

Form 3160-3
(October 2024)FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER		5. Lease Serial No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-025-55651
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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 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). | 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: NWNW / 366 FNL / 596 FWL / TWSP: 26S / RANGE: 32E / SECTION: 28 / LAT: 32.019855 / LONG: -103.686685 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 100 FNL / 177 FWL / TWSP: 26S / RANGE: 32E / SECTION: 28 / LAT: 32.020586 / LONG: -103.688038 (TVD: 11741 feet, MD: 11963 feet)

BHL: LOT 4 / 50 FSL / 177 FWL / TWSP: 26S / RANGE: 32E / SECTION: 33 / LAT: 32.000359 / LONG: -103.688031 (TVD: 11758 feet, MD: 19318 feet)

BLM Point of Contact

Name: JANET D ESTES

Title: ADJUDICATOR

Phone: (575) 234-6233

Email: JESTES@BLM.GOV

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

WELL LOCATION INFORMATION

API Number 30-025-55651	Pool Code 98081	Pool Name Zia Hills; Wolfcamp
Property Code 338328	Property Name ZIA HILLS UNIT 2832 WC	Well Number 701H
OGRID No. 217817	Operator Name CONOCOPHILLIPS COMPANY	Ground Level Elevation 3,158.94'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL D	Section 28	Township 26S	Range 32E	Lot	Ft. from N/S 366' FNL	Ft. from E/W 596' FWL	Latitude 32.019855°	Longitude -103.686685°	County LEA
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Bottom Hole Location

UL LOT 4	Section 33	Township 26S	Range 32E	Lot	Ft. from N/S 50' FSL	Ft. from E/W 177' FWL	Latitude 32.000359°	Longitude -103.688031°	County LEA
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Dedicated Acres 898.92	Infill or Defining Well Infill	Defining Well API Pending 704H	Overlapping Spacing Unit (Y/N)	Consolidation Code Unit
Order Numbers. R-20080			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL M	Section 21	Township 26S	Range 32E	Lot	Ft. from N/S 247' FSL	Ft. from E/W 175' FWL	Latitude 32.021538°	Longitude -103.688042°	County LEA
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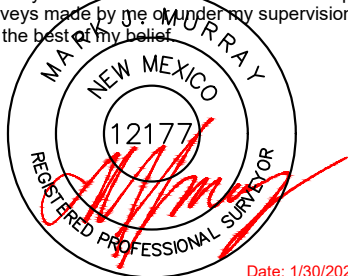
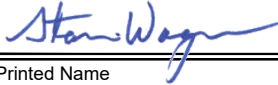
First Take Point (FTP)

UL D	Section 28	Township 26S	Range 32E	Lot	Ft. from N/S 100' FNL	Ft. from E/W 177' FWL	Latitude 32.020586°	Longitude -103.688038°	County LEA
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Last Take Point (LTP)

UL LOT 4	Section 33	Township 26S	Range 32E	Lot	Ft. from N/S 100' FSL	Ft. from E/W 177' FWL	Latitude 32.000497°	Longitude -103.688031°	County LEA
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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
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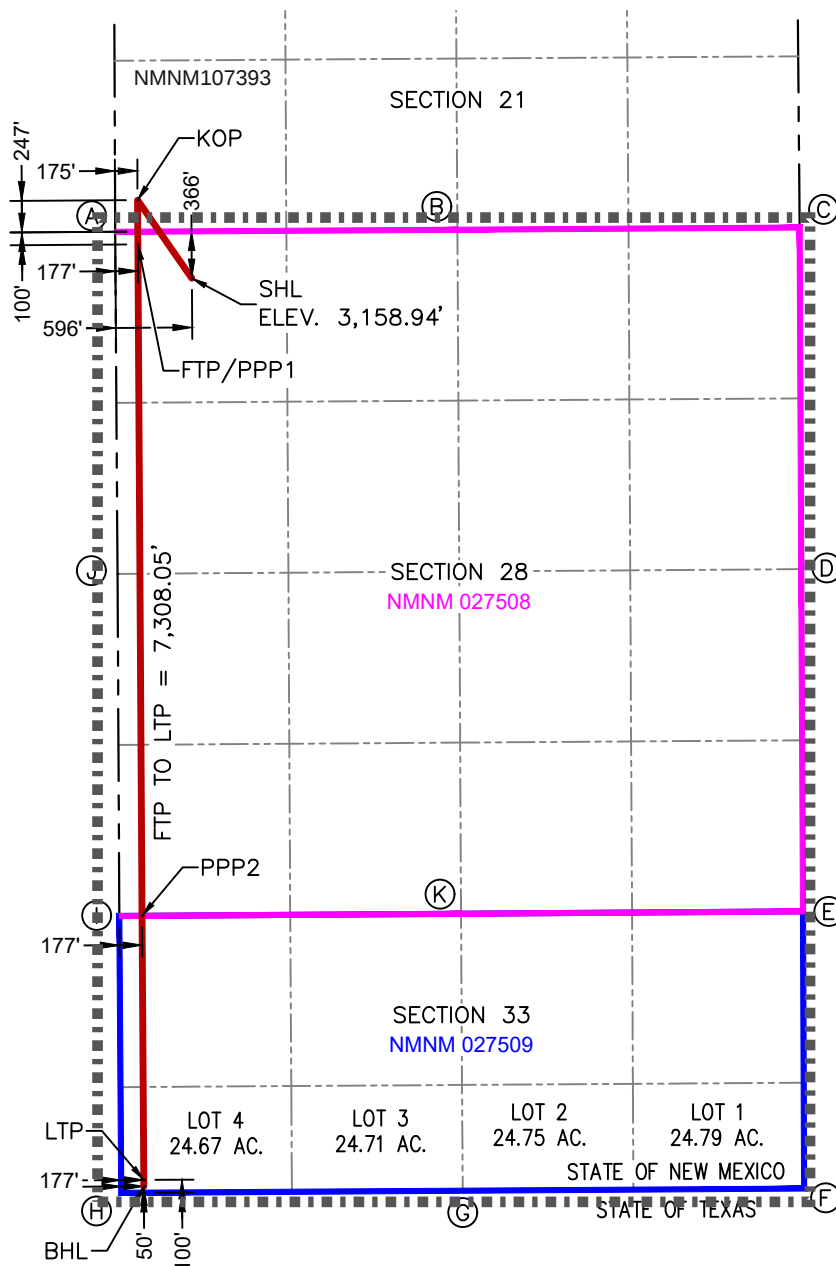
OPERATOR CERTIFICATIONS I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.		SURVEYOR CERTIFICATIONS 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: 1/30/2025	
Signature 	Date 4/15/25	Signature and Seal of Professional Surveyor	
Printed Name Stan Wagner		Certificate Number 12177	Date of Survey 1/30/2025
Email Address			

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

ACREAGE DEDICATION PLATS

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

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



SURFACE HOLE LOCATION
366' FNL & 596' FWL
ELEV.=3,158.94'

NAD 83 X = 741,749.31'
NAD 83 Y = 371,561.77'
NAD 83 LAT = 32.019855°
NAD 83 LONG = -103.686685°

KICK-OFF POINT
247' FSL & 175' FWL
NAD 83 X = 741,325.12'
NAD 83 Y = 372,171.71'
NAD 83 LAT = 32.021538°
NAD 83 LONG = -103.688042°

FIRST TAKE POINT & PENETRATION POINT 1
100' FNL & 177' FWL
NAD 83 X = 741,328.48'
NAD 83 Y = 371,825.16'
NAD 83 LAT = 32.020586°
NAD 83 LONG = -103.688038°

PENETRATION POINT 2
0' FNL & 177' FWL
NAD 83 X = 741,360.39'
NAD 83 Y = 366,580.80'
NAD 83 LAT = 32.006169°
NAD 83 LONG = -103.688036°

LAST TAKE POINT
100' FSL & 177' FWL
NAD 83 X = 741,374.36'
NAD 83 Y = 364,517.25'
NAD 83 LAT = 32.000497°
NAD 83 LONG = -103.688031°

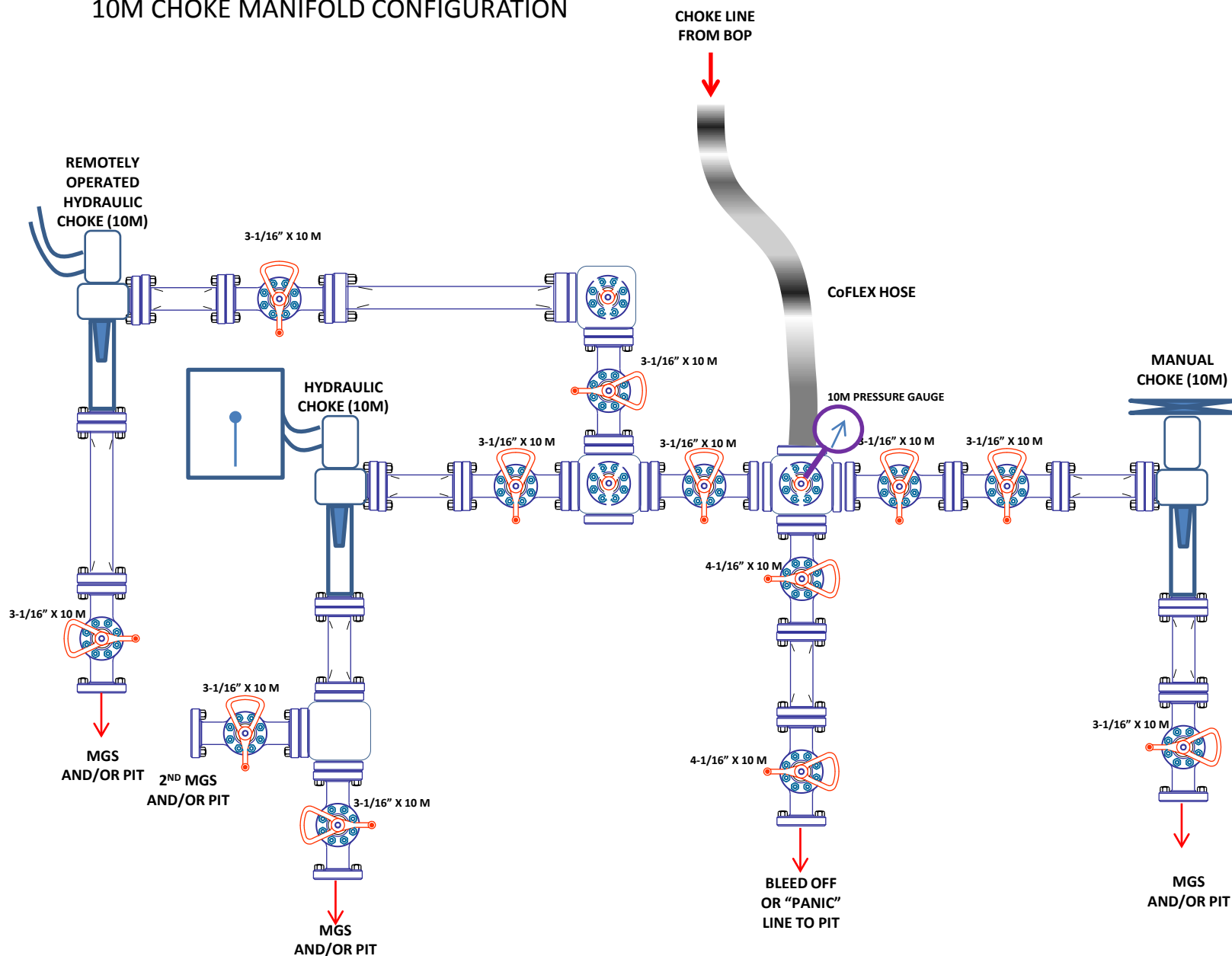
BOTTOM HOLE LOCATION
50' FSL & 177' FWL

NAD 83 X = 741,374.69'
NAD 83 Y = 364,467.25'
NAD 83 LAT = 32.000359°
NAD 83 LONG = -103.688031°

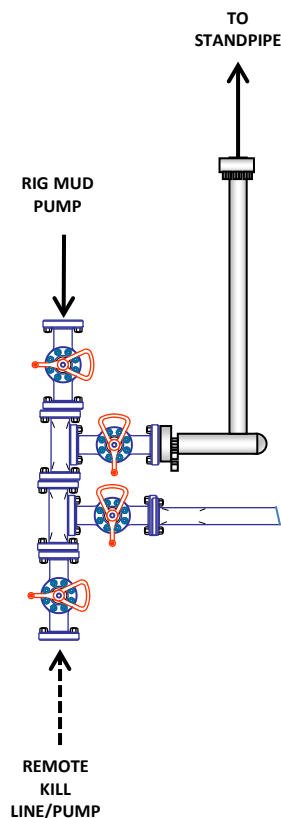
CORNER COORDINATES
NEW MEXICO EAST - NAD 83

A	IRON PIPE W/BRASS CAP N:371,924.06' E:741,150.79'	E	IRON PIPE W/BRASS CAP N:366,615.44' E:746,523.28'	I	IRON PIPE W/BRASS CAP N:366,579.65' E:741,183.39'
B	IRON PIPE W/BRASS CAP N:371,940.66' E:743,823.97'	F	CALCULATED CORNER N:364,449.93' E:746,531.16'	J	IRON PIPE W/BRASS CAP N:369,251.80' E:741,169.27'
C	IRON PIPE W/BRASS CAP N:371,957.31' E:746,496.25'	G	CALCULATED CORNER N:364,433.03' E:743,864.87'	K	CALCULATED CORNER N:366,596.96' E:743,852.02'
D	IRON PIPE W/BRASS CAP N:369,288.55' E:746,508.78'	H	CALCULATED CORNER N:364,416.13' E:741,198.04'		

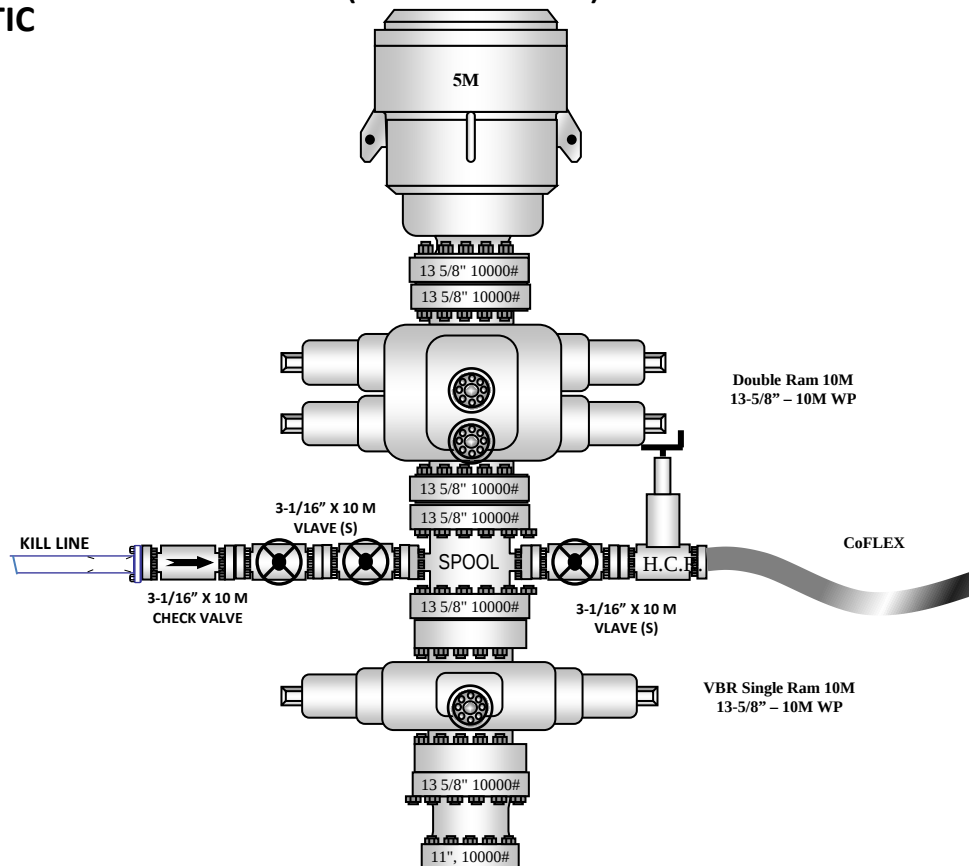
10M CHOKE MANIFOLD CONFIGURATION



10M REMOTE KILL SCHEMATIC



10M BOP Stack (5M Annular)



ConocoPhillips Company - Zia Hills Unit 2832 WC 701H

1. Geologic Formations

TVD of target	11,758' EOL	Pilot hole depth	NA
MD at TD:	19,318'	Deepest expected fresh water:	202'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	970	Water	
Top of Salt	1300	Salt	
Base of Salt	3902	Salt	
Lamar	4396	Salt Water	
Bell Canyon	4399	Salt Water	
Cherry Canyon	5295	Oil/Gas	
Brushy Canyon	6799	Oil/Gas	
Bone Spring	8393	Oil/Gas	
1st Bone Spring Sand	9384	Oil/Gas	
2nd Bone Spring Sand	10042	Oil/Gas	
3rd Bone Spring Sand	11181	Oil/Gas	
Wolfcamp	11583	Target	
Wolfcamp A	11777	Not Penetrated	
Wolfcamp B	12121	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								
17.50"	0	1150	13.375"	54.5	J55	BTC	2.15	1.51	13.61	14.50
12.25"	0	4300	9.625"	40	L80-IC	BTC	1.73	1.31	5.33	5.51
8.75"	4100	11200	7.625"	29.7	P110-ICY	W513	1.26	1.56	3.21	1.93
6.75"	0	11000	5.5"	23	P110-CY	BTC	1.88	2.19	2.88	2.88
6.75"	11000	19,318	5.5"	23	P110-CY	W441	1.76	2.05	2.70	2.45
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

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

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

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

ConocoPhillips Company - Zia Hills Unit 2832 WC 701H

	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 2832 WC 701H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	690	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Int. #1	630	12.8	1.75	9.21	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	390	14.8	1.35	6.6	8	Tail: Class C + 2% CaCl ₂
Inter. #2 (Liner)	200	10.5	3.3	22	24	Tuned light
	90	14.8	1.35	6.6	8	Tail: Class H
Prod	800	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	630	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

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%
2 nd Intermediate	4,100'	20%
Production	10,700'	20% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Zia Hills Unit 2832 WC 701H

4. Pressure Control Equipment

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

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

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

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

Y	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR Part 3170 Subpart 3172.
Y	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
N	Are anchors required by manufacturer?
Y	A multibowl wellhead is being used. The BOP will be tested per 43 CFR Part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

ConocoPhillips Company - Zia Hills Unit 2832 WC 701H

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	9-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
9-5/8" Int shoe	7-5/8" Int shoe	Brine	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 13.5	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
N	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

ConocoPhillips Company - Zia Hills Unit 2832 WC 701H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	8255 psi at 11758' TVD
Abnormal Temperature	NO 175 Deg. F.

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

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

Hydrogen Sulfide (H₂S) monitors will be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR Part 3170 Subpart 3176. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N H₂S is present

Y H₂S Plan attached

8. Other Facets of Operation

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

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

COG OPERATING LLC
HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. HYDROGEN SULFIDE TRAINING

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

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

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

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

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

2. H₂S SAFETY EQUIPMENT AND SYSTEMS

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

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

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

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

W A R N I N G

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

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

COG OPERATING LLC

1-575-748-6940

EMERGENCY CALL LIST

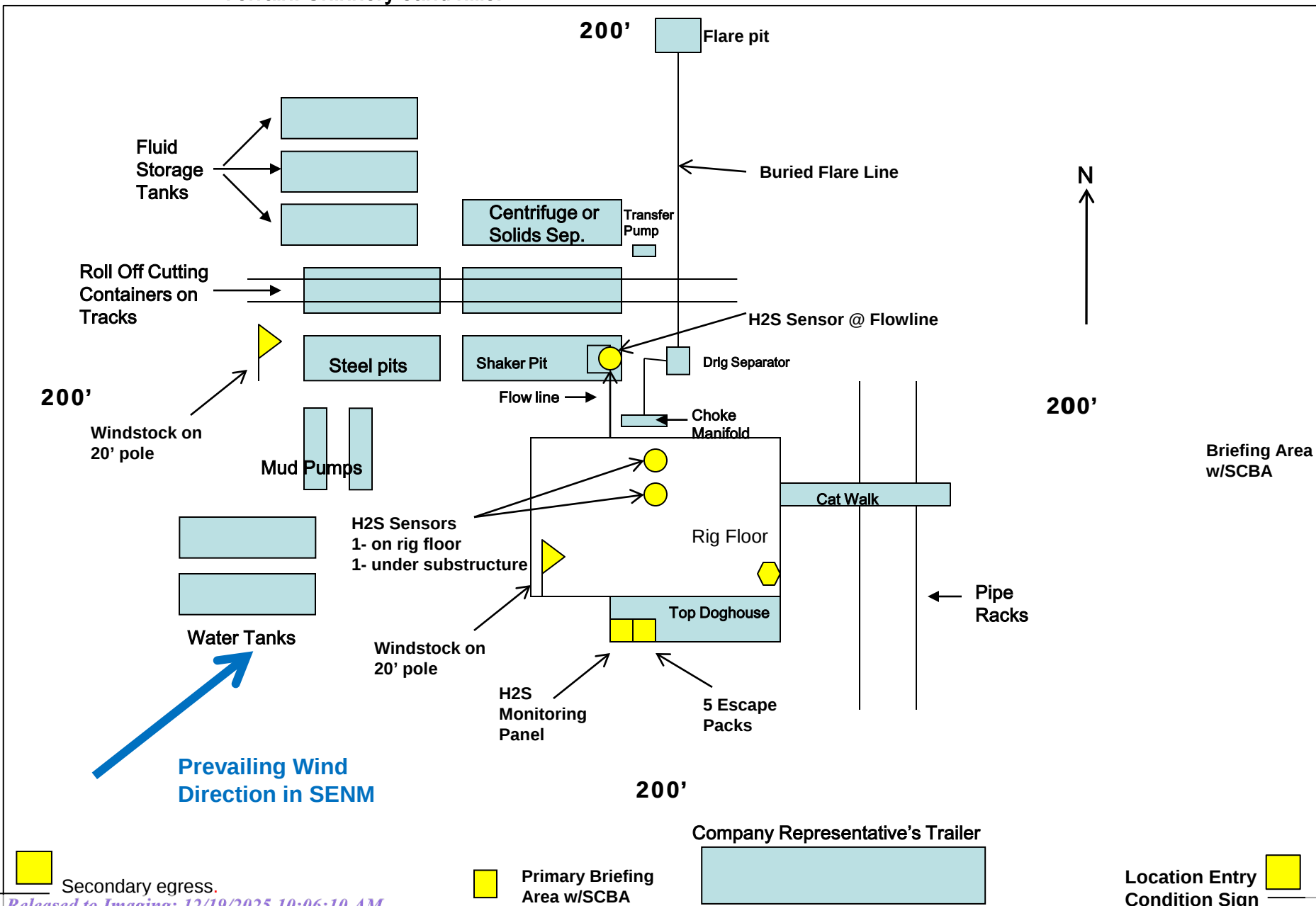
	<u>OFFICE</u>	<u>MOBILE</u>
COG OPERATING LLC OFFICE	575-748-6940	
Dallas Daley	432-818-2329	432-631-6977

EMERGENCY RESPONSE NUMBERS

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

COC Operating LLC
H₂S Equipment Schematic
Terrain: Shinnery sand hills.

