

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. 30-015-54433
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 / 970 FEL / TWSP: 26S / RANGE: 31E / SECTION: 23 / LAT: 32.0210571 / LONG: -103.7432966 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 100 FSL / 29 FEL / TWSP: 26S / RANGE: 31E / SECTION: 23 / LAT: 32.0211458 / LONG: -103.7402608 (TVD: 11323 feet, MD: 11452 feet)

BHL: NENE / 50 FNL / 29 FEL / TWSP: 26S / RANGE: 31E / SECTION: 14 / LAT: 32.050052 / LONG: -103.7403853 (TVD: 11525 feet, MD: 21875 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- 54433		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 713H
7 OGRID No. 217817	8 Operator Name CONOCOPHILLIPS COMPANY			9 Elevation 3163.65'

¹⁰ Surface Location

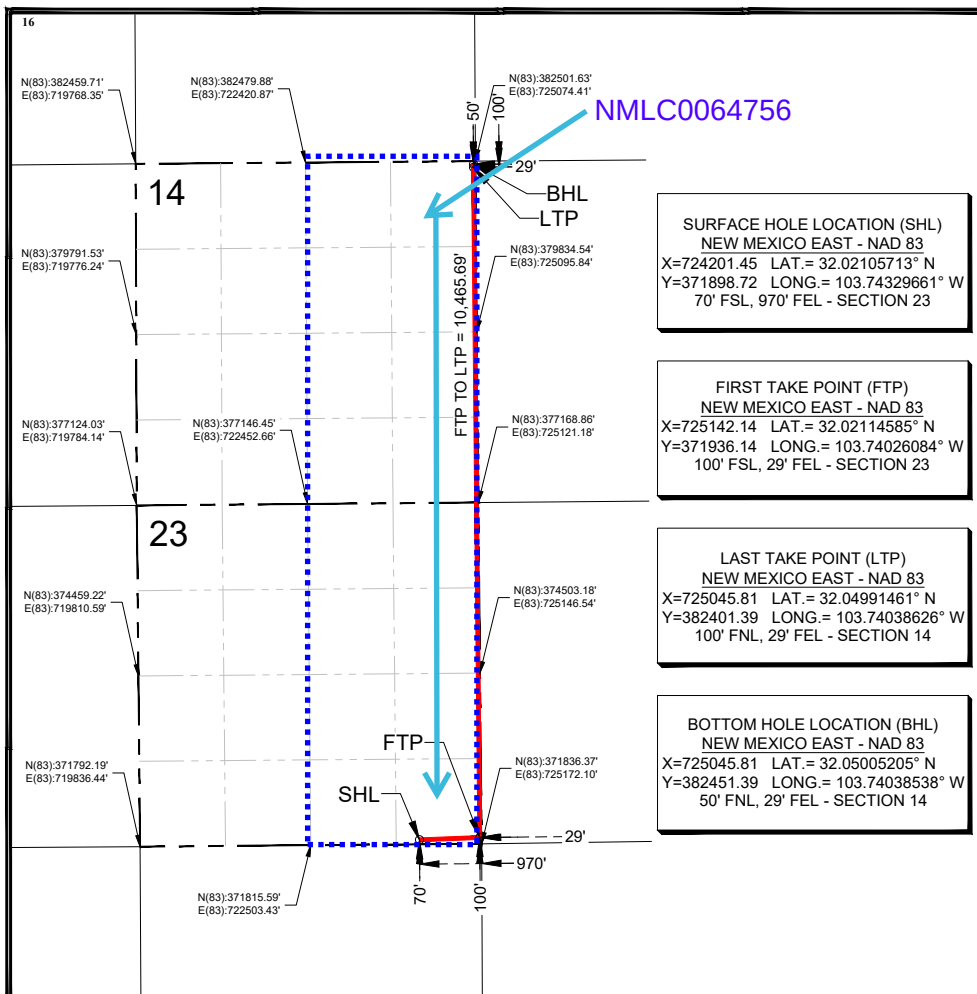
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	23	26-S	31-E		70'	SOUTH	970'	EAST	EDDY

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	29'	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

Printed Name _____

mayte.x.reyes@cop.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey 10/25/2022

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 713H	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 713H	Pending	7/3/2024	± 25 days from spud	8/31/2024	11/10/2024	11/15/2024

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 713H

1. Geologic Formations

TVD of target	11,535' EOL	Pilot hole depth	NA
MD at TD:	21,875'	Deepest expected fresh water:	405'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1055	Water	
Top of Salt	1447	Salt	
Base of Salt	3919	Salt	
Lamar	4138	Salt Water	
Bell Canyon	4164	Salt Water	
Cherry Canyon	5073	Oil/Gas	
Brushy Canyon	6467	Oil/Gas	
BSPG	8118	Oil/Gas	
BS1S	9154	Oil/Gas	
BS2S	9805	Oil/Gas	
BS3C	10277	Oil/Gas	
BS3S	10974	Oil/Gas	
WFMP	11357	Oil/Gas	
Wolfcamp A Sand	11535	Target Oil/Gas	
WFMP B	11884	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	1397	10.75"	45.5	J55	BTC	3.27	1.08	11.25	12.52
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	1.74	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	21,875	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 713H

	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 713H

3. Cementing Program

Casing	# Sk	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	666	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
	905	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 713H

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 713H

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 713H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	7500 psi at 11535' 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

CONOCOPHILLIPS**Rig Plat & Closed Loop Equipment Diagram**

**Well pad will be 650' X 400'
with cellar in center of pad**

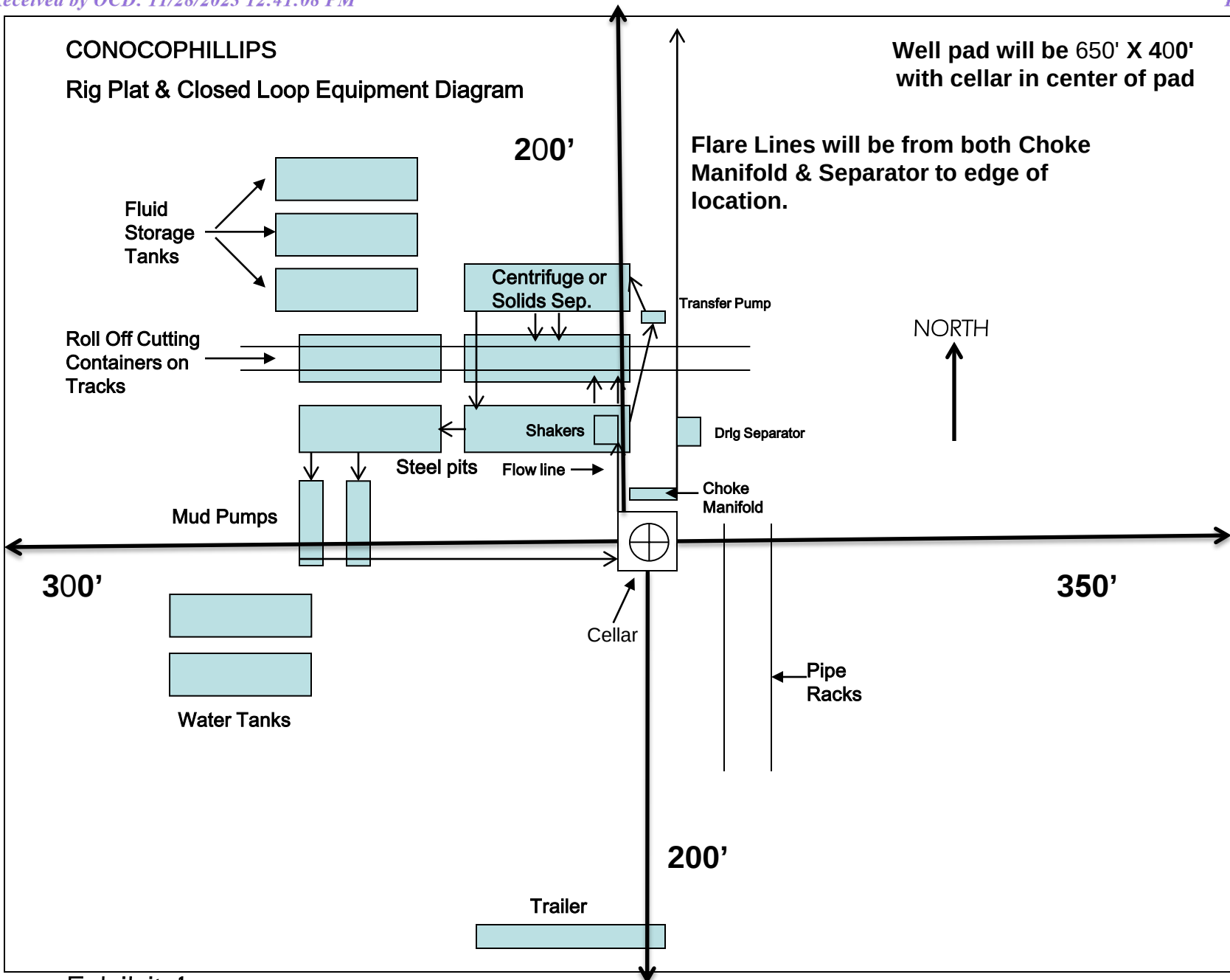


Exhibit 1

DELAWARE BASIN EAST

**BULLDOG PROSPECT (NM-E)
ZIA HILLS UNIT 2331 PROJECT
ZIA HILLS UNIT 2331 WC #713H**

**OWB
PWP0**

Anticollision Report

16 November, 2022

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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	1,500.0	PWP0 (OWB)	r.5 SDI_KPR_ADK	SDI Keeper ADK rev.5	
1,500.0	11,062.0	PWP0 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5	
11,062.0	21,875.0	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	9,583.0	14,160.0	627.0	535.8	6.875	CC, ES
GOLDEN SPUR 25 FBS #3H (P&A) - OWB - AWP	9,600.0	14,160.0	627.2	535.9	6.870	SF
GOLDEN SPUR FEDERAL #1H (P&A) - ST01 - AWP						Out of range
SHETLAND 11 FEDERAL #714H - OWB - PWP0	21,875.5	16,466.2	1,050.9	886.5	6.392	CC, ES, SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	21,875.5	16,703.1	641.1	512.3	4.977	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	21,875.5	21,907.0	736.3	476.1	2.830	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #613H - OWB						Out of range
SHETLAND 2-11 STATE FEDERAL COM #713H - OWB						Out of range
SHETLAND 2-11 STATE FEDERAL COM #733H - OWB						Out of range
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	1,000.0	1,000.0	180.3	172.2	22.417	CC, ES
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	1,300.0	1,281.3	195.0	185.7	21.003	SF
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	1,500.0	1,500.0	150.3	140.7	15.614	CC
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	1,520.0	1,520.0	150.4	140.7	15.493	ES
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	1,700.0	1,699.8	157.3	146.8	15.035	SF
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	1,500.0	1,500.0	120.5	110.9	12.515	CC
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	1,520.0	1,520.0	120.6	110.8	12.420	ES
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	1,615.0	1,615.0	122.8	112.7	12.165	SF
ZIA HILLS UNIT 2331 WC #710H - OWB - PWP0	1,500.0	1,501.0	90.4	80.8	9.390	CC
ZIA HILLS UNIT 2331 WC #710H - OWB - PWP0	1,520.0	1,521.0	90.5	80.8	9.320	ES
ZIA HILLS UNIT 2331 WC #710H - OWB - PWP0	21,875.5	21,956.2	1,244.1	1,075.8	7.392	SF
ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0	1,500.0	1,500.0	60.5	50.8	6.281	CC
ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0	1,520.0	1,520.0	60.5	50.8	6.236	ES
ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0	21,800.0	21,720.5	821.8	654.8	4.922	SF
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	1,500.0	1,500.0	30.0	20.4	3.116	CC
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	1,520.0	1,520.0	30.1	20.4	3.098	ES
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	21,875.5	21,996.4	444.8	273.8	2.602	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 #713H
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 #713H	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	11,062.0	11,071.3	412.5	354.7	7.141	CC
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	21,875.5	22,166.2	490.9	319.9	2.870	ES, SF
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0	21,875.5	21,979.7	794.1	625.8	4.720	CC, ES, SF
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0	21,875.5	22,114.9	1,226.1	1,059.8	7.373	CC, ES, SF
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 #713H
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 #713H	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	21,875.5	14,160.0				Out of Range @TD
GOLDEN SPUR FEDERAL #1H (P&A) - ST01 - AWP	21,875.5	13,450.0				Out of Range @TD
SHETLAND 11 FEDERAL #714H - OWB - PWP0	21,875.5	16,466.2	1,050.9	886.5	6.392	CC, ES, SF
SHETLAND 11 FEDERAL #734H - OWB - PWP0	21,875.5	16,703.1	641.1	512.3	4.977	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #333H - OWB	21,875.5	21,907.0	736.3	476.1	2.830	CC, ES, SF
SHETLAND 2-11 STATE FEDERAL COM #613H - OWB	21,875.5	22,089.0				Out of Range @TD
SHETLAND 2-11 STATE FEDERAL COM #713H - OWB	21,875.5	21,917.2				Out of Range @TD
SHETLAND 2-11 STATE FEDERAL COM #733H - OWB	21,875.5	22,097.6				Out of Range @TD
ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0	21,875.5	21,917.0				Out of Range @TD
ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0	21,875.5	22,048.5				Out of Range @TD
ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0	21,875.5	21,760.3				Out of Range @TD
ZIA HILLS UNIT 2331 WC #710H - OWB - PWP0	21,875.5	21,956.2	1,244.1	1,075.8	7.392	SF
ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0	21,875.5	21,724.9	824.9	658.2	4.950	
ZIA HILLS UNIT 2331 WC #712H - OWB - PWP0	21,875.5	21,996.4	444.8	273.8	2.602	SF
ZIA HILLS UNIT 2431 PROJECT						
ZIA HILLS UNIT 2431 WC #701H - OWB - PWP0	21,875.5	22,166.2	490.9	319.9	2.870	ES, SF
ZIA HILLS UNIT 2431 WC #702H - OWB - PWP0	21,875.5	21,979.7	794.1	625.8	4.720	CC, ES, SF
ZIA HILLS UNIT 2431 WC #703H - OWB - PWP0	21,875.5	22,114.9	1,226.1	1,059.8	7.373	CC, ES, SF
ZIA HILLS UNIT 2431 WC #704H - OWB - PWP0	21,875.5	21,953.0				Out of Range @TD
ZIA HILLS UNIT 2431 WC #705H - OWB - PWP0	21,875.5	22,151.3				Out of Range @TD
ZIA HILLS UNIT 2431 WC #706H - OWB - PWP0	21,875.5	22,015.7				Out of Range @TD

Offset Design: ZIA HILLS UNIT 2331 PROJECT - GOLDEN SPUR 25 FBS #3H (P&A) - OWB - AWP												Offset Site Error: 0.0 usft	
Survey Program: 54-GYD-CT-CMS, 1153-MWD - OWSG R1												Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis				Rule Assigned:					
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		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	
8,455.0	8,369.6	14,160.0	9,471.6	27.5	84.0	129.32	-384.9	1,425.0	1,290.6	1,226.4	64.18	20.110	
8,500.0	8,414.6	14,160.0	9,471.6	27.6	84.0	129.32	-384.9	1,425.0	1,251.4	1,186.6	64.79	19.315	
8,550.0	8,464.6	14,160.0	9,471.6	27.6	84.0	129.32	-384.9	1,425.0	1,208.4	1,142.9	65.52	18.443	
8,600.0	8,514.6	14,160.0	9,471.6	27.6	84.0	129.32	-384.9	1,425.0	1,166.0	1,099.6	66.31	17.583	
8,645.0	8,559.6	14,160.0	9,471.6	27.6	84.0	129.32	-384.9	1,425.0	1,128.3	1,061.2	67.07	16.821	
8,700.0	8,614.6	14,160.0	9,471.6	27.6	84.0	129.32	-384.9	1,425.0	1,083.0	1,014.9	68.08	15.908	
8,740.0	8,654.6	14,160.0	9,471.6	27.6	84.0	129.32	-384.9	1,425.0	1,050.6	981.8	68.86	15.256	
8,800.0	8,714.6	14,160.0	9,471.6	27.6	84.0	129.32	-384.9	1,425.0	1,003.1	933.0	70.13	14.303	
8,835.0	8,749.6	14,160.0	9,471.6	27.7	84.0	129.32	-384.9	1,425.0	976.0	905.1	70.93	13.760	
8,900.0	8,814.6	14,160.0	9,471.6	27.7	84.0	129.32	-384.9	1,425.0	927.2	854.6	72.52	12.785	

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 #713H
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 #713H	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 - GOLDEN SPUR 25 FBS #3H (P&A) - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 54-GYD-CT-CMS, 1153-MWD - OWSG R1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
8,930.0	8,844.6	14,160.0	9,471.6	27.7	84.0	129.32	-384.9	1,425.0	905.3	832.0	73.30	12.350	
9,000.0	8,914.6	14,160.0	9,471.6	27.7	84.0	129.32	-384.9	1,425.0	856.2	780.9	75.25	11.377	
9,025.0	8,939.6	14,160.0	9,471.6	27.7	84.0	129.32	-384.9	1,425.0	839.3	763.4	75.99	11.045	
9,100.0	9,014.6	14,160.0	9,471.6	27.7	84.0	129.32	-384.9	1,425.0	791.5	713.1	78.32	10.106	
9,120.0	9,034.6	14,160.0	9,471.6	27.7	84.0	129.32	-384.9	1,425.0	779.4	700.5	78.97	9.870	
9,200.0	9,114.6	14,160.0	9,471.6	27.8	84.0	129.32	-384.9	1,425.0	734.7	653.1	81.62	9.002	
9,215.0	9,129.6	14,160.0	9,471.6	27.8	84.0	129.32	-384.9	1,425.0	727.0	644.9	82.13	8.852	
9,300.0	9,214.6	14,160.0	9,471.6	27.8	84.0	129.32	-384.9	1,425.0	687.9	602.9	84.95	8.098	
9,310.0	9,224.6	14,160.0	9,471.6	27.8	84.0	129.32	-384.9	1,425.0	683.8	598.6	85.27	8.020	
9,400.0	9,314.6	14,160.0	9,471.6	27.8	84.0	129.32	-384.9	1,425.0	653.1	565.2	87.95	7.426	
9,405.0	9,319.6	14,160.0	9,471.6	27.8	84.0	129.32	-384.9	1,425.0	651.8	563.7	88.09	7.399	
9,500.0	9,414.6	14,160.0	9,471.6	27.9	84.0	129.32	-384.9	1,425.0	632.4	542.2	90.19	7.012	
9,583.0	9,497.6	14,160.0	9,471.6	27.9	84.0	129.32	-384.9	1,425.0	627.0	535.8	91.20	6.875 CC, ES	
9,595.0	9,509.6	14,160.0	9,471.6	27.9	84.0	129.32	-384.9	1,425.0	627.1	535.8	91.27	6.871	
9,600.0	9,514.6	14,160.0	9,471.6	27.9	84.0	129.32	-384.9	1,425.0	627.2	535.9	91.29	6.870 SF	
9,690.0	9,604.6	14,160.0	9,471.6	27.9	84.0	129.32	-384.9	1,425.0	636.0	544.8	91.18	6.976	
9,700.0	9,614.6	14,160.0	9,471.6	27.9	84.0	129.32	-384.9	1,425.0	637.8	546.7	91.10	7.001	
9,785.0	9,699.6	14,160.0	9,471.6	28.0	84.0	129.32	-384.9	1,425.0	658.7	568.6	90.04	7.315	
9,800.0	9,714.6	14,160.0	9,471.6	28.0	84.0	129.32	-384.9	1,425.0	663.4	573.7	89.79	7.389	
9,880.0	9,794.6	14,160.0	9,471.6	28.0	84.0	129.32	-384.9	1,425.0	693.7	605.6	88.18	7.868	
9,900.0	9,814.6	14,160.0	9,471.6	28.0	84.0	129.32	-384.9	1,425.0	702.5	614.8	87.72	8.009	
9,975.0	9,889.6	14,160.0	9,471.6	28.0	84.0	129.32	-384.9	1,425.0	739.4	653.5	85.93	8.605	
10,000.0	9,914.6	14,160.0	9,471.6	28.0	84.0	129.32	-384.9	1,425.0	753.0	667.6	85.32	8.825	
10,070.0	9,984.6	14,160.0	9,471.6	28.0	84.0	129.32	-384.9	1,425.0	793.9	710.3	83.61	9.495	
10,100.0	10,014.6	14,160.0	9,471.6	28.1	84.0	129.32	-384.9	1,425.0	812.6	729.7	82.89	9.804	
10,165.0	10,079.6	14,160.0	9,471.6	28.1	84.0	129.32	-384.9	1,425.0	855.4	774.0	81.40	10.510	
10,200.0	10,114.6	14,160.0	9,471.6	28.1	84.0	129.32	-384.9	1,425.0	879.6	799.0	80.63	10.909	
10,260.0	10,174.6	14,160.0	9,471.6	28.1	84.0	129.32	-384.9	1,425.0	922.7	843.3	79.41	11.620	
10,300.0	10,214.6	14,160.0	9,471.6	28.1	84.0	129.32	-384.9	1,425.0	952.4	873.8	78.65	12.110	
10,355.0	10,269.6	14,160.0	9,471.6	28.1	84.0	129.32	-384.9	1,425.0	994.5	916.8	77.68	12.803	
10,400.0	10,314.6	14,160.0	9,471.6	28.2	84.0	129.32	-384.9	1,425.0	1,029.8	952.9	76.95	13.383	
10,450.0	10,364.6	14,160.0	9,471.6	28.2	84.0	129.32	-384.9	1,425.0	1,069.9	993.7	76.21	14.040	
10,500.0	10,414.6	14,160.0	9,471.6	28.2	84.0	129.32	-384.9	1,425.0	1,110.8	1,035.3	75.53	14.707	
10,545.0	10,459.6	14,160.0	9,471.6	28.2	84.0	129.32	-384.9	1,425.0	1,148.2	1,073.3	74.98	15.314	
10,600.0	10,514.6	14,160.0	9,471.6	28.2	84.0	129.32	-384.9	1,425.0	1,194.7	1,120.3	74.37	16.065	
10,640.0	10,554.6	14,160.0	9,471.6	28.2	84.0	129.32	-384.9	1,425.0	1,228.9	1,155.0	73.96	16.615	
10,700.0	10,614.6	14,160.0	9,471.6	28.3	84.0	129.32	-384.9	1,425.0	1,280.9	1,207.5	73.42	17.446	
10,735.0	10,649.6	14,160.0	9,471.6	28.3	84.0	129.32	-384.9	1,425.0	1,311.5	1,238.4	73.13	17.933	

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 #713H
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 #713H	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		Rule Assigned:			Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor				
							+N/-S (usft)	+E/-W (usft)						
21,375.0	11,454.0	16,466.2	11,736.9	82.1	88.0	-101.64	10,924.6	-118.2	1,317.5	1,180.2	137.30	9.596		
21,400.0	11,454.0	16,466.2	11,736.9	82.3	88.0	-101.64	10,924.6	-118.2	1,300.9	1,162.3	138.61	9.385		
21,470.0	11,454.0	16,466.2	11,736.9	82.8	88.0	-101.64	10,924.6	-118.2	1,255.9	1,113.6	142.38	8.821		
21,500.0	11,454.0	16,466.2	11,736.9	83.0	88.0	-101.64	10,924.6	-118.2	1,237.4	1,093.4	144.03	8.591		
21,565.0	11,454.0	16,466.2	11,736.9	83.5	88.0	-101.64	10,924.6	-118.2	1,198.8	1,051.1	147.64	8.119		
21,600.0	11,454.0	16,466.2	11,736.9	83.7	88.0	-101.64	10,924.6	-118.2	1,179.0	1,029.3	149.61	7.880		
21,660.0	11,454.0	16,466.2	11,736.9	84.1	88.0	-101.64	10,924.6	-118.2	1,146.7	993.7	152.97	7.496		
21,700.0	11,454.0	16,466.2	11,736.9	84.4	88.0	-101.64	10,924.6	-118.2	1,126.4	971.2	155.20	7.258		
21,755.0	11,454.0	16,466.2	11,736.9	84.8	88.0	-101.64	10,924.6	-118.2	1,100.3	942.1	158.21	6.955		
21,800.0	11,454.0	16,466.2	11,736.9	85.2	88.0	-101.64	10,924.6	-118.2	1,080.5	919.9	160.60	6.728		
21,850.0	11,454.0	16,466.2	11,736.9	85.5	88.0	-101.64	10,924.6	-118.2	1,060.4	897.3	163.16	6.499		
21,875.0	11,454.0	16,466.2	11,736.9	85.7	88.0	-101.64	10,924.6	-118.2	1,051.1	886.7	164.38	6.394		
21,875.5	11,454.0	16,466.2	11,736.9	85.7	88.0	-101.64	10,924.6	-118.2	1,050.9	886.5	164.40	6.392	CC, ES, SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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										Rule Assigned:			Offset Well Error: 10.0 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
21,090.0	11,454.0	16,703.1	11,962.0	80.1	88.8	-144.56	10,929.1	541.5	1,274.1	1,185.1	88.99	14.317		
21,100.0	11,454.0	16,703.1	11,962.0	80.1	88.8	-144.56	10,929.1	541.5	1,265.0	1,175.7	89.23	14.176		
21,185.0	11,454.0	16,703.1	11,962.0	80.7	88.8	-144.56	10,929.1	541.5	1,187.9	1,096.5	91.44	12.991		
21,200.0	11,454.0	16,703.1	11,962.0	80.8	88.8	-144.56	10,929.1	541.5	1,174.4	1,082.5	91.87	12.784		
21,280.0	11,454.0	16,703.1	11,962.0	81.4	88.8	-144.56	10,929.1	541.5	1,103.1	1,008.8	94.32	11.695		
21,300.0	11,454.0	16,703.1	11,962.0	81.6	88.8	-144.56	10,929.1	541.5	1,085.5	990.5	94.99	11.427		
21,375.0	11,454.0	16,703.1	11,962.0	82.1	88.8	-144.56	10,929.1	541.5	1,020.2	922.5	97.73	10.439		
21,400.0	11,454.0	16,703.1	11,962.0	82.3	88.8	-144.56	10,929.1	541.5	998.7	900.0	98.73	10.116		
21,470.0	11,454.0	16,703.1	11,962.0	82.8	88.8	-144.56	10,929.1	541.5	939.5	837.8	101.78	9.231		
21,500.0	11,454.0	16,703.1	11,962.0	83.0	88.8	-144.56	10,929.1	541.5	914.6	811.4	103.21	8.862		
21,565.0	11,454.0	16,703.1	11,962.0	83.5	88.8	-144.56	10,929.1	541.5	861.8	755.2	106.60	8.085		
21,600.0	11,454.0	16,703.1	11,962.0	83.7	88.8	-144.56	10,929.1	541.5	834.1	725.5	108.59	7.681		
21,660.0	11,454.0	16,703.1	11,962.0	84.1	88.8	-144.56	10,929.1	541.5	787.9	675.6	112.31	7.015		
21,700.0	11,454.0	16,703.1	11,962.0	84.4	88.8	-144.56	10,929.1	541.5	758.2	643.2	115.00	6.593		
21,755.0	11,454.0	16,703.1	11,962.0	84.8	88.8	-144.56	10,929.1	541.5	718.9	599.9	118.99	6.042		
21,800.0	11,454.0	16,703.1	11,962.0	85.2	88.8	-144.56	10,929.1	541.5	688.4	565.9	122.50	5.620		
21,850.0	11,454.0	16,703.1	11,962.0	85.5	88.8	-144.56	10,929.1	541.5	656.5	529.9	126.62	5.185		
21,875.0	11,454.0	16,703.1	11,962.0	85.7	88.8	-144.56	10,929.1	541.5	641.4	512.6	128.75	4.981		
21,875.5	11,454.0	16,703.1	11,962.0	85.7	88.8	-144.56	10,929.1	541.5	641.1	512.3	128.80	4.977	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 #713H
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 #713H	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			Offset Wellbore Centre		Rule Assigned:				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
20,900.0	11,454.0	21,907.0	11,495.6	78.7	178.7	-83.63	10,663.7	121.3	1,312.5	1,155.8	156.74	8.374	
20,995.0	11,454.0	21,907.0	11,495.6	79.4	178.7	-83.63	10,663.7	121.3	1,234.6	1,070.0	164.54	7.503	
21,000.0	11,454.0	21,907.0	11,495.6	79.4	178.7	-83.63	10,663.7	121.3	1,230.5	1,065.6	164.97	7.459	
21,090.0	11,454.0	21,907.0	11,495.6	80.1	178.7	-83.63	10,663.7	121.3	1,159.1	985.9	173.21	6.692	
21,100.0	11,454.0	21,907.0	11,495.6	80.1	178.7	-83.63	10,663.7	121.3	1,151.4	977.2	174.17	6.610	
21,185.0	11,454.0	21,907.0	11,495.6	80.7	178.7	-83.63	10,663.7	121.3	1,086.8	904.0	182.79	5.945	
21,200.0	11,454.0	21,907.0	11,495.6	80.8	178.7	-83.63	10,663.7	121.3	1,075.7	891.3	184.39	5.834	
21,280.0	11,454.0	21,907.0	11,495.6	81.4	178.7	-83.63	10,663.7	121.3	1,018.1	824.8	193.29	5.267	
21,300.0	11,454.0	21,907.0	11,495.6	81.6	178.7	-83.63	10,663.7	121.3	1,004.2	808.6	195.61	5.134	
21,375.0	11,454.0	21,907.0	11,495.6	82.1	178.7	-83.63	10,663.7	121.3	954.0	749.4	204.61	4.663	
21,400.0	11,454.0	21,907.0	11,495.6	82.3	178.7	-83.63	10,663.7	121.3	938.0	730.3	207.70	4.516	
21,470.0	11,454.0	21,907.0	11,495.6	82.8	178.7	-83.63	10,663.7	121.3	895.4	678.9	216.53	4.135	
21,500.0	11,454.0	21,907.0	11,495.6	83.0	178.7	-83.63	10,663.7	121.3	878.3	657.9	220.36	3.986	
21,565.0	11,454.0	21,907.0	11,495.6	83.5	178.7	-83.63	10,663.7	121.3	843.5	614.9	228.65	3.689	
21,600.0	11,454.0	21,907.0	11,495.6	83.7	178.7	-83.63	10,663.7	121.3	826.3	593.3	233.04	3.546	
21,660.0	11,454.0	21,907.0	11,495.6	84.1	178.7	-83.63	10,663.7	121.3	799.5	559.2	240.32	3.327	
21,700.0	11,454.0	21,907.0	11,495.6	84.4	178.7	-83.63	10,663.7	121.3	783.7	538.8	244.89	3.200	
21,755.0	11,454.0	21,907.0	11,495.6	84.8	178.7	-83.63	10,663.7	121.3	764.9	514.2	250.64	3.052	
21,800.0	11,454.0	21,907.0	11,495.6	85.2	178.7	-83.63	10,663.7	121.3	752.1	497.3	254.78	2.952	
21,850.0	11,454.0	21,907.0	11,495.6	85.5	178.7	-83.63	10,663.7	121.3	740.8	482.2	258.61	2.865	
21,875.0	11,454.0	21,907.0	11,495.6	85.7	178.7	-83.63	10,663.7	121.3	736.4	476.2	260.19	2.830	
21,875.5	11,454.0	21,907.0	11,495.6	85.7	178.7	-83.63	10,663.7	121.3	736.3	476.1	260.22	2.830 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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK_1000-r.5 MWD+IFR1_11107-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Rule Assigned:				Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	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	-90.41	-1.3	-180.3	180.3				
95.0	95.0	95.0	95.0	3.0	3.0	-90.41	-1.3	-180.3	180.3	174.2	6.03	29.917	
100.0	100.0	100.0	100.0	3.0	3.0	-90.41	-1.3	-180.3	180.3	174.2	6.03	29.900	
190.0	190.0	190.0	190.0	3.1	3.1	-90.41	-1.3	-180.3	180.3	174.1	6.15	29.300	
200.0	200.0	200.0	200.0	3.1	3.1	-90.41	-1.3	-180.3	180.3	174.1	6.17	29.208	
285.0	285.0	285.0	285.0	3.2	3.2	-90.41	-1.3	-180.3	180.3	174.0	6.31	28.565	
300.0	300.0	300.0	300.0	3.2	3.2	-90.41	-1.3	-180.3	180.3	173.9	6.34	28.437	
380.0	380.0	380.0	380.0	3.3	3.3	-90.41	-1.3	-180.3	180.3	173.8	6.49	27.784	
400.0	400.0	400.0	400.0	3.3	3.3	-90.41	-1.3	-180.3	180.3	173.7	6.53	27.610	
475.0	475.0	475.0	475.0	3.4	3.4	-90.41	-1.3	-180.3	180.3	173.6	6.68	26.969	
500.0	500.0	500.0	500.0	3.4	3.4	-90.41	-1.3	-180.3	180.3	173.5	6.74	26.747	
570.0	570.0	570.0	570.0	3.5	3.5	-90.41	-1.3	-180.3	180.3	173.4	6.90	26.134	
600.0	600.0	600.0	600.0	3.5	3.5	-90.41	-1.3	-180.3	180.3	173.3	6.97	25.866	
665.0	665.0	665.0	665.0	3.6	3.6	-90.41	-1.3	-180.3	180.3	173.1	7.13	25.293	
700.0	700.0	700.0	700.0	3.7	3.7	-90.41	-1.3	-180.3	180.3	173.0	7.22	24.982	
760.0	760.0	760.0	760.0	3.8	3.8	-90.41	-1.3	-180.3	180.3	172.9	7.37	24.457	
800.0	800.0	800.0	800.0	3.8	3.8	-90.41	-1.3	-180.3	180.3	172.8	7.48	24.107	
855.0	855.0	855.0	855.0	3.9	3.9	-90.41	-1.3	-180.3	180.3	172.6	7.63	23.635	
900.0	900.0	900.0	900.0	4.0	4.0	-90.41	-1.3	-180.3	180.3	172.5	7.75	23.250	
950.0	950.0	950.0	950.0	4.1	4.1	-90.41	-1.3	-180.3	180.3	172.4	7.90	22.831	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.41	-1.3	-180.3	180.3	172.2	8.04	22.417 CC, ES	
1,045.0	1,045.0	1,042.3	1,042.3	4.2	4.2	-90.41	-1.3	-180.6	180.6	172.4	8.21	21.993	
1,100.0	1,100.0	1,094.0	1,094.0	4.3	4.3	-90.41	-1.3	-181.8	181.9	173.5	8.42	21.596	
1,140.0	1,140.0	1,131.6	1,131.6	4.4	4.4	-90.41	-1.3	-183.3	183.5	174.9	8.59	21.359	
1,200.0	1,200.0	1,187.9	1,187.8	4.5	4.5	-90.41	-1.3	-186.4	186.8	178.0	8.85	21.113	
1,235.0	1,235.0	1,220.7	1,220.4	4.6	4.6	-90.40	-1.3	-188.8	189.3	180.3	9.00	21.034	
1,300.0	1,300.0	1,281.3	1,280.9	4.7	4.8	-90.40	-1.4	-194.1	195.0	185.7	9.28	21.003 SF	
1,330.0	1,330.0	1,309.3	1,308.7	4.7	4.9	-90.40	-1.4	-196.9	198.1	188.7	9.42	21.037	
1,400.0	1,400.0	1,374.2	1,373.1	4.9	5.1	-90.39	-1.4	-204.7	206.4	196.7	9.73	21.218	
1,425.0	1,425.0	1,400.0	1,398.7	4.9	5.2	-90.39	-1.4	-208.1	209.8	199.9	9.86	21.273	
1,500.0	1,500.0	1,466.2	1,464.2	5.1	5.5	-90.38	-1.5	-218.1	221.0	210.9	10.18	21.703	
1,520.0	1,520.0	1,484.5	1,482.2	5.1	5.5	-179.63	-1.5	-221.1	224.4	214.1	10.29	21.811	
1,600.0	1,600.0	1,557.0	1,553.5	5.2	5.8	-179.62	-1.5	-234.2	240.5	229.8	10.71	22.449	
1,615.0	1,615.0	1,570.5	1,566.7	5.2	5.8	-179.62	-1.5	-236.9	244.0	233.2	10.80	22.600	
1,700.0	1,699.8	1,650.0	1,644.5	5.4	6.1	-179.61	-1.6	-253.3	266.1	254.8	11.27	23.612	
1,710.0	1,709.8	1,659.6	1,653.9	5.4	6.1	-179.61	-1.6	-255.3	268.8	257.5	11.32	23.739	
1,800.0	1,799.5	1,745.6	1,738.1	5.6	6.4	-179.61	-1.7	-273.1	295.3	283.4	11.84	24.933	
1,805.0	1,804.4	1,750.4	1,742.7	5.6	6.4	-179.61	-1.7	-274.1	296.8	285.0	11.87	25.001	
1,900.0	1,898.7	1,840.2	1,830.5	5.9	6.7	-179.61	-1.8	-292.8	327.8	315.4	12.45	26.339	
1,995.0	1,992.5	1,928.9	1,917.3	6.2	7.0	-179.62	-1.8	-311.2	361.8	348.8	13.04	27.736	
2,000.0	1,997.5	1,933.5	1,921.9	6.2	7.0	-179.62	-1.8	-312.2	363.7	350.6	13.08	27.812	
2,050.0	2,046.6	1,979.7	1,967.0	6.3	7.2	-179.62	-1.9	-321.8	382.8	369.5	13.34	28.688	
2,090.0	2,085.9	2,016.5	2,003.1	6.4	7.3	-179.62	-1.9	-329.5	398.4	384.9	13.56	29.390	
2,100.0	2,095.7	2,025.7	2,012.1	6.4	7.4	-179.62	-1.9	-331.4	402.3	388.7	13.61	29.561	
2,185.0	2,179.1	2,104.0	2,088.6	6.6	7.6	-179.63	-2.0	-347.6	435.6	421.4	14.13	30.829	
2,200.0	2,193.9	2,117.8	2,102.1	6.7	7.7	-179.63	-2.0	-350.5	441.4	427.2	14.22	31.041	
2,280.0	2,272.4	2,191.4	2,174.1	6.9	8.0	-179.64	-2.0	-365.8	472.7	457.9	14.73	32.089	
2,300.0	2,292.0	2,209.8	2,192.1	7.0	8.0	-179.64	-2.1	-369.7	480.5	465.6	14.86	32.338	
2,375.0	2,365.7	2,278.9	2,259.7	7.2	8.3	-179.64	-2.1	-384.0	509.8	494.4	15.35	33.201	
2,400.0	2,390.2	2,301.9	2,282.2	7.3	8.4	-179.65	-2.1	-388.8	519.6	504.0	15.52	33.475	
2,470.0	2,458.9	2,366.3	2,345.2	7.5	8.7	-179.65	-2.2	-402.2	546.9	530.9	16.00	34.184	
2,500.0	2,488.4	2,393.9	2,372.2	7.6	8.8	-179.65	-2.2	-407.9	558.6	542.4	16.21	34.473	

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 #713H
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 #713H	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	2,552.2	2,453.8	2,430.7	7.8	9.0	-179.65	-2.3	-420.4	584.0	567.4	16.66	35.053	
2,600.0	2,586.5	2,486.0	2,462.3	8.0	9.1	-179.66	-2.3	-427.1	597.7	580.8	16.91	35.350	
2,660.0	2,645.4	2,541.2	2,516.3	8.2	9.4	-179.66	-2.3	-438.6	621.2	603.8	17.34	35.822	
2,700.0	2,684.7	2,578.0	2,552.3	8.3	9.5	-179.66	-2.4	-446.2	636.8	619.2	17.63	36.122	
2,755.0	2,738.7	2,628.7	2,601.8	8.5	9.7	-179.66	-2.4	-456.7	658.3	640.2	18.03	36.506	
2,800.0	2,782.8	2,670.1	2,642.3	8.7	9.9	-179.66	-2.4	-465.3	675.9	657.5	18.36	36.805	
2,850.0	2,831.9	2,716.1	2,687.3	8.9	10.1	-179.67	-2.5	-474.9	695.4	676.7	18.74	37.114	
2,900.0	2,881.0	2,762.1	2,732.4	9.1	10.3	-179.67	-2.5	-484.5	714.9	695.8	19.11	37.409	
2,945.0	2,925.2	2,803.6	2,772.9	9.2	10.5	-179.67	-2.6	-493.1	732.5	713.1	19.45	37.657	
3,000.0	2,979.2	2,854.2	2,822.4	9.4	10.7	-179.67	-2.6	-503.6	754.0	734.1	19.87	37.945	
3,040.0	3,018.4	2,891.0	2,858.4	9.6	10.8	-179.67	-2.6	-511.3	769.6	749.5	20.18	38.142	
3,100.0	3,077.3	2,946.2	2,912.4	9.8	11.1	-179.67	-2.7	-522.8	793.1	772.4	20.64	38.423	
3,135.0	3,111.7	2,978.5	2,944.0	10.0	11.2	-179.67	-2.7	-529.5	806.8	785.8	20.91	38.577	
3,200.0	3,175.5	3,038.3	3,002.5	10.2	11.5	-179.68	-2.8	-541.9	832.1	810.7	21.42	38.850	
3,230.0	3,204.9	3,065.9	3,029.5	10.4	11.6	-179.68	-2.8	-547.6	843.9	822.2	21.66	38.968	
3,300.0	3,273.7	3,130.3	3,092.5	10.6	11.9	-179.68	-2.8	-561.0	871.2	849.0	22.21	39.232	
3,325.0	3,298.2	3,153.4	3,115.0	10.7	12.0	-179.68	-2.8	-565.8	881.0	858.6	22.41	39.321	
3,400.0	3,371.8	3,222.4	3,182.6	11.0	12.3	-179.68	-2.9	-580.2	910.3	887.3	23.00	39.575	
3,420.0	3,391.5	3,240.8	3,200.6	11.1	12.4	-179.68	-2.9	-584.0	918.1	894.9	23.16	39.639	
3,500.0	3,470.0	3,314.4	3,272.6	11.5	12.7	-179.68	-3.0	-599.3	949.4	925.6	23.80	39.884	
3,515.0	3,484.7	3,328.3	3,286.1	11.5	12.7	-179.68	-3.0	-602.2	955.2	931.3	23.92	39.928	
3,600.0	3,568.1	3,406.5	3,362.6	11.9	13.1	-179.68	-3.1	-618.5	988.4	963.8	24.61	40.164	
3,610.0	3,578.0	3,415.7	3,371.6	11.9	13.1	-179.68	-3.1	-620.4	992.3	967.7	24.69	40.190	
3,700.0	3,666.3	3,498.5	3,452.7	12.3	13.5	-179.68	-3.1	-637.6	1,027.5	1,002.1	25.42	40.416	
3,705.0	3,671.2	3,503.1	3,457.2	12.3	13.5	-179.68	-3.1	-638.5	1,029.5	1,004.0	25.46	40.428	
3,800.0	3,764.5	3,590.6	3,542.7	12.7	13.9	-179.69	-3.2	-656.7	1,066.6	1,040.3	26.24	40.646	
3,895.0	3,857.7	3,678.0	3,628.3	13.1	14.3	-179.69	-3.3	-674.9	1,103.7	1,076.7	27.02	40.844	
3,900.0	3,862.6	3,682.6	3,632.8	13.1	14.3	-179.69	-3.3	-675.9	1,105.7	1,078.6	27.06	40.854	
3,990.0	3,951.0	3,765.5	3,713.8	13.5	14.7	-179.69	-3.4	-693.1	1,140.8	1,113.0	27.81	41.026	
4,000.0	3,960.8	3,774.7	3,722.8	13.6	14.7	-179.69	-3.4	-695.0	1,144.7	1,116.8	27.89	41.045	
4,085.0	4,044.2	3,852.9	3,799.3	13.9	15.1	-179.69	-3.4	-711.3	1,177.9	1,149.3	28.60	41.194	
4,100.0	4,059.0	3,866.7	3,812.8	14.0	15.1	-179.69	-3.4	-714.1	1,183.8	1,155.1	28.72	41.219	
4,180.0	4,137.5	3,940.4	3,884.9	14.4	15.5	-179.69	-3.5	-729.5	1,215.1	1,185.7	29.39	41.347	
4,200.0	4,157.1	3,958.8	3,902.9	14.4	15.6	-179.69	-3.5	-733.3	1,222.9	1,193.3	29.55	41.378	
4,275.0	4,230.7	4,027.8	3,970.4	14.8	15.9	-179.69	-3.6	-747.6	1,252.2	1,222.0	30.18	41.489	
4,300.0	4,255.3	4,050.9	3,992.9	14.9	16.0	-179.69	-3.6	-752.4	1,261.9	1,231.6	30.39	41.525	
4,370.0	4,324.0	4,115.3	4,055.9	15.2	16.3	-179.69	-3.7	-765.8	1,289.3	1,258.3	30.98	41.620	
4,400.0	4,353.5	4,142.9	4,083.0	15.3	16.4	-179.69	-3.7	-771.6	1,301.0	1,269.8	31.23	41.659	

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 #713H
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 #713H	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	-90.41	-1.1	-150.3	150.3					
95.0	95.0	95.0	95.0	3.0	3.0	-90.41	-1.1	-150.3	150.3	144.3	6.03	24.946		
100.0	100.0	100.0	100.0	3.0	3.0	-90.41	-1.1	-150.3	150.3	144.3	6.03	24.932		
190.0	190.0	190.0	190.0	3.1	3.1	-90.41	-1.1	-150.3	150.3	144.2	6.15	24.432		
200.0	200.0	200.0	200.0	3.1	3.1	-90.41	-1.1	-150.3	150.3	144.1	6.17	24.355		
285.0	285.0	285.0	285.0	3.2	3.2	-90.41	-1.1	-150.3	150.3	144.0	6.31	23.819		
300.0	300.0	300.0	300.0	3.2	3.2	-90.41	-1.1	-150.3	150.3	144.0	6.34	23.712		
380.0	380.0	380.0	380.0	3.3	3.3	-90.41	-1.1	-150.3	150.3	143.8	6.49	23.168		
400.0	400.0	400.0	400.0	3.3	3.3	-90.41	-1.1	-150.3	150.3	143.8	6.53	23.022		
475.0	475.0	475.0	475.0	3.4	3.4	-90.41	-1.1	-150.3	150.3	143.6	6.68	22.488		
500.0	500.0	500.0	500.0	3.4	3.4	-90.41	-1.1	-150.3	150.3	143.6	6.74	22.303		
570.0	570.0	570.0	570.0	3.5	3.5	-90.41	-1.1	-150.3	150.3	143.4	6.90	21.792		
600.0	600.0	600.0	600.0	3.5	3.5	-90.41	-1.1	-150.3	150.3	143.3	6.97	21.568		
665.0	665.0	665.0	665.0	3.6	3.6	-90.41	-1.1	-150.3	150.3	143.2	7.13	21.091		
700.0	700.0	700.0	700.0	3.7	3.7	-90.41	-1.1	-150.3	150.3	143.1	7.22	20.832		
760.0	760.0	760.0	760.0	3.8	3.8	-90.41	-1.1	-150.3	150.3	142.9	7.37	20.394		
800.0	800.0	800.0	800.0	3.8	3.8	-90.41	-1.1	-150.3	150.3	142.8	7.48	20.102		
855.0	855.0	855.0	855.0	3.9	3.9	-90.41	-1.1	-150.3	150.3	142.7	7.63	19.708		
900.0	900.0	900.0	900.0	4.0	4.0	-90.41	-1.1	-150.3	150.3	142.6	7.75	19.387		
950.0	950.0	950.0	950.0	4.1	4.1	-90.41	-1.1	-150.3	150.3	142.4	7.90	19.038		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.41	-1.1	-150.3	150.3	142.3	8.04	18.693		
1,045.0	1,045.0	1,045.0	1,045.0	4.2	4.2	-90.41	-1.1	-150.3	150.3	142.1	8.17	18.388		
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.41	-1.1	-150.3	150.3	142.0	8.34	18.022		
1,140.0	1,140.0	1,140.0	1,140.0	4.4	4.4	-90.41	-1.1	-150.3	150.3	141.9	8.46	17.762		
1,200.0	1,200.0	1,200.0	1,200.0	4.5	4.5	-90.41	-1.1	-150.3	150.3	141.7	8.65	17.378		
1,235.0	1,235.0	1,235.0	1,235.0	4.6	4.6	-90.41	-1.1	-150.3	150.3	141.6	8.76	17.160		
1,300.0	1,300.0	1,300.0	1,300.0	4.7	4.7	-90.41	-1.1	-150.3	150.3	141.3	8.97	16.762		
1,330.0	1,330.0	1,330.0	1,330.0	4.7	4.7	-90.41	-1.1	-150.3	150.3	141.2	9.06	16.583		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	-90.41	-1.1	-150.3	150.3	141.0	9.29	16.174		
1,425.0	1,425.0	1,425.0	1,425.0	4.9	4.9	-90.41	-1.1	-150.3	150.3	140.9	9.38	16.032		
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-90.41	-1.1	-150.3	150.3	140.7	9.63	15.614 CC		
1,520.0	1,520.0	1,520.0	1,520.0	5.1	5.1	-179.66	-1.1	-150.3	150.4	140.7	9.71	15.493 ES		
1,600.0	1,600.0	1,600.0	1,600.0	5.2	5.3	-179.66	-1.1	-150.3	152.1	142.0	10.03	15.161		
1,615.0	1,615.0	1,615.0	1,615.0	5.2	5.3	-179.66	-1.1	-150.3	152.6	142.5	10.09	15.120		
1,700.0	1,699.8	1,699.8	1,699.8	5.4	5.5	-179.67	-1.1	-150.3	157.3	146.8	10.46	15.035 SF		
1,710.0	1,709.8	1,709.8	1,709.8	5.4	5.5	-179.67	-1.1	-150.3	158.0	147.5	10.51	15.039		
1,800.0	1,799.5	1,799.5	1,799.5	5.6	5.7	-179.69	-1.1	-150.3	166.0	155.1	10.91	15.215		
1,805.0	1,804.4	1,804.4	1,804.4	5.6	5.7	-179.69	-1.1	-150.3	166.5	155.6	10.93	15.230		
1,900.0	1,898.7	1,898.7	1,898.7	5.9	5.9	-179.71	-1.1	-150.3	178.2	166.8	11.38	15.658		
1,995.0	1,992.5	1,992.5	1,992.5	6.2	6.1	-179.73	-1.1	-150.3	193.0	181.1	11.85	16.290		
2,000.0	1,997.5	1,997.5	1,997.5	6.2	6.1	-179.73	-1.1	-150.3	193.8	182.0	11.87	16.329		
2,050.0	2,046.6	2,043.5	2,043.5	6.3	6.1	-179.74	-1.1	-150.6	203.3	191.2	12.07	16.847		
2,090.0	2,085.9	2,080.0	2,080.0	6.4	6.2	-179.75	-1.1	-151.4	211.8	199.6	12.22	17.327		
2,100.0	2,095.7	2,089.1	2,089.1	6.4	6.2	-179.75	-1.1	-151.7	214.0	201.7	12.26	17.452		
2,185.0	2,179.1	2,165.7	2,165.6	6.6	6.3	-179.76	-1.1	-155.1	233.9	221.2	12.65	18.490		
2,200.0	2,193.9	2,179.1	2,179.0	6.7	6.3	-179.76	-1.1	-155.9	237.6	224.9	12.72	18.686		
2,280.0	2,272.4	2,250.2	2,249.8	6.9	6.4	-179.77	-1.1	-161.2	258.7	245.6	13.09	19.760		
2,300.0	2,292.0	2,267.8	2,267.4	7.0	6.4	-179.77	-1.1	-162.8	264.3	251.1	13.19	20.042		
2,375.0	2,365.7	2,333.2	2,332.4	7.2	6.5	-179.77	-1.1	-169.7	286.2	272.7	13.55	21.125		
2,400.0	2,390.2	2,354.8	2,353.9	7.3	6.5	-179.77	-1.1	-172.3	293.9	280.3	13.67	21.500		
2,470.0	2,458.9	2,414.7	2,413.3	7.5	6.7	-179.77	-1.1	-180.3	316.4	302.3	14.02	22.572		
2,500.0	2,488.4	2,440.1	2,438.4	7.6	6.7	-179.77	-1.2	-184.1	326.4	312.2	14.16	23.043		

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #708H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 11238-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Rule Assigned:									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,565.0	2,552.2	2,500.0	2,497.5	7.8	6.9	-179.76	-1.2	-193.8	349.0	334.5	14.54	24.006	
2,600.0	2,586.5	2,523.7	2,520.8	8.0	7.0	-179.76	-1.2	-198.0	361.6	347.0	14.65	24.685	
2,660.0	2,645.4	2,575.0	2,571.1	8.2	7.1	-179.76	-1.2	-207.8	384.1	369.2	14.94	25.712	
2,700.0	2,684.7	2,609.6	2,605.1	8.3	7.1	-179.76	-1.2	-214.7	399.4	384.3	15.12	26.412	
2,755.0	2,738.7	2,660.4	2,654.9	8.5	7.3	-179.75	-1.3	-224.9	420.4	405.0	15.44	27.225	
2,800.0	2,782.8	2,702.0	2,695.6	8.7	7.4	-179.75	-1.3	-233.1	437.7	422.0	15.71	27.863	
2,850.0	2,831.9	2,748.2	2,740.9	8.9	7.5	-179.75	-1.3	-242.3	456.8	440.8	16.01	28.525	
2,900.0	2,881.0	2,794.4	2,786.1	9.1	7.6	-179.75	-1.3	-251.6	475.9	459.6	16.32	29.160	
2,945.0	2,925.2	2,836.0	2,826.9	9.2	7.7	-179.74	-1.4	-259.8	493.2	476.5	16.61	29.694	
3,000.0	2,979.2	2,886.8	2,876.7	9.4	7.9	-179.74	-1.4	-270.0	514.2	497.2	16.96	30.319	
3,040.0	3,018.4	2,923.7	2,912.9	9.6	8.0	-179.74	-1.4	-277.3	529.5	512.3	17.22	30.747	
3,100.0	3,077.3	2,979.2	2,967.2	9.8	8.2	-179.74	-1.4	-288.4	552.5	534.9	17.62	31.357	
3,135.0	3,111.7	3,011.5	2,998.9	10.0	8.3	-179.74	-1.5	-294.8	565.9	548.0	17.85	31.693	
3,200.0	3,175.5	3,071.5	3,057.7	10.2	8.5	-179.73	-1.5	-306.8	590.7	572.4	18.30	32.285	
3,230.0	3,204.9	3,099.3	3,084.9	10.4	8.6	-179.73	-1.5	-312.3	602.2	583.7	18.50	32.546	
3,300.0	3,273.7	3,163.9	3,148.3	10.6	8.8	-179.73	-1.5	-325.2	629.0	610.0	18.99	33.117	
3,325.0	3,298.2	3,187.0	3,170.9	10.7	8.9	-179.73	-1.5	-329.8	638.6	619.4	19.17	33.312	
3,400.0	3,371.8	3,256.3	3,238.8	11.0	9.1	-179.73	-1.6	-343.7	667.3	647.6	19.70	33.864	
3,420.0	3,391.5	3,274.8	3,256.9	11.1	9.2	-179.73	-1.6	-347.3	674.9	655.1	19.85	34.004	
3,500.0	3,470.0	3,348.7	3,329.3	11.5	9.4	-179.73	-1.6	-362.1	705.5	685.1	20.43	34.536	
3,515.0	3,484.7	3,362.6	3,342.9	11.5	9.5	-179.73	-1.6	-364.8	711.3	690.7	20.54	34.631	
3,600.0	3,568.1	3,441.1	3,419.9	11.9	9.8	-179.72	-1.7	-380.5	743.8	722.6	21.17	35.141	
3,610.0	3,578.0	3,450.3	3,428.9	11.9	9.8	-179.72	-1.7	-382.3	747.6	726.4	21.24	35.198	
3,700.0	3,666.3	3,533.5	3,510.4	12.3	10.1	-179.72	-1.7	-398.9	782.1	760.2	21.91	35.687	
3,705.0	3,671.2	3,538.1	3,514.9	12.3	10.1	-179.72	-1.7	-399.8	784.0	762.0	21.95	35.713	
3,800.0	3,764.5	3,625.9	3,600.9	12.7	10.5	-179.72	-1.8	-417.3	820.3	797.7	22.67	36.181	
3,895.0	3,857.7	3,713.6	3,686.9	13.1	10.8	-179.72	-1.8	-434.8	856.7	833.3	23.40	36.607	
3,900.0	3,862.6	3,718.3	3,691.5	13.1	10.8	-179.72	-1.8	-435.8	858.6	835.2	23.44	36.629	
3,990.0	3,951.0	3,801.4	3,772.9	13.5	11.1	-179.72	-1.9	-452.3	893.1	868.9	24.14	36.997	
4,000.0	3,960.8	3,810.7	3,782.0	13.6	11.2	-179.72	-1.9	-454.2	896.9	872.7	24.22	37.035	
4,085.0	4,044.2	3,889.2	3,858.9	13.9	11.5	-179.72	-1.9	-469.8	929.4	904.5	24.88	37.352	
4,100.0	4,059.0	3,903.0	3,872.5	14.0	11.5	-179.72	-1.9	-472.6	935.1	910.1	25.00	37.406	
4,180.0	4,137.5	3,977.0	3,945.0	14.4	11.8	-179.72	-2.0	-487.3	965.8	940.1	25.63	37.678	
4,200.0	4,157.1	3,995.4	3,963.1	14.4	11.9	-179.72	-2.0	-491.0	973.4	947.6	25.79	37.743	
4,275.0	4,230.7	4,064.7	4,031.0	14.8	12.2	-179.72	-2.0	-504.8	1,002.1	975.7	26.39	37.977	
4,300.0	4,255.3	4,087.8	4,053.6	14.9	12.3	-179.72	-2.0	-509.4	1,011.7	985.1	26.59	38.052	
4,370.0	4,324.0	4,152.5	4,117.0	15.2	12.5	-179.71	-2.1	-522.3	1,038.5	1,011.3	27.15	38.252	
4,400.0	4,353.5	4,180.2	4,144.1	15.3	12.7	-179.71	-2.1	-527.8	1,050.0	1,022.6	27.39	38.335	
4,465.0	4,417.3	4,240.3	4,203.0	15.6	12.9	-179.71	-2.1	-539.8	1,074.8	1,046.9	27.91	38.506	
4,500.0	4,451.6	4,272.6	4,234.7	15.7	13.0	-179.71	-2.1	-546.3	1,088.2	1,060.0	28.20	38.594	
4,560.0	4,510.5	4,328.0	4,289.0	16.0	13.3	-179.71	-2.1	-557.3	1,111.2	1,082.5	28.68	38.740	
4,600.0	4,549.8	4,365.0	4,325.2	16.2	13.4	-179.71	-2.2	-564.7	1,126.5	1,097.5	29.01	38.833	
4,655.0	4,603.8	4,415.8	4,375.0	16.4	13.6	-179.71	-2.2	-574.8	1,147.5	1,118.1	29.46	38.956	
4,700.0	4,647.9	4,457.4	4,415.7	16.6	13.8	-179.71	-2.2	-583.1	1,164.8	1,134.9	29.82	39.053	
4,750.0	4,697.0	4,503.6	4,461.0	16.9	14.0	-179.71	-2.2	-592.3	1,183.9	1,153.7	30.23	39.157	
4,800.0	4,746.1	4,549.8	4,506.3	17.1	14.2	-179.71	-2.3	-601.5	1,203.0	1,172.4	30.65	39.257	
4,845.0	4,790.3	4,591.3	4,547.0	17.3	14.4	-179.71	-2.3	-609.8	1,220.2	1,189.2	31.02	39.343	
4,900.0	4,844.3	4,642.1	4,596.8	17.5	14.6	-179.71	-2.3	-619.9	1,241.3	1,209.8	31.47	39.445	
4,940.0	4,883.5	4,679.1	4,633.0	17.7	14.8	-179.71	-2.3	-627.3	1,256.6	1,224.8	31.80	39.516	
5,000.0	4,942.4	4,734.5	4,687.3	18.0	15.0	-179.71	-2.4	-638.4	1,279.6	1,247.3	32.30	39.619	
5,035.0	4,976.8	4,766.9	4,719.0	18.1	15.1	-179.71	-2.4	-644.8	1,293.0	1,260.4	32.59	39.677	
5,100.0	5,040.6	4,826.9	4,777.9	18.4	15.4	-179.71	-2.4	-656.8	1,317.8	1,284.7	33.13	39.780	

