
1,700.0	1,700.0	1,699.0	1,699.0	5.5	5.5	89.39	0.3	29.9	30.0	19.6	10.31	2.905		
1,710.0	1,710.0	1,709.0	1,709.0	5.5	5.5	89.39	0.3	29.9	30.0	19.6	10.35	2.895		
1,800.0	1,800.0	1,799.0	1,799.0	5.7	5.7	89.39	0.3	29.9	30.0	19.3	10.66	2.809		
1,805.0	1,805.0	1,804.0	1,804.0	5.7	5.7	89.39	0.3	29.9	30.0	19.3	10.68	2.805		
1,900.0	1,900.0	1,899.0	1,899.0	5.9	5.9	89.39	0.3	29.9	30.0	18.9	11.02	2.719		
1,995.0	1,995.0	1,994.0	1,994.0	6.1	6.1	89.39	0.3	29.9	30.0	18.6	11.36	2.637		
2,000.0	2,000.0	1,999.0	1,999.0	6.1	6.1	89.39	0.3	29.9	30.0	18.6	11.38	2.633 CC, ES, SF		
2,090.0	2,090.0	2,088.1	2,088.0	6.3	6.2	89.33	0.4	31.3	31.3	19.6	11.73	2.670		
2,100.0	2,100.0	2,097.9	2,097.9	6.3	6.2	89.31	0.4	31.6	31.6	19.9	11.77	2.689		
2,185.0	2,185.0	2,181.9	2,181.7	6.5	6.3	89.16	0.5	35.7	35.8	23.7	12.10	2.959		
2,200.0	2,200.0	2,196.6	2,196.5	6.5	6.3	89.13	0.6	36.7	36.8	24.6	12.16	3.026		
2,280.0	2,280.0	2,275.6	2,275.2	6.7	6.4	88.96	0.8	43.1	43.3	30.9	12.37	3.496		
2,300.0	2,300.0	2,295.6	2,295.1	6.7	6.4	88.92	0.8	44.8	45.0	32.6	12.43	3.621		
2,375.0	2,375.0	2,370.3	2,369.5	6.9	6.5	88.81	1.1	51.3	51.5	38.8	12.70	4.058		
2,400.0	2,400.0	2,395.2	2,394.3	6.9	6.5	88.77	1.1	53.5	53.7	40.9	12.79	4.199		
2,470.0	2,470.0	2,464.9	2,463.8	7.1	6.6	88.69	1.4	59.6	59.8	46.7	13.06	4.580		
2,500.0	2,500.0	2,494.8	2,493.6	7.2	6.6	88.66	1.5	62.2	62.4	49.2	13.18	4.738		
2,565.0	2,565.0	2,559.6	2,558.1	7.3	6.7	88.61	1.6	67.8	68.1	54.7	13.44	5.067		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
2,600.0	2,600.0	2,594.4	2,592.8	7.4	6.8	88.58	1.8	70.8	71.1	57.6	13.58	5.239		
2,660.0	2,660.0	2,654.2	2,652.3	7.5	6.9	88.54	1.9	76.1	76.4	62.5	13.83	5.522		
2,700.0	2,700.0	2,694.0	2,692.0	7.6	7.0	88.52	2.1	79.5	79.9	65.9	14.00	5.704		
2,755.0	2,755.0	2,748.8	2,746.6	7.7	7.2	88.49	2.2	84.3	84.6	70.4	14.24	5.946		
2,800.0	2,800.0	2,793.7	2,791.3	7.8	7.3	88.46	2.4	88.2	88.6	74.1	14.43	6.137		
2,850.0	2,850.0	2,843.5	2,840.9	7.9	7.4	88.44	2.5	92.5	92.9	78.3	14.65	6.341		
2,900.0	2,900.0	2,893.3	2,890.5	8.0	7.5	88.42	2.7	96.9	97.3	82.4	14.88	6.538		
2,945.0	2,945.0	2,938.1	2,935.2	8.1	7.6	88.41	2.8	100.8	101.2	86.1	15.08	6.709		
3,000.0	3,000.0	2,992.9	2,989.8	8.3	7.8	88.39	3.0	105.6	106.0	90.7	15.34	6.911		
3,040.0	3,040.0	3,032.7	3,029.4	8.3	7.9	177.41	3.1	109.0	109.8	94.2	15.53	7.070		
3,100.0	3,100.0	3,092.4	3,088.8	8.4	8.1	177.42	3.3	114.2	116.4	100.6	15.81	7.366		
3,135.0	3,134.9	3,127.1	3,123.4	8.4	8.2	177.43	3.4	117.2	120.9	105.0	15.97	7.573		
3,200.0	3,199.8	3,191.4	3,187.5	8.5	8.3	177.48	3.6	122.8	130.4	114.1	16.26	8.016		
3,230.0	3,229.8	3,221.0	3,217.0	8.5	8.4	177.51	3.7	125.4	135.2	118.8	16.37	8.258		
3,250.0	3,249.7	3,240.7	3,236.6	8.5	8.5	177.53	3.7	127.1	138.6	122.2	16.45	8.428		
3,300.0	3,299.5	3,289.9	3,285.7	8.5	8.6	177.59	3.9	131.4	147.3	130.7	16.63	8.857		
3,325.0	3,324.4	3,314.6	3,310.2	8.5	8.7	177.61	4.0	133.6	151.6	134.9	16.74	9.059		
3,400.0	3,399.1	3,388.4	3,383.8	8.6	8.9	177.68	4.2	140.0	164.6	147.6	17.06	9.648		
3,420.0	3,419.0	3,408.1	3,403.4	8.6	9.0	177.70	4.2	141.7	168.1	151.0	17.16	9.800		
3,500.0	3,498.7	3,486.9	3,481.9	8.7	9.2	177.76	4.5	148.6	182.0	164.5	17.52	10.387		
3,515.0	3,513.7	3,501.7	3,496.6	8.7	9.3	177.77	4.5	149.9	184.6	167.0	17.59	10.494		
3,600.0	3,598.4	3,585.4	3,580.0	8.8	9.5	177.83	4.8	157.2	199.4	181.4	18.00	11.076		
3,610.0	3,608.3	3,595.2	3,589.8	8.8	9.6	177.83	4.8	158.0	201.1	183.0	18.05	11.142		
3,700.0	3,698.0	3,683.9	3,678.1	8.9	9.8	177.88	5.1	165.7	216.7	198.2	18.48	11.728		
3,705.0	3,703.0	3,688.9	3,683.1	8.9	9.8	177.88	5.1	166.2	217.6	199.1	18.50	11.760		
3,800.0	3,797.6	3,784.5	3,778.3	9.0	10.1	177.93	5.4	174.0	233.6	214.6	18.99	12.300		
3,895.0	3,892.2	3,880.2	3,873.9	9.1	10.4	177.97	5.6	181.1	248.9	229.4	19.50	12.762		
3,900.0	3,897.2	3,885.3	3,878.9	9.1	10.5	177.98	5.6	181.5	249.6	230.1	19.53	12.785		
3,990.0	3,986.9	3,976.3	3,969.7	9.3	10.7	178.02	5.8	187.4	263.3	243.3	20.01	13.157		
4,000.0	3,996.8	3,986.4	3,979.8	9.3	10.8	178.02	5.9	188.0	264.8	244.7	20.07	13.195		
4,085.0	4,081.5	4,072.6	4,065.8	9.5	11.0	178.06	6.0	192.9	277.0	256.5	20.53	13.491		
4,100.0	4,096.4	4,087.8	4,081.0	9.5	11.1	178.06	6.1	193.7	279.1	258.5	20.62	13.538		
4,180.0	4,176.1	4,169.1	4,162.2	9.7	11.3	178.10	6.2	197.6	289.9	268.8	21.06	13.769		
4,200.0	4,196.1	4,189.4	4,182.5	9.8	11.4	178.10	6.2	198.5	292.5	271.3	21.16	13.821		
4,275.0	4,270.8	4,265.8	4,258.9	10.0	11.6	178.14	6.3	201.5	302.0	280.4	21.58	13.996		
4,300.0	4,295.7	4,291.3	4,284.3	10.0	11.7	178.15	6.4	202.4	305.0	283.3	21.71	14.049		
4,370.0	4,365.4	4,362.7	4,355.7	10.2	11.9	178.17	6.5	204.6	313.3	291.2	22.09	14.180		
4,400.0	4,395.3	4,393.4	4,386.4	10.3	12.0	178.19	6.5	205.4	316.7	294.4	22.26	14.229		
4,465.0	4,460.1	4,459.8	4,452.8	10.5	12.1	178.21	6.5	206.9	323.8	301.2	22.60	14.324		
4,500.0	4,494.9	4,495.7	4,488.6	10.6	12.2	178.23	6.6	207.6	327.5	304.7	22.79	14.368		
4,560.0	4,554.7	4,557.1	4,550.1	10.7	12.4	178.25	6.6	208.4	333.5	310.4	23.10	14.437		
4,600.0	4,594.5	4,598.1	4,591.1	10.8	12.5	178.27	6.6	208.7	337.3	314.0	23.31	14.474		
4,655.0	4,649.3	4,654.6	4,647.6	11.0	12.6	178.30	6.6	209.0	342.4	318.9	23.53	14.551		
4,700.0	4,694.2	4,700.2	4,693.2	11.1	12.6	178.32	6.6	209.0	346.3	322.6	23.69	14.619		
4,750.0	4,744.0	4,750.0	4,743.0	11.3	12.6	178.34	6.6	209.0	350.7	326.8	23.86	14.695		
4,800.0	4,793.8	4,799.8	4,792.8	11.4	12.6	178.36	6.6	209.0	355.0	331.0	24.04	14.770		
4,845.0	4,838.6	4,844.6	4,837.6	11.5	12.7	178.37	6.6	209.0	359.0	334.8	24.20	14.835		
4,900.0	4,893.4	4,899.4	4,892.4	11.7	12.7	178.40	6.6	209.0	363.8	339.4	24.39	14.914		
4,940.0	4,933.3	4,939.3	4,932.3	11.8	12.7	178.41	6.6	209.0	367.2	342.7	24.53	14.969		
5,000.0	4,993.0	4,999.1	4,992.0	12.0	12.8	178.43	6.6	209.0	372.5	347.7	24.75	15.050		
5,035.0	5,027.9	5,033.9	5,026.9	12.1	12.8	178.45	6.6	209.0	375.5	350.6	24.88	15.095		
5,100.0	5,092.6	5,098.7	5,091.6	12.3	12.8	178.47	6.6	209.0	381.2	356.1	25.11	15.179		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,130.0	5,122.5	5,128.6	5,121.5	12.4	12.8	178.48	6.6	209.0	383.8	358.6	25.22	15.218		
5,187.7	5,180.0	5,186.0	5,179.0	12.6	12.9	178.50	6.6	209.0	388.8	363.4	25.43	15.292		
5,200.0	5,192.3	5,198.3	5,191.3	12.6	12.9	178.50	6.6	209.0	389.9	364.4	25.47	15.310		
5,225.0	5,217.2	5,223.2	5,216.2	12.7	12.9	178.51	6.6	209.0	391.9	366.4	25.56	15.336		
5,300.0	5,292.0	5,298.0	5,291.0	12.9	12.9	178.53	6.6	209.0	397.5	371.7	25.83	15.389		
5,320.0	5,311.9	5,318.0	5,310.9	13.0	13.0	178.54	6.6	209.0	398.8	372.9	25.90	15.398		
5,400.0	5,391.8	5,397.8	5,390.8	13.2	13.0	178.56	6.6	209.0	403.4	377.2	26.18	15.406		
5,415.0	5,406.8	5,412.8	5,405.8	13.2	13.0	178.56	6.6	209.0	404.1	377.9	26.23	15.404		
5,500.0	5,491.7	5,497.7	5,490.7	13.5	13.1	178.57	6.6	209.0	407.5	381.0	26.52	15.367		
5,510.0	5,501.7	5,507.7	5,500.7	13.5	13.1	178.57	6.6	209.0	407.9	381.3	26.55	15.361		
5,600.0	5,591.7	5,597.7	5,590.7	13.7	13.1	178.58	6.6	209.0	409.9	383.1	26.83	15.279		
5,605.0	5,596.7	5,602.7	5,595.7	13.7	13.1	178.58	6.6	209.0	410.0	383.2	26.84	15.276		
5,687.7	5,679.4	5,685.4	5,678.4	13.8	13.2	89.55	6.6	209.0	410.6	383.6	27.00	15.207		
5,700.0	5,691.7	5,697.7	5,690.7	13.8	13.2	89.55	6.6	209.0	410.6	383.6	27.01	15.202		
5,795.0	5,786.7	5,792.7	5,785.7	13.9	13.2	89.55	6.6	209.0	410.6	383.5	27.12	15.141		
5,800.0	5,791.7	5,797.7	5,790.7	13.9	13.2	89.55	6.6	209.0	410.6	383.5	27.12	15.138		
5,890.0	5,881.7	5,887.7	5,880.7	13.9	13.3	89.55	6.6	209.0	410.6	383.4	27.23	15.080		
5,900.0	5,891.7	5,897.7	5,890.7	13.9	13.3	89.55	6.6	209.0	410.6	383.4	27.24	15.074		
5,985.0	5,976.7	5,982.7	5,975.7	14.0	13.4	89.55	6.6	209.0	410.6	383.3	27.34	15.020		
6,000.0	5,991.7	5,997.7	5,990.7	14.0	13.4	89.55	6.6	209.0	410.6	383.3	27.36	15.010		
6,080.0	6,071.7	6,077.7	6,070.7	14.0	13.4	89.55	6.6	209.0	410.6	383.2	27.45	14.960		
6,100.0	6,091.7	6,097.7	6,090.7	14.0	13.4	89.55	6.6	209.0	410.6	383.1	27.47	14.947		
6,175.0	6,166.7	6,172.7	6,165.7	14.1	13.5	89.55	6.6	209.0	410.6	383.1	27.56	14.900		
6,200.0	6,191.7	6,197.7	6,190.7	14.1	13.5	89.55	6.6	209.0	410.6	383.0	27.59	14.884		
6,270.0	6,261.7	6,267.7	6,260.7	14.1	13.5	89.55	6.6	209.0	410.6	382.9	27.67	14.840		
6,300.0	6,291.7	6,297.7	6,290.7	14.2	13.6	89.55	6.6	209.0	410.6	382.9	27.70	14.821		
6,365.0	6,356.7	6,362.7	6,355.7	14.2	13.6	89.55	6.6	209.0	410.6	382.8	27.78	14.780		
6,400.0	6,391.7	6,397.7	6,390.7	14.2	13.6	89.55	6.6	209.0	410.6	382.8	27.82	14.758		
6,460.0	6,451.7	6,457.7	6,450.7	14.2	13.7	89.55	6.6	209.0	410.6	382.7	27.89	14.721		
6,500.0	6,491.7	6,497.7	6,490.7	14.3	13.7	89.55	6.6	209.0	410.6	382.7	27.94	14.696		
6,555.0	6,546.7	6,552.7	6,545.7	14.3	13.7	89.55	6.6	209.0	410.6	382.6	28.01	14.662		
6,600.0	6,591.7	6,597.7	6,590.7	14.3	13.7	89.55	6.6	209.0	410.6	382.6	28.06	14.634		
6,650.0	6,641.7	6,647.7	6,640.7	14.4	13.8	89.55	6.6	209.0	410.6	382.5	28.12	14.603		
6,700.0	6,691.7	6,697.7	6,690.7	14.4	13.8	89.55	6.6	209.0	410.6	382.4	28.18	14.573		
6,745.0	6,736.7	6,742.7	6,735.7	14.4	13.8	89.55	6.6	209.0	410.6	382.4	28.23	14.545		
6,800.0	6,791.7	6,797.7	6,790.7	14.4	13.9	89.55	6.6	209.0	410.6	382.3	28.30	14.511		
6,840.0	6,831.7	6,837.7	6,830.7	14.5	13.9	89.55	6.6	209.0	410.6	382.3	28.34	14.487		
6,900.0	6,891.7	6,897.7	6,890.7	14.5	13.9	89.55	6.6	209.0	410.6	382.2	28.42	14.450		
6,935.0	6,926.7	6,932.7	6,925.7	14.5	14.0	89.55	6.6	209.0	410.6	382.2	28.46	14.429		
7,000.0	6,991.7	6,997.7	6,990.7	14.5	14.0	89.55	6.6	209.0	410.6	382.1	28.54	14.389		
7,030.0	7,021.7	7,027.7	7,020.7	14.6	14.0	89.55	6.6	209.0	410.6	382.0	28.57	14.371		
7,100.0	7,091.7	7,097.7	7,090.7	14.6	14.1	89.55	6.6	209.0	410.6	382.0	28.66	14.329		
7,125.0	7,116.7	7,122.7	7,115.7	14.6	14.1	89.55	6.6	209.0	410.6	381.9	28.69	14.314		
7,200.0	7,191.7	7,197.7	7,190.7	14.7	14.1	89.55	6.6	209.0	410.6	381.8	28.78	14.269		
7,220.0	7,211.7	7,217.7	7,210.7	14.7	14.1	89.55	6.6	209.0	410.6	381.8	28.80	14.257		
7,300.0	7,291.7	7,297.7	7,290.7	14.7	14.2	89.55	6.6	209.0	410.6	381.7	28.90	14.209		
7,315.0	7,306.7	7,312.7	7,305.7	14.7	14.2	89.55	6.6	209.0	410.6	381.7	28.92	14.200		
7,400.0	7,391.7	7,397.7	7,390.7	14.8	14.3	89.55	6.6	209.0	410.6	381.6	29.02	14.149		
7,410.0	7,401.7	7,407.7	7,400.7	14.8	14.3	89.55	6.6	209.0	410.6	381.6	29.03	14.143		
7,500.0	7,491.7	7,497.7	7,490.7	14.8	14.3	89.55	6.6	209.0	410.6	381.5	29.14	14.090		
7,505.0	7,496.7	7,502.7	7,495.7	14.8	14.3	89.55	6.6	209.0	410.6	381.5	29.15	14.087		
7,600.0	7,591.7	7,597.7	7,590.7	14.9	14.4	89.55	6.6	209.0	410.6	381.3	29.27	14.031		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program:		0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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		
7,695.0	7,686.7	7,692.7	7,685.7	14.9	14.4	89.55	6.6	209.0	410.6	381.2	29.38	13.975		
7,700.0	7,691.7	7,697.7	7,690.7	14.9	14.4	89.55	6.6	209.0	410.6	381.2	29.39	13.972		
7,790.0	7,781.7	7,787.7	7,780.7	15.0	14.5	89.55	6.6	209.0	410.6	381.1	29.50	13.920		
7,800.0	7,791.7	7,797.7	7,790.7	15.0	14.5	89.55	6.6	209.0	410.6	381.1	29.51	13.914		
7,885.0	7,876.7	7,882.7	7,875.7	15.1	14.6	89.55	6.6	209.0	410.6	381.0	29.62	13.864		
7,900.0	7,891.7	7,897.7	7,890.7	15.1	14.6	89.55	6.6	209.0	410.6	381.0	29.64	13.856		
7,980.0	7,971.7	7,977.7	7,970.7	15.1	14.6	89.55	6.6	209.0	410.6	380.9	29.73	13.809		
8,000.0	7,991.7	7,997.7	7,990.7	15.1	14.6	89.55	6.6	209.0	410.6	380.9	29.76	13.798		
8,075.0	8,066.7	8,072.7	8,065.7	15.2	14.7	89.55	6.6	209.0	410.6	380.8	29.85	13.755		
8,100.0	8,091.7	8,097.7	8,090.7	15.2	14.7	89.55	6.6	209.0	410.6	380.7	29.88	13.740		
8,170.0	8,161.7	8,167.7	8,160.7	15.2	14.8	89.55	6.6	209.0	410.6	380.6	29.97	13.700		
8,200.0	8,191.7	8,197.7	8,190.7	15.2	14.8	89.55	6.6	209.0	410.6	380.6	30.01	13.683		
8,265.0	8,256.7	8,262.7	8,255.7	15.3	14.8	89.55	6.6	209.0	410.6	380.5	30.09	13.646		
8,300.0	8,291.7	8,297.7	8,290.7	15.3	14.8	89.55	6.6	209.0	410.6	380.5	30.13	13.626		
8,360.0	8,351.7	8,357.7	8,350.7	15.3	14.9	89.55	6.6	209.0	410.6	380.4	30.21	13.593		
8,400.0	8,391.7	8,397.7	8,390.7	15.4	14.9	89.55	6.6	209.0	410.6	380.4	30.26	13.570		
8,455.0	8,446.7	8,452.7	8,445.7	15.4	14.9	89.55	6.6	209.0	410.6	380.3	30.33	13.539		
8,500.0	8,491.7	8,497.7	8,490.7	15.4	15.0	89.55	6.6	209.0	410.6	380.2	30.38	13.514		
8,550.0	8,541.7	8,547.7	8,540.7	15.5	15.0	89.55	6.6	209.0	410.6	380.2	30.45	13.486		
8,600.0	8,591.7	8,597.7	8,590.7	15.5	15.0	89.55	6.6	209.0	410.6	380.1	30.51	13.458		
8,645.0	8,636.7	8,642.7	8,635.7	15.5	15.1	89.55	6.6	209.0	410.6	380.0	30.57	13.433		
8,700.0	8,691.7	8,697.7	8,690.7	15.5	15.1	89.55	6.6	209.0	410.6	380.0	30.64	13.402		
8,740.0	8,731.7	8,737.7	8,730.7	15.6	15.1	89.55	6.6	209.0	410.6	379.9	30.69	13.380		
8,800.0	8,791.7	8,797.7	8,790.7	15.6	15.2	89.55	6.6	209.0	410.6	379.8	30.76	13.347		
8,835.0	8,826.7	8,832.7	8,825.7	15.6	15.2	89.55	6.6	209.0	410.6	379.8	30.81	13.328		
8,900.0	8,891.7	8,897.7	8,890.7	15.7	15.2	89.55	6.6	209.0	410.6	379.7	30.89	13.292		
8,930.0	8,921.7	8,927.7	8,920.7	15.7	15.3	89.55	6.6	209.0	410.6	379.7	30.93	13.275		
9,000.0	8,991.7	8,997.7	8,990.7	15.7	15.3	89.55	6.6	209.0	410.6	379.6	31.02	13.237		
9,025.0	9,016.7	9,022.7	9,015.7	15.7	15.3	89.55	6.6	209.0	410.6	379.6	31.05	13.224		
9,100.0	9,091.7	9,097.7	9,090.7	15.8	15.4	89.55	6.6	209.0	410.6	379.5	31.15	13.183		
9,120.0	9,111.7	9,117.7	9,110.7	15.8	15.4	89.55	6.6	209.0	410.6	379.4	31.17	13.172		
9,200.0	9,191.7	9,197.7	9,190.7	15.8	15.4	89.55	6.6	209.0	410.6	379.3	31.28	13.129		
9,215.0	9,206.7	9,212.7	9,205.7	15.9	15.4	89.55	6.6	209.0	410.6	379.3	31.30	13.121		
9,300.0	9,291.7	9,297.7	9,290.7	15.9	15.5	89.55	6.6	209.0	410.6	379.2	31.40	13.075		
9,310.0	9,301.7	9,307.7	9,300.7	15.9	15.5	89.55	6.6	209.0	410.6	379.2	31.42	13.070		
9,400.0	9,391.7	9,397.7	9,390.7	16.0	15.6	89.55	6.6	209.0	410.6	379.1	31.53	13.022		
9,405.0	9,396.7	9,402.7	9,395.7	16.0	15.6	89.55	6.6	209.0	410.6	379.1	31.54	13.019		
9,500.0	9,491.7	9,497.7	9,490.7	16.0	15.6	89.55	6.6	209.0	410.6	379.0	31.66	12.968		
9,595.0	9,586.7	9,592.7	9,585.7	16.1	15.7	89.55	6.6	209.0	410.6	378.8	31.79	12.918		
9,600.0	9,591.7	9,597.7	9,590.7	16.1	15.7	89.55	6.6	209.0	410.6	378.8	31.79	12.916		
9,690.0	9,681.7	9,687.7	9,680.7	16.1	15.8	89.55	6.6	209.0	410.6	378.7	31.91	12.868		
9,700.0	9,691.7	9,697.7	9,690.7	16.2	15.8	89.55	6.6	209.0	410.6	378.7	31.92	12.863		
9,785.0	9,776.7	9,782.7	9,775.7	16.2	15.8	89.55	6.6	209.0	410.6	378.6	32.03	12.819		
9,800.0	9,791.7	9,797.7	9,790.7	16.2	15.8	89.55	6.6	209.0	410.6	378.6	32.05	12.811		
9,880.0	9,871.7	9,877.7	9,870.7	16.3	15.9	89.55	6.6	209.0	410.6	378.5	32.16	12.769		
9,900.0	9,891.7	9,897.7	9,890.7	16.3	15.9	89.55	6.6	209.0	410.6	378.4	32.18	12.759		
9,975.0	9,966.7	9,972.7	9,965.7	16.3	16.0	89.55	6.6	209.0	410.6	378.3	32.28	12.720		
10,000.0	9,991.7	9,997.7	9,990.7	16.3	16.0	89.55	6.6	209.0	410.6	378.3	32.31	12.707		
10,070.0	10,061.7	10,067.7	10,060.7	16.4	16.0	89.55	6.6	209.0	410.6	378.2	32.40	12.671		
10,100.0	10,091.7	10,097.7	10,090.7	16.4	16.0	89.55	6.6	209.0	410.6	378.2	32.44	12.656		
10,165.0	10,156.7	10,162.7	10,155.7	16.4	16.1	89.55	6.6	209.0	410.6	378.1	32.53	12.623		
10,200.0	10,191.7	10,197.7	10,190.7	16.5	16.1	89.55	6.6	209.0	410.6	378.0	32.58	12.605		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,260.0	10,251.7	10,257.7	10,250.7	16.5	16.2	89.55	6.6	209.0	410.6	378.0	32.65	12.575	
10,300.0	10,291.7	10,297.7	10,290.7	16.5	16.2	89.55	6.6	209.0	410.6	377.9	32.71	12.554	
10,355.0	10,346.7	10,352.7	10,345.7	16.6	16.2	89.55	6.6	209.0	410.6	377.8	32.78	12.527	
10,400.0	10,391.7	10,397.7	10,390.7	16.6	16.3	89.55	6.6	209.0	410.6	377.8	32.84	12.504	
10,450.0	10,441.7	10,447.7	10,440.7	16.6	16.3	89.55	6.6	209.0	410.6	377.7	32.90	12.479	
10,500.0	10,491.7	10,497.7	10,490.7	16.7	16.3	89.55	6.6	209.0	410.6	377.6	32.97	12.454	
10,545.0	10,536.7	10,542.7	10,535.7	16.7	16.4	89.55	6.6	209.0	410.6	377.6	33.03	12.431	
10,600.0	10,591.7	10,597.7	10,590.7	16.7	16.4	89.55	6.6	209.0	410.6	377.5	33.10	12.404	
10,640.0	10,631.7	10,637.7	10,630.7	16.7	16.4	89.55	6.6	209.0	410.6	377.5	33.16	12.384	
10,700.0	10,691.7	10,697.7	10,690.7	16.8	16.5	89.55	6.6	209.0	410.6	377.4	33.24	12.354	
10,735.0	10,726.7	10,732.7	10,725.7	16.8	16.5	89.55	6.6	209.0	410.6	377.3	33.28	12.337	
10,800.0	10,791.7	10,797.7	10,790.7	16.8	16.5	89.55	6.6	209.0	410.6	377.2	33.37	12.305	
10,830.0	10,821.7	10,827.7	10,820.7	16.9	16.6	89.55	6.6	209.0	410.6	377.2	33.41	12.291	
10,900.0	10,891.7	10,897.7	10,890.7	16.9	16.6	89.55	6.6	209.0	410.6	377.1	33.50	12.256	
10,925.0	10,916.7	10,922.7	10,915.7	16.9	16.6	89.55	6.6	209.0	410.6	377.1	33.53	12.246	
11,000.0	10,991.7	10,997.7	10,990.7	17.0	16.6	89.53	6.8	209.0	410.6	377.0	33.61	12.218	
11,008.4	11,000.1	11,006.1	10,999.1	17.0	16.6	89.48	7.1	209.0	410.6	377.0	33.61	12.216	
11,020.0	11,011.7	11,017.7	11,010.6	17.0	16.6	89.38	7.8	209.0	410.6	377.0	33.62	12.212	
11,100.0	11,091.7	11,095.7	11,087.7	17.0	16.7	87.73	19.7	208.9	410.8	377.1	33.68	12.198	
11,115.0	11,106.7	11,109.8	11,101.3	17.0	16.7	87.24	23.2	208.9	411.0	377.3	33.68	12.200	
11,155.9	11,147.5	11,147.1	11,136.8	17.1	16.7	85.69	34.3	208.8	411.6	377.9	33.69	12.217	
11,175.0	11,166.7	11,164.0	11,152.7	17.1	16.7	85.37	40.3	208.7	412.1	378.4	33.69	12.231	
11,200.0	11,191.6	11,185.8	11,172.8	17.1	16.7	84.29	48.8	208.7	412.9	379.2	33.70	12.253	
11,210.0	11,201.6	11,194.4	11,180.6	17.1	16.7	83.86	52.4	208.6	413.3	379.6	33.70	12.262	
11,225.0	11,216.4	11,207.3	11,192.2	17.1	16.7	83.22	58.1	208.6	413.8	380.1	33.71	12.276	
11,250.0	11,241.1	11,228.6	11,210.9	17.1	16.7	82.18	68.1	208.5	414.9	381.2	33.73	12.301	
11,275.0	11,265.4	11,250.0	11,229.4	17.1	16.7	81.14	79.0	208.4	416.0	382.3	33.75	12.327	
11,300.0	11,289.5	11,270.4	11,246.4	17.1	16.7	80.16	90.2	208.3	417.3	383.5	33.79	12.349	
11,305.0	11,294.3	11,275.0	11,250.2	17.1	16.7	79.95	92.8	208.3	417.6	383.8	33.80	12.355	
11,325.0	11,313.2	11,290.9	11,263.1	17.1	16.7	79.20	102.2	208.2	418.7	384.8	33.84	12.371	
11,350.0	11,336.4	11,311.3	11,279.1	17.1	16.7	78.26	114.7	208.1	420.1	386.2	33.90	12.391	
11,375.0	11,359.1	11,331.5	11,294.4	17.1	16.7	77.36	127.8	207.9	421.6	387.6	33.98	12.407	
11,400.0	11,381.2	11,350.0	11,308.0	17.1	16.7	76.54	140.4	207.8	423.1	389.0	34.09	12.413	
11,425.0	11,402.6	11,371.3	11,323.0	17.1	16.7	75.65	155.6	207.7	424.7	390.5	34.17	12.427	
11,450.0	11,423.4	11,391.0	11,336.3	17.1	16.7	74.85	170.1	207.6	426.2	392.0	34.29	12.431	
11,475.0	11,443.4	11,410.5	11,348.8	17.1	16.7	74.09	185.1	207.4	427.8	393.4	34.42	12.431	
11,495.0	11,458.9	11,425.0	11,357.7	17.1	16.7	73.53	196.5	207.3	429.1	394.5	34.54	12.423	
11,500.0	11,462.6	11,429.9	11,360.6	17.1	16.7	73.36	200.5	207.3	429.4	394.8	34.56	12.426	
11,525.0	11,481.0	11,450.0	11,372.2	17.1	16.7	72.66	216.9	207.1	430.9	396.2	34.69	12.421	
11,550.0	11,498.4	11,468.3	11,382.2	17.1	16.8	72.03	232.3	207.0	432.4	397.6	34.86	12.405	
11,575.0	11,514.9	11,487.4	11,391.9	17.1	16.8	71.43	248.7	206.8	433.9	398.9	35.02	12.389	
11,590.0	11,524.3	11,500.0	11,398.0	17.1	16.8	71.06	259.7	206.7	434.7	399.6	35.11	12.383	
11,600.0	11,530.3	11,506.4	11,401.0	17.1	16.8	70.87	265.4	206.7	435.3	400.1	35.19	12.370	
11,625.0	11,544.7	11,525.0	11,409.2	17.2	16.8	70.35	282.1	206.5	436.6	401.2	35.36	12.347	
11,650.0	11,558.1	11,544.1	11,416.9	17.2	16.8	69.87	299.5	206.4	437.8	402.3	35.53	12.324	
11,675.0	11,570.3	11,562.9	11,423.8	17.2	16.8	69.44	317.0	206.2	439.0	403.3	35.69	12.299	
11,685.0	11,574.8	11,570.3	11,426.4	17.2	16.8	69.27	324.0	206.2	439.4	403.7	35.76	12.288	
11,700.0	11,581.3	11,581.5	11,430.0	17.2	16.9	69.04	334.6	206.1	440.1	404.2	35.86	12.272	
11,725.0	11,591.2	11,600.0	11,435.4	17.2	16.9	68.70	352.2	205.9	441.0	405.0	36.02	12.243	
11,750.0	11,599.8	11,618.8	11,440.3	17.3	16.9	68.39	370.4	205.7	441.9	405.7	36.17	12.216	
11,775.0	11,607.2	11,637.3	11,444.3	17.3	16.9	68.14	388.4	205.6	442.6	406.3	36.32	12.187	
11,780.0	11,608.5	11,641.0	11,445.1	17.3	16.9	68.09	392.1	205.5	442.7	406.4	36.35	12.181	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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
11,800.0	11,613.3	11,655.8	11,447.7	17.3	16.9	67.92	406.6	205.4	443.2	406.8	36.45	12.159	
11,825.0	11,618.2	11,675.0	11,450.4	17.3	17.0	67.75	425.6	205.2	443.7	407.1	36.57	12.132	
11,850.0	11,621.7	11,692.8	11,452.3	17.4	17.0	67.63	443.3	205.1	444.1	407.4	36.69	12.103	
11,875.0	11,624.0	11,711.2	11,453.5	17.4	17.0	67.55	461.7	204.9	444.3	407.5	36.79	12.077	
11,900.0	11,625.0	11,729.6	11,454.0	17.4	17.0	67.51	480.1	204.7	444.4	407.5	36.88	12.051	
11,905.9	11,625.0	11,734.1	11,454.0	17.5	17.1	67.51	484.6	204.7	444.4	407.5	36.89	12.046	
11,970.0	11,625.0	11,798.2	11,454.0	17.6	17.2	67.51	548.7	204.1	444.4	407.3	37.11	11.976	
12,000.0	11,625.0	11,828.2	11,454.0	17.6	17.2	67.51	578.7	203.9	444.4	407.2	37.22	11.940	
12,065.0	11,625.0	11,893.2	11,454.0	17.8	17.4	67.51	643.7	203.3	444.4	406.9	37.48	11.857	
12,100.0	11,625.0	11,928.2	11,454.0	17.8	17.4	67.51	678.7	202.9	444.4	406.8	37.63	11.810	
12,160.0	11,625.0	11,988.2	11,454.0	18.0	17.6	67.51	738.7	202.4	444.4	406.5	37.91	11.724	
12,200.0	11,625.0	12,028.2	11,454.0	18.1	17.7	67.51	778.7	202.0	444.4	406.3	38.10	11.665	
12,255.0	11,625.0	12,083.2	11,454.0	18.2	17.9	67.51	833.7	201.5	444.4	406.0	38.38	11.579	
12,300.0	11,625.0	12,128.2	11,454.0	18.4	18.0	67.51	878.7	201.1	444.4	405.8	38.62	11.508	
12,350.0	11,625.0	12,178.2	11,454.0	18.5	18.1	67.51	928.7	200.7	444.4	405.5	38.90	11.424	
12,400.0	11,625.0	12,228.2	11,454.0	18.7	18.3	67.51	978.7	200.2	444.4	405.2	39.19	11.339	
12,445.0	11,625.0	12,273.2	11,454.0	18.8	18.4	67.51	1,023.7	199.8	444.4	404.9	39.47	11.259	
12,500.0	11,625.0	12,328.2	11,454.0	19.0	18.6	67.51	1,078.7	199.3	444.4	404.6	39.82	11.160	
12,540.0	11,625.0	12,368.2	11,454.0	19.1	18.8	67.51	1,118.7	199.0	444.4	404.3	40.09	11.086	
12,600.0	11,625.0	12,428.2	11,454.0	19.4	19.0	67.51	1,178.7	198.4	444.4	403.9	40.50	10.974	
12,635.0	11,625.0	12,463.2	11,454.0	19.5	19.1	67.51	1,213.7	198.1	444.4	403.7	40.75	10.907	
12,700.0	11,625.0	12,528.2	11,454.0	19.7	19.4	67.51	1,278.7	197.5	444.4	403.2	41.22	10.782	
12,730.0	11,625.0	12,558.2	11,454.0	19.8	19.5	67.51	1,308.7	197.2	444.4	403.0	41.44	10.723	
12,800.0	11,625.0	12,628.2	11,454.0	20.1	19.8	67.51	1,378.7	196.6	444.4	402.4	41.98	10.586	
12,825.0	11,625.0	12,653.2	11,454.0	20.2	19.9	67.51	1,403.7	196.4	444.4	402.2	42.18	10.536	
12,900.0	11,625.0	12,728.2	11,454.0	20.5	20.2	67.51	1,478.7	195.7	444.4	401.6	42.79	10.386	
12,920.0	11,625.0	12,748.2	11,454.0	20.6	20.3	67.51	1,498.7	195.5	444.4	401.5	42.96	10.346	
13,000.0	11,625.0	12,828.2	11,454.0	21.0	20.6	67.51	1,578.7	194.8	444.4	400.8	43.63	10.185	
13,015.0	11,625.0	12,843.2	11,454.0	21.1	20.7	67.51	1,593.7	194.6	444.4	400.6	43.77	10.154	
13,100.0	11,625.0	12,928.2	11,454.0	21.4	21.1	67.51	1,678.7	193.9	444.4	399.9	44.52	9.983	
13,110.0	11,625.0	12,938.2	11,454.0	21.5	21.2	67.51	1,688.7	193.8	444.4	399.8	44.61	9.963	
13,200.0	11,625.0	13,028.2	11,454.0	21.9	21.6	67.51	1,778.7	193.0	444.4	399.0	45.43	9.782	
13,205.0	11,625.0	13,033.2	11,454.0	21.9	21.6	67.51	1,783.7	192.9	444.4	398.9	45.48	9.772	
13,300.0	11,625.0	13,128.2	11,454.0	22.4	22.1	67.51	1,878.7	192.1	444.4	398.0	46.38	9.582	
13,395.0	11,625.0	13,223.2	11,454.0	22.9	22.6	67.51	1,973.7	191.2	444.4	397.1	47.31	9.393	
13,400.0	11,625.0	13,228.2	11,454.0	22.9	22.6	67.51	1,978.7	191.1	444.4	397.1	47.36	9.383	
13,490.0	11,625.0	13,318.2	11,454.0	23.4	23.1	67.51	2,068.7	190.3	444.4	396.1	48.27	9.207	
13,500.0	11,625.0	13,328.2	11,454.0	23.4	23.1	67.51	2,078.7	190.2	444.4	396.0	48.37	9.187	
13,510.0	11,625.0	13,338.2	11,454.0	23.5	23.2	67.51	2,088.6	190.1	444.4	395.9	48.47	9.168	
13,585.0	11,625.0	13,413.2	11,454.0	23.9	23.6	67.51	2,163.7	189.5	444.4	395.2	49.25	9.023	
13,600.0	11,625.0	13,428.2	11,454.0	24.0	23.7	67.51	2,178.7	189.3	444.4	395.0	49.41	8.995	
13,680.0	11,625.0	13,508.2	11,454.0	24.4	24.1	67.51	2,258.7	188.6	444.4	394.2	50.26	8.843	
13,700.0	11,625.0	13,528.2	11,454.0	24.5	24.2	67.51	2,278.7	188.4	444.4	393.9	50.47	8.806	
13,775.0	11,625.0	13,603.2	11,454.0	24.9	24.6	67.51	2,353.6	187.7	444.4	393.1	51.28	8.666	
13,800.0	11,625.0	13,628.2	11,454.0	25.1	24.8	67.51	2,378.6	187.5	444.4	392.9	51.56	8.620	
13,870.0	11,625.0	13,698.2	11,454.0	25.5	25.2	67.51	2,448.6	186.9	444.4	392.1	52.33	8.493	
13,900.0	11,625.0	13,728.2	11,454.0	25.6	25.3	67.51	2,478.6	186.6	444.4	391.8	52.66	8.439	
13,965.0	11,625.0	13,793.2	11,454.0	26.0	25.7	67.51	2,543.6	186.0	444.4	391.0	53.40	8.323	
14,000.0	11,625.0	13,828.2	11,454.0	26.2	25.9	67.51	2,578.6	185.7	444.4	390.6	53.79	8.262	
14,060.0	11,625.0	13,888.2	11,454.0	26.6	26.3	67.51	2,638.6	185.2	444.4	389.9	54.48	8.157	
14,100.0	11,625.0	13,928.2	11,454.0	26.8	26.5	67.51	2,678.6	184.8	444.4	389.5	54.94	8.089	
14,155.0	11,625.0	13,983.2	11,454.0	27.1	26.9	67.51	2,733.6	184.3	444.4	388.8	55.58	7.996	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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)			
14,200.0	11,625.0	14,028.2	11,454.0	27.4	27.1	67.51	2,778.6	183.9	444.4	388.3	56.11	7.921	
14,250.0	11,625.0	14,078.2	11,454.0	27.7	27.4	67.51	2,828.6	183.4	444.4	387.7	56.70	7.838	
14,300.0	11,625.0	14,128.2	11,454.0	28.0	27.7	67.51	2,878.6	183.0	444.4	387.1	57.29	7.757	
14,345.0	11,625.0	14,173.2	11,454.0	28.3	28.0	67.51	2,923.6	182.6	444.4	386.6	57.83	7.685	
14,400.0	11,625.0	14,228.2	11,454.0	28.6	28.3	67.51	2,978.6	182.1	444.4	385.9	58.49	7.598	
14,440.0	11,625.0	14,268.2	11,454.0	28.8	28.6	67.51	3,018.6	181.7	444.4	385.4	58.98	7.535	
14,500.0	11,625.0	14,328.2	11,454.0	29.2	29.0	67.51	3,078.6	181.2	444.4	384.7	59.71	7.443	
14,535.0	11,625.0	14,363.2	11,454.0	29.4	29.2	67.51	3,113.6	180.8	444.4	384.3	60.14	7.390	
14,600.0	11,625.0	14,428.2	11,454.0	29.8	29.6	67.51	3,178.6	180.3	444.4	383.5	60.94	7.293	
14,630.0	11,625.0	14,458.2	11,454.0	30.0	29.8	67.51	3,208.6	180.0	444.4	383.1	61.31	7.248	
14,700.0	11,625.0	14,528.2	11,454.0	30.5	30.2	67.51	3,278.6	179.3	444.4	382.2	62.18	7.147	
14,725.0	11,625.0	14,553.2	11,454.0	30.6	30.4	67.51	3,303.6	179.1	444.4	381.9	62.50	7.111	
14,800.0	11,625.0	14,628.2	11,454.0	31.1	30.9	67.51	3,378.6	178.4	444.4	381.0	63.44	7.005	
14,820.0	11,625.0	14,648.2	11,454.0	31.2	31.0	67.51	3,398.6	178.3	444.4	380.7	63.69	6.977	
14,900.0	11,625.0	14,728.2	11,454.0	31.7	31.5	67.51	3,478.6	177.5	444.4	379.7	64.71	6.868	
14,915.0	11,625.0	14,743.2	11,454.0	31.8	31.6	67.51	3,493.6	177.4	444.4	379.5	64.90	6.848	
15,000.0	11,625.0	14,828.2	11,454.0	32.4	32.2	67.51	3,578.6	176.6	444.4	378.4	65.99	6.735	
15,010.0	11,625.0	14,838.2	11,454.0	32.5	32.2	67.51	3,588.6	176.5	444.4	378.3	66.12	6.722	
15,100.0	11,625.0	14,928.2	11,454.0	33.0	32.8	67.51	3,678.6	175.7	444.4	377.1	67.28	6.606	
15,105.0	11,625.0	14,933.2	11,454.0	33.1	32.9	67.51	3,683.6	175.7	444.4	377.1	67.34	6.599	
15,200.0	11,625.0	15,028.2	11,454.0	33.7	33.5	67.51	3,778.6	174.8	444.4	375.8	68.58	6.480	
15,295.0	11,625.0	15,123.2	11,454.0	34.3	34.1	67.51	3,873.6	173.9	444.4	374.6	69.82	6.365	
15,300.0	11,625.0	15,128.2	11,454.0	34.4	34.2	67.51	3,878.6	173.9	444.4	374.5	69.89	6.359	
15,390.0	11,625.0	15,218.2	11,454.0	35.0	34.8	67.51	3,968.6	173.1	444.4	373.3	71.08	6.253	
15,400.0	11,625.0	15,228.2	11,454.0	35.0	34.8	67.51	3,978.6	173.0	444.4	373.2	71.21	6.241	
15,485.0	11,625.0	15,313.2	11,454.0	35.6	35.4	67.51	4,063.6	172.2	444.4	372.1	72.34	6.144	
15,500.0	11,625.0	15,328.2	11,454.0	35.7	35.5	67.51	4,078.6	172.1	444.4	371.9	72.54	6.127	
15,580.0	11,625.0	15,408.2	11,454.0	36.2	36.0	67.51	4,158.6	171.4	444.4	370.8	73.60	6.038	
15,600.0	11,625.0	15,428.2	11,454.0	36.4	36.2	67.51	4,178.6	171.2	444.4	370.5	73.87	6.016	
15,675.0	11,625.0	15,503.2	11,454.0	36.9	36.7	67.51	4,253.6	170.5	444.4	369.5	74.88	5.935	
15,700.0	11,625.0	15,528.2	11,454.0	37.1	36.9	67.51	4,278.6	170.3	444.4	369.2	75.21	5.909	
15,770.0	11,625.0	15,598.2	11,454.0	37.5	37.3	67.51	4,348.6	169.6	444.4	368.3	76.16	5.835	
15,800.0	11,625.0	15,628.2	11,454.0	37.7	37.5	67.51	4,378.6	169.4	444.4	367.8	76.57	5.804	
15,865.0	11,625.0	15,693.2	11,454.0	38.2	38.0	67.51	4,443.6	168.8	444.4	367.0	77.45	5.738	
15,900.0	11,625.0	15,728.2	11,454.0	38.4	38.2	67.51	4,478.6	168.5	444.4	366.5	77.92	5.703	
15,960.0	11,625.0	15,788.2	11,454.0	38.8	38.6	67.51	4,538.6	167.9	444.4	365.7	78.74	5.644	
16,000.0	11,625.0	15,828.2	11,454.0	39.1	38.9	67.51	4,578.6	167.6	444.4	365.1	79.29	5.605	
16,055.0	11,625.0	15,883.2	11,454.0	39.5	39.3	67.51	4,633.6	167.1	444.4	364.4	80.04	5.552	
16,100.0	11,625.0	15,928.2	11,454.0	39.8	39.6	67.51	4,678.6	166.6	444.4	363.8	80.66	5.510	
16,150.0	11,625.0	15,978.2	11,454.0	40.1	40.0	67.51	4,728.5	166.2	444.4	363.1	81.34	5.463	
16,200.0	11,625.0	16,028.2	11,454.0	40.5	40.3	67.51	4,778.5	165.7	444.4	362.4	82.03	5.418	
16,245.0	11,625.0	16,073.2	11,454.0	40.8	40.6	67.51	4,823.5	165.3	444.4	361.8	82.65	5.377	
16,300.0	11,625.0	16,128.2	11,454.0	41.2	41.0	67.51	4,878.5	164.8	444.4	361.0	83.41	5.328	
16,340.0	11,625.0	16,168.2	11,454.0	41.5	41.3	67.51	4,918.5	164.5	444.4	360.4	83.97	5.293	
16,400.0	11,625.0	16,228.2	11,454.0	41.9	41.7	67.51	4,978.5	163.9	444.4	359.6	84.80	5.241	
16,435.0	11,625.0	16,263.2	11,454.0	42.1	41.9	67.51	5,013.5	163.6	444.4	359.1	85.29	5.211	
16,500.0	11,625.0	16,328.2	11,454.0	42.6	42.4	67.51	5,078.5	163.0	444.4	358.2	86.19	5.156	
16,530.0	11,625.0	16,358.2	11,454.0	42.8	42.6	67.51	5,108.5	162.7	444.4	357.8	86.61	5.131	
16,600.0	11,625.0	16,428.2	11,454.0	43.3	43.1	67.51	5,178.5	162.1	444.4	356.8	87.59	5.074	
16,625.0	11,625.0	16,453.2	11,454.0	43.4	43.3	67.51	5,203.5	161.9	444.4	356.5	87.94	5.054	
16,700.0	11,625.0	16,528.2	11,454.0	44.0	43.8	67.51	5,278.5	161.2	444.4	355.4	88.99	4.994	
16,720.0	11,625.0	16,548.2	11,454.0	44.1	44.0	67.51	5,298.5	161.0	444.4	355.1	89.27	4.978	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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)			
16,800.0	11,625.0	16,628.2	11,454.0	44.7	44.5	67.51	5,378.5	160.3	444.4	354.0	90.39	4.916	
16,815.0	11,625.0	16,643.2	11,454.0	44.8	44.6	67.51	5,393.5	160.2	444.4	353.8	90.61	4.905	
16,900.0	11,625.0	16,728.2	11,454.0	45.4	45.2	67.51	5,478.5	159.4	444.4	352.6	91.80	4.841	
16,910.0	11,625.0	16,738.2	11,454.0	45.5	45.3	67.51	5,488.5	159.3	444.4	352.5	91.94	4.833	
17,000.0	11,625.0	16,828.2	11,454.0	46.1	45.9	67.51	5,578.5	158.5	444.4	351.2	93.22	4.768	
17,005.0	11,625.0	16,833.2	11,454.0	46.1	46.0	67.51	5,583.5	158.4	444.4	351.1	93.29	4.764	
17,100.0	11,625.0	16,928.2	11,454.0	46.8	46.7	67.51	5,678.5	157.6	444.4	349.8	94.63	4.696	
17,195.0	11,625.0	17,023.2	11,454.0	47.5	47.3	67.51	5,773.5	156.7	444.4	348.4	95.98	4.630	
17,200.0	11,625.0	17,028.2	11,454.0	47.5	47.4	67.51	5,778.5	156.7	444.4	348.4	96.05	4.627	
17,290.0	11,625.0	17,118.2	11,454.0	48.2	48.0	67.51	5,868.5	155.8	444.4	347.1	97.34	4.566	
17,300.0	11,625.0	17,128.2	11,454.0	48.2	48.1	67.51	5,878.5	155.8	444.4	346.9	97.48	4.559	
17,385.0	11,625.0	17,213.2	11,454.0	48.8	48.7	67.51	5,963.5	155.0	444.4	345.7	98.69	4.503	
17,400.0	11,625.0	17,228.2	11,454.0	48.9	48.8	67.51	5,978.5	154.8	444.4	345.5	98.91	4.493	
17,480.0	11,625.0	17,308.2	11,454.0	49.5	49.4	67.51	6,058.5	154.1	444.4	344.4	100.05	4.442	
17,500.0	11,625.0	17,328.2	11,454.0	49.7	49.5	67.51	6,078.5	153.9	444.4	344.1	100.34	4.429	
17,575.0	11,625.0	17,403.2	11,454.0	50.2	50.1	67.51	6,153.5	153.3	444.4	343.0	101.41	4.382	
17,600.0	11,625.0	17,428.2	11,454.0	50.4	50.2	67.51	6,178.5	153.0	444.4	342.6	101.77	4.367	
17,670.0	11,625.0	17,498.2	11,454.0	50.9	50.7	67.51	6,248.5	152.4	444.4	341.6	102.78	4.324	
17,700.0	11,625.0	17,528.2	11,454.0	51.1	51.0	67.51	6,278.5	152.1	444.4	341.2	103.21	4.306	
17,765.0	11,625.0	17,593.2	11,454.0	51.6	51.4	67.51	6,343.5	151.5	444.4	340.3	104.14	4.267	
17,800.0	11,625.0	17,628.2	11,454.0	51.8	51.7	67.51	6,378.5	151.2	444.4	339.8	104.65	4.247	
17,860.0	11,625.0	17,688.2	11,454.0	52.3	52.1	67.51	6,438.5	150.7	444.4	338.9	105.51	4.212	
17,900.0	11,625.0	17,728.2	11,454.0	52.5	52.4	67.51	6,478.5	150.3	444.4	338.3	106.09	4.189	
17,955.0	11,625.0	17,783.2	11,454.0	52.9	52.8	67.51	6,533.5	149.8	444.4	337.5	106.88	4.158	
18,000.0	11,625.0	17,828.2	11,454.0	53.3	53.1	67.51	6,578.5	149.4	444.4	336.9	107.53	4.133	
18,050.0	11,625.0	17,878.2	11,454.0	53.6	53.5	67.51	6,628.5	148.9	444.4	336.2	108.26	4.105	
18,100.0	11,625.0	17,928.2	11,454.0	54.0	53.9	67.51	6,678.5	148.5	444.4	335.4	108.98	4.078	
18,145.0	11,625.0	17,973.2	11,454.0	54.3	54.2	67.51	6,723.5	148.1	444.4	334.8	109.63	4.054	
18,200.0	11,625.0	18,028.2	11,454.0	54.7	54.6	67.51	6,778.5	147.6	444.4	334.0	110.43	4.024	
18,240.0	11,625.0	18,068.2	11,454.0	55.0	54.9	67.51	6,818.5	147.2	444.4	333.4	111.01	4.003	
18,300.0	11,625.0	18,128.2	11,454.0	55.4	55.3	67.51	6,878.5	146.7	444.4	332.5	111.88	3.972	
18,335.0	11,625.0	18,163.2	11,454.0	55.7	55.6	67.51	6,913.5	146.4	444.4	332.0	112.39	3.954	
18,400.0	11,625.0	18,228.2	11,454.0	56.2	56.0	67.51	6,978.5	145.8	444.4	331.1	113.34	3.921	
18,430.0	11,625.0	18,258.2	11,454.0	56.4	56.3	67.51	7,008.5	145.5	444.4	330.6	113.77	3.906	
18,500.0	11,625.0	18,328.2	11,454.0	56.9	56.8	67.51	7,078.5	144.9	444.4	329.6	114.79	3.871	
18,525.0	11,625.0	18,353.2	11,454.0	57.1	57.0	67.51	7,103.5	144.6	444.4	329.3	115.16	3.859	
18,600.0	11,625.0	18,428.2	11,454.0	57.6	57.5	67.51	7,178.4	144.0	444.4	328.2	116.25	3.823	
18,620.0	11,625.0	18,448.2	11,454.0	57.8	57.7	67.51	7,198.4	143.8	444.4	327.9	116.54	3.813	
18,700.0	11,625.0	18,528.2	11,454.0	58.4	58.2	67.51	7,278.4	143.0	444.4	326.7	117.71	3.775	
18,715.0	11,625.0	18,543.2	11,454.0	58.5	58.3	67.51	7,293.4	142.9	444.4	326.5	117.93	3.768	
18,800.0	11,625.0	18,628.2	11,454.0	59.1	59.0	67.51	7,378.4	142.1	444.4	325.2	119.17	3.729	
18,810.0	11,625.0	18,638.2	11,454.0	59.2	59.0	67.51	7,388.4	142.0	444.4	325.1	119.32	3.725	
18,900.0	11,625.0	18,728.2	11,454.0	59.8	59.7	67.51	7,478.4	141.2	444.4	323.8	120.64	3.684	
18,905.0	11,625.0	18,733.2	11,454.0	59.9	59.7	67.51	7,483.4	141.2	444.4	323.7	120.71	3.682	
19,000.0	11,625.0	18,828.2	11,454.0	60.6	60.4	67.51	7,578.4	140.3	444.4	322.3	122.10	3.640	
19,095.0	11,625.0	18,923.2	11,454.0	61.3	61.1	67.51	7,673.4	139.5	444.4	320.9	123.50	3.599	
19,100.0	11,625.0	18,928.2	11,454.0	61.3	61.2	67.51	7,678.4	139.4	444.4	320.8	123.57	3.596	
19,159.0	11,625.0	18,987.2	11,454.0	61.7	61.6	67.51	7,737.4	138.9	444.4	320.0	124.44	3.571	
19,190.0	11,625.0	19,018.2	11,454.0	61.9	61.8	67.51	7,768.4	138.6	444.4	319.5	124.89	3.558	
19,200.0	11,625.0	19,028.2	11,454.0	62.0	61.9	67.51	7,778.4	138.5	444.4	319.4	125.04	3.554	
19,285.0	11,625.0	19,113.2	11,454.0	62.6	62.5	67.51	7,863.4	137.7	444.4	318.1	126.29	3.519	
19,300.0	11,625.0	19,128.2	11,454.0	62.8	62.6	67.51	7,878.4	137.6	444.4	317.9	126.51	3.513	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-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	
19,380.0	11,625.0	19,208.2	11,454.0	63.3	63.2	67.51	7,958.4	136.9	444.4	316.7	127.69	3.481	
19,400.0	11,625.0	19,228.2	11,454.0	63.5	63.4	67.51	7,978.4	136.7	444.4	316.4	127.98	3.473	
19,475.0	11,625.0	19,303.2	11,454.0	64.0	63.9	67.51	8,053.4	136.0	444.4	315.3	129.09	3.443	
19,500.0	11,625.0	19,328.2	11,454.0	64.2	64.1	67.51	8,078.4	135.8	444.4	315.0	129.45	3.433	
19,570.0	11,625.0	19,398.2	11,454.0	64.7	64.6	67.51	8,148.4	135.2	444.4	313.9	130.49	3.406	
19,600.0	11,625.0	19,428.2	11,454.0	65.0	64.9	67.51	8,178.4	134.9	444.4	313.5	130.93	3.394	
19,665.0	11,625.0	19,493.2	11,454.0	65.4	65.3	67.51	8,243.4	134.3	444.4	312.5	131.89	3.370	
19,700.0	11,625.0	19,528.2	11,454.0	65.7	65.6	67.51	8,278.4	134.0	444.4	312.0	132.40	3.356	
19,760.0	11,625.0	19,588.2	11,454.0	66.1	66.0	67.51	8,338.4	133.4	444.4	311.1	133.29	3.334	
19,800.0	11,625.0	19,628.2	11,454.0	66.4	66.3	67.51	8,378.4	133.1	444.4	310.5	133.88	3.319	
19,855.0	11,625.0	19,683.2	11,454.0	66.8	66.7	67.51	8,433.4	132.6	444.4	309.7	134.70	3.299	
19,900.0	11,625.0	19,728.2	11,454.0	67.2	67.1	67.51	8,478.4	132.2	444.4	309.1	135.36	3.283	
19,950.0	11,625.0	19,778.2	11,454.0	67.5	67.4	67.51	8,528.4	131.7	444.4	308.3	136.10	3.265	
20,000.0	11,625.0	19,828.2	11,454.0	67.9	67.8	67.51	8,578.4	131.2	444.4	307.6	136.84	3.248	
20,045.0	11,625.0	19,873.2	11,454.0	68.3	68.1	67.51	8,623.4	130.8	444.4	306.9	137.51	3.232	
20,100.0	11,625.0	19,928.2	11,454.0	68.7	68.6	67.51	8,678.4	130.3	444.4	306.1	138.32	3.213	
20,140.0	11,625.0	19,968.2	11,454.0	69.0	68.8	67.51	8,718.4	130.0	444.4	305.5	138.91	3.199	
20,200.0	11,625.0	20,028.2	11,454.0	69.4	69.3	67.51	8,778.4	129.4	444.4	304.6	139.80	3.179	
20,235.0	11,625.0	20,063.2	11,454.0	69.7	69.6	67.51	8,813.4	129.1	444.4	304.1	140.32	3.167	
20,300.0	11,625.0	20,128.2	11,454.0	70.1	70.0	67.51	8,878.4	128.5	444.4	303.1	141.29	3.145	
20,330.0	11,625.0	20,158.2	11,454.0	70.4	70.3	67.51	8,908.4	128.3	444.4	302.7	141.73	3.136	
20,400.0	11,625.0	20,228.2	11,454.0	70.9	70.8	67.51	8,978.4	127.6	444.4	301.6	142.77	3.113	
20,425.0	11,625.0	20,253.2	11,454.0	71.1	71.0	67.51	9,003.4	127.4	444.4	301.3	143.14	3.105	
20,500.0	11,625.0	20,328.2	11,454.0	71.6	71.5	67.51	9,078.4	126.7	444.4	300.2	144.26	3.081	
20,520.0	11,625.0	20,348.2	11,454.0	71.8	71.7	67.51	9,098.4	126.5	444.4	299.9	144.55	3.074	
20,600.0	11,625.0	20,428.2	11,454.0	72.4	72.3	67.51	9,178.4	125.8	444.4	298.7	145.74	3.049	
20,615.0	11,625.0	20,443.2	11,454.0	72.5	72.4	67.51	9,193.4	125.7	444.4	298.4	145.97	3.045	
20,700.0	11,625.0	20,528.2	11,454.0	73.1	73.0	67.51	9,278.4	124.9	444.4	297.2	147.23	3.018	
20,710.0	11,625.0	20,538.2	11,454.0	73.2	73.1	67.51	9,288.4	124.8	444.4	297.0	147.38	3.015	
20,800.0	11,625.0	20,628.2	11,454.0	73.8	73.7	67.51	9,378.4	124.0	444.4	295.7	148.72	2.988	
20,805.0	11,625.0	20,633.2	11,454.0	73.9	73.8	67.51	9,383.4	123.9	444.4	295.6	148.79	2.987	
20,900.0	11,625.0	20,728.2	11,454.0	74.6	74.5	67.51	9,478.4	123.1	444.4	294.2	150.21	2.959	
20,995.0	11,625.0	20,823.2	11,454.0	75.3	75.2	67.51	9,573.3	122.2	444.4	292.8	151.63	2.931	
21,000.0	11,625.0	20,828.2	11,454.0	75.3	75.2	67.51	9,578.3	122.2	444.4	292.7	151.70	2.930	
21,090.0	11,625.0	20,918.2	11,454.0	76.0	75.9	67.51	9,668.3	121.4	444.4	291.4	153.04	2.904	
21,100.0	11,625.0	20,928.2	11,454.0	76.1	76.0	67.51	9,678.3	121.3	444.4	291.2	153.19	2.901	
21,185.0	11,625.0	21,013.2	11,454.0	76.7	76.6	67.51	9,763.3	120.5	444.4	290.0	154.46	2.877	
21,200.0	11,625.0	21,028.2	11,454.0	76.8	76.7	67.51	9,778.3	120.4	444.4	289.7	154.68	2.873	
21,280.0	11,625.0	21,108.2	11,454.0	77.4	77.3	67.51	9,858.3	119.6	444.4	288.5	155.88	2.851	
21,300.0	11,625.0	21,128.2	11,454.0	77.6	77.5	67.51	9,878.3	119.5	444.4	288.2	156.18	2.846	
21,375.0	11,625.0	21,203.2	11,454.0	78.1	78.0	67.51	9,953.3	118.8	444.4	287.1	157.30	2.825	
21,400.0	11,625.0	21,228.2	11,454.0	78.3	78.2	67.51	9,978.3	118.5	444.4	286.7	157.67	2.819	
21,470.0	11,625.0	21,298.2	11,454.0	78.8	78.7	67.51	10,048.3	117.9	444.4	285.7	158.72	2.800	
21,500.0	11,625.0	21,328.2	11,454.0	79.1	79.0	67.51	10,078.3	117.6	444.4	285.2	159.16	2.792	
21,565.0	11,625.0	21,393.2	11,454.0	79.5	79.5	67.51	10,143.3	117.0	444.4	284.3	160.14	2.775	
21,600.0	11,625.0	21,428.2	11,454.0	79.8	79.7	67.51	10,178.3	116.7	444.4	283.8	160.66	2.766	
21,660.0	11,625.0	21,488.2	11,454.0	80.3	80.2	67.51	10,238.3	116.2	444.4	282.9	161.56	2.751	
21,700.0	11,625.0	21,528.2	11,454.0	80.6	80.5	67.51	10,278.3	115.8	444.4	282.3	162.16	2.741	
21,755.0	11,625.0	21,583.2	11,454.0	81.0	80.9	67.51	10,333.3	115.3	444.4	281.4	162.98	2.727	
21,800.0	11,625.0	21,628.2	11,454.0	81.3	81.2	67.51	10,378.3	114.9	444.4	280.8	163.65	2.716	
21,850.0	11,625.0	21,678.2	11,454.0	81.7	81.6	67.51	10,428.3	114.5	444.4	280.0	164.40	2.703	
21,862.1	11,625.0	21,690.4	11,454.0	81.8	81.7	67.51	10,440.5	114.3	444.4	279.8	164.58	2.700	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
21,900.0	11,625.0	21,724.9	11,454.0	82.0	81.9	67.51	10,475.0	114.0	444.4	279.3	165.14	2.691		
21,945.0	11,625.0	21,724.9	11,454.0	82.4	81.9	67.51	10,475.0	114.0	447.0	282.1	164.89	2.711		
21,956.2	11,625.0	21,724.9	11,454.0	82.5	81.9	67.51	10,475.0	114.0	448.4	283.8	164.59	2.724		