Well pad will be 400' x 400'
with cellar in center of pad



DELAWARE BASIN EAST

ZIA HILLS UNIT AREA

ZIA HILLS UNIT 2832 PROJECT

_ZIA HILLS UNIT 2832 WC 701H

OWB

Plan: PWP0

Standard Planning Report

26 February, 2025

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3186.0usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3186.0usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2024	10/16/2024	6.27	59.51	47,133.69875663

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	183.03

Plan Survey Tool Program	Date	2/25/2025		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,318.1 PWP0 (OWB)	r.5 MWD+IFR1	
			OWSG MWD + IFR1	rev.5

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,494.7	9.89	325.26	2,492.2	35.0	-24.3	2.00	2.00	0.00	325.26	
6,071.2	9.89	325.26	6,015.6	540.0	-374.4	0.00	0.00	0.00	0.00	
7,060.6	0.00	0.00	7,000.0	610.0	-423.0	1.00	-1.00	0.00	180.00	
11,341.1	0.00	0.00	11,280.5	610.0	-423.0	0.00	0.00	0.00	0.00	
12,091.0	90.00	179.64	11,758.0	132.5	-420.0	12.00	12.00	23.95	179.64	
19,318.1	90.00	179.64	11,758.0	-7,094.3	-374.9	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3186.0usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3186.0usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	2.00	325.26	2,100.0	1.4	-1.0	-1.4	2.00	2.00	0.00
2,200.0	4.00	325.26	2,199.8	5.7	-4.0	-5.5	2.00	2.00	0.00
2,300.0	6.00	325.26	2,299.5	12.9	-8.9	-12.4	2.00	2.00	0.00
2,400.0	8.00	325.26	2,398.7	22.9	-15.9	-22.0	2.00	2.00	0.00
2,494.7	9.89	325.26	2,492.2	35.0	-24.3	-33.7	2.00	2.00	0.00
2,500.0	9.89	325.26	2,497.5	35.8	-24.8	-34.4	0.00	0.00	0.00
2,600.0	9.89	325.26	2,596.0	49.9	-34.6	-48.0	0.00	0.00	0.00
2,700.0	9.89	325.26	2,694.5	64.0	-44.4	-61.6	0.00	0.00	0.00
2,800.0	9.89	325.26	2,793.0	78.1	-54.2	-75.2	0.00	0.00	0.00
2,900.0	9.89	325.26	2,891.5	92.2	-64.0	-88.7	0.00	0.00	0.00
3,000.0	9.89	325.26	2,990.0	106.4	-73.8	-102.3	0.00	0.00	0.00
3,100.0	9.89	325.26	3,088.5	120.5	-83.5	-115.9	0.00	0.00	0.00
3,200.0	9.89	325.26	3,187.1	134.6	-93.3	-129.5	0.00	0.00	0.00
3,300.0	9.89	325.26	3,285.6	148.7	-103.1	-143.1	0.00	0.00	0.00
3,400.0	9.89	325.26	3,384.1	162.8	-112.9	-156.6	0.00	0.00	0.00
3,500.0	9.89	325.26	3,482.6	177.0	-122.7	-170.2	0.00	0.00	0.00
3,600.0	9.89	325.26	3,581.1	191.1	-132.5	-183.8	0.00	0.00	0.00
3,700.0	9.89	325.26	3,679.6	205.2	-142.3	-197.4	0.00	0.00	0.00
3,800.0	9.89	325.26	3,778.1	219.3	-152.1	-211.0	0.00	0.00	0.00
3,900.0	9.89	325.26	3,876.6	233.4	-161.9	-224.6	0.00	0.00	0.00
4,000.0	9.89	325.26	3,975.2	247.5	-171.7	-238.1	0.00	0.00	0.00
4,100.0	9.89	325.26	4,073.7	261.7	-181.5	-251.7	0.00	0.00	0.00
4,200.0	9.89	325.26	4,172.2	275.8	-191.2	-265.3	0.00	0.00	0.00
4,300.0	9.89	325.26	4,270.7	289.9	-201.0	-278.9	0.00	0.00	0.00
4,400.0	9.89	325.26	4,369.2	304.0	-210.8	-292.5	0.00	0.00	0.00
4,500.0	9.89	325.26	4,467.7	318.1	-220.6	-306.1	0.00	0.00	0.00
4,600.0	9.89	325.26	4,566.2	332.3	-230.4	-319.6	0.00	0.00	0.00
4,700.0	9.89	325.26	4,664.8	346.4	-240.2	-333.2	0.00	0.00	0.00
4,800.0	9.89	325.26	4,763.3	360.5	-250.0	-346.8	0.00	0.00	0.00
4,900.0	9.89	325.26	4,861.8	374.6	-259.8	-360.4	0.00	0.00	0.00
5,000.0	9.89	325.26	4,960.3	388.7	-269.6	-374.0	0.00	0.00	0.00
5,100.0	9.89	325.26	5,058.8	402.9	-279.4	-387.6	0.00	0.00	0.00
5,200.0	9.89	325.26	5,157.3	417.0	-289.1	-401.1	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3186.0usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3186.0usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 701H	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	9.89	325.26	5,255.8	431.1	-298.9	-414.7	0.00	0.00	0.00
5,400.0	9.89	325.26	5,354.3	445.2	-308.7	-428.3	0.00	0.00	0.00
5,500.0	9.89	325.26	5,452.9	459.3	-318.5	-441.9	0.00	0.00	0.00
5,600.0	9.89	325.26	5,551.4	473.5	-328.3	-455.5	0.00	0.00	0.00
5,700.0	9.89	325.26	5,649.9	487.6	-338.1	-469.0	0.00	0.00	0.00
5,800.0	9.89	325.26	5,748.4	501.7	-347.9	-482.6	0.00	0.00	0.00
5,900.0	9.89	325.26	5,846.9	515.8	-357.7	-496.2	0.00	0.00	0.00
6,000.0	9.89	325.26	5,945.4	529.9	-367.5	-509.8	0.00	0.00	0.00
6,071.2	9.89	325.26	6,015.6	540.0	-374.4	-519.5	0.00	0.00	0.00
6,100.0	9.61	325.26	6,043.9	544.0	-377.2	-523.3	1.00	-1.00	0.00
6,200.0	8.61	325.26	6,142.7	557.0	-386.2	-535.8	1.00	-1.00	0.00
6,300.0	7.61	325.26	6,241.7	568.6	-394.3	-547.0	1.00	-1.00	0.00
6,400.0	6.61	325.26	6,340.9	578.7	-401.3	-556.8	1.00	-1.00	0.00
6,500.0	5.61	325.26	6,440.3	587.5	-407.4	-565.2	1.00	-1.00	0.00
6,600.0	4.61	325.26	6,539.9	594.8	-412.5	-572.2	1.00	-1.00	0.00
6,700.0	3.61	325.26	6,639.7	600.7	-416.5	-577.9	1.00	-1.00	0.00
6,800.0	2.61	325.26	6,739.5	605.1	-419.6	-582.1	1.00	-1.00	0.00
6,900.0	1.61	325.26	6,839.5	608.2	-421.7	-585.0	1.00	-1.00	0.00
7,000.0	0.61	325.26	6,939.5	609.7	-422.8	-586.6	1.00	-1.00	0.00
7,060.6	0.00	0.00	7,000.0	610.0	-423.0	-586.8	1.00	-1.00	0.00
7,100.0	0.00	0.00	7,039.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,200.0	0.00	0.00	7,139.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,300.0	0.00	0.00	7,239.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,400.0	0.00	0.00	7,339.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,500.0	0.00	0.00	7,439.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,600.0	0.00	0.00	7,539.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,700.0	0.00	0.00	7,639.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,800.0	0.00	0.00	7,739.4	610.0	-423.0	-586.8	0.00	0.00	0.00
7,900.0	0.00	0.00	7,839.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,000.0	0.00	0.00	7,939.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,100.0	0.00	0.00	8,039.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,200.0	0.00	0.00	8,139.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,300.0	0.00	0.00	8,239.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,400.0	0.00	0.00	8,339.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,500.0	0.00	0.00	8,439.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,600.0	0.00	0.00	8,539.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,700.0	0.00	0.00	8,639.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,800.0	0.00	0.00	8,739.4	610.0	-423.0	-586.8	0.00	0.00	0.00
8,900.0	0.00	0.00	8,839.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,000.0	0.00	0.00	8,939.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,100.0	0.00	0.00	9,039.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,200.0	0.00	0.00	9,139.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,300.0	0.00	0.00	9,239.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,400.0	0.00	0.00	9,339.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,500.0	0.00	0.00	9,439.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,600.0	0.00	0.00	9,539.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,700.0	0.00	0.00	9,639.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,800.0	0.00	0.00	9,739.4	610.0	-423.0	-586.8	0.00	0.00	0.00
9,900.0	0.00	0.00	9,839.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,000.0	0.00	0.00	9,939.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,100.0	0.00	0.00	10,039.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,200.0	0.00	0.00	10,139.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,300.0	0.00	0.00	10,239.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,400.0	0.00	0.00	10,339.4	610.0	-423.0	-586.8	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3186.0usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3186.0usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 701H	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	10,439.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,600.0	0.00	0.00	10,539.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,700.0	0.00	0.00	10,639.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,800.0	0.00	0.00	10,739.4	610.0	-423.0	-586.8	0.00	0.00	0.00
10,900.0	0.00	0.00	10,839.4	610.0	-423.0	-586.8	0.00	0.00	0.00
11,000.0	0.00	0.00	10,939.4	610.0	-423.0	-586.8	0.00	0.00	0.00
11,100.0	0.00	0.00	11,039.4	610.0	-423.0	-586.8	0.00	0.00	0.00
11,200.0	0.00	0.00	11,139.4	610.0	-423.0	-586.8	0.00	0.00	0.00
11,300.0	0.00	0.00	11,239.4	610.0	-423.0	-586.8	0.00	0.00	0.00
11,341.1	0.00	0.00	11,280.5	610.0	-423.0	-586.8	0.00	0.00	0.00
11,400.0	7.07	179.64	11,339.3	606.4	-423.0	-583.2	12.00	12.00	0.00
11,500.0	19.07	179.64	11,436.5	583.8	-422.8	-560.7	12.00	12.00	0.00
11,600.0	31.07	179.64	11,526.9	541.5	-422.6	-518.4	12.00	12.00	0.00
11,700.0	43.07	179.64	11,606.6	481.3	-422.2	-458.4	12.00	12.00	0.00
11,800.0	55.07	179.64	11,672.0	405.9	-421.7	-383.1	12.00	12.00	0.00
11,900.0	67.07	179.64	11,720.2	318.5	-421.2	-295.9	12.00	12.00	0.00
12,000.0	79.07	179.64	11,749.3	223.0	-420.6	-200.5	12.00	12.00	0.00
12,091.0	90.00	179.64	11,758.0	132.5	-420.0	-110.2	12.00	12.00	0.00
12,100.0	90.00	179.64	11,758.0	123.6	-420.0	-101.3	0.00	0.00	0.00
12,200.0	90.00	179.64	11,758.0	23.6	-419.3	-1.4	0.00	0.00	0.00
12,300.0	90.00	179.64	11,758.0	-76.4	-418.7	98.4	0.00	0.00	0.00
12,400.0	90.00	179.64	11,758.0	-176.4	-418.1	198.2	0.00	0.00	0.00
12,500.0	90.00	179.64	11,758.0	-276.4	-417.5	298.0	0.00	0.00	0.00
12,600.0	90.00	179.64	11,758.0	-376.4	-416.8	397.9	0.00	0.00	0.00
12,700.0	90.00	179.64	11,758.0	-476.4	-416.2	497.7	0.00	0.00	0.00
12,800.0	90.00	179.64	11,758.0	-576.4	-415.6	597.5	0.00	0.00	0.00
12,900.0	90.00	179.64	11,758.0	-676.4	-415.0	697.3	0.00	0.00	0.00
13,000.0	90.00	179.64	11,758.0	-776.4	-414.3	797.2	0.00	0.00	0.00
13,100.0	90.00	179.64	11,758.0	-876.4	-413.7	897.0	0.00	0.00	0.00
13,200.0	90.00	179.64	11,758.0	-976.4	-413.1	996.8	0.00	0.00	0.00
13,300.0	90.00	179.64	11,758.0	-1,076.4	-412.5	1,096.6	0.00	0.00	0.00
13,400.0	90.00	179.64	11,758.0	-1,176.4	-411.8	1,196.5	0.00	0.00	0.00
13,500.0	90.00	179.64	11,758.0	-1,276.4	-411.2	1,296.3	0.00	0.00	0.00
13,600.0	90.00	179.64	11,758.0	-1,376.4	-410.6	1,396.1	0.00	0.00	0.00
13,700.0	90.00	179.64	11,758.0	-1,476.4	-410.0	1,496.0	0.00	0.00	0.00
13,800.0	90.00	179.64	11,758.0	-1,576.4	-409.4	1,595.8	0.00	0.00	0.00
13,900.0	90.00	179.64	11,758.0	-1,676.4	-408.7	1,695.6	0.00	0.00	0.00
14,000.0	90.00	179.64	11,758.0	-1,776.4	-408.1	1,795.4	0.00	0.00	0.00
14,100.0	90.00	179.64	11,758.0	-1,876.4	-407.5	1,895.3	0.00	0.00	0.00
14,200.0	90.00	179.64	11,758.0	-1,976.4	-406.9	1,995.1	0.00	0.00	0.00
14,300.0	90.00	179.64	11,758.0	-2,076.4	-406.2	2,094.9	0.00	0.00	0.00
14,400.0	90.00	179.64	11,758.0	-2,176.4	-405.6	2,194.7	0.00	0.00	0.00
14,500.0	90.00	179.64	11,758.0	-2,276.4	-405.0	2,294.6	0.00	0.00	0.00
14,600.0	90.00	179.64	11,758.0	-2,376.4	-404.4	2,394.4	0.00	0.00	0.00
14,700.0	90.00	179.64	11,758.0	-2,476.4	-403.7	2,494.2	0.00	0.00	0.00
14,800.0	90.00	179.64	11,758.0	-2,576.4	-403.1	2,594.0	0.00	0.00	0.00
14,900.0	90.00	179.64	11,758.0	-2,676.4	-402.5	2,693.9	0.00	0.00	0.00
15,000.0	90.00	179.64	11,758.0	-2,776.3	-401.9	2,793.7	0.00	0.00	0.00
15,100.0	90.00	179.64	11,758.0	-2,876.3	-401.2	2,893.5	0.00	0.00	0.00
15,200.0	90.00	179.64	11,758.0	-2,976.3	-400.6	2,993.3	0.00	0.00	0.00
15,300.0	90.00	179.64	11,758.0	-3,076.3	-400.0	3,093.2	0.00	0.00	0.00
15,400.0	90.00	179.64	11,758.0	-3,176.3	-399.4	3,193.0	0.00	0.00	0.00
15,500.0	90.00	179.64	11,758.0	-3,276.3	-398.7	3,292.8	0.00	0.00	0.00
15,600.0	90.00	179.64	11,758.0	-3,376.3	-398.1	3,392.6	0.00	0.00	0.00

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Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3186.0usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3186.0usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,700.0	90.00	179.64	11,758.0	-3,476.3	-397.5	3,492.5	0.00	0.00	0.00
15,800.0	90.00	179.64	11,758.0	-3,576.3	-396.9	3,592.3	0.00	0.00	0.00
15,900.0	90.00	179.64	11,758.0	-3,676.3	-396.2	3,692.1	0.00	0.00	0.00
16,000.0	90.00	179.64	11,758.0	-3,776.3	-395.6	3,791.9	0.00	0.00	0.00
16,100.0	90.00	179.64	11,758.0	-3,876.3	-395.0	3,891.8	0.00	0.00	0.00
16,200.0	90.00	179.64	11,758.0	-3,976.3	-394.4	3,991.6	0.00	0.00	0.00
16,300.0	90.00	179.64	11,758.0	-4,076.3	-393.7	4,091.4	0.00	0.00	0.00
16,400.0	90.00	179.64	11,758.0	-4,176.3	-393.1	4,191.2	0.00	0.00	0.00
16,500.0	90.00	179.64	11,758.0	-4,276.3	-392.5	4,291.1	0.00	0.00	0.00
16,600.0	90.00	179.64	11,758.0	-4,376.3	-391.9	4,390.9	0.00	0.00	0.00
16,700.0	90.00	179.64	11,758.0	-4,476.3	-391.3	4,490.7	0.00	0.00	0.00
16,800.0	90.00	179.64	11,758.0	-4,576.3	-390.6	4,590.6	0.00	0.00	0.00
16,900.0	90.00	179.64	11,758.0	-4,676.3	-390.0	4,690.4	0.00	0.00	0.00
17,000.0	90.00	179.64	11,758.0	-4,776.3	-389.4	4,790.2	0.00	0.00	0.00
17,100.0	90.00	179.64	11,758.0	-4,876.3	-388.8	4,890.0	0.00	0.00	0.00
17,200.0	90.00	179.64	11,758.0	-4,976.3	-388.1	4,989.9	0.00	0.00	0.00
17,300.0	90.00	179.64	11,758.0	-5,076.3	-387.5	5,089.7	0.00	0.00	0.00
17,400.0	90.00	179.64	11,758.0	-5,176.3	-386.9	5,189.5	0.00	0.00	0.00
17,500.0	90.00	179.64	11,758.0	-5,276.3	-386.3	5,289.3	0.00	0.00	0.00
17,600.0	90.00	179.64	11,758.0	-5,376.3	-385.6	5,389.2	0.00	0.00	0.00
17,700.0	90.00	179.64	11,758.0	-5,476.3	-385.0	5,489.0	0.00	0.00	0.00
17,800.0	90.00	179.64	11,758.0	-5,576.3	-384.4	5,588.8	0.00	0.00	0.00
17,900.0	90.00	179.64	11,758.0	-5,676.3	-383.8	5,688.6	0.00	0.00	0.00
18,000.0	90.00	179.64	11,758.0	-5,776.3	-383.1	5,788.5	0.00	0.00	0.00
18,100.0	90.00	179.64	11,758.0	-5,876.3	-382.5	5,888.3	0.00	0.00	0.00
18,200.0	90.00	179.64	11,758.0	-5,976.3	-381.9	5,988.1	0.00	0.00	0.00
18,300.0	90.00	179.64	11,758.0	-6,076.3	-381.3	6,087.9	0.00	0.00	0.00
18,400.0	90.00	179.64	11,758.0	-6,176.3	-380.6	6,187.8	0.00	0.00	0.00
18,500.0	90.00	179.64	11,758.0	-6,276.3	-380.0	6,287.6	0.00	0.00	0.00
18,600.0	90.00	179.64	11,758.0	-6,376.3	-379.4	6,387.4	0.00	0.00	0.00
18,700.0	90.00	179.64	11,758.0	-6,476.3	-378.8	6,487.2	0.00	0.00	0.00
18,800.0	90.00	179.64	11,758.0	-6,576.3	-378.1	6,587.1	0.00	0.00	0.00
18,900.0	90.00	179.64	11,758.0	-6,676.3	-377.5	6,686.9	0.00	0.00	0.00
19,000.0	90.00	179.64	11,758.0	-6,776.3	-376.9	6,786.7	0.00	0.00	0.00
19,100.0	90.00	179.64	11,758.0	-6,876.3	-376.3	6,886.5	0.00	0.00	0.00
19,200.0	90.00	179.64	11,758.0	-6,976.3	-375.6	6,986.4	0.00	0.00	0.00
19,300.0	90.00	179.64	11,758.0	-7,076.3	-375.0	7,086.2	0.00	0.00	0.00
19,318.1	90.00	179.64	11,758.0	-7,094.3	-374.9	7,104.2	0.00	0.00	0.00

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Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3186.0usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3186.0usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
LTP_ZHU 2832 701H	90.00	0.00	11,758.0	-7,044.3	-375.2	364,460.34	700,186.79	32° 0' 1.337 N	103° 41' 15.223 W
- plan hits target center									
- Circle (radius 50.0)									
FTP_ZHU 2832 701H	0.00	0.00	11,758.0	263.4	-420.8	371,768.07	700,141.22	32° 1' 13.658 N	103° 41' 15.245 W
- plan misses target center by 17.6usft at 11963.9usft MD (11741.1 TVD, 258.2 N, -420.8 E)									
- Circle (radius 50.0)									
PBHL_ZHU 2832 701H	0.00	359.64	11,758.0	-7,094.3	-374.9	364,410.34	700,187.12	32° 0' 0.842 N	103° 41' 15.222 W
- plan hits target center									
- Rectangle (sides W100.0 H7,357.7 D20.0)									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(usft)	(usft)	Name	(")	(")
	19,318.1	11,758.0	5-1/2" Production Casing	5-1/2	6

DELAWARE BASIN EAST

ZIA HILLS UNIT AREA

ZIA HILLS UNIT 2832 PROJECT

_ZIA HILLS UNIT 2832 WC 701H

OWB

PWP0

Anticollision Report

26 February, 2025

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference 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 2832 PROJECT						
_ZIA HILLS UNIT 2832 WC 702H - OWB - PWP0	2,000.0	2,000.6	20.0	7.0	1.544	Caution - Monitor Closely, CC
_ZIA HILLS UNIT 2832 WC 702H - OWB - PWP0	2,004.4	2,005.1	20.0	7.0	1.543	Caution - Monitor Closely, ES, SF
_ZIA HILLS UNIT 2832 WC 703H - OWB - PWP0	2,000.0	2,000.3	40.0	27.0	3.088	CC, ES, SF
_ZIA HILLS UNIT 2832 WC 704H - OWB - PWP0	2,000.0	2,000.4	60.0	47.0	4.632	CC, ES, SF
_ZIA HILLS UNIT 2832 WC 705H - OWB - PWP0	1,966.4	1,967.2	80.0	68.5	6.934	CC
_ZIA HILLS UNIT 2832 WC 705H - OWB - PWP0	2,000.0	2,000.8	80.0	68.4	6.891	ES
_ZIA HILLS UNIT 2832 WC 705H - OWB - PWP0	2,100.0	2,100.0	81.3	69.5	6.864	SF
_ZIA HILLS UNIT 2832 WC 706H - OWB - PWP0	1,966.2	1,967.6	100.0	87.1	7.774	CC
_ZIA HILLS UNIT 2832 WC 706H - OWB - PWP0	2,000.0	2,001.4	100.0	87.0	7.719	ES
_ZIA HILLS UNIT 2832 WC 706H - OWB - PWP0	2,100.0	2,100.9	101.2	88.0	7.655	SF
_ZIA HILLS UNIT 2832 WC 707H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2832 WC 801H - OWB - PWP0	1,966.1	1,967.7	120.0	107.1	9.329	CC
_ZIA HILLS UNIT 2832 WC 801H - OWB - PWP0	2,000.0	2,001.6	120.0	107.0	9.263	ES
_ZIA HILLS UNIT 2832 WC 801H - OWB - PWP0	2,100.0	2,100.0	121.7	108.4	9.182	SF
_ZIA HILLS UNIT 2832 WC 802H - OWB - PWP0						Out of range
RED HILLS WEST '21' DM FEDERAL COM 1H - OWB -	9,346.8	13,730.0	236.5	127.4	2.168	Caution - Monitor Closely, CC, ES, SF
RED HILLS WEST 21 W0CN FEDERAL COM 001H - OW						Out of range
RED HILLS WEST 21 W1CN FEDERAL COM 002H - OW						Out of range
RED HILLS WEST 21 W1DM FEDERAL COM 002H - O	11,790.8	16,830.0	895.4	791.7	8.639	CC, ES
RED HILLS WEST 21 W1DM FEDERAL COM 002H - O	11,800.0	16,830.0	895.4	791.8	8.639	SF
RED HILLS WEST 21 W1DM FEDERAL COM 003H - O	11,625.0	16,570.0	319.0	240.4	4.058	SF
RED HILLS WEST 21 W1DM FEDERAL COM 003H - O	11,650.0	16,570.0	314.5	237.6	4.089	ES
RED HILLS WEST 21 W1DM FEDERAL COM 003H - O	11,674.3	16,570.0	313.0	238.1	4.177	CC
WILDER FEDERAL AC COM 28 3H - OWB - AWP	445.4	452.5	954.0	947.6	149.948	CC
WILDER FEDERAL AC COM 28 3H - OWB - AWP	500.0	500.0	954.2	947.6	145.620	ES
WILDER FEDERAL AC COM 28 3H - OWB - AWP	1,600.0	1,569.9	998.5	987.9	94.147	SF