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 #713H
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 #713H	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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #709H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2500-r.5 MWD+IFR1, 11020-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.42	-0.9	-120.5	120.5				
95.0	95.0	95.0	95.0	3.0	3.0	-90.42	-0.9	-120.5	120.5	114.5	6.03	19.995	
100.0	100.0	100.0	100.0	3.0	3.0	-90.42	-0.9	-120.5	120.5	114.5	6.03	19.984	
190.0	190.0	190.0	190.0	3.1	3.1	-90.42	-0.9	-120.5	120.5	114.3	6.15	19.583	
200.0	200.0	200.0	200.0	3.1	3.1	-90.42	-0.9	-120.5	120.5	114.3	6.17	19.522	
285.0	285.0	285.0	285.0	3.2	3.2	-90.42	-0.9	-120.5	120.5	114.2	6.31	19.092	
300.0	300.0	300.0	300.0	3.2	3.2	-90.42	-0.9	-120.5	120.5	114.1	6.34	19.006	
380.0	380.0	380.0	380.0	3.3	3.3	-90.42	-0.9	-120.5	120.5	114.0	6.49	18.570	
400.0	400.0	400.0	400.0	3.3	3.3	-90.42	-0.9	-120.5	120.5	114.0	6.53	18.453	
475.0	475.0	475.0	475.0	3.4	3.4	-90.42	-0.9	-120.5	120.5	113.8	6.68	18.025	
500.0	500.0	500.0	500.0	3.4	3.4	-90.42	-0.9	-120.5	120.5	113.7	6.74	17.877	
570.0	570.0	570.0	570.0	3.5	3.5	-90.42	-0.9	-120.5	120.5	113.6	6.90	17.467	
600.0	600.0	600.0	600.0	3.5	3.5	-90.42	-0.9	-120.5	120.5	113.5	6.97	17.288	
665.0	665.0	665.0	665.0	3.6	3.6	-90.42	-0.9	-120.5	120.5	113.4	7.13	16.905	
700.0	700.0	700.0	700.0	3.7	3.7	-90.42	-0.9	-120.5	120.5	113.3	7.22	16.697	
760.0	760.0	760.0	760.0	3.8	3.8	-90.42	-0.9	-120.5	120.5	113.1	7.37	16.346	
800.0	800.0	800.0	800.0	3.8	3.8	-90.42	-0.9	-120.5	120.5	113.0	7.48	16.113	
855.0	855.0	855.0	855.0	3.9	3.9	-90.42	-0.9	-120.5	120.5	112.9	7.63	15.797	
900.0	900.0	900.0	900.0	4.0	4.0	-90.42	-0.9	-120.5	120.5	112.7	7.75	15.540	
950.0	950.0	950.0	950.0	4.1	4.1	-90.42	-0.9	-120.5	120.5	112.6	7.90	15.260	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.42	-0.9	-120.5	120.5	112.4	8.04	14.983	
1,045.0	1,045.0	1,045.0	1,045.0	4.2	4.2	-90.42	-0.9	-120.5	120.5	112.3	8.17	14.739	
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.42	-0.9	-120.5	120.5	112.1	8.34	14.446	
1,140.0	1,140.0	1,140.0	1,140.0	4.4	4.4	-90.42	-0.9	-120.5	120.5	112.0	8.46	14.237	
1,200.0	1,200.0	1,200.0	1,200.0	4.5	4.5	-90.42	-0.9	-120.5	120.5	111.8	8.65	13.929	
1,235.0	1,235.0	1,235.0	1,235.0	4.6	4.6	-90.42	-0.9	-120.5	120.5	111.7	8.76	13.754	
1,300.0	1,300.0	1,300.0	1,300.0	4.7	4.7	-90.42	-0.9	-120.5	120.5	111.5	8.97	13.435	
1,330.0	1,330.0	1,330.0	1,330.0	4.7	4.7	-90.42	-0.9	-120.5	120.5	111.4	9.06	13.292	
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	-90.42	-0.9	-120.5	120.5	111.2	9.29	12.964	
1,425.0	1,425.0	1,425.0	1,425.0	4.9	4.9	-90.42	-0.9	-120.5	120.5	111.1	9.38	12.850	
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-90.42	-0.9	-120.5	120.5	110.9	9.63	12.515 CC	
1,520.0	1,520.0	1,520.0	1,520.0	5.1	5.1	-179.67	-0.9	-120.5	120.6	110.8	9.71	12.420 ES	
1,600.0	1,600.0	1,600.0	1,600.0	5.2	5.3	-179.67	-0.9	-120.5	122.2	112.2	10.03	12.186	
1,615.0	1,615.0	1,615.0	1,615.0	5.2	5.3	-179.67	-0.9	-120.5	122.8	112.7	10.09	12.165 SF	
1,700.0	1,699.8	1,699.8	1,699.8	5.4	5.5	-179.69	-0.9	-120.5	127.5	117.0	10.46	12.184	
1,710.0	1,709.8	1,709.8	1,709.8	5.4	5.5	-179.69	-0.9	-120.5	128.2	117.7	10.51	12.200	
1,800.0	1,799.5	1,799.5	1,799.5	5.6	5.7	-179.71	-0.9	-120.5	136.2	125.3	10.91	12.481	
1,805.0	1,804.4	1,804.4	1,804.4	5.6	5.7	-179.71	-0.9	-120.5	136.7	125.8	10.93	12.502	
1,900.0	1,898.7	1,898.7	1,898.7	5.9	5.9	-179.73	-0.9	-120.5	148.4	137.0	11.38	13.037	
1,995.0	1,992.5	1,992.5	1,992.5	6.2	6.1	-179.75	-0.9	-120.5	163.1	151.3	11.85	13.772	
2,000.0	1,997.5	1,997.5	1,997.5	6.2	6.1	-179.75	-0.9	-120.5	164.0	152.1	11.87	13.816	
2,050.0	2,046.6	2,046.6	2,046.6	6.3	6.2	-179.76	-0.9	-120.5	173.1	161.1	12.06	14.355	
2,090.0	2,085.9	2,085.9	2,085.9	6.4	6.3	-179.77	-0.9	-120.5	180.7	168.5	12.21	14.802	
2,100.0	2,095.7	2,095.7	2,095.7	6.4	6.3	-179.78	-0.9	-120.5	182.7	170.4	12.25	14.912	
2,185.0	2,179.1	2,179.1	2,179.1	6.6	6.5	-179.80	-0.9	-120.5	198.9	186.2	12.64	15.735	
2,200.0	2,193.9	2,193.9	2,193.9	6.7	6.5	-179.80	-0.9	-120.5	201.7	189.0	12.71	15.875	
2,280.0	2,272.4	2,272.4	2,272.4	6.9	6.7	-179.81	-0.9	-120.5	217.0	203.9	13.09	16.575	
2,300.0	2,292.0	2,292.0	2,292.0	7.0	6.7	-179.82	-0.9	-120.5	220.8	207.6	13.19	16.743	
2,375.0	2,365.7	2,365.7	2,365.7	7.2	6.9	-179.83	-0.9	-120.5	235.1	221.6	13.56	17.336	
2,400.0	2,390.2	2,390.2	2,390.2	7.3	6.9	-179.83	-0.9	-120.5	239.9	226.2	13.69	17.526	
2,470.0	2,458.9	2,458.9	2,458.9	7.5	7.1	-179.84	-0.9	-120.5	253.3	239.2	14.05	18.026	
2,500.0	2,488.4	2,488.4	2,488.4	7.6	7.1	-179.84	-0.9	-120.5	259.0	244.8	14.20	18.232	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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	Rule Assigned:									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,565.0	2,552.2	2,547.6	2,547.6	7.8	7.2	-179.85	-0.9	-120.9	271.8	257.3	14.54	18.697	
2,600.0	2,586.5	2,578.8	2,578.8	8.0	7.3	-179.85	-0.9	-121.6	279.3	264.5	14.71	18.979	
2,660.0	2,645.4	2,632.0	2,631.9	8.2	7.3	-179.85	-0.9	-123.5	292.9	277.8	15.01	19.508	
2,700.0	2,684.7	2,667.1	2,667.0	8.3	7.4	-179.85	-0.9	-125.4	302.5	287.3	15.21	19.895	
2,755.0	2,738.7	2,715.1	2,714.9	8.5	7.4	-179.85	-0.9	-128.6	316.6	301.1	15.48	20.457	
2,800.0	2,782.8	2,754.1	2,753.7	8.7	7.4	-179.85	-0.9	-131.7	328.8	313.1	15.70	20.945	
2,850.0	2,831.9	2,800.0	2,799.5	8.9	7.5	-179.84	-0.9	-136.2	343.0	327.0	15.97	21.483	
2,900.0	2,881.0	2,839.5	2,838.7	9.1	7.5	-179.84	-0.9	-140.6	357.9	341.7	16.19	22.106	
2,945.0	2,925.2	2,877.4	2,876.3	9.2	7.6	-179.83	-0.9	-145.3	371.9	355.5	16.41	22.661	
3,000.0	2,979.2	2,923.3	2,921.8	9.4	7.6	-179.82	-0.9	-151.7	389.8	373.2	16.66	23.404	
3,040.0	3,018.4	2,957.3	2,955.3	9.6	7.6	-179.82	-0.9	-156.9	403.4	386.6	16.83	23.975	
3,100.0	3,077.3	3,013.7	3,011.0	9.8	7.7	-179.81	-0.8	-165.7	423.9	406.8	17.14	24.738	
3,135.0	3,111.7	3,046.5	3,043.5	10.0	7.7	-179.81	-0.8	-170.9	435.9	418.5	17.34	25.143	
3,200.0	3,175.5	3,107.6	3,103.8	10.2	7.8	-179.80	-0.8	-180.4	458.1	440.4	17.71	25.860	
3,230.0	3,204.9	3,135.8	3,131.7	10.4	7.9	-179.79	-0.8	-184.8	468.4	450.5	17.89	26.174	
3,300.0	3,273.7	3,201.6	3,196.7	10.6	8.0	-179.79	-0.8	-195.1	492.3	474.0	18.32	26.879	
3,325.0	3,298.2	3,225.1	3,219.9	10.7	8.1	-179.78	-0.8	-198.8	500.9	482.4	18.47	27.115	
3,400.0	3,371.8	3,295.6	3,289.5	11.0	8.2	-179.78	-0.8	-209.8	526.5	507.6	18.94	27.800	
3,420.0	3,391.5	3,314.4	3,308.0	11.1	8.3	-179.77	-0.8	-212.7	533.4	514.3	19.07	27.973	
3,500.0	3,470.0	3,389.5	3,382.3	11.5	8.5	-179.77	-0.8	-224.5	560.7	541.1	19.58	28.635	
3,515.0	3,484.7	3,403.6	3,396.2	11.5	8.5	-179.77	-0.8	-226.7	565.8	546.2	19.68	28.754	
3,600.0	3,568.1	3,483.5	3,475.1	11.9	8.7	-179.76	-0.8	-239.2	594.9	574.7	20.24	29.391	
3,610.0	3,578.0	3,492.9	3,484.4	11.9	8.8	-179.76	-0.8	-240.7	598.3	578.0	20.31	29.463	
3,700.0	3,666.3	3,577.5	3,567.9	12.3	9.0	-179.75	-0.8	-253.9	629.1	608.2	20.92	30.077	
3,705.0	3,671.2	3,582.2	3,572.5	12.3	9.0	-179.75	-0.8	-254.6	630.8	609.9	20.95	30.110	
3,800.0	3,764.5	3,671.4	3,660.7	12.7	9.3	-179.75	-0.8	-268.6	663.3	641.7	21.61	30.699	
3,895.0	3,857.7	3,760.7	3,748.9	13.1	9.6	-179.74	-0.8	-282.6	695.8	673.5	22.28	31.237	
3,900.0	3,862.6	3,765.4	3,753.5	13.1	9.6	-179.74	-0.8	-283.3	697.5	675.2	22.31	31.264	
3,990.0	3,951.0	3,850.0	3,837.1	13.5	9.8	-179.74	-0.8	-296.5	728.3	705.3	22.95	31.729	
4,000.0	3,960.8	3,859.4	3,846.3	13.6	9.9	-179.74	-0.8	-298.0	731.7	708.7	23.03	31.779	
4,085.0	4,044.2	3,939.3	3,925.2	13.9	10.1	-179.73	-0.7	-310.5	760.8	737.1	23.64	32.179	
4,100.0	4,059.0	3,953.4	3,939.2	14.0	10.2	-179.73	-0.7	-312.7	765.9	742.2	23.75	32.247	
4,180.0	4,137.5	4,028.5	4,013.4	14.4	10.4	-179.73	-0.7	-324.5	793.3	768.9	24.34	32.592	
4,200.0	4,157.1	4,047.3	4,032.0	14.4	10.5	-179.73	-0.7	-327.4	800.1	775.6	24.49	32.674	
4,275.0	4,230.7	4,117.8	4,101.6	14.8	10.7	-179.73	-0.7	-338.4	825.8	800.7	25.05	32.970	
4,300.0	4,255.3	4,141.3	4,124.8	14.9	10.8	-179.73	-0.7	-342.1	834.3	809.1	25.23	33.065	
4,370.0	4,324.0	4,207.1	4,189.7	15.2	11.0	-179.72	-0.7	-352.4	858.3	832.5	25.76	33.318	
4,400.0	4,353.5	4,235.3	4,217.6	15.3	11.1	-179.72	-0.7	-356.8	868.5	842.5	25.99	33.422	
4,465.0	4,417.3	4,296.3	4,277.9	15.6	11.4	-179.72	-0.7	-366.4	890.8	864.3	26.48	33.638	
4,500.0	4,451.6	4,329.2	4,310.4	15.7	11.5	-179.72	-0.7	-371.5	902.7	876.0	26.75	33.749	
4,560.0	4,510.5	4,385.6	4,366.1	16.0	11.7	-179.72	-0.7	-380.3	923.2	896.0	27.21	33.933	
4,600.0	4,549.8	4,423.2	4,403.2	16.2	11.8	-179.72	-0.7	-386.2	936.9	909.4	27.52	34.050	
4,655.0	4,603.8	4,474.9	4,454.3	16.4	12.0	-179.71	-0.7	-394.3	955.7	927.8	27.94	34.205	
4,700.0	4,647.9	4,517.2	4,496.0	16.6	12.2	-179.71	-0.7	-400.9	971.1	942.8	28.29	34.327	
4,750.0	4,697.0	4,564.2	4,542.4	16.9	12.3	-179.71	-0.7	-408.3	988.2	959.5	28.68	34.457	
4,800.0	4,746.1	4,611.1	4,588.8	17.1	12.5	-179.71	-0.7	-415.6	1,005.3	976.3	29.07	34.582	
4,845.0	4,790.3	4,653.4	4,630.6	17.3	12.7	-179.71	-0.7	-422.2	1,020.7	991.3	29.42	34.689	
4,900.0	4,844.3	4,705.1	4,681.7	17.5	12.9	-179.71	-0.7	-430.3	1,039.5	1,009.7	29.86	34.817	
4,940.0	4,883.5	4,742.7	4,718.8	17.7	13.0	-179.71	-0.7	-436.2	1,053.2	1,023.0	30.17	34.906	
5,000.0	4,942.4	4,799.1	4,774.5	18.0	13.2	-179.71	-0.7	-445.0	1,073.7	1,043.1	30.65	35.035	
5,035.0	4,976.8	4,832.0	4,806.9	18.1	13.4	-179.71	-0.6	-450.2	1,085.7	1,054.8	30.93	35.106	
5,100.0	5,040.6	4,893.0	4,867.3	18.4	13.6	-179.70	-0.6	-459.7	1,107.9	1,076.5	31.44	35.236	

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 #713H
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 #713H	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							Rule Assigned:				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)				
5,130.0	5,070.0	4,921.2	4,895.1	18.5	13.7	-179.70	-0.6	-464.1	1,118.2	1,086.5	31.68	35.293		
5,200.0	5,138.8	4,987.0	4,960.1	18.9	13.9	-179.70	-0.6	-474.4	1,142.1	1,109.9	32.24	35.422		
5,225.0	5,163.3	5,010.5	4,983.3	19.0	14.0	-179.70	-0.6	-478.1	1,150.7	1,118.2	32.44	35.467		
5,300.0	5,236.9	5,081.0	5,052.9	19.3	14.3	-179.70	-0.6	-489.1	1,176.3	1,143.3	33.05	35.596		
5,320.0	5,256.5	5,099.8	5,071.5	19.4	14.4	-179.70	-0.6	-492.1	1,183.2	1,150.0	33.21	35.629		
5,400.0	5,335.1	5,175.0	5,145.7	19.8	14.7	-179.70	-0.6	-503.8	1,210.5	1,176.7	33.85	35.757		
5,415.0	5,349.8	5,189.1	5,159.6	19.8	14.7	-179.70	-0.6	-506.0	1,215.7	1,181.7	33.98	35.780		
5,500.0	5,433.2	5,268.9	5,238.5	20.2	15.1	-179.70	-0.6	-518.5	1,244.7	1,210.1	34.67	35.907		
5,510.0	5,443.1	5,278.3	5,247.8	20.3	15.1	-179.70	-0.6	-520.0	1,248.2	1,213.4	34.75	35.921		
5,600.0	5,531.4	5,362.9	5,331.3	20.7	15.4	-179.70	-0.6	-533.2	1,278.9	1,243.5	35.48	36.047		
5,605.0	5,536.3	5,367.6	5,336.0	20.7	15.5	-179.70	-0.6	-533.9	1,280.6	1,245.1	35.52	36.054		
5,700.0	5,629.6	5,456.9	5,424.2	21.1	15.8	-179.69	-0.6	-547.9	1,313.1	1,276.8	36.30	36.178		

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 #713H
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 #713H	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	-90.42	-0.7	-90.4	90.4					
95.0	95.0	96.0	96.0	3.0	3.0	-90.42	-0.7	-90.4	90.4	84.4	6.03	15.004		
100.0	100.0	101.0	101.0	3.0	3.0	-90.42	-0.7	-90.4	90.4	84.4	6.03	14.995		
190.0	190.0	191.0	191.0	3.1	3.1	-90.42	-0.7	-90.4	90.4	84.3	6.15	14.693		
200.0	200.0	201.0	201.0	3.1	3.1	-90.42	-0.7	-90.4	90.4	84.2	6.17	14.648		
285.0	285.0	286.0	286.0	3.2	3.2	-90.42	-0.7	-90.4	90.4	84.1	6.31	14.325		
300.0	300.0	301.0	301.0	3.2	3.2	-90.42	-0.7	-90.4	90.4	84.1	6.34	14.261		
380.0	380.0	381.0	381.0	3.3	3.3	-90.42	-0.7	-90.4	90.4	83.9	6.49	13.933		
400.0	400.0	401.0	401.0	3.3	3.3	-90.42	-0.7	-90.4	90.4	83.9	6.53	13.846		
475.0	475.0	476.0	476.0	3.4	3.4	-90.42	-0.7	-90.4	90.4	83.7	6.69	13.524		
500.0	500.0	501.0	501.0	3.4	3.4	-90.42	-0.7	-90.4	90.4	83.7	6.74	13.413		
570.0	570.0	571.0	571.0	3.5	3.5	-90.42	-0.7	-90.4	90.4	83.5	6.90	13.105		
600.0	600.0	601.0	601.0	3.5	3.5	-90.42	-0.7	-90.4	90.4	83.4	6.97	12.971		
665.0	665.0	666.0	666.0	3.6	3.6	-90.42	-0.7	-90.4	90.4	83.3	7.13	12.684		
700.0	700.0	701.0	701.0	3.7	3.7	-90.42	-0.7	-90.4	90.4	83.2	7.22	12.528		
760.0	760.0	761.0	761.0	3.8	3.8	-90.42	-0.7	-90.4	90.4	83.0	7.37	12.264		
800.0	800.0	801.0	801.0	3.8	3.8	-90.42	-0.7	-90.4	90.4	82.9	7.48	12.089		
855.0	855.0	856.0	856.0	3.9	3.9	-90.42	-0.7	-90.4	90.4	82.8	7.63	11.852		
900.0	900.0	901.0	901.0	4.0	4.0	-90.42	-0.7	-90.4	90.4	82.7	7.75	11.659		
950.0	950.0	951.0	951.0	4.1	4.1	-90.42	-0.7	-90.4	90.4	82.5	7.90	11.449		
1,000.0	1,000.0	1,001.0	1,001.0	4.2	4.2	-90.42	-0.7	-90.4	90.4	82.4	8.04	11.241		
1,045.0	1,045.0	1,046.0	1,046.0	4.2	4.2	-90.42	-0.7	-90.4	90.4	82.2	8.18	11.058		
1,100.0	1,100.0	1,101.0	1,101.0	4.3	4.3	-90.42	-0.7	-90.4	90.4	82.1	8.34	10.838		
1,140.0	1,140.0	1,141.0	1,141.0	4.4	4.4	-90.42	-0.7	-90.4	90.4	81.9	8.46	10.682		
1,200.0	1,200.0	1,201.0	1,201.0	4.5	4.5	-90.42	-0.7	-90.4	90.4	81.8	8.65	10.451		
1,235.0	1,235.0	1,236.0	1,236.0	4.6	4.6	-90.42	-0.7	-90.4	90.4	81.7	8.76	10.320		
1,300.0	1,300.0	1,301.0	1,301.0	4.7	4.7	-90.42	-0.7	-90.4	90.4	81.4	8.97	10.080		
1,330.0	1,330.0	1,331.0	1,331.0	4.7	4.7	-90.42	-0.7	-90.4	90.4	81.3	9.07	9.973		
1,400.0	1,400.0	1,401.0	1,401.0	4.9	4.9	-90.42	-0.7	-90.4	90.4	81.1	9.30	9.727		
1,425.0	1,425.0	1,426.0	1,426.0	4.9	4.9	-90.42	-0.7	-90.4	90.4	81.0	9.38	9.641		
1,500.0	1,500.0	1,501.0	1,501.0	5.1	5.1	-90.42	-0.7	-90.4	90.4	80.8	9.63	9.390 CC		
1,520.0	1,520.0	1,521.0	1,521.0	5.1	5.1	-179.67	-0.7	-90.4	90.5	80.8	9.71	9.320 ES		
1,600.0	1,600.0	1,601.0	1,601.0	5.2	5.3	-179.67	-0.7	-90.4	92.2	82.1	10.03	9.187		
1,615.0	1,615.0	1,616.0	1,616.0	5.2	5.3	-179.68	-0.7	-90.4	92.7	82.6	10.10	9.184		
1,700.0	1,699.8	1,700.8	1,700.8	5.4	5.5	-179.69	-0.7	-90.4	97.4	86.9	10.46	9.308		
1,710.0	1,709.8	1,710.8	1,710.8	5.4	5.5	-179.69	-0.7	-90.4	98.1	87.6	10.51	9.336		
1,800.0	1,799.5	1,800.5	1,800.5	5.6	5.7	-179.72	-0.7	-90.4	106.1	95.2	10.91	9.723		
1,805.0	1,804.4	1,805.4	1,805.4	5.6	5.7	-179.72	-0.7	-90.4	106.6	95.7	10.94	9.751		
1,900.0	1,898.7	1,899.7	1,899.7	5.9	5.9	-179.74	-0.7	-90.4	118.3	106.9	11.38	10.393		
1,995.0	1,992.5	1,993.5	1,993.5	6.2	6.1	-179.77	-0.7	-90.4	133.1	121.2	11.85	11.232		
2,000.0	1,997.5	1,998.5	1,998.5	6.2	6.1	-179.77	-0.7	-90.4	133.9	122.1	11.87	11.281		
2,050.0	2,046.6	2,047.6	2,047.6	6.3	6.2	-179.79	-0.7	-90.4	143.0	131.0	12.06	11.860		
2,090.0	2,085.9	2,086.9	2,086.9	6.4	6.3	-179.80	-0.7	-90.4	150.7	138.5	12.21	12.338		
2,100.0	2,095.7	2,096.7	2,096.7	6.4	6.3	-179.80	-0.7	-90.4	152.6	140.3	12.25	12.455		
2,185.0	2,179.1	2,180.1	2,180.1	6.6	6.5	-179.82	-0.7	-90.4	168.8	156.2	12.64	13.354		
2,200.0	2,193.9	2,194.9	2,194.9	6.7	6.5	-179.82	-0.7	-90.4	171.7	159.0	12.71	13.506		
2,280.0	2,272.4	2,273.4	2,273.4	6.9	6.7	-179.84	-0.7	-90.4	186.9	173.8	13.09	14.276		
2,300.0	2,292.0	2,293.0	2,293.0	7.0	6.7	-179.84	-0.7	-90.4	190.7	177.6	13.19	14.461		
2,375.0	2,365.7	2,366.7	2,366.7	7.2	6.9	-179.85	-0.7	-90.4	205.1	191.5	13.56	15.117		
2,400.0	2,390.2	2,391.2	2,391.2	7.3	6.9	-179.85	-0.7	-90.4	209.8	196.1	13.69	15.327		
2,470.0	2,458.9	2,459.9	2,459.9	7.5	7.1	-179.86	-0.7	-90.4	223.2	209.1	14.05	15.884		
2,500.0	2,488.4	2,489.4	2,489.4	7.6	7.1	-179.87	-0.7	-90.4	228.9	214.7	14.21	16.113		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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	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
2,565.0	2,552.2	2,553.2	2,553.2	7.8	7.3	-179.87	-0.7	-90.4	241.3	226.8	14.55	16.584	
2,600.0	2,586.5	2,587.5	2,587.5	8.0	7.3	-179.88	-0.7	-90.4	248.0	233.3	14.74	16.827	
2,660.0	2,645.4	2,646.4	2,646.4	8.2	7.5	-179.88	-0.7	-90.4	259.4	244.4	15.06	17.223	
2,700.0	2,684.7	2,685.7	2,685.7	8.3	7.6	-179.89	-0.7	-90.4	267.1	251.8	15.28	17.477	
2,755.0	2,738.7	2,739.7	2,739.7	8.5	7.7	-179.89	-0.7	-90.4	277.6	262.0	15.59	17.808	
2,800.0	2,782.8	2,783.8	2,783.8	8.7	7.8	-179.89	-0.7	-90.4	286.2	270.3	15.84	18.069	
2,850.0	2,831.9	2,832.9	2,832.9	8.9	7.9	-179.90	-0.7	-90.4	295.7	279.6	16.12	18.344	
2,900.0	2,881.0	2,882.0	2,882.0	9.1	8.0	-179.90	-0.7	-90.4	305.2	288.8	16.40	18.609	
2,945.0	2,925.2	2,926.2	2,926.2	9.2	8.1	-179.90	-0.7	-90.4	313.8	297.2	16.66	18.837	
3,000.0	2,979.2	2,980.2	2,980.2	9.4	8.2	-179.91	-0.7	-90.4	324.3	307.3	16.98	19.104	
3,040.0	3,018.4	3,017.4	3,017.4	9.6	8.3	-179.91	-0.7	-90.5	332.0	314.8	17.20	19.304	
3,100.0	3,077.3	3,069.9	3,069.9	9.8	8.3	-179.91	-0.6	-91.3	344.4	326.8	17.51	19.663	
3,135.0	3,111.7	3,100.0	3,100.0	10.0	8.4	-179.90	-0.6	-92.2	352.0	334.4	17.69	19.898	
3,200.0	3,175.5	3,156.5	3,156.4	10.2	8.4	-179.90	-0.6	-94.7	367.3	349.3	18.01	20.390	
3,230.0	3,204.9	3,182.3	3,182.1	10.4	8.5	-179.89	-0.6	-96.2	374.8	356.6	18.16	20.637	
3,300.0	3,273.7	3,241.8	3,241.5	10.6	8.5	-179.87	-0.5	-100.6	393.2	374.7	18.45	21.307	
3,325.0	3,298.2	3,264.7	3,264.4	10.7	8.5	-179.87	-0.5	-102.6	400.0	381.5	18.56	21.552	
3,400.0	3,371.8	3,336.8	3,336.2	11.0	8.5	-179.85	-0.3	-108.9	420.7	401.8	18.94	22.213	
3,420.0	3,391.5	3,356.0	3,355.3	11.1	8.6	-179.84	-0.3	-110.6	426.2	407.2	19.05	22.376	
3,500.0	3,470.0	3,432.9	3,431.9	11.5	8.6	-179.82	-0.2	-117.3	448.3	428.8	19.48	23.006	
3,515.0	3,484.7	3,447.4	3,446.3	11.5	8.6	-179.82	-0.2	-118.5	452.4	432.8	19.57	23.118	
3,600.0	3,568.1	3,529.1	3,527.7	11.9	8.7	-179.80	-0.1	-125.6	475.8	455.8	20.05	23.734	
3,610.0	3,578.0	3,538.7	3,537.3	11.9	8.7	-179.80	0.0	-126.5	478.6	458.5	20.11	23.803	
3,700.0	3,666.3	3,625.2	3,623.5	12.3	8.8	-179.78	0.1	-134.0	503.4	482.8	20.63	24.402	
3,705.0	3,671.2	3,630.0	3,628.2	12.3	8.8	-179.78	0.1	-134.4	504.8	484.1	20.66	24.434	
3,800.0	3,764.5	3,721.3	3,719.2	12.7	8.9	-179.77	0.2	-142.4	530.9	509.7	21.23	25.015	
3,895.0	3,857.7	3,812.6	3,810.2	13.1	9.0	-179.75	0.4	-150.3	557.1	535.3	21.81	25.549	
3,900.0	3,862.6	3,817.5	3,815.0	13.1	9.0	-179.75	0.4	-150.8	558.5	536.7	21.84	25.576	
3,990.0	3,951.0	3,904.0	3,901.2	13.5	9.1	-179.74	0.5	-158.3	583.3	560.9	22.40	26.042	
4,000.0	3,960.8	3,913.6	3,910.7	13.6	9.1	-179.74	0.5	-159.1	586.1	563.6	22.46	26.091	
4,085.0	4,044.2	3,995.3	3,992.1	13.9	9.3	-179.73	0.6	-166.3	609.5	586.5	23.00	26.494	
4,100.0	4,059.0	4,009.7	4,006.5	14.0	9.3	-179.72	0.6	-167.5	613.6	590.5	23.10	26.563	
4,180.0	4,137.5	4,086.6	4,083.1	14.4	9.5	-179.72	0.8	-174.2	635.7	612.1	23.62	26.911	
4,200.0	4,157.1	4,105.8	4,102.3	14.4	9.5	-179.71	0.8	-175.9	641.2	617.4	23.75	26.995	
4,275.0	4,230.7	4,177.9	4,174.1	14.8	9.7	-179.70	0.9	-182.2	661.9	637.6	24.25	27.296	
4,300.0	4,255.3	4,202.0	4,198.0	14.9	9.8	-179.70	0.9	-184.3	668.7	644.3	24.41	27.393	
4,370.0	4,324.0	4,269.3	4,265.1	15.2	9.9	-179.70	1.0	-190.1	688.0	663.2	24.88	27.650	
4,400.0	4,353.5	4,298.1	4,293.8	15.3	10.0	-179.69	1.1	-192.6	696.3	671.2	25.09	27.757	
4,465.0	4,417.3	4,360.6	4,356.0	15.6	10.2	-179.69	1.2	-198.1	714.2	688.7	25.53	27.977	
4,500.0	4,451.6	4,394.2	4,389.5	15.7	10.3	-179.68	1.2	-201.0	723.9	698.1	25.77	28.092	
4,560.0	4,510.5	4,451.9	4,447.0	16.0	10.4	-179.68	1.3	-206.0	740.4	714.2	26.18	28.280	
4,600.0	4,549.8	4,490.3	4,485.3	16.2	10.5	-179.68	1.4	-209.4	751.4	725.0	26.46	28.401	
4,655.0	4,603.8	4,543.2	4,538.0	16.4	10.7	-179.67	1.4	-214.0	766.6	739.7	26.84	28.559	
4,700.0	4,647.9	4,586.5	4,581.1	16.6	10.8	-179.67	1.5	-217.8	779.0	751.8	27.16	28.684	
4,750.0	4,697.0	4,634.5	4,628.9	16.9	10.9	-179.66	1.6	-222.0	792.8	765.3	27.51	28.818	
4,800.0	4,746.1	4,682.6	4,676.8	17.1	11.1	-179.66	1.6	-226.2	806.5	778.7	27.86	28.946	
4,845.0	4,790.3	4,725.9	4,719.9	17.3	11.2	-179.66	1.7	-229.9	819.0	790.8	28.18	29.057	
4,900.0	4,844.3	4,778.7	4,772.6	17.5	11.3	-179.65	1.8	-234.5	834.1	805.5	28.58	29.188	
4,940.0	4,883.5	4,817.2	4,810.9	17.7	11.4	-179.65	1.8	-237.9	845.1	816.3	28.86	29.279	
5,000.0	4,942.4	4,874.8	4,868.3	18.0	11.6	-179.65	1.9	-242.9	861.7	832.4	29.30	29.411	
5,035.0	4,976.8	4,908.5	4,901.9	18.1	11.7	-179.65	2.0	-245.8	871.3	841.8	29.55	29.485	
5,100.0	5,040.6	4,971.0	4,964.1	18.4	11.9	-179.64	2.1	-251.3	889.2	859.2	30.02	29.617	

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 #713H
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 #713H	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
5,130.0	5,070.0	4,999.8	4,992.8	18.5	12.0	-179.64	2.1	-253.8	897.5	867.3	30.24	29.677	
5,200.0	5,138.8	5,067.1	5,059.9	18.9	12.2	-179.64	2.2	-259.7	916.8	886.0	30.76	29.809	
5,225.0	5,163.3	5,091.1	5,083.8	19.0	12.3	-179.63	2.2	-261.8	923.7	892.7	30.94	29.854	
5,300.0	5,236.9	5,163.2	5,155.6	19.3	12.5	-179.63	2.3	-268.0	944.4	912.9	31.49	29.992	
5,320.0	5,256.5	5,182.5	5,174.8	19.4	12.5	-179.63	2.4	-269.7	949.9	918.2	31.63	30.028	
5,400.0	5,335.1	5,274.0	5,266.0	19.8	12.8	-179.63	2.5	-277.0	971.4	939.0	32.33	30.048	
5,415.0	5,349.8	5,291.4	5,283.4	19.8	12.9	-179.63	2.5	-278.3	975.3	942.8	32.46	30.045	
5,500.0	5,433.2	5,390.8	5,382.7	20.2	13.2	-179.62	2.6	-284.3	996.5	963.3	33.20	30.013	
5,510.0	5,443.1	5,402.6	5,394.4	20.3	13.2	-179.62	2.6	-284.9	998.9	965.6	33.29	30.007	
5,600.0	5,531.4	5,508.9	5,500.6	20.7	13.5	-179.63	2.7	-289.2	1,019.6	985.6	34.05	29.943	
5,605.0	5,536.3	5,514.8	5,506.5	20.7	13.5	-179.63	2.7	-289.4	1,020.7	986.7	34.09	29.942	
5,700.0	5,629.6	5,628.1	5,619.7	21.1	13.8	-179.63	2.7	-291.7	1,040.8	1,005.9	34.83	29.880	
5,795.0	5,722.8	5,732.1	5,723.8	21.5	13.9	-179.64	2.8	-292.0	1,059.1	1,023.8	35.39	29.929	
5,800.0	5,727.7	5,737.1	5,728.7	21.6	13.9	-179.64	2.8	-292.0	1,060.1	1,024.7	35.41	29.935	
5,890.0	5,816.1	5,825.4	5,817.1	22.0	13.9	-179.64	2.8	-292.0	1,077.3	1,041.4	35.87	30.034	
5,900.0	5,825.9	5,835.2	5,826.9	22.0	13.9	-179.64	2.8	-292.0	1,079.2	1,043.3	35.92	30.045	
5,985.0	5,909.3	5,918.7	5,910.3	22.4	14.0	-179.65	2.8	-292.0	1,095.4	1,059.0	36.35	30.135	
6,000.0	5,924.1	5,933.4	5,925.1	22.5	14.0	-179.65	2.8	-292.0	1,098.3	1,061.8	36.43	30.151	
6,080.0	6,002.6	6,011.9	6,003.6	22.8	14.0	-179.66	2.8	-292.0	1,113.5	1,076.7	36.83	30.233	
6,100.0	6,022.2	6,031.5	6,023.2	22.9	14.0	-179.66	2.8	-292.0	1,117.3	1,080.4	36.93	30.254	
6,148.7	6,070.0	6,079.3	6,071.0	23.1	14.0	-179.66	2.8	-292.0	1,126.6	1,089.5	37.17	30.309	
6,175.0	6,095.9	6,105.2	6,096.9	23.3	14.1	-179.66	2.8	-292.0	1,131.6	1,094.3	37.30	30.338	
6,200.0	6,120.4	6,129.7	6,121.4	23.4	14.1	-179.66	2.8	-292.0	1,136.2	1,098.8	37.42	30.362	
6,270.0	6,189.3	6,198.7	6,190.3	23.7	14.1	-179.67	2.8	-292.0	1,148.5	1,110.7	37.77	30.407	
6,300.0	6,218.9	6,228.2	6,219.9	23.8	14.1	-179.67	2.8	-292.0	1,153.5	1,115.6	37.92	30.419	
6,365.0	6,283.1	6,292.4	6,284.1	24.1	14.2	-179.67	2.8	-292.0	1,163.9	1,125.6	38.24	30.436	
6,400.0	6,317.7	6,327.0	6,318.7	24.2	14.2	-179.67	2.8	-292.0	1,169.2	1,130.7	38.41	30.437	
6,460.0	6,377.1	6,386.4	6,378.1	24.5	14.2	-179.68	2.8	-292.0	1,177.7	1,139.0	38.70	30.431	
6,500.0	6,416.7	6,426.0	6,417.7	24.7	14.2	-179.68	2.8	-292.0	1,183.0	1,144.2	38.89	30.418	
6,555.0	6,471.3	6,480.6	6,472.3	24.9	14.3	-179.68	2.8	-292.0	1,190.0	1,150.8	39.15	30.394	
6,600.0	6,516.0	6,525.3	6,517.0	25.1	14.3	-179.68	2.8	-292.0	1,195.2	1,155.8	39.36	30.365	
6,650.0	6,565.7	6,575.0	6,566.7	25.3	14.3	-179.68	2.8	-292.0	1,200.6	1,161.1	39.59	30.328	
6,700.0	6,615.4	6,624.7	6,616.4	25.5	14.3	-179.69	2.8	-292.0	1,205.6	1,165.8	39.82	30.280	
6,745.0	6,660.2	6,669.6	6,661.2	25.7	14.4	-179.69	2.8	-292.0	1,209.8	1,169.8	40.01	30.233	
6,800.0	6,715.0	6,724.4	6,716.0	25.9	14.4	-179.69	2.8	-292.0	1,214.3	1,174.1	40.26	30.165	
6,840.0	6,754.9	6,764.2	6,755.9	26.0	14.4	-179.69	2.8	-292.0	1,217.3	1,176.9	40.43	30.113	
6,900.0	6,814.8	6,824.1	6,815.8	26.2	14.4	-179.69	2.8	-292.0	1,221.3	1,180.6	40.68	30.023	
6,935.0	6,849.7	6,859.1	6,850.7	26.4	14.5	-179.69	2.8	-292.0	1,223.3	1,182.5	40.82	29.970	
7,000.0	6,914.7	6,924.0	6,915.7	26.6	14.5	-179.69	2.8	-292.0	1,226.5	1,185.4	41.08	29.859	
7,030.0	6,944.6	6,954.0	6,945.6	26.7	14.5	-179.69	2.8	-292.0	1,227.7	1,186.5	41.19	29.809	
7,100.0	7,014.6	7,023.9	7,015.6	26.9	14.6	-179.69	2.8	-292.0	1,230.0	1,188.5	41.44	29.677	
7,125.0	7,039.6	7,048.9	7,040.6	27.0	14.6	-179.69	2.8	-292.0	1,230.6	1,189.0	41.52	29.635	
7,200.0	7,114.6	7,123.9	7,115.6	27.2	14.6	-179.69	2.8	-292.0	1,231.7	1,189.9	41.76	29.492	
7,220.0	7,134.6	7,143.9	7,135.6	27.2	14.6	-179.69	2.8	-292.0	1,231.8	1,190.0	41.80	29.471	
7,248.7	7,163.3	7,172.6	7,164.3	27.2	14.6	-90.44	2.8	-292.0	1,231.9	1,190.0	41.85	29.438	
7,300.0	7,214.6	7,223.9	7,215.6	27.2	14.7	-90.44	2.8	-292.0	1,231.9	1,190.0	41.88	29.414	
7,315.0	7,229.6	7,238.9	7,230.6	27.2	14.7	-90.44	2.8	-292.0	1,231.9	1,190.0	41.89	29.405	
7,400.0	7,314.6	7,323.9	7,315.6	27.2	14.7	-90.44	2.8	-292.0	1,231.9	1,189.9	41.97	29.354	
7,410.0	7,324.6	7,333.9	7,325.6	27.2	14.7	-90.44	2.8	-292.0	1,231.9	1,189.9	41.97	29.348	
7,500.0	7,414.6	7,423.9	7,415.6	27.3	14.8	-90.44	2.8	-292.0	1,231.9	1,189.8	42.05	29.295	
7,505.0	7,419.6	7,428.9	7,420.6	27.3	14.8	-90.44	2.8	-292.0	1,231.9	1,189.8	42.06	29.292	
7,600.0	7,514.6	7,523.9	7,515.6	27.3	14.8	-90.44	2.8	-292.0	1,231.9	1,189.8	42.14	29.236	

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 #713H
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 #713H	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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,695.0	7,609.6	7,618.9	7,610.6	27.3	14.9	-90.44	2.8	-292.0	1,231.9	1,189.7	42.22	29.179	
7,700.0	7,614.6	7,623.9	7,615.6	27.3	14.9	-90.44	2.8	-292.0	1,231.9	1,189.7	42.22	29.176	
7,790.0	7,704.6	7,713.9	7,705.6	27.3	15.0	-90.44	2.8	-292.0	1,231.9	1,189.6	42.30	29.123	
7,800.0	7,714.6	7,723.9	7,715.6	27.4	15.0	-90.44	2.8	-292.0	1,231.9	1,189.6	42.31	29.117	
7,885.0	7,799.6	7,808.9	7,800.6	27.4	15.0	-90.44	2.8	-292.0	1,231.9	1,189.5	42.38	29.066	
7,900.0	7,814.6	7,823.9	7,815.6	27.4	15.0	-90.44	2.8	-292.0	1,231.9	1,189.5	42.39	29.058	
7,980.0	7,894.6	7,903.9	7,895.6	27.4	15.1	-90.44	2.8	-292.0	1,231.9	1,189.4	42.46	29.010	
8,000.0	7,914.6	7,923.9	7,915.6	27.4	15.1	-90.44	2.8	-292.0	1,231.9	1,189.4	42.48	28.998	
8,075.0	7,989.6	7,998.9	7,990.6	27.4	15.1	-90.44	2.8	-292.0	1,231.9	1,189.3	42.55	28.953	
8,100.0	8,014.6	8,023.9	8,015.6	27.4	15.1	-90.44	2.8	-292.0	1,231.9	1,189.3	42.57	28.938	
8,170.0	8,084.6	8,093.9	8,085.6	27.5	15.2	-90.44	2.8	-292.0	1,231.9	1,189.3	42.63	28.897	
8,200.0	8,114.6	8,123.9	8,115.6	27.5	15.2	-90.44	2.8	-292.0	1,231.9	1,189.2	42.66	28.879	
8,265.0	8,179.6	8,188.9	8,180.6	27.5	15.2	-90.44	2.8	-292.0	1,231.9	1,189.2	42.71	28.840	
8,300.0	8,214.6	8,223.9	8,215.6	27.5	15.3	-90.44	2.8	-292.0	1,231.9	1,189.1	42.75	28.819	
8,360.0	8,274.6	8,283.9	8,275.6	27.5	15.3	-90.44	2.8	-292.0	1,231.9	1,189.1	42.80	28.783	
8,400.0	8,314.6	8,323.9	8,315.6	27.5	15.3	-90.44	2.8	-292.0	1,231.9	1,189.1	42.83	28.759	
8,455.0	8,369.6	8,378.9	8,370.6	27.5	15.3	-90.44	2.8	-292.0	1,231.9	1,189.0	42.88	28.726	
8,500.0	8,414.6	8,423.9	8,415.6	27.6	15.4	-90.44	2.8	-292.0	1,231.9	1,189.0	42.92	28.700	
8,550.0	8,464.6	8,473.9	8,465.6	27.6	15.4	-90.44	2.8	-292.0	1,231.9	1,188.9	42.97	28.670	
8,600.0	8,514.6	8,523.9	8,515.6	27.6	15.4	-90.44	2.8	-292.0	1,231.9	1,188.9	43.01	28.640	
8,645.0	8,559.6	8,568.9	8,560.6	27.6	15.5	-90.44	2.8	-292.0	1,231.9	1,188.8	43.05	28.613	
8,700.0	8,614.6	8,623.9	8,615.6	27.6	15.5	-90.44	2.8	-292.0	1,231.9	1,188.8	43.10	28.580	
8,740.0	8,654.6	8,663.9	8,655.6	27.6	15.5	-90.44	2.8	-292.0	1,231.9	1,188.8	43.14	28.556	
8,800.0	8,714.6	8,723.9	8,715.6	27.6	15.6	-90.44	2.8	-292.0	1,231.9	1,188.7	43.19	28.520	
8,835.0	8,749.6	8,758.9	8,750.6	27.7	15.6	-90.44	2.8	-292.0	1,231.9	1,188.7	43.23	28.499	
8,900.0	8,814.6	8,823.9	8,815.6	27.7	15.6	-90.44	2.8	-292.0	1,231.9	1,188.6	43.28	28.460	
8,930.0	8,844.6	8,853.9	8,845.6	27.7	15.6	-90.44	2.8	-292.0	1,231.9	1,188.6	43.31	28.442	
9,000.0	8,914.6	8,923.9	8,915.6	27.7	15.7	-90.44	2.8	-292.0	1,231.9	1,188.5	43.38	28.401	
9,025.0	8,939.6	8,948.9	8,940.6	27.7	15.7	-90.44	2.8	-292.0	1,231.9	1,188.5	43.40	28.386	
9,100.0	9,014.6	9,023.9	9,015.6	27.7	15.7	-90.44	2.8	-292.0	1,231.9	1,188.4	43.47	28.341	
9,120.0	9,034.6	9,043.9	9,035.6	27.7	15.7	-90.44	2.8	-292.0	1,231.9	1,188.4	43.49	28.329	
9,200.0	9,114.6	9,123.9	9,115.6	27.8	15.8	-90.44	2.8	-292.0	1,231.9	1,188.3	43.56	28.281	
9,215.0	9,129.6	9,138.9	9,130.6	27.8	15.8	-90.44	2.8	-292.0	1,231.9	1,188.3	43.57	28.272	
9,300.0	9,214.6	9,223.9	9,215.6	27.8	15.9	-90.44	2.8	-292.0	1,231.9	1,188.2	43.65	28.221	
9,310.0	9,224.6	9,233.9	9,225.6	27.8	15.9	-90.44	2.8	-292.0	1,231.9	1,188.2	43.66	28.215	
9,400.0	9,314.6	9,323.9	9,315.6	27.8	15.9	-90.44	2.8	-292.0	1,231.9	1,188.1	43.74	28.161	
9,405.0	9,319.6	9,328.9	9,320.6	27.8	15.9	-90.44	2.8	-292.0	1,231.9	1,188.1	43.75	28.158	
9,500.0	9,414.6	9,423.9	9,415.6	27.9	16.0	-90.44	2.8	-292.0	1,231.9	1,188.1	43.84	28.101	
9,595.0	9,509.6	9,518.9	9,510.6	27.9	16.0	-90.44	2.8	-292.0	1,231.9	1,188.0	43.93	28.045	
9,600.0	9,514.6	9,523.9	9,515.6	27.9	16.0	-90.44	2.8	-292.0	1,231.9	1,188.0	43.93	28.042	
9,690.0	9,604.6	9,613.9	9,605.6	27.9	16.1	-90.44	2.8	-292.0	1,231.9	1,187.9	44.02	27.988	
9,700.0	9,614.6	9,623.9	9,615.6	27.9	16.1	-90.44	2.8	-292.0	1,231.9	1,187.9	44.02	27.982	
9,785.0	9,699.6	9,708.9	9,700.6	28.0	16.2	-90.44	2.8	-292.0	1,231.9	1,187.8	44.10	27.931	
9,800.0	9,714.6	9,723.9	9,715.6	28.0	16.2	-90.44	2.8	-292.0	1,231.9	1,187.8	44.12	27.922	
9,880.0	9,794.6	9,803.9	9,795.6	28.0	16.2	-90.44	2.8	-292.0	1,231.9	1,187.7	44.19	27.874	
9,900.0	9,814.6	9,823.9	9,815.6	28.0	16.2	-90.44	2.8	-292.0	1,231.9	1,187.7	44.21	27.862	
9,975.0	9,889.6	9,898.9	9,890.6	28.0	16.3	-90.44	2.8	-292.0	1,231.9	1,187.6	44.28	27.817	
10,000.0	9,914.6	9,923.9	9,915.6	28.0	16.3	-90.44	2.8	-292.0	1,231.9	1,187.6	44.31	27.802	
10,070.0	9,984.6	9,993.9	9,985.6	28.0	16.3	-90.44	2.8	-292.0	1,231.9	1,187.5	44.38	27.761	
10,100.0	10,014.6	10,023.9	10,015.6	28.1	16.4	-90.44	2.8	-292.0	1,231.9	1,187.5	44.40	27.743	
10,165.0	10,079.6	10,088.9	10,080.6	28.1	16.4	-90.44	2.8	-292.0	1,231.9	1,187.4	44.47	27.704	
10,200.0	10,114.6	10,123.9	10,115.6	28.1	16.4	-90.44	2.8	-292.0	1,231.9	1,187.4	44.50	27.683	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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
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	10,174.6	10,183.9	10,175.6	28.1	16.5	-90.44	2.8	-292.0	1,231.9	1,187.3	44.56	27.647	
10,300.0	10,214.6	10,223.9	10,215.6	28.1	16.5	-90.44	2.8	-292.0	1,231.9	1,187.3	44.60	27.623	
10,355.0	10,269.6	10,278.9	10,270.6	28.1	16.5	-90.44	2.8	-292.0	1,231.9	1,187.2	44.65	27.591	
10,400.0	10,314.6	10,323.9	10,315.6	28.2	16.5	-90.44	2.8	-292.0	1,231.9	1,187.2	44.69	27.564	
10,450.0	10,364.6	10,373.9	10,365.6	28.2	16.6	-90.44	2.8	-292.0	1,231.9	1,187.1	44.74	27.534	
10,500.0	10,414.6	10,423.9	10,415.6	28.2	16.6	-90.44	2.8	-292.0	1,231.9	1,187.1	44.79	27.504	
10,545.0	10,459.6	10,468.9	10,460.6	28.2	16.6	-90.44	2.8	-292.0	1,231.9	1,187.1	44.83	27.477	
10,600.0	10,514.6	10,523.9	10,515.6	28.2	16.7	-90.44	2.8	-292.0	1,231.9	1,187.0	44.89	27.445	
10,640.0	10,554.6	10,563.9	10,555.6	28.2	16.7	-90.44	2.8	-292.0	1,231.9	1,187.0	44.93	27.421	
10,700.0	10,614.6	10,623.9	10,615.6	28.3	16.7	-90.44	2.8	-292.0	1,231.9	1,186.9	44.98	27.385	
10,735.0	10,649.6	10,658.9	10,650.6	28.3	16.8	-90.44	2.8	-292.0	1,231.9	1,186.9	45.02	27.364	
10,800.0	10,714.6	10,723.9	10,715.6	28.3	16.8	-90.44	2.8	-292.0	1,231.9	1,186.8	45.08	27.326	
10,830.0	10,744.6	10,753.9	10,745.6	28.3	16.8	-90.44	2.8	-292.0	1,231.9	1,186.8	45.11	27.308	
10,900.0	10,814.6	10,823.9	10,815.6	28.3	16.9	-90.44	2.8	-292.0	1,231.9	1,186.7	45.18	27.266	
10,925.0	10,839.6	10,848.9	10,840.6	28.3	16.9	-90.44	2.8	-292.0	1,231.9	1,186.7	45.20	27.251	
11,000.0	10,914.6	10,923.9	10,915.6	28.4	16.9	-90.44	2.8	-292.0	1,231.9	1,186.6	45.28	27.207	
11,020.0	10,934.6	10,943.9	10,935.6	28.4	16.9	-90.44	2.8	-292.0	1,231.9	1,186.6	45.30	27.196	
11,062.0	10,976.5	10,985.9	10,977.5	28.4	17.0	-90.44	2.8	-292.0	1,231.9	1,186.6	45.33	27.175	
11,075.0	10,989.6	10,998.9	10,990.6	28.4	17.0	-89.94	2.8	-292.0	1,231.9	1,186.5	45.34	27.169	
11,100.0	11,014.5	11,023.9	11,015.5	28.4	17.0	-90.00	2.8	-292.0	1,231.9	1,186.5	45.36	27.158	
11,100.7	11,015.2	11,024.5	11,016.2	28.4	17.0	-90.00	2.8	-292.0	1,231.9	1,186.5	45.36	27.158	
11,115.0	11,029.5	11,038.8	11,030.5	28.4	17.0	-90.06	2.8	-292.0	1,231.9	1,186.5	45.37	27.152	
11,125.0	11,039.4	11,048.7	11,040.4	28.4	17.0	-90.12	2.8	-292.0	1,231.9	1,186.5	45.38	27.148	
11,150.0	11,064.1	11,073.4	11,065.1	28.4	17.0	-90.30	2.8	-292.0	1,231.9	1,186.5	45.39	27.138	
11,175.0	11,088.5	11,097.9	11,089.5	28.4	17.0	-90.53	2.8	-292.0	1,231.9	1,186.5	45.41	27.129	
11,200.0	11,112.7	11,122.0	11,113.7	28.4	17.0	-90.81	2.8	-292.0	1,232.0	1,186.6	45.42	27.125	
11,210.0	11,122.2	11,131.5	11,123.2	28.4	17.0	-90.94	2.8	-292.0	1,232.1	1,186.6	45.42	27.125	
11,225.0	11,136.4	11,145.8	11,137.4	28.4	17.1	-91.14	2.8	-292.0	1,232.2	1,186.7	45.43	27.124	
11,250.0	11,159.8	11,170.1	11,161.8	28.4	17.1	-91.51	3.0	-292.0	1,232.4	1,186.9	45.43	27.126	
11,275.0	11,182.6	11,195.6	11,187.2	28.4	17.1	-91.90	4.4	-292.0	1,232.7	1,187.2	45.44	27.128	
11,300.0	11,204.8	11,221.6	11,213.0	28.4	17.1	-92.28	7.3	-292.0	1,233.0	1,187.6	45.45	27.131	
11,305.0	11,209.2	11,226.8	11,218.3	28.4	17.1	-92.36	8.0	-292.0	1,233.1	1,187.6	45.45	27.132	
11,325.0	11,226.5	11,248.1	11,239.2	28.4	17.1	-92.67	11.6	-292.0	1,233.4	1,188.0	45.46	27.134	
11,350.0	11,247.4	11,275.3	11,265.7	28.4	17.1	-93.05	17.6	-292.1	1,233.9	1,188.4	45.47	27.136	
11,375.0	11,267.6	11,303.1	11,292.5	28.4	17.1	-93.43	25.3	-292.2	1,234.4	1,188.9	45.49	27.138	
11,400.0	11,287.0	11,331.6	11,319.3	28.4	17.1	-93.81	34.7	-292.3	1,235.0	1,189.5	45.51	27.139	
11,425.0	11,305.6	11,360.8	11,346.2	28.4	17.1	-94.18	46.0	-292.4	1,235.6	1,190.0	45.53	27.138	
11,450.0	11,323.2	11,390.7	11,373.0	28.4	17.1	-94.55	59.3	-292.5	1,236.2	1,190.7	45.56	27.135	
11,475.0	11,340.0	11,421.3	11,399.5	28.4	17.1	-94.91	74.7	-292.6	1,236.9	1,191.3	45.59	27.130	
11,495.0	11,352.6	11,446.4	11,420.5	28.4	17.1	-95.19	88.4	-292.7	1,237.4	1,191.8	45.62	27.123	
11,500.0	11,355.7	11,452.7	11,425.6	28.4	17.1	-95.26	92.1	-292.8	1,237.6	1,191.9	45.63	27.121	
11,525.0	11,370.3	11,484.9	11,451.2	28.4	17.1	-95.59	111.7	-293.0	1,238.3	1,192.6	45.68	27.109	
11,550.0	11,383.9	11,517.9	11,475.9	28.4	17.1	-95.92	133.6	-293.2	1,239.0	1,193.2	45.73	27.094	
11,575.0	11,396.4	11,551.7	11,499.5	28.5	17.1	-96.23	157.6	-293.4	1,239.7	1,193.9	45.79	27.074	
11,590.0	11,403.3	11,572.3	11,513.2	28.5	17.1	-96.40	173.1	-293.5	1,240.1	1,194.2	45.83	27.059	
11,600.0	11,407.7	11,586.2	11,521.9	28.5	17.1	-96.52	183.9	-293.6	1,240.3	1,194.5	45.86	27.049	
11,625.0	11,417.9	11,621.5	11,542.8	28.5	17.2	-96.79	212.4	-293.9	1,241.0	1,195.0	45.93	27.020	
11,650.0	11,426.8	11,657.5	11,561.9	28.5	17.2	-97.03	242.9	-294.1	1,241.6	1,195.5	46.01	26.987	
11,675.0	11,434.5	11,694.2	11,578.9	28.5	17.2	-97.25	275.4	-294.4	1,242.1	1,196.0	46.09	26.950	
11,685.0	11,437.2	11,709.1	11,585.0	28.5	17.2	-97.33	288.9	-294.6	1,242.3	1,196.2	46.12	26.933	
11,700.0	11,440.9	11,731.5	11,593.5	28.5	17.2	-97.44	309.7	-294.8	1,242.5	1,196.4	46.18	26.909	
11,725.0	11,446.1	11,769.3	11,605.6	28.5	17.3	-97.60	345.5	-295.1	1,242.9	1,196.7	46.27	26.865	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
11,750.0	11,450.0	11,807.5	11,614.9	28.6	17.3	-97.72	382.5	-295.4	1,243.2	1,196.9	46.36	26.818	
11,775.0	11,452.6	11,846.0	11,621.3	28.6	17.4	-97.80	420.5	-295.8	1,243.5	1,197.0	46.45	26.770	
11,780.0	11,452.9	11,853.8	11,622.2	28.6	17.4	-97.82	428.2	-295.8	1,243.5	1,197.0	46.47	26.760	
11,800.0	11,453.8	11,884.8	11,624.5	28.6	17.4	-97.85	459.1	-296.1	1,243.6	1,197.0	46.54	26.720	
11,812.0	11,454.0	11,903.3	11,625.0	28.6	17.4	-97.86	477.7	-296.3	1,243.6	1,197.0	46.58	26.696	
11,875.0	11,454.0	11,967.3	11,625.0	28.7	17.6	-97.86	541.6	-296.9	1,243.6	1,196.8	46.77	26.590	
11,900.0	11,454.0	11,992.3	11,625.0	28.7	17.6	-97.86	566.6	-297.1	1,243.6	1,196.7	46.84	26.549	
11,970.0	11,454.0	12,062.3	11,625.0	28.8	17.8	-97.86	636.6	-297.7	1,243.6	1,196.5	47.08	26.414	
12,000.0	11,454.0	12,092.3	11,625.0	28.9	17.8	-97.86	666.6	-298.0	1,243.6	1,196.4	47.19	26.355	
12,065.0	11,454.0	12,157.3	11,625.0	29.0	18.0	-97.86	731.6	-298.6	1,243.6	1,196.2	47.44	26.214	
12,100.0	11,454.0	12,192.3	11,625.0	29.0	18.1	-97.86	766.6	-298.9	1,243.6	1,196.0	47.58	26.138	
12,160.0	11,454.0	12,252.3	11,625.0	29.1	18.2	-97.86	826.6	-299.4	1,243.6	1,195.8	47.84	25.994	
12,200.0	11,454.0	12,292.3	11,625.0	29.2	18.3	-97.86	866.6	-299.8	1,243.6	1,195.6	48.02	25.899	
12,255.0	11,454.0	12,347.3	11,625.0	29.3	18.5	-97.86	921.6	-300.3	1,243.6	1,195.3	48.28	25.756	
12,300.0	11,454.0	12,392.3	11,625.0	29.4	18.6	-97.86	966.6	-300.7	1,243.6	1,195.1	48.50	25.639	
12,350.0	11,454.0	12,442.3	11,625.0	29.5	18.8	-97.86	1,016.6	-301.2	1,243.6	1,194.8	48.77	25.500	
12,400.0	11,454.0	12,492.3	11,625.0	29.6	19.0	-97.86	1,066.6	-301.6	1,243.6	1,194.6	49.03	25.362	
12,445.0	11,454.0	12,537.3	11,625.0	29.7	19.1	-97.86	1,111.6	-302.0	1,243.6	1,194.3	49.29	25.230	
12,500.0	11,454.0	12,592.3	11,625.0	29.8	19.3	-97.86	1,166.6	-302.5	1,243.6	1,194.0	49.61	25.069	
12,540.0	11,454.0	12,632.3	11,625.0	29.9	19.5	-97.86	1,206.6	-302.9	1,243.6	1,193.8	49.85	24.946	
12,600.0	11,454.0	12,692.3	11,625.0	30.1	19.7	-97.86	1,266.6	-303.4	1,243.6	1,193.4	50.22	24.763	
12,635.0	11,454.0	12,727.3	11,625.0	30.2	19.8	-97.86	1,301.6	-303.8	1,243.6	1,193.2	50.45	24.651	
12,700.0	11,454.0	12,792.3	11,625.0	30.3	20.1	-97.86	1,366.6	-304.3	1,243.6	1,192.8	50.88	24.445	
12,730.0	11,454.0	12,822.3	11,625.0	30.4	20.2	-97.86	1,396.6	-304.6	1,243.6	1,192.6	51.08	24.346	
12,800.0	11,454.0	12,892.3	11,625.0	30.6	20.5	-97.86	1,466.6	-305.3	1,243.6	1,192.1	51.57	24.117	
12,825.0	11,454.0	12,917.3	11,625.0	30.7	20.6	-97.86	1,491.6	-305.5	1,243.6	1,191.9	51.75	24.033	
12,900.0	11,454.0	12,992.3	11,625.0	30.9	21.0	-97.86	1,566.6	-306.2	1,243.6	1,191.3	52.29	23.782	
12,920.0	11,454.0	13,012.3	11,625.0	31.0	21.0	-97.86	1,586.6	-306.3	1,243.6	1,191.2	52.44	23.714	
13,000.0	11,454.0	13,092.3	11,625.0	31.2	21.4	-97.86	1,666.6	-307.1	1,243.6	1,190.6	53.05	23.442	
13,015.0	11,454.0	13,107.3	11,625.0	31.3	21.5	-97.86	1,681.6	-307.2	1,243.6	1,190.5	53.17	23.390	
13,100.0	11,454.0	13,192.3	11,625.0	31.6	21.9	-97.86	1,766.6	-308.0	1,243.7	1,189.8	53.85	23.096	
13,110.0	11,454.0	13,202.3	11,625.0	31.6	21.9	-97.86	1,776.6	-308.1	1,243.7	1,189.7	53.93	23.061	
13,200.0	11,454.0	13,292.3	11,625.0	31.9	22.4	-97.86	1,866.6	-308.9	1,243.7	1,189.0	54.67	22.748	
13,205.0	11,454.0	13,297.3	11,625.0	31.9	22.4	-97.86	1,871.6	-308.9	1,243.7	1,188.9	54.71	22.731	
13,300.0	11,454.0	13,392.3	11,625.0	32.3	22.9	-97.86	1,966.6	-309.8	1,243.7	1,188.1	55.52	22.398	
13,395.0	11,454.0	13,487.3	11,625.0	32.6	23.4	-97.86	2,061.5	-310.7	1,243.7	1,187.3	56.36	22.065	
13,400.0	11,454.0	13,492.3	11,625.0	32.6	23.4	-97.86	2,066.5	-310.7	1,243.7	1,187.3	56.41	22.048	
13,490.0	11,454.0	13,582.3	11,625.0	33.0	23.9	-97.86	2,156.5	-311.5	1,243.7	1,186.4	57.22	21.733	
13,500.0	11,454.0	13,592.3	11,625.0	33.0	23.9	-97.86	2,166.5	-311.6	1,243.7	1,186.4	57.32	21.699	
13,585.0	11,454.0	13,677.3	11,625.0	33.4	24.4	-97.86	2,251.5	-312.4	1,243.7	1,185.6	58.11	21.402	
13,600.0	11,454.0	13,692.3	11,625.0	33.4	24.5	-97.86	2,266.5	-312.5	1,243.7	1,185.4	58.25	21.351	
13,680.0	11,454.0	13,772.3	11,625.0	33.7	24.9	-97.86	2,346.5	-313.2	1,243.7	1,184.7	59.02	21.073	
13,700.0	11,454.0	13,792.3	11,625.0	33.8	25.0	-97.86	2,366.5	-313.4	1,243.7	1,184.5	59.21	21.005	
13,775.0	11,454.0	13,867.3	11,625.0	34.1	25.4	-97.86	2,441.5	-314.1	1,243.7	1,183.7	59.94	20.747	
13,800.0	11,454.0	13,892.3	11,625.0	34.3	25.6	-97.86	2,466.5	-314.3	1,243.7	1,183.5	60.19	20.663	
13,870.0	11,454.0	13,962.3	11,625.0	34.6	26.0	-97.86	2,536.5	-315.0	1,243.7	1,182.8	60.89	20.424	
13,900.0	11,454.0	13,992.3	11,625.0	34.7	26.2	-97.86	2,566.5	-315.2	1,243.7	1,182.5	61.19	20.324	
13,965.0	11,454.0	14,057.3	11,625.0	35.0	26.5	-97.86	2,631.5	-315.8	1,243.7	1,181.8	61.86	20.105	
14,000.0	11,454.0	14,092.3	11,625.0	35.1	26.7	-97.86	2,666.5	-316.1	1,243.7	1,181.5	62.22	19.989	
14,060.0	11,454.0	14,152.3	11,625.0	35.4	27.1	-97.86	2,726.5	-316.7	1,243.7	1,180.9	62.84	19.790	
14,100.0	11,454.0	14,192.3	11,625.0	35.6	27.3	-97.86	2,766.5	-317.0	1,243.7	1,180.4	63.26	19.660	
14,155.0	11,454.0	14,247.3	11,625.0	35.9	27.7	-97.86	2,821.5	-317.5	1,243.7	1,179.9	63.85	19.480	