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	3.0	3.0	89.50	0.5	60.4	60.4					
95.0	95.0	94.0	94.0	3.0	3.0	89.50	0.5	60.4	60.4	54.4	6.03	10.026		
100.0	100.0	99.0	99.0	3.0	3.0	89.50	0.5	60.4	60.4	54.4	6.03	10.021		
190.0	190.0	189.0	189.0	3.1	3.1	89.50	0.5	60.4	60.4	54.3	6.15	9.821		
200.0	200.0	199.0	199.0	3.1	3.1	89.50	0.5	60.4	60.4	54.2	6.17	9.790		
285.0	285.0	284.0	284.0	3.2	3.2	89.50	0.5	60.4	60.4	54.1	6.31	9.574		
300.0	300.0	299.0	299.0	3.2	3.2	89.50	0.5	60.4	60.4	54.1	6.34	9.532		
380.0	380.0	379.0	379.0	3.3	3.3	89.50	0.5	60.4	60.4	53.9	6.49	9.313		
400.0	400.0	399.0	399.0	3.3	3.3	89.50	0.5	60.4	60.4	53.9	6.53	9.254		
475.0	475.0	474.0	474.0	3.4	3.4	89.50	0.5	60.4	60.4	53.7	6.68	9.040		
500.0	500.0	499.0	499.0	3.4	3.4	89.50	0.5	60.4	60.4	53.7	6.74	8.965		
570.0	570.0	569.0	569.0	3.5	3.5	89.50	0.5	60.4	60.4	53.5	6.90	8.760		
600.0	600.0	599.0	599.0	3.5	3.5	89.50	0.5	60.4	60.4	53.4	6.97	8.670		
665.0	665.0	664.0	664.0	3.6	3.6	89.50	0.5	60.4	60.4	53.3	7.13	8.478		
700.0	700.0	699.0	699.0	3.7	3.7	89.50	0.5	60.4	60.4	53.2	7.21	8.374		
760.0	760.0	759.0	759.0	3.8	3.8	89.50	0.5	60.4	60.4	53.0	7.37	8.198		
800.0	800.0	799.0	799.0	3.8	3.8	89.50	0.5	60.4	60.4	52.9	7.48	8.081		
855.0	855.0	854.0	854.0	3.9	3.9	89.50	0.5	60.4	60.4	52.8	7.63	7.922		
900.0	900.0	899.0	899.0	4.0	4.0	89.50	0.5	60.4	60.4	52.7	7.75	7.793		
950.0	950.0	949.0	949.0	4.1	4.1	89.50	0.5	60.4	60.4	52.5	7.89	7.653		
1,000.0	1,000.0	999.0	999.0	4.2	4.2	89.50	0.5	60.4	60.4	52.4	8.04	7.514		
1,045.0	1,045.0	1,044.0	1,044.0	4.2	4.2	89.50	0.5	60.4	60.4	52.2	8.17	7.392		
1,100.0	1,100.0	1,099.0	1,099.0	4.3	4.3	89.50	0.5	60.4	60.4	52.1	8.34	7.245		
1,140.0	1,140.0	1,139.0	1,139.0	4.4	4.4	89.50	0.5	60.4	60.4	52.0	8.46	7.140		
1,200.0	1,200.0	1,199.0	1,199.0	4.5	4.5	89.50	0.5	60.4	60.4	51.8	8.65	6.986		
1,235.0	1,235.0	1,234.0	1,234.0	4.6	4.6	89.50	0.5	60.4	60.4	51.7	8.76	6.898		
1,300.0	1,300.0	1,299.0	1,299.0	4.7	4.7	89.50	0.5	60.4	60.4	51.4	8.97	6.738		
1,330.0	1,330.0	1,329.0	1,329.0	4.7	4.7	89.50	0.5	60.4	60.4	51.3	9.06	6.666		
1,400.0	1,400.0	1,399.0	1,399.0	4.9	4.9	89.50	0.5	60.4	60.4	51.1	9.29	6.502		
1,425.0	1,425.0	1,424.0	1,424.0	4.9	4.9	89.50	0.5	60.4	60.4	51.0	9.37	6.444		
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	89.50	0.5	60.4	60.4	50.8	9.63	6.277		
1,520.0	1,520.0	1,519.0	1,519.0	5.1	5.1	89.50	0.5	60.4	60.4	50.7	9.69	6.233		
1,600.0	1,600.0	1,599.0	1,599.0	5.3	5.3	89.50	0.5	60.4	60.4	50.4	9.96	6.063		
1,615.0	1,615.0	1,614.0	1,614.0	5.3	5.3	89.50	0.5	60.4	60.4	50.4	10.02	6.031		
1,700.0	1,700.0	1,699.0	1,699.0	5.5	5.5	89.50	0.5	60.4	60.4	50.1	10.31	5.859		
1,710.0	1,710.0	1,709.0	1,709.0	5.5	5.5	89.50	0.5	60.4	60.4	50.1	10.35	5.840		
1,800.0	1,800.0	1,799.0	1,799.0	5.7	5.7	89.50	0.5	60.4	60.4	49.8	10.66	5.667		
1,805.0	1,805.0	1,804.0	1,804.0	5.7	5.7	89.50	0.5	60.4	60.4	49.7	10.68	5.657		
1,900.0	1,900.0	1,899.0	1,899.0	5.9	5.9	89.50	0.5	60.4	60.4	49.4	11.02	5.484		
1,995.0	1,995.0	1,994.0	1,994.0	6.1	6.1	89.50	0.5	60.4	60.4	49.1	11.36	5.319		
2,000.0	2,000.0	1,999.0	1,999.0	6.1	6.1	89.50	0.5	60.4	60.4	49.0	11.38	5.310 CC, ES		
2,090.0	2,090.0	2,087.1	2,087.1	6.3	6.2	89.49	0.5	61.7	61.8	50.0	11.73	5.267		
2,100.0	2,100.0	2,096.9	2,096.9	6.3	6.2	89.49	0.6	62.0	62.1	50.3	11.77	5.277		
2,185.0	2,185.0	2,180.0	2,179.8	6.5	6.3	89.47	0.6	66.1	66.2	54.1	12.09	5.473		
2,200.0	2,200.0	2,194.6	2,194.4	6.5	6.3	89.46	0.6	67.0	67.2	55.0	12.15	5.528		
2,280.0	2,280.0	2,272.4	2,272.0	6.7	6.4	89.44	0.7	73.4	73.7	61.2	12.46	5.912		
2,300.0	2,300.0	2,291.8	2,291.3	6.7	6.5	89.43	0.7	75.3	75.7	63.1	12.54	6.032		
2,375.0	2,375.0	2,364.3	2,363.3	6.9	6.5	89.40	0.9	83.5	84.2	71.4	12.84	6.558		
2,400.0	2,400.0	2,388.4	2,387.2	6.9	6.6	89.40	0.9	86.7	87.5	74.6	12.94	6.761		
2,470.0	2,470.0	2,457.3	2,455.5	7.1	6.7	89.37	1.1	96.3	97.2	84.0	13.22	7.356		
2,500.0	2,500.0	2,487.0	2,484.9	7.2	6.8	89.36	1.1	100.4	101.4	88.1	13.33	7.604		
2,565.0	2,565.0	2,551.4	2,548.6	7.3	6.9	89.35	1.2	109.4	110.4	96.8	13.60	8.120		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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
2,600.0	2,600.0	2,586.1	2,583.0	7.4	7.0	89.34	1.3	114.2	115.3	101.6	13.75	8.389	
2,660.0	2,660.0	2,645.5	2,641.8	7.5	7.2	89.33	1.4	122.4	123.7	109.7	14.00	8.831	
2,700.0	2,700.0	2,685.1	2,681.0	7.6	7.3	89.32	1.5	128.0	129.2	115.0	14.18	9.115	
2,755.0	2,755.0	2,739.6	2,734.9	7.7	7.4	89.31	1.6	135.5	136.9	122.5	14.42	9.491	
2,800.0	2,800.0	2,784.1	2,779.1	7.8	7.5	89.30	1.7	141.7	143.1	128.5	14.63	9.787	
2,850.0	2,850.0	2,833.6	2,828.1	7.9	7.6	89.30	1.8	148.6	150.1	135.2	14.86	10.102	
2,900.0	2,900.0	2,883.1	2,877.1	8.0	7.8	89.29	1.9	155.5	157.1	142.0	15.09	10.406	
2,945.0	2,945.0	2,927.7	2,921.3	8.1	7.9	89.29	2.0	161.7	163.3	148.0	15.31	10.669	
3,000.0	3,000.0	2,982.2	2,975.2	8.3	8.1	89.28	2.1	169.3	171.0	155.4	15.57	10.979	
3,040.0	3,040.0	3,021.7	3,014.4	8.3	8.2	178.31	2.2	174.8	176.8	161.1	15.77	11.212	
3,100.0	3,100.0	3,080.9	3,073.0	8.4	8.4	178.31	2.3	183.0	186.6	170.5	16.07	11.613	
3,135.0	3,134.9	3,115.4	3,107.1	8.4	8.5	178.31	2.4	187.8	192.9	176.7	16.24	11.880	
3,200.0	3,199.8	3,179.1	3,170.2	8.5	8.7	178.33	2.5	196.7	205.7	189.1	16.55	12.428	
3,230.0	3,229.8	3,208.4	3,199.2	8.5	8.8	178.34	2.6	200.8	212.1	195.4	16.67	12.723	
3,250.0	3,249.7	3,227.9	3,218.5	8.5	8.8	178.35	2.6	203.5	216.5	199.8	16.75	12.927	
3,300.0	3,299.5	3,276.6	3,266.8	8.5	9.0	178.38	2.7	210.3	227.8	210.8	16.95	13.440	
3,325.0	3,324.4	3,301.0	3,290.9	8.5	9.1	178.39	2.8	213.7	233.4	216.3	17.06	13.679	
3,400.0	3,399.1	3,374.1	3,363.3	8.6	9.3	178.42	2.9	223.8	250.3	232.8	17.41	14.374	
3,420.0	3,419.0	3,393.5	3,382.6	8.6	9.4	178.43	3.0	226.5	254.8	237.2	17.51	14.552	
3,500.0	3,498.7	3,471.5	3,459.8	8.7	9.6	178.46	3.1	237.4	272.7	254.8	17.90	15.240	
3,515.0	3,513.7	3,486.1	3,474.2	8.7	9.7	178.46	3.2	239.4	276.1	258.1	17.97	15.364	
3,600.0	3,598.4	3,568.9	3,556.3	8.8	10.0	178.49	3.3	251.0	295.2	276.8	18.41	16.041	
3,610.0	3,608.3	3,578.7	3,565.9	8.8	10.0	178.49	3.3	252.3	297.5	279.0	18.46	16.117	
3,700.0	3,698.0	3,666.4	3,652.8	8.9	10.3	178.52	3.5	264.5	317.7	298.8	18.93	16.781	
3,705.0	3,703.0	3,671.2	3,657.6	8.9	10.3	178.52	3.5	265.2	318.9	299.9	18.96	16.817	
3,800.0	3,797.6	3,763.8	3,749.2	9.0	10.7	178.54	3.7	278.1	340.2	320.7	19.48	17.465	
3,895.0	3,892.2	3,856.4	3,840.9	9.1	11.0	178.56	3.9	291.0	361.6	341.6	20.02	18.065	
3,900.0	3,897.2	3,861.2	3,845.7	9.1	11.0	178.56	3.9	291.6	362.7	342.7	20.04	18.096	
3,990.0	3,986.9	3,948.9	3,932.6	9.3	11.3	178.58	4.1	303.8	383.0	362.4	20.57	18.621	
4,000.0	3,996.8	3,958.7	3,942.2	9.3	11.4	178.58	4.1	305.2	385.2	364.6	20.62	18.678	
4,085.0	4,081.5	4,041.5	4,024.2	9.5	11.7	178.60	4.3	316.7	404.3	383.2	21.13	19.136	
4,100.0	4,096.4	4,056.1	4,038.7	9.5	11.7	178.60	4.3	318.8	407.7	386.5	21.22	19.215	
4,180.0	4,176.1	4,134.1	4,115.9	9.7	12.0	178.61	4.5	329.6	425.7	404.0	21.70	19.614	
4,200.0	4,196.1	4,153.6	4,135.2	9.8	12.1	178.61	4.5	332.3	430.2	408.4	21.83	19.710	
4,275.0	4,270.8	4,226.6	4,207.6	10.0	12.4	178.62	4.7	342.5	447.1	424.8	22.29	20.056	
4,300.0	4,295.7	4,251.0	4,231.7	10.0	12.5	178.63	4.7	345.9	452.7	430.2	22.45	20.167	
4,370.0	4,365.4	4,319.2	4,299.2	10.2	12.7	178.64	4.9	355.4	468.4	445.5	22.89	20.466	
4,400.0	4,395.3	4,348.4	4,328.2	10.3	12.8	178.64	4.9	359.4	475.2	452.1	23.08	20.590	
4,465.0	4,460.1	4,411.8	4,390.9	10.5	13.1	178.65	5.0	368.2	489.8	466.3	23.50	20.846	
4,500.0	4,494.9	4,445.9	4,424.7	10.6	13.2	178.65	5.1	373.0	497.7	473.9	23.72	20.980	
4,560.0	4,554.7	4,504.3	4,482.6	10.7	13.4	178.66	5.2	381.1	511.2	487.1	24.11	21.200	
4,600.0	4,594.5	4,543.3	4,521.2	10.8	13.6	178.66	5.3	386.5	520.2	495.8	24.37	21.341	
4,655.0	4,649.3	4,596.9	4,574.2	11.0	13.8	178.66	5.4	394.0	532.5	507.8	24.74	21.528	
4,700.0	4,694.2	4,640.8	4,617.6	11.1	14.0	178.67	5.5	400.1	542.7	517.6	25.04	21.676	
4,750.0	4,744.0	4,689.5	4,665.9	11.3	14.2	178.67	5.6	406.9	553.9	528.5	25.37	21.833	
4,800.0	4,793.8	4,738.2	4,714.1	11.4	14.4	178.68	5.7	413.7	565.1	539.4	25.71	21.986	
4,845.0	4,838.6	4,782.0	4,757.6	11.5	14.5	178.68	5.8	419.8	575.3	549.3	26.01	22.117	
4,900.0	4,893.4	4,835.6	4,810.6	11.7	14.7	178.69	5.9	427.2	587.6	561.3	26.38	22.273	
4,940.0	4,933.3	4,874.6	4,849.2	11.8	14.9	178.69	6.0	432.6	596.6	570.0	26.66	22.382	
5,000.0	4,993.0	4,933.1	4,907.1	12.0	15.1	178.69	6.1	440.8	610.1	583.1	27.07	22.540	
5,035.0	5,027.9	4,967.2	4,940.9	12.1	15.3	178.69	6.2	445.5	618.0	590.7	27.31	22.629	
5,100.0	5,092.6	5,030.5	5,003.6	12.3	15.5	178.70	6.3	454.3	632.6	604.9	27.76	22.789	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,130.0	5,122.5	5,059.7	5,032.5	12.4	15.6	178.70	6.4	458.4	639.4	611.4	27.97	22.862	
5,187.7	5,180.0	5,115.9	5,088.2	12.6	15.9	178.70	6.5	466.2	652.3	624.0	28.36	22.999	
5,200.0	5,192.3	5,127.9	5,100.1	12.6	15.9	178.71	6.5	467.9	655.1	626.7	28.44	23.032	
5,225.0	5,217.2	5,152.3	5,124.2	12.7	16.0	178.71	6.6	471.3	660.6	632.0	28.62	23.084	
5,300.0	5,292.0	5,225.6	5,196.8	12.9	16.3	178.71	6.7	481.5	676.5	647.4	29.14	23.216	
5,320.0	5,311.9	5,245.2	5,216.2	13.0	16.4	178.72	6.7	484.2	680.6	651.3	29.28	23.246	
5,400.0	5,391.8	5,323.7	5,293.9	13.2	16.7	178.72	6.9	495.1	696.3	666.4	29.83	23.341	
5,415.0	5,406.8	5,338.4	5,308.5	13.2	16.8	178.72	6.9	497.2	699.1	669.1	29.93	23.356	
5,500.0	5,491.7	5,422.1	5,391.4	13.5	17.1	178.72	7.1	508.8	714.3	683.8	30.50	23.420	
5,510.0	5,501.7	5,432.6	5,401.8	13.5	17.1	178.72	7.1	510.3	716.0	685.4	30.57	23.424	
5,600.0	5,591.7	5,527.5	5,495.8	13.7	17.5	178.72	7.3	523.0	730.1	698.9	31.18	23.414	
5,605.0	5,596.7	5,532.8	5,501.1	13.7	17.5	178.72	7.3	523.7	730.8	699.6	31.21	23.415	
5,687.7	5,679.4	5,620.4	5,587.9	13.8	17.9	89.68	7.5	534.7	741.8	710.1	31.69	23.410	
5,700.0	5,691.7	5,633.4	5,600.9	13.8	17.9	89.68	7.5	536.3	743.3	711.6	31.74	23.416	
5,795.0	5,786.7	5,734.4	5,701.2	13.9	18.3	89.67	7.7	548.0	754.4	722.1	32.21	23.421	
5,800.0	5,791.7	5,739.7	5,706.5	13.9	18.3	89.67	7.7	548.6	754.9	722.7	32.23	23.420	
5,890.0	5,881.7	5,835.5	5,801.7	13.9	18.7	89.67	7.8	558.9	764.6	731.9	32.67	23.405	
5,900.0	5,891.7	5,846.2	5,812.3	13.9	18.8	89.67	7.9	560.0	765.6	732.9	32.72	23.402	
5,985.0	5,976.7	5,936.9	5,902.6	14.0	19.1	89.66	8.0	568.9	774.0	740.8	33.12	23.369	
6,000.0	5,991.7	5,952.9	5,918.5	14.0	19.2	89.66	8.0	570.4	775.4	742.2	33.19	23.362	
6,080.0	6,071.7	6,038.4	6,003.7	14.0	19.5	89.65	8.1	578.1	782.5	749.0	33.56	23.316	
6,100.0	6,091.7	6,059.8	6,025.0	14.0	19.6	89.65	8.1	579.9	784.2	750.6	33.65	23.303	
6,175.0	6,166.7	6,140.0	6,105.0	14.1	19.9	89.65	8.2	586.3	790.2	756.2	33.99	23.246	
6,200.0	6,191.7	6,166.8	6,131.7	14.1	20.0	89.65	8.3	588.4	792.1	758.0	34.11	23.225	
6,270.0	6,261.7	6,241.8	6,206.5	14.1	20.2	89.64	8.3	593.7	797.1	762.7	34.42	23.161	
6,300.0	6,291.7	6,274.0	6,238.6	14.2	20.3	89.64	8.4	595.8	799.1	764.6	34.55	23.131	
6,365.0	6,356.7	6,343.8	6,308.3	14.2	20.6	89.64	8.4	600.2	803.1	768.3	34.83	23.061	
6,400.0	6,391.7	6,381.3	6,345.8	14.2	20.7	89.64	8.5	602.3	805.1	770.2	34.97	23.021	
6,460.0	6,451.7	6,445.8	6,410.1	14.2	20.9	89.64	8.5	605.7	808.3	773.1	35.22	22.948	
6,500.0	6,491.7	6,488.8	6,453.1	14.3	21.1	89.64	8.6	607.8	810.3	774.9	35.39	22.897	
6,555.0	6,546.7	6,547.9	6,512.2	14.3	21.3	89.63	8.6	610.4	812.7	777.1	35.61	22.824	
6,600.0	6,591.7	6,596.3	6,560.5	14.3	21.4	89.63	8.6	612.3	814.4	778.6	35.78	22.760	
6,650.0	6,641.7	6,650.1	6,614.3	14.4	21.6	89.63	8.6	614.2	816.2	780.2	35.97	22.689	
6,700.0	6,691.7	6,703.9	6,668.1	14.4	21.8	89.63	8.7	615.8	817.7	781.5	36.16	22.613	
6,745.0	6,736.7	6,752.4	6,716.5	14.4	21.9	89.63	8.7	617.0	818.8	782.5	36.32	22.546	
6,800.0	6,791.7	6,811.6	6,775.7	14.4	22.1	89.63	8.7	618.2	820.0	783.4	36.51	22.460	
6,840.0	6,831.7	6,854.7	6,818.8	14.5	22.2	89.63	8.7	618.9	820.6	784.0	36.64	22.399	
6,900.0	6,891.7	6,919.3	6,883.4	14.5	22.3	89.63	8.7	619.7	821.3	784.5	36.82	22.307	
6,935.0	6,926.7	6,957.0	6,921.1	14.5	22.4	89.63	8.7	620.0	821.6	784.6	36.91	22.258	
7,000.0	6,991.7	7,026.6	6,990.7	14.5	22.5	89.63	8.7	620.1	821.7	784.7	37.04	22.182	
7,030.0	7,021.7	7,056.6	7,020.7	14.6	22.5	89.63	8.7	620.1	821.7	784.7	37.07	22.168	
7,100.0	7,091.7	7,126.6	7,090.7	14.6	22.5	89.63	8.7	620.1	821.7	784.6	37.13	22.133	
7,125.0	7,116.7	7,151.6	7,115.7	14.6	22.5	89.63	8.7	620.1	821.7	784.6	37.15	22.119	
7,200.0	7,191.7	7,226.6	7,190.7	14.7	22.6	89.63	8.7	620.1	821.7	784.5	37.22	22.079	
7,220.0	7,211.7	7,246.6	7,210.7	14.7	22.6	89.63	8.7	620.1	821.7	784.5	37.23	22.069	
7,300.0	7,291.7	7,326.6	7,290.7	14.7	22.6	89.63	8.7	620.1	821.7	784.4	37.31	22.026	
7,315.0	7,306.7	7,341.6	7,305.7	14.7	22.6	89.63	8.7	620.1	821.7	784.4	37.32	22.018	
7,400.0	7,391.7	7,426.6	7,390.7	14.8	22.6	89.63	8.7	620.1	821.7	784.3	37.40	21.972	
7,410.0	7,401.7	7,436.6	7,400.7	14.8	22.6	89.63	8.7	620.1	821.7	784.3	37.41	21.967	
7,500.0	7,491.7	7,526.6	7,490.7	14.8	22.7	89.63	8.7	620.1	821.7	784.2	37.49	21.919	
7,505.0	7,496.7	7,531.6	7,495.7	14.8	22.7	89.63	8.7	620.1	821.7	784.2	37.49	21.916	
7,600.0	7,591.7	7,626.6	7,590.7	14.9	22.7	89.63	8.7	620.1	821.7	784.1	37.58	21.865	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,695.0	7,686.7	7,721.6	7,685.7	14.9	22.7	89.63	8.7	620.1	821.7	784.1	37.67	21.814	
7,700.0	7,691.7	7,726.6	7,690.7	14.9	22.7	89.63	8.7	620.1	821.7	784.0	37.67	21.812	
7,790.0	7,781.7	7,816.6	7,780.7	15.0	22.8	89.63	8.7	620.1	821.7	784.0	37.76	21.764	
7,800.0	7,791.7	7,826.6	7,790.7	15.0	22.8	89.63	8.7	620.1	821.7	784.0	37.77	21.758	
7,885.0	7,876.7	7,911.6	7,875.7	15.1	22.8	89.63	8.7	620.1	821.7	783.9	37.85	21.713	
7,900.0	7,891.7	7,926.6	7,890.7	15.1	22.8	89.63	8.7	620.1	821.7	783.9	37.86	21.705	
7,980.0	7,971.7	8,006.6	7,970.7	15.1	22.8	89.63	8.7	620.1	821.7	783.8	37.93	21.662	
8,000.0	7,991.7	8,026.6	7,990.7	15.1	22.8	89.63	8.7	620.1	821.7	783.8	37.95	21.651	
8,075.0	8,066.7	8,101.6	8,065.7	15.2	22.9	89.63	8.7	620.1	821.7	783.7	38.02	21.611	
8,100.0	8,091.7	8,126.6	8,090.7	15.2	22.9	89.63	8.7	620.1	821.7	783.7	38.05	21.597	
8,170.0	8,161.7	8,196.6	8,160.7	15.2	22.9	89.63	8.7	620.1	821.7	783.6	38.11	21.560	
8,200.0	8,191.7	8,226.6	8,190.7	15.2	22.9	89.63	8.7	620.1	821.7	783.6	38.14	21.544	
8,265.0	8,256.7	8,291.6	8,255.7	15.3	22.9	89.63	8.7	620.1	821.7	783.5	38.20	21.509	
8,300.0	8,291.7	8,326.6	8,290.7	15.3	22.9	89.63	8.7	620.1	821.7	783.5	38.24	21.490	
8,360.0	8,351.7	8,386.6	8,350.7	15.3	23.0	89.63	8.7	620.1	821.7	783.4	38.29	21.458	
8,400.0	8,391.7	8,426.6	8,390.7	15.4	23.0	89.63	8.7	620.1	821.7	783.4	38.33	21.437	
8,455.0	8,446.7	8,481.6	8,445.7	15.4	23.0	89.63	8.7	620.1	821.7	783.3	38.38	21.407	
8,500.0	8,491.7	8,526.6	8,490.7	15.4	23.0	89.63	8.7	620.1	821.7	783.3	38.43	21.383	
8,550.0	8,541.7	8,576.6	8,540.7	15.5	23.0	89.63	8.7	620.1	821.7	783.2	38.48	21.357	
8,600.0	8,591.7	8,626.6	8,590.7	15.5	23.0	89.63	8.7	620.1	821.7	783.2	38.52	21.330	
8,645.0	8,636.7	8,671.6	8,635.7	15.5	23.1	89.63	8.7	620.1	821.7	783.2	38.57	21.306	
8,700.0	8,691.7	8,726.6	8,690.7	15.5	23.1	89.63	8.7	620.1	821.7	783.1	38.62	21.277	
8,740.0	8,731.7	8,766.6	8,730.7	15.6	23.1	89.63	8.7	620.1	821.7	783.1	38.66	21.255	
8,800.0	8,791.7	8,826.6	8,790.7	15.6	23.1	89.63	8.7	620.1	821.7	783.0	38.72	21.223	
8,835.0	8,826.7	8,861.6	8,825.7	15.6	23.1	89.63	8.7	620.1	821.7	783.0	38.75	21.204	
8,900.0	8,891.7	8,926.6	8,890.7	15.7	23.2	89.63	8.7	620.1	821.7	782.9	38.82	21.170	
8,930.0	8,921.7	8,956.6	8,920.7	15.7	23.2	89.63	8.7	620.1	821.7	782.9	38.85	21.154	
9,000.0	8,991.7	9,026.6	8,990.7	15.7	23.2	89.63	8.7	620.1	821.7	782.8	38.91	21.117	
9,025.0	9,016.7	9,051.6	9,015.7	15.7	23.2	89.63	8.7	620.1	821.7	782.8	38.94	21.103	
9,100.0	9,091.7	9,126.6	9,090.7	15.8	23.2	89.63	8.7	620.1	821.7	782.7	39.01	21.063	
9,120.0	9,111.7	9,146.6	9,110.7	15.8	23.2	89.63	8.7	620.1	821.7	782.7	39.03	21.053	
9,200.0	9,191.7	9,226.6	9,190.7	15.8	23.3	89.63	8.7	620.1	821.7	782.6	39.11	21.010	
9,215.0	9,206.7	9,241.6	9,205.7	15.9	23.3	89.63	8.7	620.1	821.7	782.6	39.13	21.002	
9,300.0	9,291.7	9,326.6	9,290.7	15.9	23.3	89.63	8.7	620.1	821.7	782.5	39.21	20.957	
9,310.0	9,301.7	9,336.6	9,300.7	15.9	23.3	89.63	8.7	620.1	821.7	782.5	39.22	20.952	
9,400.0	9,391.7	9,426.6	9,390.7	16.0	23.3	89.63	8.7	620.1	821.7	782.4	39.31	20.904	
9,405.0	9,396.7	9,431.6	9,395.7	16.0	23.4	89.63	8.7	620.1	821.7	782.4	39.31	20.901	
9,500.0	9,491.7	9,526.6	9,490.7	16.0	23.4	89.63	8.7	620.1	821.7	782.3	39.41	20.851	
9,595.0	9,586.7	9,621.6	9,585.7	16.1	23.4	89.63	8.7	620.1	821.7	782.2	39.51	20.800	
9,600.0	9,591.7	9,626.6	9,590.7	16.1	23.4	89.63	8.7	620.1	821.7	782.2	39.51	20.798	
9,690.0	9,681.7	9,716.6	9,680.7	16.1	23.5	89.63	8.7	620.1	821.7	782.1	39.60	20.750	
9,700.0	9,691.7	9,726.6	9,690.7	16.2	23.5	89.63	8.7	620.1	821.7	782.1	39.61	20.745	
9,785.0	9,776.7	9,811.6	9,775.7	16.2	23.5	89.63	8.7	620.1	821.7	782.0	39.70	20.700	
9,800.0	9,791.7	9,826.6	9,790.7	16.2	23.5	89.63	8.7	620.1	821.7	782.0	39.71	20.692	
9,880.0	9,871.7	9,906.6	9,870.7	16.3	23.5	89.63	8.7	620.1	821.7	781.9	39.79	20.650	
9,900.0	9,891.7	9,926.6	9,890.7	16.3	23.5	89.63	8.7	620.1	821.7	781.9	39.81	20.639	
9,975.0	9,966.7	10,001.6	9,965.7	16.3	23.6	89.63	8.7	620.1	821.7	781.8	39.89	20.600	
10,000.0	9,991.7	10,026.6	9,990.7	16.3	23.6	89.63	8.7	620.1	821.7	781.8	39.92	20.586	
10,070.0	10,061.7	10,096.6	10,060.7	16.4	23.6	89.63	8.7	620.1	821.7	781.7	39.99	20.549	
10,100.0	10,091.7	10,126.6	10,090.7	16.4	23.6	89.63	8.7	620.1	821.7	781.7	40.02	20.534	
10,165.0	10,156.7	10,191.6	10,155.7	16.4	23.6	89.63	8.7	620.1	821.7	781.6	40.08	20.500	
10,200.0	10,191.7	10,226.6	10,190.7	16.5	23.7	89.63	8.7	620.1	821.7	781.6	40.12	20.481	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,260.0	10,251.7	10,286.6	10,250.7	16.5	23.7	89.63	8.7	620.1	821.7	781.5	40.18	20.450	
10,300.0	10,291.7	10,326.6	10,290.7	16.5	23.7	89.63	8.7	620.1	821.7	781.5	40.22	20.429	
10,355.0	10,346.7	10,381.6	10,345.7	16.6	23.7	89.63	8.7	620.1	821.7	781.4	40.28	20.400	
10,400.0	10,391.7	10,426.6	10,390.7	16.6	23.7	89.63	8.7	620.1	821.7	781.4	40.33	20.376	
10,450.0	10,441.7	10,476.6	10,440.7	16.6	23.8	89.63	8.7	620.1	821.7	781.3	40.38	20.350	
10,500.0	10,491.7	10,526.6	10,490.7	16.7	23.8	89.63	8.7	620.1	821.7	781.3	40.43	20.324	
10,545.0	10,536.7	10,571.6	10,535.7	16.7	23.8	89.63	8.7	620.1	821.7	781.2	40.48	20.300	
10,600.0	10,591.7	10,626.6	10,590.7	16.7	23.8	89.63	8.7	620.1	821.7	781.2	40.54	20.272	
10,640.0	10,631.7	10,666.6	10,630.7	16.7	23.8	89.63	8.7	620.1	821.7	781.1	40.58	20.251	
10,700.0	10,691.7	10,726.6	10,690.7	16.8	23.9	89.63	8.7	620.1	821.7	781.1	40.64	20.219	
10,735.0	10,726.7	10,761.6	10,725.7	16.8	23.9	89.63	8.7	620.1	821.7	781.0	40.68	20.201	
10,800.0	10,791.7	10,826.6	10,790.7	16.8	23.9	89.63	8.7	620.1	821.7	781.0	40.75	20.167	
10,830.0	10,821.7	10,856.6	10,820.7	16.9	23.9	89.63	8.7	620.1	821.7	780.9	40.78	20.152	
10,900.0	10,891.7	10,926.6	10,890.7	16.9	23.9	89.63	8.7	620.1	821.7	780.9	40.85	20.115	
10,925.0	10,916.7	10,951.6	10,915.7	16.9	24.0	89.63	8.7	620.1	821.7	780.8	40.88	20.102	
11,000.0	10,991.7	11,026.6	10,990.7	17.0	24.0	89.63	8.7	620.1	821.7	780.8	40.96	20.063	
11,020.0	11,011.7	11,046.6	11,010.7	17.0	24.0	89.63	8.7	620.1	821.7	780.7	40.98	20.053	
11,100.0	11,091.7	11,126.6	11,090.7	17.0	24.0	89.63	8.7	620.1	821.7	780.7	41.06	20.013	
11,115.0	11,106.7	11,141.6	11,105.7	17.0	24.0	89.63	8.7	620.1	821.7	780.7	41.07	20.009	
11,155.9	11,147.5	11,182.4	11,146.5	17.1	24.0	89.63	8.7	620.1	821.7	780.6	41.09	19.997	
11,175.0	11,166.7	11,201.7	11,165.8	17.1	24.0	90.15	9.1	620.1	821.7	780.6	41.09	19.996	
11,200.0	11,191.6	11,226.8	11,190.8	17.1	24.0	90.15	10.8	620.1	821.7	780.6	41.10	19.994	
11,210.0	11,201.6	11,236.8	11,200.8	17.1	24.0	90.15	11.8	620.1	821.7	780.6	41.10	19.994	
11,225.0	11,216.4	11,251.9	11,215.7	17.1	24.0	90.15	13.8	620.1	821.7	780.6	41.10	19.993	
11,250.0	11,241.1	11,277.0	11,240.5	17.1	24.0	90.15	18.1	620.1	821.7	780.6	41.10	19.991	
11,275.0	11,265.4	11,302.1	11,265.0	17.1	24.1	90.14	23.7	620.0	821.7	780.6	41.11	19.989	
11,300.0	11,289.5	11,327.2	11,289.1	17.1	24.1	90.14	30.5	620.0	821.7	780.6	41.11	19.987	
11,305.0	11,294.3	11,332.2	11,293.9	17.1	24.1	90.14	32.0	619.9	821.7	780.6	41.11	19.987	
11,325.0	11,313.2	11,352.3	11,312.9	17.1	24.1	90.14	38.6	619.9	821.7	780.6	41.12	19.985	
11,350.0	11,336.4	11,377.4	11,336.2	17.1	24.1	90.14	48.0	619.8	821.7	780.6	41.12	19.982	
11,375.0	11,359.1	11,402.5	11,358.9	17.1	24.1	90.13	58.6	619.7	821.7	780.6	41.13	19.980	
11,400.0	11,381.2	11,427.6	11,381.1	17.1	24.1	90.13	70.3	619.6	821.7	780.6	41.13	19.976	
11,425.0	11,402.6	11,452.7	11,402.6	17.1	24.1	90.13	83.2	619.5	821.7	780.6	41.14	19.973	
11,450.0	11,423.4	11,477.8	11,423.4	17.1	24.1	90.12	97.2	619.3	821.7	780.6	41.15	19.968	
11,475.0	11,443.4	11,502.9	11,443.5	17.1	24.1	90.12	112.3	619.2	821.7	780.6	41.16	19.963	
11,495.0	11,458.9	11,523.0	11,458.9	17.1	24.1	90.11	125.1	619.1	821.7	780.5	41.17	19.959	
11,500.0	11,462.6	11,528.0	11,462.7	17.1	24.1	90.11	128.4	619.1	821.7	780.5	41.17	19.958	
11,525.0	11,481.0	11,553.1	11,481.1	17.1	24.1	90.11	145.5	618.9	821.7	780.5	41.19	19.951	
11,550.0	11,498.4	11,578.2	11,498.5	17.1	24.1	90.10	163.5	618.7	821.7	780.5	41.20	19.943	
11,575.0	11,514.9	11,603.2	11,514.9	17.1	24.1	90.09	182.5	618.6	821.7	780.5	41.22	19.934	
11,590.0	11,524.3	11,618.3	11,524.3	17.1	24.1	90.09	194.2	618.5	821.7	780.5	41.24	19.928	
11,600.0	11,530.3	11,628.3	11,530.4	17.1	24.1	90.09	202.2	618.4	821.7	780.5	41.24	19.923	
11,625.0	11,544.7	11,653.4	11,544.7	17.2	24.1	90.08	222.8	618.2	821.7	780.4	41.27	19.912	
11,650.0	11,558.1	11,678.4	11,558.0	17.2	24.1	90.08	244.0	618.0	821.7	780.4	41.30	19.898	
11,675.0	11,570.3	11,703.5	11,570.2	17.2	24.1	90.07	265.9	617.8	821.7	780.4	41.33	19.884	
11,685.0	11,574.8	11,713.5	11,574.7	17.2	24.1	90.07	274.9	617.7	821.7	780.4	41.34	19.877	
11,700.0	11,581.3	11,728.5	11,581.1	17.2	24.2	90.06	288.4	617.6	821.7	780.4	41.36	19.867	
11,725.0	11,591.2	11,753.6	11,590.9	17.2	24.2	90.05	311.5	617.4	821.7	780.3	41.40	19.849	
11,750.0	11,599.8	11,778.6	11,599.4	17.3	24.2	90.05	335.0	617.2	821.7	780.3	41.44	19.829	
11,775.0	11,607.2	11,803.6	11,606.7	17.3	24.2	90.04	359.0	617.0	821.7	780.2	41.48	19.808	
11,780.0	11,608.5	11,808.6	11,608.0	17.3	24.2	90.04	363.8	616.9	821.7	780.2	41.49	19.803	
11,800.0	11,613.3	11,828.7	11,612.8	17.3	24.2	90.03	383.2	616.7	821.7	780.2	41.53	19.784	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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)			
11,825.0	11,618.2	11,853.7	11,617.5	17.3	24.2	90.02	407.8	616.5	821.7	780.1	41.59	19.759	
11,850.0	11,621.7	11,878.7	11,621.0	17.4	24.3	90.02	432.6	616.3	821.7	780.1	41.64	19.732	
11,875.0	11,624.0	11,903.7	11,623.1	17.4	24.3	90.01	457.5	616.1	821.7	780.0	41.70	19.703	
11,900.0	11,625.0	11,928.7	11,624.0	17.4	24.3	90.00	482.5	615.8	821.7	779.9	41.77	19.673	
11,905.9	11,625.0	11,934.6	11,624.0	17.5	24.3	90.00	488.3	615.8	821.7	779.9	41.78	19.666	
11,970.0	11,625.0	11,998.7	11,624.0	17.6	24.4	90.00	552.5	615.2	821.7	779.7	41.98	19.573	
12,000.0	11,625.0	12,028.7	11,624.0	17.6	24.5	90.00	582.5	614.9	821.7	779.6	42.08	19.526	
12,065.0	11,625.0	12,093.7	11,624.0	17.8	24.6	90.00	647.5	614.3	821.7	779.4	42.32	19.416	
12,100.0	11,625.0	12,128.7	11,624.0	17.8	24.6	90.00	682.5	614.0	821.7	779.2	42.46	19.354	
12,160.0	11,625.0	12,188.7	11,624.0	18.0	24.7	90.00	742.5	613.5	821.7	779.0	42.71	19.240	
12,200.0	11,625.0	12,228.7	11,624.0	18.1	24.8	90.00	782.5	613.1	821.7	778.8	42.88	19.162	
12,255.0	11,625.0	12,283.7	11,624.0	18.2	24.9	90.00	837.5	612.6	821.7	778.6	43.14	19.047	
12,300.0	11,625.0	12,328.7	11,624.0	18.4	25.0	90.00	882.5	612.2	821.7	778.3	43.36	18.951	
12,350.0	11,625.0	12,378.7	11,624.0	18.5	25.1	90.00	932.5	611.7	821.7	778.1	43.62	18.838	
12,400.0	11,625.0	12,428.7	11,624.0	18.7	25.2	90.00	982.5	611.3	821.7	777.8	43.88	18.724	
12,445.0	11,625.0	12,473.7	11,624.0	18.8	25.3	90.00	1,027.5	610.9	821.7	777.6	44.14	18.616	
12,500.0	11,625.0	12,528.7	11,624.0	19.0	25.5	90.00	1,082.5	610.4	821.7	777.2	44.46	18.483	
12,540.0	11,625.0	12,568.7	11,624.0	19.1	25.6	90.00	1,122.5	610.0	821.7	777.0	44.70	18.382	
12,600.0	11,625.0	12,628.7	11,624.0	19.4	25.7	90.00	1,182.4	609.5	821.7	776.6	45.07	18.230	
12,635.0	11,625.0	12,663.7	11,624.0	19.5	25.8	90.00	1,217.4	609.1	821.7	776.4	45.30	18.138	
12,700.0	11,625.0	12,728.7	11,624.0	19.7	26.0	90.00	1,282.4	608.6	821.7	776.0	45.73	17.967	
12,730.0	11,625.0	12,758.7	11,624.0	19.8	26.1	90.00	1,312.4	608.3	821.7	775.7	45.94	17.885	
12,800.0	11,625.0	12,828.7	11,624.0	20.1	26.3	90.00	1,382.4	607.6	821.7	775.2	46.43	17.696	
12,825.0	11,625.0	12,853.7	11,624.0	20.2	26.4	90.00	1,407.4	607.4	821.7	775.1	46.62	17.626	
12,900.0	11,625.0	12,928.7	11,624.0	20.5	26.6	90.00	1,482.4	606.7	821.7	774.5	47.17	17.418	
12,920.0	11,625.0	12,948.7	11,624.0	20.6	26.7	90.00	1,502.4	606.5	821.7	774.3	47.33	17.361	
13,000.0	11,625.0	13,028.7	11,624.0	21.0	27.0	90.00	1,582.4	605.8	821.7	773.7	47.95	17.135	
13,015.0	11,625.0	13,043.7	11,624.0	21.1	27.0	90.00	1,597.4	605.7	821.7	773.6	48.07	17.092	
13,100.0	11,625.0	13,128.7	11,624.0	21.4	27.3	90.00	1,682.4	604.9	821.7	772.9	48.77	16.850	
13,110.0	11,625.0	13,138.7	11,624.0	21.5	27.4	90.00	1,692.4	604.8	821.7	772.8	48.85	16.821	
13,200.0	11,625.0	13,228.7	11,624.0	21.9	27.7	90.00	1,782.4	604.0	821.7	772.1	49.61	16.562	
13,205.0	11,625.0	13,233.7	11,624.0	21.9	27.7	90.00	1,787.4	604.0	821.7	772.0	49.66	16.547	
13,300.0	11,625.0	13,328.7	11,624.0	22.4	28.1	90.00	1,882.4	603.1	821.7	771.2	50.49	16.274	
13,395.0	11,625.0	13,423.7	11,624.0	22.9	28.5	90.00	1,977.4	602.2	821.7	770.3	51.35	16.000	
13,400.0	11,625.0	13,428.7	11,624.0	22.9	28.5	90.00	1,982.4	602.2	821.7	770.3	51.40	15.986	
13,490.0	11,625.0	13,518.7	11,624.0	23.4	28.9	90.00	2,072.4	601.4	821.7	769.4	52.24	15.728	
13,500.0	11,625.0	13,528.7	11,624.0	23.4	28.9	90.00	2,082.4	601.3	821.7	769.3	52.34	15.700	
13,585.0	11,625.0	13,613.7	11,624.0	23.9	29.3	90.00	2,167.4	600.5	821.7	768.5	53.15	15.458	
13,600.0	11,625.0	13,628.7	11,624.0	24.0	29.4	90.00	2,182.4	600.4	821.7	768.4	53.30	15.416	
13,680.0	11,625.0	13,708.7	11,624.0	24.4	29.7	90.00	2,262.4	599.6	821.7	767.6	54.09	15.191	
13,700.0	11,625.0	13,728.7	11,624.0	24.5	29.8	90.00	2,282.4	599.4	821.7	767.4	54.29	15.135	
13,775.0	11,625.0	13,803.7	11,624.0	24.9	30.2	90.00	2,357.4	598.8	821.7	766.6	55.05	14.926	
13,800.0	11,625.0	13,828.7	11,624.0	25.1	30.3	90.00	2,382.4	598.5	821.7	766.3	55.30	14.857	
13,870.0	11,625.0	13,898.7	11,624.0	25.5	30.6	90.00	2,452.4	597.9	821.7	765.6	56.03	14.665	
13,900.0	11,625.0	13,928.7	11,624.0	25.6	30.8	90.00	2,482.4	597.6	821.6	765.3	56.34	14.584	
13,965.0	11,625.0	13,993.7	11,624.0	26.0	31.1	90.00	2,547.4	597.0	821.6	764.6	57.03	14.408	
14,000.0	11,625.0	14,028.7	11,624.0	26.2	31.2	90.00	2,582.4	596.7	821.6	764.2	57.40	14.315	
14,060.0	11,625.0	14,088.7	11,624.0	26.6	31.5	90.00	2,642.4	596.2	821.6	763.6	58.04	14.155	
14,100.0	11,625.0	14,128.7	11,624.0	26.8	31.7	90.00	2,682.4	595.8	821.6	763.2	58.48	14.051	
14,155.0	11,625.0	14,183.7	11,624.0	27.1	32.0	90.00	2,737.4	595.3	821.6	762.6	59.08	13.907	
14,200.0	11,625.0	14,228.7	11,624.0	27.4	32.2	90.00	2,782.4	594.9	821.6	762.1	59.58	13.792	
14,250.0	11,625.0	14,278.7	11,624.0	27.7	32.5	90.00	2,832.4	594.4	821.6	761.5	60.13	13.664	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,300.0	11,625.0	14,328.7	11,624.0	28.0	32.7	90.00	2,882.4	594.0	821.6	760.9	60.69	13.538	
14,345.0	11,625.0	14,373.7	11,624.0	28.3	33.0	90.00	2,927.4	593.6	821.6	760.4	61.20	13.425	
14,400.0	11,625.0	14,428.7	11,624.0	28.6	33.3	90.00	2,982.4	593.1	821.6	759.8	61.83	13.289	
14,440.0	11,625.0	14,468.7	11,624.0	28.8	33.5	90.00	3,022.4	592.7	821.6	759.3	62.29	13.191	
14,500.0	11,625.0	14,528.7	11,624.0	29.2	33.8	90.00	3,082.4	592.2	821.6	758.7	62.98	13.047	
14,535.0	11,625.0	14,563.7	11,624.0	29.4	34.0	90.00	3,117.4	591.8	821.6	758.2	63.38	12.963	
14,600.0	11,625.0	14,628.7	11,624.0	29.8	34.3	90.00	3,182.4	591.3	821.6	757.5	64.14	12.810	
14,630.0	11,625.0	14,658.7	11,624.0	30.0	34.5	90.00	3,212.4	591.0	821.6	757.1	64.50	12.739	
14,700.0	11,625.0	14,728.7	11,624.0	30.5	34.9	90.00	3,282.4	590.3	821.6	756.3	65.32	12.578	
14,725.0	11,625.0	14,753.7	11,624.0	30.6	35.0	90.00	3,307.4	590.1	821.6	756.0	65.62	12.521	
14,800.0	11,625.0	14,828.7	11,624.0	31.1	35.5	90.00	3,382.4	589.4	821.6	755.1	66.52	12.352	
14,820.0	11,625.0	14,848.7	11,624.0	31.2	35.6	90.00	3,402.4	589.3	821.6	754.9	66.76	12.308	
14,900.0	11,625.0	14,928.7	11,624.0	31.7	36.0	90.00	3,482.4	588.5	821.6	753.9	67.72	12.132	
14,915.0	11,625.0	14,943.7	11,624.0	31.8	36.1	90.00	3,497.4	588.4	821.6	753.7	67.91	12.099	
15,000.0	11,625.0	15,028.7	11,624.0	32.4	36.6	90.00	3,582.4	587.6	821.6	752.7	68.94	11.917	
15,010.0	11,625.0	15,038.7	11,624.0	32.5	36.7	90.00	3,592.3	587.5	821.6	752.6	69.07	11.896	
15,100.0	11,625.0	15,128.7	11,624.0	33.0	37.2	90.00	3,682.3	586.7	821.6	751.4	70.18	11.708	
15,105.0	11,625.0	15,133.7	11,624.0	33.1	37.2	90.00	3,687.3	586.7	821.6	751.4	70.24	11.698	
15,200.0	11,625.0	15,228.7	11,624.0	33.7	37.8	90.00	3,782.3	585.8	821.6	750.2	71.42	11.504	
15,295.0	11,625.0	15,323.7	11,624.0	34.3	38.3	90.00	3,877.3	584.9	821.6	749.0	72.61	11.315	
15,300.0	11,625.0	15,328.7	11,624.0	34.4	38.4	90.00	3,882.3	584.9	821.6	748.9	72.67	11.306	
15,390.0	11,625.0	15,418.7	11,624.0	35.0	38.9	90.00	3,972.3	584.1	821.6	747.8	73.81	11.131	
15,400.0	11,625.0	15,428.7	11,624.0	35.0	39.0	90.00	3,982.3	584.0	821.6	747.7	73.94	11.112	
15,485.0	11,625.0	15,513.7	11,624.0	35.6	39.5	90.00	4,067.3	583.2	821.6	746.6	75.02	10.952	
15,500.0	11,625.0	15,528.7	11,624.0	35.7	39.6	90.00	4,082.3	583.1	821.6	746.4	75.21	10.924	
15,580.0	11,625.0	15,608.7	11,624.0	36.2	40.0	90.00	4,162.3	582.3	821.6	745.4	76.23	10.777	
15,600.0	11,625.0	15,628.7	11,624.0	36.4	40.2	90.00	4,182.3	582.2	821.6	745.1	76.49	10.741	
15,675.0	11,625.0	15,703.7	11,624.0	36.9	40.6	90.00	4,257.3	581.5	821.6	744.1	77.46	10.607	
15,700.0	11,625.0	15,728.7	11,624.0	37.1	40.8	90.00	4,282.3	581.2	821.6	743.8	77.78	10.563	
15,770.0	11,625.0	15,798.7	11,624.0	37.5	41.2	90.00	4,352.3	580.6	821.6	742.9	78.69	10.441	
15,800.0	11,625.0	15,828.7	11,624.0	37.7	41.4	90.00	4,382.3	580.3	821.6	742.5	79.08	10.389	
15,865.0	11,625.0	15,893.7	11,624.0	38.2	41.8	90.00	4,447.3	579.7	821.6	741.7	79.93	10.279	
15,900.0	11,625.0	15,928.7	11,624.0	38.4	42.0	90.00	4,482.3	579.4	821.6	741.2	80.39	10.220	
15,960.0	11,625.0	15,988.7	11,624.0	38.8	42.4	90.00	4,542.3	578.9	821.6	740.4	81.18	10.121	
16,000.0	11,625.0	16,028.7	11,624.0	39.1	42.7	90.00	4,582.3	578.5	821.6	739.9	81.71	10.055	
16,055.0	11,625.0	16,083.7	11,624.0	39.5	43.0	90.00	4,637.3	578.0	821.6	739.2	82.43	9.967	
16,100.0	11,625.0	16,128.7	11,624.0	39.8	43.3	90.00	4,682.3	577.6	821.6	738.6	83.03	9.895	
16,150.0	11,625.0	16,178.7	11,624.0	40.1	43.6	90.00	4,732.3	577.1	821.6	737.9	83.69	9.817	
16,200.0	11,625.0	16,228.7	11,624.0	40.5	43.9	90.00	4,782.3	576.7	821.6	737.2	84.36	9.739	
16,245.0	11,625.0	16,273.7	11,624.0	40.8	44.2	90.00	4,827.3	576.3	821.6	736.6	84.96	9.671	
16,300.0	11,625.0	16,328.7	11,624.0	41.2	44.6	90.00	4,882.3	575.8	821.6	735.9	85.69	9.588	
16,340.0	11,625.0	16,368.7	11,624.0	41.5	44.8	90.00	4,922.3	575.4	821.6	735.4	86.23	9.528	
16,400.0	11,625.0	16,428.7	11,624.0	41.9	45.2	90.00	4,982.3	574.9	821.6	734.5	87.03	9.440	
16,435.0	11,625.0	16,463.7	11,624.0	42.1	45.4	90.00	5,017.3	574.5	821.6	734.1	87.51	9.389	
16,500.0	11,625.0	16,528.7	11,624.0	42.6	45.9	90.00	5,082.3	574.0	821.6	733.2	88.38	9.296	
16,530.0	11,625.0	16,558.7	11,624.0	42.8	46.1	90.00	5,112.3	573.7	821.6	732.8	88.79	9.253	
16,600.0	11,625.0	16,628.7	11,624.0	43.3	46.5	90.00	5,182.3	573.0	821.6	731.8	89.74	9.156	
16,625.0	11,625.0	16,653.7	11,624.0	43.4	46.7	90.00	5,207.3	572.8	821.6	731.5	90.07	9.121	
16,700.0	11,625.0	16,728.7	11,624.0	44.0	47.2	90.00	5,282.3	572.1	821.6	730.5	91.09	9.019	
16,720.0	11,625.0	16,748.7	11,624.0	44.1	47.3	90.00	5,302.3	572.0	821.6	730.2	91.37	8.992	
16,800.0	11,625.0	16,828.7	11,624.0	44.7	47.8	90.00	5,382.3	571.2	821.6	729.1	92.46	8.886	
16,815.0	11,625.0	16,843.7	11,624.0	44.8	47.9	90.00	5,397.3	571.1	821.6	728.9	92.66	8.866	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-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
16,900.0	11,625.0	16,928.7	11,624.0	45.4	48.5	90.00	5,482.3	570.3	821.6	727.7	93.83	8.756	
16,910.0	11,625.0	16,938.7	11,624.0	45.5	48.6	90.00	5,492.3	570.2	821.6	727.6	93.96	8.743	
17,000.0	11,625.0	17,028.7	11,624.0	46.1	49.1	90.00	5,582.3	569.4	821.6	726.4	95.20	8.630	
17,005.0	11,625.0	17,033.7	11,624.0	46.1	49.2	90.00	5,587.3	569.4	821.6	726.3	95.27	8.624	
17,100.0	11,625.0	17,128.7	11,624.0	46.8	49.8	90.00	5,682.3	568.5	821.6	725.0	96.58	8.507	
17,195.0	11,625.0	17,223.7	11,624.0	47.5	50.5	90.00	5,777.3	567.6	821.6	723.7	97.89	8.392	
17,200.0	11,625.0	17,228.7	11,624.0	47.5	50.5	90.00	5,782.3	567.6	821.6	723.6	97.96	8.387	
17,290.0	11,625.0	17,318.7	11,624.0	48.2	51.1	90.00	5,872.3	566.8	821.6	722.3	99.21	8.281	
17,300.0	11,625.0	17,328.7	11,624.0	48.2	51.2	90.00	5,882.3	566.7	821.6	722.2	99.35	8.269	
17,385.0	11,625.0	17,413.7	11,624.0	48.8	51.7	90.00	5,967.3	565.9	821.6	721.0	100.53	8.172	
17,400.0	11,625.0	17,428.7	11,624.0	48.9	51.8	90.00	5,982.3	565.8	821.5	720.8	100.74	8.155	
17,480.0	11,625.0	17,508.7	11,624.0	49.5	52.4	90.00	6,062.2	565.0	821.5	719.7	101.85	8.066	
17,500.0	11,625.0	17,528.7	11,624.0	49.7	52.5	90.00	6,082.2	564.9	821.5	719.4	102.13	8.044	
17,575.0	11,625.0	17,603.7	11,624.0	50.2	53.0	90.00	6,157.2	564.2	821.5	718.4	103.18	7.962	
17,600.0	11,625.0	17,628.7	11,624.0	50.4	53.2	90.00	6,182.2	563.9	821.5	718.0	103.53	7.935	
17,670.0	11,625.0	17,698.7	11,624.0	50.9	53.7	90.00	6,252.2	563.3	821.5	717.0	104.51	7.861	
17,700.0	11,625.0	17,728.7	11,624.0	51.1	53.9	90.00	6,282.2	563.0	821.5	716.6	104.93	7.829	
17,765.0	11,625.0	17,793.7	11,624.0	51.6	54.3	90.00	6,347.2	562.4	821.5	715.7	105.85	7.762	
17,800.0	11,625.0	17,828.7	11,624.0	51.8	54.6	90.00	6,382.2	562.1	821.5	715.2	106.34	7.726	
17,860.0	11,625.0	17,888.7	11,624.0	52.3	55.0	90.00	6,442.2	561.6	821.5	714.4	107.18	7.665	
17,900.0	11,625.0	17,928.7	11,624.0	52.5	55.2	90.00	6,482.2	561.2	821.5	713.8	107.75	7.625	
17,955.0	11,625.0	17,983.7	11,624.0	52.9	55.6	90.00	6,537.2	560.7	821.5	713.0	108.52	7.570	
18,000.0	11,625.0	18,028.7	11,624.0	53.3	55.9	90.00	6,582.2	560.3	821.5	712.4	109.16	7.526	
18,050.0	11,625.0	18,078.7	11,624.0	53.6	56.3	90.00	6,632.2	559.8	821.5	711.7	109.87	7.477	
18,100.0	11,625.0	18,128.7	11,624.0	54.0	56.6	90.00	6,682.2	559.4	821.5	711.0	110.58	7.430	
18,145.0	11,625.0	18,173.7	11,624.0	54.3	56.9	90.00	6,727.2	559.0	821.5	710.3	111.21	7.387	
18,200.0	11,625.0	18,228.7	11,624.0	54.7	57.3	90.00	6,782.2	558.5	821.5	709.5	111.99	7.336	
18,240.0	11,625.0	18,268.7	11,624.0	55.0	57.6	90.00	6,822.2	558.1	821.5	709.0	112.56	7.298	
18,300.0	11,625.0	18,328.7	11,624.0	55.4	58.0	90.00	6,882.2	557.6	821.5	708.1	113.41	7.244	
18,335.0	11,625.0	18,363.7	11,624.0	55.7	58.3	90.00	6,917.2	557.3	821.5	707.6	113.91	7.212	
18,400.0	11,625.0	18,428.7	11,624.0	56.2	58.7	90.00	6,982.2	556.7	821.5	706.7	114.84	7.154	
18,430.0	11,625.0	18,458.7	11,624.0	56.4	58.9	90.00	7,012.2	556.4	821.5	706.3	115.26	7.127	
18,500.0	11,625.0	18,528.7	11,624.0	56.9	59.4	90.00	7,082.2	555.7	821.5	705.3	116.26	7.066	
18,525.0	11,625.0	18,553.7	11,624.0	57.1	59.6	90.00	7,107.2	555.5	821.5	704.9	116.62	7.044	
18,600.0	11,625.0	18,628.7	11,624.0	57.6	60.1	90.00	7,182.2	554.8	821.5	703.8	117.69	6.980	
18,620.0	11,625.0	18,648.7	11,624.0	57.8	60.2	90.00	7,202.2	554.7	821.5	703.5	117.98	6.963	
18,700.0	11,625.0	18,728.7	11,624.0	58.4	60.8	90.00	7,282.2	553.9	821.5	702.4	119.12	6.896	
18,715.0	11,625.0	18,743.7	11,624.0	58.5	60.9	90.00	7,297.2	553.8	821.5	702.2	119.34	6.884	