Offset Design: RED HILLS WEST - RED HILLS WEST 21 DM FEDERAL COM #1H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program:		100-r.5 GYRO-NS, 8633-MWD - OWSG R1						Rule Assigned:					Offset Well Error:	3.0 usft
Reference	Offset	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)	No-Go Distance (usft)		Separation Factor	
8,400.0	8,339.4	13,730.0	9,288.2	25.0	83.4	67.97	698.7	-203.8	977.8	914.4	63.37	15.430		
8,500.0	8,439.4	13,730.0	9,288.2	25.0	83.4	67.97	698.7	-203.8	881.1	816.7	64.36	13.689		
8,600.0	8,539.4	13,730.0	9,288.2	25.1	83.4	67.97	698.7	-203.8	785.2	719.5	65.68	11.956		
8,700.0	8,639.4	13,730.0	9,288.2	25.1	83.4	67.97	698.7	-203.8	690.5	623.1	67.46	10.237		
8,800.0	8,739.4	13,730.0	9,288.2	25.2	83.4	67.97	698.7	-203.8	597.5	527.6	69.96	8.541		
8,900.0	8,839.4	13,730.0	9,288.2	25.2	83.4	67.97	698.7	-203.8	507.3	433.6	73.62	6.890		
9,000.0	8,939.4	13,730.0	9,288.2	25.3	83.4	67.97	698.7	-203.8	421.4	342.3	79.09	5.328		
9,100.0	9,039.4	13,730.0	9,288.2	25.3	83.4	67.97	698.7	-203.8	343.2	256.0	87.28	3.933		
9,200.0	9,139.4	13,730.0	9,288.2	25.4	83.4	67.97	698.7	-203.8	279.4	181.0	98.37	2.840 Normal Operations		
9,300.0	9,239.4	13,730.0	9,288.2	25.4	83.4	67.97	698.7	-203.8	241.5	133.0	108.46	2.226 Caution - Monitor Closely		
9,348.8	9,288.2	13,730.0	9,288.2	25.5	83.4	67.97	698.7	-203.8	236.5	126.3	110.15	2.147 Caution - Monitor Closely, CC, ES, SF		
9,400.0	9,339.4	13,730.0	9,288.2	25.5	83.4	67.97	698.7	-203.8	242.0	133.4	108.55	2.229 Caution - Monitor Closely		
9,500.0	9,439.4	13,730.0	9,288.2	25.5	83.4	67.97	698.7	-203.8	280.7	181.9	98.78	2.842 Normal Operations		
9,600.0	9,539.4	13,730.0	9,288.2	25.6	83.4	67.97	698.7	-203.8	345.0	256.9	88.09	3.917		
9,700.0	9,639.4	13,730.0	9,288.2	25.6	83.4	67.97	698.7	-203.8	423.4	343.1	80.29	5.274		
9,800.0	9,739.4	13,730.0	9,288.2	25.7	83.4	67.97	698.7	-203.8	509.4	434.3	75.16	6.778		
9,900.0	9,839.4	13,730.0	9,288.2	25.7	83.4	67.97	698.7	-203.8	599.8	528.0	71.84	8.350		

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design:	RED HILLS WEST - RED HILLS WEST 21 DM FEDERAL COM #1H - OWB - AWP											Offset Site Error:	0.0 usft
Survey Program:	100-r.5 GYRO-NS, 8633-MWD - OWSG R1											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	
10,000.0	9,939.4	13,730.0	9,288.2	25.8	83.4	67.97	698.7	-203.8	692.8	623.2	69.65	9.948	
10,100.0	10,039.4	13,730.0	9,288.2	25.9	83.4	67.97	698.7	-203.8	787.6	719.4	68.18	11.552	
10,200.0	10,139.4	13,730.0	9,288.2	25.9	83.4	67.97	698.7	-203.8	883.5	816.3	67.18	13.151	
10,300.0	10,239.4	13,730.0	9,288.2	26.0	83.4	67.97	698.7	-203.8	980.2	913.7	66.50	14.740	

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: RED HILLS WEST - RED HILLS WEST 21 W0DM FEDERAL COM #3H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 134-MWD - OWSG R1, 963-MWD+IGRF												Offset Well Error:	2.0 usft
Reference												Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		No-Go Distance (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
10,900.0	10,839.4	16,570.0	11,755.5	26.3	100.5	62.26	700.0	-251.9	936.3	859.6	76.63	12.217	
11,000.0	10,939.4	16,570.0	11,755.5	26.3	100.5	62.26	700.0	-251.9	838.7	761.1	77.58	10.811	
11,100.0	11,039.4	16,570.0	11,755.5	26.4	100.5	62.26	700.0	-251.9	741.7	662.9	78.81	9.411	
11,200.0	11,139.4	16,570.0	11,755.5	26.4	100.5	62.26	700.0	-251.9	645.7	565.2	80.50	8.021	
11,300.0	11,239.4	16,570.0	11,755.5	26.5	100.5	62.26	700.0	-251.9	551.1	468.2	82.94	6.645	
11,341.1	11,280.5	16,570.0	11,755.5	26.5	100.5	62.26	700.0	-251.9	512.9	428.6	84.26	6.086	
11,350.0	11,289.4	16,570.0	11,755.5	26.5	100.5	-119.65	700.0	-251.9	504.6	420.0	84.58	5.966	
11,375.0	11,314.4	16,570.0	11,755.5	26.4	100.5	-125.23	700.0	-251.9	481.8	396.3	85.51	5.635	
11,400.0	11,339.3	16,570.0	11,755.5	26.4	100.5	-129.82	700.0	-251.9	459.6	373.1	86.51	5.313	
11,425.0	11,364.0	16,570.0	11,755.5	26.3	100.5	-133.57	700.0	-251.9	438.2	350.6	87.56	5.005	
11,450.0	11,388.5	16,570.0	11,755.5	26.2	100.5	-136.63	700.0	-251.9	417.6	329.0	88.66	4.711	
11,475.0	11,412.7	16,570.0	11,755.5	26.1	100.5	-139.12	700.0	-251.9	398.2	308.4	89.79	4.435	
11,500.0	11,436.5	16,570.0	11,755.5	26.1	100.5	-141.14	700.0	-251.9	380.1	289.2	90.92	4.181	
11,525.0	11,459.9	16,570.0	11,755.5	26.0	100.5	-142.77	700.0	-251.9	363.6	271.6	92.01	3.952	
11,550.0	11,482.8	16,570.0	11,755.5	25.9	100.5	-144.07	700.0	-251.9	348.9	255.9	93.00	3.752	
11,575.0	11,505.2	16,570.0	11,755.5	25.8	100.5	-145.08	700.0	-251.9	336.4	242.6	93.82	3.586	
11,600.0	11,526.9	16,570.0	11,755.5	25.7	100.5	-145.83	700.0	-251.9	326.3	231.9	94.40	3.457	
11,625.0	11,548.0	16,570.0	11,755.5	25.6	100.5	-146.35	700.0	-251.9	319.0	224.3	94.65	3.370	
11,650.0	11,568.3	16,570.0	11,755.5	25.5	100.5	-146.65	700.0	-251.9	314.5	220.0	94.51	3.327 SF	
11,674.3	11,587.3	16,570.0	11,755.5	25.5	100.5	-146.75	700.0	-251.9	313.0	219.0	93.97	3.331 CC, ES	
11,675.0	11,587.9	16,570.0	11,755.5	25.5	100.5	-146.75	700.0	-251.9	313.0	219.1	93.95	3.332	
11,700.0	11,606.6	16,570.0	11,755.5	25.4	100.5	-146.64	700.0	-251.9	314.6	221.7	92.97	3.384	
11,725.0	11,624.4	16,570.0	11,755.5	25.3	100.5	-146.32	700.0	-251.9	319.3	227.7	91.65	3.484	
11,750.0	11,641.3	16,570.0	11,755.5	25.2	100.5	-145.79	700.0	-251.9	326.9	236.8	90.05	3.630	
11,775.0	11,657.1	16,570.0	11,755.5	25.2	100.5	-145.03	700.0	-251.9	337.1	248.8	88.27	3.819	
11,800.0	11,672.0	16,570.0	11,755.5	25.1	100.5	-144.00	700.0	-251.9	349.7	263.3	86.43	4.046	
11,825.0	11,685.7	16,570.0	11,755.5	25.1	100.5	-142.69	700.0	-251.9	364.5	279.9	84.59	4.309	
11,850.0	11,698.4	16,570.0	11,755.5	25.0	100.5	-141.04	700.0	-251.9	381.1	298.3	82.82	4.602	
11,875.0	11,709.9	16,570.0	11,755.5	25.0	100.5	-138.99	700.0	-251.9	399.3	318.1	81.15	4.920	
11,900.0	11,720.2	16,570.0	11,755.5	24.9	100.5	-136.47	700.0	-251.9	418.8	339.2	79.61	5.260	
11,925.0	11,729.4	16,570.0	11,755.5	24.9	100.5	-133.37	700.0	-251.9	439.4	361.2	78.21	5.618	
11,950.0	11,737.3	16,570.0	11,755.5	24.9	100.5	-129.58	700.0	-251.9	460.9	384.0	76.95	5.990	
11,975.0	11,743.9	16,570.0	11,755.5	24.8	100.5	-124.94	700.0	-251.9	483.1	407.3	75.81	6.373	
12,000.0	11,749.3	16,570.0	11,755.5	24.8	100.5	-119.30	700.0	-251.9	505.9	431.1	74.78	6.765	
12,025.0	11,753.4	16,570.0	11,755.5	24.8	100.5	-112.51	700.0	-251.9	529.2	455.3	73.86	7.164	
12,050.0	11,756.2	16,570.0	11,755.5	24.8	100.5	-104.52	700.0	-251.9	552.7	479.7	73.03	7.568	
12,075.0	11,757.7	16,570.0	11,755.5	24.8	100.5	-95.44	700.0	-251.9	576.5	504.2	72.29	7.975	
12,091.0	11,758.0	16,570.0	11,755.5	24.8	100.5	-89.19	700.0	-251.9	591.8	520.0	71.85	8.237	
12,100.0	11,758.0	16,570.0	11,755.5	24.8	100.5	-89.19	700.0	-251.9	600.4	528.8	71.61	8.384	
12,200.0	11,758.0	16,570.0	11,755.5	24.9	100.5	-89.19	700.0	-251.9	696.8	627.2	69.55	10.018	
12,300.0	11,758.0	16,570.0	11,755.5	25.0	100.5	-89.19	700.0	-251.9	794.1	725.9	68.21	11.643	
12,400.0	11,758.0	16,570.0	11,755.5	25.1	100.5	-89.19	700.0	-251.9	892.0	824.7	67.29	13.256	
12,500.0	11,758.0	16,570.0	11,755.5	25.2	100.5	-89.19	700.0	-251.9	990.3	923.7	66.65	14.859	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: RED HILLS WEST - WILDER 28 AC FEDERAL COM #4H - OWB - AWP													Offset Site Error: 0.0 usft
Survey Program: 141-MWD - OWSG R1													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.0	0.0	0.0	8.0	3.0	3.0	-82.55	34.8	-266.0	268.4				
100.0	100.0	91.3	99.3	3.1	3.0	-82.57	34.7	-266.2	268.4	261.6	6.84	39.236	
200.0	200.0	191.0	199.0	3.3	3.0	-82.63	34.5	-266.6	268.8	261.7	7.09	37.884	
300.0	300.0	291.1	299.1	3.6	3.1	-82.74	34.0	-267.0	269.1	261.8	7.38	36.461	
400.0	400.0	391.4	399.4	3.8	3.2	-83.02	32.7	-267.4	269.4	261.7	7.69	35.018	
500.0	500.0	491.9	499.9	4.0	3.3	-83.53	30.4	-267.9	269.6	261.6	8.03	33.568	
600.0	600.0	592.1	600.0	4.1	3.5	-84.31	26.7	-268.2	269.6	261.2	8.39	32.139	
617.4	617.4	609.6	617.4	4.2	3.5	-84.46	26.0	-268.3	269.6	261.1	8.45	31.899	
700.0	700.0	689.9	697.7	4.3	3.7	-85.20	22.6	-269.0	269.9	261.2	8.76	30.819	
800.0	800.0	789.1	796.8	4.5	3.9	-86.14	18.2	-270.4	271.0	261.8	9.15	29.622	
900.0	900.0	880.9	888.5	4.7	4.2	-87.01	14.3	-273.0	273.6	264.1	9.53	28.716	
1,000.0	1,000.0	978.7	986.1	4.8	4.4	-87.82	10.6	-277.9	278.4	268.6	9.78	28.476	
1,100.0	1,100.0	1,078.0	1,085.2	5.0	4.7	-88.30	8.4	-283.0	283.5	273.3	10.19	27.810	
1,200.0	1,200.0	1,188.6	1,195.8	5.2	5.0	-88.10	9.5	-286.6	286.7	276.1	10.65	26.934	
1,300.0	1,300.0	1,294.2	1,301.1	5.3	5.3	-86.73	16.4	-286.7	287.1	276.1	11.07	25.933	
1,400.0	1,400.0	1,399.9	1,406.0	5.5	5.5	-84.29	28.5	-284.7	286.2	274.7	11.50	24.880	
1,500.0	1,500.0	1,505.8	1,510.9	5.6	5.8	-81.38	42.4	-279.4	282.8	270.8	11.95	23.671	
1,600.0	1,600.0	1,605.7	1,609.8	5.8	6.1	-78.62	55.0	-273.4	279.0	266.6	12.39	22.516	
1,700.0	1,700.0	1,705.3	1,708.5	5.9	6.5	-75.93	67.0	-267.4	275.8	262.9	12.85	21.464	
1,800.0	1,800.0	1,805.3	1,807.7	6.0	6.8	-73.30	78.4	-261.2	272.8	259.5	13.31	20.491	
1,900.0	1,900.0	1,906.7	1,908.2	6.2	7.1	-70.59	89.7	-254.5	270.0	256.2	13.79	19.574	
2,000.0	2,000.0	2,006.5	2,007.2	6.3	7.4	-67.89	100.5	-247.3	267.0	252.8	14.27	18.708	
2,100.0	2,100.0	2,105.0	2,104.9	6.5	7.8	-30.81	110.5	-240.5	263.3	248.5	14.81	17.778	
2,200.0	2,199.8	2,202.9	2,202.2	6.8	8.1	-28.98	120.0	-234.5	257.3	242.0	15.35	16.761	
2,300.0	2,299.5	2,302.4	2,301.2	7.0	8.5	-27.87	128.0	-229.6	248.9	233.0	15.91	15.643	
2,400.0	2,398.7	2,401.0	2,399.7	7.2	8.8	-27.88	133.1	-226.4	237.6	221.1	16.47	14.428	
2,494.7	2,492.2	2,495.1	2,493.7	7.5	9.1	-28.86	136.1	-224.4	224.2	207.2	16.99	13.197	
2,500.0	2,497.5	2,500.4	2,499.0	7.5	9.1	-28.93	136.2	-224.3	223.3	206.3	17.01	13.128	
2,600.0	2,596.0	2,599.5	2,598.0	7.8	9.5	-30.37	138.6	-222.2	207.5	189.9	17.64	11.762	
2,700.0	2,694.5	2,698.2	2,696.7	8.1	9.8	-32.26	140.3	-220.2	191.7	173.5	18.16	10.553	
2,800.0	2,793.0	2,796.4	2,794.9	8.3	10.1	-34.72	141.3	-218.6	176.2	157.5	18.68	9.430	
2,900.0	2,891.5	2,894.4	2,892.8	8.6	10.4	-37.79	141.9	-217.4	161.3	142.1	19.19	8.405	
3,000.0	2,990.0	2,992.6	2,991.1	8.9	10.8	-41.50	142.6	-216.4	147.2	127.5	19.68	7.479	
3,100.0	3,088.5	3,091.0	3,089.4	9.2	11.1	-46.07	143.0	-215.7	134.1	113.9	20.15	6.654	
3,200.0	3,187.1	3,189.8	3,188.2	9.5	11.4	-51.67	143.3	-214.8	121.8	101.2	20.57	5.920	
3,300.0	3,285.6	3,288.3	3,286.7	9.8	11.8	-58.34	143.7	-213.9	110.9	89.9	20.95	5.291	
3,400.0	3,384.1	3,386.9	3,385.3	10.2	12.1	-66.25	144.2	-212.8	101.6	80.3	21.29	4.773	
3,500.0	3,482.6	3,484.8	3,483.3	10.5	12.4	-75.40	144.8	-211.7	94.7	73.1	21.61	4.382	
3,600.0	3,581.1	3,582.5	3,580.9	10.9	12.7	-85.63	144.7	-211.7	91.7	69.8	21.96	4.176	
3,631.6	3,612.3	3,613.5	3,612.0	11.0	12.8	-88.99	144.7	-211.7	91.6	69.5	22.10	4.143 CC, ES	
3,700.0	3,679.6	3,680.9	3,679.4	11.2	13.1	-96.30	144.4	-211.8	92.3	69.9	22.46	4.111 SF	
3,800.0	3,778.1	3,779.6	3,778.1	11.6	13.4	-106.99	143.6	-211.3	96.1	73.0	23.13	4.153	
3,900.0	3,876.6	3,878.2	3,876.6	12.0	13.7	-116.87	142.9	-210.1	102.6	78.6	23.98	4.278	
4,000.0	3,975.2	3,976.1	3,974.5	12.3	14.1	-125.52	142.0	-208.6	111.8	86.9	24.90	4.491	
4,100.0	4,073.7	4,074.0	4,072.4	12.7	14.4	-132.91	140.6	-206.8	123.7	97.8	25.86	4.783	
4,200.0	4,172.2	4,172.1	4,170.4	13.1	14.7	-139.21	139.1	-204.5	137.3	110.5	26.81	5.121	
4,300.0	4,270.7	4,270.3	4,268.6	13.5	15.1	-144.17	137.7	-202.6	152.2	124.5	27.72	5.491	
4,400.0	4,369.2	4,368.9	4,367.1	13.9	15.4	-148.01	136.5	-201.5	167.8	139.2	28.59	5.870	
4,500.0	4,467.7	4,467.6	4,465.9	14.3	15.7	-151.15	135.3	-200.4	183.9	154.6	29.27	6.284	
4,600.0	4,566.2	4,569.8	4,568.1	14.7	16.1	-153.62	135.4	-200.4	199.2	169.0	30.12	6.612	
4,700.0	4,664.8	4,670.4	4,668.6	15.1	16.4	-155.47	136.7	-201.5	213.3	182.3	30.93	6.895	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: RED HILLS WEST - WILDER 28 AC FEDERAL COM #4H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 141-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)			
4,800.0	4,763.3	4,769.1	4,767.4	15.5	16.7	-157.00	138.3	-202.8	227.2	195.5	31.71	7.165	
4,900.0	4,861.8	4,867.7	4,865.9	15.9	17.1	-158.39	139.8	-204.0	241.4	208.9	32.49	7.430	
5,000.0	4,960.3	4,966.3	4,964.5	16.3	17.4	-159.59	141.2	-205.3	255.8	222.5	33.26	7.690	
5,100.0	5,058.8	5,064.9	5,063.0	16.8	17.8	-160.64	142.5	-206.7	270.4	236.3	34.04	7.944	
5,200.0	5,157.3	5,163.7	5,161.8	17.2	18.1	-161.60	143.7	-208.0	285.1	250.3	34.81	8.192	
5,300.0	5,255.8	5,262.5	5,260.7	17.6	18.4	-162.46	145.0	-209.3	299.9	264.3	35.58	8.427	
5,400.0	5,354.3	5,361.0	5,359.1	18.0	18.8	-163.19	146.1	-210.8	314.8	278.4	36.35	8.660	
5,500.0	5,452.9	5,460.2	5,458.3	18.4	19.1	-163.86	147.2	-212.4	329.7	292.6	37.12	8.883	
5,600.0	5,551.4	5,559.2	5,557.3	18.9	19.4	-164.51	148.5	-213.7	344.6	306.7	37.90	9.093	
5,700.0	5,649.9	5,658.0	5,656.1	19.3	19.8	-165.11	149.9	-215.1	359.5	320.8	38.67	9.296	
5,800.0	5,748.4	5,756.6	5,754.6	19.7	20.1	-165.64	151.1	-216.5	374.4	335.0	39.44	9.494	
5,900.0	5,846.9	5,856.1	5,854.1	20.1	20.5	-166.12	152.3	-218.1	389.4	349.2	40.22	9.683	
6,000.0	5,945.4	5,949.4	5,947.4	20.6	20.8	-166.54	153.2	-219.4	404.8	363.9	40.94	9.888	
6,071.2	6,015.6	6,015.9	6,013.9	20.9	21.0	-166.86	153.0	-219.7	416.7	375.3	41.44	10.056	
6,100.0	6,043.9	6,043.1	6,041.1	21.0	21.1	-166.99	152.9	-219.8	421.6	380.0	41.64	10.125	
6,200.0	6,142.7	6,140.0	6,138.1	21.4	21.4	-167.41	151.8	-220.0	438.0	395.6	42.39	10.333	
6,300.0	6,241.7	6,238.5	6,236.5	21.8	21.8	-167.72	150.5	-220.4	452.9	409.7	43.13	10.501	
6,400.0	6,340.9	6,337.6	6,335.6	22.2	22.1	-167.98	149.1	-220.7	466.1	422.2	43.86	10.626	
6,500.0	6,440.3	6,437.4	6,435.4	22.6	22.5	-168.16	147.8	-221.0	477.6	433.0	44.59	10.711	
6,600.0	6,539.9	6,536.5	6,534.5	23.0	22.8	-168.27	146.4	-221.6	487.4	442.1	45.29	10.761	
6,700.0	6,639.7	6,635.3	6,633.2	23.4	23.1	-168.29	144.7	-222.4	495.6	449.6	45.97	10.782	
6,800.0	6,739.5	6,736.4	6,734.3	23.7	23.5	-168.29	143.1	-223.1	502.1	455.4	46.65	10.764	
6,900.0	6,839.5	6,837.9	6,835.8	24.0	23.8	-168.33	142.2	-223.2	506.5	459.2	47.30	10.708	
7,000.0	6,939.5	6,937.3	6,935.2	24.3	24.2	-168.36	141.4	-223.0	509.2	461.3	47.90	10.631	
7,060.6	7,000.0	6,998.4	6,996.3	24.4	24.4	156.91	140.9	-223.0	510.0	461.8	48.19	10.584	
7,100.0	7,039.4	7,037.6	7,035.5	24.4	24.5	156.93	140.5	-223.1	510.3	462.0	48.33	10.559	
7,200.0	7,139.4	7,136.5	7,134.4	24.4	24.9	157.03	139.4	-223.5	511.2	462.5	48.70	10.496	
7,300.0	7,239.4	7,236.3	7,234.2	24.5	25.2	157.14	138.0	-224.0	512.2	463.1	49.09	10.435	
7,400.0	7,339.4	7,336.5	7,334.4	24.5	25.5	157.27	136.7	-224.7	513.2	463.7	49.48	10.372	
7,500.0	7,439.4	7,437.1	7,435.0	24.6	25.9	157.43	135.2	-225.7	514.2	464.3	49.87	10.310	
7,600.0	7,539.4	7,537.8	7,535.7	24.6	26.2	157.61	133.9	-226.9	514.9	464.6	50.27	10.243	
7,700.0	7,639.4	7,638.2	7,636.0	24.7	26.6	157.79	132.7	-228.1	515.6	465.0	50.66	10.178	
7,800.0	7,739.4	7,736.1	7,733.9	24.7	26.9	157.94	131.4	-229.0	516.4	465.4	51.04	10.118	
7,900.0	7,839.4	7,833.4	7,831.2	24.8	27.3	157.96	130.1	-228.8	517.8	466.3	51.42	10.070	
8,000.0	7,939.4	7,933.0	7,930.8	24.8	27.6	157.89	128.8	-227.5	519.4	467.6	51.82	10.024	
8,100.0	8,039.4	8,034.5	8,032.3	24.9	28.0	157.82	127.6	-226.4	521.0	468.7	52.25	9.971	
8,200.0	8,139.4	8,135.2	8,133.0	24.9	28.3	157.79	126.5	-225.6	522.3	469.6	52.67	9.916	
8,300.0	8,239.4	8,237.9	8,235.7	24.9	28.7	157.80	125.5	-225.3	523.3	470.2	53.11	9.853	
8,400.0	8,339.4	8,342.4	8,340.2	25.0	29.0	157.79	125.3	-225.1	523.6	470.0	53.56	9.775	
8,500.0	8,439.4	8,444.9	8,442.7	25.0	29.4	157.79	125.6	-225.2	523.2	469.2	53.99	9.690	
8,600.0	8,539.4	8,548.6	8,546.3	25.1	29.7	157.81	126.5	-225.8	522.2	467.8	54.44	9.593	
8,700.0	8,639.4	8,649.8	8,647.5	25.1	30.1	157.85	127.8	-226.7	520.7	465.8	54.86	9.491	
8,793.8	8,733.3	8,735.5	8,733.3	25.2	30.4	157.97	128.2	-228.0	519.7	464.5	55.18	9.418	
8,800.0	8,739.4	8,740.9	8,738.6	25.2	30.4	157.98	128.2	-228.1	519.7	464.5	55.20	9.415	
8,900.0	8,839.4	8,789.0	8,786.7	25.2	30.6	158.13	126.4	-228.9	523.7	468.8	54.98	9.526	
9,000.0	8,939.4	8,852.0	8,849.0	25.3	30.8	158.45	117.3	-228.4	537.4	482.7	54.74	9.818	
9,100.0	9,039.4	8,897.9	8,893.5	25.3	30.9	158.75	106.5	-227.2	559.6	505.7	53.97	10.369	
9,200.0	9,139.4	8,956.2	8,949.2	25.4	31.1	159.26	88.8	-225.6	588.9	535.5	53.37	11.033	
9,300.0	9,239.4	9,009.0	8,998.0	25.4	31.3	159.90	69.1	-225.1	624.6	572.0	52.59	11.876	
9,400.0	9,339.4	9,041.0	9,026.8	25.5	31.4	160.29	55.0	-224.2	667.3	616.1	51.22	13.028	
9,500.0	9,439.4	9,072.0	9,053.6	25.5	31.5	160.68	39.5	-223.0	717.2	667.4	49.88	14.379	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design:	RED HILLS WEST - WILDER 28 AC FEDERAL COM #4H - OWB - AWP											Offset Site Error:	0.0 usft
Survey Program:	141-MWD - OWSG R1											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	
9,600.0	9,539.4	9,103.0	9,079.1	25.6	31.6	161.09	22.0	-221.6	773.5	724.8	48.66	15.895	
9,700.0	9,639.4	9,135.0	9,104.2	25.6	31.7	161.54	2.2	-220.1	834.9	787.3	47.63	17.528	
9,800.0	9,739.4	9,166.0	9,127.3	25.7	31.8	162.01	-18.4	-219.0	900.7	853.9	46.74	19.271	
9,900.0	9,839.4	9,198.0	9,150.0	25.7	31.9	162.52	-40.9	-218.0	970.1	924.0	46.02	21.079	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design:		RED HILLS WEST - WILDER 28 AC FEDERAL COM #8H - OWB - AWP											Offset Site Error:		0.0 usft
Survey Program:		174-MWD - OWSG R1						Rule Assigned:				Offset Well Error:		0.0 usft	
Measured Depth	Reference	Measured Depth	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Distance	No-Go	Separation	Warning				
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor			
0.0	0.0	0.0	6.0	3.0	0.0	-72.42	84.5	-266.9	280.0						
100.0	100.0	92.4	98.4	3.1	0.1	-72.42	84.6	-267.1	280.2	275.0	5.15	54.360			
200.0	200.0	190.9	196.9	3.3	0.3	-72.41	84.9	-267.9	281.0	275.5	5.49	51.183			
300.0	300.0	290.5	296.5	3.6	0.7	-72.45	85.1	-269.1	282.2	276.4	5.86	48.160			
400.0	400.0	390.9	396.9	3.8	1.0	-72.58	84.8	-270.4	283.4	277.2	6.25	45.324			
500.0	500.0	491.0	497.0	4.0	1.4	-72.79	84.2	-271.7	284.5	277.8	6.66	42.687			
600.0	600.0	591.7	597.6	4.1	1.8	-73.13	82.8	-273.2	285.5	278.4	7.09	40.257			
700.0	700.0	691.5	697.5	4.3	2.1	-73.61	80.8	-274.7	286.3	278.8	7.53	38.034			
800.0	800.0	788.0	793.9	4.5	2.5	-74.07	78.9	-276.4	287.5	279.5	7.97	36.087			
900.0	900.0	883.0	888.9	4.7	2.8	-74.61	77.0	-279.5	290.2	281.8	8.41	34.506			
1,000.0	1,000.0	977.0	982.6	4.8	3.2	-75.16	75.5	-284.9	295.2	286.5	8.69	33.955			
1,100.0	1,100.0	1,080.1	1,085.5	5.0	3.5	-75.81	73.7	-291.4	301.0	291.8	9.18	32.794			
1,200.0	1,200.0	1,199.4	1,204.8	5.2	4.0	-76.60	70.1	-294.2	302.5	292.8	9.71	31.159			
1,300.0	1,300.0	1,315.4	1,320.5	5.3	4.3	-77.04	66.7	-289.8	298.1	287.9	10.20	29.232			
1,400.0	1,400.0	1,423.4	1,428.1	5.5	4.7	-77.10	64.4	-280.9	289.5	278.9	10.66	27.159			
1,500.0	1,500.0	1,529.2	1,533.3	5.6	5.0	-76.87	62.8	-269.3	278.5	267.4	11.12	25.050			
1,600.0	1,600.0	1,631.9	1,635.2	5.8	5.4	-76.41	61.9	-256.2	265.9	254.3	11.58	22.963			
1,700.0	1,700.0	1,731.0	1,733.3	5.9	5.7	-75.86	61.2	-242.8	252.6	240.6	12.05	20.970			
1,800.0	1,800.0	1,829.0	1,830.5	6.0	6.1	-75.29	60.4	-230.0	239.8	227.3	12.52	19.150			
1,900.0	1,900.0	1,925.5	1,926.3	6.2	6.4	-74.57	60.2	-218.2	227.8	214.8	13.00	17.524			
2,000.0	2,000.0	2,025.5	2,025.5	6.3	6.8	-73.48	61.0	-205.8	216.2	202.7	13.48	16.037			
2,100.0	2,100.0	2,126.8	2,126.0	6.5	7.2	-37.89	62.0	-192.5	202.6	188.6	14.01	14.461			
2,200.0	2,199.8	2,227.8	2,225.9	6.8	7.6	-37.61	62.5	-178.1	185.0	170.4	14.54	12.724			
2,300.0	2,299.5	2,326.1	2,323.1	7.0	8.0	-38.09	62.6	-163.2	163.8	148.7	15.07	10.866			
2,400.0	2,398.7	2,421.6	2,417.6	7.2	8.3	-40.29	61.1	-149.6	140.4	124.7	15.62	8.988			
2,494.7	2,492.2	2,510.8	2,506.1	7.5	8.7	-44.59	59.2	-138.6	117.7	101.6	16.10	7.309			
2,500.0	2,497.5	2,515.9	2,511.1	7.5	8.7	-44.88	59.1	-138.0	116.4	100.3	16.13	7.220			
2,600.0	2,596.0	2,613.1	2,607.6	7.8	9.1	-50.94	59.1	-126.5	93.1	76.4	16.70	5.575			
2,700.0	2,694.5	2,711.9	2,705.4	8.1	9.5	-59.28	61.3	-112.3	68.9	51.8	17.11	4.026			
2,800.0	2,793.0	2,808.3	2,800.4	8.3	9.9	-76.24	63.5	-96.4	45.3	27.7	17.53	2.583 Normal Operations			
2,894.1	2,885.7	2,897.1	2,888.0	8.6	10.2	-112.96	62.9	-81.6	33.9	15.4	18.49	1.835 Caution - Monitor Closely, CC			
2,900.0	2,891.5	2,902.6	2,893.5	8.6	10.3	-115.77	62.8	-80.7	34.0	15.4	18.58	1.829 Caution - Monitor Closely, ES, SF			
3,000.0	2,990.0	2,997.3	2,987.1	8.9	10.7	-152.39	59.2	-67.3	47.7	27.9	19.75	2.413 Caution - Monitor Closely			
3,100.0	3,088.5	3,093.4	3,082.3	9.2	11.0	-168.64	55.2	-54.9	71.6	51.1	20.45	3.501			
3,200.0	3,187.1	3,190.3	3,178.2	9.5	11.4	-177.39	52.4	-41.5	97.6	76.5	21.08	4.629			
3,300.0	3,285.6	3,288.3	3,275.2	9.8	11.8	176.69	52.0	-27.7	123.1	101.4	21.72	5.670			
3,400.0	3,384.1	3,385.5	3,371.5	10.2	12.2	172.74	52.5	-14.3	148.5	126.1	22.35	6.643			
3,500.0	3,482.6	3,483.4	3,468.7	10.5	12.6	170.27	52.9	-2.1	173.6	150.6	23.00	7.547			
3,600.0	3,581.1	3,582.4	3,567.0	10.9	13.0	168.72	53.2	8.9	197.9	174.3	23.69	8.357			
3,700.0	3,679.6	3,680.6	3,664.6	11.2	13.4	167.26	54.9	19.7	221.4	197.1	24.36	9.091			
3,800.0	3,778.1	3,776.3	3,759.6	11.6	13.8	165.73	57.8	31.3	245.1	220.0	25.01	9.799			
3,900.0	3,876.6	3,871.4	3,853.9	12.0	14.2	164.44	60.2	43.5	269.6	243.9	25.66	10.507			
4,000.0	3,975.2	3,967.1	3,948.8	12.3	14.5	163.55	61.7	55.5	294.7	268.3	26.33	11.193			
4,100.0	4,073.7	4,063.3	4,044.3	12.7	14.9	163.01	62.1	67.0	320.0	293.0	27.01	11.849			
4,200.0	4,172.2	4,159.6	4,140.0	13.1	15.3	162.67	61.9	78.2	345.5	317.8	27.71	12.472			
4,300.0	4,270.7	4,261.6	4,241.3	13.5	15.7	162.43	61.5	89.5	370.7	342.2	28.46	13.025			
4,400.0	4,369.2	4,363.9	4,343.1	13.9	16.1	162.08	63.1	99.9	394.1	364.9	29.21	13.491			
4,500.0	4,467.7	4,457.8	4,436.3	14.3	16.5	161.61	65.7	110.0	417.1	387.2	29.89	13.956			
4,600.0	4,566.2	4,551.0	4,529.0	14.7	16.9	161.20	67.6	121.0	441.5	411.1	30.39	14.526			
4,700.0	4,664.8	4,643.6	4,620.8	15.1	17.2	160.81	69.2	132.5	466.5	435.4	31.06	15.018			
4,800.0	4,763.3	4,737.7	4,714.1	15.5	17.6	160.40	70.8	144.9	492.3	460.5	31.75	15.504			