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 #713H
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 #713H	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	
14,200.0	11,454.0	14,292.3	11,625.0	36.1	27.9	-97.86	2,866.5	-318.0	1,243.7	1,179.4	64.32	19.335	
14,250.0	11,454.0	14,342.3	11,625.0	36.3	28.2	-97.86	2,916.5	-318.4	1,243.7	1,178.8	64.86	19.174	
14,300.0	11,454.0	14,392.3	11,625.0	36.5	28.5	-97.86	2,966.5	-318.9	1,243.7	1,178.3	65.41	19.015	
14,345.0	11,454.0	14,437.3	11,625.0	36.8	28.8	-97.86	3,011.5	-319.3	1,243.7	1,177.8	65.90	18.873	
14,400.0	11,454.0	14,492.3	11,625.0	37.0	29.2	-97.86	3,066.5	-319.8	1,243.7	1,177.2	66.50	18.702	
14,440.0	11,454.0	14,532.3	11,625.0	37.2	29.4	-97.86	3,106.5	-320.1	1,243.7	1,176.8	66.95	18.577	
14,500.0	11,454.0	14,592.3	11,625.0	37.5	29.8	-97.86	3,166.5	-320.7	1,243.7	1,176.1	67.62	18.394	
14,535.0	11,454.0	14,627.3	11,625.0	37.7	30.0	-97.86	3,201.5	-321.0	1,243.7	1,175.7	68.01	18.287	
14,600.0	11,454.0	14,692.3	11,625.0	38.0	30.4	-97.86	3,266.5	-321.6	1,243.7	1,175.0	68.75	18.092	
14,630.0	11,454.0	14,722.3	11,625.0	38.2	30.6	-97.86	3,296.5	-321.9	1,243.7	1,174.6	69.09	18.002	
14,700.0	11,454.0	14,792.3	11,625.0	38.5	31.1	-97.86	3,366.5	-322.5	1,243.7	1,173.8	69.89	17.796	
14,725.0	11,454.0	14,817.3	11,625.0	38.7	31.2	-97.86	3,391.5	-322.7	1,243.7	1,173.6	70.18	17.722	
14,800.0	11,454.0	14,892.3	11,625.0	39.1	31.7	-97.86	3,466.5	-323.4	1,243.7	1,172.7	71.05	17.506	
14,820.0	11,454.0	14,912.3	11,625.0	39.2	31.8	-97.86	3,486.5	-323.6	1,243.7	1,172.5	71.28	17.448	
14,900.0	11,454.0	14,992.3	11,625.0	39.6	32.3	-97.86	3,566.5	-324.3	1,243.7	1,171.5	72.22	17.222	
14,915.0	11,454.0	15,007.3	11,625.0	39.7	32.4	-97.86	3,581.5	-324.4	1,243.7	1,171.3	72.40	17.180	
15,000.0	11,454.0	15,092.3	11,625.0	40.1	33.0	-97.86	3,666.5	-325.2	1,243.7	1,170.3	73.40	16.944	
15,010.0	11,454.0	15,102.3	11,625.0	40.2	33.1	-97.86	3,676.5	-325.3	1,243.7	1,170.2	73.52	16.917	
15,100.0	11,454.0	15,192.3	11,625.0	40.7	33.7	-97.86	3,766.5	-326.1	1,243.7	1,169.2	74.60	16.672	
15,105.0	11,454.0	15,197.3	11,625.0	40.7	33.7	-97.86	3,771.5	-326.2	1,243.7	1,169.1	74.66	16.659	
15,200.0	11,454.0	15,292.3	11,625.0	41.2	34.3	-97.86	3,866.5	-327.0	1,243.8	1,167.9	75.81	16.407	
15,295.0	11,454.0	15,387.3	11,625.0	41.8	34.9	-97.86	3,961.5	-327.9	1,243.8	1,166.8	76.96	16.160	
15,300.0	11,454.0	15,392.3	11,625.0	41.8	35.0	-97.86	3,966.5	-327.9	1,243.8	1,166.7	77.02	16.147	
15,390.0	11,454.0	15,482.3	11,625.0	42.3	35.6	-97.86	4,056.5	-328.8	1,243.8	1,165.6	78.13	15.919	
15,400.0	11,454.0	15,492.3	11,625.0	42.3	35.6	-97.86	4,066.5	-328.8	1,243.8	1,165.5	78.25	15.894	
15,485.0	11,454.0	15,577.3	11,625.0	42.8	36.2	-97.86	4,151.5	-329.6	1,243.8	1,164.5	79.31	15.683	
15,500.0	11,454.0	15,592.3	11,625.0	42.9	36.3	-97.86	4,166.5	-329.8	1,243.8	1,164.3	79.49	15.646	
15,580.0	11,454.0	15,672.3	11,625.0	43.4	36.9	-97.86	4,246.5	-330.5	1,243.8	1,163.3	80.49	15.452	
15,600.0	11,454.0	15,692.3	11,625.0	43.5	37.0	-97.86	4,266.5	-330.7	1,243.8	1,163.0	80.74	15.404	
15,675.0	11,454.0	15,767.3	11,625.0	43.9	37.5	-97.86	4,341.5	-331.3	1,243.8	1,162.1	81.69	15.227	
15,700.0	11,454.0	15,792.3	11,625.0	44.1	37.7	-97.86	4,366.5	-331.6	1,243.8	1,161.8	82.00	15.168	
15,770.0	11,454.0	15,862.3	11,625.0	44.5	38.2	-97.86	4,436.4	-332.2	1,243.8	1,160.9	82.89	15.006	
15,800.0	11,454.0	15,892.3	11,625.0	44.7	38.4	-97.86	4,466.4	-332.5	1,243.8	1,160.5	83.27	14.937	
15,865.0	11,454.0	15,957.3	11,625.0	45.0	38.8	-97.86	4,531.4	-333.1	1,243.8	1,159.7	84.09	14.790	
15,900.0	11,454.0	15,992.3	11,625.0	45.3	39.0	-97.86	4,566.4	-333.4	1,243.8	1,159.2	84.54	14.712	
15,960.0	11,454.0	16,052.3	11,625.0	45.6	39.5	-97.86	4,626.4	-333.9	1,243.8	1,158.5	85.31	14.580	
16,000.0	11,454.0	16,092.3	11,625.0	45.9	39.7	-97.86	4,666.4	-334.3	1,243.8	1,158.0	85.82	14.492	
16,055.0	11,454.0	16,147.3	11,625.0	46.2	40.1	-97.86	4,721.4	-334.8	1,243.8	1,157.3	86.53	14.374	
16,100.0	11,454.0	16,192.3	11,625.0	46.5	40.4	-97.86	4,766.4	-335.2	1,243.8	1,156.7	87.11	14.278	
16,150.0	11,454.0	16,242.3	11,625.0	46.8	40.8	-97.86	4,816.4	-335.7	1,243.8	1,156.0	87.76	14.172	
16,200.0	11,454.0	16,292.3	11,625.0	47.1	41.1	-97.86	4,866.4	-336.1	1,243.8	1,155.4	88.41	14.068	
16,245.0	11,454.0	16,337.3	11,625.0	47.3	41.4	-97.86	4,911.4	-336.5	1,243.8	1,154.8	89.00	13.975	
16,300.0	11,454.0	16,392.3	11,625.0	47.7	41.8	-97.86	4,966.4	-337.0	1,243.8	1,154.1	89.72	13.864	
16,340.0	11,454.0	16,432.3	11,625.0	47.9	42.1	-97.86	5,006.4	-337.4	1,243.8	1,153.6	90.24	13.783	
16,400.0	11,454.0	16,492.3	11,625.0	48.3	42.5	-97.86	5,066.4	-337.9	1,243.8	1,152.8	91.03	13.664	
16,435.0	11,454.0	16,527.3	11,625.0	48.5	42.8	-97.86	5,101.4	-338.2	1,243.8	1,152.3	91.49	13.595	
16,500.0	11,454.0	16,592.3	11,625.0	48.9	43.2	-97.86	5,166.4	-338.8	1,243.8	1,151.5	92.35	13.469	
16,530.0	11,454.0	16,622.3	11,625.0	49.1	43.4	-97.86	5,196.4	-339.1	1,243.8	1,151.1	92.74	13.411	
16,600.0	11,454.0	16,692.3	11,625.0	49.5	43.9	-97.86	5,266.4	-339.7	1,243.8	1,150.2	93.67	13.278	
16,625.0	11,454.0	16,717.3	11,625.0	49.7	44.1	-97.86	5,291.4	-340.0	1,243.8	1,149.8	94.00	13.232	
16,700.0	11,454.0	16,792.3	11,625.0	50.2	44.6	-97.86	5,366.4	-340.6	1,243.8	1,148.8	95.00	13.093	
16,720.0	11,454.0	16,812.3	11,625.0	50.3	44.8	-97.86	5,386.4	-340.8	1,243.8	1,148.6	95.27	13.056	

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 #713H
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 #713H	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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,800.0	11,454.0	16,892.3	11,625.0	50.8	45.3	-97.86	5,466.4	-341.6	1,243.8	1,147.5	96.34	12.911	
16,815.0	11,454.0	16,907.3	11,625.0	50.9	45.4	-97.86	5,481.4	-341.7	1,243.8	1,147.3	96.54	12.884	
16,900.0	11,454.0	16,992.3	11,625.0	51.4	46.0	-97.86	5,566.4	-342.5	1,243.8	1,146.2	97.68	12.734	
16,910.0	11,454.0	17,002.3	11,625.0	51.5	46.1	-97.86	5,576.4	-342.6	1,243.8	1,146.0	97.81	12.716	
17,000.0	11,454.0	17,092.3	11,625.0	52.1	46.8	-97.86	5,666.4	-343.4	1,243.8	1,144.8	99.03	12.561	
17,005.0	11,454.0	17,097.3	11,625.0	52.1	46.8	-97.86	5,671.4	-343.4	1,243.8	1,144.7	99.09	12.552	
17,100.0	11,454.0	17,192.3	11,625.0	52.7	47.5	-97.86	5,766.4	-344.3	1,243.8	1,143.5	100.38	12.392	
17,195.0	11,454.0	17,287.3	11,625.0	53.3	48.1	-97.86	5,861.4	-345.1	1,243.9	1,142.2	101.67	12.234	
17,200.0	11,454.0	17,292.3	11,625.0	53.4	48.2	-97.86	5,866.4	-345.2	1,243.9	1,142.1	101.74	12.226	
17,290.0	11,454.0	17,382.3	11,625.0	53.9	48.8	-97.86	5,956.4	-346.0	1,243.9	1,140.9	102.96	12.081	
17,300.0	11,454.0	17,392.3	11,625.0	54.0	48.9	-97.86	5,966.4	-346.1	1,243.9	1,140.8	103.10	12.065	
17,385.0	11,454.0	17,477.3	11,625.0	54.6	49.5	-97.86	6,051.4	-346.9	1,243.9	1,139.6	104.26	11.931	
17,400.0	11,454.0	17,492.3	11,625.0	54.6	49.6	-97.86	6,066.4	-347.0	1,243.9	1,139.4	104.46	11.907	
17,480.0	11,454.0	17,572.3	11,625.0	55.2	50.2	-97.86	6,146.4	-347.7	1,243.9	1,138.3	105.56	11.784	
17,500.0	11,454.0	17,592.3	11,625.0	55.3	50.3	-97.86	6,166.4	-347.9	1,243.9	1,138.0	105.83	11.753	
17,575.0	11,454.0	17,667.3	11,625.0	55.8	50.9	-97.86	6,241.4	-348.6	1,243.9	1,137.0	106.86	11.640	
17,600.0	11,454.0	17,692.3	11,625.0	56.0	51.0	-97.86	6,266.4	-348.8	1,243.9	1,136.7	107.21	11.602	
17,670.0	11,454.0	17,762.3	11,625.0	56.4	51.6	-97.86	6,336.4	-349.4	1,243.9	1,135.7	108.17	11.499	
17,700.0	11,454.0	17,792.3	11,625.0	56.6	51.8	-97.86	6,366.4	-349.7	1,243.9	1,135.3	108.59	11.455	
17,765.0	11,454.0	17,857.3	11,625.0	57.0	52.2	-97.86	6,431.4	-350.3	1,243.9	1,134.4	109.48	11.361	
17,800.0	11,454.0	17,892.3	11,625.0	57.3	52.5	-97.86	6,466.4	-350.6	1,243.9	1,133.9	109.97	11.311	
17,860.0	11,454.0	17,952.3	11,625.0	57.7	52.9	-97.86	6,526.4	-351.2	1,243.9	1,133.1	110.80	11.226	
17,900.0	11,454.0	17,992.3	11,625.0	57.9	53.2	-97.86	6,566.4	-351.5	1,243.9	1,132.5	111.35	11.171	
17,955.0	11,454.0	18,047.3	11,625.0	58.3	53.6	-97.86	6,621.4	-352.0	1,243.9	1,131.8	112.12	11.094	
18,000.0	11,454.0	18,092.3	11,625.0	58.6	53.9	-97.86	6,666.4	-352.4	1,243.9	1,131.1	112.74	11.033	
18,050.0	11,454.0	18,142.3	11,625.0	58.9	54.3	-97.86	6,716.4	-352.9	1,243.9	1,130.5	113.44	10.965	
18,100.0	11,454.0	18,192.3	11,625.0	59.3	54.7	-97.86	6,766.4	-353.4	1,243.9	1,129.8	114.14	10.898	
18,145.0	11,454.0	18,237.3	11,625.0	59.6	55.0	-97.86	6,811.4	-353.8	1,243.9	1,129.1	114.77	10.839	
18,200.0	11,454.0	18,292.3	11,625.0	60.0	55.4	-97.86	6,866.3	-354.3	1,243.9	1,128.4	115.53	10.767	
18,240.0	11,454.0	18,332.3	11,625.0	60.2	55.7	-97.85	6,906.3	-354.6	1,243.9	1,127.8	116.09	10.715	
18,300.0	11,454.0	18,392.3	11,625.0	60.6	56.1	-97.85	6,966.3	-355.2	1,243.9	1,127.0	116.93	10.638	
18,335.0	11,454.0	18,427.3	11,625.0	60.9	56.4	-97.85	7,001.3	-355.5	1,243.9	1,126.5	117.42	10.593	
18,400.0	11,454.0	18,492.3	11,625.0	61.3	56.8	-97.85	7,066.3	-356.1	1,243.9	1,125.6	118.34	10.512	
18,430.0	11,454.0	18,522.3	11,625.0	61.5	57.1	-97.85	7,096.3	-356.3	1,243.9	1,125.2	118.76	10.474	
18,500.0	11,454.0	18,592.3	11,625.0	62.0	57.6	-97.85	7,166.3	-357.0	1,243.9	1,124.2	119.74	10.388	
18,525.0	11,454.0	18,617.3	11,625.0	62.1	57.8	-97.85	7,191.3	-357.2	1,243.9	1,123.8	120.09	10.358	
18,600.0	11,454.0	18,692.3	11,625.0	62.7	58.3	-97.85	7,266.3	-357.9	1,243.9	1,122.8	121.15	10.268	
18,620.0	11,454.0	18,712.3	11,625.0	62.8	58.4	-97.85	7,286.3	-358.1	1,243.9	1,122.5	121.43	10.244	
18,700.0	11,454.0	18,792.3	11,625.0	63.3	59.0	-97.85	7,366.3	-358.8	1,243.9	1,121.4	122.56	10.149	
18,715.0	11,454.0	18,807.3	11,625.0	63.4	59.1	-97.85	7,381.3	-358.9	1,243.9	1,121.2	122.77	10.132	
18,800.0	11,454.0	18,892.3	11,625.0	64.0	59.8	-97.85	7,466.3	-359.7	1,243.9	1,120.0	123.98	10.034	
18,810.0	11,454.0	18,902.3	11,625.0	64.1	59.8	-97.85	7,476.3	-359.8	1,243.9	1,119.8	124.12	10.022	
18,900.0	11,454.0	18,992.3	11,625.0	64.7	60.5	-97.85	7,566.3	-360.6	1,243.9	1,118.5	125.39	9.920	
18,905.0	11,454.0	18,997.3	11,625.0	64.7	60.5	-97.85	7,571.3	-360.7	1,243.9	1,118.5	125.46	9.915	
19,000.0	11,454.0	19,092.3	11,625.0	65.4	61.2	-97.85	7,666.3	-361.5	1,243.9	1,117.1	126.81	9.809	
19,095.0	11,454.0	19,187.3	11,625.0	66.0	61.9	-97.85	7,761.3	-362.4	1,243.9	1,115.8	128.16	9.706	
19,100.0	11,454.0	19,192.3	11,625.0	66.1	62.0	-97.85	7,766.3	-362.4	1,243.9	1,115.7	128.23	9.701	
19,190.0	11,454.0	19,282.3	11,625.0	66.7	62.6	-97.85	7,856.3	-363.2	1,244.0	1,114.4	129.52	9.605	
19,200.0	11,454.0	19,292.3	11,625.0	66.8	62.7	-97.85	7,866.3	-363.3	1,244.0	1,114.3	129.66	9.594	
19,285.0	11,454.0	19,377.3	11,625.0	67.4	63.3	-97.85	7,951.3	-364.1	1,244.0	1,113.1	130.87	9.505	
19,300.0	11,454.0	19,392.3	11,625.0	67.5	63.4	-97.85	7,966.3	-364.2	1,244.0	1,112.9	131.09	9.490	
19,380.0	11,454.0	19,472.3	11,625.0	68.0	64.0	-97.85	8,046.3	-365.0	1,244.0	1,111.7	132.23	9.408	

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 #713H
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 #713H	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		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	19,492.3	11,625.0	68.2	64.2	-97.85	8,066.3	-365.2	1,244.0	1,111.4	132.51	9.387	
19,475.0	11,454.0	19,567.3	11,625.0	68.7	64.7	-97.85	8,141.3	-365.8	1,244.0	1,110.4	133.59	9.312	
19,500.0	11,454.0	19,592.3	11,625.0	68.8	64.9	-97.85	8,166.3	-366.1	1,244.0	1,110.0	133.95	9.287	
19,570.0	11,454.0	19,662.3	11,625.0	69.3	65.4	-97.85	8,236.3	-366.7	1,244.0	1,109.0	134.95	9.218	
19,600.0	11,454.0	19,692.3	11,625.0	69.5	65.6	-97.85	8,266.3	-367.0	1,244.0	1,108.6	135.38	9.189	
19,665.0	11,454.0	19,757.3	11,625.0	70.0	66.1	-97.85	8,331.3	-367.6	1,244.0	1,107.7	136.31	9.126	
19,700.0	11,454.0	19,792.3	11,625.0	70.2	66.4	-97.85	8,366.3	-367.9	1,244.0	1,107.2	136.81	9.092	
19,760.0	11,454.0	19,852.3	11,625.0	70.7	66.8	-97.85	8,426.3	-368.4	1,244.0	1,106.3	137.68	9.036	
19,800.0	11,454.0	19,892.3	11,625.0	70.9	67.1	-97.85	8,466.3	-368.8	1,244.0	1,105.7	138.25	8.998	
19,855.0	11,454.0	19,947.3	11,625.0	71.3	67.5	-97.85	8,521.3	-369.3	1,244.0	1,104.9	139.04	8.947	
19,900.0	11,454.0	19,992.3	11,625.0	71.6	67.9	-97.85	8,566.3	-369.7	1,244.0	1,104.3	139.69	8.905	
19,950.0	11,454.0	20,042.3	11,625.0	72.0	68.2	-97.85	8,616.3	-370.1	1,244.0	1,103.6	140.41	8.860	
20,000.0	11,454.0	20,092.3	11,625.0	72.3	68.6	-97.85	8,666.3	-370.6	1,244.0	1,102.9	141.13	8.814	
20,045.0	11,454.0	20,137.3	11,625.0	72.7	68.9	-97.85	8,711.3	-371.0	1,244.0	1,102.2	141.78	8.774	
20,100.0	11,454.0	20,192.3	11,625.0	73.0	69.3	-97.85	8,766.3	-371.5	1,244.0	1,101.4	142.57	8.725	
20,140.0	11,454.0	20,232.3	11,625.0	73.3	69.6	-97.85	8,806.3	-371.9	1,244.0	1,100.8	143.15	8.690	
20,200.0	11,454.0	20,292.3	11,625.0	73.7	70.1	-97.85	8,866.3	-372.4	1,244.0	1,100.0	144.02	8.638	
20,235.0	11,454.0	20,327.3	11,625.0	74.0	70.3	-97.85	8,901.3	-372.7	1,244.0	1,099.5	144.52	8.608	
20,300.0	11,454.0	20,392.3	11,625.0	74.5	70.8	-97.85	8,966.3	-373.3	1,244.0	1,098.5	145.46	8.552	
20,330.0	11,454.0	20,422.3	11,625.0	74.7	71.0	-97.85	8,996.3	-373.6	1,244.0	1,098.1	145.90	8.527	
20,400.0	11,454.0	20,492.3	11,625.0	75.2	71.6	-97.85	9,066.3	-374.2	1,244.0	1,097.1	146.91	8.468	
20,425.0	11,454.0	20,517.3	11,625.0	75.3	71.7	-97.85	9,091.3	-374.5	1,244.0	1,096.7	147.27	8.447	
20,500.0	11,454.0	20,592.3	11,625.0	75.9	72.3	-97.85	9,166.3	-375.1	1,244.0	1,095.7	148.36	8.385	
20,520.0	11,454.0	20,612.3	11,625.0	76.0	72.5	-97.85	9,186.3	-375.3	1,244.0	1,095.4	148.65	8.369	
20,600.0	11,454.0	20,692.3	11,625.0	76.6	73.0	-97.85	9,266.3	-376.0	1,244.0	1,094.2	149.81	8.304	
20,615.0	11,454.0	20,707.3	11,625.0	76.7	73.2	-97.85	9,281.2	-376.2	1,244.0	1,094.0	150.03	8.292	
20,700.0	11,454.0	20,792.3	11,625.0	77.3	73.8	-97.85	9,366.2	-376.9	1,244.0	1,092.8	151.26	8.224	
20,710.0	11,454.0	20,802.3	11,625.0	77.4	73.9	-97.85	9,376.2	-377.0	1,244.0	1,092.6	151.41	8.216	
20,800.0	11,454.0	20,892.3	11,625.0	78.0	74.5	-97.85	9,466.2	-377.9	1,244.0	1,091.3	152.72	8.146	
20,805.0	11,454.0	20,897.3	11,625.0	78.0	74.6	-97.85	9,471.2	-377.9	1,244.0	1,091.2	152.79	8.142	
20,900.0	11,454.0	20,992.3	11,625.0	78.7	75.3	-97.85	9,566.2	-378.8	1,244.0	1,089.9	154.17	8.069	
20,995.0	11,454.0	21,087.3	11,625.0	79.4	76.0	-97.85	9,661.2	-379.6	1,244.0	1,088.5	155.56	7.997	
21,000.0	11,454.0	21,092.3	11,625.0	79.4	76.0	-97.85	9,666.2	-379.7	1,244.0	1,088.4	155.63	7.994	
21,090.0	11,454.0	21,182.3	11,625.0	80.1	76.7	-97.85	9,756.2	-380.5	1,244.0	1,087.1	156.94	7.927	
21,100.0	11,454.0	21,192.3	11,625.0	80.1	76.8	-97.85	9,766.2	-380.6	1,244.0	1,087.0	157.09	7.919	
21,185.0	11,454.0	21,277.3	11,625.0	80.7	77.4	-97.85	9,851.2	-381.4	1,244.0	1,085.7	158.33	7.857	
21,200.0	11,454.0	21,292.3	11,625.0	80.8	77.5	-97.85	9,866.2	-381.5	1,244.1	1,085.5	158.55	7.847	
21,280.0	11,454.0	21,372.3	11,625.0	81.4	78.1	-97.85	9,946.2	-382.2	1,244.1	1,084.3	159.72	7.789	
21,300.0	11,454.0	21,392.3	11,625.0	81.6	78.3	-97.85	9,966.2	-382.4	1,244.1	1,084.0	160.01	7.775	
21,375.0	11,454.0	21,467.3	11,625.0	82.1	78.8	-97.85	10,041.2	-383.1	1,244.1	1,083.0	161.10	7.722	
21,400.0	11,454.0	21,492.3	11,625.0	82.3	79.0	-97.85	10,066.2	-383.3	1,244.1	1,082.6	161.47	7.705	
21,470.0	11,454.0	21,562.3	11,625.0	82.8	79.5	-97.85	10,136.2	-383.9	1,244.1	1,081.6	162.49	7.656	
21,500.0	11,454.0	21,592.3	11,625.0	83.0	79.7	-97.85	10,166.2	-384.2	1,244.1	1,081.1	162.93	7.635	
21,565.0	11,454.0	21,657.3	11,625.0	83.5	80.2	-97.85	10,231.2	-384.8	1,244.1	1,080.2	163.88	7.591	
21,600.0	11,454.0	21,692.3	11,625.0	83.7	80.5	-97.85	10,266.2	-385.1	1,244.1	1,079.7	164.40	7.567	
21,660.0	11,454.0	21,752.3	11,625.0	84.1	80.9	-97.85	10,326.2	-385.7	1,244.1	1,078.8	165.28	7.527	
21,700.0	11,454.0	21,792.3	11,625.0	84.4	81.2	-97.85	10,366.2	-386.0	1,244.1	1,078.2	165.86	7.501	
21,755.0	11,454.0	21,847.3	11,625.0	84.8	81.7	-97.85	10,421.2	-386.5	1,244.1	1,077.4	166.67	7.464	
21,800.0	11,454.0	21,892.3	11,625.0	85.2	82.0	-97.85	10,466.2	-386.9	1,244.1	1,076.8	167.33	7.435	
21,850.0	11,454.0	21,942.3	11,625.0	85.5	82.4	-97.85	10,516.2	-387.4	1,244.1	1,076.0	168.06	7.403	
21,851.0	11,454.0	21,943.2	11,625.0	85.5	82.4	-97.85	10,517.2	-387.4	1,244.1	1,076.0	168.07	7.402	
21,875.0	11,454.0	21,956.2	11,625.0	85.7	82.5	-97.85	10,530.1	-387.5	1,244.1	1,075.8	168.31	7.392	

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 #713H
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 #713H	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 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		
21,875.5	11,454.0	21,956.2	11,625.0	85.7	82.5	-97.85	10,530.1	-387.5	1,244.1	1,075.8	168.31	7.392 SF		

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	3.0	3.0	-90.32	-0.3	-60.5	60.5				
95.0	95.0	95.0	95.0	3.0	3.0	-90.32	-0.3	-60.5	60.5	54.4	6.03	10.034	
100.0	100.0	100.0	100.0	3.0	3.0	-90.32	-0.3	-60.5	60.5	54.4	6.03	10.028	
190.0	190.0	190.0	190.0	3.1	3.1	-90.32	-0.3	-60.5	60.5	54.3	6.15	9.827	
200.0	200.0	200.0	200.0	3.1	3.1	-90.32	-0.3	-60.5	60.5	54.3	6.17	9.796	
285.0	285.0	285.0	285.0	3.2	3.2	-90.32	-0.3	-60.5	60.5	54.2	6.31	9.581	
300.0	300.0	300.0	300.0	3.2	3.2	-90.32	-0.3	-60.5	60.5	54.1	6.34	9.538	
380.0	380.0	380.0	380.0	3.3	3.3	-90.32	-0.3	-60.5	60.5	54.0	6.49	9.319	
400.0	400.0	400.0	400.0	3.3	3.3	-90.32	-0.3	-60.5	60.5	53.9	6.53	9.260	
475.0	475.0	475.0	475.0	3.4	3.4	-90.32	-0.3	-60.5	60.5	53.8	6.68	9.045	
500.0	500.0	500.0	500.0	3.4	3.4	-90.32	-0.3	-60.5	60.5	53.7	6.74	8.971	
570.0	570.0	570.0	570.0	3.5	3.5	-90.32	-0.3	-60.5	60.5	53.6	6.90	8.765	
600.0	600.0	600.0	600.0	3.5	3.5	-90.32	-0.3	-60.5	60.5	53.5	6.97	8.675	
665.0	665.0	665.0	665.0	3.6	3.6	-90.32	-0.3	-60.5	60.5	53.3	7.13	8.483	
700.0	700.0	700.0	700.0	3.7	3.7	-90.32	-0.3	-60.5	60.5	53.2	7.22	8.379	
760.0	760.0	760.0	760.0	3.8	3.8	-90.32	-0.3	-60.5	60.5	53.1	7.37	8.203	
800.0	800.0	800.0	800.0	3.8	3.8	-90.32	-0.3	-60.5	60.5	53.0	7.48	8.086	
855.0	855.0	855.0	855.0	3.9	3.9	-90.32	-0.3	-60.5	60.5	52.8	7.63	7.927	
900.0	900.0	900.0	900.0	4.0	4.0	-90.32	-0.3	-60.5	60.5	52.7	7.75	7.798	
950.0	950.0	950.0	950.0	4.1	4.1	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-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	-90.32	-0.3	-60.5	60.5	50.8	9.63	6.281 CC	
1,520.0	1,520.0	1,520.0	1,520.0	5.1	5.1	-179.57	-0.3	-60.5	60.5	50.8	9.71	6.236 ES	
1,600.0	1,600.0	1,600.0	1,600.0	5.2	5.3	-179.58	-0.3	-60.5	62.2	52.2	10.03	6.202	
1,615.0	1,615.0	1,615.0	1,615.0	5.2	5.3	-179.59	-0.3	-60.5	62.8	52.7	10.09	6.218	
1,700.0	1,699.8	1,699.8	1,699.8	5.4	5.5	-179.62	-0.3	-60.5	67.4	57.0	10.46	6.446	
1,710.0	1,709.8	1,709.8	1,709.8	5.4	5.5	-179.62	-0.3	-60.5	68.2	57.6	10.51	6.487	
1,800.0	1,799.5	1,799.5	1,799.5	5.6	5.7	-179.66	-0.3	-60.5	76.2	65.2	10.91	6.980	
1,805.0	1,804.4	1,804.4	1,804.4	5.6	5.7	-179.66	-0.3	-60.5	76.7	65.7	10.93	7.013	
1,900.0	1,898.7	1,898.7	1,898.7	5.9	5.9	-179.70	-0.3	-60.5	88.3	77.0	11.38	7.762	
1,995.0	1,992.5	1,992.5	1,992.5	6.2	6.1	-179.75	-0.3	-60.5	103.1	91.3	11.85	8.705	
2,000.0	1,997.5	1,997.5	1,997.5	6.2	6.1	-179.75	-0.3	-60.5	104.0	92.1	11.87	8.760	
2,050.0	2,046.6	2,048.5	2,048.5	6.3	6.2	-179.76	-0.3	-60.0	112.7	100.6	12.08	9.329	
2,090.0	2,085.9	2,089.6	2,089.6	6.4	6.2	-179.77	-0.3	-59.1	119.4	107.1	12.25	9.747	
2,100.0	2,095.7	2,099.9	2,099.9	6.4	6.2	-179.77	-0.3	-58.7	121.0	108.7	12.29	9.843	
2,185.0	2,179.1	2,188.0	2,187.9	6.6	6.3	-179.75	-0.1	-54.3	133.0	120.3	12.71	10.458	
2,200.0	2,193.9	2,203.6	2,203.4	6.7	6.3	-179.74	-0.1	-53.2	134.8	122.0	12.79	10.545	
2,280.0	2,272.4	2,285.4	2,284.9	6.9	6.4	-179.70	0.2	-46.5	143.5	130.4	13.10	10.960	
2,300.0	2,292.0	2,305.3	2,304.7	7.0	6.4	-179.68	0.2	-44.8	145.6	132.5	13.18	11.048	
2,375.0	2,365.7	2,379.8	2,379.0	7.2	6.5	-179.65	0.4	-38.3	153.5	139.9	13.56	11.319	
2,400.0	2,390.2	2,404.7	2,403.8	7.3	6.5	-179.64	0.5	-36.1	156.1	142.4	13.69	11.404	
2,470.0	2,458.9	2,474.3	2,473.1	7.5	6.6	-179.60	0.7	-30.0	163.4	149.4	14.06	11.621	
2,500.0	2,488.4	2,504.2	2,502.9	7.6	6.6	-179.59	0.8	-27.4	166.6	152.3	14.22	11.709	

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,565.0	2,552.2	2,568.8	2,567.3	7.8	6.8	-179.57	1.0	-21.8	173.3	158.8	14.59	11.880	
2,600.0	2,586.5	2,603.6	2,601.9	8.0	6.8	-179.55	1.1	-18.8	177.0	162.2	14.79	11.967	
2,660.0	2,645.4	2,663.3	2,661.4	8.2	7.0	-179.53	1.3	-13.6	183.3	168.1	15.15	12.100	
2,700.0	2,684.7	2,703.1	2,701.0	8.3	7.1	-179.52	1.4	-10.1	187.5	172.1	15.38	12.185	
2,755.0	2,738.7	2,757.8	2,755.5	8.5	7.2	-179.50	1.6	-5.3	193.2	177.5	15.72	12.288	
2,800.0	2,782.8	2,802.5	2,800.1	8.7	7.3	-179.49	1.7	-1.4	197.9	181.9	16.00	12.368	
2,850.0	2,831.9	2,852.2	2,849.6	8.9	7.4	-179.48	1.9	2.9	203.1	186.8	16.32	12.447	
2,900.0	2,881.0	2,902.0	2,899.2	9.1	7.6	-179.46	2.0	7.2	208.4	191.7	16.64	12.522	
2,945.0	2,925.2	2,946.7	2,943.7	9.2	7.7	-179.45	2.2	11.1	213.1	196.1	16.94	12.582	
3,000.0	2,979.2	3,001.4	2,998.2	9.4	7.8	-179.44	2.3	15.9	218.8	201.5	17.30	12.651	
3,040.0	3,018.4	3,041.2	3,037.9	9.6	7.9	-179.43	2.5	19.3	223.0	205.4	17.57	12.695	
3,100.0	3,077.3	3,100.9	3,097.3	9.8	8.1	-179.42	2.6	24.5	229.3	211.3	17.97	12.758	
3,135.0	3,111.7	3,135.7	3,132.0	10.0	8.2	-179.41	2.7	27.6	232.9	214.7	18.21	12.791	
3,200.0	3,175.5	3,200.3	3,196.4	10.2	8.4	-179.40	2.9	33.2	239.7	221.1	18.66	12.848	
3,230.0	3,204.9	3,230.2	3,226.1	10.4	8.5	-179.39	3.0	35.8	242.9	224.0	18.87	12.871	
3,300.0	3,273.7	3,299.8	3,295.5	10.6	8.7	-179.38	3.3	41.9	250.2	230.8	19.36	12.922	
3,325.0	3,298.2	3,324.6	3,320.2	10.7	8.7	-179.37	3.3	44.0	252.8	233.3	19.54	12.938	
3,400.0	3,371.8	3,399.2	3,394.5	11.0	9.0	-179.36	3.6	50.5	260.7	240.6	20.08	12.983	
3,420.0	3,391.5	3,419.1	3,414.3	11.1	9.0	-179.36	3.6	52.3	262.7	242.5	20.22	12.993	
3,500.0	3,470.0	3,498.7	3,493.6	11.5	9.3	-179.34	3.9	59.2	271.1	250.3	20.80	13.033	
3,515.0	3,484.7	3,513.6	3,508.5	11.5	9.3	-179.34	3.9	60.5	272.7	251.8	20.91	13.039	
3,600.0	3,568.1	3,598.1	3,592.7	11.9	9.6	-179.33	4.2	67.9	281.6	260.0	21.54	13.074	
3,610.0	3,578.0	3,608.1	3,602.6	11.9	9.6	-179.33	4.2	68.7	282.6	261.0	21.61	13.078	
3,700.0	3,666.3	3,697.2	3,691.3	12.3	9.9	-179.32	4.5	76.5	292.0	269.8	22.25	13.123	
3,705.0	3,671.2	3,702.0	3,696.2	12.3	9.9	-179.32	4.5	76.9	292.6	270.3	22.29	13.127	
3,800.0	3,764.5	3,794.0	3,787.9	12.7	10.2	-179.31	4.7	84.4	303.1	280.1	22.99	13.184	
3,895.0	3,857.7	3,885.9	3,879.5	13.1	10.5	-179.30	5.0	91.1	314.3	290.6	23.68	13.271	
3,900.0	3,862.6	3,890.7	3,884.3	13.1	10.5	-179.30	5.0	91.4	314.9	291.2	23.72	13.277	
3,990.0	3,951.0	3,977.6	3,971.0	13.5	10.7	-179.31	5.2	97.1	326.3	301.9	24.37	13.387	
4,000.0	3,960.8	3,987.2	3,980.6	13.6	10.8	-179.31	5.2	97.7	327.6	303.2	24.45	13.401	
4,085.0	4,044.2	4,069.1	4,062.3	13.9	11.0	-179.31	5.4	102.3	339.1	314.0	25.06	13.529	
4,100.0	4,059.0	4,083.5	4,076.7	14.0	11.1	-179.31	5.4	103.1	341.1	316.0	25.17	13.554	
4,180.0	4,137.5	4,160.3	4,153.5	14.4	11.3	-179.32	5.5	106.8	352.6	326.8	25.74	13.696	
4,200.0	4,157.1	4,179.5	4,172.7	14.4	11.4	-179.32	5.6	107.7	355.5	329.6	25.88	13.734	
4,275.0	4,230.7	4,251.4	4,244.5	14.8	11.6	-179.33	5.7	110.6	366.8	340.4	26.41	13.888	
4,300.0	4,255.3	4,275.3	4,268.4	14.9	11.6	-179.34	5.7	111.5	370.7	344.1	26.59	13.942	
4,370.0	4,324.0	4,342.3	4,335.3	15.2	11.8	-179.35	5.8	113.6	381.8	354.7	27.07	14.103	
4,400.0	4,353.5	4,370.9	4,363.9	15.3	11.9	-179.35	5.8	114.4	386.7	359.4	27.28	14.175	
4,465.0	4,417.3	4,432.9	4,425.9	15.6	12.1	-179.37	5.9	116.0	397.5	369.8	27.72	14.341	
4,500.0	4,451.6	4,466.2	4,459.2	15.7	12.2	-179.37	5.9	116.6	403.5	375.6	27.95	14.435	
4,560.0	4,510.5	4,523.2	4,516.2	16.0	12.3	-179.39	5.9	117.6	414.0	385.7	28.35	14.604	
4,600.0	4,549.8	4,561.2	4,554.2	16.2	12.4	-179.39	5.9	118.0	421.2	392.6	28.61	14.723	
4,655.0	4,603.8	4,613.3	4,606.3	16.4	12.5	-179.41	5.9	118.4	431.2	402.3	28.94	14.898	
4,700.0	4,647.9	4,655.9	4,648.9	16.6	12.6	-179.42	5.9	118.6	439.6	410.4	29.18	15.063	
4,750.0	4,697.0	4,704.1	4,697.0	16.9	12.6	-179.43	5.9	118.6	449.1	419.7	29.43	15.259	
4,800.0	4,746.1	4,753.1	4,746.1	17.1	12.6	-179.44	5.9	118.6	458.7	429.0	29.69	15.451	
4,845.0	4,790.3	4,797.3	4,790.3	17.3	12.6	-179.45	5.9	118.6	467.3	437.4	29.91	15.621	
4,900.0	4,844.3	4,851.3	4,844.3	17.5	12.7	-179.46	5.9	118.6	477.8	447.6	30.19	15.826	
4,940.0	4,883.5	4,890.6	4,883.5	17.7	12.7	-179.47	5.9	118.6	485.4	455.0	30.39	15.972	
5,000.0	4,942.4	4,949.5	4,942.4	18.0	12.7	-179.48	5.9	118.6	496.8	466.1	30.69	16.188	
5,035.0	4,976.8	4,983.8	4,976.8	18.1	12.8	-179.49	5.9	118.6	503.5	472.6	30.87	16.311	
5,100.0	5,040.6	5,047.6	5,040.6	18.4	12.8	-179.50	5.9	118.6	515.9	484.7	31.20	16.537	

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,130.0	5,070.0	5,077.1	5,070.0	18.5	12.8	-179.51	5.9	118.6	521.6	490.3	31.35	16.640	
5,200.0	5,138.8	5,145.8	5,138.8	18.9	12.9	-179.52	5.9	118.6	535.0	503.3	31.70	16.875	
5,225.0	5,163.3	5,170.3	5,163.3	19.0	12.9	-179.53	5.9	118.6	539.8	507.9	31.83	16.957	
5,300.0	5,236.9	5,243.9	5,236.9	19.3	12.9	-179.54	5.9	118.6	554.1	521.9	32.21	17.201	
5,320.0	5,256.5	5,263.6	5,256.5	19.4	12.9	-179.54	5.9	118.6	557.9	525.6	32.31	17.265	
5,400.0	5,335.1	5,342.1	5,335.1	19.8	13.0	-179.55	5.9	118.6	573.2	540.4	32.72	17.517	
5,415.0	5,349.8	5,356.8	5,349.8	19.8	13.0	-179.55	5.9	118.6	576.0	543.2	32.80	17.563	
5,500.0	5,433.2	5,440.3	5,433.2	20.2	13.0	-179.57	5.9	118.6	592.2	559.0	33.23	17.822	
5,510.0	5,443.1	5,450.1	5,443.1	20.3	13.0	-179.57	5.9	118.6	594.1	560.9	33.28	17.852	
5,600.0	5,531.4	5,538.4	5,531.4	20.7	13.1	-179.58	5.9	118.6	611.3	577.6	33.74	18.118	
5,605.0	5,536.3	5,543.3	5,536.3	20.7	13.1	-179.58	5.9	118.6	612.3	578.5	33.77	18.133	
5,700.0	5,629.6	5,636.6	5,629.6	21.1	13.1	-179.59	5.9	118.6	630.4	596.1	34.25	18.405	
5,795.0	5,722.8	5,729.9	5,722.8	21.5	13.2	-179.60	5.9	118.6	648.5	613.8	34.74	18.668	
5,800.0	5,727.7	5,734.8	5,727.7	21.6	13.2	-179.61	5.9	118.6	649.5	614.7	34.76	18.682	
5,890.0	5,816.1	5,823.1	5,816.1	22.0	13.3	-179.62	5.9	118.6	666.7	631.4	35.23	18.925	
5,900.0	5,825.9	5,832.9	5,825.9	22.0	13.3	-179.62	5.9	118.6	668.6	633.3	35.28	18.951	
5,985.0	5,909.3	5,916.4	5,909.3	22.4	13.3	-179.63	5.9	118.6	684.8	649.1	35.72	19.173	
6,000.0	5,924.1	5,931.1	5,924.1	22.5	13.3	-179.63	5.9	118.6	687.6	651.8	35.79	19.212	
6,080.0	6,002.6	6,009.6	6,002.6	22.8	13.4	-179.64	5.9	118.6	702.9	666.7	36.20	19.415	
6,100.0	6,022.2	6,029.2	6,022.2	22.9	13.4	-179.64	5.9	118.6	706.7	670.4	36.31	19.465	
6,148.7	6,070.0	6,077.0	6,070.0	23.1	13.4	-179.64	5.9	118.6	716.0	679.5	36.55	19.590	
6,175.0	6,095.9	6,102.9	6,095.9	23.3	13.4	-179.64	5.9	118.6	721.0	684.3	36.68	19.656	
6,200.0	6,120.4	6,127.5	6,120.4	23.4	13.4	-179.65	5.9	118.6	725.6	688.8	36.80	19.715	
6,270.0	6,189.3	6,196.4	6,189.3	23.7	13.5	-179.65	5.9	118.6	737.9	700.7	37.16	19.858	
6,300.0	6,218.9	6,225.9	6,218.9	23.8	13.5	-179.66	5.9	118.6	742.9	705.6	37.31	19.911	
6,365.0	6,283.1	6,290.1	6,283.1	24.1	13.5	-179.66	5.9	118.6	753.3	715.6	37.64	20.015	
6,400.0	6,317.7	6,324.7	6,317.7	24.2	13.6	-179.66	5.9	118.6	758.5	720.7	37.81	20.062	
6,460.0	6,377.1	6,384.1	6,377.1	24.5	13.6	-179.67	5.9	118.6	767.1	729.0	38.10	20.132	
6,500.0	6,416.7	6,423.7	6,416.7	24.7	13.6	-179.67	5.9	118.6	772.4	734.1	38.30	20.169	
6,555.0	6,471.3	6,478.3	6,471.3	24.9	13.7	-179.67	5.9	118.6	779.3	740.8	38.56	20.211	
6,600.0	6,516.0	6,523.0	6,516.0	25.1	13.7	-179.68	5.9	118.6	784.6	745.8	38.77	20.235	
6,650.0	6,565.7	6,572.7	6,565.7	25.3	13.7	-179.68	5.9	118.6	790.0	751.0	39.01	20.254	
6,700.0	6,615.4	6,622.4	6,615.4	25.5	13.8	-179.68	5.9	118.6	795.0	755.8	39.24	20.262	
6,745.0	6,660.2	6,667.3	6,660.2	25.7	13.8	-179.68	5.9	118.6	799.2	759.7	39.44	20.263	
6,800.0	6,715.0	6,722.1	6,715.0	25.9	13.8	-179.69	5.9	118.6	803.7	764.0	39.68	20.253	
6,840.0	6,754.9	6,762.0	6,754.9	26.0	13.8	-179.69	5.9	118.6	806.7	766.9	39.86	20.241	
6,900.0	6,814.8	6,821.8	6,814.8	26.2	13.9	-179.69	5.9	118.6	810.7	770.6	40.11	20.210	
6,935.0	6,849.7	6,856.8	6,849.7	26.4	13.9	-179.69	5.9	118.6	812.7	772.4	40.25	20.189	
7,000.0	6,914.7	6,921.7	6,914.7	26.6	13.9	-179.69	5.9	118.6	815.9	775.4	40.52	20.136	
7,030.0	6,944.6	6,951.7	6,944.6	26.7	14.0	-179.69	5.9	118.6	817.1	776.5	40.63	20.110	
7,100.0	7,014.6	7,021.6	7,014.6	26.9	14.0	-179.69	5.9	118.6	819.3	778.5	40.89	20.036	
7,125.0	7,039.6	7,046.6	7,039.6	27.0	14.0	-179.69	5.9	118.6	819.9	779.0	40.98	20.011	
7,200.0	7,114.6	7,121.6	7,114.6	27.2	14.1	-179.69	5.9	118.6	821.1	779.8	41.22	19.919	
7,220.0	7,134.6	7,141.6	7,134.6	27.2	14.1	-179.69	5.9	118.6	821.2	779.9	41.26	19.905	
7,248.7	7,163.3	7,170.3	7,163.3	27.2	14.1	-90.44	5.9	118.6	821.3	780.0	41.31	19.882	
7,300.0	7,214.6	7,221.6	7,214.6	27.2	14.1	-90.44	5.9	118.6	821.3	779.9	41.35	19.864	
7,315.0	7,229.6	7,236.6	7,229.6	27.2	14.1	-90.44	5.9	118.6	821.3	779.9	41.36	19.857	
7,400.0	7,314.6	7,321.6	7,314.6	27.2	14.2	-90.44	5.9	118.6	821.3	779.8	41.44	19.820	
7,410.0	7,324.6	7,331.6	7,324.6	27.2	14.2	-90.44	5.9	118.6	821.3	779.8	41.45	19.816	
7,500.0	7,414.6	7,421.6	7,414.6	27.3	14.3	-90.44	5.9	118.6	821.3	779.7	41.53	19.776	
7,505.0	7,419.6	7,426.6	7,419.6	27.3	14.3	-90.44	5.9	118.6	821.3	779.7	41.53	19.774	
7,600.0	7,514.6	7,521.6	7,514.6	27.3	14.3	-90.44	5.9	118.6	821.3	779.7	41.62	19.732	

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
7,695.0	7,609.6	7,616.6	7,609.6	27.3	14.4	-90.44	5.9	118.6	821.3	779.6	41.71	19.691		
7,700.0	7,614.6	7,621.6	7,614.6	27.3	14.4	-90.44	5.9	118.6	821.3	779.6	41.71	19.688		
7,790.0	7,704.6	7,711.6	7,704.6	27.3	14.5	-90.44	5.9	118.6	821.3	779.5	41.80	19.649		
7,800.0	7,714.6	7,721.6	7,714.6	27.4	14.5	-90.44	5.9	118.6	821.3	779.5	41.81	19.645		
7,885.0	7,799.6	7,806.6	7,799.6	27.4	14.5	-90.44	5.9	118.6	821.3	779.4	41.89	19.607		
7,900.0	7,814.6	7,821.6	7,814.6	27.4	14.5	-90.44	5.9	118.6	821.3	779.4	41.90	19.601		
7,980.0	7,894.6	7,901.6	7,894.6	27.4	14.6	-90.44	5.9	118.6	821.3	779.3	41.98	19.566		
8,000.0	7,914.6	7,921.6	7,914.6	27.4	14.6	-90.44	5.9	118.6	821.3	779.3	41.99	19.557		
8,075.0	7,989.6	7,996.6	7,989.6	27.4	14.6	-90.44	5.9	118.6	821.3	779.2	42.06	19.524		
8,100.0	8,014.6	8,021.6	8,014.6	27.4	14.7	-90.44	5.9	118.6	821.3	779.2	42.09	19.513		
8,170.0	8,084.6	8,091.6	8,084.6	27.5	14.7	-90.44	5.9	118.6	821.3	779.1	42.15	19.483		
8,200.0	8,114.6	8,121.6	8,114.6	27.5	14.7	-90.44	5.9	118.6	821.3	779.1	42.18	19.469		
8,265.0	8,179.6	8,186.6	8,179.6	27.5	14.8	-90.44	5.9	118.6	821.3	779.0	42.24	19.441		
8,300.0	8,214.6	8,221.6	8,214.6	27.5	14.8	-90.44	5.9	118.6	821.3	779.0	42.28	19.426		
8,360.0	8,274.6	8,281.6	8,274.6	27.5	14.8	-90.44	5.9	118.6	821.3	778.9	42.33	19.400		
8,400.0	8,314.6	8,321.6	8,314.6	27.5	14.9	-90.44	5.9	118.6	821.3	778.9	42.37	19.382		
8,455.0	8,369.6	8,376.6	8,369.6	27.5	14.9	-90.44	5.9	118.6	821.3	778.8	42.43	19.358		
8,500.0	8,414.6	8,421.6	8,414.6	27.6	14.9	-90.44	5.9	118.6	821.3	778.8	42.47	19.338		
8,550.0	8,464.6	8,471.6	8,464.6	27.6	15.0	-90.44	5.9	118.6	821.3	778.8	42.52	19.317		
8,600.0	8,514.6	8,521.6	8,514.6	27.6	15.0	-90.44	5.9	118.6	821.3	778.7	42.56	19.295		
8,645.0	8,559.6	8,566.6	8,559.6	27.6	15.0	-90.44	5.9	118.6	821.3	778.7	42.61	19.275		
8,700.0	8,614.6	8,621.6	8,614.6	27.6	15.1	-90.44	5.9	118.6	821.3	778.6	42.66	19.251		
8,740.0	8,654.6	8,661.6	8,654.6	27.6	15.1	-90.44	5.9	118.6	821.3	778.6	42.70	19.234		
8,800.0	8,714.6	8,721.6	8,714.6	27.6	15.1	-90.44	5.9	118.6	821.3	778.5	42.76	19.208		
8,835.0	8,749.6	8,756.6	8,749.6	27.7	15.1	-90.44	5.9	118.6	821.3	778.5	42.79	19.192		
8,900.0	8,814.6	8,821.6	8,814.6	27.7	15.2	-90.44	5.9	118.6	821.3	778.4	42.85	19.164		
8,930.0	8,844.6	8,851.6	8,844.6	27.7	15.2	-90.44	5.9	118.6	821.3	778.4	42.88	19.151		
9,000.0	8,914.6	8,921.6	8,914.6	27.7	15.3	-90.44	5.9	118.6	821.3	778.3	42.95	19.121		
9,025.0	8,939.6	8,946.6	8,939.6	27.7	15.3	-90.44	5.9	118.6	821.3	778.3	42.98	19.110		
9,100.0	9,014.6	9,021.6	9,014.6	27.7	15.3	-90.44	5.9	118.6	821.3	778.2	43.05	19.077		
9,120.0	9,034.6	9,041.6	9,034.6	27.7	15.3	-90.44	5.9	118.6	821.3	778.2	43.07	19.068		
9,200.0	9,114.6	9,121.6	9,114.6	27.8	15.4	-90.44	5.9	118.6	821.3	778.1	43.15	19.034		
9,215.0	9,129.6	9,136.6	9,129.6	27.8	15.4	-90.44	5.9	118.6	821.3	778.1	43.16	19.027		
9,300.0	9,214.6	9,221.6	9,214.6	27.8	15.5	-90.44	5.9	118.6	821.3	778.0	43.25	18.990		
9,310.0	9,224.6	9,231.6	9,224.6	27.8	15.5	-90.44	5.9	118.6	821.3	778.0	43.26	18.986		
9,400.0	9,314.6	9,321.6	9,314.6	27.8	15.5	-90.44	5.9	118.6	821.3	777.9	43.35	18.947		
9,405.0	9,319.6	9,326.6	9,319.6	27.8	15.5	-90.44	5.9	118.6	821.3	777.9	43.35	18.945		
9,500.0	9,414.6	9,421.6	9,414.6	27.9	15.6	-90.44	5.9	118.6	821.3	777.8	43.44	18.904		
9,595.0	9,509.6	9,516.6	9,509.6	27.9	15.7	-90.44	5.9	118.6	821.3	777.7	43.54	18.863		
9,600.0	9,514.6	9,521.6	9,514.6	27.9	15.7	-90.44	5.9	118.6	821.3	777.7	43.54	18.861		
9,690.0	9,604.6	9,611.6	9,604.6	27.9	15.7	-90.44	5.9	118.6	821.3	777.6	43.63	18.822		
9,700.0	9,614.6	9,621.6	9,614.6	27.9	15.7	-90.44	5.9	118.6	821.3	777.6	43.64	18.817		
9,785.0	9,699.6	9,706.6	9,699.6	28.0	15.8	-90.44	5.9	118.6	821.3	777.5	43.73	18.781		
9,800.0	9,714.6	9,721.6	9,714.6	28.0	15.8	-90.44	5.9	118.6	821.3	777.5	43.74	18.774		
9,880.0	9,794.6	9,801.6	9,794.6	28.0	15.8	-90.44	5.9	118.6	821.3	777.5	43.82	18.740		
9,900.0	9,814.6	9,821.6	9,814.6	28.0	15.9	-90.44	5.9	118.6	821.3	777.4	43.84	18.731		
9,975.0	9,889.6	9,896.6	9,889.6	28.0	15.9	-90.44	5.9	118.6	821.3	777.4	43.92	18.699		
10,000.0	9,914.6	9,921.6	9,914.6	28.0	15.9	-90.44	5.9	118.6	821.3	777.3	43.95	18.688		
10,070.0	9,984.6	9,991.6	9,984.6	28.0	16.0	-90.44	5.9	118.6	821.3	777.3	44.02	18.658		
10,100.0	10,014.6	10,021.6	10,014.6	28.1	16.0	-90.44	5.9	118.6	821.3	777.2	44.05	18.645		
10,165.0	10,079.6	10,086.6	10,079.6	28.1	16.0	-90.44	5.9	118.6	821.3	777.2	44.11	18.618		
10,200.0	10,114.6	10,121.6	10,114.6	28.1	16.1	-90.44	5.9	118.6	821.3	777.1	44.15	18.603		

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,260.0	10,174.6	10,181.6	10,174.6	28.1	16.1	-90.44	5.9	118.6	821.3	777.1	44.21	18.577	
10,300.0	10,214.6	10,221.6	10,214.6	28.1	16.1	-90.44	5.9	118.6	821.3	777.0	44.25	18.560	
10,355.0	10,269.6	10,276.6	10,269.6	28.1	16.2	-90.44	5.9	118.6	821.3	777.0	44.31	18.536	
10,400.0	10,314.6	10,321.6	10,314.6	28.2	16.2	-90.44	5.9	118.6	821.3	776.9	44.35	18.517	
10,450.0	10,364.6	10,371.6	10,364.6	28.2	16.2	-90.44	5.9	118.6	821.3	776.9	44.40	18.496	
10,500.0	10,414.6	10,421.6	10,414.6	28.2	16.3	-90.44	5.9	118.6	821.3	776.8	44.45	18.474	
10,545.0	10,459.6	10,466.6	10,459.6	28.2	16.3	-90.44	5.9	118.6	821.3	776.8	44.50	18.455	
10,600.0	10,514.6	10,521.6	10,514.6	28.2	16.3	-90.44	5.9	118.6	821.3	776.7	44.56	18.432	
10,640.0	10,554.6	10,561.6	10,554.6	28.2	16.4	-90.44	5.9	118.6	821.3	776.7	44.60	18.415	
10,700.0	10,614.6	10,621.6	10,614.6	28.3	16.4	-90.44	5.9	118.6	821.3	776.6	44.66	18.389	
10,735.0	10,649.6	10,656.6	10,649.6	28.3	16.4	-90.44	5.9	118.6	821.3	776.6	44.70	18.374	
10,800.0	10,714.6	10,721.6	10,714.6	28.3	16.5	-90.44	5.9	118.6	821.3	776.5	44.76	18.347	
10,830.0	10,744.6	10,751.6	10,744.6	28.3	16.5	-90.44	5.9	118.6	821.3	776.5	44.80	18.334	
10,900.0	10,814.6	10,821.6	10,814.6	28.3	16.5	-90.44	5.9	118.6	821.3	776.4	44.87	18.304	
10,925.0	10,839.6	10,846.6	10,839.6	28.3	16.6	-90.44	5.9	118.6	821.3	776.4	44.89	18.294	
11,000.0	10,914.6	10,921.6	10,914.6	28.4	16.6	-90.44	5.9	118.6	821.3	776.3	44.97	18.264	
11,020.0	10,934.6	10,941.6	10,934.6	28.4	16.6	-90.44	5.9	118.6	821.3	776.3	44.98	18.258	
11,062.0	10,976.5	10,983.6	10,976.5	28.4	16.6	-90.44	5.9	118.6	821.3	776.3	45.01	18.247	
11,075.0	10,989.6	10,996.6	10,989.5	28.4	16.6	-89.93	6.1	118.6	821.3	776.3	45.01	18.246	
11,100.0	11,014.5	11,021.5	11,014.5	28.4	16.6	-89.93	7.5	118.6	821.3	776.3	45.01	18.245	
11,115.0	11,029.5	11,036.5	11,029.3	28.4	16.6	-89.93	8.9	118.6	821.3	776.3	45.02	18.244	
11,125.0	11,039.4	11,046.5	11,039.3	28.4	16.6	-89.93	10.1	118.6	821.3	776.3	45.02	18.243	
11,150.0	11,064.1	11,071.4	11,063.9	28.4	16.6	-89.93	14.0	118.6	821.3	776.3	45.02	18.242	
11,175.0	11,088.5	11,096.4	11,088.3	28.4	16.7	-89.93	19.2	118.5	821.3	776.3	45.02	18.241	
11,200.0	11,112.7	11,121.3	11,112.4	28.4	16.7	-89.93	25.7	118.5	821.3	776.2	45.03	18.239	
11,210.0	11,122.2	11,131.3	11,121.9	28.4	16.7	-89.93	28.6	118.4	821.3	776.2	45.03	18.239	
11,225.0	11,136.4	11,146.2	11,136.1	28.4	16.7	-89.93	33.4	118.4	821.3	776.2	45.03	18.238	
11,250.0	11,159.8	11,171.2	11,159.4	28.4	16.7	-89.93	42.3	118.3	821.3	776.2	45.04	18.236	
11,275.0	11,182.6	11,196.1	11,182.2	28.4	16.7	-89.93	52.5	118.2	821.3	776.2	45.04	18.234	
11,300.0	11,204.8	11,221.1	11,204.4	28.4	16.7	-89.94	63.8	118.1	821.3	776.2	45.05	18.231	
11,305.0	11,209.2	11,226.1	11,208.8	28.4	16.7	-89.94	66.2	118.1	821.3	776.2	45.05	18.231	
11,325.0	11,226.5	11,246.0	11,226.0	28.4	16.7	-89.94	76.3	118.0	821.3	776.2	45.05	18.228	
11,350.0	11,247.4	11,271.0	11,246.9	28.4	16.7	-89.94	89.9	117.9	821.3	776.2	45.06	18.225	
11,375.0	11,267.6	11,295.9	11,267.1	28.4	16.7	-89.94	104.5	117.7	821.3	776.2	45.07	18.221	
11,400.0	11,287.0	11,320.9	11,286.5	28.4	16.7	-89.94	120.2	117.6	821.3	776.2	45.08	18.217	
11,425.0	11,305.6	11,345.9	11,305.0	28.4	16.7	-89.95	136.9	117.4	821.3	776.2	45.10	18.212	
11,450.0	11,323.2	11,370.8	11,322.7	28.4	16.7	-89.95	154.6	117.3	821.3	776.2	45.11	18.206	
11,475.0	11,340.0	11,395.8	11,339.4	28.4	16.7	-89.95	173.1	117.1	821.3	776.2	45.13	18.199	
11,495.0	11,352.6	11,415.7	11,352.1	28.4	16.7	-89.95	188.5	117.0	821.3	776.1	45.14	18.193	
11,500.0	11,355.7	11,420.7	11,355.1	28.4	16.7	-89.96	192.5	116.9	821.3	776.1	45.15	18.191	
11,525.0	11,370.3	11,445.7	11,369.8	28.4	16.7	-89.96	212.7	116.8	821.3	776.1	45.17	18.182	
11,550.0	11,383.9	11,470.7	11,383.4	28.4	16.8	-89.96	233.6	116.6	821.3	776.1	45.20	18.172	
11,575.0	11,396.4	11,495.6	11,395.9	28.5	16.8	-89.96	255.2	116.4	821.3	776.1	45.22	18.161	
11,590.0	11,403.3	11,510.6	11,402.9	28.5	16.8	-89.97	268.5	116.3	821.3	776.0	45.24	18.153	
11,600.0	11,407.7	11,520.6	11,407.3	28.5	16.8	-89.97	277.4	116.2	821.3	776.0	45.25	18.148	
11,625.0	11,417.9	11,545.6	11,417.5	28.5	16.8	-89.97	300.2	116.0	821.3	776.0	45.29	18.134	
11,650.0	11,426.8	11,570.6	11,426.4	28.5	16.8	-89.98	323.6	115.8	821.3	776.0	45.33	18.119	
11,675.0	11,434.5	11,595.6	11,434.2	28.5	16.9	-89.98	347.3	115.5	821.3	775.9	45.37	18.102	
11,685.0	11,437.2	11,605.6	11,436.9	28.5	16.9	-89.98	356.9	115.5	821.3	775.9	45.39	18.095	
11,700.0	11,440.9	11,620.5	11,440.7	28.5	16.9	-89.98	371.4	115.3	821.3	775.9	45.42	18.084	
11,725.0	11,446.1	11,645.5	11,445.9	28.5	16.9	-89.99	395.9	115.1	821.3	775.8	45.46	18.064	
11,750.0	11,450.0	11,670.5	11,449.8	28.6	17.0	-89.99	420.5	114.9	821.3	775.8	45.52	18.043	

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,775.0	11,452.6	11,695.5	11,452.5	28.6	17.0	-89.99	445.4	114.6	821.3	775.7	45.57	18.021	
11,780.0	11,452.9	11,700.5	11,452.9	28.6	17.0	-89.99	450.4	114.6	821.3	775.7	45.59	18.016	
11,800.0	11,453.8	11,720.5	11,453.8	28.6	17.0	-90.00	470.3	114.4	821.3	775.7	45.63	17.997	
11,812.0	11,454.0	11,732.5	11,454.0	28.6	17.0	-90.00	482.3	114.3	821.3	775.6	45.66	17.986	
11,875.0	11,454.0	11,795.5	11,454.0	28.7	17.2	-90.00	545.3	113.7	821.3	775.5	45.85	17.915	
11,900.0	11,454.0	11,820.5	11,454.0	28.7	17.2	-90.00	570.3	113.5	821.3	775.4	45.92	17.884	
11,970.0	11,454.0	11,890.5	11,454.0	28.8	17.4	-90.00	640.3	112.9	821.3	775.1	46.17	17.790	
12,000.0	11,454.0	11,920.5	11,454.0	28.9	17.4	-90.00	670.3	112.6	821.3	775.0	46.28	17.748	
12,065.0	11,454.0	11,985.5	11,454.0	29.0	17.6	-90.00	735.3	112.0	821.3	774.8	46.53	17.650	
12,100.0	11,454.0	12,020.5	11,454.0	29.0	17.7	-90.00	770.3	111.7	821.3	774.6	46.68	17.595	
12,160.0	11,454.0	12,080.5	11,454.0	29.1	17.8	-90.00	830.3	111.2	821.3	774.4	46.94	17.495	
12,200.0	11,454.0	12,120.5	11,454.0	29.2	18.0	-90.00	870.3	110.8	821.3	774.2	47.13	17.427	
12,255.0	11,454.0	12,175.5	11,454.0	29.3	18.1	-90.00	925.3	110.3	821.3	773.9	47.40	17.328	
12,300.0	11,454.0	12,220.5	11,454.0	29.4	18.3	-90.00	970.3	109.9	821.3	773.7	47.62	17.246	
12,350.0	11,454.0	12,270.5	11,454.0	29.5	18.4	-90.00	1,020.3	109.4	821.3	773.4	47.89	17.149	
12,400.0	11,454.0	12,320.5	11,454.0	29.6	18.6	-90.00	1,070.3	109.0	821.3	773.2	48.17	17.052	
12,445.0	11,454.0	12,365.5	11,454.0	29.7	18.8	-90.00	1,115.3	108.6	821.3	772.9	48.43	16.960	
12,500.0	11,454.0	12,420.5	11,454.0	29.8	19.0	-90.00	1,170.3	108.1	821.3	772.6	48.75	16.848	
12,540.0	11,454.0	12,460.5	11,454.0	29.9	19.1	-90.00	1,210.3	107.7	821.3	772.3	49.00	16.762	
12,600.0	11,454.0	12,520.5	11,454.0	30.1	19.3	-90.00	1,270.3	107.2	821.3	772.0	49.38	16.634	
12,635.0	11,454.0	12,555.5	11,454.0	30.2	19.5	-90.00	1,305.3	106.8	821.3	771.7	49.61	16.557	
12,700.0	11,454.0	12,620.5	11,454.0	30.3	19.7	-90.00	1,370.3	106.3	821.3	771.3	50.04	16.413	
12,730.0	11,454.0	12,650.5	11,454.0	30.4	19.9	-90.00	1,400.3	106.0	821.3	771.1	50.25	16.345	
12,800.0	11,454.0	12,720.5	11,454.0	30.6	20.2	-90.00	1,470.3	105.3	821.3	770.6	50.74	16.186	
12,825.0	11,454.0	12,745.5	11,454.0	30.7	20.3	-90.00	1,495.3	105.1	821.3	770.4	50.93	16.128	
12,900.0	11,454.0	12,820.5	11,454.0	30.9	20.6	-90.00	1,570.3	104.4	821.4	769.9	51.48	15.954	
12,920.0	11,454.0	12,840.5	11,454.0	31.0	20.7	-90.00	1,590.3	104.3	821.4	769.7	51.64	15.906	
13,000.0	11,454.0	12,920.5	11,454.0	31.2	21.1	-90.00	1,670.3	103.5	821.4	769.1	52.26	15.718	
13,015.0	11,454.0	12,935.5	11,454.0	31.3	21.1	-90.00	1,685.3	103.4	821.4	769.0	52.38	15.682	
13,100.0	11,454.0	13,020.5	11,454.0	31.6	21.6	-90.00	1,770.3	102.6	821.4	768.3	53.06	15.479	
13,110.0	11,454.0	13,030.5	11,454.0	31.6	21.6	-90.00	1,780.3	102.5	821.4	768.2	53.14	15.455	
13,200.0	11,454.0	13,120.5	11,454.0	31.9	22.0	-90.00	1,870.3	101.7	821.4	767.5	53.90	15.239	
13,205.0	11,454.0	13,125.5	11,454.0	31.9	22.1	-90.00	1,875.3	101.7	821.4	767.4	53.94	15.227	
13,300.0	11,454.0	13,220.5	11,454.0	32.3	22.6	-90.00	1,970.3	100.8	821.4	766.6	54.76	14.998	
13,395.0	11,454.0	13,315.5	11,454.0	32.6	23.1	-90.00	2,065.3	99.9	821.4	765.8	55.61	14.769	
13,400.0	11,454.0	13,320.5	11,454.0	32.6	23.1	-90.00	2,070.3	99.9	821.4	765.7	55.66	14.757	
13,490.0	11,454.0	13,410.5	11,454.0	33.0	23.6	-90.00	2,160.3	99.1	821.4	764.9	56.49	14.541	
13,500.0	11,454.0	13,420.5	11,454.0	33.0	23.6	-90.00	2,170.3	99.0	821.4	764.8	56.58	14.517	
13,585.0	11,454.0	13,505.5	11,454.0	33.4	24.1	-90.00	2,255.3	98.2	821.4	764.0	57.38	14.314	
13,600.0	11,454.0	13,520.5	11,454.0	33.4	24.2	-90.00	2,270.3	98.1	821.4	763.9	57.53	14.279	
13,680.0	11,454.0	13,600.5	11,454.0	33.7	24.6	-90.00	2,350.3	97.4	821.4	763.1	58.30	14.089	
13,700.0	11,454.0	13,620.5	11,454.0	33.8	24.7	-90.00	2,370.3	97.2	821.4	762.9	58.50	14.042	
13,775.0	11,454.0	13,695.5	11,454.0	34.1	25.2	-90.00	2,445.3	96.5	821.4	762.2	59.24	13.866	
13,800.0	11,454.0	13,720.5	11,454.0	34.3	25.3	-90.00	2,470.3	96.3	821.4	761.9	59.49	13.808	
13,870.0	11,454.0	13,790.5	11,454.0	34.6	25.7	-90.00	2,540.3	95.6	821.4	761.2	60.20	13.645	
13,900.0	11,454.0	13,820.5	11,454.0	34.7	25.9	-90.00	2,570.3	95.4	821.4	760.9	60.50	13.576	
13,965.0	11,454.0	13,885.5	11,454.0	35.0	26.3	-90.00	2,635.2	94.8	821.4	760.2	61.17	13.427	
14,000.0	11,454.0	13,920.5	11,454.0	35.1	26.5	-90.00	2,670.2	94.5	821.4	759.9	61.54	13.348	
14,060.0	11,454.0	13,980.5	11,454.0	35.4	26.8	-90.00	2,730.2	93.9	821.4	759.2	62.17	13.213	
14,100.0	11,454.0	14,020.5	11,454.0	35.6	27.1	-90.00	2,770.2	93.5	821.4	758.8	62.59	13.123	
14,155.0	11,454.0	14,075.5	11,454.0	35.9	27.4	-90.00	2,825.2	93.0	821.4	758.2	63.18	13.001	
14,200.0	11,454.0	14,120.5	11,454.0	36.1	27.7	-90.00	2,870.2	92.6	821.4	757.8	63.66	12.902	