18,800.0	11,625.0	18,828.7	11,624.0	59.1	61.5	90.00	7,382.2	553.0	821.5	701.0	120.56	6.814	
18,810.0	11,625.0	18,838.7	11,624.0	59.2	61.6	90.00	7,392.2	552.9	821.5	700.8	120.70	6.806	
18,900.0	11,625.0	18,928.7	11,624.0	59.8	62.2	90.00	7,482.2	552.1	821.5	699.5	121.99	6.734	
18,905.0	11,625.0	18,933.7	11,624.0	59.9	62.2	90.00	7,487.2	552.1	821.5	699.4	122.06	6.730	
19,000.0	11,625.0	19,028.7	11,624.0	60.6	62.9	90.00	7,582.2	551.2	821.5	698.1	123.43	6.656	
19,095.0	11,625.0	19,123.7	11,624.0	61.3	63.6	90.00	7,677.2	550.3	821.5	696.7	124.80	6.583	
19,100.0	11,625.0	19,128.7	11,624.0	61.3	63.6	90.00	7,682.2	550.3	821.5	696.6	124.87	6.579	
19,190.0	11,625.0	19,218.7	11,624.0	61.9	64.3	90.00	7,772.2	549.5	821.5	695.3	126.17	6.511	
19,200.0	11,625.0	19,228.7	11,624.0	62.0	64.3	90.00	7,782.2	549.4	821.5	695.2	126.31	6.504	
19,285.0	11,625.0	19,313.7	11,624.0	62.6	64.9	90.00	7,867.2	548.6	821.5	694.0	127.54	6.441	
19,300.0	11,625.0	19,328.7	11,624.0	62.8	65.0	90.00	7,882.2	548.5	821.5	693.7	127.75	6.430	
19,380.0	11,625.0	19,408.7	11,624.0	63.3	65.6	90.00	7,962.2	547.7	821.5	692.6	128.91	6.373	
19,400.0	11,625.0	19,428.7	11,624.0	63.5	65.7	90.00	7,982.2	547.6	821.5	692.3	129.20	6.358	
19,475.0	11,625.0	19,503.7	11,624.0	64.0	66.3	90.00	8,057.2	546.9	821.5	691.2	130.29	6.305	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 2000-r.5 MWD+IFR1, 11182-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Rule Assigned:													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
19,500.0	11,625.0	19,528.7	11,624.0	64.2	66.5	90.00	8,082.2	546.6	821.5	690.8	130.65	6.288	
19,570.0	11,625.0	19,598.7	11,624.0	64.7	67.0	90.00	8,152.2	546.0	821.5	689.8	131.66	6.239	
19,600.0	11,625.0	19,628.7	11,624.0	65.0	67.2	90.00	8,182.2	545.7	821.5	689.4	132.10	6.219	
19,665.0	11,625.0	19,693.7	11,624.0	65.4	67.6	90.00	8,247.2	545.1	821.5	688.4	133.04	6.175	
19,700.0	11,625.0	19,728.7	11,624.0	65.7	67.9	90.00	8,282.2	544.8	821.5	687.9	133.55	6.151	
19,760.0	11,625.0	19,788.7	11,624.0	66.1	68.3	90.00	8,342.2	544.3	821.5	687.1	134.42	6.111	
19,800.0	11,625.0	19,828.7	11,624.0	66.4	68.6	90.00	8,382.2	543.9	821.5	686.5	135.00	6.085	
19,855.0	11,625.0	19,883.7	11,624.0	66.8	69.0	90.00	8,437.1	543.4	821.5	685.7	135.80	6.049	
19,900.0	11,625.0	19,928.7	11,624.0	67.2	69.3	90.00	8,482.1	543.0	821.5	685.0	136.46	6.020	
19,950.0	11,625.0	19,978.7	11,624.0	67.5	69.7	90.00	8,532.1	542.5	821.5	684.3	137.18	5.988	
20,000.0	11,625.0	20,028.7	11,624.0	67.9	70.0	90.00	8,582.1	542.1	821.5	683.6	137.91	5.957	
20,045.0	11,625.0	20,073.7	11,624.0	68.3	70.4	90.00	8,627.1	541.7	821.5	682.9	138.57	5.928	
20,100.0	11,625.0	20,128.7	11,624.0	68.7	70.7	90.00	8,682.1	541.2	821.5	682.1	139.37	5.894	
20,140.0	11,625.0	20,168.7	11,624.0	69.0	71.0	90.00	8,722.1	540.8	821.5	681.5	139.95	5.870	
20,200.0	11,625.0	20,228.7	11,624.0	69.4	71.5	90.00	8,782.1	540.3	821.5	680.6	140.83	5.833	
20,235.0	11,625.0	20,263.7	11,624.0	69.7	71.7	90.00	8,817.1	540.0	821.5	680.1	141.34	5.812	
20,300.0	11,625.0	20,328.7	11,624.0	70.1	72.2	90.00	8,882.1	539.4	821.5	679.2	142.29	5.773	
20,330.0	11,625.0	20,358.7	11,624.0	70.4	72.4	90.00	8,912.1	539.1	821.5	678.7	142.73	5.756	
20,400.0	11,625.0	20,428.7	11,624.0	70.9	72.9	90.00	8,982.1	538.5	821.5	677.7	143.75	5.715	
20,425.0	11,625.0	20,453.7	11,624.0	71.1	73.1	90.00	9,007.1	538.2	821.5	677.3	144.12	5.700	
20,500.0	11,625.0	20,528.7	11,624.0	71.6	73.6	90.00	9,082.1	537.5	821.5	676.2	145.21	5.657	
20,520.0	11,625.0	20,548.7	11,624.0	71.8	73.8	90.00	9,102.1	537.4	821.5	676.0	145.51	5.646	
20,600.0	11,625.0	20,628.7	11,624.0	72.4	74.3	90.00	9,182.1	536.6	821.5	674.8	146.68	5.600	
20,615.0	11,625.0	20,643.7	11,624.0	72.5	74.5	90.00	9,197.1	536.5	821.5	674.6	146.90	5.592	
20,700.0	11,625.0	20,728.7	11,624.0	73.1	75.1	90.00	9,282.1	535.7	821.5	673.3	148.14	5.545	
20,710.0	11,625.0	20,738.7	11,624.0	73.2	75.1	90.00	9,292.1	535.6	821.5	673.2	148.29	5.540	
20,800.0	11,625.0	20,828.7	11,624.0	73.8	75.8	90.00	9,382.1	534.8	821.5	671.8	149.61	5.491	
20,805.0	11,625.0	20,833.7	11,624.0	73.9	75.8	90.00	9,387.1	534.8	821.5	671.8	149.68	5.488	
20,900.0	11,625.0	20,928.7	11,624.0	74.6	76.5	90.00	9,482.1	533.9	821.5	670.4	151.08	5.437	
20,995.0	11,625.0	21,023.7	11,624.0	75.3	77.2	90.00	9,577.1	533.0	821.4	669.0	152.47	5.387	
21,000.0	11,625.0	21,028.7	11,624.0	75.3	77.2	90.00	9,582.1	533.0	821.4	668.9	152.55	5.385	
21,090.0	11,625.0	21,118.7	11,624.0	76.0	77.9	90.00	9,672.1	532.2	821.4	667.6	153.87	5.339	
21,100.0	11,625.0	21,128.7	11,624.0	76.1	78.0	90.00	9,682.1	532.1	821.4	667.4	154.02	5.333	
21,185.0	11,625.0	21,213.7	11,624.0	76.7	78.6	90.00	9,767.1	531.3	821.4	666.2	155.27	5.290	
21,200.0	11,625.0	21,228.7	11,624.0	76.8	78.7	90.00	9,782.1	531.2	821.4	666.0	155.49	5.283	
21,280.0	11,625.0	21,308.7	11,624.0	77.4	79.3	90.00	9,862.1	530.4	821.4	664.8	156.67	5.243	
21,300.0	11,625.0	21,328.7	11,624.0	77.6	79.4	90.00	9,882.1	530.3	821.4	664.5	156.96	5.233	
21,375.0	11,625.0	21,403.7	11,624.0	78.1	80.0	90.00	9,957.1	529.6	821.4	663.4	158.07	5.197	
21,400.0	11,625.0	21,428.7	11,624.0	78.3	80.2	90.00	9,982.1	529.3	821.4	663.0	158.44	5.185	
21,470.0	11,625.0	21,498.7	11,624.0	78.8	80.7	90.00	10,052.1	528.7	821.4	662.0	159.47	5.151	
21,500.0	11,625.0	21,528.7	11,624.0	79.1	80.9	90.00	10,082.1	528.4	821.4	661.5	159.91	5.137	
21,565.0	11,625.0	21,593.7	11,624.0	79.5	81.4	90.00	10,147.1	527.8	821.4	660.6	160.87	5.106	
21,600.0	11,625.0	21,628.7	11,624.0	79.8	81.6	90.00	10,182.1	527.5	821.4	660.0	161.39	5.090	
21,660.0	11,625.0	21,688.7	11,624.0	80.3	82.1	90.00	10,242.1	527.0	821.4	659.2	162.27	5.062	
21,700.0	11,625.0	21,728.7	11,624.0	80.6	82.3	90.00	10,282.1	526.6	821.4	658.6	162.86	5.044	
21,755.0	11,625.0	21,783.7	11,624.0	81.0	82.7	90.00	10,337.1	526.1	821.4	657.8	163.68	5.019	
21,800.0	11,625.0	21,828.7	11,624.0	81.3	83.1	90.00	10,382.1	525.7	821.4	657.1	164.34	4.998	
21,850.0	11,625.0	21,878.7	11,624.0	81.7	83.4	90.00	10,432.1	525.3	821.4	656.3	165.08	4.976	
21,900.0	11,625.0	21,928.7	11,624.0	82.0	83.8	90.00	10,482.1	524.8	821.4	655.6	165.82	4.954	
21,945.0	11,625.0	21,973.7	11,624.0	82.4	84.1	90.00	10,527.1	524.4	821.4	654.9	166.48	4.934	
21,956.2	11,625.0	21,984.9	11,624.0	82.5	84.2	90.00	10,538.3	524.3	821.4	654.8	166.65	4.929 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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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_11062-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)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	3.0	3.0	89.58	0.7	90.4	90.4					
95.0	95.0	94.0	94.0	3.0	3.0	89.58	0.7	90.4	90.4	84.4	6.03	15.006		
100.0	100.0	99.0	99.0	3.0	3.0	89.58	0.7	90.4	90.4	84.4	6.03	14.997		
190.0	190.0	189.0	189.0	3.1	3.1	89.58	0.7	90.4	90.4	84.3	6.15	14.698		
200.0	200.0	199.0	199.0	3.1	3.1	89.58	0.7	90.4	90.4	84.2	6.17	14.652		
285.0	285.0	284.0	284.0	3.2	3.2	89.58	0.7	90.4	90.4	84.1	6.31	14.329		
300.0	300.0	299.0	299.0	3.2	3.2	89.58	0.7	90.4	90.4	84.1	6.34	14.265		
380.0	380.0	379.0	379.0	3.3	3.3	89.58	0.7	90.4	90.4	83.9	6.49	13.937		
400.0	400.0	399.0	399.0	3.3	3.3	89.58	0.7	90.4	90.4	83.9	6.53	13.850		
475.0	475.0	474.0	474.0	3.4	3.4	89.58	0.7	90.4	90.4	83.7	6.68	13.528		
500.0	500.0	499.0	499.0	3.4	3.4	89.58	0.7	90.4	90.4	83.7	6.74	13.417		
570.0	570.0	569.0	569.0	3.5	3.5	89.58	0.7	90.4	90.4	83.5	6.90	13.110		
600.0	600.0	599.0	599.0	3.5	3.5	89.58	0.7	90.4	90.4	83.4	6.97	12.975		
665.0	665.0	664.0	664.0	3.6	3.6	89.58	0.7	90.4	90.4	83.3	7.13	12.688		
700.0	700.0	699.0	699.0	3.7	3.7	89.58	0.7	90.4	90.4	83.2	7.21	12.532		
760.0	760.0	759.0	759.0	3.8	3.8	89.58	0.7	90.4	90.4	83.0	7.37	12.269		
800.0	800.0	799.0	799.0	3.8	3.8	89.58	0.7	90.4	90.4	82.9	7.48	12.093		
855.0	855.0	854.0	854.0	3.9	3.9	89.58	0.7	90.4	90.4	82.8	7.63	11.856		
900.0	900.0	899.0	899.0	4.0	4.0	89.58	0.7	90.4	90.4	82.7	7.75	11.663		
950.0	950.0	949.0	949.0	4.1	4.1	89.58	0.7	90.4	90.4	82.5	7.89	11.453		
1,000.0	1,000.0	999.0	999.0	4.2	4.2	89.58	0.7	90.4	90.4	82.4	8.04	11.246		
1,045.0	1,045.0	1,044.0	1,044.0	4.2	4.2	89.58	0.7	90.4	90.4	82.2	8.17	11.063		
1,100.0	1,100.0	1,099.0	1,099.0	4.3	4.3	89.58	0.7	90.4	90.4	82.1	8.34	10.842		
1,140.0	1,140.0	1,139.0	1,139.0	4.4	4.4	89.58	0.7	90.4	90.4	82.0	8.46	10.686		
1,200.0	1,200.0	1,199.0	1,199.0	4.5	4.5	89.58	0.7	90.4	90.4	81.8	8.65	10.455		
1,235.0	1,235.0	1,234.0	1,234.0	4.6	4.6	89.58	0.7	90.4	90.4	81.7	8.76	10.323		
1,300.0	1,300.0	1,299.0	1,299.0	4.7	4.7	89.58	0.7	90.4	90.4	81.4	8.97	10.084		
1,330.0	1,330.0	1,329.0	1,329.0	4.7	4.7	89.58	0.7	90.4	90.4	81.3	9.06	9.976		
1,400.0	1,400.0	1,399.0	1,399.0	4.9	4.9	89.58	0.7	90.4	90.4	81.1	9.29	9.730		
1,425.0	1,425.0	1,424.0	1,424.0	4.9	4.9	89.58	0.7	90.4	90.4	81.0	9.37	9.645		
1,500.0	1,500.0	1,499.0	1,499.0	5.1	5.1	89.58	0.7	90.4	90.4	80.8	9.63	9.393 CC		
1,520.0	1,520.0	1,518.4	1,518.4	5.1	5.1	89.58	0.7	90.5	90.5	80.8	9.70	9.324 ES		
1,600.0	1,600.0	1,595.9	1,595.9	5.3	5.2	89.58	0.7	92.0	92.1	82.1	10.02	9.192		
1,615.0	1,615.0	1,610.5	1,610.4	5.3	5.2	89.57	0.7	92.5	92.6	82.5	10.08	9.190		
1,700.0	1,700.0	1,692.6	1,692.5	5.5	5.3	89.56	0.7	96.9	97.1	86.7	10.43	9.314		
1,710.0	1,710.0	1,702.3	1,702.1	5.5	5.4	89.56	0.8	97.5	97.8	87.3	10.47	9.344		
1,800.0	1,800.0	1,788.9	1,788.4	5.7	5.5	89.54	0.9	105.0	105.5	94.7	10.84	9.730		
1,805.0	1,805.0	1,793.7	1,793.2	5.7	5.6	89.53	0.9	105.4	106.0	95.1	10.86	9.758		
1,900.0	1,900.0	1,884.5	1,883.3	5.9	5.8	89.51	1.0	116.2	117.2	106.0	11.27	10.403		
1,995.0	1,995.0	1,974.5	1,972.3	6.1	6.1	89.48	1.2	129.6	131.4	119.7	11.68	11.247		
2,000.0	2,000.0	1,979.2	1,977.0	6.1	6.1	89.48	1.2	130.4	132.2	120.5	11.71	11.297		
2,090.0	2,090.0	2,064.3	2,060.7	6.3	6.3	89.46	1.4	145.8	148.5	136.5	12.03	12.347		
2,100.0	2,100.0	2,074.1	2,070.3	6.3	6.3	89.45	1.4	147.6	150.4	138.3	12.07	12.466		
2,185.0	2,185.0	2,157.6	2,152.2	6.5	6.5	89.43	1.6	163.6	166.6	154.2	12.44	13.397		
2,200.0	2,200.0	2,172.3	2,166.7	6.5	6.6	89.43	1.7	166.4	169.5	157.0	12.51	13.551		
2,280.0	2,280.0	2,250.8	2,243.7	6.7	6.8	89.42	1.9	181.4	184.8	171.9	12.89	14.331		
2,300.0	2,300.0	2,270.4	2,263.0	6.7	6.9	89.41	1.9	185.1	188.6	175.6	12.99	14.517		
2,375.0	2,375.0	2,344.1	2,335.3	6.9	7.1	89.40	2.1	199.1	202.9	189.5	13.36	15.182		
2,400.0	2,400.0	2,368.6	2,359.4	6.9	7.2	89.40	2.1	203.8	207.7	194.2	13.49	15.393		
2,470.0	2,470.0	2,437.3	2,426.8	7.1	7.4	89.39	2.3	216.9	221.0	207.2	13.85	15.957		
2,500.0	2,500.0	2,466.8	2,455.7	7.2	7.5	89.38	2.4	222.6	226.7	212.7	14.01	16.187		
2,565.0	2,565.0	2,530.6	2,518.4	7.3	7.7	89.38	2.5	234.7	239.1	224.8	14.35	16.662		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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_11062-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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,600.0	2,600.0	2,564.9	2,552.1	7.4	7.8	89.37	2.6	241.3	245.8	231.3	14.54	16.906	
2,660.0	2,660.0	2,623.8	2,609.9	7.5	8.0	89.37	2.8	252.5	257.3	242.4	14.87	17.306	
2,700.0	2,700.0	2,663.1	2,648.5	7.6	8.2	89.37	2.9	260.0	264.9	249.8	15.09	17.560	
2,755.0	2,755.0	2,717.1	2,701.5	7.7	8.4	89.36	3.0	270.3	275.4	260.0	15.39	17.894	
2,800.0	2,800.0	2,761.3	2,744.8	7.8	8.5	89.36	3.1	278.7	284.0	268.3	15.64	18.154	
2,850.0	2,850.0	2,810.3	2,793.0	7.9	8.7	89.35	3.2	288.1	293.5	277.6	15.92	18.432	
2,900.0	2,900.0	2,859.4	2,841.2	8.0	8.9	89.35	3.4	297.5	303.1	286.8	16.21	18.696	
2,945.0	2,945.0	2,903.6	2,884.5	8.1	9.1	89.35	3.5	305.9	311.6	295.2	16.47	18.925	
3,000.0	3,000.0	2,957.6	2,937.5	8.3	9.3	89.34	3.6	316.2	322.1	305.4	16.79	19.191	
3,040.0	3,040.0	2,996.8	2,976.0	8.3	9.4	178.37	3.7	323.7	330.0	313.0	17.02	19.394	
3,100.0	3,100.0	3,055.4	3,033.5	8.4	9.7	178.37	3.9	334.9	342.9	325.6	17.37	19.739	
3,135.0	3,134.9	3,089.4	3,067.0	8.4	9.8	178.37	3.9	341.4	351.0	333.4	17.57	19.978	
3,200.0	3,199.8	3,152.4	3,128.8	8.5	10.0	178.37	4.1	353.4	367.1	349.2	17.94	20.467	
3,230.0	3,229.8	3,181.4	3,157.2	8.5	10.2	178.37	4.2	358.9	375.0	357.0	18.08	20.743	
3,250.0	3,249.7	3,200.6	3,176.1	8.5	10.2	178.38	4.2	362.6	380.5	362.3	18.17	20.934	
3,300.0	3,299.5	3,248.7	3,223.3	8.5	10.4	178.39	4.3	371.7	394.3	375.8	18.41	21.413	
3,325.0	3,324.4	3,272.7	3,246.9	8.5	10.5	178.40	4.4	376.3	401.1	382.6	18.55	21.630	
3,400.0	3,399.1	3,344.8	3,317.6	8.6	10.8	178.42	4.6	390.1	421.8	402.9	18.95	22.261	
3,420.0	3,419.0	3,364.0	3,336.5	8.6	10.9	178.42	4.6	393.7	427.3	408.3	19.06	22.421	
3,500.0	3,498.7	3,440.9	3,412.0	8.7	11.2	178.44	4.8	408.4	449.4	429.9	19.50	23.040	
3,515.0	3,513.7	3,455.3	3,426.1	8.7	11.3	178.45	4.9	411.2	453.5	433.9	19.59	23.150	
3,600.0	3,598.4	3,537.0	3,506.3	8.8	11.6	178.46	5.1	426.8	476.9	456.9	20.08	23.754	
3,610.0	3,608.3	3,546.7	3,515.8	8.8	11.7	178.47	5.1	428.6	479.7	459.6	20.14	23.821	
3,700.0	3,698.0	3,633.2	3,600.7	8.9	12.0	178.48	5.3	445.1	504.5	483.8	20.67	24.409	
3,705.0	3,703.0	3,638.0	3,605.4	8.9	12.0	178.48	5.3	446.0	505.9	485.2	20.70	24.440	
3,800.0	3,797.6	3,729.3	3,695.1	9.0	12.4	178.50	5.5	463.4	532.1	510.8	21.27	25.009	
3,895.0	3,892.2	3,820.6	3,784.7	9.1	12.8	178.51	5.8	480.9	558.2	536.4	21.86	25.532	
3,900.0	3,897.2	3,825.4	3,789.4	9.1	12.8	178.52	5.8	481.8	559.6	537.7	21.90	25.558	
3,990.0	3,986.9	3,911.9	3,874.4	9.3	13.2	178.53	6.0	498.3	584.4	562.0	22.47	26.013	
4,000.0	3,996.8	3,921.5	3,883.8	9.3	13.2	178.53	6.0	500.1	587.2	564.7	22.53	26.062	
4,085.0	4,081.5	4,003.3	3,964.0	9.5	13.6	178.54	6.2	515.7	610.6	587.5	23.08	26.457	
4,100.0	4,096.4	4,017.7	3,978.2	9.5	13.6	178.54	6.3	518.5	614.7	591.6	23.18	26.524	
4,180.0	4,176.1	4,094.6	4,053.6	9.7	14.0	178.55	6.5	533.1	636.8	613.1	23.70	26.865	
4,200.0	4,196.1	4,113.8	4,072.5	9.8	14.1	178.55	6.5	536.8	642.3	618.5	23.84	26.948	
4,275.0	4,270.8	4,185.9	4,143.3	10.0	14.4	178.56	6.7	550.6	663.0	638.6	24.34	27.241	
4,300.0	4,295.7	4,209.9	4,166.9	10.0	14.5	178.56	6.7	555.1	669.9	645.4	24.50	27.336	
4,370.0	4,365.4	4,277.2	4,232.9	10.2	14.8	178.57	6.9	568.0	689.2	664.2	24.98	27.588	
4,400.0	4,395.3	4,306.1	4,261.2	10.3	14.9	178.57	7.0	573.5	697.4	672.2	25.18	27.693	
4,465.0	4,460.1	4,368.5	4,322.6	10.5	15.2	178.58	7.1	585.4	715.3	689.7	25.63	27.909	
4,500.0	4,494.9	4,402.2	4,355.6	10.6	15.3	178.58	7.2	591.8	725.0	699.1	25.87	28.022	
4,560.0	4,554.7	4,459.9	4,412.2	10.7	15.6	178.59	7.4	602.8	741.5	715.2	26.29	28.205	
4,600.0	4,594.5	4,498.3	4,450.0	10.8	15.7	178.59	7.5	610.2	752.5	726.0	26.57	28.324	
4,655.0	4,649.3	4,551.2	4,501.9	11.0	16.0	178.59	7.6	620.2	767.7	740.7	26.96	28.479	
4,700.0	4,694.2	4,594.4	4,544.3	11.1	16.2	178.60	7.7	628.5	780.1	752.8	27.27	28.602	
4,750.0	4,744.0	4,642.5	4,591.5	11.3	16.4	178.60	7.8	637.7	793.9	766.3	27.63	28.732	
4,800.0	4,793.8	4,690.6	4,638.7	11.4	16.6	178.61	7.9	646.8	807.7	779.7	27.99	28.859	
4,845.0	4,838.6	4,733.8	4,681.1	11.5	16.8	178.61	8.1	655.1	820.1	791.8	28.31	28.967	
4,900.0	4,893.4	4,786.7	4,733.0	11.7	17.0	178.61	8.2	665.2	835.2	806.5	28.71	29.096	
4,940.0	4,933.3	4,825.1	4,770.8	11.8	17.2	178.61	8.3	672.5	846.3	817.3	29.00	29.185	
5,000.0	4,993.0	4,882.8	4,827.4	12.0	17.4	178.62	8.4	683.5	862.8	833.4	29.43	29.315	
5,035.0	5,027.9	4,916.5	4,860.4	12.1	17.6	178.62	8.5	689.9	872.4	842.7	29.69	29.387	
5,100.0	5,092.6	4,978.9	4,921.8	12.3	17.9	178.62	8.7	701.9	890.4	860.2	30.16	29.518	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 11062-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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,130.0	5,122.5	5,007.8	4,950.1	12.4	18.0	178.63	8.7	707.4	898.6	868.2	30.38	29.578	
5,187.7	5,180.0	5,063.2	5,004.5	12.6	18.2	178.63	8.9	717.9	914.5	883.7	30.80	29.691	
5,200.0	5,192.3	5,075.1	5,016.1	12.6	18.3	178.63	8.9	720.2	917.9	887.0	30.89	29.719	
5,225.0	5,217.2	5,099.1	5,039.7	12.7	18.4	178.63	9.0	724.8	924.7	893.6	31.07	29.762	
5,300.0	5,292.0	5,171.5	5,110.8	12.9	18.7	178.64	9.1	738.6	944.4	912.8	31.62	29.866	
5,320.0	5,311.9	5,190.8	5,129.8	13.0	18.8	178.64	9.2	742.3	949.5	917.7	31.77	29.890	
5,400.0	5,391.8	5,268.4	5,205.9	13.2	19.2	178.65	9.4	757.1	969.2	936.9	32.35	29.962	
5,415.0	5,406.8	5,282.9	5,220.2	13.2	19.2	178.65	9.4	759.9	972.8	940.4	32.46	29.973	
5,500.0	5,491.7	5,365.6	5,301.4	13.5	19.6	178.65	9.6	775.6	992.4	959.3	33.06	30.014	
5,510.0	5,501.7	5,375.4	5,310.9	13.5	19.6	178.65	9.7	777.5	994.6	961.5	33.13	30.018	
5,600.0	5,591.7	5,463.3	5,397.2	13.7	20.0	178.65	9.9	794.3	1,013.8	980.1	33.76	30.033	
5,605.0	5,596.7	5,468.2	5,402.0	13.7	20.1	178.65	9.9	795.2	1,014.8	981.0	33.79	30.037	
5,687.7	5,679.4	5,549.3	5,481.6	13.8	20.4	89.62	10.1	810.7	1,031.2	996.9	34.27	30.092	
5,700.0	5,691.7	5,561.4	5,493.5	13.8	20.5	89.62	10.1	813.0	1,033.5	999.2	34.32	30.111	
5,795.0	5,786.7	5,654.6	5,585.0	13.9	20.9	89.61	10.4	830.8	1,051.7	1,016.9	34.81	30.214	
5,800.0	5,791.7	5,659.5	5,589.8	13.9	20.9	89.61	10.4	831.7	1,052.6	1,017.8	34.83	30.219	
5,890.0	5,881.7	5,747.9	5,676.6	13.9	21.3	89.61	10.6	848.6	1,069.8	1,034.5	35.29	30.313	
5,900.0	5,891.7	5,757.7	5,686.2	13.9	21.4	89.61	10.6	850.4	1,071.7	1,036.4	35.34	30.323	
5,985.0	5,976.7	5,841.1	5,768.1	14.0	21.8	89.60	10.8	866.4	1,087.9	1,052.1	35.78	30.408	
6,000.0	5,991.7	5,855.8	5,782.5	14.0	21.8	89.60	10.9	869.2	1,090.8	1,054.9	35.85	30.423	
6,080.0	6,071.7	5,934.4	5,859.6	14.0	22.2	89.60	11.1	884.1	1,106.1	1,069.8	36.26	30.501	
6,100.0	6,091.7	5,954.0	5,878.9	14.0	22.3	89.60	11.1	887.9	1,109.9	1,073.5	36.37	30.520	
6,175.0	6,166.7	6,027.6	5,951.2	14.1	22.6	89.59	11.3	901.9	1,124.2	1,087.4	36.75	30.590	
6,200.0	6,191.7	6,052.2	5,975.3	14.1	22.7	89.59	11.3	906.6	1,128.9	1,092.1	36.88	30.613	
6,270.0	6,261.7	6,120.9	6,042.7	14.1	23.0	89.59	11.5	919.7	1,142.3	1,105.1	37.23	30.679	
6,300.0	6,291.7	6,150.7	6,072.0	14.2	23.1	89.58	11.6	925.4	1,148.0	1,110.6	37.39	30.708	
6,365.0	6,356.7	6,230.8	6,150.7	14.2	23.5	89.58	11.8	940.1	1,160.0	1,122.2	37.81	30.680	
6,400.0	6,391.7	6,274.0	6,193.3	14.2	23.7	89.58	11.9	947.6	1,166.0	1,128.0	38.04	30.655	
6,460.0	6,451.7	6,348.4	6,266.7	14.2	24.0	89.57	12.0	959.7	1,175.8	1,137.4	38.42	30.602	
6,500.0	6,491.7	6,398.2	6,315.9	14.3	24.2	89.57	12.1	967.3	1,181.9	1,143.2	38.67	30.560	
6,555.0	6,546.7	6,466.8	6,383.8	14.3	24.5	89.57	12.3	977.0	1,189.7	1,150.7	39.01	30.497	
6,600.0	6,591.7	6,523.2	6,439.7	14.3	24.8	89.57	12.4	984.4	1,195.6	1,156.3	39.28	30.438	
6,650.0	6,641.7	6,585.9	6,502.0	14.4	25.0	89.57	12.5	992.0	1,201.6	1,162.1	39.57	30.367	
6,700.0	6,691.7	6,648.9	6,564.5	14.4	25.3	89.56	12.6	998.9	1,207.1	1,167.3	39.85	30.291	
6,745.0	6,736.7	6,705.6	6,621.0	14.4	25.5	89.56	12.6	1,004.6	1,211.6	1,171.5	40.10	30.214	
6,800.0	6,791.7	6,775.1	6,690.2	14.4	25.8	89.56	12.7	1,010.7	1,216.5	1,176.1	40.39	30.120	
6,840.0	6,831.7	6,825.8	6,740.7	14.5	26.0	89.56	12.8	1,014.7	1,219.6	1,179.0	40.59	30.047	
6,900.0	6,891.7	6,901.9	6,816.7	14.5	26.2	89.56	12.8	1,019.8	1,223.6	1,182.8	40.88	29.930	
6,935.0	6,926.7	6,946.3	6,861.0	14.5	26.4	89.56	12.9	1,022.3	1,225.6	1,184.6	41.04	29.863	
7,000.0	6,991.7	7,028.9	6,943.6	14.5	26.7	89.56	12.9	1,026.1	1,228.6	1,187.3	41.32	29.733	
7,030.0	7,021.7	7,067.1	6,981.7	14.6	26.8	89.56	12.9	1,027.4	1,229.6	1,188.2	41.44	29.672	
7,100.0	7,091.7	7,156.2	7,070.8	14.6	27.0	89.56	13.0	1,029.6	1,231.3	1,189.6	41.69	29.537	
7,125.0	7,116.7	7,188.1	7,102.6	14.6	27.1	89.56	13.0	1,030.0	1,231.6	1,189.9	41.77	29.488	
7,200.0	7,191.7	7,276.1	7,190.7	14.7	27.2	89.56	13.0	1,030.3	1,231.9	1,190.0	41.87	29.425	
7,220.0	7,211.7	7,296.1	7,210.7	14.7	27.2	89.56	13.0	1,030.3	1,231.9	1,190.0	41.88	29.415	
7,300.0	7,291.7	7,376.1	7,290.7	14.7	27.2	89.56	13.0	1,030.3	1,231.9	1,189.9	41.95	29.369	
7,315.0	7,306.7	7,391.1	7,305.7	14.7	27.2	89.56	13.0	1,030.3	1,231.9	1,189.9	41.96	29.360	
7,400.0	7,391.7	7,476.1	7,390.7	14.8	27.3	89.56	13.0	1,030.3	1,231.9	1,189.9	42.03	29.309	
7,410.0	7,401.7	7,486.1	7,400.7	14.8	27.3	89.56	13.0	1,030.3	1,231.9	1,189.9	42.04	29.303	
7,500.0	7,491.7	7,576.1	7,490.7	14.8	27.3	89.56	13.0	1,030.3	1,231.9	1,189.8	42.12	29.250	
7,505.0	7,496.7	7,581.1	7,495.7	14.8	27.3	89.56	13.0	1,030.3	1,231.9	1,189.8	42.12	29.247	
7,600.0	7,591.7	7,676.1	7,590.7	14.9	27.3	89.56	13.0	1,030.3	1,231.9	1,189.7	42.20	29.191	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 11062-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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,695.0	7,686.7	7,771.1	7,685.7	14.9	27.3	89.56	13.0	1,030.3	1,231.9	1,189.6	42.28	29.134	
7,700.0	7,691.7	7,776.1	7,690.7	14.9	27.3	89.56	13.0	1,030.3	1,231.9	1,189.6	42.29	29.131	
7,790.0	7,781.7	7,866.1	7,780.7	15.0	27.4	89.56	13.0	1,030.3	1,231.9	1,189.5	42.37	29.078	
7,800.0	7,791.7	7,876.1	7,790.7	15.0	27.4	89.56	13.0	1,030.3	1,231.9	1,189.5	42.37	29.072	
7,885.0	7,876.7	7,961.1	7,875.7	15.1	27.4	89.56	13.0	1,030.3	1,231.9	1,189.4	42.45	29.021	
7,900.0	7,891.7	7,976.1	7,890.7	15.1	27.4	89.56	13.0	1,030.3	1,231.9	1,189.4	42.46	29.012	
7,980.0	7,971.7	8,056.1	7,970.7	15.1	27.4	89.56	13.0	1,030.3	1,231.9	1,189.4	42.53	28.965	
8,000.0	7,991.7	8,076.1	7,990.7	15.1	27.4	89.56	13.0	1,030.3	1,231.9	1,189.3	42.55	28.953	
8,075.0	8,066.7	8,151.1	8,065.7	15.2	27.5	89.56	13.0	1,030.3	1,231.9	1,189.3	42.61	28.908	
8,100.0	8,091.7	8,176.1	8,090.7	15.2	27.5	89.56	13.0	1,030.3	1,231.9	1,189.3	42.64	28.893	
8,170.0	8,161.7	8,246.1	8,160.7	15.2	27.5	89.56	13.0	1,030.3	1,231.9	1,189.2	42.70	28.851	
8,200.0	8,191.7	8,276.1	8,190.7	15.2	27.5	89.56	13.0	1,030.3	1,231.9	1,189.2	42.72	28.833	
8,265.0	8,256.7	8,341.1	8,255.7	15.3	27.5	89.56	13.0	1,030.3	1,231.9	1,189.1	42.78	28.794	
8,300.0	8,291.7	8,376.1	8,290.7	15.3	27.5	89.56	13.0	1,030.3	1,231.9	1,189.1	42.81	28.774	
8,360.0	8,351.7	8,436.1	8,350.7	15.3	27.5	89.56	13.0	1,030.3	1,231.9	1,189.0	42.87	28.738	
8,400.0	8,391.7	8,476.1	8,390.7	15.4	27.5	89.56	13.0	1,030.3	1,231.9	1,189.0	42.90	28.714	
8,455.0	8,446.7	8,531.1	8,445.7	15.4	27.6	89.56	13.0	1,030.3	1,231.9	1,188.9	42.95	28.681	
8,500.0	8,491.7	8,576.1	8,490.7	15.4	27.6	89.56	13.0	1,030.3	1,231.9	1,188.9	42.99	28.654	
8,550.0	8,541.7	8,626.1	8,540.7	15.5	27.6	89.56	13.0	1,030.3	1,231.9	1,188.9	43.04	28.624	
8,600.0	8,591.7	8,676.1	8,590.7	15.5	27.6	89.56	13.0	1,030.3	1,231.9	1,188.8	43.08	28.594	
8,645.0	8,636.7	8,721.1	8,635.7	15.5	27.6	89.56	13.0	1,030.3	1,231.9	1,188.8	43.12	28.567	
8,700.0	8,691.7	8,776.1	8,690.7	15.5	27.6	89.56	13.0	1,030.3	1,231.9	1,188.7	43.17	28.535	
8,740.0	8,731.7	8,816.1	8,730.7	15.6	27.6	89.56	13.0	1,030.3	1,231.9	1,188.7	43.21	28.511	
8,800.0	8,791.7	8,876.1	8,790.7	15.6	27.7	89.56	13.0	1,030.3	1,231.9	1,188.6	43.26	28.475	
8,835.0	8,826.7	8,911.1	8,825.7	15.6	27.7	89.56	13.0	1,030.3	1,231.9	1,188.6	43.29	28.454	
8,900.0	8,891.7	8,976.1	8,890.7	15.7	27.7	89.56	13.0	1,030.3	1,231.9	1,188.5	43.35	28.415	
8,930.0	8,921.7	9,006.1	8,920.7	15.7	27.7	89.56	13.0	1,030.3	1,231.9	1,188.5	43.38	28.397	
9,000.0	8,991.7	9,076.1	8,990.7	15.7	27.7	89.56	13.0	1,030.3	1,231.9	1,188.4	43.45	28.355	
9,025.0	9,016.7	9,101.1	9,015.7	15.7	27.7	89.56	13.0	1,030.3	1,231.9	1,188.4	43.47	28.340	
9,100.0	9,091.7	9,176.1	9,090.7	15.8	27.8	89.56	13.0	1,030.3	1,231.9	1,188.4	43.54	28.295	
9,120.0	9,111.7	9,196.1	9,110.7	15.8	27.8	89.56	13.0	1,030.3	1,231.9	1,188.3	43.56	28.283	
9,200.0	9,191.7	9,276.1	9,190.7	15.8	27.8	89.56	13.0	1,030.3	1,231.9	1,188.3	43.63	28.235	
9,215.0	9,206.7	9,291.1	9,205.7	15.9	27.8	89.56	13.0	1,030.3	1,231.9	1,188.2	43.64	28.226	
9,300.0	9,291.7	9,376.1	9,290.7	15.9	27.8	89.56	13.0	1,030.3	1,231.9	1,188.2	43.72	28.176	
9,310.0	9,301.7	9,386.1	9,300.7	15.9	27.8	89.56	13.0	1,030.3	1,231.9	1,188.2	43.73	28.170	
9,400.0	9,391.7	9,476.1	9,390.7	16.0	27.9	89.56	13.0	1,030.3	1,231.9	1,188.1	43.82	28.116	
9,405.0	9,396.7	9,481.1	9,395.7	16.0	27.9	89.56	13.0	1,030.3	1,231.9	1,188.1	43.82	28.113	
9,500.0	9,491.7	9,576.1	9,490.7	16.0	27.9	89.56	13.0	1,030.3	1,231.9	1,188.0	43.91	28.056	
9,595.0	9,586.7	9,671.1	9,585.7	16.1	27.9	89.56	13.0	1,030.3	1,231.9	1,187.9	44.00	27.999	
9,600.0	9,591.7	9,676.1	9,590.7	16.1	27.9	89.56	13.0	1,030.3	1,231.9	1,187.9	44.00	27.996	
9,690.0	9,681.7	9,766.1	9,680.7	16.1	27.9	89.56	13.0	1,030.3	1,231.9	1,187.8	44.09	27.942	
9,700.0	9,691.7	9,776.1	9,690.7	16.2	28.0	89.56	13.0	1,030.3	1,231.9	1,187.8	44.10	27.936	
9,785.0	9,776.7	9,861.1	9,775.7	16.2	28.0	89.56	13.0	1,030.3	1,231.9	1,187.7	44.18	27.885	
9,800.0	9,791.7	9,876.1	9,790.7	16.2	28.0	89.56	13.0	1,030.3	1,231.9	1,187.7	44.19	27.876	
9,880.0	9,871.7	9,956.1	9,870.7	16.3	28.0	89.56	13.0	1,030.3	1,231.9	1,187.6	44.27	27.829	
9,900.0	9,891.7	9,976.1	9,890.7	16.3	28.0	89.56	13.0	1,030.3	1,231.9	1,187.6	44.29	27.817	
9,975.0	9,966.7	10,051.1	9,965.7	16.3	28.0	89.56	13.0	1,030.3	1,231.9	1,187.5	44.36	27.772	
10,000.0	9,991.7	10,076.1	9,990.7	16.3	28.0	89.56	13.0	1,030.3	1,231.9	1,187.5	44.38	27.757	
10,070.0	10,061.7	10,146.1	10,060.7	16.4	28.1	89.56	13.0	1,030.3	1,231.9	1,187.4	44.45	27.715	
10,100.0	10,091.7	10,176.1	10,090.7	16.4	28.1	89.56	13.0	1,030.3	1,231.9	1,187.4	44.48	27.697	
10,165.0	10,156.7	10,241.1	10,155.7	16.4	28.1	89.56	13.0	1,030.3	1,231.9	1,187.4	44.54	27.658	
10,200.0	10,191.7	10,276.1	10,190.7	16.5	28.1	89.56	13.0	1,030.3	1,231.9	1,187.3	44.57	27.638	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 11062-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	
10,260.0	10,251.7	10,336.1	10,250.7	16.5	28.1	89.56	13.0	1,030.3	1,231.9	1,187.3	44.63	27.602	
10,300.0	10,291.7	10,376.1	10,290.7	16.5	28.1	89.56	13.0	1,030.3	1,231.9	1,187.2	44.67	27.578	
10,355.0	10,346.7	10,431.1	10,345.7	16.6	28.2	89.56	13.0	1,030.3	1,231.9	1,187.2	44.72	27.545	
10,400.0	10,391.7	10,476.1	10,390.7	16.6	28.2	89.56	13.0	1,030.3	1,231.9	1,187.1	44.77	27.518	
10,450.0	10,441.7	10,526.1	10,440.7	16.6	28.2	89.56	13.0	1,030.3	1,231.9	1,187.1	44.81	27.489	
10,500.0	10,491.7	10,576.1	10,490.7	16.7	28.2	89.56	13.0	1,030.3	1,231.9	1,187.0	44.86	27.459	
10,545.0	10,536.7	10,621.1	10,535.7	16.7	28.2	89.56	13.0	1,030.3	1,231.9	1,187.0	44.91	27.432	
10,600.0	10,591.7	10,676.1	10,590.7	16.7	28.2	89.56	13.0	1,030.3	1,231.9	1,186.9	44.96	27.399	
10,640.0	10,631.7	10,716.1	10,630.7	16.7	28.3	89.56	13.0	1,030.3	1,231.9	1,186.9	45.00	27.375	
10,700.0	10,691.7	10,776.1	10,690.7	16.8	28.3	89.56	13.0	1,030.3	1,231.9	1,186.8	45.06	27.340	
10,735.0	10,726.7	10,811.1	10,725.7	16.8	28.3	89.56	13.0	1,030.3	1,231.9	1,186.8	45.09	27.319	
10,800.0	10,791.7	10,876.1	10,790.7	16.8	28.3	89.56	13.0	1,030.3	1,231.9	1,186.7	45.16	27.280	
10,830.0	10,821.7	10,906.1	10,820.7	16.9	28.3	89.56	13.0	1,030.3	1,231.9	1,186.7	45.19	27.263	
10,900.0	10,891.7	10,976.1	10,890.7	16.9	28.4	89.56	13.0	1,030.3	1,231.9	1,186.6	45.26	27.221	
10,925.0	10,916.7	11,001.1	10,915.7	16.9	28.4	89.56	13.0	1,030.3	1,231.9	1,186.6	45.28	27.206	
11,000.0	10,991.7	11,076.1	10,990.7	17.0	28.4	89.55	13.2	1,030.3	1,231.9	1,186.5	45.34	27.169	
11,020.0	11,011.7	11,096.2	11,010.7	17.0	28.4	89.50	14.2	1,030.3	1,231.9	1,186.5	45.36	27.160	
11,024.6	11,016.2	11,100.7	11,015.2	17.0	28.4	89.48	14.5	1,030.3	1,231.9	1,186.5	45.36	27.158	
11,100.0	11,091.7	11,174.3	11,087.9	17.0	28.4	88.94	26.1	1,030.2	1,231.9	1,186.5	45.42	27.123	
11,115.0	11,106.7	11,188.5	11,101.6	17.0	28.4	88.78	29.6	1,030.1	1,232.0	1,186.6	45.43	27.119	
11,155.9	11,147.5	11,225.8	11,137.2	17.1	28.4	88.26	40.8	1,030.0	1,232.2	1,186.7	45.45	27.109	
11,175.0	11,166.7	11,242.7	11,153.0	17.1	28.4	88.50	46.8	1,030.0	1,232.4	1,186.9	45.46	27.107	
11,200.0	11,191.6	11,264.6	11,173.1	17.1	28.4	88.13	55.3	1,029.9	1,232.6	1,187.1	45.48	27.104	
11,210.0	11,201.6	11,273.2	11,181.0	17.1	28.4	87.99	58.9	1,029.9	1,232.7	1,187.3	45.48	27.103	
11,225.0	11,216.4	11,286.1	11,192.6	17.1	28.4	87.77	64.6	1,029.8	1,232.9	1,187.4	45.49	27.102	
11,250.0	11,241.1	11,307.4	11,211.3	17.1	28.4	87.42	74.7	1,029.7	1,233.3	1,187.8	45.51	27.100	
11,275.0	11,265.4	11,328.5	11,229.4	17.1	28.4	87.07	85.4	1,029.6	1,233.7	1,188.1	45.53	27.098	
11,300.0	11,289.5	11,350.0	11,247.4	17.1	28.4	86.72	97.2	1,029.5	1,234.1	1,188.5	45.54	27.098	
11,305.0	11,294.3	11,353.4	11,250.2	17.1	28.4	86.67	99.2	1,029.5	1,234.2	1,188.6	45.55	27.096	
11,325.0	11,313.2	11,369.8	11,263.5	17.1	28.4	86.40	108.8	1,029.4	1,234.5	1,189.0	45.57	27.094	
11,350.0	11,336.4	11,390.2	11,279.5	17.1	28.4	86.08	121.4	1,029.3	1,235.0	1,189.4	45.59	27.091	
11,375.0	11,359.1	11,410.4	11,294.9	17.1	28.4	85.76	134.6	1,029.2	1,235.5	1,189.9	45.61	27.087	
11,400.0	11,381.2	11,430.4	11,309.5	17.1	28.4	85.46	148.2	1,029.1	1,236.1	1,190.4	45.64	27.083	
11,425.0	11,402.6	11,450.0	11,323.2	17.1	28.4	85.17	162.2	1,028.9	1,236.6	1,190.9	45.67	27.077	
11,450.0	11,423.4	11,470.0	11,336.7	17.1	28.4	84.88	176.9	1,028.8	1,237.1	1,191.4	45.70	27.071	
11,475.0	11,443.4	11,489.5	11,349.2	17.1	28.4	84.61	191.9	1,028.7	1,237.7	1,191.9	45.73	27.063	
11,495.0	11,458.9	11,505.1	11,358.7	17.1	28.4	84.40	204.2	1,028.6	1,238.1	1,192.3	45.76	27.056	
11,500.0	11,462.6	11,508.9	11,361.0	17.1	28.4	84.34	207.3	1,028.5	1,238.2	1,192.4	45.77	27.054	
11,525.0	11,481.0	11,528.2	11,372.2	17.1	28.4	84.10	223.1	1,028.4	1,238.7	1,192.9	45.81	27.043	
11,550.0	11,498.4	11,550.0	11,383.9	17.1	28.4	83.84	241.4	1,028.2	1,239.3	1,193.4	45.84	27.035	
11,575.0	11,514.9	11,566.5	11,392.3	17.1	28.4	83.64	255.6	1,028.1	1,239.8	1,193.9	45.89	27.017	
11,590.0	11,524.3	11,577.9	11,397.8	17.1	28.5	83.51	265.6	1,028.0	1,240.1	1,194.2	45.91	27.008	
11,600.0	11,530.3	11,585.5	11,401.3	17.1	28.5	83.43	272.4	1,028.0	1,240.3	1,194.3	45.93	27.002	
11,625.0	11,544.7	11,604.4	11,409.6	17.2	28.5	83.23	289.3	1,027.8	1,240.7	1,194.8	45.98	26.985	
11,650.0	11,558.1	11,625.0	11,417.9	17.2	28.5	83.04	308.2	1,027.6	1,241.2	1,195.2	46.02	26.969	
11,675.0	11,570.3	11,642.0	11,424.1	17.2	28.5	82.89	324.0	1,027.5	1,241.6	1,195.5	46.08	26.947	
11,685.0	11,574.8	11,650.0	11,426.8	17.2	28.5	82.83	331.5	1,027.4	1,241.8	1,195.7	46.10	26.939	
11,700.0	11,581.3	11,660.7	11,430.2	17.2	28.5	82.74	341.6	1,027.3	1,242.0	1,195.9	46.13	26.925	
11,725.0	11,591.2	11,679.3	11,435.7	17.2	28.5	82.61	359.5	1,027.2	1,242.3	1,196.2	46.18	26.902	
11,750.0	11,599.8	11,700.0	11,440.9	17.3	28.5	82.48	379.5	1,027.0	1,242.6	1,196.4	46.23	26.878	
11,775.0	11,607.2	11,716.4	11,444.5	17.3	28.5	82.39	395.5	1,026.8	1,242.9	1,196.6	46.29	26.851	
11,780.0	11,608.5	11,720.2	11,445.2	17.3	28.5	82.38	399.2	1,026.8	1,243.0	1,196.7	46.30	26.846	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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_11062-r.5 MWD+IFR1+MS		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		
11,800.0	11,613.3	11,735.0	11,447.8	17.3	28.6	82.31	413.7	1,026.7	1,243.1	1,196.8	46.34	26.823			
11,825.0	11,618.2	11,753.4	11,450.4	17.3	28.6	82.24	432.0	1,026.5	1,243.3	1,196.9	46.40	26.795			
11,850.0	11,621.7	11,775.0	11,452.6	17.4	28.6	82.19	453.5	1,026.3	1,243.5	1,197.0	46.46	26.765			
11,875.0	11,624.0	11,790.4	11,453.5	17.4	28.6	82.16	468.8	1,026.2	1,243.5	1,197.0	46.52	26.733			
11,900.0	11,625.0	11,808.8	11,454.0	17.4	28.6	82.14	487.2	1,026.0	1,243.6	1,197.0	46.57	26.701			
11,905.9	11,625.0	11,813.5	11,454.0	17.5	28.6	82.14	492.0	1,026.0	1,243.6	1,197.0	46.59	26.693			
11,970.0	11,625.0	11,877.7	11,454.0	17.6	28.7	82.14	556.1	1,025.4	1,243.6	1,196.8	46.78	26.586			
12,000.0	11,625.0	11,907.7	11,454.0	17.6	28.7	82.14	586.1	1,025.1	1,243.6	1,196.7	46.87	26.535			
12,065.0	11,625.0	11,972.7	11,454.0	17.8	28.8	82.14	651.1	1,024.5	1,243.6	1,196.5	47.09	26.408			
12,100.0	11,625.0	12,007.7	11,454.0	17.8	28.9	82.14	686.1	1,024.2	1,243.6	1,196.4	47.21	26.340			
12,160.0	11,625.0	12,067.7	11,454.0	18.0	29.0	82.14	746.1	1,023.7	1,243.6	1,196.1	47.45	26.208			
12,200.0	11,625.0	12,107.7	11,454.0	18.1	29.0	82.14	786.1	1,023.3	1,243.6	1,196.0	47.61	26.121			
12,255.0	11,625.0	12,162.7	11,454.0	18.2	29.1	82.14	841.1	1,022.8	1,243.6	1,195.8	47.85	25.988			
12,300.0	11,625.0	12,207.7	11,454.0	18.4	29.2	82.14	886.1	1,022.4	1,243.6	1,195.6	48.05	25.879			
12,350.0	11,625.0	12,257.7	11,454.0	18.5	29.3	82.14	936.1	1,022.0	1,243.6	1,195.3	48.30	25.749			
12,400.0	11,625.0	12,307.7	11,454.0	18.7	29.4	82.14	986.1	1,021.5	1,243.6	1,195.1	48.54	25.618			
12,445.0	11,625.0	12,352.7	11,454.0	18.8	29.5	82.14	1,031.1	1,021.1	1,243.6	1,194.8	48.78	25.493			
12,500.0	11,625.0	12,407.7	11,454.0	19.0	29.6	82.14	1,086.1	1,020.6	1,243.6	1,194.5	49.08	25.340			
12,540.0	11,625.0	12,447.7	11,454.0	19.1	29.7	82.14	1,126.1	1,020.2	1,243.6	1,194.3	49.31	25.222			
12,600.0	11,625.0	12,507.7	11,454.0	19.4	29.8	82.14	1,186.1	1,019.7	1,243.6	1,194.0	49.65	25.046			
12,635.0	11,625.0	12,542.7	11,454.0	19.5	29.9	82.14	1,221.1	1,019.4	1,243.6	1,193.8	49.87	24.938			
12,700.0	11,625.0	12,607.7	11,454.0	19.7	30.1	82.14	1,286.1	1,018.8	1,243.6	1,193.4	50.27	24.739			
12,730.0	11,625.0	12,637.7	11,454.0	19.8	30.2	82.14	1,316.1	1,018.5	1,243.6	1,193.2	50.47	24.642			
12,800.0	11,625.0	12,707.7	11,454.0	20.1	30.3	82.14	1,386.1	1,017.9	1,243.6	1,192.7	50.93	24.420			
12,825.0	11,625.0	12,732.7	11,454.0	20.2	30.4	82.14	1,411.1	1,017.7	1,243.6	1,192.5	51.10	24.337			
12,900.0	11,625.0	12,807.7	11,454.0	20.5	30.6	82.14	1,486.1	1,017.0	1,243.6	1,192.0	51.62	24.092			
12,920.0	11,625.0	12,827.7	11,454.0	20.6	30.7	82.14	1,506.1	1,016.8	1,243.6	1,191.9	51.77	24.024			
13,000.0	11,625.0	12,907.7	11,454.0	21.0	30.9	82.14	1,586.1	1,016.1	1,243.6	1,191.3	52.35	23.756			
13,015.0	11,625.0	12,922.7	11,454.0	21.1	31.0	82.14	1,601.1	1,016.0	1,243.6	1,191.2	52.46	23.705			
13,100.0	11,625.0	13,007.7	11,454.0	21.4	31.2	82.14	1,686.1	1,015.2	1,243.6	1,190.5	53.11	23.415			
13,110.0	11,625.0	13,017.7	11,454.0	21.5	31.3	82.14	1,696.1	1,015.1	1,243.6	1,190.5	53.19	23.380			
13,200.0	11,625.0	13,107.7	11,454.0	21.9	31.6	82.14	1,786.1	1,014.3	1,243.7	1,189.7	53.91	23.069			
13,205.0	11,625.0	13,112.7	11,454.0	21.9	31.6	82.14	1,791.1	1,014.2	1,243.7	1,189.7	53.95	23.052			
13,300.0	11,625.0	13,207.7	11,454.0	22.4	31.9	82.14	1,886.1	1,013.4	1,243.7	1,188.9	54.74	22.721			
13,395.0	11,625.0	13,302.7	11,454.0	22.9	32.3	82.14	1,981.1	1,012.5	1,243.7	1,188.1	55.55	22.389			
13,400.0	11,625.0	13,307.7	11,454.0	22.9	32.3	82.14	1,986.1	1,012.5	1,243.7	1,188.1	55.59	22.371			
13,490.0	11,625.0	13,397.7	11,454.0	23.4	32.6	82.14	2,076.1	1,011.7	1,243.7	1,187.3	56.39	22.056			
13,500.0	11,625.0	13,407.7	11,454.0	23.4	32.7	82.14	2,086.1	1,011.6	1,243.7	1,187.2	56.48	22.021			
13,585.0	11,625.0	13,492.7	11,454.0	23.9	33.0	82.14	2,171.0	1,010.8	1,243.7	1,186.4	57.25	21.724			
13,600.0	11,625.0	13,507.7	11,454.0	24.0	33.0	82.14	2,186.0	1,010.7	1,243.7	1,186.3	57.39	21.672			
13,680.0	11,625.0	13,587.7	11,454.0	24.4	33.4	82.14	2,266.0	1,010.0	1,243.7	1,185.5	58.14	21.393			
13,700.0	11,625.0	13,607.7	11,454.0	24.5	33.4	82.14	2,286.0	1,009.8	1,243.7	1,185.4	58.32	21.324			
13,775.0	11,625.0	13,682.7	11,454.0	24.9	33.8	82.14	2,361.0	1,009.1	1,243.7	1,184.6	59.04	21.064			
13,800.0	11,625.0	13,707.7	11,454.0	25.1	33.9	82.14	2,386.0	1,008.9	1,243.7	1,184.4	59.28	20.978			
13,870.0	11,625.0	13,777.7	11,454.0	25.5	34.2	82.14	2,456.0	1,008.2	1,243.7	1,183.7	59.97	20.738			
13,900.0	11,625.0	13,807.7	11,454.0	25.6	34.3	82.14	2,486.0	1,008.0	1,243.7	1,183.4	60.27	20.636			
13,965.0	11,625.0	13,872.7	11,454.0	26.0	34.6	82.14	2,551.0	1,007.4	1,243.7	1,182.8	60.92	20.415			
14,000.0	11,625.0	13,907.7	11,454.0	26.2	34.7	82.14	2,586.0	1,007.1	1,243.7	1,182.4	61.27	20.298			
14,060.0	11,625.0	13,967.7	11,454.0	26.6	35.0	82.14	2,646.0	1,006.5	1,243.7	1,181.8	61.89	20.096			
14,100.0	11,625.0	14,007.7	11,454.0	26.8	35.2	82.14	2,686.0	1,006.2	1,243.7	1,181.4	62.30	19.964			
14,155.0	11,625.0	14,062.7	11,454.0	27.1	35.4	82.14	2,741.0	1,005.7	1,243.7	1,180.8	62.87	19.781			
14,200.0	11,625.0	14,107.7	11,454.0	27.4	35.6	82.14	2,786.0	1,005.3	1,243.7	1,180.4	63.34	19.634			