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: RED HILLS WEST - WILDER 28 AC FEDERAL COM #8H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 174-MWD - OWSG R1												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,900.0	4,861.8	4,837.4	4,812.8	15.9	18.0	160.04	72.2	158.0	518.0	485.5	32.49	15.943	
5,000.0	4,960.3	4,937.8	4,912.6	16.3	18.4	159.77	73.8	170.3	543.1	509.9	33.25	16.337	
5,100.0	5,058.8	5,034.3	5,008.3	16.8	18.8	159.53	75.3	181.9	568.0	534.0	33.96	16.723	
5,200.0	5,157.3	5,131.5	5,104.8	17.2	19.2	159.31	77.0	193.5	592.8	558.1	34.69	17.086	
5,300.0	5,255.8	5,221.9	5,194.6	17.6	19.6	159.19	77.6	204.4	618.1	582.7	35.37	17.476	
5,400.0	5,354.3	5,320.0	5,291.9	18.0	20.0	159.14	77.4	215.9	643.8	607.7	36.11	17.827	
5,500.0	5,452.9	5,421.5	5,392.8	18.4	20.4	159.14	77.1	227.3	669.0	632.1	36.89	18.133	
5,600.0	5,551.4	5,520.8	5,491.5	18.9	20.8	159.14	77.1	237.9	693.7	656.1	37.66	18.423	
5,700.0	5,649.9	5,619.9	5,590.1	19.3	21.1	159.15	77.2	248.2	718.1	679.7	38.42	18.694	
5,800.0	5,748.4	5,714.7	5,684.4	19.7	21.5	159.15	77.5	258.0	742.4	703.2	39.14	18.966	
5,900.0	5,846.9	5,799.0	5,768.1	20.1	21.9	159.06	78.1	268.1	767.7	727.9	39.78	19.301	
6,000.0	5,945.4	5,884.0	5,852.3	20.6	22.2	158.92	78.6	279.8	794.6	754.2	40.41	19.664	
6,071.2	6,015.6	5,952.1	5,919.7	20.9	22.5	158.80	78.8	289.7	814.2	773.3	40.92	19.898	
6,100.0	6,043.9	5,979.9	5,947.1	21.0	22.6	158.79	78.9	293.7	822.1	781.0	41.13	19.990	
6,200.0	6,142.7	6,077.6	6,043.8	21.4	23.0	158.73	78.8	307.6	848.4	806.5	41.87	20.263	
6,300.0	6,241.7	6,177.7	6,143.1	21.8	23.4	158.68	78.3	321.1	872.9	830.2	42.62	20.479	
6,400.0	6,340.9	6,277.6	6,242.1	22.2	23.9	158.59	77.9	334.3	895.4	852.1	43.36	20.652	
6,500.0	6,440.3	6,376.0	6,339.5	22.6	24.3	158.40	78.5	347.7	916.2	872.2	44.05	20.797	
6,600.0	6,539.9	6,475.1	6,437.7	23.0	24.7	158.16	79.3	361.4	935.4	890.7	44.74	20.908	
6,700.0	6,639.7	6,580.1	6,541.8	23.4	25.1	157.90	79.9	375.1	952.6	907.1	45.46	20.957	
6,800.0	6,739.5	6,683.6	6,644.5	23.7	25.5	157.66	80.1	387.6	967.6	921.5	46.14	20.973	
6,900.0	6,839.5	6,785.0	6,745.3	24.0	25.9	157.44	79.9	399.1	980.7	933.9	46.77	20.967	
7,000.0	6,939.5	6,892.8	6,852.5	24.3	26.4	157.22	78.9	410.4	991.8	944.4	47.42	20.917	
7,060.6	7,000.0	6,966.0	6,925.4	24.4	26.6	122.36	77.9	416.9	997.1	949.3	47.79	20.863	
7,100.0	7,039.4	7,016.1	6,975.4	24.4	26.8	122.27	77.4	420.7	999.8	951.8	48.02	20.823	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS 20 FED COM PROJECT - WILDER 29 FEDERAL #5H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program:		170-MWD - OWSG R1				Rule Assigned:				Offset Well Error:		3.0 usft		
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
6,300.0	6,241.7	6,396.1	6,390.4	21.8	23.4	-97.79	-79.6	-1,128.2	990.4	953.8	36.63	27.038		
6,400.0	6,340.9	6,489.1	6,482.3	22.2	23.8	-98.35	-70.6	-1,117.9	977.3	940.1	37.19	26.279		
6,500.0	6,440.3	6,582.3	6,574.6	22.6	24.2	-98.83	-61.9	-1,107.8	964.5	926.8	37.74	25.556		
6,600.0	6,539.9	6,678.6	6,670.0	23.0	24.6	-99.26	-53.4	-1,097.8	952.3	914.0	38.30	24.865		
6,700.0	6,639.7	6,776.7	6,767.2	23.4	25.0	-99.59	-44.3	-1,087.7	939.6	900.7	38.85	24.185		
6,800.0	6,739.5	6,868.1	6,857.7	23.7	25.3	-99.77	-36.1	-1,079.1	927.4	888.0	39.37	23.558		
6,900.0	6,839.5	6,975.4	6,964.1	24.0	25.8	-99.90	-26.5	-1,069.2	915.2	875.3	39.92	22.924		
7,000.0	6,939.5	7,083.2	7,070.8	24.3	26.2	-99.95	-16.2	-1,057.6	901.1	860.6	40.47	22.266		
7,060.6	7,000.0	7,141.3	7,128.3	24.4	26.4	-134.66	-10.7	-1,051.2	892.4	851.6	40.76	21.892		
7,100.0	7,039.4	7,177.9	7,164.6	24.4	26.6	-134.68	-7.3	-1,047.2	886.7	845.8	40.94	21.657		
7,200.0	7,139.4	7,269.0	7,254.8	24.4	26.9	-134.75	0.8	-1,037.6	873.0	831.6	41.42	21.076		
7,300.0	7,239.4	7,364.6	7,349.6	24.5	27.3	-134.84	8.5	-1,027.9	860.2	818.2	41.92	20.521		
7,400.0	7,339.4	7,457.5	7,441.8	24.5	27.7	-134.92	15.8	-1,018.8	847.6	805.2	42.40	19.991		
7,500.0	7,439.4	7,560.5	7,544.0	24.6	28.1	-134.99	23.9	-1,009.4	835.6	792.7	42.91	19.472		
7,600.0	7,539.4	7,657.5	7,640.2	24.6	28.5	-135.02	32.2	-1,000.4	823.0	779.6	43.41	18.960		
7,700.0	7,639.4	7,758.1	7,740.0	24.7	28.9	-135.05	40.5	-991.4	810.8	766.9	43.91	18.464		
7,800.0	7,739.4	7,854.5	7,835.7	24.7	29.3	-135.12	48.3	-982.4	798.5	754.1	44.41	17.981		
7,900.0	7,839.4	7,945.6	7,926.2	24.8	29.6	-135.19	55.1	-974.2	786.9	742.1	44.88	17.533		
8,000.0	7,939.4	8,030.2	8,010.3	24.8	30.0	-135.26	60.6	-967.5	776.8	731.5	45.32	17.139		
8,100.0	8,039.4	8,113.6	8,093.5	24.9	30.3	-135.32	64.7	-962.2	768.7	723.0	45.74	16.806		
8,200.0	8,139.4	8,196.2	8,175.9	24.9	30.6	-135.40	67.5	-958.0	762.8	716.6	46.14	16.532		
8,300.0	8,239.4	8,283.9	8,263.5	24.9	30.9	-135.47	69.2	-955.1	759.1	712.5	46.55	16.305		
8,400.0	8,339.4	8,383.8	8,363.4	25.0	31.2	-135.53	70.9	-952.2	755.9	708.8	47.05	16.065		
8,500.0	8,439.4	8,479.9	8,459.5	25.0	31.6	-135.58	72.5	-949.8	752.9	705.3	47.52	15.844		
8,600.0	8,539.4	8,574.9	8,554.5	25.1	31.9	-135.58	74.0	-948.3	750.6	702.6	47.97	15.647		
8,700.0	8,639.4	8,672.7	8,652.2	25.1	32.2	-135.55	75.6	-947.3	748.7	700.3	48.44	15.457		
8,800.0	8,739.4	8,760.9	8,740.4	25.2	32.5	-135.47	77.1	-947.1	747.4	698.6	48.83	15.308		
8,804.4	8,743.9	8,763.9	8,743.4	25.2	32.5	-135.47	77.1	-947.1	747.4	698.6	48.83	15.305 CC, ES		
8,900.0	8,839.4	8,826.0	8,805.5	25.2	32.7	-135.54	75.6	-947.4	749.5	700.5	48.99	15.298 SF		
9,000.0	8,939.4	8,889.0	8,868.0	25.3	32.9	-135.97	68.2	-946.7	756.9	707.8	49.08	15.420		
9,100.0	9,039.4	8,940.6	8,918.2	25.3	33.1	-136.70	56.7	-944.3	769.8	720.8	48.98	15.717		
9,200.0	9,139.4	8,993.7	8,968.5	25.4	33.2	-137.77	40.1	-940.3	788.4	739.6	48.83	16.147		
9,300.0	9,239.4	9,032.4	9,003.9	25.4	33.3	-138.70	25.0	-937.0	813.6	765.3	48.36	16.823		
9,400.0	9,339.4	9,064.1	9,032.0	25.5	33.3	-139.51	10.4	-935.0	846.3	798.6	47.70	17.742		
9,500.0	9,439.4	9,094.6	9,058.1	25.5	33.4	-140.29	-5.3	-934.0	886.1	839.1	46.98	18.861		
9,600.0	9,539.4	9,124.6	9,082.9	25.6	33.4	-141.06	-22.1	-933.8	932.1	885.9	46.26	20.151		
9,700.0	9,639.4	9,153.8	9,106.2	25.6	33.4	-141.81	-39.8	-934.2	983.8	938.2	45.57	21.589		