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside		Offset Wellbore Centre		Distance		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	
14,250.0	11,454.0	14,170.5	11,454.0	36.3	28.0	-90.00	2,920.2	92.2	821.4	757.2	64.21	12.793	
14,300.0	11,454.0	14,220.5	11,454.0	36.5	28.3	-90.00	2,970.2	91.7	821.4	756.7	64.76	12.685	
14,345.0	11,454.0	14,265.5	11,454.0	36.8	28.6	-90.00	3,015.2	91.3	821.4	756.2	65.25	12.588	
14,400.0	11,454.0	14,320.5	11,454.0	37.0	28.9	-90.00	3,070.2	90.8	821.4	755.6	65.86	12.472	
14,440.0	11,454.0	14,360.5	11,454.0	37.2	29.2	-90.00	3,110.2	90.5	821.4	755.1	66.31	12.387	
14,500.0	11,454.0	14,420.5	11,454.0	37.5	29.5	-90.00	3,170.2	89.9	821.4	754.4	66.99	12.263	
14,535.0	11,454.0	14,455.5	11,454.0	37.7	29.8	-90.00	3,205.2	89.6	821.4	754.0	67.38	12.190	
14,600.0	11,454.0	14,520.5	11,454.0	38.0	30.2	-90.00	3,270.2	89.0	821.4	753.3	68.12	12.058	
14,630.0	11,454.0	14,550.5	11,454.0	38.2	30.4	-90.00	3,300.2	88.7	821.4	753.0	68.47	11.997	
14,700.0	11,454.0	14,620.5	11,454.0	38.5	30.8	-90.00	3,370.2	88.1	821.4	752.2	69.28	11.857	
14,725.0	11,454.0	14,645.5	11,454.0	38.7	31.0	-90.00	3,395.2	87.9	821.4	751.9	69.57	11.808	
14,800.0	11,454.0	14,720.5	11,454.0	39.1	31.5	-90.00	3,470.2	87.2	821.4	751.0	70.44	11.661	
14,820.0	11,454.0	14,740.5	11,454.0	39.2	31.6	-90.00	3,490.2	87.0	821.4	750.8	70.68	11.622	
14,900.0	11,454.0	14,820.5	11,454.0	39.6	32.1	-90.00	3,570.2	86.3	821.5	749.8	71.62	11.469	
14,915.0	11,454.0	14,835.5	11,454.0	39.7	32.2	-90.00	3,585.2	86.2	821.5	749.7	71.80	11.440	
15,000.0	11,454.0	14,920.5	11,454.0	40.1	32.8	-90.00	3,670.2	85.4	821.5	748.6	72.82	11.281	
15,010.0	11,454.0	14,930.5	11,454.0	40.2	32.8	-90.00	3,680.2	85.3	821.5	748.5	72.94	11.263	
15,100.0	11,454.0	15,020.5	11,454.0	40.7	33.4	-90.00	3,770.2	84.5	821.5	747.4	74.02	11.098	
15,105.0	11,454.0	15,025.5	11,454.0	40.7	33.5	-90.00	3,775.2	84.4	821.5	747.4	74.08	11.089	
15,200.0	11,454.0	15,120.5	11,454.0	41.2	34.1	-90.00	3,870.2	83.6	821.5	746.2	75.24	10.919	
15,295.0	11,454.0	15,215.5	11,454.0	41.8	34.7	-90.00	3,965.2	82.7	821.5	745.1	76.40	10.752	
15,300.0	11,454.0	15,220.5	11,454.0	41.8	34.8	-90.00	3,970.2	82.7	821.5	745.0	76.46	10.744	
15,390.0	11,454.0	15,310.5	11,454.0	42.3	35.4	-90.00	4,060.2	81.8	821.5	743.9	77.57	10.590	
15,400.0	11,454.0	15,320.5	11,454.0	42.3	35.4	-90.00	4,070.2	81.7	821.5	743.8	77.70	10.573	
15,485.0	11,454.0	15,405.5	11,454.0	42.8	36.0	-90.00	4,155.2	81.0	821.5	742.7	78.76	10.431	
15,500.0	11,454.0	15,420.5	11,454.0	42.9	36.1	-90.00	4,170.2	80.8	821.5	742.5	78.94	10.406	
15,580.0	11,454.0	15,500.5	11,454.0	43.4	36.7	-90.00	4,250.2	80.1	821.5	741.5	79.95	10.275	
15,600.0	11,454.0	15,520.5	11,454.0	43.5	36.8	-90.00	4,270.2	79.9	821.5	741.3	80.20	10.243	
15,675.0	11,454.0	15,595.5	11,454.0	43.9	37.3	-90.00	4,345.2	79.3	821.5	740.3	81.15	10.123	
15,700.0	11,454.0	15,620.5	11,454.0	44.1	37.5	-90.00	4,370.2	79.0	821.5	740.0	81.46	10.084	
15,770.0	11,454.0	15,690.5	11,454.0	44.5	38.0	-90.00	4,440.2	78.4	821.5	739.1	82.35	9.975	
15,800.0	11,454.0	15,720.5	11,454.0	44.7	38.2	-90.00	4,470.2	78.1	821.5	738.8	82.74	9.929	
15,865.0	11,454.0	15,785.5	11,454.0	45.0	38.6	-90.00	4,535.2	77.5	821.5	737.9	83.57	9.830	
15,900.0	11,454.0	15,820.5	11,454.0	45.3	38.9	-90.00	4,570.2	77.2	821.5	737.5	84.02	9.778	
15,960.0	11,454.0	15,880.5	11,454.0	45.6	39.3	-90.00	4,630.2	76.7	821.5	736.7	84.79	9.689	
16,000.0	11,454.0	15,920.5	11,454.0	45.9	39.6	-90.00	4,670.2	76.3	821.5	736.2	85.31	9.630	
16,055.0	11,454.0	15,975.5	11,454.0	46.2	39.9	-90.00	4,725.2	75.8	821.5	735.5	86.02	9.550	
16,100.0	11,454.0	16,020.5	11,454.0	46.5	40.2	-90.00	4,770.2	75.4	821.5	734.9	86.60	9.486	
16,150.0	11,454.0	16,070.5	11,454.0	46.8	40.6	-90.00	4,820.2	74.9	821.5	734.3	87.26	9.415	
16,200.0	11,454.0	16,120.5	11,454.0	47.1	40.9	-90.00	4,870.2	74.5	821.5	733.6	87.91	9.345	
16,245.0	11,454.0	16,165.5	11,454.0	47.3	41.3	-90.00	4,915.2	74.1	821.5	733.0	88.50	9.283	
16,300.0	11,454.0	16,220.5	11,454.0	47.7	41.6	-90.00	4,970.2	73.6	821.5	732.3	89.22	9.208	
16,340.0	11,454.0	16,260.5	11,454.0	47.9	41.9	-90.00	5,010.2	73.2	821.5	731.8	89.74	9.154	
16,400.0	11,454.0	16,320.5	11,454.0	48.3	42.3	-90.00	5,070.1	72.7	821.5	731.0	90.54	9.074	
16,435.0	11,454.0	16,355.5	11,454.0	48.5	42.6	-90.00	5,105.1	72.4	821.5	730.5	91.00	9.028	
16,500.0	11,454.0	16,420.5	11,454.0	48.9	43.1	-90.00	5,170.1	71.8	821.5	729.7	91.86	8.943	
16,530.0	11,454.0	16,450.5	11,454.0	49.1	43.3	-90.00	5,200.1	71.5	821.5	729.3	92.26	8.905	
16,600.0	11,454.0	16,520.5	11,454.0	49.5	43.8	-90.00	5,270.1	70.9	821.5	728.3	93.19	8.816	
16,625.0	11,454.0	16,545.5	11,454.0	49.7	43.9	-90.00	5,295.1	70.6	821.5	728.0	93.52	8.784	
16,700.0	11,454.0	16,620.5	11,454.0	50.2	44.5	-90.00	5,370.1	70.0	821.5	727.0	94.52	8.691	
16,720.0	11,454.0	16,640.5	11,454.0	50.3	44.6	-90.00	5,390.1	69.8	821.5	726.8	94.79	8.667	
16,800.0	11,454.0	16,720.5	11,454.0	50.8	45.2	-90.00	5,470.1	69.0	821.5	725.7	95.86	8.570	

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
16,815.0	11,454.0	16,735.5	11,454.0	50.9	45.3	-90.00	5,485.1	68.9	821.5	725.5	96.07	8.552	
16,900.0	11,454.0	16,820.5	11,454.0	51.4	45.9	-90.00	5,570.1	68.1	821.6	724.3	97.21	8.451	
16,910.0	11,454.0	16,830.5	11,454.0	51.5	46.0	-90.00	5,580.1	68.0	821.6	724.2	97.35	8.440	
17,000.0	11,454.0	16,920.5	11,454.0	52.1	46.6	-90.00	5,670.1	67.2	821.6	723.0	98.56	8.335	
17,005.0	11,454.0	16,925.5	11,454.0	52.1	46.6	-90.00	5,675.1	67.2	821.6	722.9	98.63	8.330	
17,100.0	11,454.0	17,020.5	11,454.0	52.7	47.3	-90.00	5,770.1	66.3	821.6	721.6	99.92	8.222	
17,195.0	11,454.0	17,115.5	11,454.0	53.3	48.0	-90.00	5,865.1	65.5	821.6	720.4	101.21	8.117	
17,200.0	11,454.0	17,120.5	11,454.0	53.4	48.0	-90.00	5,870.1	65.4	821.6	720.3	101.28	8.112	
17,290.0	11,454.0	17,210.5	11,454.0	53.9	48.7	-90.00	5,960.1	64.6	821.6	719.1	102.51	8.015	
17,300.0	11,454.0	17,220.5	11,454.0	54.0	48.7	-90.00	5,970.1	64.5	821.6	718.9	102.64	8.004	
17,385.0	11,454.0	17,305.5	11,454.0	54.6	49.4	-90.00	6,055.1	63.7	821.6	717.8	103.81	7.914	
17,400.0	11,454.0	17,320.5	11,454.0	54.6	49.5	-90.00	6,070.1	63.6	821.6	717.6	104.01	7.899	
17,480.0	11,454.0	17,400.5	11,454.0	55.2	50.0	-90.00	6,150.1	62.9	821.6	716.5	105.11	7.816	
17,500.0	11,454.0	17,420.5	11,454.0	55.3	50.2	-90.00	6,170.1	62.7	821.6	716.2	105.39	7.796	
17,575.0	11,454.0	17,495.5	11,454.0	55.8	50.7	-90.00	6,245.1	62.0	821.6	715.2	106.42	7.720	
17,600.0	11,454.0	17,520.5	11,454.0	56.0	50.9	-90.00	6,270.1	61.8	821.6	714.8	106.77	7.695	
17,670.0	11,454.0	17,590.5	11,454.0	56.4	51.4	-90.00	6,340.1	61.1	821.6	713.9	107.73	7.626	
17,700.0	11,454.0	17,620.5	11,454.0	56.6	51.6	-90.00	6,370.1	60.9	821.6	713.4	108.15	7.597	
17,765.0	11,454.0	17,685.5	11,454.0	57.0	52.1	-90.00	6,435.1	60.3	821.6	712.5	109.05	7.534	
17,800.0	11,454.0	17,720.5	11,454.0	57.3	52.4	-90.00	6,470.1	60.0	821.6	712.1	109.53	7.501	
17,860.0	11,454.0	17,780.5	11,454.0	57.7	52.8	-90.00	6,530.1	59.4	821.6	711.2	110.37	7.444	
17,900.0	11,454.0	17,820.5	11,454.0	57.9	53.1	-90.00	6,570.1	59.1	821.6	710.7	110.92	7.407	
17,955.0	11,454.0	17,875.5	11,454.0	58.3	53.5	-90.00	6,625.1	58.6	821.6	709.9	111.69	7.356	
18,000.0	11,454.0	17,920.5	11,454.0	58.6	53.8	-90.00	6,670.1	58.2	821.6	709.3	112.32	7.315	
18,050.0	11,454.0	17,970.5	11,454.0	58.9	54.2	-90.00	6,720.1	57.7	821.6	708.6	113.01	7.270	
18,100.0	11,454.0	18,020.5	11,454.0	59.3	54.5	-90.00	6,770.1	57.2	821.6	707.9	113.71	7.225	
18,145.0	11,454.0	18,065.5	11,454.0	59.6	54.9	-90.00	6,815.1	56.8	821.6	707.3	114.34	7.186	
18,200.0	11,454.0	18,120.5	11,454.0	60.0	55.3	-90.00	6,870.1	56.3	821.6	706.5	115.11	7.138	
18,240.0	11,454.0	18,160.5	11,454.0	60.2	55.5	-90.00	6,910.1	56.0	821.6	705.9	115.67	7.103	
18,300.0	11,454.0	18,220.5	11,454.0	60.6	56.0	-90.00	6,970.1	55.4	821.6	705.1	116.52	7.052	
18,335.0	11,454.0	18,255.5	11,454.0	60.9	56.2	-90.00	7,005.1	55.1	821.6	704.6	117.01	7.022	
18,400.0	11,454.0	18,320.5	11,454.0	61.3	56.7	-90.00	7,070.1	54.5	821.6	703.7	117.92	6.968	
18,430.0	11,454.0	18,350.5	11,454.0	61.5	56.9	-90.00	7,100.1	54.2	821.6	703.3	118.34	6.943	
18,500.0	11,454.0	18,420.5	11,454.0	62.0	57.4	-90.00	7,170.1	53.6	821.6	702.3	119.33	6.885	
18,525.0	11,454.0	18,445.5	11,454.0	62.1	57.6	-90.00	7,195.1	53.4	821.6	702.0	119.68	6.865	
18,600.0	11,454.0	18,520.5	11,454.0	62.7	58.2	-90.00	7,270.1	52.7	821.6	700.9	120.74	6.805	
18,620.0	11,454.0	18,540.5	11,454.0	62.8	58.3	-90.00	7,290.1	52.5	821.6	700.6	121.02	6.789	
18,700.0	11,454.0	18,620.5	11,454.0	63.3	58.9	-90.00	7,370.1	51.8	821.6	699.5	122.16	6.726	
18,715.0	11,454.0	18,635.5	11,454.0	63.4	59.0	-90.00	7,385.1	51.7	821.6	699.3	122.37	6.715	
18,800.0	11,454.0	18,720.5	11,454.0	64.0	59.6	-90.00	7,470.1	50.9	821.6	698.1	123.57	6.649	
18,810.0	11,454.0	18,730.5	11,454.0	64.1	59.7	-90.00	7,480.1	50.8	821.6	697.9	123.71	6.642	
18,900.0	11,454.0	18,820.5	11,454.0	64.7	60.4	-90.00	7,570.0	50.0	821.7	696.7	124.99	6.574	
18,905.0	11,454.0	18,825.5	11,454.0	64.7	60.4	-90.00	7,575.0	49.9	821.7	696.6	125.06	6.570	
19,000.0	11,454.0	18,920.5	11,454.0	65.4	61.1	-90.00	7,670.0	49.1	821.7	695.2	126.41	6.500	
19,095.0	11,454.0	19,015.5	11,454.0	66.0	61.8	-90.00	7,765.0	48.2	821.7	693.9	127.77	6.431	
19,100.0	11,454.0	19,020.5	11,454.0	66.1	61.8	-90.00	7,770.0	48.2	821.7	693.8	127.84	6.427	
19,190.0	11,454.0	19,110.5	11,454.0	66.7	62.5	-90.00	7,860.0	47.4	821.7	692.5	129.12	6.364	
19,200.0	11,454.0	19,120.5	11,454.0	66.8	62.6	-90.00	7,870.0	47.3	821.7	692.4	129.26	6.357	
19,285.0	11,454.0	19,205.5	11,454.0	67.4	63.2	-90.00	7,955.0	46.5	821.7	691.2	130.48	6.297	
19,300.0	11,454.0	19,220.5	11,454.0	67.5	63.3	-90.00	7,970.0	46.4	821.7	691.0	130.69	6.287	
19,380.0	11,454.0	19,300.5	11,454.0	68.0	63.9	-90.00	8,050.0	45.6	821.7	689.8	131.84	6.232	
19,400.0	11,454.0	19,320.5	11,454.0	68.2	64.1	-90.00	8,070.0	45.4	821.7	689.6	132.12	6.219	

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 #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 15 Central Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2331 PROJECT - ZIA HILLS UNIT 2331 WC #711H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_ADK, 2000-r.5 MWD+IFR1, 10984-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference												Rule Assigned:	
Offset												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	
19,475.0	11,454.0	19,395.5	11,454.0	68.7	64.6	-90.00	8,145.0	44.8	821.7	688.5	133.20	6.169	
19,500.0	11,454.0	19,420.5	11,454.0	68.8	64.8	-90.00	8,170.0	44.5	821.7	688.1	133.56	6.152	
19,570.0	11,454.0	19,490.5	11,454.0	69.3	65.3	-90.00	8,240.0	43.9	821.7	687.1	134.56	6.106	
19,600.0	11,454.0	19,520.5	11,454.0	69.5	65.5	-90.00	8,270.0	43.6	821.7	686.7	134.99	6.087	
19,665.0	11,454.0	19,585.5	11,454.0	70.0	66.0	-90.00	8,335.0	43.0	821.7	685.8	135.93	6.045	
19,700.0	11,454.0	19,620.5	11,454.0	70.2	66.3	-90.00	8,370.0	42.7	821.7	685.3	136.43	6.023	
19,760.0	11,454.0	19,680.5	11,454.0	70.7	66.7	-90.00	8,430.0	42.2	821.7	684.4	137.29	5.985	
19,800.0	11,454.0	19,720.5	11,454.0	70.9	67.0	-90.00	8,470.0	41.8	821.7	683.8	137.87	5.960	
19,855.0	11,454.0	19,775.5	11,454.0	71.3	67.4	-90.00	8,525.0	41.3	821.7	683.0	138.66	5.926	
19,900.0	11,454.0	19,820.5	11,454.0	71.6	67.8	-90.00	8,570.0	40.9	821.7	682.4	139.31	5.898	
19,950.0	11,454.0	19,870.5	11,454.0	72.0	68.1	-90.00	8,620.0	40.5	821.7	681.7	140.03	5.868	
20,000.0	11,454.0	19,920.5	11,454.0	72.3	68.5	-90.00	8,670.0	40.0	821.7	681.0	140.75	5.838	
20,045.0	11,454.0	19,965.5	11,454.0	72.7	68.8	-90.00	8,715.0	39.6	821.7	680.3	141.40	5.811	
20,100.0	11,454.0	20,020.5	11,454.0	73.0	69.2	-90.00	8,770.0	39.1	821.7	679.5	142.20	5.779	
20,140.0	11,454.0	20,060.5	11,454.0	73.3	69.5	-90.00	8,810.0	38.7	821.7	678.9	142.77	5.755	
20,200.0	11,454.0	20,120.5	11,454.0	73.7	70.0	-90.00	8,870.0	38.2	821.7	678.1	143.64	5.721	
20,235.0	11,454.0	20,155.5	11,454.0	74.0	70.2	-90.00	8,905.0	37.9	821.7	677.6	144.15	5.701	
20,300.0	11,454.0	20,220.5	11,454.0	74.5	70.7	-90.00	8,970.0	37.3	821.7	676.6	145.09	5.664	
20,330.0	11,454.0	20,250.5	11,454.0	74.7	70.9	-90.00	9,000.0	37.0	821.7	676.2	145.52	5.647	
20,400.0	11,454.0	20,320.5	11,454.0	75.2	71.5	-90.00	9,070.0	36.4	821.7	675.2	146.54	5.608	
20,425.0	11,454.0	20,345.5	11,454.0	75.3	71.6	-90.00	9,095.0	36.1	821.7	674.8	146.90	5.594	
20,500.0	11,454.0	20,420.5	11,454.0	75.9	72.2	-90.00	9,170.0	35.5	821.7	673.7	147.99	5.553	
20,520.0	11,454.0	20,440.5	11,454.0	76.0	72.4	-90.00	9,190.0	35.3	821.7	673.5	148.28	5.542	
20,600.0	11,454.0	20,520.5	11,454.0	76.6	72.9	-90.00	9,270.0	34.6	821.7	672.3	149.44	5.499	
20,615.0	11,454.0	20,535.5	11,454.0	76.7	73.1	-90.00	9,285.0	34.4	821.7	672.1	149.66	5.491	
20,700.0	11,454.0	20,620.5	11,454.0	77.3	73.7	-90.00	9,370.0	33.6	821.7	670.8	150.89	5.446	
20,710.0	11,454.0	20,630.5	11,454.0	77.4	73.8	-90.00	9,380.0	33.6	821.7	670.7	151.04	5.441	
20,800.0	11,454.0	20,720.5	11,454.0	78.0	74.4	-90.00	9,470.0	32.7	821.7	669.4	152.35	5.394	
20,805.0	11,454.0	20,725.5	11,454.0	78.0	74.5	-90.00	9,475.0	32.7	821.7	669.3	152.42	5.391	
20,900.0	11,454.0	20,820.5	11,454.0	78.7	75.2	-90.00	9,570.0	31.8	821.8	667.9	153.81	5.343	
20,995.0	11,454.0	20,915.5	11,454.0	79.4	75.9	-90.00	9,665.0	31.0	821.8	666.6	155.19	5.295	
21,000.0	11,454.0	20,920.5	11,454.0	79.4	75.9	-90.00	9,670.0	30.9	821.8	666.5	155.26	5.293	
21,090.0	11,454.0	21,010.5	11,454.0	80.1	76.6	-90.00	9,760.0	30.1	821.8	665.2	156.58	5.248	
21,100.0	11,454.0	21,020.5	11,454.0	80.1	76.7	-90.00	9,770.0	30.0	821.8	665.0	156.72	5.243	
21,185.0	11,454.0	21,105.5	11,454.0	80.7	77.3	-90.00	9,855.0	29.2	821.8	663.8	157.96	5.202	
21,200.0	11,454.0	21,120.5	11,454.0	80.8	77.4	-90.00	9,870.0	29.1	821.8	663.6	158.18	5.195	
21,280.0	11,454.0	21,200.5	11,454.0	81.4	78.0	-90.00	9,949.9	28.4	821.8	662.4	159.35	5.157	
21,300.0	11,454.0	21,220.5	11,454.0	81.6	78.2	-90.00	9,969.9	28.2	821.8	662.1	159.65	5.147	
21,375.0	11,454.0	21,295.5	11,454.0	82.1	78.7	-90.00	10,044.9	27.5	821.8	661.0	160.74	5.112	
21,400.0	11,454.0	21,320.5	11,454.0	82.3	78.9	-90.00	10,069.9	27.3	821.8	660.7	161.11	5.101	
21,470.0	11,454.0	21,390.5	11,454.0	82.8	79.4	-90.00	10,139.9	26.7	821.8	659.6	162.13	5.069	
21,500.0	11,454.0	21,420.5	11,454.0	83.0	79.7	-90.00	10,169.9	26.4	821.8	659.2	162.57	5.055	
21,565.0	11,454.0	21,485.5	11,454.0	83.5	80.1	-90.00	10,234.9	25.8	821.8	658.3	163.52	5.025	
21,600.0	11,454.0	21,520.5	11,454.0	83.7	80.4	-90.00	10,269.9	25.5	821.8	657.7	164.04	5.010	
21,660.0	11,454.0	21,580.5	11,454.0	84.1	80.9	-90.00	10,329.9	24.9	821.8	656.9	164.92	4.983	
21,700.0	11,454.0	21,620.5	11,454.0	84.4	81.2	-90.00	10,369.9	24.6	821.8	656.3	165.50	4.965	
21,755.0	11,454.0	21,675.5	11,454.0	84.8	81.6	-90.00	10,424.9	24.1	821.8	655.5	166.31	4.941	
21,800.0	11,454.0	21,720.5	11,454.0	85.2	81.9	-90.00	10,469.9	23.7	821.8	654.8	166.97	4.922 SF	
21,850.0	11,454.0	21,724.9	11,454.0	85.5	81.9	-90.00	10,474.3	23.6	823.1	656.2	166.91	4.931	
21,875.0	11,454.0	21,724.9	11,454.0	85.7	81.9	-90.00	10,474.3	23.6	824.8	658.2	166.65	4.950	
21,875.5	11,454.0	21,724.9	11,454.0	85.7	81.9	-90.00	10,474.3	23.6	824.9	658.2	166.64	4.950	

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 #713H
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 #713H	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	-90.25	-0.1	-30.0	30.0					
95.0	95.0	95.0	95.0	3.0	3.0	-90.25	-0.1	-30.0	30.0	24.0	6.03	4.979		
100.0	100.0	100.0	100.0	3.0	3.0	-90.25	-0.1	-30.0	30.0	24.0	6.03	4.976		
190.0	190.0	190.0	190.0	3.1	3.1	-90.25	-0.1	-30.0	30.0	23.8	6.15	4.876		
200.0	200.0	200.0	200.0	3.1	3.1	-90.25	-0.1	-30.0	30.0	23.8	6.17	4.861		
285.0	285.0	285.0	285.0	3.2	3.2	-90.25	-0.1	-30.0	30.0	23.7	6.31	4.754		
300.0	300.0	300.0	300.0	3.2	3.2	-90.25	-0.1	-30.0	30.0	23.7	6.34	4.733		
380.0	380.0	380.0	380.0	3.3	3.3	-90.25	-0.1	-30.0	30.0	23.5	6.49	4.624		
400.0	400.0	400.0	400.0	3.3	3.3	-90.25	-0.1	-30.0	30.0	23.5	6.53	4.595		
475.0	475.0	475.0	475.0	3.4	3.4	-90.25	-0.1	-30.0	30.0	23.3	6.68	4.488		
500.0	500.0	500.0	500.0	3.4	3.4	-90.25	-0.1	-30.0	30.0	23.3	6.74	4.451		
570.0	570.0	570.0	570.0	3.5	3.5	-90.25	-0.1	-30.0	30.0	23.1	6.90	4.349		
600.0	600.0	600.0	600.0	3.5	3.5	-90.25	-0.1	-30.0	30.0	23.0	6.97	4.305		
665.0	665.0	665.0	665.0	3.6	3.6	-90.25	-0.1	-30.0	30.0	22.9	7.13	4.209		
700.0	700.0	700.0	700.0	3.7	3.7	-90.25	-0.1	-30.0	30.0	22.8	7.22	4.158		
760.0	760.0	760.0	760.0	3.8	3.8	-90.25	-0.1	-30.0	30.0	22.6	7.37	4.070		
800.0	800.0	800.0	800.0	3.8	3.8	-90.25	-0.1	-30.0	30.0	22.5	7.48	4.012		
855.0	855.0	855.0	855.0	3.9	3.9	-90.25	-0.1	-30.0	30.0	22.4	7.63	3.933		
900.0	900.0	900.0	900.0	4.0	4.0	-90.25	-0.1	-30.0	30.0	22.2	7.75	3.869		
950.0	950.0	950.0	950.0	4.1	4.1	-90.25	-0.1	-30.0	30.0	22.1	7.90	3.800		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.25	-0.1	-30.0	30.0	22.0	8.04	3.731		
1,045.0	1,045.0	1,045.0	1,045.0	4.2	4.2	-90.25	-0.1	-30.0	30.0	21.8	8.17	3.670		
1,100.0	1,100.0	1,100.0	1,100.0	4.3	4.3	-90.25	-0.1	-30.0	30.0	21.7	8.34	3.597		
1,140.0	1,140.0	1,140.0	1,140.0	4.4	4.4	-90.25	-0.1	-30.0	30.0	21.5	8.46	3.545		
1,200.0	1,200.0	1,200.0	1,200.0	4.5	4.5	-90.25	-0.1	-30.0	30.0	21.4	8.65	3.468		
1,235.0	1,235.0	1,235.0	1,235.0	4.6	4.6	-90.25	-0.1	-30.0	30.0	21.2	8.76	3.425		
1,300.0	1,300.0	1,300.0	1,300.0	4.7	4.7	-90.25	-0.1	-30.0	30.0	21.0	8.97	3.345		
1,330.0	1,330.0	1,330.0	1,330.0	4.7	4.7	-90.25	-0.1	-30.0	30.0	20.9	9.06	3.310		
1,400.0	1,400.0	1,400.0	1,400.0	4.9	4.9	-90.25	-0.1	-30.0	30.0	20.7	9.29	3.228		
1,425.0	1,425.0	1,425.0	1,425.0	4.9	4.9	-90.25	-0.1	-30.0	30.0	20.6	9.38	3.200		
1,500.0	1,500.0	1,500.0	1,500.0	5.1	5.1	-90.25	-0.1	-30.0	30.0	20.4	9.63	3.116 CC		
1,520.0	1,520.0	1,520.0	1,520.0	5.1	5.1	-179.50	-0.1	-30.0	30.1	20.4	9.71	3.098 ES		
1,600.0	1,600.0	1,600.0	1,600.0	5.2	5.3	-179.53	-0.1	-30.0	31.7	21.7	10.03	3.165		
1,615.0	1,615.0	1,615.0	1,615.0	5.2	5.3	-179.53	-0.1	-30.0	32.3	22.2	10.09	3.201		
1,700.0	1,699.8	1,699.8	1,699.8	5.4	5.5	-179.59	-0.1	-30.0	37.0	26.5	10.46	3.535		
1,710.0	1,709.8	1,709.8	1,709.8	5.4	5.5	-179.60	-0.1	-30.0	37.7	27.2	10.51	3.588		
1,800.0	1,799.5	1,799.5	1,799.5	5.6	5.7	-179.67	-0.1	-30.0	45.7	34.8	10.91	4.188		
1,805.0	1,804.4	1,804.4	1,804.4	5.6	5.7	-179.67	-0.1	-30.0	46.2	35.3	10.93	4.227		
1,900.0	1,898.7	1,898.7	1,898.7	5.9	5.9	-179.74	-0.1	-30.0	57.9	46.5	11.38	5.086		
1,995.0	1,992.5	1,992.5	1,992.5	6.2	6.1	-179.79	-0.1	-30.0	72.7	60.8	11.85	6.133		
2,000.0	1,997.5	1,997.5	1,997.5	6.2	6.1	-179.79	-0.1	-30.0	73.5	61.7	11.87	6.194		
2,050.0	2,046.6	2,048.0	2,048.0	6.3	6.2	-179.81	-0.1	-29.6	82.2	70.2	12.08	6.809		
2,090.0	2,085.9	2,088.7	2,088.6	6.4	6.2	-179.83	-0.1	-28.6	88.9	76.7	12.25	7.263		
2,100.0	2,095.7	2,098.9	2,098.8	6.4	6.2	-179.83	-0.1	-28.3	90.5	78.2	12.29	7.367		
2,185.0	2,179.1	2,185.9	2,185.8	6.6	6.3	-179.85	0.0	-24.0	102.6	89.9	12.71	8.070		
2,200.0	2,193.9	2,201.4	2,201.2	6.7	6.3	-179.85	0.0	-22.9	104.4	91.7	12.79	8.168		
2,280.0	2,272.4	2,284.1	2,283.6	6.9	6.4	-179.85	0.1	-15.9	113.0	99.8	13.21	8.555		
2,300.0	2,292.0	2,304.8	2,304.2	7.0	6.5	-179.86	0.1	-13.8	114.8	101.5	13.32	8.620		
2,375.0	2,365.7	2,382.8	2,381.7	7.2	6.6	-179.86	0.2	-4.5	120.2	106.4	13.74	8.748		
2,400.0	2,390.2	2,408.5	2,407.1	7.3	6.6	-179.85	0.3	-0.9	121.5	107.7	13.88	8.759		
2,470.0	2,458.9	2,478.4	2,476.3	7.5	6.8	-179.85	0.4	8.8	125.2	110.9	14.26	8.780		
2,500.0	2,488.4	2,508.4	2,506.0	7.6	6.9	-179.85	0.5	13.0	126.8	112.3	14.43	8.788		

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 #713H
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 #713H	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	
2,565.0	2,552.2	2,573.3	2,570.3	7.8	7.0	-179.85	0.6	22.0	130.2	115.4	14.80	8.793		
2,600.0	2,586.5	2,608.2	2,604.9	8.0	7.1	-179.85	0.7	26.9	132.0	117.0	15.01	8.795		
2,660.0	2,645.4	2,668.1	2,664.2	8.2	7.2	-179.85	0.8	35.2	135.1	119.8	15.38	8.789		
2,700.0	2,684.7	2,708.1	2,703.8	8.3	7.3	-179.84	0.9	40.7	137.2	121.6	15.62	8.784		
2,755.0	2,738.7	2,763.0	2,758.2	8.5	7.5	-179.84	1.0	48.4	140.1	124.1	15.98	8.770		
2,800.0	2,782.8	2,807.9	2,802.7	8.7	7.6	-179.84	1.1	54.6	142.5	126.2	16.27	8.759		
2,850.0	2,831.9	2,857.9	2,852.1	8.9	7.7	-179.84	1.2	61.6	145.1	128.5	16.60	8.741		
2,900.0	2,881.0	2,907.8	2,901.6	9.1	7.9	-179.84	1.3	68.5	147.7	130.8	16.93	8.723		
2,945.0	2,925.2	2,952.7	2,946.1	9.2	8.0	-179.84	1.4	74.8	150.1	132.8	17.24	8.703		
3,000.0	2,979.2	3,007.7	3,000.5	9.4	8.1	-179.84	1.5	82.4	152.9	135.3	17.62	8.679		
3,040.0	3,018.4	3,047.6	3,040.0	9.6	8.3	-179.83	1.6	88.0	155.0	137.1	17.90	8.659		
3,100.0	3,077.3	3,107.5	3,099.3	9.8	8.4	-179.83	1.7	96.3	158.2	139.8	18.33	8.630		
3,135.0	3,111.7	3,142.5	3,134.0	10.0	8.6	-179.83	1.8	101.2	160.0	141.4	18.58	8.611		
3,200.0	3,175.5	3,207.4	3,198.2	10.2	8.8	-179.83	1.9	110.2	163.4	144.4	19.05	8.576		
3,230.0	3,204.9	3,237.4	3,227.9	10.4	8.9	-179.83	2.0	114.4	165.0	145.7	19.27	8.559		
3,300.0	3,273.7	3,307.3	3,297.1	10.6	9.1	-179.83	2.1	124.1	168.6	148.8	19.79	8.520		
3,325.0	3,298.2	3,332.2	3,321.9	10.7	9.2	-179.83	2.2	127.6	169.9	150.0	19.98	8.505		
3,400.0	3,371.8	3,407.1	3,396.0	11.0	9.4	-179.83	2.3	138.0	173.9	153.3	20.55	8.462		
3,420.0	3,391.5	3,427.1	3,415.8	11.1	9.5	-179.83	2.4	140.8	174.9	154.2	20.70	8.450		
3,500.0	3,470.0	3,507.0	3,494.9	11.5	9.7	-179.82	2.5	151.9	179.1	157.8	21.31	8.404		
3,515.0	3,484.7	3,522.0	3,509.7	11.5	9.8	-179.82	2.6	154.0	179.9	158.5	21.43	8.395		
3,600.0	3,568.1	3,606.8	3,593.8	11.9	10.1	-179.82	2.7	165.8	184.3	162.3	22.09	8.345		
3,610.0	3,578.0	3,616.8	3,603.7	11.9	10.1	-179.82	2.8	167.2	184.9	162.7	22.17	8.339		
3,700.0	3,666.3	3,706.7	3,692.7	12.3	10.4	-179.82	2.9	179.7	189.6	166.7	22.88	8.287		
3,705.0	3,671.2	3,711.7	3,697.6	12.3	10.5	-179.82	3.0	180.4	189.8	166.9	22.92	8.284		
3,800.0	3,764.5	3,806.6	3,791.6	12.7	10.8	-179.82	3.1	193.6	194.8	171.1	23.67	8.229		
3,895.0	3,857.7	3,901.4	3,885.5	13.1	11.2	-179.82	3.3	206.8	199.8	175.3	24.44	8.176		
3,900.0	3,862.6	3,906.4	3,890.5	13.1	11.2	-179.82	3.4	207.5	200.0	175.6	24.48	8.173		
3,990.0	3,951.0	3,996.3	3,979.5	13.5	11.5	-179.82	3.5	220.0	204.8	179.5	25.21	8.123		
4,000.0	3,960.8	4,006.3	3,989.4	13.6	11.5	-179.82	3.6	221.4	205.3	180.0	25.29	8.118		
4,085.0	4,044.2	4,091.2	4,073.4	13.9	11.9	-179.82	3.7	233.2	209.7	183.7	25.98	8.072		
4,100.0	4,059.0	4,106.2	4,088.3	14.0	11.9	-179.81	3.8	235.3	210.5	184.4	26.10	8.064		
4,180.0	4,137.5	4,186.1	4,167.4	14.4	12.2	-179.81	3.9	246.4	214.7	187.9	26.76	8.022		
4,200.0	4,157.1	4,206.0	4,187.2	14.4	12.3	-179.81	4.0	249.2	215.7	188.8	26.93	8.012		
4,275.0	4,230.7	4,280.9	4,261.3	14.8	12.6	-179.81	4.1	259.6	219.7	192.1	27.55	7.973		
4,300.0	4,255.3	4,305.9	4,286.0	14.9	12.7	-179.81	4.2	263.1	221.0	193.2	27.76	7.961		
4,370.0	4,324.0	4,375.8	4,355.3	15.2	12.9	-179.81	4.3	272.8	224.6	196.3	28.34	7.926		
4,400.0	4,353.5	4,405.8	4,384.9	15.3	13.1	-179.81	4.4	277.0	226.2	197.6	28.59	7.912		
4,465.0	4,417.3	4,470.7	4,449.2	15.6	13.3	-179.81	4.5	286.0	229.6	200.5	29.14	7.881		
4,500.0	4,451.6	4,505.6	4,483.8	15.7	13.4	-179.81	4.6	290.9	231.4	202.0	29.43	7.864		
4,560.0	4,510.5	4,565.5	4,543.2	16.0	13.7	-179.81	4.7	299.2	234.6	204.6	29.94	7.836		
4,600.0	4,549.8	4,605.5	4,582.7	16.2	13.8	-179.81	4.8	304.8	236.7	206.4	30.27	7.818		
4,655.0	4,603.8	4,660.4	4,637.1	16.4	14.0	-179.81	4.9	312.4	239.6	208.8	30.74	7.793		
4,700.0	4,647.9	4,705.3	4,681.6	16.6	14.2	-179.81	5.0	318.7	241.9	210.8	31.12	7.774		
4,750.0	4,697.0	4,755.3	4,731.1	16.9	14.4	-179.81	5.1	325.6	244.5	213.0	31.54	7.752		
4,800.0	4,746.1	4,805.2	4,780.5	17.1	14.6	-179.81	5.2	332.6	247.1	215.2	31.97	7.731		
4,845.0	4,790.3	4,850.1	4,825.0	17.3	14.8	-179.81	5.3	338.8	249.5	217.1	32.35	7.712		
4,900.0	4,844.3	4,905.1	4,879.4	17.5	15.0	-179.81	5.4	346.5	252.4	219.6	32.82	7.689		
4,940.0	4,883.5	4,945.0	4,918.9	17.7	15.2	-179.81	5.5	352.0	254.5	221.3	33.17	7.673		
5,000.0	4,942.4	5,004.9	4,978.3	18.0	15.4	-179.80	5.6	360.4	257.6	223.9	33.68	7.649		
5,035.0	4,976.8	5,039.9	5,012.9	18.1	15.6	-179.80	5.7	365.2	259.4	225.5	33.98	7.635		
5,100.0	5,040.6	5,104.8	5,077.2	18.4	15.8	-179.80	5.8	374.3	262.8	228.3	34.54	7.610		

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 #713H
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 #713H	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		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,130.0	5,070.0	5,134.8	5,106.8	18.5	15.9	-179.80	5.9	378.4	264.4	229.6	34.80	7.599	
5,200.0	5,138.8	5,204.7	5,176.1	18.9	16.2	-179.80	6.0	388.2	268.1	232.7	35.40	7.573	
5,225.0	5,163.3	5,229.6	5,200.8	19.0	16.3	-179.80	6.1	391.6	269.4	233.8	35.62	7.564	
5,300.0	5,236.9	5,304.5	5,275.0	19.3	16.6	-179.80	6.2	402.1	273.3	237.1	36.26	7.537	
5,320.0	5,256.5	5,324.5	5,294.7	19.4	16.7	-179.80	6.2	404.8	274.4	237.9	36.44	7.530	
5,400.0	5,335.1	5,404.4	5,373.8	19.8	17.0	-179.80	6.4	416.0	278.5	241.4	37.13	7.502	
5,415.0	5,349.8	5,419.4	5,388.7	19.8	17.1	-179.80	6.4	418.0	279.3	242.1	37.25	7.498	
5,500.0	5,433.2	5,502.2	5,470.8	20.2	17.4	-179.80	6.6	429.3	284.1	246.1	37.97	7.482	
5,510.0	5,443.1	5,512.0	5,480.4	20.3	17.4	-179.80	6.6	430.6	284.7	246.6	38.05	7.481	
5,600.0	5,531.4	5,600.0	5,567.7	20.7	17.8	-179.80	6.8	441.8	290.4	251.6	38.82	7.482	
5,605.0	5,536.3	5,604.4	5,572.2	20.7	17.8	-179.80	6.8	442.3	290.8	251.9	38.86	7.484	
5,700.0	5,629.6	5,696.8	5,663.9	21.1	18.2	-179.80	7.0	453.4	297.7	258.0	39.65	7.507	
5,795.0	5,722.8	5,789.1	5,755.6	21.5	18.5	-179.80	7.1	463.6	305.3	264.9	40.44	7.549	
5,800.0	5,727.7	5,793.9	5,760.4	21.6	18.6	-179.80	7.1	464.1	305.7	265.2	40.48	7.552	
5,890.0	5,816.1	5,881.2	5,847.2	22.0	18.9	-179.81	7.2	473.1	313.7	272.5	41.22	7.610	
5,900.0	5,825.9	5,890.9	5,856.9	22.0	18.9	-179.81	7.3	474.1	314.6	273.3	41.30	7.618	
5,985.0	5,909.3	5,973.2	5,938.8	22.4	19.2	-179.81	7.4	481.9	322.9	280.9	41.99	7.689	
6,000.0	5,924.1	5,987.7	5,953.3	22.5	19.3	-179.81	7.4	483.2	324.4	282.3	42.11	7.702	
6,080.0	6,002.6	6,065.1	6,030.3	22.8	19.6	-179.81	7.5	489.9	332.8	290.0	42.75	7.784	
6,100.0	6,022.2	6,084.4	6,049.6	22.9	19.7	-179.81	7.5	491.5	335.0	292.0	42.91	7.805	
6,148.7	6,070.0	6,131.4	6,096.4	23.1	19.8	-179.82	7.6	495.3	340.4	297.1	43.29	7.864	
6,175.0	6,095.9	6,156.8	6,121.7	23.3	19.9	-179.82	7.6	497.2	343.4	299.9	43.49	7.895	
6,200.0	6,120.4	6,180.9	6,145.8	23.4	20.0	-179.82	7.6	499.0	346.2	302.5	43.68	7.924	
6,270.0	6,189.3	6,248.4	6,213.1	23.7	20.3	-179.82	7.7	503.7	353.6	309.4	44.22	7.996	
6,300.0	6,218.9	6,277.4	6,242.0	23.8	20.4	-179.82	7.7	505.6	356.7	312.2	44.45	8.023	
6,365.0	6,283.1	6,340.1	6,304.6	24.1	20.6	-179.82	7.8	509.5	363.0	318.1	44.94	8.078	
6,400.0	6,317.7	6,373.9	6,338.3	24.2	20.7	-179.83	7.8	511.5	366.3	321.1	45.20	8.104	
6,460.0	6,377.1	6,431.8	6,396.2	24.5	20.9	-179.83	7.9	514.6	371.6	326.0	45.63	8.143	
6,500.0	6,416.7	6,470.4	6,434.7	24.7	21.0	-179.83	7.9	516.5	375.0	329.0	45.92	8.166	
6,555.0	6,471.3	6,523.5	6,487.7	24.9	21.2	-179.83	7.9	519.0	379.4	333.1	46.30	8.193	
6,600.0	6,516.0	6,566.9	6,531.1	25.1	21.3	-179.83	7.9	520.8	382.8	336.2	46.61	8.212	
6,650.0	6,565.7	6,615.1	6,579.3	25.3	21.5	-179.83	8.0	522.6	386.3	339.4	46.95	8.229	
6,700.0	6,615.4	6,663.4	6,627.6	25.5	21.6	-179.83	8.0	524.2	389.7	342.4	47.27	8.243	
6,745.0	6,660.2	6,706.8	6,671.0	25.7	21.8	-179.83	8.0	525.4	392.5	344.9	47.56	8.253	
6,800.0	6,715.0	6,759.9	6,724.0	25.9	21.9	-179.84	8.0	526.8	395.7	347.8	47.90	8.261	
6,840.0	6,754.9	6,800.0	6,764.1	26.0	22.0	-179.84	8.0	527.6	397.8	349.7	48.16	8.260	
6,900.0	6,814.8	6,856.4	6,820.5	26.2	22.2	-179.84	8.1	528.6	400.8	352.3	48.48	8.267	
6,935.0	6,849.7	6,890.2	6,854.3	26.4	22.3	-179.84	8.1	529.0	402.4	353.7	48.67	8.267	
7,000.0	6,914.7	6,952.9	6,917.1	26.6	22.4	-179.84	8.1	529.5	405.0	356.0	49.00	8.265	
7,030.0	6,944.6	6,981.9	6,946.0	26.7	22.4	-179.84	8.1	529.7	406.1	356.9	49.14	8.264	
7,100.0	7,014.6	7,050.5	7,014.6	26.9	22.5	-179.84	8.1	529.7	408.2	358.8	49.39	8.265	
7,125.0	7,039.6	7,075.5	7,039.6	27.0	22.5	-179.84	8.1	529.7	408.8	359.4	49.47	8.265	
7,200.0	7,114.6	7,150.5	7,114.6	27.2	22.5	-179.84	8.1	529.7	410.0	360.3	49.68	8.251	
7,220.0	7,134.6	7,170.5	7,134.6	27.2	22.5	-179.84	8.1	529.7	410.1	360.4	49.71	8.249	
7,248.7	7,163.3	7,199.1	7,163.3	27.2	22.6	-90.59	8.1	529.7	410.2	360.4	49.76	8.244	
7,300.0	7,214.6	7,250.5	7,214.6	27.2	22.6	-90.59	8.1	529.7	410.2	360.4	49.78	8.240	
7,315.0	7,229.6	7,265.5	7,229.6	27.2	22.6	-90.59	8.1	529.7	410.2	360.4	49.79	8.238	
7,400.0	7,314.6	7,350.5	7,314.6	27.2	22.6	-90.59	8.1	529.7	410.2	360.3	49.84	8.230	
7,410.0	7,324.6	7,360.5	7,324.6	27.2	22.6	-90.59	8.1	529.7	410.2	360.3	49.85	8.229	
7,500.0	7,414.6	7,450.5	7,414.6	27.3	22.6	-90.59	8.1	529.7	410.2	360.3	49.90	8.220	
7,505.0	7,419.6	7,455.5	7,419.6	27.3	22.6	-90.59	8.1	529.7	410.2	360.3	49.90	8.219	
7,600.0	7,514.6	7,550.5	7,514.6	27.3	22.7	-90.59	8.1	529.7	410.2	360.2	49.96	8.210	

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 #713H
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 #713H	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
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
7,695.0	7,609.6	7,645.5	7,609.6	27.3	22.7	-90.59	8.1	529.7	410.2	360.1	50.02	8.200	
7,700.0	7,614.6	7,650.5	7,614.6	27.3	22.7	-90.59	8.1	529.7	410.2	360.1	50.02	8.199	
7,790.0	7,704.6	7,740.5	7,704.6	27.3	22.7	-90.59	8.1	529.7	410.2	360.1	50.08	8.190	
7,800.0	7,714.6	7,750.5	7,714.6	27.4	22.7	-90.59	8.1	529.7	410.2	360.1	50.09	8.189	
7,885.0	7,799.6	7,835.5	7,799.6	27.4	22.8	-90.59	8.1	529.7	410.2	360.0	50.14	8.181	
7,900.0	7,814.6	7,850.5	7,814.6	27.4	22.8	-90.59	8.1	529.7	410.2	360.0	50.15	8.179	
7,980.0	7,894.6	7,930.5	7,894.6	27.4	22.8	-90.59	8.1	529.7	410.2	360.0	50.20	8.171	
8,000.0	7,914.6	7,950.5	7,914.6	27.4	22.8	-90.59	8.1	529.7	410.2	360.0	50.21	8.169	
8,075.0	7,989.6	8,025.5	7,989.6	27.4	22.8	-90.59	8.1	529.7	410.2	359.9	50.26	8.161	
8,100.0	8,014.6	8,050.5	8,014.6	27.4	22.8	-90.59	8.1	529.7	410.2	359.9	50.28	8.158	
8,170.0	8,084.6	8,120.5	8,084.6	27.5	22.9	-90.59	8.1	529.7	410.2	359.8	50.32	8.151	
8,200.0	8,114.6	8,150.5	8,114.6	27.5	22.9	-90.59	8.1	529.7	410.2	359.8	50.34	8.148	
8,265.0	8,179.6	8,215.5	8,179.6	27.5	22.9	-90.59	8.1	529.7	410.2	359.8	50.38	8.141	
8,300.0	8,214.6	8,250.5	8,214.6	27.5	22.9	-90.59	8.1	529.7	410.2	359.8	50.41	8.137	
8,360.0	8,274.6	8,310.5	8,274.6	27.5	22.9	-90.59	8.1	529.7	410.2	359.7	50.44	8.131	
8,400.0	8,314.6	8,350.5	8,314.6	27.5	22.9	-90.59	8.1	529.7	410.2	359.7	50.47	8.127	
8,455.0	8,369.6	8,405.5	8,369.6	27.5	23.0	-90.59	8.1	529.7	410.2	359.7	50.51	8.121	
8,500.0	8,414.6	8,450.5	8,414.6	27.6	23.0	-90.59	8.1	529.7	410.2	359.6	50.54	8.116	
8,550.0	8,464.6	8,500.5	8,464.6	27.6	23.0	-90.59	8.1	529.7	410.2	359.6	50.57	8.111	
8,600.0	8,514.6	8,550.5	8,514.6	27.6	23.0	-90.59	8.1	529.7	410.2	359.6	50.60	8.106	
8,645.0	8,559.6	8,595.5	8,559.6	27.6	23.0	-90.59	8.1	529.7	410.2	359.5	50.63	8.101	
8,700.0	8,614.6	8,650.5	8,614.6	27.6	23.1	-90.59	8.1	529.7	410.2	359.5	50.67	8.095	
8,740.0	8,654.6	8,690.5	8,654.6	27.6	23.1	-90.59	8.1	529.7	410.2	359.5	50.70	8.091	
8,800.0	8,714.6	8,750.5	8,714.6	27.6	23.1	-90.59	8.1	529.7	410.2	359.4	50.74	8.084	
8,835.0	8,749.6	8,785.5	8,749.6	27.7	23.1	-90.59	8.1	529.7	410.2	359.4	50.76	8.081	
8,900.0	8,814.6	8,850.5	8,814.6	27.7	23.1	-90.59	8.1	529.7	410.2	359.4	50.80	8.074	
8,930.0	8,844.6	8,880.5	8,844.6	27.7	23.1	-90.59	8.1	529.7	410.2	359.3	50.82	8.071	
9,000.0	8,914.6	8,950.5	8,914.6	27.7	23.2	-90.59	8.1	529.7	410.2	359.3	50.87	8.063	
9,025.0	8,939.6	8,975.5	8,939.6	27.7	23.2	-90.59	8.1	529.7	410.2	359.3	50.89	8.060	
9,100.0	9,014.6	9,050.5	9,014.6	27.7	23.2	-90.59	8.1	529.7	410.2	359.2	50.94	8.052	
9,120.0	9,034.6	9,070.5	9,034.6	27.7	23.2	-90.59	8.1	529.7	410.2	359.2	50.95	8.050	
9,200.0	9,114.6	9,150.5	9,114.6	27.8	23.2	-90.59	8.1	529.7	410.2	359.2	51.01	8.041	
9,215.0	9,129.6	9,165.5	9,129.6	27.8	23.2	-90.59	8.1	529.7	410.2	359.2	51.02	8.040	
9,300.0	9,214.6	9,250.5	9,214.6	27.8	23.3	-90.59	8.1	529.7	410.2	359.1	51.08	8.030	
9,310.0	9,224.6	9,260.5	9,224.6	27.8	23.3	-90.59	8.1	529.7	410.2	359.1	51.08	8.029	
9,400.0	9,314.6	9,350.5	9,314.6	27.8	23.3	-90.59	8.1	529.7	410.2	359.0	51.15	8.020	
9,405.0	9,319.6	9,355.5	9,319.6	27.8	23.3	-90.59	8.1	529.7	410.2	359.0	51.15	8.019	
9,500.0	9,414.6	9,450.5	9,414.6	27.9	23.4	-90.59	8.1	529.7	410.2	359.0	51.22	8.009	
9,595.0	9,509.6	9,545.5	9,509.6	27.9	23.4	-90.59	8.1	529.7	410.2	358.9	51.28	7.998	
9,600.0	9,514.6	9,550.5	9,514.6	27.9	23.4	-90.59	8.1	529.7	410.2	358.9	51.29	7.998	
9,690.0	9,604.6	9,640.5	9,604.6	27.9	23.4	-90.59	8.1	529.7	410.2	358.8	51.35	7.988	
9,700.0	9,614.6	9,650.5	9,614.6	27.9	23.4	-90.59	8.1	529.7	410.2	358.8	51.36	7.987	
9,785.0	9,699.6	9,735.5	9,699.6	28.0	23.5	-90.59	8.1	529.7	410.2	358.8	51.42	7.977	
9,800.0	9,714.6	9,750.5	9,714.6	28.0	23.5	-90.59	8.1	529.7	410.2	358.7	51.43	7.976	
9,880.0	9,794.6	9,830.5	9,794.6	28.0	23.5	-90.59	8.1	529.7	410.2	358.7	51.49	7.967	
9,900.0	9,814.6	9,850.5	9,814.6	28.0	23.5	-90.59	8.1	529.7	410.2	358.7	51.50	7.964	
9,975.0	9,889.6	9,925.5	9,889.6	28.0	23.5	-90.59	8.1	529.7	410.2	358.6	51.55	7.956	
10,000.0	9,914.6	9,950.5	9,914.6	28.0	23.6	-90.59	8.1	529.7	410.2	358.6	51.57	7.953	
10,070.0	9,984.6	10,020.5	9,984.6	28.0	23.6	-90.59	8.1	529.7	410.2	358.5	51.62	7.946	
10,100.0	10,014.6	10,050.5	10,014.6	28.1	23.6	-90.59	8.1	529.7	410.2	358.5	51.64	7.942	
10,165.0	10,079.6	10,115.5	10,079.6	28.1	23.6	-90.59	8.1	529.7	410.2	358.5	51.69	7.935	
10,200.0	10,114.6	10,150.5	10,114.6	28.1	23.6	-90.59	8.1	529.7	410.2	358.5	51.72	7.931	

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 #713H
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 #713H	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	Distance	Rule Assigned:									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
10,260.0	10,174.6	10,210.5	10,174.6	28.1	23.7	-90.59	8.1	529.7	410.2	358.4	51.76	7.924	
10,300.0	10,214.6	10,250.5	10,214.6	28.1	23.7	-90.59	8.1	529.7	410.2	358.4	51.79	7.920	
10,355.0	10,269.6	10,305.5	10,269.6	28.1	23.7	-90.59	8.1	529.7	410.2	358.3	51.83	7.914	
10,400.0	10,314.6	10,350.5	10,314.6	28.2	23.7	-90.59	8.1	529.7	410.2	358.3	51.86	7.909	
10,450.0	10,364.6	10,400.5	10,364.6	28.2	23.7	-90.59	8.1	529.7	410.2	358.3	51.90	7.903	
10,500.0	10,414.6	10,450.5	10,414.6	28.2	23.8	-90.59	8.1	529.7	410.2	358.2	51.94	7.897	
10,545.0	10,459.6	10,495.5	10,459.6	28.2	23.8	-90.59	8.1	529.7	410.2	358.2	51.97	7.892	
10,600.0	10,514.6	10,550.5	10,514.6	28.2	23.8	-90.59	8.1	529.7	410.2	358.2	52.01	7.886	
10,640.0	10,554.6	10,590.5	10,554.6	28.2	23.8	-90.59	8.1	529.7	410.2	358.1	52.04	7.881	
10,700.0	10,614.6	10,650.5	10,614.6	28.3	23.8	-90.59	8.1	529.7	410.2	358.1	52.09	7.875	
10,735.0	10,649.6	10,685.5	10,649.6	28.3	23.8	-90.59	8.1	529.7	410.2	358.1	52.11	7.871	
10,800.0	10,714.6	10,750.5	10,714.6	28.3	23.9	-90.59	8.1	529.7	410.2	358.0	52.16	7.863	
10,830.0	10,744.6	10,780.5	10,744.6	28.3	23.9	-90.59	8.1	529.7	410.2	358.0	52.19	7.860	
10,900.0	10,814.6	10,850.5	10,814.6	28.3	23.9	-90.59	8.1	529.7	410.2	357.9	52.24	7.852	
10,925.0	10,839.6	10,875.5	10,839.6	28.3	23.9	-90.59	8.1	529.7	410.2	357.9	52.26	7.849	
11,000.0	10,914.6	10,950.5	10,914.6	28.4	24.0	-90.59	8.1	529.7	410.2	357.9	52.31	7.840	
11,020.0	10,934.6	10,970.5	10,934.6	28.4	24.0	-90.59	8.1	529.7	410.2	357.8	52.33	7.838	
11,062.0	10,976.5	11,012.4	10,976.5	28.4	24.0	-90.59	8.1	529.7	410.2	357.8	52.35	7.834	
11,075.0	10,989.6	11,025.5	10,989.6	28.4	24.0	-90.10	8.1	529.7	410.2	357.8	52.36	7.833	
11,100.0	11,014.5	11,050.4	11,014.5	28.4	24.0	-90.28	8.1	529.7	410.2	357.8	52.37	7.832	
11,115.0	11,029.5	11,065.4	11,029.5	28.4	24.0	-90.48	8.1	529.7	410.2	357.8	52.38	7.831	
11,125.0	11,039.4	11,075.3	11,039.4	28.4	24.0	-90.65	8.1	529.7	410.2	357.8	52.39	7.830	
11,150.0	11,064.1	11,100.0	11,064.1	28.4	24.0	-91.18	8.1	529.7	410.3	357.9	52.40	7.830	
11,175.0	11,088.5	11,124.4	11,088.5	28.4	24.0	-91.88	8.1	529.7	410.4	358.0	52.40	7.832	
11,200.0	11,112.7	11,148.6	11,112.7	28.4	24.0	-92.72	8.1	529.7	410.7	358.3	52.40	7.838	
11,210.0	11,122.2	11,158.1	11,122.2	28.4	24.0	-93.10	8.1	529.7	410.8	358.4	52.39	7.842	
11,225.0	11,136.4	11,172.3	11,136.4	28.4	24.0	-93.69	8.1	529.7	411.1	358.8	52.38	7.849	
11,250.0	11,159.8	11,196.8	11,160.9	28.4	24.0	-94.80	8.3	529.7	411.8	359.5	52.35	7.866	
11,275.0	11,182.6	11,222.3	11,186.4	28.4	24.0	-95.96	9.7	529.7	412.7	360.4	52.33	7.887	
11,300.0	11,204.8	11,248.5	11,212.4	28.4	24.0	-97.10	12.6	529.7	413.8	361.5	52.31	7.911	
11,305.0	11,209.2	11,253.8	11,217.6	28.4	24.0	-97.33	13.4	529.7	414.0	361.7	52.30	7.916	
11,325.0	11,226.5	11,275.2	11,238.7	28.4	24.0	-98.24	17.1	529.7	415.0	362.8	52.29	7.938	
11,350.0	11,247.4	11,302.5	11,265.3	28.4	24.1	-99.36	23.1	529.6	416.5	364.2	52.27	7.967	
11,375.0	11,267.6	11,330.5	11,292.2	28.4	24.1	-100.47	30.8	529.5	418.0	365.8	52.26	7.999	
11,400.0	11,287.0	11,359.1	11,319.2	28.4	24.1	-101.57	40.4	529.4	419.7	367.5	52.26	8.032	
11,425.0	11,305.6	11,388.4	11,346.2	28.4	24.1	-102.64	51.8	529.3	421.5	369.3	52.27	8.065	
11,450.0	11,323.2	11,418.5	11,373.1	28.4	24.1	-103.68	65.3	529.2	423.4	371.1	52.29	8.097	
11,475.0	11,340.0	11,449.3	11,399.8	28.4	24.1	-104.69	80.8	529.1	425.4	373.1	52.34	8.128	
11,495.0	11,352.6	11,474.6	11,420.8	28.4	24.1	-105.48	94.7	529.0	427.0	374.6	52.39	8.151	
11,500.0	11,355.7	11,480.9	11,426.0	28.4	24.1	-105.67	98.4	528.9	427.4	375.0	52.40	8.156	
11,525.0	11,370.3	11,513.3	11,451.6	28.4	24.1	-106.61	118.2	528.7	429.4	377.0	52.49	8.181	
11,550.0	11,383.9	11,546.5	11,476.3	28.4	24.1	-107.50	140.3	528.5	431.5	378.9	52.60	8.202	
11,575.0	11,396.4	11,580.4	11,500.0	28.5	24.1	-108.34	164.6	528.3	433.4	380.7	52.73	8.219	
11,590.0	11,403.3	11,601.2	11,513.6	28.5	24.1	-108.81	180.2	528.2	434.6	381.7	52.82	8.227	
11,600.0	11,407.7	11,615.2	11,522.4	28.5	24.1	-109.12	191.1	528.1	435.3	382.4	52.89	8.231	
11,625.0	11,417.9	11,650.7	11,543.2	28.5	24.1	-109.83	219.8	527.8	437.1	384.0	53.05	8.238	
11,650.0	11,426.8	11,686.8	11,562.2	28.5	24.1	-110.48	250.6	527.5	438.7	385.5	53.23	8.241	
11,675.0	11,434.5	11,723.7	11,579.1	28.5	24.2	-111.04	283.4	527.2	440.2	386.7	53.42	8.240	
11,685.0	11,437.2	11,738.6	11,585.2	28.5	24.2	-111.25	296.9	527.1	440.7	387.2	53.49	8.238	
11,700.0	11,440.9	11,761.1	11,593.6	28.5	24.2	-111.52	317.8	526.9	441.4	387.8	53.60	8.235	
11,725.0	11,446.1	11,799.0	11,605.5	28.5	24.2	-111.91	353.8	526.6	442.4	388.7	53.78	8.227	
11,750.0	11,450.0	11,837.3	11,614.5	28.6	24.2	-112.21	391.0	526.3	443.2	389.3	53.94	8.217	

