

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. 30-015-54435
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
13. State		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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

(Continued on page 2)

*(Instructions on page 2)



Additional Operator Remarks

Location of Well

0. SHL: SESE / 70 FSL / 1030 FEL / TWSP: 26S / RANGE: 31E / SECTION: 23 / LAT: 32.0210571 / LONG: -103.7434916 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 100 FSL / 851 FEL / TWSP: 26S / RANGE: 31E / SECTION: 23 / LAT: 32.0211406 / LONG: -103.742913 (TVD: 11325 feet, MD: 11375 feet)

BHL: NENE / 50 FNL / 851 FEL / TWSP: 26S / RANGE: 31E / SECTION: 14 / LAT: 32.0500459 / LONG: -103.7430384 (TVD: 11534 feet, MD: 21725 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- 54435		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 711H
7 OGRID No. 217817	8 Operator Name CONOCOPHILLIPS COMPANY		9 Elevation 3164.05'

¹⁰ Surface Location

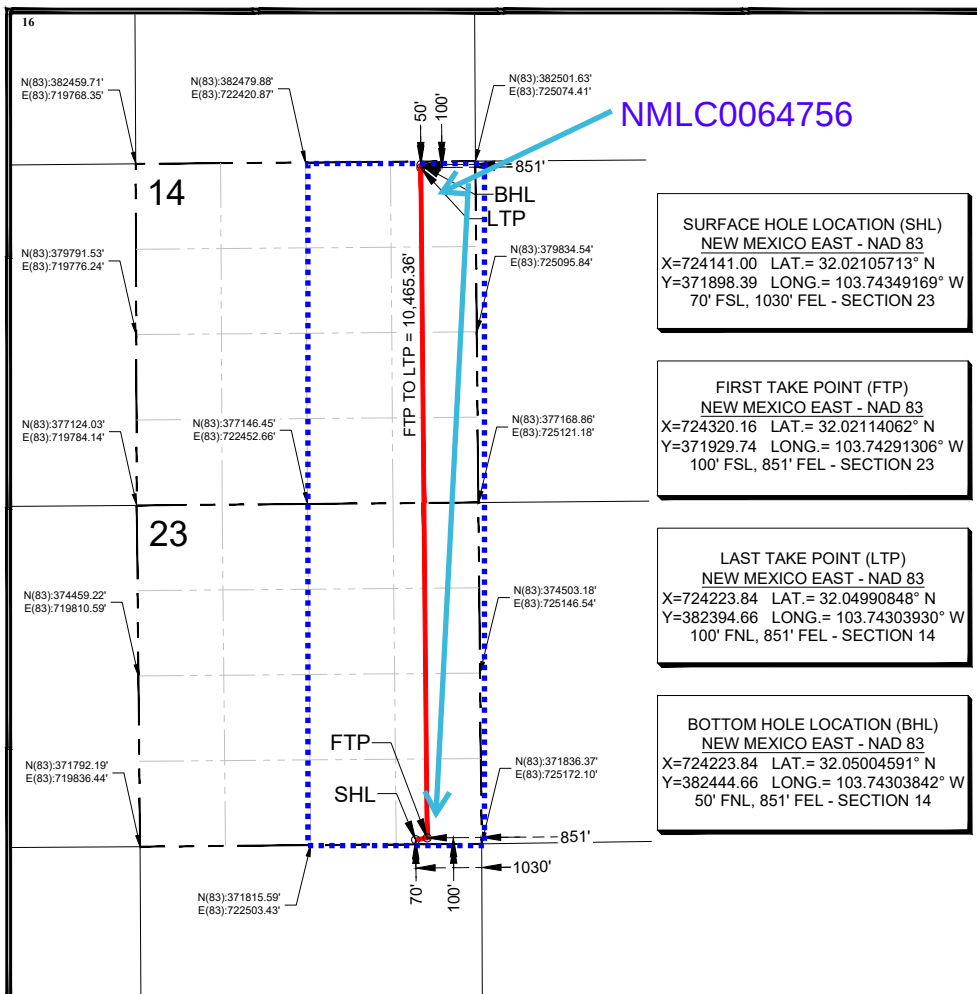
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	23	26-S	31-E		70'	SOUTH	1030'	EAST	EDDY

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	851'	EAST	EDDY

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

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

mayte.x.reyes@cop.com

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 707H	30-015-	P-23-26S-31E	70' FSL & 1150' FEL 50' FNL & 2495' 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 707H	Pending	4/4/2024	± 25 days from spud	8/2/2024	8/12/2024	8/17/2024

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 711H

1. Geologic Formations

TVD of target	11,534' EOL	Pilot hole depth	NA
MD at TD:	21,725'	Deepest expected fresh water:	405'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1056	Water	
Top of Salt	1448	Salt	
Base of Salt	3918	Salt	
Lamar	4137	Salt Water	
Bell Canyon	4163	Salt Water	
Cherry Canyon	5072	Oil/Gas	
Brushy Canyon	6466	Oil/Gas	
BSPG	8117	Oil/Gas	
BS1S	9153	Oil/Gas	
BS2S	9804	Oil/Gas	
BS3C	10276	Oil/Gas	
BS3S	10973	Oil/Gas	
WFMP	11356	Oil/Gas	
Wolfcamp A Sand	11534	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	1.15	2.88	2.88
8.750"	8500	10,900	7.625"	29.7	P110-ICY	W513	1.38	1.75	3.30	1.98
6.75"	0	10400	5.5"	23	P110-CY	TXP BTC	2.15	2.54	3.05	3.05
6.75"	10400	21,725	5.5"	23	P110-CY	W441	1.94	2.29	2.75	2.50
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 711H

	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 711H

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.	800	10.5	3.5	22.3	24	NeoCem
Stage 1	250	16.4	1.08	4.52	7	Tail: Class H
Prod	578	12.5	1.67	10.7	72	Lead: 50:50:10 H Blend
	893	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	10,400'	35% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Zia Hills Unit 2331 WC 711H

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 711H

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 711H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	7500 psi at 11534' TVD
Abnormal Temperature	NO 170 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

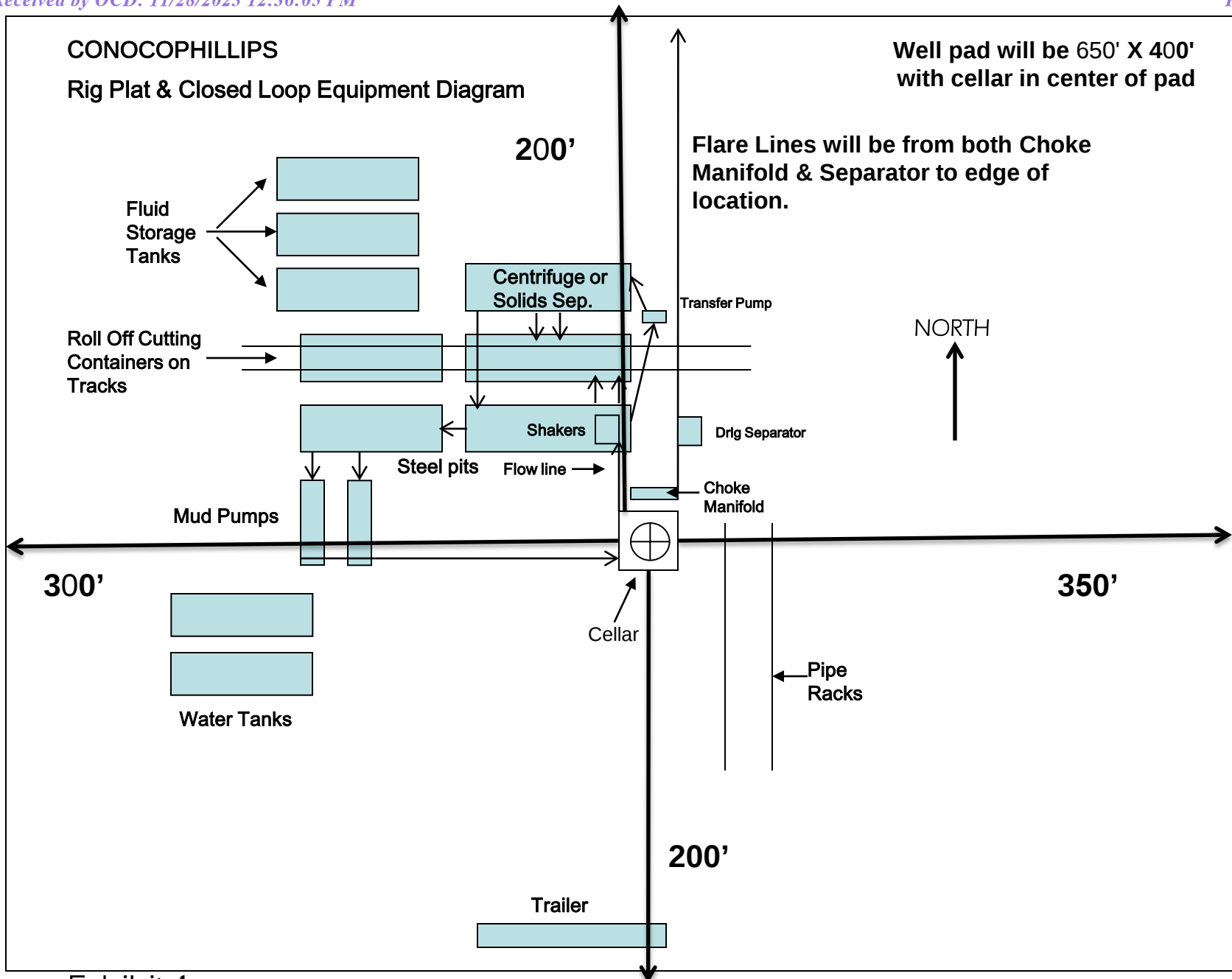


Exhibit 1

DELAWARE BASIN EAST

**BULLDOG PROSPECT (NM-E)
ZIA HILLS UNIT 2331 PROJECT
ZIA HILLS UNIT 2331 WC #711H**

**OWB
PWP0**

Anticollision Report

16 November, 2022

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	2,000.0	PWP0 (OWB)	r.5 SDI_KPR_ADK	SDI Keeper ADK rev.5
2,000.0	10,983.6	PWP0 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5
10,983.6	21,724.9	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	21,724.9	16,466.2	511.8	415.4	5.311	CC, ES, SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	21,724.9	16,703.1	807.8	668.9	5.817	CC, ES, SF
SHETLAND 11-2 FEDERAL STATE COM #732H - OWB						Out of range
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	21,724.9	21,907.0	227.8	80.5	1.546	Advise and Monitor, CC, ES,
SHETLAND 2-11 STATE FEDERAL COM #613H - OWB	21,724.9	22,089.0	805.1	548.0	3.132	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #713H - OWB						Out of range
SHETLAND 2-11 STATE FEDERAL COM #733H - OWB	21,724.9	22,097.6	1,024.3	804.3	4.655	CC, ES, SF
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	1,000.0	119.8	111.8	14.899	CC, ES
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	1,200.0	1,191.7	126.5	117.6	14.278	SF
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	2,000.0	2,000.0	89.9	78.5	7.897	CC, ES
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	21,724.9	21,977.4	1,244.8	1,077.8	7.455	SF
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	2,000.0	2,000.0	60.0	48.6	5.275	CC, ES
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	21,724.9	21,759.9	822.0	656.7	4.973	SF
ZIA HILLS UNIT 2331 WC #710H - OWB - PWP0	2,000.0	2,001.0	30.0	18.6	2.632	CC, ES, SF
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	2,252.5	2,249.9	30.3	18.0	2.449	CC, ES
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	2,280.0	2,277.1	30.5	18.0	2.443	SF
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	1,500.0	1,500.0	60.5	50.8	6.281	CC
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	1,520.0	1,519.6	60.5	50.8	6.237	ES
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	21,724.9	21,804.4	821.8	654.8	4.920	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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	10,983.6	11,071.3	1,233.7	1,187.6	26.749	CC
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	21,724.9	22,097.8	1,239.9	1,073.4	7.443	ES, SF
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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

TD Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
ZIA HILLS UNIT 2331 PROJECT						
GOLDEN SPUR 25 FBS #3H (P&A) - OWB - AWP	21,724.9	14,160.0				Out of Range @TD
SHETLAND 11 FEDERAL #332H - OWB - PWP0	21,724.9	11,219.5				Out of Range @TD
SHETLAND 11 FEDERAL #714H - OWB - PWP0	21,724.9	16,466.2	511.8	415.4	5.311	CC, ES, SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	21,724.9	16,703.1	807.8	668.9	5.817	CC, ES, SF
SHETLAND 11-2 FEDERAL STATE COM #732H - OWB	21,724.9	12,065.4				Out of Range @TD
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	21,724.9	21,907.0	227.8	80.5	1.546	Advise and Monitor, CC, ES,
SHETLAND 2-11 STATE FEDERAL COM #613H - OWB	21,724.9	22,089.0	805.1	548.0	3.132	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #713H - OWB	21,724.9	21,917.2				Out of Range @TD
SHETLAND 2-11 STATE FEDERAL COM #733H - OWB	21,724.9	22,097.6	1,024.3	804.3	4.655	CC, ES, SF
ZHU 2331 WC #5H - OWB - AWP	21,724.9	21,876.3				Out of Range @TD
ZHU 2331 WC #6H - OWB - AWP (PH)	21,724.9	11,170.2				Out of Range @TD
ZHU 2331 WC #6H - ST01 - AWP	21,724.9	21,951.4				Out of Range @TD
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	21,724.9	21,845.9				Out of Range @TD
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	21,724.9	21,977.4	1,244.8	1,077.8	7.455	SF
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	21,724.9	21,759.9	822.0	656.7	4.973	SF
ZIA HILLS UNIT 2331 WC #710H - OWB - PWP0	21,724.9	21,896.7	444.4	279.3	2.692	
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	21,724.9	21,925.4	444.6	278.4	2.676	
ZIA HILLS UNIT 2331 WC #713H - OWB - PWP0	21,724.9	21,804.4	821.8	654.8	4.920	SF
ZIA HILLS UNIT 2431 PROJECT						
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	21,724.9	22,097.8	1,239.9	1,073.4	7.443	ES, SF
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0	21,724.9	21,911.7				Out of Range @TD
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0	21,724.9	22,047.5				Out of Range @TD
ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0	21,724.9	21,886.1				Out of Range @TD
ZIA HILLS UNIT 2431 WC #705H - OWB - PWP0	21,724.9	22,085.0				Out of Range @TD
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0	21,724.9	21,951.9				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: 0-MWD		Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error: 10.0 usft	
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside				Distance				Warning	
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
20,900.0	11,454.0	16,466.2	11,736.9	75.8	88.0	-145.14	10,925.0	-57.7	1,299.0	1,223.8	75.16	17.284			
20,995.0	11,454.0	16,466.2	11,736.9	76.5	88.0	-145.14	10,925.0	-57.7	1,205.8	1,129.7	76.04	15.857			
21,000.0	11,454.0	16,466.2	11,736.9	76.5	88.0	-145.14	10,925.0	-57.7	1,200.9	1,124.8	76.09	15.783			
21,090.0	11,454.0	16,466.2	11,736.9	77.2	88.0	-145.14	10,925.0	-57.7	1,112.9	1,035.8	77.08	14.437			
21,100.0	11,454.0	16,466.2	11,736.9	77.3	88.0	-145.14	10,925.0	-57.7	1,103.1	1,025.9	77.21	14.288			
21,185.0	11,454.0	16,466.2	11,736.9	77.9	88.0	-145.14	10,925.0	-57.7	1,020.3	942.0	78.35	13.022			

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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		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		
21,200.0	11,454.0	16,466.2	11,736.9	78.0	88.0	-145.14	10,925.0	-57.7	1,005.7	927.2	78.57	12.800		
21,280.0	11,454.0	16,466.2	11,736.9	78.6	88.0	-145.14	10,925.0	-57.7	928.3	848.4	79.91	11.617		
21,300.0	11,454.0	16,466.2	11,736.9	78.8	88.0	-145.14	10,925.0	-57.7	909.0	828.7	80.28	11.322		
21,375.0	11,454.0	16,466.2	11,736.9	79.3	88.0	-145.14	10,925.0	-57.7	836.9	755.0	81.87	10.222		
21,400.0	11,454.0	16,466.2	11,736.9	79.5	88.0	-145.14	10,925.0	-57.7	813.0	730.5	82.48	9.857		
21,470.0	11,454.0	16,466.2	11,736.9	80.0	88.0	-145.14	10,925.0	-57.7	746.4	662.0	84.40	8.843		
21,500.0	11,454.0	16,466.2	11,736.9	80.3	88.0	-145.14	10,925.0	-57.7	718.1	632.7	85.36	8.413		
21,565.0	11,454.0	16,466.2	11,736.9	80.7	88.0	-145.14	10,925.0	-57.7	657.2	569.5	87.75	7.490		
21,600.0	11,454.0	16,466.2	11,736.9	81.0	88.0	-145.14	10,925.0	-57.7	624.8	535.5	89.26	7.000		
21,660.0	11,454.0	16,466.2	11,736.9	81.4	88.0	-145.14	10,925.0	-57.7	569.9	477.6	92.29	6.175		
21,700.0	11,454.0	16,466.2	11,736.9	81.7	88.0	-145.14	10,925.0	-57.7	533.9	439.2	94.69	5.638		
21,724.9	11,454.0	16,466.2	11,736.9	81.9	88.0	-145.14	10,925.0	-57.7	511.8	415.4	96.37	5.311 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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		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)		Minimum Separation (usft)	Warning
21,090.0	11,454.0	16,703.1	11,962.0	77.2	88.8	128.91	10,929.4	602.0	1,275.6	1,171.6	104.03	12.262	
21,100.0	11,454.0	16,703.1	11,962.0	77.3	88.8	128.91	10,929.4	602.0	1,267.1	1,162.7	104.40	12.137	
21,185.0	11,454.0	16,703.1	11,962.0	77.9	88.8	128.91	10,929.4	602.0	1,195.8	1,088.0	107.81	11.092	
21,200.0	11,454.0	16,703.1	11,962.0	78.0	88.8	128.91	10,929.4	602.0	1,183.4	1,075.0	108.45	10.912	
21,280.0	11,454.0	16,703.1	11,962.0	78.6	88.8	128.91	10,929.4	602.0	1,118.5	1,006.4	112.08	9.979	
21,300.0	11,454.0	16,703.1	11,962.0	78.8	88.8	128.91	10,929.4	602.0	1,102.5	989.5	113.04	9.753	
21,375.0	11,454.0	16,703.1	11,962.0	79.3	88.8	128.91	10,929.4	602.0	1,044.0	927.1	116.87	8.933	
21,400.0	11,454.0	16,703.1	11,962.0	79.5	88.8	128.91	10,929.4	602.0	1,025.0	906.7	118.23	8.669	
21,470.0	11,454.0	16,703.1	11,962.0	80.0	88.8	128.91	10,929.4	602.0	973.1	850.9	122.22	7.962	
21,500.0	11,454.0	16,703.1	11,962.0	80.3	88.8	128.91	10,929.4	602.0	951.6	827.6	124.02	7.673	
21,565.0	11,454.0	16,703.1	11,962.0	80.7	88.8	128.91	10,929.4	602.0	906.7	778.6	128.10	7.078	
21,600.0	11,454.0	16,703.1	11,962.0	81.0	88.8	128.91	10,929.4	602.0	883.5	753.1	130.38	6.776	
21,660.0	11,454.0	16,703.1	11,962.0	81.4	88.8	128.91	10,929.4	602.0	845.7	711.3	134.41	6.292	
21,700.0	11,454.0	16,703.1	11,962.0	81.7	88.8	128.91	10,929.4	602.0	821.9	684.8	137.15	5.993	
21,724.9	11,454.0	16,703.1	11,962.0	81.9	88.8	128.91	10,929.4	602.0	807.8	668.9	138.86	5.817 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Warning
20,600.0	11,454.0	21,907.0	11,495.6	73.5	178.7	50.92	10,664.1	181.7	1,319.6	1,238.5	81.13	16.265	
20,615.0	11,454.0	21,907.0	11,495.6	73.7	178.7	50.92	10,664.1	181.7	1,304.7	1,223.5	81.22	16.064	
20,700.0	11,454.0	21,907.0	11,495.6	74.3	178.7	50.92	10,664.1	181.7	1,220.1	1,138.4	81.75	14.924	
20,710.0	11,454.0	21,907.0	11,495.6	74.4	178.7	50.92	10,664.1	181.7	1,210.2	1,128.4	81.82	14.790	
20,800.0	11,454.0	21,907.0	11,495.6	75.0	178.7	50.92	10,664.1	181.7	1,120.7	1,038.2	82.50	13.585	
20,805.0	11,454.0	21,907.0	11,495.6	75.1	178.7	50.92	10,664.1	181.7	1,115.8	1,033.2	82.54	13.518	
20,900.0	11,454.0	21,907.0	11,495.6	75.8	178.7	50.92	10,664.1	181.7	1,021.5	938.0	83.42	12.245	
20,995.0	11,454.0	21,907.0	11,495.6	76.5	178.7	50.92	10,664.1	181.7	927.3	842.8	84.52	10.972	
21,000.0	11,454.0	21,907.0	11,495.6	76.5	178.7	50.92	10,664.1	181.7	922.3	837.7	84.58	10.905	
21,090.0	11,454.0	21,907.0	11,495.6	77.2	178.7	50.92	10,664.1	181.7	833.3	747.4	85.93	9.697	
21,100.0	11,454.0	21,907.0	11,495.6	77.3	178.7	50.92	10,664.1	181.7	823.4	737.3	86.11	9.563	
21,185.0	11,454.0	21,907.0	11,495.6	77.9	178.7	50.92	10,664.1	181.7	739.6	651.7	87.83	8.420	
21,200.0	11,454.0	21,907.0	11,495.6	78.0	178.7	50.92	10,664.1	181.7	724.8	636.6	88.19	8.219	
21,280.0	11,454.0	21,907.0	11,495.6	78.6	178.7	50.92	10,664.1	181.7	646.2	555.7	90.47	7.143	
21,300.0	11,454.0	21,907.0	11,495.6	78.8	178.7	50.92	10,664.1	181.7	626.6	535.5	91.16	6.874	
21,375.0	11,454.0	21,907.0	11,495.6	79.3	178.7	50.92	10,664.1	181.7	553.4	459.1	94.33	5.867	
21,400.0	11,454.0	21,907.0	11,495.6	79.5	178.7	50.92	10,664.1	181.7	529.1	433.5	95.64	5.532	
21,470.0	11,454.0	21,907.0	11,495.6	80.0	178.7	50.92	10,664.1	181.7	461.5	361.2	100.28	4.602	
21,500.0	11,454.0	21,907.0	11,495.6	80.3	178.7	50.92	10,664.1	181.7	432.8	329.9	102.83	4.209	
21,565.0	11,454.0	21,907.0	11,495.6	80.7	178.7	50.92	10,664.1	181.7	371.2	261.1	110.07	3.372	
21,600.0	11,454.0	21,907.0	11,495.6	81.0	178.7	50.92	10,664.1	181.7	338.5	223.2	115.29	2.936	
21,660.0	11,454.0	21,907.0	11,495.6	81.4	178.7	50.92	10,664.1	181.7	283.9	156.5	127.43	2.228	
21,700.0	11,454.0	21,907.0	11,495.6	81.7	178.7	50.92	10,664.1	181.7	248.8	110.2	138.68	1.794 Advise and Monitor	
21,724.9	11,454.0	21,907.0	11,495.6	81.9	178.7	50.92	10,664.1	181.7	227.8	80.5	147.38	1.546 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #613H - OWB - AWP													Offset Site Error: 0.0 usft
Survey Program: 226-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	
20,900.0	11,454.0	22,089.0	11,669.7	75.8	179.6	-96.79	10,629.0	-700.6	1,262.9	1,085.6	177.37	7.120	
20,995.0	11,454.0	22,089.0	11,669.7	76.5	179.6	-96.79	10,629.0	-700.6	1,190.2	1,004.4	185.79	6.406	
21,000.0	11,454.0	22,089.0	11,669.7	76.5	179.6	-96.79	10,629.0	-700.6	1,186.5	1,000.2	186.26	6.370	
21,090.0	11,454.0	22,089.0	11,669.7	77.2	179.6	-96.79	10,629.0	-700.6	1,120.9	925.9	194.92	5.750	
21,100.0	11,454.0	22,089.0	11,669.7	77.3	179.6	-96.79	10,629.0	-700.6	1,113.8	917.9	195.92	5.685	
21,185.0	11,454.0	22,089.0	11,669.7	77.9	179.6	-96.79	10,629.0	-700.6	1,055.5	850.8	204.69	5.157	
21,200.0	11,454.0	22,089.0	11,669.7	78.0	179.6	-96.79	10,629.0	-700.6	1,045.6	839.3	206.28	5.069	
21,280.0	11,454.0	22,089.0	11,669.7	78.6	179.6	-96.79	10,629.0	-700.6	994.9	780.0	214.95	4.629	
21,300.0	11,454.0	22,089.0	11,669.7	78.8	179.6	-96.79	10,629.0	-700.6	982.8	765.7	217.15	4.526	
21,375.0	11,454.0	22,089.0	11,669.7	79.3	179.6	-96.79	10,629.0	-700.6	940.0	714.6	225.42	4.170	
21,400.0	11,454.0	22,089.0	11,669.7	79.5	179.6	-96.79	10,629.0	-700.6	926.7	698.5	228.16	4.061	
21,470.0	11,454.0	22,089.0	11,669.7	80.0	179.6	-96.79	10,629.0	-700.6	891.9	656.2	235.68	3.784	
21,500.0	11,454.0	22,089.0	11,669.7	80.3	179.6	-96.79	10,629.0	-700.6	878.3	639.5	238.78	3.678	
21,565.0	11,454.0	22,089.0	11,669.7	80.7	179.6	-96.79	10,629.0	-700.6	851.7	606.6	245.12	3.475	
21,600.0	11,454.0	22,089.0	11,669.7	81.0	179.6	-96.79	10,629.0	-700.6	839.1	590.9	248.25	3.380	
21,660.0	11,454.0	22,089.0	11,669.7	81.4	179.6	-96.79	10,629.0	-700.6	820.6	567.6	253.01	3.243	
21,700.0	11,454.0	22,089.0	11,669.7	81.7	179.6	-96.79	10,629.0	-700.6	810.5	554.8	255.68	3.170	
21,724.9	11,454.0	22,089.0	11,669.7	81.9	179.6	-96.79	10,629.0	-700.6	805.1	548.0	257.10	3.132 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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				Rule Assigned:	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning	
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
21,280.0	11,454.0	22,097.6	12,034.9	78.6	173.7	-119.89	10,918.9	-717.1	1,284.1	1,102.1	182.03	7.055		
21,300.0	11,454.0	22,097.6	12,034.9	78.8	173.7	-119.89	10,918.9	-717.1	1,270.3	1,086.6	183.65	6.917		
21,375.0	11,454.0	22,097.6	12,034.9	79.3	173.7	-119.89	10,918.9	-717.1	1,219.7	1,029.8	189.88	6.423		
21,400.0	11,454.0	22,097.6	12,034.9	79.5	173.7	-119.89	10,918.9	-717.1	1,203.4	1,011.4	192.01	6.268		
21,470.0	11,454.0	22,097.6	12,034.9	80.0	173.7	-119.89	10,918.9	-717.1	1,159.5	961.4	198.06	5.854		
21,500.0	11,454.0	22,097.6	12,034.9	80.3	173.7	-119.89	10,918.9	-717.1	1,141.5	940.8	200.68	5.688		
21,565.0	11,454.0	22,097.6	12,034.9	80.7	173.7	-119.89	10,918.9	-717.1	1,104.2	897.8	206.39	5.350		
21,600.0	11,454.0	22,097.6	12,034.9	81.0	173.7	-119.89	10,918.9	-717.1	1,085.2	875.8	209.45	5.181		
21,660.0	11,454.0	22,097.6	12,034.9	81.4	173.7	-119.89	10,918.9	-717.1	1,054.6	839.9	214.64	4.913		
21,700.0	11,454.0	22,097.6	12,034.9	81.7	173.7	-119.89	10,918.9	-717.1	1,035.6	817.5	218.01	4.750		
21,724.9	11,454.0	22,097.6	12,034.9	81.9	173.7	-119.89	10,918.9	-717.1	1,024.3	804.3	220.06	4.655 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	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	
0.0	0.0	0.0	0.0	3.0	3.0	-90.46	-1.0	-119.8	119.8				
95.0	95.0	95.0	95.0	3.0	3.0	-90.46	-1.0	-119.8	119.8	113.8	6.03	19.883	
100.0	100.0	100.0	100.0	3.0	3.0	-90.46	-1.0	-119.8	119.8	113.8	6.03	19.871	
190.0	190.0	190.0	190.0	3.1	3.1	-90.46	-1.0	-119.8	119.8	113.7	6.15	19.473	
200.0	200.0	200.0	200.0	3.1	3.1	-90.46	-1.0	-119.8	119.8	113.6	6.17	19.412	
285.0	285.0	285.0	285.0	3.2	3.2	-90.46	-1.0	-119.8	119.8	113.5	6.31	18.984	
300.0	300.0	300.0	300.0	3.2	3.2	-90.46	-1.0	-119.8	119.8	113.5	6.34	18.899	
380.0	380.0	380.0	380.0	3.3	3.3	-90.46	-1.0	-119.8	119.8	113.3	6.49	18.465	
400.0	400.0	400.0	400.0	3.3	3.3	-90.46	-1.0	-119.8	119.8	113.3	6.53	18.349	
475.0	475.0	475.0	475.0	3.4	3.4	-90.46	-1.0	-119.8	119.8	113.1	6.68	17.923	
500.0	500.0	500.0	500.0	3.4	3.4	-90.46	-1.0	-119.8	119.8	113.1	6.74	17.776	
570.0	570.0	570.0	570.0	3.5	3.5	-90.46	-1.0	-119.8	119.8	112.9	6.90	17.369	
600.0	600.0	600.0	600.0	3.5	3.5	-90.46	-1.0	-119.8	119.8	112.8	6.97	17.191	
665.0	665.0	665.0	665.0	3.6	3.6	-90.46	-1.0	-119.8	119.8	112.7	7.13	16.810	
700.0	700.0	700.0	700.0	3.7	3.7	-90.46	-1.0	-119.8	119.8	112.6	7.22	16.603	
760.0	760.0	760.0	760.0	3.8	3.8	-90.46	-1.0	-119.8	119.8	112.4	7.37	16.254	
800.0	800.0	800.0	800.0	3.8	3.8	-90.46	-1.0	-119.8	119.8	112.3	7.48	16.022	
855.0	855.0	855.0	855.0	3.9	3.9	-90.46	-1.0	-119.8	119.8	112.2	7.63	15.707	
900.0	900.0	900.0	900.0	4.0	4.0	-90.46	-1.0	-119.8	119.8	112.1	7.75	15.452	
950.0	950.0	950.0	950.0	4.1	4.1	-90.46	-1.0	-119.8	119.8	111.9	7.90	15.174	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.46	-1.0	-119.8	119.8	111.8	8.04	14.899 CC, ES	
1,045.0	1,045.0	1,043.2	1,043.2	4.2	4.2	-90.46	-1.0	-120.1	120.1	111.9	8.21	14.627	
1,100.0	1,100.0	1,096.0	1,095.9	4.3	4.3	-90.46	-1.0	-121.4	121.5	113.1	8.43	14.414	
1,140.0	1,140.0	1,134.3	1,134.2	4.4	4.4	-90.45	-1.0	-122.9	123.1	114.5	8.60	14.315	
1,200.0	1,200.0	1,191.7	1,191.5	4.5	4.5	-90.45	-1.0	-126.2	126.5	117.6	8.86	14.278 SF	
1,235.0	1,235.0	1,225.1	1,224.9	4.6	4.7	-90.44	-1.0	-128.6	129.0	120.0	9.01	14.316	
1,300.0	1,300.0	1,287.0	1,286.5	4.7	4.8	-90.43	-1.0	-134.2	134.8	125.5	9.30	14.497	
1,330.0	1,330.0	1,315.5	1,314.8	4.7	4.9	-90.43	-1.0	-137.2	138.0	128.6	9.44	14.625	
1,400.0	1,400.0	1,381.7	1,380.5	4.9	5.2	-90.42	-1.1	-145.2	146.5	136.7	9.75	15.022	
1,425.0	1,425.0	1,405.2	1,403.9	4.9	5.2	-90.41	-1.1	-148.4	149.9	140.0	9.87	15.194	
1,500.0	1,500.0	1,475.5	1,473.3	5.1	5.5	-90.40	-1.1	-159.2	161.4	151.2	10.21	15.801	
1,520.0	1,520.0	1,494.2	1,491.7	5.1	5.6	-90.40	-1.1	-162.3	164.8	154.5	10.31	15.985	
1,600.0	1,600.0	1,568.3	1,564.6	5.3	5.8	-90.39	-1.2	-176.0	179.5	168.8	10.69	16.799	
1,615.0	1,615.0	1,582.2	1,578.2	5.3	5.9	-90.38	-1.2	-178.7	182.5	171.8	10.76	16.966	
1,700.0	1,700.0	1,664.2	1,658.4	5.5	6.1	-90.37	-1.3	-195.7	200.1	189.0	11.16	17.929	
1,710.0	1,710.0	1,674.0	1,668.0	5.5	6.2	-90.37	-1.3	-197.8	202.2	191.0	11.21	18.038	
1,800.0	1,800.0	1,762.0	1,754.1	5.7	6.4	-90.36	-1.3	-216.1	220.9	209.3	11.65	18.956	
1,805.0	1,805.0	1,766.9	1,758.9	5.7	6.5	-90.36	-1.4	-217.1	222.0	210.3	11.68	19.004	
1,900.0	1,900.0	1,859.8	1,849.7	5.9	6.8	-90.35	-1.4	-236.4	241.7	229.5	12.17	19.866	
1,995.0	1,995.0	1,952.7	1,940.6	6.1	7.1	-90.34	-1.5	-255.7	261.5	248.8	12.67	20.634	
2,000.0	2,000.0	1,957.6	1,945.4	6.1	7.1	-90.34	-1.5	-256.8	262.5	249.8	12.70	20.673	
2,090.0	2,090.0	2,045.3	2,031.2	6.2	7.4	-178.32	-1.6	-275.0	282.6	269.4	13.22	21.372	
2,100.0	2,100.0	2,055.0	2,040.7	6.2	7.5	-178.32	-1.6	-277.0	285.0	271.7	13.28	21.458	
2,185.0	2,184.9	2,137.2	2,121.1	6.3	7.8	-178.32	-1.7	-294.1	306.8	293.0	13.79	22.253	
2,200.0	2,199.8	2,151.6	2,135.2	6.3	7.8	-178.32	-1.7	-297.1	310.9	297.0	13.88	22.404	
2,250.0	2,249.7	2,199.6	2,182.1	6.4	8.0	-178.33	-1.7	-307.1	325.1	310.9	14.12	23.029	
2,280.0	2,279.6	2,228.3	2,210.2	6.4	8.1	-178.34	-1.7	-313.0	333.8	319.6	14.26	23.411	
2,300.0	2,299.5	2,247.4	2,228.9	6.4	8.2	-178.35	-1.8	-317.0	339.7	325.3	14.36	23.661	
2,375.0	2,374.2	2,319.1	2,299.0	6.5	8.5	-178.37	-1.8	-331.9	361.6	346.8	14.77	24.474	
2,400.0	2,399.1	2,343.0	2,322.4	6.5	8.6	-178.38	-1.8	-336.9	368.9	354.0	14.92	24.733	
2,470.0	2,468.8	2,410.0	2,387.9	6.6	8.8	-178.40	-1.9	-350.8	389.4	374.1	15.32	25.412	
2,500.0	2,498.7	2,438.7	2,416.0	6.6	8.9	-178.40	-1.9	-356.8	398.1	382.6	15.50	25.687	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
2,565.0	2,563.5	2,500.8	2,476.8	6.7	9.2	-178.42	-2.0	-369.7	417.2	401.3	15.89	26.247	
2,600.0	2,598.4	2,534.3	2,509.5	6.8	9.3	-178.43	-2.0	-376.6	427.4	411.3	16.11	26.536	
2,660.0	2,658.1	2,591.7	2,565.6	7.0	9.6	-178.44	-2.0	-388.6	444.9	428.4	16.48	26.997	
2,700.0	2,698.0	2,629.9	2,603.0	7.0	9.7	-178.45	-2.1	-396.5	456.6	439.9	16.73	27.291	
2,755.0	2,752.8	2,682.5	2,654.5	7.2	10.0	-178.46	-2.1	-407.5	472.7	455.6	17.08	27.668	
2,800.0	2,797.6	2,725.5	2,696.6	7.3	10.1	-178.46	-2.2	-416.4	485.9	468.5	17.37	27.963	
2,850.0	2,847.4	2,773.4	2,743.3	7.4	10.3	-178.47	-2.2	-426.4	500.5	482.8	17.70	28.269	
2,900.0	2,897.2	2,821.2	2,790.1	7.5	10.5	-178.48	-2.2	-436.3	515.1	497.1	18.03	28.562	
2,945.0	2,942.0	2,864.2	2,832.2	7.7	10.7	-178.49	-2.3	-445.2	528.2	509.9	18.34	28.808	
3,000.0	2,996.8	2,916.8	2,883.7	7.8	10.9	-178.49	-2.3	-456.2	544.3	525.6	18.71	29.096	
3,040.0	3,036.7	2,955.1	2,921.1	7.9	11.1	-178.50	-2.3	-464.1	556.0	537.0	18.98	29.291	
3,100.0	3,096.4	3,012.4	2,977.2	8.1	11.4	-178.51	-2.4	-476.1	573.6	554.2	19.39	29.573	
3,135.0	3,131.3	3,045.9	3,009.9	8.2	11.5	-178.51	-2.4	-483.0	583.8	564.1	19.64	29.726	
3,200.0	3,196.1	3,108.1	3,070.7	8.4	11.8	-178.52	-2.5	-495.9	602.8	582.7	20.09	30.000	
3,230.0	3,226.0	3,136.8	3,098.8	8.5	11.9	-178.52	-2.5	-501.9	611.6	591.3	20.31	30.118	
3,300.0	3,295.7	3,203.7	3,164.3	8.7	12.2	-178.53	-2.5	-515.8	632.0	611.2	20.80	30.383	
3,325.0	3,320.6	3,227.6	3,187.7	8.7	12.3	-178.53	-2.6	-520.8	639.3	618.3	20.98	30.471	
3,400.0	3,395.3	3,299.3	3,257.8	9.0	12.6	-178.54	-2.6	-535.7	661.3	639.7	21.52	30.727	
3,420.0	3,415.2	3,318.5	3,276.5	9.0	12.7	-178.54	-2.6	-539.7	667.1	645.4	21.67	30.791	
3,500.0	3,494.9	3,395.0	3,351.4	9.3	13.0	-178.54	-2.7	-555.6	690.5	668.2	22.25	31.036	
3,515.0	3,509.9	3,409.3	3,365.4	9.3	13.1	-178.55	-2.7	-558.6	694.9	672.5	22.36	31.080	
3,600.0	3,594.5	3,490.6	3,444.9	9.6	13.5	-178.55	-2.8	-575.5	719.7	696.7	22.98	31.316	
3,610.0	3,604.5	3,500.2	3,454.3	9.6	13.5	-178.55	-2.8	-577.5	722.6	699.6	23.05	31.345	
3,680.8	3,675.0	3,567.8	3,520.5	9.8	13.8	-178.56	-2.9	-591.5	743.3	719.8	23.57	31.541	
3,700.0	3,694.2	3,586.2	3,538.5	9.9	13.9	-178.56	-2.9	-595.4	748.9	725.2	23.70	31.603	
3,705.0	3,699.1	3,591.0	3,543.1	9.9	13.9	-178.56	-2.9	-596.4	750.4	726.7	23.74	31.614	
3,800.0	3,793.8	3,682.0	3,632.2	10.2	14.3	-178.57	-2.9	-615.3	777.6	753.2	24.44	31.811	
3,895.0	3,888.6	3,773.3	3,721.4	10.5	14.7	-178.58	-3.0	-634.2	804.0	778.9	25.15	31.965	
3,900.0	3,893.6	3,778.1	3,726.1	10.5	14.7	-178.58	-3.0	-635.2	805.4	780.2	25.19	31.972	
3,990.0	3,983.4	3,864.7	3,810.9	10.8	15.1	-178.58	-3.1	-653.3	829.7	803.9	25.86	32.083	
4,000.0	3,993.4	3,874.4	3,820.3	10.8	15.2	-178.58	-3.1	-655.3	832.4	806.5	25.94	32.093	
4,085.0	4,078.2	3,956.4	3,900.5	11.1	15.5	-178.58	-3.2	-672.3	854.7	828.1	26.57	32.168	
4,100.0	4,093.2	3,970.9	3,914.7	11.1	15.6	-178.58	-3.2	-675.3	858.5	831.9	26.68	32.178	
4,180.0	4,173.1	4,048.3	3,990.4	11.4	16.0	-178.59	-3.3	-691.4	878.8	851.6	27.27	32.225	
4,200.0	4,193.1	4,067.7	4,009.4	11.4	16.1	-178.59	-3.3	-695.5	883.8	856.4	27.42	32.233	
4,275.0	4,268.1	4,140.4	4,080.5	11.6	16.4	-178.59	-3.3	-710.6	902.3	874.3	27.97	32.258	
4,300.0	4,293.0	4,164.6	4,104.2	11.7	16.5	-178.59	-3.4	-715.6	908.3	880.1	28.15	32.262	
4,370.0	4,363.0	4,232.6	4,170.7	11.9	16.8	-178.59	-3.4	-729.8	924.9	896.2	28.66	32.272	
4,400.0	4,393.0	4,261.8	4,199.3	12.0	16.9	-178.59	-3.4	-735.8	931.9	903.0	28.88	32.272	
4,465.0	4,458.0	4,325.1	4,261.1	12.2	17.2	-178.58	-3.5	-749.0	946.8	917.4	29.34	32.272	
4,500.0	4,493.0	4,359.2	4,294.5	12.3	17.4	-178.58	-3.5	-756.1	954.6	925.1	29.59	32.267	
4,560.0	4,553.0	4,417.7	4,351.7	12.4	17.6	-178.58	-3.6	-768.2	967.9	937.9	30.00	32.266	
4,600.0	4,593.0	4,456.7	4,389.9	12.5	17.8	-178.58	-3.6	-776.3	976.5	946.3	30.27	32.259	
4,655.0	4,648.0	4,510.5	4,442.5	12.6	18.1	-178.58	-3.6	-787.5	988.2	957.6	30.59	32.304	
4,680.8	4,673.7	4,535.7	4,467.2	12.6	18.2	-90.59	-3.7	-792.8	993.6	962.9	30.74	32.322	
4,700.0	4,693.0	4,554.5	4,485.6	12.6	18.3	-90.58	-3.7	-796.7	997.6	966.8	30.83	32.356	
4,750.0	4,743.0	4,603.4	4,533.4	12.6	18.5	-90.58	-3.7	-806.8	1,008.0	976.9	31.09	32.419	
4,800.0	4,793.0	4,652.3	4,581.2	12.6	18.7	-90.58	-3.8	-817.0	1,018.4	987.1	31.35	32.481	
4,845.0	4,838.0	4,696.3	4,624.3	12.7	18.9	-90.57	-3.8	-826.2	1,027.8	996.2	31.59	32.535	
4,900.0	4,893.0	4,750.1	4,676.9	12.7	19.2	-90.57	-3.8	-837.3	1,039.2	1,007.3	31.88	32.600	
4,940.0	4,933.0	4,789.3	4,715.2	12.7	19.4	-90.57	-3.9	-845.5	1,047.5	1,015.4	32.09	32.646	
5,000.0	4,993.0	4,847.9	4,772.6	12.8	19.6	-90.56	-3.9	-857.7	1,060.0	1,027.6	32.40	32.714	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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)	Separation Factor		
5,035.0	5,028.0	4,882.2	4,806.1	12.8	19.8	-90.56	-4.0	-864.8	1,067.3	1,034.7	32.59	32.753		
5,100.0	5,093.0	4,945.8	4,868.3	12.8	20.1	-90.56	-4.0	-878.0	1,080.8	1,047.9	32.93	32.824		
5,130.0	5,123.0	4,975.1	4,897.0	12.8	20.2	-90.56	-4.0	-884.1	1,087.0	1,053.9	33.08	32.856		
5,200.0	5,193.0	5,043.6	4,963.9	12.9	20.5	-90.55	-4.1	-898.4	1,101.6	1,068.1	33.45	32.929		
5,225.0	5,218.0	5,068.0	4,987.9	12.9	20.6	-90.55	-4.1	-903.4	1,106.8	1,073.2	33.58	32.955		
5,300.0	5,293.0	5,141.4	5,059.6	12.9	21.0	-90.55	-4.2	-918.7	1,122.4	1,088.4	33.98	33.031		
5,320.0	5,313.0	5,160.9	5,078.8	13.0	21.1	-90.54	-4.2	-922.8	1,126.5	1,092.4	34.09	33.050		
5,400.0	5,393.0	5,239.2	5,155.3	13.0	21.4	-90.54	-4.2	-939.0	1,143.2	1,108.6	34.51	33.128		
5,415.0	5,408.0	5,253.9	5,169.6	13.0	21.5	-90.54	-4.3	-942.1	1,146.3	1,111.7	34.59	33.142		
5,500.0	5,493.0	5,337.0	5,251.0	13.1	21.9	-90.53	-4.3	-959.4	1,163.9	1,128.9	35.04	33.222		
5,510.0	5,503.0	5,346.8	5,260.5	13.1	21.9	-90.53	-4.3	-961.4	1,166.0	1,130.9	35.09	33.231		
5,600.0	5,593.0	5,434.8	5,346.7	13.1	22.3	-90.53	-4.4	-979.7	1,184.7	1,149.2	35.57	33.312		
5,605.0	5,598.0	5,439.7	5,351.4	13.1	22.4	-90.53	-4.4	-980.7	1,185.8	1,150.2	35.59	33.316		
5,700.0	5,693.0	5,532.6	5,442.3	13.2	22.8	-90.52	-4.5	-1,000.0	1,205.5	1,169.4	36.10	33.398		
5,795.0	5,788.0	5,625.6	5,533.2	13.2	23.2	-90.52	-4.6	-1,019.4	1,225.3	1,188.7	36.60	33.478		
5,800.0	5,793.0	5,630.5	5,538.0	13.2	23.3	-90.52	-4.6	-1,020.4	1,226.3	1,189.7	36.63	33.482		
5,890.0	5,883.0	5,718.5	5,624.1	13.3	23.7	-90.51	-4.6	-1,038.7	1,245.0	1,207.9	37.10	33.555		
5,900.0	5,893.0	5,728.3	5,633.7	13.3	23.7	-90.51	-4.7	-1,040.7	1,247.1	1,210.0	37.16	33.563		
5,985.0	5,978.0	5,811.4	5,715.0	13.4	24.1	-90.51	-4.7	-1,058.0	1,264.8	1,227.2	37.61	33.629		
6,000.0	5,993.0	5,826.1	5,729.4	13.4	24.2	-90.51	-4.7	-1,061.0	1,267.9	1,230.2	37.69	33.640		
6,080.0	6,073.0	5,904.3	5,805.9	13.4	24.5	-90.51	-4.8	-1,077.3	1,284.5	1,246.4	38.12	33.700		
6,100.0	6,093.0	5,923.9	5,825.0	13.4	24.6	-90.50	-4.8	-1,081.4	1,288.7	1,250.5	38.22	33.715		
6,175.0	6,168.0	5,997.3	5,896.8	13.5	25.0	-90.50	-4.9	-1,096.6	1,304.3	1,265.7	38.62	33.770		
6,200.0	6,193.0	6,021.7	5,920.7	13.5	25.1	-90.50	-4.9	-1,101.7	1,309.5	1,270.7	38.76	33.787		

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	-90.47	-0.7	-89.8	89.9					
95.0	95.0	95.0	95.0	3.0	3.0	-90.47	-0.7	-89.8	89.9	83.8	6.03	14.912		
100.0	100.0	100.0	100.0	3.0	3.0	-90.47	-0.7	-89.8	89.9	83.8	6.03	14.904		
190.0	190.0	190.0	190.0	3.1	3.1	-90.47	-0.7	-89.8	89.9	83.7	6.15	14.605		
200.0	200.0	200.0	200.0	3.1	3.1	-90.47	-0.7	-89.8	89.9	83.7	6.17	14.559		
285.0	285.0	285.0	285.0	3.2	3.2	-90.47	-0.7	-89.8	89.9	83.5	6.31	14.238		
300.0	300.0	300.0	300.0	3.2	3.2	-90.47	-0.7	-89.8	89.9	83.5	6.34	14.174		
380.0	380.0	380.0	380.0	3.3	3.3	-90.47	-0.7	-89.8	89.9	83.4	6.49	13.849		
400.0	400.0	400.0	400.0	3.3	3.3	-90.47	-0.7	-89.8	89.9	83.3	6.53	13.762		
475.0	475.0	475.0	475.0	3.4	3.4	-90.47	-0.7	-89.8	89.9	83.2	6.68	13.443		
500.0	500.0	500.0	500.0	3.4	3.4	-90.47	-0.7	-89.8	89.9	83.1	6.74	13.332		
570.0	570.0	570.0	570.0	3.5	3.5	-90.47	-0.7	-89.8	89.9	83.0	6.90	13.027		
600.0	600.0	600.0	600.0	3.5	3.5	-90.47	-0.7	-89.8	89.9	82.9	6.97	12.893		
665.0	665.0	665.0	665.0	3.6	3.6	-90.47	-0.7	-89.8	89.9	82.7	7.13	12.607		
700.0	700.0	700.0	700.0	3.7	3.7	-90.47	-0.7	-89.8	89.9	82.6	7.22	12.452		
760.0	760.0	760.0	760.0	3.8	3.8	-90.47	-0.7	-89.8	89.9	82.5	7.37	12.191		
800.0	800.0	800.0	800.0	3.8	3.8	-90.47	-0.7	-89.8	89.9	82.4	7.48	12.016		
855.0	855.0	855.0	855.0	3.9	3.9	-90.47	-0.7	-89.8	89.9	82.2	7.63	11.781		
900.0	900.0	900.0	900.0	4.0	4.0	-90.47	-0.7	-89.8	89.9	82.1	7.75	11.589		
950.0	950.0	950.0	950.0	4.1	4.1	-90.47	-0.7	-89.8	89.9	82.0	7.90	11.380		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.47	-0.7	-89.8	89.9	81.8	8.04	11.174		
1,045.0	1,045.0	1,045.0	1,045.0	4.2	4.2	-90.47	-0.7	-89.8	89.9	81.7	8.17	10.992		
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.47	-0.7	-89.8	89.9	81.5	8.34	10.773		
1,140.0	1,140.0	1,140.0	1,140.0	4.4	4.4	-90.47	-0.7	-89.8	89.9	81.4	8.46	10.617		
1,200.0	1,200.0	1,200.0	1,200.0	4.5	4.5	-90.47	-0.7	-89.8	89.9	81.2	8.65	10.388		
1,235.0	1,235.0	1,235.0	1,235.0	4.6	4.6	-90.47	-0.7	-89.8	89.9	81.1	8.76	10.258		
1,300.0	1,300.0	1,300.0	1,300.0	4.7	4.7	-90.47	-0.7	-89.8	89.9	80.9	8.97	10.020		
1,330.0	1,330.0	1,330.0	1,330.0	4.7	4.7	-90.47	-0.7	-89.8	89.9	80.8	9.06	9.913		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	-90.47	-0.7	-89.8	89.9	80.6	9.29	9.668		
1,425.0	1,425.0	1,425.0	1,425.0	4.9	4.9	-90.47	-0.7	-89.8	89.9	80.5	9.38	9.583		
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-90.47	-0.7	-89.8	89.9	80.2	9.63	9.334		
1,520.0	1,520.0	1,520.0	1,520.0	5.1	5.1	-90.47	-0.7	-89.8	89.9	80.2	9.69	9.269		
1,600.0	1,600.0	1,600.0	1,600.0	5.3	5.3	-90.47	-0.7	-89.8	89.9	79.9	9.97	9.016		
1,615.0	1,615.0	1,615.0	1,615.0	5.3	5.3	-90.47	-0.7	-89.8	89.9	79.8	10.02	8.969		
1,700.0	1,700.0	1,700.0	1,700.0	5.5	5.5	-90.47	-0.7	-89.8	89.9	79.5	10.31	8.713		
1,710.0	1,710.0	1,710.0	1,710.0	5.5	5.5	-90.47	-0.7	-89.8	89.9	79.5	10.35	8.684		
1,800.0	1,800.0	1,800.0	1,800.0	5.7	5.7	-90.47	-0.7	-89.8	89.9	79.2	10.66	8.427		
1,805.0	1,805.0	1,805.0	1,805.0	5.7	5.7	-90.47	-0.7	-89.8	89.9	79.2	10.68	8.413		
1,900.0	1,900.0	1,900.0	1,900.0	5.9	5.9	-90.47	-0.7	-89.8	89.9	78.8	11.02	8.155		
1,995.0	1,995.0	1,995.0	1,995.0	6.1	6.1	-90.47	-0.7	-89.8	89.9	78.5	11.36	7.910		
2,000.0	2,000.0	2,000.0	2,000.0	6.1	6.1	-90.47	-0.7	-89.8	89.9	78.5	11.38	7.897 CC, ES		
2,090.0	2,090.0	2,087.2	2,087.2	6.2	6.2	-178.47	-0.7	-91.2	92.6	80.9	11.76	7.878		
2,100.0	2,100.0	2,096.8	2,096.8	6.2	6.2	-178.48	-0.7	-91.5	93.3	81.5	11.80	7.905		
2,185.0	2,184.9	2,178.7	2,178.5	6.3	6.3	-178.52	-0.7	-95.4	101.6	89.4	12.16	8.353		
2,200.0	2,199.8	2,193.0	2,192.9	6.3	6.3	-178.53	-0.7	-96.3	103.6	91.3	12.22	8.472		
2,250.0	2,249.7	2,240.6	2,240.3	6.4	6.4	-178.56	-0.8	-100.0	111.2	98.9	12.38	8.988		
2,280.0	2,279.6	2,269.0	2,268.6	6.4	6.4	-178.58	-0.8	-102.5	116.5	104.0	12.47	9.345		
2,300.0	2,299.5	2,287.9	2,287.4	6.4	6.4	-178.60	-0.8	-104.3	120.2	107.6	12.53	9.593		
2,375.0	2,374.2	2,358.3	2,357.4	6.5	6.5	-178.63	-0.8	-112.2	135.1	122.3	12.82	10.540		
2,400.0	2,399.1	2,381.6	2,380.5	6.5	6.6	-178.64	-0.8	-115.2	140.4	127.5	12.91	10.878		
2,470.0	2,468.8	2,446.4	2,444.6	6.6	6.8	-178.66	-0.8	-124.6	156.5	143.3	13.19	11.863		
2,500.0	2,498.7	2,473.9	2,471.7	6.6	6.8	-178.67	-0.8	-129.0	163.9	150.6	13.32	12.306		