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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_11062-r.5 MWD+IFR1+MS													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
14,250.0	11,625.0	14,157.7	11,454.0	27.7	35.9	82.14	2,836.0	1,004.8	1,243.7	1,179.8	63.87	19.471	
14,300.0	11,625.0	14,207.7	11,454.0	28.0	36.1	82.14	2,886.0	1,004.4	1,243.7	1,179.3	64.41	19.310	
14,345.0	11,625.0	14,252.7	11,454.0	28.3	36.3	82.14	2,931.0	1,004.0	1,243.7	1,178.8	64.89	19.165	
14,400.0	11,625.0	14,307.7	11,454.0	28.6	36.6	82.14	2,986.0	1,003.5	1,243.7	1,178.2	65.49	18.991	
14,440.0	11,625.0	14,347.7	11,454.0	28.8	36.8	82.14	3,026.0	1,003.1	1,243.7	1,177.8	65.93	18.865	
14,500.0	11,625.0	14,407.7	11,454.0	29.2	37.1	82.14	3,086.0	1,002.6	1,243.7	1,177.1	66.59	18.678	
14,535.0	11,625.0	14,442.7	11,454.0	29.4	37.2	82.14	3,121.0	1,002.2	1,243.7	1,176.7	66.98	18.569	
14,600.0	11,625.0	14,507.7	11,454.0	29.8	37.6	82.14	3,186.0	1,001.7	1,243.7	1,176.0	67.70	18.370	
14,630.0	11,625.0	14,537.7	11,454.0	30.0	37.7	82.14	3,216.0	1,001.4	1,243.7	1,175.7	68.04	18.279	
14,700.0	11,625.0	14,607.7	11,454.0	30.5	38.1	82.14	3,286.0	1,000.8	1,243.7	1,174.9	68.83	18.069	
14,725.0	11,625.0	14,632.7	11,454.0	30.6	38.2	82.14	3,311.0	1,000.5	1,243.7	1,174.6	69.12	17.994	
14,800.0	11,625.0	14,707.7	11,454.0	31.1	38.6	82.14	3,386.0	999.9	1,243.7	1,173.8	69.98	17.773	
14,820.0	11,625.0	14,727.7	11,454.0	31.2	38.7	82.14	3,406.0	999.7	1,243.7	1,173.5	70.21	17.714	
14,900.0	11,625.0	14,807.7	11,454.0	31.7	39.1	82.14	3,486.0	998.9	1,243.7	1,172.6	71.14	17.483	
14,915.0	11,625.0	14,822.7	11,454.0	31.8	39.2	82.14	3,501.0	998.8	1,243.7	1,172.4	71.31	17.440	
15,000.0	11,625.0	14,907.7	11,454.0	32.4	39.6	82.14	3,586.0	998.0	1,243.7	1,171.4	72.31	17.200	
15,010.0	11,625.0	14,917.7	11,454.0	32.5	39.7	82.14	3,596.0	998.0	1,243.7	1,171.3	72.43	17.172	
15,100.0	11,625.0	15,007.7	11,454.0	33.0	40.2	82.14	3,686.0	997.1	1,243.7	1,170.2	73.49	16.923	
15,105.0	11,625.0	15,012.7	11,454.0	33.1	40.2	82.14	3,691.0	997.1	1,243.7	1,170.2	73.55	16.909	
15,200.0	11,625.0	15,107.7	11,454.0	33.7	40.7	82.14	3,786.0	996.2	1,243.7	1,169.1	74.69	16.652	
15,295.0	11,625.0	15,202.7	11,454.0	34.3	41.2	82.14	3,881.0	995.4	1,243.8	1,167.9	75.84	16.400	
15,300.0	11,625.0	15,207.7	11,454.0	34.4	41.3	82.14	3,886.0	995.3	1,243.8	1,167.9	75.90	16.387	
15,390.0	11,625.0	15,297.7	11,454.0	35.0	41.8	82.14	3,976.0	994.5	1,243.8	1,166.8	77.00	16.153	
15,400.0	11,625.0	15,307.7	11,454.0	35.0	41.8	82.14	3,986.0	994.4	1,243.8	1,166.6	77.12	16.128	
15,485.0	11,625.0	15,392.7	11,454.0	35.6	42.3	82.14	4,071.0	993.7	1,243.8	1,165.6	78.16	15.912	
15,500.0	11,625.0	15,407.7	11,454.0	35.7	42.4	82.14	4,086.0	993.5	1,243.8	1,165.4	78.35	15.875	
15,580.0	11,625.0	15,487.7	11,454.0	36.2	42.8	82.14	4,166.0	992.8	1,243.8	1,164.4	79.34	15.676	
15,600.0	11,625.0	15,507.7	11,454.0	36.4	43.0	82.14	4,186.0	992.6	1,243.8	1,164.2	79.59	15.627	
15,675.0	11,625.0	15,582.7	11,454.0	36.9	43.4	82.14	4,261.0	992.0	1,243.8	1,163.2	80.53	15.446	
15,700.0	11,625.0	15,607.7	11,454.0	37.1	43.5	82.14	4,286.0	991.7	1,243.8	1,162.9	80.84	15.386	
15,770.0	11,625.0	15,677.7	11,454.0	37.5	43.9	82.14	4,356.0	991.1	1,243.8	1,162.1	81.72	15.220	
15,800.0	11,625.0	15,707.7	11,454.0	37.7	44.1	82.14	4,386.0	990.8	1,243.8	1,161.7	82.10	15.150	
15,865.0	11,625.0	15,772.7	11,454.0	38.2	44.5	82.14	4,451.0	990.2	1,243.8	1,160.9	82.92	15.000	
15,900.0	11,625.0	15,807.7	11,454.0	38.4	44.7	82.14	4,486.0	989.9	1,243.8	1,160.4	83.36	14.920	
15,960.0	11,625.0	15,867.7	11,454.0	38.8	45.1	82.14	4,546.0	989.4	1,243.8	1,159.7	84.13	14.784	
16,000.0	11,625.0	15,907.7	11,454.0	39.1	45.3	82.14	4,585.9	989.0	1,243.8	1,159.1	84.64	14.695	
16,055.0	11,625.0	15,962.7	11,454.0	39.5	45.6	82.14	4,640.9	988.5	1,243.8	1,158.4	85.35	14.574	
16,100.0	11,625.0	16,007.7	11,454.0	39.8	45.9	82.14	4,685.9	988.1	1,243.8	1,157.9	85.92	14.476	
16,150.0	11,625.0	16,057.7	11,454.0	40.1	46.2	82.14	4,735.9	987.7	1,243.8	1,157.2	86.57	14.368	
16,200.0	11,625.0	16,107.7	11,454.0	40.5	46.5	82.14	4,785.9	987.2	1,243.8	1,156.6	87.21	14.261	
16,245.0	11,625.0	16,152.7	11,454.0	40.8	46.8	82.14	4,830.9	986.8	1,243.8	1,156.0	87.80	14.167	
16,300.0	11,625.0	16,207.7	11,454.0	41.2	47.1	82.14	4,885.9	986.3	1,243.8	1,155.3	88.51	14.052	
16,340.0	11,625.0	16,247.7	11,454.0	41.5	47.4	82.14	4,925.9	986.0	1,243.8	1,154.8	89.04	13.970	
16,400.0	11,625.0	16,307.7	11,454.0	41.9	47.7	82.14	4,985.9	985.4	1,243.8	1,154.0	89.82	13.848	
16,435.0	11,625.0	16,342.7	11,454.0	42.1	47.9	82.14	5,020.9	985.1	1,243.8	1,153.5	90.28	13.778	
16,500.0	11,625.0	16,407.7	11,454.0	42.6	48.3	82.14	5,085.9	984.5	1,243.8	1,152.7	91.13	13.649	
16,530.0	11,625.0	16,437.7	11,454.0	42.8	48.5	82.14	5,115.9	984.2	1,243.8	1,152.3	91.53	13.590	
16,600.0	11,625.0	16,507.7	11,454.0	43.3	49.0	82.14	5,185.9	983.6	1,243.8	1,151.4	92.45	13.454	
16,625.0	11,625.0	16,532.7	11,454.0	43.4	49.1	82.14	5,210.9	983.4	1,243.8	1,151.0	92.78	13.406	
16,700.0	11,625.0	16,607.7	11,454.0	44.0	49.6	82.14	5,285.9	982.7	1,243.8	1,150.0	93.77	13.264	
16,720.0	11,625.0	16,627.7	11,454.0	44.1	49.7	82.14	5,305.9	982.5	1,243.8	1,149.8	94.04	13.226	
16,800.0	11,625.0	16,707.7	11,454.0	44.7	50.2	82.14	5,385.9	981.8	1,243.8	1,148.7	95.11	13.078	