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 #713H
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 #713H	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		Offset Wellbore Centre		Distance		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
11,775.0	11,452.6	11,875.9	11,620.7	28.6	24.3	-112.41		429.1	525.9	443.8	389.7	54.08	8.205
11,780.0	11,452.9	11,883.6	11,621.5	28.6	24.3	-112.43		436.8	525.8	443.8	389.7	54.11	8.202
11,800.0	11,453.8	11,914.6	11,623.7	28.6	24.3	-112.50		467.7	525.6	444.0	389.8	54.20	8.192
11,812.0	11,454.0	11,933.2	11,624.0	28.6	24.3	-112.51		486.3	525.4	444.0	389.8	54.25	8.186
11,813.3	11,454.0	11,934.3	11,624.0	28.6	24.3	-112.51		487.4	525.4	444.0	389.8	54.25	8.185
11,875.0	11,454.0	11,996.0	11,624.0	28.7	24.4	-112.51		549.1	524.8	444.0	389.7	54.39	8.164
11,900.0	11,454.0	12,021.0	11,624.0	28.7	24.4	-112.51		574.1	524.6	444.0	389.6	54.45	8.155
11,970.0	11,454.0	12,091.0	11,624.0	28.8	24.5	-112.51		644.1	523.9	444.0	389.4	54.64	8.126
12,000.0	11,454.0	12,121.0	11,624.0	28.9	24.6	-112.51		674.1	523.7	444.1	389.3	54.73	8.113
12,065.0	11,454.0	12,186.0	11,624.0	29.0	24.7	-112.51		739.0	523.1	444.1	389.1	54.94	8.083
12,100.0	11,454.0	12,221.0	11,624.0	29.0	24.8	-112.51		774.0	522.8	444.1	389.0	55.05	8.066
12,160.0	11,454.0	12,281.0	11,624.0	29.1	24.9	-112.51		834.0	522.2	444.1	388.8	55.27	8.035
12,200.0	11,454.0	12,321.0	11,624.0	29.2	25.0	-112.51		874.0	521.9	444.1	388.7	55.41	8.013
12,255.0	11,454.0	12,376.0	11,624.0	29.3	25.1	-112.51		929.0	521.4	444.1	388.4	55.63	7.982
12,300.0	11,454.0	12,421.0	11,624.0	29.4	25.2	-112.51		974.0	520.9	444.1	388.3	55.82	7.956
12,350.0	11,454.0	12,471.0	11,624.0	29.5	25.3	-112.51		1,024.0	520.5	444.1	388.0	56.04	7.925
12,400.0	11,454.0	12,521.0	11,624.0	29.6	25.4	-112.51		1,074.0	520.0	444.1	387.8	56.26	7.894
12,445.0	11,454.0	12,566.0	11,624.0	29.7	25.6	-112.51		1,119.0	519.6	444.1	387.6	56.47	7.864
12,500.0	11,454.0	12,621.0	11,624.0	29.8	25.7	-112.51		1,174.0	519.1	444.1	387.3	56.74	7.827
12,540.0	11,454.0	12,661.0	11,624.0	29.9	25.8	-112.51		1,214.0	518.8	444.1	387.1	56.94	7.799
12,600.0	11,454.0	12,721.0	11,624.0	30.1	26.0	-112.51		1,274.0	518.2	444.1	386.8	57.26	7.756
12,635.0	11,454.0	12,756.0	11,624.0	30.2	26.1	-112.51		1,309.0	517.9	444.1	386.6	57.45	7.730
12,700.0	11,454.0	12,821.0	11,624.0	30.3	26.3	-112.51		1,374.0	517.3	444.1	386.3	57.81	7.682
12,730.0	11,454.0	12,851.0	11,624.0	30.4	26.4	-112.51		1,404.0	517.0	444.1	386.1	57.98	7.659
12,800.0	11,454.0	12,921.0	11,624.0	30.6	26.6	-112.51		1,474.0	516.4	444.1	385.7	58.40	7.605
12,825.0	11,454.0	12,946.0	11,624.0	30.7	26.7	-112.51		1,499.0	516.2	444.1	385.6	58.55	7.585
12,900.0	11,454.0	13,021.0	11,624.0	30.9	27.0	-112.51		1,574.0	515.5	444.1	385.1	59.02	7.525
12,920.0	11,454.0	13,041.0	11,624.0	31.0	27.0	-112.51		1,594.0	515.3	444.1	385.0	59.15	7.508
13,000.0	11,454.0	13,121.0	11,624.0	31.2	27.3	-112.51		1,674.0	514.6	444.1	384.4	59.67	7.442
13,015.0	11,454.0	13,136.0	11,624.0	31.3	27.4	-112.51		1,689.0	514.4	444.1	384.3	59.78	7.430
13,100.0	11,454.0	13,221.0	11,624.0	31.6	27.7	-112.51		1,774.0	513.7	444.1	383.8	60.36	7.358
13,110.0	11,454.0	13,231.0	11,624.0	31.6	27.7	-112.51		1,784.0	513.6	444.1	383.7	60.43	7.349
13,200.0	11,454.0	13,321.0	11,624.0	31.9	28.1	-112.51		1,874.0	512.8	444.1	383.1	61.08	7.271
13,205.0	11,454.0	13,326.0	11,624.0	31.9	28.1	-112.50		1,879.0	512.7	444.1	383.0	61.12	7.267
13,300.0	11,454.0	13,421.0	11,624.0	32.3	28.5	-112.50		1,974.0	511.8	444.1	382.3	61.83	7.183
13,395.0	11,454.0	13,516.0	11,624.0	32.6	28.9	-112.50		2,069.0	511.0	444.2	381.6	62.57	7.099
13,400.0	11,454.0	13,521.0	11,624.0	32.6	28.9	-112.50		2,074.0	510.9	444.2	381.5	62.61	7.094
13,490.0	11,454.0	13,611.0	11,624.0	33.0	29.3	-112.50		2,164.0	510.1	444.2	380.8	63.33	7.014
13,500.0	11,454.0	13,621.0	11,624.0	33.0	29.3	-112.50		2,174.0	510.0	444.2	380.7	63.41	7.005
13,585.0	11,454.0	13,706.0	11,624.0	33.4	29.7	-112.50		2,259.0	509.2	444.2	380.1	64.11	6.928
13,600.0	11,454.0	13,721.0	11,624.0	33.4	29.8	-112.50		2,274.0	509.1	444.2	379.9	64.24	6.914
13,680.0	11,454.0	13,801.0	11,624.0	33.7	30.1	-112.50		2,354.0	508.4	444.2	379.2	64.92	6.841
13,700.0	11,454.0	13,821.0	11,624.0	33.8	30.2	-112.50		2,374.0	508.2	444.2	379.1	65.10	6.823
13,775.0	11,454.0	13,896.0	11,624.0	34.1	30.6	-112.50		2,449.0	507.5	444.2	378.4	65.76	6.755
13,800.0	11,454.0	13,921.0	11,624.0	34.3	30.7	-112.50		2,474.0	507.3	444.2	378.2	65.98	6.732
13,870.0	11,454.0	13,991.0	11,624.0	34.6	31.1	-112.50		2,544.0	506.7	444.2	377.6	66.61	6.668
13,900.0	11,454.0	14,021.0	11,624.0	34.7	31.2	-112.50		2,574.0	506.4	444.2	377.3	66.88	6.641
13,965.0	11,454.0	14,086.0	11,624.0	35.0	31.5	-112.50		2,639.0	505.8	444.2	376.7	67.48	6.582
14,000.0	11,454.0	14,121.0	11,624.0	35.1	31.7	-112.50		2,674.0	505.5	444.2	376.4	67.81	6.550
14,060.0	11,454.0	14,181.0	11,624.0	35.4	32.0	-112.50		2,734.0	504.9	444.2	375.8	68.38	6.496
14,100.0	11,454.0	14,221.0	11,624.0	35.6	32.2	-112.50		2,774.0	504.6	444.2	375.4	68.76	6.460
14,155.0	11,454.0	14,276.0	11,624.0	35.9	32.5	-112.50		2,829.0	504.1	444.2	374.9	69.29	6.411

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 #713H
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 #713H	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			Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
14,200.0	11,454.0	14,321.0	11,624.0	36.1	32.7	-112.50	2,874.0	503.6	444.2	374.5	69.73	6.370	
14,250.0	11,454.0	14,371.0	11,624.0	36.3	33.0	-112.50	2,924.0	503.2	444.2	374.0	70.22	6.326	
14,300.0	11,454.0	14,421.0	11,624.0	36.5	33.2	-112.50	2,974.0	502.7	444.2	373.5	70.72	6.281	
14,345.0	11,454.0	14,466.0	11,624.0	36.8	33.5	-112.50	3,019.0	502.3	444.2	373.0	71.17	6.241	
14,400.0	11,454.0	14,521.0	11,624.0	37.0	33.8	-112.50	3,074.0	501.8	444.2	372.5	71.73	6.193	
14,440.0	11,454.0	14,561.0	11,624.0	37.2	34.0	-112.50	3,113.9	501.5	444.2	372.1	72.14	6.158	
14,500.0	11,454.0	14,621.0	11,624.0	37.5	34.3	-112.50	3,173.9	500.9	444.2	371.5	72.76	6.106	
14,535.0	11,454.0	14,656.0	11,624.0	37.7	34.5	-112.50	3,208.9	500.6	444.2	371.1	73.12	6.075	
14,600.0	11,454.0	14,721.0	11,624.0	38.0	34.9	-112.50	3,273.9	500.0	444.2	370.4	73.80	6.019	
14,630.0	11,454.0	14,751.0	11,624.0	38.2	35.0	-112.50	3,303.9	499.7	444.2	370.1	74.12	5.994	
14,700.0	11,454.0	14,821.0	11,624.0	38.5	35.4	-112.50	3,373.9	499.1	444.2	369.4	74.86	5.934	
14,725.0	11,454.0	14,846.0	11,624.0	38.7	35.6	-112.50	3,398.9	498.9	444.2	369.1	75.13	5.913	
14,800.0	11,454.0	14,921.0	11,624.0	39.1	36.0	-112.50	3,473.9	498.2	444.3	368.3	75.94	5.850	
14,820.0	11,454.0	14,941.0	11,624.0	39.2	36.1	-112.50	3,493.9	498.0	444.3	368.1	76.16	5.833	
14,900.0	11,454.0	15,021.0	11,624.0	39.6	36.5	-112.50	3,573.9	497.3	444.3	367.2	77.03	5.767	
14,915.0	11,454.0	15,036.0	11,624.0	39.7	36.6	-112.50	3,588.9	497.1	444.3	367.1	77.20	5.755	
15,000.0	11,454.0	15,121.0	11,624.0	40.1	37.1	-112.50	3,673.9	496.4	444.3	366.1	78.14	5.685	
15,010.0	11,454.0	15,131.0	11,624.0	40.2	37.2	-112.50	3,683.9	496.3	444.3	366.0	78.25	5.677	
15,100.0	11,454.0	15,221.0	11,624.0	40.7	37.7	-112.50	3,773.9	495.5	444.3	365.0	79.26	5.605	
15,105.0	11,454.0	15,226.0	11,624.0	40.7	37.7	-112.50	3,778.9	495.4	444.3	365.0	79.32	5.601	
15,200.0	11,454.0	15,321.0	11,624.0	41.2	38.3	-112.50	3,873.9	494.5	444.3	363.9	80.40	5.526	
15,295.0	11,454.0	15,416.0	11,624.0	41.8	38.9	-112.50	3,968.9	493.7	444.3	362.8	81.49	5.452	
15,300.0	11,454.0	15,421.0	11,624.0	41.8	38.9	-112.50	3,973.9	493.6	444.3	362.7	81.55	5.448	
15,390.0	11,454.0	15,511.0	11,624.0	42.3	39.4	-112.50	4,063.9	492.8	444.3	361.7	82.59	5.379	
15,400.0	11,454.0	15,521.0	11,624.0	42.3	39.5	-112.50	4,073.9	492.7	444.3	361.6	82.71	5.372	
15,485.0	11,454.0	15,606.0	11,624.0	42.8	40.0	-112.50	4,158.9	491.9	444.3	360.6	83.71	5.308	
15,500.0	11,454.0	15,621.0	11,624.0	42.9	40.1	-112.50	4,173.9	491.8	444.3	360.4	83.88	5.297	
15,580.0	11,454.0	15,701.0	11,624.0	43.4	40.6	-112.50	4,253.9	491.1	444.3	359.5	84.83	5.238	
15,600.0	11,454.0	15,721.0	11,624.0	43.5	40.7	-112.50	4,273.9	490.9	444.3	359.2	85.07	5.223	
15,675.0	11,454.0	15,796.0	11,624.0	43.9	41.2	-112.50	4,348.9	490.2	444.3	358.4	85.96	5.169	
15,700.0	11,454.0	15,821.0	11,624.0	44.1	41.4	-112.50	4,373.9	490.0	444.3	358.1	86.26	5.151	
15,770.0	11,454.0	15,891.0	11,624.0	44.5	41.8	-112.50	4,443.9	489.4	444.3	357.2	87.11	5.101	
15,800.0	11,454.0	15,921.0	11,624.0	44.7	42.0	-112.49	4,473.9	489.1	444.3	356.9	87.47	5.080	
15,865.0	11,454.0	15,986.0	11,624.0	45.0	42.4	-112.49	4,538.9	488.5	444.3	356.1	88.26	5.034	
15,900.0	11,454.0	16,021.0	11,624.0	45.3	42.6	-112.49	4,573.9	488.2	444.3	355.6	88.69	5.010	
15,960.0	11,454.0	16,081.0	11,624.0	45.6	43.0	-112.49	4,633.9	487.6	444.3	354.9	89.42	4.969	
16,000.0	11,454.0	16,121.0	11,624.0	45.9	43.2	-112.49	4,673.9	487.3	444.3	354.4	89.91	4.942	
16,055.0	11,454.0	16,176.0	11,624.0	46.2	43.6	-112.49	4,728.9	486.8	444.3	353.8	90.59	4.905	
16,100.0	11,454.0	16,221.0	11,624.0	46.5	43.9	-112.49	4,773.9	486.3	444.3	353.2	91.15	4.875	
16,150.0	11,454.0	16,271.0	11,624.0	46.8	44.2	-112.49	4,823.9	485.9	444.4	352.6	91.77	4.842	
16,200.0	11,454.0	16,321.0	11,624.0	47.1	44.5	-112.49	4,873.9	485.4	444.4	352.0	92.39	4.809	
16,245.0	11,454.0	16,366.0	11,624.0	47.3	44.8	-112.49	4,918.9	485.0	444.4	351.4	92.96	4.780	
16,300.0	11,454.0	16,421.0	11,624.0	47.7	45.2	-112.49	4,973.9	484.5	444.4	350.7	93.65	4.745	
16,340.0	11,454.0	16,461.0	11,624.0	47.9	45.4	-112.49	5,013.9	484.2	444.4	350.2	94.15	4.720	
16,400.0	11,454.0	16,521.0	11,624.0	48.3	45.8	-112.49	5,073.9	483.6	444.4	349.5	94.91	4.682	
16,435.0	11,454.0	16,556.0	11,624.0	48.5	46.0	-112.49	5,108.9	483.3	444.4	349.0	95.35	4.660	
16,500.0	11,454.0	16,621.0	11,624.0	48.9	46.5	-112.49	5,173.9	482.7	444.4	348.2	96.18	4.620	
16,530.0	11,454.0	16,651.0	11,624.0	49.1	46.7	-112.49	5,203.9	482.4	444.4	347.8	96.56	4.602	
16,600.0	11,454.0	16,721.0	11,624.0	49.5	47.1	-112.49	5,273.9	481.8	444.4	346.9	97.45	4.560	
16,625.0	11,454.0	16,746.0	11,624.0	49.7	47.3	-112.49	5,298.9	481.6	444.4	346.6	97.77	4.545	
16,700.0	11,454.0	16,821.0	11,624.0	50.2	47.8	-112.49	5,373.9	480.9	444.4	345.7	98.74	4.501	
16,720.0	11,454.0	16,841.0	11,624.0	50.3	47.9	-112.49	5,393.9	480.7	444.4	345.4	99.00	4.489	

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 #713H
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 #713H	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
16,800.0	11,454.0	16,921.0	11,624.0	50.8	48.4	-112.49	5,473.9	480.0	444.4	344.4	100.03	4.443	
16,815.0	11,454.0	16,936.0	11,624.0	50.9	48.5	-112.49	5,488.9	479.8	444.4	344.2	100.22	4.434	
16,900.0	11,454.0	17,021.0	11,624.0	51.4	49.1	-112.49	5,573.8	479.1	444.4	343.1	101.33	4.386	
16,910.0	11,454.0	17,031.0	11,624.0	51.5	49.2	-112.49	5,583.8	479.0	444.4	342.9	101.46	4.380	
17,000.0	11,454.0	17,121.0	11,624.0	52.1	49.8	-112.49	5,673.8	478.2	444.4	341.8	102.63	4.330	
17,005.0	11,454.0	17,126.0	11,624.0	52.1	49.8	-112.49	5,678.8	478.1	444.4	341.7	102.70	4.327	
17,100.0	11,454.0	17,221.0	11,624.0	52.7	50.4	-112.49	5,773.8	477.2	444.4	340.5	103.94	4.276	
17,195.0	11,454.0	17,316.0	11,624.0	53.3	51.1	-112.49	5,868.8	476.4	444.4	339.2	105.19	4.225	
17,200.0	11,454.0	17,321.0	11,624.0	53.4	51.1	-112.49	5,873.8	476.3	444.4	339.2	105.26	4.222	
17,290.0	11,454.0	17,411.0	11,624.0	53.9	51.7	-112.49	5,963.8	475.5	444.4	338.0	106.45	4.175	
17,300.0	11,454.0	17,421.0	11,624.0	54.0	51.8	-112.49	5,973.8	475.4	444.4	337.9	106.58	4.170	
17,385.0	11,454.0	17,506.0	11,624.0	54.6	52.4	-112.49	6,058.8	474.7	444.4	336.7	107.71	4.126	
17,400.0	11,454.0	17,521.0	11,624.0	54.6	52.5	-112.49	6,073.8	474.5	444.4	336.5	107.91	4.119	
17,480.0	11,454.0	17,601.0	11,624.0	55.2	53.0	-112.49	6,153.8	473.8	444.4	335.5	108.98	4.078	
17,500.0	11,454.0	17,621.0	11,624.0	55.3	53.1	-112.49	6,173.8	473.6	444.4	335.2	109.24	4.068	
17,575.0	11,454.0	17,696.0	11,624.0	55.8	53.7	-112.49	6,248.8	472.9	444.5	334.2	110.25	4.031	
17,600.0	11,454.0	17,721.0	11,624.0	56.0	53.8	-112.49	6,273.8	472.7	444.5	333.9	110.58	4.019	
17,670.0	11,454.0	17,791.0	11,624.0	56.4	54.3	-112.49	6,343.8	472.1	444.5	332.9	111.52	3.985	
17,700.0	11,454.0	17,821.0	11,624.0	56.6	54.5	-112.49	6,373.8	471.8	444.5	332.5	111.93	3.971	
17,765.0	11,454.0	17,886.0	11,624.0	57.0	55.0	-112.49	6,438.8	471.2	444.5	331.7	112.80	3.940	
17,800.0	11,454.0	17,921.0	11,624.0	57.3	55.2	-112.49	6,473.8	470.9	444.5	331.2	113.27	3.924	
17,860.0	11,454.0	17,981.0	11,624.0	57.7	55.6	-112.49	6,533.8	470.3	444.5	330.4	114.09	3.896	
17,900.0	11,454.0	18,021.0	11,624.0	57.9	55.9	-112.49	6,573.8	470.0	444.5	329.8	114.63	3.878	
17,955.0	11,454.0	18,076.0	11,624.0	58.3	56.3	-112.49	6,628.8	469.5	444.5	329.1	115.37	3.853	
18,000.0	11,454.0	18,121.0	11,624.0	58.6	56.6	-112.49	6,673.8	469.1	444.5	328.5	115.99	3.832	
18,050.0	11,454.0	18,171.0	11,624.0	58.9	56.9	-112.49	6,723.8	468.6	444.5	327.8	116.67	3.810	
18,100.0	11,454.0	18,221.0	11,624.0	59.3	57.3	-112.49	6,773.8	468.1	444.5	327.1	117.35	3.788	
18,145.0	11,454.0	18,266.0	11,624.0	59.6	57.6	-112.49	6,818.8	467.7	444.5	326.5	117.96	3.768	
18,200.0	11,454.0	18,321.0	11,624.0	60.0	58.0	-112.49	6,873.8	467.2	444.5	325.8	118.71	3.744	
18,240.0	11,454.0	18,361.0	11,624.0	60.2	58.2	-112.49	6,913.8	466.9	444.5	325.2	119.26	3.727	
18,300.0	11,454.0	18,421.0	11,624.0	60.6	58.7	-112.49	6,973.8	466.3	444.5	324.4	120.08	3.702	
18,335.0	11,454.0	18,456.0	11,624.0	60.9	58.9	-112.49	7,008.8	466.0	444.5	323.9	120.57	3.687	
18,400.0	11,454.0	18,521.0	11,624.0	61.3	59.3	-112.48	7,073.8	465.4	444.5	323.1	121.46	3.660	
18,430.0	11,454.0	18,551.0	11,624.0	61.5	59.6	-112.48	7,103.8	465.1	444.5	322.6	121.87	3.647	
18,500.0	11,454.0	18,621.0	11,624.0	62.0	60.0	-112.48	7,173.8	464.5	444.5	321.7	122.84	3.619	
18,525.0	11,454.0	18,646.0	11,624.0	62.1	60.2	-112.48	7,198.8	464.3	444.5	321.3	123.18	3.609	
18,600.0	11,454.0	18,721.0	11,624.0	62.7	60.7	-112.48	7,273.8	463.6	444.5	320.3	124.22	3.579	
18,620.0	11,454.0	18,741.0	11,624.0	62.8	60.9	-112.48	7,293.8	463.4	444.5	320.0	124.50	3.571	
18,700.0	11,454.0	18,821.0	11,624.0	63.3	61.5	-112.48	7,373.8	462.7	444.5	318.9	125.60	3.539	
18,715.0	11,454.0	18,836.0	11,624.0	63.4	61.6	-112.48	7,388.8	462.5	444.5	318.7	125.81	3.533	
18,800.0	11,454.0	18,921.0	11,624.0	64.0	62.2	-112.48	7,473.8	461.8	444.5	317.5	126.99	3.501	
18,810.0	11,454.0	18,931.0	11,624.0	64.1	62.2	-112.48	7,483.8	461.7	444.5	317.4	127.13	3.497	
18,900.0	11,454.0	19,021.0	11,624.0	64.7	62.9	-112.48	7,573.8	460.9	444.5	316.2	128.38	3.463	
18,905.0	11,454.0	19,026.0	11,624.0	64.7	62.9	-112.48	7,578.8	460.8	444.6	316.1	128.45	3.461	
19,000.0	11,454.0	19,121.0	11,624.0	65.4	63.6	-112.48	7,673.8	459.9	444.6	314.8	129.78	3.425	
19,095.0	11,454.0	19,216.0	11,624.0	66.0	64.2	-112.48	7,768.8	459.1	444.6	313.5	131.11	3.391	
19,100.0	11,454.0	19,221.0	11,624.0	66.1	64.3	-112.48	7,773.8	459.0	444.6	313.4	131.18	3.389	
19,190.0	11,454.0	19,311.0	11,624.0	66.7	64.9	-112.48	7,863.8	458.2	444.6	312.1	132.44	3.357	
19,200.0	11,454.0	19,321.0	11,624.0	66.8	65.0	-112.48	7,873.8	458.1	444.6	312.0	132.58	3.353	
19,285.0	11,454.0	19,406.0	11,624.0	67.4	65.6	-112.48	7,958.7	457.4	444.6	310.8	133.77	3.323	
19,300.0	11,454.0	19,421.0	11,624.0	67.5	65.7	-112.48	7,973.7	457.2	444.6	310.6	133.98	3.318	
19,380.0	11,454.0	19,501.0	11,624.0	68.0	66.3	-112.48	8,053.7	456.5	444.6	309.5	135.11	3.291	

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 #713H
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 #713H	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			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	
19,400.0	11,454.0	19,521.0	11,624.0	68.2	66.4	-112.48	8,073.7	456.3	444.6	309.2	135.39	3.284	
19,475.0	11,454.0	19,596.0	11,624.0	68.7	66.9	-112.48	8,148.7	455.6	444.6	308.1	136.45	3.258	
19,500.0	11,454.0	19,621.0	11,624.0	68.8	67.1	-112.48	8,173.7	455.4	444.6	307.8	136.80	3.250	
19,570.0	11,454.0	19,691.0	11,624.0	69.3	67.6	-112.48	8,243.7	454.8	444.6	306.8	137.79	3.227	
19,600.0	11,454.0	19,721.0	11,624.0	69.5	67.8	-112.48	8,273.7	454.5	444.6	306.4	138.21	3.217	
19,665.0	11,454.0	19,786.0	11,624.0	70.0	68.3	-112.48	8,338.7	453.9	444.6	305.5	139.13	3.196	
19,700.0	11,454.0	19,821.0	11,624.0	70.2	68.5	-112.48	8,373.7	453.6	444.6	305.0	139.63	3.184	
19,760.0	11,454.0	19,881.0	11,624.0	70.7	69.0	-112.48	8,433.7	453.0	444.6	304.1	140.48	3.165	
19,800.0	11,454.0	19,921.0	11,624.0	70.9	69.3	-112.48	8,473.7	452.7	444.6	303.6	141.05	3.152	
19,855.0	11,454.0	19,976.0	11,624.0	71.3	69.7	-112.48	8,528.7	452.2	444.6	302.8	141.83	3.135	
19,900.0	11,454.0	20,021.0	11,624.0	71.6	70.0	-112.48	8,573.7	451.8	444.6	302.2	142.47	3.121	
19,950.0	11,454.0	20,071.0	11,624.0	72.0	70.3	-112.48	8,623.7	451.3	444.6	301.4	143.18	3.105	
20,000.0	11,454.0	20,121.0	11,624.0	72.3	70.7	-112.48	8,673.7	450.8	444.6	300.7	143.89	3.090	
20,045.0	11,454.0	20,166.0	11,624.0	72.7	71.0	-112.48	8,718.7	450.4	444.6	300.1	144.53	3.076	
20,100.0	11,454.0	20,221.0	11,624.0	73.0	71.4	-112.48	8,773.7	449.9	444.6	299.3	145.31	3.060	
20,140.0	11,454.0	20,261.0	11,624.0	73.3	71.7	-112.48	8,813.7	449.6	444.6	298.8	145.88	3.048	
20,200.0	11,454.0	20,321.0	11,624.0	73.7	72.1	-112.48	8,873.7	449.0	444.6	297.9	146.74	3.030	
20,235.0	11,454.0	20,356.0	11,624.0	74.0	72.4	-112.48	8,908.7	448.7	444.6	297.4	147.24	3.020	
20,300.0	11,454.0	20,421.0	11,624.0	74.5	72.9	-112.48	8,973.7	448.1	444.7	296.5	148.17	3.001	
20,330.0	11,454.0	20,451.0	11,624.0	74.7	73.1	-112.48	9,003.7	447.8	444.7	296.1	148.60	2.992	
20,400.0	11,454.0	20,521.0	11,624.0	75.2	73.6	-112.48	9,073.7	447.2	444.7	295.1	149.60	2.972	
20,425.0	11,454.0	20,546.0	11,624.0	75.3	73.8	-112.48	9,098.7	447.0	444.7	294.7	149.96	2.965	
20,500.0	11,454.0	20,621.0	11,624.0	75.9	74.3	-112.48	9,173.7	446.3	444.7	293.6	151.03	2.944	
20,520.0	11,454.0	20,641.0	11,624.0	76.0	74.4	-112.48	9,193.7	446.1	444.7	293.3	151.32	2.939	
20,600.0	11,454.0	20,721.0	11,624.0	76.6	75.0	-112.48	9,273.7	445.4	444.7	292.2	152.47	2.916	
20,615.0	11,454.0	20,736.0	11,624.0	76.7	75.1	-112.48	9,288.7	445.2	444.7	292.0	152.68	2.912	
20,700.0	11,454.0	20,821.0	11,624.0	77.3	75.7	-112.48	9,373.7	444.5	444.7	290.8	153.91	2.889	
20,710.0	11,454.0	20,831.0	11,624.0	77.4	75.8	-112.48	9,383.7	444.4	444.7	290.6	154.05	2.887	
20,800.0	11,454.0	20,921.0	11,624.0	78.0	76.5	-112.48	9,473.7	443.6	444.7	289.3	155.34	2.863	
20,805.0	11,454.0	20,926.0	11,624.0	78.0	76.5	-112.48	9,478.7	443.5	444.7	289.3	155.42	2.861	
20,900.0	11,454.0	21,021.0	11,624.0	78.7	77.2	-112.48	9,573.7	442.7	444.7	287.9	156.79	2.836	
20,995.0	11,454.0	21,116.0	11,624.0	79.4	77.9	-112.47	9,668.7	441.8	444.7	286.5	158.16	2.812	
21,000.0	11,454.0	21,121.0	11,624.0	79.4	77.9	-112.47	9,673.7	441.7	444.7	286.5	158.23	2.811	
21,090.0	11,454.0	21,211.0	11,624.0	80.1	78.6	-112.47	9,763.7	440.9	444.7	285.2	159.53	2.788	
21,100.0	11,454.0	21,221.0	11,624.0	80.1	78.6	-112.47	9,773.7	440.8	444.7	285.0	159.67	2.785	
21,185.0	11,454.0	21,306.0	11,624.0	80.7	79.3	-112.47	9,858.7	440.1	444.7	283.8	160.90	2.764	
21,200.0	11,454.0	21,321.0	11,624.0	80.8	79.4	-112.47	9,873.7	439.9	444.7	283.6	161.12	2.760	
21,280.0	11,454.0	21,401.0	11,624.0	81.4	80.0	-112.47	9,953.7	439.2	444.7	282.4	162.28	2.741	
21,300.0	11,454.0	21,421.0	11,624.0	81.6	80.1	-112.47	9,973.7	439.0	444.7	282.2	162.57	2.736	
21,375.0	11,454.0	21,496.0	11,624.0	82.1	80.6	-112.47	10,048.7	438.3	444.7	281.1	163.65	2.718	
21,400.0	11,454.0	21,521.0	11,624.0	82.3	80.8	-112.47	10,073.7	438.1	444.7	280.7	164.01	2.712	
21,470.0	11,454.0	21,591.0	11,624.0	82.8	81.3	-112.47	10,143.7	437.5	444.7	279.7	165.03	2.695	
21,500.0	11,454.0	21,621.0	11,624.0	83.0	81.6	-112.47	10,173.7	437.2	444.7	279.3	165.46	2.688	
21,565.0	11,454.0	21,686.0	11,624.0	83.5	82.0	-112.47	10,238.7	436.6	444.7	278.3	166.41	2.673	
21,600.0	11,454.0	21,721.0	11,624.0	83.7	82.3	-112.47	10,273.7	436.3	444.7	277.8	166.92	2.664	
21,660.0	11,454.0	21,781.0	11,624.0	84.1	82.7	-112.47	10,333.6	435.7	444.7	277.0	167.79	2.651	
21,700.0	11,454.0	21,821.0	11,624.0	84.4	83.0	-112.47	10,373.6	435.4	444.8	276.4	168.37	2.642	
21,755.0	11,454.0	21,876.0	11,624.0	84.8	83.4	-112.47	10,428.6	434.9	444.8	275.6	169.17	2.629	
21,800.0	11,454.0	21,921.0	11,624.0	85.2	83.7	-112.47	10,473.6	434.5	444.8	274.9	169.83	2.619	
21,850.0	11,454.0	21,971.0	11,624.0	85.5	84.1	-112.47	10,523.6	434.0	444.8	274.2	170.55	2.608	
21,875.0	11,454.0	21,996.0	11,624.0	85.7	84.3	-112.47	10,548.7	433.8	444.8	273.8	170.92	2.602	
21,875.5	11,454.0	21,996.4	11,624.0	85.7	84.3	-112.47	10,549.0	433.8	444.8	273.8	170.92	2.602 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 #713H
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 #713H	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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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	Offset	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,465.0	4,417.3	4,714.2	4,664.2	15.6	16.4	-7.87	188.5	1,775.8	1,297.8	1,266.6	31.17	41.632	
4,500.0	4,451.6	4,746.8	4,696.1	15.7	16.5	-7.84	186.1	1,770.1	1,284.9	1,253.5	31.46	40.841	
4,560.0	4,510.5	4,802.6	4,750.9	16.0	16.8	-7.77	182.0	1,760.3	1,262.9	1,231.0	31.96	39.517	
4,600.0	4,549.8	4,839.8	4,787.4	16.2	17.0	-7.73	179.2	1,753.8	1,248.2	1,215.9	32.29	38.657	
4,655.0	4,603.8	4,890.9	4,837.6	16.4	17.2	-7.67	175.4	1,744.8	1,228.0	1,195.3	32.75	37.501	
4,700.0	4,647.9	4,932.8	4,878.7	16.6	17.4	-7.62	172.3	1,737.5	1,211.5	1,178.4	33.12	36.579	
4,750.0	4,697.0	4,979.3	4,924.3	16.9	17.6	-7.57	168.8	1,729.3	1,193.2	1,159.6	33.54	35.579	
4,800.0	4,746.1	5,025.7	4,969.9	17.1	17.8	-7.51	165.3	1,721.1	1,174.8	1,140.8	33.95	34.602	
4,845.0	4,790.3	5,067.6	5,011.0	17.3	18.0	-7.45	162.2	1,713.8	1,158.3	1,123.9	34.33	33.743	
4,900.0	4,844.3	5,118.7	5,061.2	17.5	18.2	-7.38	158.4	1,704.8	1,138.1	1,103.3	34.78	32.718	
4,940.0	4,883.5	5,155.9	5,097.7	17.7	18.4	-7.33	155.6	1,698.3	1,123.4	1,088.3	35.12	31.989	
5,000.0	4,942.4	5,211.7	5,152.5	18.0	18.6	-7.25	151.5	1,688.5	1,101.4	1,065.8	35.62	30.921	
5,035.0	4,976.8	5,244.3	5,184.5	18.1	18.8	-7.20	149.0	1,682.7	1,088.5	1,052.6	35.91	30.311	
5,100.0	5,040.6	5,304.7	5,243.8	18.4	19.0	-7.11	144.5	1,672.1	1,064.7	1,028.2	36.46	29.205	
5,130.0	5,070.0	5,332.6	5,271.2	18.5	19.2	-7.07	142.4	1,667.2	1,053.7	1,017.0	36.71	28.705	
5,200.0	5,138.8	5,397.7	5,335.1	18.9	19.5	-6.96	137.6	1,655.8	1,028.0	990.7	37.29	27.566	
5,225.0	5,163.3	5,421.0	5,357.9	19.0	19.6	-6.92	135.9	1,651.7	1,018.8	981.3	37.50	27.167	
5,300.0	5,236.9	5,490.7	5,426.4	19.3	19.9	-6.80	130.7	1,639.5	991.3	953.2	38.13	25.998	
5,320.0	5,256.5	5,509.3	5,444.6	19.4	20.0	-6.77	129.3	1,636.2	984.0	945.7	38.30	25.693	
5,400.0	5,335.1	5,583.7	5,517.6	19.8	20.3	-6.63	123.7	1,623.1	954.6	915.7	38.97	24.497	
5,415.0	5,349.8	5,597.6	5,531.3	19.8	20.4	-6.60	122.7	1,620.7	949.1	910.0	39.09	24.278	
5,500.0	5,433.2	5,676.7	5,608.9	20.2	20.7	-6.44	116.8	1,606.8	918.0	878.1	39.81	23.060	
5,510.0	5,443.1	5,686.0	5,618.0	20.3	20.8	-6.42	116.1	1,605.2	914.3	874.4	39.89	22.919	
5,600.0	5,531.4	5,769.7	5,700.2	20.7	21.2	-6.23	109.9	1,590.5	881.3	840.6	40.65	21.682	
5,605.0	5,536.3	5,774.3	5,704.8	20.7	21.2	-6.22	109.5	1,589.7	879.5	838.8	40.69	21.615	
5,700.0	5,629.6	5,862.7	5,791.5	21.1	21.6	-6.01	102.9	1,574.1	844.6	803.2	41.49	20.360	
5,795.0	5,722.8	5,951.0	5,878.2	21.5	22.0	-5.78	96.3	1,558.6	809.8	767.5	42.28	19.153	
5,800.0	5,727.7	5,955.6	5,882.8	21.6	22.0	-5.77	96.0	1,557.8	808.0	765.7	42.32	19.091	
5,890.0	5,816.1	6,038.3	5,963.9	22.0	22.4	-5.54	89.8	1,543.3	775.0	732.0	43.07	17.993	
5,900.0	5,825.9	6,047.0	5,972.5	22.0	22.4	-5.51	89.2	1,541.8	771.4	728.2	43.16	17.873	
5,985.0	5,909.3	6,121.5	6,045.7	22.4	22.7	-5.29	83.8	1,529.1	740.7	696.8	43.89	16.878	
6,000.0	5,924.1	6,134.7	6,058.6	22.5	22.8	-5.25	82.9	1,526.8	735.3	691.3	44.01	16.707	
6,080.0	6,002.6	6,205.2	6,128.0	22.8	23.1	-5.04	77.9	1,515.3	707.0	662.3	44.70	15.816	
6,100.0	6,022.2	6,222.9	6,145.4	22.9	23.2	-4.98	76.7	1,512.4	699.9	655.1	44.87	15.599	
6,148.7	6,070.0	6,266.0	6,187.9	23.1	23.4	-4.85	73.8	1,505.6	683.0	637.7	45.28	15.084	
6,175.0	6,095.9	6,289.4	6,211.0	23.3	23.5	-4.77	72.3	1,502.0	673.9	628.4	45.50	14.812	
6,200.0	6,120.4	6,311.7	6,232.9	23.4	23.6	-4.69	70.9	1,498.6	665.5	619.8	45.71	14.560	
6,270.0	6,189.3	6,374.4	6,294.8	23.7	23.9	-4.46	66.9	1,489.2	642.6	596.3	46.30	13.880	
6,300.0	6,218.9	6,400.0	6,320.1	23.8	24.0	-4.36	65.3	1,485.4	633.2	586.6	46.56	13.600	
6,365.0	6,283.1	6,460.3	6,379.6	24.1	24.3	-4.13	61.6	1,476.8	613.5	566.4	47.09	13.027	
6,400.0	6,317.7	6,492.1	6,411.1	24.2	24.4	-4.01	59.7	1,472.3	603.3	555.9	47.39	12.732	
6,460.0	6,377.1	6,547.0	6,465.3	24.5	24.6	-3.80	56.5	1,464.8	586.5	538.6	47.88	12.250	
6,500.0	6,416.7	6,583.7	6,501.7	24.7	24.8	-3.65	54.5	1,460.0	575.8	527.6	48.20	11.945	
6,555.0	6,471.3	6,634.5	6,551.9	24.9	25.0	-3.44	51.7	1,453.4	561.7	513.1	48.65	11.547	
6,600.0	6,516.0	6,676.2	6,593.2	25.1	25.2	-3.27	49.5	1,448.2	550.7	501.7	49.01	11.238	
6,650.0	6,565.7	6,722.7	6,639.3	25.3	25.4	-3.07	47.0	1,442.5	539.1	489.7	49.40	10.914	
6,700.0	6,615.4	6,769.4	6,685.6	25.5	25.6	-2.88	44.7	1,437.0	528.1	478.4	49.79	10.608	
6,745.0	6,660.2	6,811.5	6,727.5	25.7	25.8	-2.70	42.7	1,432.1	518.8	468.7	50.13	10.349	
6,800.0	6,715.0	6,863.2	6,778.8	25.9	26.0	-2.47	40.2	1,426.4	508.0	457.5	50.54	10.051	
6,840.0	6,754.9	6,900.0	6,815.3	26.0	26.1	-2.32	38.5	1,422.5	500.7	449.8	50.84	9.847	
6,900.0	6,814.8	6,957.7	6,872.7	26.2	26.4	-2.07	36.0	1,416.5	490.4	439.1	51.28	9.564	
6,935.0	6,849.7	6,990.9	6,905.7	26.4	26.5	-1.93	34.6	1,413.1	484.8	433.3	51.52	9.410	

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 #713H
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 #713H	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)		
7,000.0	6,914.7	7,052.8	6,967.2	26.6	26.7	-1.66	32.1	1,407.2	475.3	423.3	51.97	9.145	
7,030.0	6,944.6	7,081.4	6,995.7	26.7	26.9	-1.54	30.9	1,404.5	471.2	419.1	52.17	9.033	
7,100.0	7,014.6	7,148.3	7,062.2	26.9	27.1	-1.26	28.4	1,398.6	462.7	410.1	52.63	8.791	
7,125.0	7,039.6	7,172.2	7,086.1	27.0	27.2	-1.16	27.6	1,396.6	460.0	407.2	52.78	8.714	
7,200.0	7,114.6	7,244.1	7,157.7	27.2	27.5	-0.87	25.1	1,390.7	452.6	399.4	53.23	8.504	
7,220.0	7,134.6	7,263.3	7,176.9	27.2	27.6	-0.80	24.4	1,389.2	450.9	397.6	53.32	8.457	
7,248.7	7,163.3	7,290.9	7,204.3	27.2	27.7	88.56	23.5	1,387.1	448.7	395.2	53.45	8.395	
7,300.0	7,214.6	7,340.3	7,253.6	27.2	27.9	88.74	22.0	1,383.5	444.9	391.3	53.62	8.298	
7,315.0	7,229.6	7,354.7	7,268.0	27.2	27.9	88.80	21.6	1,382.5	443.8	390.2	53.67	8.270	
7,400.0	7,314.6	7,436.6	7,349.6	27.2	28.2	89.08	19.3	1,377.1	438.2	384.2	53.96	8.120	
7,410.0	7,324.6	7,446.2	7,359.2	27.2	28.3	89.12	19.0	1,376.5	437.5	383.5	53.99	8.103	
7,500.0	7,414.6	7,533.0	7,445.8	27.3	28.6	89.39	16.9	1,371.4	432.2	377.9	54.29	7.960	
7,505.0	7,419.6	7,537.8	7,450.6	27.3	28.6	89.41	16.8	1,371.1	431.9	377.6	54.31	7.953	
7,600.0	7,514.6	7,629.5	7,542.2	27.3	28.9	89.67	14.8	1,366.4	427.0	372.4	54.62	7.819	
7,695.0	7,609.6	7,721.2	7,633.8	27.3	29.2	89.90	13.0	1,362.4	422.9	367.9	54.91	7.701	
7,700.0	7,614.6	7,726.1	7,638.6	27.3	29.2	89.91	13.0	1,362.2	422.7	367.7	54.93	7.695	
7,790.0	7,704.6	7,813.1	7,725.5	27.3	29.5	90.09	11.6	1,359.0	419.4	364.2	55.20	7.598	
7,800.0	7,714.6	7,822.7	7,735.2	27.4	29.5	90.11	11.5	1,358.7	419.1	363.8	55.23	7.588	
7,885.0	7,799.6	7,904.9	7,817.4	27.4	29.8	90.25	10.5	1,356.4	416.6	361.1	55.47	7.511	
7,900.0	7,814.6	7,919.4	7,831.9	27.4	29.8	90.27	10.3	1,356.0	416.2	360.7	55.51	7.498	
7,980.0	7,894.6	7,996.8	7,909.3	27.4	30.1	90.37	9.6	1,354.4	414.6	358.8	55.73	7.439	
8,000.0	7,914.6	8,016.2	7,928.6	27.4	30.1	90.39	9.5	1,354.0	414.2	358.4	55.78	7.426	
8,075.0	7,989.6	8,088.8	8,001.2	27.4	30.3	90.45	9.1	1,353.0	413.2	357.2	55.97	7.382	
8,100.0	8,014.6	8,113.0	8,025.4	27.4	30.4	90.46	9.0	1,352.8	412.9	356.9	56.03	7.370	
8,170.0	8,084.6	8,180.7	8,093.1	27.5	30.5	90.49	8.8	1,352.4	412.5	356.4	56.18	7.343	
8,200.0	8,114.6	8,209.8	8,122.2	27.5	30.5	90.49	8.8	1,352.3	412.5	356.2	56.23	7.336	
8,226.9	8,141.5	8,236.3	8,148.7	27.5	30.6	90.49	8.8	1,352.3	412.5	356.2	56.25	7.333	
8,265.0	8,179.6	8,274.4	8,186.8	27.5	30.6	90.49	8.8	1,352.3	412.5	356.2	56.26	7.331	
8,300.0	8,214.6	8,309.4	8,221.8	27.5	30.6	90.49	8.8	1,352.3	412.5	356.2	56.28	7.329	
8,360.0	8,274.6	8,369.4	8,281.8	27.5	30.6	90.49	8.8	1,352.3	412.5	356.2	56.30	7.325	
8,400.0	8,314.6	8,409.4	8,321.8	27.5	30.6	90.49	8.8	1,352.3	412.5	356.1	56.32	7.323	
8,455.0	8,369.6	8,464.4	8,376.8	27.5	30.6	90.49	8.8	1,352.3	412.5	356.1	56.35	7.319	
8,500.0	8,414.6	8,509.4	8,421.8	27.6	30.6	90.49	8.8	1,352.3	412.5	356.1	56.37	7.317	
8,550.0	8,464.6	8,559.4	8,471.8	27.6	30.6	90.49	8.8	1,352.3	412.5	356.1	56.40	7.313	
8,600.0	8,514.6	8,609.4	8,521.8	27.6	30.6	90.49	8.8	1,352.3	412.5	356.0	56.42	7.310	
8,645.0	8,559.6	8,654.4	8,566.8	27.6	30.6	90.49	8.8	1,352.3	412.5	356.0	56.44	7.307	
8,700.0	8,614.6	8,709.4	8,621.8	27.6	30.6	90.49	8.8	1,352.3	412.5	356.0	56.47	7.304	
8,740.0	8,654.6	8,749.4	8,661.8	27.6	30.6	90.49	8.8	1,352.3	412.5	356.0	56.49	7.301	
8,800.0	8,714.6	8,809.4	8,721.8	27.6	30.7	90.49	8.8	1,352.3	412.5	355.9	56.52	7.297	
8,835.0	8,749.6	8,844.4	8,756.8	27.7	30.7	90.49	8.8	1,352.3	412.5	355.9	56.54	7.295	
8,900.0	8,814.6	8,909.4	8,821.8	27.7	30.7	90.49	8.8	1,352.3	412.5	355.9	56.57	7.291	
8,930.0	8,844.6	8,939.4	8,851.8	27.7	30.7	90.49	8.8	1,352.3	412.5	355.9	56.59	7.289	
9,000.0	8,914.6	9,009.4	8,921.8	27.7	30.7	90.49	8.8	1,352.3	412.5	355.8	56.62	7.284	
9,025.0	8,939.6	9,034.4	8,946.8	27.7	30.7	90.49	8.8	1,352.3	412.5	355.8	56.64	7.283	
9,100.0	9,014.6	9,109.4	9,021.8	27.7	30.7	90.49	8.8	1,352.3	412.5	355.8	56.67	7.278	
9,120.0	9,034.6	9,129.4	9,041.8	27.7	30.7	90.49	8.8	1,352.3	412.5	355.8	56.68	7.276	
9,200.0	9,114.6	9,209.4	9,121.8	27.8	30.7	90.49	8.8	1,352.3	412.5	355.7	56.73	7.271	
9,215.0	9,129.6	9,224.4	9,136.8	27.8	30.7	90.49	8.8	1,352.3	412.5	355.7	56.73	7.270	
9,300.0	9,214.6	9,309.4	9,221.8	27.8	30.8	90.49	8.8	1,352.3	412.5	355.7	56.78	7.264	
9,310.0	9,224.6	9,319.4	9,231.8	27.8	30.8	90.49	8.8	1,352.3	412.5	355.7	56.78	7.264	
9,400.0	9,314.6	9,409.4	9,321.8	27.8	30.8	90.49	8.8	1,352.3	412.5	355.6	56.83	7.258	
9,405.0	9,319.6	9,414.4	9,326.8	27.8	30.8	90.49	8.8	1,352.3	412.5	355.6	56.83	7.257	

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 #713H
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 #713H	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	
9,500.0	9,414.6	9,509.4	9,421.8	27.9	30.8	90.49	8.8	1,352.3	412.5	355.6	56.88	7.251	
9,595.0	9,509.6	9,604.4	9,516.8	27.9	30.8	90.49	8.8	1,352.3	412.5	355.5	56.93	7.244	
9,600.0	9,514.6	9,609.4	9,521.8	27.9	30.8	90.49	8.8	1,352.3	412.5	355.5	56.94	7.244	
9,690.0	9,604.6	9,699.4	9,611.8	27.9	30.8	90.49	8.8	1,352.3	412.5	355.5	56.99	7.238	
9,700.0	9,614.6	9,709.4	9,621.8	27.9	30.8	90.49	8.8	1,352.3	412.5	355.5	56.99	7.237	
9,785.0	9,699.6	9,794.4	9,706.8	28.0	30.9	90.49	8.8	1,352.3	412.5	355.4	57.04	7.231	
9,800.0	9,714.6	9,809.4	9,721.8	28.0	30.9	90.49	8.8	1,352.3	412.5	355.4	57.05	7.230	
9,880.0	9,794.6	9,889.4	9,801.8	28.0	30.9	90.49	8.8	1,352.3	412.5	355.4	57.09	7.225	
9,900.0	9,814.6	9,909.4	9,821.8	28.0	30.9	90.49	8.8	1,352.3	412.5	355.4	57.10	7.223	
9,975.0	9,889.6	9,984.4	9,896.8	28.0	30.9	90.49	8.8	1,352.3	412.5	355.3	57.14	7.218	
10,000.0	9,914.6	10,009.4	9,921.8	28.0	30.9	90.49	8.8	1,352.3	412.5	355.3	57.16	7.216	
10,070.0	9,984.6	10,079.4	9,991.8	28.0	30.9	90.49	8.8	1,352.3	412.5	355.3	57.19	7.211	
10,100.0	10,014.6	10,109.4	10,021.8	28.1	30.9	90.49	8.8	1,352.3	412.5	355.2	57.21	7.209	
10,165.0	10,079.6	10,174.4	10,086.8	28.1	30.9	90.49	8.8	1,352.3	412.5	355.2	57.25	7.205	
10,200.0	10,114.6	10,209.4	10,121.8	28.1	30.9	90.49	8.8	1,352.3	412.5	355.2	57.27	7.202	
10,260.0	10,174.6	10,269.4	10,181.8	28.1	31.0	90.49	8.8	1,352.3	412.5	355.2	57.30	7.198	
10,300.0	10,214.6	10,309.4	10,221.8	28.1	31.0	90.49	8.8	1,352.3	412.5	355.1	57.32	7.195	
10,355.0	10,269.6	10,364.4	10,276.8	28.1	31.0	90.49	8.8	1,352.3	412.5	355.1	57.35	7.191	
10,400.0	10,314.6	10,409.4	10,321.8	28.2	31.0	90.49	8.8	1,352.3	412.5	355.1	57.38	7.188	
10,450.0	10,364.6	10,459.4	10,371.8	28.2	31.0	90.49	8.8	1,352.3	412.5	355.0	57.41	7.185	
10,500.0	10,414.6	10,509.4	10,421.8	28.2	31.0	90.49	8.8	1,352.3	412.5	355.0	57.44	7.181	
10,545.0	10,459.6	10,554.4	10,466.8	28.2	31.0	90.49	8.8	1,352.3	412.5	355.0	57.46	7.178	
10,600.0	10,514.6	10,609.4	10,521.8	28.2	31.0	90.49	8.8	1,352.3	412.5	355.0	57.49	7.174	
10,640.0	10,554.6	10,649.4	10,561.8	28.2	31.0	90.49	8.8	1,352.3	412.5	354.9	57.52	7.171	
10,700.0	10,614.6	10,709.4	10,621.8	28.3	31.1	90.49	8.8	1,352.3	412.5	354.9	57.55	7.167	
10,735.0	10,649.6	10,744.4	10,656.8	28.3	31.1	90.49	8.8	1,352.3	412.5	354.9	57.57	7.164	
10,800.0	10,714.6	10,809.4	10,721.8	28.3	31.1	90.49	8.8	1,352.3	412.5	354.8	57.61	7.159	
10,830.0	10,744.6	10,839.4	10,751.8	28.3	31.1	90.49	8.8	1,352.3	412.5	354.8	57.63	7.157	
10,900.0	10,814.6	10,909.4	10,821.8	28.3	31.1	90.49	8.8	1,352.3	412.5	354.8	57.67	7.152	
10,925.0	10,839.6	10,934.4	10,846.8	28.3	31.1	90.49	8.8	1,352.3	412.5	354.8	57.68	7.150	
11,000.0	10,914.6	11,009.4	10,921.8	28.4	31.1	90.49	8.8	1,352.3	412.5	354.7	57.73	7.145	
11,020.0	10,934.6	11,029.4	10,941.8	28.4	31.1	90.49	8.8	1,352.3	412.5	354.7	57.74	7.144	
11,062.0	10,976.5	11,071.3	10,983.7	28.4	31.1	90.49	8.8	1,352.3	412.5	354.7	57.76	7.141 CC	
11,075.0	10,989.6	11,084.4	10,996.8	28.4	31.2	91.03	8.8	1,352.3	412.5	354.7	57.76	7.141	
11,100.0	11,014.5	11,109.3	11,021.7	28.4	31.2	91.21	8.8	1,352.3	412.5	354.7	57.74	7.144	
11,115.0	11,029.5	11,124.3	11,036.7	28.4	31.2	91.41	8.8	1,352.3	412.5	354.8	57.71	7.148	
11,125.0	11,039.4	11,134.2	11,046.6	28.4	31.2	91.57	8.8	1,352.3	412.5	354.9	57.68	7.152	
11,150.0	11,064.1	11,158.9	11,071.3	28.4	31.2	92.10	8.8	1,352.3	412.7	355.1	57.60	7.164	
11,175.0	11,088.5	11,183.3	11,095.7	28.4	31.2	92.78	8.8	1,352.3	412.9	355.4	57.48	7.183	
11,200.0	11,112.7	11,207.5	11,119.9	28.4	31.2	93.60	8.8	1,352.3	413.3	356.0	57.32	7.209	
11,210.0	11,122.2	11,217.0	11,129.4	28.4	31.2	93.97	8.8	1,352.3	413.5	356.2	57.25	7.222	
11,225.0	11,136.4	11,231.2	11,143.6	28.4	31.2	94.55	8.8	1,352.3	413.9	356.7	57.12	7.245	
11,250.0	11,159.8	11,254.6	11,167.0	28.4	31.2	95.60	8.8	1,352.3	414.7	357.8	56.88	7.291	
11,275.0	11,182.6	11,277.4	11,189.8	28.4	31.2	96.74	8.8	1,352.3	415.9	359.3	56.58	7.351	
11,300.0	11,204.8	11,301.0	11,213.4	28.4	31.2	98.00	8.9	1,352.3	417.5	361.3	56.23	7.426	
11,305.0	11,209.2	11,306.0	11,218.4	28.4	31.2	98.27	9.0	1,352.3	417.9	361.7	56.15	7.442	
11,325.0	11,226.5	11,326.3	11,238.7	28.4	31.2	99.36	9.9	1,352.3	419.5	363.6	55.85	7.511	
11,350.0	11,247.4	11,352.2	11,264.4	28.4	31.2	100.73	12.2	1,352.3	421.8	366.4	55.45	7.607	
11,375.0	11,267.6	11,378.5	11,290.6	28.4	31.2	102.10	15.7	1,352.2	424.5	369.4	55.04	7.712	
11,400.0	11,287.0	11,405.5	11,317.1	28.4	31.2	103.46	20.5	1,352.2	427.5	372.8	54.62	7.826	
11,425.0	11,305.6	11,433.2	11,344.1	28.4	31.2	104.82	26.7	1,352.1	430.8	376.6	54.20	7.948	
11,450.0	11,323.2	11,461.5	11,371.4	28.4	31.2	106.18	34.4	1,352.0	434.5	380.7	53.79	8.077	

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 #713H
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 #713H	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	
11,475.0	11,340.0	11,490.6	11,398.9	28.4	31.2	107.54	43.7	1,351.9	438.5	385.1	53.40	8.212	
11,495.0	11,352.6	11,514.5	11,421.2	28.4	31.2	108.62	52.4	1,351.8	441.9	388.8	53.10	8.322	
11,500.0	11,355.7	11,520.6	11,426.8	28.4	31.2	108.89	54.7	1,351.8	442.8	389.8	53.03	8.350	
11,525.0	11,370.3	11,551.5	11,454.9	28.4	31.3	110.24	67.6	1,351.6	447.4	394.7	52.69	8.491	
11,550.0	11,383.9	11,583.4	11,483.1	28.4	31.3	111.58	82.5	1,351.4	452.3	399.9	52.40	8.631	
11,575.0	11,396.4	11,616.4	11,511.4	28.5	31.3	112.91	99.5	1,351.2	457.4	405.2	52.16	8.768	
11,590.0	11,403.3	11,636.8	11,528.3	28.5	31.3	113.70	110.8	1,351.1	460.6	408.5	52.05	8.848	
11,600.0	11,407.7	11,650.6	11,539.6	28.5	31.3	114.23	118.8	1,351.0	462.7	410.7	51.99	8.900	
11,625.0	11,417.9	11,686.2	11,567.7	28.5	31.3	115.55	140.6	1,350.7	468.1	416.3	51.88	9.023	
11,650.0	11,426.8	11,723.1	11,595.3	28.5	31.3	116.85	165.1	1,350.4	473.7	421.9	51.85	9.135	
11,675.0	11,434.5	11,761.6	11,622.4	28.5	31.3	118.14	192.4	1,350.1	479.3	427.4	51.91	9.234	
11,685.0	11,437.2	11,777.4	11,633.0	28.5	31.3	118.65	204.2	1,349.9	481.6	429.6	51.96	9.269	
11,700.0	11,440.9	11,801.7	11,648.6	28.5	31.3	119.41	222.8	1,349.7	485.0	432.9	52.05	9.317	
11,725.0	11,446.1	11,843.6	11,673.6	28.5	31.3	120.66	256.4	1,349.3	490.5	438.3	52.28	9.383	
11,750.0	11,450.0	11,887.4	11,697.1	28.6	31.4	121.87	293.3	1,348.8	496.0	443.4	52.59	9.431	
11,775.0	11,452.6	11,933.1	11,718.5	28.6	31.4	123.03	333.7	1,348.3	501.2	448.2	52.98	9.460	
11,780.0	11,452.9	11,942.4	11,722.5	28.6	31.4	123.26	342.1	1,348.2	502.2	449.2	53.07	9.464	
11,800.0	11,453.8	11,980.8	11,737.3	28.6	31.4	124.14	377.5	1,347.8	506.2	452.7	53.44	9.473	
11,812.0	11,454.0	12,004.3	11,745.3	28.6	31.4	124.64	399.6	1,347.5	508.4	454.8	53.67	9.473	
11,875.0	11,454.0	12,137.1	11,772.5	28.7	31.5	127.17	529.2	1,345.9	516.1	461.0	55.10	9.367	
11,900.0	11,454.0	12,192.2	11,775.0	28.7	31.6	127.39	584.3	1,345.2	516.7	461.0	55.66	9.282	
11,970.0	11,454.0	12,260.8	11,775.0	28.8	31.6	127.41	652.8	1,344.4	516.5	460.7	55.81	9.254	
12,000.0	11,454.0	12,290.8	11,775.0	28.9	31.7	127.41	682.8	1,344.0	516.4	460.5	55.88	9.241	
12,065.0	11,454.0	12,355.8	11,775.0	29.0	31.7	127.43	747.8	1,343.2	516.2	460.2	56.07	9.207	
12,100.0	11,454.0	12,390.8	11,775.0	29.0	31.8	127.44	782.8	1,342.8	516.2	460.0	56.17	9.189	
12,160.0	11,454.0	12,450.8	11,775.0	29.1	31.9	127.45	842.8	1,342.0	516.0	459.6	56.36	9.155	
12,200.0	11,454.0	12,490.8	11,775.0	29.2	31.9	127.46	882.8	1,341.6	515.9	459.4	56.49	9.132	
12,255.0	11,454.0	12,545.8	11,775.0	29.3	32.0	127.47	937.8	1,340.9	515.7	459.0	56.69	9.097	
12,300.0	11,454.0	12,590.8	11,775.0	29.4	32.1	127.48	982.8	1,340.3	515.6	458.8	56.86	9.068	
12,350.0	11,454.0	12,640.8	11,775.0	29.5	32.1	127.49	1,032.8	1,339.7	515.5	458.4	57.06	9.034	
12,400.0	11,454.0	12,690.8	11,775.0	29.6	32.2	127.50	1,082.8	1,339.1	515.4	458.1	57.27	9.000	
12,445.0	11,454.0	12,735.8	11,775.0	29.7	32.3	127.51	1,127.8	1,338.5	515.2	457.8	57.46	8.966	
12,500.0	11,454.0	12,790.8	11,775.0	29.8	32.4	127.53	1,182.8	1,337.9	515.1	457.4	57.71	8.926	
12,540.0	11,454.0	12,830.8	11,775.0	29.9	32.5	127.54	1,222.8	1,337.4	515.0	457.1	57.90	8.895	
12,600.0	11,454.0	12,890.8	11,775.0	30.1	32.6	127.55	1,282.8	1,336.6	514.8	456.7	58.19	8.848	
12,635.0	11,454.0	12,925.8	11,775.0	30.2	32.7	127.56	1,317.8	1,336.2	514.8	456.4	58.37	8.819	
12,700.0	11,454.0	12,990.8	11,775.0	30.3	32.8	127.57	1,382.8	1,335.4	514.6	455.9	58.71	8.765	
12,730.0	11,454.0	13,020.8	11,775.0	30.4	32.9	127.58	1,412.8	1,335.0	514.5	455.6	58.87	8.739	
12,800.0	11,454.0	13,090.8	11,775.0	30.6	33.0	127.59	1,482.8	1,334.2	514.3	455.1	59.26	8.679	
12,825.0	11,454.0	13,115.8	11,775.0	30.7	33.1	127.60	1,507.8	1,333.8	514.3	454.8	59.41	8.656	
12,900.0	11,454.0	13,190.8	11,775.0	30.9	33.3	127.62	1,582.8	1,332.9	514.1	454.2	59.85	8.589	
12,920.0	11,454.0	13,210.8	11,775.0	31.0	33.3	127.62	1,602.8	1,332.7	514.0	454.0	59.97	8.571	
13,000.0	11,454.0	13,290.8	11,775.0	31.2	33.5	127.64	1,682.8	1,331.7	513.8	453.3	60.47	8.497	
13,015.0	11,454.0	13,305.8	11,775.0	31.3	33.5	127.64	1,697.8	1,331.5	513.8	453.2	60.57	8.482	
13,100.0	11,454.0	13,390.8	11,775.0	31.6	33.8	127.66	1,782.8	1,330.5	513.5	452.4	61.12	8.401	
13,110.0	11,454.0	13,400.8	11,775.0	31.6	33.8	127.66	1,792.7	1,330.3	513.5	452.3	61.19	8.392	
13,200.0	11,454.0	13,490.8	11,775.0	31.9	34.0	127.68	1,882.7	1,329.2	513.3	451.5	61.81	8.304	
13,205.0	11,454.0	13,495.8	11,775.0	31.9	34.1	127.68	1,887.7	1,329.2	513.3	451.4	61.85	8.299	
13,300.0	11,454.0	13,590.7	11,775.0	32.3	34.3	127.71	1,982.7	1,328.0	513.0	450.5	62.53	8.205	
13,395.0	11,454.0	13,685.7	11,775.0	32.6	34.6	127.73	2,077.7	1,326.8	512.8	449.5	63.24	8.109	
13,400.0	11,454.0	13,690.7	11,775.0	32.6	34.6	127.73	2,082.7	1,326.8	512.8	449.5	63.27	8.104	
13,490.0	11,454.0	13,780.7	11,775.0	33.0	34.9	127.75	2,172.7	1,325.6	512.5	448.5	63.97	8.012	