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,565.0	2,563.5	2,533.1	2,530.0	6.7	7.0	-178.67	-0.9	-139.3	180.8	167.2	13.57	13.323	
2,600.0	2,598.4	2,564.7	2,561.1	6.8	7.1	-178.68	-0.9	-145.3	190.4	176.7	13.69	13.905	
2,660.0	2,658.1	2,621.6	2,616.8	7.0	7.2	-178.68	-0.9	-156.6	207.4	193.5	13.94	14.880	
2,700.0	2,698.0	2,659.9	2,654.4	7.0	7.3	-178.68	-0.9	-164.3	218.8	204.7	14.13	15.486	
2,755.0	2,752.8	2,712.6	2,706.0	7.2	7.4	-178.68	-1.0	-174.8	234.4	220.0	14.40	16.281	
2,800.0	2,797.6	2,755.8	2,748.3	7.3	7.5	-178.68	-1.0	-183.4	247.2	232.6	14.62	16.902	
2,850.0	2,847.4	2,803.7	2,795.3	7.4	7.7	-178.68	-1.0	-193.0	261.4	246.5	14.88	17.562	
2,900.0	2,897.2	2,851.7	2,842.3	7.5	7.8	-178.68	-1.0	-202.5	275.6	260.4	15.15	18.189	
2,945.0	2,942.0	2,894.8	2,884.6	7.7	7.9	-178.68	-1.1	-211.1	288.4	273.0	15.40	18.729	
3,000.0	2,996.8	2,947.6	2,936.2	7.8	8.1	-178.68	-1.1	-221.6	304.0	288.3	15.70	19.357	
3,040.0	3,036.7	2,985.9	2,973.8	7.9	8.2	-178.68	-1.1	-229.3	315.3	299.4	15.93	19.792	
3,100.0	3,096.4	3,043.4	3,030.2	8.1	8.4	-178.68	-1.1	-240.8	332.4	316.1	16.28	20.414	
3,135.0	3,131.3	3,077.0	3,063.1	8.2	8.5	-178.69	-1.1	-247.4	342.3	325.8	16.49	20.760	
3,200.0	3,196.1	3,139.3	3,124.1	8.4	8.7	-178.69	-1.2	-259.9	360.8	343.9	16.88	21.372	
3,230.0	3,226.0	3,168.1	3,152.3	8.5	8.8	-178.69	-1.2	-265.6	369.3	352.2	17.07	21.640	
3,300.0	3,295.7	3,235.2	3,218.1	8.7	9.0	-178.69	-1.2	-279.0	389.2	371.7	17.50	22.239	
3,325.0	3,320.6	3,259.2	3,241.6	8.7	9.1	-178.69	-1.2	-283.8	396.3	378.6	17.66	22.442	
3,400.0	3,395.3	3,331.1	3,312.1	9.0	9.4	-178.69	-1.3	-298.1	417.6	399.4	18.14	23.025	
3,420.0	3,415.2	3,350.3	3,330.9	9.0	9.4	-178.69	-1.3	-301.9	423.3	405.0	18.27	23.172	
3,500.0	3,494.9	3,427.0	3,406.0	9.3	9.7	-178.69	-1.3	-317.2	446.0	427.2	18.79	23.737	
3,515.0	3,509.9	3,441.4	3,420.1	9.3	9.8	-178.69	-1.3	-320.1	450.2	431.3	18.89	23.838	
3,600.0	3,594.5	3,522.9	3,500.0	9.6	10.1	-178.69	-1.4	-336.3	474.4	454.9	19.45	24.384	
3,610.0	3,604.5	3,532.4	3,509.4	9.6	10.1	-178.69	-1.4	-338.2	477.2	457.7	19.52	24.447	
3,680.8	3,675.0	3,600.3	3,575.9	9.8	10.4	-178.69	-1.4	-351.8	497.3	477.3	19.99	24.882	
3,700.0	3,694.2	3,618.7	3,593.9	9.9	10.4	-178.69	-1.4	-355.4	502.8	482.7	20.11	25.004	
3,705.0	3,699.1	3,623.5	3,598.6	9.9	10.4	-178.69	-1.4	-356.4	504.2	484.0	20.14	25.032	
3,800.0	3,793.8	3,714.8	3,688.1	10.2	10.8	-178.69	-1.5	-374.6	530.6	509.8	20.79	25.515	
3,895.0	3,888.6	3,806.3	3,777.7	10.5	11.2	-178.69	-1.5	-392.8	556.2	534.8	21.45	25.929	
3,900.0	3,893.6	3,811.1	3,782.4	10.5	11.2	-178.69	-1.5	-393.8	557.6	536.1	21.49	25.949	
3,990.0	3,983.4	3,897.9	3,867.5	10.8	11.5	-178.69	-1.6	-411.1	581.1	559.0	22.11	26.280	
4,000.0	3,993.4	3,907.6	3,877.0	10.8	11.6	-178.69	-1.6	-413.0	583.7	561.5	22.18	26.313	
4,085.0	4,078.2	3,989.8	3,957.6	11.1	11.9	-178.69	-1.6	-429.4	605.2	582.5	22.77	26.575	
4,100.0	4,093.2	4,004.4	3,971.8	11.1	11.9	-178.69	-1.6	-432.3	609.0	586.1	22.88	26.617	
4,180.0	4,173.1	4,081.9	4,047.8	11.4	12.3	-178.68	-1.7	-447.8	628.6	605.2	23.44	26.823	
4,200.0	4,193.1	4,101.3	4,066.8	11.4	12.3	-178.68	-1.7	-451.7	633.4	609.9	23.58	26.869	
4,275.0	4,268.1	4,174.2	4,138.2	11.6	12.6	-178.68	-1.7	-466.2	651.2	627.1	24.09	27.028	
4,300.0	4,293.0	4,198.5	4,162.1	11.7	12.7	-178.67	-1.7	-471.0	657.0	632.8	24.27	27.075	
4,370.0	4,363.0	4,266.6	4,228.8	11.9	13.0	-178.67	-1.8	-484.6	673.1	648.3	24.75	27.198	
4,400.0	4,393.0	4,295.9	4,257.5	12.0	13.1	-178.67	-1.8	-490.4	679.8	654.8	24.95	27.244	
4,465.0	4,458.0	4,359.3	4,319.6	12.2	13.4	-178.66	-1.8	-503.1	694.1	668.7	25.39	27.339	
4,500.0	4,493.0	4,393.4	4,353.1	12.3	13.5	-178.66	-1.8	-509.9	701.7	676.1	25.63	27.382	
4,560.0	4,553.0	4,452.1	4,410.5	12.4	13.8	-178.65	-1.9	-521.6	714.4	688.4	26.02	27.460	
4,600.0	4,593.0	4,491.2	4,448.9	12.5	14.0	-178.65	-1.9	-529.4	722.8	696.5	26.28	27.504	
4,655.0	4,648.0	4,545.0	4,501.6	12.6	14.2	-178.64	-1.9	-540.1	734.0	707.4	26.58	27.613	
4,680.8	4,673.7	4,570.3	4,526.4	12.6	14.3	-90.65	-1.9	-545.2	739.1	712.4	26.72	27.660	
4,700.0	4,693.0	4,589.1	4,544.9	12.6	14.4	-90.65	-1.9	-548.9	743.0	716.2	26.81	27.716	
4,750.0	4,743.0	4,638.1	4,592.9	12.6	14.6	-90.64	-2.0	-558.7	752.9	725.9	27.05	27.833	
4,800.0	4,793.0	4,687.1	4,640.9	12.6	14.8	-90.63	-2.0	-568.5	762.9	735.6	27.30	27.948	
4,845.0	4,838.0	4,731.2	4,684.1	12.7	15.0	-90.63	-2.0	-577.2	771.9	744.4	27.52	28.048	
4,900.0	4,893.0	4,785.1	4,736.9	12.7	15.2	-90.62	-2.0	-588.0	782.8	755.1	27.79	28.168	
4,940.0	4,933.0	4,824.3	4,775.3	12.7	15.4	-90.62	-2.1	-595.8	790.8	762.8	27.99	28.254	
5,000.0	4,993.0	4,883.1	4,832.9	12.8	15.6	-90.61	-2.1	-607.5	802.8	774.5	28.29	28.379	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
5,035.0	5,028.0	4,917.4	4,866.5	12.8	15.8	-90.61	-2.1	-614.4	809.8	781.3	28.46	28.450	
5,100.0	5,093.0	4,981.1	4,929.0	12.8	16.1	-90.60	-2.2	-627.1	822.7	793.9	28.79	28.579	
5,130.0	5,123.0	5,010.5	4,957.8	12.8	16.2	-90.60	-2.2	-632.9	828.7	799.8	28.94	28.638	
5,200.0	5,193.0	5,079.1	5,025.0	12.9	16.5	-90.59	-2.2	-646.6	842.7	813.4	29.29	28.771	
5,225.0	5,218.0	5,103.6	5,049.0	12.9	16.6	-90.59	-2.2	-651.5	847.6	818.2	29.41	28.818	
5,300.0	5,293.0	5,177.1	5,121.0	12.9	16.9	-90.58	-2.3	-666.1	862.6	832.8	29.79	28.954	
5,320.0	5,313.0	5,196.7	5,140.2	13.0	17.0	-90.58	-2.3	-670.0	866.6	836.7	29.89	28.990	
5,400.0	5,393.0	5,275.1	5,217.0	13.0	17.4	-90.57	-2.3	-685.7	882.5	852.2	30.30	29.130	
5,415.0	5,408.0	5,289.8	5,231.4	13.0	17.4	-90.57	-2.3	-688.6	885.5	855.1	30.37	29.155	
5,500.0	5,493.0	5,373.1	5,313.1	13.1	17.8	-90.56	-2.4	-705.2	902.5	871.7	30.80	29.297	
5,510.0	5,503.0	5,382.9	5,322.7	13.1	17.8	-90.56	-2.4	-707.2	904.5	873.6	30.85	29.314	
5,600.0	5,593.0	5,471.1	5,409.1	13.1	18.2	-90.55	-2.4	-724.7	922.4	891.1	31.31	29.458	
5,605.0	5,598.0	5,476.0	5,413.9	13.1	18.2	-90.55	-2.4	-725.7	923.4	892.1	31.34	29.466	
5,700.0	5,693.0	5,569.1	5,505.1	13.2	18.7	-90.54	-2.5	-744.3	942.3	910.5	31.82	29.612	
5,795.0	5,788.0	5,662.2	5,596.3	13.2	19.1	-90.54	-2.5	-762.8	961.3	929.0	32.31	29.753	
5,800.0	5,793.0	5,667.1	5,601.1	13.2	19.1	-90.53	-2.5	-763.8	962.3	929.9	32.33	29.760	
5,890.0	5,883.0	5,755.2	5,687.6	13.3	19.5	-90.53	-2.6	-781.4	980.2	947.4	32.80	29.888	
5,900.0	5,893.0	5,765.0	5,697.2	13.3	19.5	-90.53	-2.6	-783.4	982.2	949.4	32.85	29.902	
5,985.0	5,978.0	5,848.3	5,778.8	13.4	19.9	-90.52	-2.6	-800.0	999.2	965.9	33.28	30.019	
6,000.0	5,993.0	5,863.0	5,793.2	13.4	20.0	-90.52	-2.6	-802.9	1,002.1	968.8	33.36	30.039	
6,080.0	6,073.0	5,941.4	5,870.0	13.4	20.3	-90.51	-2.7	-818.5	1,018.1	984.3	33.77	30.144	
6,100.0	6,093.0	5,961.0	5,889.2	13.4	20.4	-90.51	-2.7	-822.4	1,022.1	988.2	33.88	30.170	
6,175.0	6,168.0	6,034.5	5,961.2	13.5	20.7	-90.51	-2.7	-837.1	1,037.0	1,002.8	34.27	30.265	
6,200.0	6,193.0	6,059.0	5,985.2	13.5	20.9	-90.51	-2.7	-842.0	1,042.0	1,007.6	34.39	30.296	
6,270.0	6,263.0	6,127.6	6,052.4	13.5	21.2	-90.50	-2.8	-855.6	1,056.0	1,021.2	34.76	30.381	
6,300.0	6,293.0	6,157.0	6,081.3	13.6	21.3	-90.50	-2.8	-861.5	1,062.0	1,027.0	34.91	30.417	
6,365.0	6,358.0	6,220.7	6,143.7	13.6	21.6	-90.49	-2.8	-874.2	1,074.9	1,039.7	35.25	30.493	
6,400.0	6,393.0	6,255.0	6,177.3	13.6	21.7	-90.49	-2.8	-881.0	1,081.9	1,046.5	35.43	30.534	
6,460.0	6,453.0	6,313.8	6,234.9	13.7	22.0	-90.49	-2.9	-892.8	1,093.8	1,058.1	35.74	30.602	
6,500.0	6,493.0	6,353.0	6,273.3	13.7	22.2	-90.49	-2.9	-900.6	1,101.8	1,065.9	35.95	30.646	
6,555.0	6,548.0	6,406.9	6,326.1	13.7	22.4	-90.48	-2.9	-911.3	1,112.8	1,076.5	36.24	30.706	
6,600.0	6,593.0	6,451.0	6,369.3	13.7	22.6	-90.48	-2.9	-920.1	1,121.8	1,085.3	36.47	30.755	
6,650.0	6,643.0	6,500.0	6,417.3	13.8	22.9	-90.48	-3.0	-929.9	1,131.7	1,095.0	36.74	30.807	
6,700.0	6,693.0	6,550.3	6,466.7	13.8	23.1	-90.47	-3.0	-939.9	1,141.7	1,104.7	37.00	30.860	
6,745.0	6,738.0	6,605.5	6,520.8	13.8	23.3	-90.47	-3.0	-950.6	1,150.4	1,113.1	37.29	30.851	
6,800.0	6,793.0	6,673.3	6,587.4	13.9	23.6	-90.47	-3.0	-963.0	1,160.5	1,122.8	37.65	30.822	
6,840.0	6,833.0	6,722.7	6,636.1	13.9	23.8	-90.47	-3.1	-971.5	1,167.4	1,129.5	37.91	30.794	
6,900.0	6,893.0	6,797.1	6,709.6	13.9	24.2	-90.46	-3.1	-983.6	1,177.1	1,138.8	38.29	30.741	
6,935.0	6,928.0	6,840.7	6,752.6	14.0	24.3	-90.46	-3.1	-990.2	1,182.4	1,143.9	38.51	30.707	
7,000.0	6,993.0	6,921.9	6,833.0	14.0	24.7	-90.46	-3.1	-1,001.7	1,191.6	1,152.7	38.90	30.631	
7,030.0	7,023.0	6,959.4	6,870.2	14.0	24.8	-90.46	-3.2	-1,006.6	1,195.5	1,156.5	39.08	30.592	
7,100.0	7,093.0	7,047.3	6,957.5	14.1	25.2	-90.45	-3.2	-1,017.2	1,204.0	1,164.5	39.48	30.492	
7,125.0	7,118.0	7,078.8	6,988.8	14.1	25.3	-90.45	-3.2	-1,020.6	1,206.7	1,167.1	39.63	30.453	
7,200.0	7,193.0	7,173.4	7,082.9	14.1	25.7	-90.45	-3.2	-1,030.0	1,214.1	1,174.1	40.03	30.328	
7,220.0	7,213.0	7,198.7	7,108.1	14.1	25.8	-90.45	-3.2	-1,032.2	1,215.9	1,175.7	40.14	30.292	
7,300.0	7,293.0	7,300.0	7,209.1	14.2	26.2	-90.45	-3.2	-1,040.1	1,222.1	1,181.5	40.54	30.143	
7,315.0	7,308.0	7,319.1	7,228.1	14.2	26.2	-90.45	-3.2	-1,041.3	1,223.1	1,182.5	40.61	30.115	
7,400.0	7,393.0	7,427.0	7,335.9	14.3	26.6	-90.45	-3.3	-1,047.4	1,227.8	1,186.8	41.00	29.946	
7,410.0	7,403.0	7,439.7	7,348.6	14.3	26.7	-90.45	-3.3	-1,048.0	1,228.3	1,187.3	41.04	29.926	
7,500.0	7,493.0	7,554.3	7,463.0	14.3	27.0	-90.45	-3.3	-1,051.9	1,231.4	1,190.0	41.40	29.743	
7,505.0	7,498.0	7,560.6	7,469.4	14.3	27.0	-90.45	-3.3	-1,052.0	1,231.5	1,190.1	41.42	29.732	
7,600.0	7,593.0	7,681.6	7,590.4	14.4	27.3	-90.44	-3.3	-1,053.6	1,232.7	1,191.1	41.64	29.601	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	Offset	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	7,688.0	7,779.2	7,688.0	14.4	27.3	-90.44	-3.3	-1,053.6	1,232.7	1,191.0	41.74	29.536	
7,700.0	7,693.0	7,784.2	7,693.0	14.4	27.3	-90.44	-3.3	-1,053.6	1,232.7	1,191.0	41.74	29.532	
7,790.0	7,783.0	7,874.2	7,783.0	14.5	27.3	-90.44	-3.3	-1,053.6	1,232.7	1,190.9	41.82	29.474	
7,800.0	7,793.0	7,884.2	7,793.0	14.5	27.3	-90.44	-3.3	-1,053.6	1,232.7	1,190.9	41.83	29.467	
7,885.0	7,878.0	7,969.2	7,878.0	14.6	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.8	41.91	29.412	
7,900.0	7,893.0	7,984.2	7,893.0	14.6	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.8	41.93	29.402	
7,980.0	7,973.0	8,064.2	7,973.0	14.6	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.7	42.00	29.350	
8,000.0	7,993.0	8,084.2	7,993.0	14.6	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.7	42.02	29.337	
8,075.0	8,068.0	8,159.2	8,068.0	14.7	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.6	42.09	29.289	
8,100.0	8,093.0	8,184.2	8,093.0	14.7	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.6	42.11	29.272	
8,170.0	8,163.0	8,254.2	8,163.0	14.8	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.5	42.18	29.227	
8,200.0	8,193.0	8,284.2	8,193.0	14.8	27.4	-90.44	-3.3	-1,053.6	1,232.7	1,190.5	42.21	29.207	
8,265.0	8,258.0	8,349.2	8,258.0	14.8	27.5	-90.44	-3.3	-1,053.6	1,232.7	1,190.4	42.27	29.165	
8,300.0	8,293.0	8,384.2	8,293.0	14.8	27.5	-90.44	-3.3	-1,053.6	1,232.7	1,190.4	42.30	29.142	
8,360.0	8,353.0	8,444.2	8,353.0	14.9	27.5	-90.44	-3.3	-1,053.6	1,232.7	1,190.4	42.36	29.103	
8,400.0	8,393.0	8,484.2	8,393.0	14.9	27.5	-90.44	-3.3	-1,053.6	1,232.7	1,190.3	42.39	29.077	
8,455.0	8,448.0	8,539.2	8,448.0	14.9	27.5	-90.44	-3.3	-1,053.6	1,232.7	1,190.3	42.45	29.042	
8,500.0	8,493.0	8,584.2	8,493.0	15.0	27.5	-90.44	-3.3	-1,053.6	1,232.7	1,190.2	42.49	29.013	
8,550.0	8,543.0	8,634.2	8,543.0	15.0	27.5	-90.44	-3.3	-1,053.6	1,232.7	1,190.2	42.54	28.980	
8,600.0	8,593.0	8,684.2	8,593.0	15.0	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,190.1	42.58	28.948	
8,645.0	8,638.0	8,729.2	8,638.0	15.1	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,190.1	42.63	28.919	
8,700.0	8,693.0	8,784.2	8,693.0	15.1	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,190.0	42.68	28.883	
8,740.0	8,733.0	8,824.2	8,733.0	15.1	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,190.0	42.72	28.857	
8,800.0	8,793.0	8,884.2	8,793.0	15.2	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,189.9	42.78	28.818	
8,835.0	8,828.0	8,919.2	8,828.0	15.2	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,189.9	42.81	28.796	
8,900.0	8,893.0	8,984.2	8,893.0	15.2	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,189.8	42.87	28.753	
8,930.0	8,923.0	9,014.2	8,923.0	15.3	27.6	-90.44	-3.3	-1,053.6	1,232.7	1,189.8	42.90	28.734	
9,000.0	8,993.0	9,084.2	8,993.0	15.3	27.7	-90.44	-3.3	-1,053.6	1,232.7	1,189.7	42.97	28.689	
9,025.0	9,018.0	9,109.2	9,018.0	15.3	27.7	-90.44	-3.3	-1,053.6	1,232.7	1,189.7	42.99	28.673	
9,100.0	9,093.0	9,184.2	9,093.0	15.4	27.7	-90.44	-3.3	-1,053.6	1,232.7	1,189.6	43.07	28.624	
9,120.0	9,113.0	9,204.2	9,113.0	15.4	27.7	-90.44	-3.3	-1,053.6	1,232.7	1,189.6	43.08	28.611	
9,200.0	9,193.0	9,284.2	9,193.0	15.4	27.7	-90.44	-3.3	-1,053.6	1,232.7	1,189.5	43.16	28.560	
9,215.0	9,208.0	9,299.2	9,208.0	15.5	27.7	-90.44	-3.3	-1,053.6	1,232.7	1,189.5	43.18	28.550	
9,300.0	9,293.0	9,384.2	9,293.0	15.5	27.8	-90.44	-3.3	-1,053.6	1,232.7	1,189.4	43.26	28.495	
9,310.0	9,303.0	9,394.2	9,303.0	15.5	27.8	-90.44	-3.3	-1,053.6	1,232.7	1,189.4	43.27	28.489	
9,400.0	9,393.0	9,484.2	9,393.0	15.6	27.8	-90.44	-3.3	-1,053.6	1,232.7	1,189.4	43.36	28.431	
9,405.0	9,398.0	9,489.2	9,398.0	15.6	27.8	-90.44	-3.3	-1,053.6	1,232.7	1,189.3	43.36	28.428	
9,500.0	9,493.0	9,584.2	9,493.0	15.6	27.8	-90.44	-3.3	-1,053.6	1,232.7	1,189.3	43.46	28.367	
9,595.0	9,588.0	9,679.2	9,588.0	15.7	27.8	-90.44	-3.3	-1,053.6	1,232.7	1,189.2	43.55	28.306	
9,600.0	9,593.0	9,684.2	9,593.0	15.7	27.9	-90.44	-3.3	-1,053.6	1,232.7	1,189.2	43.56	28.302	
9,690.0	9,683.0	9,774.2	9,683.0	15.8	27.9	-90.44	-3.3	-1,053.6	1,232.7	1,189.1	43.64	28.245	
9,700.0	9,693.0	9,784.2	9,693.0	15.8	27.9	-90.44	-3.3	-1,053.6	1,232.7	1,189.1	43.65	28.238	
9,785.0	9,778.0	9,869.2	9,778.0	15.8	27.9	-90.44	-3.3	-1,053.6	1,232.7	1,189.0	43.74	28.184	
9,800.0	9,793.0	9,884.2	9,793.0	15.8	27.9	-90.44	-3.3	-1,053.6	1,232.7	1,189.0	43.75	28.174	
9,880.0	9,873.0	9,964.2	9,873.0	15.9	27.9	-90.44	-3.3	-1,053.6	1,232.7	1,188.9	43.83	28.123	
9,900.0	9,893.0	9,984.2	9,893.0	15.9	27.9	-90.44	-3.3	-1,053.6	1,232.7	1,188.9	43.85	28.110	
9,975.0	9,968.0	10,059.2	9,968.0	16.0	28.0	-90.44	-3.3	-1,053.6	1,232.7	1,188.8	43.93	28.062	
10,000.0	9,993.0	10,084.2	9,993.0	16.0	28.0	-90.44	-3.3	-1,053.6	1,232.7	1,188.8	43.95	28.046	
10,070.0	10,063.0	10,154.2	10,063.0	16.0	28.0	-90.44	-3.3	-1,053.6	1,232.7	1,188.7	44.02	28.001	
10,100.0	10,093.0	10,184.2	10,093.0	16.1	28.0	-90.44	-3.3	-1,053.6	1,232.7	1,188.7	44.05	27.982	
10,165.0	10,158.0	10,249.2	10,158.0	16.1	28.0	-90.44	-3.3	-1,053.6	1,232.7	1,188.6	44.12	27.941	
10,200.0	10,193.0	10,284.2	10,193.0	16.1	28.0	-90.44	-3.3	-1,053.6	1,232.7	1,188.6	44.15	27.918	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
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
10,260.0	10,253.0	10,344.2	10,253.0	16.2	28.1	-90.44	-3.3	-1,053.6	1,232.7	1,188.5	44.21	27.880	
10,300.0	10,293.0	10,384.2	10,293.0	16.2	28.1	-90.44	-3.3	-1,053.6	1,232.7	1,188.5	44.25	27.855	
10,355.0	10,348.0	10,439.2	10,348.0	16.2	28.1	-90.44	-3.3	-1,053.6	1,232.7	1,188.4	44.31	27.820	
10,400.0	10,393.0	10,484.2	10,393.0	16.3	28.1	-90.44	-3.3	-1,053.6	1,232.7	1,188.4	44.36	27.791	
10,450.0	10,443.0	10,534.2	10,443.0	16.3	28.1	-90.44	-3.3	-1,053.6	1,232.7	1,188.3	44.41	27.759	
10,500.0	10,493.0	10,584.2	10,493.0	16.3	28.1	-90.44	-3.3	-1,053.6	1,232.7	1,188.3	44.46	27.728	
10,545.0	10,538.0	10,629.2	10,538.0	16.4	28.2	-90.44	-3.3	-1,053.6	1,232.7	1,188.2	44.50	27.699	
10,600.0	10,593.0	10,684.2	10,593.0	16.4	28.2	-90.44	-3.3	-1,053.6	1,232.7	1,188.2	44.56	27.664	
10,640.0	10,633.0	10,724.2	10,633.0	16.4	28.2	-90.44	-3.3	-1,053.6	1,232.7	1,188.1	44.60	27.639	
10,700.0	10,693.0	10,784.2	10,693.0	16.5	28.2	-90.44	-3.3	-1,053.6	1,232.7	1,188.0	44.66	27.601	
10,735.0	10,728.0	10,819.2	10,728.0	16.5	28.2	-90.44	-3.3	-1,053.6	1,232.7	1,188.0	44.70	27.579	
10,800.0	10,793.0	10,884.2	10,793.0	16.5	28.2	-90.44	-3.3	-1,053.6	1,232.7	1,187.9	44.76	27.538	
10,830.0	10,823.0	10,914.2	10,823.0	16.6	28.2	-90.44	-3.3	-1,053.6	1,232.7	1,187.9	44.80	27.519	
10,900.0	10,893.0	10,984.2	10,893.0	16.6	28.3	-90.44	-3.3	-1,053.6	1,232.7	1,187.8	44.87	27.475	
10,925.0	10,918.0	11,009.2	10,918.0	16.6	28.3	-90.44	-3.3	-1,053.6	1,232.7	1,187.8	44.89	27.462	
10,983.6	10,976.5	11,067.8	10,976.5	16.6	28.3	-90.44	-3.3	-1,053.6	1,232.7	1,187.8	44.93	27.433	
11,000.0	10,993.0	11,084.2	10,993.0	16.6	28.3	-89.94	-3.3	-1,053.6	1,232.7	1,187.8	44.94	27.429	
11,020.0	11,012.9	11,104.2	11,012.9	16.6	28.3	-89.99	-3.3	-1,053.6	1,232.7	1,187.8	44.95	27.424	
11,022.9	11,015.8	11,107.1	11,015.8	16.6	28.3	-90.00	-3.3	-1,053.6	1,232.7	1,187.8	44.95	27.424	
11,025.0	11,017.9	11,109.1	11,017.9	16.6	28.3	-90.01	-3.3	-1,053.6	1,232.7	1,187.8	44.95	27.423	
11,050.0	11,042.8	11,134.0	11,042.8	16.6	28.3	-90.14	-3.3	-1,053.6	1,232.7	1,187.8	44.96	27.417	
11,075.0	11,067.4	11,158.6	11,067.4	16.6	28.3	-90.32	-3.3	-1,053.6	1,232.7	1,187.8	44.97	27.411	
11,100.0	11,091.8	11,183.0	11,091.8	16.7	28.3	-90.56	-3.3	-1,053.6	1,232.8	1,187.8	44.98	27.407	
11,115.0	11,106.3	11,197.5	11,106.3	16.7	28.3	-90.73	-3.3	-1,053.6	1,232.8	1,187.8	44.99	27.404	
11,125.0	11,115.9	11,207.1	11,115.9	16.7	28.3	-90.85	-3.3	-1,053.6	1,232.9	1,187.9	44.99	27.404	
11,150.0	11,139.6	11,230.8	11,139.6	16.7	28.3	-91.18	-3.3	-1,053.6	1,233.0	1,188.0	44.99	27.407	
11,175.0	11,162.9	11,255.4	11,164.2	16.7	28.3	-91.56	-3.0	-1,053.6	1,233.2	1,188.2	44.99	27.414	
11,200.0	11,185.6	11,281.0	11,189.7	16.7	28.4	-91.95	-1.3	-1,053.6	1,233.5	1,188.5	44.98	27.426	
11,210.0	11,194.6	11,291.3	11,200.0	16.7	28.4	-92.10	-0.3	-1,053.6	1,233.7	1,188.7	44.97	27.432	
11,225.0	11,207.8	11,307.0	11,215.6	16.7	28.4	-92.33	1.7	-1,053.6	1,233.9	1,188.9	44.96	27.441	
11,250.0	11,229.4	11,333.7	11,241.8	16.7	28.4	-92.72	6.3	-1,053.7	1,234.3	1,189.3	44.95	27.459	
11,275.0	11,250.2	11,360.9	11,268.3	16.7	28.4	-93.10	12.5	-1,053.7	1,234.8	1,189.8	44.94	27.479	
11,300.0	11,270.3	11,388.8	11,295.1	16.7	28.4	-93.48	20.4	-1,053.8	1,235.3	1,190.4	44.92	27.501	
11,305.0	11,274.2	11,394.5	11,300.5	16.7	28.4	-93.56	22.2	-1,053.8	1,235.4	1,190.5	44.92	27.505	
11,325.0	11,289.6	11,417.4	11,322.0	16.7	28.4	-93.86	30.1	-1,053.9	1,235.9	1,191.0	44.90	27.524	
11,350.0	11,308.0	11,446.7	11,348.8	16.7	28.4	-94.23	41.7	-1,054.0	1,236.5	1,191.6	44.88	27.548	
11,375.0	11,325.6	11,476.6	11,375.6	16.7	28.4	-94.59	55.2	-1,054.1	1,237.1	1,192.2	44.87	27.571	
11,400.0	11,342.1	11,507.4	11,402.1	16.7	28.4	-94.95	70.8	-1,054.3	1,237.8	1,192.9	44.86	27.594	
11,425.0	11,357.7	11,538.9	11,428.1	16.7	28.4	-95.30	88.6	-1,054.4	1,238.5	1,193.6	44.85	27.615	
11,450.0	11,372.2	11,571.2	11,453.5	16.7	28.4	-95.63	108.5	-1,054.6	1,239.2	1,194.3	44.84	27.633	
11,475.0	11,385.7	11,604.3	11,478.1	16.8	28.4	-95.96	130.6	-1,054.8	1,239.9	1,195.0	44.85	27.647	
11,495.0	11,395.6	11,631.3	11,497.0	16.8	28.4	-96.20	149.9	-1,055.0	1,240.4	1,195.6	44.85	27.655	
11,500.0	11,398.0	11,638.2	11,501.6	16.8	28.4	-96.26	155.0	-1,055.0	1,240.6	1,195.7	44.86	27.657	
11,525.0	11,409.2	11,672.8	11,523.8	16.8	28.4	-96.55	181.6	-1,055.3	1,241.2	1,196.4	44.87	27.662	
11,550.0	11,419.1	11,708.2	11,544.5	16.8	28.4	-96.82	210.3	-1,055.5	1,241.9	1,197.0	44.89	27.662	
11,575.0	11,427.9	11,744.3	11,563.3	16.8	28.4	-97.06	241.1	-1,055.8	1,242.4	1,197.5	44.93	27.655	
11,590.0	11,432.6	11,766.3	11,573.6	16.9	28.4	-97.19	260.6	-1,056.0	1,242.8	1,197.8	44.95	27.648	
11,600.0	11,435.4	11,781.1	11,580.0	16.9	28.4	-97.27	273.9	-1,056.1	1,243.0	1,198.0	44.97	27.642	
11,625.0	11,441.7	11,818.4	11,594.3	16.9	28.5	-97.46	308.4	-1,056.4	1,243.4	1,198.4	45.01	27.623	
11,650.0	11,446.7	11,856.3	11,606.0	16.9	28.5	-97.61	344.3	-1,056.7	1,243.8	1,198.7	45.07	27.598	
11,675.0	11,450.4	11,894.5	11,614.9	17.0	28.5	-97.73	381.5	-1,057.1	1,244.1	1,199.0	45.13	27.566	
11,685.0	11,451.5	11,909.9	11,617.7	17.0	28.5	-97.76	396.7	-1,057.2	1,244.2	1,199.0	45.16	27.552	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
11,700.0	11,452.8	11,933.1	11,620.9	17.0	28.5	-97.81	419.6	-1,057.4	1,244.3	1,199.1	45.20	27.529	
11,725.0	11,453.9	11,971.9	11,623.7	17.0	28.6	-97.85	458.3	-1,057.8	1,244.4	1,199.1	45.27	27.487	
11,733.6	11,454.0	11,985.2	11,624.0	17.0	28.6	-97.85	471.6	-1,057.9	1,244.4	1,199.1	45.30	27.471	
11,780.0	11,454.0	12,032.5	11,624.0	17.1	28.6	-97.85	518.9	-1,058.3	1,244.4	1,199.0	45.43	27.390	
11,800.0	11,454.0	12,052.5	11,624.0	17.2	28.7	-97.85	538.9	-1,058.5	1,244.4	1,198.9	45.49	27.355	
11,875.0	11,454.0	12,127.5	11,624.0	17.3	28.8	-97.85	613.9	-1,059.2	1,244.4	1,198.7	45.74	27.203	
11,900.0	11,454.0	12,152.5	11,624.0	17.4	28.8	-97.85	638.9	-1,059.4	1,244.4	1,198.6	45.83	27.151	
11,970.0	11,454.0	12,222.5	11,624.0	17.6	28.9	-97.85	708.9	-1,060.1	1,244.4	1,198.3	46.10	26.991	
12,000.0	11,454.0	12,252.5	11,624.0	17.6	28.9	-97.85	738.9	-1,060.3	1,244.4	1,198.2	46.22	26.921	
12,065.0	11,454.0	12,317.5	11,624.0	17.8	29.1	-97.85	803.9	-1,060.9	1,244.4	1,197.9	46.51	26.758	
12,100.0	11,454.0	12,352.5	11,624.0	17.9	29.1	-97.85	838.9	-1,061.3	1,244.4	1,197.7	46.66	26.667	
12,160.0	11,454.0	12,412.5	11,624.0	18.1	29.2	-97.85	898.9	-1,061.8	1,244.4	1,197.5	46.95	26.503	
12,200.0	11,454.0	12,452.5	11,624.0	18.2	29.3	-97.85	938.9	-1,062.2	1,244.4	1,197.3	47.15	26.392	
12,255.0	11,454.0	12,507.5	11,624.0	18.4	29.4	-97.85	993.9	-1,062.7	1,244.4	1,197.0	47.44	26.231	
12,300.0	11,454.0	12,552.5	11,624.0	18.5	29.5	-97.85	1,038.9	-1,063.1	1,244.4	1,196.7	47.68	26.097	
12,350.0	11,454.0	12,602.5	11,624.0	18.7	29.6	-97.85	1,088.9	-1,063.5	1,244.4	1,196.5	47.97	25.943	
12,400.0	11,454.0	12,652.5	11,624.0	18.9	29.7	-97.85	1,138.9	-1,064.0	1,244.4	1,196.2	48.26	25.785	
12,445.0	11,454.0	12,697.5	11,624.0	19.0	29.8	-97.85	1,183.9	-1,064.4	1,244.4	1,195.9	48.53	25.640	
12,500.0	11,454.0	12,752.5	11,624.0	19.3	30.0	-97.85	1,238.9	-1,064.9	1,244.4	1,195.6	48.88	25.459	
12,540.0	11,454.0	12,792.5	11,624.0	19.4	30.1	-97.85	1,278.9	-1,065.3	1,244.4	1,195.3	49.14	25.325	
12,600.0	11,454.0	12,852.5	11,624.0	19.7	30.2	-97.85	1,338.9	-1,065.8	1,244.4	1,194.9	49.54	25.121	
12,635.0	11,454.0	12,887.5	11,624.0	19.8	30.3	-97.85	1,373.9	-1,066.1	1,244.4	1,194.7	49.78	24.999	
12,700.0	11,454.0	12,952.5	11,624.0	20.1	30.5	-97.85	1,438.9	-1,066.7	1,244.4	1,194.2	50.23	24.773	
12,730.0	11,454.0	12,982.5	11,624.0	20.2	30.6	-97.85	1,468.9	-1,067.0	1,244.4	1,194.0	50.45	24.666	
12,800.0	11,454.0	13,052.5	11,624.0	20.5	30.8	-97.85	1,538.9	-1,067.6	1,244.4	1,193.5	50.97	24.416	
12,825.0	11,454.0	13,077.5	11,624.0	20.6	30.9	-97.85	1,563.9	-1,067.9	1,244.4	1,193.3	51.16	24.326	
12,900.0	11,454.0	13,152.5	11,624.0	21.0	31.1	-97.85	1,638.9	-1,068.6	1,244.4	1,192.7	51.74	24.054	
12,920.0	11,454.0	13,172.5	11,624.0	21.1	31.2	-97.85	1,658.9	-1,068.7	1,244.4	1,192.6	51.89	23.980	
13,000.0	11,454.0	13,252.5	11,624.0	21.5	31.5	-97.85	1,738.9	-1,069.5	1,244.5	1,191.9	52.54	23.687	
13,015.0	11,454.0	13,267.5	11,624.0	21.5	31.5	-97.85	1,753.9	-1,069.6	1,244.5	1,191.8	52.66	23.631	
13,100.0	11,454.0	13,352.5	11,624.0	21.9	31.8	-97.85	1,838.9	-1,070.4	1,244.5	1,191.1	53.37	23.317	
13,110.0	11,454.0	13,362.5	11,624.0	22.0	31.8	-97.85	1,848.9	-1,070.5	1,244.5	1,191.0	53.46	23.280	
13,200.0	11,454.0	13,452.5	11,624.0	22.5	32.2	-97.85	1,938.9	-1,071.3	1,244.5	1,190.2	54.23	22.947	
13,205.0	11,454.0	13,457.5	11,624.0	22.5	32.2	-97.85	1,943.9	-1,071.3	1,244.5	1,190.2	54.28	22.928	
13,300.0	11,454.0	13,552.5	11,624.0	23.0	32.5	-97.85	2,038.9	-1,072.2	1,244.5	1,189.3	55.12	22.576	
13,395.0	11,454.0	13,647.5	11,624.0	23.5	32.9	-97.85	2,133.9	-1,073.1	1,244.5	1,188.5	56.00	22.224	
13,400.0	11,454.0	13,652.5	11,624.0	23.5	32.9	-97.85	2,138.9	-1,073.1	1,244.5	1,188.4	56.04	22.206	
13,490.0	11,454.0	13,742.5	11,624.0	24.0	33.3	-97.85	2,228.9	-1,073.9	1,244.5	1,187.6	56.89	21.874	
13,500.0	11,454.0	13,752.5	11,624.0	24.1	33.3	-97.85	2,238.9	-1,074.0	1,244.5	1,187.5	56.99	21.838	
13,585.0	11,454.0	13,837.5	11,624.0	24.5	33.7	-97.85	2,323.8	-1,074.8	1,244.5	1,186.7	57.81	21.527	
13,600.0	11,454.0	13,852.5	11,624.0	24.6	33.7	-97.85	2,338.8	-1,074.9	1,244.5	1,186.5	57.96	21.473	
13,680.0	11,454.0	13,932.5	11,624.0	25.1	34.1	-97.85	2,418.8	-1,075.7	1,244.5	1,185.7	58.75	21.183	
13,700.0	11,454.0	13,952.5	11,624.0	25.2	34.1	-97.85	2,438.8	-1,075.8	1,244.5	1,185.5	58.95	21.112	
13,775.0	11,454.0	14,027.5	11,624.0	25.6	34.5	-97.85	2,513.8	-1,076.5	1,244.5	1,184.8	59.71	20.843	
13,800.0	11,454.0	14,052.5	11,624.0	25.8	34.6	-97.85	2,538.8	-1,076.8	1,244.5	1,184.5	59.96	20.755	
13,870.0	11,454.0	14,122.5	11,624.0	26.2	34.9	-97.85	2,608.8	-1,077.4	1,244.5	1,183.8	60.68	20.508	
13,900.0	11,454.0	14,152.5	11,624.0	26.4	35.0	-97.85	2,638.8	-1,077.7	1,244.5	1,183.5	61.00	20.403	
13,965.0	11,454.0	14,217.5	11,624.0	26.7	35.3	-97.85	2,703.8	-1,078.3	1,244.5	1,182.8	61.68	20.177	
14,000.0	11,454.0	14,252.5	11,624.0	27.0	35.5	-97.85	2,738.8	-1,078.6	1,244.5	1,182.4	62.05	20.056	
14,060.0	11,454.0	14,312.5	11,624.0	27.3	35.7	-97.85	2,798.8	-1,079.1	1,244.5	1,181.8	62.69	19.851	
14,100.0	11,454.0	14,352.5	11,624.0	27.6	35.9	-97.85	2,838.8	-1,079.5	1,244.5	1,181.4	63.12	19.715	
14,155.0	11,454.0	14,407.5	11,624.0	27.9	36.2	-97.85	2,893.8	-1,080.0	1,244.5	1,180.8	63.72	19.530	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,200.0	11,454.0	14,452.5	11,624.0	28.2	36.4	-97.85	2,938.8	-1,080.4	1,244.5	1,180.3	64.21	19.380	
14,250.0	11,454.0	14,502.5	11,624.0	28.5	36.7	-97.85	2,988.8	-1,080.9	1,244.5	1,179.7	64.77	19.215	
14,300.0	11,454.0	14,552.5	11,624.0	28.8	36.9	-97.85	3,038.8	-1,081.3	1,244.5	1,179.2	65.32	19.052	
14,345.0	11,454.0	14,597.5	11,624.0	29.1	37.1	-97.85	3,083.8	-1,081.7	1,244.5	1,178.7	65.83	18.906	
14,400.0	11,454.0	14,652.5	11,624.0	29.4	37.4	-97.85	3,138.8	-1,082.2	1,244.5	1,178.1	66.45	18.729	
14,440.0	11,454.0	14,692.5	11,624.0	29.7	37.6	-97.85	3,178.8	-1,082.6	1,244.5	1,177.6	66.90	18.602	
14,500.0	11,454.0	14,752.5	11,624.0	30.1	37.9	-97.85	3,238.8	-1,083.1	1,244.5	1,176.9	67.59	18.414	
14,535.0	11,454.0	14,787.5	11,624.0	30.3	38.1	-97.85	3,273.8	-1,083.5	1,244.5	1,176.5	67.99	18.305	
14,600.0	11,454.0	14,852.5	11,624.0	30.7	38.4	-97.85	3,338.8	-1,084.1	1,244.5	1,175.8	68.74	18.104	
14,630.0	11,454.0	14,882.5	11,624.0	30.9	38.6	-97.85	3,368.8	-1,084.3	1,244.5	1,175.4	69.09	18.013	
14,700.0	11,454.0	14,952.5	11,624.0	31.3	38.9	-97.85	3,438.8	-1,085.0	1,244.5	1,174.6	69.91	17.802	
14,725.0	11,454.0	14,977.5	11,624.0	31.5	39.1	-97.85	3,463.8	-1,085.2	1,244.5	1,174.3	70.20	17.727	
14,800.0	11,454.0	15,052.5	11,624.0	32.0	39.5	-97.85	3,538.8	-1,085.9	1,244.5	1,173.4	71.09	17.506	
14,820.0	11,454.0	15,072.5	11,624.0	32.1	39.6	-97.85	3,558.8	-1,086.1	1,244.5	1,173.2	71.33	17.448	
14,900.0	11,454.0	15,152.5	11,624.0	32.6	40.0	-97.85	3,638.8	-1,086.8	1,244.5	1,172.2	72.29	17.217	
14,915.0	11,454.0	15,167.5	11,624.0	32.7	40.1	-97.85	3,653.8	-1,086.9	1,244.5	1,172.1	72.47	17.174	
15,000.0	11,454.0	15,252.5	11,624.0	33.3	40.5	-97.85	3,738.8	-1,087.7	1,244.5	1,171.0	73.49	16.935	
15,010.0	11,454.0	15,262.5	11,624.0	33.4	40.6	-97.85	3,748.8	-1,087.8	1,244.5	1,170.9	73.61	16.907	
15,100.0	11,454.0	15,352.5	11,624.0	34.0	41.1	-97.85	3,838.8	-1,088.6	1,244.5	1,169.8	74.71	16.659	
15,105.0	11,454.0	15,357.5	11,624.0	34.0	41.1	-97.85	3,843.8	-1,088.7	1,244.5	1,169.8	74.77	16.645	
15,200.0	11,454.0	15,452.5	11,624.0	34.6	41.6	-97.85	3,938.8	-1,089.5	1,244.5	1,168.6	75.94	16.389	
15,295.0	11,454.0	15,547.5	11,624.0	35.3	42.2	-97.85	4,033.8	-1,090.4	1,244.6	1,167.4	77.11	16.139	
15,300.0	11,454.0	15,552.5	11,624.0	35.3	42.2	-97.85	4,038.8	-1,090.4	1,244.6	1,167.4	77.18	16.126	
15,390.0	11,454.0	15,642.5	11,624.0	35.9	42.7	-97.85	4,128.8	-1,091.3	1,244.6	1,166.3	78.30	15.895	
15,400.0	11,454.0	15,652.5	11,624.0	36.0	42.8	-97.85	4,138.8	-1,091.4	1,244.6	1,166.1	78.42	15.870	
15,485.0	11,454.0	15,737.5	11,624.0	36.6	43.3	-97.85	4,223.8	-1,092.1	1,244.6	1,165.1	79.49	15.656	
15,500.0	11,454.0	15,752.5	11,624.0	36.7	43.4	-97.85	4,238.8	-1,092.3	1,244.6	1,164.9	79.68	15.619	
15,580.0	11,454.0	15,832.5	11,624.0	37.2	43.8	-97.85	4,318.8	-1,093.0	1,244.6	1,163.9	80.70	15.423	
15,600.0	11,454.0	15,852.5	11,624.0	37.3	43.9	-97.85	4,338.8	-1,093.2	1,244.6	1,163.6	80.95	15.375	
15,675.0	11,454.0	15,927.5	11,624.0	37.9	44.4	-97.85	4,413.8	-1,093.9	1,244.6	1,162.7	81.91	15.195	
15,700.0	11,454.0	15,952.5	11,624.0	38.0	44.5	-97.85	4,438.8	-1,094.1	1,244.6	1,162.3	82.22	15.136	
15,770.0	11,454.0	16,022.5	11,624.0	38.5	44.9	-97.85	4,508.8	-1,094.7	1,244.6	1,161.4	83.12	14.973	
15,800.0	11,454.0	16,052.5	11,624.0	38.7	45.1	-97.85	4,538.8	-1,095.0	1,244.6	1,161.1	83.51	14.904	
15,865.0	11,454.0	16,117.5	11,624.0	39.2	45.5	-97.85	4,603.8	-1,095.6	1,244.6	1,160.2	84.35	14.755	
15,900.0	11,454.0	16,152.5	11,624.0	39.4	45.7	-97.85	4,638.8	-1,095.9	1,244.6	1,159.8	84.80	14.677	
15,960.0	11,454.0	16,212.5	11,624.0	39.8	46.1	-97.85	4,698.7	-1,096.5	1,244.6	1,159.0	85.58	14.543	
16,000.0	11,454.0	16,252.5	11,624.0	40.1	46.3	-97.85	4,738.7	-1,096.8	1,244.6	1,158.5	86.10	14.455	
16,055.0	11,454.0	16,307.5	11,624.0	40.5	46.6	-97.85	4,793.7	-1,097.3	1,244.6	1,157.8	86.82	14.336	
16,100.0	11,454.0	16,352.5	11,624.0	40.8	46.9	-97.85	4,838.7	-1,097.7	1,244.6	1,157.2	87.41	14.239	
16,150.0	11,454.0	16,402.5	11,624.0	41.2	47.2	-97.85	4,888.7	-1,098.2	1,244.6	1,156.5	88.06	14.133	
16,200.0	11,454.0	16,452.5	11,624.0	41.5	47.5	-97.85	4,938.7	-1,098.6	1,244.6	1,155.9	88.72	14.028	
16,245.0	11,454.0	16,497.5	11,624.0	41.8	47.8	-97.85	4,983.7	-1,099.1	1,244.6	1,155.3	89.31	13.935	
16,300.0	11,454.0	16,552.5	11,624.0	42.2	48.1	-97.85	5,038.7	-1,099.6	1,244.6	1,154.6	90.04	13.823	
16,340.0	11,454.0	16,592.5	11,624.0	42.5	48.4	-97.85	5,078.7	-1,099.9	1,244.6	1,154.0	90.57	13.742	
16,400.0	11,454.0	16,652.5	11,624.0	42.9	48.8	-97.85	5,138.7	-1,100.5	1,244.6	1,153.2	91.37	13.622	
16,435.0	11,454.0	16,687.5	11,624.0	43.2	49.0	-97.85	5,173.7	-1,100.8	1,244.6	1,152.8	91.83	13.553	
16,500.0	11,454.0	16,752.5	11,624.0	43.6	49.4	-97.85	5,238.7	-1,101.4	1,244.6	1,151.9	92.70	13.426	
16,530.0	11,454.0	16,782.5	11,624.0	43.8	49.6	-97.85	5,268.7	-1,101.7	1,244.6	1,151.5	93.10	13.369	
16,600.0	11,454.0	16,852.5	11,624.0	44.3	50.0	-97.85	5,338.7	-1,102.3	1,244.6	1,150.6	94.04	13.235	
16,625.0	11,454.0	16,877.5	11,624.0	44.5	50.2	-97.85	5,363.7	-1,102.5	1,244.6	1,150.2	94.37	13.188	
16,700.0	11,454.0	16,952.5	11,624.0	45.0	50.6	-97.85	5,438.7	-1,103.2	1,244.6	1,149.2	95.38	13.049	
16,720.0	11,454.0	16,972.5	11,624.0	45.2	50.8	-97.85	5,458.7	-1,103.4	1,244.6	1,149.0	95.65	13.012	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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)			
16,800.0	11,454.0	17,052.5	11,624.0	45.7	51.3	-97.85	5,538.7	-1,104.1	1,244.6	1,147.9	96.73	12.867	
16,815.0	11,454.0	17,067.5	11,624.0	45.8	51.4	-97.85	5,553.7	-1,104.3	1,244.6	1,147.7	96.93	12.840	
16,900.0	11,454.0	17,152.5	11,624.0	46.5	51.9	-97.85	5,638.7	-1,105.0	1,244.6	1,146.5	98.08	12.689	
16,910.0	11,454.0	17,162.5	11,624.0	46.5	52.0	-97.85	5,648.7	-1,105.1	1,244.6	1,146.4	98.22	12.672	
17,000.0	11,454.0	17,252.5	11,624.0	47.2	52.6	-97.85	5,738.7	-1,105.9	1,244.6	1,145.2	99.44	12.516	
17,005.0	11,454.0	17,257.5	11,624.0	47.2	52.6	-97.85	5,743.7	-1,106.0	1,244.6	1,145.1	99.51	12.507	
17,100.0	11,454.0	17,352.5	11,624.0	47.9	53.2	-97.85	5,838.7	-1,106.9	1,244.6	1,143.8	100.81	12.347	
17,195.0	11,454.0	17,447.5	11,624.0	48.6	53.8	-97.85	5,933.7	-1,107.7	1,244.6	1,142.5	102.11	12.190	
17,200.0	11,454.0	17,452.5	11,624.0	48.6	53.8	-97.85	5,938.7	-1,107.8	1,244.6	1,142.5	102.17	12.181	
17,290.0	11,454.0	17,542.5	11,624.0	49.2	54.4	-97.85	6,028.7	-1,108.6	1,244.6	1,141.2	103.41	12.036	
17,300.0	11,454.0	17,552.5	11,624.0	49.3	54.5	-97.85	6,038.7	-1,108.7	1,244.6	1,141.1	103.55	12.020	
17,385.0	11,454.0	17,637.5	11,624.0	49.9	55.0	-97.85	6,123.7	-1,109.5	1,244.6	1,139.9	104.72	11.886	
17,400.0	11,454.0	17,652.5	11,624.0	50.0	55.1	-97.85	6,138.7	-1,109.6	1,244.6	1,139.7	104.92	11.862	
17,480.0	11,454.0	17,732.5	11,624.0	50.6	55.7	-97.85	6,218.7	-1,110.3	1,244.6	1,138.6	106.03	11.739	
17,500.0	11,454.0	17,752.5	11,624.0	50.8	55.8	-97.85	6,238.7	-1,110.5	1,244.6	1,138.3	106.31	11.708	
17,575.0	11,454.0	17,827.5	11,624.0	51.3	56.3	-97.85	6,313.7	-1,111.2	1,244.6	1,137.3	107.34	11.595	
17,600.0	11,454.0	17,852.5	11,624.0	51.5	56.5	-97.85	6,338.7	-1,111.4	1,244.6	1,137.0	107.69	11.558	
17,670.0	11,454.0	17,922.5	11,624.0	52.0	56.9	-97.85	6,408.7	-1,112.1	1,244.7	1,136.0	108.66	11.454	
17,700.0	11,454.0	17,952.5	11,624.0	52.2	57.1	-97.85	6,438.7	-1,112.3	1,244.7	1,135.6	109.08	11.411	
17,765.0	11,454.0	18,017.5	11,624.0	52.7	57.6	-97.85	6,503.7	-1,112.9	1,244.7	1,134.7	109.98	11.317	
17,800.0	11,454.0	18,052.5	11,624.0	52.9	57.8	-97.85	6,538.7	-1,113.2	1,244.7	1,134.2	110.47	11.267	
17,860.0	11,454.0	18,112.5	11,624.0	53.4	58.2	-97.85	6,598.7	-1,113.8	1,244.7	1,133.4	111.31	11.182	
17,900.0	11,454.0	18,152.5	11,624.0	53.7	58.5	-97.85	6,638.7	-1,114.1	1,244.7	1,132.8	111.87	11.126	
17,955.0	11,454.0	18,207.5	11,624.0	54.1	58.8	-97.85	6,693.7	-1,114.7	1,244.7	1,132.0	112.64	11.050	
18,000.0	11,454.0	18,252.5	11,624.0	54.4	59.1	-97.85	6,738.7	-1,115.1	1,244.7	1,131.4	113.27	10.989	
18,050.0	11,454.0	18,302.5	11,624.0	54.7	59.5	-97.85	6,788.7	-1,115.5	1,244.7	1,130.7	113.97	10.921	
18,100.0	11,454.0	18,352.5	11,624.0	55.1	59.8	-97.85	6,838.7	-1,116.0	1,244.7	1,130.0	114.67	10.855	
18,145.0	11,454.0	18,397.5	11,624.0	55.4	60.1	-97.85	6,883.7	-1,116.4	1,244.7	1,129.4	115.30	10.795	
18,200.0	11,454.0	18,452.5	11,624.0	55.8	60.5	-97.85	6,938.7	-1,116.9	1,244.7	1,128.6	116.07	10.723	
18,240.0	11,454.0	18,492.5	11,624.0	56.1	60.7	-97.85	6,978.7	-1,117.2	1,244.7	1,128.0	116.64	10.671	
18,300.0	11,454.0	18,552.5	11,624.0	56.6	61.1	-97.85	7,038.7	-1,117.8	1,244.7	1,127.2	117.48	10.595	
18,335.0	11,454.0	18,587.5	11,624.0	56.8	61.4	-97.85	7,073.6	-1,118.1	1,244.7	1,126.7	117.98	10.550	
18,400.0	11,454.0	18,652.5	11,624.0	57.3	61.8	-97.85	7,138.6	-1,118.7	1,244.7	1,125.8	118.89	10.469	
18,430.0	11,454.0	18,682.5	11,624.0	57.5	62.0	-97.85	7,168.6	-1,119.0	1,244.7	1,125.4	119.32	10.432	
18,500.0	11,454.0	18,752.5	11,624.0	58.0	62.5	-97.85	7,238.6	-1,119.6	1,244.7	1,124.4	120.31	10.346	
18,525.0	11,454.0	18,777.5	11,624.0	58.2	62.7	-97.85	7,263.6	-1,119.8	1,244.7	1,124.0	120.66	10.316	
18,600.0	11,454.0	18,852.5	11,624.0	58.8	63.2	-97.85	7,338.6	-1,120.5	1,244.7	1,123.0	121.72	10.225	
18,620.0	11,454.0	18,872.5	11,624.0	58.9	63.3	-97.85	7,358.6	-1,120.7	1,244.7	1,122.7	122.01	10.202	
18,700.0	11,454.0	18,952.5	11,624.0	59.5	63.9	-97.85	7,438.6	-1,121.4	1,244.7	1,121.6	123.14	10.108	
18,715.0	11,454.0	18,967.5	11,624.0	59.6	64.0	-97.85	7,453.6	-1,121.6	1,244.7	1,121.3	123.36	10.090	
18,800.0	11,454.0	19,052.5	11,624.0	60.2	64.5	-97.85	7,538.6	-1,122.4	1,244.7	1,120.1	124.57	9.992	
18,810.0	11,454.0	19,062.5	11,624.0	60.3	64.6	-97.85	7,548.6	-1,122.4	1,244.7	1,120.0	124.71	9.981	
18,900.0	11,454.0	19,152.5	11,624.0	61.0	65.2	-97.85	7,638.6	-1,123.3	1,244.7	1,118.7	125.99	9.879	
18,905.0	11,454.0	19,157.5	11,624.0	61.0	65.3	-97.85	7,643.6	-1,123.3	1,244.7	1,118.6	126.06	9.874	
19,000.0	11,454.0	19,252.5	11,624.0	61.7	65.9	-97.85	7,738.6	-1,124.2	1,244.7	1,117.3	127.42	9.769	
19,095.0	11,454.0	19,347.5	11,624.0	62.4	66.6	-97.85	7,833.6	-1,125.0	1,244.7	1,115.9	128.78	9.666	
19,100.0	11,454.0	19,352.5	11,624.0	62.4	66.6	-97.85	7,838.6	-1,125.1	1,244.7	1,115.9	128.85	9.660	
19,190.0	11,454.0	19,442.5	11,624.0	63.1	67.2	-97.85	7,928.6	-1,125.9	1,244.7	1,114.6	130.14	9.565	
19,200.0	11,454.0	19,452.5	11,624.0	63.2	67.3	-97.85	7,938.6	-1,126.0	1,244.7	1,114.4	130.28	9.554	
19,285.0	11,454.0	19,537.5	11,624.0	63.8	67.9	-97.85	8,023.6	-1,126.8	1,244.7	1,113.2	131.50	9.466	
19,300.0	11,454.0	19,552.5	11,624.0	63.9	68.0	-97.85	8,038.6	-1,126.9	1,244.7	1,113.0	131.71	9.450	
19,380.0	11,454.0	19,632.5	11,624.0	64.5	68.5	-97.85	8,118.6	-1,127.6	1,244.7	1,111.9	132.86	9.369	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
19,400.0	11,454.0	19,652.5	11,624.0	64.6	68.7	-97.85	8,138.6	-1,127.8	1,244.7	1,111.6	133.15	9.348	
19,475.0	11,454.0	19,727.5	11,624.0	65.2	69.2	-97.85	8,213.6	-1,128.5	1,244.7	1,110.5	134.23	9.273	
19,500.0	11,454.0	19,752.5	11,624.0	65.4	69.4	-97.85	8,238.6	-1,128.7	1,244.7	1,110.1	134.59	9.249	
19,570.0	11,454.0	19,822.5	11,624.0	65.9	69.9	-97.85	8,308.6	-1,129.4	1,244.7	1,109.1	135.59	9.180	
19,600.0	11,454.0	19,852.5	11,624.0	66.1	70.1	-97.85	8,338.6	-1,129.7	1,244.7	1,108.7	136.02	9.151	
19,665.0	11,454.0	19,917.5	11,624.0	66.6	70.5	-97.85	8,403.6	-1,130.2	1,244.7	1,107.8	136.96	9.088	
19,700.0	11,454.0	19,952.5	11,624.0	66.9	70.8	-97.85	8,438.6	-1,130.6	1,244.7	1,107.3	137.47	9.055	
19,760.0	11,454.0	20,012.5	11,624.0	67.3	71.2	-97.85	8,498.6	-1,131.1	1,244.7	1,106.4	138.33	8.998	
19,800.0	11,454.0	20,052.5	11,624.0	67.6	71.5	-97.85	8,538.6	-1,131.5	1,244.7	1,105.8	138.91	8.961	
19,855.0	11,454.0	20,107.5	11,624.0	68.0	71.9	-97.85	8,593.6	-1,132.0	1,244.7	1,105.0	139.70	8.910	
19,900.0	11,454.0	20,152.5	11,624.0	68.3	72.2	-97.85	8,638.6	-1,132.4	1,244.7	1,104.4	140.35	8.869	
19,950.0	11,454.0	20,202.5	11,624.0	68.7	72.5	-97.85	8,688.6	-1,132.8	1,244.8	1,103.7	141.08	8.823	
20,000.0	11,454.0	20,252.5	11,624.0	69.1	72.9	-97.85	8,738.6	-1,133.3	1,244.8	1,103.0	141.80	8.778	
20,045.0	11,454.0	20,297.5	11,624.0	69.4	73.2	-97.85	8,783.6	-1,133.7	1,244.8	1,102.3	142.45	8.738	
20,100.0	11,454.0	20,352.5	11,624.0	69.8	73.6	-97.85	8,838.6	-1,134.2	1,244.8	1,101.5	143.25	8.689	
20,140.0	11,454.0	20,392.5	11,624.0	70.1	73.9	-97.85	8,878.6	-1,134.6	1,244.8	1,100.9	143.83	8.654	
20,200.0	11,454.0	20,452.5	11,624.0	70.6	74.3	-97.85	8,938.6	-1,135.1	1,244.8	1,100.1	144.70	8.602	
20,235.0	11,454.0	20,487.5	11,624.0	70.8	74.5	-97.85	8,973.6	-1,135.4	1,244.8	1,099.6	145.21	8.572	
20,300.0	11,454.0	20,552.5	11,624.0	71.3	75.0	-97.85	9,038.6	-1,136.0	1,244.8	1,098.6	146.15	8.517	
20,330.0	11,454.0	20,582.5	11,624.0	71.5	75.2	-97.85	9,068.6	-1,136.3	1,244.8	1,098.2	146.59	8.492	
20,400.0	11,454.0	20,652.5	11,624.0	72.1	75.7	-97.85	9,138.6	-1,136.9	1,244.8	1,097.2	147.60	8.433	
20,425.0	11,454.0	20,677.5	11,624.0	72.2	75.9	-97.85	9,163.6	-1,137.2	1,244.8	1,096.8	147.97	8.412	
20,500.0	11,454.0	20,752.5	11,624.0	72.8	76.4	-97.85	9,238.6	-1,137.9	1,244.8	1,095.7	149.06	8.351	
20,520.0	11,454.0	20,772.5	11,624.0	72.9	76.6	-97.85	9,258.6	-1,138.0	1,244.8	1,095.4	149.35	8.335	
20,600.0	11,454.0	20,852.5	11,624.0	73.5	77.1	-97.85	9,338.6	-1,138.8	1,244.8	1,094.3	150.52	8.270	
20,615.0	11,454.0	20,867.5	11,624.0	73.7	77.2	-97.85	9,353.6	-1,138.9	1,244.8	1,094.0	150.73	8.258	
20,700.0	11,454.0	20,952.5	11,624.0	74.3	77.8	-97.85	9,438.6	-1,139.7	1,244.8	1,092.8	151.97	8.191	
20,710.0	11,454.0	20,962.5	11,624.0	74.4	77.9	-97.85	9,448.6	-1,139.8	1,244.8	1,092.7	152.12	8.183	
20,800.0	11,454.0	21,052.5	11,624.0	75.0	78.5	-97.85	9,538.5	-1,140.6	1,244.8	1,091.4	153.43	8.113	
20,805.0	11,454.0	21,057.5	11,624.0	75.1	78.6	-97.85	9,543.5	-1,140.6	1,244.8	1,091.3	153.51	8.109	
20,900.0	11,454.0	21,152.5	11,624.0	75.8	79.3	-97.85	9,638.5	-1,141.5	1,244.8	1,089.9	154.89	8.036	
20,995.0	11,454.0	21,247.5	11,624.0	76.5	79.9	-97.85	9,733.5	-1,142.4	1,244.8	1,088.5	156.28	7.965	
21,000.0	11,454.0	21,252.5	11,624.0	76.5	80.0	-97.85	9,738.5	-1,142.4	1,244.8	1,088.4	156.35	7.961	
21,090.0	11,454.0	21,342.5	11,624.0	77.2	80.6	-97.85	9,828.5	-1,143.2	1,244.8	1,087.1	157.67	7.895	
21,100.0	11,454.0	21,352.5	11,624.0	77.3	80.7	-97.85	9,838.5	-1,143.3	1,244.8	1,087.0	157.82	7.888	
21,185.0	11,454.0	21,437.5	11,624.0	77.9	81.3	-97.85	9,923.5	-1,144.1	1,244.8	1,085.7	159.06	7.826	
21,200.0	11,454.0	21,452.5	11,624.0	78.0	81.4	-97.85	9,938.5	-1,144.2	1,244.8	1,085.5	159.28	7.815	
21,280.0	11,454.0	21,532.5	11,624.0	78.6	82.0	-97.85	10,018.5	-1,145.0	1,244.8	1,084.4	160.45	7.758	
21,300.0	11,454.0	21,552.5	11,624.0	78.8	82.1	-97.85	10,038.5	-1,145.2	1,244.8	1,084.1	160.75	7.744	
21,375.0	11,454.0	21,627.5	11,624.0	79.3	82.6	-97.85	10,113.5	-1,145.8	1,244.8	1,083.0	161.85	7.691	
21,400.0	11,454.0	21,652.5	11,624.0	79.5	82.8	-97.85	10,138.5	-1,146.1	1,244.8	1,082.6	162.21	7.674	
21,470.0	11,454.0	21,722.5	11,624.0	80.0	83.3	-97.85	10,208.5	-1,146.7	1,244.8	1,081.6	163.24	7.626	
21,500.0	11,454.0	21,752.5	11,624.0	80.3	83.5	-97.85	10,238.5	-1,147.0	1,244.8	1,081.1	163.68	7.605	
21,565.0	11,454.0	21,817.5	11,624.0	80.7	84.0	-97.85	10,303.5	-1,147.6	1,244.8	1,080.2	164.63	7.561	
21,600.0	11,454.0	21,852.5	11,624.0	81.0	84.3	-97.85	10,338.5	-1,147.9	1,244.8	1,079.7	165.15	7.538	
21,660.0	11,454.0	21,912.5	11,624.0	81.4	84.7	-97.85	10,398.5	-1,148.4	1,244.8	1,078.8	166.03	7.498	
21,700.0	11,454.0	21,952.5	11,624.0	81.7	85.0	-97.85	10,438.5	-1,148.8	1,244.8	1,078.2	166.62	7.471	
21,724.9	11,454.0	21,977.4	11,624.0	81.9	85.2	-97.85	10,463.4	-1,149.0	1,244.8	1,077.8	166.98	7.455 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	-90.52	-0.5	-60.0	60.0					
95.0	95.0	95.0	95.0	3.0	3.0	-90.52	-0.5	-60.0	60.0	54.0	6.03	9.961		
100.0	100.0	100.0	100.0	3.0	3.0	-90.52	-0.5	-60.0	60.0	54.0	6.03	9.956		
190.0	190.0	190.0	190.0	3.1	3.1	-90.52	-0.5	-60.0	60.0	53.9	6.15	9.756		
200.0	200.0	200.0	200.0	3.1	3.1	-90.52	-0.5	-60.0	60.0	53.9	6.17	9.725		
285.0	285.0	285.0	285.0	3.2	3.2	-90.52	-0.5	-60.0	60.0	53.7	6.31	9.511		
300.0	300.0	300.0	300.0	3.2	3.2	-90.52	-0.5	-60.0	60.0	53.7	6.34	9.469		
380.0	380.0	380.0	380.0	3.3	3.3	-90.52	-0.5	-60.0	60.0	53.5	6.49	9.251		
400.0	400.0	400.0	400.0	3.3	3.3	-90.52	-0.5	-60.0	60.0	53.5	6.53	9.193		
475.0	475.0	475.0	475.0	3.4	3.4	-90.52	-0.5	-60.0	60.0	53.3	6.68	8.980		
500.0	500.0	500.0	500.0	3.4	3.4	-90.52	-0.5	-60.0	60.0	53.3	6.74	8.906		
570.0	570.0	570.0	570.0	3.5	3.5	-90.52	-0.5	-60.0	60.0	53.1	6.90	8.702		
600.0	600.0	600.0	600.0	3.5	3.5	-90.52	-0.5	-60.0	60.0	53.1	6.97	8.613		
665.0	665.0	665.0	665.0	3.6	3.6	-90.52	-0.5	-60.0	60.0	52.9	7.13	8.422		
700.0	700.0	700.0	700.0	3.7	3.7	-90.52	-0.5	-60.0	60.0	52.8	7.22	8.318		
760.0	760.0	760.0	760.0	3.8	3.8	-90.52	-0.5	-60.0	60.0	52.7	7.37	8.144		
800.0	800.0	800.0	800.0	3.8	3.8	-90.52	-0.5	-60.0	60.0	52.5	7.48	8.027		
855.0	855.0	855.0	855.0	3.9	3.9	-90.52	-0.5	-60.0	60.0	52.4	7.63	7.870		
900.0	900.0	900.0	900.0	4.0	4.0	-90.52	-0.5	-60.0	60.0	52.3	7.75	7.742		
950.0	950.0	950.0	950.0	4.1	4.1	-90.52	-0.5	-60.0	60.0	52.1	7.90	7.602		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.52	-0.5	-60.0	60.0	52.0	8.04	7.464		
1,045.0	1,045.0	1,045.0	1,045.0	4.2	4.2	-90.52	-0.5	-60.0	60.0	51.8	8.17	7.343		
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.52	-0.5	-60.0	60.0	51.7	8.34	7.197		
1,140.0	1,140.0	1,140.0	1,140.0	4.4	4.4	-90.52	-0.5	-60.0	60.0	51.6	8.46	7.093		
1,200.0	1,200.0	1,200.0	1,200.0	4.5	4.5	-90.52	-0.5	-60.0	60.0	51.4	8.65	6.939		
1,235.0	1,235.0	1,235.0	1,235.0	4.6	4.6	-90.52	-0.5	-60.0	60.0	51.3	8.76	6.852		
1,300.0	1,300.0	1,300.0	1,300.0	4.7	4.7	-90.52	-0.5	-60.0	60.0	51.1	8.97	6.693		
1,330.0	1,330.0	1,330.0	1,330.0	4.7	4.7	-90.52	-0.5	-60.0	60.0	51.0	9.06	6.622		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	-90.52	-0.5	-60.0	60.0	50.7	9.29	6.458		
1,425.0	1,425.0	1,425.0	1,425.0	4.9	4.9	-90.52	-0.5	-60.0	60.0	50.6	9.38	6.402		
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-90.52	-0.5	-60.0	60.0	50.4	9.63	6.235		
1,520.0	1,520.0	1,520.0	1,520.0	5.1	5.1	-90.52	-0.5	-60.0	60.0	50.3	9.69	6.192		
1,600.0	1,600.0	1,600.0	1,600.0	5.3	5.3	-90.52	-0.5	-60.0	60.0	50.1	9.97	6.022		
1,615.0	1,615.0	1,615.0	1,615.0	5.3	5.3	-90.52	-0.5	-60.0	60.0	50.0	10.02	5.992		
1,700.0	1,700.0	1,700.0	1,700.0	5.5	5.5	-90.52	-0.5	-60.0	60.0	49.7	10.31	5.821		
1,710.0	1,710.0	1,710.0	1,710.0	5.5	5.5	-90.52	-0.5	-60.0	60.0	49.7	10.35	5.801		
1,800.0	1,800.0	1,800.0	1,800.0	5.7	5.7	-90.52	-0.5	-60.0	60.0	49.4	10.66	5.629		
1,805.0	1,805.0	1,805.0	1,805.0	5.7	5.7	-90.52	-0.5	-60.0	60.0	49.3	10.68	5.620		
1,900.0	1,900.0	1,900.0	1,900.0	5.9	5.9	-90.52	-0.5	-60.0	60.0	49.0	11.02	5.448		
1,995.0	1,995.0	1,995.0	1,995.0	6.1	6.1	-90.52	-0.5	-60.0	60.0	48.7	11.36	5.284		
2,000.0	2,000.0	2,000.0	2,000.0	6.1	6.1	-90.52	-0.5	-60.0	60.0	48.6	11.38	5.275 CC, ES		
2,090.0	2,090.0	2,090.0	2,090.0	6.2	6.3	-178.54	-0.5	-60.0	61.4	49.7	11.74	5.234		
2,100.0	2,100.0	2,100.0	2,100.0	6.2	6.3	-178.55	-0.5	-60.0	61.8	50.0	11.78	5.245		
2,185.0	2,184.9	2,184.9	2,184.9	6.3	6.5	-178.64	-0.5	-60.0	66.0	53.9	12.12	5.444		
2,200.0	2,199.8	2,199.8	2,199.8	6.3	6.5	-178.66	-0.5	-60.0	67.0	54.8	12.18	5.499		
2,250.0	2,249.7	2,249.7	2,249.7	6.4	6.6	-178.73	-0.5	-60.0	70.9	58.6	12.32	5.754		
2,280.0	2,279.6	2,279.6	2,279.6	6.4	6.7	-178.78	-0.5	-60.0	73.5	61.1	12.41	5.926		
2,300.0	2,299.5	2,299.5	2,299.5	6.4	6.7	-178.80	-0.5	-60.0	75.3	62.8	12.47	6.039		
2,375.0	2,374.2	2,374.2	2,374.2	6.5	6.9	-178.90	-0.5	-60.0	81.8	69.1	12.74	6.422		
2,400.0	2,399.1	2,399.1	2,399.1	6.5	6.9	-178.93	-0.5	-60.0	84.0	71.2	12.83	6.546		
2,470.0	2,468.8	2,468.8	2,468.8	6.6	7.1	-179.00	-0.5	-60.0	90.1	77.0	13.10	6.877		
2,500.0	2,498.7	2,498.7	2,498.7	6.6	7.2	-179.03	-0.5	-60.0	92.7	79.5	13.22	7.014		