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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, 11062-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	
16,815.0	11,625.0	16,722.7	11,454.0	44.8	50.3	82.14	5,400.9	981.7	1,243.8	1,148.5	95.31	13.051		
16,900.0	11,625.0	16,807.7	11,454.0	45.4	50.8	82.14	5,485.9	980.9	1,243.8	1,147.4	96.44	12.897		
16,910.0	11,625.0	16,817.7	11,454.0	45.5	50.9	82.14	5,495.9	980.8	1,243.8	1,147.3	96.58	12.879		
17,000.0	11,625.0	16,907.7	11,454.0	46.1	51.5	82.14	5,585.9	980.0	1,243.8	1,146.1	97.78	12.720		
17,005.0	11,625.0	16,912.7	11,454.0	46.1	51.5	82.14	5,590.9	979.9	1,243.8	1,146.0	97.85	12.712		
17,100.0	11,625.0	17,007.7	11,454.0	46.8	52.1	82.14	5,685.9	979.1	1,243.8	1,144.7	99.13	12.547		
17,195.0	11,625.0	17,102.7	11,454.0	47.5	52.7	82.14	5,780.9	978.2	1,243.8	1,143.4	100.42	12.387		
17,200.0	11,625.0	17,107.7	11,454.0	47.5	52.8	82.14	5,785.9	978.2	1,243.8	1,143.4	100.48	12.379		
17,290.0	11,625.0	17,197.7	11,454.0	48.2	53.3	82.14	5,875.9	977.4	1,243.9	1,142.1	101.70	12.230		
17,300.0	11,625.0	17,207.7	11,454.0	48.2	53.4	82.14	5,885.9	977.3	1,243.9	1,142.0	101.84	12.214		
17,385.0	11,625.0	17,292.7	11,454.0	48.8	54.0	82.14	5,970.9	976.5	1,243.9	1,140.9	103.00	12.077		
17,400.0	11,625.0	17,307.7	11,454.0	48.9	54.0	82.14	5,985.9	976.4	1,243.9	1,140.7	103.20	12.053		
17,480.0	11,625.0	17,387.7	11,454.0	49.5	54.6	82.14	6,065.9	975.7	1,243.9	1,139.6	104.29	11.926		
17,500.0	11,625.0	17,407.7	11,454.0	49.7	54.7	82.14	6,085.9	975.5	1,243.9	1,139.3	104.57	11.895		
17,575.0	11,625.0	17,482.7	11,454.0	50.2	55.2	82.14	6,160.9	974.8	1,243.9	1,138.3	105.60	11.779		
17,600.0	11,625.0	17,507.7	11,454.0	50.4	55.4	82.14	6,185.9	974.6	1,243.9	1,137.9	105.94	11.741		
17,670.0	11,625.0	17,577.7	11,454.0	50.9	55.8	82.14	6,255.9	973.9	1,243.9	1,137.0	106.90	11.636		
17,700.0	11,625.0	17,607.7	11,454.0	51.1	56.0	82.14	6,285.9	973.7	1,243.9	1,136.6	107.31	11.591		
17,765.0	11,625.0	17,672.7	11,454.0	51.6	56.4	82.14	6,350.9	973.1	1,243.9	1,135.7	108.21	11.495		
17,800.0	11,625.0	17,707.7	11,454.0	51.8	56.7	82.14	6,385.9	972.8	1,243.9	1,135.2	108.69	11.444		
17,860.0	11,625.0	17,767.7	11,454.0	52.3	57.1	82.14	6,445.9	972.2	1,243.9	1,134.4	109.52	11.357		
17,900.0	11,625.0	17,807.7	11,454.0	52.5	57.3	82.14	6,485.9	971.9	1,243.9	1,133.8	110.08	11.300		
17,955.0	11,625.0	17,862.7	11,454.0	52.9	57.7	82.14	6,540.9	971.4	1,243.9	1,133.0	110.84	11.223		
18,000.0	11,625.0	17,907.7	11,454.0	53.3	58.0	82.14	6,585.9	971.0	1,243.9	1,132.4	111.46	11.160		
18,050.0	11,625.0	17,957.7	11,454.0	53.6	58.3	82.14	6,635.9	970.5	1,243.9	1,131.7	112.16	11.091		
18,100.0	11,625.0	18,007.7	11,454.0	54.0	58.7	82.14	6,685.9	970.1	1,243.9	1,131.0	112.85	11.022		
18,145.0	11,625.0	18,052.7	11,454.0	54.3	59.0	82.14	6,730.9	969.7	1,243.9	1,130.4	113.48	10.962		
18,200.0	11,625.0	18,107.7	11,454.0	54.7	59.3	82.14	6,785.9	969.2	1,243.9	1,129.7	114.24	10.888		
18,240.0	11,625.0	18,147.7	11,454.0	55.0	59.6	82.14	6,825.9	968.8	1,243.9	1,129.1	114.80	10.835		
18,300.0	11,625.0	18,207.7	11,454.0	55.4	60.0	82.15	6,885.9	968.3	1,243.9	1,128.3	115.64	10.757		
18,335.0	11,625.0	18,242.7	11,454.0	55.7	60.2	82.15	6,920.9	967.9	1,243.9	1,127.8	116.13	10.711		
18,400.0	11,625.0	18,307.7	11,454.0	56.2	60.7	82.15	6,985.9	967.4	1,243.9	1,126.9	117.04	10.628		
18,430.0	11,625.0	18,337.7	11,454.0	56.4	60.9	82.15	7,015.9	967.1	1,243.9	1,126.4	117.46	10.590		
18,500.0	11,625.0	18,407.7	11,454.0	56.9	61.4	82.15	7,085.8	966.5	1,243.9	1,125.5	118.44	10.502		
18,525.0	11,625.0	18,432.7	11,454.0	57.1	61.5	82.15	7,110.8	966.2	1,243.9	1,125.1	118.80	10.471		
18,600.0	11,625.0	18,507.7	11,454.0	57.6	62.0	82.15	7,185.8	965.6	1,243.9	1,124.1	119.85	10.379		
18,620.0	11,625.0	18,527.7	11,454.0	57.8	62.2	82.15	7,205.8	965.4	1,243.9	1,123.8	120.13	10.355		
18,700.0	11,625.0	18,607.7	11,454.0	58.4	62.7	82.15	7,285.8	964.7	1,243.9	1,122.7	121.26	10.258		
18,715.0	11,625.0	18,622.7	11,454.0	58.5	62.8	82.15	7,300.8	964.5	1,243.9	1,122.5	121.47	10.240		
18,800.0	11,625.0	18,707.7	11,454.0	59.1	63.4	82.15	7,385.8	963.7	1,243.9	1,121.3	122.67	10.140		
18,810.0	11,625.0	18,717.7	11,454.0	59.2	63.5	82.15	7,395.8	963.7	1,243.9	1,121.1	122.81	10.129		
18,900.0	11,625.0	18,807.7	11,454.0	59.8	64.1	82.15	7,485.8	962.8	1,243.9	1,119.8	124.09	10.025		
18,905.0	11,625.0	18,812.7	11,454.0	59.9	64.1	82.15	7,490.8	962.8	1,243.9	1,119.8	124.16	10.019		
19,000.0	11,625.0	18,907.7	11,454.0	60.6	64.8	82.15	7,585.8	961.9	1,243.9	1,118.4	125.50	9.912		
19,095.0	11,625.0	19,002.7	11,454.0	61.3	65.4	82.15	7,680.8	961.1	1,243.9	1,117.1	126.85	9.806		
19,100.0	11,625.0	19,007.7	11,454.0	61.3	65.4	82.15	7,685.8	961.0	1,243.9	1,117.0	126.92	9.801		
19,190.0	11,625.0	19,097.7	11,454.0	61.9	66.1	82.15	7,775.8	960.2	1,243.9	1,115.7	128.20	9.703		
19,200.0	11,625.0	19,107.7	11,454.0	62.0	66.1	82.15	7,785.8	960.1	1,243.9	1,115.6	128.34	9.692		
19,285.0	11,625.0	19,192.7	11,454.0	62.6	66.7	82.15	7,870.8	959.4	1,244.0	1,114.4	129.56	9.602		
19,300.0	11,625.0	19,207.7	11,454.0	62.8	66.8	82.15	7,885.8	959.2	1,244.0	1,114.2	129.77	9.586		
19,380.0	11,625.0	19,287.7	11,454.0	63.3	67.4	82.15	7,965.8	958.5	1,244.0	1,113.0	130.91	9.502		
19,400.0	11,625.0	19,307.7	11,454.0	63.5	67.5	82.15	7,985.8	958.3	1,244.0	1,112.8	131.20	9.482		