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS 20 FED COM PROJECT - ZIA HILLS 20 FEDERAL COM #114H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 10905-r.5 MWD+IFR1+MS												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)			
11,375.0	11,314.4	13,459.2	11,742.4	26.4	16.9	94.78	648.2	-1,325.2	999.4	959.1	40.28	24.808	
11,400.0	11,339.3	13,461.7	11,742.5	26.4	16.9	95.97	645.7	-1,325.3	989.1	949.0	40.04	24.705	
11,425.0	11,364.0	13,465.4	11,742.6	26.3	16.9	96.99	642.0	-1,325.4	979.4	939.6	39.80	24.610	
11,450.0	11,388.5	13,470.3	11,742.7	26.2	17.0	97.83	637.2	-1,325.6	970.5	930.9	39.57	24.524	
11,475.0	11,412.7	13,478.0	11,743.0	26.1	17.0	98.41	629.5	-1,325.8	962.2	922.8	39.36	24.445	
11,500.0	11,436.5	13,484.3	11,743.3	26.1	17.1	98.99	623.2	-1,326.0	954.6	915.5	39.17	24.371	
11,525.0	11,459.9	13,493.6	11,743.7	26.0	17.1	99.30	613.9	-1,326.2	947.8	908.8	39.00	24.303	
11,550.0	11,482.8	13,504.1	11,744.1	25.9	17.2	99.46	603.4	-1,326.6	941.6	902.8	38.85	24.239	
11,575.0	11,505.2	13,515.6	11,744.6	25.8	17.3	99.50	591.9	-1,326.9	936.2	897.5	38.72	24.178	
11,600.0	11,526.9	13,528.3	11,745.1	25.7	17.4	99.40	579.3	-1,327.3	931.4	892.8	38.62	24.118	
11,625.0	11,548.0	13,541.9	11,745.7	25.6	17.5	99.20	565.6	-1,327.7	927.4	888.8	38.55	24.058	
11,650.0	11,568.3	13,556.6	11,746.3	25.5	17.6	98.89	551.0	-1,328.2	923.9	885.4	38.50	23.997	
11,675.0	11,587.9	13,572.3	11,746.9	25.5	17.7	98.49	535.3	-1,328.8	921.1	882.6	38.48	23.935	
11,700.0	11,606.6	13,589.4	11,747.6	25.4	17.8	98.00	518.2	-1,329.3	918.8	880.3	38.49	23.870	
11,725.0	11,624.4	13,607.4	11,748.4	25.3	18.0	97.44	500.2	-1,330.0	917.0	878.5	38.53	23.803	
11,750.0	11,641.3	13,626.3	11,749.2	25.2	18.1	96.83	481.4	-1,330.6	915.7	877.1	38.59	23.733	
11,775.0	11,657.1	13,646.0	11,750.0	25.2	18.2	96.19	461.7	-1,331.3	914.9	876.2	38.67	23.659	
11,800.0	11,672.0	13,668.4	11,751.0	25.1	18.4	95.47	439.4	-1,332.1	914.4	875.6	38.77	23.584	
11,825.0	11,685.7	13,694.5	11,751.9	25.1	18.6	94.65	413.2	-1,332.9	914.1	875.2	38.89	23.505	
11,850.0	11,698.4	13,721.2	11,752.5	25.0	18.8	93.85	386.6	-1,333.6	914.0	875.0	39.03	23.421	
11,855.8	11,701.2	13,727.5	11,752.7	25.0	18.8	93.66	380.3	-1,333.7	914.0	875.0	39.06	23.400	
11,875.0	11,709.9	13,748.3	11,752.9	25.0	19.0	93.08	359.5	-1,334.2	914.0	874.9	39.18	23.330	
11,900.0	11,720.2	13,772.1	11,753.1	24.9	19.1	92.45	335.6	-1,334.6	914.2	874.8	39.35	23.232	
11,925.0	11,729.4	13,796.3	11,753.2	24.9	19.3	91.87	311.5	-1,335.1	914.5	874.9	39.54	23.131	
11,950.0	11,737.3	13,820.9	11,753.3	24.9	19.5	91.34	286.9	-1,335.5	914.9	875.1	39.73	23.027	
11,975.0	11,743.9	13,845.5	11,753.3	24.8	19.7	90.88	262.3	-1,335.9	915.3	875.4	39.93	22.922	
12,000.0	11,749.3	13,869.5	11,753.3	24.8	19.9	90.49	238.3	-1,336.3	915.8	875.7	40.14	22.816	
12,025.0	11,753.4	13,893.8	11,753.4	24.8	20.0	90.18	214.1	-1,336.7	916.4	876.0	40.35	22.710	
12,050.0	11,756.2	13,918.2	11,753.6	24.8	20.2	89.95	189.6	-1,337.1	917.0	876.4	40.56	22.606	
12,075.0	11,757.7	13,942.3	11,753.8	24.8	20.4	89.81	165.5	-1,337.5	917.6	876.8	40.78	22.503	
12,091.0	11,758.0	13,957.6	11,754.0	24.8	20.5	89.75	150.2	-1,337.8	918.0	877.1	40.91	22.439	
12,100.0	11,758.0	13,966.1	11,754.0	24.8	20.6	89.75	141.7	-1,338.0	918.2	877.2	40.99	22.403	
12,200.0	11,758.0	14,062.3	11,754.5	24.9	21.3	89.78	45.5	-1,340.1	921.1	879.2	41.87	21.996	
12,300.0	11,758.0	14,160.8	11,755.3	25.0	22.0	89.83	-52.9	-1,342.6	924.2	881.4	42.81	21.589	
12,400.0	11,758.0	14,264.0	11,757.3	25.1	22.7	89.96	-156.1	-1,345.1	927.2	883.5	43.78	21.180	
12,500.0	11,758.0	14,367.0	11,759.4	25.2	23.5	90.09	-259.0	-1,347.1	929.8	885.0	44.80	20.757	
12,600.0	11,758.0	14,459.9	11,759.4	25.4	24.2	90.09	-351.9	-1,349.2	932.6	886.8	45.86	20.336	
12,700.0	11,758.0	14,577.0	11,760.5	25.5	25.0	90.15	-469.0	-1,351.2	935.0	888.0	46.98	19.902	
12,800.0	11,758.0	14,669.8	11,760.5	25.7	25.7	90.15	-561.7	-1,352.3	936.8	888.7	48.12	19.468	
12,900.0	11,758.0	14,768.9	11,759.0	25.9	26.5	90.07	-660.9	-1,354.1	939.3	890.0	49.31	19.050	
13,000.0	11,758.0	14,866.2	11,758.5	26.2	27.3	90.03	-778.1	-1,354.9	940.5	890.0	50.54	18.609	
13,100.0	11,758.0	14,991.4	11,758.4	26.5	28.1	90.02	-883.3	-1,354.2	940.5	888.7	51.79	18.161	
13,200.0	11,758.0	15,094.5	11,758.5	26.8	28.9	90.03	-986.4	-1,353.3	940.3	887.2	53.06	17.720	
13,300.0	11,758.0	15,202.6	11,759.3	27.1	29.7	90.08	-1,094.5	-1,351.7	939.4	885.1	54.36	17.280	
13,400.0	11,758.0	15,313.1	11,758.1	27.5	30.5	90.01	-1,204.9	-1,348.8	937.4	881.7	55.70	16.828	
13,500.0	11,758.0	15,411.7	11,755.6	27.9	31.3	89.85	-1,303.5	-1,345.9	935.1	878.0	57.06	16.387	
13,600.0	11,758.0	15,513.5	11,753.0	28.4	32.0	89.70	-1,405.2	-1,342.9	932.8	874.3	58.45	15.959	
13,700.0	11,758.0	15,615.8	11,750.8	28.8	32.8	89.56	-1,507.5	-1,339.6	930.1	870.3	59.85	15.541	
13,800.0	11,758.0	15,716.7	11,748.3	29.4	33.6	89.40	-1,608.2	-1,336.1	927.4	866.1	61.27	15.136	
13,900.0	11,758.0	15,836.9	11,746.3	29.9	34.5	89.27	-1,728.3	-1,330.9	923.7	861.0	62.71	14.729	
14,000.0	11,758.0	15,921.0	11,745.7	30.5	35.1	89.23	-1,812.3	-1,327.1	919.8	855.6	64.15	14.339	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS 20 FED COM PROJECT - ZIA HILLS 20 FEDERAL COM #114H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 10905-r.5 MWD+IFR1+MS												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)			
14,100.0	11,758.0	16,002.2	11,745.4	31.1	35.7	89.21	-1,893.4	-1,324.8	917.6	852.0	65.58	13.993	
14,200.0	11,758.0	16,110.6	11,747.0	31.7	36.5	89.31	-2,001.8	-1,322.4	915.9	848.9	67.03	13.664	
14,300.0	11,758.0	16,197.7	11,749.1	32.4	37.2	89.44	-2,088.9	-1,320.7	914.6	846.1	68.46	13.358	
14,400.0	11,758.0	16,312.8	11,752.4	33.0	38.1	89.65	-2,203.9	-1,317.9	912.7	842.8	69.94	13.050	
14,500.0	11,758.0	16,411.7	11,755.5	33.7	38.8	89.84	-2,302.7	-1,315.0	910.4	839.0	71.41	12.749	
14,600.0	11,758.0	16,505.5	11,757.7	34.4	39.5	89.98	-2,396.5	-1,312.5	908.3	835.5	72.88	12.464	
14,700.0	11,758.0	16,597.9	11,758.0	35.1	40.2	90.00	-2,488.9	-1,310.9	907.2	832.9	74.37	12.199	
14,800.0	11,758.0	16,711.2	11,758.9	35.9	41.1	90.06	-2,602.2	-1,309.0	906.2	830.3	75.91	11.939	
14,900.0	11,758.0	16,804.9	11,760.6	36.6	41.8	90.17	-2,695.8	-1,306.3	904.0	826.6	77.41	11.678	
15,000.0	11,758.0	16,910.3	11,761.6	37.4	42.6	90.23	-2,801.1	-1,303.9	902.4	823.5	78.95	11.431	
15,100.0	11,758.0	17,007.0	11,763.0	38.2	43.3	90.32	-2,897.8	-1,301.4	900.4	820.0	80.47	11.190	
15,200.0	11,758.0	17,102.7	11,764.0	38.9	44.1	90.38	-2,993.4	-1,299.3	898.9	816.9	82.00	10.962	
15,300.0	11,758.0	17,203.0	11,764.6	39.7	44.8	90.42	-3,093.7	-1,297.4	897.6	814.1	83.55	10.744	
15,400.0	11,758.0	17,303.0	11,764.6	40.5	45.6	90.43	-3,193.7	-1,295.5	896.3	811.2	85.11	10.531	
15,500.0	11,758.0	17,395.1	11,764.6	41.4	46.3	90.43	-3,285.8	-1,293.8	895.2	808.5	86.65	10.330	
15,517.5	11,758.0	17,408.7	11,764.7	41.5	46.4	90.43	-3,299.4	-1,293.7	895.1	808.2	86.92	10.299 CC	
15,600.0	11,758.0	17,475.7	11,765.2	42.2	46.9	90.46	-3,366.4	-1,294.0	895.9	807.8	88.14	10.165	
15,700.0	11,758.0	17,568.8	11,765.9	43.0	47.6	90.51	-3,459.5	-1,295.3	898.0	808.3	89.67	10.015	
15,800.0	11,758.0	17,663.3	11,766.3	43.8	48.3	90.53	-3,553.9	-1,297.6	901.1	809.8	91.21	9.879	
15,900.0	11,758.0	17,775.1	11,767.6	44.7	49.2	90.61	-3,665.7	-1,299.5	903.3	810.5	92.85	9.730	
16,000.0	11,758.0	17,874.2	11,765.3	45.5	49.9	90.46	-3,764.8	-1,300.6	905.0	810.6	94.45	9.582	
16,100.0	11,758.0	18,015.7	11,764.0	46.4	51.0	90.38	-3,906.2	-1,299.9	905.4	809.2	96.22	9.410	
16,200.0	11,758.0	18,114.1	11,766.5	47.2	51.7	90.54	-4,004.6	-1,296.3	902.4	804.6	97.80	9.227	
16,277.6	11,758.0	18,169.1	11,766.9	47.9	52.2	90.57	-4,059.5	-1,295.2	901.4	802.4	98.98	9.107	
16,300.0	11,758.0	18,183.0	11,766.8	48.1	52.3	90.56	-4,073.4	-1,295.2	901.5	802.2	99.31	9.078	
16,400.0	11,758.0	18,273.0	11,765.6	49.0	53.0	90.48	-4,163.4	-1,296.0	903.0	802.2	100.87	8.953	
16,500.0	11,758.0	18,426.5	11,766.8	49.8	54.2	90.56	-4,316.7	-1,290.3	898.8	796.1	102.71	8.751	
16,600.0	11,758.0	18,500.5	11,767.2	50.7	54.8	90.59	-4,390.7	-1,288.0	896.3	792.1	104.28	8.596	
16,632.2	11,758.0	18,523.9	11,767.2	51.0	54.9	90.59	-4,414.1	-1,287.8	896.2	791.4	104.77	8.554	
16,700.0	11,758.0	18,576.0	11,766.8	51.6	55.3	90.56	-4,466.2	-1,288.0	896.8	791.0	105.79	8.477	
16,800.0	11,758.0	18,671.1	11,764.0	52.5	56.1	90.38	-4,561.3	-1,290.0	899.5	792.1	107.40	8.375	
16,900.0	11,758.0	18,781.4	11,762.1	53.3	56.9	90.26	-4,671.5	-1,290.5	900.5	791.4	109.11	8.254	
17,000.0	11,758.0	18,856.2	11,761.6	54.2	57.5	90.23	-4,746.3	-1,291.6	902.7	792.2	110.57	8.164	
17,100.0	11,758.0	18,927.0	11,761.0	55.1	58.0	90.19	-4,817.0	-1,295.4	908.6	796.6	111.92	8.118	
17,200.0	11,758.0	18,998.0	11,761.1	56.0	58.5	90.20	-4,887.8	-1,300.2	916.3	803.2	113.15	8.098	
17,300.0	11,758.0	19,088.0	11,761.4	56.9	59.2	90.21	-4,977.3	-1,309.3	927.1	812.5	114.63	8.087	
17,400.0	11,758.0	19,155.4	11,761.4	57.8	59.7	90.21	-5,044.2	-1,318.5	941.0	825.3	115.67	8.135	
17,500.0	11,758.0	19,250.0	11,762.0	58.7	60.4	90.24	-5,137.8	-1,332.1	955.9	838.8	117.18	8.158	
17,600.0	11,758.0	19,526.7	11,764.4	59.6	62.6	90.38	-5,413.3	-1,347.0	962.1	841.3	120.73	7.969	
17,700.0	11,758.0	19,632.2	11,765.8	60.5	63.4	90.46	-5,518.6	-1,341.4	957.4	835.0	122.36	7.824	
17,800.0	11,758.0	19,736.7	11,767.8	61.4	64.2	90.59	-5,623.0	-1,336.5	953.3	829.3	123.99	7.689	
17,900.0	11,758.0	19,839.2	11,770.2	62.3	65.0	90.74	-5,725.4	-1,331.3	948.9	823.3	125.61	7.554	
18,000.0	11,758.0	19,942.0	11,773.2	63.2	65.8	90.93	-5,828.0	-1,325.8	944.2	817.0	127.23	7.421	
18,100.0	11,758.0	20,046.1	11,777.1	64.1	66.6	91.17	-5,931.8	-1,319.8	939.1	810.3	128.84	7.289	
18,200.0	11,758.0	20,140.1	11,780.5	65.0	67.3	91.38	-6,025.6	-1,314.3	934.0	803.5	130.47	7.159	
18,300.0	11,758.0	20,240.3	11,782.5	66.0	68.0	91.51	-6,125.7	-1,309.2	929.6	797.5	132.10	7.037	
18,400.0	11,758.0	20,316.9	11,783.8	66.9	68.6	91.60	-6,202.2	-1,305.6	925.7	792.0	133.74	6.922	
18,480.8	11,758.0	20,377.6	11,783.5	67.6	69.1	91.58	-6,262.8	-1,304.8	925.0	790.0	135.01	6.852	
18,500.0	11,758.0	20,395.4	11,783.3	67.8	69.2	91.57	-6,280.7	-1,304.7	925.1	789.7	135.32	6.836	
18,600.0	11,758.0	20,480.7	11,782.2	68.7	69.9	91.50	-6,366.0	-1,304.8	925.8	788.9	136.89	6.763 ES	
18,700.0	11,758.0	20,566.1	11,783.3	69.6	70.5	91.56	-6,451.3	-1,306.7	928.7	790.2	138.42	6.709	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS 20 FED COM PROJECT - ZIA HILLS 20 FEDERAL COM #114H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 10905-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)	No-Go Distance (usft)	Separation Factor	
18,800.0	11,758.0	20,672.5	11,784.5	70.5	71.3	91.63	-6,557.7	-1,309.1	931.5	791.4	140.11	6.648	
18,900.0	11,758.0	20,781.5	11,785.4	71.5	72.2	91.68	-6,666.7	-1,310.9	933.8	792.0	141.83	6.584	
19,000.0	11,758.0	20,886.6	11,786.2	72.4	72.9	91.73	-6,771.7	-1,311.5	935.1	791.6	143.52	6.515	
19,100.0	11,758.0	20,985.3	11,786.8	73.3	73.7	91.76	-6,870.5	-1,312.0	936.2	791.1	145.16	6.450	
19,200.0	11,758.0	21,087.5	11,787.5	74.2	74.5	91.80	-6,972.6	-1,312.6	937.4	790.6	146.83	6.384	
19,300.0	11,758.0	21,191.8	11,788.5	75.2	75.3	91.86	-7,076.9	-1,312.6	938.1	789.6	148.51	6.317	
19,318.1	11,758.0	21,199.0	11,788.6	75.3	75.3	91.87	-7,084.1	-1,312.6	938.2	789.5	148.73	6.308 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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS 20 FED COM PROJECT - ZIA HILLS 20 FEDERAL COM #115H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 11102-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		No-Go		Separation	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor	Warning
11,200.0	11,139.4	13,743.8	11,927.6	26.4	18.3	-90.25	607.9	-905.6	924.2	875.0	49.23	18.774	
11,300.0	11,239.4	13,745.7	11,927.6	26.5	18.4	-90.47	606.0	-905.6	840.5	791.9	48.62	17.288	
11,341.1	11,280.5	13,746.3	11,927.6	26.5	18.4	-90.54	605.4	-905.6	807.3	759.0	48.29	16.716	
11,350.0	11,289.4	13,746.6	11,927.6	26.5	18.4	91.21	605.2	-905.6	800.1	751.9	48.21	16.595	
11,375.0	11,314.4	13,749.0	11,927.6	26.4	18.4	94.80	602.7	-905.5	780.3	732.3	47.99	16.260	
11,400.0	11,339.3	13,753.6	11,927.6	26.4	18.4	97.94	598.1	-905.4	760.9	713.2	47.75	15.934	
11,425.0	11,364.0	13,760.2	11,927.7	26.3	18.5	100.64	591.5	-905.3	741.9	694.4	47.51	15.617	
11,450.0	11,388.5	13,760.6	11,927.7	26.2	18.5	103.81	591.1	-905.3	723.5	676.3	47.21	15.326	
11,475.0	11,412.7	13,767.3	11,927.7	26.1	18.5	106.06	584.4	-905.2	705.6	658.7	46.92	15.039	
11,500.0	11,436.5	13,775.2	11,927.8	26.1	18.6	107.98	576.5	-905.0	688.4	641.8	46.62	14.767	
11,525.0	11,459.9	13,784.5	11,927.8	26.0	18.6	109.58	567.2	-904.8	671.8	625.5	46.30	14.510	
11,550.0	11,482.8	13,795.0	11,927.9	25.9	18.7	110.88	556.8	-904.6	656.0	610.0	45.98	14.269	
11,575.0	11,505.2	13,806.7	11,928.0	25.8	18.8	111.92	545.1	-904.3	640.9	595.3	45.64	14.043	
11,600.0	11,526.9	13,819.6	11,928.0	25.7	18.9	112.72	532.2	-904.0	626.7	581.4	45.30	13.834	
11,625.0	11,548.0	13,833.6	11,928.1	25.6	19.0	113.30	518.2	-903.7	613.3	568.3	44.96	13.640	
11,650.0	11,568.3	13,849.1	11,928.1	25.5	19.1	113.65	502.6	-903.3	600.7	556.1	44.63	13.460	
11,675.0	11,587.9	13,866.0	11,928.2	25.5	19.2	113.82	485.8	-902.8	589.0	544.7	44.30	13.295	
11,700.0	11,606.6	13,883.9	11,928.4	25.4	19.3	113.83	467.8	-902.3	578.1	534.1	43.99	13.142	
11,725.0	11,624.4	13,903.0	11,928.5	25.3	19.4	113.72	448.8	-901.6	568.0	524.3	43.70	13.000	
11,750.0	11,641.3	13,923.0	11,928.7	25.2	19.6	113.50	428.8	-900.9	558.8	515.3	43.42	12.868	
11,775.0	11,657.1	13,943.6	11,928.9	25.2	19.7	113.22	408.2	-900.0	550.3	507.1	43.18	12.744	
11,800.0	11,672.0	13,965.1	11,929.2	25.1	19.9	112.89	386.7	-899.0	542.5	499.5	42.97	12.626	
11,825.0	11,685.7	13,987.5	11,929.5	25.1	20.0	112.52	364.4	-897.9	535.5	492.7	42.79	12.513	
11,850.0	11,698.4	14,010.6	11,930.0	25.0	20.2	112.14	341.3	-896.6	529.1	486.4	42.65	12.404	
11,875.0	11,709.9	14,031.2	11,930.5	25.0	20.4	111.90	320.8	-895.4	523.3	480.8	42.55	12.299	
11,900.0	11,720.2	14,050.2	11,930.7	24.9	20.5	111.71	301.7	-894.6	518.3	475.9	42.48	12.203	
11,925.0	11,729.4	14,069.6	11,930.9	24.9	20.7	111.47	282.4	-893.9	514.2	471.7	42.44	12.116	
11,950.0	11,737.3	14,089.2	11,930.8	24.9	20.8	111.21	262.8	-893.5	510.8	468.3	42.43	12.039	
11,975.0	11,743.9	14,109.0	11,930.6	24.8	21.0	110.93	243.0	-893.3	508.1	465.7	42.44	11.971	
12,000.0	11,749.3	14,131.1	11,930.1	24.8	21.1	110.60	220.9	-893.3	506.1	463.7	42.49	11.913	
12,025.0	11,753.4	14,153.3	11,929.5	24.8	21.3	110.29	198.7	-893.5	504.8	462.2	42.55	11.862	
12,050.0	11,756.2	14,175.6	11,928.7	24.8	21.4	110.00	176.4	-893.9	504.0	461.4	42.65	11.818	
12,069.4	11,757.5	14,193.0	11,927.9	24.8	21.6	109.80	159.0	-894.3	503.9	461.1	42.74	11.789 CC	
12,075.0	11,757.7	14,200.0	11,927.6	24.8	21.6	109.72	152.0	-894.5	503.9	461.1	42.77	11.781	
12,091.0	11,758.0	14,214.6	11,926.9	24.8	21.7	109.58	137.4	-894.9	504.1	461.2	42.86	11.761	
12,100.0	11,758.0	14,224.0	11,926.4	24.8	21.8	109.52	128.0	-895.2	504.2	461.3	42.91	11.750	
12,200.0	11,758.0	14,325.3	11,921.0	24.9	22.5	108.83	27.0	-897.6	505.3	461.8	43.55	11.603	
12,300.0	11,758.0	14,415.6	11,916.1	25.0	23.1	108.17	-63.1	-900.6	507.3	463.1	44.22	11.472	
12,400.0	11,758.0	14,501.9	11,913.0	25.1	23.7	107.65	-149.3	-905.3	512.0	467.1	44.93	11.395	
12,500.0	11,758.0	14,597.0	11,910.1	25.2	24.4	107.09	-244.0	-912.3	518.7	472.9	45.73	11.342	
12,600.0	11,758.0	14,699.7	11,907.4	25.4	25.1	106.57	-346.4	-919.4	525.1	478.5	46.63	11.262	
12,700.0	11,758.0	14,812.6	11,908.5	25.5	25.9	106.49	-459.2	-924.8	530.7	483.0	47.72	11.122	
12,800.0	11,758.0	14,930.6	11,914.2	25.7	26.8	107.06	-577.1	-924.9	532.8	483.8	48.94	10.887	
12,900.0	11,758.0	15,027.3	11,920.1	25.9	27.5	107.69	-673.6	-923.4	533.6	483.6	50.05	10.663	
13,000.0	11,758.0	15,123.5	11,926.9	26.2	28.2	108.40	-769.6	-922.2	535.3	484.1	51.18	10.459	
13,100.0	11,758.0	15,228.4	11,934.4	26.5	28.9	109.20	-874.2	-920.5	536.6	484.2	52.42	10.236	
13,200.0	11,758.0	15,328.8	11,938.5	26.8	29.7	109.62	-974.4	-919.4	537.6	483.9	53.62	10.025	
13,300.0	11,758.0	15,427.4	11,940.4	27.1	30.4	109.80	-1,073.0	-919.2	538.6	483.8	54.81	9.828	
13,400.0	11,758.0	15,534.1	11,942.4	27.5	31.2	109.99	-1,179.7	-918.9	539.5	483.4	56.10	9.617	
13,500.0	11,758.0	15,639.8	11,943.0	27.9	32.0	110.09	-1,285.4	-917.2	538.8	481.4	57.40	9.387	
13,600.0	11,758.0	15,762.2	11,943.7	28.4	32.9	110.31	-1,407.7	-912.1	535.7	476.8	58.91	9.094	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS 20 FED COM PROJECT - ZIA HILLS 20 FEDERAL COM #115H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 11102-r.5 MWD+IFR1+MS												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
13,700.0	11,758.0	15,864.4	11,943.1	28.8	33.7	110.50	-1,509.6	-904.7	529.3	469.0	60.24	8.787	
13,800.0	11,758.0	15,948.3	11,945.1	29.4	34.3	110.87	-1,593.3	-900.0	525.4	463.9	61.43	8.552	
13,900.0	11,758.0	16,045.5	11,944.6	29.9	35.0	110.89	-1,690.5	-897.4	523.3	460.5	62.74	8.341	
14,000.0	11,758.0	16,145.7	11,937.8	30.5	35.7	110.20	-1,790.5	-896.8	520.9	456.9	64.03	8.135	
14,100.0	11,758.0	16,235.2	11,932.8	31.1	36.4	109.66	-1,879.8	-896.7	519.6	454.3	65.24	7.964	
14,104.4	11,758.0	16,238.9	11,932.6	31.1	36.4	109.64	-1,883.5	-896.8	519.6	454.3	65.29	7.958	
14,200.0	11,758.0	16,320.8	11,930.1	31.7	37.0	109.30	-1,965.4	-898.4	520.9	454.5	66.39	7.846	
14,300.0	11,758.0	16,412.6	11,928.7	32.4	37.7	109.00	-2,057.1	-902.0	524.7	457.0	67.64	7.757	
14,400.0	11,758.0	16,510.9	11,926.8	33.0	38.4	108.63	-2,155.2	-906.6	529.1	460.1	69.00	7.669	
14,500.0	11,758.0	16,613.4	11,925.4	33.7	39.2	108.30	-2,257.7	-911.3	533.6	463.2	70.45	7.575	
14,600.0	11,758.0	16,722.6	11,924.1	34.4	40.0	108.02	-2,366.7	-914.9	536.9	464.9	72.02	7.456	
14,700.0	11,758.0	16,817.6	11,924.5	35.1	40.7	107.98	-2,461.7	-916.8	539.7	466.3	73.38	7.354	
14,800.0	11,758.0	16,916.5	11,927.3	35.9	41.4	108.18	-2,560.5	-918.9	543.1	468.3	74.81	7.260	
14,900.0	11,758.0	17,014.0	11,930.7	36.6	42.2	108.43	-2,657.9	-920.9	546.8	470.5	76.22	7.173	
15,000.0	11,758.0	17,107.8	11,932.3	37.4	42.9	108.45	-2,751.7	-924.5	551.5	473.9	77.58	7.109	
15,100.0	11,758.0	17,226.3	11,932.4	38.2	43.7	108.32	-2,870.1	-928.1	555.0	475.6	79.38	6.992	
15,200.0	11,758.0	17,337.8	11,933.1	38.9	44.6	108.38	-2,981.7	-927.5	555.3	474.2	81.04	6.852	
15,300.0	11,758.0	17,437.8	11,934.1	39.7	45.3	108.51	-3,081.6	-926.1	554.8	472.3	82.53	6.722	
15,392.6	11,758.0	17,528.4	11,934.8	40.5	46.0	108.60	-3,172.2	-925.1	554.6	470.7	83.90	6.611	
15,400.0	11,758.0	17,535.7	11,934.9	40.5	46.1	108.60	-3,179.5	-925.0	554.6	470.6	84.01	6.602	
15,500.0	11,758.0	17,636.7	11,935.0	41.4	46.8	108.61	-3,280.5	-924.3	554.6	469.1	85.54	6.484	
15,514.4	11,758.0	17,648.8	11,934.9	41.5	46.9	108.60	-3,292.6	-924.3	554.6	468.9	85.72	6.470	
15,600.0	11,758.0	17,718.6	11,934.3	42.2	47.4	108.50	-3,362.4	-925.3	556.1	469.3	86.78	6.408	
15,700.0	11,758.0	17,818.0	11,933.4	43.0	48.2	108.29	-3,461.7	-928.5	559.4	471.1	88.30	6.335	
15,800.0	11,758.0	17,927.8	11,932.7	43.8	49.0	108.13	-3,571.5	-930.5	561.5	471.5	90.01	6.238	
15,900.0	11,758.0	18,025.0	11,934.3	44.7	49.7	108.25	-3,668.7	-931.2	563.3	471.8	91.49	6.157	
16,000.0	11,758.0	18,127.8	11,935.7	45.5	50.5	108.33	-3,771.4	-932.0	565.1	472.0	93.08	6.072	
16,100.0	11,758.0	18,230.6	11,937.2	46.4	51.3	108.46	-3,874.3	-932.0	566.1	471.5	94.66	5.980	
16,200.0	11,758.0	18,332.0	11,942.0	47.2	52.0	108.94	-3,975.5	-930.7	567.1	470.8	96.22	5.894	
16,300.0	11,758.0	18,434.3	11,952.1	48.1	52.8	110.00	-4,077.3	-927.1	567.6	469.9	97.75	5.807	
16,400.0	11,758.0	18,549.7	11,962.4	49.0	53.7	111.14	-4,192.0	-921.7	567.0	467.5	99.49	5.699	
16,500.0	11,758.0	18,658.1	11,966.8	49.8	54.5	111.75	-4,300.2	-915.9	564.1	462.9	101.14	5.577	
16,600.0	11,758.0	18,764.7	11,966.5	50.7	55.3	111.90	-4,406.6	-910.4	559.8	457.0	102.77	5.447	
16,700.0	11,758.0	18,867.3	11,964.5	51.6	56.1	111.90	-4,509.0	-904.9	554.6	450.2	104.36	5.314	
16,800.0	11,758.0	18,953.7	11,964.2	52.5	56.8	112.03	-4,595.3	-900.2	550.0	444.2	105.79	5.199	
16,900.0	11,758.0	19,041.8	11,962.7	53.3	57.4	111.90	-4,683.4	-899.0	548.7	441.5	107.20	5.118	
17,000.0	11,758.0	19,141.7	11,959.6	54.2	58.2	111.59	-4,783.3	-898.9	548.0	439.2	108.80	5.037	
17,100.0	11,758.0	19,240.8	11,956.4	55.1	58.9	111.25	-4,882.4	-898.8	547.4	437.0	110.38	4.959	
17,129.0	11,758.0	19,267.0	11,955.3	55.4	59.1	111.14	-4,908.5	-899.0	547.2	436.4	110.80	4.939	
17,200.0	11,758.0	19,315.4	11,953.4	56.0	59.5	110.88	-4,956.8	-900.4	548.6	437.1	111.49	4.920	
17,300.0	11,758.0	19,396.3	11,951.7	56.9	60.2	110.48	-5,037.5	-906.5	555.3	442.7	112.62	4.931	
17,400.0	11,758.0	19,499.2	11,957.1	57.8	60.9	110.79	-5,140.1	-911.6	562.4	448.1	114.27	4.922	
17,500.0	11,758.0	19,638.3	11,965.8	58.7	62.0	111.48	-5,278.8	-914.3	567.4	450.7	116.74	4.861	
17,600.0	11,758.0	19,747.9	11,967.7	59.6	62.8	111.73	-5,388.4	-911.8	566.6	448.1	118.48	4.782	
17,700.0	11,758.0	19,839.3	11,965.9	60.5	63.5	111.57	-5,479.7	-910.9	565.5	445.5	119.95	4.714	
17,704.4	11,758.0	19,842.9	11,965.8	60.5	63.6	111.56	-5,483.4	-910.9	565.5	445.5	120.01	4.712	
17,800.0	11,758.0	19,927.3	11,961.7	61.4	64.2	111.07	-5,567.6	-913.4	566.9	445.6	121.37	4.671	
17,900.0	11,758.0	20,035.4	11,960.2	62.3	65.0	110.84	-5,675.7	-914.9	568.3	445.2	123.16	4.614	
18,000.0	11,758.0	20,137.5	11,962.3	63.2	65.8	111.06	-5,777.7	-913.8	568.6	443.8	124.79	4.557	
18,100.0	11,758.0	20,233.6	11,964.0	64.1	66.5	111.22	-5,873.8	-913.2	569.2	442.9	126.31	4.507	
18,200.0	11,758.0	20,328.5	11,964.1	65.0	67.2	111.18	-5,968.7	-914.0	570.7	442.9	127.82	4.465	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS 20 FED COM PROJECT - ZIA HILLS 20 FEDERAL COM #115H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 SDI_KPR_WL_NS-CT, 11102-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)		No-Go Distance (usft)	Separation Factor
18,300.0	11,758.0	20,413.8	11,963.1	66.0	67.9	110.98	-6,053.9	-916.5	573.7	444.6		129.11	4.443
18,400.0	11,758.0	20,503.9	11,962.1	66.9	68.5	110.68	-6,143.9	-921.8	579.3	448.8		130.49	4.439
18,500.0	11,758.0	20,631.4	11,969.1	67.8	69.5	111.19	-6,271.1	-924.5	584.0	451.2		132.74	4.399
18,600.0	11,758.0	20,764.0	11,976.0	68.7	70.5	112.02	-6,403.3	-918.3	582.0	447.2		134.77	4.318
18,700.0	11,758.0	20,861.4	11,975.2	69.6	71.3	112.10	-6,500.7	-913.4	577.6	441.2		136.37	4.236
18,800.0	11,758.0	20,987.0	11,980.0	70.5	72.3	112.87	-6,625.8	-904.1	573.0	434.9		138.09	4.150
18,900.0	11,758.0	21,083.3	11,981.5	71.5	73.0	113.36	-6,721.6	-894.8	565.3	425.6		139.66	4.048
19,000.0	11,758.0	21,179.5	11,984.2	72.4	73.7	113.96	-6,817.3	-885.6	558.3	417.0		141.22	3.953
19,100.0	11,758.0	21,281.2	11,985.1	73.3	74.5	114.40	-6,918.6	-876.7	551.2	408.4		142.81	3.860
19,200.0	11,758.0	21,378.7	11,983.7	74.2	75.3	114.55	-7,015.9	-869.4	544.4	400.0		144.41	3.770
19,300.0	11,758.0	21,460.0	11,982.2	75.2	75.9	114.65	-7,096.9	-863.6	537.9	392.1		145.84	3.688
19,317.6	11,758.0	21,460.0	11,982.2	75.3	75.9	114.65	-7,096.9	-863.6	537.6	391.8		145.82	3.687 ES, SF
19,318.1	11,758.0	21,460.0	11,982.2	75.3	75.9	114.65	-7,096.9	-863.6	537.6	391.8		145.82	3.687