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
2,565.0	2,563.5	2,561.4	2,561.4	6.7	7.2	-179.08	-0.5	-60.7	99.0	85.6	13.48	7.347	
2,600.0	2,598.4	2,595.0	2,594.9	6.8	7.3	-179.09	-0.5	-61.6	103.0	89.4	13.62	7.566	
2,660.0	2,658.1	2,652.3	2,652.2	7.0	7.3	-179.11	-0.5	-64.1	110.9	97.0	13.86	7.999	
2,700.0	2,698.0	2,690.4	2,690.2	7.0	7.4	-179.11	-0.5	-66.3	116.7	102.7	14.01	8.328	
2,755.0	2,752.8	2,742.4	2,742.1	7.2	7.4	-179.11	-0.5	-70.3	125.6	111.4	14.24	8.823	
2,800.0	2,797.6	2,784.8	2,784.3	7.3	7.5	-179.10	-0.5	-74.2	133.7	119.2	14.42	9.268	
2,850.0	2,847.4	2,831.6	2,830.8	7.4	7.5	-179.08	-0.5	-79.2	143.3	128.7	14.63	9.797	
2,900.0	2,897.2	2,878.1	2,877.0	7.5	7.6	-179.06	-0.5	-84.9	153.8	139.0	14.84	10.365	
2,945.0	2,942.0	2,919.6	2,918.1	7.7	7.6	-179.04	-0.5	-90.7	163.9	148.9	15.01	10.920	
3,000.0	2,996.8	2,971.2	2,969.1	7.8	7.6	-179.02	-0.5	-98.6	177.0	161.8	15.20	11.646	
3,040.0	3,036.7	3,010.1	3,007.5	7.9	7.7	-179.00	-0.5	-104.7	186.7	171.3	15.37	12.149	
3,100.0	3,096.4	3,068.3	3,065.0	8.1	7.7	-178.98	-0.5	-113.8	201.2	185.6	15.65	12.858	
3,135.0	3,131.3	3,102.2	3,098.5	8.2	7.8	-178.96	-0.5	-119.1	209.7	193.9	15.82	13.254	
3,200.0	3,196.1	3,165.3	3,160.8	8.4	7.9	-178.94	-0.5	-129.0	225.4	209.3	16.15	13.962	
3,230.0	3,226.0	3,194.4	3,189.6	8.5	8.0	-178.94	-0.5	-133.5	232.7	216.4	16.30	14.276	
3,300.0	3,295.7	3,262.3	3,256.6	8.7	8.2	-178.92	-0.5	-144.2	249.6	232.9	16.66	14.979	
3,325.0	3,320.6	3,286.6	3,280.6	8.7	8.2	-178.91	-0.5	-147.9	255.7	238.9	16.80	15.220	
3,400.0	3,395.3	3,359.4	3,352.5	9.0	8.4	-178.90	-0.5	-159.3	273.8	256.6	17.21	15.912	
3,420.0	3,415.2	3,378.8	3,371.6	9.0	8.5	-178.89	-0.5	-162.4	278.6	261.3	17.32	16.089	
3,500.0	3,494.9	3,456.4	3,448.3	9.3	8.7	-178.88	-0.5	-174.5	298.0	280.2	17.77	16.769	
3,515.0	3,509.9	3,471.0	3,462.7	9.3	8.7	-178.88	-0.5	-176.8	301.6	283.8	17.86	16.891	
3,600.0	3,594.5	3,553.4	3,544.2	9.6	8.9	-178.86	-0.4	-189.7	322.2	303.8	18.35	17.554	
3,610.0	3,604.5	3,563.1	3,553.7	9.6	9.0	-178.86	-0.4	-191.2	324.6	306.2	18.41	17.630	
3,680.8	3,675.0	3,631.8	3,621.6	9.8	9.2	-178.85	-0.4	-201.9	341.7	322.9	18.82	18.155	
3,700.0	3,694.2	3,650.5	3,640.0	9.9	9.2	-178.85	-0.4	-204.9	346.3	327.4	18.93	18.299	
3,705.0	3,699.1	3,655.3	3,644.8	9.9	9.2	-178.85	-0.4	-205.6	347.5	328.6	18.96	18.333	
3,800.0	3,793.8	3,747.6	3,736.0	10.2	9.5	-178.84	-0.4	-220.1	369.9	350.4	19.54	18.932	
3,895.0	3,888.6	3,840.1	3,827.3	10.5	9.8	-178.83	-0.4	-234.5	391.6	371.5	20.13	19.451	
3,900.0	3,893.6	3,845.0	3,832.1	10.5	9.8	-178.83	-0.4	-235.3	392.7	372.5	20.16	19.476	
3,990.0	3,983.4	3,932.8	3,918.9	10.8	10.1	-178.82	-0.4	-249.0	412.5	391.7	20.73	19.898	
4,000.0	3,993.4	3,942.6	3,928.5	10.8	10.1	-178.81	-0.4	-250.6	414.6	393.8	20.79	19.941	
4,085.0	4,078.2	4,025.7	4,010.6	11.1	10.4	-178.80	-0.4	-263.6	432.6	411.2	21.33	20.280	
4,100.0	4,093.2	4,040.3	4,025.1	11.1	10.5	-178.80	-0.4	-265.9	435.7	414.2	21.42	20.334	
4,180.0	4,173.1	4,118.7	4,102.4	11.4	10.7	-178.79	-0.4	-278.1	451.9	430.0	21.93	20.604	
4,200.0	4,193.1	4,138.3	4,121.8	11.4	10.8	-178.78	-0.4	-281.2	455.9	433.8	22.06	20.665	
4,275.0	4,268.1	4,211.9	4,194.5	11.6	11.1	-178.77	-0.4	-292.7	470.4	447.9	22.53	20.878	
4,300.0	4,293.0	4,236.4	4,218.7	11.7	11.2	-178.77	-0.4	-296.5	475.2	452.5	22.69	20.941	
4,370.0	4,363.0	4,305.2	4,286.6	11.9	11.4	-178.76	-0.4	-307.3	488.2	465.1	23.13	21.107	
4,400.0	4,393.0	4,334.7	4,315.8	12.0	11.5	-178.75	-0.4	-311.9	493.7	470.4	23.32	21.169	
4,465.0	4,458.0	4,398.6	4,379.0	12.2	11.7	-178.74	-0.4	-321.9	505.2	481.5	23.72	21.299	
4,500.0	4,493.0	4,433.1	4,413.0	12.3	11.9	-178.73	-0.4	-327.3	511.3	487.4	23.94	21.359	
4,560.0	4,553.0	4,492.2	4,471.4	12.4	12.1	-178.72	-0.3	-336.5	521.5	497.2	24.30	21.462	
4,600.0	4,593.0	4,531.7	4,510.4	12.5	12.2	-178.72	-0.3	-342.7	528.1	503.5	24.54	21.521	
4,655.0	4,648.0	4,586.0	4,564.0	12.6	12.4	-178.70	-0.3	-351.2	536.9	512.1	24.81	21.641	
4,680.8	4,673.7	4,611.4	4,589.1	12.6	12.5	-90.71	-0.3	-355.2	541.0	516.1	24.94	21.693	
4,700.0	4,693.0	4,630.4	4,607.9	12.6	12.6	-90.71	-0.3	-358.2	544.0	519.0	25.01	21.749	
4,750.0	4,743.0	4,679.8	4,656.7	12.6	12.8	-90.70	-0.3	-365.9	551.8	526.6	25.23	21.870	
4,800.0	4,793.0	4,729.2	4,705.4	12.6	13.0	-90.68	-0.3	-373.6	559.6	534.2	25.45	21.988	
4,845.0	4,838.0	4,773.6	4,749.3	12.7	13.1	-90.68	-0.3	-380.6	566.7	541.0	25.65	22.092	
4,900.0	4,893.0	4,828.0	4,803.0	12.7	13.3	-90.67	-0.3	-389.1	575.3	549.4	25.90	22.215	
4,940.0	4,933.0	4,867.5	4,842.0	12.7	13.5	-90.66	-0.3	-395.2	581.5	555.5	26.07	22.303	
5,000.0	4,993.0	4,926.7	4,900.5	12.8	13.7	-90.65	-0.3	-404.5	590.9	564.6	26.34	22.432	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,035.0	5,028.0	4,961.3	4,934.7	12.8	13.8	-90.64	-0.3	-409.9	596.4	569.9	26.50	22.505	
5,100.0	5,093.0	5,025.5	4,998.1	12.8	14.1	-90.63	-0.3	-420.0	606.6	579.8	26.79	22.637	
5,130.0	5,123.0	5,055.1	5,027.4	12.8	14.2	-90.62	-0.3	-424.6	611.3	584.3	26.93	22.697	
5,200.0	5,193.0	5,124.3	5,095.6	12.9	14.5	-90.61	-0.3	-435.4	622.2	595.0	27.25	22.833	
5,225.0	5,218.0	5,148.9	5,120.0	12.9	14.6	-90.61	-0.3	-439.3	626.1	598.8	27.36	22.881	
5,300.0	5,293.0	5,223.0	5,193.2	12.9	14.9	-90.60	-0.3	-450.9	637.9	610.1	27.71	23.020	
5,320.0	5,313.0	5,242.8	5,212.7	13.0	15.0	-90.59	-0.3	-454.0	641.0	613.2	27.80	23.057	
5,400.0	5,393.0	5,321.8	5,290.7	13.0	15.3	-90.58	-0.3	-466.3	653.5	625.3	28.17	23.199	
5,415.0	5,408.0	5,336.6	5,305.4	13.0	15.3	-90.58	-0.3	-468.6	655.8	627.6	28.24	23.225	
5,500.0	5,493.0	5,420.6	5,388.3	13.1	15.7	-90.57	-0.2	-481.8	669.1	640.5	28.63	23.369	
5,510.0	5,503.0	5,430.4	5,398.1	13.1	15.7	-90.56	-0.2	-483.3	670.7	642.0	28.68	23.386	
5,600.0	5,593.0	5,519.3	5,485.9	13.1	16.1	-90.55	-0.2	-497.2	684.8	655.7	29.10	23.532	
5,605.0	5,598.0	5,524.3	5,490.7	13.1	16.1	-90.55	-0.2	-498.0	685.6	656.4	29.12	23.540	
5,700.0	5,693.0	5,618.1	5,583.4	13.2	16.5	-90.54	-0.2	-512.7	700.4	670.9	29.57	23.688	
5,795.0	5,788.0	5,711.9	5,676.1	13.2	16.8	-90.53	-0.2	-527.4	715.3	685.3	30.02	23.829	
5,800.0	5,793.0	5,716.9	5,681.0	13.2	16.9	-90.53	-0.2	-528.1	716.1	686.0	30.04	23.837	
5,890.0	5,883.0	5,805.8	5,768.8	13.3	17.2	-90.52	-0.2	-542.0	730.1	699.7	30.47	23.966	
5,900.0	5,893.0	5,815.6	5,778.5	13.3	17.3	-90.51	-0.2	-543.6	731.7	701.2	30.51	23.979	
5,985.0	5,978.0	5,899.6	5,861.4	13.4	17.6	-90.50	-0.2	-556.7	745.0	714.1	30.92	24.096	
6,000.0	5,993.0	5,914.4	5,876.1	13.4	17.7	-90.50	-0.2	-559.0	747.4	716.4	30.99	24.116	
6,080.0	6,073.0	5,993.4	5,954.1	13.4	18.0	-90.49	-0.2	-571.4	759.9	728.5	31.37	24.222	
6,100.0	6,093.0	6,015.3	5,975.7	13.4	18.1	-90.49	-0.2	-574.8	763.0	731.5	31.48	24.237	
6,175.0	6,168.0	6,101.0	6,060.5	13.5	18.4	-90.48	-0.2	-587.3	773.9	742.0	31.91	24.256	
6,200.0	6,193.0	6,129.6	6,088.8	13.5	18.5	-90.48	-0.2	-591.2	777.4	745.3	32.05	24.258	
6,270.0	6,263.0	6,210.0	6,168.6	13.5	18.9	-90.47	-0.2	-601.4	786.2	753.8	32.43	24.244	
6,300.0	6,293.0	6,244.6	6,202.9	13.6	19.0	-90.47	-0.2	-605.5	789.8	757.2	32.59	24.233	
6,365.0	6,358.0	6,319.6	6,277.5	13.6	19.3	-90.47	-0.2	-613.5	796.7	763.8	32.93	24.194	
6,400.0	6,393.0	6,360.1	6,317.8	13.6	19.4	-90.46	-0.2	-617.5	800.2	767.0	33.11	24.166	
6,460.0	6,453.0	6,429.6	6,387.0	13.7	19.7	-90.46	-0.1	-623.6	805.4	772.0	33.41	24.107	
6,500.0	6,493.0	6,476.0	6,433.3	13.7	19.9	-90.46	-0.1	-627.2	808.6	774.9	33.60	24.061	
6,555.0	6,548.0	6,539.9	6,497.0	13.7	20.1	-90.45	-0.1	-631.6	812.3	778.4	33.86	23.990	
6,600.0	6,593.0	6,592.2	6,549.3	13.7	20.3	-90.45	-0.1	-634.6	814.9	780.9	34.06	23.923	
6,650.0	6,643.0	6,650.5	6,607.5	13.8	20.5	-90.45	-0.1	-637.5	817.3	783.1	34.28	23.845	
6,700.0	6,693.0	6,708.8	6,665.7	13.8	20.6	-90.45	-0.1	-639.7	819.3	784.8	34.48	23.759	
6,745.0	6,738.0	6,761.3	6,718.2	13.8	20.8	-90.45	-0.1	-641.2	820.6	785.9	34.65	23.681	
6,800.0	6,793.0	6,825.5	6,782.4	13.9	20.9	-90.45	-0.1	-642.4	821.6	786.8	34.82	23.596	
6,840.0	6,833.0	6,872.1	6,829.1	13.9	21.0	-90.45	-0.1	-642.8	821.9	787.0	34.90	23.550	
6,900.0	6,893.0	6,936.1	6,893.0	13.9	21.1	-90.45	-0.1	-642.9	822.0	787.0	34.98	23.496	
6,935.0	6,928.0	6,971.1	6,928.0	14.0	21.1	-90.45	-0.1	-642.9	822.0	787.0	35.02	23.472	
7,000.0	6,993.0	7,036.1	6,993.0	14.0	21.1	-90.45	-0.1	-642.9	822.0	786.9	35.08	23.429	
7,030.0	7,023.0	7,066.1	7,023.0	14.0	21.1	-90.45	-0.1	-642.9	822.0	786.9	35.11	23.410	
7,100.0	7,093.0	7,136.1	7,093.0	14.1	21.1	-90.45	-0.1	-642.9	822.0	786.8	35.18	23.363	
7,125.0	7,118.0	7,161.1	7,118.0	14.1	21.1	-90.45	-0.1	-642.9	822.0	786.8	35.21	23.347	
7,200.0	7,193.0	7,236.1	7,193.0	14.1	21.2	-90.45	-0.1	-642.9	822.0	786.7	35.28	23.297	
7,220.0	7,213.0	7,256.1	7,213.0	14.1	21.2	-90.45	-0.1	-642.9	822.0	786.7	35.30	23.284	
7,300.0	7,293.0	7,336.1	7,293.0	14.2	21.2	-90.45	-0.1	-642.9	822.0	786.6	35.38	23.232	
7,315.0	7,308.0	7,351.1	7,308.0	14.2	21.2	-90.45	-0.1	-642.9	822.0	786.6	35.40	23.222	
7,400.0	7,393.0	7,436.1	7,393.0	14.3	21.2	-90.45	-0.1	-642.9	822.0	786.5	35.48	23.166	
7,410.0	7,403.0	7,446.1	7,403.0	14.3	21.2	-90.45	-0.1	-642.9	822.0	786.5	35.49	23.159	
7,500.0	7,493.0	7,536.1	7,493.0	14.3	21.3	-90.45	-0.1	-642.9	822.0	786.4	35.58	23.100	
7,505.0	7,498.0	7,541.1	7,498.0	14.3	21.3	-90.45	-0.1	-642.9	822.0	786.4	35.59	23.097	
7,600.0	7,593.0	7,636.1	7,593.0	14.4	21.3	-90.45	-0.1	-642.9	822.0	786.3	35.68	23.035	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	
7,695.0	7,688.0	7,731.1	7,688.0	14.4	21.3	-90.45	-0.1	-642.9	822.0	786.2	35.78	22.972	
7,700.0	7,693.0	7,736.1	7,693.0	14.4	21.3	-90.45	-0.1	-642.9	822.0	786.2	35.79	22.969	
7,790.0	7,783.0	7,826.1	7,783.0	14.5	21.4	-90.45	-0.1	-642.9	822.0	786.1	35.88	22.910	
7,800.0	7,793.0	7,836.1	7,793.0	14.5	21.4	-90.45	-0.1	-642.9	822.0	786.1	35.89	22.904	
7,885.0	7,878.0	7,921.1	7,878.0	14.6	21.4	-90.45	-0.1	-642.9	822.0	786.0	35.98	22.848	
7,900.0	7,893.0	7,936.1	7,893.0	14.6	21.4	-90.45	-0.1	-642.9	822.0	786.0	35.99	22.839	
7,980.0	7,973.0	8,016.1	7,973.0	14.6	21.4	-90.45	-0.1	-642.9	822.0	785.9	36.07	22.786	
8,000.0	7,993.0	8,036.1	7,993.0	14.6	21.5	-90.45	-0.1	-642.9	822.0	785.9	36.09	22.773	
8,075.0	8,068.0	8,111.1	8,068.0	14.7	21.5	-90.45	-0.1	-642.9	822.0	785.8	36.17	22.725	
8,100.0	8,093.0	8,136.1	8,093.0	14.7	21.5	-90.45	-0.1	-642.9	822.0	785.8	36.20	22.708	
8,170.0	8,163.0	8,206.1	8,163.0	14.8	21.5	-90.45	-0.1	-642.9	822.0	785.7	36.27	22.663	
8,200.0	8,193.0	8,236.1	8,193.0	14.8	21.5	-90.45	-0.1	-642.9	822.0	785.7	36.30	22.643	
8,265.0	8,258.0	8,301.1	8,258.0	14.8	21.6	-90.45	-0.1	-642.9	822.0	785.6	36.37	22.601	
8,300.0	8,293.0	8,336.1	8,293.0	14.8	21.6	-90.45	-0.1	-642.9	822.0	785.6	36.41	22.579	
8,360.0	8,353.0	8,396.1	8,353.0	14.9	21.6	-90.45	-0.1	-642.9	822.0	785.5	36.47	22.540	
8,400.0	8,393.0	8,436.1	8,393.0	14.9	21.6	-90.45	-0.1	-642.9	822.0	785.5	36.51	22.514	
8,455.0	8,448.0	8,491.1	8,448.0	14.9	21.6	-90.45	-0.1	-642.9	822.0	785.4	36.57	22.479	
8,500.0	8,493.0	8,536.1	8,493.0	15.0	21.6	-90.45	-0.1	-642.9	822.0	785.4	36.61	22.450	
8,550.0	8,543.0	8,586.1	8,543.0	15.0	21.7	-90.45	-0.1	-642.9	822.0	785.3	36.67	22.417	
8,600.0	8,593.0	8,636.1	8,593.0	15.0	21.7	-90.45	-0.1	-642.9	822.0	785.3	36.72	22.385	
8,645.0	8,638.0	8,681.1	8,638.0	15.1	21.7	-90.45	-0.1	-642.9	822.0	785.2	36.77	22.356	
8,700.0	8,693.0	8,736.1	8,693.0	15.1	21.7	-90.45	-0.1	-642.9	822.0	785.2	36.83	22.321	
8,740.0	8,733.0	8,776.1	8,733.0	15.1	21.7	-90.45	-0.1	-642.9	822.0	785.1	36.87	22.295	
8,800.0	8,793.0	8,836.1	8,793.0	15.2	21.8	-90.45	-0.1	-642.9	822.0	785.0	36.93	22.257	
8,835.0	8,828.0	8,871.1	8,828.0	15.2	21.8	-90.45	-0.1	-642.9	822.0	785.0	36.97	22.234	
8,900.0	8,893.0	8,936.1	8,893.0	15.2	21.8	-90.45	-0.1	-642.9	822.0	784.9	37.04	22.193	
8,930.0	8,923.0	8,966.1	8,923.0	15.3	21.8	-90.45	-0.1	-642.9	822.0	784.9	37.07	22.174	
9,000.0	8,993.0	9,036.1	8,993.0	15.3	21.8	-90.45	-0.1	-642.9	822.0	784.8	37.15	22.129	
9,025.0	9,018.0	9,061.1	9,018.0	15.3	21.9	-90.45	-0.1	-642.9	822.0	784.8	37.17	22.113	
9,100.0	9,093.0	9,136.1	9,093.0	15.4	21.9	-90.45	-0.1	-642.9	822.0	784.7	37.25	22.065	
9,120.0	9,113.0	9,156.1	9,113.0	15.4	21.9	-90.45	-0.1	-642.9	822.0	784.7	37.27	22.052	
9,200.0	9,193.0	9,236.1	9,193.0	15.4	21.9	-90.45	-0.1	-642.9	822.0	784.6	37.36	22.002	
9,215.0	9,208.0	9,251.1	9,208.0	15.5	21.9	-90.45	-0.1	-642.9	822.0	784.6	37.38	21.992	
9,300.0	9,293.0	9,336.1	9,293.0	15.5	22.0	-90.45	-0.1	-642.9	822.0	784.5	37.47	21.938	
9,310.0	9,303.0	9,346.1	9,303.0	15.5	22.0	-90.45	-0.1	-642.9	822.0	784.5	37.48	21.932	
9,400.0	9,393.0	9,436.1	9,393.0	15.6	22.0	-90.45	-0.1	-642.9	822.0	784.4	37.58	21.875	
9,405.0	9,398.0	9,441.1	9,398.0	15.6	22.0	-90.45	-0.1	-642.9	822.0	784.4	37.58	21.872	
9,500.0	9,493.0	9,536.1	9,493.0	15.6	22.0	-90.45	-0.1	-642.9	822.0	784.3	37.68	21.812	
9,595.0	9,588.0	9,631.1	9,588.0	15.7	22.1	-90.45	-0.1	-642.9	822.0	784.2	37.79	21.752	
9,600.0	9,593.0	9,636.1	9,593.0	15.7	22.1	-90.45	-0.1	-642.9	822.0	784.2	37.79	21.749	
9,690.0	9,683.0	9,726.1	9,683.0	15.8	22.1	-90.45	-0.1	-642.9	822.0	784.1	37.89	21.692	
9,700.0	9,693.0	9,736.1	9,693.0	15.8	22.1	-90.45	-0.1	-642.9	822.0	784.1	37.90	21.686	
9,785.0	9,778.0	9,821.1	9,778.0	15.8	22.2	-90.45	-0.1	-642.9	822.0	784.0	38.00	21.633	
9,800.0	9,793.0	9,836.1	9,793.0	15.8	22.2	-90.45	-0.1	-642.9	822.0	784.0	38.01	21.624	
9,880.0	9,873.0	9,916.1	9,873.0	15.9	22.2	-90.45	-0.1	-642.9	822.0	783.9	38.10	21.574	
9,900.0	9,893.0	9,936.1	9,893.0	15.9	22.2	-90.45	-0.1	-642.9	822.0	783.9	38.12	21.561	
9,975.0	9,968.0	10,011.1	9,968.0	16.0	22.2	-90.45	-0.1	-642.9	822.0	783.8	38.21	21.514	
10,000.0	9,993.0	10,036.1	9,993.0	16.0	22.3	-90.45	-0.1	-642.9	822.0	783.7	38.23	21.499	
10,070.0	10,063.0	10,106.1	10,063.0	16.0	22.3	-90.45	-0.1	-642.9	822.0	783.7	38.31	21.455	
10,100.0	10,093.0	10,136.1	10,093.0	16.1	22.3	-90.45	-0.1	-642.9	822.0	783.6	38.34	21.437	
10,165.0	10,158.0	10,201.1	10,158.0	16.1	22.3	-90.45	-0.1	-642.9	822.0	783.6	38.42	21.396	
10,200.0	10,193.0	10,236.1	10,193.0	16.1	22.3	-90.45	-0.1	-642.9	822.0	783.5	38.46	21.375	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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		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	10,253.0	10,296.1	10,253.0	16.2	22.4	-90.45	-0.1	-642.9	822.0	783.5	38.52	21.338	
10,300.0	10,293.0	10,336.1	10,293.0	16.2	22.4	-90.45	-0.1	-642.9	822.0	783.4	38.57	21.313	
10,355.0	10,348.0	10,391.1	10,348.0	16.2	22.4	-90.45	-0.1	-642.9	822.0	783.4	38.63	21.279	
10,400.0	10,393.0	10,436.1	10,393.0	16.3	22.4	-90.45	-0.1	-642.9	822.0	783.3	38.68	21.251	
10,450.0	10,443.0	10,486.1	10,443.0	16.3	22.4	-90.45	-0.1	-642.9	822.0	783.2	38.73	21.221	
10,500.0	10,493.0	10,536.1	10,493.0	16.3	22.5	-90.45	-0.1	-642.9	822.0	783.2	38.79	21.190	
10,545.0	10,538.0	10,581.1	10,538.0	16.4	22.5	-90.45	-0.1	-642.9	822.0	783.1	38.84	21.162	
10,600.0	10,593.0	10,636.1	10,593.0	16.4	22.5	-90.45	-0.1	-642.9	822.0	783.1	38.90	21.129	
10,640.0	10,633.0	10,676.1	10,633.0	16.4	22.5	-90.45	-0.1	-642.9	822.0	783.0	38.95	21.104	
10,700.0	10,693.0	10,736.1	10,693.0	16.5	22.6	-90.45	-0.1	-642.9	822.0	783.0	39.02	21.068	
10,735.0	10,728.0	10,771.1	10,728.0	16.5	22.6	-90.45	-0.1	-642.9	822.0	782.9	39.06	21.046	
10,800.0	10,793.0	10,836.1	10,793.0	16.5	22.6	-90.45	-0.1	-642.9	822.0	782.9	39.13	21.007	
10,830.0	10,823.0	10,866.1	10,823.0	16.6	22.6	-90.45	-0.1	-642.9	822.0	782.8	39.16	20.989	
10,900.0	10,893.0	10,936.1	10,893.0	16.6	22.6	-90.45	-0.1	-642.9	822.0	782.7	39.24	20.946	
10,925.0	10,918.0	10,961.1	10,918.0	16.6	22.7	-90.45	-0.1	-642.9	822.0	782.7	39.27	20.934	
10,983.6	10,976.5	11,019.6	10,976.5	16.6	22.7	-90.45	-0.1	-642.9	822.0	782.7	39.31	20.908	
11,000.0	10,993.0	11,036.0	10,992.9	16.6	22.7	-89.93	0.1	-642.9	822.0	782.7	39.32	20.907	
11,020.0	11,012.9	11,056.0	11,012.9	16.6	22.7	-89.93	1.3	-642.9	822.0	782.7	39.32	20.906	
11,025.0	11,017.9	11,061.0	11,017.8	16.6	22.7	-89.93	1.7	-642.9	822.0	782.7	39.32	20.905	
11,050.0	11,042.8	11,085.9	11,042.6	16.6	22.7	-89.93	4.5	-642.9	822.0	782.7	39.32	20.903	
11,075.0	11,067.4	11,110.9	11,067.2	16.6	22.7	-89.93	8.6	-642.9	822.0	782.7	39.33	20.901	
11,100.0	11,091.8	11,135.8	11,091.6	16.7	22.7	-89.93	13.9	-643.0	822.0	782.6	39.33	20.899	
11,115.0	11,106.3	11,150.8	11,106.0	16.7	22.7	-89.93	17.8	-643.0	822.0	782.6	39.33	20.897	
11,125.0	11,115.9	11,160.8	11,115.6	16.7	22.7	-89.93	20.6	-643.0	822.0	782.6	39.34	20.896	
11,150.0	11,139.6	11,185.7	11,139.3	16.7	22.7	-89.93	28.5	-643.1	822.0	782.6	39.34	20.894	
11,175.0	11,162.9	11,210.7	11,162.5	16.7	22.7	-89.93	37.6	-643.2	822.0	782.6	39.35	20.891	
11,200.0	11,185.6	11,235.6	11,185.2	16.7	22.7	-89.93	47.9	-643.3	822.0	782.6	39.35	20.888	
11,210.0	11,194.6	11,245.6	11,194.2	16.7	22.7	-89.94	52.3	-643.3	822.0	782.6	39.35	20.886	
11,225.0	11,207.8	11,260.6	11,207.4	16.7	22.7	-89.94	59.4	-643.4	822.0	782.6	39.36	20.884	
11,250.0	11,229.4	11,285.5	11,228.9	16.7	22.7	-89.94	72.0	-643.5	822.0	782.6	39.37	20.880	
11,275.0	11,250.2	11,310.5	11,249.7	16.7	22.7	-89.94	85.7	-643.6	822.0	782.6	39.38	20.875	
11,300.0	11,270.3	11,335.4	11,269.8	16.7	22.7	-89.94	100.5	-643.8	822.0	782.6	39.39	20.870	
11,305.0	11,274.2	11,340.4	11,273.7	16.7	22.7	-89.94	103.6	-643.8	822.0	782.6	39.39	20.868	
11,325.0	11,289.6	11,360.4	11,289.1	16.7	22.7	-89.95	116.4	-643.9	822.0	782.6	39.40	20.863	
11,350.0	11,308.0	11,385.3	11,307.5	16.7	22.7	-89.95	133.2	-644.1	822.0	782.6	39.41	20.855	
11,375.0	11,325.6	11,410.3	11,325.1	16.7	22.7	-89.95	151.0	-644.2	822.0	782.6	39.43	20.847	
11,400.0	11,342.1	11,435.3	11,341.6	16.7	22.7	-89.95	169.6	-644.4	822.0	782.5	39.45	20.837	
11,425.0	11,357.7	11,460.2	11,357.2	16.7	22.7	-89.96	189.1	-644.6	822.0	782.5	39.47	20.825	
11,450.0	11,372.2	11,485.2	11,371.8	16.7	22.8	-89.96	209.4	-644.8	822.0	782.5	39.50	20.812	
11,475.0	11,385.7	11,510.2	11,385.2	16.8	22.8	-89.96	230.4	-645.0	822.0	782.5	39.52	20.797	
11,495.0	11,395.6	11,530.1	11,395.2	16.8	22.8	-89.97	247.8	-645.1	822.0	782.4	39.55	20.784	
11,500.0	11,398.0	11,535.1	11,397.6	16.8	22.8	-89.97	252.2	-645.2	822.0	782.4	39.55	20.781	
11,525.0	11,409.2	11,560.1	11,408.8	16.8	22.8	-89.97	274.5	-645.4	822.0	782.4	39.59	20.763	
11,550.0	11,419.1	11,585.1	11,418.8	16.8	22.8	-89.97	297.3	-645.6	822.0	782.4	39.63	20.743	
11,575.0	11,427.9	11,610.1	11,427.6	16.8	22.8	-89.98	320.7	-645.8	822.0	782.3	39.67	20.721	
11,590.0	11,432.6	11,625.1	11,432.3	16.9	22.8	-89.98	335.0	-645.9	822.0	782.3	39.70	20.706	
11,600.0	11,435.4	11,635.1	11,435.2	16.9	22.8	-89.98	344.5	-646.0	822.0	782.3	39.72	20.696	
11,625.0	11,441.7	11,660.0	11,441.5	16.9	22.9	-89.98	368.7	-646.2	822.0	782.2	39.77	20.670	
11,650.0	11,446.7	11,685.0	11,446.5	16.9	22.9	-89.99	393.2	-646.4	822.0	782.2	39.82	20.642	
11,675.0	11,450.4	11,710.0	11,450.3	17.0	22.9	-89.99	417.9	-646.7	822.0	782.1	39.88	20.612	
11,685.0	11,451.5	11,720.0	11,451.4	17.0	22.9	-89.99	427.8	-646.7	822.0	782.1	39.90	20.599	
11,700.0	11,452.8	11,735.0	11,452.7	17.0	22.9	-89.99	442.7	-646.9	822.0	782.0	39.94	20.580	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
11,725.0	11,453.9	11,760.0	11,453.9	17.0	23.0	-90.00	467.7	-647.1	822.0	782.0	40.01	20.546	
11,733.6	11,454.0	11,768.6	11,454.0	17.0	23.0	-90.00	476.3	-647.2	822.0	782.0	40.03	20.534	
11,749.2	11,454.0	11,784.2	11,454.0	17.1	23.0	-90.00	491.9	-647.3	822.0	781.9	40.08	20.510	
11,780.0	11,454.0	11,815.0	11,454.0	17.1	23.0	-90.00	522.7	-647.6	822.0	781.8	40.17	20.461	
11,800.0	11,454.0	11,835.0	11,454.0	17.2	23.1	-90.00	542.7	-647.8	822.0	781.7	40.24	20.428	
11,875.0	11,454.0	11,910.0	11,454.0	17.3	23.2	-90.00	617.7	-648.5	822.0	781.5	40.51	20.289	
11,900.0	11,454.0	11,935.0	11,454.0	17.4	23.2	-90.00	642.7	-648.7	822.0	781.4	40.61	20.241	
11,970.0	11,454.0	12,005.0	11,454.0	17.6	23.4	-90.00	712.7	-649.3	822.0	781.1	40.90	20.095	
12,000.0	11,454.0	12,035.0	11,454.0	17.6	23.4	-90.00	742.7	-649.6	822.0	780.9	41.04	20.030	
12,065.0	11,454.0	12,100.0	11,454.0	17.8	23.5	-90.00	807.7	-650.2	822.0	780.6	41.34	19.882	
12,100.0	11,454.0	12,135.0	11,454.0	17.9	23.6	-90.00	842.7	-650.5	822.0	780.5	41.52	19.799	
12,160.0	11,454.0	12,195.0	11,454.0	18.1	23.8	-90.00	902.7	-651.1	822.0	780.2	41.83	19.651	
12,200.0	11,454.0	12,235.0	11,454.0	18.2	23.9	-90.00	942.7	-651.4	822.0	779.9	42.05	19.549	
12,255.0	11,454.0	12,290.0	11,454.0	18.4	24.0	-90.00	997.7	-651.9	822.0	779.6	42.36	19.405	
12,300.0	11,454.0	12,335.0	11,454.0	18.5	24.1	-90.00	1,042.7	-652.3	822.0	779.4	42.62	19.284	
12,350.0	11,454.0	12,385.0	11,454.0	18.7	24.2	-90.00	1,092.7	-652.8	822.0	779.0	42.93	19.145	
12,400.0	11,454.0	12,435.0	11,454.0	18.9	24.4	-90.00	1,142.7	-653.2	822.0	778.7	43.25	19.005	
12,445.0	11,454.0	12,480.0	11,454.0	19.0	24.5	-90.00	1,187.7	-653.6	822.0	778.4	43.55	18.875	
12,500.0	11,454.0	12,535.0	11,454.0	19.3	24.7	-90.00	1,242.7	-654.1	822.0	778.1	43.92	18.716	
12,540.0	11,454.0	12,575.0	11,454.0	19.4	24.8	-90.00	1,282.7	-654.5	822.0	777.8	44.20	18.596	
12,600.0	11,454.0	12,635.0	11,454.0	19.7	25.0	-90.00	1,342.7	-655.0	822.0	777.3	44.63	18.417	
12,635.0	11,454.0	12,670.0	11,454.0	19.8	25.1	-90.00	1,377.7	-655.4	822.0	777.1	44.89	18.310	
12,700.0	11,454.0	12,735.0	11,454.0	20.1	25.3	-90.00	1,442.7	-656.0	822.0	776.6	45.38	18.112	
12,730.0	11,454.0	12,765.0	11,454.0	20.2	25.4	-90.00	1,472.7	-656.2	822.0	776.4	45.62	18.018	
12,800.0	11,454.0	12,835.0	11,454.0	20.5	25.7	-90.00	1,542.7	-656.9	822.0	775.8	46.17	17.802	
12,825.0	11,454.0	12,860.0	11,454.0	20.6	25.8	-90.00	1,567.7	-657.1	822.0	775.6	46.38	17.723	
12,900.0	11,454.0	12,935.0	11,454.0	21.0	26.1	-90.00	1,642.7	-657.8	822.0	775.0	47.00	17.488	
12,920.0	11,454.0	12,955.0	11,454.0	21.1	26.1	-90.00	1,662.7	-658.0	822.0	774.8	47.17	17.425	
13,000.0	11,454.0	13,035.0	11,454.0	21.5	26.4	-90.00	1,742.7	-658.7	822.0	774.1	47.86	17.174	
13,015.0	11,454.0	13,050.0	11,454.0	21.5	26.5	-90.00	1,757.7	-658.8	822.0	774.0	48.00	17.126	
13,100.0	11,454.0	13,135.0	11,454.0	21.9	26.8	-90.00	1,842.6	-659.6	822.0	773.2	48.76	16.859	
13,110.0	11,454.0	13,145.0	11,454.0	22.0	26.9	-90.00	1,852.6	-659.7	822.0	773.1	48.85	16.827	
13,200.0	11,454.0	13,235.0	11,454.0	22.5	27.3	-90.00	1,942.6	-660.5	822.0	772.3	49.68	16.545	
13,205.0	11,454.0	13,240.0	11,454.0	22.5	27.3	-90.00	1,947.6	-660.5	822.0	772.3	49.73	16.529	
13,300.0	11,454.0	13,335.0	11,454.0	23.0	27.7	-90.00	2,042.6	-661.4	822.0	771.3	50.63	16.234	
13,395.0	11,454.0	13,430.0	11,454.0	23.5	28.1	-90.00	2,137.6	-662.3	822.0	770.4	51.57	15.941	
13,400.0	11,454.0	13,435.0	11,454.0	23.5	28.1	-90.00	2,142.6	-662.3	822.0	770.4	51.61	15.925	
13,490.0	11,454.0	13,525.0	11,454.0	24.0	28.6	-90.00	2,232.6	-663.1	822.0	769.5	52.52	15.651	
13,500.0	11,454.0	13,535.0	11,454.0	24.1	28.6	-90.00	2,242.6	-663.2	822.0	769.4	52.62	15.621	
13,585.0	11,454.0	13,620.0	11,454.0	24.5	29.0	-90.00	2,327.6	-664.0	822.0	768.5	53.50	15.365	
13,600.0	11,454.0	13,635.0	11,454.0	24.6	29.1	-90.00	2,342.6	-664.1	822.0	768.3	53.65	15.320	
13,680.0	11,454.0	13,715.0	11,454.0	25.1	29.5	-90.00	2,422.6	-664.8	822.0	767.5	54.49	15.084	
13,700.0	11,454.0	13,735.0	11,454.0	25.2	29.6	-90.00	2,442.6	-665.0	822.0	767.3	54.71	15.025	
13,775.0	11,454.0	13,810.0	11,454.0	25.6	29.9	-90.00	2,517.6	-665.7	822.0	766.5	55.51	14.807	
13,800.0	11,454.0	13,835.0	11,454.0	25.8	30.1	-90.00	2,542.6	-665.9	822.0	766.2	55.78	14.736	
13,870.0	11,454.0	13,905.0	11,454.0	26.2	30.4	-90.00	2,612.6	-666.6	822.0	765.4	56.55	14.536	
13,900.0	11,454.0	13,935.0	11,454.0	26.4	30.6	-90.00	2,642.6	-666.8	822.0	765.1	56.88	14.452	
13,965.0	11,454.0	14,000.0	11,454.0	26.7	30.9	-90.00	2,707.6	-667.4	822.0	764.4	57.60	14.270	
14,000.0	11,454.0	14,035.0	11,454.0	27.0	31.1	-90.00	2,742.6	-667.8	822.0	764.0	57.99	14.174	
14,060.0	11,454.0	14,095.0	11,454.0	27.3	31.4	-90.00	2,802.6	-668.3	822.0	763.3	58.67	14.010	
14,100.0	11,454.0	14,135.0	11,454.0	27.6	31.6	-90.00	2,842.6	-668.7	822.0	762.9	59.13	13.902	
14,155.0	11,454.0	14,190.0	11,454.0	27.9	31.9	-90.00	2,897.6	-669.2	822.0	762.2	59.76	13.755	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
14,200.0	11,454.0	14,235.0	11,454.0	28.2	32.2	-90.00	2,942.6	-669.6	822.0	761.7	60.28	13.637		
14,250.0	11,454.0	14,285.0	11,454.0	28.5	32.4	-90.00	2,992.6	-670.0	822.0	761.1	60.86	13.506		
14,300.0	11,454.0	14,335.0	11,454.0	28.8	32.7	-90.00	3,042.6	-670.5	822.0	760.5	61.44	13.378		
14,345.0	11,454.0	14,380.0	11,454.0	29.1	33.0	-90.00	3,087.6	-670.9	822.0	760.0	61.97	13.263		
14,400.0	11,454.0	14,435.0	11,454.0	29.4	33.3	-90.00	3,142.6	-671.4	822.0	759.4	62.63	13.125		
14,440.0	11,454.0	14,475.0	11,454.0	29.7	33.5	-90.00	3,182.6	-671.7	822.0	758.9	63.10	13.026		
14,500.0	11,454.0	14,535.0	11,454.0	30.1	33.8	-90.00	3,242.6	-672.3	822.0	758.2	63.82	12.879		
14,535.0	11,454.0	14,570.0	11,454.0	30.3	34.0	-90.00	3,277.6	-672.6	822.0	757.7	64.25	12.794		
14,600.0	11,454.0	14,635.0	11,454.0	30.7	34.4	-90.00	3,342.6	-673.2	822.0	756.9	65.03	12.639		
14,630.0	11,454.0	14,665.0	11,454.0	30.9	34.6	-90.00	3,372.6	-673.5	822.0	756.6	65.40	12.569		
14,700.0	11,454.0	14,735.0	11,454.0	31.3	35.0	-90.00	3,442.6	-674.1	822.0	755.7	66.26	12.406		
14,725.0	11,454.0	14,760.0	11,454.0	31.5	35.1	-90.00	3,467.6	-674.3	822.0	755.4	66.56	12.349		
14,800.0	11,454.0	14,835.0	11,454.0	32.0	35.6	-90.00	3,542.6	-675.0	822.0	754.5	67.49	12.179		
14,820.0	11,454.0	14,855.0	11,454.0	32.1	35.7	-90.00	3,562.6	-675.2	822.0	754.2	67.74	12.134		
14,900.0	11,454.0	14,935.0	11,454.0	32.6	36.1	-90.00	3,642.6	-675.9	822.0	753.2	68.74	11.958		
14,915.0	11,454.0	14,950.0	11,454.0	32.7	36.2	-90.00	3,657.6	-676.1	822.0	753.1	68.93	11.925		
15,000.0	11,454.0	15,035.0	11,454.0	33.3	36.7	-90.00	3,742.6	-676.8	822.0	752.0	70.00	11.743		
15,010.0	11,454.0	15,045.0	11,454.0	33.4	36.8	-90.00	3,752.6	-676.9	822.0	751.9	70.12	11.722		
15,100.0	11,454.0	15,135.0	11,454.0	34.0	37.3	-90.00	3,842.6	-677.7	822.0	750.7	71.27	11.534		
15,105.0	11,454.0	15,140.0	11,454.0	34.0	37.4	-90.00	3,847.6	-677.8	822.0	750.7	71.33	11.524		
15,200.0	11,454.0	15,235.0	11,454.0	34.6	38.0	-90.00	3,942.6	-678.6	822.0	749.4	72.54	11.331		
15,295.0	11,454.0	15,330.0	11,454.0	35.3	38.5	-90.00	4,037.6	-679.5	822.0	748.2	73.77	11.143		
15,300.0	11,454.0	15,335.0	11,454.0	35.3	38.6	-90.00	4,042.6	-679.6	822.0	748.1	73.83	11.133		
15,390.0	11,454.0	15,425.0	11,454.0	35.9	39.1	-90.00	4,132.6	-680.4	822.0	747.0	75.00	10.960		
15,400.0	11,454.0	15,435.0	11,454.0	36.0	39.2	-90.00	4,142.6	-680.5	822.0	746.9	75.13	10.941		
15,485.0	11,454.0	15,520.0	11,454.0	36.6	39.7	-90.00	4,227.6	-681.2	822.0	745.7	76.24	10.782		
15,500.0	11,454.0	15,535.0	11,454.0	36.7	39.8	-90.00	4,242.6	-681.4	822.0	745.5	76.43	10.754		
15,580.0	11,454.0	15,615.0	11,454.0	37.2	40.3	-90.00	4,322.5	-682.1	822.0	744.5	77.48	10.609		
15,600.0	11,454.0	15,635.0	11,454.0	37.3	40.5	-90.00	4,342.5	-682.3	822.0	744.2	77.75	10.573		
15,675.0	11,454.0	15,710.0	11,454.0	37.9	40.9	-90.00	4,417.5	-683.0	822.0	743.2	78.74	10.440		
15,700.0	11,454.0	15,735.0	11,454.0	38.0	41.1	-90.00	4,442.5	-683.2	822.0	742.9	79.07	10.396		
15,770.0	11,454.0	15,805.0	11,454.0	38.5	41.5	-90.00	4,512.5	-683.8	822.0	742.0	79.99	10.275		
15,800.0	11,454.0	15,835.0	11,454.0	38.7	41.7	-90.00	4,542.5	-684.1	822.0	741.6	80.39	10.224		
15,865.0	11,454.0	15,900.0	11,454.0	39.2	42.1	-90.00	4,607.5	-684.7	822.0	740.7	81.26	10.115		
15,900.0	11,454.0	15,935.0	11,454.0	39.4	42.4	-90.00	4,642.5	-685.0	822.0	740.3	81.73	10.057		
15,960.0	11,454.0	15,995.0	11,454.0	39.8	42.8	-90.00	4,702.5	-685.5	822.0	739.4	82.53	9.959		
16,000.0	11,454.0	16,035.0	11,454.0	40.1	43.0	-90.00	4,742.5	-685.9	822.0	738.9	83.07	9.895		
16,055.0	11,454.0	16,090.0	11,454.0	40.5	43.4	-90.00	4,797.5	-686.4	822.0	738.2	83.81	9.808		
16,100.0	11,454.0	16,135.0	11,454.0	40.8	43.7	-90.00	4,842.5	-686.8	822.0	737.6	84.42	9.737		
16,150.0	11,454.0	16,185.0	11,454.0	41.2	44.0	-90.00	4,892.5	-687.3	822.0	736.9	85.09	9.660		
16,200.0	11,454.0	16,235.0	11,454.0	41.5	44.3	-90.00	4,942.5	-687.7	822.0	736.2	85.77	9.583		
16,245.0	11,454.0	16,280.0	11,454.0	41.8	44.6	-90.00	4,987.5	-688.1	822.0	735.6	86.38	9.516		
16,300.0	11,454.0	16,335.0	11,454.0	42.2	45.0	-90.00	5,042.5	-688.6	822.0	734.9	87.13	9.434		
16,340.0	11,454.0	16,375.0	11,454.0	42.5	45.2	-90.00	5,082.5	-689.0	822.0	734.3	87.68	9.375		
16,400.0	11,454.0	16,435.0	11,454.0	42.9	45.6	-90.00	5,142.5	-689.5	822.0	733.5	88.49	9.288		
16,435.0	11,454.0	16,470.0	11,454.0	43.2	45.9	-90.00	5,177.5	-689.9	822.0	733.0	88.97	9.238		
16,500.0	11,454.0	16,535.0	11,454.0	43.6	46.3	-90.00	5,242.5	-690.4	822.0	732.1	89.86	9.147		
16,530.0	11,454.0	16,565.0	11,454.0	43.8	46.5	-90.00	5,272.5	-690.7	822.0	731.7	90.28	9.105		
16,600.0	11,454.0	16,635.0	11,454.0	44.3	47.0	-90.00	5,342.5	-691.4	822.0	730.7	91.24	9.009		
16,625.0	11,454.0	16,660.0	11,454.0	44.5	47.1	-90.00	5,367.5	-691.6	822.0	730.4	91.58	8.975		
16,700.0	11,454.0	16,735.0	11,454.0	45.0	47.6	-90.00	5,442.5	-692.3	822.0	729.4	92.62	8.875		
16,720.0	11,454.0	16,755.0	11,454.0	45.2	47.8	-90.00	5,462.5	-692.4	822.0	729.1	92.90	8.848		

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	
16,800.0	11,454.0	16,835.0	11,454.0	45.7	48.3	-90.00	5,542.5	-693.2	822.0	728.0	94.00	8.744	
16,815.0	11,454.0	16,850.0	11,454.0	45.8	48.4	-90.00	5,557.5	-693.3	822.0	727.8	94.21	8.725	
16,900.0	11,454.0	16,935.0	11,454.0	46.5	49.0	-90.00	5,642.5	-694.1	822.0	726.6	95.39	8.617	
16,910.0	11,454.0	16,945.0	11,454.0	46.5	49.1	-90.00	5,652.5	-694.2	822.0	726.5	95.53	8.604	
17,000.0	11,454.0	17,035.0	11,454.0	47.2	49.7	-90.00	5,742.5	-695.0	822.0	725.2	96.78	8.493	
17,005.0	11,454.0	17,040.0	11,454.0	47.2	49.7	-90.00	5,747.5	-695.0	822.0	725.1	96.85	8.487	
17,100.0	11,454.0	17,135.0	11,454.0	47.9	50.3	-90.00	5,842.5	-695.9	822.0	723.8	98.18	8.372	
17,195.0	11,454.0	17,230.0	11,454.0	48.6	51.0	-90.00	5,937.5	-696.8	822.0	722.5	99.51	8.260	
17,200.0	11,454.0	17,235.0	11,454.0	48.6	51.0	-90.00	5,942.5	-696.8	822.0	722.4	99.58	8.254	
17,290.0	11,454.0	17,325.0	11,454.0	49.2	51.6	-90.00	6,032.5	-697.6	822.0	721.1	100.84	8.151	
17,300.0	11,454.0	17,335.0	11,454.0	49.3	51.7	-90.00	6,042.5	-697.7	822.0	721.0	100.98	8.140	
17,385.0	11,454.0	17,420.0	11,454.0	49.9	52.3	-90.00	6,127.5	-698.5	822.0	719.8	102.18	8.044	
17,400.0	11,454.0	17,435.0	11,454.0	50.0	52.4	-90.00	6,142.5	-698.6	822.0	719.6	102.39	8.028	
17,480.0	11,454.0	17,515.0	11,454.0	50.6	53.0	-90.00	6,222.5	-699.3	822.0	718.5	103.52	7.940	
17,500.0	11,454.0	17,535.0	11,454.0	50.8	53.1	-90.00	6,242.5	-699.5	822.0	718.2	103.80	7.919	
17,575.0	11,454.0	17,610.0	11,454.0	51.3	53.6	-90.00	6,317.5	-700.2	822.0	717.1	104.86	7.839	
17,600.0	11,454.0	17,635.0	11,454.0	51.5	53.8	-90.00	6,342.5	-700.4	822.0	716.8	105.22	7.812	
17,670.0	11,454.0	17,705.0	11,454.0	52.0	54.3	-90.00	6,412.5	-701.1	822.0	715.8	106.21	7.739	
17,700.0	11,454.0	17,735.0	11,454.0	52.2	54.5	-90.00	6,442.5	-701.3	822.0	715.3	106.63	7.708	
17,765.0	11,454.0	17,800.0	11,454.0	52.7	54.9	-90.00	6,507.5	-701.9	822.0	714.4	107.56	7.642	
17,800.0	11,454.0	17,835.0	11,454.0	52.9	55.2	-90.00	6,542.5	-702.2	822.0	713.9	108.05	7.607	
17,860.0	11,454.0	17,895.0	11,454.0	53.4	55.6	-90.00	6,602.5	-702.8	822.0	713.1	108.91	7.548	
17,900.0	11,454.0	17,935.0	11,454.0	53.7	55.9	-90.00	6,642.5	-703.1	822.0	712.5	109.48	7.508	
17,955.0	11,454.0	17,990.0	11,454.0	54.1	56.3	-90.00	6,697.4	-703.6	822.0	711.7	110.26	7.455	
18,000.0	11,454.0	18,035.0	11,454.0	54.4	56.6	-90.00	6,742.4	-704.1	822.0	711.1	110.90	7.412	
18,050.0	11,454.0	18,085.0	11,454.0	54.7	56.9	-90.00	6,792.4	-704.5	822.0	710.4	111.62	7.364	
18,100.0	11,454.0	18,135.0	11,454.0	55.1	57.3	-90.00	6,842.4	-705.0	822.0	709.7	112.33	7.318	
18,145.0	11,454.0	18,180.0	11,454.0	55.4	57.6	-90.00	6,887.4	-705.4	822.0	709.0	112.97	7.276	
18,200.0	11,454.0	18,235.0	11,454.0	55.8	58.0	-90.00	6,942.4	-705.9	822.0	708.2	113.76	7.225	
18,240.0	11,454.0	18,275.0	11,454.0	56.1	58.2	-90.00	6,982.4	-706.2	822.0	707.6	114.33	7.189	
18,300.0	11,454.0	18,335.0	11,454.0	56.6	58.7	-90.00	7,042.4	-706.8	822.0	706.8	115.19	7.136	
18,335.0	11,454.0	18,370.0	11,454.0	56.8	58.9	-90.00	7,077.4	-707.1	822.0	706.3	115.70	7.105	
18,400.0	11,454.0	18,435.0	11,454.0	57.3	59.4	-90.00	7,142.4	-707.7	822.0	705.4	116.63	7.048	
18,430.0	11,454.0	18,465.0	11,454.0	57.5	59.6	-90.00	7,172.4	-708.0	822.0	704.9	117.06	7.022	
18,500.0	11,454.0	18,535.0	11,454.0	58.0	60.1	-90.00	7,242.4	-708.6	822.0	703.9	118.07	6.962	
18,525.0	11,454.0	18,560.0	11,454.0	58.2	60.3	-90.00	7,267.4	-708.8	822.0	703.6	118.43	6.941	
18,600.0	11,454.0	18,635.0	11,454.0	58.8	60.8	-90.00	7,342.4	-709.5	822.0	702.5	119.51	6.878	
18,620.0	11,454.0	18,655.0	11,454.0	58.9	60.9	-90.00	7,362.4	-709.7	822.0	702.2	119.80	6.861	
18,700.0	11,454.0	18,735.0	11,454.0	59.5	61.5	-90.00	7,442.4	-710.4	822.0	701.0	120.95	6.796	
18,715.0	11,454.0	18,750.0	11,454.0	59.6	61.6	-90.00	7,457.4	-710.5	822.0	700.8	121.17	6.784	
18,800.0	11,454.0	18,835.0	11,454.0	60.2	62.2	-90.00	7,542.4	-711.3	822.0	699.6	122.40	6.716	
18,810.0	11,454.0	18,845.0	11,454.0	60.3	62.3	-90.00	7,552.4	-711.4	822.0	699.4	122.54	6.708	
18,900.0	11,454.0	18,935.0	11,454.0	61.0	62.9	-90.00	7,642.4	-712.2	822.0	698.1	123.84	6.637	
18,905.0	11,454.0	18,940.0	11,454.0	61.0	63.0	-90.00	7,647.4	-712.3	822.0	698.1	123.91	6.633	
19,000.0	11,454.0	19,035.0	11,454.0	61.7	63.6	-90.00	7,742.4	-713.1	822.0	696.7	125.29	6.561	
19,095.0	11,454.0	19,130.0	11,454.0	62.4	64.3	-90.00	7,837.4	-714.0	822.0	695.3	126.67	6.489	
19,100.0	11,454.0	19,135.0	11,454.0	62.4	64.3	-90.00	7,842.4	-714.0	822.0	695.2	126.74	6.486	
19,190.0	11,454.0	19,225.0	11,454.0	63.1	65.0	-90.00	7,932.4	-714.9	822.0	693.9	128.05	6.419	
19,200.0	11,454.0	19,235.0	11,454.0	63.2	65.1	-90.00	7,942.4	-714.9	822.0	693.8	128.19	6.412	
19,285.0	11,454.0	19,320.0	11,454.0	63.8	65.7	-90.00	8,027.4	-715.7	822.0	692.6	129.43	6.351	
19,300.0	11,454.0	19,335.0	11,454.0	63.9	65.8	-90.00	8,042.4	-715.9	822.0	692.3	129.65	6.340	
19,380.0	11,454.0	19,415.0	11,454.0	64.5	66.4	-90.00	8,122.4	-716.6	822.0	691.2	130.81	6.284	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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		
19,400.0	11,454.0	19,435.0	11,454.0	64.6	66.5	-90.00	8,142.4	-716.8	822.0	690.9	131.10	6.270		
19,475.0	11,454.0	19,510.0	11,454.0	65.2	67.0	-90.00	8,217.4	-717.4	822.0	689.8	132.19	6.218		
19,500.0	11,454.0	19,535.0	11,454.0	65.4	67.2	-90.00	8,242.4	-717.7	822.0	689.4	132.56	6.201		
19,570.0	11,454.0	19,605.0	11,454.0	65.9	67.7	-90.00	8,312.4	-718.3	822.0	688.4	133.58	6.154		
19,600.0	11,454.0	19,635.0	11,454.0	66.1	67.9	-90.00	8,342.4	-718.6	822.0	688.0	134.02	6.133		
19,665.0	11,454.0	19,700.0	11,454.0	66.6	68.4	-90.00	8,407.4	-719.2	822.0	687.0	134.97	6.090		
19,700.0	11,454.0	19,735.0	11,454.0	66.9	68.7	-90.00	8,442.4	-719.5	822.0	686.5	135.48	6.067		
19,760.0	11,454.0	19,795.0	11,454.0	67.3	69.1	-90.00	8,502.4	-720.0	822.0	685.6	136.35	6.028		
19,800.0	11,454.0	19,835.0	11,454.0	67.6	69.4	-90.00	8,542.4	-720.4	822.0	685.0	136.94	6.003		
19,855.0	11,454.0	19,890.0	11,454.0	68.0	69.8	-90.00	8,597.4	-720.9	822.0	684.2	137.74	5.968		
19,900.0	11,454.0	19,935.0	11,454.0	68.3	70.1	-90.00	8,642.4	-721.3	822.0	683.6	138.40	5.939		
19,950.0	11,454.0	19,985.0	11,454.0	68.7	70.5	-90.00	8,692.4	-721.8	822.0	682.8	139.13	5.908		
20,000.0	11,454.0	20,035.0	11,454.0	69.1	70.8	-90.00	8,742.4	-722.2	822.0	682.1	139.87	5.877		
20,045.0	11,454.0	20,080.0	11,454.0	69.4	71.1	-90.00	8,787.4	-722.6	822.0	681.5	140.52	5.849		
20,100.0	11,454.0	20,135.0	11,454.0	69.8	71.5	-90.00	8,842.4	-723.1	822.0	680.6	141.33	5.816		
20,140.0	11,454.0	20,175.0	11,454.0	70.1	71.8	-90.00	8,882.4	-723.5	822.0	680.1	141.92	5.792		
20,200.0	11,454.0	20,235.0	11,454.0	70.6	72.3	-90.00	8,942.4	-724.0	822.0	679.2	142.80	5.756		
20,235.0	11,454.0	20,270.0	11,454.0	70.8	72.5	-90.00	8,977.4	-724.3	822.0	678.7	143.31	5.736		
20,300.0	11,454.0	20,335.0	11,454.0	71.3	73.0	-90.00	9,042.4	-724.9	822.0	677.7	144.27	5.698		
20,330.0	11,454.0	20,365.0	11,454.0	71.5	73.2	-90.00	9,072.4	-725.2	822.0	677.3	144.71	5.680		
20,400.0	11,454.0	20,435.0	11,454.0	72.1	73.7	-90.00	9,142.3	-725.8	822.0	676.2	145.74	5.640		
20,425.0	11,454.0	20,460.0	11,454.0	72.2	73.9	-90.00	9,167.3	-726.1	822.0	675.9	146.10	5.626		
20,500.0	11,454.0	20,535.0	11,454.0	72.8	74.4	-90.00	9,242.3	-726.7	822.0	674.8	147.21	5.584		
20,520.0	11,454.0	20,555.0	11,454.0	72.9	74.6	-90.00	9,262.3	-726.9	822.0	674.5	147.50	5.573		
20,600.0	11,454.0	20,635.0	11,454.0	73.5	75.2	-90.00	9,342.3	-727.7	822.0	673.3	148.68	5.529		
20,615.0	11,454.0	20,650.0	11,454.0	73.7	75.3	-90.00	9,357.3	-727.8	822.0	673.1	148.90	5.520		
20,700.0	11,454.0	20,735.0	11,454.0	74.3	75.9	-90.00	9,442.3	-728.6	822.0	671.8	150.15	5.474		
20,710.0	11,454.0	20,745.0	11,454.0	74.4	76.0	-90.00	9,452.3	-728.7	822.0	671.7	150.30	5.469		
20,800.0	11,454.0	20,835.0	11,454.0	75.0	76.6	-90.00	9,542.3	-729.5	822.0	670.4	151.62	5.421		
20,805.0	11,454.0	20,840.0	11,454.0	75.1	76.7	-90.00	9,547.3	-729.5	822.0	670.3	151.70	5.419		
20,900.0	11,454.0	20,935.0	11,454.0	75.8	77.4	-90.00	9,642.3	-730.4	822.0	668.9	153.10	5.369		
20,995.0	11,454.0	21,030.0	11,454.0	76.5	78.1	-90.00	9,737.3	-731.2	822.0	667.5	154.50	5.320		
21,000.0	11,454.0	21,035.0	11,454.0	76.5	78.1	-90.00	9,742.3	-731.3	822.0	667.4	154.57	5.318		
21,090.0	11,454.0	21,125.0	11,454.0	77.2	78.7	-90.00	9,832.3	-732.1	822.0	666.1	155.90	5.272		
21,100.0	11,454.0	21,135.0	11,454.0	77.3	78.8	-90.00	9,842.3	-732.2	822.0	665.9	156.05	5.267		
21,185.0	11,454.0	21,220.0	11,454.0	77.9	79.4	-90.00	9,927.3	-733.0	822.0	664.7	157.31	5.225		
21,200.0	11,454.0	21,235.0	11,454.0	78.0	79.6	-90.00	9,942.3	-733.1	822.0	664.5	157.53	5.218		
21,280.0	11,454.0	21,315.0	11,454.0	78.6	80.1	-90.00	10,022.3	-733.8	822.0	663.3	158.71	5.179		
21,300.0	11,454.0	21,335.0	11,454.0	78.8	80.3	-90.00	10,042.3	-734.0	822.0	663.0	159.01	5.169		
21,375.0	11,454.0	21,410.0	11,454.0	79.3	80.8	-90.00	10,117.3	-734.7	822.0	661.9	160.12	5.134		
21,400.0	11,454.0	21,435.0	11,454.0	79.5	81.0	-90.00	10,142.3	-734.9	822.0	661.5	160.49	5.122		
21,470.0	11,454.0	21,505.0	11,454.0	80.0	81.5	-90.00	10,212.3	-735.5	822.0	660.5	161.52	5.089		
21,500.0	11,454.0	21,535.0	11,454.0	80.3	81.8	-90.00	10,242.3	-735.8	822.0	660.0	161.97	5.075		
21,565.0	11,454.0	21,600.0	11,454.0	80.7	82.2	-90.00	10,307.3	-736.4	822.0	659.0	162.93	5.045		
21,600.0	11,454.0	21,635.0	11,454.0	81.0	82.5	-90.00	10,342.3	-736.7	822.0	658.5	163.45	5.029		
21,660.0	11,454.0	21,695.0	11,454.0	81.4	82.9	-90.00	10,402.3	-737.3	822.0	657.6	164.34	5.002		
21,700.0	11,454.0	21,735.0	11,454.0	81.7	83.2	-90.00	10,442.3	-737.6	822.0	657.0	164.93	4.984		
21,724.9	11,454.0	21,759.9	11,454.0	81.9	83.4	-90.00	10,467.2	-737.9	822.0	656.7	165.30	4.973 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 3000-r.5 MWD+IFR1, 11156-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	1.0	1.0	3.0	3.0	-90.61	-0.3	-29.9	30.0					
95.0	95.0	96.0	96.0	3.0	3.0	-90.61	-0.3	-29.9	30.0	23.9	6.03	4.971		
100.0	100.0	101.0	101.0	3.0	3.0	-90.61	-0.3	-29.9	30.0	23.9	6.03	4.968		
190.0	190.0	191.0	191.0	3.1	3.1	-90.61	-0.3	-29.9	30.0	23.8	6.15	4.868		
200.0	200.0	201.0	201.0	3.1	3.1	-90.61	-0.3	-29.9	30.0	23.8	6.17	4.852		
285.0	285.0	286.0	286.0	3.2	3.2	-90.61	-0.3	-29.9	30.0	23.6	6.31	4.746		
300.0	300.0	301.0	301.0	3.2	3.2	-90.61	-0.3	-29.9	30.0	23.6	6.34	4.724		
380.0	380.0	381.0	381.0	3.3	3.3	-90.61	-0.3	-29.9	30.0	23.5	6.49	4.616		
400.0	400.0	401.0	401.0	3.3	3.3	-90.61	-0.3	-29.9	30.0	23.4	6.53	4.587		
475.0	475.0	476.0	476.0	3.4	3.4	-90.61	-0.3	-29.9	30.0	23.3	6.69	4.480		
500.0	500.0	501.0	501.0	3.4	3.4	-90.61	-0.3	-29.9	30.0	23.2	6.74	4.443		
570.0	570.0	571.0	571.0	3.5	3.5	-90.61	-0.3	-29.9	30.0	23.1	6.90	4.342		
600.0	600.0	601.0	601.0	3.5	3.5	-90.61	-0.3	-29.9	30.0	23.0	6.97	4.297		
665.0	665.0	666.0	666.0	3.6	3.6	-90.61	-0.3	-29.9	30.0	22.8	7.13	4.202		
700.0	700.0	701.0	701.0	3.7	3.7	-90.61	-0.3	-29.9	30.0	22.7	7.22	4.150		
760.0	760.0	761.0	761.0	3.8	3.8	-90.61	-0.3	-29.9	30.0	22.6	7.37	4.063		
800.0	800.0	801.0	801.0	3.8	3.8	-90.61	-0.3	-29.9	30.0	22.5	7.48	4.005		
855.0	855.0	856.0	856.0	3.9	3.9	-90.61	-0.3	-29.9	30.0	22.3	7.63	3.926		
900.0	900.0	901.0	901.0	4.0	4.0	-90.61	-0.3	-29.9	30.0	22.2	7.75	3.862		
950.0	950.0	951.0	951.0	4.1	4.1	-90.61	-0.3	-29.9	30.0	22.1	7.90	3.793		
1,000.0	1,000.0	1,001.0	1,001.0	4.2	4.2	-90.61	-0.3	-29.9	30.0	21.9	8.04	3.724		
1,045.0	1,045.0	1,046.0	1,046.0	4.2	4.2	-90.61	-0.3	-29.9	30.0	21.8	8.18	3.663		
1,100.0	1,100.0	1,101.0	1,101.0	4.3	4.3	-90.61	-0.3	-29.9	30.0	21.6	8.34	3.590		
1,140.0	1,140.0	1,141.0	1,141.0	4.4	4.4	-90.61	-0.3	-29.9	30.0	21.5	8.46	3.539		
1,200.0	1,200.0	1,201.0	1,201.0	4.5	4.5	-90.61	-0.3	-29.9	30.0	21.3	8.65	3.462		
1,235.0	1,235.0	1,236.0	1,236.0	4.6	4.6	-90.61	-0.3	-29.9	30.0	21.2	8.76	3.419		
1,300.0	1,300.0	1,301.0	1,301.0	4.7	4.7	-90.61	-0.3	-29.9	30.0	21.0	8.97	3.339		
1,330.0	1,330.0	1,331.0	1,331.0	4.7	4.7	-90.61	-0.3	-29.9	30.0	20.9	9.07	3.304		
1,400.0	1,400.0	1,401.0	1,401.0	4.9	4.9	-90.61	-0.3	-29.9	30.0	20.7	9.30	3.222		
1,425.0	1,425.0	1,426.0	1,426.0	4.9	4.9	-90.61	-0.3	-29.9	30.0	20.6	9.38	3.194		
1,500.0	1,500.0	1,501.0	1,501.0	5.1	5.1	-90.61	-0.3	-29.9	30.0	20.3	9.63	3.111		
1,520.0	1,520.0	1,521.0	1,521.0	5.1	5.1	-90.61	-0.3	-29.9	30.0	20.3	9.70	3.089		
1,600.0	1,600.0	1,601.0	1,601.0	5.3	5.3	-90.61	-0.3	-29.9	30.0	20.0	9.97	3.005		
1,615.0	1,615.0	1,616.0	1,616.0	5.3	5.3	-90.61	-0.3	-29.9	30.0	19.9	10.02	2.989		
1,700.0	1,700.0	1,701.0	1,701.0	5.5	5.5	-90.61	-0.3	-29.9	30.0	19.6	10.31	2.904		
1,710.0	1,710.0	1,711.0	1,711.0	5.5	5.5	-90.61	-0.3	-29.9	30.0	19.6	10.35	2.894		
1,800.0	1,800.0	1,801.0	1,801.0	5.7	5.7	-90.61	-0.3	-29.9	30.0	19.3	10.66	2.809		
1,805.0	1,805.0	1,806.0	1,806.0	5.7	5.7	-90.61	-0.3	-29.9	30.0	19.3	10.68	2.804		
1,900.0	1,900.0	1,901.0	1,901.0	5.9	5.9	-90.61	-0.3	-29.9	30.0	18.9	11.02	2.718		
1,995.0	1,995.0	1,996.0	1,996.0	6.1	6.1	-90.61	-0.3	-29.9	30.0	18.6	11.36	2.636		
2,000.0	2,000.0	2,001.0	2,001.0	6.1	6.1	-90.61	-0.3	-29.9	30.0	18.6	11.38	2.632 CC, ES, SF		
2,090.0	2,090.0	2,091.0	2,091.0	6.2	6.3	-178.66	-0.3	-29.9	31.4	19.6	11.74	2.672		
2,100.0	2,100.0	2,101.0	2,101.0	6.2	6.3	-178.68	-0.3	-29.9	31.7	19.9	11.78	2.691		
2,185.0	2,184.9	2,185.9	2,185.9	6.3	6.5	-178.83	-0.3	-29.9	35.9	23.8	12.12	2.963		
2,200.0	2,199.8	2,200.8	2,200.8	6.3	6.5	-178.86	-0.3	-29.9	36.9	24.7	12.19	3.030		
2,250.0	2,249.7	2,250.7	2,250.7	6.4	6.6	-178.97	-0.3	-29.9	40.9	28.5	12.33	3.314		
2,280.0	2,279.6	2,280.6	2,280.6	6.4	6.7	-179.03	-0.3	-29.9	43.5	31.1	12.41	3.502		
2,300.0	2,299.5	2,300.5	2,300.5	6.4	6.7	-179.07	-0.3	-29.9	45.2	32.7	12.47	3.626		
2,375.0	2,374.2	2,375.2	2,375.2	6.5	6.9	-179.19	-0.3	-29.9	51.7	39.0	12.74	4.061		
2,400.0	2,399.1	2,400.1	2,400.1	6.5	6.9	-179.22	-0.3	-29.9	53.9	41.1	12.83	4.202		
2,470.0	2,468.8	2,469.8	2,469.8	6.6	7.1	-179.30	-0.3	-29.9	60.0	46.9	13.10	4.581		
2,500.0	2,498.7	2,499.7	2,499.7	6.6	7.2	-179.33	-0.3	-29.9	62.6	49.4	13.22	4.738		