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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: 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_11062-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	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	Warning
19,475.0	11,625.0	19,382.7	11,454.0	64.0	68.0	82.15	8,060.8	957.7	1,244.0	1,111.7	132.27	9.405	
19,500.0	11,625.0	19,407.7	11,454.0	64.2	68.2	82.15	8,085.8	957.4	1,244.0	1,111.3	132.62	9.380	
19,570.0	11,625.0	19,477.7	11,454.0	64.7	68.7	82.15	8,155.8	956.8	1,244.0	1,110.3	133.63	9.309	
19,600.0	11,625.0	19,507.7	11,454.0	65.0	68.9	82.15	8,185.8	956.5	1,244.0	1,109.9	134.06	9.279	
19,665.0	11,625.0	19,572.7	11,454.0	65.4	69.4	82.15	8,250.8	955.9	1,244.0	1,109.0	134.99	9.215	
19,700.0	11,625.0	19,607.7	11,454.0	65.7	69.6	82.15	8,285.8	955.6	1,244.0	1,108.5	135.49	9.181	
19,760.0	11,625.0	19,667.7	11,454.0	66.1	70.0	82.15	8,345.8	955.1	1,244.0	1,107.6	136.35	9.123	
19,800.0	11,625.0	19,707.7	11,454.0	66.4	70.3	82.15	8,385.8	954.7	1,244.0	1,107.1	136.92	9.085	
19,855.0	11,625.0	19,762.7	11,454.0	66.8	70.7	82.15	8,440.8	954.2	1,244.0	1,106.3	137.71	9.033	
19,900.0	11,625.0	19,807.7	11,454.0	67.2	71.0	82.15	8,485.8	953.8	1,244.0	1,105.6	138.36	8.991	
19,950.0	11,625.0	19,857.7	11,454.0	67.5	71.3	82.15	8,535.8	953.4	1,244.0	1,104.9	139.08	8.944	
20,000.0	11,625.0	19,907.7	11,454.0	67.9	71.7	82.15	8,585.8	952.9	1,244.0	1,104.2	139.80	8.898	
20,045.0	11,625.0	19,952.7	11,454.0	68.3	72.0	82.15	8,630.8	952.5	1,244.0	1,103.5	140.45	8.857	
20,100.0	11,625.0	20,007.7	11,454.0	68.7	72.4	82.15	8,685.8	952.0	1,244.0	1,102.7	141.24	8.808	
20,140.0	11,625.0	20,047.7	11,454.0	69.0	72.7	82.15	8,725.8	951.7	1,244.0	1,102.2	141.82	8.772	
20,200.0	11,625.0	20,107.7	11,454.0	69.4	73.1	82.15	8,785.8	951.1	1,244.0	1,101.3	142.68	8.718	
20,235.0	11,625.0	20,142.7	11,454.0	69.7	73.3	82.15	8,820.8	950.8	1,244.0	1,100.8	143.19	8.688	
20,300.0	11,625.0	20,207.7	11,454.0	70.1	73.8	82.15	8,885.8	950.2	1,244.0	1,099.9	144.13	8.631	
20,330.0	11,625.0	20,237.7	11,454.0	70.4	74.0	82.15	8,915.8	949.9	1,244.0	1,099.4	144.56	8.605	
20,400.0	11,625.0	20,307.7	11,454.0	70.9	74.5	82.15	8,985.8	949.3	1,244.0	1,098.4	145.58	8.545	
20,425.0	11,625.0	20,332.7	11,454.0	71.1	74.7	82.15	9,010.8	949.1	1,244.0	1,098.1	145.94	8.524	
20,500.0	11,625.0	20,407.7	11,454.0	71.6	75.2	82.15	9,085.8	948.4	1,244.0	1,097.0	147.02	8.461	
20,520.0	11,625.0	20,427.7	11,454.0	71.8	75.4	82.15	9,105.8	948.2	1,244.0	1,096.7	147.31	8.445	
20,600.0	11,625.0	20,507.7	11,454.0	72.4	75.9	82.15	9,185.8	947.5	1,244.0	1,095.5	148.47	8.379	
20,615.0	11,625.0	20,522.7	11,454.0	72.5	76.0	82.15	9,200.8	947.4	1,244.0	1,095.3	148.69	8.366	
20,700.0	11,625.0	20,607.7	11,454.0	73.1	76.6	82.15	9,285.8	946.6	1,244.0	1,094.1	149.92	8.298	
20,710.0	11,625.0	20,617.7	11,454.0	73.2	76.7	82.15	9,295.8	946.5	1,244.0	1,094.0	150.07	8.290	
20,800.0	11,625.0	20,707.7	11,454.0	73.8	77.3	82.15	9,385.8	945.7	1,244.0	1,092.6	151.38	8.218	
20,805.0	11,625.0	20,712.7	11,454.0	73.9	77.4	82.15	9,390.8	945.7	1,244.0	1,092.6	151.45	8.214	
20,900.0	11,625.0	20,807.7	11,454.0	74.6	78.1	82.15	9,485.8	944.8	1,244.0	1,091.2	152.83	8.140	
20,995.0	11,625.0	20,902.7	11,454.0	75.3	78.7	82.15	9,580.7	943.9	1,244.0	1,089.8	154.21	8.067	
21,000.0	11,625.0	20,907.7	11,454.0	75.3	78.8	82.15	9,585.7	943.9	1,244.0	1,089.8	154.29	8.063	
21,090.0	11,625.0	20,997.7	11,454.0	76.0	79.4	82.15	9,675.7	943.1	1,244.0	1,088.4	155.60	7.995	
21,100.0	11,625.0	21,007.7	11,454.0	76.1	79.5	82.15	9,685.7	943.0	1,244.0	1,088.3	155.74	7.988	
21,185.0	11,625.0	21,092.7	11,454.0	76.7	80.1	82.15	9,770.7	942.2	1,244.0	1,087.1	156.98	7.925	
21,200.0	11,625.0	21,107.7	11,454.0	76.8	80.2	82.15	9,785.7	942.1	1,244.0	1,086.8	157.20	7.914	
21,280.0	11,625.0	21,187.7	11,454.0	77.4	80.8	82.15	9,865.7	941.4	1,244.0	1,085.7	158.37	7.855	
21,300.0	11,625.0	21,207.7	11,454.0	77.6	80.9	82.15	9,885.7	941.2	1,244.1	1,085.4	158.66	7.841	
21,375.0	11,625.0	21,282.7	11,454.0	78.1	81.4	82.15	9,960.7	940.5	1,244.1	1,084.3	159.76	7.787	
21,400.0	11,625.0	21,307.7	11,454.0	78.3	81.6	82.15	9,985.7	940.3	1,244.1	1,083.9	160.12	7.769	
21,470.0	11,625.0	21,377.7	11,454.0	78.8	82.1	82.15	10,055.7	939.6	1,244.1	1,082.9	161.14	7.720	
21,500.0	11,625.0	21,407.7	11,454.0	79.1	82.3	82.15	10,085.7	939.4	1,244.1	1,082.5	161.58	7.699	
21,565.0	11,625.0	21,472.7	11,454.0	79.5	82.8	82.15	10,150.7	938.8	1,244.1	1,081.5	162.53	7.654	
21,600.0	11,625.0	21,507.7	11,454.0	79.8	83.0	82.15	10,185.7	938.5	1,244.1	1,081.0	163.05	7.630	
21,660.0	11,625.0	21,567.7	11,454.0	80.3	83.5	82.15	10,245.7	937.9	1,244.1	1,080.1	163.92	7.589	
21,700.0	11,625.0	21,607.7	11,454.0	80.6	83.8	82.15	10,285.7	937.6	1,244.1	1,079.6	164.51	7.562	
21,755.0	11,625.0	21,662.7	11,454.0	81.0	84.2	82.15	10,340.7	937.1	1,244.1	1,078.8	165.32	7.525	
21,800.0	11,625.0	21,707.7	11,454.0	81.3	84.5	82.15	10,385.7	936.7	1,244.1	1,078.1	165.98	7.496	
21,850.0	11,625.0	21,757.7	11,454.0	81.7	84.8	82.15	10,435.7	936.2	1,244.1	1,077.4	166.71	7.463	
21,900.0	11,625.0	21,807.7	11,454.0	82.0	85.2	82.15	10,485.7	935.8	1,244.1	1,076.6	167.44	7.430	
21,945.0	11,625.0	21,852.7	11,454.0	82.4	85.5	82.15	10,530.7	935.4	1,244.1	1,076.0	168.10	7.401	
21,956.2	11,625.0	21,863.9	11,454.0	82.5	85.6	82.15	10,541.9	935.3	1,244.1	1,075.8	168.26	7.394 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 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=31ft @ 3196.0usft