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2032 PROJECT (S TO N) - BUCK 20 FEDERAL #1H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-GYD-CT-CMS, 8329-MWD - OWSG R1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
8,500.0	8,439.4	13,905.0	9,248.7	25.0	85.0	-72.13	780.3	-951.0	981.2	898.2	82.98	11.824	
8,600.0	8,539.4	13,905.0	9,248.7	25.1	85.0	-72.13	780.3	-951.0	900.5	813.9	86.55	10.405	
8,700.0	8,639.4	13,905.0	9,248.7	25.1	85.0	-72.13	780.3	-951.0	824.0	733.3	90.74	9.081	
8,800.0	8,739.4	13,905.0	9,248.7	25.2	85.0	-72.13	780.3	-951.0	753.1	657.5	95.57	7.880	
8,900.0	8,839.4	13,905.0	9,248.7	25.2	85.0	-72.13	780.3	-951.0	689.4	588.5	100.94	6.830	
9,000.0	8,939.4	13,905.0	9,248.7	25.3	85.0	-72.13	780.3	-951.0	635.2	528.6	106.56	5.961	
9,100.0	9,039.4	13,905.0	9,248.7	25.3	85.0	-72.13	780.3	-951.0	592.9	481.2	111.79	5.304	
9,200.0	9,139.4	13,905.0	9,248.7	25.4	85.0	-72.13	780.3	-951.0	565.4	449.7	115.75	4.885	
9,300.0	9,239.4	13,905.0	9,248.7	25.4	85.0	-72.13	780.3	-951.0	554.9	437.3	117.52	4.722	
9,309.3	9,248.7	13,905.0	9,248.7	25.4	85.0	-72.13	780.3	-951.0	554.8	437.2	117.55	4.720 CC, ES, SF	
9,400.0	9,339.4	13,905.0	9,248.7	25.5	85.0	-72.13	780.3	-951.0	562.2	445.5	116.62	4.820	
9,500.0	9,439.4	13,905.0	9,248.7	25.5	85.0	-72.13	780.3	-951.0	586.7	473.3	113.39	5.174	
9,600.0	9,539.4	13,905.0	9,248.7	25.6	85.0	-72.13	780.3	-951.0	626.3	517.7	108.67	5.764	
9,700.0	9,639.4	13,905.0	9,248.7	25.6	85.0	-72.13	780.3	-951.0	678.6	575.2	103.40	6.563	
9,800.0	9,739.4	13,905.0	9,248.7	25.7	85.0	-72.13	780.3	-951.0	740.7	642.4	98.26	7.538	
9,900.0	9,839.4	13,905.0	9,248.7	25.7	85.0	-72.13	780.3	-951.0	810.4	716.8	93.61	8.657	
10,000.0	9,939.4	13,905.0	9,248.7	25.8	85.0	-72.13	780.3	-951.0	885.9	796.3	89.59	9.888	
10,100.0	10,039.4	13,905.0	9,248.7	25.9	85.0	-72.13	780.3	-951.0	965.9	879.7	86.21	11.205	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 702H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-r.5 MWD+IFR1		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:			Offset Well Error: 3.0 usft		
Measured Depth (usft)	Reference Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
0.0	0.0	0.6	0.0	3.0	3.0	89.66	0.1	20.0	20.0					
100.0	100.0	100.6	100.0	3.1	3.1	89.66	0.1	20.0	20.0	13.4	6.62	3.021		
200.0	200.0	200.6	200.0	3.3	3.3	89.66	0.1	20.0	20.0	12.9	7.07	2.828	Normal Operations	
300.0	300.0	300.6	300.0	3.6	3.6	89.66	0.1	20.0	20.0	12.5	7.50	2.667	Normal Operations	
400.0	400.0	400.6	400.0	3.8	3.8	89.66	0.1	20.0	20.0	12.1	7.90	2.531	Normal Operations	
500.0	500.0	500.6	500.0	4.0	4.0	89.66	0.1	20.0	20.0	11.7	8.29	2.413	Caution - Monitor Closely	
600.0	600.0	600.6	600.0	4.1	4.1	89.66	0.1	20.0	20.0	11.3	8.66	2.309	Caution - Monitor Closely	
700.0	700.0	700.6	700.0	4.3	4.3	89.66	0.1	20.0	20.0	11.0	9.02	2.217	Caution - Monitor Closely	
800.0	800.0	800.6	800.0	4.5	4.5	89.66	0.1	20.0	20.0	10.6	9.37	2.135	Caution - Monitor Closely	
900.0	900.0	900.6	900.0	4.7	4.7	89.66	0.1	20.0	20.0	10.3	9.70	2.061	Caution - Monitor Closely	
1,000.0	1,000.0	1,000.6	1,000.0	4.8	4.8	89.66	0.1	20.0	20.0	10.0	10.03	1.994	Caution - Monitor Closely	
1,100.0	1,100.0	1,100.6	1,100.0	5.0	5.0	89.66	0.1	20.0	20.0	9.6	10.35	1.932	Caution - Monitor Closely	
1,200.0	1,200.0	1,200.6	1,200.0	5.2	5.2	89.66	0.1	20.0	20.0	9.3	10.66	1.876	Caution - Monitor Closely	
1,300.0	1,300.0	1,300.6	1,300.0	5.3	5.3	89.66	0.1	20.0	20.0	9.0	10.97	1.824	Caution - Monitor Closely	
1,400.0	1,400.0	1,400.6	1,400.0	5.5	5.5	89.66	0.1	20.0	20.0	8.7	11.27	1.775	Caution - Monitor Closely	
1,500.0	1,500.0	1,500.6	1,500.0	5.6	5.6	89.66	0.1	20.0	20.0	8.4	11.56	1.730	Caution - Monitor Closely	
1,600.0	1,600.0	1,600.6	1,600.0	5.8	5.8	89.66	0.1	20.0	20.0	8.2	11.85	1.688	Caution - Monitor Closely	
1,700.0	1,700.0	1,700.6	1,700.0	5.9	5.9	89.66	0.1	20.0	20.0	7.9	12.13	1.649	Caution - Monitor Closely	
1,800.0	1,800.0	1,800.6	1,800.0	6.0	6.0	89.66	0.1	20.0	20.0	7.6	12.41	1.612	Caution - Monitor Closely	
1,900.0	1,900.0	1,900.6	1,900.0	6.2	6.2	89.66	0.1	20.0	20.0	7.3	12.68	1.577	Caution - Monitor Closely	
2,000.0	2,000.0	2,000.6	2,000.0	6.3	6.3	89.66	0.1	20.0	20.0	7.0	12.95	1.544	Caution - Monitor Closely, CC	
2,004.4	2,004.4	2,005.1	2,004.5	6.3	6.3	124.39	0.1	20.0	20.0	7.0	12.97	1.543	Caution - Monitor Closely, ES, SF	
2,100.0	2,100.0	2,100.6	2,100.0	6.5	6.5	123.49	1.9	20.0	21.0	7.7	13.24	1.585	Caution - Monitor Closely	
2,200.0	2,199.8	2,200.5	2,199.8	6.8	6.8	121.32	7.1	19.9	24.0	10.4	13.52	1.772	Caution - Monitor Closely	
2,300.0	2,299.5	2,300.3	2,299.2	7.0	7.0	118.71	15.8	19.9	29.0	15.2	13.79	2.100	Caution - Monitor Closely	
2,400.0	2,398.7	2,400.0	2,398.1	7.2	7.2	116.28	28.0	19.8	36.0	22.0	14.06	2.562	Normal Operations	
2,494.7	2,492.2	2,494.1	2,491.2	7.5	7.4	115.09	42.1	19.7	44.5	30.3	14.26	3.122		
2,500.0	2,497.5	2,499.4	2,496.4	7.5	7.4	115.13	42.9	19.7	45.0	30.8	14.27	3.156		
2,600.0	2,596.0	2,599.0	2,594.8	7.8	7.6	115.73	58.0	19.5	54.7	40.1	14.68	3.729		
2,700.0	2,694.5	2,698.5	2,693.2	8.1	7.9	116.14	73.0	19.4	64.4	49.5	14.96	4.309		
2,800.0	2,793.0	2,798.0	2,791.6	8.3	8.1	116.45	88.1	19.3	74.2	58.9	15.24	4.865		
2,900.0	2,891.5	2,897.6	2,889.9	8.6	8.4	116.68	103.2	19.2	83.9	68.3	15.54	5.398		
3,000.0	2,990.0	2,997.1	2,988.3	8.9	8.7	116.87	118.3	19.0	93.6	77.7	15.84	5.909		
3,100.0	3,088.5	3,096.6	3,086.7	9.2	9.0	117.02	133.4	18.9	103.3	87.2	16.14	6.399		
3,200.0	3,187.1	3,196.1	3,185.1	9.5	9.3	117.15	148.5	18.8	113.0	96.6	16.45	6.869		
3,300.0	3,285.6	3,295.7	3,283.4	9.8	9.6	117.25	163.6	18.7	122.7	106.0	16.77	7.320		
3,400.0	3,384.1	3,395.2	3,381.8	10.2	10.0	117.34	178.7	18.6	132.4	115.4	17.09	7.751		
3,500.0	3,482.6	3,494.7	3,480.2	10.5	10.3	117.42	193.8	18.4	142.2	124.8	17.41	8.164		
3,600.0	3,581.1	3,594.2	3,578.6	10.9	10.6	117.49	208.9	18.3	151.9	134.1	17.74	8.561		
3,700.0	3,679.6	3,693.8	3,676.9	11.2	11.0	117.55	224.0	18.2	161.6	143.5	18.08	8.940		
3,800.0	3,778.1	3,793.3	3,775.3	11.6	11.4	117.60	239.1	18.1	171.3	152.9	18.41	9.304		
3,900.0	3,876.6	3,892.8	3,873.7	12.0	11.7	117.65	254.2	17.9	181.0	162.3	18.75	9.653		
4,000.0	3,975.2	3,992.3	3,972.1	12.3	12.1	117.69	269.3	17.8	190.8	171.7	19.10	9.988		
4,100.0	4,073.7	4,091.9	4,070.4	12.7	12.5	117.73	284.4	17.7	200.5	181.0	19.45	10.309		
4,200.0	4,172.2	4,191.4	4,168.8	13.1	12.8	117.77	299.5	17.6	210.2	190.4	19.80	10.618		
4,300.0	4,270.7	4,290.9	4,267.2	13.5	13.2	117.80	314.6	17.5	219.9	199.8	20.15	10.914		
4,400.0	4,369.2	4,390.5	4,365.6	13.9	13.6	117.83	329.7	17.3	229.6	209.1	20.51	11.198		
4,500.0	4,467.7	4,490.0	4,463.9	14.3	14.0	117.85	344.8	17.2	239.3	218.5	20.87	11.471		
4,600.0	4,566.2	4,589.5	4,562.3	14.7	14.4	117.88	359.9	17.1	249.1	227.8	21.23	11.733		
4,700.0	4,664.8	4,689.0	4,660.7	15.1	14.8	117.90	375.0	17.0	258.8	237.2	21.59	11.986		
4,800.0	4,763.3	4,788.6	4,759.1	15.5	15.2	117.92	390.1	16.9	268.5	246.5	21.96	12.228		