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 3000-r.5 MWD+IFR1, 11156-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
2,565.0	2,563.5	2,564.5	2,564.5	6.7	7.3	-179.38	-0.3	-29.9	68.3	54.8	13.48	5.067	
2,600.0	2,598.4	2,599.4	2,599.4	6.8	7.4	-179.41	-0.3	-29.9	71.4	57.7	13.62	5.238	
2,660.0	2,658.1	2,659.1	2,659.1	7.0	7.5	-179.45	-0.3	-29.9	76.6	62.7	13.87	5.520	
2,700.0	2,698.0	2,699.0	2,699.0	7.0	7.6	-179.48	-0.3	-29.9	80.1	66.0	14.04	5.702	
2,755.0	2,752.8	2,753.8	2,753.8	7.2	7.7	-179.50	-0.3	-29.9	84.9	70.6	14.28	5.943	
2,800.0	2,797.6	2,798.6	2,798.6	7.3	7.8	-179.53	-0.3	-29.9	88.8	74.3	14.47	6.134	
2,850.0	2,847.4	2,848.4	2,848.4	7.4	7.9	-179.55	-0.3	-29.9	93.1	78.4	14.70	6.337	
2,900.0	2,897.2	2,898.2	2,898.2	7.5	8.0	-179.57	-0.3	-29.9	97.5	82.6	14.92	6.534	
2,945.0	2,942.0	2,943.0	2,943.0	7.7	8.1	-179.59	-0.3	-29.9	101.4	86.3	15.13	6.705	
3,000.0	2,996.8	2,997.8	2,997.8	7.8	8.2	-179.60	-0.3	-29.9	106.2	90.8	15.38	6.906	
3,040.0	3,036.7	3,036.3	3,036.3	7.9	8.3	-179.61	-0.3	-30.2	109.9	94.4	15.56	7.065	
3,100.0	3,096.4	3,093.7	3,093.6	8.1	8.4	-179.60	-0.3	-31.5	116.5	100.7	15.83	7.362	
3,135.0	3,131.3	3,127.0	3,127.0	8.2	8.4	-179.58	-0.3	-32.8	120.9	104.9	15.98	7.568	
3,200.0	3,196.1	3,188.6	3,188.5	8.4	8.5	-179.53	-0.2	-36.2	130.1	113.9	16.25	8.010	
3,230.0	3,226.0	3,217.0	3,216.8	8.5	8.5	-179.50	-0.2	-38.2	134.8	118.5	16.35	8.245	
3,300.0	3,295.7	3,284.4	3,283.9	8.7	8.5	-179.42	-0.1	-43.8	146.8	130.2	16.59	8.847	
3,325.0	3,320.6	3,309.0	3,308.4	8.7	8.5	-179.40	0.0	-46.0	151.1	134.4	16.69	9.055	
3,400.0	3,395.3	3,382.8	3,382.0	9.0	8.6	-179.33	0.1	-52.4	164.2	147.1	17.02	9.646	
3,420.0	3,415.2	3,402.5	3,401.6	9.0	8.6	-179.31	0.1	-54.1	167.6	150.5	17.11	9.799	
3,500.0	3,494.9	3,481.3	3,480.1	9.3	8.7	-179.25	0.2	-61.0	181.5	164.0	17.47	10.389	
3,515.0	3,509.9	3,496.1	3,494.8	9.3	8.7	-179.24	0.2	-62.3	184.1	166.6	17.54	10.496	
3,600.0	3,594.5	3,579.8	3,578.2	9.6	8.8	-179.18	0.4	-69.6	198.9	180.9	17.95	11.080	
3,610.0	3,604.5	3,589.6	3,588.0	9.6	8.8	-179.18	0.4	-70.4	200.6	182.6	17.99	11.148	
3,680.8	3,675.0	3,659.3	3,657.5	9.8	8.8	-179.14	0.5	-76.5	212.9	194.6	18.33	11.614	
3,700.0	3,694.2	3,678.3	3,676.3	9.9	8.9	-179.13	0.5	-78.2	216.2	197.8	18.42	11.741	
3,705.0	3,699.1	3,683.2	3,681.2	9.9	8.9	-179.13	0.5	-78.6	217.1	198.6	18.44	11.772	
3,800.0	3,793.8	3,776.9	3,774.5	10.2	8.9	-179.08	0.6	-86.8	233.0	214.1	18.92	12.311	
3,895.0	3,888.6	3,870.7	3,868.0	10.5	9.0	-179.04	0.8	-94.9	248.1	228.7	19.42	12.777	
3,900.0	3,893.6	3,875.6	3,872.9	10.5	9.0	-179.04	0.8	-95.4	248.9	229.4	19.44	12.800	
3,990.0	3,983.4	3,964.6	3,961.5	10.8	9.2	-179.00	0.9	-103.1	262.5	242.5	19.92	13.177	
4,000.0	3,993.4	3,974.5	3,971.4	10.8	9.2	-178.99	0.9	-104.0	263.9	243.9	19.97	13.215	
4,085.0	4,078.2	4,058.6	4,055.2	11.1	9.4	-178.96	1.1	-111.3	276.0	255.6	20.42	13.515	
4,100.0	4,093.2	4,073.4	4,070.0	11.1	9.5	-178.95	1.1	-112.6	278.1	257.6	20.50	13.563	
4,180.0	4,173.1	4,152.7	4,149.0	11.4	9.7	-178.92	1.2	-119.5	288.8	267.9	20.93	13.798	
4,200.0	4,193.1	4,172.6	4,168.7	11.4	9.7	-178.91	1.2	-121.2	291.4	270.4	21.04	13.850	
4,275.0	4,268.1	4,247.0	4,242.8	11.6	9.9	-178.88	1.3	-127.7	300.8	279.4	21.44	14.030	
4,300.0	4,293.0	4,271.8	4,267.6	11.7	10.0	-178.87	1.4	-129.9	303.9	282.3	21.58	14.083	
4,370.0	4,363.0	4,341.3	4,336.8	11.9	10.1	-178.85	1.5	-135.9	312.1	290.1	21.95	14.218	
4,400.0	4,393.0	4,371.1	4,366.5	12.0	10.2	-178.83	1.5	-138.5	315.4	293.3	22.11	14.268	
4,465.0	4,458.0	4,435.7	4,430.9	12.2	10.4	-178.81	1.6	-144.2	322.5	300.1	22.45	14.367	
4,500.0	4,493.0	4,470.5	4,465.6	12.3	10.5	-178.79	1.7	-147.2	326.2	303.5	22.63	14.411	
4,560.0	4,553.0	4,530.2	4,525.0	12.4	10.6	-178.77	1.8	-152.4	332.2	309.2	22.94	14.483	
4,600.0	4,593.0	4,570.0	4,564.7	12.5	10.7	-178.75	1.8	-155.9	336.0	312.9	23.14	14.521	
4,655.0	4,648.0	4,624.8	4,619.3	12.6	10.9	-178.73	1.9	-160.7	341.0	317.7	23.36	14.600	
4,680.8	4,673.7	4,650.5	4,644.8	12.6	11.0	-90.73	1.9	-162.9	343.3	319.9	23.46	14.632	
4,700.0	4,693.0	4,669.6	4,663.9	12.6	11.0	-90.72	2.0	-164.6	345.0	321.5	23.52	14.668	
4,750.0	4,743.0	4,719.4	4,713.5	12.6	11.2	-90.70	2.0	-168.9	349.4	325.7	23.69	14.745	
4,800.0	4,793.0	4,769.3	4,763.2	12.6	11.3	-90.68	2.1	-173.2	353.7	329.8	23.87	14.820	
4,845.0	4,838.0	4,814.1	4,807.8	12.7	11.4	-90.66	2.2	-177.1	357.6	333.6	24.02	14.886	
4,900.0	4,893.0	4,868.9	4,862.4	12.7	11.6	-90.64	2.3	-181.9	362.4	338.2	24.22	14.964	
4,940.0	4,933.0	4,908.7	4,902.1	12.7	11.7	-90.62	2.3	-185.4	365.9	341.5	24.36	15.019	
5,000.0	4,993.0	4,968.5	4,961.6	12.8	11.9	-90.60	2.4	-190.6	371.1	346.6	24.58	15.100	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 3000-r.5 MWD+IFR1, 11156-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	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,035.0	5,028.0	5,003.4	4,996.4	12.8	12.0	-90.59	2.5	-193.6	374.2	349.5	24.70	15.146	
5,100.0	5,093.0	5,068.1	5,060.9	12.8	12.2	-90.57	2.5	-199.3	379.8	354.9	24.94	15.229	
5,130.0	5,123.0	5,098.0	5,090.6	12.8	12.3	-90.56	2.6	-201.9	382.5	357.4	25.05	15.267	
5,200.0	5,193.0	5,167.7	5,160.1	12.9	12.5	-90.53	2.7	-208.0	388.6	363.3	25.30	15.356	
5,225.0	5,218.0	5,193.0	5,185.3	12.9	12.6	-90.52	2.7	-210.2	390.7	365.3	25.39	15.387	
5,300.0	5,293.0	5,273.3	5,265.3	12.9	12.8	-90.50	2.8	-216.5	396.7	371.0	25.70	15.433	
5,320.0	5,313.0	5,294.7	5,286.7	13.0	12.9	-90.49	2.9	-218.0	398.1	372.3	25.79	15.438	
5,400.0	5,393.0	5,380.6	5,372.4	13.0	13.1	-90.47	3.0	-223.3	403.0	376.9	26.10	15.437	
5,415.0	5,408.0	5,396.7	5,388.5	13.0	13.2	-90.47	3.0	-224.1	403.7	377.6	26.16	15.432	
5,500.0	5,493.0	5,488.1	5,479.8	13.1	13.4	-90.46	3.0	-228.0	407.4	380.9	26.48	15.385	
5,510.0	5,503.0	5,498.8	5,490.5	13.1	13.5	-90.46	3.0	-228.4	407.7	381.2	26.52	15.376	
5,600.0	5,593.0	5,595.7	5,587.4	13.1	13.7	-90.45	3.1	-230.8	409.9	383.1	26.82	15.284	
5,605.0	5,598.0	5,601.1	5,592.8	13.1	13.7	-90.45	3.1	-230.9	410.0	383.2	26.84	15.278	
5,700.0	5,693.0	5,702.3	5,694.0	13.2	13.8	-90.45	3.1	-231.5	410.6	383.6	27.01	15.201	
5,795.0	5,788.0	5,797.3	5,789.0	13.2	13.9	-90.45	3.1	-231.5	410.6	383.5	27.12	15.140	
5,800.0	5,793.0	5,802.3	5,794.0	13.2	13.9	-90.45	3.1	-231.5	410.6	383.5	27.13	15.136	
5,890.0	5,883.0	5,892.3	5,884.0	13.3	13.9	-90.45	3.1	-231.5	410.6	383.4	27.23	15.079	
5,900.0	5,893.0	5,902.3	5,894.0	13.3	13.9	-90.45	3.1	-231.5	410.6	383.4	27.24	15.073	
5,985.0	5,978.0	5,987.3	5,979.0	13.4	14.0	-90.45	3.1	-231.5	410.6	383.3	27.34	15.018	
6,000.0	5,993.0	6,002.3	5,994.0	13.4	14.0	-90.45	3.1	-231.5	410.6	383.3	27.36	15.009	
6,080.0	6,073.0	6,082.3	6,074.0	13.4	14.0	-90.45	3.1	-231.5	410.6	383.2	27.45	14.958	
6,100.0	6,093.0	6,102.3	6,094.0	13.4	14.0	-90.45	3.1	-231.5	410.6	383.1	27.47	14.946	
6,175.0	6,168.0	6,177.3	6,169.0	13.5	14.1	-90.45	3.1	-231.5	410.6	383.1	27.56	14.898	
6,200.0	6,193.0	6,202.3	6,194.0	13.5	14.1	-90.45	3.1	-231.5	410.6	383.0	27.59	14.882	
6,270.0	6,263.0	6,272.3	6,264.0	13.5	14.1	-90.45	3.1	-231.5	410.6	382.9	27.67	14.838	
6,300.0	6,293.0	6,302.3	6,294.0	13.6	14.2	-90.45	3.1	-231.5	410.6	382.9	27.71	14.820	
6,365.0	6,358.0	6,367.3	6,359.0	13.6	14.2	-90.45	3.1	-231.5	410.6	382.8	27.78	14.779	
6,400.0	6,393.0	6,402.3	6,394.0	13.6	14.2	-90.45	3.1	-231.5	410.6	382.8	27.82	14.757	
6,460.0	6,453.0	6,462.3	6,454.0	13.7	14.2	-90.45	3.1	-231.5	410.6	382.7	27.90	14.720	
6,500.0	6,493.0	6,502.3	6,494.0	13.7	14.3	-90.45	3.1	-231.5	410.6	382.7	27.94	14.695	
6,555.0	6,548.0	6,557.3	6,549.0	13.7	14.3	-90.45	3.1	-231.5	410.6	382.6	28.01	14.661	
6,600.0	6,593.0	6,602.3	6,594.0	13.7	14.3	-90.45	3.1	-231.5	410.6	382.6	28.06	14.633	
6,650.0	6,643.0	6,652.3	6,644.0	13.8	14.4	-90.45	3.1	-231.5	410.6	382.5	28.12	14.602	
6,700.0	6,693.0	6,702.3	6,694.0	13.8	14.4	-90.45	3.1	-231.5	410.6	382.4	28.18	14.571	
6,745.0	6,738.0	6,747.3	6,739.0	13.8	14.4	-90.45	3.1	-231.5	410.6	382.4	28.23	14.543	
6,800.0	6,793.0	6,802.3	6,794.0	13.9	14.4	-90.45	3.1	-231.5	410.6	382.3	28.30	14.510	
6,840.0	6,833.0	6,842.3	6,834.0	13.9	14.5	-90.45	3.1	-231.5	410.6	382.3	28.35	14.485	
6,900.0	6,893.0	6,902.3	6,894.0	13.9	14.5	-90.45	3.1	-231.5	410.6	382.2	28.42	14.449	
6,935.0	6,928.0	6,937.3	6,929.0	14.0	14.5	-90.45	3.1	-231.5	410.6	382.2	28.46	14.427	
7,000.0	6,993.0	7,002.3	6,994.0	14.0	14.5	-90.45	3.1	-231.5	410.6	382.1	28.54	14.388	
7,030.0	7,023.0	7,032.3	7,024.0	14.0	14.6	-90.45	3.1	-231.5	410.6	382.0	28.57	14.370	
7,100.0	7,093.0	7,102.3	7,094.0	14.1	14.6	-90.45	3.1	-231.5	410.6	382.0	28.66	14.327	
7,125.0	7,118.0	7,127.3	7,119.0	14.1	14.6	-90.45	3.1	-231.5	410.6	381.9	28.69	14.312	
7,200.0	7,193.0	7,202.3	7,194.0	14.1	14.7	-90.45	3.1	-231.5	410.6	381.8	28.78	14.267	
7,220.0	7,213.0	7,222.3	7,214.0	14.1	14.7	-90.45	3.1	-231.5	410.6	381.8	28.80	14.255	
7,300.0	7,293.0	7,302.3	7,294.0	14.2	14.7	-90.45	3.1	-231.5	410.6	381.7	28.90	14.207	
7,315.0	7,308.0	7,317.3	7,309.0	14.2	14.7	-90.45	3.1	-231.5	410.6	381.7	28.92	14.198	
7,400.0	7,393.0	7,402.3	7,394.0	14.3	14.8	-90.45	3.1	-231.5	410.6	381.6	29.02	14.148	
7,410.0	7,403.0	7,412.3	7,404.0	14.3	14.8	-90.45	3.1	-231.5	410.6	381.6	29.04	14.142	
7,500.0	7,493.0	7,502.3	7,494.0	14.3	14.8	-90.45	3.1	-231.5	410.6	381.5	29.15	14.088	
7,505.0	7,498.0	7,507.3	7,499.0	14.3	14.8	-90.45	3.1	-231.5	410.6	381.5	29.15	14.085	
7,600.0	7,593.0	7,602.3	7,594.0	14.4	14.9	-90.45	3.1	-231.5	410.6	381.3	29.27	14.029	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 3000-r.5 MWD+IFR1, 11156-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	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
7,695.0	7,688.0	7,697.3	7,689.0	14.4	14.9	-90.45	3.1	-231.5	410.6	381.2	29.38	13.974	
7,700.0	7,693.0	7,702.3	7,694.0	14.4	14.9	-90.45	3.1	-231.5	410.6	381.2	29.39	13.971	
7,790.0	7,783.0	7,792.3	7,784.0	14.5	15.0	-90.45	3.1	-231.5	410.6	381.1	29.50	13.918	
7,800.0	7,793.0	7,802.3	7,794.0	14.5	15.0	-90.45	3.1	-231.5	410.6	381.1	29.51	13.912	
7,885.0	7,878.0	7,887.3	7,879.0	14.6	15.1	-90.45	3.1	-231.5	410.6	381.0	29.62	13.863	
7,900.0	7,893.0	7,902.3	7,894.0	14.6	15.1	-90.45	3.1	-231.5	410.6	381.0	29.64	13.854	
7,980.0	7,973.0	7,982.3	7,974.0	14.6	15.1	-90.45	3.1	-231.5	410.6	380.9	29.74	13.808	
8,000.0	7,993.0	8,002.3	7,994.0	14.6	15.1	-90.45	3.1	-231.5	410.6	380.9	29.76	13.797	
8,075.0	8,068.0	8,077.3	8,069.0	14.7	15.2	-90.45	3.1	-231.5	410.6	380.8	29.86	13.753	
8,100.0	8,093.0	8,102.3	8,094.0	14.7	15.2	-90.45	3.1	-231.5	410.6	380.7	29.89	13.739	
8,170.0	8,163.0	8,172.3	8,164.0	14.8	15.2	-90.45	3.1	-231.5	410.6	380.6	29.97	13.699	
8,200.0	8,193.0	8,202.3	8,194.0	14.8	15.2	-90.45	3.1	-231.5	410.6	380.6	30.01	13.682	
8,265.0	8,258.0	8,267.3	8,259.0	14.8	15.3	-90.45	3.1	-231.5	410.6	380.5	30.09	13.645	
8,300.0	8,293.0	8,302.3	8,294.0	14.8	15.3	-90.45	3.1	-231.5	410.6	380.5	30.14	13.625	
8,360.0	8,353.0	8,362.3	8,354.0	14.9	15.3	-90.45	3.1	-231.5	410.6	380.4	30.21	13.591	
8,400.0	8,393.0	8,402.3	8,394.0	14.9	15.4	-90.45	3.1	-231.5	410.6	380.4	30.26	13.569	
8,455.0	8,448.0	8,457.3	8,449.0	14.9	15.4	-90.45	3.1	-231.5	410.6	380.3	30.33	13.538	
8,500.0	8,493.0	8,502.3	8,494.0	15.0	15.4	-90.45	3.1	-231.5	410.6	380.2	30.39	13.512	
8,550.0	8,543.0	8,552.3	8,544.0	15.0	15.5	-90.45	3.1	-231.5	410.6	380.2	30.45	13.484	
8,600.0	8,593.0	8,602.3	8,594.0	15.0	15.5	-90.45	3.1	-231.5	410.6	380.1	30.51	13.457	
8,645.0	8,638.0	8,647.3	8,639.0	15.1	15.5	-90.45	3.1	-231.5	410.6	380.0	30.57	13.431	
8,700.0	8,693.0	8,702.3	8,694.0	15.1	15.5	-90.45	3.1	-231.5	410.6	380.0	30.64	13.401	
8,740.0	8,733.0	8,742.3	8,734.0	15.1	15.6	-90.45	3.1	-231.5	410.6	379.9	30.69	13.379	
8,800.0	8,793.0	8,802.3	8,794.0	15.2	15.6	-90.45	3.1	-231.5	410.6	379.8	30.77	13.346	
8,835.0	8,828.0	8,837.3	8,829.0	15.2	15.6	-90.45	3.1	-231.5	410.6	379.8	30.81	13.326	
8,900.0	8,893.0	8,902.3	8,894.0	15.2	15.7	-90.45	3.1	-231.5	410.6	379.7	30.89	13.291	
8,930.0	8,923.0	8,932.3	8,924.0	15.3	15.7	-90.45	3.1	-231.5	410.6	379.7	30.93	13.274	
9,000.0	8,993.0	9,002.3	8,994.0	15.3	15.7	-90.45	3.1	-231.5	410.6	379.6	31.02	13.236	
9,025.0	9,018.0	9,027.3	9,019.0	15.3	15.7	-90.45	3.1	-231.5	410.6	379.6	31.05	13.222	
9,100.0	9,093.0	9,102.3	9,094.0	15.4	15.8	-90.45	3.1	-231.5	410.6	379.5	31.15	13.182	
9,120.0	9,113.0	9,122.3	9,114.0	15.4	15.8	-90.45	3.1	-231.5	410.6	379.4	31.18	13.171	
9,200.0	9,193.0	9,202.3	9,194.0	15.4	15.8	-90.45	3.1	-231.5	410.6	379.3	31.28	13.128	
9,215.0	9,208.0	9,217.3	9,209.0	15.5	15.9	-90.45	3.1	-231.5	410.6	379.3	31.30	13.120	
9,300.0	9,293.0	9,302.3	9,294.0	15.5	15.9	-90.45	3.1	-231.5	410.6	379.2	31.41	13.074	
9,310.0	9,303.0	9,312.3	9,304.0	15.5	15.9	-90.45	3.1	-231.5	410.6	379.2	31.42	13.068	
9,400.0	9,393.0	9,402.3	9,394.0	15.6	16.0	-90.45	3.1	-231.5	410.6	379.1	31.54	13.020	
9,405.0	9,398.0	9,407.3	9,399.0	15.6	16.0	-90.45	3.1	-231.5	410.6	379.1	31.54	13.018	
9,500.0	9,493.0	9,502.3	9,494.0	15.6	16.0	-90.45	3.1	-231.5	410.6	378.9	31.67	12.967	
9,595.0	9,588.0	9,597.3	9,589.0	15.7	16.1	-90.45	3.1	-231.5	410.6	378.8	31.79	12.917	
9,600.0	9,593.0	9,602.3	9,594.0	15.7	16.1	-90.45	3.1	-231.5	410.6	378.8	31.79	12.914	
9,690.0	9,683.0	9,692.3	9,684.0	15.8	16.1	-90.45	3.1	-231.5	410.6	378.7	31.91	12.867	
9,700.0	9,693.0	9,702.3	9,694.0	15.8	16.2	-90.45	3.1	-231.5	410.6	378.7	31.92	12.862	
9,785.0	9,778.0	9,787.3	9,779.0	15.8	16.2	-90.45	3.1	-231.5	410.6	378.6	32.04	12.818	
9,800.0	9,793.0	9,802.3	9,794.0	15.8	16.2	-90.45	3.1	-231.5	410.6	378.6	32.05	12.810	
9,880.0	9,873.0	9,882.3	9,874.0	15.9	16.3	-90.45	3.1	-231.5	410.6	378.5	32.16	12.768	
9,900.0	9,893.0	9,902.3	9,894.0	15.9	16.3	-90.45	3.1	-231.5	410.6	378.4	32.19	12.758	
9,975.0	9,968.0	9,977.3	9,969.0	16.0	16.3	-90.45	3.1	-231.5	410.6	378.3	32.28	12.719	
10,000.0	9,993.0	10,002.3	9,994.0	16.0	16.3	-90.45	3.1	-231.5	410.6	378.3	32.32	12.706	
10,070.0	10,063.0	10,072.3	10,064.0	16.0	16.4	-90.45	3.1	-231.5	410.6	378.2	32.41	12.670	
10,100.0	10,093.0	10,102.3	10,094.0	16.1	16.4	-90.45	3.1	-231.5	410.6	378.2	32.45	12.655	
10,165.0	10,158.0	10,167.3	10,159.0	16.1	16.4	-90.45	3.1	-231.5	410.6	378.1	32.53	12.622	
10,200.0	10,193.0	10,202.3	10,194.0	16.1	16.5	-90.45	3.1	-231.5	410.6	378.0	32.58	12.604	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 3000-r.5 MWD+IFR1, 11156-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	10,253.0	10,262.3	10,254.0	16.2	16.5	-90.45	3.1	-231.5	410.6	378.0	32.66	12.573	
10,300.0	10,293.0	10,302.3	10,294.0	16.2	16.5	-90.45	3.1	-231.5	410.6	377.9	32.71	12.553	
10,355.0	10,348.0	10,357.3	10,349.0	16.2	16.6	-90.45	3.1	-231.5	410.6	377.8	32.78	12.525	
10,400.0	10,393.0	10,402.3	10,394.0	16.3	16.6	-90.45	3.1	-231.5	410.6	377.8	32.84	12.503	
10,450.0	10,443.0	10,452.3	10,444.0	16.3	16.6	-90.45	3.1	-231.5	410.6	377.7	32.91	12.478	
10,500.0	10,493.0	10,502.3	10,494.0	16.3	16.7	-90.45	3.1	-231.5	410.6	377.6	32.97	12.453	
10,545.0	10,538.0	10,547.3	10,539.0	16.4	16.7	-90.45	3.1	-231.5	410.6	377.6	33.03	12.430	
10,600.0	10,593.0	10,602.3	10,594.0	16.4	16.7	-90.45	3.1	-231.5	410.6	377.5	33.11	12.403	
10,640.0	10,633.0	10,642.3	10,634.0	16.4	16.7	-90.45	3.1	-231.5	410.6	377.5	33.16	12.383	
10,700.0	10,693.0	10,702.3	10,694.0	16.5	16.8	-90.45	3.1	-231.5	410.6	377.4	33.24	12.353	
10,735.0	10,728.0	10,737.3	10,729.0	16.5	16.8	-90.45	3.1	-231.5	410.6	377.3	33.29	12.336	
10,800.0	10,793.0	10,802.3	10,794.0	16.5	16.8	-90.45	3.1	-231.5	410.6	377.2	33.37	12.304	
10,830.0	10,823.0	10,832.3	10,824.0	16.6	16.9	-90.45	3.1	-231.5	410.6	377.2	33.41	12.289	
10,900.0	10,893.0	10,902.3	10,894.0	16.6	16.9	-90.45	3.1	-231.5	410.6	377.1	33.51	12.255	
10,925.0	10,918.0	10,927.3	10,919.0	16.6	16.9	-90.45	3.1	-231.5	410.6	377.1	33.53	12.245	
10,983.6	10,976.5	10,985.9	10,977.5	16.6	17.0	-90.45	3.1	-231.5	410.6	377.0	33.60	12.221	
11,000.0	10,993.0	11,002.3	10,994.0	16.6	17.0	-89.97	3.1	-231.5	410.6	377.0	33.61	12.217	
11,006.1	10,999.1	11,008.4	11,000.1	16.6	17.0	-90.00	3.1	-231.5	410.6	377.0	33.61	12.216	
11,020.0	11,012.9	11,022.3	11,013.9	16.6	17.0	-90.12	3.1	-231.5	410.6	377.0	33.62	12.212	
11,025.0	11,017.9	11,027.2	11,018.9	16.6	17.0	-90.18	3.1	-231.5	410.6	377.0	33.63	12.211	
11,050.0	11,042.8	11,052.1	11,043.8	16.6	17.0	-90.56	3.1	-231.5	410.6	377.0	33.65	12.205	
11,075.0	11,067.4	11,076.7	11,068.4	16.6	17.0	-91.12	3.1	-231.5	410.7	377.0	33.66	12.200	
11,100.0	11,091.8	11,101.1	11,092.8	16.7	17.0	-91.84	3.1	-231.5	410.8	377.2	33.68	12.199	
11,115.0	11,106.3	11,115.6	11,107.3	16.7	17.0	-92.34	3.1	-231.5	411.0	377.3	33.68	12.202	
11,125.0	11,115.9	11,125.2	11,116.9	16.7	17.0	-92.70	3.1	-231.5	411.1	377.4	33.68	12.206	
11,150.0	11,139.6	11,148.9	11,140.6	16.7	17.1	-93.69	3.1	-231.5	411.6	377.9	33.68	12.220	
11,175.0	11,162.9	11,173.6	11,165.3	16.7	17.1	-94.82	3.4	-231.5	412.3	378.6	33.67	12.243	
11,200.0	11,185.6	11,199.2	11,190.8	16.7	17.1	-95.97	5.1	-231.5	413.2	379.5	33.66	12.274	
11,210.0	11,194.6	11,209.6	11,201.1	16.7	17.1	-96.43	6.1	-231.5	413.6	379.9	33.66	12.288	
11,225.0	11,207.8	11,225.3	11,216.7	16.7	17.1	-97.11	8.1	-231.6	414.2	380.6	33.65	12.310	
11,250.0	11,229.4	11,252.0	11,243.1	16.7	17.1	-98.25	12.7	-231.6	415.5	381.9	33.64	12.350	
11,275.0	11,250.2	11,279.4	11,269.7	16.7	17.1	-99.37	19.0	-231.7	416.9	383.3	33.64	12.392	
11,300.0	11,270.3	11,307.4	11,296.5	16.7	17.1	-100.48	26.9	-231.7	418.5	384.8	33.65	12.435	
11,305.0	11,274.2	11,313.0	11,301.9	16.7	17.1	-100.70	28.7	-231.7	418.8	385.2	33.66	12.444	
11,325.0	11,289.6	11,336.0	11,323.4	16.7	17.1	-101.57	36.7	-231.8	420.2	386.5	33.68	12.477	
11,350.0	11,308.0	11,365.4	11,350.4	16.7	17.1	-102.64	48.3	-231.9	422.0	388.3	33.72	12.514	
11,375.0	11,325.6	11,395.4	11,377.2	16.7	17.1	-103.68	62.0	-232.0	423.9	390.1	33.79	12.545	
11,400.0	11,342.1	11,426.3	11,403.7	16.7	17.1	-104.69	77.6	-232.2	425.9	392.0	33.89	12.567	
11,425.0	11,357.7	11,457.9	11,429.8	16.7	17.1	-105.67	95.5	-232.3	427.9	393.9	34.01	12.579	
11,450.0	11,372.2	11,490.3	11,455.3	16.7	17.1	-106.61	115.5	-232.5	429.9	395.7	34.17	12.579	
11,475.0	11,385.7	11,523.5	11,479.9	16.8	17.1	-107.50	137.8	-232.7	431.9	397.5	34.37	12.567	
11,495.0	11,395.6	11,550.6	11,498.8	16.8	17.1	-108.17	157.2	-232.9	433.5	398.9	34.54	12.548	
11,500.0	11,398.0	11,557.5	11,503.4	16.8	17.1	-108.33	162.3	-233.0	433.9	399.3	34.59	12.542	
11,525.0	11,409.2	11,592.2	11,525.6	16.8	17.1	-109.11	189.0	-233.2	435.7	400.9	34.84	12.505	
11,550.0	11,419.1	11,627.7	11,546.2	16.8	17.2	-109.83	217.9	-233.5	437.5	402.4	35.12	12.459	
11,575.0	11,427.9	11,663.9	11,565.0	16.8	17.2	-110.47	248.8	-233.7	439.1	403.7	35.40	12.404	
11,590.0	11,432.6	11,685.9	11,575.2	16.9	17.2	-110.82	268.3	-233.9	440.0	404.4	35.58	12.368	
11,600.0	11,435.4	11,700.7	11,581.6	16.9	17.2	-111.03	281.7	-234.0	440.6	404.9	35.69	12.343	
11,625.0	11,441.7	11,738.1	11,595.8	16.9	17.2	-111.51	316.3	-234.3	441.8	405.8	35.98	12.281	
11,650.0	11,446.7	11,776.1	11,607.5	16.9	17.3	-111.90	352.3	-234.7	442.8	406.6	36.24	12.219	
11,675.0	11,450.4	11,814.4	11,616.3	17.0	17.3	-112.19	389.6	-235.0	443.6	407.1	36.48	12.160	
11,685.0	11,451.5	11,829.8	11,619.0	17.0	17.3	-112.28	404.8	-235.2	443.9	407.3	36.57	12.138	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK_3000-r.5 MWD+IFR1_11156-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
11,700.0	11,452.8	11,853.0	11,622.1	17.0	17.4	-112.39	427.8	-235.4	444.1	407.5	36.69	12.106	
11,725.0	11,453.9	11,891.7	11,624.8	17.0	17.4	-112.48	466.4	-235.7	444.4	407.5	36.85	12.060	
11,733.6	11,454.0	11,905.0	11,625.0	17.0	17.5	-112.49	479.7	-235.8	444.4	407.5	36.89	12.046	
11,780.0	11,454.0	11,951.8	11,625.0	17.1	17.5	-112.49	526.4	-236.3	444.4	407.4	37.05	11.995	
11,800.0	11,454.0	11,971.8	11,625.0	17.2	17.6	-112.49	546.4	-236.4	444.4	407.3	37.12	11.974	
11,875.0	11,454.0	12,046.8	11,625.0	17.3	17.7	-112.49	621.4	-237.1	444.4	407.0	37.41	11.880	
11,900.0	11,454.0	12,071.8	11,625.0	17.4	17.8	-112.49	646.4	-237.3	444.4	406.9	37.51	11.848	
11,970.0	11,454.0	12,141.8	11,625.0	17.6	17.9	-112.49	716.4	-238.0	444.4	406.6	37.82	11.750	
12,000.0	11,454.0	12,171.8	11,625.0	17.6	18.0	-112.49	746.4	-238.3	444.4	406.5	37.96	11.708	
12,065.0	11,454.0	12,236.8	11,625.0	17.8	18.2	-112.49	811.4	-238.8	444.4	406.1	38.29	11.608	
12,100.0	11,454.0	12,271.8	11,625.0	17.9	18.3	-112.49	846.4	-239.2	444.4	405.9	38.47	11.553	
12,160.0	11,454.0	12,331.8	11,625.0	18.1	18.5	-112.49	906.4	-239.7	444.4	405.6	38.80	11.454	
12,200.0	11,454.0	12,371.8	11,625.0	18.2	18.6	-112.49	946.4	-240.1	444.4	405.4	39.03	11.387	
12,255.0	11,454.0	12,426.8	11,625.0	18.4	18.8	-112.49	1,001.4	-240.6	444.4	405.1	39.36	11.291	
12,300.0	11,454.0	12,471.8	11,625.0	18.5	18.9	-112.49	1,046.4	-241.0	444.4	404.8	39.64	11.211	
12,350.0	11,454.0	12,521.8	11,625.0	18.7	19.1	-112.49	1,096.4	-241.4	444.4	404.4	39.97	11.120	
12,400.0	11,454.0	12,571.8	11,625.0	18.9	19.3	-112.49	1,146.4	-241.9	444.4	404.1	40.30	11.027	
12,445.0	11,454.0	12,616.8	11,625.0	19.0	19.4	-112.49	1,191.4	-242.3	444.4	403.8	40.62	10.942	
12,500.0	11,454.0	12,671.8	11,625.0	19.3	19.6	-112.49	1,246.4	-242.8	444.4	403.4	41.01	10.837	
12,540.0	11,454.0	12,711.8	11,625.0	19.4	19.8	-112.49	1,286.4	-243.2	444.4	403.1	41.31	10.759	
12,600.0	11,454.0	12,771.8	11,625.0	19.7	20.0	-112.49	1,346.4	-243.7	444.4	402.7	41.76	10.642	
12,635.0	11,454.0	12,806.8	11,625.0	19.8	20.2	-112.49	1,381.4	-244.0	444.4	402.4	42.04	10.572	
12,700.0	11,454.0	12,871.8	11,625.0	20.1	20.4	-112.49	1,446.4	-244.6	444.4	401.9	42.56	10.443	
12,730.0	11,454.0	12,901.8	11,625.0	20.2	20.6	-112.49	1,476.4	-244.9	444.4	401.6	42.80	10.383	
12,800.0	11,454.0	12,971.8	11,625.0	20.5	20.9	-112.49	1,546.4	-245.5	444.4	401.0	43.39	10.242	
12,825.0	11,454.0	12,996.8	11,625.0	20.6	21.0	-112.49	1,571.4	-245.7	444.4	400.8	43.61	10.192	
12,900.0	11,454.0	13,071.8	11,625.0	21.0	21.3	-112.49	1,646.4	-246.4	444.4	400.2	44.26	10.040	
12,920.0	11,454.0	13,091.8	11,625.0	21.1	21.4	-112.49	1,666.4	-246.6	444.4	400.0	44.44	10.000	
13,000.0	11,454.0	13,171.8	11,625.0	21.5	21.8	-112.49	1,746.4	-247.3	444.4	399.2	45.17	9.839	
13,015.0	11,454.0	13,186.8	11,625.0	21.5	21.9	-112.49	1,761.4	-247.5	444.4	399.1	45.31	9.808	
13,100.0	11,454.0	13,271.8	11,625.0	21.9	22.3	-112.49	1,846.4	-248.2	444.4	398.3	46.11	9.638	
13,110.0	11,454.0	13,281.8	11,625.0	22.0	22.3	-112.49	1,856.4	-248.3	444.4	398.2	46.21	9.618	
13,200.0	11,454.0	13,371.8	11,625.0	22.5	22.8	-112.49	1,946.4	-249.1	444.4	397.3	47.08	9.439	
13,205.0	11,454.0	13,376.8	11,625.0	22.5	22.8	-112.49	1,951.4	-249.2	444.4	397.3	47.13	9.429	
13,300.0	11,454.0	13,471.8	11,625.0	23.0	23.3	-112.49	2,046.4	-250.1	444.4	396.3	48.08	9.242	
13,395.0	11,454.0	13,566.8	11,625.0	23.5	23.8	-112.49	2,141.4	-250.9	444.4	395.4	49.06	9.058	
13,400.0	11,454.0	13,571.8	11,625.0	23.5	23.8	-112.49	2,146.4	-251.0	444.4	395.3	49.11	9.049	
13,490.0	11,454.0	13,661.8	11,625.0	24.0	24.3	-112.49	2,236.4	-251.8	444.4	394.4	50.06	8.877	
13,500.0	11,454.0	13,671.8	11,625.0	24.1	24.4	-112.49	2,246.4	-251.9	444.4	394.2	50.17	8.859	
13,585.0	11,454.0	13,756.8	11,625.0	24.5	24.8	-112.49	2,331.4	-252.6	444.4	393.3	51.08	8.700	
13,600.0	11,454.0	13,771.8	11,625.0	24.6	24.9	-112.49	2,346.4	-252.8	444.4	393.2	51.25	8.672	
13,680.0	11,454.0	13,851.8	11,625.0	25.1	25.4	-112.49	2,426.4	-253.5	444.4	392.3	52.13	8.526	
13,700.0	11,454.0	13,871.8	11,625.0	25.2	25.5	-112.49	2,446.4	-253.7	444.4	392.1	52.35	8.490	
13,775.0	11,454.0	13,946.8	11,625.0	25.6	25.9	-112.49	2,521.4	-254.4	444.4	391.2	53.19	8.355	
13,800.0	11,454.0	13,971.8	11,625.0	25.8	26.0	-112.49	2,546.4	-254.6	444.4	390.9	53.47	8.311	
13,870.0	11,454.0	14,041.8	11,625.0	26.2	26.4	-112.49	2,616.4	-255.2	444.4	390.1	54.27	8.189	
13,900.0	11,454.0	14,071.8	11,625.0	26.4	26.6	-112.49	2,646.3	-255.5	444.4	389.8	54.61	8.137	
13,965.0	11,454.0	14,136.8	11,625.0	26.7	27.0	-112.49	2,711.3	-256.1	444.4	389.0	55.37	8.026	
14,000.0	11,454.0	14,171.8	11,625.0	27.0	27.2	-112.49	2,746.3	-256.4	444.4	388.6	55.78	7.968	
14,060.0	11,454.0	14,231.8	11,625.0	27.3	27.6	-112.49	2,806.3	-256.9	444.4	387.9	56.48	7.868	
14,100.0	11,454.0	14,271.8	11,625.0	27.6	27.8	-112.49	2,846.3	-257.3	444.4	387.5	56.96	7.803	
14,155.0	11,454.0	14,326.8	11,625.0	27.9	28.1	-112.49	2,901.3	-257.8	444.4	386.8	57.61	7.714	

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

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Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK_3000-r.5 MWD+IFR1_11156-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
14,200.0	11,454.0	14,371.8	11,625.0	28.2	28.4	-112.49	2,946.3	-258.2	444.4	386.3	58.15	7.642	
14,250.0	11,454.0	14,421.8	11,625.0	28.5	28.7	-112.49	2,996.3	-258.7	444.4	385.7	58.76	7.564	
14,300.0	11,454.0	14,471.8	11,625.0	28.8	29.0	-112.49	3,046.3	-259.1	444.4	385.1	59.36	7.486	
14,345.0	11,454.0	14,516.8	11,625.0	29.1	29.3	-112.49	3,091.3	-259.5	444.4	384.5	59.91	7.418	
14,400.0	11,454.0	14,571.8	11,625.0	29.4	29.7	-112.49	3,146.3	-260.0	444.4	383.8	60.59	7.335	
14,440.0	11,454.0	14,611.8	11,625.0	29.7	29.9	-112.49	3,186.3	-260.4	444.4	383.3	61.08	7.275	
14,500.0	11,454.0	14,671.8	11,625.0	30.1	30.3	-112.49	3,246.3	-260.9	444.4	382.6	61.83	7.188	
14,535.0	11,454.0	14,706.8	11,625.0	30.3	30.5	-112.49	3,281.3	-261.3	444.4	382.1	62.27	7.137	
14,600.0	11,454.0	14,771.8	11,625.0	30.7	30.9	-112.49	3,346.3	-261.8	444.4	381.3	63.08	7.045	
14,630.0	11,454.0	14,801.8	11,625.0	30.9	31.1	-112.49	3,376.3	-262.1	444.4	381.0	63.46	7.003	
14,700.0	11,454.0	14,871.8	11,625.0	31.3	31.6	-112.49	3,446.3	-262.8	444.4	380.1	64.35	6.906	
14,725.0	11,454.0	14,896.8	11,625.0	31.5	31.7	-112.49	3,471.3	-263.0	444.4	379.7	64.67	6.872	
14,800.0	11,454.0	14,971.8	11,625.0	32.0	32.2	-112.49	3,546.3	-263.7	444.4	378.8	65.63	6.772	
14,820.0	11,454.0	14,991.8	11,625.0	32.1	32.3	-112.49	3,566.3	-263.8	444.4	378.5	65.88	6.746	
14,900.0	11,454.0	15,071.8	11,625.0	32.6	32.9	-112.49	3,646.3	-264.6	444.4	377.5	66.91	6.642	
14,915.0	11,454.0	15,086.8	11,625.0	32.7	33.0	-112.49	3,661.3	-264.7	444.4	377.3	67.11	6.622	
14,925.4	11,454.0	15,097.1	11,625.0	32.8	33.0	-112.49	3,671.7	-264.8	444.4	377.2	67.24	6.609	
15,000.0	11,454.0	15,171.8	11,625.0	33.3	33.5	-112.49	3,746.3	-265.5	444.4	376.2	68.21	6.515	
15,010.0	11,454.0	15,181.8	11,625.0	33.4	33.6	-112.49	3,756.3	-265.6	444.4	376.1	68.34	6.503	
15,100.0	11,454.0	15,271.8	11,625.0	34.0	34.2	-112.49	3,846.3	-266.4	444.4	374.9	69.52	6.393	
15,105.0	11,454.0	15,276.8	11,625.0	34.0	34.2	-112.49	3,851.3	-266.4	444.4	374.8	69.58	6.387	
15,200.0	11,454.0	15,371.8	11,625.0	34.6	34.8	-112.49	3,946.3	-267.3	444.4	373.6	70.83	6.274	
15,295.0	11,454.0	15,466.8	11,625.0	35.3	35.5	-112.49	4,041.3	-268.2	444.4	372.3	72.09	6.164	
15,300.0	11,454.0	15,471.8	11,625.0	35.3	35.5	-112.49	4,046.3	-268.2	444.4	372.3	72.16	6.159	
15,390.0	11,454.0	15,561.8	11,625.0	35.9	36.1	-112.49	4,136.3	-269.0	444.4	371.1	73.36	6.058	
15,400.0	11,454.0	15,571.8	11,625.0	36.0	36.2	-112.49	4,146.3	-269.1	444.4	370.9	73.49	6.047	
15,485.0	11,454.0	15,656.8	11,625.0	36.6	36.8	-112.49	4,231.3	-269.9	444.4	369.8	74.63	5.955	
15,500.0	11,454.0	15,671.8	11,625.0	36.7	36.9	-112.49	4,246.3	-270.0	444.4	369.6	74.83	5.939	
15,580.0	11,454.0	15,751.8	11,625.0	37.2	37.4	-112.49	4,326.3	-270.7	444.4	368.5	75.91	5.854	
15,600.0	11,454.0	15,771.8	11,625.0	37.3	37.5	-112.49	4,346.3	-270.9	444.4	368.2	76.18	5.833	
15,675.0	11,454.0	15,846.8	11,625.0	37.9	38.1	-112.49	4,421.3	-271.6	444.4	367.2	77.20	5.757	
15,700.0	11,454.0	15,871.8	11,625.0	38.0	38.2	-112.49	4,446.3	-271.8	444.4	366.9	77.54	5.732	
15,770.0	11,454.0	15,941.8	11,625.0	38.5	38.7	-112.49	4,516.3	-272.5	444.4	365.9	78.49	5.662	
15,800.0	11,454.0	15,971.8	11,625.0	38.7	38.9	-112.49	4,546.3	-272.7	444.4	365.5	78.90	5.633	
15,865.0	11,454.0	16,036.8	11,625.0	39.2	39.4	-112.49	4,611.3	-273.3	444.4	364.6	79.79	5.570	
15,900.0	11,454.0	16,071.8	11,625.0	39.4	39.6	-112.49	4,646.3	-273.6	444.4	364.1	80.27	5.537	
15,960.0	11,454.0	16,131.8	11,625.0	39.8	40.0	-112.49	4,706.3	-274.2	444.4	363.3	81.09	5.480	
16,000.0	11,454.0	16,171.8	11,625.0	40.1	40.3	-112.49	4,746.3	-274.6	444.4	362.8	81.64	5.443	
16,055.0	11,454.0	16,226.8	11,625.0	40.5	40.7	-112.49	4,801.3	-275.1	444.4	362.0	82.40	5.393	
16,100.0	11,454.0	16,271.8	11,625.0	40.8	41.0	-112.49	4,846.3	-275.5	444.4	361.4	83.02	5.353	
16,150.0	11,454.0	16,321.8	11,625.0	41.2	41.3	-112.49	4,896.3	-275.9	444.4	360.7	83.71	5.309	
16,200.0	11,454.0	16,371.8	11,625.0	41.5	41.7	-112.49	4,946.3	-276.4	444.4	360.0	84.41	5.265	
16,245.0	11,454.0	16,416.8	11,625.0	41.8	42.0	-112.49	4,991.3	-276.8	444.4	359.4	85.03	5.226	
16,300.0	11,454.0	16,471.8	11,625.0	42.2	42.4	-112.49	5,046.3	-277.3	444.4	358.6	85.80	5.180	
16,340.0	11,454.0	16,511.8	11,625.0	42.5	42.7	-112.49	5,086.2	-277.6	444.4	358.1	86.36	5.146	
16,400.0	11,454.0	16,571.8	11,625.0	42.9	43.1	-112.49	5,146.2	-278.2	444.4	357.2	87.19	5.097	
16,435.0	11,454.0	16,606.8	11,625.0	43.2	43.3	-112.49	5,181.2	-278.5	444.4	356.7	87.68	5.068	
16,500.0	11,454.0	16,671.8	11,625.0	43.6	43.8	-112.49	5,246.2	-279.1	444.4	355.8	88.59	5.016	
16,530.0	11,454.0	16,701.8	11,625.0	43.8	44.0	-112.49	5,276.2	-279.4	444.4	355.4	89.01	4.993	
16,600.0	11,454.0	16,771.8	11,625.0	44.3	44.5	-112.49	5,346.2	-280.0	444.4	354.4	90.00	4.938	
16,625.0	11,454.0	16,796.8	11,625.0	44.5	44.7	-112.49	5,371.2	-280.2	444.4	354.1	90.35	4.919	
16,700.0	11,454.0	16,871.8	11,625.0	45.0	45.2	-112.49	5,446.2	-280.9	444.4	353.0	91.41	4.862	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 3000-r.5 MWD+IFR1, 11156-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference												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	
16,720.0	11,454.0	16,891.8	11,625.0	45.2	45.3	-112.49	5,466.2	-281.1	444.4	352.7	91.69	4.847	
16,800.0	11,454.0	16,971.8	11,625.0	45.7	45.9	-112.49	5,546.2	-281.8	444.4	351.6	92.82	4.788	
16,815.0	11,454.0	16,986.8	11,625.0	45.8	46.0	-112.49	5,561.2	-282.0	444.4	351.4	93.03	4.777	
16,900.0	11,454.0	17,071.8	11,625.0	46.5	46.6	-112.49	5,646.2	-282.7	444.4	350.2	94.23	4.716	
16,910.0	11,454.0	17,081.8	11,625.0	46.5	46.7	-112.49	5,656.2	-282.8	444.4	350.0	94.38	4.709	
17,000.0	11,454.0	17,171.8	11,625.0	47.2	47.3	-112.49	5,746.2	-283.6	444.4	348.8	95.65	4.646	
17,005.0	11,454.0	17,176.8	11,625.0	47.2	47.4	-112.49	5,751.2	-283.7	444.4	348.7	95.72	4.643	
17,100.0	11,454.0	17,271.8	11,625.0	47.9	48.0	-112.49	5,846.2	-284.5	444.4	347.3	97.08	4.578	
17,195.0	11,454.0	17,366.8	11,625.0	48.6	48.7	-112.49	5,941.2	-285.4	444.4	346.0	98.43	4.515	
17,200.0	11,454.0	17,371.8	11,625.0	48.6	48.7	-112.49	5,946.2	-285.4	444.4	345.9	98.50	4.512	
17,290.0	11,454.0	17,461.8	11,625.0	49.2	49.4	-112.49	6,036.2	-286.3	444.4	344.6	99.79	4.453	
17,300.0	11,454.0	17,471.8	11,625.0	49.3	49.5	-112.49	6,046.2	-286.4	444.4	344.5	99.93	4.447	
17,385.0	11,454.0	17,556.8	11,625.0	49.9	50.1	-112.49	6,131.2	-287.1	444.4	343.3	101.15	4.394	
17,400.0	11,454.0	17,571.8	11,625.0	50.0	50.2	-112.49	6,146.2	-287.3	444.4	343.0	101.37	4.384	
17,480.0	11,454.0	17,651.8	11,625.0	50.6	50.8	-112.49	6,226.2	-288.0	444.4	341.9	102.51	4.335	
17,500.0	11,454.0	17,671.8	11,625.0	50.8	50.9	-112.49	6,246.2	-288.2	444.4	341.6	102.80	4.323	
17,575.0	11,454.0	17,746.8	11,625.0	51.3	51.4	-112.49	6,321.2	-288.8	444.4	340.5	103.88	4.278	
17,600.0	11,454.0	17,771.8	11,625.0	51.5	51.6	-112.49	6,346.2	-289.1	444.4	340.2	104.24	4.263	
17,670.0	11,454.0	17,841.8	11,625.0	52.0	52.1	-112.49	6,416.2	-289.7	444.4	339.2	105.25	4.222	
17,700.0	11,454.0	17,871.8	11,625.0	52.2	52.3	-112.49	6,446.2	-290.0	444.4	338.7	105.68	4.205	
17,742.8	11,454.0	17,914.6	11,625.0	52.5	52.7	-112.49	6,489.0	-290.4	444.4	338.1	106.30	4.181	
17,765.0	11,454.0	17,936.8	11,625.0	52.7	52.8	-112.49	6,511.2	-290.6	444.4	337.8	106.62	4.168	
17,800.0	11,454.0	17,971.8	11,625.0	52.9	53.1	-112.49	6,546.2	-290.9	444.4	337.3	107.13	4.149	
17,860.0	11,454.0	18,031.8	11,625.0	53.4	53.5	-112.49	6,606.2	-291.4	444.4	336.4	107.99	4.115	
17,900.0	11,454.0	18,071.8	11,625.0	53.7	53.8	-112.49	6,646.2	-291.8	444.4	335.8	108.57	4.093	
17,955.0	11,454.0	18,126.8	11,625.0	54.1	54.2	-112.49	6,701.2	-292.3	444.4	335.0	109.37	4.063	
18,000.0	11,454.0	18,171.8	11,625.0	54.4	54.5	-112.49	6,746.2	-292.7	444.4	334.4	110.02	4.039	
18,050.0	11,454.0	18,221.8	11,625.0	54.7	54.9	-112.49	6,796.2	-293.2	444.4	333.7	110.75	4.013	
18,100.0	11,454.0	18,271.8	11,625.0	55.1	55.2	-112.49	6,846.2	-293.6	444.4	332.9	111.47	3.987	
18,145.0	11,454.0	18,316.8	11,625.0	55.4	55.6	-112.49	6,891.2	-294.0	444.4	332.3	112.13	3.964	
18,200.0	11,454.0	18,371.8	11,625.0	55.8	56.0	-112.49	6,946.2	-294.5	444.4	331.5	112.93	3.935	
18,240.0	11,454.0	18,411.8	11,625.0	56.1	56.3	-112.49	6,986.2	-294.9	444.4	330.9	113.51	3.915	
18,300.0	11,454.0	18,471.8	11,625.0	56.6	56.7	-112.49	7,046.2	-295.4	444.4	330.0	114.38	3.885	
18,335.0	11,454.0	18,506.8	11,625.0	56.8	56.9	-112.49	7,081.2	-295.7	444.4	329.5	114.89	3.868	
18,400.0	11,454.0	18,571.8	11,625.0	57.3	57.4	-112.49	7,146.2	-296.3	444.4	328.6	115.84	3.836	
18,430.0	11,454.0	18,601.8	11,625.0	57.5	57.6	-112.49	7,176.2	-296.6	444.4	328.1	116.28	3.822	
18,500.0	11,454.0	18,671.8	11,625.0	58.0	58.2	-112.49	7,246.2	-297.2	444.4	327.1	117.30	3.789	
18,525.0	11,454.0	18,696.8	11,625.0	58.2	58.3	-112.49	7,271.2	-297.5	444.4	326.8	117.66	3.777	
18,600.0	11,454.0	18,771.8	11,625.0	58.8	58.9	-112.49	7,346.2	-298.2	444.4	325.7	118.76	3.742	
18,620.0	11,454.0	18,791.8	11,625.0	58.9	59.0	-112.49	7,366.2	-298.3	444.4	325.4	119.05	3.733	
18,700.0	11,454.0	18,871.8	11,625.0	59.5	59.6	-112.49	7,446.2	-299.1	444.4	324.2	120.22	3.697	
18,715.0	11,454.0	18,886.8	11,625.0	59.6	59.7	-112.49	7,461.2	-299.2	444.4	324.0	120.44	3.690	
18,800.0	11,454.0	18,971.8	11,625.0	60.2	60.3	-112.49	7,546.1	-300.0	444.4	322.7	121.69	3.652	
18,810.0	11,454.0	18,981.8	11,625.0	60.3	60.4	-112.49	7,556.1	-300.1	444.4	322.6	121.83	3.648	
18,900.0	11,454.0	19,071.8	11,625.0	61.0	61.1	-112.49	7,646.1	-300.9	444.4	321.3	123.15	3.609	
18,905.0	11,454.0	19,076.8	11,625.0	61.0	61.1	-112.49	7,651.1	-300.9	444.4	321.2	123.23	3.606	
19,000.0	11,454.0	19,171.8	11,625.0	61.7	61.8	-112.49	7,746.1	-301.8	444.4	319.8	124.62	3.566	
19,095.0	11,454.0	19,266.8	11,625.0	62.4	62.5	-112.49	7,841.1	-302.6	444.4	318.4	126.02	3.527	
19,100.0	11,454.0	19,271.8	11,625.0	62.4	62.5	-112.49	7,846.1	-302.7	444.4	318.3	126.09	3.524	
19,190.0	11,454.0	19,361.8	11,625.0	63.1	63.2	-112.49	7,936.1	-303.5	444.4	317.0	127.42	3.488	
19,200.0	11,454.0	19,371.8	11,625.0	63.2	63.3	-112.49	7,946.1	-303.6	444.4	316.8	127.56	3.484	
19,285.0	11,454.0	19,456.8	11,625.0	63.8	63.9	-112.49	8,031.1	-304.4	444.4	315.6	128.82	3.450	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 #710H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 3000-r.5 MWD+IFR1, 11156-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	
19,300.0	11,454.0	19,471.8	11,625.0	63.9	64.0	-112.49	8,046.1	-304.5	444.4	315.4	129.04	3.444	
19,380.0	11,454.0	19,551.8	11,625.0	64.5	64.6	-112.49	8,126.1	-305.2	444.4	314.2	130.22	3.413	
19,400.0	11,454.0	19,571.8	11,625.0	64.6	64.8	-112.49	8,146.1	-305.4	444.4	313.9	130.51	3.405	
19,475.0	11,454.0	19,646.8	11,625.0	65.2	65.3	-112.49	8,221.1	-306.1	444.4	312.8	131.62	3.377	
19,500.0	11,454.0	19,671.8	11,625.0	65.4	65.5	-112.49	8,246.1	-306.3	444.4	312.4	131.99	3.367	
19,570.0	11,454.0	19,741.8	11,625.0	65.9	66.0	-112.49	8,316.1	-307.0	444.4	311.4	133.02	3.341	
19,600.0	11,454.0	19,771.8	11,625.0	66.1	66.2	-112.49	8,346.1	-307.2	444.4	310.9	133.46	3.330	
19,665.0	11,454.0	19,836.8	11,625.0	66.6	66.7	-112.49	8,411.1	-307.8	444.4	310.0	134.43	3.306	
19,700.0	11,454.0	19,871.8	11,625.0	66.9	67.0	-112.49	8,446.1	-308.1	444.4	309.5	134.94	3.293	
19,760.0	11,454.0	19,931.8	11,625.0	67.3	67.4	-112.49	8,506.1	-308.7	444.4	308.6	135.83	3.272	
19,800.0	11,454.0	19,971.8	11,625.0	67.6	67.7	-112.49	8,546.1	-309.0	444.4	308.0	136.42	3.258	
19,855.0	11,454.0	20,026.8	11,625.0	68.0	68.1	-112.49	8,601.1	-309.5	444.4	307.2	137.24	3.238	
19,900.0	11,454.0	20,071.8	11,625.0	68.3	68.4	-112.49	8,646.1	-309.9	444.4	306.5	137.90	3.223	
19,950.0	11,454.0	20,121.8	11,625.0	68.7	68.8	-112.49	8,696.1	-310.4	444.4	305.8	138.64	3.205	
20,000.0	11,454.0	20,171.8	11,625.0	69.1	69.2	-112.49	8,746.1	-310.9	444.4	305.0	139.39	3.188	
20,045.0	11,454.0	20,216.8	11,625.0	69.4	69.5	-112.49	8,791.1	-311.3	444.4	304.4	140.05	3.173	
20,100.0	11,454.0	20,271.8	11,625.0	69.8	69.9	-112.49	8,846.1	-311.8	444.4	303.5	140.87	3.155	
20,140.0	11,454.0	20,311.8	11,625.0	70.1	70.2	-112.49	8,886.1	-312.1	444.4	303.0	141.46	3.142	
20,200.0	11,454.0	20,371.8	11,625.0	70.6	70.7	-112.49	8,946.1	-312.7	444.4	302.1	142.35	3.122	
20,235.0	11,454.0	20,406.8	11,625.0	70.8	70.9	-112.49	8,981.1	-313.0	444.4	301.5	142.87	3.111	
20,300.0	11,454.0	20,471.8	11,625.0	71.3	71.4	-112.49	9,046.1	-313.6	444.4	300.6	143.84	3.090	
20,330.0	11,454.0	20,501.8	11,625.0	71.5	71.6	-112.49	9,076.1	-313.9	444.4	300.1	144.28	3.080	
20,400.0	11,454.0	20,571.8	11,625.0	72.1	72.2	-112.49	9,146.1	-314.5	444.4	299.1	145.32	3.058	
20,425.0	11,454.0	20,596.8	11,625.0	72.2	72.3	-112.49	9,171.1	-314.7	444.4	298.7	145.70	3.050	
20,500.0	11,454.0	20,671.8	11,625.0	72.8	72.9	-112.49	9,246.1	-315.4	444.4	297.6	146.81	3.027	
20,520.0	11,454.0	20,691.8	11,625.0	72.9	73.0	-112.49	9,266.1	-315.6	444.4	297.3	147.11	3.021	
20,521.4	11,454.0	20,693.2	11,625.0	73.0	73.1	-112.49	9,267.5	-315.6	444.4	297.3	147.13	3.021	
20,600.0	11,454.0	20,771.8	11,625.0	73.5	73.6	-112.49	9,346.1	-316.3	444.4	296.1	148.30	2.997	
20,615.0	11,454.0	20,786.8	11,625.0	73.7	73.7	-112.49	9,361.1	-316.4	444.4	295.9	148.52	2.992	
20,700.0	11,454.0	20,871.8	11,625.0	74.3	74.4	-112.49	9,446.1	-317.2	444.4	294.6	149.79	2.967	
20,710.0	11,454.0	20,881.8	11,625.0	74.4	74.5	-112.49	9,456.1	-317.3	444.4	294.5	149.94	2.964	
20,800.0	11,454.0	20,971.8	11,625.0	75.0	75.1	-112.49	9,546.1	-318.1	444.4	293.1	151.28	2.938	
20,805.0	11,454.0	20,976.8	11,625.0	75.1	75.2	-112.49	9,551.1	-318.2	444.4	293.1	151.35	2.936	
20,900.0	11,454.0	21,071.8	11,625.0	75.8	75.9	-112.49	9,646.1	-319.0	444.4	291.6	152.77	2.909	
20,995.0	11,454.0	21,166.8	11,625.0	76.5	76.6	-112.49	9,741.1	-319.9	444.4	290.2	154.19	2.882	
21,000.0	11,454.0	21,171.8	11,625.0	76.5	76.6	-112.49	9,746.1	-319.9	444.4	290.2	154.26	2.881	
21,090.0	11,454.0	21,261.8	11,625.0	77.2	77.3	-112.49	9,836.1	-320.7	444.4	288.8	155.61	2.856	
21,100.0	11,454.0	21,271.8	11,625.0	77.3	77.4	-112.49	9,846.1	-320.8	444.4	288.7	155.75	2.853	
21,185.0	11,454.0	21,356.8	11,625.0	77.9	78.0	-112.49	9,931.0	-321.6	444.4	287.4	157.02	2.830	
21,200.0	11,454.0	21,371.8	11,625.0	78.0	78.1	-112.49	9,946.0	-321.7	444.4	287.2	157.25	2.826	
21,280.0	11,454.0	21,451.8	11,625.0	78.6	78.7	-112.49	10,026.0	-322.5	444.4	286.0	158.44	2.805	
21,300.0	11,454.0	21,471.8	11,625.0	78.8	78.8	-112.49	10,046.0	-322.7	444.4	285.7	158.74	2.800	
21,375.0	11,454.0	21,546.8	11,625.0	79.3	79.4	-112.49	10,121.0	-323.3	444.4	284.6	159.86	2.780	
21,400.0	11,454.0	21,571.8	11,625.0	79.5	79.6	-112.49	10,146.0	-323.6	444.4	284.2	160.24	2.773	
21,470.0	11,454.0	21,641.8	11,625.0	80.0	80.1	-112.49	10,216.0	-324.2	444.4	283.1	161.28	2.755	
21,500.0	11,454.0	21,671.8	11,625.0	80.3	80.3	-112.49	10,246.0	-324.5	444.4	282.7	161.73	2.748	
21,565.0	11,454.0	21,736.8	11,625.0	80.7	80.8	-112.49	10,311.0	-325.1	444.4	281.7	162.71	2.731	
21,600.0	11,454.0	21,771.8	11,625.0	81.0	81.1	-112.49	10,346.0	-325.4	444.4	281.2	163.23	2.723	
21,660.0	11,454.0	21,831.8	11,625.0	81.4	81.5	-112.49	10,406.0	-325.9	444.4	280.3	164.13	2.708	
21,700.0	11,454.0	21,871.8	11,625.0	81.7	81.8	-112.49	10,446.0	-326.3	444.4	279.7	164.73	2.698	
21,724.9	11,454.0	21,896.7	11,625.0	81.9	82.0	-112.49	10,470.9	-326.5	444.4	279.3	165.10	2.692	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	89.60	0.2	30.5	30.5					
95.0	95.0	95.0	95.0	3.0	3.0	89.60	0.2	30.5	30.5	24.4	6.03	5.055		
100.0	100.0	100.0	100.0	3.0	3.0	89.60	0.2	30.5	30.5	24.4	6.03	5.052		
190.0	190.0	190.0	190.0	3.1	3.1	89.60	0.2	30.5	30.5	24.3	6.15	4.951		
200.0	200.0	200.0	200.0	3.1	3.1	89.60	0.2	30.5	30.5	24.3	6.17	4.935		
285.0	285.0	285.0	285.0	3.2	3.2	89.60	0.2	30.5	30.5	24.2	6.31	4.827		
300.0	300.0	300.0	300.0	3.2	3.2	89.60	0.2	30.5	30.5	24.1	6.34	4.805		
380.0	380.0	380.0	380.0	3.3	3.3	89.60	0.2	30.5	30.5	24.0	6.49	4.695		
400.0	400.0	400.0	400.0	3.3	3.3	89.60	0.2	30.5	30.5	23.9	6.53	4.665		
475.0	475.0	475.0	475.0	3.4	3.4	89.60	0.2	30.5	30.5	23.8	6.68	4.557		
500.0	500.0	500.0	500.0	3.4	3.4	89.60	0.2	30.5	30.5	23.7	6.74	4.520		
570.0	570.0	570.0	570.0	3.5	3.5	89.60	0.2	30.5	30.5	23.6	6.90	4.416		
600.0	600.0	600.0	600.0	3.5	3.5	89.60	0.2	30.5	30.5	23.5	6.97	4.371		
665.0	665.0	665.0	665.0	3.6	3.6	89.60	0.2	30.5	30.5	23.3	7.13	4.274		
700.0	700.0	700.0	700.0	3.7	3.7	89.60	0.2	30.5	30.5	23.2	7.22	4.221		
760.0	760.0	760.0	760.0	3.8	3.8	89.60	0.2	30.5	30.5	23.1	7.37	4.133		
800.0	800.0	800.0	800.0	3.8	3.8	89.60	0.2	30.5	30.5	23.0	7.48	4.074		
855.0	855.0	855.0	855.0	3.9	3.9	89.60	0.2	30.5	30.5	22.8	7.63	3.994		
900.0	900.0	900.0	900.0	4.0	4.0	89.60	0.2	30.5	30.5	22.7	7.75	3.929		
950.0	950.0	950.0	950.0	4.1	4.1	89.60	0.2	30.5	30.5	22.6	7.90	3.858		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	89.60	0.2	30.5	30.5	22.4	8.04	3.788		
1,045.0	1,045.0	1,045.0	1,045.0	4.2	4.2	89.60	0.2	30.5	30.5	22.3	8.17	3.726		
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	89.60	0.2	30.5	30.5	22.1	8.34	3.652		
1,140.0	1,140.0	1,140.0	1,140.0	4.4	4.4	89.60	0.2	30.5	30.5	22.0	8.46	3.599		
1,200.0	1,200.0	1,200.0	1,200.0	4.5	4.5	89.60	0.2	30.5	30.5	21.8	8.65	3.522		
1,235.0	1,235.0	1,235.0	1,235.0	4.6	4.6	89.60	0.2	30.5	30.5	21.7	8.76	3.477		
1,300.0	1,300.0	1,300.0	1,300.0	4.7	4.7	89.60	0.2	30.5	30.5	21.5	8.97	3.397		
1,330.0	1,330.0	1,330.0	1,330.0	4.7	4.7	89.60	0.2	30.5	30.5	21.4	9.06	3.360		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	89.60	0.2	30.5	30.5	21.2	9.29	3.278		
1,425.0	1,425.0	1,425.0	1,425.0	4.9	4.9	89.60	0.2	30.5	30.5	21.1	9.38	3.249		
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	89.60	0.2	30.5	30.5	20.8	9.63	3.164		
1,520.0	1,520.0	1,520.0	1,520.0	5.1	5.1	89.60	0.2	30.5	30.5	20.8	9.69	3.142		
1,600.0	1,600.0	1,600.0	1,600.0	5.3	5.3	89.60	0.2	30.5	30.5	20.5	9.97	3.056		
1,615.0	1,615.0	1,615.0	1,615.0	5.3	5.3	89.60	0.2	30.5	30.5	20.4	10.02	3.041		
1,700.0	1,700.0	1,700.0	1,700.0	5.5	5.5	89.60	0.2	30.5	30.5	20.1	10.31	2.954		
1,710.0	1,710.0	1,710.0	1,710.0	5.5	5.5	89.60	0.2	30.5	30.5	20.1	10.35	2.944		
1,800.0	1,800.0	1,800.0	1,800.0	5.7	5.7	89.60	0.2	30.5	30.5	19.8	10.66	2.857		
1,805.0	1,805.0	1,805.0	1,805.0	5.7	5.7	89.60	0.2	30.5	30.5	19.8	10.68	2.852		
1,900.0	1,900.0	1,900.0	1,900.0	5.9	5.9	89.60	0.2	30.5	30.5	19.4	11.02	2.765		
1,995.0	1,995.0	1,995.0	1,995.0	6.1	6.1	89.60	0.2	30.5	30.5	19.1	11.36	2.681		
2,000.0	2,000.0	2,000.0	2,000.0	6.1	6.1	89.60	0.2	30.5	30.5	19.1	11.38	2.677		
2,090.0	2,090.0	2,089.1	2,089.0	6.2	6.2	1.67	0.2	31.8	30.4	18.7	11.76	2.589		
2,100.0	2,100.0	2,098.9	2,098.9	6.2	6.2	1.68	0.2	32.2	30.4	18.6	11.80	2.579		
2,185.0	2,184.9	2,183.1	2,182.9	6.3	6.3	1.84	0.3	36.3	30.4	18.2	12.17	2.499		
2,200.0	2,199.8	2,197.9	2,197.7	6.3	6.3	1.88	0.3	37.3	30.4	18.2	12.23	2.485		
2,250.0	2,249.7	2,247.4	2,247.1	6.4	6.4	2.03	0.4	41.1	30.4	18.0	12.38	2.451		
2,252.5	2,252.2	2,249.9	2,249.6	6.4	6.4	2.04	0.4	41.3	30.3	18.0	12.39	2.449 CC, ES		
2,280.0	2,279.6	2,277.1	2,276.6	6.4	6.4	2.13	0.4	43.8	30.5	18.0	12.47	2.443 SF		
2,300.0	2,299.5	2,296.8	2,296.3	6.4	6.5	2.19	0.4	45.8	30.7	18.2	12.53	2.452		
2,375.0	2,374.2	2,371.0	2,370.0	6.5	6.6	2.35	0.6	54.4	32.9	20.1	12.84	2.566		
2,400.0	2,399.1	2,395.7	2,394.4	6.5	6.6	2.38	0.6	57.7	34.1	21.2	12.93	2.637		
2,470.0	2,468.8	2,465.5	2,463.6	6.6	6.8	2.45	0.8	67.5	37.8	24.5	13.22	2.857		