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 #713H
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 #713H	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		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	
13,500.0	11,454.0	13,790.7	11,775.0	33.0	35.0	127.75	2,182.7	1,325.5	512.5	448.4	64.05	8.002	
13,585.0	11,454.0	13,875.7	11,775.0	33.4	35.2	127.77	2,267.7	1,324.5	512.3	447.5	64.73	7.914	
13,600.0	11,454.0	13,890.7	11,775.0	33.4	35.3	127.77	2,282.7	1,324.3	512.2	447.4	64.85	7.899	
13,680.0	11,454.0	13,970.7	11,775.0	33.7	35.5	127.79	2,362.7	1,323.3	512.0	446.5	65.51	7.816	
13,700.0	11,454.0	13,990.7	11,775.0	33.8	35.6	127.80	2,382.7	1,323.1	512.0	446.3	65.68	7.795	
13,775.0	11,454.0	14,065.7	11,775.0	34.1	35.9	127.81	2,457.7	1,322.1	511.8	445.5	66.32	7.717	
13,800.0	11,454.0	14,090.7	11,775.0	34.3	36.0	127.82	2,482.7	1,321.8	511.7	445.2	66.53	7.691	
13,870.0	11,454.0	14,160.7	11,775.0	34.6	36.2	127.84	2,552.7	1,321.0	511.5	444.4	67.14	7.618	
13,900.0	11,454.0	14,190.7	11,775.0	34.7	36.3	127.84	2,582.7	1,320.6	511.4	444.0	67.41	7.587	
13,965.0	11,454.0	14,255.7	11,775.0	35.0	36.6	127.86	2,647.7	1,319.8	511.3	443.3	67.99	7.520	
14,000.0	11,454.0	14,290.7	11,775.0	35.1	36.7	127.86	2,682.7	1,319.4	511.2	442.9	68.31	7.483	
14,060.0	11,454.0	14,350.7	11,775.0	35.4	36.9	127.88	2,742.7	1,318.6	511.0	442.2	68.86	7.421	
14,100.0	11,454.0	14,390.7	11,775.0	35.6	37.1	127.89	2,782.7	1,318.1	510.9	441.7	69.23	7.380	
14,155.0	11,454.0	14,445.7	11,775.0	35.9	37.3	127.90	2,837.7	1,317.5	510.8	441.0	69.75	7.323	
14,200.0	11,454.0	14,490.7	11,775.0	36.1	37.5	127.91	2,882.7	1,316.9	510.7	440.5	70.18	7.277	
14,250.0	11,454.0	14,540.7	11,775.0	36.3	37.7	127.92	2,932.7	1,316.3	510.5	439.9	70.66	7.225	
14,300.0	11,454.0	14,590.7	11,775.0	36.5	37.9	127.93	2,982.7	1,315.7	510.4	439.3	71.14	7.174	
14,345.0	11,454.0	14,635.7	11,775.0	36.8	38.1	127.94	3,027.6	1,315.1	510.3	438.7	71.59	7.128	
14,400.0	11,454.0	14,690.7	11,775.0	37.0	38.3	127.96	3,082.6	1,314.4	510.1	438.0	72.13	7.073	
14,440.0	11,454.0	14,730.7	11,775.0	37.2	38.5	127.97	3,122.6	1,313.9	510.0	437.5	72.53	7.032	
14,500.0	11,454.0	14,790.7	11,775.0	37.5	38.7	127.98	3,182.6	1,313.2	509.9	436.7	73.14	6.972	
14,535.0	11,454.0	14,825.7	11,775.0	37.7	38.9	127.99	3,217.6	1,312.8	509.8	436.3	73.49	6.937	
14,600.0	11,454.0	14,890.7	11,775.0	38.0	39.2	128.00	3,282.6	1,312.0	509.6	435.5	74.16	6.872	
14,630.0	11,454.0	14,920.7	11,775.0	38.2	39.3	128.01	3,312.6	1,311.6	509.5	435.1	74.47	6.842	
14,700.0	11,454.0	14,990.7	11,775.0	38.5	39.6	128.02	3,382.6	1,310.7	509.4	434.2	75.20	6.773	
14,725.0	11,454.0	15,015.7	11,775.0	38.7	39.8	128.03	3,407.6	1,310.4	509.3	433.8	75.47	6.749	
14,800.0	11,454.0	15,090.7	11,775.0	39.1	40.1	128.05	3,482.6	1,309.5	509.1	432.8	76.26	6.676	
14,820.0	11,454.0	15,110.7	11,775.0	39.2	40.2	128.05	3,502.6	1,309.3	509.1	432.6	76.47	6.657	
14,900.0	11,454.0	15,190.7	11,775.0	39.6	40.6	128.07	3,582.6	1,308.3	508.8	431.5	77.33	6.580	
14,915.0	11,454.0	15,205.7	11,775.0	39.7	40.6	128.07	3,597.6	1,308.1	508.8	431.3	77.50	6.565	
15,000.0	11,454.0	15,290.7	11,775.0	40.1	41.0	128.09	3,682.6	1,307.0	508.6	430.2	78.42	6.485	
15,010.0	11,454.0	15,300.7	11,775.0	40.2	41.1	128.10	3,692.6	1,306.9	508.6	430.0	78.53	6.476	
15,100.0	11,454.0	15,390.7	11,775.0	40.7	41.5	128.12	3,782.6	1,305.8	508.3	428.8	79.53	6.392	
15,105.0	11,454.0	15,395.7	11,775.0	40.7	41.6	128.12	3,787.6	1,305.7	508.3	428.7	79.59	6.387	
15,200.0	11,454.0	15,490.7	11,775.0	41.2	42.0	128.14	3,882.6	1,304.6	508.1	427.4	80.65	6.300	
15,295.0	11,454.0	15,585.7	11,775.0	41.8	42.5	128.16	3,977.6	1,303.4	507.8	426.1	81.73	6.214	
15,300.0	11,454.0	15,590.7	11,775.0	41.8	42.5	128.16	3,982.6	1,303.3	507.8	426.0	81.78	6.209	
15,390.0	11,454.0	15,680.7	11,775.0	42.3	43.0	128.18	4,072.6	1,302.2	507.6	424.8	82.81	6.129	
15,400.0	11,454.0	15,690.7	11,775.0	42.3	43.0	128.19	4,082.6	1,302.1	507.5	424.6	82.93	6.120	
15,485.0	11,454.0	15,775.7	11,775.0	42.8	43.5	128.21	4,167.6	1,301.1	507.3	423.4	83.91	6.046	
15,500.0	11,454.0	15,790.7	11,775.0	42.9	43.5	128.21	4,182.6	1,300.9	507.3	423.2	84.09	6.033	
15,580.0	11,454.0	15,870.7	11,775.0	43.4	44.0	128.23	4,262.5	1,299.9	507.1	422.1	85.02	5.964	
15,600.0	11,454.0	15,890.7	11,775.0	43.5	44.1	128.23	4,282.5	1,299.6	507.0	421.8	85.26	5.947	
15,675.0	11,454.0	15,965.7	11,775.0	43.9	44.5	128.25	4,357.5	1,298.7	506.8	420.7	86.15	5.883	
15,700.0	11,454.0	15,990.7	11,775.0	44.1	44.6	128.25	4,382.5	1,298.4	506.8	420.3	86.44	5.863	
15,770.0	11,454.0	16,060.7	11,775.0	44.5	45.0	128.27	4,452.5	1,297.5	506.6	419.3	87.28	5.804	
15,800.0	11,454.0	16,090.7	11,775.0	44.7	45.1	128.28	4,482.5	1,297.2	506.5	418.9	87.64	5.780	
15,865.0	11,454.0	16,155.7	11,775.0	45.0	45.5	128.29	4,547.5	1,296.4	506.3	417.9	88.42	5.727	
15,900.0	11,454.0	16,190.7	11,775.0	45.3	45.7	128.30	4,582.5	1,295.9	506.3	417.4	88.84	5.698	
15,960.0	11,454.0	16,250.7	11,775.0	45.6	46.0	128.32	4,642.5	1,295.2	506.1	416.5	89.57	5.650	
16,000.0	11,454.0	16,290.7	11,775.0	45.9	46.2	128.32	4,682.5	1,294.7	506.0	415.9	90.06	5.619	
16,055.0	11,454.0	16,345.7	11,775.0	46.2	46.5	128.34	4,737.5	1,294.0	505.9	415.1	90.73	5.575	

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 #713H
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 #713H	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	
16,100.0	11,454.0	16,390.7	11,775.0	46.5	46.8	128.35	4,782.5	1,293.5	505.7	414.5	91.28	5.540	
16,150.0	11,454.0	16,440.7	11,775.0	46.8	47.1	128.36	4,832.5	1,292.9	505.6	413.7	91.90	5.502	
16,200.0	11,454.0	16,490.7	11,775.0	47.1	47.4	128.37	4,882.5	1,292.2	505.5	413.0	92.51	5.464	
16,245.0	11,454.0	16,535.7	11,775.0	47.3	47.6	128.38	4,927.5	1,291.7	505.4	412.3	93.07	5.430	
16,300.0	11,454.0	16,590.7	11,775.0	47.7	47.9	128.39	4,982.5	1,291.0	505.2	411.5	93.76	5.389	
16,340.0	11,454.0	16,630.7	11,775.0	47.9	48.2	128.40	5,022.5	1,290.5	505.1	410.9	94.26	5.359	
16,400.0	11,454.0	16,690.7	11,775.0	48.3	48.5	128.42	5,082.5	1,289.8	505.0	409.9	95.01	5.315	
16,435.0	11,454.0	16,725.7	11,775.0	48.5	48.7	128.43	5,117.5	1,289.3	504.9	409.4	95.45	5.289	
16,500.0	11,454.0	16,790.7	11,775.0	48.9	49.1	128.44	5,182.5	1,288.5	504.7	408.4	96.27	5.242	
16,530.0	11,454.0	16,820.7	11,775.0	49.1	49.3	128.45	5,212.5	1,288.2	504.6	408.0	96.65	5.221	
16,600.0	11,454.0	16,890.7	11,775.0	49.5	49.7	128.46	5,282.5	1,287.3	504.4	406.9	97.54	5.172	
16,625.0	11,454.0	16,915.7	11,775.0	49.7	49.8	128.47	5,307.5	1,287.0	504.4	406.5	97.86	5.154	
16,700.0	11,454.0	16,990.7	11,775.0	50.2	50.3	128.49	5,382.5	1,286.1	504.2	405.4	98.82	5.102	
16,720.0	11,454.0	17,010.7	11,775.0	50.3	50.4	128.49	5,402.5	1,285.8	504.1	405.1	99.07	5.088	
16,800.0	11,454.0	17,090.7	11,775.0	50.8	50.9	128.51	5,482.4	1,284.8	503.9	403.8	100.10	5.034	
16,815.0	11,454.0	17,105.7	11,775.0	50.9	51.0	128.51	5,497.4	1,284.7	503.9	403.6	100.29	5.024	
16,900.0	11,454.0	17,190.7	11,775.0	51.4	51.5	128.53	5,582.4	1,283.6	503.7	402.3	101.39	4.968	
16,910.0	11,454.0	17,200.7	11,775.0	51.5	51.5	128.54	5,592.4	1,283.5	503.6	402.1	101.52	4.961	
17,000.0	11,454.0	17,290.7	11,775.0	52.1	52.1	128.56	5,682.4	1,282.4	503.4	400.7	102.69	4.902	
17,005.0	11,454.0	17,295.7	11,775.0	52.1	52.1	128.56	5,687.4	1,282.3	503.4	400.6	102.76	4.899	
17,100.0	11,454.0	17,390.7	11,775.0	52.7	52.7	128.58	5,782.4	1,281.1	503.2	399.2	104.00	4.838	
17,195.0	11,454.0	17,485.7	11,775.0	53.3	53.3	128.60	5,877.4	1,280.0	502.9	397.7	105.24	4.779	
17,200.0	11,454.0	17,490.7	11,775.0	53.4	53.3	128.60	5,882.4	1,279.9	502.9	397.6	105.31	4.775	
17,290.0	11,454.0	17,580.7	11,775.0	53.9	53.8	128.63	5,972.4	1,278.8	502.7	396.2	106.49	4.720	
17,300.0	11,454.0	17,590.7	11,775.0	54.0	53.9	128.63	5,982.4	1,278.7	502.6	396.0	106.63	4.714	
17,385.0	11,454.0	17,675.7	11,775.0	54.6	54.4	128.65	6,067.4	1,277.6	502.4	394.7	107.75	4.663	
17,400.0	11,454.0	17,690.7	11,775.0	54.6	54.5	128.65	6,082.4	1,277.4	502.4	394.4	107.95	4.654	
17,480.0	11,454.0	17,770.7	11,775.0	55.2	55.0	128.67	6,162.4	1,276.5	502.2	393.2	109.01	4.607	
17,500.0	11,454.0	17,790.7	11,775.0	55.3	55.2	128.68	6,182.4	1,276.2	502.1	392.8	109.28	4.595	
17,575.0	11,454.0	17,865.7	11,775.0	55.8	55.6	128.69	6,257.4	1,275.3	501.9	391.6	110.28	4.551	
17,600.0	11,454.0	17,890.7	11,775.0	56.0	55.8	128.70	6,282.4	1,275.0	501.9	391.2	110.61	4.537	
17,670.0	11,454.0	17,960.7	11,775.0	56.4	56.2	128.72	6,352.4	1,274.1	501.7	390.1	111.55	4.497	
17,700.0	11,454.0	17,990.7	11,775.0	56.6	56.4	128.72	6,382.4	1,273.7	501.6	389.7	111.95	4.480	
17,765.0	11,454.0	18,055.7	11,775.0	57.0	56.8	128.74	6,447.4	1,272.9	501.4	388.6	112.83	4.444	
17,800.0	11,454.0	18,090.7	11,775.0	57.3	57.0	128.75	6,482.4	1,272.5	501.3	388.0	113.30	4.425	
17,860.0	11,454.0	18,150.7	11,775.0	57.7	57.4	128.76	6,542.4	1,271.8	501.2	387.1	114.11	4.392	
17,900.0	11,454.0	18,190.7	11,775.0	57.9	57.7	128.77	6,582.4	1,271.3	501.1	386.4	114.65	4.371	
17,955.0	11,454.0	18,245.7	11,775.0	58.3	58.0	128.78	6,637.4	1,270.6	500.9	385.6	115.40	4.341	
18,000.0	11,454.0	18,290.7	11,775.0	58.6	58.3	128.79	6,682.4	1,270.1	500.8	384.8	116.01	4.317	
18,050.0	11,454.0	18,340.7	11,775.0	58.9	58.7	128.81	6,732.3	1,269.4	500.7	384.0	116.69	4.291	
18,100.0	11,454.0	18,390.7	11,775.0	59.3	59.0	128.82	6,782.3	1,268.8	500.6	383.2	117.37	4.265	
18,145.0	11,454.0	18,435.7	11,775.0	59.6	59.3	128.83	6,827.3	1,268.3	500.5	382.5	117.98	4.242	
18,200.0	11,454.0	18,490.7	11,775.0	60.0	59.6	128.84	6,882.3	1,267.6	500.3	381.6	118.73	4.214	
18,240.0	11,454.0	18,530.7	11,775.0	60.2	59.9	128.85	6,922.3	1,267.1	500.2	380.9	119.28	4.194	
18,300.0	11,454.0	18,590.7	11,775.0	60.6	60.3	128.86	6,982.3	1,266.4	500.1	380.0	120.10	4.164	
18,335.0	11,454.0	18,625.7	11,775.0	60.9	60.5	128.87	7,017.3	1,265.9	500.0	379.4	120.58	4.146	
18,400.0	11,454.0	18,690.7	11,775.0	61.3	60.9	128.89	7,082.3	1,265.1	499.8	378.3	121.47	4.115	
18,430.0	11,454.0	18,720.7	11,775.0	61.5	61.1	128.90	7,112.3	1,264.7	499.7	377.8	121.89	4.100	
18,500.0	11,454.0	18,790.7	11,775.0	62.0	61.6	128.91	7,182.3	1,263.9	499.5	376.7	122.85	4.066	
18,525.0	11,454.0	18,815.7	11,775.0	62.1	61.7	128.92	7,207.3	1,263.6	499.5	376.3	123.20	4.054	
18,600.0	11,454.0	18,890.7	11,775.0	62.7	62.2	128.94	7,282.3	1,262.7	499.3	375.1	124.23	4.019	
18,620.0	11,454.0	18,910.7	11,775.0	62.8	62.4	128.94	7,302.3	1,262.4	499.2	374.7	124.51	4.010	

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 #713H
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 #713H	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	
18,700.0	11,454.0	18,990.7	11,775.0	63.3	62.9	128.96	7,382.3	1,261.4	499.0	373.4	125.62	3.973	
18,715.0	11,454.0	19,005.7	11,775.0	63.4	63.0	128.96	7,397.3	1,261.2	499.0	373.2	125.82	3.966	
18,800.0	11,454.0	19,090.7	11,775.0	64.0	63.6	128.98	7,482.3	1,260.2	498.8	371.8	127.01	3.927	
18,810.0	11,454.0	19,100.7	11,775.0	64.1	63.6	128.99	7,492.3	1,260.1	498.8	371.6	127.14	3.923	
18,900.0	11,454.0	19,190.7	11,775.0	64.7	64.2	129.01	7,582.3	1,259.0	498.5	370.1	128.40	3.883	
18,905.0	11,454.0	19,195.7	11,775.0	64.7	64.3	129.01	7,587.3	1,258.9	498.5	370.0	128.47	3.880	
19,000.0	11,454.0	19,290.7	11,775.0	65.4	64.9	129.03	7,682.3	1,257.7	498.3	368.5	129.79	3.839	
19,095.0	11,454.0	19,385.7	11,775.0	66.0	65.5	129.05	7,777.3	1,256.6	498.0	366.9	131.12	3.798	
19,100.0	11,454.0	19,390.7	11,775.0	66.1	65.6	129.06	7,782.3	1,256.5	498.0	366.8	131.19	3.796	
19,190.0	11,454.0	19,480.7	11,775.0	66.7	66.2	129.08	7,872.3	1,255.4	497.8	365.3	132.46	3.758	
19,200.0	11,454.0	19,490.7	11,775.0	66.8	66.2	129.08	7,882.3	1,255.3	497.8	365.2	132.60	3.754	
19,285.0	11,454.0	19,575.7	11,775.0	67.4	66.8	129.10	7,967.2	1,254.2	497.5	363.7	133.79	3.719	
19,300.0	11,454.0	19,590.7	11,775.0	67.5	66.9	129.10	7,982.2	1,254.0	497.5	363.5	134.00	3.713	
19,380.0	11,454.0	19,670.7	11,775.0	68.0	67.5	129.12	8,062.2	1,253.0	497.3	362.2	135.13	3.680	
19,400.0	11,454.0	19,690.7	11,775.0	68.2	67.6	129.13	8,082.2	1,252.8	497.2	361.8	135.41	3.672	
19,475.0	11,454.0	19,765.7	11,775.0	68.7	68.1	129.15	8,157.2	1,251.9	497.0	360.6	136.47	3.642	
19,500.0	11,454.0	19,790.7	11,775.0	68.8	68.3	129.15	8,182.2	1,251.6	497.0	360.2	136.82	3.632	
19,570.0	11,454.0	19,860.7	11,775.0	69.3	68.8	129.17	8,252.2	1,250.7	496.8	359.0	137.81	3.605	
19,600.0	11,454.0	19,890.7	11,775.0	69.5	69.0	129.18	8,282.2	1,250.3	496.7	358.5	138.24	3.593	
19,665.0	11,454.0	19,955.7	11,775.0	70.0	69.4	129.19	8,347.2	1,249.5	496.6	357.4	139.16	3.568	
19,700.0	11,454.0	19,990.7	11,775.0	70.2	69.6	129.20	8,382.2	1,249.1	496.5	356.8	139.65	3.555	
19,760.0	11,454.0	20,050.7	11,775.0	70.7	70.1	129.21	8,442.2	1,248.4	496.3	355.8	140.50	3.532	
19,800.0	11,454.0	20,090.7	11,775.0	70.9	70.3	129.22	8,482.2	1,247.9	496.2	355.1	141.07	3.517	
19,855.0	11,454.0	20,145.7	11,775.0	71.3	70.7	129.24	8,537.2	1,247.2	496.1	354.2	141.86	3.497	
19,900.0	11,454.0	20,190.7	11,775.0	71.6	71.0	129.25	8,582.2	1,246.6	496.0	353.5	142.50	3.481	
19,950.0	11,454.0	20,240.7	11,775.0	72.0	71.4	129.26	8,632.2	1,246.0	495.8	352.6	143.21	3.462	
20,000.0	11,454.0	20,290.7	11,775.0	72.3	71.7	129.27	8,682.2	1,245.4	495.7	351.8	143.92	3.444	
20,045.0	11,454.0	20,335.7	11,775.0	72.7	72.0	129.28	8,727.2	1,244.8	495.6	351.0	144.56	3.428	
20,100.0	11,454.0	20,390.7	11,775.0	73.0	72.4	129.30	8,782.2	1,244.2	495.5	350.1	145.35	3.409	
20,140.0	11,454.0	20,430.7	11,775.0	73.3	72.7	129.31	8,822.2	1,243.7	495.3	349.4	145.92	3.395	
20,200.0	11,454.0	20,490.7	11,775.0	73.7	73.1	129.32	8,882.2	1,242.9	495.2	348.4	146.78	3.374	
20,235.0	11,454.0	20,525.7	11,775.0	74.0	73.3	129.33	8,917.2	1,242.5	495.1	347.8	147.28	3.362	
20,300.0	11,454.0	20,590.7	11,775.0	74.5	73.8	129.34	8,982.2	1,241.7	494.9	346.7	148.21	3.339	
20,330.0	11,454.0	20,620.7	11,775.0	74.7	74.0	129.35	9,012.2	1,241.3	494.9	346.2	148.64	3.329	
20,400.0	11,454.0	20,690.7	11,775.0	75.2	74.5	129.37	9,082.2	1,240.5	494.7	345.0	149.64	3.306	
20,425.0	11,454.0	20,715.7	11,775.0	75.3	74.6	129.38	9,107.2	1,240.2	494.6	344.6	150.00	3.297	
20,500.0	11,454.0	20,790.7	11,775.0	75.9	75.2	129.39	9,182.1	1,239.2	494.4	343.3	151.08	3.273	
20,520.0	11,454.0	20,810.7	11,775.0	76.0	75.3	129.40	9,202.1	1,239.0	494.4	343.0	151.37	3.266	
20,600.0	11,454.0	20,890.7	11,775.0	76.6	75.9	129.42	9,282.1	1,238.0	494.2	341.7	152.52	3.240	
20,615.0	11,454.0	20,905.7	11,775.0	76.7	76.0	129.42	9,297.1	1,237.8	494.1	341.4	152.74	3.235	
20,700.0	11,454.0	20,990.7	11,775.0	77.3	76.6	129.44	9,382.1	1,236.8	493.9	340.0	153.96	3.208	
20,710.0	11,454.0	21,000.7	11,775.0	77.4	76.6	129.44	9,392.1	1,236.6	493.9	339.8	154.11	3.205	
20,800.0	11,454.0	21,090.7	11,775.0	78.0	77.3	129.47	9,482.1	1,235.5	493.7	338.3	155.40	3.177	
20,805.0	11,454.0	21,095.7	11,775.0	78.0	77.3	129.47	9,487.1	1,235.5	493.7	338.2	155.48	3.175	
20,900.0	11,454.0	21,190.7	11,775.0	78.7	78.0	129.49	9,582.1	1,234.3	493.4	336.6	156.85	3.146	
20,995.0	11,454.0	21,285.7	11,775.0	79.4	78.6	129.51	9,677.1	1,233.1	493.2	334.9	158.22	3.117	
21,000.0	11,454.0	21,290.7	11,775.0	79.4	78.7	129.52	9,682.1	1,233.1	493.2	334.9	158.30	3.115	
21,090.0	11,454.0	21,380.7	11,775.0	80.1	79.3	129.54	9,772.1	1,232.0	492.9	333.3	159.60	3.089	
21,100.0	11,454.0	21,390.7	11,775.0	80.1	79.4	129.54	9,782.1	1,231.8	492.9	333.2	159.75	3.086	
21,185.0	11,454.0	21,475.7	11,775.0	80.7	80.0	129.56	9,867.1	1,230.8	492.7	331.7	160.98	3.061	
21,200.0	11,454.0	21,490.7	11,775.0	80.8	80.1	129.56	9,882.1	1,230.6	492.6	331.5	161.20	3.056	
21,280.0	11,454.0	21,570.7	11,775.0	81.4	80.6	129.58	9,962.1	1,229.6	492.4	330.1	162.36	3.033	

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 #713H
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 #713H	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)				
21,300.0	11,454.0	21,590.7	11,775.0	81.6	80.8	129.59	9,982.1	1,229.4	492.4	329.7	162.65	3.027		
21,375.0	11,454.0	21,665.7	11,775.0	82.1	81.3	129.61	10,057.1	1,228.4	492.2	328.5	163.74	3.006		
21,400.0	11,454.0	21,690.7	11,775.0	82.3	81.5	129.61	10,082.1	1,228.1	492.1	328.0	164.10	2.999		
21,470.0	11,454.0	21,760.7	11,775.0	82.8	82.0	129.63	10,152.1	1,227.3	492.0	326.8	165.12	2.979		
21,500.0	11,454.0	21,790.7	11,775.0	83.0	82.2	129.64	10,182.1	1,226.9	491.9	326.3	165.56	2.971		
21,565.0	11,454.0	21,855.7	11,775.0	83.5	82.6	129.65	10,247.1	1,226.1	491.7	325.2	166.51	2.953		
21,600.0	11,454.0	21,890.7	11,775.0	83.7	82.9	129.66	10,282.1	1,225.7	491.6	324.6	167.02	2.944		
21,660.0	11,454.0	21,950.7	11,775.0	84.1	83.3	129.68	10,342.1	1,224.9	491.5	323.6	167.89	2.927		
21,700.0	11,454.0	21,990.7	11,775.0	84.4	83.6	129.69	10,382.1	1,224.4	491.4	322.9	168.47	2.917		
21,755.0	11,454.0	22,045.7	11,775.0	84.8	84.0	129.70	10,437.0	1,223.8	491.2	322.0	169.28	2.902		
21,800.0	11,454.0	22,090.7	11,775.0	85.2	84.3	129.71	10,482.0	1,223.2	491.1	321.2	169.93	2.890		
21,850.0	11,454.0	22,140.7	11,775.0	85.5	84.7	129.72	10,532.0	1,222.6	491.0	320.3	170.67	2.877		
21,875.0	11,454.0	22,165.7	11,775.0	85.7	84.8	129.73	10,557.1	1,222.3	490.9	319.9	171.03	2.870		
21,875.5	11,454.0	22,166.2	11,775.0	85.7	84.8	129.73	10,557.6	1,222.3	490.9	319.9	171.04	2.870 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 #713H
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 #713H	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 #702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,800.0	4,746.1	4,945.3	4,909.5	17.1	18.8	-3.20	94.8	1,884.4	1,319.3	1,285.6	33.71	39.138	
4,845.0	4,790.3	4,988.1	4,951.9	17.3	19.0	-3.08	91.3	1,879.6	1,305.5	1,271.5	34.05	38.343	
4,900.0	4,844.3	5,040.4	5,003.6	17.5	19.2	-2.92	87.0	1,873.7	1,288.8	1,254.3	34.46	37.393	
4,940.0	4,883.5	5,078.4	5,041.3	17.7	19.4	-2.80	83.9	1,869.4	1,276.6	1,241.8	34.77	36.717	
5,000.0	4,942.4	5,135.4	5,097.8	18.0	19.6	-2.62	79.3	1,863.0	1,258.3	1,223.1	35.22	35.726	
5,035.0	4,976.8	5,168.7	5,130.7	18.1	19.7	-2.52	76.6	1,859.3	1,247.6	1,212.1	35.48	35.160	
5,100.0	5,040.6	5,230.4	5,191.9	18.4	20.0	-2.31	71.5	1,852.3	1,227.8	1,191.9	35.96	34.140	
5,130.0	5,070.0	5,257.3	5,218.5	18.5	20.1	-2.23	69.3	1,849.3	1,218.7	1,182.6	36.18	33.681	
5,200.0	5,138.8	5,318.5	5,279.1	18.9	20.4	-2.02	64.5	1,842.6	1,197.7	1,161.0	36.70	32.634	
5,225.0	5,163.3	5,340.4	5,300.8	19.0	20.4	-1.95	62.8	1,840.3	1,190.3	1,153.4	36.89	32.267	
5,300.0	5,236.9	5,406.3	5,366.1	19.3	20.7	-1.73	57.8	1,833.5	1,168.2	1,130.7	37.45	31.194	
5,320.0	5,256.5	5,423.9	5,383.6	19.4	20.8	-1.68	56.5	1,831.7	1,162.4	1,124.8	37.60	30.916	
5,400.0	5,335.1	5,494.4	5,453.7	19.8	21.1	-1.45	51.6	1,824.9	1,139.3	1,101.1	38.19	29.831	
5,415.0	5,349.8	5,507.7	5,466.8	19.8	21.1	-1.41	50.7	1,823.6	1,135.0	1,096.7	38.30	29.633	
5,500.0	5,433.2	5,583.0	5,541.6	20.2	21.4	-1.18	45.7	1,816.8	1,111.1	1,072.2	38.93	28.540	
5,510.0	5,443.1	5,591.8	5,550.5	20.3	21.5	-1.15	45.1	1,816.0	1,108.3	1,069.3	39.01	28.414	
5,600.0	5,531.4	5,671.9	5,630.1	20.7	21.8	-0.91	40.2	1,809.2	1,083.5	1,043.8	39.67	27.316	
5,605.0	5,536.3	5,676.3	5,634.5	20.7	21.8	-0.89	39.9	1,808.8	1,082.2	1,042.4	39.70	27.256	
5,700.0	5,629.6	5,761.2	5,718.9	21.1	22.1	-0.64	35.0	1,802.1	1,056.6	1,016.2	40.40	26.155	
5,795.0	5,722.8	5,846.3	5,803.7	21.5	22.5	-0.40	30.5	1,795.9	1,031.6	990.5	41.09	25.108	
5,800.0	5,727.7	5,850.8	5,808.2	21.6	22.5	-0.39	30.3	1,795.6	1,030.3	989.2	41.12	25.054	
5,890.0	5,816.1	5,931.8	5,888.9	22.0	22.8	-0.17	26.4	1,790.2	1,007.2	965.4	41.77	24.111	
5,900.0	5,825.9	5,940.8	5,897.9	22.0	22.8	-0.15	25.9	1,789.6	1,004.6	962.8	41.84	24.009	
5,985.0	5,909.3	6,017.6	5,974.4	22.4	23.1	0.05	22.6	1,785.0	983.3	940.9	42.45	23.163	
6,000.0	5,924.1	6,031.2	5,988.0	22.5	23.2	0.08	22.0	1,784.2	979.6	937.1	42.56	23.018	
6,080.0	6,002.6	6,103.7	6,060.3	22.8	23.4	0.26	19.1	1,780.2	960.1	916.9	43.13	22.261	
6,100.0	6,022.2	6,121.8	6,078.4	22.9	23.5	0.30	18.5	1,779.3	955.2	912.0	43.27	22.077	
6,148.7	6,070.0	6,166.1	6,122.6	23.1	23.7	0.40	16.9	1,777.1	943.6	900.0	43.60	21.641	
6,175.0	6,095.9	6,190.0	6,146.5	23.3	23.7	0.45	16.1	1,776.0	937.4	893.7	43.78	21.411	
6,200.0	6,120.4	6,212.9	6,169.3	23.4	23.8	0.50	15.3	1,775.0	931.7	887.8	43.95	21.198	
6,270.0	6,189.3	6,277.0	6,233.3	23.7	24.0	0.63	13.4	1,772.3	916.5	872.1	44.44	20.626	
6,300.0	6,218.9	6,304.5	6,260.9	23.8	24.1	0.68	12.6	1,771.2	910.4	865.7	44.64	20.392	
6,365.0	6,283.1	6,364.4	6,320.7	24.1	24.3	0.79	11.0	1,769.1	897.7	852.7	45.08	19.914	
6,400.0	6,317.7	6,396.8	6,353.1	24.2	24.4	0.84	10.3	1,768.1	891.3	846.0	45.32	19.669	
6,460.0	6,377.1	6,452.4	6,408.6	24.5	24.6	0.92	9.1	1,766.4	881.1	835.4	45.71	19.275	
6,500.0	6,416.7	6,489.6	6,445.8	24.7	24.7	0.98	8.4	1,765.5	874.7	828.7	45.97	19.026	
6,555.0	6,471.3	6,540.8	6,497.0	24.9	24.9	1.04	7.6	1,764.3	866.6	820.2	46.32	18.707	
6,600.0	6,516.0	6,582.9	6,539.0	25.1	25.0	1.08	7.0	1,763.5	860.4	813.8	46.61	18.461	
6,650.0	6,565.7	6,629.7	6,585.8	25.3	25.1	1.13	6.4	1,762.7	854.2	807.3	46.91	18.208	
6,700.0	6,615.4	6,676.5	6,632.7	25.5	25.3	1.16	6.0	1,762.1	848.5	801.3	47.22	17.971	
6,745.0	6,660.2	6,718.8	6,674.9	25.7	25.4	1.19	5.6	1,761.7	844.0	796.5	47.48	17.777	
6,800.0	6,715.0	6,770.5	6,726.7	25.9	25.5	1.21	5.4	1,761.3	839.0	791.3	47.79	17.558	
6,840.0	6,754.9	6,808.2	6,764.3	26.0	25.6	1.22	5.3	1,761.2	835.9	787.9	48.00	17.417	
6,900.0	6,814.8	6,866.2	6,822.4	26.2	25.6	1.23	5.3	1,761.2	831.9	783.7	48.24	17.246	
6,935.0	6,849.7	6,901.2	6,857.3	26.4	25.6	1.23	5.3	1,761.2	829.9	781.5	48.36	17.160	
7,000.0	6,914.7	6,966.1	6,922.3	26.6	25.6	1.23	5.3	1,761.2	826.7	778.1	48.60	17.012	
7,030.0	6,944.6	6,996.1	6,952.2	26.7	25.6	1.23	5.3	1,761.2	825.5	776.8	48.70	16.952	
7,100.0	7,014.6	7,066.0	7,022.2	26.9	25.6	1.24	5.3	1,761.2	823.2	774.3	48.93	16.825	
7,125.0	7,039.6	7,091.0	7,047.2	27.0	25.6	1.24	5.3	1,761.2	822.7	773.7	49.00	16.789	
7,200.0	7,114.6	7,166.0	7,122.2	27.2	25.6	1.24	5.3	1,761.2	821.5	772.3	49.21	16.693	
7,220.0	7,134.6	7,186.0	7,142.2	27.2	25.6	1.24	5.3	1,761.2	821.4	772.2	49.24	16.681	
7,248.7	7,163.3	7,214.7	7,170.9	27.2	25.6	90.49	5.3	1,761.2	821.3	772.0	49.28	16.666	

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 #713H
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 #713H	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 #702H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Tooface (")	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
7,300.0	7,214.6	7,266.0	7,222.2	27.2	25.7	90.49	5.3	1,761.2	821.3	772.0	49.30	16.660	
7,315.0	7,229.6	7,281.0	7,237.2	27.2	25.7	90.49	5.3	1,761.2	821.3	772.0	49.31	16.658	
7,400.0	7,314.6	7,366.0	7,322.2	27.2	25.7	90.49	5.3	1,761.2	821.3	772.0	49.35	16.643	
7,410.0	7,324.6	7,376.0	7,332.2	27.2	25.7	90.49	5.3	1,761.2	821.3	772.0	49.35	16.642	
7,500.0	7,414.6	7,466.0	7,422.2	27.3	25.7	90.49	5.3	1,761.2	821.3	771.9	49.40	16.626	
7,505.0	7,419.6	7,471.0	7,427.2	27.3	25.7	90.49	5.3	1,761.2	821.3	771.9	49.40	16.626	
7,600.0	7,514.6	7,566.0	7,522.2	27.3	25.7	90.49	5.3	1,761.2	821.3	771.9	49.45	16.609	
7,695.0	7,609.6	7,661.0	7,617.2	27.3	25.7	90.49	5.3	1,761.2	821.3	771.8	49.50	16.593	
7,700.0	7,614.6	7,666.0	7,622.2	27.3	25.7	90.49	5.3	1,761.2	821.3	771.8	49.50	16.592	
7,790.0	7,704.6	7,756.0	7,712.2	27.3	25.8	90.49	5.3	1,761.2	821.3	771.8	49.55	16.576	
7,800.0	7,714.6	7,766.0	7,722.2	27.4	25.8	90.49	5.3	1,761.2	821.3	771.8	49.55	16.574	
7,885.0	7,799.6	7,851.0	7,807.2	27.4	25.8	90.49	5.3	1,761.2	821.3	771.7	49.60	16.559	
7,900.0	7,814.6	7,866.0	7,822.2	27.4	25.8	90.49	5.3	1,761.2	821.3	771.7	49.61	16.557	
7,980.0	7,894.6	7,946.0	7,902.2	27.4	25.8	90.49	5.3	1,761.2	821.3	771.7	49.65	16.543	
8,000.0	7,914.6	7,966.0	7,922.2	27.4	25.8	90.49	5.3	1,761.2	821.3	771.7	49.66	16.539	
8,075.0	7,989.6	8,041.0	7,997.2	27.4	25.8	90.49	5.3	1,761.2	821.3	771.6	49.70	16.526	
8,100.0	8,014.6	8,066.0	8,022.2	27.4	25.8	90.49	5.3	1,761.2	821.3	771.6	49.71	16.521	
8,170.0	8,084.6	8,136.0	8,092.2	27.5	25.8	90.49	5.3	1,761.2	821.3	771.6	49.75	16.509	
8,200.0	8,114.6	8,166.0	8,122.2	27.5	25.9	90.49	5.3	1,761.2	821.3	771.6	49.77	16.503	
8,265.0	8,179.6	8,231.0	8,187.2	27.5	25.9	90.49	5.3	1,761.2	821.3	771.5	49.80	16.491	
8,300.0	8,214.6	8,266.0	8,222.2	27.5	25.9	90.49	5.3	1,761.2	821.3	771.5	49.82	16.485	
8,360.0	8,274.6	8,326.0	8,282.2	27.5	25.9	90.49	5.3	1,761.2	821.3	771.5	49.86	16.474	
8,400.0	8,314.6	8,366.0	8,322.2	27.5	25.9	90.49	5.3	1,761.2	821.3	771.4	49.88	16.467	
8,455.0	8,369.6	8,421.0	8,377.2	27.5	25.9	90.49	5.3	1,761.2	821.3	771.4	49.91	16.457	
8,500.0	8,414.6	8,466.0	8,422.2	27.6	25.9	90.49	5.3	1,761.2	821.3	771.4	49.93	16.449	
8,550.0	8,464.6	8,516.0	8,472.2	27.6	25.9	90.49	5.3	1,761.2	821.3	771.4	49.96	16.439	
8,600.0	8,514.6	8,566.0	8,522.2	27.6	25.9	90.49	5.3	1,761.2	821.3	771.3	49.99	16.430	
8,645.0	8,559.6	8,611.0	8,567.2	27.6	26.0	90.49	5.3	1,761.2	821.3	771.3	50.01	16.422	
8,700.0	8,614.6	8,666.0	8,622.2	27.6	26.0	90.49	5.3	1,761.2	821.3	771.3	50.05	16.411	
8,740.0	8,654.6	8,706.0	8,662.2	27.6	26.0	90.49	5.3	1,761.2	821.3	771.3	50.07	16.404	
8,800.0	8,714.6	8,766.0	8,722.2	27.6	26.0	90.49	5.3	1,761.2	821.3	771.2	50.10	16.393	
8,835.0	8,749.6	8,801.0	8,757.2	27.7	26.0	90.49	5.3	1,761.2	821.3	771.2	50.12	16.386	
8,900.0	8,814.6	8,866.0	8,822.2	27.7	26.0	90.49	5.3	1,761.2	821.3	771.2	50.16	16.374	
8,930.0	8,844.6	8,896.0	8,852.2	27.7	26.0	90.49	5.3	1,761.2	821.3	771.1	50.18	16.368	
9,000.0	8,914.6	8,966.0	8,922.2	27.7	26.0	90.49	5.3	1,761.2	821.3	771.1	50.22	16.355	
9,025.0	8,939.6	8,991.0	8,947.2	27.7	26.1	90.49	5.3	1,761.2	821.3	771.1	50.23	16.350	
9,100.0	9,014.6	9,066.0	9,022.2	27.7	26.1	90.49	5.3	1,761.2	821.3	771.0	50.28	16.336	
9,120.0	9,034.6	9,086.0	9,042.2	27.7	26.1	90.49	5.3	1,761.2	821.3	771.0	50.29	16.332	
9,200.0	9,114.6	9,166.0	9,122.2	27.8	26.1	90.49	5.3	1,761.2	821.3	771.0	50.34	16.317	
9,215.0	9,129.6	9,181.0	9,137.2	27.8	26.1	90.49	5.3	1,761.2	821.3	771.0	50.34	16.314	
9,300.0	9,214.6	9,266.0	9,222.2	27.8	26.1	90.49	5.3	1,761.2	821.3	770.9	50.39	16.298	
9,310.0	9,224.6	9,276.0	9,232.2	27.8	26.1	90.49	5.3	1,761.2	821.3	770.9	50.40	16.296	
9,400.0	9,314.6	9,366.0	9,322.2	27.8	26.1	90.49	5.3	1,761.2	821.3	770.9	50.45	16.278	
9,405.0	9,319.6	9,371.0	9,327.2	27.8	26.1	90.49	5.3	1,761.2	821.3	770.9	50.46	16.277	
9,500.0	9,414.6	9,466.0	9,422.2	27.9	26.2	90.49	5.3	1,761.2	821.3	770.8	50.51	16.259	
9,595.0	9,509.6	9,561.0	9,517.2	27.9	26.2	90.49	5.3	1,761.2	821.3	770.7	50.57	16.240	
9,600.0	9,514.6	9,566.0	9,522.2	27.9	26.2	90.49	5.3	1,761.2	821.3	770.7	50.58	16.240	
9,690.0	9,604.6	9,656.0	9,612.2	27.9	26.2	90.49	5.3	1,761.2	821.3	770.7	50.63	16.222	
9,700.0	9,614.6	9,666.0	9,622.2	27.9	26.2	90.49	5.3	1,761.2	821.3	770.7	50.64	16.220	
9,785.0	9,699.6	9,751.0	9,707.2	28.0	26.2	90.49	5.3	1,761.2	821.3	770.6	50.69	16.203	
9,800.0	9,714.6	9,766.0	9,722.2	28.0	26.3	90.49	5.3	1,761.2	821.3	770.6	50.70	16.200	
9,880.0	9,794.6	9,846.0	9,802.2	28.0	26.3	90.49	5.3	1,761.2	821.3	770.6	50.75	16.184	

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 #713H
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 #713H	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 #702H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	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
9,900.0	9,814.6	9,866.0	9,822.2	28.0	26.3	90.49	5.3	1,761.2	821.3	770.6	50.76	16.180	
9,975.0	9,889.6	9,941.0	9,897.2	28.0	26.3	90.49	5.3	1,761.2	821.3	770.5	50.81	16.165	
10,000.0	9,914.6	9,966.0	9,922.2	28.0	26.3	90.49	5.3	1,761.2	821.3	770.5	50.82	16.160	
10,070.0	9,984.6	10,036.0	9,992.2	28.0	26.3	90.49	5.3	1,761.2	821.3	770.5	50.87	16.146	
10,100.0	10,014.6	10,066.0	10,022.2	28.1	26.3	90.49	5.3	1,761.2	821.3	770.4	50.89	16.140	
10,165.0	10,079.6	10,131.0	10,087.2	28.1	26.4	90.49	5.3	1,761.2	821.3	770.4	50.93	16.127	
10,200.0	10,114.6	10,166.0	10,122.2	28.1	26.4	90.49	5.3	1,761.2	821.3	770.4	50.95	16.120	
10,260.0	10,174.6	10,226.0	10,182.2	28.1	26.4	90.49	5.3	1,761.2	821.3	770.3	50.99	16.108	
10,300.0	10,214.6	10,266.0	10,222.2	28.1	26.4	90.49	5.3	1,761.2	821.3	770.3	51.01	16.100	
10,355.0	10,269.6	10,321.0	10,277.2	28.1	26.4	90.49	5.3	1,761.2	821.3	770.3	51.05	16.089	
10,400.0	10,314.6	10,366.0	10,322.2	28.2	26.4	90.49	5.3	1,761.2	821.3	770.2	51.08	16.080	
10,450.0	10,364.6	10,416.0	10,372.2	28.2	26.4	90.49	5.3	1,761.2	821.3	770.2	51.11	16.070	
10,500.0	10,414.6	10,466.0	10,422.2	28.2	26.4	90.49	5.3	1,761.2	821.3	770.2	51.14	16.059	
10,545.0	10,459.6	10,511.0	10,467.2	28.2	26.5	90.49	5.3	1,761.2	821.3	770.1	51.17	16.050	
10,600.0	10,514.6	10,566.0	10,522.2	28.2	26.5	90.49	5.3	1,761.2	821.3	770.1	51.21	16.039	
10,640.0	10,554.6	10,606.0	10,562.2	28.2	26.5	90.49	5.3	1,761.2	821.3	770.1	51.23	16.031	
10,700.0	10,614.6	10,666.0	10,622.2	28.3	26.5	90.49	5.3	1,761.2	821.3	770.0	51.27	16.018	
10,735.0	10,649.6	10,701.0	10,657.2	28.3	26.5	90.49	5.3	1,761.2	821.3	770.0	51.30	16.011	
10,800.0	10,714.6	10,766.0	10,722.2	28.3	26.5	90.49	5.3	1,761.2	821.3	770.0	51.34	15.998	
10,830.0	10,744.6	10,796.0	10,752.2	28.3	26.5	90.49	5.3	1,761.2	821.3	770.0	51.36	15.992	
10,900.0	10,814.6	10,866.0	10,822.2	28.3	26.6	90.49	5.3	1,761.2	821.3	769.9	51.41	15.977	
10,925.0	10,839.6	10,891.0	10,847.2	28.3	26.6	90.49	5.3	1,761.2	821.3	769.9	51.42	15.972	
11,000.0	10,914.6	10,966.0	10,922.2	28.4	26.6	90.49	5.3	1,761.2	821.3	769.8	51.47	15.956	
11,020.0	10,934.6	10,986.0	10,942.2	28.4	26.6	90.49	5.3	1,761.2	821.3	769.8	51.48	15.953	
11,062.0	10,976.5	11,028.0	10,984.1	28.4	26.6	90.49	5.3	1,761.2	821.3	769.8	51.51	15.946	
11,075.0	10,989.6	11,041.0	10,997.2	28.4	26.6	91.02	5.3	1,761.2	821.3	769.8	51.51	15.945	
11,100.0	11,014.5	11,066.0	11,022.1	28.4	26.6	91.11	5.3	1,761.2	821.3	769.8	51.50	15.948	
11,115.0	11,029.5	11,080.9	11,037.1	28.4	26.6	91.21	5.3	1,761.2	821.4	769.9	51.49	15.953	
11,125.0	11,039.4	11,090.8	11,047.0	28.4	26.6	91.29	5.3	1,761.2	821.4	769.9	51.47	15.957	
11,150.0	11,064.1	11,116.5	11,072.7	28.4	26.6	91.53	5.7	1,761.2	821.5	770.1	51.43	15.973	
11,175.0	11,088.5	11,142.5	11,098.6	28.4	26.6	91.78	7.3	1,761.1	821.6	770.2	51.38	15.989	
11,200.0	11,112.7	11,168.6	11,124.5	28.4	26.7	92.05	10.1	1,761.1	821.7	770.4	51.33	16.007	
11,210.0	11,122.2	11,179.1	11,134.9	28.4	26.7	92.16	11.6	1,761.1	821.8	770.5	51.31	16.014	
11,225.0	11,136.4	11,194.9	11,150.5	28.4	26.7	92.33	14.2	1,761.1	821.9	770.6	51.28	16.026	
11,250.0	11,159.8	11,221.3	11,176.4	28.4	26.7	92.62	19.4	1,761.0	822.0	770.8	51.23	16.046	
11,275.0	11,182.6	11,247.9	11,202.2	28.4	26.7	92.92	25.9	1,760.9	822.2	771.0	51.17	16.067	
11,300.0	11,204.8	11,274.8	11,227.9	28.4	26.7	93.22	33.6	1,760.8	822.4	771.3	51.12	16.088	
11,305.0	11,209.2	11,280.1	11,233.0	28.4	26.7	93.29	35.3	1,760.8	822.5	771.4	51.11	16.093	
11,325.0	11,226.5	11,301.8	11,253.4	28.4	26.7	93.54	42.6	1,760.7	822.7	771.6	51.06	16.111	
11,350.0	11,247.4	11,329.0	11,278.6	28.4	26.7	93.87	52.9	1,760.6	822.9	771.9	51.01	16.133	
11,375.0	11,267.6	11,356.5	11,303.6	28.4	26.7	94.20	64.4	1,760.4	823.2	772.3	50.96	16.156	
11,400.0	11,287.0	11,384.2	11,328.1	28.4	26.7	94.54	77.3	1,760.3	823.6	772.7	50.91	16.178	
11,425.0	11,305.6	11,412.2	11,352.2	28.4	26.8	94.89	91.5	1,760.1	824.0	773.1	50.86	16.200	
11,450.0	11,323.2	11,440.5	11,375.9	28.4	26.8	95.24	106.9	1,759.9	824.4	773.5	50.82	16.221	
11,475.0	11,340.0	11,469.0	11,398.9	28.4	26.8	95.60	123.7	1,759.7	824.8	774.0	50.79	16.241	
11,495.0	11,352.6	11,492.0	11,416.9	28.4	26.8	95.89	138.1	1,759.5	825.2	774.4	50.76	16.256	
11,500.0	11,355.7	11,497.8	11,421.3	28.4	26.8	95.96	141.9	1,759.4	825.3	774.5	50.76	16.259	
11,525.0	11,370.3	11,526.9	11,443.0	28.4	26.8	96.32	161.3	1,759.2	825.8	775.1	50.74	16.276	
11,550.0	11,383.9	11,556.4	11,463.9	28.4	26.8	96.69	182.0	1,758.9	826.4	775.6	50.73	16.290	
11,575.0	11,396.4	11,586.1	11,483.9	28.5	26.8	97.06	204.0	1,758.6	826.9	776.2	50.73	16.301	
11,590.0	11,403.3	11,604.1	11,495.5	28.5	26.9	97.28	217.9	1,758.4	827.3	776.6	50.73	16.307	
11,600.0	11,407.7	11,616.2	11,503.0	28.5	26.9	97.43	227.3	1,758.3	827.6	776.8	50.74	16.310	

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 #713H
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 #713H	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 #702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
11,625.0	11,417.9	11,646.7	11,521.0	28.5	26.9	97.80	251.9	1,758.0	828.2	777.4	50.76	16.315	
11,650.0	11,426.8	11,677.5	11,537.8	28.5	26.9	98.17	277.7	1,757.7	828.9	778.1	50.80	16.316	
11,675.0	11,434.5	11,708.7	11,553.5	28.5	26.9	98.53	304.7	1,757.3	829.6	778.7	50.85	16.314	
11,685.0	11,437.2	11,721.3	11,559.3	28.5	26.9	98.68	315.8	1,757.2	829.8	779.0	50.88	16.311	
11,700.0	11,440.9	11,740.3	11,567.8	28.5	26.9	98.90	332.9	1,757.0	830.3	779.4	50.92	16.307	
11,725.0	11,446.1	11,772.3	11,580.6	28.5	27.0	99.26	362.1	1,756.6	831.0	780.0	50.99	16.296	
11,750.0	11,450.0	11,804.7	11,592.0	28.6	27.0	99.61	392.4	1,756.2	831.8	780.7	51.09	16.281	
11,775.0	11,452.6	11,837.4	11,601.7	28.6	27.0	99.96	423.7	1,755.8	832.5	781.3	51.20	16.262	
11,780.0	11,452.9	11,844.0	11,603.5	28.6	27.0	100.03	430.1	1,755.7	832.7	781.5	51.22	16.257	
11,800.0	11,453.8	11,870.6	11,609.8	28.6	27.0	100.30	455.9	1,755.4	833.3	782.0	51.32	16.238	
11,812.0	11,454.0	11,886.6	11,613.0	28.6	27.0	100.47	471.6	1,755.2	833.7	782.3	51.38	16.225	
11,875.0	11,454.0	11,973.1	11,622.6	28.7	27.1	101.12	557.5	1,754.1	834.8	783.0	51.78	16.121	
11,900.0	11,454.0	12,004.3	11,622.9	28.7	27.1	101.14	588.6	1,753.7	834.7	782.8	51.91	16.080	
11,970.0	11,454.0	12,074.3	11,622.8	28.8	27.2	101.14	658.6	1,752.8	834.4	782.3	52.08	16.021	
12,000.0	11,454.0	12,104.3	11,622.8	28.9	27.2	101.14	688.6	1,752.4	834.3	782.1	52.16	15.996	
12,065.0	11,454.0	12,169.2	11,622.7	29.0	27.3	101.13	753.6	1,751.6	834.0	781.7	52.35	15.933	
12,100.0	11,454.0	12,204.2	11,622.6	29.0	27.3	101.13	788.6	1,751.1	833.9	781.5	52.45	15.900	
12,160.0	11,454.0	12,264.2	11,622.5	29.1	27.4	101.13	848.6	1,750.3	833.7	781.0	52.65	15.835	
12,200.0	11,454.0	12,304.2	11,622.4	29.2	27.5	101.12	888.6	1,749.8	833.5	780.7	52.78	15.791	
12,255.0	11,454.0	12,359.2	11,622.3	29.3	27.5	101.12	943.6	1,749.1	833.3	780.3	52.99	15.726	
12,300.0	11,454.0	12,404.2	11,622.2	29.4	27.6	101.12	988.6	1,748.5	833.1	779.9	53.16	15.672	
12,350.0	11,454.0	12,454.2	11,622.2	29.5	27.7	101.11	1,038.5	1,747.9	832.9	779.5	53.37	15.607	
12,400.0	11,454.0	12,504.2	11,622.1	29.6	27.8	101.11	1,088.5	1,747.3	832.7	779.1	53.57	15.543	
12,445.0	11,454.0	12,549.2	11,622.0	29.7	27.8	101.11	1,133.5	1,746.7	832.5	778.7	53.78	15.480	
12,500.0	11,454.0	12,604.2	11,621.9	29.8	27.9	101.10	1,188.5	1,746.0	832.3	778.2	54.03	15.403	
12,540.0	11,454.0	12,644.2	11,621.8	29.9	28.0	101.10	1,228.5	1,745.5	832.1	777.9	54.23	15.344	
12,600.0	11,454.0	12,704.2	11,621.7	30.1	28.1	101.10	1,288.5	1,744.7	831.9	777.3	54.53	15.256	
12,635.0	11,454.0	12,739.2	11,621.7	30.2	28.2	101.10	1,323.5	1,744.2	831.7	777.0	54.71	15.201	
12,700.0	11,454.0	12,804.2	11,621.5	30.3	28.3	101.09	1,388.5	1,743.4	831.4	776.4	55.06	15.100	
12,730.0	11,454.0	12,834.2	11,621.5	30.4	28.4	101.09	1,418.5	1,743.0	831.3	776.1	55.23	15.051	
12,800.0	11,454.0	12,904.2	11,621.4	30.6	28.5	101.08	1,488.5	1,742.1	831.0	775.4	55.63	14.938	
12,825.0	11,454.0	12,929.2	11,621.3	30.7	28.6	101.08	1,513.5	1,741.8	830.9	775.2	55.79	14.895	
12,900.0	11,454.0	13,004.2	11,621.2	30.9	28.7	101.08	1,588.5	1,740.8	830.6	774.4	56.24	14.769	
12,920.0	11,454.0	13,024.2	11,621.2	31.0	28.8	101.08	1,608.5	1,740.6	830.6	774.2	56.37	14.734	
13,000.0	11,454.0	13,104.2	11,621.0	31.2	29.0	101.07	1,688.5	1,739.6	830.2	773.3	56.88	14.595	
13,015.0	11,454.0	13,119.2	11,621.0	31.3	29.0	101.07	1,703.5	1,739.4	830.2	773.2	56.99	14.568	
13,100.0	11,454.0	13,204.2	11,620.9	31.6	29.2	101.06	1,788.5	1,738.3	829.8	772.3	57.56	14.417	
13,110.0	11,454.0	13,214.2	11,620.8	31.6	29.3	101.06	1,798.5	1,738.1	829.8	772.1	57.63	14.398	
13,200.0	11,454.0	13,304.2	11,620.7	31.9	29.5	101.06	1,888.5	1,737.0	829.4	771.1	58.27	14.234	
13,205.0	11,454.0	13,309.2	11,620.7	31.9	29.5	101.06	1,893.5	1,736.9	829.4	771.1	58.31	14.225	
13,300.0	11,454.0	13,404.2	11,620.5	32.3	29.8	101.05	1,988.5	1,735.7	829.0	770.0	59.01	14.049	
13,395.0	11,454.0	13,499.2	11,620.3	32.6	30.1	101.04	2,083.4	1,734.5	828.6	768.9	59.74	13.871	
13,400.0	11,454.0	13,504.2	11,620.3	32.6	30.1	101.04	2,088.4	1,734.4	828.6	768.8	59.78	13.861	
13,490.0	11,454.0	13,594.2	11,620.2	33.0	30.4	101.04	2,178.4	1,733.3	828.2	767.7	60.50	13.691	
13,500.0	11,454.0	13,604.2	11,620.2	33.0	30.4	101.04	2,188.4	1,733.1	828.2	767.6	60.58	13.672	
13,585.0	11,454.0	13,689.2	11,620.0	33.4	30.7	101.03	2,273.4	1,732.0	827.8	766.6	61.28	13.509	
13,600.0	11,454.0	13,704.2	11,620.0	33.4	30.7	101.03	2,288.4	1,731.9	827.8	766.4	61.40	13.481	
13,680.0	11,454.0	13,784.2	11,619.8	33.7	31.0	101.03	2,368.4	1,730.8	827.5	765.4	62.08	13.328	
13,700.0	11,454.0	13,804.2	11,619.8	33.8	31.1	101.02	2,388.4	1,730.6	827.4	765.1	62.26	13.290	
13,775.0	11,454.0	13,879.2	11,619.7	34.1	31.4	101.02	2,463.4	1,729.6	827.1	764.1	62.91	13.146	
13,800.0	11,454.0	13,904.2	11,619.6	34.3	31.5	101.02	2,488.4	1,729.3	827.0	763.8	63.13	13.098	
13,870.0	11,454.0	13,974.2	11,619.5	34.6	31.7	101.01	2,558.4	1,728.4	826.7	762.9	63.77	12.964	

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 #713H
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 #713H	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 #702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,900.0	11,454.0	14,004.2	11,619.5	34.7	31.8	101.01	2,588.4	1,728.0	826.6	762.5	64.04	12.907	
13,965.0	11,454.0	14,069.2	11,619.3	35.0	32.1	101.01	2,653.4	1,727.2	826.3	761.6	64.64	12.783	
14,000.0	11,454.0	14,104.2	11,619.3	35.1	32.2	101.00	2,688.4	1,726.7	826.1	761.2	64.96	12.717	
14,060.0	11,454.0	14,164.2	11,619.2	35.4	32.5	101.00	2,748.4	1,725.9	825.9	760.4	65.53	12.603	
14,100.0	11,454.0	14,204.2	11,619.1	35.6	32.6	101.00	2,788.4	1,725.4	825.7	759.8	65.91	12.528	
14,155.0	11,454.0	14,259.2	11,619.0	35.9	32.9	100.99	2,843.4	1,724.7	825.5	759.1	66.45	12.424	
14,200.0	11,454.0	14,304.2	11,618.9	36.1	33.0	100.99	2,888.4	1,724.1	825.3	758.4	66.88	12.340	
14,250.0	11,454.0	14,354.2	11,618.9	36.3	33.3	100.99	2,938.4	1,723.5	825.1	757.7	67.38	12.246	
14,300.0	11,454.0	14,404.2	11,618.8	36.5	33.5	100.98	2,988.4	1,722.9	824.9	757.0	67.87	12.154	
14,345.0	11,454.0	14,449.2	11,618.7	36.8	33.7	100.98	3,033.4	1,722.3	824.7	756.4	68.33	12.070	
14,400.0	11,454.0	14,504.2	11,618.6	37.0	33.9	100.98	3,088.4	1,721.6	824.5	755.6	68.89	11.969	
14,440.0	11,454.0	14,544.2	11,618.5	37.2	34.1	100.97	3,128.4	1,721.1	824.4	755.1	69.30	11.896	
14,500.0	11,454.0	14,604.2	11,618.4	37.5	34.4	100.97	3,188.3	1,720.3	824.1	754.2	69.92	11.787	
14,535.0	11,454.0	14,639.2	11,618.4	37.7	34.5	100.97	3,223.3	1,719.8	824.0	753.7	70.28	11.724	
14,600.0	11,454.0	14,704.2	11,618.2	38.0	34.8	100.96	3,288.3	1,719.0	823.7	752.7	70.96	11.607	
14,630.0	11,454.0	14,734.2	11,618.2	38.2	35.0	100.96	3,318.3	1,718.6	823.6	752.3	71.28	11.554	
14,700.0	11,454.0	14,804.2	11,618.1	38.5	35.3	100.96	3,388.3	1,717.7	823.3	751.3	72.03	11.430	
14,725.0	11,454.0	14,829.2	11,618.0	38.7	35.4	100.95	3,413.3	1,717.4	823.2	750.9	72.30	11.386	
14,800.0	11,454.0	14,904.2	11,617.9	39.1	35.8	100.95	3,488.3	1,716.4	822.9	749.8	73.11	11.256	
14,820.0	11,454.0	14,924.2	11,617.9	39.2	35.9	100.95	3,508.3	1,716.2	822.8	749.5	73.33	11.221	
14,900.0	11,454.0	15,004.2	11,617.7	39.6	36.3	100.94	3,588.3	1,715.2	822.5	748.3	74.21	11.084	
14,915.0	11,454.0	15,019.2	11,617.7	39.7	36.4	100.94	3,603.3	1,715.0	822.4	748.0	74.37	11.058	
15,000.0	11,454.0	15,104.2	11,617.5	40.1	36.8	100.94	3,688.3	1,713.9	822.1	746.8	75.32	10.915	
15,010.0	11,454.0	15,114.2	11,617.5	40.2	36.9	100.93	3,698.3	1,713.7	822.0	746.6	75.43	10.898	
15,100.0	11,454.0	15,204.2	11,617.4	40.7	37.4	100.93	3,788.3	1,712.6	821.7	745.2	76.44	10.749	
15,105.0	11,454.0	15,209.2	11,617.4	40.7	37.4	100.93	3,793.3	1,712.5	821.6	745.1	76.50	10.740	
15,200.0	11,454.0	15,304.2	11,617.2	41.2	37.9	100.92	3,888.3	1,711.3	821.3	743.7	77.58	10.585	
15,295.0	11,454.0	15,399.2	11,617.0	41.8	38.4	100.92	3,983.3	1,710.1	820.9	742.2	78.68	10.433	
15,300.0	11,454.0	15,404.2	11,617.0	41.8	38.4	100.91	3,988.3	1,710.0	820.8	742.1	78.74	10.425	
15,390.0	11,454.0	15,494.2	11,616.9	42.3	38.9	100.91	4,078.3	1,708.9	820.5	740.7	79.79	10.283	
15,400.0	11,454.0	15,504.2	11,616.9	42.3	39.0	100.91	4,088.3	1,708.7	820.4	740.5	79.90	10.268	
15,485.0	11,454.0	15,589.2	11,616.7	42.8	39.5	100.90	4,173.3	1,707.6	820.1	739.2	80.90	10.137	
15,500.0	11,454.0	15,604.2	11,616.7	42.9	39.5	100.90	4,188.3	1,707.5	820.0	738.9	81.08	10.114	
15,580.0	11,454.0	15,684.2	11,616.5	43.4	40.0	100.90	4,268.2	1,706.4	819.7	737.7	82.03	9.992	
15,600.0	11,454.0	15,704.2	11,616.5	43.5	40.1	100.89	4,288.2	1,706.2	819.6	737.4	82.27	9.962	
15,675.0	11,454.0	15,779.2	11,616.4	43.9	40.5	100.89	4,363.2	1,705.2	819.3	736.1	83.17	9.851	
15,700.0	11,454.0	15,804.2	11,616.3	44.1	40.7	100.89	4,388.2	1,704.9	819.2	735.7	83.47	9.814	
15,770.0	11,454.0	15,874.2	11,616.2	44.5	41.1	100.88	4,458.2	1,704.0	818.9	734.6	84.32	9.712	
15,800.0	11,454.0	15,904.2	11,616.2	44.7	41.3	100.88	4,488.2	1,703.6	818.8	734.1	84.68	9.669	
15,865.0	11,454.0	15,969.2	11,616.0	45.0	41.6	100.88	4,553.2	1,702.8	818.5	733.1	85.48	9.576	
15,900.0	11,454.0	16,004.2	11,616.0	45.3	41.8	100.87	4,588.2	1,702.3	818.4	732.5	85.90	9.527	
15,960.0	11,454.0	16,064.2	11,615.9	45.6	42.2	100.87	4,648.2	1,701.5	818.2	731.5	86.64	9.443	
16,000.0	11,454.0	16,104.2	11,615.8	45.9	42.4	100.87	4,688.2	1,701.0	818.0	730.9	87.13	9.388	
16,055.0	11,454.0	16,159.2	11,615.7	46.2	42.8	100.86	4,743.2	1,700.3	817.8	730.0	87.82	9.312	
16,100.0	11,454.0	16,204.2	11,615.6	46.5	43.0	100.86	4,788.2	1,699.7	817.6	729.2	88.37	9.251	
16,150.0	11,454.0	16,254.2	11,615.5	46.8	43.3	100.86	4,838.2	1,699.1	817.4	728.4	89.00	9.184	
16,200.0	11,454.0	16,304.2	11,615.5	47.1	43.6	100.85	4,888.2	1,698.5	817.2	727.6	89.62	9.118	
16,245.0	11,454.0	16,349.2	11,615.4	47.3	43.9	100.85	4,933.2	1,697.9	817.0	726.8	90.19	9.059	
16,300.0	11,454.0	16,404.2	11,615.3	47.7	44.3	100.85	4,988.2	1,697.2	816.8	725.9	90.88	8.987	
16,340.0	11,454.0	16,444.2	11,615.2	47.9	44.5	100.84	5,028.2	1,696.7	816.6	725.2	91.39	8.936	
16,400.0	11,454.0	16,504.2	11,615.1	48.3	44.9	100.84	5,088.2	1,695.9	816.4	724.2	92.15	8.859	
16,435.0	11,454.0	16,539.2	11,615.0	48.5	45.1	100.84	5,123.2	1,695.4	816.2	723.6	92.59	8.815	