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,900.0	4,861.8	4,888.1	4,857.4	15.9	15.6	117.94	405.2	16.7	278.2	255.9	22.33	12.462	
5,000.0	4,960.3	4,987.6	4,955.8	16.3	16.0	117.96	420.3	16.6	287.9	265.2	22.70	12.687	
5,100.0	5,058.8	5,087.1	5,054.2	16.8	16.4	117.98	435.4	16.5	297.7	274.6	23.07	12.903	
5,200.0	5,157.3	5,186.7	5,152.6	17.2	16.8	117.99	450.5	16.4	307.4	283.9	23.44	13.112	
5,300.0	5,255.8	5,286.2	5,250.9	17.6	17.2	118.01	465.6	16.2	317.1	293.3	23.82	13.313	
5,400.0	5,354.3	5,385.7	5,349.3	18.0	17.6	118.02	480.6	16.1	326.8	302.6	24.20	13.507	
5,500.0	5,452.9	5,485.2	5,447.7	18.4	18.0	118.03	495.7	16.0	336.5	312.0	24.58	13.694	
5,600.0	5,551.4	5,584.8	5,546.1	18.9	18.4	118.05	510.8	15.9	346.3	321.3	24.96	13.875	
5,700.0	5,649.9	5,684.3	5,644.4	19.3	18.8	118.06	525.9	15.8	356.0	330.6	25.34	14.049	
5,800.0	5,748.4	5,783.8	5,742.8	19.7	19.3	118.07	541.0	15.6	365.7	340.0	25.72	14.217	
5,900.0	5,846.9	5,883.4	5,841.2	20.1	19.7	118.08	556.1	15.5	375.4	349.3	26.11	14.380	
6,000.0	5,945.4	5,982.9	5,939.6	20.6	20.1	118.09	571.2	15.4	385.1	358.6	26.49	14.537	
6,071.2	6,015.6	6,053.7	6,009.6	20.9	20.4	118.10	582.0	15.3	392.1	365.3	26.75	14.654	
6,100.0	6,043.9	6,082.4	6,037.9	21.0	20.5	118.12	586.3	15.3	394.8	368.0	26.85	14.703	
6,200.0	6,142.7	6,182.0	6,136.4	21.4	20.9	118.03	601.4	15.1	403.9	376.7	27.22	14.840	
6,300.0	6,241.7	6,281.6	6,234.8	21.8	21.4	117.74	616.5	15.0	412.2	384.6	27.54	14.964	
6,400.0	6,340.9	6,381.2	6,333.3	22.2	21.8	117.23	631.6	14.9	419.6	391.8	27.84	15.075	
6,500.0	6,440.3	6,480.9	6,431.8	22.6	22.2	116.54	646.8	14.8	426.4	398.3	28.10	15.174	
6,600.0	6,539.9	6,580.4	6,530.2	23.0	22.6	115.65	661.9	14.7	432.5	404.1	28.34	15.262	
6,700.0	6,639.7	6,679.9	6,628.5	23.4	23.0	114.58	676.9	14.5	437.9	409.4	28.54	15.344	
6,800.0	6,739.5	6,780.7	6,728.3	23.7	23.5	113.42	691.4	14.4	442.7	413.9	28.75	15.397	
6,900.0	6,839.5	6,881.8	6,828.6	24.0	23.9	112.28	704.1	14.3	446.6	417.6	28.97	15.418	
7,000.0	6,939.5	6,983.1	6,929.3	24.3	24.3	111.17	715.1	14.2	449.7	420.5	29.18	15.413	
7,060.6	7,000.0	7,044.5	6,990.4	24.4	24.5	75.77	720.9	14.2	451.1	421.8	29.28	15.409	
7,100.0	7,039.4	7,084.6	7,030.4	24.4	24.7	75.35	724.3	14.2	451.9	422.6	29.33	15.406	
7,200.0	7,139.4	7,186.4	7,131.9	24.4	25.0	74.44	731.7	14.1	453.8	424.3	29.53	15.367	
7,300.0	7,239.4	7,288.4	7,233.7	24.5	25.4	73.75	737.4	14.0	455.3	425.5	29.73	15.311	
7,400.0	7,339.4	7,390.6	7,335.8	24.5	25.7	73.29	741.2	14.0	456.3	426.4	29.94	15.241	
7,500.0	7,439.4	7,492.8	7,438.1	24.6	26.0	73.05	743.2	14.0	456.9	426.7	30.13	15.162	
7,600.0	7,539.4	7,594.2	7,539.4	24.6	26.1	73.01	743.5	14.0	456.9	426.7	30.27	15.098	
7,700.0	7,639.4	7,694.2	7,639.4	24.7	26.1	73.01	743.5	14.0	456.9	426.5	30.41	15.024	
7,800.0	7,739.4	7,794.2	7,739.4	24.7	26.2	73.01	743.5	14.0	456.9	426.4	30.56	14.951	
7,900.0	7,839.4	7,894.2	7,839.4	24.8	26.2	73.01	743.5	14.0	456.9	426.2	30.71	14.878	
8,000.0	7,939.4	7,994.2	7,939.4	24.8	26.3	73.01	743.5	14.0	456.9	426.1	30.86	14.806	
8,100.0	8,039.4	8,094.2	8,039.4	24.9	26.3	73.01	743.5	14.0	456.9	425.9	31.01	14.735	
8,200.0	8,139.4	8,194.2	8,139.4	24.9	26.4	73.01	743.5	14.0	456.9	425.8	31.16	14.664	
8,300.0	8,239.4	8,294.2	8,239.4	24.9	26.4	73.01	743.5	14.0	456.9	425.6	31.31	14.594	
8,400.0	8,339.4	8,394.2	8,339.4	25.0	26.5	73.01	743.5	14.0	456.9	425.5	31.46	14.524	
8,500.0	8,439.4	8,494.2	8,439.4	25.0	26.5	73.01	743.5	14.0	456.9	425.3	31.61	14.455	
8,600.0	8,539.4	8,594.2	8,539.4	25.1	26.6	73.01	743.5	14.0	456.9	425.2	31.76	14.387	
8,700.0	8,639.4	8,694.2	8,639.4	25.1	26.6	73.01	743.5	14.0	456.9	425.0	31.91	14.319	
8,800.0	8,739.4	8,794.2	8,739.4	25.2	26.7	73.01	743.5	14.0	456.9	424.9	32.06	14.252	
8,900.0	8,839.4	8,894.2	8,839.4	25.2	26.7	73.01	743.5	14.0	456.9	424.7	32.21	14.185	
9,000.0	8,939.4	8,994.2	8,939.4	25.3	26.7	73.01	743.5	14.0	456.9	424.6	32.36	14.119	
9,100.0	9,039.4	9,094.2	9,039.4	25.3	26.8	73.01	743.5	14.0	456.9	424.4	32.51	14.054	
9,200.0	9,139.4	9,194.2	9,139.4	25.4	26.8	73.01	743.5	14.0	456.9	424.3	32.66	13.989	
9,300.0	9,239.4	9,294.2	9,239.4	25.4	26.9	73.01	743.5	14.0	456.9	424.1	32.82	13.924	
9,400.0	9,339.4	9,394.2	9,339.4	25.5	26.9	73.01	743.5	14.0	456.9	424.0	32.97	13.861	
9,500.0	9,439.4	9,494.2	9,439.4	25.5	27.0	73.01	743.5	14.0	456.9	423.8	33.12	13.797	
9,600.0	9,539.4	9,594.2	9,539.4	25.6	27.0	73.01	743.5	14.0	456.9	423.7	33.27	13.735	
9,700.0	9,639.4	9,694.2	9,639.4	25.6	27.1	73.01	743.5	14.0	456.9	423.5	33.42	13.672	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
9,800.0	9,739.4	9,794.2	9,739.4	25.7	27.1	73.01	743.5	14.0	456.9	423.4	33.57	13.611	
9,900.0	9,839.4	9,894.2	9,839.4	25.7	27.2	73.01	743.5	14.0	456.9	423.2	33.72	13.550	
10,000.0	9,939.4	9,994.2	9,939.4	25.8	27.3	73.01	743.5	14.0	456.9	423.1	33.88	13.489	
10,100.0	10,039.4	10,094.2	10,039.4	25.9	27.3	73.01	743.5	14.0	456.9	422.9	34.03	13.429	
10,200.0	10,139.4	10,194.2	10,139.4	25.9	27.4	73.01	743.5	14.0	456.9	422.8	34.18	13.369	
10,300.0	10,239.4	10,294.2	10,239.4	26.0	27.4	73.01	743.5	14.0	456.9	422.6	34.33	13.310	
10,400.0	10,339.4	10,394.2	10,339.4	26.0	27.5	73.01	743.5	14.0	456.9	422.5	34.48	13.252	
10,500.0	10,439.4	10,494.2	10,439.4	26.1	27.5	73.01	743.5	14.0	456.9	422.3	34.63	13.193	
10,600.0	10,539.4	10,594.2	10,539.4	26.1	27.6	73.01	743.5	14.0	456.9	422.2	34.79	13.136	
10,700.0	10,639.4	10,694.2	10,639.4	26.2	27.6	73.01	743.5	14.0	456.9	422.0	34.94	13.078	
10,800.0	10,739.4	10,794.2	10,739.4	26.2	27.7	73.01	743.5	14.0	456.9	421.9	35.09	13.022	
10,900.0	10,839.4	10,894.2	10,839.4	26.3	27.7	73.01	743.5	14.0	456.9	421.7	35.24	12.965	
11,000.0	10,939.4	10,994.2	10,939.4	26.3	27.8	73.01	743.5	14.0	456.9	421.5	35.40	12.910	
11,100.0	11,039.4	11,094.2	11,039.4	26.4	27.8	73.01	743.5	14.0	456.9	421.4	35.55	12.854	
11,200.0	11,139.4	11,194.2	11,139.4	26.4	27.9	73.01	743.5	14.0	456.9	421.2	35.70	12.799	
11,300.0	11,239.4	11,294.2	11,239.4	26.5	27.9	73.01	743.5	14.0	456.9	421.1	35.85	12.745	
11,341.1	11,280.5	11,335.3	11,280.5	26.5	27.9	73.01	743.5	14.0	456.9	421.0	35.90	12.726	
11,350.0	11,289.4	11,344.2	11,289.4	26.5	28.0	-106.64	743.5	14.0	457.0	421.1	35.91	12.724	
11,375.0	11,314.4	11,369.2	11,314.4	26.4	28.0	-106.74	743.5	14.0	457.3	421.4	35.94	12.724	
11,400.0	11,339.3	11,394.1	11,339.3	26.4	28.0	-106.95	743.5	14.0	458.0	422.0	35.97	12.734	
11,425.0	11,364.0	11,418.8	11,364.0	26.3	28.0	-107.26	743.5	14.0	459.1	423.1	36.00	12.753	
11,450.0	11,388.5	11,443.3	11,388.5	26.2	28.0	-107.67	743.5	14.0	460.6	424.6	36.04	12.781	
11,475.0	11,412.7	11,467.5	11,412.7	26.1	28.0	-108.16	743.5	14.0	462.6	426.5	36.09	12.817	
11,500.0	11,436.5	11,491.3	11,436.5	26.1	28.0	-108.72	743.5	14.0	465.1	429.0	36.16	12.862	
11,525.0	11,459.9	11,514.7	11,459.9	26.0	28.0	-109.34	743.5	14.0	468.2	431.9	36.24	12.917	
11,550.0	11,482.8	11,537.6	11,482.8	25.9	28.0	-109.98	743.5	14.0	471.8	435.4	36.35	12.981	
11,575.0	11,505.2	11,566.0	11,511.2	25.8	28.0	-110.94	743.3	14.0	476.0	439.6	36.46	13.058	
11,600.0	11,526.9	11,603.7	11,548.9	25.7	27.9	-112.29	740.6	14.0	480.3	443.8	36.53	13.149	
11,625.0	11,548.0	11,643.5	11,588.1	25.6	27.8	-113.60	734.5	14.1	484.6	448.0	36.60	13.242	
11,650.0	11,568.3	11,685.2	11,628.7	25.5	27.6	-114.84	724.7	14.1	488.7	452.0	36.67	13.327	
11,675.0	11,587.9	11,729.1	11,670.2	25.5	27.5	-116.01	710.6	14.2	492.5	455.7	36.76	13.399	
11,700.0	11,606.6	11,775.0	11,712.1	25.4	27.3	-117.07	691.8	14.3	496.0	459.1	36.88	13.449	
11,725.0	11,624.4	11,822.8	11,753.6	25.3	27.1	-118.00	668.0	14.5	499.0	461.9	37.05	13.468	
11,750.0	11,641.3	11,872.4	11,793.9	25.2	26.9	-118.78	639.1	14.7	501.5	464.2	37.29	13.448	
11,775.0	11,657.1	11,923.5	11,832.0	25.2	26.7	-119.37	605.2	14.9	503.4	465.8	37.62	13.380	
11,800.0	11,672.0	11,975.7	11,867.0	25.1	26.5	-119.75	566.5	15.1	504.6	466.6	38.05	13.261	
11,825.0	11,685.7	12,028.5	11,897.8	25.1	26.3	-119.92	523.8	15.4	505.2	466.6	38.58	13.095	
11,850.0	11,698.4	12,081.4	11,923.9	25.0	26.2	-119.85	477.7	15.7	505.0	465.8	39.18	12.889	
11,875.0	11,709.9	12,133.9	11,944.5	25.0	26.1	-119.56	429.5	16.0	504.0	464.2	39.83	12.654	
11,900.0	11,720.2	12,185.5	11,959.5	24.9	26.0	-119.06	380.2	16.3	502.4	461.9	40.50	12.406	
11,925.0	11,729.4	12,235.8	11,969.0	24.9	25.9	-118.37	330.8	16.6	500.2	459.0	41.14	12.157	
11,950.0	11,737.3	12,284.4	11,973.1	24.9	25.9	-117.50	282.3	16.9	497.4	455.6	41.73	11.918	
11,975.0	11,743.9	12,316.5	11,973.4	24.8	25.9	-116.96	250.2	17.1	494.3	452.4	41.88	11.803	
12,000.0	11,749.3	12,341.0	11,973.4	24.8	25.9	-116.68	225.8	17.2	491.8	450.0	41.85	11.752	
12,025.0	11,753.4	12,365.6	11,973.4	24.8	25.9	-116.45	201.1	17.4	490.0	448.1	41.86	11.706	
12,050.0	11,756.2	12,390.5	11,973.4	24.8	25.9	-116.30	176.3	17.6	488.7	446.8	41.90	11.665	
12,075.0	11,757.7	12,415.4	11,973.4	24.8	25.9	-116.21	151.3	17.7	488.1	446.1	41.98	11.626	
12,091.0	11,758.0	12,431.4	11,973.4	24.8	25.9	-116.20	135.3	17.8	488.0	445.9	42.06	11.602	
12,091.0	11,758.0	12,431.5	11,973.4	24.8	25.9	-116.20	135.3	17.8	488.0	445.9	42.06	11.602	
12,100.0	11,758.0	12,440.4	11,973.4	24.8	25.9	-116.20	126.3	17.9	488.0	445.9	42.10	11.589	
12,200.0	11,758.0	12,540.4	11,973.4	24.9	25.9	-116.20	26.3	18.5	488.0	445.3	42.66	11.437	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
12,300.0	11,758.0	12,640.4	11,973.4	25.0	25.9	-116.20	-73.7	19.1	488.0	444.7	43.30	11.270	
12,400.0	11,758.0	12,740.4	11,973.4	25.1	25.9	-116.20	-173.7	19.7	488.0	444.0	44.00	11.091	
12,500.0	11,758.0	12,840.4	11,973.4	25.2	26.0	-116.20	-273.7	20.4	488.0	443.2	44.76	10.901	
12,600.0	11,758.0	12,940.4	11,973.4	25.4	26.0	-116.19	-373.7	21.0	488.0	442.4	45.59	10.703	
12,700.0	11,758.0	13,040.4	11,973.4	25.5	26.0	-116.19	-473.6	21.6	488.0	441.5	46.48	10.499	
12,800.0	11,758.0	13,140.4	11,973.4	25.7	26.0	-116.19	-573.6	22.3	488.0	440.6	47.42	10.291	
12,900.0	11,758.0	13,240.4	11,973.4	25.9	26.0	-116.19	-673.6	22.9	488.0	439.6	48.41	10.080	
13,000.0	11,758.0	13,340.4	11,973.4	26.2	26.0	-116.19	-773.6	23.5	488.0	438.5	49.45	9.867	
13,100.0	11,758.0	13,440.4	11,973.4	26.5	26.0	-116.19	-873.6	24.1	488.0	437.4	50.54	9.655	
13,200.0	11,758.0	13,540.4	11,973.4	26.8	26.1	-116.19	-973.6	24.8	488.0	436.3	51.67	9.444	
13,300.0	11,758.0	13,640.4	11,973.4	27.1	26.1	-116.19	-1,073.6	25.4	488.0	435.1	52.84	9.235	
13,400.0	11,758.0	13,740.4	11,973.4	27.5	26.1	-116.19	-1,173.6	26.0	488.0	433.9	54.05	9.028	
13,500.0	11,758.0	13,840.4	11,973.4	27.9	26.1	-116.19	-1,273.6	26.6	488.0	432.7	55.29	8.826	
13,600.0	11,758.0	13,940.4	11,973.4	28.4	26.2	-116.19	-1,373.6	27.3	488.0	431.4	56.57	8.627	
13,700.0	11,758.0	14,040.4	11,973.4	28.8	26.2	-116.19	-1,473.6	27.9	488.0	430.1	57.87	8.432	
13,800.0	11,758.0	14,140.4	11,973.4	29.4	26.4	-116.19	-1,573.6	28.5	488.0	428.8	59.21	8.242	
13,900.0	11,758.0	14,240.4	11,973.4	29.9	27.1	-116.19	-1,673.6	29.1	488.0	427.4	60.57	8.057	
14,000.0	11,758.0	14,340.4	11,973.4	30.5	27.9	-116.19	-1,773.6	29.8	488.0	426.0	61.95	7.877	
14,100.0	11,758.0	14,440.4	11,973.4	31.1	28.7	-116.19	-1,873.6	30.4	488.0	424.6	63.36	7.702	
14,200.0	11,758.0	14,540.4	11,973.4	31.7	29.5	-116.19	-1,973.6	31.0	488.0	423.2	64.79	7.532	
14,300.0	11,758.0	14,640.4	11,973.4	32.4	30.3	-116.19	-2,073.6	31.6	488.0	421.8	66.24	7.367	
14,400.0	11,758.0	14,740.4	11,973.4	33.0	31.1	-116.19	-2,173.6	32.3	488.0	420.3	67.71	7.207	
14,500.0	11,758.0	14,840.4	11,973.4	33.7	31.9	-116.19	-2,273.6	32.9	488.0	418.8	69.20	7.052	
14,600.0	11,758.0	14,940.4	11,973.4	34.4	32.7	-116.19	-2,373.6	33.5	488.0	417.3	70.70	6.902	
14,700.0	11,758.0	15,040.4	11,973.4	35.1	33.6	-116.19	-2,473.6	34.2	488.0	415.8	72.22	6.757	
14,800.0	11,758.0	15,140.4	11,973.4	35.9	34.4	-116.19	-2,573.6	34.8	488.0	414.3	73.76	6.617	
14,900.0	11,758.0	15,240.4	11,973.4	36.6	35.2	-116.19	-2,673.6	35.4	488.0	412.7	75.30	6.481	
15,000.0	11,758.0	15,340.4	11,973.4	37.4	36.1	-116.19	-2,773.6	36.0	488.0	411.2	76.86	6.349	
15,100.0	11,758.0	15,440.4	11,973.4	38.2	37.0	-116.19	-2,873.6	36.7	488.0	409.6	78.44	6.222	
15,200.0	11,758.0	15,540.4	11,973.4	38.9	37.8	-116.19	-2,973.6	37.3	488.0	408.0	80.02	6.099	
15,300.0	11,758.0	15,640.4	11,973.4	39.7	38.7	-116.19	-3,073.6	37.9	488.0	406.4	81.61	5.980	
15,400.0	11,758.0	15,740.4	11,973.4	40.5	39.6	-116.19	-3,173.6	38.5	488.0	404.8	83.22	5.864	
15,500.0	11,758.0	15,840.4	11,973.4	41.4	40.4	-116.19	-3,273.6	39.2	488.0	403.2	84.83	5.753	
15,600.0	11,758.0	15,940.4	11,973.4	42.2	41.3	-116.19	-3,373.6	39.8	488.0	401.6	86.45	5.645	
15,700.0	11,758.0	16,040.4	11,973.4	43.0	42.2	-116.19	-3,473.6	40.4	488.0	399.9	88.08	5.540	
15,800.0	11,758.0	16,140.4	11,973.4	43.8	43.1	-116.19	-3,573.6	41.0	488.0	398.3	89.72	5.439	
15,900.0	11,758.0	16,240.4	11,973.4	44.7	44.0	-116.19	-3,673.6	41.7	488.0	396.7	91.37	5.341	
16,000.0	11,758.0	16,340.4	11,973.4	45.5	44.9	-116.19	-3,773.6	42.3	488.0	395.0	93.02	5.246	
16,100.0	11,758.0	16,440.4	11,973.4	46.4	45.8	-116.19	-3,873.6	42.9	488.0	393.4	94.68	5.154	
16,200.0	11,758.0	16,540.4	11,973.4	47.2	46.7	-116.19	-3,973.6	43.6	488.0	391.7	96.35	5.065	
16,300.0	11,758.0	16,640.4	11,973.4	48.1	47.6	-116.19	-4,073.6	44.2	488.0	390.0	98.02	4.979	
16,400.0	11,758.0	16,740.4	11,973.4	49.0	48.5	-116.19	-4,173.6	44.8	488.0	388.3	99.70	4.895	
16,500.0	11,758.0	16,840.4	11,973.4	49.8	49.4	-116.19	-4,273.6	45.4	488.0	386.7	101.39	4.814	
16,600.0	11,758.0	16,940.4	11,973.4	50.7	50.3	-116.19	-4,373.6	46.1	488.0	385.0	103.08	4.735	
16,700.0	11,758.0	17,040.4	11,973.4	51.6	51.2	-116.19	-4,473.6	46.7	488.0	383.3	104.77	4.658	
16,800.0	11,758.0	17,140.4	11,973.4	52.5	52.1	-116.19	-4,573.6	47.3	488.1	381.6	106.47	4.584	
16,900.0	11,758.0	17,240.4	11,973.4	53.3	53.0	-116.19	-4,673.6	47.9	488.1	379.9	108.18	4.512	
17,000.0	11,758.0	17,340.4	11,973.4	54.2	53.9	-116.19	-4,773.6	48.6	488.1	378.2	109.88	4.442	
17,100.0	11,758.0	17,440.4	11,973.4	55.1	54.9	-116.19	-4,873.6	49.2	488.1	376.5	111.60	4.373	
17,200.0	11,758.0	17,540.4	11,973.4	56.0	55.8	-116.19	-4,973.6	49.8	488.1	374.7	113.31	4.307	
17,300.0	11,758.0	17,640.4	11,973.4	56.9	56.7	-116.19	-5,073.6	50.4	488.1	373.0	115.03	4.243	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,400.0	11,758.0	17,740.4	11,973.4	57.8	57.6	-116.19	-5,173.6	51.1	488.1	371.3	116.76	4.180	
17,500.0	11,758.0	17,840.4	11,973.4	58.7	58.5	-116.19	-5,273.6	51.7	488.1	369.6	118.48	4.119	
17,600.0	11,758.0	17,940.4	11,973.4	59.6	59.5	-116.19	-5,373.6	52.3	488.1	367.9	120.21	4.060	
17,700.0	11,758.0	18,040.4	11,973.4	60.5	60.4	-116.19	-5,473.6	52.9	488.1	366.1	121.95	4.002	
17,800.0	11,758.0	18,140.4	11,973.4	61.4	61.3	-116.19	-5,573.5	53.6	488.1	364.4	123.68	3.946	
17,900.0	11,758.0	18,240.4	11,973.4	62.3	62.2	-116.19	-5,673.5	54.2	488.1	362.7	125.42	3.891	
18,000.0	11,758.0	18,340.4	11,973.4	63.2	63.2	-116.19	-5,773.5	54.8	488.1	360.9	127.16	3.838	
18,100.0	11,758.0	18,440.4	11,973.4	64.1	64.1	-116.19	-5,873.5	55.5	488.1	359.2	128.91	3.786	
18,200.0	11,758.0	18,540.4	11,973.4	65.0	65.0	-116.19	-5,973.5	56.1	488.1	357.4	130.65	3.736	
18,300.0	11,758.0	18,640.4	11,973.4	66.0	66.0	-116.19	-6,073.5	56.7	488.1	355.7	132.40	3.686	
18,400.0	11,758.0	18,740.4	11,973.4	66.9	66.9	-116.19	-6,173.5	57.3	488.1	353.9	134.16	3.638	
18,500.0	11,758.0	18,840.4	11,973.4	67.8	67.8	-116.19	-6,273.5	58.0	488.1	352.2	135.91	3.591	
18,600.0	11,758.0	18,940.4	11,973.4	68.7	68.8	-116.19	-6,373.5	58.6	488.1	350.4	137.67	3.545	
18,700.0	11,758.0	19,040.4	11,973.4	69.6	69.7	-116.19	-6,473.5	59.2	488.1	348.7	139.42	3.501	
18,800.0	11,758.0	19,140.4	11,973.4	70.5	70.6	-116.19	-6,573.5	59.8	488.1	346.9	141.18	3.457	
18,900.0	11,758.0	19,240.4	11,973.4	71.5	71.6	-116.19	-6,673.5	60.5	488.1	345.1	142.95	3.415	
19,000.0	11,758.0	19,340.4	11,973.4	72.4	72.5	-116.19	-6,773.5	61.1	488.1	343.4	144.71	3.373	
19,100.0	11,758.0	19,440.4	11,973.4	73.3	73.5	-116.19	-6,873.5	61.7	488.1	341.6	146.48	3.332	
19,200.0	11,758.0	19,540.4	11,973.4	74.2	74.4	-116.19	-6,973.5	62.3	488.1	339.9	148.24	3.293	
19,300.0	11,758.0	19,640.4	11,973.4	75.2	75.3	-116.19	-7,073.5	63.0	488.1	338.1	150.01	3.254	
19,318.1	11,758.0	19,658.5	11,973.4	75.3	75.5	-116.19	-7,091.6	63.1	488.1	337.8	150.33	3.247	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 703H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program:		0-r.5 MWD+IFR1						Rule Assigned:					Offset Well Error: 3.0 usft	
Measured Depth	Reference	Offset	Semi Major Axis		Highside Toolface	Offset Wellbore Centre		Distance			Separation Factor	Warning		
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Reference (usft)		Offset (usft)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			No-Go Distance (usft)	
0.0	0.0	0.3	0.0	3.0	3.0	89.66	0.2	40.0	40.0					
100.0	100.0	100.3	100.0	3.1	3.1	89.66	0.2	40.0	40.0	33.4	6.62	6.041		
200.0	200.0	200.3	200.0	3.3	3.3	89.66	0.2	40.0	40.0	32.9	7.07	5.656		
300.0	300.0	300.3	300.0	3.6	3.6	89.66	0.2	40.0	40.0	32.5	7.50	5.335		
400.0	400.0	400.3	400.0	3.8	3.8	89.66	0.2	40.0	40.0	32.1	7.90	5.062		
500.0	500.0	500.3	500.0	4.0	4.0	89.66	0.2	40.0	40.0	31.7	8.29	4.826		
600.0	600.0	600.3	600.0	4.1	4.1	89.66	0.2	40.0	40.0	31.3	8.66	4.619		
700.0	700.0	700.3	700.0	4.3	4.3	89.66	0.2	40.0	40.0	31.0	9.02	4.435		
800.0	800.0	800.3	800.0	4.5	4.5	89.66	0.2	40.0	40.0	30.6	9.37	4.271		
900.0	900.0	900.3	900.0	4.7	4.7	89.66	0.2	40.0	40.0	30.3	9.70	4.122		
1,000.0	1,000.0	1,000.3	1,000.0	4.8	4.8	89.66	0.2	40.0	40.0	30.0	10.03	3.988		
1,100.0	1,100.0	1,100.3	1,100.0	5.0	5.0	89.66	0.2	40.0	40.0	29.7	10.35	3.865		
1,200.0	1,200.0	1,200.3	1,200.0	5.2	5.2	89.66	0.2	40.0	40.0	29.3	10.66	3.752		
1,300.0	1,300.0	1,300.3	1,300.0	5.3	5.3	89.66	0.2	40.0	40.0	29.0	10.97	3.647		
1,400.0	1,400.0	1,400.3	1,400.0	5.5	5.5	89.66	0.2	40.0	40.0	28.7	11.27	3.550		
1,500.0	1,500.0	1,500.3	1,500.0	5.6	5.6	89.66	0.2	40.0	40.0	28.4	11.56	3.460		
1,600.0	1,600.0	1,600.3	1,600.0	5.8	5.8	89.66	0.2	40.0	40.0	28.2	11.85	3.376		
1,700.0	1,700.0	1,700.3	1,700.0	5.9	5.9	89.66	0.2	40.0	40.0	27.9	12.13	3.297		
1,800.0	1,800.0	1,800.3	1,800.0	6.0	6.0	89.66	0.2	40.0	40.0	27.6	12.41	3.223		
1,900.0	1,900.0	1,900.3	1,900.0	6.2	6.2	89.66	0.2	40.0	40.0	27.3	12.68	3.154		
2,000.0	2,000.0	2,000.3	2,000.0	6.3	6.3	89.66	0.2	40.0	40.0	27.0	12.95	3.088 CC, ES, SF		
2,100.0	2,100.0	2,100.0	2,099.7	6.5	6.5	126.38	0.2	40.0	41.0	27.8	13.25	3.096		
2,200.0	2,199.8	2,199.4	2,199.1	6.8	6.7	129.77	1.7	40.9	45.1	31.6	13.56	3.327		
2,300.0	2,299.5	2,298.3	2,297.9	7.0	6.9	131.93	6.0	43.8	53.2	39.3	13.87	3.834		
2,400.0	2,398.7	2,396.7	2,395.9	7.2	7.1	132.90	13.1	48.4	65.1	50.9	14.19	4.588		
2,494.7	2,492.2	2,489.3	2,487.8	7.5	7.3	133.05	22.3	54.5	79.9	65.4	14.49	5.514		
2,500.0	2,497.5	2,494.5	2,492.9	7.5	7.3	133.06	22.9	54.9	80.8	66.3	14.50	5.573		
2,600.0	2,596.0	2,591.5	2,588.8	7.8	7.6	132.20	35.4	63.1	99.0	84.0	14.93	6.630		
2,700.0	2,694.5	2,687.9	2,683.5	8.1	7.9	130.16	50.5	72.9	118.6	103.4	15.22	7.791		
2,800.0	2,793.0	2,783.3	2,776.6	8.3	8.2	127.53	68.1	84.5	140.0	124.4	15.53	9.014		
2,900.0	2,891.5	2,877.8	2,868.0	8.6	8.4	124.64	88.0	97.5	163.2	147.4	15.80	10.329		
3,000.0	2,990.0	2,974.5	2,961.2	8.9	8.7	122.04	109.6	111.6	187.6	171.5	16.14	11.630		
3,100.0	3,088.5	3,071.2	3,054.3	9.2	9.0	120.04	131.1	125.8	212.3	195.8	16.50	12.868		
3,200.0	3,187.1	3,167.8	3,147.5	9.5	9.3	118.46	152.7	139.9	237.2	220.4	16.89	14.048		
3,300.0	3,285.6	3,264.5	3,240.7	9.8	9.6	117.18	174.3	154.0	262.3	245.0	17.29	15.168		
3,400.0	3,384.1	3,361.2	3,333.8	10.2	9.9	116.12	195.8	168.1	287.4	269.7	17.71	16.228		
3,500.0	3,482.6	3,457.8	3,427.0	10.5	10.3	115.23	217.4	182.3	312.6	294.5	18.14	17.230		
3,600.0	3,581.1	3,554.5	3,520.2	10.9	10.6	114.47	238.9	196.4	337.9	319.3	18.59	18.175		
3,700.0	3,679.6	3,651.2	3,613.3	11.2	11.0	113.82	260.5	210.5	363.2	344.2	19.05	19.066		
3,800.0	3,778.1	3,747.8	3,706.5	11.6	11.4	113.25	282.0	224.6	388.6	369.0	19.52	19.906		
3,900.0	3,876.6	3,844.5	3,799.7	12.0	11.8	112.76	303.6	238.8	413.9	393.9	20.00	20.697		
4,000.0	3,975.2	3,941.1	3,892.8	12.3	12.2	112.32	325.2	252.9	439.4	418.9	20.49	21.442		
4,100.0	4,073.7	4,037.8	3,986.0	12.7	12.6	111.92	346.7	267.0	464.8	443.8	20.99	22.143		
4,200.0	4,172.2	4,134.5	4,079.2	13.1	13.0	111.57	368.3	281.1	490.2	468.7	21.50	22.805		
4,300.0	4,270.7	4,231.1	4,172.3	13.5	13.4	111.26	389.8	295.3	515.7	493.7	22.01	23.428		
4,400.0	4,369.2	4,327.8	4,265.5	13.9	13.8	110.97	411.4	309.4	541.2	518.7	22.54	24.016		
4,500.0	4,467.7	4,424.5	4,358.7	14.3	14.2	110.71	433.0	323.5	566.7	543.6	23.06	24.570		
4,600.0	4,566.2	4,521.1	4,451.8	14.7	14.6	110.47	454.5	337.6	592.2	568.6	23.60	25.094		
4,700.0	4,664.8	4,617.8	4,545.0	15.1	15.0	110.25	476.1	351.8	617.7	593.6	24.14	25.588		
4,800.0	4,763.3	4,714.5	4,638.2	15.5	15.5	110.05	497.6	365.9	643.2	618.5	24.69	26.056		
4,900.0	4,861.8	4,811.1	4,731.3	15.9	15.9	109.86	519.2	380.0	668.8	643.5	25.24	26.498		