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
2,500.0	2,498.7	2,495.5	2,493.3	6.6	6.8	2.48	0.8	71.6	39.3	26.0	13.34	2.949	
2,565.0	2,563.5	2,560.4	2,557.5	6.7	7.0	2.53	0.9	80.7	42.7	29.1	13.63	3.136	
2,600.0	2,598.4	2,595.3	2,592.1	6.8	7.0	2.55	1.0	85.5	44.6	30.8	13.78	3.234	
2,660.0	2,658.1	2,655.3	2,651.5	7.0	7.2	2.59	1.1	93.9	47.7	33.6	14.07	3.392	
2,700.0	2,698.0	2,695.2	2,691.0	7.0	7.3	2.61	1.2	99.4	49.8	35.6	14.26	3.493	
2,755.0	2,752.8	2,750.1	2,745.4	7.2	7.4	2.64	1.3	107.1	52.7	38.2	14.54	3.624	
2,800.0	2,797.6	2,795.1	2,789.9	7.3	7.5	2.66	1.4	113.3	55.1	40.3	14.77	3.728	
2,850.0	2,847.4	2,845.0	2,839.4	7.4	7.7	2.68	1.5	120.3	57.7	42.6	15.04	3.836	
2,900.0	2,897.2	2,894.9	2,888.8	7.5	7.8	2.70	1.6	127.2	60.3	45.0	15.30	3.939	
2,945.0	2,942.0	2,939.9	2,933.3	7.7	7.9	2.71	1.7	133.5	62.6	47.1	15.56	4.027	
3,000.0	2,996.8	2,994.8	2,987.7	7.8	8.1	2.73	1.8	141.1	65.5	49.7	15.86	4.130	
3,040.0	3,036.7	3,034.7	3,027.3	7.9	8.2	2.74	1.9	146.7	67.6	51.5	16.10	4.201	
3,100.0	3,096.4	3,094.7	3,086.6	8.1	8.4	2.76	2.0	155.0	70.8	54.3	16.45	4.303	
3,135.0	3,131.3	3,129.6	3,121.2	8.2	8.5	2.77	2.1	159.9	72.6	55.9	16.66	4.358	
3,200.0	3,196.1	3,194.5	3,185.5	8.4	8.7	2.78	2.2	168.9	76.0	59.0	17.05	4.458	
3,230.0	3,226.0	3,224.5	3,215.2	8.5	8.8	2.79	2.3	173.1	77.6	60.3	17.24	4.501	
3,300.0	3,295.7	3,294.4	3,284.4	8.7	9.0	2.80	2.4	182.8	81.2	63.6	17.67	4.598	
3,325.0	3,320.6	3,319.4	3,309.1	8.7	9.1	2.81	2.5	186.3	82.6	64.7	17.83	4.630	
3,400.0	3,395.3	3,394.3	3,383.3	9.0	9.4	2.82	2.6	196.7	86.5	68.2	18.31	4.724	
3,420.0	3,415.2	3,414.2	3,403.1	9.0	9.4	2.83	2.7	199.5	87.5	69.1	18.44	4.748	
3,500.0	3,494.9	3,494.1	3,482.2	9.3	9.7	2.84	2.9	210.6	91.7	72.8	18.96	4.838	
3,515.0	3,509.9	3,509.1	3,497.0	9.3	9.8	2.84	2.9	212.7	92.5	73.4	19.06	4.854	
3,600.0	3,594.5	3,594.0	3,581.1	9.6	10.1	2.85	3.1	224.5	97.0	77.3	19.62	4.941	
3,610.0	3,604.5	3,604.0	3,590.9	9.6	10.1	2.86	3.1	225.9	97.5	77.8	19.69	4.951	
3,680.8	3,675.0	3,674.6	3,660.9	9.8	10.3	2.86	3.2	235.7	101.2	81.0	20.15	5.021	
3,700.0	3,694.2	3,693.8	3,679.9	9.9	10.4	2.87	3.3	238.4	102.2	81.9	20.27	5.042	
3,705.0	3,699.1	3,698.8	3,684.9	9.9	10.4	2.87	3.3	239.1	102.5	82.2	20.31	5.047	
3,800.0	3,793.8	3,793.7	3,778.8	10.2	10.8	2.86	3.5	252.3	108.1	87.1	20.95	5.157	
3,895.0	3,888.6	3,888.5	3,872.7	10.5	11.1	2.84	3.7	265.5	114.4	92.8	21.61	5.295	
3,900.0	3,893.6	3,893.4	3,877.6	10.5	11.1	2.84	3.7	266.2	114.8	93.1	21.64	5.303	
3,990.0	3,983.4	3,983.2	3,966.5	10.8	11.5	2.80	3.8	278.6	121.5	99.3	22.26	5.461	
4,000.0	3,993.4	3,993.2	3,976.3	10.8	11.5	2.80	3.9	280.0	122.3	100.0	22.33	5.480	
4,085.0	4,078.2	4,077.9	4,060.2	11.1	11.8	2.75	4.0	291.8	129.5	106.6	22.91	5.652	
4,100.0	4,093.2	4,092.8	4,075.0	11.1	11.9	2.74	4.1	293.9	130.8	107.8	23.01	5.684	
4,180.0	4,173.1	4,172.5	4,153.9	11.4	12.2	2.69	4.2	305.0	138.2	114.6	23.55	5.867	
4,200.0	4,193.1	4,192.4	4,173.6	11.4	12.2	2.68	4.3	307.8	140.1	116.4	23.69	5.915	
4,275.0	4,268.1	4,267.0	4,247.5	11.6	12.5	2.63	4.4	318.1	147.7	123.5	24.19	6.104	
4,300.0	4,293.0	4,291.8	4,272.1	11.7	12.6	2.61	4.5	321.6	150.3	125.9	24.36	6.169	
4,370.0	4,363.0	4,361.4	4,341.0	11.9	12.9	2.56	4.6	331.3	157.9	133.1	24.83	6.362	
4,400.0	4,393.0	4,391.2	4,370.5	12.0	13.0	2.53	4.7	335.4	161.3	136.3	25.03	6.448	
4,465.0	4,458.0	4,455.8	4,434.5	12.2	13.2	2.48	4.8	344.4	169.0	143.6	25.45	6.641	
4,500.0	4,493.0	4,490.5	4,468.9	12.3	13.4	2.46	4.9	349.2	173.3	147.6	25.67	6.749	
4,560.0	4,553.0	4,550.0	4,527.8	12.4	13.6	2.41	5.0	357.5	180.8	154.8	26.05	6.942	
4,600.0	4,593.0	4,589.7	4,567.1	12.5	13.8	2.38	5.1	363.1	186.1	159.8	26.30	7.075	
4,655.0	4,648.0	4,644.2	4,621.1	12.6	14.0	2.33	5.2	370.6	193.5	166.9	26.58	7.278	
4,680.8	4,673.7	4,669.7	4,646.3	12.6	14.1	90.30	5.2	374.2	197.0	170.3	26.71	7.374	
4,700.0	4,693.0	4,688.8	4,665.2	12.6	14.2	90.29	5.3	376.8	199.7	172.9	26.79	7.453	
4,750.0	4,743.0	4,738.3	4,714.2	12.6	14.4	90.25	5.4	383.7	206.6	179.6	27.02	7.648	
4,800.0	4,793.0	4,787.8	4,763.2	12.6	14.5	90.22	5.5	390.6	213.6	186.4	27.25	7.839	
4,845.0	4,838.0	4,832.3	4,807.4	12.7	14.7	90.19	5.6	396.8	219.9	192.4	27.45	8.009	
4,900.0	4,893.0	4,886.8	4,861.3	12.7	14.9	90.15	5.7	404.4	227.5	199.8	27.70	8.212	
4,940.0	4,933.0	4,926.4	4,900.5	12.7	15.1	90.13	5.8	409.9	233.1	205.2	27.89	8.358	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	Rule Assigned:				Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.0	4,993.0	4,985.8	4,959.4	12.8	15.3	90.09	5.9	418.2	241.4	213.3	28.16	8.572	
5,035.0	5,028.0	5,020.5	4,993.7	12.8	15.5	90.08	6.0	423.0	246.3	218.0	28.32	8.696	
5,100.0	5,093.0	5,084.9	5,057.4	12.8	15.7	90.04	6.1	432.0	255.3	226.7	28.62	8.920	
5,130.0	5,123.0	5,114.6	5,086.9	12.8	15.9	90.03	6.2	436.1	259.5	230.8	28.76	9.023	
5,200.0	5,193.0	5,183.9	5,155.5	12.9	16.1	90.00	6.3	445.7	269.3	240.2	29.09	9.257	
5,225.0	5,218.0	5,208.6	5,180.0	12.9	16.2	89.99	6.3	449.2	272.7	243.5	29.20	9.339	
5,300.0	5,293.0	5,282.9	5,253.6	12.9	16.5	89.96	6.5	459.5	283.2	253.6	29.55	9.582	
5,320.0	5,313.0	5,302.7	5,273.2	13.0	16.6	89.95	6.5	462.3	286.0	256.3	29.65	9.646	
5,400.0	5,393.0	5,381.9	5,351.6	13.0	16.9	89.92	6.7	473.3	297.1	267.1	30.02	9.897	
5,415.0	5,408.0	5,396.8	5,366.3	13.0	17.0	89.91	6.7	475.4	299.2	269.1	30.09	9.943	
5,500.0	5,493.0	5,482.7	5,451.4	13.1	17.3	89.88	6.9	487.1	310.8	280.4	30.48	10.198	
5,510.0	5,503.0	5,492.8	5,461.5	13.1	17.4	89.88	6.9	488.5	312.2	281.7	30.53	10.225	
5,600.0	5,593.0	5,584.6	5,552.5	13.1	17.7	89.85	7.1	500.3	323.8	292.8	30.96	10.458	
5,605.0	5,598.0	5,589.7	5,557.6	13.1	17.8	89.85	7.1	501.0	324.4	293.4	30.99	10.470	
5,700.0	5,693.0	5,686.8	5,654.0	13.2	18.1	89.83	7.3	512.7	335.8	304.4	31.44	10.683	
5,795.0	5,788.0	5,784.1	5,750.7	13.2	18.5	89.81	7.4	523.6	346.5	314.6	31.88	10.868	
5,800.0	5,793.0	5,789.3	5,755.8	13.2	18.5	89.81	7.4	524.1	347.0	315.1	31.90	10.877	
5,890.0	5,883.0	5,881.6	5,847.6	13.3	18.9	89.79	7.6	533.6	356.3	324.0	32.32	11.025	
5,900.0	5,893.0	5,891.9	5,857.8	13.3	18.9	89.79	7.6	534.7	357.3	324.9	32.36	11.040	
5,985.0	5,978.0	5,979.3	5,944.8	13.4	19.3	89.77	7.7	542.9	365.3	332.6	32.75	11.156	
6,000.0	5,993.0	5,994.7	5,960.2	13.4	19.3	89.77	7.7	544.3	366.7	333.9	32.81	11.174	
6,080.0	6,073.0	6,077.1	6,042.2	13.4	19.6	89.76	7.8	551.4	373.5	340.4	33.17	11.262	
6,100.0	6,093.0	6,097.7	6,062.8	13.4	19.7	89.76	7.9	553.0	375.2	341.9	33.26	11.281	
6,175.0	6,168.0	6,175.0	6,139.9	13.5	20.0	89.75	8.0	559.0	381.0	347.4	33.58	11.344	
6,200.0	6,193.0	6,200.8	6,165.6	13.5	20.1	89.74	8.0	560.9	382.8	349.1	33.69	11.362	
6,270.0	6,263.0	6,273.1	6,237.7	13.5	20.3	89.74	8.1	565.8	387.6	353.6	33.98	11.404	
6,300.0	6,293.0	6,304.1	6,268.6	13.6	20.5	89.73	8.1	567.8	389.5	355.4	34.11	11.418	
6,365.0	6,358.0	6,371.2	6,335.7	13.6	20.7	89.73	8.1	571.8	393.3	359.0	34.38	11.443	
6,400.0	6,393.0	6,407.4	6,371.8	13.6	20.8	89.73	8.2	573.8	395.3	360.8	34.52	11.451	
6,460.0	6,453.0	6,469.5	6,433.8	13.7	21.0	89.72	8.2	576.9	398.3	363.6	34.75	11.461	
6,500.0	6,493.0	6,510.9	6,475.2	13.7	21.2	89.72	8.3	578.9	400.2	365.3	34.91	11.462	
6,555.0	6,548.0	6,567.8	6,532.1	13.7	21.3	89.72	8.3	581.3	402.5	367.4	35.12	11.460	
6,600.0	6,593.0	6,614.4	6,578.6	13.7	21.5	89.71	8.3	583.0	404.2	368.9	35.29	11.453	
6,650.0	6,643.0	6,666.3	6,630.4	13.8	21.6	89.71	8.3	584.7	405.8	370.4	35.47	11.441	
6,700.0	6,693.0	6,718.1	6,682.2	13.8	21.8	89.71	8.4	586.2	407.3	371.6	35.65	11.425	
6,745.0	6,738.0	6,764.7	6,728.8	13.8	21.9	89.71	8.4	587.3	408.4	372.6	35.80	11.407	
6,800.0	6,793.0	6,821.7	6,785.9	13.9	22.1	89.71	8.4	588.5	409.4	373.5	35.98	11.380	
6,840.0	6,833.0	6,863.2	6,827.3	13.9	22.2	89.70	8.4	589.1	410.1	374.0	36.10	11.358	
6,900.0	6,893.0	6,925.4	6,889.6	13.9	22.3	89.70	8.4	589.8	410.7	374.4	36.28	11.322	
6,935.0	6,928.0	6,961.7	6,925.9	14.0	22.4	89.70	8.4	590.0	411.0	374.6	36.37	11.300	
7,000.0	6,993.0	7,028.9	6,993.0	14.0	22.5	89.70	8.4	590.2	411.1	374.6	36.49	11.266	
7,030.0	7,023.0	7,058.9	7,023.0	14.0	22.5	89.70	8.4	590.2	411.1	374.6	36.52	11.257	
7,100.0	7,093.0	7,128.9	7,093.0	14.1	22.5	89.70	8.4	590.2	411.1	374.5	36.58	11.238	
7,125.0	7,118.0	7,153.9	7,118.0	14.1	22.5	89.70	8.4	590.2	411.1	374.5	36.61	11.230	
7,200.0	7,193.0	7,228.9	7,193.0	14.1	22.6	89.70	8.4	590.2	411.1	374.4	36.68	11.208	
7,220.0	7,213.0	7,248.9	7,213.0	14.1	22.6	89.70	8.4	590.2	411.1	374.4	36.70	11.202	
7,300.0	7,293.0	7,328.9	7,293.0	14.2	22.6	89.70	8.4	590.2	411.1	374.3	36.78	11.178	
7,315.0	7,308.0	7,343.9	7,308.0	14.2	22.6	89.70	8.4	590.2	411.1	374.3	36.79	11.174	
7,400.0	7,393.0	7,428.9	7,393.0	14.3	22.6	89.70	8.4	590.2	411.1	374.2	36.88	11.149	
7,410.0	7,403.0	7,438.9	7,403.0	14.3	22.6	89.70	8.4	590.2	411.1	374.2	36.89	11.146	
7,500.0	7,493.0	7,528.9	7,493.0	14.3	22.7	89.70	8.4	590.2	411.1	374.1	36.97	11.119	
7,505.0	7,498.0	7,533.9	7,498.0	14.3	22.7	89.70	8.4	590.2	411.1	374.1	36.98	11.118	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
7,600.0	7,593.0	7,628.9	7,593.0	14.4	22.7	89.70	8.4	590.2	411.1	374.0	37.07	11.089	
7,695.0	7,688.0	7,723.9	7,688.0	14.4	22.7	89.70	8.4	590.2	411.1	373.9	37.17	11.061	
7,700.0	7,693.0	7,728.9	7,693.0	14.4	22.7	89.70	8.4	590.2	411.1	373.9	37.17	11.060	
7,790.0	7,783.0	7,818.9	7,783.0	14.5	22.8	89.70	8.4	590.2	411.1	373.8	37.26	11.033	
7,800.0	7,793.0	7,828.9	7,793.0	14.5	22.8	89.70	8.4	590.2	411.1	373.8	37.27	11.030	
7,885.0	7,878.0	7,913.9	7,878.0	14.6	22.8	89.70	8.4	590.2	411.1	373.8	37.36	11.005	
7,900.0	7,893.0	7,928.9	7,893.0	14.6	22.8	89.70	8.4	590.2	411.1	373.7	37.37	11.001	
7,980.0	7,973.0	8,008.9	7,973.0	14.6	22.8	89.70	8.4	590.2	411.1	373.7	37.45	10.977	
8,000.0	7,993.0	8,028.9	7,993.0	14.6	22.8	89.70	8.4	590.2	411.1	373.6	37.47	10.971	
8,075.0	8,068.0	8,103.9	8,068.0	14.7	22.9	89.70	8.4	590.2	411.1	373.6	37.55	10.949	
8,100.0	8,093.0	8,128.9	8,093.0	14.7	22.9	89.70	8.4	590.2	411.1	373.5	37.57	10.942	
8,170.0	8,163.0	8,198.9	8,163.0	14.8	22.9	89.70	8.4	590.2	411.1	373.5	37.64	10.921	
8,200.0	8,193.0	8,228.9	8,193.0	14.8	22.9	89.70	8.4	590.2	411.1	373.4	37.67	10.912	
8,265.0	8,258.0	8,293.9	8,258.0	14.8	22.9	89.70	8.4	590.2	411.1	373.4	37.74	10.893	
8,300.0	8,293.0	8,328.9	8,293.0	14.8	22.9	89.70	8.4	590.2	411.1	373.3	37.77	10.883	
8,360.0	8,353.0	8,388.9	8,353.0	14.9	23.0	89.70	8.4	590.2	411.1	373.3	37.84	10.866	
8,400.0	8,393.0	8,428.9	8,393.0	14.9	23.0	89.70	8.4	590.2	411.1	373.2	37.88	10.854	
8,455.0	8,448.0	8,483.9	8,448.0	14.9	23.0	89.70	8.4	590.2	411.1	373.2	37.93	10.838	
8,500.0	8,493.0	8,528.9	8,493.0	15.0	23.0	89.70	8.4	590.2	411.1	373.1	37.98	10.825	
8,550.0	8,543.0	8,578.9	8,543.0	15.0	23.0	89.70	8.4	590.2	411.1	373.1	38.03	10.810	
8,600.0	8,593.0	8,628.9	8,593.0	15.0	23.0	89.70	8.4	590.2	411.1	373.0	38.08	10.795	
8,645.0	8,638.0	8,673.9	8,638.0	15.1	23.1	89.70	8.4	590.2	411.1	373.0	38.13	10.782	
8,700.0	8,693.0	8,728.9	8,693.0	15.1	23.1	89.70	8.4	590.2	411.1	372.9	38.19	10.766	
8,740.0	8,733.0	8,768.9	8,733.0	15.1	23.1	89.70	8.4	590.2	411.1	372.9	38.23	10.755	
8,800.0	8,793.0	8,828.9	8,793.0	15.2	23.1	89.70	8.4	590.2	411.1	372.8	38.29	10.737	
8,835.0	8,828.0	8,863.9	8,828.0	15.2	23.1	89.70	8.4	590.2	411.1	372.8	38.32	10.727	
8,900.0	8,893.0	8,928.9	8,893.0	15.2	23.2	89.70	8.4	590.2	411.1	372.7	38.39	10.708	
8,930.0	8,923.0	8,958.9	8,923.0	15.3	23.2	89.70	8.4	590.2	411.1	372.7	38.42	10.699	
9,000.0	8,993.0	9,028.9	8,993.0	15.3	23.2	89.70	8.4	590.2	411.1	372.6	38.50	10.679	
9,025.0	9,018.0	9,053.9	9,018.0	15.3	23.2	89.70	8.4	590.2	411.1	372.6	38.52	10.672	
9,100.0	9,093.0	9,128.9	9,093.0	15.4	23.2	89.70	8.4	590.2	411.1	372.5	38.60	10.650	
9,120.0	9,113.0	9,148.9	9,113.0	15.4	23.2	89.70	8.4	590.2	411.1	372.5	38.62	10.644	
9,200.0	9,193.0	9,228.9	9,193.0	15.4	23.3	89.70	8.4	590.2	411.1	372.4	38.71	10.621	
9,215.0	9,208.0	9,243.9	9,208.0	15.5	23.3	89.70	8.4	590.2	411.1	372.4	38.72	10.617	
9,300.0	9,293.0	9,328.9	9,293.0	15.5	23.3	89.70	8.4	590.2	411.1	372.3	38.81	10.592	
9,310.0	9,303.0	9,338.9	9,303.0	15.5	23.3	89.70	8.4	590.2	411.1	372.3	38.82	10.590	
9,400.0	9,393.0	9,428.9	9,393.0	15.6	23.3	89.70	8.4	590.2	411.1	372.2	38.92	10.564	
9,405.0	9,398.0	9,433.9	9,398.0	15.6	23.4	89.70	8.4	590.2	411.1	372.2	38.92	10.562	
9,500.0	9,493.0	9,528.9	9,493.0	15.6	23.4	89.70	8.4	590.2	411.1	372.1	39.02	10.535	
9,595.0	9,588.0	9,623.9	9,588.0	15.7	23.4	89.70	8.4	590.2	411.1	372.0	39.12	10.508	
9,600.0	9,593.0	9,628.9	9,593.0	15.7	23.4	89.70	8.4	590.2	411.1	372.0	39.13	10.506	
9,690.0	9,683.0	9,718.9	9,683.0	15.8	23.5	89.70	8.4	590.2	411.1	371.9	39.23	10.481	
9,700.0	9,693.0	9,728.9	9,693.0	15.8	23.5	89.70	8.4	590.2	411.1	371.9	39.24	10.478	
9,785.0	9,778.0	9,813.9	9,778.0	15.8	23.5	89.70	8.4	590.2	411.1	371.8	39.33	10.453	
9,800.0	9,793.0	9,828.9	9,793.0	15.8	23.5	89.70	8.4	590.2	411.1	371.8	39.34	10.449	
9,880.0	9,873.0	9,908.9	9,873.0	15.9	23.5	89.70	8.4	590.2	411.1	371.7	39.43	10.426	
9,900.0	9,893.0	9,928.9	9,893.0	15.9	23.5	89.70	8.4	590.2	411.1	371.7	39.45	10.421	
9,975.0	9,968.0	10,003.9	9,968.0	16.0	23.6	89.70	8.4	590.2	411.1	371.6	39.53	10.399	
10,000.0	9,993.0	10,028.9	9,993.0	16.0	23.6	89.70	8.4	590.2	411.1	371.6	39.56	10.392	
10,070.0	10,063.0	10,098.9	10,063.0	16.0	23.6	89.70	8.4	590.2	411.1	371.5	39.63	10.373	
10,100.0	10,093.0	10,128.9	10,093.0	16.1	23.6	89.70	8.4	590.2	411.1	371.4	39.67	10.364	
10,165.0	10,158.0	10,193.9	10,158.0	16.1	23.6	89.70	8.4	590.2	411.1	371.4	39.74	10.346	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
10,200.0	10,193.0	10,228.9	10,193.0	16.1	23.7	89.70	8.4	590.2	411.1	371.3	39.78	10.336	
10,260.0	10,253.0	10,288.9	10,253.0	16.2	23.7	89.70	8.4	590.2	411.1	371.3	39.84	10.319	
10,300.0	10,293.0	10,328.9	10,293.0	16.2	23.7	89.70	8.4	590.2	411.1	371.2	39.88	10.308	
10,355.0	10,348.0	10,383.9	10,348.0	16.2	23.7	89.70	8.4	590.2	411.1	371.2	39.94	10.292	
10,400.0	10,393.0	10,428.9	10,393.0	16.3	23.7	89.70	8.4	590.2	411.1	371.1	39.99	10.279	
10,450.0	10,443.0	10,478.9	10,443.0	16.3	23.8	89.70	8.4	590.2	411.1	371.1	40.05	10.265	
10,500.0	10,493.0	10,528.9	10,493.0	16.3	23.8	89.70	8.4	590.2	411.1	371.0	40.10	10.251	
10,545.0	10,538.0	10,573.9	10,538.0	16.4	23.8	89.70	8.4	590.2	411.1	371.0	40.15	10.239	
10,600.0	10,593.0	10,628.9	10,593.0	16.4	23.8	89.70	8.4	590.2	411.1	370.9	40.21	10.223	
10,640.0	10,633.0	10,668.9	10,633.0	16.4	23.8	89.70	8.4	590.2	411.1	370.9	40.26	10.212	
10,700.0	10,693.0	10,728.9	10,693.0	16.5	23.9	89.70	8.4	590.2	411.1	370.8	40.32	10.195	
10,735.0	10,728.0	10,763.9	10,728.0	16.5	23.9	89.70	8.4	590.2	411.1	370.7	40.36	10.186	
10,800.0	10,793.0	10,828.9	10,793.0	16.5	23.9	89.70	8.4	590.2	411.1	370.7	40.43	10.168	
10,830.0	10,823.0	10,858.9	10,823.0	16.6	23.9	89.70	8.4	590.2	411.1	370.6	40.47	10.159	
10,900.0	10,893.0	10,928.9	10,893.0	16.6	23.9	89.70	8.4	590.2	411.1	370.6	40.54	10.140	
10,925.0	10,918.0	10,953.9	10,918.0	16.6	24.0	89.70	8.4	590.2	411.1	370.5	40.57	10.134	
10,983.6	10,976.5	11,012.4	10,976.5	16.6	24.0	89.70	8.4	590.2	411.1	370.5	40.62	10.121	
11,000.0	10,993.0	11,028.9	10,993.0	16.6	24.0	90.26	8.4	590.2	411.1	370.5	40.63	10.120	
11,020.0	11,012.9	11,048.8	11,012.9	16.6	24.0	90.42	8.4	590.2	411.1	370.5	40.63	10.118	
11,025.0	11,017.9	11,053.8	11,017.9	16.6	24.0	90.47	8.4	590.2	411.1	370.5	40.64	10.117	
11,050.0	11,042.8	11,078.6	11,042.8	16.6	24.0	90.86	8.4	590.2	411.2	370.5	40.64	10.116	
11,075.0	11,067.4	11,103.3	11,067.4	16.6	24.0	91.41	8.4	590.2	411.2	370.6	40.65	10.117	
11,100.0	11,091.8	11,127.7	11,091.8	16.7	24.0	92.13	8.4	590.2	411.4	370.8	40.65	10.122	
11,115.0	11,106.3	11,142.2	11,106.3	16.7	24.0	92.62	8.4	590.2	411.6	370.9	40.64	10.127	
11,125.0	11,115.9	11,151.8	11,115.9	16.7	24.0	92.98	8.4	590.2	411.7	371.1	40.63	10.132	
11,150.0	11,139.6	11,175.5	11,139.6	16.7	24.0	93.96	8.4	590.2	412.2	371.6	40.61	10.150	
11,175.0	11,162.9	11,200.2	11,164.3	16.7	24.0	95.09	8.7	590.2	413.0	372.4	40.57	10.179	
11,200.0	11,185.6	11,226.0	11,190.0	16.7	24.0	96.24	10.4	590.2	413.9	373.4	40.51	10.216	
11,210.0	11,194.6	11,236.4	11,200.4	16.7	24.0	96.69	11.5	590.2	414.3	373.8	40.49	10.233	
11,225.0	11,207.8	11,252.2	11,216.1	16.7	24.0	97.38	13.5	590.2	415.0	374.6	40.45	10.261	
11,250.0	11,229.4	11,279.1	11,242.6	16.7	24.0	98.51	18.2	590.1	416.3	375.9	40.38	10.311	
11,275.0	11,250.2	11,306.6	11,269.3	16.7	24.1	99.63	24.5	590.1	417.8	377.5	40.30	10.365	
11,300.0	11,270.3	11,334.7	11,296.3	16.7	24.1	100.73	32.5	590.0	419.4	379.1	40.23	10.423	
11,305.0	11,274.2	11,340.4	11,301.7	16.7	24.1	100.95	34.3	590.0	419.7	379.5	40.22	10.435	
11,325.0	11,289.6	11,363.5	11,323.3	16.7	24.1	101.82	42.4	589.9	421.1	380.9	40.17	10.482	
11,350.0	11,308.0	11,393.1	11,350.4	16.7	24.1	102.88	54.1	589.8	422.9	382.8	40.12	10.540	
11,375.0	11,325.6	11,423.3	11,377.4	16.7	24.1	103.91	67.9	589.7	424.8	384.7	40.09	10.596	
11,400.0	11,342.1	11,454.4	11,404.0	16.7	24.1	104.92	83.8	589.5	426.8	386.7	40.09	10.647	
11,425.0	11,357.7	11,486.2	11,430.2	16.7	24.1	105.88	101.8	589.3	428.8	388.7	40.11	10.692	
11,450.0	11,372.2	11,518.8	11,455.7	16.7	24.1	106.81	122.1	589.2	430.8	390.7	40.15	10.730	
11,475.0	11,385.7	11,552.1	11,480.4	16.8	24.1	107.68	144.5	589.0	432.8	392.6	40.23	10.758	
11,495.0	11,395.6	11,579.4	11,499.3	16.8	24.1	108.35	164.2	588.8	434.4	394.1	40.32	10.774	
11,500.0	11,398.0	11,586.3	11,503.9	16.8	24.1	108.51	169.3	588.7	434.8	394.4	40.35	10.776	
11,525.0	11,409.2	11,621.2	11,526.1	16.8	24.1	109.27	196.3	588.5	436.6	396.1	40.48	10.785	
11,550.0	11,419.1	11,656.9	11,546.7	16.8	24.1	109.97	225.4	588.2	438.4	397.7	40.65	10.784	
11,575.0	11,427.9	11,693.2	11,565.3	16.8	24.1	110.59	256.6	587.9	439.9	399.1	40.83	10.775	
11,590.0	11,432.6	11,715.4	11,575.5	16.9	24.1	110.93	276.2	587.8	440.8	399.9	40.94	10.766	
11,600.0	11,435.4	11,730.2	11,581.8	16.9	24.2	111.13	289.7	587.6	441.3	400.3	41.02	10.759	
11,625.0	11,441.7	11,767.8	11,595.9	16.9	24.2	111.59	324.5	587.3	442.5	401.3	41.22	10.737	
11,650.0	11,446.7	11,805.8	11,607.3	16.9	24.2	111.96	360.7	587.0	443.5	402.1	41.41	10.711	
11,675.0	11,450.4	11,844.2	11,615.9	17.0	24.2	112.23	398.1	586.7	444.2	402.6	41.58	10.683	
11,685.0	11,451.5	11,859.6	11,618.5	17.0	24.3	112.31	413.3	586.5	444.4	402.8	41.64	10.672	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
11,700.0	11,452.8	11,882.8	11,621.4	17.0	24.3	112.40	436.4	586.3	444.7	402.9	41.73	10.655	
11,725.0	11,453.9	11,921.6	11,623.9	17.0	24.3	112.47	475.1	586.0	444.9	403.0	41.86	10.628	
11,733.6	11,454.0	11,934.0	11,624.0	17.0	24.3	112.47	487.5	585.8	444.9	403.0	41.89	10.619	
11,780.0	11,454.0	11,980.5	11,624.0	17.1	24.4	112.47	533.9	585.4	444.9	402.8	42.03	10.585	
11,800.0	11,454.0	12,000.5	11,624.0	17.2	24.4	112.47	553.9	585.2	444.9	402.8	42.09	10.570	
11,875.0	11,454.0	12,075.5	11,624.0	17.3	24.5	112.47	628.9	584.5	444.9	402.5	42.35	10.504	
11,900.0	11,454.0	12,100.5	11,624.0	17.4	24.6	112.47	653.9	584.3	444.9	402.4	42.44	10.482	
11,970.0	11,454.0	12,170.5	11,624.0	17.6	24.7	112.47	723.9	583.7	444.8	402.1	42.72	10.413	
12,000.0	11,454.0	12,200.5	11,624.0	17.6	24.7	112.47	753.9	583.4	444.8	402.0	42.84	10.383	
12,065.0	11,454.0	12,265.5	11,624.0	17.8	24.9	112.47	818.9	582.8	444.8	401.7	43.14	10.312	
12,100.0	11,454.0	12,300.5	11,624.0	17.9	24.9	112.47	853.9	582.5	444.8	401.5	43.30	10.274	
12,160.0	11,454.0	12,360.5	11,624.0	18.1	25.1	112.47	913.9	582.0	444.8	401.2	43.60	10.202	
12,200.0	11,454.0	12,400.5	11,624.0	18.2	25.2	112.47	953.9	581.6	444.8	401.0	43.81	10.155	
12,255.0	11,454.0	12,455.5	11,624.0	18.4	25.3	112.47	1,008.9	581.1	444.8	400.7	44.11	10.085	
12,300.0	11,454.0	12,500.5	11,624.0	18.5	25.4	112.47	1,053.9	580.7	444.8	400.5	44.36	10.028	
12,350.0	11,454.0	12,550.5	11,624.0	18.7	25.5	112.47	1,103.9	580.2	444.8	400.2	44.66	9.961	
12,400.0	11,454.0	12,600.5	11,624.0	18.9	25.7	112.47	1,153.9	579.8	444.8	399.9	44.96	9.895	
12,445.0	11,454.0	12,645.5	11,624.0	19.0	25.8	112.47	1,198.9	579.4	444.8	399.6	45.25	9.831	
12,500.0	11,454.0	12,700.5	11,624.0	19.3	25.9	112.47	1,253.9	578.9	444.8	399.2	45.60	9.755	
12,540.0	11,454.0	12,740.5	11,624.0	19.4	26.1	112.47	1,293.9	578.5	444.8	399.0	45.87	9.697	
12,600.0	11,454.0	12,800.5	11,624.0	19.7	26.2	112.47	1,353.9	577.9	444.8	398.5	46.29	9.611	
12,635.0	11,454.0	12,835.5	11,624.0	19.8	26.3	112.47	1,388.9	577.6	444.8	398.3	46.54	9.558	
12,700.0	11,454.0	12,900.5	11,624.0	20.1	26.6	112.47	1,453.9	577.0	444.8	397.8	47.01	9.462	
12,730.0	11,454.0	12,930.5	11,624.0	20.2	26.7	112.47	1,483.9	576.8	444.8	397.6	47.24	9.416	
12,800.0	11,454.0	13,000.5	11,624.0	20.5	26.9	112.47	1,553.9	576.1	444.8	397.1	47.77	9.311	
12,825.0	11,454.0	13,025.5	11,624.0	20.6	27.0	112.47	1,578.9	575.9	444.8	396.9	47.97	9.272	
12,900.0	11,454.0	13,100.5	11,624.0	21.0	27.2	112.47	1,653.9	575.2	444.8	396.3	48.57	9.158	
12,920.0	11,454.0	13,120.5	11,624.0	21.1	27.3	112.47	1,673.9	575.0	444.8	396.1	48.74	9.126	
13,000.0	11,454.0	13,200.5	11,624.0	21.5	27.6	112.47	1,753.9	574.3	444.8	395.4	49.41	9.003	
13,015.0	11,454.0	13,215.5	11,624.0	21.5	27.7	112.47	1,768.9	574.2	444.8	395.3	49.54	8.979	
13,100.0	11,454.0	13,300.5	11,624.0	21.9	28.0	112.47	1,853.9	573.4	444.8	394.5	50.27	8.848	
13,110.0	11,454.0	13,310.5	11,624.0	22.0	28.0	112.47	1,863.9	573.3	444.8	394.5	50.36	8.832	
13,200.0	11,454.0	13,400.5	11,624.0	22.5	28.4	112.47	1,953.8	572.5	444.8	393.6	51.17	8.692	
13,205.0	11,454.0	13,405.5	11,624.0	22.5	28.4	112.47	1,958.8	572.4	444.8	393.6	51.22	8.685	
13,300.0	11,454.0	13,500.5	11,624.0	23.0	28.8	112.47	2,053.8	571.6	444.8	392.7	52.10	8.538	
13,395.0	11,454.0	13,595.5	11,624.0	23.5	29.2	112.47	2,148.8	570.7	444.8	391.8	53.01	8.391	
13,400.0	11,454.0	13,600.5	11,624.0	23.5	29.2	112.47	2,153.8	570.7	444.8	391.8	53.06	8.384	
13,490.0	11,454.0	13,690.5	11,624.0	24.0	29.6	112.47	2,243.8	569.8	444.8	390.9	53.94	8.246	
13,500.0	11,454.0	13,700.5	11,624.0	24.1	29.7	112.47	2,253.8	569.8	444.8	390.8	54.04	8.231	
13,585.0	11,454.0	13,785.5	11,624.0	24.5	30.1	112.47	2,338.8	569.0	444.8	389.9	54.89	8.103	
13,600.0	11,454.0	13,800.5	11,624.0	24.6	30.1	112.47	2,353.8	568.8	444.8	389.8	55.04	8.081	
13,680.0	11,454.0	13,880.5	11,624.0	25.1	30.5	112.47	2,433.8	568.1	444.8	388.9	55.87	7.962	
13,700.0	11,454.0	13,900.5	11,624.0	25.2	30.6	112.47	2,453.8	567.9	444.8	388.7	56.07	7.932	
13,775.0	11,454.0	13,975.5	11,624.0	25.6	31.0	112.47	2,528.8	567.3	444.8	387.9	56.86	7.822	
13,800.0	11,454.0	14,000.5	11,624.0	25.8	31.1	112.47	2,553.8	567.0	444.8	387.7	57.13	7.786	
13,870.0	11,454.0	14,070.5	11,624.0	26.2	31.4	112.47	2,623.8	566.4	444.8	386.9	57.88	7.685	
13,900.0	11,454.0	14,100.5	11,624.0	26.4	31.6	112.47	2,653.8	566.1	444.8	386.6	58.20	7.642	
13,965.0	11,454.0	14,165.5	11,624.0	26.7	31.9	112.47	2,718.8	565.5	444.8	385.9	58.91	7.550	
14,000.0	11,454.0	14,200.5	11,624.0	27.0	32.1	112.47	2,753.8	565.2	444.8	385.5	59.29	7.501	
14,060.0	11,454.0	14,260.5	11,624.0	27.3	32.4	112.47	2,813.8	564.7	444.8	384.8	59.96	7.418	
14,100.0	11,454.0	14,300.5	11,624.0	27.6	32.6	112.47	2,853.8	564.3	444.8	384.4	60.41	7.363	
14,155.0	11,454.0	14,355.5	11,624.0	27.9	32.9	112.47	2,908.8	563.8	444.8	383.8	61.03	7.288	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
14,200.0	11,454.0	14,400.5	11,624.0	28.2	33.1	112.47	2,953.8	563.4	444.8	383.3	61.54	7.228	
14,250.0	11,454.0	14,450.5	11,624.0	28.5	33.4	112.47	3,003.8	562.9	444.8	382.7	62.11	7.161	
14,300.0	11,454.0	14,500.5	11,624.0	28.8	33.7	112.47	3,053.8	562.5	444.8	382.1	62.69	7.096	
14,345.0	11,454.0	14,545.5	11,624.0	29.1	33.9	112.47	3,098.8	562.1	444.8	381.6	63.21	7.037	
14,400.0	11,454.0	14,600.5	11,624.0	29.4	34.2	112.47	3,153.8	561.6	444.8	380.9	63.85	6.966	
14,440.0	11,454.0	14,640.5	11,624.0	29.7	34.4	112.47	3,193.8	561.2	444.8	380.5	64.32	6.915	
14,500.0	11,454.0	14,700.5	11,624.0	30.1	34.7	112.47	3,253.8	560.7	444.8	379.8	65.03	6.840	
14,535.0	11,454.0	14,735.5	11,624.0	30.3	34.9	112.47	3,288.8	560.3	444.8	379.3	65.44	6.796	
14,600.0	11,454.0	14,800.5	11,624.0	30.7	35.3	112.47	3,353.8	559.7	444.8	378.6	66.22	6.717	
14,630.0	11,454.0	14,830.5	11,624.0	30.9	35.5	112.47	3,383.8	559.5	444.8	378.2	66.58	6.680	
14,700.0	11,454.0	14,900.5	11,624.0	31.3	35.9	112.47	3,453.8	558.8	444.8	377.4	67.43	6.596	
14,725.0	11,454.0	14,925.5	11,624.0	31.5	36.0	112.47	3,478.8	558.6	444.8	377.0	67.73	6.567	
14,800.0	11,454.0	15,000.5	11,624.0	32.0	36.4	112.47	3,553.8	557.9	444.8	376.1	68.65	6.479	
14,820.0	11,454.0	15,020.5	11,624.0	32.1	36.5	112.47	3,573.8	557.7	444.8	375.9	68.89	6.456	
14,900.0	11,454.0	15,100.5	11,624.0	32.6	37.0	112.47	3,653.8	557.0	444.8	374.9	69.88	6.365	
14,915.0	11,454.0	15,115.5	11,624.0	32.7	37.1	112.47	3,668.8	556.9	444.8	374.7	70.06	6.348	
15,000.0	11,454.0	15,200.5	11,624.0	33.3	37.6	112.47	3,753.8	556.1	444.8	373.6	71.12	6.254	
15,010.0	11,454.0	15,210.5	11,624.0	33.4	37.7	112.47	3,763.8	556.0	444.8	373.5	71.25	6.243	
15,100.0	11,454.0	15,300.5	11,624.0	34.0	38.2	112.47	3,853.8	555.2	444.8	372.4	72.37	6.145	
15,105.0	11,454.0	15,305.5	11,624.0	34.0	38.2	112.47	3,858.8	555.1	444.8	372.3	72.44	6.140	
15,200.0	11,454.0	15,400.5	11,624.0	34.6	38.8	112.47	3,953.8	554.3	444.8	371.1	73.64	6.040	
15,295.0	11,454.0	15,495.5	11,624.0	35.3	39.4	112.47	4,048.8	553.4	444.8	369.9	74.85	5.942	
15,300.0	11,454.0	15,500.5	11,624.0	35.3	39.4	112.47	4,053.8	553.4	444.8	369.8	74.91	5.937	
15,390.0	11,454.0	15,590.5	11,624.0	35.9	39.9	112.47	4,143.8	552.5	444.8	368.7	76.07	5.847	
15,400.0	11,454.0	15,600.5	11,624.0	36.0	40.0	112.47	4,153.8	552.5	444.8	368.6	76.20	5.837	
15,485.0	11,454.0	15,685.5	11,624.0	36.6	40.5	112.47	4,238.8	551.7	444.8	367.5	77.30	5.754	
15,500.0	11,454.0	15,700.5	11,624.0	36.7	40.6	112.47	4,253.8	551.5	444.8	367.3	77.49	5.740	
15,580.0	11,454.0	15,780.5	11,624.0	37.2	41.1	112.47	4,333.7	550.8	444.8	366.2	78.53	5.663	
15,600.0	11,454.0	15,800.5	11,624.0	37.3	41.2	112.47	4,353.7	550.6	444.8	366.0	78.79	5.645	
15,675.0	11,454.0	15,875.5	11,624.0	37.9	41.7	112.47	4,428.7	550.0	444.8	365.0	79.77	5.575	
15,700.0	11,454.0	15,900.5	11,624.0	38.0	41.8	112.47	4,453.7	549.7	444.8	364.7	80.10	5.552	
15,770.0	11,454.0	15,970.5	11,624.0	38.5	42.3	112.47	4,523.7	549.1	444.7	363.7	81.02	5.489	
15,800.0	11,454.0	16,000.5	11,624.0	38.7	42.5	112.47	4,553.7	548.8	444.7	363.3	81.42	5.463	
15,865.0	11,454.0	16,065.5	11,624.0	39.2	42.9	112.47	4,618.7	548.2	444.7	362.5	82.28	5.405	
15,900.0	11,454.0	16,100.5	11,624.0	39.4	43.1	112.47	4,653.7	547.9	444.7	362.0	82.74	5.375	
15,960.0	11,454.0	16,160.5	11,624.0	39.8	43.5	112.47	4,713.7	547.4	444.7	361.2	83.54	5.324	
16,000.0	11,454.0	16,200.5	11,624.0	40.1	43.7	112.47	4,753.7	547.0	444.7	360.7	84.07	5.290	
16,055.0	11,454.0	16,255.5	11,624.0	40.5	44.1	112.47	4,808.7	546.5	444.7	359.9	84.81	5.244	
16,100.0	11,454.0	16,300.5	11,624.0	40.8	44.4	112.47	4,853.7	546.1	444.7	359.3	85.41	5.207	
16,150.0	11,454.0	16,350.5	11,624.0	41.2	44.7	112.47	4,903.7	545.6	444.7	358.7	86.08	5.166	
16,200.0	11,454.0	16,400.5	11,624.0	41.5	45.0	112.47	4,953.7	545.2	444.7	358.0	86.76	5.126	
16,245.0	11,454.0	16,445.5	11,624.0	41.8	45.3	112.47	4,998.7	544.8	444.7	357.4	87.36	5.091	
16,300.0	11,454.0	16,500.5	11,624.0	42.2	45.7	112.47	5,053.7	544.3	444.7	356.6	88.11	5.048	
16,340.0	11,454.0	16,540.5	11,624.0	42.5	45.9	112.47	5,093.7	543.9	444.7	356.1	88.65	5.017	
16,400.0	11,454.0	16,600.5	11,624.0	42.9	46.3	112.47	5,153.7	543.4	444.7	355.3	89.46	4.971	
16,435.0	11,454.0	16,635.5	11,624.0	43.2	46.6	112.47	5,188.7	543.0	444.7	354.8	89.94	4.945	
16,500.0	11,454.0	16,700.5	11,624.0	43.6	47.0	112.47	5,253.7	542.4	444.7	353.9	90.82	4.897	
16,530.0	11,454.0	16,730.5	11,624.0	43.8	47.2	112.47	5,283.7	542.2	444.7	353.5	91.23	4.875	
16,600.0	11,454.0	16,800.5	11,624.0	44.3	47.6	112.47	5,353.7	541.5	444.7	352.5	92.19	4.824	
16,625.0	11,454.0	16,825.5	11,624.0	44.5	47.8	112.47	5,378.7	541.3	444.7	352.2	92.53	4.806	
16,700.0	11,454.0	16,900.5	11,624.0	45.0	48.3	112.47	5,453.7	540.6	444.7	351.2	93.56	4.753	
16,720.0	11,454.0	16,920.5	11,624.0	45.2	48.4	112.47	5,473.7	540.4	444.7	350.9	93.84	4.739	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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)			
16,800.0	11,454.0	17,000.5	11,624.0	45.7	49.0	112.47	5,553.7	539.7	444.7	349.8	94.94	4.684	
16,815.0	11,454.0	17,015.5	11,624.0	45.8	49.1	112.47	5,568.7	539.6	444.7	349.6	95.15	4.674	
16,900.0	11,454.0	17,100.5	11,624.0	46.5	49.6	112.47	5,653.7	538.8	444.7	348.4	96.32	4.617	
16,910.0	11,454.0	17,110.5	11,624.0	46.5	49.7	112.47	5,663.7	538.7	444.7	348.3	96.46	4.610	
17,000.0	11,454.0	17,200.5	11,624.0	47.2	50.3	112.47	5,753.7	537.9	444.7	347.0	97.71	4.551	
17,005.0	11,454.0	17,205.5	11,624.0	47.2	50.3	112.47	5,758.7	537.8	444.7	346.9	97.78	4.548	
17,100.0	11,454.0	17,300.5	11,624.0	47.9	51.0	112.47	5,853.7	537.0	444.7	345.6	99.10	4.488	
17,195.0	11,454.0	17,395.5	11,624.0	48.6	51.6	112.47	5,948.7	536.1	444.7	344.3	100.42	4.428	
17,200.0	11,454.0	17,400.5	11,624.0	48.6	51.6	112.47	5,953.7	536.1	444.7	344.2	100.49	4.425	
17,290.0	11,454.0	17,490.5	11,624.0	49.2	52.3	112.47	6,043.7	535.3	444.7	343.0	101.75	4.371	
17,300.0	11,454.0	17,500.5	11,624.0	49.3	52.3	112.47	6,053.7	535.2	444.7	342.8	101.89	4.365	
17,385.0	11,454.0	17,585.5	11,624.0	49.9	52.9	112.47	6,138.7	534.4	444.7	341.6	103.08	4.314	
17,400.0	11,454.0	17,600.5	11,624.0	50.0	53.0	112.47	6,153.7	534.3	444.7	341.4	103.29	4.305	
17,480.0	11,454.0	17,680.5	11,624.0	50.6	53.5	112.47	6,233.7	533.5	444.7	340.3	104.42	4.259	
17,500.0	11,454.0	17,700.5	11,624.0	50.8	53.7	112.47	6,253.7	533.3	444.7	340.0	104.70	4.247	
17,575.0	11,454.0	17,775.5	11,624.0	51.3	54.2	112.47	6,328.7	532.7	444.7	338.9	105.76	4.205	
17,600.0	11,454.0	17,800.5	11,624.0	51.5	54.4	112.47	6,353.7	532.4	444.7	338.6	106.11	4.191	
17,670.0	11,454.0	17,870.5	11,624.0	52.0	54.8	112.48	6,423.7	531.8	444.7	337.6	107.10	4.152	
17,700.0	11,454.0	17,900.5	11,624.0	52.2	55.1	112.48	6,453.7	531.5	444.7	337.2	107.52	4.136	
17,765.0	11,454.0	17,965.5	11,624.0	52.7	55.5	112.48	6,518.7	530.9	444.7	336.3	108.44	4.101	
17,800.0	11,454.0	18,000.5	11,624.0	52.9	55.7	112.48	6,553.7	530.6	444.7	335.8	108.94	4.082	
17,860.0	11,454.0	18,060.5	11,624.0	53.4	56.2	112.48	6,613.7	530.1	444.7	334.9	109.79	4.050	
17,900.0	11,454.0	18,100.5	11,624.0	53.7	56.4	112.48	6,653.7	529.7	444.7	334.3	110.36	4.030	
17,955.0	11,454.0	18,155.5	11,624.0	54.1	56.8	112.48	6,708.6	529.2	444.7	333.6	111.14	4.001	
18,000.0	11,454.0	18,200.5	11,624.0	54.4	57.1	112.48	6,753.6	528.8	444.7	332.9	111.78	3.978	
18,050.0	11,454.0	18,250.5	11,624.0	54.7	57.5	112.48	6,803.6	528.3	444.7	332.2	112.49	3.953	
18,100.0	11,454.0	18,300.5	11,624.0	55.1	57.8	112.48	6,853.6	527.9	444.7	331.5	113.20	3.928	
18,145.0	11,454.0	18,345.5	11,624.0	55.4	58.1	112.48	6,898.6	527.5	444.7	330.8	113.85	3.906	
18,200.0	11,454.0	18,400.5	11,624.0	55.8	58.5	112.48	6,953.6	527.0	444.7	330.1	114.63	3.879	
18,240.0	11,454.0	18,440.5	11,624.0	56.1	58.8	112.48	6,993.6	526.6	444.7	329.5	115.20	3.860	
18,300.0	11,454.0	18,500.5	11,624.0	56.6	59.2	112.48	7,053.6	526.1	444.7	328.6	116.06	3.831	
18,335.0	11,454.0	18,535.5	11,624.0	56.8	59.5	112.48	7,088.6	525.7	444.7	328.1	116.56	3.815	
18,400.0	11,454.0	18,600.5	11,624.0	57.3	59.9	112.48	7,153.6	525.1	444.7	327.2	117.50	3.785	
18,430.0	11,454.0	18,630.5	11,624.0	57.5	60.1	112.48	7,183.6	524.9	444.7	326.8	117.93	3.771	
18,500.0	11,454.0	18,700.5	11,624.0	58.0	60.6	112.48	7,253.6	524.2	444.7	325.7	118.93	3.739	
18,525.0	11,454.0	18,725.5	11,624.0	58.2	60.8	112.48	7,278.6	524.0	444.7	325.4	119.29	3.728	
18,600.0	11,454.0	18,800.5	11,624.0	58.8	61.3	112.48	7,353.6	523.3	444.7	324.3	120.37	3.694	
18,620.0	11,454.0	18,820.5	11,624.0	58.9	61.4	112.48	7,373.6	523.1	444.7	324.0	120.66	3.685	
18,700.0	11,454.0	18,900.5	11,624.0	59.5	62.0	112.48	7,453.6	522.4	444.7	322.9	121.81	3.651	
18,715.0	11,454.0	18,915.5	11,624.0	59.6	62.1	112.48	7,468.6	522.3	444.7	322.6	122.02	3.644	
18,800.0	11,454.0	19,000.5	11,624.0	60.2	62.7	112.48	7,553.6	521.5	444.7	321.4	123.25	3.608	
18,810.0	11,454.0	19,010.5	11,624.0	60.3	62.8	112.48	7,563.6	521.4	444.7	321.3	123.40	3.604	
18,900.0	11,454.0	19,100.5	11,624.0	61.0	63.4	112.48	7,653.6	520.6	444.7	320.0	124.70	3.566	
18,905.0	11,454.0	19,105.5	11,624.0	61.0	63.5	112.48	7,658.6	520.5	444.7	319.9	124.77	3.564	
19,000.0	11,454.0	19,200.5	11,624.0	61.7	64.1	112.48	7,753.6	519.7	444.7	318.5	126.14	3.525	
19,095.0	11,454.0	19,295.5	11,624.0	62.4	64.8	112.48	7,848.6	518.8	444.7	317.1	127.52	3.487	
19,100.0	11,454.0	19,300.5	11,624.0	62.4	64.8	112.48	7,853.6	518.8	444.7	317.1	127.59	3.485	
19,190.0	11,454.0	19,390.5	11,624.0	63.1	65.5	112.48	7,943.6	518.0	444.7	315.8	128.90	3.450	
19,200.0	11,454.0	19,400.5	11,624.0	63.2	65.5	112.48	7,953.6	517.9	444.7	315.6	129.04	3.446	
19,285.0	11,454.0	19,485.5	11,624.0	63.8	66.1	112.48	8,038.6	517.1	444.7	314.4	130.27	3.413	
19,300.0	11,454.0	19,500.5	11,624.0	63.9	66.3	112.48	8,053.6	517.0	444.7	314.2	130.49	3.408	
19,380.0	11,454.0	19,580.5	11,624.0	64.5	66.8	112.48	8,133.6	516.2	444.7	313.0	131.66	3.377	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
19,400.0	11,454.0	19,600.5	11,624.0	64.6	67.0	112.48	8,153.6	516.0	444.7	312.7	131.95	3.370	
19,475.0	11,454.0	19,675.5	11,624.0	65.2	67.5	112.48	8,228.6	515.4	444.7	311.6	133.04	3.342	
19,500.0	11,454.0	19,700.5	11,624.0	65.4	67.7	112.48	8,253.6	515.1	444.7	311.2	133.40	3.333	
19,570.0	11,454.0	19,770.5	11,624.0	65.9	68.2	112.48	8,323.6	514.5	444.7	310.2	134.42	3.308	
19,600.0	11,454.0	19,800.5	11,624.0	66.1	68.4	112.48	8,353.6	514.2	444.6	309.8	134.86	3.297	
19,665.0	11,454.0	19,865.5	11,624.0	66.6	68.9	112.48	8,418.6	513.6	444.6	308.8	135.81	3.274	
19,700.0	11,454.0	19,900.5	11,624.0	66.9	69.1	112.48	8,453.6	513.3	444.6	308.3	136.32	3.262	
19,760.0	11,454.0	19,960.5	11,624.0	67.3	69.5	112.48	8,513.6	512.8	444.6	307.4	137.20	3.241	
19,800.0	11,454.0	20,000.5	11,624.0	67.6	69.8	112.48	8,553.6	512.4	444.6	306.9	137.78	3.227	
19,855.0	11,454.0	20,055.5	11,624.0	68.0	70.2	112.48	8,608.6	511.9	444.6	306.1	138.58	3.208	
19,900.0	11,454.0	20,100.5	11,624.0	68.3	70.5	112.48	8,653.6	511.5	444.6	305.4	139.24	3.193	
19,950.0	11,454.0	20,150.5	11,624.0	68.7	70.9	112.48	8,703.6	511.0	444.6	304.7	139.97	3.177	
20,000.0	11,454.0	20,200.5	11,624.0	69.1	71.3	112.48	8,753.6	510.6	444.6	303.9	140.71	3.160	
20,045.0	11,454.0	20,245.5	11,624.0	69.4	71.6	112.48	8,798.6	510.2	444.6	303.3	141.36	3.145	
20,100.0	11,454.0	20,300.5	11,624.0	69.8	72.0	112.48	8,853.6	509.7	444.6	302.5	142.17	3.127	
20,140.0	11,454.0	20,340.5	11,624.0	70.1	72.3	112.48	8,893.6	509.3	444.6	301.9	142.76	3.115	
20,200.0	11,454.0	20,400.5	11,624.0	70.6	72.7	112.48	8,953.6	508.8	444.6	301.0	143.64	3.096	
20,235.0	11,454.0	20,435.5	11,624.0	70.8	73.0	112.48	8,988.6	508.4	444.6	300.5	144.15	3.084	
20,300.0	11,454.0	20,500.5	11,624.0	71.3	73.4	112.48	9,053.6	507.8	444.6	299.5	145.11	3.064	
20,330.0	11,454.0	20,530.5	11,624.0	71.5	73.6	112.48	9,083.6	507.6	444.6	299.1	145.55	3.055	
20,400.0	11,454.0	20,600.5	11,624.0	72.1	74.1	112.48	9,153.5	506.9	444.6	298.1	146.57	3.033	
20,425.0	11,454.0	20,625.5	11,624.0	72.2	74.3	112.48	9,178.5	506.7	444.6	297.7	146.94	3.026	
20,500.0	11,454.0	20,700.5	11,624.0	72.8	74.9	112.48	9,253.5	506.0	444.6	296.6	148.04	3.003	
20,520.0	11,454.0	20,720.5	11,624.0	72.9	75.0	112.48	9,273.5	505.8	444.6	296.3	148.34	2.997	
20,600.0	11,454.0	20,800.5	11,624.0	73.5	75.6	112.48	9,353.5	505.1	444.6	295.1	149.52	2.974	
20,615.0	11,454.0	20,815.5	11,624.0	73.7	75.7	112.48	9,368.5	505.0	444.6	294.9	149.74	2.969	
20,700.0	11,454.0	20,900.5	11,624.0	74.3	76.3	112.48	9,453.5	504.2	444.6	293.6	150.99	2.945	
20,710.0	11,454.0	20,910.5	11,624.0	74.4	76.4	112.48	9,463.5	504.1	444.6	293.5	151.14	2.942	
20,800.0	11,454.0	21,000.5	11,624.0	75.0	77.0	112.48	9,553.5	503.3	444.6	292.2	152.46	2.916	
20,805.0	11,454.0	21,005.5	11,624.0	75.1	77.1	112.48	9,558.5	503.3	444.6	292.1	152.54	2.915	
20,900.0	11,454.0	21,100.5	11,624.0	75.8	77.8	112.48	9,653.5	502.4	444.6	290.7	153.94	2.888	
20,995.0	11,454.0	21,195.5	11,624.0	76.5	78.5	112.48	9,748.5	501.5	444.6	289.3	155.34	2.862	
21,000.0	11,454.0	21,200.5	11,624.0	76.5	78.5	112.48	9,753.5	501.5	444.6	289.2	155.42	2.861	
21,090.0	11,454.0	21,290.5	11,624.0	77.2	79.1	112.48	9,843.5	500.7	444.6	287.9	156.74	2.837	
21,100.0	11,454.0	21,300.5	11,624.0	77.3	79.2	112.48	9,853.5	500.6	444.6	287.7	156.89	2.834	
21,185.0	11,454.0	21,385.5	11,624.0	77.9	79.8	112.48	9,938.5	499.8	444.6	286.5	158.15	2.811	
21,200.0	11,454.0	21,400.5	11,624.0	78.0	79.9	112.48	9,953.5	499.7	444.6	286.2	158.37	2.807	
21,280.0	11,454.0	21,480.5	11,624.0	78.6	80.5	112.48	10,033.5	498.9	444.6	285.1	159.55	2.787	
21,300.0	11,454.0	21,500.5	11,624.0	78.8	80.7	112.48	10,053.5	498.7	444.6	284.8	159.85	2.781	
21,375.0	11,454.0	21,575.5	11,624.0	79.3	81.2	112.48	10,128.5	498.1	444.6	283.6	160.96	2.762	
21,400.0	11,454.0	21,600.5	11,624.0	79.5	81.4	112.48	10,153.5	497.8	444.6	283.3	161.33	2.756	
21,470.0	11,454.0	21,670.5	11,624.0	80.0	81.9	112.48	10,223.5	497.2	444.6	282.2	162.37	2.738	
21,500.0	11,454.0	21,700.5	11,624.0	80.3	82.1	112.48	10,253.5	496.9	444.6	281.8	162.81	2.731	
21,565.0	11,454.0	21,765.5	11,624.0	80.7	82.6	112.48	10,318.5	496.3	444.6	280.8	163.78	2.715	
21,600.0	11,454.0	21,800.5	11,624.0	81.0	82.9	112.48	10,353.5	496.0	444.6	280.3	164.29	2.706	
21,660.0	11,454.0	21,860.5	11,624.0	81.4	83.3	112.48	10,413.5	495.5	444.6	279.4	165.18	2.692	
21,700.0	11,454.0	21,900.5	11,624.0	81.7	83.6	112.48	10,453.5	495.1	444.6	278.8	165.78	2.682	
21,724.9	11,454.0	21,925.4	11,624.0	81.9	83.8	112.48	10,478.4	494.9	444.6	278.4	166.15	2.676	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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, 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	89.68	0.3	60.5	60.5					
95.0	95.0	95.0	95.0	3.0	3.0	89.68	0.3	60.5	60.5	54.4	6.03	10.034		
100.0	100.0	100.0	100.0	3.0	3.0	89.68	0.3	60.5	60.5	54.4	6.03	10.028		
190.0	190.0	190.0	190.0	3.1	3.1	89.68	0.3	60.5	60.5	54.3	6.15	9.827		
200.0	200.0	200.0	200.0	3.1	3.1	89.68	0.3	60.5	60.5	54.3	6.17	9.796		
285.0	285.0	285.0	285.0	3.2	3.2	89.68	0.3	60.5	60.5	54.2	6.31	9.581		
300.0	300.0	300.0	300.0	3.2	3.2	89.68	0.3	60.5	60.5	54.1	6.34	9.538		
380.0	380.0	380.0	380.0	3.3	3.3	89.68	0.3	60.5	60.5	54.0	6.49	9.319		
400.0	400.0	400.0	400.0	3.3	3.3	89.68	0.3	60.5	60.5	53.9	6.53	9.260		
475.0	475.0	475.0	475.0	3.4	3.4	89.68	0.3	60.5	60.5	53.8	6.68	9.045		
500.0	500.0	500.0	500.0	3.4	3.4	89.68	0.3	60.5	60.5	53.7	6.74	8.971		
570.0	570.0	570.0	570.0	3.5	3.5	89.68	0.3	60.5	60.5	53.6	6.90	8.765		
600.0	600.0	600.0	600.0	3.5	3.5	89.68	0.3	60.5	60.5	53.5	6.97	8.675		
665.0	665.0	665.0	665.0	3.6	3.6	89.68	0.3	60.5	60.5	53.3	7.13	8.483		
700.0	700.0	700.0	700.0	3.7	3.7	89.68	0.3	60.5	60.5	53.2	7.22	8.379		
760.0	760.0	760.0	760.0	3.8	3.8	89.68	0.3	60.5	60.5	53.1	7.37	8.203		
800.0	800.0	800.0	800.0	3.8	3.8	89.68	0.3	60.5	60.5	53.0	7.48	8.086		
855.0	855.0	855.0	855.0	3.9	3.9	89.68	0.3	60.5	60.5	52.8	7.63	7.927		
900.0	900.0	900.0	900.0	4.0	4.0	89.68	0.3	60.5	60.5	52.7	7.75	7.798		
950.0	950.0	950.0	950.0	4.1	4.1	89.68	0.3	60.5	60.5	52.6	7.90	7.658		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	89.68	0.3	60.5	60.5	52.4	8.04	7.519		
1,045.0	1,045.0	1,045.0	1,045.0	4.2	4.2	89.68	0.3	60.5	60.5	52.3	8.17	7.396		
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	89.68	0.3	60.5	60.5	52.1	8.34	7.249		
1,140.0	1,140.0	1,140.0	1,140.0	4.4	4.4	89.68	0.3	60.5	60.5	52.0	8.46	7.144		
1,200.0	1,200.0	1,200.0	1,200.0	4.5	4.5	89.68	0.3	60.5	60.5	51.8	8.65	6.990		
1,235.0	1,235.0	1,235.0	1,235.0	4.6	4.6	89.68	0.3	60.5	60.5	51.7	8.76	6.902		
1,300.0	1,300.0	1,300.0	1,300.0	4.7	4.7	89.68	0.3	60.5	60.5	51.5	8.97	6.742		
1,330.0	1,330.0	1,330.0	1,330.0	4.7	4.7	89.68	0.3	60.5	60.5	51.4	9.06	6.670		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	89.68	0.3	60.5	60.5	51.2	9.29	6.506		
1,425.0	1,425.0	1,425.0	1,425.0	4.9	4.9	89.68	0.3	60.5	60.5	51.1	9.38	6.448		
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	89.68	0.3	60.5	60.5	50.8	9.63	6.281 CC		
1,520.0	1,520.0	1,519.6	1,519.6	5.1	5.1	89.68	0.3	60.5	60.5	50.8	9.71	6.237 ES		
1,600.0	1,600.0	1,597.9	1,597.9	5.3	5.2	89.67	0.4	62.1	62.2	52.1	10.02	6.204		
1,615.0	1,615.0	1,612.6	1,612.5	5.3	5.2	89.66	0.4	62.7	62.7	52.6	10.08	6.221		
1,700.0	1,700.0	1,695.6	1,695.4	5.5	5.3	89.64	0.4	67.1	67.3	56.9	10.43	6.450		
1,710.0	1,710.0	1,705.3	1,705.1	5.5	5.4	89.63	0.4	67.8	68.0	57.5	10.47	6.491		
1,800.0	1,800.0	1,792.8	1,792.3	5.7	5.6	89.59	0.5	75.4	75.8	65.0	10.85	6.985		
1,805.0	1,805.0	1,797.6	1,797.1	5.7	5.6	89.59	0.5	75.9	76.3	65.4	10.87	7.019		
1,900.0	1,900.0	1,889.3	1,888.1	5.9	5.8	89.55	0.7	86.9	87.7	76.4	11.28	7.772		
1,995.0	1,995.0	1,980.2	1,978.0	6.1	6.1	89.51	0.9	100.6	102.0	90.3	11.70	8.722		
2,000.0	2,000.0	1,985.0	1,982.7	6.1	6.1	89.51	0.9	101.4	102.9	91.2	11.72	8.777		
2,090.0	2,090.0	2,071.3	2,067.5	6.2	6.3	1.49	1.1	117.1	117.9	105.8	12.07	9.769		
2,100.0	2,100.0	2,081.1	2,077.2	6.2	6.3	1.49	1.1	119.0	119.5	107.4	12.11	9.866		
2,185.0	2,184.9	2,165.3	2,159.8	6.3	6.6	1.50	1.3	135.1	131.5	119.0	12.52	10.504		
2,200.0	2,199.8	2,180.1	2,174.4	6.3	6.6	1.51	1.4	137.9	133.4	120.8	12.60	10.589		
2,250.0	2,249.7	2,229.8	2,223.1	6.4	6.8	1.53	1.5	147.4	139.1	126.3	12.79	10.870		
2,280.0	2,279.6	2,259.7	2,252.4	6.4	6.8	1.55	1.6	153.1	142.2	129.3	12.91	11.011		
2,300.0	2,299.5	2,279.6	2,272.0	6.4	6.9	1.56	1.6	156.9	144.3	131.3	13.00	11.103		
2,375.0	2,374.2	2,354.1	2,345.2	6.5	7.1	1.60	1.8	171.1	152.1	138.8	13.37	11.376		
2,400.0	2,399.1	2,379.0	2,369.6	6.5	7.2	1.61	1.9	175.9	154.7	141.2	13.50	11.463		
2,470.0	2,468.8	2,448.6	2,437.9	6.6	7.4	1.64	2.0	189.1	162.1	148.2	13.88	11.679		
2,500.0	2,498.7	2,478.5	2,467.2	6.6	7.5	1.65	2.1	194.8	165.2	151.2	14.04	11.768		