Offset Depths are relative to Offset Datum

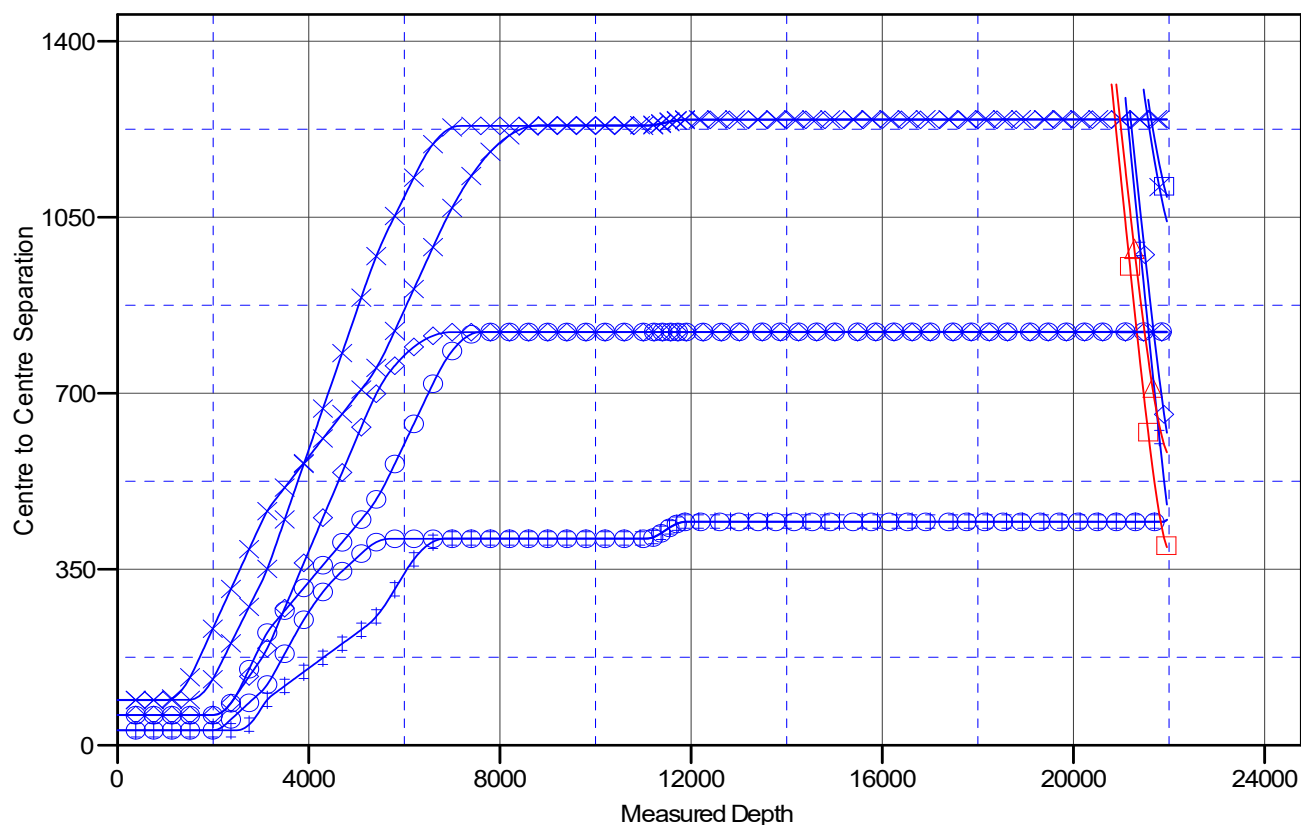
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ZIA HILLS UNIT 2331 WC #710H

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

Grid Convergence at Surface is: 0.31°

Ladder Plot



LEGEND

ZIA HILLS UNIT 2331 WC #711H, OWB, PWP0 V0	ZIA HILLS UNIT 2331 WC #708H, OWB, PWP0 V0	SHETLAND 11 FEDERAL #716H, OWB, PWP0 V0
ZIA HILLS UNIT 2331 WC #701H, OWB, PWP0 V0	SHETLAND 2-11 STATE FEDERAL COM #713H, OWB, PWP0 V0	ZIA HILLS UNIT 2331 WC #712H, OWB, PWP0 V0
ZIA HILLS UNIT 2331 WC #709H, OWB, PWP0 V0	SHETLAND 2-11 STATE FEDERAL COM #733H, OWB, PWP0 V0	SHETLAND 11 FEDERAL #736H, OWB, PWP0 V0
SHETLAND 2-11 STATE FEDERAL COM #613H, OWB, AWP V0	ZIA HILLS UNIT 2331 WC #713H, OWB, PWP0 V0	SHETLAND 2-11 STATE FEDERAL COM #333H, OWB, AWP V0

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3196.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3196.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=31ft @ 3196.0usft

Offset Depths are relative to Offset Datum

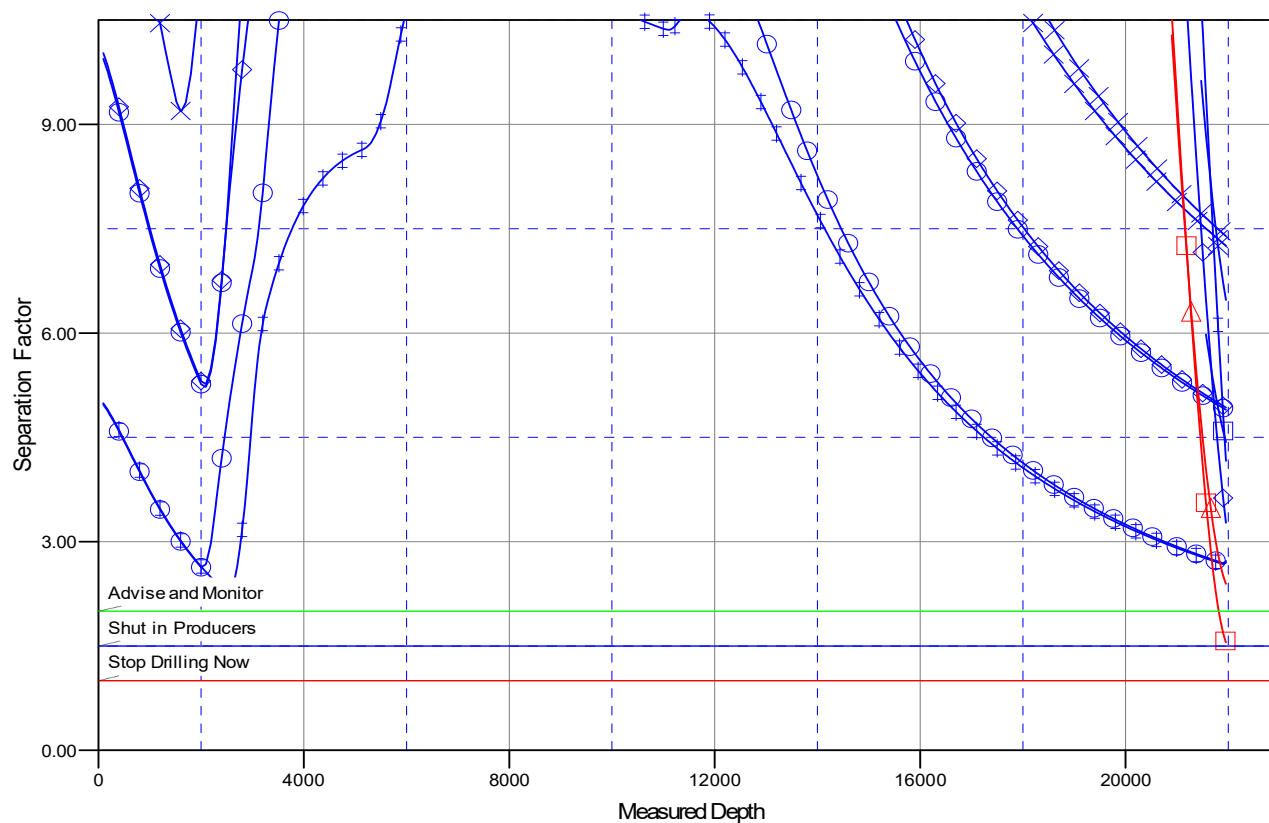
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ZIA HILLS UNIT 2331 WC #710H

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

Grid Convergence at Surface is: 0.31°

Separation Factor Plot



LEGEND

● ZIA HILLS UNIT 2331 WC #710H, OWB, PWP0 V0	● ZIA HILLS UNIT 2331 WC #709H, OWB, PWP0 V0	● SHETLAND 11 FEDERAL #711H, OWB, PWP0 V0
● ZIA HILLS UNIT 2331 WC #709H, OWB, PWP0 V0	● SHETLAND 2-11 STATE FEDERAL COM #713H, OWB, PWP0 V0	● ZIA HILLS UNIT 2331 WC #712H, OWB, PWP0 V0
● ZIA HILLS UNIT 2331 WC #709H, OWB, PWP0 V0	● SHETLAND 2-11 STATE FEDERAL COM #733H, OWB, PWP0 V0	● SHETLAND 11 FEDERAL #731H, OWB, PWP0 V0
■ SHETLAND 2-11 STATE FEDERAL COM #613H, OWB, AWP V0	● ZIA HILLS UNIT 2331 WC #713H, OWB, PWP0 V0	■ SHETLAND 2-11 STATE FEDERAL COM #833H, OWB, AWP 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 2331 PROJECT

ZIA HILLS UNIT 2331 WC #710H

OWB

Plan: PWP0

Standard Planning Report

16 November, 2022

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3196.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3196.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

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

Site	ZIA HILLS UNIT 2331 PROJECT					
Site Position:		Northing:	371,734.97 usft	Latitude:	32° 1' 14.533 N	
From:	Map	Easting:	678,649.42 usft	Longitude:	103° 45' 24.875 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.31 °

Well	ZIA HILLS UNIT 2331 WC #710H					
Well Position	+N/-S	105.9 usft	Northing:	371,840.90 usft	Latitude:	32° 1' 15.353 N
	+E/-W	4,274.6 usft	Easting:	682,924.04 usft	Longitude:	103° 44' 35.218 W
Position Uncertainty		3.0 usft	Wellhead Elevation:		Ground Level:	3,165.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	12/31/2023	6.34	59.52	47,263.52425813

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	358.38	

Plan Survey Tool Program	Date	11/16/2022			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	3,000.0 PWP0 (OWB)	r.5 SDI_KPR_ADK SDI Keeper ADK rev.5		
2	3,000.0	11,155.9 PWP0 (OWB)	r.5 MWD+IFR1 OWSG MWD + IFR1 rev.5		
3	11,155.9	21,956.2 PWP0 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St		

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Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3196.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3196.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,250.0	5.00	270.97	3,249.7	0.2	-10.9	2.00	2.00	0.00	270.97	
5,187.7	5.00	270.97	5,180.0	3.0	-179.8	0.00	0.00	0.00	0.00	
5,687.7	0.00	0.00	5,679.4	3.4	-201.6	1.00	-1.00	0.00	180.00	
11,155.9	0.00	0.00	11,147.5	3.4	-201.6	0.00	0.00	0.00	0.00	
11,905.9	90.00	359.48	11,625.0	480.9	-205.9	12.00	12.00	0.00	359.48	
21,956.2	90.00	359.48	11,625.0	10,530.8	-297.1	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3196.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3196.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	2.00	270.97	3,100.0	0.0	-1.7	0.1	2.00	2.00	0.00
3,200.0	4.00	270.97	3,199.8	0.1	-7.0	0.3	2.00	2.00	0.00
3,250.0	5.00	270.97	3,249.7	0.2	-10.9	0.5	2.00	2.00	0.00
3,300.0	5.00	270.97	3,299.5	0.3	-15.3	0.7	0.00	0.00	0.00
3,400.0	5.00	270.97	3,399.1	0.4	-24.0	1.1	0.00	0.00	0.00
3,500.0	5.00	270.97	3,498.7	0.6	-32.7	1.5	0.00	0.00	0.00
3,600.0	5.00	270.97	3,598.4	0.7	-41.4	1.9	0.00	0.00	0.00
3,700.0	5.00	270.97	3,698.0	0.8	-50.1	2.3	0.00	0.00	0.00
3,800.0	5.00	270.97	3,797.6	1.0	-58.8	2.7	0.00	0.00	0.00
3,900.0	5.00	270.97	3,897.2	1.1	-67.5	3.1	0.00	0.00	0.00
4,000.0	5.00	270.97	3,996.8	1.3	-76.3	3.4	0.00	0.00	0.00
4,100.0	5.00	270.97	4,096.4	1.4	-85.0	3.8	0.00	0.00	0.00
4,200.0	5.00	270.97	4,196.1	1.6	-93.7	4.2	0.00	0.00	0.00
4,300.0	5.00	270.97	4,295.7	1.7	-102.4	4.6	0.00	0.00	0.00
4,400.0	5.00	270.97	4,395.3	1.9	-111.1	5.0	0.00	0.00	0.00
4,500.0	5.00	270.97	4,494.9	2.0	-119.8	5.4	0.00	0.00	0.00
4,600.0	5.00	270.97	4,594.5	2.2	-128.5	5.8	0.00	0.00	0.00
4,700.0	5.00	270.97	4,694.2	2.3	-137.3	6.2	0.00	0.00	0.00
4,800.0	5.00	270.97	4,793.8	2.5	-146.0	6.6	0.00	0.00	0.00
4,900.0	5.00	270.97	4,893.4	2.6	-154.7	7.0	0.00	0.00	0.00
5,000.0	5.00	270.97	4,993.0	2.8	-163.4	7.4	0.00	0.00	0.00
5,100.0	5.00	270.97	5,092.6	2.9	-172.1	7.8	0.00	0.00	0.00
5,187.7	5.00	270.97	5,180.0	3.0	-179.8	8.1	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3196.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3196.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #710H	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)
5,200.0	4.88	270.97	5,192.3	3.1	-180.8	8.2	1.00	-1.00	0.00
5,300.0	3.88	270.97	5,292.0	3.2	-188.4	8.5	1.00	-1.00	0.00
5,400.0	2.88	270.97	5,391.8	3.3	-194.3	8.8	1.00	-1.00	0.00
5,500.0	1.88	270.97	5,491.7	3.4	-198.5	9.0	1.00	-1.00	0.00
5,600.0	0.88	270.97	5,591.7	3.4	-200.9	9.1	1.00	-1.00	0.00
5,687.7	0.00	0.00	5,679.4	3.4	-201.6	9.1	1.00	-1.00	0.00
5,700.0	0.00	0.00	5,691.7	3.4	-201.6	9.1	0.00	0.00	0.00
5,800.0	0.00	0.00	5,791.7	3.4	-201.6	9.1	0.00	0.00	0.00
5,900.0	0.00	0.00	5,891.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,991.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,100.0	0.00	0.00	6,091.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,200.0	0.00	0.00	6,191.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,300.0	0.00	0.00	6,291.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,391.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,500.0	0.00	0.00	6,491.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,591.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,700.0	0.00	0.00	6,691.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,791.7	3.4	-201.6	9.1	0.00	0.00	0.00
6,900.0	0.00	0.00	6,891.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,000.0	0.00	0.00	6,991.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,100.0	0.00	0.00	7,091.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,200.0	0.00	0.00	7,191.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,300.0	0.00	0.00	7,291.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,400.0	0.00	0.00	7,391.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,500.0	0.00	0.00	7,491.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,600.0	0.00	0.00	7,591.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,700.0	0.00	0.00	7,691.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,800.0	0.00	0.00	7,791.7	3.4	-201.6	9.1	0.00	0.00	0.00
7,900.0	0.00	0.00	7,891.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,000.0	0.00	0.00	7,991.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,100.0	0.00	0.00	8,091.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,200.0	0.00	0.00	8,191.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,291.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,400.0	0.00	0.00	8,391.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,491.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,600.0	0.00	0.00	8,591.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,700.0	0.00	0.00	8,691.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,800.0	0.00	0.00	8,791.7	3.4	-201.6	9.1	0.00	0.00	0.00
8,900.0	0.00	0.00	8,891.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,000.0	0.00	0.00	8,991.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,100.0	0.00	0.00	9,091.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,200.0	0.00	0.00	9,191.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,300.0	0.00	0.00	9,291.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,400.0	0.00	0.00	9,391.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,500.0	0.00	0.00	9,491.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,600.0	0.00	0.00	9,591.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,700.0	0.00	0.00	9,691.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,800.0	0.00	0.00	9,791.7	3.4	-201.6	9.1	0.00	0.00	0.00
9,900.0	0.00	0.00	9,891.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,000.0	0.00	0.00	9,991.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,100.0	0.00	0.00	10,091.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,200.0	0.00	0.00	10,191.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,300.0	0.00	0.00	10,291.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,400.0	0.00	0.00	10,391.7	3.4	-201.6	9.1	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3196.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3196.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #710H	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)
10,500.0	0.00	0.00	10,491.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,600.0	0.00	0.00	10,591.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,700.0	0.00	0.00	10,691.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,800.0	0.00	0.00	10,791.7	3.4	-201.6	9.1	0.00	0.00	0.00
10,900.0	0.00	0.00	10,891.7	3.4	-201.6	9.1	0.00	0.00	0.00
11,000.0	0.00	0.00	10,991.7	3.4	-201.6	9.1	0.00	0.00	0.00
11,100.0	0.00	0.00	11,091.7	3.4	-201.6	9.1	0.00	0.00	0.00
11,155.9	0.00	0.00	11,147.5	3.4	-201.6	9.1	0.00	0.00	0.00
11,175.0	2.30	359.48	11,166.7	3.8	-201.6	9.5	12.00	12.00	0.00
11,200.0	5.30	359.48	11,191.6	5.5	-201.6	11.1	12.00	12.00	0.00
11,225.0	8.30	359.48	11,216.4	8.4	-201.6	14.1	12.00	12.00	0.00
11,250.0	11.30	359.48	11,241.1	12.7	-201.6	18.4	12.00	12.00	0.00
11,275.0	14.30	359.48	11,265.4	18.2	-201.7	23.9	12.00	12.00	0.00
11,300.0	17.30	359.48	11,289.5	25.0	-201.8	30.7	12.00	12.00	0.00
11,325.0	20.30	359.48	11,313.2	33.1	-201.8	38.7	12.00	12.00	0.00
11,350.0	23.30	359.48	11,336.4	42.3	-201.9	48.0	12.00	12.00	0.00
11,375.0	26.30	359.48	11,359.1	52.8	-202.0	58.5	12.00	12.00	0.00
11,400.0	29.30	359.48	11,381.2	64.5	-202.1	70.2	12.00	12.00	0.00
11,425.0	32.30	359.48	11,402.6	77.3	-202.2	83.0	12.00	12.00	0.00
11,450.0	35.30	359.48	11,423.4	91.2	-202.4	96.9	12.00	12.00	0.00
11,475.0	38.30	359.48	11,443.4	106.2	-202.5	111.8	12.00	12.00	0.00
11,500.0	41.30	359.48	11,462.6	122.2	-202.6	127.8	12.00	12.00	0.00
11,525.0	44.30	359.48	11,481.0	139.1	-202.8	144.8	12.00	12.00	0.00
11,550.0	47.30	359.48	11,498.4	157.1	-203.0	162.7	12.00	12.00	0.00
11,575.0	50.30	359.48	11,514.9	175.9	-203.1	181.5	12.00	12.00	0.00
11,600.0	53.30	359.48	11,530.3	195.5	-203.3	201.2	12.00	12.00	0.00
11,625.0	56.30	359.48	11,544.7	215.9	-203.5	221.6	12.00	12.00	0.00
11,650.0	59.30	359.48	11,558.1	237.1	-203.7	242.7	12.00	12.00	0.00
11,675.0	62.30	359.48	11,570.3	258.9	-203.9	264.6	12.00	12.00	0.00
11,700.0	65.30	359.48	11,581.3	281.3	-204.1	287.0	12.00	12.00	0.00
11,725.0	68.30	359.48	11,591.2	304.3	-204.3	309.9	12.00	12.00	0.00
11,750.0	71.30	359.48	11,599.8	327.8	-204.5	333.4	12.00	12.00	0.00
11,775.0	74.30	359.48	11,607.2	351.6	-204.7	357.3	12.00	12.00	0.00
11,800.0	77.30	359.48	11,613.3	375.9	-204.9	381.5	12.00	12.00	0.00
11,825.0	80.30	359.48	11,618.2	400.4	-205.2	406.0	12.00	12.00	0.00
11,850.0	83.30	359.48	11,621.7	425.1	-205.4	430.8	12.00	12.00	0.00
11,875.0	86.30	359.48	11,624.0	450.0	-205.6	455.6	12.00	12.00	0.00
11,900.0	89.30	359.48	11,625.0	475.0	-205.8	480.6	12.00	12.00	0.00
11,905.9	90.00	359.48	11,625.0	480.9	-205.9	486.5	12.00	12.00	0.00
12,000.0	90.00	359.48	11,625.0	575.0	-206.7	580.6	0.00	0.00	0.00
12,100.0	90.00	359.48	11,625.0	675.0	-207.7	680.6	0.00	0.00	0.00
12,200.0	90.00	359.48	11,625.0	775.0	-208.6	780.6	0.00	0.00	0.00
12,300.0	90.00	359.48	11,625.0	875.0	-209.5	880.5	0.00	0.00	0.00
12,400.0	90.00	359.48	11,625.0	975.0	-210.4	980.5	0.00	0.00	0.00
12,500.0	90.00	359.48	11,625.0	1,075.0	-211.3	1,080.5	0.00	0.00	0.00
12,600.0	90.00	359.48	11,625.0	1,175.0	-212.2	1,180.5	0.00	0.00	0.00
12,700.0	90.00	359.48	11,625.0	1,275.0	-213.1	1,280.5	0.00	0.00	0.00
12,800.0	90.00	359.48	11,625.0	1,375.0	-214.0	1,380.5	0.00	0.00	0.00
12,900.0	90.00	359.48	11,625.0	1,475.0	-214.9	1,480.4	0.00	0.00	0.00
13,000.0	90.00	359.48	11,625.0	1,575.0	-215.8	1,580.4	0.00	0.00	0.00
13,100.0	90.00	359.48	11,625.0	1,674.9	-216.7	1,680.4	0.00	0.00	0.00
13,200.0	90.00	359.48	11,625.0	1,774.9	-217.6	1,780.4	0.00	0.00	0.00
13,300.0	90.00	359.48	11,625.0	1,874.9	-218.5	1,880.4	0.00	0.00	0.00
13,400.0	90.00	359.48	11,625.0	1,974.9	-219.4	1,980.3	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3196.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3196.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #710H	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)
13,500.0	90.00	359.48	11,625.0	2,074.9	-220.4	2,080.3	0.00	0.00	0.00
13,600.0	90.00	359.48	11,625.0	2,174.9	-221.3	2,180.3	0.00	0.00	0.00
13,700.0	90.00	359.48	11,625.0	2,274.9	-222.2	2,280.3	0.00	0.00	0.00
13,800.0	90.00	359.48	11,625.0	2,374.9	-223.1	2,380.3	0.00	0.00	0.00
13,900.0	90.00	359.48	11,625.0	2,474.9	-224.0	2,480.3	0.00	0.00	0.00
14,000.0	90.00	359.48	11,625.0	2,574.9	-224.9	2,580.2	0.00	0.00	0.00
14,100.0	90.00	359.48	11,625.0	2,674.9	-225.8	2,680.2	0.00	0.00	0.00
14,200.0	90.00	359.48	11,625.0	2,774.9	-226.7	2,780.2	0.00	0.00	0.00
14,300.0	90.00	359.48	11,625.0	2,874.9	-227.6	2,880.2	0.00	0.00	0.00
14,400.0	90.00	359.48	11,625.0	2,974.9	-228.5	2,980.2	0.00	0.00	0.00
14,500.0	90.00	359.48	11,625.0	3,074.9	-229.4	3,080.1	0.00	0.00	0.00
14,600.0	90.00	359.48	11,625.0	3,174.9	-230.3	3,180.1	0.00	0.00	0.00
14,700.0	90.00	359.48	11,625.0	3,274.9	-231.2	3,280.1	0.00	0.00	0.00
14,800.0	90.00	359.48	11,625.0	3,374.9	-232.2	3,380.1	0.00	0.00	0.00
14,900.0	90.00	359.48	11,625.0	3,474.9	-233.1	3,480.1	0.00	0.00	0.00
15,000.0	90.00	359.48	11,625.0	3,574.9	-234.0	3,580.1	0.00	0.00	0.00
15,100.0	90.00	359.48	11,625.0	3,674.9	-234.9	3,680.0	0.00	0.00	0.00
15,200.0	90.00	359.48	11,625.0	3,774.9	-235.8	3,780.0	0.00	0.00	0.00
15,300.0	90.00	359.48	11,625.0	3,874.9	-236.7	3,880.0	0.00	0.00	0.00
15,400.0	90.00	359.48	11,625.0	3,974.9	-237.6	3,980.0	0.00	0.00	0.00
15,500.0	90.00	359.48	11,625.0	4,074.8	-238.5	4,080.0	0.00	0.00	0.00
15,600.0	90.00	359.48	11,625.0	4,174.8	-239.4	4,179.9	0.00	0.00	0.00
15,700.0	90.00	359.48	11,625.0	4,274.8	-240.3	4,279.9	0.00	0.00	0.00
15,800.0	90.00	359.48	11,625.0	4,374.8	-241.2	4,379.9	0.00	0.00	0.00
15,900.0	90.00	359.48	11,625.0	4,474.8	-242.1	4,479.9	0.00	0.00	0.00
16,000.0	90.00	359.48	11,625.0	4,574.8	-243.0	4,579.9	0.00	0.00	0.00
16,100.0	90.00	359.48	11,625.0	4,674.8	-244.0	4,679.8	0.00	0.00	0.00
16,200.0	90.00	359.48	11,625.0	4,774.8	-244.9	4,779.8	0.00	0.00	0.00
16,300.0	90.00	359.48	11,625.0	4,874.8	-245.8	4,879.8	0.00	0.00	0.00
16,400.0	90.00	359.48	11,625.0	4,974.8	-246.7	4,979.8	0.00	0.00	0.00
16,500.0	90.00	359.48	11,625.0	5,074.8	-247.6	5,079.8	0.00	0.00	0.00
16,600.0	90.00	359.48	11,625.0	5,174.8	-248.5	5,179.8	0.00	0.00	0.00
16,700.0	90.00	359.48	11,625.0	5,274.8	-249.4	5,279.7	0.00	0.00	0.00
16,800.0	90.00	359.48	11,625.0	5,374.8	-250.3	5,379.7	0.00	0.00	0.00
16,900.0	90.00	359.48	11,625.0	5,474.8	-251.2	5,479.7	0.00	0.00	0.00
17,000.0	90.00	359.48	11,625.0	5,574.8	-252.1	5,579.7	0.00	0.00	0.00
17,100.0	90.00	359.48	11,625.0	5,674.8	-253.0	5,679.7	0.00	0.00	0.00
17,200.0	90.00	359.48	11,625.0	5,774.8	-253.9	5,779.6	0.00	0.00	0.00
17,300.0	90.00	359.48	11,625.0	5,874.8	-254.8	5,879.6	0.00	0.00	0.00
17,400.0	90.00	359.48	11,625.0	5,974.8	-255.8	5,979.6	0.00	0.00	0.00
17,500.0	90.00	359.48	11,625.0	6,074.8	-256.7	6,079.6	0.00	0.00	0.00
17,600.0	90.00	359.48	11,625.0	6,174.8	-257.6	6,179.6	0.00	0.00	0.00
17,700.0	90.00	359.48	11,625.0	6,274.8	-258.5	6,279.6	0.00	0.00	0.00
17,800.0	90.00	359.48	11,625.0	6,374.8	-259.4	6,379.5	0.00	0.00	0.00
17,900.0	90.00	359.48	11,625.0	6,474.8	-260.3	6,479.5	0.00	0.00	0.00
18,000.0	90.00	359.48	11,625.0	6,574.7	-261.2	6,579.5	0.00	0.00	0.00
18,100.0	90.00	359.48	11,625.0	6,674.7	-262.1	6,679.5	0.00	0.00	0.00
18,200.0	90.00	359.48	11,625.0	6,774.7	-263.0	6,779.5	0.00	0.00	0.00
18,300.0	90.00	359.48	11,625.0	6,874.7	-263.9	6,879.4	0.00	0.00	0.00
18,400.0	90.00	359.48	11,625.0	6,974.7	-264.8	6,979.4	0.00	0.00	0.00
18,500.0	90.00	359.48	11,625.0	7,074.7	-265.7	7,079.4	0.00	0.00	0.00
18,600.0	90.00	359.48	11,625.0	7,174.7	-266.6	7,179.4	0.00	0.00	0.00
18,700.0	90.00	359.48	11,625.0	7,274.7	-267.6	7,279.4	0.00	0.00	0.00
18,800.0	90.00	359.48	11,625.0	7,374.7	-268.5	7,379.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #710H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3196.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3196.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