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 #713H
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 #713H	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 #702H - OWB - PWP0											Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS											Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	
16,500.0	11,454.0	16,604.2	11,614.9	48.9	45.5	100.83	5,188.2	1,694.6	816.0	722.5	93.42	8.734
16,530.0	11,454.0	16,634.2	11,614.9	49.1	45.7	100.83	5,218.2	1,694.2	815.8	722.0	93.80	8.697
16,600.0	11,454.0	16,704.2	11,614.8	49.5	46.1	100.82	5,288.2	1,693.3	815.5	720.8	94.70	8.612
16,625.0	11,454.0	16,729.2	11,614.7	49.7	46.3	100.82	5,313.1	1,693.0	815.4	720.4	95.02	8.582
16,700.0	11,454.0	16,804.2	11,614.6	50.2	46.8	100.82	5,388.1	1,692.0	815.1	719.1	95.99	8.492
16,720.0	11,454.0	16,824.2	11,614.6	50.3	46.9	100.82	5,408.1	1,691.8	815.1	718.8	96.25	8.468
16,800.0	11,454.0	16,904.2	11,614.4	50.8	47.4	100.81	5,488.1	1,690.8	814.7	717.4	97.28	8.375
16,815.0	11,454.0	16,919.2	11,614.4	50.9	47.5	100.81	5,503.1	1,690.6	814.7	717.2	97.48	8.357
16,900.0	11,454.0	17,004.2	11,614.2	51.4	48.0	100.80	5,588.1	1,689.5	814.3	715.7	98.59	8.260
16,910.0	11,454.0	17,014.2	11,614.2	51.5	48.1	100.80	5,598.1	1,689.3	814.3	715.6	98.72	8.249
17,000.0	11,454.0	17,104.2	11,614.1	52.1	48.7	100.80	5,688.1	1,688.2	813.9	714.0	99.90	8.148
17,005.0	11,454.0	17,109.2	11,614.1	52.1	48.7	100.80	5,693.1	1,688.1	813.9	713.9	99.96	8.142
17,100.0	11,454.0	17,204.2	11,613.9	52.7	49.3	100.79	5,788.1	1,686.9	813.5	712.3	101.21	8.038
17,195.0	11,454.0	17,299.2	11,613.7	53.3	49.9	100.78	5,883.1	1,685.7	813.1	710.7	102.46	7.936
17,200.0	11,454.0	17,304.2	11,613.7	53.4	50.0	100.78	5,888.1	1,685.6	813.1	710.6	102.53	7.930
17,290.0	11,454.0	17,394.2	11,613.6	53.9	50.6	100.78	5,978.1	1,684.5	812.7	709.0	103.72	7.836
17,300.0	11,454.0	17,404.2	11,613.5	54.0	50.6	100.78	5,988.1	1,684.3	812.7	708.8	103.86	7.825
17,385.0	11,454.0	17,489.2	11,613.4	54.6	51.2	100.77	6,073.1	1,683.2	812.3	707.4	104.99	7.738
17,400.0	11,454.0	17,504.2	11,613.4	54.6	51.3	100.77	6,088.1	1,683.1	812.3	707.1	105.19	7.722
17,480.0	11,454.0	17,584.2	11,613.2	55.2	51.8	100.76	6,168.1	1,682.0	812.0	705.7	106.26	7.641
17,500.0	11,454.0	17,604.2	11,613.2	55.3	52.0	100.76	6,188.1	1,681.8	811.9	705.4	106.52	7.622
17,575.0	11,454.0	17,679.2	11,613.1	55.8	52.5	100.76	6,263.1	1,680.8	811.6	704.0	107.53	7.547
17,600.0	11,454.0	17,704.2	11,613.0	56.0	52.6	100.75	6,288.1	1,680.5	811.5	703.6	107.87	7.523
17,670.0	11,454.0	17,774.2	11,612.9	56.4	53.1	100.75	6,358.1	1,679.6	811.2	702.4	108.81	7.455
17,700.0	11,454.0	17,804.2	11,612.8	56.6	53.3	100.75	6,388.0	1,679.2	811.1	701.8	109.21	7.426
17,765.0	11,454.0	17,869.2	11,612.7	57.0	53.7	100.74	6,453.0	1,678.4	810.8	700.7	110.09	7.365
17,800.0	11,454.0	17,904.2	11,612.7	57.3	54.0	100.74	6,488.0	1,677.9	810.7	700.1	110.56	7.332
17,860.0	11,454.0	17,964.2	11,612.6	57.7	54.4	100.74	6,548.0	1,677.1	810.4	699.0	111.38	7.276
17,900.0	11,454.0	18,004.2	11,612.5	57.9	54.6	100.73	6,588.0	1,676.6	810.2	698.3	111.92	7.239
17,955.0	11,454.0	18,059.2	11,612.4	58.3	55.0	100.73	6,643.0	1,675.9	810.0	697.4	112.67	7.189
18,000.0	11,454.0	18,104.2	11,612.3	58.6	55.3	100.73	6,688.0	1,675.3	809.8	696.6	113.28	7.149
18,050.0	11,454.0	18,154.2	11,612.2	58.9	55.7	100.72	6,738.0	1,674.7	809.6	695.7	113.96	7.104
18,100.0	11,454.0	18,204.2	11,612.2	59.3	56.0	100.72	6,788.0	1,674.1	809.4	694.8	114.65	7.060
18,145.0	11,454.0	18,249.2	11,612.1	59.6	56.3	100.72	6,833.0	1,673.5	809.2	694.0	115.26	7.021
18,200.0	11,454.0	18,304.2	11,612.0	60.0	56.7	100.71	6,888.0	1,672.8	809.0	693.0	116.01	6.973
18,240.0	11,454.0	18,344.2	11,611.9	60.2	56.9	100.71	6,928.0	1,672.3	808.9	692.3	116.56	6.939
18,300.0	11,454.0	18,404.2	11,611.8	60.6	57.4	100.71	6,988.0	1,671.5	808.6	691.2	117.39	6.888
18,335.0	11,454.0	18,439.2	11,611.7	60.9	57.6	100.70	7,023.0	1,671.0	808.5	690.6	117.87	6.859
18,400.0	11,454.0	18,504.2	11,611.6	61.3	58.0	100.70	7,088.0	1,670.2	808.2	689.4	118.76	6.805
18,430.0	11,454.0	18,534.2	11,611.6	61.5	58.3	100.70	7,118.0	1,669.8	808.1	688.9	119.18	6.781
18,500.0	11,454.0	18,604.2	11,611.5	62.0	58.7	100.69	7,188.0	1,668.9	807.8	687.7	120.14	6.724
18,525.0	11,454.0	18,629.2	11,611.4	62.1	58.9	100.69	7,213.0	1,668.6	807.7	687.2	120.49	6.703
18,600.0	11,454.0	18,704.2	11,611.3	62.7	59.4	100.68	7,288.0	1,667.6	807.4	685.9	121.53	6.644
18,620.0	11,454.0	18,724.2	11,611.2	62.8	59.6	100.68	7,308.0	1,667.4	807.3	685.5	121.80	6.628
18,700.0	11,454.0	18,804.2	11,611.1	63.3	60.1	100.68	7,388.0	1,666.4	807.0	684.1	122.91	6.565
18,715.0	11,454.0	18,819.2	11,611.1	63.4	60.2	100.68	7,403.0	1,666.2	806.9	683.8	123.12	6.554
18,800.0	11,454.0	18,904.2	11,610.9	64.0	60.8	100.67	7,487.9	1,665.1	806.6	682.3	124.30	6.489
18,810.0	11,454.0	18,914.2	11,610.9	64.1	60.9	100.67	7,497.9	1,664.9	806.5	682.1	124.44	6.481
18,900.0	11,454.0	19,004.2	11,610.8	64.7	61.5	100.66	7,587.9	1,663.8	806.2	680.5	125.70	6.414
18,905.0	11,454.0	19,009.2	11,610.8	64.7	61.5	100.66	7,592.9	1,663.7	806.2	680.4	125.77	6.410
19,000.0	11,454.0	19,104.2	11,610.6	65.4	62.2	100.66	7,687.9	1,662.5	805.8	678.7	127.10	6.340
19,095.0	11,454.0	19,199.2	11,610.4	66.0	62.9	100.65	7,782.9	1,661.3	805.4	677.0	128.42	6.271

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 #713H
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 #713H	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 #702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
19,100.0	11,454.0	19,204.2	11,610.4	66.1	62.9	100.65	7,787.9	1,661.2	805.4	676.9	128.49	6.268	
19,190.0	11,454.0	19,294.2	11,610.3	66.7	63.5	100.64	7,877.9	1,660.1	805.0	675.2	129.76	6.204	
19,200.0	11,454.0	19,304.2	11,610.2	66.8	63.6	100.64	7,887.9	1,659.9	805.0	675.1	129.90	6.197	
19,285.0	11,454.0	19,389.2	11,610.1	67.4	64.2	100.64	7,972.9	1,658.8	804.6	673.5	131.09	6.138	
19,300.0	11,454.0	19,404.2	11,610.1	67.5	64.3	100.63	7,987.9	1,658.7	804.5	673.2	131.30	6.127	
19,380.0	11,454.0	19,484.2	11,609.9	68.0	64.9	100.63	8,067.9	1,657.6	804.2	671.8	132.43	6.073	
19,400.0	11,454.0	19,504.2	11,609.9	68.2	65.0	100.63	8,087.9	1,657.4	804.1	671.4	132.71	6.059	
19,475.0	11,454.0	19,579.2	11,609.8	68.7	65.5	100.62	8,162.9	1,656.4	803.8	670.1	133.77	6.009	
19,500.0	11,454.0	19,604.2	11,609.7	68.8	65.7	100.62	8,187.9	1,656.1	803.7	669.6	134.12	5.993	
19,570.0	11,454.0	19,674.2	11,609.6	69.3	66.2	100.61	8,257.9	1,655.2	803.4	668.3	135.11	5.947	
19,600.0	11,454.0	19,704.2	11,609.5	69.5	66.4	100.61	8,287.9	1,654.8	803.3	667.8	135.53	5.927	
19,665.0	11,454.0	19,769.2	11,609.4	70.0	66.9	100.61	8,352.9	1,654.0	803.1	666.6	136.46	5.885	
19,700.0	11,454.0	19,804.2	11,609.4	70.2	67.1	100.61	8,387.9	1,653.5	802.9	666.0	136.95	5.863	
19,760.0	11,454.0	19,864.2	11,609.3	70.7	67.6	100.60	8,447.9	1,652.7	802.7	664.9	137.80	5.825	
19,800.0	11,454.0	19,904.2	11,609.2	70.9	67.8	100.60	8,487.9	1,652.2	802.5	664.1	138.37	5.800	
19,855.0	11,454.0	19,959.2	11,609.1	71.3	68.2	100.59	8,542.8	1,651.5	802.3	663.1	139.15	5.766	
19,900.0	11,454.0	20,004.2	11,609.0	71.6	68.6	100.59	8,587.8	1,650.9	802.1	662.3	139.79	5.738	
19,950.0	11,454.0	20,054.2	11,608.9	72.0	68.9	100.59	8,637.8	1,650.3	801.9	661.4	140.50	5.707	
20,000.0	11,454.0	20,104.2	11,608.8	72.3	69.3	100.58	8,687.8	1,649.7	801.7	660.5	141.21	5.677	
20,045.0	11,454.0	20,149.2	11,608.8	72.7	69.6	100.58	8,732.8	1,649.1	801.5	659.7	141.85	5.650	
20,100.0	11,454.0	20,204.2	11,608.7	73.0	70.0	100.58	8,787.8	1,648.4	801.3	658.7	142.64	5.618	
20,140.0	11,454.0	20,244.2	11,608.6	73.3	70.3	100.57	8,827.8	1,647.9	801.1	657.9	143.21	5.594	
20,200.0	11,454.0	20,304.2	11,608.5	73.7	70.7	100.57	8,887.8	1,647.1	800.9	656.8	144.06	5.559	
20,235.0	11,454.0	20,339.2	11,608.4	74.0	70.9	100.57	8,922.8	1,646.6	800.7	656.2	144.56	5.539	
20,300.0	11,454.0	20,404.2	11,608.3	74.5	71.4	100.56	8,987.8	1,645.8	800.5	655.0	145.49	5.502	
20,330.0	11,454.0	20,434.2	11,608.3	74.7	71.6	100.56	9,017.8	1,645.4	800.4	654.4	145.92	5.485	
20,400.0	11,454.0	20,504.2	11,608.2	75.2	72.1	100.55	9,087.8	1,644.5	800.1	653.1	146.92	5.445	
20,425.0	11,454.0	20,529.2	11,608.1	75.3	72.3	100.55	9,112.8	1,644.2	800.0	652.7	147.28	5.432	
20,500.0	11,454.0	20,604.2	11,608.0	75.9	72.8	100.55	9,187.8	1,643.2	799.7	651.3	148.36	5.390	
20,520.0	11,454.0	20,624.2	11,607.9	76.0	73.0	100.55	9,207.8	1,643.0	799.6	650.9	148.64	5.379	
20,600.0	11,454.0	20,704.2	11,607.8	76.6	73.6	100.54	9,287.8	1,642.0	799.3	649.5	149.79	5.336	
20,615.0	11,454.0	20,719.2	11,607.8	76.7	73.7	100.54	9,302.8	1,641.8	799.2	649.2	150.01	5.328	
20,700.0	11,454.0	20,804.2	11,607.6	77.3	74.3	100.53	9,387.8	1,640.7	798.8	647.6	151.23	5.282	
20,710.0	11,454.0	20,814.2	11,607.6	77.4	74.4	100.53	9,397.8	1,640.5	798.8	647.4	151.37	5.277	
20,800.0	11,454.0	20,904.2	11,607.5	78.0	75.0	100.53	9,487.8	1,639.4	798.4	645.8	152.67	5.230	
20,805.0	11,454.0	20,909.2	11,607.4	78.0	75.0	100.53	9,492.8	1,639.3	798.4	645.7	152.74	5.227	
20,900.0	11,454.0	21,004.2	11,607.3	78.7	75.7	100.52	9,587.8	1,638.1	798.0	643.9	154.11	5.178	
20,995.0	11,454.0	21,099.2	11,607.1	79.4	76.4	100.51	9,682.7	1,636.9	797.6	642.2	155.48	5.130	
21,000.0	11,454.0	21,104.2	11,607.1	79.4	76.5	100.51	9,687.7	1,636.8	797.6	642.1	155.55	5.128	
21,090.0	11,454.0	21,194.2	11,607.0	80.1	77.1	100.50	9,777.7	1,635.7	797.3	640.4	156.85	5.083	
21,100.0	11,454.0	21,204.2	11,606.9	80.1	77.2	100.50	9,787.7	1,635.5	797.2	640.2	156.99	5.078	
21,185.0	11,454.0	21,289.2	11,606.8	80.7	77.8	100.50	9,872.7	1,634.4	796.9	638.7	158.22	5.036	
21,200.0	11,454.0	21,304.2	11,606.8	80.8	77.9	100.50	9,887.7	1,634.3	796.8	638.4	158.44	5.029	
21,280.0	11,454.0	21,384.2	11,606.6	81.4	78.5	100.49	9,967.7	1,633.2	796.5	636.9	159.59	4.991	
21,300.0	11,454.0	21,404.2	11,606.6	81.6	78.6	100.49	9,987.7	1,633.0	796.4	636.5	159.88	4.981	
21,375.0	11,454.0	21,479.2	11,606.5	82.1	79.2	100.48	10,062.7	1,632.0	796.1	635.1	160.97	4.946	
21,400.0	11,454.0	21,504.2	11,606.4	82.3	79.4	100.48	10,087.7	1,631.7	796.0	634.7	161.33	4.934	
21,470.0	11,454.0	21,574.2	11,606.3	82.8	79.9	100.48	10,157.7	1,630.8	795.7	633.4	162.35	4.901	
21,500.0	11,454.0	21,604.2	11,606.2	83.0	80.1	100.47	10,187.7	1,630.4	795.6	632.8	162.78	4.887	
21,565.0	11,454.0	21,669.2	11,606.1	83.5	80.6	100.47	10,252.7	1,629.6	795.3	631.6	163.72	4.858	
21,600.0	11,454.0	21,704.2	11,606.1	83.7	80.8	100.47	10,287.7	1,629.1	795.2	630.9	164.23	4.842	
21,660.0	11,454.0	21,764.2	11,606.0	84.1	81.2	100.46	10,347.7	1,628.3	794.9	629.8	165.10	4.815	

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 #713H
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 #713H	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 #702H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11094-r.5 MWD+IFR1+MS													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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		
21,700.0	11,454.0	21,804.2	11,605.9	84.4	81.5	100.46	10,387.7	1,627.8	794.8	629.1	165.68	4.797		
21,755.0	11,454.0	21,859.2	11,605.8	84.8	81.9	100.46	10,442.7	1,627.1	794.6	628.1	166.48	4.773		
21,800.0	11,454.0	21,904.2	11,605.7	85.2	82.3	100.45	10,487.7	1,626.5	794.4	627.2	167.14	4.753		
21,850.0	11,454.0	21,954.2	11,605.6	85.5	82.6	100.45	10,537.7	1,625.9	794.2	626.3	167.87	4.731		
21,875.0	11,454.0	21,979.2	11,605.6	85.7	82.8	100.45	10,562.7	1,625.6	794.1	625.8	168.23	4.720		
21,875.5	11,454.0	21,979.7	11,605.6	85.7	82.8	100.45	10,563.2	1,625.6	794.1	625.8	168.24	4.720 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 #713H
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 #713H	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 #703H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		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	
6,270.0	6,189.3	6,224.3	6,196.8	23.7	17.4	0.69	12.8	2,174.2	1,317.7	1,282.2	35.42	37.199	
6,300.0	6,218.9	6,253.9	6,226.4	23.8	17.4	0.69	12.8	2,174.2	1,312.6	1,277.1	35.57	36.903	
6,365.0	6,283.1	6,318.1	6,290.6	24.1	17.4	0.70	12.8	2,174.2	1,302.3	1,266.4	35.89	36.291	
6,400.0	6,317.7	6,352.7	6,325.2	24.2	17.4	0.70	12.8	2,174.2	1,297.0	1,261.0	36.05	35.974	
6,460.0	6,377.1	6,412.1	6,384.6	24.5	17.4	0.70	12.8	2,174.2	1,288.5	1,252.1	36.34	35.457	
6,500.0	6,416.7	6,451.7	6,424.2	24.7	17.4	0.70	12.8	2,174.2	1,283.1	1,246.6	36.53	35.126	
6,555.0	6,471.3	6,506.3	6,478.8	24.9	17.5	0.71	12.8	2,174.2	1,276.2	1,239.4	36.78	34.695	
6,600.0	6,516.0	6,551.0	6,523.5	25.1	17.5	0.71	12.8	2,174.2	1,271.0	1,234.0	36.99	34.358	
6,650.0	6,565.7	6,600.7	6,573.2	25.3	17.5	0.71	12.8	2,174.2	1,265.5	1,228.3	37.22	34.004	
6,700.0	6,615.4	6,650.4	6,622.9	25.5	17.5	0.71	12.8	2,174.2	1,260.5	1,223.1	37.44	33.666	
6,745.0	6,660.2	6,695.2	6,667.7	25.7	17.5	0.72	12.8	2,174.2	1,256.4	1,218.8	37.64	33.382	
6,800.0	6,715.0	6,750.0	6,722.5	25.9	17.5	0.72	12.8	2,174.2	1,251.8	1,214.0	37.88	33.051	
6,840.0	6,754.9	6,789.9	6,762.4	26.0	17.6	0.72	12.8	2,174.2	1,248.9	1,210.8	38.04	32.828	
6,900.0	6,814.8	6,849.8	6,822.3	26.2	17.6	0.72	12.8	2,174.2	1,244.9	1,206.6	38.29	32.510	
6,935.0	6,849.7	6,884.7	6,857.2	26.4	17.6	0.72	12.8	2,174.2	1,242.9	1,204.4	38.43	32.341	
7,000.0	6,914.7	6,949.7	6,922.2	26.6	17.6	0.72	12.8	2,174.2	1,239.7	1,201.0	38.69	32.045	
7,030.0	6,944.6	6,979.6	6,952.1	26.7	17.6	0.72	12.8	2,174.2	1,238.5	1,199.7	38.79	31.924	
7,100.0	7,014.6	7,049.6	7,022.1	26.9	17.7	0.73	12.8	2,174.2	1,236.2	1,197.2	39.05	31.658	
7,125.0	7,039.6	7,074.6	7,047.1	27.0	17.7	0.73	12.8	2,174.2	1,235.6	1,196.5	39.13	31.580	
7,200.0	7,114.6	7,149.6	7,122.1	27.2	17.7	0.73	12.8	2,174.2	1,234.5	1,195.1	39.36	31.362	
7,220.0	7,134.6	7,169.6	7,142.1	27.2	17.7	0.73	12.8	2,174.2	1,234.4	1,195.0	39.40	31.332	
7,248.7	7,163.3	7,198.2	7,170.8	27.2	17.7	89.98	12.8	2,174.2	1,234.3	1,194.8	39.44	31.292	
7,300.0	7,214.6	7,249.6	7,222.1	27.2	17.7	89.98	12.8	2,174.2	1,234.3	1,194.8	39.48	31.266	
7,315.0	7,229.6	7,264.6	7,237.1	27.2	17.7	89.98	12.8	2,174.2	1,234.3	1,194.8	39.49	31.257	
7,400.0	7,314.6	7,349.6	7,322.1	27.2	17.8	89.98	12.8	2,174.2	1,234.3	1,194.7	39.56	31.203	
7,410.0	7,324.6	7,359.6	7,332.1	27.2	17.8	89.98	12.8	2,174.2	1,234.3	1,194.7	39.56	31.197	
7,500.0	7,414.6	7,449.6	7,422.1	27.3	17.8	89.98	12.8	2,174.2	1,234.3	1,194.7	39.64	31.140	
7,505.0	7,419.6	7,454.6	7,427.1	27.3	17.8	89.98	12.8	2,174.2	1,234.3	1,194.6	39.64	31.137	
7,600.0	7,514.6	7,549.6	7,522.1	27.3	17.9	89.98	12.8	2,174.2	1,234.3	1,194.6	39.72	31.076	
7,695.0	7,609.6	7,644.6	7,617.1	27.3	17.9	89.98	12.8	2,174.2	1,234.3	1,194.5	39.80	31.016	
7,700.0	7,614.6	7,649.6	7,622.1	27.3	17.9	89.98	12.8	2,174.2	1,234.3	1,194.5	39.80	31.012	
7,790.0	7,704.6	7,739.6	7,712.1	27.3	17.9	89.98	12.8	2,174.2	1,234.3	1,194.4	39.87	30.955	
7,800.0	7,714.6	7,749.6	7,722.1	27.4	17.9	89.98	12.8	2,174.2	1,234.3	1,194.4	39.88	30.949	
7,885.0	7,799.6	7,834.6	7,807.1	27.4	18.0	89.98	12.8	2,174.2	1,234.3	1,194.3	39.95	30.894	
7,900.0	7,814.6	7,849.6	7,822.1	27.4	18.0	89.98	12.8	2,174.2	1,234.3	1,194.3	39.96	30.885	
7,980.0	7,894.6	7,929.6	7,902.1	27.4	18.0	89.98	12.8	2,174.2	1,234.3	1,194.3	40.03	30.833	
8,000.0	7,914.6	7,949.6	7,922.1	27.4	18.0	89.98	12.8	2,174.2	1,234.3	1,194.2	40.05	30.821	
8,075.0	7,989.6	8,024.6	7,997.1	27.4	18.0	89.98	12.8	2,174.2	1,234.3	1,194.2	40.11	30.772	
8,100.0	8,014.6	8,049.6	8,022.1	27.4	18.1	89.98	12.8	2,174.2	1,234.3	1,194.2	40.13	30.756	
8,170.0	8,084.6	8,119.6	8,092.1	27.5	18.1	89.98	12.8	2,174.2	1,234.3	1,194.1	40.19	30.711	
8,200.0	8,114.6	8,149.6	8,122.1	27.5	18.1	89.98	12.8	2,174.2	1,234.3	1,194.1	40.22	30.692	
8,265.0	8,179.6	8,214.6	8,187.1	27.5	18.1	89.98	12.8	2,174.2	1,234.3	1,194.0	40.27	30.650	
8,300.0	8,214.6	8,249.6	8,222.1	27.5	18.1	89.98	12.8	2,174.2	1,234.3	1,194.0	40.30	30.628	
8,360.0	8,274.6	8,309.6	8,282.1	27.5	18.2	89.98	12.8	2,174.2	1,234.3	1,193.9	40.35	30.589	
8,400.0	8,314.6	8,349.6	8,322.1	27.5	18.2	89.98	12.8	2,174.2	1,234.3	1,193.9	40.39	30.563	
8,455.0	8,369.6	8,404.6	8,377.1	27.5	18.2	89.98	12.8	2,174.2	1,234.3	1,193.9	40.43	30.527	
8,500.0	8,414.6	8,449.6	8,422.1	27.6	18.2	89.98	12.8	2,174.2	1,234.3	1,193.8	40.47	30.498	
8,550.0	8,464.6	8,499.6	8,472.1	27.6	18.2	89.98	12.8	2,174.2	1,234.3	1,193.8	40.51	30.466	
8,600.0	8,514.6	8,549.6	8,522.1	27.6	18.3	89.98	12.8	2,174.2	1,234.3	1,193.7	40.56	30.434	
8,645.0	8,559.6	8,594.6	8,567.1	27.6	18.3	89.98	12.8	2,174.2	1,234.3	1,193.7	40.60	30.405	
8,700.0	8,614.6	8,649.6	8,622.1	27.6	18.3	89.98	12.8	2,174.2	1,234.3	1,193.6	40.64	30.369	
8,740.0	8,654.6	8,689.6	8,662.1	27.6	18.3	89.98	12.8	2,174.2	1,234.3	1,193.6	40.68	30.343	

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 #713H
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 #713H	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 #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		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	
8,800.0	8,714.6	8,749.6	8,722.1	27.6	18.4	89.98	12.8	2,174.2	1,234.3	1,193.6	40.73	30.304	
8,835.0	8,749.6	8,784.6	8,757.1	27.7	18.4	89.98	12.8	2,174.2	1,234.3	1,193.5	40.76	30.281	
8,900.0	8,814.6	8,849.6	8,822.1	27.7	18.4	89.98	12.8	2,174.2	1,234.3	1,193.5	40.82	30.239	
8,930.0	8,844.6	8,879.6	8,852.1	27.7	18.4	89.98	12.8	2,174.2	1,234.3	1,193.4	40.84	30.220	
9,000.0	8,914.6	8,949.6	8,922.1	27.7	18.4	89.98	12.8	2,174.2	1,234.3	1,193.4	40.91	30.174	
9,025.0	8,939.6	8,974.6	8,947.1	27.7	18.5	89.98	12.8	2,174.2	1,234.3	1,193.4	40.93	30.158	
9,100.0	9,014.6	9,049.6	9,022.1	27.7	18.5	89.98	12.8	2,174.2	1,234.3	1,193.3	40.99	30.109	
9,120.0	9,034.6	9,069.6	9,042.1	27.7	18.5	89.98	12.8	2,174.2	1,234.3	1,193.3	41.01	30.096	
9,200.0	9,114.6	9,149.6	9,122.1	27.8	18.5	89.98	12.8	2,174.2	1,234.3	1,193.2	41.08	30.044	
9,215.0	9,129.6	9,164.6	9,137.1	27.8	18.5	89.98	12.8	2,174.2	1,234.3	1,193.2	41.10	30.034	
9,300.0	9,214.6	9,249.6	9,222.1	27.8	18.6	89.98	12.8	2,174.2	1,234.3	1,193.1	41.17	29.979	
9,310.0	9,224.6	9,259.6	9,232.1	27.8	18.6	89.98	12.8	2,174.2	1,234.3	1,193.1	41.18	29.972	
9,400.0	9,314.6	9,349.6	9,322.1	27.8	18.6	89.98	12.8	2,174.2	1,234.3	1,193.0	41.26	29.913	
9,405.0	9,319.6	9,354.6	9,327.1	27.8	18.6	89.98	12.8	2,174.2	1,234.3	1,193.0	41.27	29.910	
9,500.0	9,414.6	9,449.6	9,422.1	27.9	18.7	89.98	12.8	2,174.2	1,234.3	1,192.9	41.35	29.848	
9,595.0	9,509.6	9,544.6	9,517.1	27.9	18.7	89.98	12.8	2,174.2	1,234.3	1,192.9	41.44	29.786	
9,600.0	9,514.6	9,549.6	9,522.1	27.9	18.7	89.98	12.8	2,174.2	1,234.3	1,192.8	41.44	29.783	
9,690.0	9,604.6	9,639.6	9,612.1	27.9	18.7	89.98	12.8	2,174.2	1,234.3	1,192.8	41.52	29.724	
9,700.0	9,614.6	9,649.6	9,622.1	27.9	18.8	89.98	12.8	2,174.2	1,234.3	1,192.8	41.53	29.718	
9,785.0	9,699.6	9,734.6	9,707.1	28.0	18.8	89.98	12.8	2,174.2	1,234.3	1,192.7	41.61	29.662	
9,800.0	9,714.6	9,749.6	9,722.1	28.0	18.8	89.98	12.8	2,174.2	1,234.3	1,192.7	41.63	29.652	
9,880.0	9,794.6	9,829.6	9,802.1	28.0	18.8	89.98	12.8	2,174.2	1,234.3	1,192.6	41.70	29.600	
9,900.0	9,814.6	9,849.6	9,822.1	28.0	18.8	89.98	12.8	2,174.2	1,234.3	1,192.6	41.72	29.587	
9,975.0	9,889.6	9,924.6	9,897.1	28.0	18.9	89.98	12.8	2,174.2	1,234.3	1,192.5	41.79	29.538	
10,000.0	9,914.6	9,949.6	9,922.1	28.0	18.9	89.98	12.8	2,174.2	1,234.3	1,192.5	41.81	29.521	
10,070.0	9,984.6	10,019.6	9,992.1	28.0	18.9	89.98	12.8	2,174.2	1,234.3	1,192.4	41.87	29.476	
10,100.0	10,014.6	10,049.6	10,022.1	28.1	18.9	89.98	12.8	2,174.2	1,234.3	1,192.4	41.90	29.456	
10,165.0	10,079.6	10,114.6	10,087.1	28.1	19.0	89.98	12.8	2,174.2	1,234.3	1,192.3	41.96	29.414	
10,200.0	10,114.6	10,149.6	10,122.1	28.1	19.0	89.98	12.8	2,174.2	1,234.3	1,192.3	42.00	29.391	
10,260.0	10,174.6	10,209.6	10,182.1	28.1	19.0	89.98	12.8	2,174.2	1,234.3	1,192.2	42.05	29.351	
10,300.0	10,214.6	10,249.6	10,222.1	28.1	19.0	89.98	12.8	2,174.2	1,234.3	1,192.2	42.09	29.325	
10,355.0	10,269.6	10,304.6	10,277.1	28.1	19.1	89.98	12.8	2,174.2	1,234.3	1,192.1	42.14	29.289	
10,400.0	10,314.6	10,349.6	10,322.1	28.2	19.1	89.98	12.8	2,174.2	1,234.3	1,192.1	42.18	29.260	
10,450.0	10,364.6	10,399.6	10,372.1	28.2	19.1	89.98	12.8	2,174.2	1,234.3	1,192.1	42.23	29.227	
10,500.0	10,414.6	10,449.6	10,422.1	28.2	19.1	89.98	12.8	2,174.2	1,234.3	1,192.0	42.28	29.195	
10,545.0	10,459.6	10,494.6	10,467.1	28.2	19.1	89.98	12.8	2,174.2	1,234.3	1,192.0	42.32	29.165	
10,600.0	10,514.6	10,549.6	10,522.1	28.2	19.2	89.98	12.8	2,174.2	1,234.3	1,191.9	42.37	29.129	
10,640.0	10,554.6	10,589.6	10,562.1	28.2	19.2	89.98	12.8	2,174.2	1,234.3	1,191.9	42.41	29.103	
10,700.0	10,614.6	10,649.6	10,622.1	28.3	19.2	89.98	12.8	2,174.2	1,234.3	1,191.8	42.47	29.064	
10,735.0	10,649.6	10,684.6	10,657.1	28.3	19.2	89.98	12.8	2,174.2	1,234.3	1,191.8	42.50	29.041	
10,800.0	10,714.6	10,749.6	10,722.1	28.3	19.3	89.98	12.8	2,174.2	1,234.3	1,191.7	42.56	28.999	
10,830.0	10,744.6	10,779.6	10,752.1	28.3	19.3	89.98	12.8	2,174.2	1,234.3	1,191.7	42.59	28.979	
10,900.0	10,814.6	10,849.6	10,822.1	28.3	19.3	89.98	12.8	2,174.2	1,234.3	1,191.6	42.66	28.933	
10,925.0	10,839.6	10,874.6	10,847.1	28.3	19.3	89.98	12.8	2,174.2	1,234.3	1,191.6	42.68	28.917	
11,000.0	10,914.6	10,949.6	10,922.1	28.4	19.4	89.98	12.8	2,174.2	1,234.3	1,191.5	42.76	28.868	
11,020.0	10,934.6	10,969.6	10,942.1	28.4	19.4	89.98	12.8	2,174.2	1,234.3	1,191.5	42.77	28.857	
11,062.0	10,976.5	11,011.5	10,984.0	28.4	19.4	89.98	12.8	2,174.2	1,234.3	1,191.5	42.81	28.833	
11,075.0	10,989.6	11,024.6	10,997.1	28.4	19.4	90.50	12.8	2,174.2	1,234.3	1,191.5	42.82	28.827	
11,100.0	11,014.5	11,049.5	11,022.0	28.4	19.4	90.56	12.8	2,174.2	1,234.3	1,191.5	42.83	28.820	
11,115.0	11,029.5	11,064.5	11,037.0	28.4	19.4	90.63	12.8	2,174.2	1,234.3	1,191.5	42.83	28.818	
11,125.0	11,039.4	11,074.4	11,046.9	28.4	19.4	90.68	12.8	2,174.2	1,234.3	1,191.5	42.83	28.817	
11,150.0	11,064.1	11,099.1	11,071.6	28.4	19.4	90.85	12.8	2,174.2	1,234.4	1,191.6	42.83	28.818	

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 #713H
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 #713H	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 #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		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	
11,175.0	11,088.5	11,123.5	11,096.0	28.4	19.4	91.08	12.8	2,174.2	1,234.5	1,191.6	42.83	28.824	
11,200.0	11,112.7	11,147.7	11,120.2	28.4	19.5	91.35	12.8	2,174.2	1,234.6	1,191.8	42.82	28.834	
11,210.0	11,122.2	11,157.2	11,129.7	28.4	19.5	91.48	12.8	2,174.2	1,234.7	1,191.9	42.81	28.840	
11,225.0	11,136.4	11,171.4	11,143.9	28.4	19.5	91.67	12.8	2,174.2	1,234.8	1,192.0	42.80	28.851	
11,250.0	11,159.8	11,194.7	11,167.3	28.4	19.5	92.02	12.8	2,174.2	1,235.1	1,192.4	42.78	28.873	
11,275.0	11,182.6	11,217.6	11,190.1	28.4	19.5	92.40	12.8	2,174.2	1,235.6	1,192.8	42.74	28.906	
11,300.0	11,204.8	11,241.2	11,213.7	28.4	19.5	92.83	12.9	2,174.2	1,236.2	1,193.5	42.70	28.951	
11,305.0	11,209.2	11,246.3	11,218.8	28.4	19.5	92.92	13.0	2,174.2	1,236.3	1,193.6	42.69	28.961	
11,325.0	11,226.5	11,267.0	11,239.4	28.4	19.5	93.30	14.0	2,174.2	1,236.8	1,194.2	42.64	29.004	
11,350.0	11,247.4	11,293.2	11,265.6	28.4	19.5	93.77	16.2	2,174.1	1,237.7	1,195.1	42.59	29.061	
11,375.0	11,267.6	11,320.1	11,292.2	28.4	19.6	94.25	19.8	2,174.1	1,238.6	1,196.1	42.53	29.123	
11,400.0	11,287.0	11,347.5	11,319.2	28.4	19.6	94.74	24.7	2,174.0	1,239.6	1,197.2	42.47	29.188	
11,425.0	11,305.6	11,375.7	11,346.7	28.4	19.6	95.22	31.1	2,173.9	1,240.8	1,198.4	42.41	29.257	
11,450.0	11,323.2	11,404.6	11,374.4	28.4	19.7	95.72	39.1	2,173.8	1,242.1	1,199.7	42.35	29.328	
11,475.0	11,340.0	11,434.3	11,402.6	28.4	19.7	96.22	48.7	2,173.7	1,243.5	1,201.2	42.30	29.400	
11,495.0	11,352.6	11,458.7	11,425.3	28.4	19.7	96.62	57.7	2,173.6	1,244.7	1,202.5	42.25	29.458	
11,500.0	11,355.7	11,464.9	11,431.0	28.4	19.7	96.72	60.1	2,173.5	1,245.0	1,202.8	42.24	29.472	
11,525.0	11,370.3	11,496.5	11,459.6	28.4	19.8	97.23	73.5	2,173.3	1,246.6	1,204.5	42.20	29.543	
11,550.0	11,383.9	11,529.2	11,488.3	28.4	19.8	97.74	88.9	2,173.1	1,248.4	1,206.2	42.16	29.610	
11,575.0	11,396.4	11,563.0	11,517.1	28.5	19.9	98.26	106.6	2,172.9	1,250.2	1,208.1	42.13	29.673	
11,590.0	11,403.3	11,583.8	11,534.4	28.5	19.9	98.57	118.3	2,172.7	1,251.3	1,209.2	42.12	29.707	
11,600.0	11,407.7	11,598.0	11,545.8	28.5	19.9	98.78	126.7	2,172.6	1,252.1	1,210.0	42.12	29.729	
11,625.0	11,417.9	11,634.4	11,574.3	28.5	20.0	99.31	149.4	2,172.3	1,254.0	1,211.9	42.12	29.775	
11,650.0	11,426.8	11,672.3	11,602.3	28.5	20.0	99.85	174.9	2,172.0	1,256.1	1,213.9	42.14	29.809	
11,675.0	11,434.5	11,711.8	11,629.7	28.5	20.1	100.38	203.3	2,171.6	1,258.1	1,215.9	42.18	29.830	
11,685.0	11,437.2	11,728.1	11,640.3	28.5	20.1	100.60	215.6	2,171.4	1,258.9	1,216.7	42.20	29.834	
11,700.0	11,440.9	11,753.0	11,656.0	28.5	20.1	100.92	235.0	2,171.1	1,260.1	1,217.9	42.24	29.835	
11,725.0	11,446.1	11,795.9	11,681.0	28.5	20.1	101.45	269.9	2,170.7	1,262.1	1,219.8	42.32	29.822	
11,750.0	11,450.0	11,840.8	11,704.3	28.6	20.2	101.98	308.2	2,170.1	1,264.1	1,221.7	42.44	29.789	
11,775.0	11,452.6	11,887.6	11,725.2	28.6	20.2	102.50	350.0	2,169.6	1,266.0	1,223.4	42.57	29.737	
11,780.0	11,452.9	11,897.2	11,729.1	28.6	20.2	102.60	358.8	2,169.4	1,266.4	1,223.8	42.60	29.724	
11,800.0	11,453.8	11,936.3	11,743.4	28.6	20.3	102.99	395.2	2,168.9	1,267.8	1,225.0	42.74	29.664	
11,812.0	11,454.0	11,960.3	11,750.9	28.6	20.3	103.21	418.0	2,168.6	1,268.6	1,225.8	42.82	29.623	
11,875.0	11,454.0	12,094.9	11,774.9	28.7	20.4	104.27	550.2	2,166.8	1,271.0	1,227.7	43.36	29.313	
11,900.0	11,454.0	12,139.4	11,776.0	28.7	20.4	104.32	594.6	2,166.2	1,271.1	1,227.5	43.53	29.202	
11,970.0	11,454.0	12,209.4	11,776.0	28.8	20.4	104.33	664.6	2,165.3	1,270.7	1,227.0	43.73	29.058	
12,000.0	11,454.0	12,239.4	11,776.0	28.9	20.4	104.33	694.6	2,164.8	1,270.6	1,226.8	43.83	28.990	
12,065.0	11,454.0	12,304.4	11,776.0	29.0	20.5	104.33	759.6	2,164.0	1,270.3	1,226.3	44.06	28.834	
12,100.0	11,454.0	12,339.4	11,776.0	29.0	20.5	104.33	794.6	2,163.5	1,270.2	1,226.0	44.19	28.744	
12,160.0	11,454.0	12,399.4	11,776.0	29.1	20.5	104.34	854.6	2,162.7	1,269.9	1,225.5	44.43	28.582	
12,200.0	11,454.0	12,439.4	11,776.0	29.2	20.5	104.34	894.6	2,162.1	1,269.7	1,225.1	44.60	28.468	
12,255.0	11,454.0	12,494.4	11,776.0	29.3	20.6	104.34	949.6	2,161.4	1,269.5	1,224.6	44.85	28.304	
12,300.0	11,454.0	12,539.4	11,776.0	29.4	20.6	104.34	994.6	2,160.7	1,269.3	1,224.2	45.07	28.164	
12,350.0	11,454.0	12,589.4	11,776.0	29.5	20.6	104.35	1,044.6	2,160.1	1,269.0	1,223.7	45.32	28.003	
12,400.0	11,454.0	12,639.4	11,776.0	29.6	20.7	104.35	1,094.6	2,159.4	1,268.8	1,223.2	45.58	27.837	
12,445.0	11,454.0	12,684.4	11,776.0	29.7	20.7	104.35	1,139.6	2,158.8	1,268.6	1,222.8	45.83	27.682	
12,500.0	11,454.0	12,739.4	11,776.0	29.8	20.7	104.36	1,194.6	2,158.0	1,268.4	1,222.2	46.14	27.489	
12,540.0	11,454.0	12,779.4	11,776.0	29.9	20.8	104.36	1,234.6	2,157.5	1,268.2	1,221.8	46.38	27.344	
12,600.0	11,454.0	12,839.4	11,776.0	30.1	20.8	104.36	1,294.6	2,156.6	1,267.9	1,221.2	46.75	27.123	
12,635.0	11,454.0	12,874.4	11,776.0	30.2	20.9	104.36	1,329.6	2,156.2	1,267.7	1,220.8	46.97	26.990	
12,700.0	11,454.0	12,939.4	11,776.0	30.3	20.9	104.37	1,394.6	2,155.3	1,267.5	1,220.1	47.40	26.742	
12,730.0	11,454.0	12,969.4	11,776.0	30.4	21.0	104.37	1,424.6	2,154.9	1,267.3	1,219.7	47.60	26.624	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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 #703H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS													Offset Well Error: 3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance			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	
12,800.0	11,454.0	13,039.4	11,776.0	30.6	21.1	104.37	1,494.5	2,153.9	1,267.0	1,218.9	48.09	26.348	
12,825.0	11,454.0	13,064.4	11,776.0	30.7	21.1	104.37	1,519.5	2,153.6	1,266.9	1,218.6	48.27	26.248	
12,900.0	11,454.0	13,139.4	11,776.0	30.9	21.2	104.38	1,594.5	2,152.5	1,266.5	1,217.7	48.82	25.945	
12,920.0	11,454.0	13,159.4	11,776.0	31.0	21.2	104.38	1,614.5	2,152.3	1,266.5	1,217.5	48.97	25.863	
13,000.0	11,454.0	13,239.4	11,776.0	31.2	21.4	104.38	1,694.5	2,151.2	1,266.1	1,216.5	49.58	25.535	
13,015.0	11,454.0	13,254.4	11,776.0	31.3	21.4	104.38	1,709.5	2,151.0	1,266.0	1,216.3	49.70	25.473	
13,100.0	11,454.0	13,339.4	11,776.0	31.6	21.5	104.39	1,794.5	2,149.8	1,265.6	1,215.3	50.38	25.120	
13,110.0	11,454.0	13,349.4	11,776.0	31.6	21.6	104.39	1,804.5	2,149.7	1,265.6	1,215.1	50.47	25.078	
13,200.0	11,454.0	13,439.4	11,776.0	31.9	21.8	104.39	1,894.5	2,148.4	1,265.2	1,214.0	51.22	24.701	
13,205.0	11,454.0	13,444.4	11,776.0	31.9	21.8	104.39	1,899.5	2,148.4	1,265.2	1,213.9	51.26	24.680	
13,300.0	11,454.0	13,539.4	11,776.0	32.3	22.0	104.40	1,994.5	2,147.1	1,264.7	1,212.7	52.09	24.281	
13,395.0	11,454.0	13,634.4	11,776.0	32.6	22.3	104.40	2,089.5	2,145.8	1,264.3	1,211.4	52.94	23.883	
13,400.0	11,454.0	13,639.4	11,776.0	32.6	22.3	104.40	2,094.5	2,145.7	1,264.3	1,211.3	52.98	23.862	
13,490.0	11,454.0	13,729.4	11,776.0	33.0	22.6	104.41	2,184.5	2,144.5	1,263.9	1,210.1	53.82	23.485	
13,500.0	11,454.0	13,739.4	11,776.0	33.0	22.6	104.41	2,194.5	2,144.3	1,263.8	1,209.9	53.91	23.444	
13,585.0	11,454.0	13,824.4	11,776.0	33.4	22.9	104.41	2,279.5	2,143.2	1,263.5	1,208.7	54.72	23.091	
13,600.0	11,454.0	13,839.4	11,776.0	33.4	23.0	104.41	2,294.5	2,143.0	1,263.4	1,208.5	54.86	23.029	
13,680.0	11,454.0	13,919.4	11,776.0	33.7	23.3	104.42	2,374.5	2,141.9	1,263.0	1,207.4	55.64	22.699	
13,700.0	11,454.0	13,939.4	11,776.0	33.8	23.4	104.42	2,394.4	2,141.6	1,262.9	1,207.1	55.84	22.618	
13,775.0	11,454.0	14,014.4	11,776.0	34.1	23.7	104.42	2,469.4	2,140.6	1,262.6	1,206.0	56.59	22.312	
13,800.0	11,454.0	14,039.4	11,776.0	34.3	23.8	104.42	2,494.4	2,140.2	1,262.5	1,205.7	56.84	22.211	
13,870.0	11,454.0	14,109.4	11,776.0	34.6	24.1	104.43	2,564.4	2,139.3	1,262.2	1,204.6	57.56	21.930	
13,900.0	11,454.0	14,139.4	11,776.0	34.7	24.3	104.43	2,594.4	2,138.9	1,262.0	1,204.2	57.86	21.810	
13,965.0	11,454.0	14,204.4	11,776.0	35.0	24.6	104.43	2,659.4	2,138.0	1,261.7	1,203.2	58.54	21.553	
14,000.0	11,454.0	14,239.4	11,776.0	35.1	24.8	104.43	2,694.4	2,137.5	1,261.6	1,202.7	58.91	21.416	
14,060.0	11,454.0	14,299.4	11,776.0	35.4	25.1	104.44	2,754.4	2,136.7	1,261.3	1,201.8	59.55	21.182	
14,100.0	11,454.0	14,339.4	11,776.0	35.6	25.3	104.44	2,794.4	2,136.1	1,261.1	1,201.2	59.98	21.028	
14,155.0	11,454.0	14,394.4	11,776.0	35.9	25.6	104.44	2,849.4	2,135.4	1,260.9	1,200.3	60.57	20.817	
14,200.0	11,454.0	14,439.4	11,776.0	36.1	25.8	104.44	2,894.4	2,134.7	1,260.7	1,199.6	61.06	20.647	
14,250.0	11,454.0	14,489.4	11,776.0	36.3	26.1	104.45	2,944.4	2,134.1	1,260.5	1,198.9	61.61	20.459	
14,300.0	11,454.0	14,539.4	11,776.0	36.5	26.4	104.45	2,994.4	2,133.4	1,260.2	1,198.1	62.16	20.273	
14,345.0	11,454.0	14,584.4	11,776.0	36.8	26.7	104.45	3,039.4	2,132.8	1,260.0	1,197.4	62.67	20.107	
14,400.0	11,454.0	14,639.4	11,776.0	37.0	27.0	104.46	3,094.4	2,132.0	1,259.8	1,196.5	63.28	19.907	
14,440.0	11,454.0	14,679.4	11,776.0	37.2	27.2	104.46	3,134.4	2,131.5	1,259.6	1,195.9	63.74	19.763	
14,500.0	11,454.0	14,739.4	11,776.0	37.5	27.6	104.46	3,194.4	2,130.6	1,259.3	1,194.9	64.42	19.549	
14,535.0	11,454.0	14,774.4	11,776.0	37.7	27.8	104.46	3,229.4	2,130.2	1,259.2	1,194.4	64.82	19.425	
14,600.0	11,454.0	14,839.4	11,776.0	38.0	28.2	104.47	3,294.4	2,129.3	1,258.9	1,193.3	65.57	19.199	
14,630.0	11,454.0	14,869.4	11,776.0	38.2	28.4	104.47	3,324.4	2,128.9	1,258.7	1,192.8	65.92	19.095	
14,700.0	11,454.0	14,939.4	11,776.0	38.5	28.8	104.47	3,394.3	2,127.9	1,258.4	1,191.7	66.74	18.856	
14,725.0	11,454.0	14,964.4	11,776.0	38.7	29.0	104.47	3,419.3	2,127.6	1,258.3	1,191.3	67.03	18.772	
14,800.0	11,454.0	15,039.4	11,776.0	39.1	29.4	104.48	3,494.3	2,126.5	1,258.0	1,190.1	67.92	18.522	
14,820.0	11,454.0	15,059.4	11,776.0	39.2	29.6	104.48	3,514.3	2,126.3	1,257.9	1,189.7	68.16	18.456	
14,900.0	11,454.0	15,139.4	11,776.0	39.6	30.1	104.48	3,594.3	2,125.2	1,257.5	1,188.4	69.11	18.195	
14,915.0	11,454.0	15,154.4	11,776.0	39.7	30.2	104.48	3,609.3	2,125.0	1,257.5	1,188.2	69.29	18.147	
15,000.0	11,454.0	15,239.4	11,776.0	40.1	30.7	104.49	3,694.3	2,123.8	1,257.1	1,186.8	70.32	17.877	
15,010.0	11,454.0	15,249.4	11,776.0	40.2	30.8	104.49	3,704.3	2,123.7	1,257.0	1,186.6	70.44	17.845	
15,100.0	11,454.0	15,339.4	11,776.0	40.7	31.4	104.49	3,794.3	2,122.4	1,256.6	1,185.1	71.54	17.566	
15,105.0	11,454.0	15,344.4	11,776.0	40.7	31.4	104.49	3,799.3	2,122.4	1,256.6	1,185.0	71.60	17.551	
15,200.0	11,454.0	15,439.4	11,776.0	41.2	32.0	104.50	3,894.3	2,121.1	1,256.2	1,183.4	72.77	17.263	
15,295.0	11,454.0	15,534.4	11,776.0	41.8	32.7	104.50	3,989.3	2,119.8	1,255.8	1,181.8	73.95	16.982	
15,300.0	11,454.0	15,539.4	11,776.0	41.8	32.7	104.50	3,994.3	2,119.7	1,255.7	1,181.7	74.01	16.968	
15,390.0	11,454.0	15,629.4	11,776.0	42.3	33.3	104.51	4,084.3	2,118.5	1,255.3	1,180.2	75.13	16.708	

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 #713H
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 #713H	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 #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,400.0	11,454.0	15,639.4	11,776.0	42.3	33.4	104.51	4,094.3	2,118.3	1,255.3	1,180.0	75.26	16.680	
15,485.0	11,454.0	15,724.4	11,776.0	42.8	33.9	104.51	4,179.3	2,117.2	1,254.9	1,178.6	76.33	16.441	
15,500.0	11,454.0	15,739.4	11,776.0	42.9	34.0	104.51	4,194.3	2,117.0	1,254.8	1,178.3	76.52	16.399	
15,580.0	11,454.0	15,819.4	11,776.0	43.4	34.6	104.52	4,274.3	2,115.9	1,254.5	1,176.9	77.53	16.180	
15,600.0	11,454.0	15,839.4	11,776.0	43.5	34.7	104.52	4,294.3	2,115.6	1,254.4	1,176.6	77.79	16.126	
15,675.0	11,454.0	15,914.4	11,776.0	43.9	35.2	104.52	4,369.2	2,114.6	1,254.0	1,175.3	78.75	15.925	
15,700.0	11,454.0	15,939.4	11,776.0	44.1	35.4	104.52	4,394.2	2,114.2	1,253.9	1,174.9	79.07	15.859	
15,770.0	11,454.0	16,009.4	11,776.0	44.5	35.9	104.53	4,464.2	2,113.3	1,253.6	1,173.6	79.97	15.677	
15,800.0	11,454.0	16,039.4	11,776.0	44.7	36.1	104.53	4,494.2	2,112.9	1,253.5	1,173.1	80.35	15.599	
15,865.0	11,454.0	16,104.4	11,776.0	45.0	36.5	104.53	4,559.2	2,112.0	1,253.2	1,172.0	81.20	15.434	
15,900.0	11,454.0	16,139.4	11,776.0	45.3	36.8	104.54	4,594.2	2,111.5	1,253.0	1,171.4	81.65	15.346	
15,960.0	11,454.0	16,199.4	11,776.0	45.6	37.2	104.54	4,654.2	2,110.7	1,252.8	1,170.3	82.43	15.198	
16,000.0	11,454.0	16,239.4	11,776.0	45.9	37.5	104.54	4,694.2	2,110.1	1,252.6	1,169.6	82.95	15.100	
16,055.0	11,454.0	16,294.4	11,776.0	46.2	37.9	104.54	4,749.2	2,109.4	1,252.3	1,168.7	83.67	14.967	
16,100.0	11,454.0	16,339.4	11,776.0	46.5	38.2	104.55	4,794.2	2,108.8	1,252.1	1,167.9	84.26	14.860	
16,150.0	11,454.0	16,389.4	11,776.0	46.8	38.5	104.55	4,844.2	2,108.1	1,251.9	1,167.0	84.92	14.742	
16,200.0	11,454.0	16,439.4	11,776.0	47.1	38.9	104.55	4,894.2	2,107.4	1,251.7	1,166.1	85.58	14.626	
16,245.0	11,454.0	16,484.4	11,776.0	47.3	39.2	104.55	4,939.2	2,106.8	1,251.5	1,165.3	86.17	14.522	
16,300.0	11,454.0	16,539.4	11,776.0	47.7	39.6	104.56	4,994.2	2,106.0	1,251.2	1,164.3	86.90	14.398	
16,340.0	11,454.0	16,579.4	11,776.0	47.9	39.9	104.56	5,034.2	2,105.5	1,251.0	1,163.6	87.43	14.308	
16,400.0	11,454.0	16,639.4	11,776.0	48.3	40.3	104.56	5,094.2	2,104.6	1,250.8	1,162.5	88.23	14.176	
16,435.0	11,454.0	16,674.4	11,776.0	48.5	40.5	104.56	5,129.2	2,104.2	1,250.6	1,161.9	88.70	14.099	
16,500.0	11,454.0	16,739.4	11,776.0	48.9	41.0	104.57	5,194.2	2,103.3	1,250.3	1,160.8	89.57	13.959	
16,530.0	11,454.0	16,769.4	11,776.0	49.1	41.2	104.57	5,224.2	2,102.9	1,250.2	1,160.2	89.97	13.895	
16,600.0	11,454.0	16,839.4	11,776.0	49.5	41.7	104.57	5,294.1	2,101.9	1,249.9	1,159.0	90.91	13.748	
16,625.0	11,454.0	16,864.4	11,776.0	49.7	41.9	104.57	5,319.1	2,101.6	1,249.8	1,158.5	91.25	13.696	
16,700.0	11,454.0	16,939.4	11,776.0	50.2	42.4	104.58	5,394.1	2,100.5	1,249.4	1,157.2	92.26	13.542	
16,720.0	11,454.0	16,959.4	11,776.0	50.3	42.6	104.58	5,414.1	2,100.3	1,249.3	1,156.8	92.53	13.502	
16,800.0	11,454.0	17,039.4	11,776.0	50.8	43.1	104.58	5,494.1	2,099.2	1,249.0	1,155.4	93.61	13.342	
16,815.0	11,454.0	17,054.4	11,776.0	50.9	43.2	104.58	5,509.1	2,099.0	1,248.9	1,155.1	93.82	13.312	
16,900.0	11,454.0	17,139.4	11,776.0	51.4	43.8	104.59	5,594.1	2,097.8	1,248.5	1,153.5	94.97	13.146	
16,910.0	11,454.0	17,149.4	11,776.0	51.5	43.9	104.59	5,604.1	2,097.7	1,248.5	1,153.4	95.11	13.127	
17,000.0	11,454.0	17,239.4	11,776.0	52.1	44.6	104.59	5,694.1	2,096.4	1,248.1	1,151.7	96.34	12.955	
17,005.0	11,454.0	17,244.4	11,776.0	52.1	44.6	104.59	5,699.1	2,096.4	1,248.0	1,151.6	96.40	12.946	
17,100.0	11,454.0	17,339.4	11,776.0	52.7	45.3	104.60	5,794.1	2,095.1	1,247.6	1,149.9	97.70	12.769	
17,195.0	11,454.0	17,434.4	11,776.0	53.3	46.0	104.60	5,889.1	2,093.8	1,247.2	1,148.2	99.01	12.597	
17,200.0	11,454.0	17,439.4	11,776.0	53.4	46.0	104.61	5,894.1	2,093.7	1,247.2	1,148.1	99.08	12.588	
17,290.0	11,454.0	17,529.4	11,776.0	53.9	46.6	104.61	5,984.1	2,092.5	1,246.8	1,146.4	100.32	12.428	
17,300.0	11,454.0	17,539.4	11,776.0	54.0	46.7	104.61	5,994.1	2,092.3	1,246.7	1,146.3	100.45	12.411	
17,385.0	11,454.0	17,624.4	11,776.0	54.6	47.3	104.62	6,079.1	2,091.2	1,246.3	1,144.7	101.63	12.264	
17,400.0	11,454.0	17,639.4	11,776.0	54.6	47.4	104.62	6,094.1	2,091.0	1,246.3	1,144.4	101.84	12.238	
17,480.0	11,454.0	17,719.4	11,776.0	55.2	48.0	104.62	6,174.1	2,089.9	1,245.9	1,143.0	102.94	12.103	
17,500.0	11,454.0	17,739.4	11,776.0	55.3	48.2	104.62	6,194.1	2,089.6	1,245.8	1,142.6	103.22	12.069	
17,575.0	11,454.0	17,814.4	11,776.0	55.8	48.7	104.63	6,269.0	2,088.6	1,245.5	1,141.2	104.26	11.945	
17,600.0	11,454.0	17,839.4	11,776.0	56.0	48.9	104.63	6,294.0	2,088.2	1,245.4	1,140.8	104.61	11.905	
17,670.0	11,454.0	17,909.4	11,776.0	56.4	49.4	104.63	6,364.0	2,087.3	1,245.1	1,139.5	105.59	11.792	
17,700.0	11,454.0	17,939.4	11,776.0	56.6	49.6	104.63	6,394.0	2,086.9	1,244.9	1,138.9	106.00	11.744	
17,765.0	11,454.0	18,004.4	11,776.0	57.0	50.1	104.64	6,459.0	2,086.0	1,244.6	1,137.7	106.91	11.641	
17,800.0	11,454.0	18,039.4	11,776.0	57.3	50.4	104.64	6,494.0	2,085.5	1,244.5	1,137.1	107.40	11.587	
17,860.0	11,454.0	18,099.4	11,776.0	57.7	50.8	104.64	6,554.0	2,084.7	1,244.2	1,136.0	108.24	11.495	
17,900.0	11,454.0	18,139.4	11,776.0	57.9	51.1	104.64	6,594.0	2,084.1	1,244.0	1,135.2	108.80	11.434	
17,955.0	11,454.0	18,194.4	11,776.0	58.3	51.5	104.65	6,649.0	2,083.4	1,243.8	1,134.2	109.57	11.351	