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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_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)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,565.0	2,563.5	2,543.1	2,530.7	6.7	7.8	1.68	2.3	207.2	172.0	157.6	14.41	11.940	
2,600.0	2,598.4	2,577.9	2,564.8	6.8	7.9	1.69	2.3	213.8	175.7	161.1	14.61	12.026	
2,660.0	2,658.1	2,637.6	2,623.4	7.0	8.1	1.71	2.5	225.2	181.9	167.0	14.96	12.160	
2,700.0	2,698.0	2,677.4	2,662.5	7.0	8.2	1.72	2.6	232.8	186.1	170.9	15.20	12.244	
2,755.0	2,752.8	2,732.1	2,716.2	7.2	8.4	1.74	2.7	243.2	191.9	176.3	15.54	12.347	
2,800.0	2,797.6	2,776.8	2,760.1	7.3	8.6	1.76	2.8	251.8	196.6	180.8	15.82	12.426	
2,850.0	2,847.4	2,826.5	2,808.9	7.4	8.8	1.77	3.0	261.2	201.8	185.7	16.14	12.504	
2,900.0	2,897.2	2,876.3	2,857.7	7.5	9.0	1.78	3.1	270.7	207.0	190.6	16.46	12.578	
2,945.0	2,942.0	2,921.0	2,901.6	7.7	9.1	1.79	3.2	279.3	211.7	195.0	16.75	12.637	
3,000.0	2,996.8	2,975.7	2,955.3	7.8	9.3	1.81	3.3	289.7	217.5	200.4	17.12	12.705	
3,040.0	3,036.7	3,015.5	2,994.4	7.9	9.5	1.82	3.4	297.3	221.7	204.3	17.39	12.749	
3,100.0	3,096.4	3,075.2	3,053.0	8.1	9.7	1.83	3.6	308.7	227.9	210.1	17.79	12.810	
3,135.0	3,131.3	3,110.0	3,087.1	8.2	9.9	1.84	3.7	315.3	231.6	213.6	18.03	12.842	
3,200.0	3,196.1	3,174.6	3,150.6	8.4	10.1	1.85	3.8	327.7	238.4	219.9	18.48	12.897	
3,230.0	3,226.0	3,204.5	3,179.9	8.5	10.3	1.86	3.9	333.4	241.5	222.8	18.70	12.920	
3,300.0	3,295.7	3,274.1	3,248.2	8.7	10.5	1.87	4.1	346.6	248.9	229.7	19.19	12.969	
3,325.0	3,320.6	3,298.9	3,272.6	8.7	10.6	1.87	4.1	351.4	251.5	232.1	19.37	12.984	
3,400.0	3,395.3	3,373.5	3,345.8	9.0	10.9	1.89	4.3	365.6	259.3	239.4	19.91	13.027	
3,420.0	3,415.2	3,393.4	3,365.4	9.0	11.0	1.89	4.4	369.4	261.4	241.4	20.05	13.038	
3,500.0	3,494.9	3,473.0	3,443.5	9.3	11.3	1.90	4.6	384.6	269.8	249.1	20.63	13.075	
3,515.0	3,509.9	3,487.9	3,458.1	9.3	11.4	1.91	4.6	387.4	271.3	250.6	20.74	13.081	
3,600.0	3,594.5	3,572.4	3,541.1	9.6	11.8	1.92	4.8	403.6	280.2	258.9	21.37	13.114	
3,610.0	3,604.5	3,582.4	3,550.8	9.6	11.8	1.92	4.9	405.5	281.3	259.8	21.44	13.118	
3,680.8	3,675.0	3,652.7	3,619.9	9.8	12.1	1.93	5.0	418.9	288.7	266.7	21.95	13.148	
3,700.0	3,694.2	3,671.9	3,638.7	9.9	12.2	1.93	5.1	422.5	290.7	268.6	22.09	13.162	
3,705.0	3,699.1	3,676.8	3,643.6	9.9	12.2	1.93	5.1	423.5	291.2	269.1	22.12	13.163	
3,800.0	3,793.8	3,771.3	3,736.3	10.2	12.6	1.94	5.3	441.5	301.8	278.9	22.84	13.214	
3,895.0	3,888.6	3,865.6	3,828.9	10.5	13.0	1.95	5.6	459.5	313.1	289.5	23.55	13.295	
3,900.0	3,893.6	3,870.5	3,833.7	10.5	13.0	1.95	5.6	460.4	313.7	290.1	23.59	13.300	
3,990.0	3,983.4	3,959.8	3,921.4	10.8	13.4	1.95	5.8	477.5	325.1	300.9	24.26	13.404	
4,000.0	3,993.4	3,969.7	3,931.1	10.8	13.4	1.95	5.8	479.4	326.5	302.1	24.33	13.417	
4,085.0	4,078.2	4,053.9	4,013.7	11.1	13.8	1.94	6.0	495.4	338.0	313.1	24.96	13.541	
4,100.0	4,093.2	4,068.8	4,028.3	11.1	13.9	1.94	6.1	498.3	340.1	315.0	25.07	13.564	
4,180.0	4,173.1	4,148.0	4,106.0	11.4	14.2	1.93	6.3	513.4	351.7	326.0	25.66	13.703	
4,200.0	4,193.1	4,167.7	4,125.4	11.4	14.3	1.93	6.3	517.1	354.6	328.8	25.81	13.740	
4,275.0	4,268.1	4,241.8	4,198.2	11.6	14.6	1.92	6.5	531.3	366.1	339.7	26.36	13.891	
4,300.0	4,293.0	4,266.5	4,222.4	11.7	14.7	1.92	6.6	536.0	370.0	343.5	26.54	13.943	
4,370.0	4,363.0	4,335.6	4,290.3	11.9	15.0	1.91	6.7	549.2	381.3	354.3	27.04	14.102	
4,400.0	4,393.0	4,365.2	4,319.3	12.0	15.2	1.90	6.8	554.8	386.3	359.0	27.25	14.173	
4,465.0	4,458.0	4,429.3	4,382.2	12.2	15.4	1.89	7.0	567.0	397.3	369.6	27.71	14.339	
4,500.0	4,493.0	4,463.7	4,416.0	12.3	15.6	1.89	7.1	573.6	403.4	375.4	27.95	14.431	
4,560.0	4,553.0	4,522.8	4,474.0	12.4	15.9	1.87	7.2	584.9	414.0	385.7	28.35	14.602	
4,600.0	4,593.0	4,562.1	4,512.6	12.5	16.0	1.87	7.3	592.4	421.3	392.7	28.62	14.719	
4,655.0	4,648.0	4,616.1	4,565.6	12.6	16.3	1.85	7.4	602.7	431.6	402.6	28.94	14.914	
4,680.8	4,673.7	4,641.4	4,590.5	12.6	16.4	89.84	7.5	607.5	436.4	407.4	29.08	15.008	
4,700.0	4,693.0	4,660.3	4,609.0	12.6	16.5	89.83	7.5	611.1	440.1	410.9	29.17	15.089	
4,750.0	4,743.0	4,709.4	4,657.2	12.6	16.7	89.82	7.7	620.5	449.7	420.2	29.42	15.284	
4,800.0	4,793.0	4,758.5	4,705.4	12.6	16.9	89.81	7.8	629.8	459.2	429.5	29.67	15.476	
4,845.0	4,838.0	4,802.7	4,748.7	12.7	17.1	89.80	7.9	638.3	467.8	437.9	29.90	15.646	
4,900.0	4,893.0	4,856.7	4,801.7	12.7	17.3	89.79	8.0	648.6	478.3	448.1	30.18	15.850	
4,940.0	4,933.0	4,895.9	4,840.3	12.7	17.5	89.78	8.1	656.1	485.9	455.5	30.38	15.995	
5,000.0	4,993.0	4,954.8	4,898.1	12.8	17.8	89.77	8.3	667.3	497.4	466.7	30.68	16.210	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
5,035.0	5,028.0	4,989.2	4,931.8	12.8	17.9	89.76	8.4	673.9	504.0	473.2	30.86	16.333	
5,100.0	5,093.0	5,053.0	4,994.4	12.8	18.2	89.75	8.5	686.0	516.4	485.2	31.19	16.558	
5,130.0	5,123.0	5,082.4	5,023.3	12.8	18.3	89.74	8.6	691.7	522.2	490.8	31.34	16.661	
5,200.0	5,193.0	5,151.1	5,090.8	12.9	18.6	89.73	8.8	704.8	535.5	503.8	31.70	16.895	
5,225.0	5,218.0	5,175.7	5,114.9	12.9	18.8	89.72	8.8	709.4	540.3	508.5	31.82	16.977	
5,300.0	5,293.0	5,249.3	5,187.2	12.9	19.1	89.71	9.0	723.5	554.6	522.4	32.21	17.220	
5,320.0	5,313.0	5,268.9	5,206.4	13.0	19.2	89.71	9.1	727.2	558.4	526.1	32.31	17.284	
5,400.0	5,393.0	5,347.5	5,283.5	13.0	19.5	89.70	9.3	742.2	573.7	541.0	32.72	17.535	
5,415.0	5,408.0	5,362.2	5,298.0	13.0	19.6	89.69	9.3	745.0	576.5	543.7	32.79	17.581	
5,500.0	5,493.0	5,445.6	5,379.9	13.1	20.0	89.68	9.5	761.0	592.8	559.5	33.23	17.839	
5,510.0	5,503.0	5,455.4	5,389.5	13.1	20.0	89.68	9.5	762.8	594.7	561.4	33.28	17.869	
5,600.0	5,593.0	5,543.8	5,476.2	13.1	20.4	89.67	9.8	779.7	611.8	578.1	33.74	18.133	
5,605.0	5,598.0	5,548.7	5,481.0	13.1	20.4	89.67	9.8	780.6	612.8	579.0	33.77	18.148	
5,700.0	5,693.0	5,642.0	5,572.6	13.2	20.9	89.66	10.0	798.4	630.9	596.7	34.25	18.418	
5,795.0	5,788.0	5,735.2	5,664.1	13.2	21.3	89.64	10.2	816.2	649.0	614.3	34.74	18.681	
5,800.0	5,793.0	5,740.1	5,668.9	13.2	21.3	89.64	10.2	817.1	650.0	615.2	34.77	18.695	
5,890.0	5,883.0	5,828.5	5,755.7	13.3	21.7	89.63	10.5	834.0	667.2	631.9	35.23	18.936	
5,900.0	5,893.0	5,838.3	5,765.3	13.3	21.7	89.63	10.5	835.9	669.1	633.8	35.28	18.962	
5,985.0	5,978.0	5,921.7	5,847.2	13.4	22.1	89.62	10.7	851.8	685.3	649.6	35.72	19.183	
6,000.0	5,993.0	5,936.4	5,861.7	13.4	22.2	89.62	10.7	854.6	688.2	652.4	35.80	19.222	
6,080.0	6,073.0	6,015.0	5,938.8	13.4	22.5	89.61	10.9	869.6	703.4	667.2	36.21	19.424	
6,100.0	6,093.0	6,034.6	5,958.0	13.4	22.6	89.61	11.0	873.3	707.2	670.9	36.32	19.474	
6,175.0	6,168.0	6,108.2	6,030.3	13.5	23.0	89.61	11.2	887.4	721.5	684.8	36.70	19.658	
6,200.0	6,193.0	6,132.8	6,054.4	13.5	23.1	89.60	11.2	892.1	726.3	689.5	36.83	19.721	
6,270.0	6,263.0	6,209.3	6,129.6	13.5	23.4	89.60	11.4	906.3	739.4	702.2	37.23	19.863	
6,300.0	6,293.0	6,243.2	6,163.0	13.6	23.6	89.59	11.5	912.4	744.7	707.3	37.40	19.911	
6,365.0	6,358.0	6,317.0	6,235.6	13.6	23.9	89.59	11.7	924.8	755.7	717.9	37.78	20.000	
6,400.0	6,393.0	6,356.8	6,275.0	13.6	24.1	89.58	11.7	931.1	761.2	723.2	37.98	20.041	
6,460.0	6,453.0	6,425.3	6,342.7	13.7	24.4	89.58	11.9	941.3	770.1	731.8	38.32	20.098	
6,500.0	6,493.0	6,471.0	6,388.0	13.7	24.5	89.58	12.0	947.7	775.7	737.2	38.54	20.128	
6,555.0	6,548.0	6,534.2	6,450.6	13.7	24.8	89.57	12.1	955.9	782.9	744.0	38.83	20.159	
6,600.0	6,593.0	6,585.9	6,502.0	13.7	25.0	89.57	12.1	962.1	788.3	749.2	39.07	20.176	
6,650.0	6,643.0	6,643.6	6,559.3	13.8	25.3	89.57	12.2	968.4	793.8	754.5	39.32	20.186	
6,700.0	6,693.0	6,701.4	6,616.8	13.8	25.5	89.57	12.3	974.2	798.8	759.2	39.57	20.186	
6,745.0	6,738.0	6,753.5	6,668.7	13.8	25.7	89.56	12.4	979.0	802.9	763.1	39.79	20.180	
6,800.0	6,793.0	6,817.3	6,732.2	13.9	25.9	89.56	12.4	984.1	807.3	767.3	40.04	20.163	
6,840.0	6,833.0	6,863.7	6,778.6	13.9	26.1	89.56	12.5	987.4	810.2	770.0	40.22	20.145	
6,900.0	6,893.0	6,933.5	6,848.2	13.9	26.4	89.56	12.5	991.7	813.8	773.4	40.47	20.109	
6,935.0	6,928.0	6,974.2	6,888.9	14.0	26.5	89.56	12.6	993.8	815.6	775.0	40.61	20.084	
7,000.0	6,993.0	7,050.0	6,964.6	14.0	26.7	89.56	12.6	996.9	818.3	777.5	40.86	20.029	
7,030.0	7,023.0	7,085.0	6,999.6	14.0	26.8	89.56	12.6	998.0	819.3	778.3	40.96	20.000	
7,100.0	7,093.0	7,166.6	7,081.2	14.1	27.1	89.56	12.6	999.8	820.8	779.6	41.18	19.933	
7,125.0	7,118.0	7,195.8	7,110.4	14.1	27.1	89.56	12.6	1,000.1	821.1	779.8	41.25	19.905	
7,200.0	7,193.0	7,278.4	7,193.0	14.1	27.2	89.56	12.6	1,000.3	821.3	779.9	41.33	19.872	
7,220.0	7,213.0	7,298.4	7,213.0	14.1	27.2	89.56	12.6	1,000.3	821.3	779.9	41.34	19.864	
7,300.0	7,293.0	7,378.4	7,293.0	14.2	27.2	89.56	12.6	1,000.3	821.3	779.9	41.42	19.829	
7,315.0	7,308.0	7,393.4	7,308.0	14.2	27.2	89.56	12.6	1,000.3	821.3	779.8	41.43	19.823	
7,400.0	7,393.0	7,478.4	7,393.0	14.3	27.3	89.56	12.6	1,000.3	821.3	779.8	41.51	19.786	
7,410.0	7,403.0	7,488.4	7,403.0	14.3	27.3	89.56	12.6	1,000.3	821.3	779.8	41.52	19.781	
7,500.0	7,493.0	7,578.4	7,493.0	14.3	27.3	89.56	12.6	1,000.3	821.3	779.7	41.60	19.742	
7,505.0	7,498.0	7,583.4	7,498.0	14.3	27.3	89.56	12.6	1,000.3	821.3	779.7	41.61	19.740	
7,600.0	7,593.0	7,678.4	7,593.0	14.4	27.3	89.56	12.6	1,000.3	821.3	779.6	41.69	19.698	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,695.0	7,688.0	7,773.4	7,688.0	14.4	27.3	89.56	12.6	1,000.3	821.3	779.5	41.78	19.656	
7,700.0	7,693.0	7,778.4	7,693.0	14.4	27.3	89.56	12.6	1,000.3	821.3	779.5	41.79	19.654	
7,790.0	7,783.0	7,868.4	7,783.0	14.5	27.4	89.56	12.6	1,000.3	821.3	779.4	41.87	19.615	
7,800.0	7,793.0	7,878.4	7,793.0	14.5	27.4	89.56	12.6	1,000.3	821.3	779.4	41.88	19.610	
7,885.0	7,878.0	7,963.4	7,878.0	14.6	27.4	89.56	12.6	1,000.3	821.3	779.3	41.96	19.573	
7,900.0	7,893.0	7,978.4	7,893.0	14.6	27.4	89.56	12.6	1,000.3	821.3	779.3	41.97	19.566	
7,980.0	7,973.0	8,058.4	7,973.0	14.6	27.4	89.56	12.6	1,000.3	821.3	779.2	42.05	19.531	
8,000.0	7,993.0	8,078.4	7,993.0	14.6	27.4	89.56	12.6	1,000.3	821.3	779.2	42.07	19.523	
8,075.0	8,068.0	8,153.4	8,068.0	14.7	27.5	89.56	12.6	1,000.3	821.3	779.1	42.14	19.490	
8,100.0	8,093.0	8,178.4	8,093.0	14.7	27.5	89.56	12.6	1,000.3	821.3	779.1	42.16	19.479	
8,170.0	8,163.0	8,248.4	8,163.0	14.8	27.5	89.56	12.6	1,000.3	821.3	779.0	42.23	19.448	
8,200.0	8,193.0	8,278.4	8,193.0	14.8	27.5	89.56	12.6	1,000.3	821.3	779.0	42.26	19.435	
8,265.0	8,258.0	8,343.4	8,258.0	14.8	27.5	89.56	12.6	1,000.3	821.3	779.0	42.32	19.407	
8,300.0	8,293.0	8,378.4	8,293.0	14.8	27.5	89.56	12.6	1,000.3	821.3	778.9	42.35	19.391	
8,360.0	8,353.0	8,438.4	8,353.0	14.9	27.5	89.56	12.6	1,000.3	821.3	778.9	42.41	19.365	
8,400.0	8,393.0	8,478.4	8,393.0	14.9	27.5	89.56	12.6	1,000.3	821.3	778.8	42.45	19.348	
8,455.0	8,448.0	8,533.4	8,448.0	14.9	27.6	89.56	12.6	1,000.3	821.3	778.8	42.50	19.324	
8,500.0	8,493.0	8,578.4	8,493.0	15.0	27.6	89.56	12.6	1,000.3	821.3	778.7	42.54	19.304	
8,550.0	8,543.0	8,628.4	8,543.0	15.0	27.6	89.56	12.6	1,000.3	821.3	778.7	42.59	19.282	
8,600.0	8,593.0	8,678.4	8,593.0	15.0	27.6	89.56	12.6	1,000.3	821.3	778.6	42.64	19.261	
8,645.0	8,638.0	8,723.4	8,638.0	15.1	27.6	89.56	12.6	1,000.3	821.3	778.6	42.68	19.241	
8,700.0	8,693.0	8,778.4	8,693.0	15.1	27.6	89.56	12.6	1,000.3	821.3	778.5	42.74	19.217	
8,740.0	8,733.0	8,818.4	8,733.0	15.1	27.7	89.56	12.6	1,000.3	821.3	778.5	42.78	19.200	
8,800.0	8,793.0	8,878.4	8,793.0	15.2	27.7	89.56	12.6	1,000.3	821.3	778.4	42.83	19.173	
8,835.0	8,828.0	8,913.4	8,828.0	15.2	27.7	89.56	12.6	1,000.3	821.3	778.4	42.87	19.158	
8,900.0	8,893.0	8,978.4	8,893.0	15.2	27.7	89.56	12.6	1,000.3	821.3	778.3	42.93	19.130	
8,930.0	8,923.0	9,008.4	8,923.0	15.3	27.7	89.56	12.6	1,000.3	821.3	778.3	42.96	19.117	
9,000.0	8,993.0	9,078.4	8,993.0	15.3	27.7	89.56	12.6	1,000.3	821.3	778.2	43.03	19.087	
9,025.0	9,018.0	9,103.4	9,018.0	15.3	27.7	89.56	12.6	1,000.3	821.3	778.2	43.05	19.076	
9,100.0	9,093.0	9,178.4	9,093.0	15.4	27.8	89.56	12.6	1,000.3	821.3	778.1	43.13	19.043	
9,120.0	9,113.0	9,198.4	9,113.0	15.4	27.8	89.56	12.6	1,000.3	821.3	778.1	43.15	19.034	
9,200.0	9,193.0	9,278.4	9,193.0	15.4	27.8	89.56	12.6	1,000.3	821.3	778.0	43.23	19.000	
9,215.0	9,208.0	9,293.4	9,208.0	15.5	27.8	89.56	12.6	1,000.3	821.3	778.0	43.24	18.993	
9,300.0	9,293.0	9,378.4	9,293.0	15.5	27.8	89.56	12.6	1,000.3	821.3	778.0	43.32	18.956	
9,310.0	9,303.0	9,388.4	9,303.0	15.5	27.8	89.56	12.6	1,000.3	821.3	777.9	43.33	18.952	
9,400.0	9,393.0	9,478.4	9,393.0	15.6	27.9	89.56	12.6	1,000.3	821.3	777.9	43.42	18.913	
9,405.0	9,398.0	9,483.4	9,398.0	15.6	27.9	89.56	12.6	1,000.3	821.3	777.8	43.43	18.911	
9,500.0	9,493.0	9,578.4	9,493.0	15.6	27.9	89.56	12.6	1,000.3	821.3	777.8	43.52	18.870	
9,595.0	9,588.0	9,673.4	9,588.0	15.7	27.9	89.56	12.6	1,000.3	821.3	777.7	43.62	18.829	
9,600.0	9,593.0	9,678.4	9,593.0	15.7	27.9	89.56	12.6	1,000.3	821.3	777.7	43.62	18.827	
9,690.0	9,683.0	9,768.4	9,683.0	15.8	27.9	89.56	12.6	1,000.3	821.3	777.6	43.71	18.788	
9,700.0	9,693.0	9,778.4	9,693.0	15.8	28.0	89.56	12.6	1,000.3	821.3	777.6	43.72	18.784	
9,785.0	9,778.0	9,863.4	9,778.0	15.8	28.0	89.56	12.6	1,000.3	821.3	777.5	43.81	18.747	
9,800.0	9,793.0	9,878.4	9,793.0	15.8	28.0	89.56	12.6	1,000.3	821.3	777.5	43.82	18.741	
9,880.0	9,873.0	9,958.4	9,873.0	15.9	28.0	89.56	12.6	1,000.3	821.3	777.4	43.90	18.706	
9,900.0	9,893.0	9,978.4	9,893.0	15.9	28.0	89.56	12.6	1,000.3	821.3	777.4	43.92	18.698	
9,975.0	9,968.0	10,053.4	9,968.0	16.0	28.0	89.56	12.6	1,000.3	821.3	777.3	44.00	18.665	
10,000.0	9,993.0	10,078.4	9,993.0	16.0	28.0	89.56	12.6	1,000.3	821.3	777.3	44.03	18.655	
10,070.0	10,063.0	10,148.4	10,063.0	16.0	28.1	89.56	12.6	1,000.3	821.3	777.2	44.10	18.625	
10,100.0	10,093.0	10,178.4	10,093.0	16.1	28.1	89.56	12.6	1,000.3	821.3	777.1	44.13	18.612	
10,165.0	10,158.0	10,243.4	10,158.0	16.1	28.1	89.56	12.6	1,000.3	821.3	777.1	44.19	18.584	
10,200.0	10,193.0	10,278.4	10,193.0	16.1	28.1	89.56	12.6	1,000.3	821.3	777.0	44.23	18.569	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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
10,260.0	10,253.0	10,338.4	10,253.0	16.2	28.1	89.56	12.6	1,000.3	821.3	777.0	44.29	18.543	
10,300.0	10,293.0	10,378.4	10,293.0	16.2	28.1	89.56	12.6	1,000.3	821.3	776.9	44.33	18.526	
10,355.0	10,348.0	10,433.4	10,348.0	16.2	28.2	89.56	12.6	1,000.3	821.3	776.9	44.39	18.503	
10,400.0	10,393.0	10,478.4	10,393.0	16.3	28.2	89.56	12.6	1,000.3	821.3	776.8	44.43	18.484	
10,450.0	10,443.0	10,528.4	10,443.0	16.3	28.2	89.56	12.6	1,000.3	821.3	776.8	44.48	18.462	
10,500.0	10,493.0	10,578.4	10,493.0	16.3	28.2	89.56	12.6	1,000.3	821.3	776.7	44.54	18.441	
10,545.0	10,538.0	10,623.4	10,538.0	16.4	28.2	89.56	12.6	1,000.3	821.3	776.7	44.58	18.422	
10,600.0	10,593.0	10,678.4	10,593.0	16.4	28.3	89.56	12.6	1,000.3	821.3	776.6	44.64	18.398	
10,640.0	10,633.0	10,718.4	10,633.0	16.4	28.3	89.56	12.6	1,000.3	821.3	776.6	44.68	18.381	
10,700.0	10,693.0	10,778.4	10,693.0	16.5	28.3	89.56	12.6	1,000.3	821.3	776.5	44.74	18.356	
10,735.0	10,728.0	10,813.4	10,728.0	16.5	28.3	89.56	12.6	1,000.3	821.3	776.5	44.78	18.341	
10,800.0	10,793.0	10,878.4	10,793.0	16.5	28.3	89.56	12.6	1,000.3	821.3	776.4	44.85	18.314	
10,830.0	10,823.0	10,908.4	10,823.0	16.6	28.3	89.56	12.6	1,000.3	821.3	776.4	44.88	18.301	
10,900.0	10,893.0	10,978.4	10,893.0	16.6	28.4	89.56	12.6	1,000.3	821.3	776.3	44.95	18.271	
10,925.0	10,918.0	11,003.4	10,918.0	16.6	28.4	89.56	12.6	1,000.3	821.3	776.3	44.97	18.263	
10,983.6	10,976.5	11,062.0	10,976.5	16.6	28.4	89.56	12.6	1,000.3	821.3	776.3	45.01	18.247	
11,000.0	10,993.0	11,078.4	10,993.0	16.6	28.4	90.08	12.9	1,000.3	821.3	776.3	45.01	18.246	
11,020.0	11,012.9	11,098.5	11,013.0	16.6	28.4	90.08	14.0	1,000.3	821.3	776.3	45.01	18.245	
11,025.0	11,017.9	11,103.5	11,018.0	16.6	28.4	90.08	14.4	1,000.3	821.3	776.3	45.01	18.245	
11,050.0	11,042.8	11,128.5	11,042.9	16.6	28.4	90.08	17.3	1,000.3	821.3	776.3	45.02	18.243	
11,075.0	11,067.4	11,153.6	11,067.6	16.6	28.4	90.08	21.4	1,000.3	821.3	776.3	45.02	18.242	
11,100.0	11,091.8	11,178.6	11,092.1	16.7	28.4	90.07	26.8	1,000.2	821.3	776.3	45.03	18.240	
11,115.0	11,106.3	11,193.7	11,106.6	16.7	28.4	90.07	30.7	1,000.2	821.3	776.2	45.03	18.240	
11,125.0	11,115.9	11,203.7	11,116.2	16.7	28.4	90.07	33.5	1,000.2	821.3	776.2	45.03	18.239	
11,150.0	11,139.6	11,228.8	11,140.0	16.7	28.4	90.07	41.5	1,000.1	821.3	776.2	45.03	18.237	
11,175.0	11,162.9	11,253.8	11,163.3	16.7	28.4	90.07	50.7	1,000.0	821.3	776.2	45.04	18.235	
11,200.0	11,185.6	11,278.9	11,186.0	16.7	28.4	90.07	61.1	999.9	821.3	776.2	45.04	18.233	
11,210.0	11,194.6	11,288.9	11,195.0	16.7	28.4	90.07	65.6	999.9	821.3	776.2	45.05	18.232	
11,225.0	11,207.8	11,303.9	11,208.3	16.7	28.4	90.07	72.6	999.8	821.3	776.2	45.05	18.231	
11,250.0	11,229.4	11,329.0	11,229.8	16.7	28.4	90.06	85.4	999.7	821.3	776.2	45.06	18.228	
11,275.0	11,250.2	11,354.0	11,250.7	16.7	28.4	90.06	99.2	999.6	821.3	776.2	45.06	18.225	
11,300.0	11,270.3	11,379.0	11,270.8	16.7	28.4	90.06	114.1	999.4	821.3	776.2	45.07	18.221	
11,305.0	11,274.2	11,384.0	11,274.7	16.7	28.4	90.06	117.2	999.4	821.3	776.2	45.08	18.220	
11,325.0	11,289.6	11,404.1	11,290.1	16.7	28.4	90.06	130.1	999.3	821.3	776.2	45.09	18.216	
11,350.0	11,308.0	11,429.1	11,308.6	16.7	28.4	90.05	147.0	999.1	821.3	776.2	45.10	18.211	
11,375.0	11,325.6	11,454.2	11,326.1	16.7	28.4	90.05	164.9	999.0	821.3	776.2	45.11	18.205	
11,400.0	11,342.1	11,479.2	11,342.7	16.7	28.4	90.05	183.6	998.8	821.3	776.2	45.13	18.198	
11,425.0	11,357.7	11,504.2	11,358.2	16.7	28.4	90.05	203.2	998.6	821.3	776.1	45.15	18.190	
11,450.0	11,372.2	11,529.3	11,372.7	16.7	28.4	90.04	223.6	998.4	821.3	776.1	45.17	18.180	
11,475.0	11,385.7	11,554.3	11,386.1	16.8	28.4	90.04	244.8	998.3	821.3	776.1	45.20	18.170	
11,495.0	11,395.6	11,574.3	11,396.1	16.8	28.5	90.04	262.1	998.1	821.3	776.1	45.22	18.161	
11,500.0	11,398.0	11,579.3	11,398.4	16.8	28.5	90.04	266.6	998.1	821.3	776.1	45.23	18.159	
11,525.0	11,409.2	11,604.3	11,409.6	16.8	28.5	90.03	289.0	997.9	821.3	776.0	45.26	18.146	
11,550.0	11,419.1	11,629.4	11,419.5	16.8	28.5	90.03	311.9	997.6	821.3	776.0	45.30	18.132	
11,575.0	11,427.9	11,654.4	11,428.2	16.8	28.5	90.02	335.4	997.4	821.3	776.0	45.34	18.116	
11,590.0	11,432.6	11,669.4	11,432.9	16.9	28.5	90.02	349.6	997.3	821.3	775.9	45.36	18.106	
11,600.0	11,435.4	11,679.4	11,435.7	16.9	28.5	90.02	359.2	997.2	821.3	775.9	45.38	18.099	
11,625.0	11,441.7	11,704.4	11,441.9	16.9	28.5	90.02	383.5	997.0	821.3	775.9	45.42	18.081	
11,650.0	11,446.7	11,729.4	11,446.9	16.9	28.5	90.01	408.0	996.8	821.3	775.8	45.47	18.061	
11,675.0	11,450.4	11,754.4	11,450.5	17.0	28.6	90.01	432.7	996.6	821.3	775.8	45.53	18.039	
11,685.0	11,451.5	11,764.4	11,451.6	17.0	28.6	90.01	442.7	996.5	821.3	775.7	45.55	18.030	
11,700.0	11,452.8	11,779.4	11,452.9	17.0	28.6	90.01	457.6	996.3	821.3	775.7	45.58	18.017	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 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)			
11,725.0	11,453.9	11,804.4	11,453.9	17.0	28.6	90.00	482.6	996.1	821.3	775.7	45.65	17.993	
11,733.6	11,454.0	11,813.0	11,454.0	17.0	28.6	90.00	491.1	996.0	821.3	775.6	45.67	17.984	
11,780.0	11,454.0	11,859.4	11,454.0	17.1	28.7	90.00	537.6	995.6	821.3	775.5	45.80	17.932	
11,800.0	11,454.0	11,879.4	11,454.0	17.2	28.7	90.00	557.6	995.4	821.3	775.4	45.86	17.910	
11,875.0	11,454.0	11,954.4	11,454.0	17.3	28.8	90.00	632.6	994.8	821.3	775.2	46.11	17.811	
11,900.0	11,454.0	11,979.4	11,454.0	17.4	28.8	90.00	657.6	994.5	821.3	775.1	46.20	17.777	
11,970.0	11,454.0	12,049.4	11,454.0	17.6	28.9	90.00	727.6	993.9	821.3	774.8	46.47	17.673	
12,000.0	11,454.0	12,079.4	11,454.0	17.6	29.0	90.00	757.6	993.6	821.3	774.7	46.59	17.628	
12,065.0	11,454.0	12,144.4	11,454.0	17.8	29.1	90.00	822.6	993.0	821.3	774.4	46.88	17.521	
12,100.0	11,454.0	12,179.4	11,454.0	17.9	29.1	90.00	857.6	992.7	821.3	774.3	47.03	17.463	
12,160.0	11,454.0	12,239.4	11,454.0	18.1	29.3	90.00	917.6	992.2	821.3	774.0	47.32	17.356	
12,200.0	11,454.0	12,279.4	11,454.0	18.2	29.3	90.00	957.6	991.8	821.3	773.8	47.52	17.284	
12,255.0	11,454.0	12,334.4	11,454.0	18.4	29.4	90.00	1,012.6	991.3	821.3	773.5	47.81	17.179	
12,300.0	11,454.0	12,379.4	11,454.0	18.5	29.5	90.00	1,057.6	990.9	821.3	773.3	48.05	17.093	
12,350.0	11,454.0	12,429.4	11,454.0	18.7	29.6	90.00	1,107.6	990.5	821.3	773.0	48.34	16.992	
12,400.0	11,454.0	12,479.4	11,454.0	18.9	29.8	90.00	1,157.6	990.0	821.3	772.7	48.63	16.891	
12,445.0	11,454.0	12,524.4	11,454.0	19.0	29.9	90.00	1,202.5	989.6	821.3	772.4	48.90	16.795	
12,500.0	11,454.0	12,579.4	11,454.0	19.3	30.0	90.00	1,257.5	989.1	821.3	772.1	49.24	16.679	
12,540.0	11,454.0	12,619.4	11,454.0	19.4	30.1	90.00	1,297.5	988.7	821.3	771.8	49.50	16.591	
12,600.0	11,454.0	12,679.4	11,454.0	19.7	30.3	90.00	1,357.5	988.2	821.3	771.4	49.90	16.459	
12,635.0	11,454.0	12,714.4	11,454.0	19.8	30.4	90.00	1,392.5	987.9	821.3	771.2	50.14	16.380	
12,700.0	11,454.0	12,779.4	11,454.0	20.1	30.5	90.00	1,457.5	987.3	821.3	770.8	50.60	16.233	
12,730.0	11,454.0	12,809.4	11,454.0	20.2	30.6	90.00	1,487.5	987.0	821.3	770.5	50.81	16.164	
12,800.0	11,454.0	12,879.4	11,454.0	20.5	30.8	90.00	1,557.5	986.4	821.4	770.0	51.33	16.002	
12,825.0	11,454.0	12,904.4	11,454.0	20.6	30.9	90.00	1,582.5	986.2	821.4	769.8	51.52	15.943	
12,900.0	11,454.0	12,979.4	11,454.0	21.0	31.2	90.00	1,657.5	985.5	821.4	769.3	52.09	15.767	
12,920.0	11,454.0	12,999.4	11,454.0	21.1	31.2	90.00	1,677.5	985.3	821.4	769.1	52.25	15.719	
13,000.0	11,454.0	13,079.4	11,454.0	21.5	31.5	90.00	1,757.5	984.6	821.4	768.5	52.89	15.529	
13,015.0	11,454.0	13,094.4	11,454.0	21.5	31.5	90.00	1,772.5	984.5	821.4	768.3	53.02	15.493	
13,100.0	11,454.0	13,179.4	11,454.0	21.9	31.8	90.00	1,857.5	983.7	821.4	767.6	53.72	15.289	
13,110.0	11,454.0	13,189.4	11,454.0	22.0	31.9	90.00	1,867.5	983.6	821.4	767.6	53.81	15.265	
13,200.0	11,454.0	13,279.4	11,454.0	22.5	32.2	90.00	1,957.5	982.8	821.4	766.8	54.58	15.048	
13,205.0	11,454.0	13,284.4	11,454.0	22.5	32.2	90.00	1,962.5	982.7	821.4	766.7	54.63	15.036	
13,300.0	11,454.0	13,379.4	11,454.0	23.0	32.6	90.00	2,057.5	981.9	821.4	765.9	55.47	14.807	
13,395.0	11,454.0	13,474.4	11,454.0	23.5	32.9	90.00	2,152.5	981.0	821.4	765.0	56.34	14.578	
13,400.0	11,454.0	13,479.4	11,454.0	23.5	32.9	90.00	2,157.5	981.0	821.4	765.0	56.39	14.567	
13,490.0	11,454.0	13,569.4	11,454.0	24.0	33.3	90.00	2,247.5	980.2	821.4	764.2	57.23	14.351	
13,500.0	11,454.0	13,579.4	11,454.0	24.1	33.3	90.00	2,257.5	980.1	821.4	764.1	57.33	14.328	
13,585.0	11,454.0	13,664.4	11,454.0	24.5	33.7	90.00	2,342.5	979.3	821.4	763.2	58.15	14.126	
13,600.0	11,454.0	13,679.4	11,454.0	24.6	33.7	90.00	2,357.5	979.2	821.4	763.1	58.29	14.090	
13,680.0	11,454.0	13,759.4	11,454.0	25.1	34.1	90.00	2,437.5	978.5	821.4	762.3	59.08	13.902	
13,700.0	11,454.0	13,779.4	11,454.0	25.2	34.2	90.00	2,457.5	978.3	821.4	762.1	59.28	13.856	
13,775.0	11,454.0	13,854.4	11,454.0	25.6	34.5	90.00	2,532.5	977.6	821.4	761.4	60.04	13.681	
13,800.0	11,454.0	13,879.4	11,454.0	25.8	34.6	90.00	2,557.5	977.4	821.4	761.1	60.29	13.624	
13,870.0	11,454.0	13,949.4	11,454.0	26.2	34.9	90.00	2,627.5	976.7	821.4	760.4	61.01	13.463	
13,900.0	11,454.0	13,979.4	11,454.0	26.4	35.0	90.00	2,657.5	976.5	821.4	760.1	61.32	13.395	
13,965.0	11,454.0	14,044.4	11,454.0	26.7	35.3	90.00	2,722.5	975.9	821.4	759.4	62.01	13.247	
14,000.0	11,454.0	14,079.4	11,454.0	27.0	35.5	90.00	2,757.5	975.6	821.4	759.0	62.37	13.169	
14,060.0	11,454.0	14,139.4	11,454.0	27.3	35.8	90.00	2,817.5	975.0	821.4	758.4	63.01	13.035	
14,100.0	11,454.0	14,179.4	11,454.0	27.6	36.0	90.00	2,857.5	974.7	821.4	758.0	63.44	12.947	
14,155.0	11,454.0	14,234.4	11,454.0	27.9	36.2	90.00	2,912.5	974.2	821.4	757.4	64.04	12.827	
14,200.0	11,454.0	14,279.4	11,454.0	28.2	36.4	90.00	2,957.5	973.8	821.4	756.9	64.53	12.729	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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_1500-r.5 MWD+IFR1_11062-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)			
14,250.0	11,454.0	14,329.4	11,454.0	28.5	36.7	90.00	3,007.5	973.3	821.4	756.3	65.08	12.621	
14,300.0	11,454.0	14,379.4	11,454.0	28.8	36.9	90.00	3,057.5	972.9	821.4	755.8	65.63	12.515	
14,345.0	11,454.0	14,424.4	11,454.0	29.1	37.1	90.00	3,102.5	972.5	821.4	755.3	66.14	12.420	
14,400.0	11,454.0	14,479.4	11,454.0	29.4	37.4	90.00	3,157.5	972.0	821.4	754.7	66.75	12.305	
14,440.0	11,454.0	14,519.4	11,454.0	29.7	37.6	90.00	3,197.5	971.6	821.4	754.2	67.21	12.222	
14,500.0	11,454.0	14,579.4	11,454.0	30.1	37.9	90.00	3,257.5	971.1	821.4	753.5	67.89	12.099	
14,535.0	11,454.0	14,614.4	11,454.0	30.3	38.1	90.00	3,292.5	970.7	821.4	753.1	68.29	12.028	
14,600.0	11,454.0	14,679.4	11,454.0	30.7	38.4	90.00	3,357.5	970.2	821.4	752.4	69.04	11.898	
14,630.0	11,454.0	14,709.4	11,454.0	30.9	38.6	90.00	3,387.5	969.9	821.4	752.1	69.39	11.838	
14,700.0	11,454.0	14,779.4	11,454.0	31.3	39.0	90.00	3,457.5	969.3	821.4	751.2	70.20	11.701	
14,725.0	11,454.0	14,804.4	11,454.0	31.5	39.1	90.00	3,482.5	969.0	821.4	751.0	70.50	11.652	
14,800.0	11,454.0	14,879.4	11,454.0	32.0	39.5	90.00	3,557.5	968.4	821.5	750.1	71.38	11.508	
14,820.0	11,454.0	14,899.4	11,454.0	32.1	39.6	90.00	3,577.5	968.2	821.5	749.8	71.62	11.470	
14,900.0	11,454.0	14,979.4	11,454.0	32.6	40.0	90.00	3,657.4	967.4	821.5	748.9	72.57	11.319	
14,915.0	11,454.0	14,994.4	11,454.0	32.7	40.1	90.00	3,672.4	967.3	821.5	748.7	72.75	11.291	
15,000.0	11,454.0	15,079.4	11,454.0	33.3	40.6	90.00	3,757.4	966.5	821.5	747.7	73.77	11.135	
15,010.0	11,454.0	15,089.4	11,454.0	33.4	40.6	90.00	3,767.4	966.5	821.5	747.6	73.89	11.117	
15,100.0	11,454.0	15,179.4	11,454.0	34.0	41.1	90.00	3,857.4	965.6	821.5	746.5	74.99	10.955	
15,105.0	11,454.0	15,184.4	11,454.0	34.0	41.1	90.00	3,862.4	965.6	821.5	746.4	75.05	10.946	
15,200.0	11,454.0	15,279.4	11,454.0	34.6	41.7	90.00	3,957.4	964.7	821.5	745.3	76.21	10.779	
15,295.0	11,454.0	15,374.4	11,454.0	35.3	42.2	90.00	4,052.4	963.9	821.5	744.1	77.38	10.616	
15,300.0	11,454.0	15,379.4	11,454.0	35.3	42.2	90.00	4,057.4	963.8	821.5	744.0	77.44	10.607	
15,390.0	11,454.0	15,469.4	11,454.0	35.9	42.7	90.00	4,147.4	963.0	821.5	742.9	78.56	10.456	
15,400.0	11,454.0	15,479.4	11,454.0	36.0	42.8	90.00	4,157.4	962.9	821.5	742.8	78.69	10.440	
15,485.0	11,454.0	15,564.4	11,454.0	36.6	43.3	90.00	4,242.4	962.2	821.5	741.7	79.75	10.300	
15,500.0	11,454.0	15,579.4	11,454.0	36.7	43.4	90.00	4,257.4	962.0	821.5	741.5	79.94	10.276	
15,580.0	11,454.0	15,659.4	11,454.0	37.2	43.8	90.00	4,337.4	961.3	821.5	740.5	80.95	10.148	
15,600.0	11,454.0	15,679.4	11,454.0	37.3	44.0	90.00	4,357.4	961.1	821.5	740.3	81.20	10.116	
15,675.0	11,454.0	15,754.4	11,454.0	37.9	44.4	90.00	4,432.4	960.5	821.5	739.3	82.16	9.999	
15,700.0	11,454.0	15,779.4	11,454.0	38.0	44.5	90.00	4,457.4	960.2	821.5	739.0	82.48	9.960	
15,770.0	11,454.0	15,849.4	11,454.0	38.5	45.0	90.00	4,527.4	959.6	821.5	738.1	83.37	9.854	
15,800.0	11,454.0	15,879.4	11,454.0	38.7	45.1	90.00	4,557.4	959.3	821.5	737.7	83.75	9.808	
15,865.0	11,454.0	15,944.4	11,454.0	39.2	45.5	90.00	4,622.4	958.7	821.5	736.9	84.59	9.711	
15,900.0	11,454.0	15,979.4	11,454.0	39.4	45.7	90.00	4,657.4	958.4	821.5	736.5	85.04	9.660	
15,960.0	11,454.0	16,039.4	11,454.0	39.8	46.1	90.00	4,717.4	957.9	821.5	735.7	85.82	9.573	
16,000.0	11,454.0	16,079.4	11,454.0	40.1	46.3	90.00	4,757.4	957.5	821.5	735.2	86.34	9.515	
16,055.0	11,454.0	16,134.4	11,454.0	40.5	46.7	90.00	4,812.4	957.0	821.5	734.5	87.05	9.437	
16,100.0	11,454.0	16,179.4	11,454.0	40.8	46.9	90.00	4,857.4	956.6	821.5	733.9	87.64	9.374	
16,150.0	11,454.0	16,229.4	11,454.0	41.2	47.2	90.00	4,907.4	956.2	821.5	733.2	88.29	9.304	
16,200.0	11,454.0	16,279.4	11,454.0	41.5	47.5	90.00	4,957.4	955.7	821.5	732.6	88.95	9.236	
16,245.0	11,454.0	16,324.4	11,454.0	41.8	47.8	90.00	5,002.4	955.3	821.5	732.0	89.54	9.175	
16,300.0	11,454.0	16,379.4	11,454.0	42.2	48.2	90.00	5,057.4	954.8	821.5	731.3	90.26	9.101	
16,340.0	11,454.0	16,419.4	11,454.0	42.5	48.4	90.00	5,097.4	954.5	821.5	730.7	90.79	9.048	
16,400.0	11,454.0	16,479.4	11,454.0	42.9	48.8	90.00	5,157.4	953.9	821.5	729.9	91.59	8.970	
16,435.0	11,454.0	16,514.4	11,454.0	43.2	49.0	90.00	5,192.4	953.6	821.5	729.5	92.05	8.925	
16,500.0	11,454.0	16,579.4	11,454.0	43.6	49.4	90.00	5,257.4	953.0	821.5	728.6	92.92	8.842	
16,530.0	11,454.0	16,609.4	11,454.0	43.8	49.6	90.00	5,287.4	952.7	821.5	728.2	93.31	8.804	
16,600.0	11,454.0	16,679.4	11,454.0	44.3	50.0	90.00	5,357.4	952.1	821.5	727.3	94.25	8.717	
16,625.0	11,454.0	16,704.4	11,454.0	44.5	50.2	90.00	5,382.4	951.9	821.5	727.0	94.58	8.686	
16,700.0	11,454.0	16,779.4	11,454.0	45.0	50.7	90.00	5,457.4	951.2	821.5	726.0	95.59	8.595	
16,720.0	11,454.0	16,799.4	11,454.0	45.2	50.8	90.00	5,477.4	951.0	821.5	725.7	95.86	8.571	
16,800.0	11,454.0	16,879.4	11,454.0	45.7	51.3	90.00	5,557.4	950.3	821.6	724.6	96.93	8.475	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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, 1500-r.5 MWD+IFR1, 11062-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)			
16,815.0	11,454.0	16,894.4	11,454.0	45.8	51.4	90.00	5,572.4	950.2	821.6	724.4	97.14	8.458	
16,900.0	11,454.0	16,979.4	11,454.0	46.5	51.9	90.00	5,657.4	949.4	821.6	723.3	98.28	8.359	
16,910.0	11,454.0	16,989.4	11,454.0	46.5	52.0	90.00	5,667.4	949.3	821.6	723.1	98.42	8.347	
17,000.0	11,454.0	17,079.4	11,454.0	47.2	52.6	90.00	5,757.4	948.5	821.6	721.9	99.64	8.245	
17,005.0	11,454.0	17,084.4	11,454.0	47.2	52.6	90.00	5,762.4	948.4	821.6	721.9	99.71	8.240	
17,100.0	11,454.0	17,179.4	11,454.0	47.9	53.2	90.00	5,857.4	947.6	821.6	720.6	101.00	8.134	
17,195.0	11,454.0	17,274.4	11,454.0	48.6	53.8	90.00	5,952.4	946.7	821.6	719.3	102.30	8.031	
17,200.0	11,454.0	17,279.4	11,454.0	48.6	53.9	90.00	5,957.4	946.7	821.6	719.2	102.36	8.026	
17,290.0	11,454.0	17,369.4	11,454.0	49.2	54.5	90.00	6,047.4	945.9	821.6	718.0	103.60	7.931	
17,300.0	11,454.0	17,379.4	11,454.0	49.3	54.5	90.00	6,057.4	945.8	821.6	717.8	103.73	7.920	
17,385.0	11,454.0	17,464.4	11,454.0	49.9	55.1	90.00	6,142.3	945.0	821.6	716.7	104.90	7.832	
17,400.0	11,454.0	17,479.4	11,454.0	50.0	55.2	90.00	6,157.3	944.9	821.6	716.5	105.11	7.817	
17,480.0	11,454.0	17,559.4	11,454.0	50.6	55.7	90.00	6,237.3	944.2	821.6	715.4	106.21	7.736	
17,500.0	11,454.0	17,579.4	11,454.0	50.8	55.8	90.00	6,257.3	944.0	821.6	715.1	106.48	7.716	
17,575.0	11,454.0	17,654.4	11,454.0	51.3	56.3	90.00	6,332.3	943.3	821.6	714.1	107.52	7.641	
17,600.0	11,454.0	17,679.4	11,454.0	51.5	56.5	90.00	6,357.3	943.1	821.6	713.7	107.86	7.617	
17,670.0	11,454.0	17,749.4	11,454.0	52.0	56.9	90.00	6,427.3	942.4	821.6	712.8	108.83	7.549	
17,700.0	11,454.0	17,779.4	11,454.0	52.2	57.1	90.00	6,457.3	942.2	821.6	712.3	109.25	7.520	
17,765.0	11,454.0	17,844.4	11,454.0	52.7	57.6	90.00	6,522.3	941.6	821.6	711.4	110.15	7.459	
17,800.0	11,454.0	17,879.4	11,454.0	52.9	57.8	90.00	6,557.3	941.3	821.6	711.0	110.64	7.426	
17,860.0	11,454.0	17,939.4	11,454.0	53.4	58.2	90.00	6,617.3	940.7	821.6	710.1	111.47	7.370	
17,900.0	11,454.0	17,979.4	11,454.0	53.7	58.5	90.00	6,657.3	940.4	821.6	709.6	112.03	7.334	
17,955.0	11,454.0	18,034.4	11,454.0	54.1	58.8	90.00	6,712.3	939.9	821.6	708.8	112.80	7.284	
18,000.0	11,454.0	18,079.4	11,454.0	54.4	59.1	90.00	6,757.3	939.5	821.6	708.2	113.43	7.244	
18,050.0	11,454.0	18,129.4	11,454.0	54.7	59.5	90.00	6,807.3	939.0	821.6	707.5	114.13	7.199	
18,100.0	11,454.0	18,179.4	11,454.0	55.1	59.8	90.00	6,857.3	938.6	821.6	706.8	114.83	7.155	
18,145.0	11,454.0	18,224.4	11,454.0	55.4	60.1	90.00	6,902.3	938.2	821.6	706.2	115.46	7.116	
18,200.0	11,454.0	18,279.4	11,454.0	55.8	60.5	90.00	6,957.3	937.7	821.6	705.4	116.23	7.069	
18,240.0	11,454.0	18,319.4	11,454.0	56.1	60.8	90.00	6,997.3	937.3	821.6	704.8	116.79	7.035	
18,300.0	11,454.0	18,379.4	11,454.0	56.6	61.2	90.00	7,057.3	936.8	821.6	704.0	117.63	6.985	
18,335.0	11,454.0	18,414.4	11,454.0	56.8	61.4	90.00	7,092.3	936.4	821.6	703.5	118.12	6.956	
18,400.0	11,454.0	18,479.4	11,454.0	57.3	61.8	90.00	7,157.3	935.9	821.6	702.6	119.04	6.902	
18,430.0	11,454.0	18,509.4	11,454.0	57.5	62.0	90.00	7,187.3	935.6	821.6	702.2	119.46	6.878	
18,500.0	11,454.0	18,579.4	11,454.0	58.0	62.5	90.00	7,257.3	935.0	821.6	701.2	120.45	6.821	
18,525.0	11,454.0	18,604.4	11,454.0	58.2	62.7	90.00	7,282.3	934.7	821.6	700.8	120.80	6.801	
18,600.0	11,454.0	18,679.4	11,454.0	58.8	63.2	90.00	7,357.3	934.1	821.6	699.8	121.86	6.742	
18,620.0	11,454.0	18,699.4	11,454.0	58.9	63.3	90.00	7,377.3	933.9	821.6	699.5	122.15	6.727	
18,700.0	11,454.0	18,779.4	11,454.0	59.5	63.9	90.00	7,457.3	933.2	821.6	698.4	123.28	6.665	
18,715.0	11,454.0	18,794.4	11,454.0	59.6	64.0	90.00	7,472.3	933.0	821.6	698.2	123.49	6.653	
18,800.0	11,454.0	18,879.4	11,454.0	60.2	64.6	90.00	7,557.3	932.2	821.7	697.0	124.70	6.589	
18,810.0	11,454.0	18,889.4	11,454.0	60.3	64.6	90.00	7,567.3	932.2	821.7	696.8	124.84	6.582	
18,900.0	11,454.0	18,979.4	11,454.0	61.0	65.3	90.00	7,657.3	931.3	821.7	695.5	126.12	6.515	
18,905.0	11,454.0	18,984.4	11,454.0	61.0	65.3	90.00	7,662.3	931.3	821.7	695.5	126.19	6.511	
19,000.0	11,454.0	19,079.4	11,454.0	61.7	65.9	90.00	7,757.3	930.4	821.7	694.1	127.54	6.442	
19,095.0	11,454.0	19,174.4	11,454.0	62.4	66.6	90.00	7,852.3	929.6	821.7	692.8	128.90	6.374	
19,100.0	11,454.0	19,179.4	11,454.0	62.4	66.6	90.00	7,857.3	929.5	821.7	692.7	128.97	6.371	
19,190.0	11,454.0	19,269.4	11,454.0	63.1	67.3	90.00	7,947.3	928.7	821.7	691.4	130.26	6.308	
19,200.0	11,454.0	19,279.4	11,454.0	63.2	67.3	90.00	7,957.3	928.6	821.7	691.3	130.40	6.301	
19,285.0	11,454.0	19,364.4	11,454.0	63.8	67.9	90.00	8,042.3	927.9	821.7	690.1	131.62	6.243	
19,300.0	11,454.0	19,379.4	11,454.0	63.9	68.0	90.00	8,057.3	927.7	821.7	689.8	131.83	6.233	
19,380.0	11,454.0	19,459.4	11,454.0	64.5	68.6	90.00	8,137.3	927.0	821.7	688.7	132.98	6.179	
19,400.0	11,454.0	19,479.4	11,454.0	64.6	68.7	90.00	8,157.3	926.8	821.7	688.4	133.26	6.166	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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_1500-r.5 MWD+IFR1_11062-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
19,475.0	11,454.0	19,554.4	11,454.0	65.2	69.2	90.00	8,232.3	926.2	821.7	687.3	134.34	6.117	
19,500.0	11,454.0	19,579.4	11,454.0	65.4	69.4	90.00	8,257.3	925.9	821.7	687.0	134.70	6.100	
19,570.0	11,454.0	19,649.4	11,454.0	65.9	69.9	90.00	8,327.3	925.3	821.7	686.0	135.70	6.055	
19,600.0	11,454.0	19,679.4	11,454.0	66.1	70.1	90.00	8,357.3	925.0	821.7	685.6	136.13	6.036	
19,665.0	11,454.0	19,744.4	11,454.0	66.6	70.6	90.00	8,422.3	924.4	821.7	684.6	137.07	5.995	
19,700.0	11,454.0	19,779.4	11,454.0	66.9	70.8	90.00	8,457.3	924.1	821.7	684.1	137.57	5.973	
19,760.0	11,454.0	19,839.4	11,454.0	67.3	71.2	90.00	8,517.3	923.6	821.7	683.3	138.44	5.936	
19,800.0	11,454.0	19,879.4	11,454.0	67.6	71.5	90.00	8,557.2	923.2	821.7	682.7	139.01	5.911	
19,855.0	11,454.0	19,934.4	11,454.0	68.0	71.9	90.00	8,612.2	922.7	821.7	681.9	139.81	5.877	
19,900.0	11,454.0	19,979.4	11,454.0	68.3	72.2	90.00	8,657.2	922.3	821.7	681.3	140.45	5.850	
19,950.0	11,454.0	20,029.4	11,454.0	68.7	72.6	90.00	8,707.2	921.9	821.7	680.5	141.18	5.820	
20,000.0	11,454.0	20,079.4	11,454.0	69.1	72.9	90.00	8,757.2	921.4	821.7	679.8	141.90	5.791	
20,045.0	11,454.0	20,124.4	11,454.0	69.4	73.2	90.00	8,802.2	921.0	821.7	679.2	142.55	5.764	
20,100.0	11,454.0	20,179.4	11,454.0	69.8	73.6	90.00	8,857.2	920.5	821.7	678.4	143.34	5.732	
20,140.0	11,454.0	20,219.4	11,454.0	70.1	73.9	90.00	8,897.2	920.2	821.7	677.8	143.92	5.709	
20,200.0	11,454.0	20,279.4	11,454.0	70.6	74.3	90.00	8,957.2	919.6	821.7	676.9	144.79	5.675	
20,235.0	11,454.0	20,314.4	11,454.0	70.8	74.6	90.00	8,992.2	919.3	821.7	676.4	145.30	5.655	
20,300.0	11,454.0	20,379.4	11,454.0	71.3	75.0	90.00	9,057.2	918.7	821.7	675.5	146.24	5.619	
20,330.0	11,454.0	20,409.4	11,454.0	71.5	75.2	90.00	9,087.2	918.4	821.7	675.1	146.68	5.602	
20,400.0	11,454.0	20,479.4	11,454.0	72.1	75.7	90.00	9,157.2	917.8	821.7	674.0	147.69	5.564	
20,425.0	11,454.0	20,504.4	11,454.0	72.2	75.9	90.00	9,182.2	917.6	821.7	673.7	148.05	5.550	
20,500.0	11,454.0	20,579.4	11,454.0	72.8	76.4	90.00	9,257.2	916.9	821.7	672.6	149.14	5.510	
20,520.0	11,454.0	20,599.4	11,454.0	72.9	76.6	90.00	9,277.2	916.7	821.7	672.3	149.43	5.499	
20,600.0	11,454.0	20,679.4	11,454.0	73.5	77.1	90.00	9,357.2	916.0	821.7	671.1	150.60	5.457	
20,615.0	11,454.0	20,694.4	11,454.0	73.7	77.2	90.00	9,372.2	915.9	821.7	670.9	150.81	5.449	
20,700.0	11,454.0	20,779.4	11,454.0	74.3	77.8	90.00	9,457.2	915.1	821.7	669.7	152.05	5.404	
20,710.0	11,454.0	20,789.4	11,454.0	74.4	77.9	90.00	9,467.2	915.0	821.7	669.5	152.20	5.399	
20,800.0	11,454.0	20,879.4	11,454.0	75.0	78.6	90.00	9,557.2	914.2	821.8	668.2	153.51	5.353	
20,805.0	11,454.0	20,884.4	11,454.0	75.1	78.6	90.00	9,562.2	914.2	821.8	668.2	153.58	5.351	
20,900.0	11,454.0	20,979.4	11,454.0	75.8	79.3	90.00	9,657.2	913.3	821.8	666.8	154.97	5.303	
20,995.0	11,454.0	21,074.4	11,454.0	76.5	80.0	90.00	9,752.2	912.4	821.8	665.4	156.35	5.256	
21,000.0	11,454.0	21,079.4	11,454.0	76.5	80.0	90.00	9,757.2	912.4	821.8	665.3	156.42	5.253	
21,090.0	11,454.0	21,169.4	11,454.0	77.2	80.6	90.00	9,847.2	911.6	821.8	664.0	157.74	5.210	
21,100.0	11,454.0	21,179.4	11,454.0	77.3	80.7	90.00	9,857.2	911.5	821.8	663.9	157.88	5.205	
21,185.0	11,454.0	21,264.4	11,454.0	77.9	81.3	90.00	9,942.2	910.7	821.8	662.6	159.13	5.164	
21,200.0	11,454.0	21,279.4	11,454.0	78.0	81.4	90.00	9,957.2	910.6	821.8	662.4	159.35	5.157	
21,280.0	11,454.0	21,359.4	11,454.0	78.6	82.0	90.00	10,037.2	909.9	821.8	661.3	160.52	5.120	
21,300.0	11,454.0	21,379.4	11,454.0	78.8	82.1	90.00	10,057.2	909.7	821.8	661.0	160.81	5.110	
21,375.0	11,454.0	21,454.4	11,454.0	79.3	82.7	90.00	10,132.2	909.0	821.8	659.9	161.91	5.076	
21,400.0	11,454.0	21,479.4	11,454.0	79.5	82.8	90.00	10,157.2	908.8	821.8	659.5	162.27	5.064	
21,470.0	11,454.0	21,549.4	11,454.0	80.0	83.3	90.00	10,227.2	908.1	821.8	658.5	163.30	5.032	
21,500.0	11,454.0	21,579.4	11,454.0	80.3	83.6	90.00	10,257.2	907.9	821.8	658.0	163.74	5.019	
21,565.0	11,454.0	21,644.4	11,454.0	80.7	84.0	90.00	10,322.2	907.3	821.8	657.1	164.69	4.990	
21,600.0	11,454.0	21,679.4	11,454.0	81.0	84.3	90.00	10,357.2	907.0	821.8	656.6	165.20	4.974	
21,660.0	11,454.0	21,739.4	11,454.0	81.4	84.7	90.00	10,417.2	906.4	821.8	655.7	166.08	4.948	
21,700.0	11,454.0	21,779.4	11,454.0	81.7	85.0	90.00	10,457.2	906.1	821.8	655.1	166.67	4.931	
21,724.9	11,454.0	21,804.4	11,454.0	81.9	85.2	90.00	10,482.1	905.8	821.8	654.8	167.03	4.920 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
6,600.0	6,593.0	6,833.1	6,748.9	13.7	25.8	88.44	42.0	1,490.2	1,320.0	1,281.4	38.61	34.191	
6,650.0	6,643.0	6,877.9	6,793.4	13.8	26.0	88.53	39.9	1,485.3	1,314.4	1,275.6	38.80	33.874	
6,700.0	6,693.0	6,922.8	6,838.0	13.8	26.2	88.61	37.9	1,480.5	1,309.1	1,270.1	39.00	33.567	
6,745.0	6,738.0	6,963.2	6,878.2	13.8	26.4	88.68	36.1	1,476.4	1,304.4	1,265.2	39.17	33.298	
6,800.0	6,793.0	7,012.7	6,927.3	13.9	26.6	88.77	34.0	1,471.5	1,298.9	1,259.5	39.39	32.979	
6,840.0	6,833.0	7,048.7	6,963.1	13.9	26.7	88.83	32.6	1,468.0	1,295.1	1,255.5	39.54	32.755	
6,900.0	6,893.0	7,100.0	7,014.2	13.9	26.9	88.92	30.6	1,463.3	1,289.5	1,249.8	39.75	32.437	
6,935.0	6,928.0	7,134.3	7,048.3	14.0	27.1	88.97	29.3	1,460.3	1,286.4	1,246.5	39.90	32.243	
7,000.0	6,993.0	7,192.9	7,106.7	14.0	27.3	89.06	27.2	1,455.3	1,280.8	1,240.7	40.14	31.910	
7,030.0	7,023.0	7,220.0	7,133.7	14.0	27.4	89.10	26.2	1,453.1	1,278.4	1,238.1	40.25	31.762	
7,100.0	7,093.0	7,283.2	7,196.7	14.1	27.6	89.19	24.1	1,448.2	1,272.9	1,232.4	40.50	31.427	
7,125.0	7,118.0	7,305.8	7,219.2	14.1	27.7	89.23	23.4	1,446.5	1,271.0	1,230.4	40.59	31.311	
7,200.0	7,193.0	7,373.6	7,286.8	14.1	28.0	89.31	21.4	1,441.7	1,265.7	1,224.8	40.86	30.976	
7,220.0	7,213.0	7,391.7	7,304.9	14.1	28.1	89.34	20.9	1,440.5	1,264.3	1,223.4	40.93	30.889	
7,300.0	7,293.0	7,464.2	7,377.1	14.2	28.3	89.42	18.9	1,435.9	1,259.2	1,218.0	41.21	30.557	
7,315.0	7,308.0	7,477.8	7,390.7	14.2	28.4	89.44	18.6	1,435.0	1,258.3	1,217.0	41.26	30.497	
7,400.0	7,393.0	7,554.8	7,467.6	14.3	28.6	89.52	16.7	1,430.7	1,253.4	1,211.9	41.55	30.169	
7,410.0	7,403.0	7,563.9	7,476.6	14.3	28.7	89.53	16.5	1,430.2	1,252.9	1,211.3	41.58	30.132	
7,500.0	7,493.0	7,645.5	7,558.1	14.3	29.0	89.61	14.8	1,426.1	1,248.4	1,206.5	41.88	29.812	
7,505.0	7,498.0	7,650.0	7,562.7	14.3	29.0	89.61	14.7	1,425.9	1,248.2	1,206.3	41.89	29.794	
7,600.0	7,593.0	7,736.3	7,648.8	14.4	29.3	89.68	13.1	1,422.3	1,244.1	1,201.9	42.20	29.484	
7,695.0	7,688.0	7,822.6	7,735.1	14.4	29.5	89.74	11.8	1,419.2	1,240.8	1,198.3	42.49	29.201	
7,700.0	7,693.0	7,827.1	7,739.6	14.4	29.6	89.75	11.8	1,419.1	1,240.6	1,198.1	42.51	29.187	
7,790.0	7,783.0	7,908.9	7,821.4	14.5	29.8	89.79	10.8	1,416.7	1,238.0	1,195.3	42.77	28.945	
7,800.0	7,793.0	7,918.0	7,830.4	14.5	29.8	89.80	10.7	1,416.5	1,237.8	1,195.0	42.80	28.920	
7,885.0	7,878.0	7,995.3	7,907.7	14.6	30.1	89.83	10.0	1,414.9	1,236.0	1,192.9	43.04	28.717	
7,900.0	7,893.0	8,008.9	7,921.4	14.6	30.1	89.83	9.9	1,414.6	1,235.7	1,192.6	43.08	28.685	
7,980.0	7,973.0	8,081.7	7,994.1	14.6	30.3	89.85	9.4	1,413.6	1,234.6	1,191.3	43.29	28.521	
8,000.0	7,993.0	8,100.0	8,012.4	14.6	30.3	89.86	9.4	1,413.4	1,234.4	1,191.0	43.34	28.482	
8,075.0	8,068.0	8,168.1	8,080.5	14.7	30.5	89.87	9.2	1,412.9	1,233.8	1,190.3	43.50	28.365	
8,100.0	8,093.0	8,190.9	8,103.3	14.7	30.5	89.87	9.1	1,412.8	1,233.7	1,190.2	43.55	28.327	
8,145.8	8,138.8	8,233.6	8,146.0	14.7	30.6	89.87	9.1	1,412.8	1,233.7	1,190.1	43.61	28.290	
8,170.0	8,163.0	8,257.8	8,170.2	14.8	30.6	89.87	9.1	1,412.8	1,233.7	1,190.1	43.63	28.278	
8,200.0	8,193.0	8,287.8	8,200.2	14.8	30.6	89.87	9.1	1,412.8	1,233.7	1,190.0	43.65	28.263	
8,265.0	8,258.0	8,352.8	8,265.2	14.8	30.6	89.87	9.1	1,412.8	1,233.7	1,190.0	43.70	28.228	
8,300.0	8,293.0	8,387.8	8,300.2	14.8	30.6	89.87	9.1	1,412.8	1,233.7	1,190.0	43.73	28.209	
8,360.0	8,353.0	8,447.8	8,360.2	14.9	30.6	89.87	9.1	1,412.8	1,233.7	1,189.9	43.78	28.176	
8,400.0	8,393.0	8,487.8	8,400.2	14.9	30.6	89.87	9.1	1,412.8	1,233.7	1,189.9	43.82	28.154	
8,455.0	8,448.0	8,542.8	8,455.2	14.9	30.6	89.87	9.1	1,412.8	1,233.7	1,189.8	43.87	28.124	
8,500.0	8,493.0	8,587.8	8,500.2	15.0	30.6	89.87	9.1	1,412.8	1,233.7	1,189.8	43.90	28.100	
8,550.0	8,543.0	8,637.8	8,550.2	15.0	30.6	89.87	9.1	1,412.8	1,233.7	1,189.7	43.95	28.072	
8,600.0	8,593.0	8,687.8	8,600.2	15.0	30.6	89.87	9.1	1,412.8	1,233.7	1,189.7	43.99	28.045	
8,645.0	8,638.0	8,732.8	8,645.2	15.1	30.6	89.87	9.1	1,412.8	1,233.7	1,189.7	44.03	28.020	
8,700.0	8,693.0	8,787.8	8,700.2	15.1	30.7	89.87	9.1	1,412.8	1,233.7	1,189.6	44.08	27.990	
8,740.0	8,733.0	8,827.8	8,740.2	15.1	30.7	89.87	9.1	1,412.8	1,233.7	1,189.6	44.11	27.968	
8,800.0	8,793.0	8,887.8	8,800.2	15.2	30.7	89.87	9.1	1,412.8	1,233.7	1,189.5	44.16	27.935	
8,835.0	8,828.0	8,922.8	8,835.2	15.2	30.7	89.87	9.1	1,412.8	1,233.7	1,189.5	44.19	27.916	
8,900.0	8,893.0	8,987.8	8,900.2	15.2	30.7	89.87	9.1	1,412.8	1,233.7	1,189.4	44.25	27.880	
8,930.0	8,923.0	9,017.8	8,930.2	15.3	30.7	89.87	9.1	1,412.8	1,233.7	1,189.4	44.28	27.864	
9,000.0	8,993.0	9,087.8	9,000.2	15.3	30.7	89.87	9.1	1,412.8	1,233.7	1,189.4	44.34	27.825	
9,025.0	9,018.0	9,112.8	9,025.2	15.3	30.7	89.87	9.1	1,412.8	1,233.7	1,189.3	44.36	27.812	
9,100.0	9,093.0	9,187.8	9,100.2	15.4	30.7	89.87	9.1	1,412.8	1,233.7	1,189.3	44.42	27.770	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
9,120.0	9,113.0	9,207.8	9,120.2	15.4	30.7	89.87	9.1	1,412.8	1,233.7	1,189.3	44.44	27.759	
9,200.0	9,193.0	9,287.8	9,200.2	15.4	30.8	89.87	9.1	1,412.8	1,233.7	1,189.2	44.51	27.715	
9,215.0	9,208.0	9,302.8	9,215.2	15.5	30.8	89.87	9.1	1,412.8	1,233.7	1,189.2	44.53	27.707	
9,300.0	9,293.0	9,387.8	9,300.2	15.5	30.8	89.87	9.1	1,412.8	1,233.7	1,189.1	44.60	27.661	
9,310.0	9,303.0	9,397.8	9,310.2	15.5	30.8	89.87	9.1	1,412.8	1,233.7	1,189.1	44.61	27.655	
9,400.0	9,393.0	9,487.8	9,400.2	15.6	30.8	89.87	9.1	1,412.8	1,233.7	1,189.0	44.69	27.606	
9,405.0	9,398.0	9,492.8	9,405.2	15.6	30.8	89.87	9.1	1,412.8	1,233.7	1,189.0	44.69	27.603	
9,500.0	9,493.0	9,587.8	9,500.2	15.6	30.8	89.87	9.1	1,412.8	1,233.7	1,188.9	44.78	27.551	
9,595.0	9,588.0	9,682.8	9,595.2	15.7	30.8	89.87	9.1	1,412.8	1,233.7	1,188.8	44.86	27.499	
9,600.0	9,593.0	9,687.8	9,600.2	15.7	30.8	89.87	9.1	1,412.8	1,233.7	1,188.8	44.87	27.496	
9,690.0	9,683.0	9,777.8	9,690.2	15.8	30.9	89.87	9.1	1,412.8	1,233.7	1,188.7	44.95	27.446	
9,700.0	9,693.0	9,787.8	9,700.2	15.8	30.9	89.87	9.1	1,412.8	1,233.7	1,188.7	44.96	27.441	
9,785.0	9,778.0	9,872.8	9,785.2	15.8	30.9	89.87	9.1	1,412.8	1,233.7	1,188.7	45.03	27.394	
9,800.0	9,793.0	9,887.8	9,800.2	15.8	30.9	89.87	9.1	1,412.8	1,233.7	1,188.6	45.05	27.386	
9,880.0	9,873.0	9,967.8	9,880.2	15.9	30.9	89.87	9.1	1,412.8	1,233.7	1,188.6	45.12	27.342	
9,900.0	9,893.0	9,987.8	9,900.2	15.9	30.9	89.87	9.1	1,412.8	1,233.7	1,188.6	45.14	27.331	
9,975.0	9,968.0	10,062.8	9,975.2	16.0	30.9	89.87	9.1	1,412.8	1,233.7	1,188.5	45.21	27.290	
10,000.0	9,993.0	10,087.8	10,000.2	16.0	30.9	89.87	9.1	1,412.8	1,233.7	1,188.5	45.23	27.276	
10,070.0	10,063.0	10,157.8	10,070.2	16.0	30.9	89.87	9.1	1,412.8	1,233.7	1,188.4	45.29	27.238	
10,100.0	10,093.0	10,187.8	10,100.2	16.1	30.9	89.87	9.1	1,412.8	1,233.7	1,188.4	45.32	27.222	
10,165.0	10,158.0	10,252.8	10,165.2	16.1	31.0	89.87	9.1	1,412.8	1,233.7	1,188.3	45.38	27.186	
10,200.0	10,193.0	10,287.8	10,200.2	16.1	31.0	89.87	9.1	1,412.8	1,233.7	1,188.3	45.41	27.167	
10,260.0	10,253.0	10,347.8	10,260.2	16.2	31.0	89.87	9.1	1,412.8	1,233.7	1,188.2	45.47	27.134	
10,300.0	10,293.0	10,387.8	10,300.2	16.2	31.0	89.87	9.1	1,412.8	1,233.7	1,188.2	45.50	27.112	
10,355.0	10,348.0	10,442.8	10,355.2	16.2	31.0	89.87	9.1	1,412.8	1,233.7	1,188.1	45.55	27.082	
10,400.0	10,393.0	10,487.8	10,400.2	16.3	31.0	89.87	9.1	1,412.8	1,233.7	1,188.1	45.60	27.057	
10,450.0	10,443.0	10,537.8	10,450.2	16.3	31.0	89.87	9.1	1,412.8	1,233.7	1,188.1	45.64	27.030	
10,500.0	10,493.0	10,587.8	10,500.2	16.3	31.0	89.87	9.1	1,412.8	1,233.7	1,188.0	45.69	27.002	
10,545.0	10,538.0	10,632.8	10,545.2	16.4	31.0	89.87	9.1	1,412.8	1,233.7	1,188.0	45.73	26.978	
10,600.0	10,593.0	10,687.8	10,600.2	16.4	31.1	89.87	9.1	1,412.8	1,233.7	1,187.9	45.78	26.948	
10,640.0	10,633.0	10,727.8	10,640.2	16.4	31.1	89.87	9.1	1,412.8	1,233.7	1,187.9	45.82	26.926	
10,700.0	10,693.0	10,787.8	10,700.2	16.5	31.1	89.87	9.1	1,412.8	1,233.7	1,187.8	45.87	26.893	
10,735.0	10,728.0	10,822.8	10,735.2	16.5	31.1	89.87	9.1	1,412.8	1,233.7	1,187.8	45.91	26.874	
10,800.0	10,793.0	10,887.8	10,800.2	16.5	31.1	89.87	9.1	1,412.8	1,233.7	1,187.7	45.97	26.838	
10,830.0	10,823.0	10,917.8	10,830.2	16.6	31.1	89.87	9.1	1,412.8	1,233.7	1,187.7	46.00	26.822	
10,900.0	10,893.0	10,987.8	10,900.2	16.6	31.1	89.87	9.1	1,412.8	1,233.7	1,187.6	46.06	26.784	
10,925.0	10,918.0	11,012.8	10,925.2	16.6	31.1	89.87	9.1	1,412.8	1,233.7	1,187.6	46.08	26.773	
10,983.6	10,976.5	11,071.3	10,983.7	16.6	31.1	89.87	9.1	1,412.8	1,233.7	1,187.6	46.12	26.749 CC	
11,000.0	10,993.0	11,087.8	11,000.2	16.6	31.2	90.40	9.1	1,412.8	1,233.7	1,187.6	46.12	26.747	
11,020.0	11,012.9	11,107.7	11,020.1	16.6	31.2	90.45	9.1	1,412.8	1,233.7	1,187.6	46.12	26.748	
11,025.0	11,017.9	11,112.7	11,025.1	16.6	31.2	90.47	9.1	1,412.8	1,233.7	1,187.6	46.12	26.749	
11,050.0	11,042.8	11,137.6	11,050.0	16.6	31.2	90.60	9.1	1,412.8	1,233.7	1,187.6	46.11	26.756	
11,075.0	11,067.4	11,162.2	11,074.6	16.6	31.2	90.78	9.1	1,412.8	1,233.8	1,187.7	46.09	26.768	
11,100.0	11,091.8	11,186.6	11,099.0	16.7	31.2	91.01	9.1	1,412.8	1,233.9	1,187.8	46.06	26.787	
11,115.0	11,106.3	11,201.1	11,113.5	16.7	31.2	91.18	9.1	1,412.8	1,233.9	1,187.9	46.04	26.802	
11,125.0	11,115.9	11,210.7	11,123.1	16.7	31.2	91.30	9.1	1,412.8	1,234.0	1,188.0	46.02	26.813	
11,150.0	11,139.6	11,234.4	11,146.8	16.7	31.2	91.62	9.1	1,412.8	1,234.2	1,188.2	45.97	26.846	
11,175.0	11,162.9	11,257.7	11,170.1	16.7	31.2	91.98	9.1	1,412.8	1,234.5	1,188.6	45.92	26.887	
11,200.0	11,185.6	11,280.4	11,192.8	16.7	31.2	92.36	9.1	1,412.8	1,235.0	1,189.1	45.85	26.937	
11,210.0	11,194.6	11,289.4	11,201.8	16.7	31.2	92.52	9.1	1,412.8	1,235.2	1,189.4	45.82	26.959	
11,225.0	11,207.8	11,304.5	11,216.9	16.7	31.2	92.80	9.3	1,412.8	1,235.5	1,189.8	45.77	26.993	
11,250.0	11,229.4	11,330.1	11,242.5	16.7	31.2	93.27	10.5	1,412.8	1,236.2	1,190.5	45.70	27.050	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Distance	Rule Assigned:									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,275.0	11,250.2	11,356.2	11,268.5	16.7	31.2	93.74	13.0	1,412.7	1,237.0	1,191.4	45.63	27.108	
11,300.0	11,270.3	11,382.9	11,294.9	16.7	31.2	94.22	16.7	1,412.7	1,238.0	1,192.4	45.57	27.167	
11,305.0	11,274.2	11,388.3	11,300.2	16.7	31.2	94.31	17.6	1,412.7	1,238.2	1,192.6	45.56	27.178	
11,325.0	11,289.6	11,410.2	11,321.7	16.7	31.2	94.70	21.8	1,412.6	1,239.0	1,193.5	45.51	27.225	
11,350.0	11,308.0	11,438.2	11,349.0	16.7	31.2	95.19	28.3	1,412.6	1,240.2	1,194.7	45.46	27.283	
11,375.0	11,325.6	11,466.9	11,376.5	16.7	31.2	95.68	36.3	1,412.5	1,241.5	1,196.1	45.41	27.338	
11,400.0	11,342.1	11,496.5	11,404.4	16.7	31.2	96.17	46.1	1,412.3	1,242.9	1,197.5	45.38	27.390	
11,425.0	11,357.7	11,526.9	11,432.6	16.7	31.2	96.67	57.5	1,412.2	1,244.4	1,199.1	45.36	27.436	
11,450.0	11,372.2	11,558.2	11,460.9	16.7	31.3	97.17	70.9	1,412.0	1,246.1	1,200.7	45.35	27.477	
11,475.0	11,385.7	11,590.6	11,489.4	16.8	31.3	97.68	86.4	1,411.8	1,247.8	1,202.4	45.36	27.509	
11,495.0	11,395.6	11,617.4	11,512.2	16.8	31.3	98.10	100.3	1,411.7	1,249.3	1,203.9	45.38	27.528	
11,500.0	11,398.0	11,624.2	11,517.9	16.8	31.3	98.20	104.1	1,411.6	1,249.6	1,204.3	45.39	27.532	
11,525.0	11,409.2	11,659.0	11,546.3	16.8	31.3	98.72	124.1	1,411.4	1,251.6	1,206.1	45.44	27.542	
11,550.0	11,419.1	11,695.1	11,574.5	16.8	31.3	99.25	146.7	1,411.1	1,253.5	1,208.0	45.52	27.540	
11,575.0	11,427.9	11,732.7	11,602.2	16.8	31.3	99.78	172.1	1,410.8	1,255.6	1,210.0	45.62	27.522	
11,590.0	11,432.6	11,756.0	11,618.6	16.9	31.3	100.10	188.7	1,410.6	1,256.8	1,211.1	45.70	27.503	
11,600.0	11,435.4	11,771.9	11,629.3	16.9	31.3	100.31	200.4	1,410.4	1,257.7	1,211.9	45.75	27.487	
11,625.0	11,441.7	11,812.7	11,655.4	16.9	31.3	100.85	231.8	1,410.0	1,259.8	1,213.8	45.92	27.435	
11,650.0	11,446.7	11,855.4	11,680.2	16.9	31.3	101.38	266.4	1,409.6	1,261.8	1,215.7	46.11	27.364	
11,675.0	11,450.4	11,899.9	11,703.2	17.0	31.4	101.91	304.5	1,409.1	1,263.9	1,217.5	46.34	27.275	
11,685.0	11,451.5	11,918.2	11,711.9	17.0	31.4	102.12	320.7	1,408.9	1,264.6	1,218.2	46.44	27.234	
11,700.0	11,452.8	11,946.3	11,724.1	17.0	31.4	102.42	346.0	1,408.6	1,265.8	1,219.2	46.59	27.168	
11,725.0	11,453.9	11,994.8	11,742.1	17.0	31.4	102.92	390.9	1,408.1	1,267.7	1,220.8	46.87	27.044	
11,733.6	11,454.0	12,011.8	11,747.6	17.0	31.4	103.08	407.1	1,407.9	1,268.3	1,221.3	46.97	26.999	
11,780.0	11,454.0	12,109.1	11,769.3	17.1	31.5	104.04	501.8	1,406.7	1,270.6	1,223.1	47.56	26.717	
11,800.0	11,454.0	12,152.8	11,773.8	17.2	31.5	104.24	545.2	1,406.2	1,271.1	1,223.3	47.81	26.586	
11,875.0	11,454.0	12,247.9	11,775.0	17.3	31.6	104.29	640.3	1,405.0	1,271.0	1,222.8	48.19	26.376	
11,900.0	11,454.0	12,272.9	11,775.0	17.4	31.7	104.29	665.3	1,404.7	1,270.9	1,222.6	48.26	26.333	
11,970.0	11,454.0	12,342.9	11,775.0	17.6	31.7	104.30	735.3	1,403.8	1,270.7	1,222.2	48.50	26.200	
12,000.0	11,454.0	12,372.9	11,775.0	17.6	31.8	104.30	765.3	1,403.5	1,270.6	1,222.0	48.60	26.142	
12,065.0	11,454.0	12,437.9	11,775.0	17.8	31.8	104.30	830.3	1,402.7	1,270.4	1,221.5	48.85	26.004	
12,100.0	11,454.0	12,472.9	11,775.0	17.9	31.9	104.30	865.3	1,402.2	1,270.2	1,221.3	48.99	25.928	
12,160.0	11,454.0	12,532.9	11,775.0	18.1	32.0	104.30	925.3	1,401.5	1,270.1	1,220.8	49.25	25.788	
12,200.0	11,454.0	12,572.9	11,775.0	18.2	32.0	104.30	965.3	1,401.0	1,269.9	1,220.5	49.43	25.694	
12,255.0	11,454.0	12,627.9	11,775.0	18.4	32.1	104.31	1,020.3	1,400.3	1,269.8	1,220.1	49.69	25.555	
12,300.0	11,454.0	12,672.9	11,775.0	18.5	32.2	104.31	1,065.3	1,399.8	1,269.6	1,219.7	49.90	25.441	
12,350.0	11,454.0	12,722.9	11,775.0	18.7	32.3	104.31	1,115.3	1,399.1	1,269.5	1,219.3	50.16	25.307	
12,400.0	11,454.0	12,772.9	11,775.0	18.9	32.4	104.31	1,165.3	1,398.5	1,269.3	1,218.9	50.43	25.171	
12,445.0	11,454.0	12,817.9	11,775.0	19.0	32.5	104.31	1,210.3	1,398.0	1,269.2	1,218.5	50.68	25.044	
12,500.0	11,454.0	12,872.9	11,775.0	19.3	32.6	104.32	1,265.3	1,397.3	1,269.0	1,218.0	50.99	24.887	
12,540.0	11,454.0	12,912.9	11,775.0	19.4	32.6	104.32	1,305.3	1,396.8	1,268.9	1,217.6	51.23	24.769	
12,600.0	11,454.0	12,972.9	11,775.0	19.7	32.8	104.32	1,365.3	1,396.1	1,268.7	1,217.1	51.59	24.590	
12,635.0	11,454.0	13,007.9	11,775.0	19.8	32.8	104.32	1,400.3	1,395.6	1,268.6	1,216.7	51.82	24.482	
12,700.0	11,454.0	13,072.9	11,775.0	20.1	33.0	104.32	1,465.3	1,394.8	1,268.4	1,216.1	52.24	24.282	
12,730.0	11,454.0	13,102.9	11,775.0	20.2	33.1	104.32	1,495.3	1,394.5	1,268.3	1,215.8	52.44	24.187	
12,800.0	11,454.0	13,172.9	11,775.0	20.5	33.2	104.33	1,565.3	1,393.6	1,268.0	1,215.1	52.91	23.965	
12,825.0	11,454.0	13,197.9	11,775.0	20.6	33.3	104.33	1,590.3	1,393.3	1,268.0	1,214.9	53.09	23.884	
12,900.0	11,454.0	13,272.9	11,775.0	21.0	33.5	104.33	1,665.3	1,392.4	1,267.7	1,214.1	53.63	23.640	
12,920.0	11,454.0	13,292.9	11,775.0	21.1	33.5	104.33	1,685.3	1,392.1	1,267.7	1,213.9	53.77	23.574	
13,000.0	11,454.0	13,372.9	11,775.0	21.5	33.7	104.33	1,765.2	1,391.1	1,267.4	1,213.0	54.37	23.310	
13,015.0	11,454.0	13,387.9	11,775.0	21.5	33.8	104.33	1,780.2	1,391.0	1,267.4	1,212.9	54.49	23.260	
13,100.0	11,454.0	13,472.9	11,775.0	21.9	34.0	104.34	1,865.2	1,389.9	1,267.1	1,211.9	55.15	22.975	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
13,110.0	11,454.0	13,482.9	11,775.0	22.0	34.0	104.34	1,875.2	1,389.8	1,267.1	1,211.8	55.23	22.942	
13,200.0	11,454.0	13,572.9	11,775.0	22.5	34.3	104.34	1,965.2	1,388.7	1,266.8	1,210.8	55.96	22.638	
13,205.0	11,454.0	13,577.9	11,775.0	22.5	34.3	104.34	1,970.2	1,388.6	1,266.8	1,210.8	56.00	22.621	
13,300.0	11,454.0	13,672.9	11,775.0	23.0	34.6	104.34	2,065.2	1,387.4	1,266.5	1,209.7	56.80	22.299	
13,395.0	11,454.0	13,767.9	11,775.0	23.5	34.9	104.35	2,160.2	1,386.3	1,266.2	1,208.6	57.62	21.975	
13,400.0	11,454.0	13,772.9	11,775.0	23.5	34.9	104.35	2,165.2	1,386.2	1,266.2	1,208.5	57.66	21.959	
13,490.0	11,454.0	13,862.9	11,775.0	24.0	35.2	104.35	2,255.2	1,385.1	1,265.9	1,207.4	58.46	21.653	
13,500.0	11,454.0	13,872.9	11,775.0	24.1	35.2	104.35	2,265.2	1,385.0	1,265.8	1,207.3	58.55	21.619	
13,585.0	11,454.0	13,957.9	11,775.0	24.5	35.5	104.35	2,350.2	1,383.9	1,265.6	1,206.2	59.33	21.331	
13,600.0	11,454.0	13,972.9	11,775.0	24.6	35.6	104.36	2,365.2	1,383.7	1,265.5	1,206.1	59.47	21.280	
13,680.0	11,454.0	14,052.9	11,775.0	25.1	35.8	104.36	2,445.2	1,382.8	1,265.3	1,205.0	60.22	21.011	
13,700.0	11,454.0	14,072.9	11,775.0	25.2	35.9	104.36	2,465.2	1,382.5	1,265.2	1,204.8	60.41	20.944	
13,775.0	11,454.0	14,147.9	11,775.0	25.6	36.2	104.36	2,540.2	1,381.6	1,265.0	1,203.8	61.13	20.693	
13,800.0	11,454.0	14,172.9	11,775.0	25.8	36.3	104.36	2,565.2	1,381.3	1,264.9	1,203.5	61.37	20.610	
13,870.0	11,454.0	14,242.9	11,775.0	26.2	36.5	104.37	2,635.2	1,380.4	1,264.7	1,202.6	62.06	20.378	
13,900.0	11,454.0	14,272.9	11,775.0	26.4	36.6	104.37	2,665.2	1,380.0	1,264.6	1,202.2	62.36	20.280	
13,965.0	11,454.0	14,337.9	11,775.0	26.7	36.9	104.37	2,730.2	1,379.2	1,264.4	1,201.4	63.01	20.066	
14,000.0	11,454.0	14,372.9	11,775.0	27.0	37.0	104.37	2,765.2	1,378.8	1,264.3	1,200.9	63.36	19.953	
14,060.0	11,454.0	14,432.9	11,775.0	27.3	37.3	104.37	2,825.2	1,378.1	1,264.1	1,200.1	63.98	19.758	
14,100.0	11,454.0	14,472.9	11,775.0	27.6	37.4	104.37	2,865.2	1,377.6	1,263.9	1,199.6	64.39	19.630	
14,155.0	11,454.0	14,527.9	11,775.0	27.9	37.6	104.38	2,920.2	1,376.9	1,263.8	1,198.8	64.96	19.454	
14,200.0	11,454.0	14,572.9	11,775.0	28.2	37.8	104.38	2,965.2	1,376.3	1,263.6	1,198.2	65.43	19.312	
14,250.0	11,454.0	14,622.9	11,775.0	28.5	38.0	104.38	3,015.1	1,375.7	1,263.5	1,197.5	65.96	19.155	
14,300.0	11,454.0	14,672.9	11,775.0	28.8	38.2	104.38	3,065.1	1,375.1	1,263.3	1,196.8	66.49	18.999	
14,345.0	11,454.0	14,717.9	11,775.0	29.1	38.4	104.38	3,110.1	1,374.6	1,263.2	1,196.2	66.98	18.859	
14,400.0	11,454.0	14,772.9	11,775.0	29.4	38.7	104.38	3,165.1	1,373.9	1,263.0	1,195.4	67.57	18.691	
14,440.0	11,454.0	14,812.9	11,775.0	29.7	38.8	104.39	3,205.1	1,373.4	1,262.9	1,194.9	68.01	18.569	
14,500.0	11,454.0	14,872.9	11,775.0	30.1	39.1	104.39	3,265.1	1,372.6	1,262.7	1,194.0	68.67	18.388	
14,535.0	11,454.0	14,907.9	11,775.0	30.3	39.3	104.39	3,300.1	1,372.2	1,262.6	1,193.5	69.06	18.283	
14,600.0	11,454.0	14,972.9	11,775.0	30.7	39.6	104.39	3,365.1	1,371.4	1,262.4	1,192.6	69.78	18.091	
14,630.0	11,454.0	15,002.9	11,775.0	30.9	39.7	104.39	3,395.1	1,371.0	1,262.3	1,192.2	70.12	18.003	
14,700.0	11,454.0	15,072.9	11,775.0	31.3	40.0	104.40	3,465.1	1,370.2	1,262.1	1,191.2	70.91	17.799	
14,725.0	11,454.0	15,097.9	11,775.0	31.5	40.1	104.40	3,490.1	1,369.9	1,262.0	1,190.8	71.19	17.727	
14,800.0	11,454.0	15,172.9	11,775.0	32.0	40.5	104.40	3,565.1	1,368.9	1,261.7	1,189.7	72.05	17.513	
14,820.0	11,454.0	15,192.9	11,775.0	32.1	40.6	104.40	3,585.1	1,368.7	1,261.7	1,189.4	72.28	17.456	
14,900.0	11,454.0	15,272.9	11,775.0	32.6	41.0	104.40	3,665.1	1,367.7	1,261.4	1,188.2	73.20	17.233	
14,915.0	11,454.0	15,287.9	11,775.0	32.7	41.0	104.40	3,680.1	1,367.5	1,261.4	1,188.0	73.37	17.191	
15,000.0	11,454.0	15,372.9	11,775.0	33.3	41.4	104.41	3,765.1	1,366.5	1,261.1	1,186.7	74.37	16.958	
15,010.0	11,454.0	15,382.9	11,775.0	33.4	41.5	104.41	3,775.1	1,366.4	1,261.1	1,186.6	74.48	16.931	
15,100.0	11,454.0	15,472.9	11,775.0	34.0	41.9	104.41	3,865.1	1,365.2	1,260.8	1,185.3	75.55	16.689	
15,105.0	11,454.0	15,477.9	11,775.0	34.0	42.0	104.41	3,870.1	1,365.2	1,260.8	1,185.2	75.61	16.676	
15,200.0	11,454.0	15,572.9	11,775.0	34.6	42.4	104.41	3,965.1	1,364.0	1,260.5	1,183.7	76.74	16.426	
15,295.0	11,454.0	15,667.9	11,775.0	35.3	42.9	104.42	4,060.1	1,362.8	1,260.2	1,182.3	77.88	16.181	
15,300.0	11,454.0	15,672.9	11,775.0	35.3	42.9	104.42	4,065.1	1,362.8	1,260.2	1,182.2	77.94	16.169	
15,390.0	11,454.0	15,762.9	11,775.0	35.9	43.4	104.42	4,155.1	1,361.7	1,259.9	1,180.9	79.03	15.942	
15,400.0	11,454.0	15,772.9	11,775.0	36.0	43.5	104.42	4,165.1	1,361.5	1,259.9	1,180.7	79.15	15.917	
15,485.0	11,454.0	15,857.9	11,775.0	36.6	43.9	104.42	4,250.0	1,360.5	1,259.6	1,179.4	80.19	15.707	
15,500.0	11,454.0	15,872.9	11,775.0	36.7	44.0	104.43	4,265.0	1,360.3	1,259.5	1,179.2	80.37	15.671	
15,580.0	11,454.0	15,952.9	11,775.0	37.2	44.4	104.43	4,345.0	1,359.3	1,259.3	1,177.9	81.36	15.478	
15,600.0	11,454.0	15,972.9	11,775.0	37.3	44.5	104.43	4,365.0	1,359.1	1,259.2	1,177.6	81.61	15.430	
15,675.0	11,454.0	16,047.9	11,775.0	37.9	44.9	104.43	4,440.0	1,358.2	1,259.0	1,176.4	82.54	15.253	
15,700.0	11,454.0	16,072.9	11,775.0	38.0	45.0	104.43	4,465.0	1,357.9	1,258.9	1,176.1	82.85	15.195	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
15,770.0	11,454.0	16,142.9	11,775.0	38.5	45.4	104.44	4,535.0	1,357.0	1,258.7	1,175.0	83.73	15.033	
15,800.0	11,454.0	16,172.9	11,775.0	38.7	45.6	104.44	4,565.0	1,356.6	1,258.6	1,174.5	84.10	14.965	
15,865.0	11,454.0	16,237.9	11,775.0	39.2	45.9	104.44	4,630.0	1,355.8	1,258.4	1,173.5	84.92	14.818	
15,900.0	11,454.0	16,272.9	11,775.0	39.4	46.1	104.44	4,665.0	1,355.4	1,258.3	1,172.9	85.36	14.740	
15,960.0	11,454.0	16,332.9	11,775.0	39.8	46.5	104.44	4,725.0	1,354.6	1,258.1	1,172.0	86.12	14.608	
16,000.0	11,454.0	16,372.9	11,775.0	40.1	46.7	104.44	4,765.0	1,354.2	1,258.0	1,171.3	86.63	14.521	
16,055.0	11,454.0	16,427.9	11,775.0	40.5	47.0	104.45	4,820.0	1,353.5	1,257.8	1,170.5	87.33	14.402	
16,100.0	11,454.0	16,472.9	11,775.0	40.8	47.3	104.45	4,865.0	1,352.9	1,257.6	1,169.7	87.91	14.306	
16,150.0	11,454.0	16,522.9	11,775.0	41.2	47.5	104.45	4,915.0	1,352.3	1,257.5	1,168.9	88.55	14.201	
16,200.0	11,454.0	16,572.9	11,775.0	41.5	47.8	104.45	4,965.0	1,351.7	1,257.3	1,168.1	89.19	14.097	
16,245.0	11,454.0	16,617.9	11,775.0	41.8	48.1	104.45	5,010.0	1,351.1	1,257.2	1,167.4	89.77	14.004	
16,300.0	11,454.0	16,672.9	11,775.0	42.2	48.4	104.45	5,065.0	1,350.5	1,257.0	1,166.5	90.48	13.892	
16,340.0	11,454.0	16,712.9	11,775.0	42.5	48.6	104.46	5,105.0	1,350.0	1,256.9	1,165.9	91.00	13.812	
16,400.0	11,454.0	16,772.9	11,775.0	42.9	49.0	104.46	5,165.0	1,349.2	1,256.7	1,164.9	91.78	13.692	
16,435.0	11,454.0	16,807.9	11,775.0	43.2	49.2	104.46	5,200.0	1,348.8	1,256.6	1,164.4	92.24	13.623	
16,500.0	11,454.0	16,872.9	11,775.0	43.6	49.6	104.46	5,265.0	1,348.0	1,256.4	1,163.3	93.09	13.497	
16,530.0	11,454.0	16,902.9	11,775.0	43.8	49.7	104.46	5,295.0	1,347.6	1,256.3	1,162.8	93.48	13.439	
16,600.0	11,454.0	16,972.9	11,775.0	44.3	50.2	104.47	5,365.0	1,346.8	1,256.1	1,161.7	94.40	13.306	
16,625.0	11,454.0	16,997.9	11,775.0	44.5	50.3	104.47	5,390.0	1,346.4	1,256.0	1,161.3	94.73	13.259	
16,700.0	11,454.0	17,072.9	11,775.0	45.0	50.8	104.47	5,464.9	1,345.5	1,255.8	1,160.0	95.72	13.119	
16,720.0	11,454.0	17,092.9	11,775.0	45.2	50.9	104.47	5,484.9	1,345.3	1,255.7	1,159.7	95.98	13.083	
16,800.0	11,454.0	17,172.9	11,775.0	45.7	51.4	104.47	5,564.9	1,344.3	1,255.4	1,158.4	97.04	12.937	
16,815.0	11,454.0	17,187.9	11,775.0	45.8	51.4	104.47	5,579.9	1,344.1	1,255.4	1,158.2	97.24	12.910	
16,900.0	11,454.0	17,272.9	11,775.0	46.5	52.0	104.48	5,664.9	1,343.1	1,255.1	1,156.8	98.37	12.759	
16,910.0	11,454.0	17,282.9	11,775.0	46.5	52.0	104.48	5,674.9	1,342.9	1,255.1	1,156.6	98.50	12.742	
17,000.0	11,454.0	17,372.9	11,775.0	47.2	52.6	104.48	5,764.9	1,341.8	1,254.8	1,155.1	99.71	12.585	
17,005.0	11,454.0	17,377.9	11,775.0	47.2	52.6	104.48	5,769.9	1,341.8	1,254.8	1,155.0	99.77	12.577	
17,100.0	11,454.0	17,472.9	11,775.0	47.9	53.2	104.48	5,864.9	1,340.6	1,254.5	1,153.5	101.05	12.415	
17,195.0	11,454.0	17,567.9	11,775.0	48.6	53.8	104.49	5,959.9	1,339.4	1,254.2	1,151.9	102.33	12.257	
17,200.0	11,454.0	17,572.9	11,775.0	48.6	53.8	104.49	5,964.9	1,339.4	1,254.2	1,151.8	102.39	12.249	
17,290.0	11,454.0	17,662.9	11,775.0	49.2	54.4	104.49	6,054.9	1,338.3	1,253.9	1,150.3	103.61	12.102	
17,300.0	11,454.0	17,672.9	11,775.0	49.3	54.4	104.49	6,064.9	1,338.1	1,253.9	1,150.1	103.74	12.086	
17,385.0	11,454.0	17,757.9	11,775.0	49.9	54.9	104.50	6,149.9	1,337.1	1,253.6	1,148.7	104.90	11.951	
17,400.0	11,454.0	17,772.9	11,775.0	50.0	55.0	104.50	6,164.9	1,336.9	1,253.6	1,148.5	105.10	11.927	
17,480.0	11,454.0	17,852.9	11,775.0	50.6	55.5	104.50	6,244.9	1,335.9	1,253.3	1,147.1	106.19	11.803	
17,500.0	11,454.0	17,872.9	11,775.0	50.8	55.7	104.50	6,264.9	1,335.7	1,253.2	1,146.8	106.46	11.772	
17,575.0	11,454.0	17,947.9	11,775.0	51.3	56.1	104.50	6,339.9	1,334.7	1,253.0	1,145.5	107.48	11.658	
17,600.0	11,454.0	17,972.9	11,775.0	51.5	56.3	104.50	6,364.9	1,334.4	1,252.9	1,145.1	107.82	11.620	
17,670.0	11,454.0	18,042.9	11,775.0	52.0	56.7	104.51	6,434.9	1,333.6	1,252.7	1,143.9	108.78	11.516	
17,700.0	11,454.0	18,072.9	11,775.0	52.2	56.9	104.51	6,464.9	1,333.2	1,252.6	1,143.4	109.19	11.472	
17,765.0	11,454.0	18,137.9	11,775.0	52.7	57.4	104.51	6,529.9	1,332.4	1,252.4	1,142.3	110.08	11.377	
17,800.0	11,454.0	18,172.9	11,775.0	52.9	57.6	104.51	6,564.9	1,332.0	1,252.3	1,141.7	110.57	11.326	
17,860.0	11,454.0	18,232.9	11,775.0	53.4	58.0	104.51	6,624.9	1,331.2	1,252.1	1,140.7	111.39	11.241	
17,900.0	11,454.0	18,272.9	11,775.0	53.7	58.2	104.51	6,664.9	1,330.7	1,252.0	1,140.0	111.94	11.184	
17,955.0	11,454.0	18,327.9	11,775.0	54.1	58.6	104.52	6,719.8	1,330.1	1,251.8	1,139.1	112.70	11.107	
18,000.0	11,454.0	18,372.9	11,775.0	54.4	58.9	104.52	6,764.8	1,329.5	1,251.7	1,138.3	113.32	11.045	
18,050.0	11,454.0	18,422.9	11,775.0	54.7	59.2	104.52	6,814.8	1,328.9	1,251.5	1,137.5	114.01	10.977	
18,100.0	11,454.0	18,472.9	11,775.0	55.1	59.5	104.52	6,864.8	1,328.3	1,251.4	1,136.6	114.71	10.909	
18,145.0	11,454.0	18,517.9	11,775.0	55.4	59.8	104.52	6,909.8	1,327.7	1,251.2	1,135.9	115.33	10.849	
18,200.0	11,454.0	18,572.9	11,775.0	55.8	60.2	104.53	6,964.8	1,327.0	1,251.0	1,134.9	116.09	10.776	
18,240.0	11,454.0	18,612.9	11,775.0	56.1	60.4	104.53	7,004.8	1,326.5	1,250.9	1,134.3	116.65	10.724	
18,300.0	11,454.0	18,672.9	11,775.0	56.6	60.8	104.53	7,064.8	1,325.8	1,250.7	1,133.2	117.49	10.646	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		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	
18,335.0	11,454.0	18,707.9	11,775.0	56.8	61.0	104.53	7,099.8	1,325.4	1,250.6	1,132.6	117.97	10.601	
18,400.0	11,454.0	18,772.9	11,775.0	57.3	61.5	104.53	7,164.8	1,324.6	1,250.4	1,131.5	118.88	10.518	
18,430.0	11,454.0	18,802.9	11,775.0	57.5	61.7	104.53	7,194.8	1,324.2	1,250.3	1,131.0	119.30	10.480	
18,500.0	11,454.0	18,872.9	11,775.0	58.0	62.1	104.54	7,264.8	1,323.3	1,250.1	1,129.8	120.28	10.393	
18,525.0	11,454.0	18,897.9	11,775.0	58.2	62.3	104.54	7,289.8	1,323.0	1,250.0	1,129.4	120.63	10.363	
18,600.0	11,454.0	18,972.9	11,775.0	58.8	62.8	104.54	7,364.8	1,322.1	1,249.8	1,128.1	121.68	10.271	
18,620.0	11,454.0	18,992.9	11,775.0	58.9	62.9	104.54	7,384.8	1,321.9	1,249.7	1,127.8	121.96	10.247	
18,700.0	11,454.0	19,072.9	11,775.0	59.5	63.5	104.54	7,464.8	1,320.9	1,249.5	1,126.4	123.08	10.151	
18,715.0	11,454.0	19,087.9	11,775.0	59.6	63.6	104.55	7,479.8	1,320.7	1,249.4	1,126.1	123.29	10.134	
18,800.0	11,454.0	19,172.9	11,775.0	60.2	64.1	104.55	7,564.8	1,319.6	1,249.1	1,124.7	124.49	10.034	
18,810.0	11,454.0	19,182.9	11,775.0	60.3	64.2	104.55	7,574.8	1,319.5	1,249.1	1,124.5	124.63	10.023	
18,900.0	11,454.0	19,272.9	11,775.0	61.0	64.8	104.55	7,664.8	1,318.4	1,248.8	1,122.9	125.90	9.919	
18,905.0	11,454.0	19,277.9	11,775.0	61.0	64.8	104.55	7,669.8	1,318.3	1,248.8	1,122.8	125.97	9.914	
19,000.0	11,454.0	19,372.9	11,775.0	61.7	65.5	104.56	7,764.8	1,317.2	1,248.5	1,121.2	127.31	9.807	
19,095.0	11,454.0	19,467.9	11,775.0	62.4	66.1	104.56	7,859.8	1,316.0	1,248.2	1,119.6	128.66	9.702	
19,100.0	11,454.0	19,472.9	11,775.0	62.4	66.1	104.56	7,864.8	1,315.9	1,248.2	1,119.5	128.73	9.697	
19,190.0	11,454.0	19,562.9	11,775.0	63.1	66.7	104.56	7,954.7	1,314.8	1,247.9	1,117.9	130.00	9.599	
19,200.0	11,454.0	19,572.9	11,775.0	63.2	66.8	104.56	7,964.7	1,314.7	1,247.9	1,117.7	130.14	9.589	
19,285.0	11,454.0	19,657.9	11,775.0	63.8	67.4	104.57	8,049.7	1,313.7	1,247.6	1,116.3	131.35	9.498	
19,300.0	11,454.0	19,672.9	11,775.0	63.9	67.5	104.57	8,064.7	1,313.5	1,247.6	1,116.0	131.56	9.483	
19,380.0	11,454.0	19,752.9	11,775.0	64.5	68.0	104.57	8,144.7	1,312.5	1,247.3	1,114.6	132.70	9.399	
19,400.0	11,454.0	19,772.9	11,775.0	64.6	68.2	104.57	8,164.7	1,312.2	1,247.3	1,114.3	132.99	9.379	
19,475.0	11,454.0	19,847.9	11,775.0	65.2	68.7	104.57	8,239.7	1,311.3	1,247.0	1,113.0	134.05	9.302	
19,500.0	11,454.0	19,872.9	11,775.0	65.4	68.8	104.57	8,264.7	1,311.0	1,246.9	1,112.5	134.41	9.277	
19,570.0	11,454.0	19,942.9	11,775.0	65.9	69.3	104.58	8,334.7	1,310.1	1,246.7	1,111.3	135.41	9.207	
19,600.0	11,454.0	19,972.9	11,775.0	66.1	69.5	104.58	8,364.7	1,309.8	1,246.6	1,110.8	135.84	9.177	
19,665.0	11,454.0	20,037.9	11,775.0	66.6	70.0	104.58	8,429.7	1,309.0	1,246.4	1,109.7	136.77	9.114	
19,700.0	11,454.0	20,072.9	11,775.0	66.9	70.2	104.58	8,464.7	1,308.5	1,246.3	1,109.1	137.27	9.080	
19,760.0	11,454.0	20,132.9	11,775.0	67.3	70.6	104.58	8,524.7	1,307.8	1,246.1	1,108.0	138.13	9.022	
19,800.0	11,454.0	20,172.9	11,775.0	67.6	70.9	104.59	8,564.7	1,307.3	1,246.0	1,107.3	138.70	8.984	
19,855.0	11,454.0	20,227.9	11,775.0	68.0	71.3	104.59	8,619.7	1,306.6	1,245.8	1,106.3	139.49	8.932	
19,900.0	11,454.0	20,272.9	11,775.0	68.3	71.6	104.59	8,664.7	1,306.1	1,245.7	1,105.6	140.13	8.889	
19,950.0	11,454.0	20,322.9	11,775.0	68.7	71.9	104.59	8,714.7	1,305.5	1,245.5	1,104.7	140.85	8.843	
20,000.0	11,454.0	20,372.9	11,775.0	69.1	72.3	104.59	8,764.7	1,304.8	1,245.4	1,103.8	141.57	8.797	
20,045.0	11,454.0	20,417.9	11,775.0	69.4	72.6	104.60	8,809.7	1,304.3	1,245.2	1,103.0	142.21	8.756	
20,100.0	11,454.0	20,472.9	11,775.0	69.8	73.0	104.60	8,864.7	1,303.6	1,245.1	1,102.1	143.00	8.707	
20,140.0	11,454.0	20,512.9	11,775.0	70.1	73.2	104.60	8,904.7	1,303.1	1,244.9	1,101.4	143.58	8.671	
20,200.0	11,454.0	20,572.9	11,775.0	70.6	73.6	104.60	8,964.7	1,302.4	1,244.7	1,100.3	144.44	8.618	
20,235.0	11,454.0	20,607.9	11,775.0	70.8	73.9	104.60	8,999.7	1,301.9	1,244.6	1,099.7	144.95	8.587	
20,300.0	11,454.0	20,672.9	11,775.0	71.3	74.3	104.61	9,064.7	1,301.1	1,244.4	1,098.5	145.88	8.530	
20,330.0	11,454.0	20,702.9	11,775.0	71.5	74.5	104.61	9,094.7	1,300.8	1,244.3	1,098.0	146.32	8.504	
20,400.0	11,454.0	20,772.9	11,775.0	72.1	75.0	104.61	9,164.6	1,299.9	1,244.1	1,096.8	147.33	8.445	
20,425.0	11,454.0	20,797.9	11,775.0	72.2	75.2	104.61	9,189.6	1,299.6	1,244.0	1,096.3	147.69	8.423	
20,500.0	11,454.0	20,872.9	11,775.0	72.8	75.7	104.61	9,264.6	1,298.7	1,243.8	1,095.0	148.77	8.361	
20,520.0	11,454.0	20,892.9	11,775.0	72.9	75.9	104.61	9,284.6	1,298.4	1,243.7	1,094.7	149.06	8.344	
20,600.0	11,454.0	20,972.9	11,775.0	73.5	76.4	104.62	9,364.6	1,297.4	1,243.5	1,093.3	150.22	8.278	
20,615.0	11,454.0	20,987.9	11,775.0	73.7	76.5	104.62	9,379.6	1,297.3	1,243.4	1,093.0	150.43	8.266	
20,700.0	11,454.0	21,072.9	11,775.0	74.3	77.1	104.62	9,464.6	1,296.2	1,243.2	1,091.5	151.66	8.197	
20,710.0	11,454.0	21,082.9	11,775.0	74.4	77.2	104.62	9,474.6	1,296.1	1,243.1	1,091.3	151.81	8.189	
20,800.0	11,454.0	21,172.9	11,775.0	75.0	77.8	104.62	9,564.6	1,295.0	1,242.9	1,089.7	153.11	8.117	
20,805.0	11,454.0	21,177.9	11,775.0	75.1	77.9	104.62	9,569.6	1,294.9	1,242.8	1,089.7	153.19	8.113	
20,900.0	11,454.0	21,272.9	11,775.0	75.8	78.5	104.63	9,664.6	1,293.7	1,242.5	1,088.0	154.56	8.039	