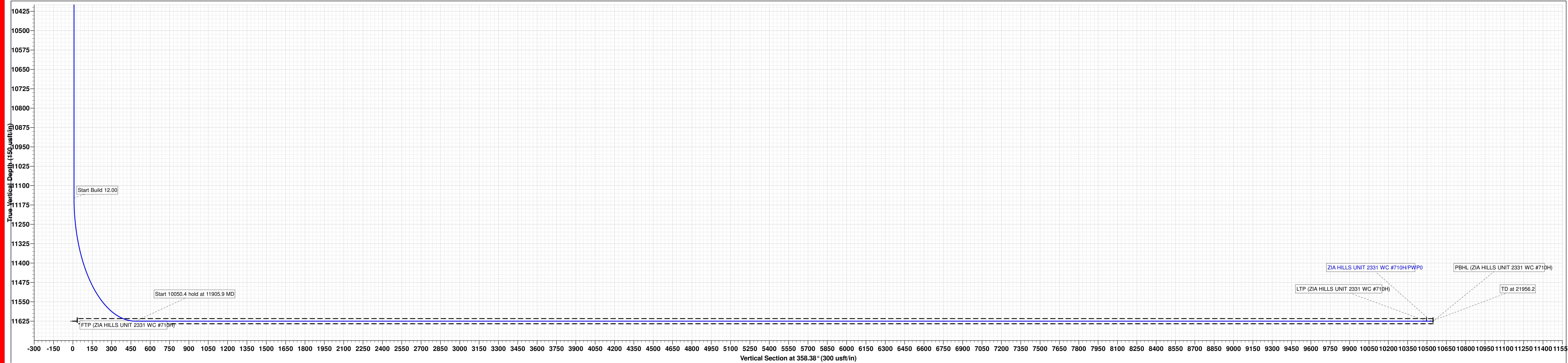
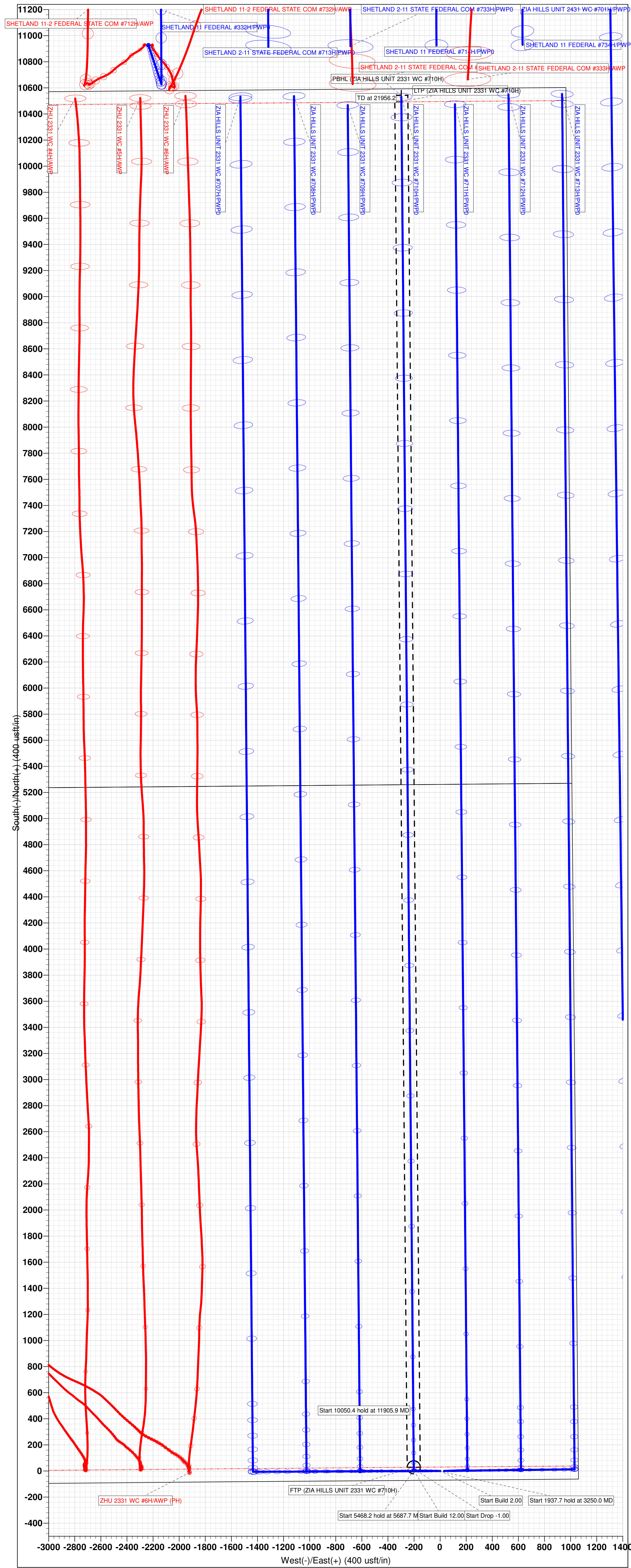
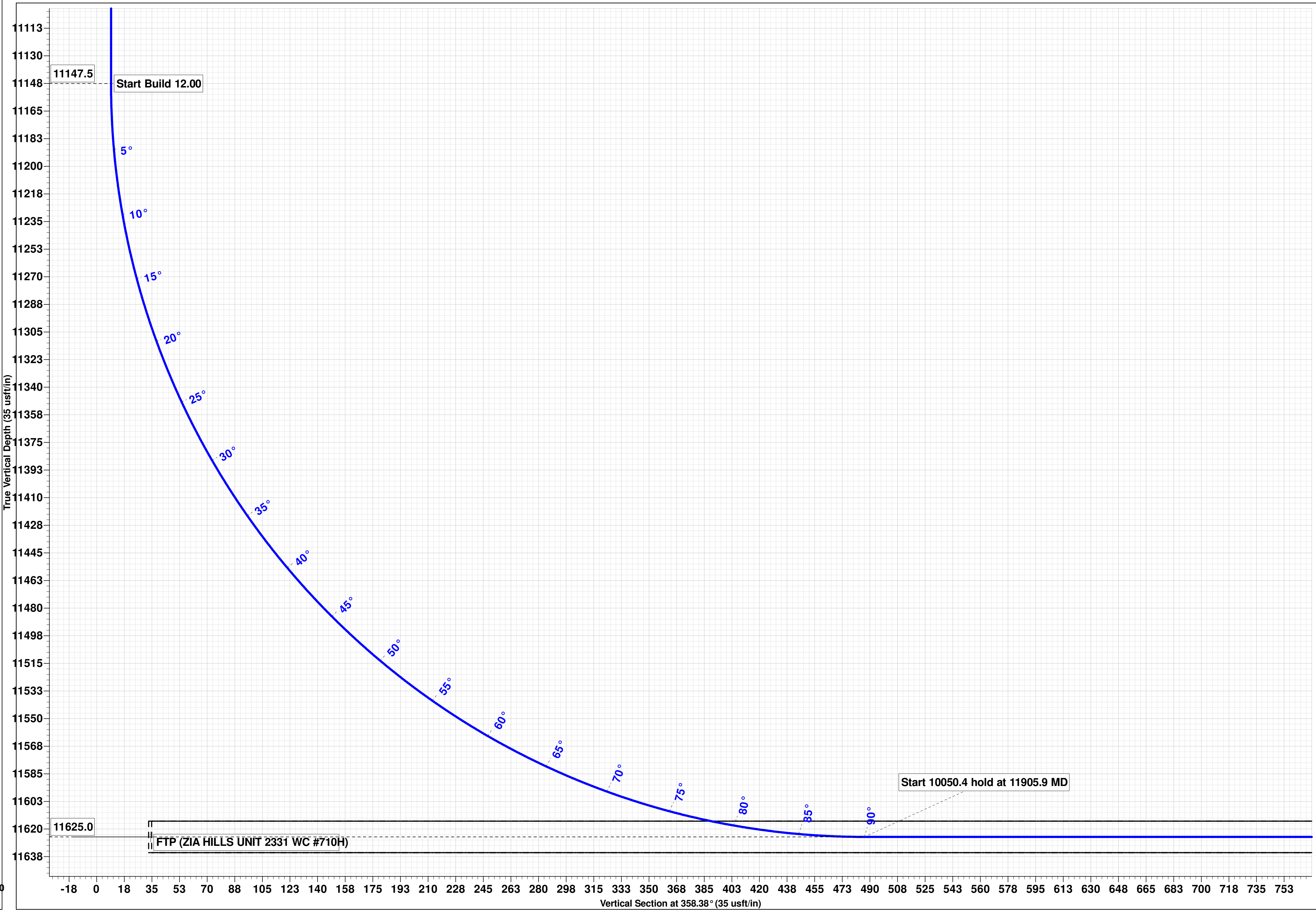
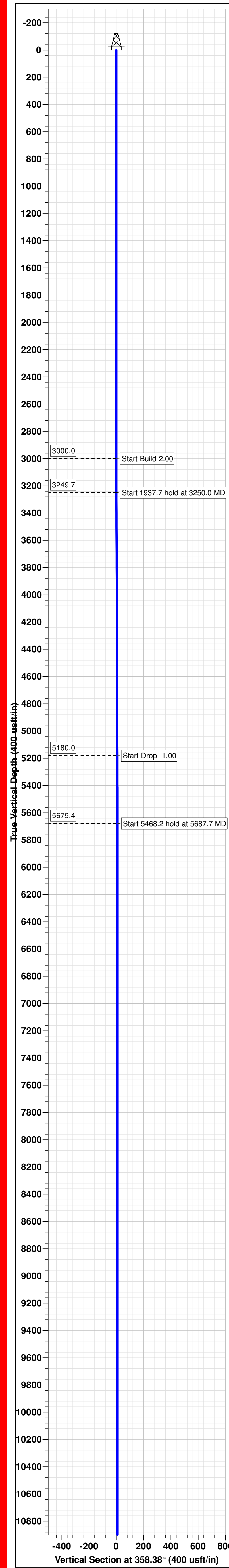
Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,900.0	90.00	359.48	11,625.0	7,474.7	-269.4	7,479.3	0.00	0.00	0.00
19,000.0	90.00	359.48	11,625.0	7,574.7	-270.3	7,579.3	0.00	0.00	0.00
19,100.0	90.00	359.48	11,625.0	7,674.7	-271.2	7,679.3	0.00	0.00	0.00
19,200.0	90.00	359.48	11,625.0	7,774.7	-272.1	7,779.3	0.00	0.00	0.00
19,300.0	90.00	359.48	11,625.0	7,874.7	-273.0	7,879.3	0.00	0.00	0.00
19,400.0	90.00	359.48	11,625.0	7,974.7	-273.9	7,979.2	0.00	0.00	0.00
19,500.0	90.00	359.48	11,625.0	8,074.7	-274.8	8,079.2	0.00	0.00	0.00
19,600.0	90.00	359.48	11,625.0	8,174.7	-275.7	8,179.2	0.00	0.00	0.00
19,700.0	90.00	359.48	11,625.0	8,274.7	-276.6	8,279.2	0.00	0.00	0.00
19,800.0	90.00	359.48	11,625.0	8,374.7	-277.5	8,379.2	0.00	0.00	0.00
19,900.0	90.00	359.48	11,625.0	8,474.7	-278.4	8,479.2	0.00	0.00	0.00
20,000.0	90.00	359.48	11,625.0	8,574.7	-279.3	8,579.1	0.00	0.00	0.00
20,100.0	90.00	359.48	11,625.0	8,674.7	-280.3	8,679.1	0.00	0.00	0.00
20,200.0	90.00	359.48	11,625.0	8,774.7	-281.2	8,779.1	0.00	0.00	0.00
20,300.0	90.00	359.48	11,625.0	8,874.7	-282.1	8,879.1	0.00	0.00	0.00
20,400.0	90.00	359.48	11,625.0	8,974.6	-283.0	8,979.1	0.00	0.00	0.00
20,500.0	90.00	359.48	11,625.0	9,074.6	-283.9	9,079.0	0.00	0.00	0.00
20,600.0	90.00	359.48	11,625.0	9,174.6	-284.8	9,179.0	0.00	0.00	0.00
20,700.0	90.00	359.48	11,625.0	9,274.6	-285.7	9,279.0	0.00	0.00	0.00
20,800.0	90.00	359.48	11,625.0	9,374.6	-286.6	9,379.0	0.00	0.00	0.00
20,900.0	90.00	359.48	11,625.0	9,474.6	-287.5	9,479.0	0.00	0.00	0.00
21,000.0	90.00	359.48	11,625.0	9,574.6	-288.4	9,578.9	0.00	0.00	0.00
21,100.0	90.00	359.48	11,625.0	9,674.6	-289.3	9,678.9	0.00	0.00	0.00
21,200.0	90.00	359.48	11,625.0	9,774.6	-290.2	9,778.9	0.00	0.00	0.00
21,300.0	90.00	359.48	11,625.0	9,874.6	-291.1	9,878.9	0.00	0.00	0.00
21,400.0	90.00	359.48	11,625.0	9,974.6	-292.1	9,978.9	0.00	0.00	0.00
21,500.0	90.00	359.48	11,625.0	10,074.6	-293.0	10,078.9	0.00	0.00	0.00
21,600.0	90.00	359.48	11,625.0	10,174.6	-293.9	10,178.8	0.00	0.00	0.00
21,700.0	90.00	359.48	11,625.0	10,274.6	-294.8	10,278.8	0.00	0.00	0.00
21,800.0	90.00	359.48	11,625.0	10,374.6	-295.7	10,378.8	0.00	0.00	0.00
21,900.0	90.00	359.48	11,625.0	10,474.6	-296.6	10,478.8	0.00	0.00	0.00
21,956.2	90.00	359.48	11,625.0	10,530.8	-297.1	10,535.0	0.00	0.00	0.00

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP (ZIA HILLS UNIT 2331 WC #710H) - hit/miss target - Shape	0.00	0.00	11,625.0	28.5	-201.9	371,869.37	682,722.17	32° 1' 15.646 N	103° 44' 37.561 W
- plan misses target center by 180.3usft at 11546.1usft MD (11495.7 TVD, 154.2 N, -202.9 E)									
- Circle (radius 50.0)									
LTP (ZIA HILLS UNIT 2331 WC #710H) - hit/miss target - Shape	0.00	0.00	11,625.0	10,493.0	-297.4	382,333.88	682,626.66	32° 2' 59.209 N	103° 44' 38.007 W
- plan misses target center by 18.4usft at 21900.0usft MD (11625.0 TVD, 10474.6 N, -296.6 E)									
- Point									
PBHL (ZIA HILLS UNIT 2331 WC #710H) - hit/miss target - Shape	0.00	179.48	11,625.0	10,543.0	-297.8	382,383.87	682,626.26	32° 2' 59.704 N	103° 44' 38.009 W
- plan misses target center by 12.2usft at 21956.2usft MD (11625.0 TVD, 10530.8 N, -297.1 E)									
- Rectangle (sides W100.0 H10,515.2 D20.0)									



Project: BULLDOG PROSPECT (NM-E)
Site: ZIA HILLS UNIT 2331 PROJECT
Well: ZIA HILLS UNIT 2331 WC #710H
Wellbore: OWB
Design: PWP0
GL: 3165.0
KB=31ft @ 3196.0usft

WELL DETAILS: ZIA HILLS UNIT 2331 WC #710H						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	371840.90	682924.04	32° 1' 15.353 N	103° 44' 35.218 W	
DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	
FTP (ZIA HILLS UNIT 2331 WC #710H)	11625.0	28.5	-201.9	371869.37	682722.17	
LTP (ZIA HILLS UNIT 2331 WC #710H)	11625.0	10493.0	-297.4	382333.88	682626.66	
PBHL (ZIA HILLS UNIT 2331 WC #710H)	11625.0	10543.0	-297.8	382383.87	682626.26	
SECTION DETAILS						
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg TFace V Sect
0.0	0.00	0.00	0.0	0.0	0.0	0.00 0.00 0.0
3000.0	0.00	0.00	3000.0	0.0	0.0	0.00 0.00 0.0
3250.0	5.00	270.97	3249.7	0.2	-10.9	2.00 270.97 0.5
5187.7	5.00	270.97	5180.0	3.0	-179.8	0.00 0.00 8.1
5687.7	0.00	0.00	5679.4	3.4	-201.6	1.00 180.00 9.1
11155.9	0.00	0.00	11147.5	3.4	-201.6	0.00 0.00 9.1
11905.9	90.00	359.48	11625.0	480.9	-205.9	12.00 359.48 486.5
21956.2	90.00	359.48	11625.0	10530.8	-297.1	0.00 0.00 10535.0



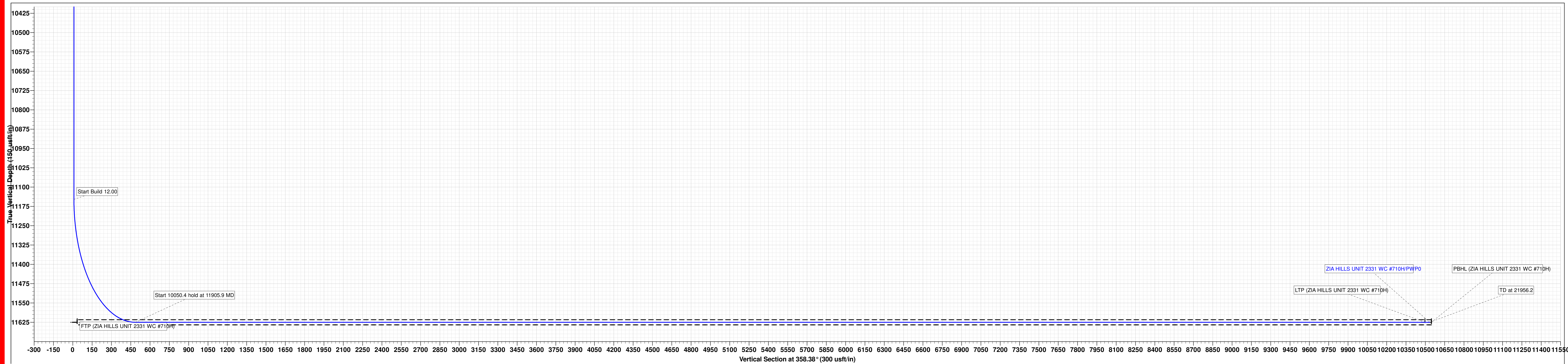
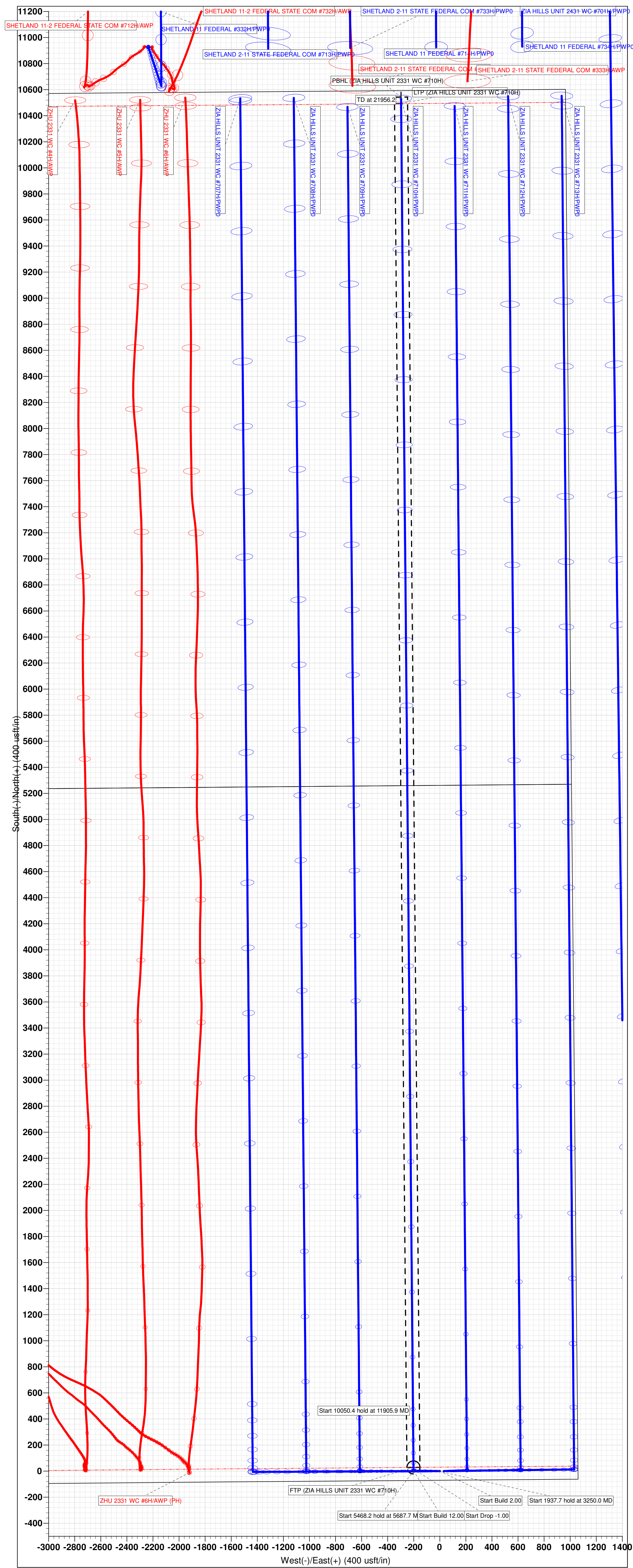
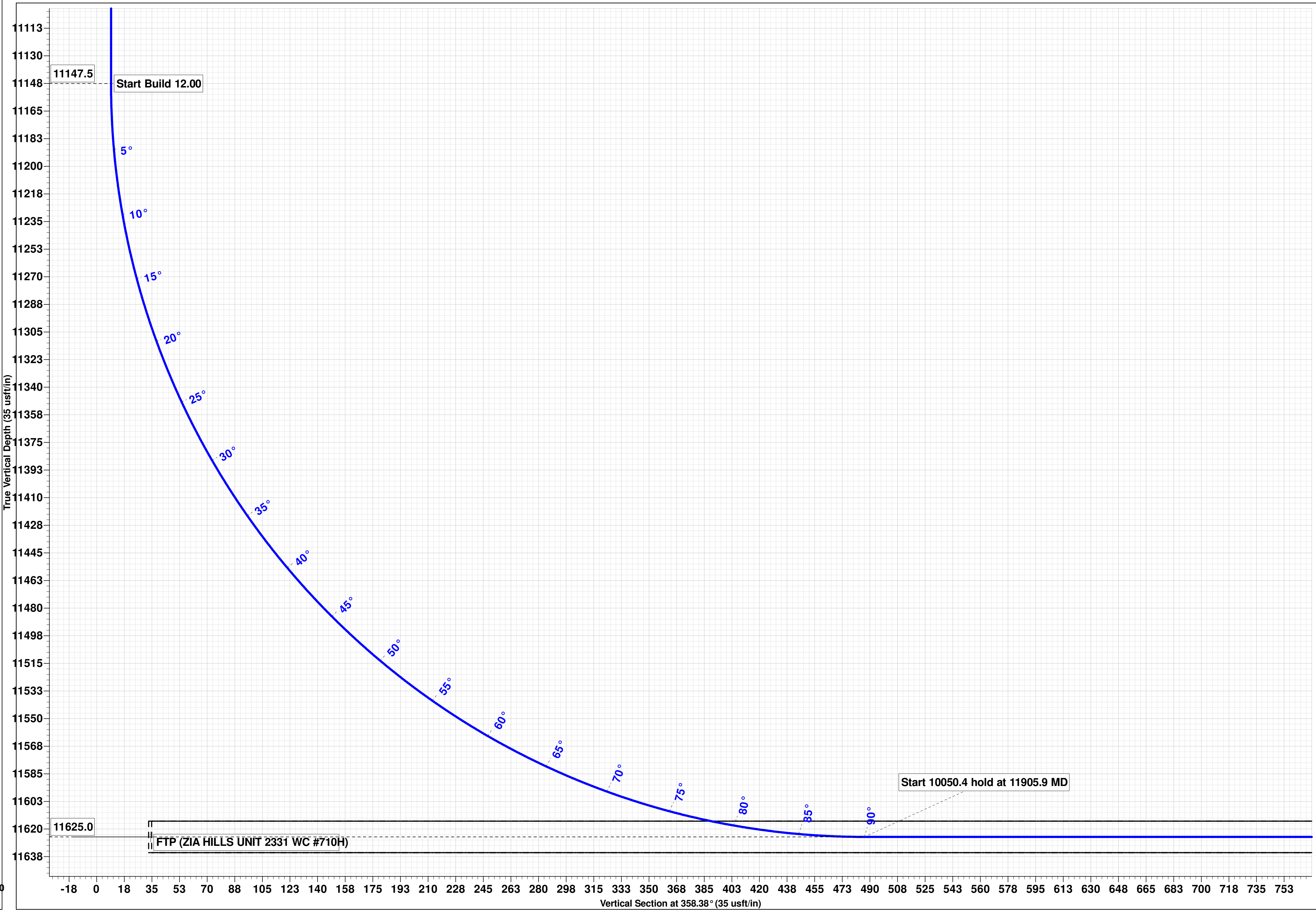
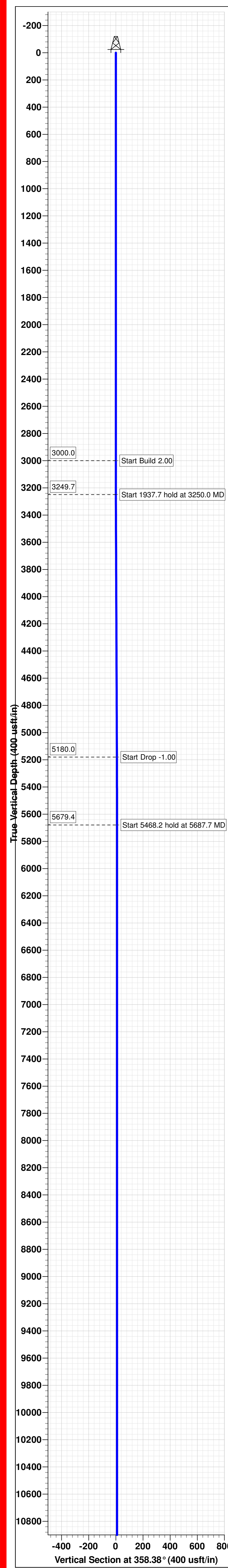


Project: BULLDOG PROSPECT (NM-E)
Site: ZIA HILLS UNIT 2331 PROJECT
Well: ZIA HILLS UNIT 2331 WC #710H
Wellbore: OWB
Design: PWP0
GL: 3165.0
KB=31ft @ 3196.0usft

WELL DETAILS: ZIA HILLS UNIT 2331 WC #710H						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	371840.90	682924.04	32° 1' 15.353 N	103° 44' 35.218 W	

DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	
FTP (ZIA HILLS UNIT 2331 WC #710H)	11625.0	28.5	-201.9	371869.37	682722.17	
LTP (ZIA HILLS UNIT 2331 WC #710H)	11625.0	10493.0	-297.4	382333.88	682626.66	
PBHL (ZIA HILLS UNIT 2331 WC #710H)	11625.0	10543.0	-297.8	382383.87	682626.26	

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	
3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3250.0	5.00	270.97	3249.7	0.2	-10.9	2.00	270.97	0.5	
5187.7	5.00	270.97	5180.0	3.0	-179.8	0.00	0.00	8.1	
5687.7	0.00	0.00	5679.4	3.4	-201.6	1.00	180.00	9.1	
11155.9	0.00	0.00	11147.5	3.4	-201.6	0.00	0.00	9.1	
11905.9	90.00	359.48	11625.0	480.9	-205.9	12.00	359.48	486.5	
21956.2	90.00	359.48	11625.0	10530.8	-297.1	0.00	0.00	10535.0	



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	ConocoPhillips
LEASE NO.:	NMLC064756
LOCATION:	Section 23, T.26 S, R.31 E., NMPM
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Zia Hills Unit 2331 WC 710H
SURFACE HOLE FOOTAGE:	70'/S & 1060'/E
BOTTOM HOLE FOOTAGE:	50'/N & 1262'/E

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 **Brushy Canyon and Cherry Canyon** 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 **1050** 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)**Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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 10/17/2023

CONOCOPHILLIPS
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.

CONOCOPHILLIPS 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 CONOCOPHILLIPS FOREMAN AT MAIN OFFICE**

CONOCOPHILLIPS

1-575-748-6940

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 288975

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 288975
	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	12/7/2023
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/7/2023
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	12/7/2023
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	12/7/2023
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	12/7/2023
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	12/7/2023