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 #713H
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 #713H	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 #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Distance		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	
18,000.0	11,454.0	18,239.4	11,776.0	58.6	51.8	104.65	6,694.0	2,082.8	1,243.6	1,133.4	110.21	11.284	
18,050.0	11,454.0	18,289.4	11,776.0	58.9	52.2	104.65	6,744.0	2,082.1	1,243.3	1,132.4	110.91	11.210	
18,100.0	11,454.0	18,339.4	11,776.0	59.3	52.5	104.65	6,794.0	2,081.4	1,243.1	1,131.5	111.61	11.138	
18,145.0	11,454.0	18,384.4	11,776.0	59.6	52.9	104.66	6,839.0	2,080.8	1,242.9	1,130.7	112.25	11.073	
18,200.0	11,454.0	18,439.4	11,776.0	60.0	53.3	104.66	6,894.0	2,080.0	1,242.7	1,129.6	113.02	10.995	
18,240.0	11,454.0	18,479.4	11,776.0	60.2	53.6	104.66	6,934.0	2,079.5	1,242.5	1,128.9	113.59	10.939	
18,300.0	11,454.0	18,539.4	11,776.0	60.6	54.0	104.66	6,994.0	2,078.7	1,242.2	1,127.8	114.44	10.855	
18,335.0	11,454.0	18,574.4	11,776.0	60.9	54.3	104.67	7,029.0	2,078.2	1,242.1	1,127.1	114.93	10.807	
18,400.0	11,454.0	18,639.4	11,776.0	61.3	54.7	104.67	7,094.0	2,077.3	1,241.8	1,125.9	115.85	10.719	
18,430.0	11,454.0	18,669.3	11,776.0	61.5	55.0	104.67	7,124.0	2,076.9	1,241.6	1,125.4	116.28	10.678	
18,500.0	11,454.0	18,739.3	11,776.0	62.0	55.5	104.68	7,193.9	2,075.9	1,241.3	1,124.0	117.27	10.585	
18,525.0	11,454.0	18,764.3	11,776.0	62.1	55.7	104.68	7,218.9	2,075.6	1,241.2	1,123.6	117.63	10.552	
18,600.0	11,454.0	18,839.3	11,776.0	62.7	56.2	104.68	7,293.9	2,074.5	1,240.9	1,122.2	118.69	10.454	
18,620.0	11,454.0	18,859.3	11,776.0	62.8	56.4	104.68	7,313.9	2,074.3	1,240.8	1,121.8	118.98	10.429	
18,700.0	11,454.0	18,939.3	11,776.0	63.3	57.0	104.69	7,393.9	2,073.2	1,240.4	1,120.3	120.12	10.327	
18,715.0	11,454.0	18,954.3	11,776.0	63.4	57.1	104.69	7,408.9	2,073.0	1,240.3	1,120.0	120.33	10.308	
18,800.0	11,454.0	19,039.3	11,776.0	64.0	57.7	104.69	7,493.9	2,071.8	1,240.0	1,118.4	121.54	10.202	
18,810.0	11,454.0	19,049.3	11,776.0	64.1	57.8	104.69	7,503.9	2,071.7	1,239.9	1,118.2	121.69	10.190	
18,900.0	11,454.0	19,139.3	11,776.0	64.7	58.4	104.70	7,593.9	2,070.4	1,239.5	1,116.5	122.97	10.080	
18,905.0	11,454.0	19,144.3	11,776.0	64.7	58.5	104.70	7,598.9	2,070.4	1,239.5	1,116.4	123.04	10.074	
19,000.0	11,454.0	19,239.3	11,776.0	65.4	59.2	104.70	7,693.9	2,069.1	1,239.1	1,114.7	124.40	9.960	
19,095.0	11,454.0	19,334.3	11,776.0	66.0	59.9	104.71	7,788.9	2,067.8	1,238.6	1,112.9	125.76	9.849	
19,100.0	11,454.0	19,339.3	11,776.0	66.1	59.9	104.71	7,793.9	2,067.7	1,238.6	1,112.8	125.84	9.843	
19,190.0	11,454.0	19,429.3	11,776.0	66.7	60.6	104.71	7,883.9	2,066.5	1,238.2	1,111.1	127.13	9.740	
19,200.0	11,454.0	19,439.3	11,776.0	66.8	60.7	104.71	7,893.9	2,066.3	1,238.2	1,110.9	127.27	9.728	
19,285.0	11,454.0	19,524.3	11,776.0	67.4	61.3	104.72	7,978.9	2,065.2	1,237.8	1,109.3	128.49	9.633	
19,300.0	11,454.0	19,539.3	11,776.0	67.5	61.4	104.72	7,993.9	2,065.0	1,237.7	1,109.0	128.71	9.616	
19,380.0	11,454.0	19,619.3	11,776.0	68.0	62.0	104.72	8,073.9	2,063.9	1,237.3	1,107.5	129.86	9.528	
19,400.0	11,454.0	19,639.3	11,776.0	68.2	62.1	104.72	8,093.9	2,063.6	1,237.3	1,107.1	130.15	9.506	
19,475.0	11,454.0	19,714.3	11,776.0	68.7	62.7	104.73	8,168.8	2,062.6	1,236.9	1,105.7	131.23	9.425	
19,500.0	11,454.0	19,739.3	11,776.0	68.8	62.9	104.73	8,193.8	2,062.2	1,236.8	1,105.2	131.59	9.399	
19,570.0	11,454.0	19,809.3	11,776.0	69.3	63.4	104.73	8,263.8	2,061.3	1,236.5	1,103.9	132.60	9.325	
19,600.0	11,454.0	19,839.3	11,776.0	69.5	63.6	104.74	8,293.8	2,060.9	1,236.4	1,103.3	133.04	9.293	
19,665.0	11,454.0	19,904.3	11,776.0	70.0	64.1	104.74	8,358.8	2,060.0	1,236.1	1,102.1	133.98	9.226	
19,700.0	11,454.0	19,939.3	11,776.0	70.2	64.4	104.74	8,393.8	2,059.5	1,235.9	1,101.4	134.48	9.190	
19,760.0	11,454.0	19,999.3	11,776.0	70.7	64.8	104.74	8,453.8	2,058.7	1,235.6	1,100.3	135.35	9.129	
19,800.0	11,454.0	20,039.3	11,776.0	70.9	65.1	104.75	8,493.8	2,058.1	1,235.5	1,099.5	135.93	9.089	
19,855.0	11,454.0	20,094.3	11,776.0	71.3	65.5	104.75	8,548.8	2,057.4	1,235.2	1,098.5	136.73	9.034	
19,900.0	11,454.0	20,139.3	11,776.0	71.6	65.9	104.75	8,593.8	2,056.8	1,235.0	1,097.6	137.38	8.990	
19,950.0	11,454.0	20,189.3	11,776.0	72.0	66.2	104.76	8,643.8	2,056.1	1,234.8	1,096.7	138.10	8.941	
20,000.0	11,454.0	20,239.3	11,776.0	72.3	66.6	104.76	8,693.8	2,055.4	1,234.6	1,095.7	138.83	8.893	
20,045.0	11,454.0	20,284.3	11,776.0	72.7	66.9	104.76	8,738.8	2,054.8	1,234.4	1,094.9	139.48	8.849	
20,100.0	11,454.0	20,339.3	11,776.0	73.0	67.3	104.76	8,793.8	2,054.0	1,234.1	1,093.8	140.28	8.797	
20,140.0	11,454.0	20,379.3	11,776.0	73.3	67.6	104.77	8,833.8	2,053.5	1,233.9	1,093.1	140.86	8.760	
20,200.0	11,454.0	20,439.3	11,776.0	73.7	68.1	104.77	8,893.8	2,052.7	1,233.7	1,091.9	141.74	8.704	
20,235.0	11,454.0	20,474.3	11,776.0	74.0	68.3	104.77	8,928.8	2,052.2	1,233.5	1,091.3	142.25	8.672	
20,300.0	11,454.0	20,539.3	11,776.0	74.5	68.8	104.77	8,993.8	2,051.3	1,233.2	1,090.0	143.19	8.612	
20,330.0	11,454.0	20,569.3	11,776.0	74.7	69.1	104.78	9,023.8	2,050.9	1,233.1	1,089.4	143.63	8.585	
20,400.0	11,454.0	20,639.3	11,776.0	75.2	69.6	104.78	9,093.7	2,049.9	1,232.8	1,088.1	144.65	8.522	
20,425.0	11,454.0	20,664.3	11,776.0	75.3	69.8	104.78	9,118.7	2,049.6	1,232.6	1,087.6	145.01	8.500	
20,500.0	11,454.0	20,739.3	11,776.0	75.9	70.3	104.79	9,193.7	2,048.6	1,232.3	1,086.2	146.11	8.434	
20,520.0	11,454.0	20,759.3	11,776.0	76.0	70.5	104.79	9,213.7	2,048.3	1,232.2	1,085.8	146.40	8.417	

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 #713H
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 #713H	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 #703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 1000-r.5 MWD+IFR1, 11231-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
20,600.0	11,454.0	20,839.3	11,776.0	76.6	71.1	104.79	9,293.7	2,047.2	1,231.9	1,084.3	147.57	8.348	
20,615.0	11,454.0	20,854.3	11,776.0	76.7	71.2	104.79	9,308.7	2,047.0	1,231.8	1,084.0	147.79	8.335	
20,700.0	11,454.0	20,939.3	11,776.0	77.3	71.8	104.80	9,393.7	2,045.8	1,231.4	1,082.4	149.03	8.263	
20,710.0	11,454.0	20,949.3	11,776.0	77.4	71.9	104.80	9,403.7	2,045.7	1,231.4	1,082.2	149.18	8.254	
20,800.0	11,454.0	21,039.3	11,776.0	78.0	72.6	104.80	9,493.7	2,044.4	1,231.0	1,080.5	150.49	8.179	
20,805.0	11,454.0	21,044.3	11,776.0	78.0	72.6	104.80	9,498.7	2,044.4	1,230.9	1,080.4	150.57	8.175	
20,900.0	11,454.0	21,139.3	11,776.0	78.7	73.3	104.81	9,593.7	2,043.1	1,230.5	1,078.6	151.96	8.098	
20,995.0	11,454.0	21,234.3	11,776.0	79.4	74.0	104.81	9,688.7	2,041.8	1,230.1	1,076.7	153.35	8.021	
21,000.0	11,454.0	21,239.3	11,776.0	79.4	74.1	104.81	9,693.7	2,041.7	1,230.1	1,076.6	153.42	8.017	
21,090.0	11,454.0	21,329.3	11,776.0	80.1	74.7	104.82	9,783.7	2,040.5	1,229.7	1,074.9	154.74	7.946	
21,100.0	11,454.0	21,339.3	11,776.0	80.1	74.8	104.82	9,793.7	2,040.3	1,229.6	1,074.7	154.89	7.939	
21,185.0	11,454.0	21,424.3	11,776.0	80.7	75.5	104.82	9,878.7	2,039.2	1,229.2	1,073.1	156.14	7.873	
21,200.0	11,454.0	21,439.3	11,776.0	80.8	75.6	104.82	9,893.7	2,039.0	1,229.2	1,072.8	156.36	7.861	
21,280.0	11,454.0	21,519.3	11,776.0	81.4	76.2	104.83	9,973.7	2,037.9	1,228.8	1,071.3	157.53	7.800	
21,300.0	11,454.0	21,539.3	11,776.0	81.6	76.3	104.83	9,993.7	2,037.6	1,228.7	1,070.9	157.83	7.785	
21,375.0	11,454.0	21,614.3	11,776.0	82.1	76.9	104.83	10,068.6	2,036.6	1,228.4	1,069.4	158.93	7.729	
21,400.0	11,454.0	21,639.3	11,776.0	82.3	77.1	104.84	10,093.6	2,036.2	1,228.3	1,069.0	159.30	7.711	
21,470.0	11,454.0	21,709.3	11,776.0	82.8	77.6	104.84	10,163.6	2,035.3	1,227.9	1,067.6	160.33	7.659	
21,500.0	11,454.0	21,739.3	11,776.0	83.0	77.8	104.84	10,193.6	2,034.9	1,227.8	1,067.0	160.77	7.637	
21,565.0	11,454.0	21,804.3	11,776.0	83.5	78.3	104.84	10,258.6	2,034.0	1,227.5	1,065.8	161.72	7.590	
21,600.0	11,454.0	21,839.3	11,776.0	83.7	78.6	104.85	10,293.6	2,033.5	1,227.4	1,065.1	162.24	7.565	
21,660.0	11,454.0	21,899.3	11,776.0	84.1	79.0	104.85	10,353.6	2,032.7	1,227.1	1,064.0	163.12	7.522	
21,700.0	11,454.0	21,939.3	11,776.0	84.4	79.3	104.85	10,393.6	2,032.1	1,226.9	1,063.2	163.71	7.494	
21,755.0	11,454.0	21,994.3	11,776.0	84.8	79.7	104.86	10,448.6	2,031.4	1,226.7	1,062.1	164.52	7.456	
21,800.0	11,454.0	22,039.3	11,776.0	85.2	80.1	104.86	10,493.6	2,030.8	1,226.5	1,061.3	165.19	7.425	
21,850.0	11,454.0	22,089.3	11,776.0	85.5	80.4	104.86	10,543.6	2,030.1	1,226.2	1,060.3	165.92	7.390	
21,875.0	11,454.0	22,114.3	11,776.0	85.7	80.6	104.86	10,568.6	2,029.7	1,226.1	1,059.8	166.29	7.373	
21,875.5	11,454.0	22,114.9	11,776.0	85.7	80.6	104.86	10,569.1	2,029.7	1,226.1	1,059.8	166.30	7.373 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 #713H
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 #713H	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

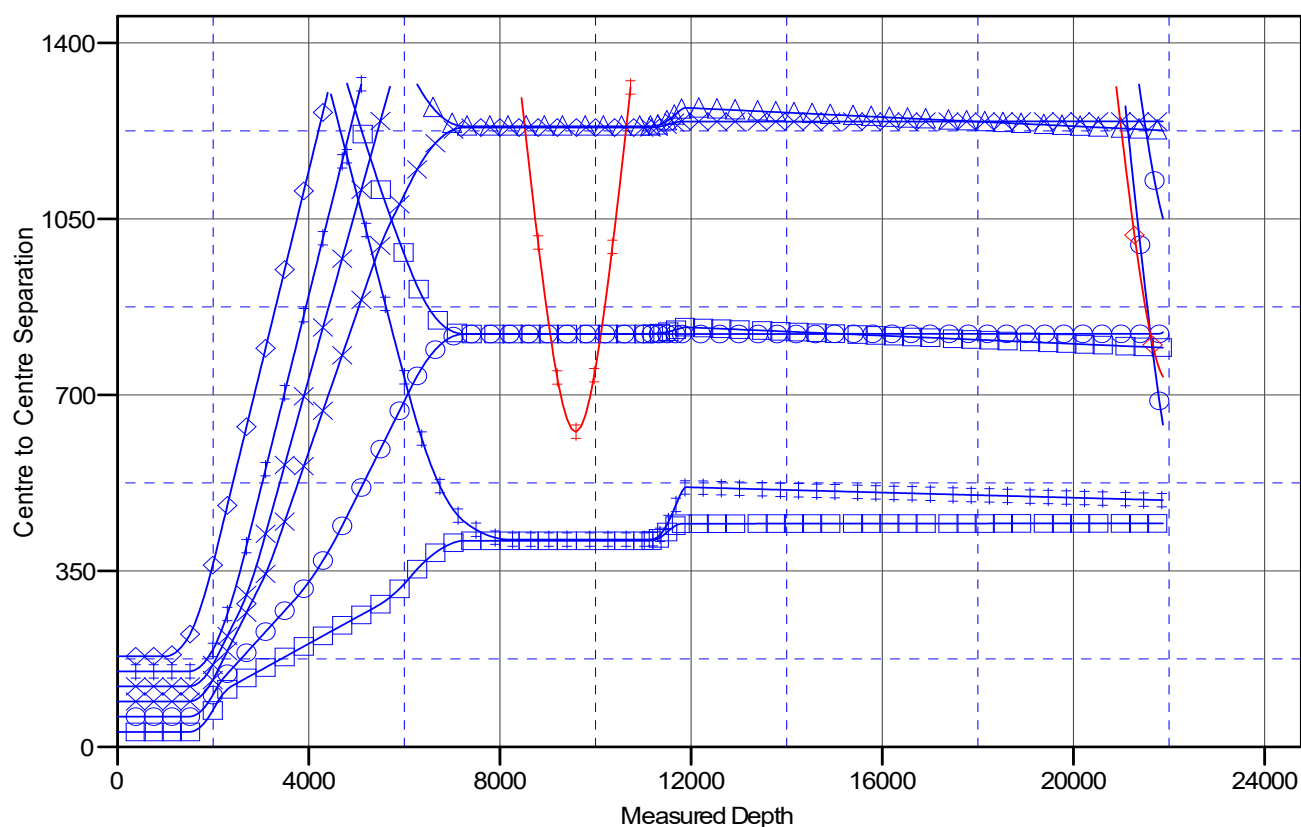
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: ZIA HILLS UNIT 2331 WC #713H

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

Grid Convergence at Surface is: 0.31°

Ladder Plot



LEGEND

- ZIA HILLS UNIT 2331 WC #71H, OWB, PWP0 V0 - GOLDEN SPUR 25 FBS #3H (P&A), OWB, AWP V0 - ZIA HILLS UNIT 2331 WC #70H, OWB, PWP0 V0 - ZIA HILLS UNIT 2331 WC #70H, OWB, PWP0 V0 - ZIA HILLS UNIT 2331 WC #70H, OWB, PWP0 V0 - ZIA HILLS UNIT 2331 WC #70H, OWB, PWP0 V0	- SHETLAND 11 FEDERAL #71H, OWB, PWP0 V0 - ZIA HILLS UNIT 2331 WC #71H, OWB, PWP0 V0 - SHETLAND 11 FEDERAL #73H, OWB, PWP0 V0 - SHETLAND 2-11 STATE FEDERAL COM #333H, OWB, AWP V0 - ZIA HILLS UNIT 2331 WC #71H, OWB, PWP0 V0	- ZIA HILLS UNIT 2431 WC #70H, OWB, PWP0 V0 - ZIA HILLS UNIT 2431 WC #70H, OWB, PWP0 V0 - ZIA HILLS UNIT 2431 WC #70H, OWB, PWP0 V0
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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 #713H

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 #713H
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 #713H	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 #713H					
Well Position	+N/-S	106.6 usft	Northing:	371,841.56 usft	Latitude:	32° 1' 15.355 N
	+E/-W	4,365.0 usft	Easting:	683,014.45 usft	Longitude:	103° 44' 34.168 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	47,263.48898522

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	4.58

Plan Survey Tool Program	Date	11/16/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	1,500.0 PWP0 (OWB)	r.5 SDI_KPR_ADK SDI Keeper ADK rev.5	
2	1,500.0	11,062.0 PWP0 (OWB)	r.5 MWD+IFR1 OWSG MWD + IFR1 rev.5	
3	11,062.0	21,875.0 PWP0 (OWB)	r.5 MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St	

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Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,050.0	11.00	89.25	2,046.6	0.7	52.6	2.00	2.00	0.00	89.25	
6,148.7	11.00	89.25	6,070.0	10.9	834.6	0.00	0.00	0.00	0.00	
7,248.7	0.00	0.00	7,163.3	12.3	939.9	1.00	-1.00	0.00	180.00	
11,062.0	0.00	0.00	10,976.5	12.3	939.9	0.00	0.00	0.00	0.00	
11,812.0	90.00	359.48	11,454.0	489.7	935.6	12.00	12.00	-0.07	359.48	
21,875.0	90.00	359.48	11,454.0	10,552.4	844.7	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 #713H
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 #713H	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	2.00	89.25	1,600.0	0.0	1.7	0.2	2.00	2.00	0.00
1,700.0	4.00	89.25	1,699.8	0.1	7.0	0.6	2.00	2.00	0.00
1,800.0	6.00	89.25	1,799.5	0.2	15.7	1.5	2.00	2.00	0.00
1,900.0	8.00	89.25	1,898.7	0.4	27.9	2.6	2.00	2.00	0.00
2,000.0	10.00	89.25	1,997.5	0.6	43.5	4.0	2.00	2.00	0.00
2,050.0	11.00	89.25	2,046.6	0.7	52.6	4.9	2.00	2.00	0.00
2,100.0	11.00	89.25	2,095.7	0.8	62.2	5.8	0.00	0.00	0.00
2,200.0	11.00	89.25	2,193.9	1.1	81.2	7.5	0.00	0.00	0.00
2,300.0	11.00	89.25	2,292.0	1.3	100.3	9.3	0.00	0.00	0.00
2,400.0	11.00	89.25	2,390.2	1.6	119.4	11.1	0.00	0.00	0.00
2,500.0	11.00	89.25	2,488.4	1.8	138.5	12.9	0.00	0.00	0.00
2,600.0	11.00	89.25	2,586.5	2.1	157.6	14.6	0.00	0.00	0.00
2,700.0	11.00	89.25	2,684.7	2.3	176.6	16.4	0.00	0.00	0.00
2,800.0	11.00	89.25	2,782.8	2.6	195.7	18.2	0.00	0.00	0.00
2,900.0	11.00	89.25	2,881.0	2.8	214.8	19.9	0.00	0.00	0.00
3,000.0	11.00	89.25	2,979.2	3.1	233.9	21.7	0.00	0.00	0.00
3,100.0	11.00	89.25	3,077.3	3.3	253.0	23.5	0.00	0.00	0.00
3,200.0	11.00	89.25	3,175.5	3.6	272.0	25.3	0.00	0.00	0.00
3,300.0	11.00	89.25	3,273.7	3.8	291.1	27.0	0.00	0.00	0.00
3,400.0	11.00	89.25	3,371.8	4.1	310.2	28.8	0.00	0.00	0.00
3,500.0	11.00	89.25	3,470.0	4.3	329.3	30.6	0.00	0.00	0.00
3,600.0	11.00	89.25	3,568.1	4.6	348.4	32.3	0.00	0.00	0.00
3,700.0	11.00	89.25	3,666.3	4.8	367.4	34.1	0.00	0.00	0.00
3,800.0	11.00	89.25	3,764.5	5.1	386.5	35.9	0.00	0.00	0.00
3,900.0	11.00	89.25	3,862.6	5.3	405.6	37.7	0.00	0.00	0.00
4,000.0	11.00	89.25	3,960.8	5.6	424.7	39.4	0.00	0.00	0.00
4,100.0	11.00	89.25	4,059.0	5.8	443.8	41.2	0.00	0.00	0.00
4,200.0	11.00	89.25	4,157.1	6.1	462.8	43.0	0.00	0.00	0.00
4,300.0	11.00	89.25	4,255.3	6.3	481.9	44.7	0.00	0.00	0.00
4,400.0	11.00	89.25	4,353.5	6.6	501.0	46.5	0.00	0.00	0.00
4,500.0	11.00	89.25	4,451.6	6.8	520.1	48.3	0.00	0.00	0.00
4,600.0	11.00	89.25	4,549.8	7.1	539.2	50.1	0.00	0.00	0.00
4,700.0	11.00	89.25	4,647.9	7.3	558.2	51.8	0.00	0.00	0.00
4,800.0	11.00	89.25	4,746.1	7.6	577.3	53.6	0.00	0.00	0.00
4,900.0	11.00	89.25	4,844.3	7.8	596.4	55.4	0.00	0.00	0.00
5,000.0	11.00	89.25	4,942.4	8.1	615.5	57.1	0.00	0.00	0.00
5,100.0	11.00	89.25	5,040.6	8.3	634.5	58.9	0.00	0.00	0.00
5,200.0	11.00	89.25	5,138.8	8.6	653.6	60.7	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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)
5,300.0	11.00	89.25	5,236.9	8.8	672.7	62.5	0.00	0.00	0.00
5,400.0	11.00	89.25	5,335.1	9.1	691.8	64.2	0.00	0.00	0.00
5,500.0	11.00	89.25	5,433.2	9.3	710.9	66.0	0.00	0.00	0.00
5,600.0	11.00	89.25	5,531.4	9.6	729.9	67.8	0.00	0.00	0.00
5,700.0	11.00	89.25	5,629.6	9.8	749.0	69.5	0.00	0.00	0.00
5,800.0	11.00	89.25	5,727.7	10.1	768.1	71.3	0.00	0.00	0.00
5,900.0	11.00	89.25	5,825.9	10.3	787.2	73.1	0.00	0.00	0.00
6,000.0	11.00	89.25	5,924.1	10.6	806.3	74.9	0.00	0.00	0.00
6,100.0	11.00	89.25	6,022.2	10.8	825.3	76.6	0.00	0.00	0.00
6,148.7	11.00	89.25	6,070.0	10.9	834.6	77.5	0.00	0.00	0.00
6,200.0	10.49	89.25	6,120.4	11.1	844.2	78.4	1.00	-1.00	0.00
6,300.0	9.49	89.25	6,218.9	11.3	861.5	80.0	1.00	-1.00	0.00
6,400.0	8.49	89.25	6,317.7	11.5	877.2	81.4	1.00	-1.00	0.00
6,500.0	7.49	89.25	6,416.7	11.7	891.0	82.7	1.00	-1.00	0.00
6,600.0	6.49	89.25	6,516.0	11.8	903.2	83.9	1.00	-1.00	0.00
6,700.0	5.49	89.25	6,615.4	12.0	913.6	84.8	1.00	-1.00	0.00
6,800.0	4.49	89.25	6,715.0	12.1	922.3	85.6	1.00	-1.00	0.00
6,900.0	3.49	89.25	6,814.8	12.2	929.3	86.3	1.00	-1.00	0.00
7,000.0	2.49	89.25	6,914.7	12.2	934.5	86.8	1.00	-1.00	0.00
7,100.0	1.49	89.25	7,014.6	12.3	938.0	87.1	1.00	-1.00	0.00
7,200.0	0.49	89.25	7,114.6	12.3	939.7	87.2	1.00	-1.00	0.00
7,248.7	0.00	0.00	7,163.3	12.3	939.9	87.3	1.00	-1.00	0.00
7,300.0	0.00	0.00	7,214.6	12.3	939.9	87.3	0.00	0.00	0.00
7,400.0	0.00	0.00	7,314.6	12.3	939.9	87.3	0.00	0.00	0.00
7,500.0	0.00	0.00	7,414.6	12.3	939.9	87.3	0.00	0.00	0.00
7,600.0	0.00	0.00	7,514.6	12.3	939.9	87.3	0.00	0.00	0.00
7,700.0	0.00	0.00	7,614.6	12.3	939.9	87.3	0.00	0.00	0.00
7,800.0	0.00	0.00	7,714.6	12.3	939.9	87.3	0.00	0.00	0.00
7,900.0	0.00	0.00	7,814.6	12.3	939.9	87.3	0.00	0.00	0.00
8,000.0	0.00	0.00	7,914.6	12.3	939.9	87.3	0.00	0.00	0.00
8,100.0	0.00	0.00	8,014.6	12.3	939.9	87.3	0.00	0.00	0.00
8,200.0	0.00	0.00	8,114.6	12.3	939.9	87.3	0.00	0.00	0.00
8,300.0	0.00	0.00	8,214.6	12.3	939.9	87.3	0.00	0.00	0.00
8,400.0	0.00	0.00	8,314.6	12.3	939.9	87.3	0.00	0.00	0.00
8,500.0	0.00	0.00	8,414.6	12.3	939.9	87.3	0.00	0.00	0.00
8,600.0	0.00	0.00	8,514.6	12.3	939.9	87.3	0.00	0.00	0.00
8,700.0	0.00	0.00	8,614.6	12.3	939.9	87.3	0.00	0.00	0.00
8,800.0	0.00	0.00	8,714.6	12.3	939.9	87.3	0.00	0.00	0.00
8,900.0	0.00	0.00	8,814.6	12.3	939.9	87.3	0.00	0.00	0.00
9,000.0	0.00	0.00	8,914.6	12.3	939.9	87.3	0.00	0.00	0.00
9,100.0	0.00	0.00	9,014.6	12.3	939.9	87.3	0.00	0.00	0.00
9,200.0	0.00	0.00	9,114.6	12.3	939.9	87.3	0.00	0.00	0.00
9,300.0	0.00	0.00	9,214.6	12.3	939.9	87.3	0.00	0.00	0.00
9,400.0	0.00	0.00	9,314.6	12.3	939.9	87.3	0.00	0.00	0.00
9,500.0	0.00	0.00	9,414.6	12.3	939.9	87.3	0.00	0.00	0.00
9,600.0	0.00	0.00	9,514.6	12.3	939.9	87.3	0.00	0.00	0.00
9,700.0	0.00	0.00	9,614.6	12.3	939.9	87.3	0.00	0.00	0.00
9,800.0	0.00	0.00	9,714.6	12.3	939.9	87.3	0.00	0.00	0.00
9,900.0	0.00	0.00	9,814.6	12.3	939.9	87.3	0.00	0.00	0.00
10,000.0	0.00	0.00	9,914.6	12.3	939.9	87.3	0.00	0.00	0.00
10,100.0	0.00	0.00	10,014.6	12.3	939.9	87.3	0.00	0.00	0.00
10,200.0	0.00	0.00	10,114.6	12.3	939.9	87.3	0.00	0.00	0.00
10,300.0	0.00	0.00	10,214.6	12.3	939.9	87.3	0.00	0.00	0.00
10,400.0	0.00	0.00	10,314.6	12.3	939.9	87.3	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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	10,414.6	12.3	939.9	87.3	0.00	0.00	0.00
10,600.0	0.00	0.00	10,514.6	12.3	939.9	87.3	0.00	0.00	0.00
10,700.0	0.00	0.00	10,614.6	12.3	939.9	87.3	0.00	0.00	0.00
10,800.0	0.00	0.00	10,714.6	12.3	939.9	87.3	0.00	0.00	0.00
10,900.0	0.00	0.00	10,814.6	12.3	939.9	87.3	0.00	0.00	0.00
11,000.0	0.00	0.00	10,914.6	12.3	939.9	87.3	0.00	0.00	0.00
11,062.0	0.00	0.00	10,976.5	12.3	939.9	87.3	0.00	0.00	0.00
11,075.0	1.57	359.48	10,989.6	12.5	939.9	87.4	12.00	12.00	0.00
11,100.0	4.57	359.48	11,014.5	13.8	939.9	88.8	12.00	12.00	0.00
11,125.0	7.57	359.48	11,039.4	16.5	939.8	91.4	12.00	12.00	0.00
11,150.0	10.57	359.48	11,064.1	20.4	939.8	95.3	12.00	12.00	0.00
11,175.0	13.57	359.48	11,088.5	25.6	939.8	100.5	12.00	12.00	0.00
11,200.0	16.57	359.48	11,112.7	32.1	939.7	107.0	12.00	12.00	0.00
11,225.0	19.57	359.48	11,136.4	39.9	939.6	114.7	12.00	12.00	0.00
11,250.0	22.57	359.48	11,159.8	48.9	939.6	123.7	12.00	12.00	0.00
11,275.0	25.57	359.48	11,182.6	59.0	939.5	133.8	12.00	12.00	0.00
11,300.0	28.57	359.48	11,204.8	70.4	939.4	145.2	12.00	12.00	0.00
11,325.0	31.57	359.48	11,226.5	82.9	939.2	157.6	12.00	12.00	0.00
11,350.0	34.57	359.48	11,247.4	96.6	939.1	171.2	12.00	12.00	0.00
11,375.0	37.57	359.48	11,267.6	111.3	939.0	185.9	12.00	12.00	0.00
11,400.0	40.57	359.48	11,287.0	127.0	938.9	201.6	12.00	12.00	0.00
11,425.0	43.57	359.48	11,305.6	143.8	938.7	218.2	12.00	12.00	0.00
11,450.0	46.57	359.48	11,323.2	161.5	938.5	235.9	12.00	12.00	0.00
11,475.0	49.57	359.48	11,340.0	180.1	938.4	254.4	12.00	12.00	0.00
11,500.0	52.57	359.48	11,355.7	199.5	938.2	273.8	12.00	12.00	0.00
11,525.0	55.57	359.48	11,370.3	219.8	938.0	293.9	12.00	12.00	0.00
11,550.0	58.57	359.48	11,383.9	240.7	937.8	314.8	12.00	12.00	0.00
11,575.0	61.57	359.48	11,396.4	262.4	937.6	336.4	12.00	12.00	0.00
11,600.0	64.57	359.48	11,407.7	284.7	937.4	358.6	12.00	12.00	0.00
11,625.0	67.57	359.48	11,417.9	307.5	937.2	381.3	12.00	12.00	0.00
11,650.0	70.57	359.48	11,426.8	330.9	937.0	404.6	12.00	12.00	0.00
11,675.0	73.57	359.48	11,434.5	354.7	936.8	428.3	12.00	12.00	0.00
11,700.0	76.57	359.48	11,440.9	378.8	936.6	452.3	12.00	12.00	0.00
11,725.0	79.57	359.48	11,446.1	403.3	936.4	476.7	12.00	12.00	0.00
11,750.0	82.57	359.48	11,450.0	428.0	936.1	501.3	12.00	12.00	0.00
11,775.0	85.57	359.48	11,452.6	452.8	935.9	526.1	12.00	12.00	0.00
11,800.0	88.57	359.48	11,453.8	477.8	935.7	550.9	12.00	12.00	0.00
11,812.0	90.00	359.48	11,454.0	489.7	935.6	562.8	12.00	12.00	0.00
11,900.0	90.00	359.48	11,454.0	577.8	934.8	650.5	0.00	0.00	0.00
12,000.0	90.00	359.48	11,454.0	677.8	933.9	750.1	0.00	0.00	0.00
12,100.0	90.00	359.48	11,454.0	777.8	933.0	849.7	0.00	0.00	0.00
12,200.0	90.00	359.48	11,454.0	877.8	932.1	949.4	0.00	0.00	0.00
12,300.0	90.00	359.48	11,454.0	977.8	931.2	1,049.0	0.00	0.00	0.00
12,400.0	90.00	359.48	11,454.0	1,077.8	930.3	1,148.6	0.00	0.00	0.00
12,500.0	90.00	359.48	11,454.0	1,177.8	929.4	1,248.2	0.00	0.00	0.00
12,600.0	90.00	359.48	11,454.0	1,277.8	928.5	1,347.8	0.00	0.00	0.00
12,700.0	90.00	359.48	11,454.0	1,377.8	927.6	1,447.4	0.00	0.00	0.00
12,800.0	90.00	359.48	11,454.0	1,477.8	926.7	1,547.0	0.00	0.00	0.00
12,900.0	90.00	359.48	11,454.0	1,577.7	925.8	1,646.6	0.00	0.00	0.00
13,000.0	90.00	359.48	11,454.0	1,677.7	924.9	1,746.2	0.00	0.00	0.00
13,100.0	90.00	359.48	11,454.0	1,777.7	924.0	1,845.8	0.00	0.00	0.00
13,200.0	90.00	359.48	11,454.0	1,877.7	923.0	1,945.4	0.00	0.00	0.00
13,300.0	90.00	359.48	11,454.0	1,977.7	922.1	2,045.0	0.00	0.00	0.00
13,400.0	90.00	359.48	11,454.0	2,077.7	921.2	2,144.6	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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	2,177.7	920.3	2,244.2	0.00	0.00	0.00	
13,600.0	90.00	359.48	11,454.0	2,277.7	919.4	2,343.8	0.00	0.00	0.00	
13,700.0	90.00	359.48	11,454.0	2,377.7	918.5	2,443.4	0.00	0.00	0.00	
13,800.0	90.00	359.48	11,454.0	2,477.7	917.6	2,543.0	0.00	0.00	0.00	
13,900.0	90.00	359.48	11,454.0	2,577.7	916.7	2,642.6	0.00	0.00	0.00	
14,000.0	90.00	359.48	11,454.0	2,677.7	915.8	2,742.2	0.00	0.00	0.00	
14,100.0	90.00	359.48	11,454.0	2,777.7	914.9	2,841.9	0.00	0.00	0.00	
14,200.0	90.00	359.48	11,454.0	2,877.7	914.0	2,941.5	0.00	0.00	0.00	
14,300.0	90.00	359.48	11,454.0	2,977.7	913.1	3,041.1	0.00	0.00	0.00	
14,400.0	90.00	359.48	11,454.0	3,077.7	912.2	3,140.7	0.00	0.00	0.00	
14,500.0	90.00	359.48	11,454.0	3,177.7	911.3	3,240.3	0.00	0.00	0.00	
14,600.0	90.00	359.48	11,454.0	3,277.7	910.4	3,339.9	0.00	0.00	0.00	
14,700.0	90.00	359.48	11,454.0	3,377.7	909.5	3,439.5	0.00	0.00	0.00	
14,800.0	90.00	359.48	11,454.0	3,477.7	908.6	3,539.1	0.00	0.00	0.00	
14,900.0	90.00	359.48	11,454.0	3,577.7	907.7	3,638.7	0.00	0.00	0.00	
15,000.0	90.00	359.48	11,454.0	3,677.7	906.8	3,738.3	0.00	0.00	0.00	
15,100.0	90.00	359.48	11,454.0	3,777.7	905.9	3,837.9	0.00	0.00	0.00	
15,200.0	90.00	359.48	11,454.0	3,877.7	905.0	3,937.5	0.00	0.00	0.00	
15,300.0	90.00	359.48	11,454.0	3,977.7	904.1	4,037.1	0.00	0.00	0.00	
15,400.0	90.00	359.48	11,454.0	4,077.6	903.2	4,136.7	0.00	0.00	0.00	
15,500.0	90.00	359.48	11,454.0	4,177.6	902.3	4,236.3	0.00	0.00	0.00	
15,600.0	90.00	359.48	11,454.0	4,277.6	901.4	4,335.9	0.00	0.00	0.00	
15,700.0	90.00	359.48	11,454.0	4,377.6	900.5	4,435.5	0.00	0.00	0.00	
15,800.0	90.00	359.48	11,454.0	4,477.6	899.6	4,535.1	0.00	0.00	0.00	
15,900.0	90.00	359.48	11,454.0	4,577.6	898.7	4,634.7	0.00	0.00	0.00	
16,000.0	90.00	359.48	11,454.0	4,677.6	897.8	4,734.3	0.00	0.00	0.00	
16,100.0	90.00	359.48	11,454.0	4,777.6	896.9	4,834.0	0.00	0.00	0.00	
16,200.0	90.00	359.48	11,454.0	4,877.6	896.0	4,933.6	0.00	0.00	0.00	
16,300.0	90.00	359.48	11,454.0	4,977.6	895.1	5,033.2	0.00	0.00	0.00	
16,400.0	90.00	359.48	11,454.0	5,077.6	894.2	5,132.8	0.00	0.00	0.00	
16,500.0	90.00	359.48	11,454.0	5,177.6	893.3	5,232.4	0.00	0.00	0.00	
16,600.0	90.00	359.48	11,454.0	5,277.6	892.4	5,332.0	0.00	0.00	0.00	
16,700.0	90.00	359.48	11,454.0	5,377.6	891.5	5,431.6	0.00	0.00	0.00	
16,800.0	90.00	359.48	11,454.0	5,477.6	890.6	5,531.2	0.00	0.00	0.00	
16,900.0	90.00	359.48	11,454.0	5,577.6	889.7	5,630.8	0.00	0.00	0.00	
17,000.0	90.00	359.48	11,454.0	5,677.6	888.8	5,730.4	0.00	0.00	0.00	
17,100.0	90.00	359.48	11,454.0	5,777.6	887.8	5,830.0	0.00	0.00	0.00	
17,200.0	90.00	359.48	11,454.0	5,877.6	886.9	5,929.6	0.00	0.00	0.00	
17,300.0	90.00	359.48	11,454.0	5,977.6	886.0	6,029.2	0.00	0.00	0.00	
17,400.0	90.00	359.48	11,454.0	6,077.6	885.1	6,128.8	0.00	0.00	0.00	
17,500.0	90.00	359.48	11,454.0	6,177.6	884.2	6,228.4	0.00	0.00	0.00	
17,600.0	90.00	359.48	11,454.0	6,277.6	883.3	6,328.0	0.00	0.00	0.00	
17,700.0	90.00	359.48	11,454.0	6,377.6	882.4	6,427.6	0.00	0.00	0.00	
17,800.0	90.00	359.48	11,454.0	6,477.5	881.5	6,527.2	0.00	0.00	0.00	
17,900.0	90.00	359.48	11,454.0	6,577.5	880.6	6,626.8	0.00	0.00	0.00	
18,000.0	90.00	359.48	11,454.0	6,677.5	879.7	6,726.4	0.00	0.00	0.00	
18,100.0	90.00	359.48	11,454.0	6,777.5	878.8	6,826.1	0.00	0.00	0.00	
18,200.0	90.00	359.48	11,454.0	6,877.5	877.9	6,925.7	0.00	0.00	0.00	
18,300.0	90.00	359.48	11,454.0	6,977.5	877.0	7,025.3	0.00	0.00	0.00	
18,400.0	90.00	359.48	11,454.0	7,077.5	876.1	7,124.9	0.00	0.00	0.00	
18,500.0	90.00	359.48	11,454.0	7,177.5	875.2	7,224.5	0.00	0.00	0.00	
18,600.0	90.00	359.48	11,454.0	7,277.5	874.3	7,324.1	0.00	0.00	0.00	
18,700.0	90.00	359.48	11,454.0	7,377.5	873.4	7,423.7	0.00	0.00	0.00	
18,800.0	90.00	359.48	11,454.0	7,477.5	872.5	7,523.3	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 15 Central Prod	Local Co-ordinate Reference:	Well ZIA HILLS UNIT 2331 WC #713H
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 #713H	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	7,577.5	871.6	7,622.9	0.00	0.00	0.00	
19,000.0	90.00	359.48	11,454.0	7,677.5	870.7	7,722.5	0.00	0.00	0.00	
19,100.0	90.00	359.48	11,454.0	7,777.5	869.8	7,822.1	0.00	0.00	0.00	
19,200.0	90.00	359.48	11,454.0	7,877.5	868.9	7,921.7	0.00	0.00	0.00	
19,300.0	90.00	359.48	11,454.0	7,977.5	868.0	8,021.3	0.00	0.00	0.00	
19,400.0	90.00	359.48	11,454.0	8,077.5	867.1	8,120.9	0.00	0.00	0.00	
19,500.0	90.00	359.48	11,454.0	8,177.5	866.2	8,220.5	0.00	0.00	0.00	
19,600.0	90.00	359.48	11,454.0	8,277.5	865.3	8,320.1	0.00	0.00	0.00	
19,700.0	90.00	359.48	11,454.0	8,377.5	864.4	8,419.7	0.00	0.00	0.00	
19,800.0	90.00	359.48	11,454.0	8,477.5	863.5	8,519.3	0.00	0.00	0.00	
19,900.0	90.00	359.48	11,454.0	8,577.5	862.6	8,618.9	0.00	0.00	0.00	
20,000.0	90.00	359.48	11,454.0	8,677.5	861.7	8,718.5	0.00	0.00	0.00	
20,100.0	90.00	359.48	11,454.0	8,777.5	860.8	8,818.2	0.00	0.00	0.00	
20,200.0	90.00	359.48	11,454.0	8,877.5	859.9	8,917.8	0.00	0.00	0.00	
20,300.0	90.00	359.48	11,454.0	8,977.4	859.0	9,017.4	0.00	0.00	0.00	
20,400.0	90.00	359.48	11,454.0	9,077.4	858.1	9,117.0	0.00	0.00	0.00	
20,500.0	90.00	359.48	11,454.0	9,177.4	857.2	9,216.6	0.00	0.00	0.00	
20,600.0	90.00	359.48	11,454.0	9,277.4	856.3	9,316.2	0.00	0.00	0.00	
20,700.0	90.00	359.48	11,454.0	9,377.4	855.4	9,415.8	0.00	0.00	0.00	
20,800.0	90.00	359.48	11,454.0	9,477.4	854.5	9,515.4	0.00	0.00	0.00	
20,900.0	90.00	359.48	11,454.0	9,577.4	853.6	9,615.0	0.00	0.00	0.00	
21,000.0	90.00	359.48	11,454.0	9,677.4	852.6	9,714.6	0.00	0.00	0.00	
21,100.0	90.00	359.48	11,454.0	9,777.4	851.7	9,814.2	0.00	0.00	0.00	
21,200.0	90.00	359.48	11,454.0	9,877.4	850.8	9,913.8	0.00	0.00	0.00	
21,300.0	90.00	359.48	11,454.0	9,977.4	849.9	10,013.4	0.00	0.00	0.00	
21,400.0	90.00	359.48	11,454.0	10,077.4	849.0	10,113.0	0.00	0.00	0.00	
21,500.0	90.00	359.48	11,454.0	10,177.4	848.1	10,212.6	0.00	0.00	0.00	
21,600.0	90.00	359.48	11,454.0	10,277.4	847.2	10,312.2	0.00	0.00	0.00	
21,700.0	90.00	359.48	11,454.0	10,377.4	846.3	10,411.8	0.00	0.00	0.00	
21,800.0	90.00	359.48	11,454.0	10,477.4	845.4	10,511.4	0.00	0.00	0.00	
21,875.0	90.00	359.48	11,454.0	10,552.4	844.7	10,586.2	0.00	0.00	0.00	

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude
FTP (ZIA HILLS UNIT 2331) - plan misses target center by 180.3usft at 11450.0usft MD (11323.2 TVD, 161.5 N, 938.5 E) - Circle (radius 50.0)	0.00	0.00	11,454.0	37.4	940.7	371,878.98	683,955.12	32° 1' 15.674 N	103° 44' 23.240 W
LTP (ZIA HILLS UNIT 2331) - plan misses target center by 25.0usft at 21800.0usft MD (11454.0 TVD, 10477.4 N, 845.4 E) - Point	0.00	0.00	11,454.0	10,502.4	844.7	382,343.98	683,859.20	32° 2' 59.242 N	103° 44' 23.686 W
PBHL (ZIA HILLS UNIT 2331) - plan hits target center - Rectangle (sides W79.0 H10,515.7 D20.0)	0.00	179.48	11,454.0	10,552.4	844.7	382,393.98	683,859.20	32° 2' 59.737 N	103° 44' 23.683 W

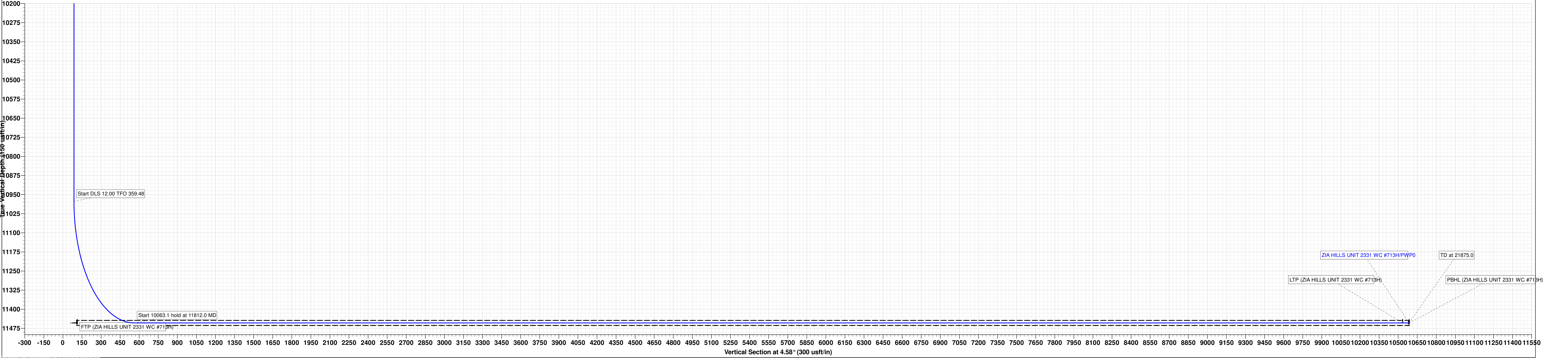
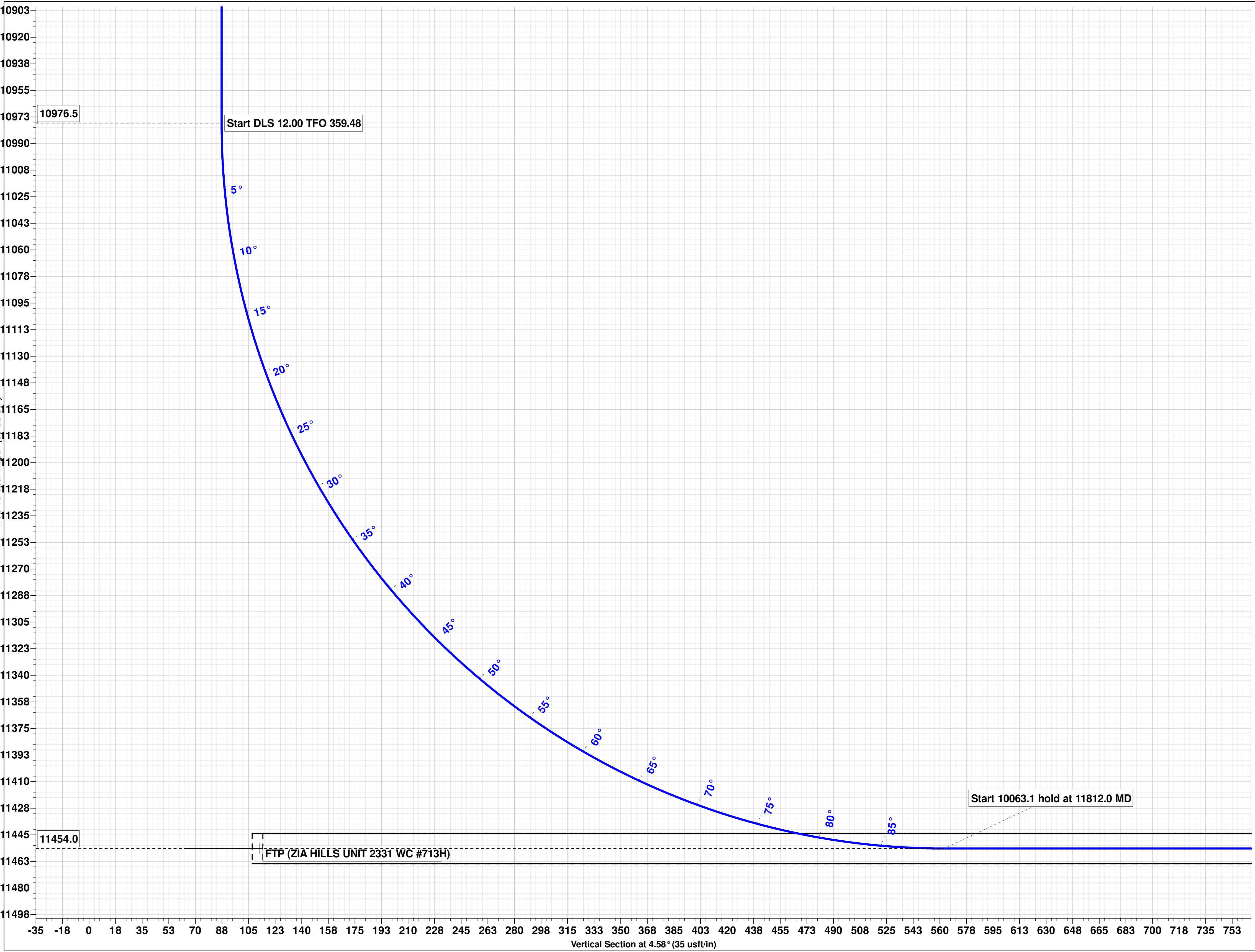
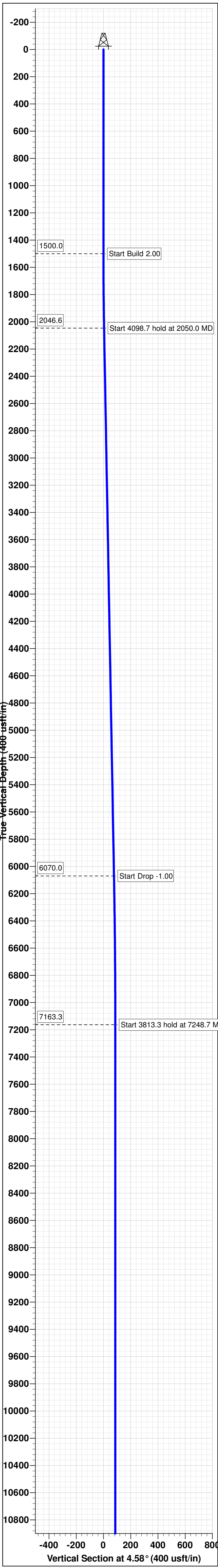
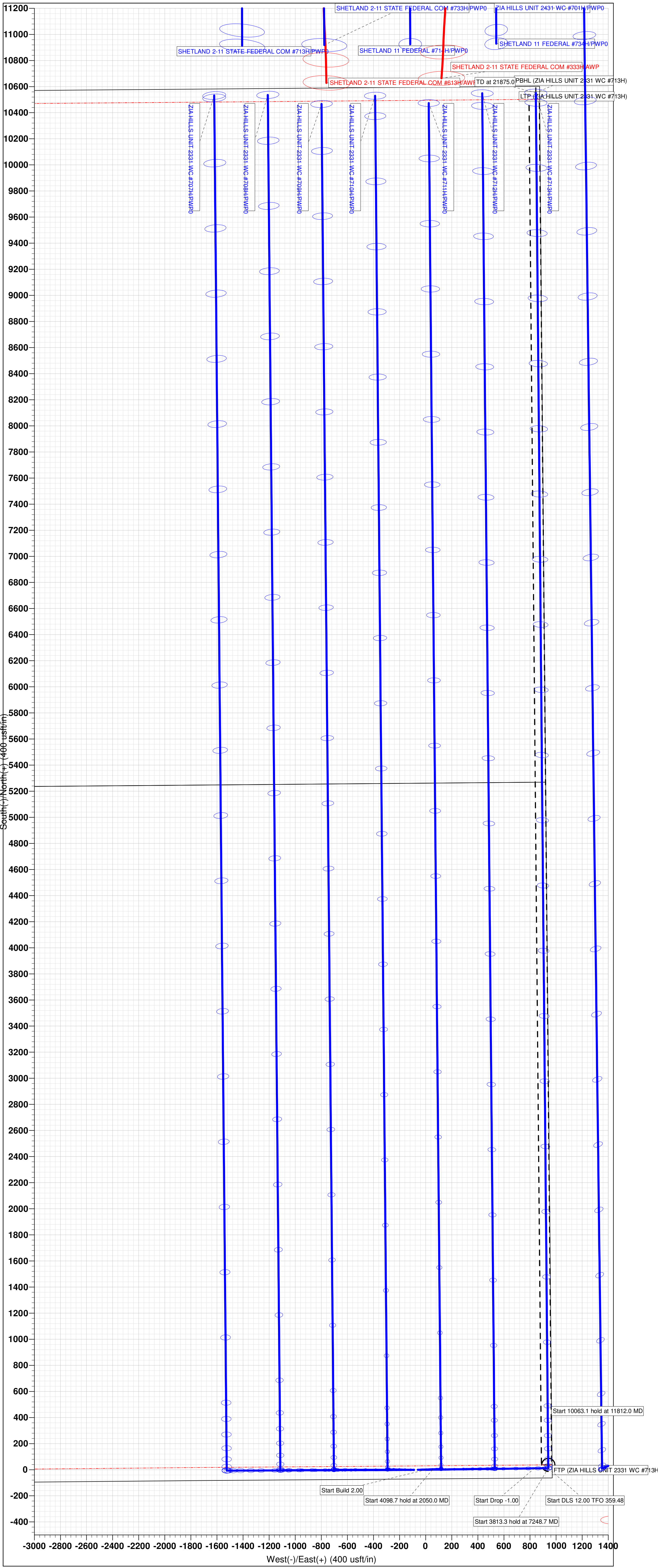


Project: BULLDOG PROSPECT (NM-E)
Site: ZIA HILLS UNIT 2331 PROJECT
Well: ZIA HILLS UNIT 2331 WC #713H
Wellbore: OWB
Design: PWP0
GL: 3164.0
KB=31ft @ 3195.0usft

WELL DETAILS: ZIA HILLS UNIT 2331 WC #713H					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	371841.56	683014.45	32° 1' 15.355 N	103° 44' 34.168 W

DESIGN TARGET DETAILS					
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (ZIA HILLS UNIT 2331 WC #713H)	11454.0	37.4	940.7	371878.98	683955.12
LTP (ZIA HILLS UNIT 2331 WC #713H)	11454.0	10502.4	844.8	382393.98	683859.20
PBHL (ZIA HILLS UNIT 2331 WC #713H)	11454.0	10552.4	844.8	382393.98	683859.20

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	VFace
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	0.0
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	0.0
2050.0	11.00	89.25	2046.6	0.7	52.6	2.00	89.25	4.9	4.9
6148.7	11.00	89.25	6070.0	10.9	834.6	0.00	0.00	77.5	77.5
7248.7	0.00	0.00	7163.3	12.3	939.9	1.00	180.00	87.3	87.3
11062.0	0.00	0.00	10976.5	12.3	939.9	0.00	0.00	87.3	87.3
11812.0	90.00	359.48	11454.0	489.7	935.6	12.00	359.48	562.8	562.8
21875.0	90.00	359.48	11454.0	10552.4	844.8	0.00	0.00	10586.2	10586.2





Project: BULLDOG PROSPECT (NM-E)
Site: ZIA HILLS UNIT 2331 PROJECT
Well: ZIA HILLS UNIT 2331 WC #713H
Wellbore: OWB
Design: PWP0
GL: 3164.0
KB=31ft @ 3195.0usft

WELL DETAILS: ZIA HILLS UNIT 2331 WC #713H

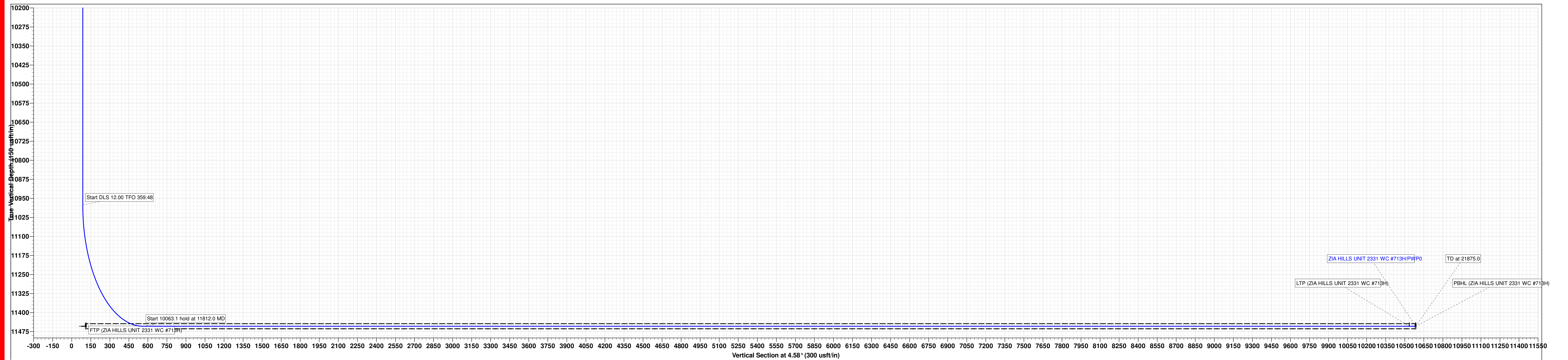
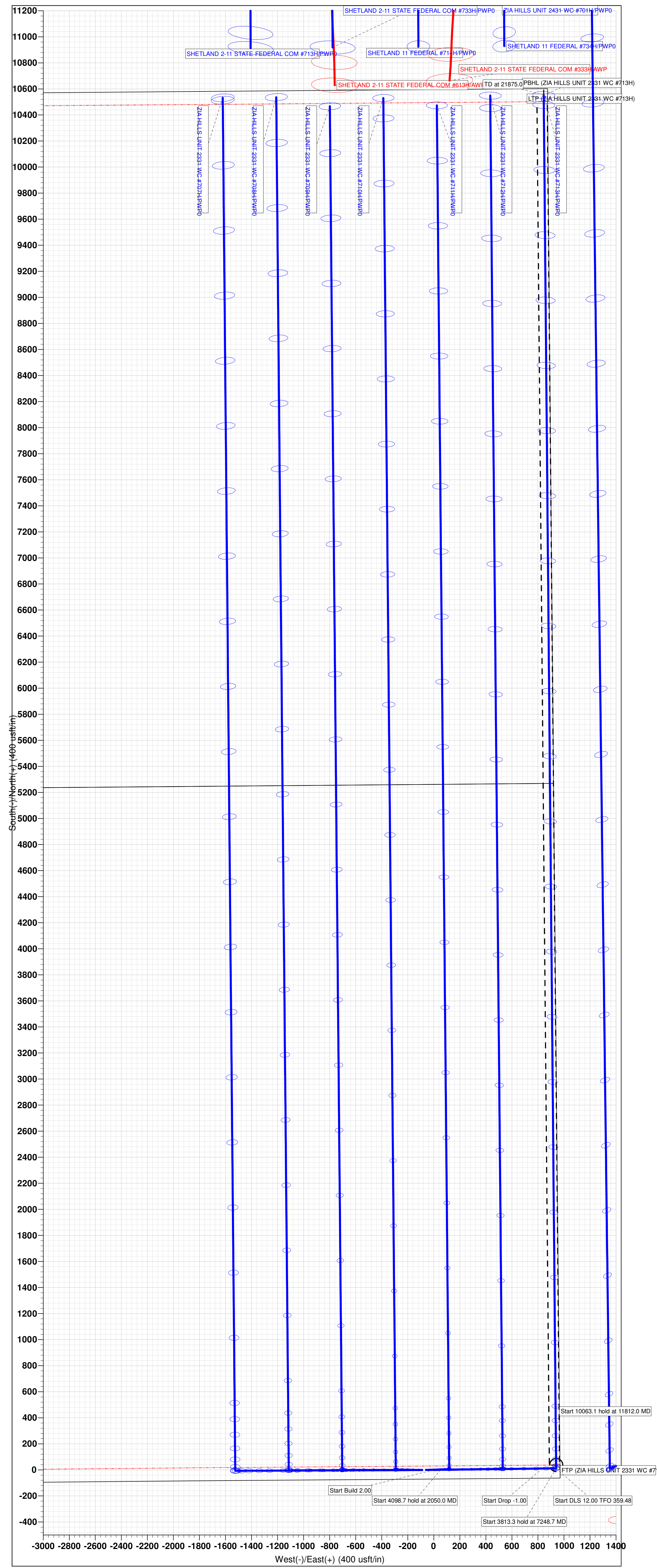
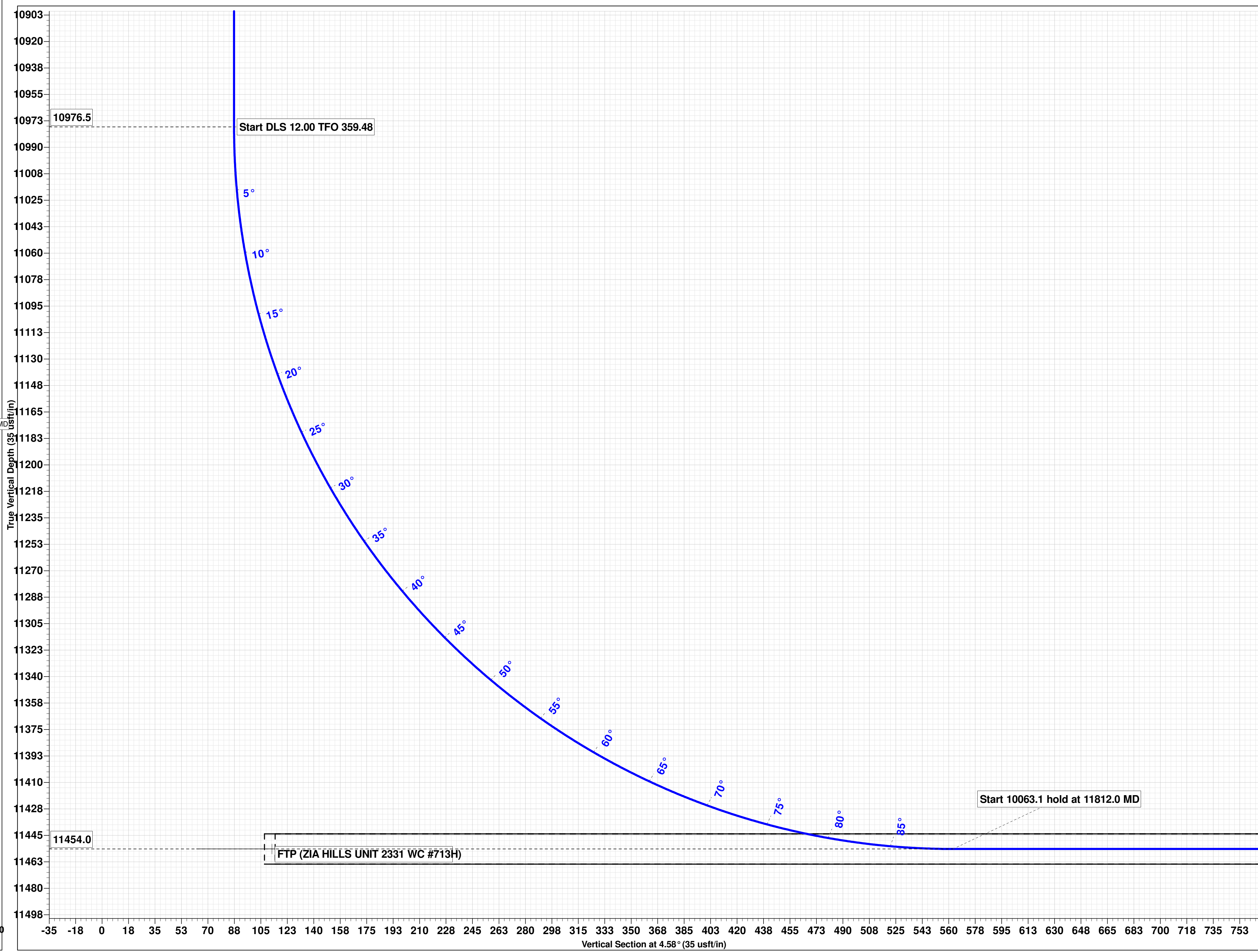
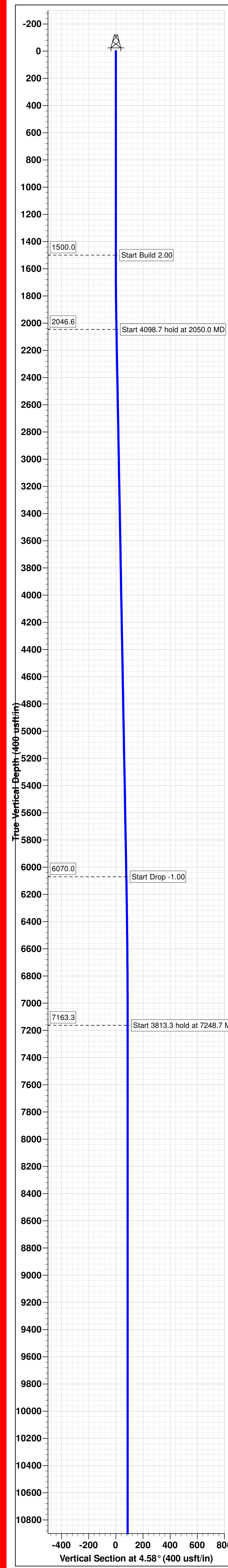
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	371841.56	683014.45	32° 1' 15.355 N	103° 44' 34.168 W

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP (ZIA HILLS UNIT 2331 WC #713H)	11454.0	37.4	940.7	371878.98	683955.12
LTP (ZIA HILLS UNIT 2331 WC #713H)	11454.0	10502.4	844.8	382393.98	683859.20
PBHL (ZIA HILLS UNIT 2331 WC #713H)	11454.0	10552.4	844.8	382393.98	683859.20

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
1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0
2050.0	11.00	89.25	2046.6	0.7	52.6	2.00	89.25	4.9
6148.7	11.00	89.25	6070.0	10.9	834.6	0.00	0.00	77.5
7248.7	0.00	0.00	7163.3	12.3	939.9	1.00	180.00	87.3
11062.0	0.00	0.00	10976.5	12.3	939.9	0.00	0.00	87.3
11812.0	90.00	359.48	11454.0	489.7	935.6	12.00	359.48	562.8
21875.0	90.00	359.48	11454.0	10552.4	844.8	0.00	0.00	10586.2



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	ConocoPhillips
LEASE NO.:	NMLC064756
LOCATION:	Section 23, T. 26S, R.31 E., NMPM
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Zia Hills Unit 2331 WC 713H
SURFACE HOLE FOOTAGE:	70'/S & 970'/E
BOTTOM HOLE FOOTAGE:	50'/N & 29'/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 **Delaware** 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 **1397** 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.

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

C. PRESSURE CONTROL

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

D. SPECIAL REQUIREMENT (S)**Unit Wells**

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

Commercial Well Determination

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

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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

☒ Lea County

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

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

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

A. CASING

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

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

B. PRESSURE CONTROL

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

ZS 9/25/2023

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

CONDITIONS

Action 288988

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 288988
	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