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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 2431 PROJECT - ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1500-r.5 MWD+IFR1, 11290-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
20,995.0	11,454.0	21,367.9	11,775.0	76.5	79.2	104.63	9,759.6	1,292.6	1,242.2	1,086.3	155.94	7.966		
21,000.0	11,454.0	21,372.9	11,775.0	76.5	79.2	104.63	9,764.6	1,292.5	1,242.2	1,086.2	156.02	7.962		
21,090.0	11,454.0	21,462.9	11,775.0	77.2	79.9	104.64	9,854.6	1,291.4	1,241.9	1,084.6	157.32	7.894		
21,100.0	11,454.0	21,472.9	11,775.0	77.3	79.9	104.64	9,864.6	1,291.3	1,241.9	1,084.4	157.47	7.887		
21,185.0	11,454.0	21,557.9	11,775.0	77.9	80.5	104.64	9,949.6	1,290.2	1,241.6	1,082.9	158.71	7.824		
21,200.0	11,454.0	21,572.9	11,775.0	78.0	80.6	104.64	9,964.6	1,290.0	1,241.6	1,082.7	158.92	7.813		
21,280.0	11,454.0	21,652.9	11,775.0	78.6	81.2	104.64	10,044.6	1,289.1	1,241.3	1,081.3	160.09	7.754		
21,300.0	11,454.0	21,672.9	11,775.0	78.8	81.3	104.64	10,064.6	1,288.8	1,241.3	1,080.9	160.38	7.740		
21,375.0	11,454.0	21,747.9	11,775.0	79.3	81.9	104.65	10,139.6	1,287.9	1,241.0	1,079.6	161.47	7.686		
21,400.0	11,454.0	21,772.9	11,775.0	79.5	82.1	104.65	10,164.6	1,287.6	1,241.0	1,079.1	161.84	7.668		
21,470.0	11,454.0	21,842.9	11,775.0	80.0	82.6	104.65	10,234.6	1,286.7	1,240.7	1,077.9	162.86	7.619		
21,500.0	11,454.0	21,872.9	11,775.0	80.3	82.8	104.65	10,264.6	1,286.4	1,240.7	1,077.4	163.30	7.598		
21,565.0	11,454.0	21,937.9	11,775.0	80.7	83.2	104.65	10,329.6	1,285.5	1,240.4	1,076.2	164.25	7.552		
21,600.0	11,454.0	21,972.9	11,775.0	81.0	83.5	104.65	10,364.6	1,285.1	1,240.3	1,075.6	164.76	7.528		
21,660.0	11,454.0	22,032.9	11,775.0	81.4	83.9	104.66	10,424.5	1,284.4	1,240.2	1,074.5	165.63	7.487		
21,700.0	11,454.0	22,072.9	11,775.0	81.7	84.2	104.66	10,464.5	1,283.9	1,240.0	1,073.8	166.22	7.460		
21,724.9	11,454.0	22,097.8	11,775.0	81.9	84.4	104.66	10,489.4	1,283.6	1,239.9	1,073.4	166.58	7.443 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 @ 3195.0usft

Offset Depths are relative to Offset Datum

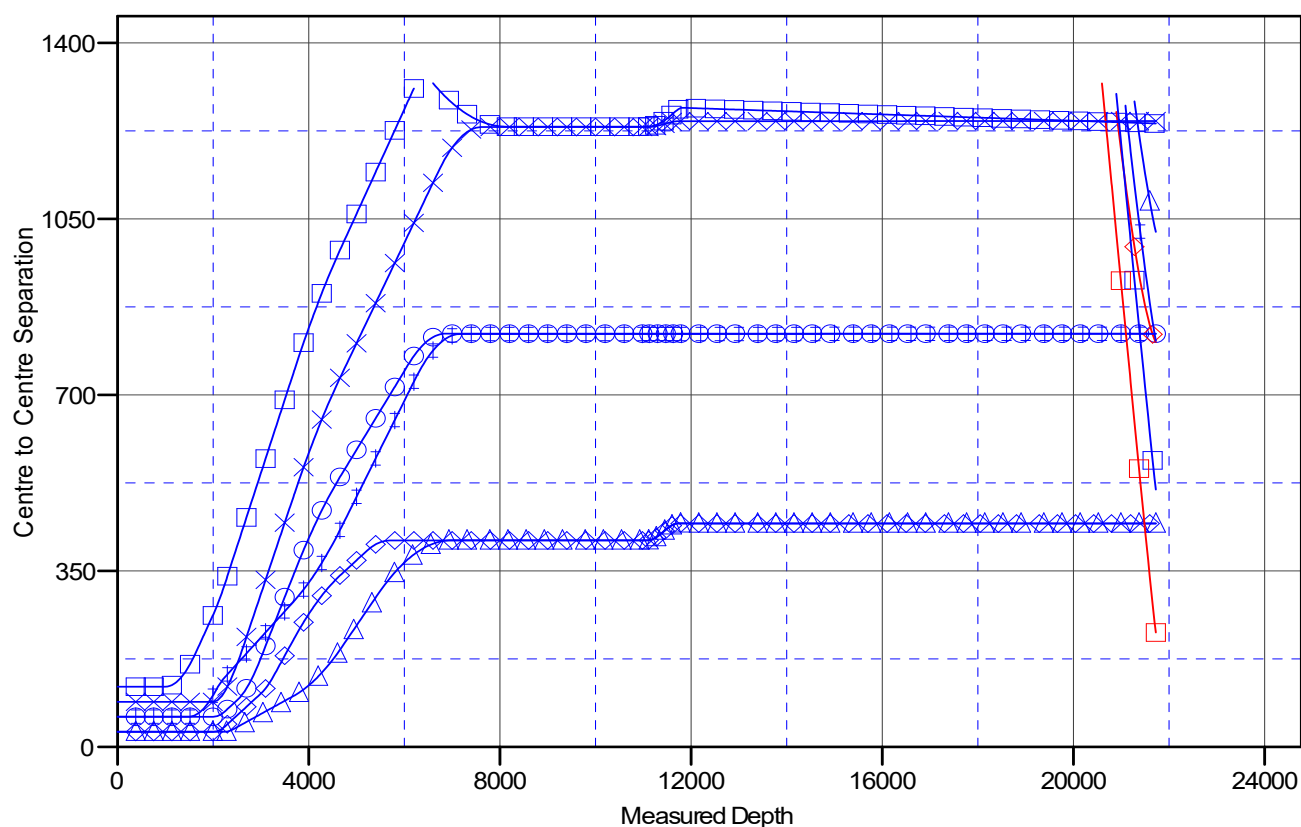
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ZIA HILLS UNIT 2331 WC #711H

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

Grid Convergence at Surface is: 0.31°

Ladder Plot



LEGEND

ZA HILLS UNIT 2331 WC #707H, OWB, PWP0 V0	SHETLAND 2-11 STATE FEDERAL COM #733H, OWB, PWP0 V0	ZA HILLS UNIT 2331 WC #712H, OWB, PWP0 V0
ZA HILLS UNIT 2331 WC #709H, OWB, PWP0 V0	ZA HILLS UNIT 2331 WC #713H, OWB, PWP0 V0	SHETLAND 11 FEDERAL #734H, OWB, PWP0 V0
SHETLAND 2-11 STATE FEDERAL COM #613H, OWB, AWP V0	ZA HILLS UNIT 2331 WC #710H, OWB, PWP0 V0	SHETLAND 2-11 STATE FEDERAL COM #633H, OWB, AWP V0
ZA HILLS UNIT 2331 WC #708H, OWB, PWP0 V0	SHETLAND 11 FEDERAL #711H, OWB, PWP0 V0	ZA HILLS UNIT 2431 WC #707H, OWB, PWP0 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 #711H
Project:	BULLDOG PROSPECT (NM-E)	TVD Reference:	KB=31ft @ 3195.0usft
Reference Site:	ZIA HILLS UNIT 2331 PROJECT	MD Reference:	KB=31ft @ 3195.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	ZIA HILLS UNIT 2331 WC #711H	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 @ 3195.0usft

Offset Depths are relative to Offset Datum

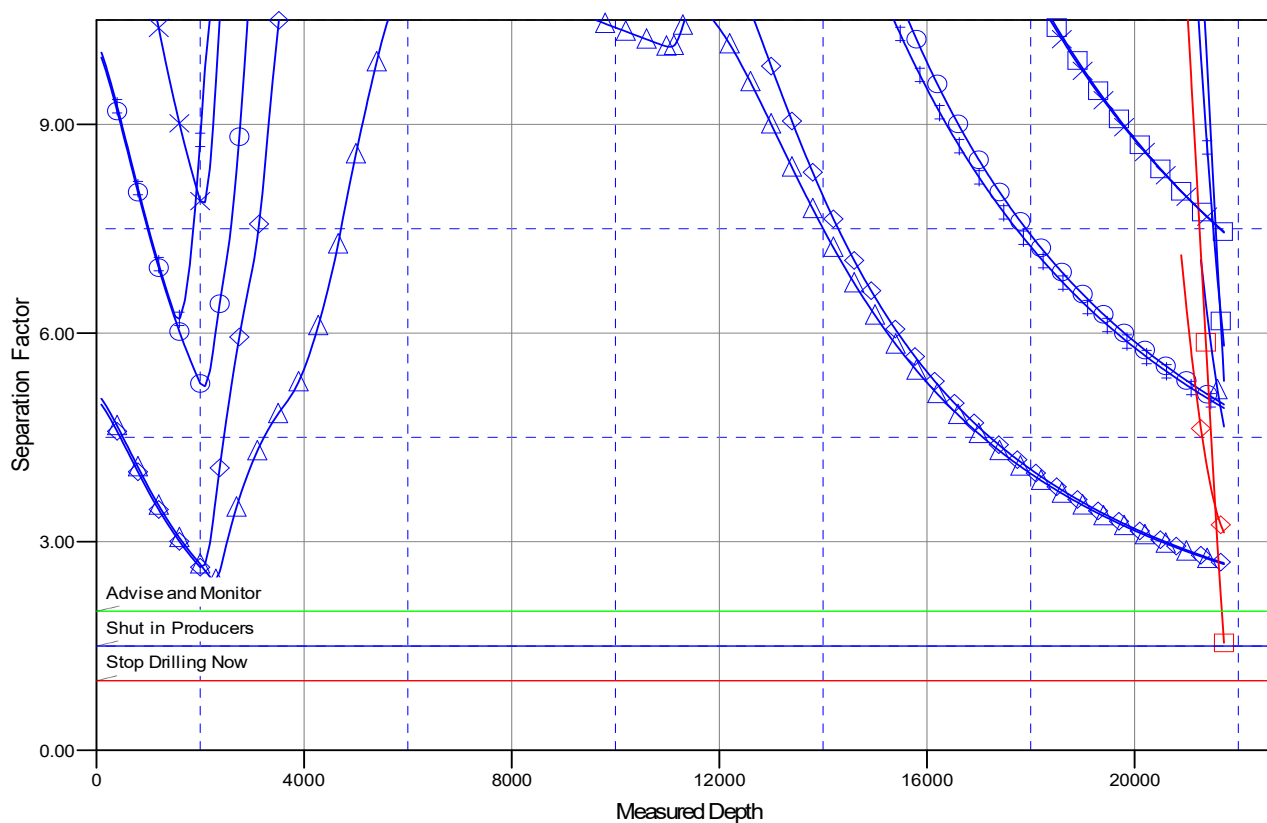
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ZIA HILLS UNIT 2331 WC #711H

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 #709H, OWB, PWP0 V0	SHELTLAND 2-11 STATE FEDERAL COM #733H, OWB, PWP0 V0	ZIA HILLS UNIT 2331 WC #712H, OWB, PWP0 V0
ZIA HILLS UNIT 2331 WC #709H, OWB, PWP0 V0	ZIA HILLS UNIT 2331 WC #713H, OWB, PWP0 V0	SHELTLAND 11 FEDERAL #733H, OWB, PWP0 V0
SHELTLAND 2-11 STATE FEDERAL COM #613H, OWB, AWP V0	ZIA HILLS UNIT 2331 WC #710H, OWB, PWP0 V0	SHELTLAND 2-11 STATE FEDERAL COM #633H, OWB, AWP V0
ZIA HILLS UNIT 2331 WC #709H, OWB, PWP0 V0	SHELTLAND 11 FEDERAL #711H, OWB, PWP0 V0	ZIA HILLS UNIT 2431 WC #709H, OWB, PWP0 V0

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

DELAWARE BASIN EAST

**BULLDOG PROSPECT (NM-E)
ZIA HILLS UNIT 2331 PROJECT
ZIA HILLS UNIT 2331 WC #711H**

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 #711H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3195.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3195.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #711H	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 #711H					
Well Position	+N/-S	106.3 usft	Northing:	371,841.22 usft	Latitude:	32° 1' 15.355 N
	+E/-W	4,304.6 usft	Easting:	682,953.99 usft	Longitude:	103° 44' 34.870 W
Position Uncertainty		3.0 usft	Wellhead Elevation:		Ground Level:	3,164.0 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	12/31/2023	6.34	59.52	47,263.56267469

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	0.45

Plan Survey Tool Program	Date	11/16/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	2,000.0 PWP0 (OWB)	r.5 SDI_KPR_ADK SDI Keeper ADK rev.5	
2	2,000.0	10,983.6 PWP0 (OWB)	r.5 MWD+IFR1 OWSG MWD + IFR1 rev.5	
3	10,983.6	21,724.9 PWP0 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St	

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #711H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3195.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3195.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,250.0	5.00	87.99	2,249.7	0.4	10.9	2.00	2.00	0.00	87.99	
3,680.8	5.00	87.99	3,675.0	4.8	135.5	0.00	0.00	0.00	0.00	
4,680.8	0.00	0.00	4,673.7	6.3	179.1	0.50	-0.50	0.00	180.00	
10,983.6	0.00	0.00	10,976.5	6.3	179.1	0.00	0.00	0.00	0.00	
11,733.6	90.00	359.48	11,454.0	483.7	174.8	12.00	12.00	0.00	359.48	
21,724.9	90.00	359.48	11,454.0	10,474.7	84.1	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 #711H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3195.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3195.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #711H	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	2.00	87.99	2,100.0	0.1	1.7	0.1	2.00	2.00	0.00
2,200.0	4.00	87.99	2,199.8	0.2	7.0	0.3	2.00	2.00	0.00
2,250.0	5.00	87.99	2,249.7	0.4	10.9	0.5	2.00	2.00	0.00
2,300.0	5.00	87.99	2,299.5	0.5	15.2	0.7	0.00	0.00	0.00
2,400.0	5.00	87.99	2,399.1	0.8	24.0	1.0	0.00	0.00	0.00
2,500.0	5.00	87.99	2,498.7	1.1	32.7	1.4	0.00	0.00	0.00
2,600.0	5.00	87.99	2,598.4	1.5	41.4	1.8	0.00	0.00	0.00
2,700.0	5.00	87.99	2,698.0	1.8	50.1	2.2	0.00	0.00	0.00
2,800.0	5.00	87.99	2,797.6	2.1	58.8	2.5	0.00	0.00	0.00
2,900.0	5.00	87.99	2,897.2	2.4	67.5	2.9	0.00	0.00	0.00
3,000.0	5.00	87.99	2,996.8	2.7	76.2	3.3	0.00	0.00	0.00
3,100.0	5.00	87.99	3,096.4	3.0	84.9	3.7	0.00	0.00	0.00
3,200.0	5.00	87.99	3,196.1	3.3	93.6	4.0	0.00	0.00	0.00
3,300.0	5.00	87.99	3,295.7	3.6	102.4	4.4	0.00	0.00	0.00
3,400.0	5.00	87.99	3,395.3	3.9	111.1	4.8	0.00	0.00	0.00
3,500.0	5.00	87.99	3,494.9	4.2	119.8	5.1	0.00	0.00	0.00
3,600.0	5.00	87.99	3,594.5	4.5	128.5	5.5	0.00	0.00	0.00
3,680.8	5.00	87.99	3,675.0	4.8	135.5	5.8	0.00	0.00	0.00
3,700.0	4.90	87.99	3,694.2	4.8	137.2	5.9	0.50	-0.50	0.00
3,800.0	4.40	87.99	3,793.8	5.1	145.3	6.2	0.50	-0.50	0.00
3,900.0	3.90	87.99	3,893.6	5.4	152.5	6.6	0.50	-0.50	0.00
4,000.0	3.40	87.99	3,993.4	5.6	158.9	6.8	0.50	-0.50	0.00
4,100.0	2.90	87.99	4,093.2	5.8	164.4	7.1	0.50	-0.50	0.00
4,200.0	2.40	87.99	4,193.1	5.9	169.0	7.3	0.50	-0.50	0.00
4,300.0	1.90	87.99	4,293.0	6.1	172.8	7.4	0.50	-0.50	0.00
4,400.0	1.40	87.99	4,393.0	6.2	175.7	7.6	0.50	-0.50	0.00
4,500.0	0.90	87.99	4,493.0	6.2	177.7	7.6	0.50	-0.50	0.00
4,600.0	0.40	87.99	4,593.0	6.3	178.8	7.7	0.50	-0.50	0.00
4,680.8	0.00	0.00	4,673.7	6.3	179.1	7.7	0.50	-0.50	0.00
4,700.0	0.00	0.00	4,693.0	6.3	179.1	7.7	0.00	0.00	0.00
4,800.0	0.00	0.00	4,793.0	6.3	179.1	7.7	0.00	0.00	0.00
4,900.0	0.00	0.00	4,893.0	6.3	179.1	7.7	0.00	0.00	0.00
5,000.0	0.00	0.00	4,993.0	6.3	179.1	7.7	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #711H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3195.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3195.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #711H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,100.0	0.00	0.00	5,093.0	6.3	179.1	7.7	0.00	0.00	0.00
5,200.0	0.00	0.00	5,193.0	6.3	179.1	7.7	0.00	0.00	0.00
5,300.0	0.00	0.00	5,293.0	6.3	179.1	7.7	0.00	0.00	0.00
5,400.0	0.00	0.00	5,393.0	6.3	179.1	7.7	0.00	0.00	0.00
5,500.0	0.00	0.00	5,493.0	6.3	179.1	7.7	0.00	0.00	0.00
5,600.0	0.00	0.00	5,593.0	6.3	179.1	7.7	0.00	0.00	0.00
5,700.0	0.00	0.00	5,693.0	6.3	179.1	7.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,793.0	6.3	179.1	7.7	0.00	0.00	0.00
5,900.0	0.00	0.00	5,893.0	6.3	179.1	7.7	0.00	0.00	0.00
6,000.0	0.00	0.00	5,993.0	6.3	179.1	7.7	0.00	0.00	0.00
6,100.0	0.00	0.00	6,093.0	6.3	179.1	7.7	0.00	0.00	0.00
6,200.0	0.00	0.00	6,193.0	6.3	179.1	7.7	0.00	0.00	0.00
6,300.0	0.00	0.00	6,293.0	6.3	179.1	7.7	0.00	0.00	0.00
6,400.0	0.00	0.00	6,393.0	6.3	179.1	7.7	0.00	0.00	0.00
6,500.0	0.00	0.00	6,493.0	6.3	179.1	7.7	0.00	0.00	0.00
6,600.0	0.00	0.00	6,593.0	6.3	179.1	7.7	0.00	0.00	0.00
6,700.0	0.00	0.00	6,693.0	6.3	179.1	7.7	0.00	0.00	0.00
6,800.0	0.00	0.00	6,793.0	6.3	179.1	7.7	0.00	0.00	0.00
6,900.0	0.00	0.00	6,893.0	6.3	179.1	7.7	0.00	0.00	0.00
7,000.0	0.00	0.00	6,993.0	6.3	179.1	7.7	0.00	0.00	0.00
7,100.0	0.00	0.00	7,093.0	6.3	179.1	7.7	0.00	0.00	0.00
7,200.0	0.00	0.00	7,193.0	6.3	179.1	7.7	0.00	0.00	0.00
7,300.0	0.00	0.00	7,293.0	6.3	179.1	7.7	0.00	0.00	0.00
7,400.0	0.00	0.00	7,393.0	6.3	179.1	7.7	0.00	0.00	0.00
7,500.0	0.00	0.00	7,493.0	6.3	179.1	7.7	0.00	0.00	0.00
7,600.0	0.00	0.00	7,593.0	6.3	179.1	7.7	0.00	0.00	0.00
7,700.0	0.00	0.00	7,693.0	6.3	179.1	7.7	0.00	0.00	0.00
7,800.0	0.00	0.00	7,793.0	6.3	179.1	7.7	0.00	0.00	0.00
7,900.0	0.00	0.00	7,893.0	6.3	179.1	7.7	0.00	0.00	0.00
8,000.0	0.00	0.00	7,993.0	6.3	179.1	7.7	0.00	0.00	0.00
8,100.0	0.00	0.00	8,093.0	6.3	179.1	7.7	0.00	0.00	0.00
8,200.0	0.00	0.00	8,193.0	6.3	179.1	7.7	0.00	0.00	0.00
8,300.0	0.00	0.00	8,293.0	6.3	179.1	7.7	0.00	0.00	0.00
8,400.0	0.00	0.00	8,393.0	6.3	179.1	7.7	0.00	0.00	0.00
8,500.0	0.00	0.00	8,493.0	6.3	179.1	7.7	0.00	0.00	0.00
8,600.0	0.00	0.00	8,593.0	6.3	179.1	7.7	0.00	0.00	0.00
8,700.0	0.00	0.00	8,693.0	6.3	179.1	7.7	0.00	0.00	0.00
8,800.0	0.00	0.00	8,793.0	6.3	179.1	7.7	0.00	0.00	0.00
8,900.0	0.00	0.00	8,893.0	6.3	179.1	7.7	0.00	0.00	0.00
9,000.0	0.00	0.00	8,993.0	6.3	179.1	7.7	0.00	0.00	0.00
9,100.0	0.00	0.00	9,093.0	6.3	179.1	7.7	0.00	0.00	0.00
9,200.0	0.00	0.00	9,193.0	6.3	179.1	7.7	0.00	0.00	0.00
9,300.0	0.00	0.00	9,293.0	6.3	179.1	7.7	0.00	0.00	0.00
9,400.0	0.00	0.00	9,393.0	6.3	179.1	7.7	0.00	0.00	0.00
9,500.0	0.00	0.00	9,493.0	6.3	179.1	7.7	0.00	0.00	0.00
9,600.0	0.00	0.00	9,593.0	6.3	179.1	7.7	0.00	0.00	0.00
9,700.0	0.00	0.00	9,693.0	6.3	179.1	7.7	0.00	0.00	0.00
9,800.0	0.00	0.00	9,793.0	6.3	179.1	7.7	0.00	0.00	0.00
9,900.0	0.00	0.00	9,893.0	6.3	179.1	7.7	0.00	0.00	0.00
10,000.0	0.00	0.00	9,993.0	6.3	179.1	7.7	0.00	0.00	0.00
10,100.0	0.00	0.00	10,093.0	6.3	179.1	7.7	0.00	0.00	0.00
10,200.0	0.00	0.00	10,193.0	6.3	179.1	7.7	0.00	0.00	0.00
10,300.0	0.00	0.00	10,293.0	6.3	179.1	7.7	0.00	0.00	0.00
10,400.0	0.00	0.00	10,393.0	6.3	179.1	7.7	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #711H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3195.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3195.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #711H	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	10,493.0	6.3	179.1	7.7	0.00	0.00	0.00
10,600.0	0.00	0.00	10,593.0	6.3	179.1	7.7	0.00	0.00	0.00
10,700.0	0.00	0.00	10,693.0	6.3	179.1	7.7	0.00	0.00	0.00
10,800.0	0.00	0.00	10,793.0	6.3	179.1	7.7	0.00	0.00	0.00
10,900.0	0.00	0.00	10,893.0	6.3	179.1	7.7	0.00	0.00	0.00
10,983.6	0.00	0.00	10,976.5	6.3	179.1	7.7	0.00	0.00	0.00
11,000.0	1.97	359.48	10,993.0	6.6	179.1	8.0	12.00	12.00	0.00
11,025.0	4.97	359.48	11,017.9	8.1	179.1	9.5	12.00	12.00	0.00
11,050.0	7.97	359.48	11,042.8	10.9	179.1	12.3	12.00	12.00	0.00
11,075.0	10.97	359.48	11,067.4	15.0	179.0	16.4	12.00	12.00	0.00
11,100.0	13.97	359.48	11,091.8	20.4	179.0	21.8	12.00	12.00	0.00
11,125.0	16.97	359.48	11,115.9	27.1	178.9	28.5	12.00	12.00	0.00
11,150.0	19.97	359.48	11,139.6	35.0	178.8	36.4	12.00	12.00	0.00
11,175.0	22.97	359.48	11,162.9	44.1	178.8	45.6	12.00	12.00	0.00
11,200.0	25.97	359.48	11,185.6	54.5	178.7	55.9	12.00	12.00	0.00
11,225.0	28.97	359.48	11,207.8	66.0	178.6	67.4	12.00	12.00	0.00
11,250.0	31.97	359.48	11,229.4	78.7	178.4	80.1	12.00	12.00	0.00
11,275.0	34.97	359.48	11,250.2	92.5	178.3	93.9	12.00	12.00	0.00
11,300.0	37.97	359.48	11,270.3	107.4	178.2	108.8	12.00	12.00	0.00
11,325.0	40.97	359.48	11,289.6	123.2	178.0	124.6	12.00	12.00	0.00
11,350.0	43.97	359.48	11,308.0	140.1	177.9	141.5	12.00	12.00	0.00
11,375.0	46.97	359.48	11,325.6	157.9	177.7	159.3	12.00	12.00	0.00
11,400.0	49.97	359.48	11,342.1	176.7	177.5	178.1	12.00	12.00	0.00
11,425.0	52.97	359.48	11,357.7	196.2	177.4	197.6	12.00	12.00	0.00
11,450.0	55.97	359.48	11,372.2	216.6	177.2	217.9	12.00	12.00	0.00
11,475.0	58.97	359.48	11,385.7	237.6	177.0	239.0	12.00	12.00	0.00
11,500.0	61.97	359.48	11,398.0	259.4	176.8	260.8	12.00	12.00	0.00
11,525.0	64.97	359.48	11,409.2	281.7	176.6	283.1	12.00	12.00	0.00
11,550.0	67.97	359.48	11,419.1	304.7	176.4	306.0	12.00	12.00	0.00
11,575.0	70.97	359.48	11,427.9	328.1	176.2	329.5	12.00	12.00	0.00
11,600.0	73.97	359.48	11,435.4	351.9	176.0	353.3	12.00	12.00	0.00
11,625.0	76.97	359.48	11,441.7	376.1	175.7	377.5	12.00	12.00	0.00
11,650.0	79.97	359.48	11,446.7	400.6	175.5	402.0	12.00	12.00	0.00
11,675.0	82.97	359.48	11,450.4	425.3	175.3	426.7	12.00	12.00	0.00
11,700.0	85.97	359.48	11,452.8	450.2	175.1	451.6	12.00	12.00	0.00
11,725.0	88.97	359.48	11,453.9	475.2	174.8	476.5	12.00	12.00	0.00
11,733.6	90.00	359.48	11,454.0	483.7	174.8	485.1	12.00	12.00	0.00
11,800.0	90.00	359.48	11,454.0	550.2	174.2	551.5	0.00	0.00	0.00
11,900.0	90.00	359.48	11,454.0	650.2	173.3	651.5	0.00	0.00	0.00
12,000.0	90.00	359.48	11,454.0	750.2	172.3	751.5	0.00	0.00	0.00
12,100.0	90.00	359.48	11,454.0	850.2	171.4	851.5	0.00	0.00	0.00
12,200.0	90.00	359.48	11,454.0	950.1	170.5	951.5	0.00	0.00	0.00
12,300.0	90.00	359.48	11,454.0	1,050.1	169.6	1,051.4	0.00	0.00	0.00
12,400.0	90.00	359.48	11,454.0	1,150.1	168.7	1,151.4	0.00	0.00	0.00
12,500.0	90.00	359.48	11,454.0	1,250.1	167.8	1,251.4	0.00	0.00	0.00
12,600.0	90.00	359.48	11,454.0	1,350.1	166.9	1,351.4	0.00	0.00	0.00
12,700.0	90.00	359.48	11,454.0	1,450.1	166.0	1,451.4	0.00	0.00	0.00
12,800.0	90.00	359.48	11,454.0	1,550.1	165.1	1,551.4	0.00	0.00	0.00
12,900.0	90.00	359.48	11,454.0	1,650.1	164.2	1,651.4	0.00	0.00	0.00
13,000.0	90.00	359.48	11,454.0	1,750.1	163.3	1,751.3	0.00	0.00	0.00
13,100.0	90.00	359.48	11,454.0	1,850.1	162.4	1,851.3	0.00	0.00	0.00
13,200.0	90.00	359.48	11,454.0	1,950.1	161.5	1,951.3	0.00	0.00	0.00
13,300.0	90.00	359.48	11,454.0	2,050.1	160.5	2,051.3	0.00	0.00	0.00
13,400.0	90.00	359.48	11,454.0	2,150.1	159.6	2,151.3	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #711H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3195.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3195.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #711H	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	11,454.0	2,250.1	158.7	2,251.3	0.00	0.00	0.00	
13,600.0	90.00	359.48	11,454.0	2,350.1	157.8	2,351.3	0.00	0.00	0.00	
13,700.0	90.00	359.48	11,454.0	2,450.1	156.9	2,451.2	0.00	0.00	0.00	
13,800.0	90.00	359.48	11,454.0	2,550.1	156.0	2,551.2	0.00	0.00	0.00	
13,900.0	90.00	359.48	11,454.0	2,650.1	155.1	2,651.2	0.00	0.00	0.00	
14,000.0	90.00	359.48	11,454.0	2,750.1	154.2	2,751.2	0.00	0.00	0.00	
14,100.0	90.00	359.48	11,454.0	2,850.1	153.3	2,851.2	0.00	0.00	0.00	
14,200.0	90.00	359.48	11,454.0	2,950.1	152.4	2,951.2	0.00	0.00	0.00	
14,300.0	90.00	359.48	11,454.0	3,050.1	151.5	3,051.2	0.00	0.00	0.00	
14,400.0	90.00	359.48	11,454.0	3,150.1	150.6	3,151.1	0.00	0.00	0.00	
14,500.0	90.00	359.48	11,454.0	3,250.1	149.7	3,251.1	0.00	0.00	0.00	
14,600.0	90.00	359.48	11,454.0	3,350.0	148.7	3,351.1	0.00	0.00	0.00	
14,700.0	90.00	359.48	11,454.0	3,450.0	147.8	3,451.1	0.00	0.00	0.00	
14,800.0	90.00	359.48	11,454.0	3,550.0	146.9	3,551.1	0.00	0.00	0.00	
14,900.0	90.00	359.48	11,454.0	3,650.0	146.0	3,651.1	0.00	0.00	0.00	
15,000.0	90.00	359.48	11,454.0	3,750.0	145.1	3,751.1	0.00	0.00	0.00	
15,100.0	90.00	359.48	11,454.0	3,850.0	144.2	3,851.0	0.00	0.00	0.00	
15,200.0	90.00	359.48	11,454.0	3,950.0	143.3	3,951.0	0.00	0.00	0.00	
15,300.0	90.00	359.48	11,454.0	4,050.0	142.4	4,051.0	0.00	0.00	0.00	
15,400.0	90.00	359.48	11,454.0	4,150.0	141.5	4,151.0	0.00	0.00	0.00	
15,500.0	90.00	359.48	11,454.0	4,250.0	140.6	4,251.0	0.00	0.00	0.00	
15,600.0	90.00	359.48	11,454.0	4,350.0	139.7	4,351.0	0.00	0.00	0.00	
15,700.0	90.00	359.48	11,454.0	4,450.0	138.8	4,451.0	0.00	0.00	0.00	
15,800.0	90.00	359.48	11,454.0	4,550.0	137.9	4,550.9	0.00	0.00	0.00	
15,900.0	90.00	359.48	11,454.0	4,650.0	136.9	4,650.9	0.00	0.00	0.00	
16,000.0	90.00	359.48	11,454.0	4,750.0	136.0	4,750.9	0.00	0.00	0.00	
16,100.0	90.00	359.48	11,454.0	4,850.0	135.1	4,850.9	0.00	0.00	0.00	
16,200.0	90.00	359.48	11,454.0	4,950.0	134.2	4,950.9	0.00	0.00	0.00	
16,300.0	90.00	359.48	11,454.0	5,050.0	133.3	5,050.9	0.00	0.00	0.00	
16,400.0	90.00	359.48	11,454.0	5,150.0	132.4	5,150.9	0.00	0.00	0.00	
16,500.0	90.00	359.48	11,454.0	5,250.0	131.5	5,250.8	0.00	0.00	0.00	
16,600.0	90.00	359.48	11,454.0	5,350.0	130.6	5,350.8	0.00	0.00	0.00	
16,700.0	90.00	359.48	11,454.0	5,450.0	129.7	5,450.8	0.00	0.00	0.00	
16,800.0	90.00	359.48	11,454.0	5,550.0	128.8	5,550.8	0.00	0.00	0.00	
16,900.0	90.00	359.48	11,454.0	5,650.0	127.9	5,650.8	0.00	0.00	0.00	
17,000.0	90.00	359.48	11,454.0	5,749.9	127.0	5,750.8	0.00	0.00	0.00	
17,100.0	90.00	359.48	11,454.0	5,849.9	126.1	5,850.8	0.00	0.00	0.00	
17,200.0	90.00	359.48	11,454.0	5,949.9	125.2	5,950.7	0.00	0.00	0.00	
17,300.0	90.00	359.48	11,454.0	6,049.9	124.2	6,050.7	0.00	0.00	0.00	
17,400.0	90.00	359.48	11,454.0	6,149.9	123.3	6,150.7	0.00	0.00	0.00	
17,500.0	90.00	359.48	11,454.0	6,249.9	122.4	6,250.7	0.00	0.00	0.00	
17,600.0	90.00	359.48	11,454.0	6,349.9	121.5	6,350.7	0.00	0.00	0.00	
17,700.0	90.00	359.48	11,454.0	6,449.9	120.6	6,450.7	0.00	0.00	0.00	
17,800.0	90.00	359.48	11,454.0	6,549.9	119.7	6,550.7	0.00	0.00	0.00	
17,900.0	90.00	359.48	11,454.0	6,649.9	118.8	6,650.6	0.00	0.00	0.00	
18,000.0	90.00	359.48	11,454.0	6,749.9	117.9	6,750.6	0.00	0.00	0.00	
18,100.0	90.00	359.48	11,454.0	6,849.9	117.0	6,850.6	0.00	0.00	0.00	
18,200.0	90.00	359.48	11,454.0	6,949.9	116.1	6,950.6	0.00	0.00	0.00	
18,300.0	90.00	359.48	11,454.0	7,049.9	115.2	7,050.6	0.00	0.00	0.00	
18,400.0	90.00	359.48	11,454.0	7,149.9	114.3	7,150.6	0.00	0.00	0.00	
18,500.0	90.00	359.48	11,454.0	7,249.9	113.4	7,250.6	0.00	0.00	0.00	
18,600.0	90.00	359.48	11,454.0	7,349.9	112.4	7,350.5	0.00	0.00	0.00	
18,700.0	90.00	359.48	11,454.0	7,449.9	111.5	7,450.5	0.00	0.00	0.00	
18,800.0	90.00	359.48	11,454.0	7,549.9	110.6	7,550.5	0.00	0.00	0.00	

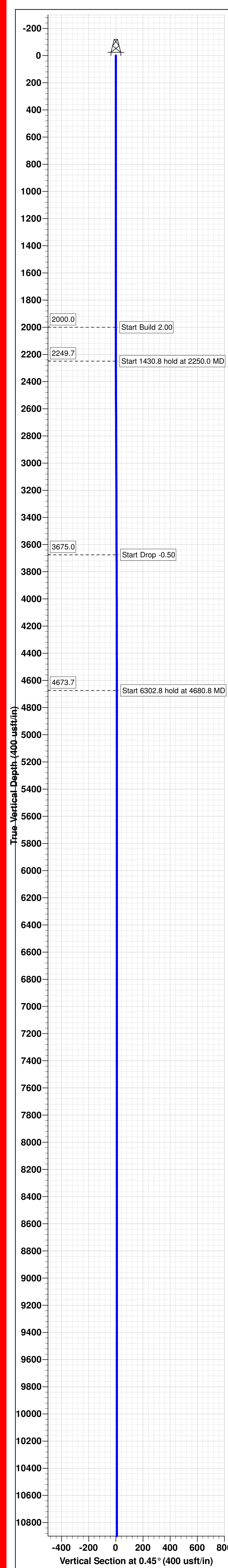
ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #711H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB=31ft @ 3195.0usft
Project:	BULLDOG PROSPECT (NM-E)	MD Reference:	KB=31ft @ 3195.0usft
Site:	ZIA HILLS UNIT 2331 PROJECT	North Reference:	Grid
Well:	ZIA HILLS UNIT 2331 WC #711H	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	11,454.0	7,649.9	109.7	7,650.5	0.00	0.00	0.00	
19,000.0	90.00	359.48	11,454.0	7,749.9	108.8	7,750.5	0.00	0.00	0.00	
19,100.0	90.00	359.48	11,454.0	7,849.9	107.9	7,850.5	0.00	0.00	0.00	
19,200.0	90.00	359.48	11,454.0	7,949.9	107.0	7,950.5	0.00	0.00	0.00	
19,300.0	90.00	359.48	11,454.0	8,049.9	106.1	8,050.4	0.00	0.00	0.00	
19,400.0	90.00	359.48	11,454.0	8,149.8	105.2	8,150.4	0.00	0.00	0.00	
19,500.0	90.00	359.48	11,454.0	8,249.8	104.3	8,250.4	0.00	0.00	0.00	
19,600.0	90.00	359.48	11,454.0	8,349.8	103.4	8,350.4	0.00	0.00	0.00	
19,700.0	90.00	359.48	11,454.0	8,449.8	102.5	8,450.4	0.00	0.00	0.00	
19,800.0	90.00	359.48	11,454.0	8,549.8	101.6	8,550.4	0.00	0.00	0.00	
19,900.0	90.00	359.48	11,454.0	8,649.8	100.6	8,650.4	0.00	0.00	0.00	
20,000.0	90.00	359.48	11,454.0	8,749.8	99.7	8,750.3	0.00	0.00	0.00	
20,100.0	90.00	359.48	11,454.0	8,849.8	98.8	8,850.3	0.00	0.00	0.00	
20,200.0	90.00	359.48	11,454.0	8,949.8	97.9	8,950.3	0.00	0.00	0.00	
20,300.0	90.00	359.48	11,454.0	9,049.8	97.0	9,050.3	0.00	0.00	0.00	
20,400.0	90.00	359.48	11,454.0	9,149.8	96.1	9,150.3	0.00	0.00	0.00	
20,500.0	90.00	359.48	11,454.0	9,249.8	95.2	9,250.3	0.00	0.00	0.00	
20,600.0	90.00	359.48	11,454.0	9,349.8	94.3	9,350.3	0.00	0.00	0.00	
20,700.0	90.00	359.48	11,454.0	9,449.8	93.4	9,450.2	0.00	0.00	0.00	
20,800.0	90.00	359.48	11,454.0	9,549.8	92.5	9,550.2	0.00	0.00	0.00	
20,900.0	90.00	359.48	11,454.0	9,649.8	91.6	9,650.2	0.00	0.00	0.00	
21,000.0	90.00	359.48	11,454.0	9,749.8	90.7	9,750.2	0.00	0.00	0.00	
21,100.0	90.00	359.48	11,454.0	9,849.8	89.8	9,850.2	0.00	0.00	0.00	
21,200.0	90.00	359.48	11,454.0	9,949.8	88.8	9,950.2	0.00	0.00	0.00	
21,300.0	90.00	359.48	11,454.0	10,049.8	87.9	10,050.2	0.00	0.00	0.00	
21,400.0	90.00	359.48	11,454.0	10,149.8	87.0	10,150.1	0.00	0.00	0.00	
21,500.0	90.00	359.48	11,454.0	10,249.8	86.1	10,250.1	0.00	0.00	0.00	
21,600.0	90.00	359.48	11,454.0	10,349.8	85.2	10,350.1	0.00	0.00	0.00	
21,700.0	90.00	359.48	11,454.0	10,449.8	84.3	10,450.1	0.00	0.00	0.00	
21,724.9	90.00	359.48	11,454.0	10,474.7	84.1	10,475.0	0.00	0.00	0.00	

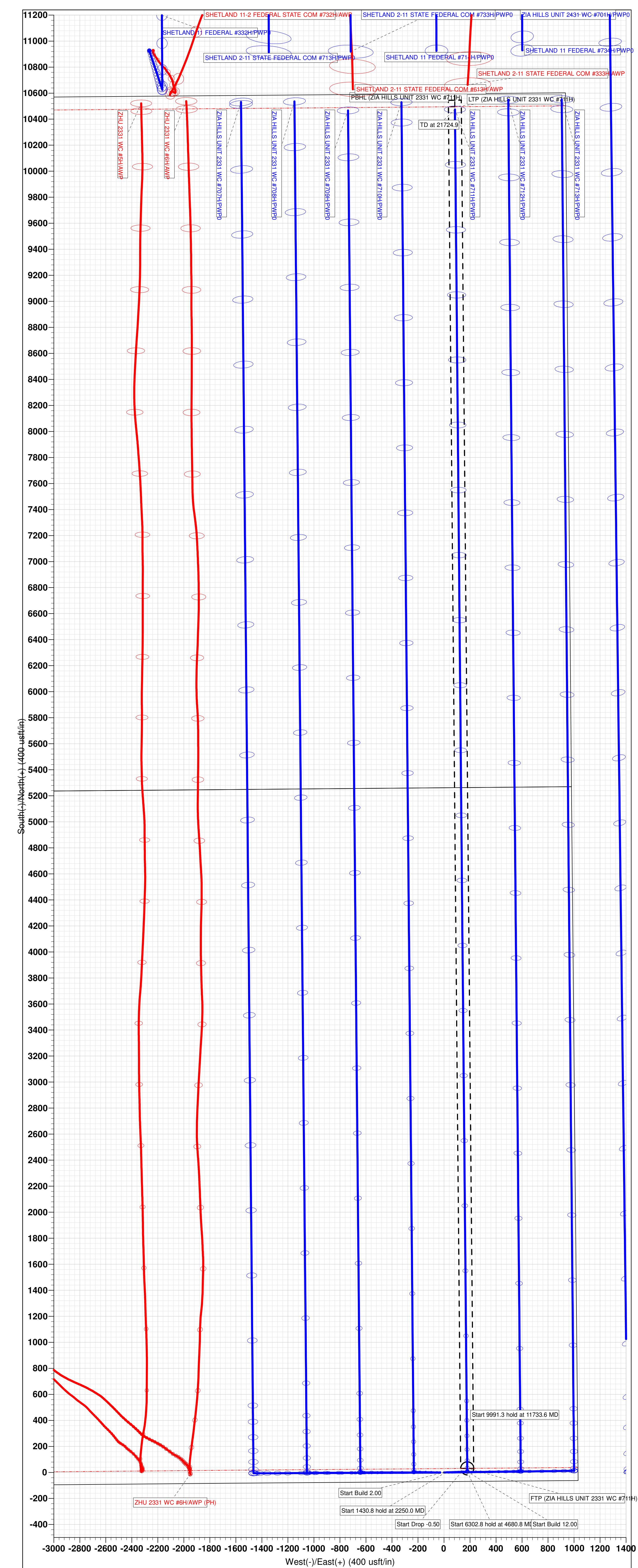
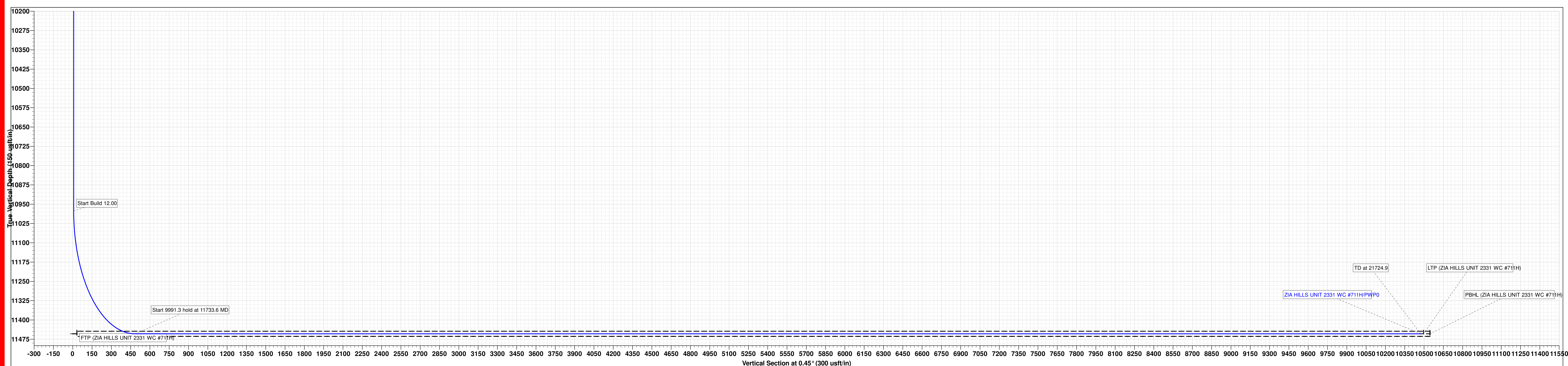
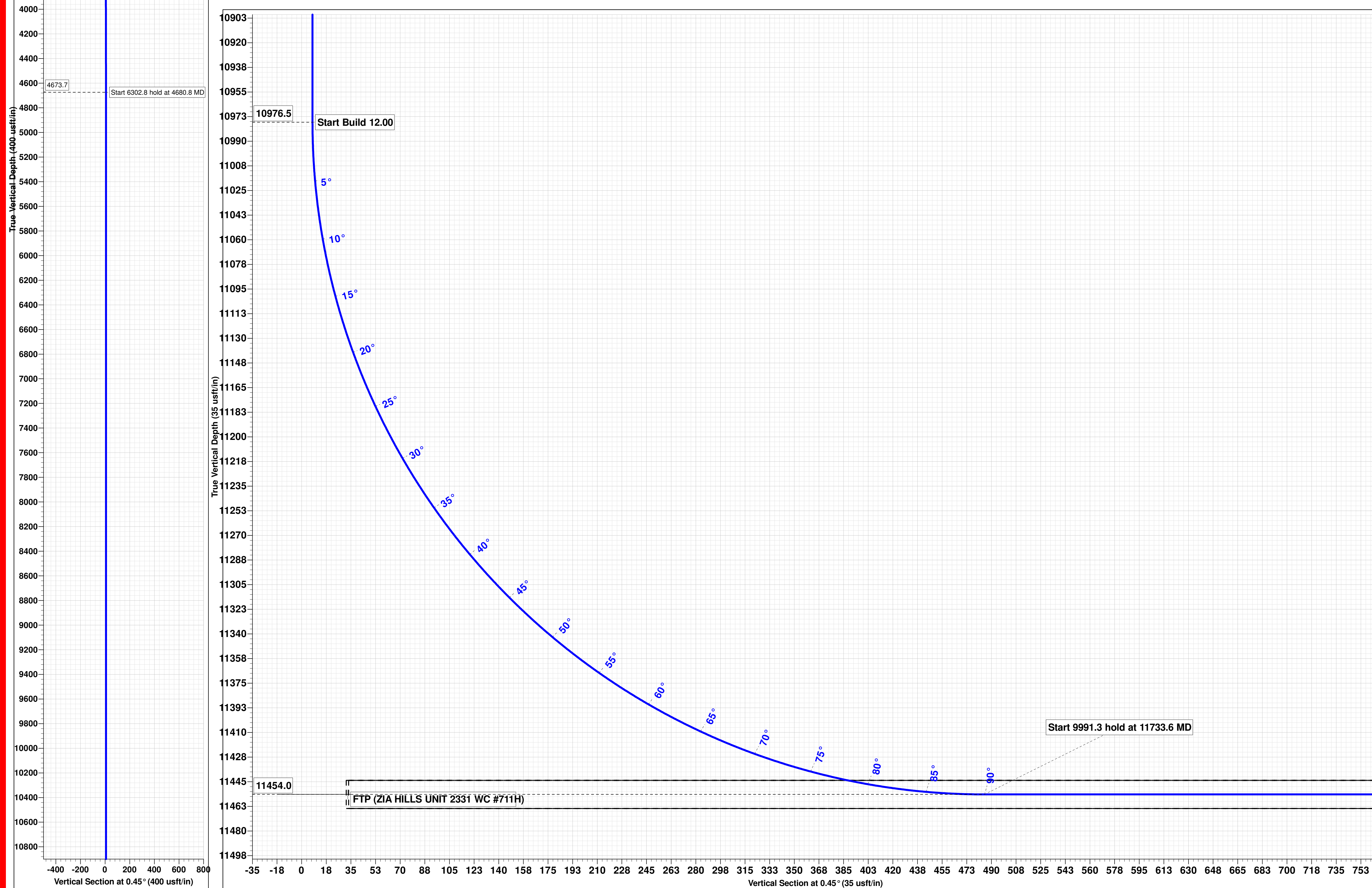
Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL (ZIA HILLS UNIT : - hit/miss target - Shape	0.00	179.48	11,454.0	10,546.0	83.2	382,387.24	683,037.24	32° 2' 59.715 N	103° 44' 33.233 W	
- plan misses target center by 71.4usft at 21724.9usft MD (11454.0 TVD, 10474.7 N, 84.1 E)										
- Rectangle (sides W100.0 H10,515.4 D20.0)										
LTP (ZIA HILLS UNIT 23 - plan misses target center by 21.4usft at 21724.9usft MD (11454.0 TVD, 10474.7 N, 84.1 E)	0.00	0.00	11,454.0	10,496.0	83.2	382,337.25	683,037.24	32° 2' 59.221 N	103° 44' 33.236 W	
- Point										
FTP (ZIA HILLS UNIT 23 - plan misses target center by 180.3usft at 11374.8usft MD (11325.4 TVD, 157.8 N, 177.7 E)	0.00	0.00	11,454.0	31.4	179.2	371,872.58	683,133.15	32° 1' 15.655 N	103° 44' 32.787 W	
- Circle (radius 50.0)										



WELL DETAILS: ZIA HILLS UNIT 2331 WC #711H					
+N-S	+E-W	Northing	Easting	Latitude	Longitude
0.0	0.0	371841.22	682953.99	32° 1' 15.35 N	103° 44' 34.870 W

Name	TVD	+N/S	+E/W	Northing	Easting
FTP (ZIA HILLS UNIT 2331 WC #711H)	11454.0	31.4	179.2	371672.58	683133.15
LTP (ZIA HILLS UNIT 2331 WC #711H)	11454.0	10496.0	83.2	382337.25	683037.24
PBHL (ZIA HILLS UNIT 2331 WC #711H)	11454.0	10546.0	83.2	382387.24	683037.24

	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VScat
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0
	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0
	2250.0	5.00	87.99	2249.7	0.4	10.9	2.00	87.99	0.5
	3680.8	5.00	87.99	3679.0	4.8	135.5	0.00	0.00	7.8
	4580.8	0.00	0.00	4579.7	5.3	179.1	0.00	180.00	7.7
	10983.6	0.00	0.00	10979.5	6.3	179.1	0.00	0.00	5.8
	11733.6	90.00	359.48	11454.0	483.7	174.8	12.00	359.48	485.1
	21724.9	90.00	359.48	11454.0	10474.7	84.1	0.00	0.00	10475.0



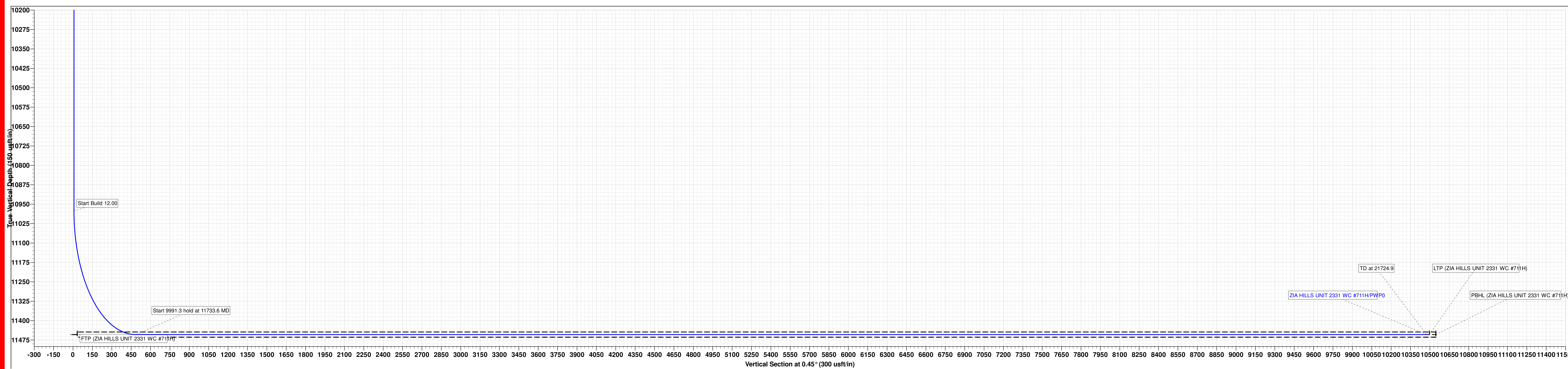
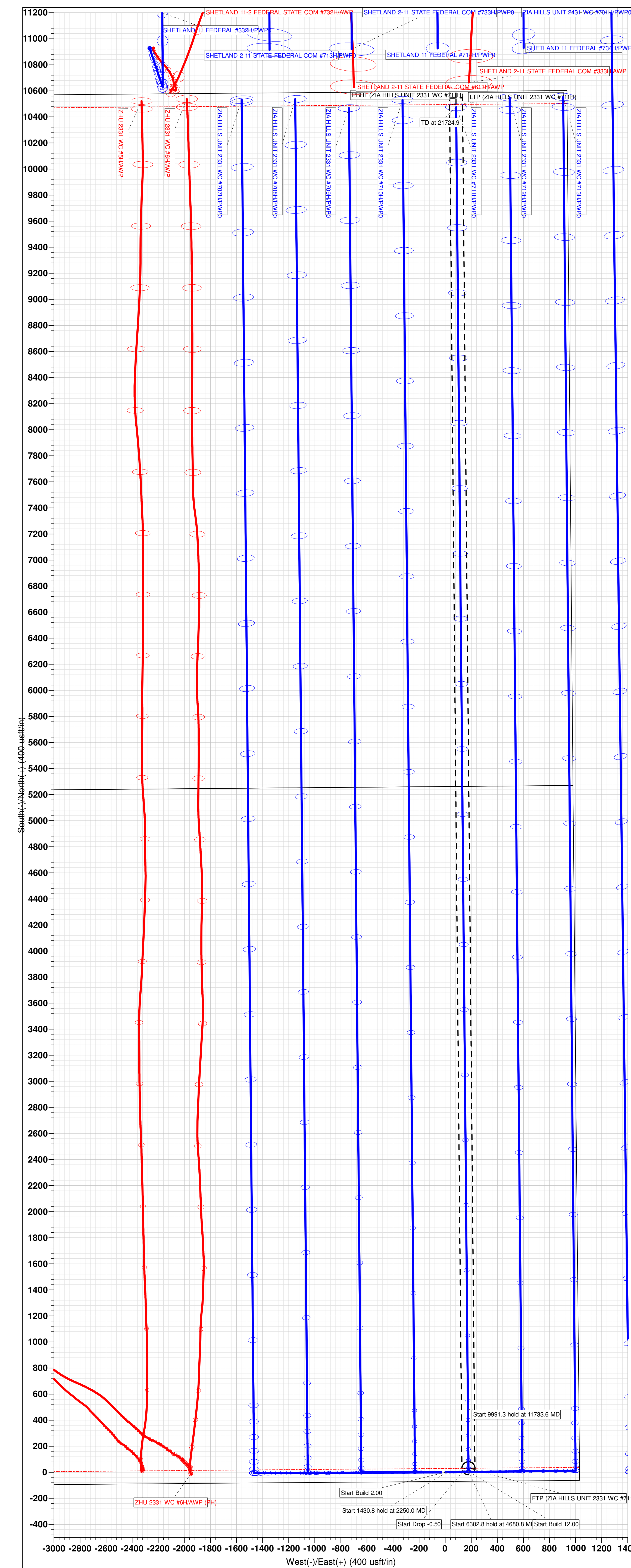
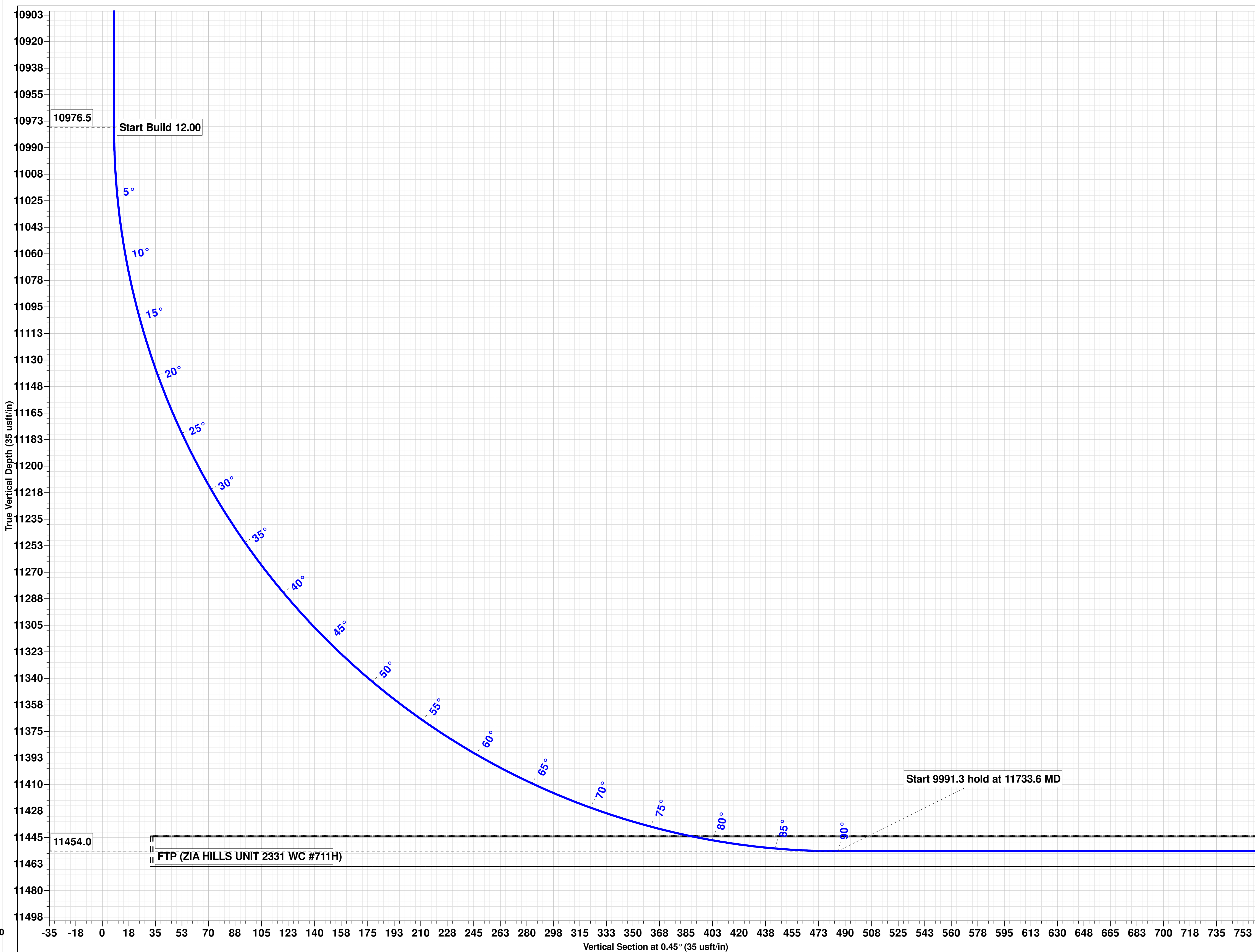
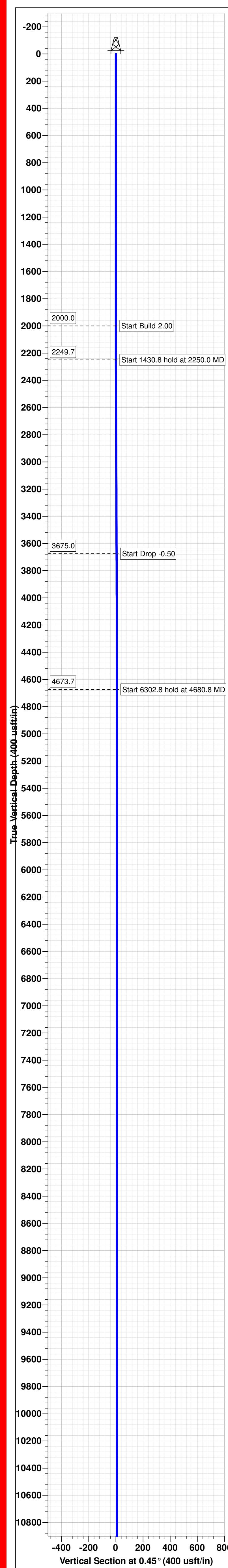


Project: BULLDOG PROSPECT (NM-E)
Site: ZIA HILLS UNIT 2331 PROJECT
Well: ZIA HILLS UNIT 2331 WC #711H
Wellbore: OWB
Design: PWP0
GL: 3164.0
KB=31ft @ 3195.0usft

WELL DETAILS: ZIA HILLS UNIT 2331 WC #711H					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	371841.22	682953.99	32° 1' 15.355 N	103° 44' 34.870 W

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (ZIA HILLS UNIT 2331 WC #711H)	11454.0	31.4	179.2	371872.58	683133.15
LTP (ZIA HILLS UNIT 2331 WC #711H)	11454.0	10496.0	83.2	382337.25	683037.24
PBHL (ZIA HILLS UNIT 2331 WC #711H)	11454.0	10546.0	83.2	382387.24	683037.24

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
2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0
2250.0	5.00	87.99	2249.7	0.4	10.9	2.00	87.99	0.5
3680.8	5.00	87.99	3675.0	4.8	135.5	0.00	0.00	5.8
4680.8	0.00	0.00	4673.7	6.3	179.1	0.50	180.00	7.7
10983.6	0.00	0.00	10976.5	6.3	179.1	0.00	0.00	7.7
11733.6	90.00	359.48	11454.0	483.7	174.8	12.00	359.48	485.1
21724.9	90.00	359.48	11454.0	10474.7	84.1	0.00	0.00	10475.0



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 711H
SURFACE HOLE FOOTAGE:	70'/S & 1030'/E
BOTTOM HOLE FOOTAGE:	50'/N & 851'/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 288980

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 288980
	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