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,000.0	4,960.3	4,907.8	4,824.5	16.3	16.3	109.69	540.7	394.1	694.3	668.5	25.79	26.919	
5,100.0	5,058.8	5,009.3	4,922.4	16.8	16.8	109.54	563.2	408.8	719.7	693.3	26.35	27.308	
5,200.0	5,157.3	5,116.4	5,026.1	17.2	17.3	109.48	585.5	423.4	743.9	716.9	26.97	27.579	
5,300.0	5,255.8	5,224.2	5,131.0	17.6	17.7	109.53	606.3	437.1	766.8	739.2	27.58	27.801	
5,400.0	5,354.3	5,332.6	5,236.9	18.0	18.2	109.68	625.5	449.7	788.3	760.1	28.18	27.979	
5,500.0	5,452.9	5,441.6	5,343.9	18.4	18.7	109.92	643.2	461.2	808.5	779.7	28.76	28.116	
5,600.0	5,551.4	5,551.2	5,451.7	18.9	19.2	110.25	659.2	471.7	827.3	798.0	29.32	28.218	
5,700.0	5,649.9	5,661.1	5,560.4	19.3	19.6	110.67	673.5	481.1	844.8	815.0	29.86	28.289	
5,800.0	5,748.4	5,771.4	5,669.6	19.7	20.1	111.17	686.2	489.4	861.0	830.6	30.39	28.331	
5,900.0	5,846.9	5,882.0	5,779.4	20.1	20.5	111.75	697.1	496.5	875.9	845.0	30.90	28.349	
6,000.0	5,945.4	5,992.7	5,889.6	20.6	21.0	112.40	706.2	502.5	889.4	858.1	31.38	28.345	
6,071.2	6,015.6	6,071.7	5,968.3	20.9	21.2	112.91	711.6	506.1	898.4	866.7	31.70	28.342	
6,100.0	6,043.9	6,103.6	6,000.1	21.0	21.4	113.16	713.6	507.4	901.8	869.9	31.82	28.340	
6,200.0	6,142.7	6,214.7	6,111.0	21.4	21.7	113.98	719.2	511.0	912.3	880.1	32.25	28.286	
6,300.0	6,241.7	6,326.0	6,222.3	21.8	22.1	114.75	722.9	513.5	921.0	888.3	32.66	28.201	
6,400.0	6,340.9	6,437.5	6,333.7	22.2	22.4	115.48	724.9	514.8	927.7	894.7	33.01	28.108	
6,500.0	6,440.3	6,544.1	6,440.3	22.6	22.5	116.14	725.2	515.0	932.6	899.4	33.26	28.037	
6,600.0	6,539.9	6,643.7	6,539.9	23.0	22.5	116.66	725.2	515.0	936.6	903.1	33.49	27.969	
6,700.0	6,639.7	6,743.5	6,639.7	23.4	22.6	117.08	725.2	515.0	939.8	906.1	33.71	27.880	
6,800.0	6,739.5	6,843.3	6,739.5	23.7	22.6	117.39	725.2	515.0	942.3	908.4	33.93	27.772	
6,900.0	6,839.5	6,943.3	6,839.5	24.0	22.7	117.60	725.2	515.0	944.0	909.9	34.14	27.651	
7,000.0	6,939.5	7,043.2	6,939.5	24.3	22.7	117.72	725.2	515.0	944.9	910.6	34.34	27.519	
7,060.6	7,000.0	7,103.8	7,000.0	24.4	22.8	83.00	725.2	515.0	945.1	910.6	34.42	27.458	
7,100.0	7,039.4	7,143.2	7,039.4	24.4	22.8	83.00	725.2	515.0	945.1	910.6	34.46	27.428	
7,200.0	7,139.4	7,243.2	7,139.4	24.4	22.8	83.00	725.2	515.0	945.1	910.5	34.58	27.330	
7,300.0	7,239.4	7,343.2	7,239.4	24.5	22.9	83.00	725.2	515.0	945.1	910.3	34.70	27.232	
7,400.0	7,339.4	7,443.2	7,339.4	24.5	22.9	83.00	725.2	515.0	945.1	910.2	34.83	27.134	
7,500.0	7,439.4	7,543.2	7,439.4	24.6	23.0	83.00	725.2	515.0	945.1	910.1	34.95	27.037	
7,600.0	7,539.4	7,643.2	7,539.4	24.6	23.0	83.00	725.2	515.0	945.1	910.0	35.08	26.940	
7,700.0	7,639.4	7,743.2	7,639.4	24.7	23.1	83.00	725.2	515.0	945.1	909.8	35.21	26.844	
7,800.0	7,739.4	7,843.2	7,739.4	24.7	23.1	83.00	725.2	515.0	945.1	909.7	35.33	26.748	
7,900.0	7,839.4	7,943.2	7,839.4	24.8	23.2	83.00	725.2	515.0	945.1	909.6	35.46	26.653	
8,000.0	7,939.4	8,043.2	7,939.4	24.8	23.2	83.00	725.2	515.0	945.1	909.5	35.58	26.558	
8,100.0	8,039.4	8,143.2	8,039.4	24.9	23.3	83.00	725.2	515.0	945.1	909.3	35.71	26.464	
8,200.0	8,139.4	8,243.2	8,139.4	24.9	23.4	83.00	725.2	515.0	945.1	909.2	35.84	26.370	
8,300.0	8,239.4	8,343.2	8,239.4	24.9	23.4	83.00	725.2	515.0	945.1	909.1	35.97	26.276	
8,400.0	8,339.4	8,443.2	8,339.4	25.0	23.5	83.00	725.2	515.0	945.1	909.0	36.09	26.183	
8,500.0	8,439.4	8,543.2	8,439.4	25.0	23.5	83.00	725.2	515.0	945.1	908.8	36.22	26.091	
8,600.0	8,539.4	8,643.2	8,539.4	25.1	23.6	83.00	725.2	515.0	945.1	908.7	36.35	25.999	
8,700.0	8,639.4	8,743.2	8,639.4	25.1	23.6	83.00	725.2	515.0	945.1	908.6	36.48	25.907	
8,800.0	8,739.4	8,843.2	8,739.4	25.2	23.7	83.00	725.2	515.0	945.1	908.4	36.61	25.816	
8,900.0	8,839.4	8,943.2	8,839.4	25.2	23.7	83.00	725.2	515.0	945.1	908.3	36.74	25.725	
9,000.0	8,939.4	9,043.2	8,939.4	25.3	23.8	83.00	725.2	515.0	945.1	908.2	36.87	25.635	
9,100.0	9,039.4	9,143.2	9,039.4	25.3	23.8	83.00	725.2	515.0	945.1	908.1	36.99	25.545	
9,200.0	9,139.4	9,243.2	9,139.4	25.4	23.9	83.00	725.2	515.0	945.1	907.9	37.12	25.456	
9,300.0	9,239.4	9,343.2	9,239.4	25.4	23.9	83.00	725.2	515.0	945.1	907.8	37.25	25.367	
9,400.0	9,339.4	9,443.2	9,339.4	25.5	24.0	83.00	725.2	515.0	945.1	907.7	37.39	25.279	
9,500.0	9,439.4	9,543.2	9,439.4	25.5	24.0	83.00	725.2	515.0	945.1	907.5	37.52	25.191	
9,600.0	9,539.4	9,643.2	9,539.4	25.6	24.1	83.00	725.2	515.0	945.1	907.4	37.65	25.103	
9,700.0	9,639.4	9,743.2	9,639.4	25.6	24.2	83.00	725.2	515.0	945.1	907.3	37.78	25.016	
9,800.0	9,739.4	9,843.2	9,739.4	25.7	24.2	83.00	725.2	515.0	945.1	907.1	37.91	24.930	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
9,900.0	9,839.4	9,943.2	9,839.4	25.7	24.3	83.00	725.2	515.0	945.1	907.0	38.04	24.844	
10,000.0	9,939.4	10,043.2	9,939.4	25.8	24.3	83.00	725.2	515.0	945.1	906.9	38.17	24.758	
10,100.0	10,039.4	10,143.2	10,039.4	25.9	24.4	83.00	725.2	515.0	945.1	906.7	38.30	24.673	
10,200.0	10,139.4	10,243.2	10,139.4	25.9	24.4	83.00	725.2	515.0	945.1	906.6	38.44	24.588	
10,300.0	10,239.4	10,343.2	10,239.4	26.0	24.5	83.00	725.2	515.0	945.1	906.5	38.57	24.503	
10,400.0	10,339.4	10,443.2	10,339.4	26.0	24.5	83.00	725.2	515.0	945.1	906.4	38.70	24.419	
10,500.0	10,439.4	10,543.2	10,439.4	26.1	24.6	83.00	725.2	515.0	945.1	906.2	38.83	24.336	
10,600.0	10,539.4	10,643.2	10,539.4	26.1	24.7	83.00	725.2	515.0	945.1	906.1	38.97	24.253	
10,700.0	10,639.4	10,743.2	10,639.4	26.2	24.7	83.00	725.2	515.0	945.1	906.0	39.10	24.170	
10,800.0	10,739.4	10,843.2	10,739.4	26.2	24.8	83.00	725.2	515.0	945.1	905.8	39.23	24.088	
10,900.0	10,839.4	10,943.2	10,839.4	26.3	24.8	83.00	725.2	515.0	945.1	905.7	39.37	24.006	
11,000.0	10,939.4	11,043.2	10,939.4	26.3	24.9	83.00	725.2	515.0	945.1	905.6	39.50	23.925	
11,100.0	11,039.4	11,143.2	11,039.4	26.4	24.9	83.00	725.2	515.0	945.1	905.4	39.63	23.844	
11,200.0	11,139.4	11,243.2	11,139.4	26.4	25.0	83.00	725.2	515.0	945.1	905.3	39.77	23.764	
11,300.0	11,239.4	11,343.2	11,239.4	26.5	25.0	83.00	725.2	515.0	945.1	905.1	39.90	23.684	
11,341.1	11,280.5	11,384.3	11,280.5	26.5	25.1	83.00	725.2	515.0	945.1	905.1	39.95	23.657	
11,350.0	11,289.4	11,393.2	11,289.4	26.5	25.1	-96.65	725.2	515.0	945.1	905.1	39.95	23.653	
11,375.0	11,314.4	11,431.5	11,327.7	26.4	25.0	-96.69	724.1	514.9	945.1	905.1	39.94	23.664	
11,400.0	11,339.3	11,472.8	11,368.7	26.4	24.9	-96.69	719.4	514.5	944.8	904.9	39.89	23.683	
11,425.0	11,364.0	11,514.0	11,409.1	26.3	24.8	-96.64	711.3	513.9	944.2	904.4	39.85	23.694	
11,450.0	11,388.5	11,554.9	11,448.3	26.2	24.6	-96.54	699.8	513.0	943.4	903.6	39.81	23.696	
11,475.0	11,412.7	11,595.2	11,485.9	26.1	24.5	-96.40	685.2	511.8	942.3	902.5	39.78	23.688	
11,500.0	11,436.5	11,634.9	11,521.5	26.1	24.4	-96.22	667.8	510.5	940.9	901.2	39.75	23.670	
11,525.0	11,459.9	11,673.9	11,555.0	26.0	24.2	-96.00	647.9	508.9	939.4	899.6	39.73	23.641	
11,550.0	11,482.8	11,712.1	11,586.1	25.9	24.1	-95.75	625.9	507.2	937.6	897.9	39.72	23.603	
11,575.0	11,505.2	11,749.3	11,614.7	25.8	24.0	-95.48	602.1	505.3	935.6	895.9	39.72	23.556	
11,600.0	11,526.9	11,785.7	11,640.6	25.7	23.9	-95.18	576.8	503.3	933.5	893.8	39.72	23.501	
11,625.0	11,548.0	11,821.0	11,664.0	25.6	23.8	-94.87	550.4	501.2	931.2	891.5	39.73	23.440	
11,650.0	11,568.3	11,855.3	11,684.7	25.5	23.7	-94.54	523.1	499.1	928.9	889.1	39.74	23.374	
11,675.0	11,587.9	11,888.7	11,703.0	25.5	23.6	-94.21	495.2	496.9	926.4	886.6	39.75	23.303	
11,700.0	11,606.6	11,921.1	11,718.7	25.4	23.5	-93.87	467.1	494.7	923.8	884.1	39.77	23.230	
11,725.0	11,624.4	11,952.5	11,732.2	25.3	23.5	-93.52	438.7	492.5	921.2	881.4	39.78	23.155	
11,750.0	11,641.3	11,983.1	11,743.5	25.2	23.4	-93.18	410.4	490.2	918.6	878.8	39.80	23.078	
11,775.0	11,657.1	12,012.7	11,752.6	25.2	23.4	-92.83	382.3	488.0	915.9	876.1	39.82	23.001	
11,800.0	11,672.0	12,041.6	11,759.9	25.1	23.4	-92.48	354.5	485.8	913.2	873.4	39.84	22.924	
11,825.0	11,685.7	12,069.7	11,765.3	25.1	23.3	-92.14	327.0	483.7	910.6	870.7	39.86	22.846	
11,850.0	11,698.4	12,097.0	11,768.9	25.0	23.3	-91.80	300.0	481.5	908.0	868.1	39.88	22.769	
11,875.0	11,709.9	12,123.6	11,771.0	25.0	23.3	-91.46	273.5	479.4	905.4	865.5	39.90	22.691	
11,900.0	11,720.2	12,148.0	11,771.7	24.9	23.3	-91.16	249.2	477.5	902.9	862.9	39.92	22.617	
11,925.0	11,729.4	12,166.7	11,771.7	24.9	23.4	-91.01	230.6	476.1	900.5	860.6	39.92	22.557	
11,950.0	11,737.3	12,184.7	11,771.7	24.9	23.4	-90.90	212.6	474.9	898.4	858.4	39.92	22.502	
11,975.0	11,743.9	12,200.0	11,771.7	24.8	23.4	-90.87	197.4	473.9	896.5	856.6	39.92	22.455	
12,000.0	11,749.3	12,221.6	11,771.7	24.8	23.4	-90.77	175.8	472.7	894.8	854.9	39.97	22.388	
12,025.0	11,753.4	12,240.4	11,771.7	24.8	23.4	-90.75	157.1	471.8	893.4	853.3	40.00	22.331	
12,050.0	11,756.2	12,259.3	11,771.7	24.8	23.4	-90.76	138.2	471.0	892.1	852.0	40.05	22.276	
12,075.0	11,757.7	12,278.3	11,771.7	24.8	23.4	-90.82	119.2	470.3	891.0	850.9	40.09	22.224	
12,091.0	11,758.0	12,300.0	11,771.7	24.8	23.4	-90.88	97.5	469.6	890.5	850.3	40.17	22.169	
12,100.0	11,758.0	12,300.0	11,771.7	24.8	23.4	-90.88	97.5	469.6	890.1	849.9	40.15	22.167	
12,200.0	11,758.0	12,373.7	11,771.7	24.9	23.5	-90.88	23.8	468.7	888.2	847.7	40.41	21.980	
12,243.0	11,758.0	12,411.4	11,771.7	24.9	23.5	-90.88	-13.9	468.9	888.1	847.5	40.57	21.892	
12,300.0	11,758.0	12,468.3	11,771.7	25.0	23.6	-90.88	-70.9	469.2	888.1	847.3	40.82	21.755	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												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)			
12,400.0	11,758.0	12,568.3	11,771.7	25.1	23.7	-90.88	-170.9	469.9	888.1	846.7	41.34	21.481	
12,500.0	11,758.0	12,668.3	11,771.7	25.2	23.8	-90.88	-270.9	470.5	888.1	846.1	41.94	21.174	
12,600.0	11,758.0	12,768.3	11,771.7	25.4	24.0	-90.88	-370.9	471.1	888.1	845.5	42.62	20.837	
12,700.0	11,758.0	12,868.3	11,771.7	25.5	24.2	-90.88	-470.9	471.7	888.1	844.7	43.37	20.476	
12,800.0	11,758.0	12,968.3	11,771.7	25.7	24.4	-90.88	-570.8	472.4	888.1	843.9	44.19	20.096	
12,900.0	11,758.0	13,068.3	11,771.7	25.9	24.7	-90.88	-670.8	473.0	888.1	843.0	45.08	19.701	
13,000.0	11,758.0	13,168.3	11,771.7	26.2	24.9	-90.88	-770.8	473.6	888.1	842.1	46.03	19.294	
13,100.0	11,758.0	13,268.3	11,771.7	26.5	25.3	-90.88	-870.8	474.2	888.1	841.0	47.04	18.881	
13,200.0	11,758.0	13,368.3	11,771.7	26.8	25.6	-90.88	-970.8	474.9	888.1	840.0	48.10	18.464	
13,300.0	11,758.0	13,468.3	11,771.7	27.1	26.1	-90.88	-1,070.8	475.5	888.1	838.9	49.21	18.047	
13,400.0	11,758.0	13,568.3	11,771.7	27.5	26.5	-90.88	-1,170.8	476.1	888.1	837.7	50.37	17.631	
13,500.0	11,758.0	13,668.3	11,771.7	27.9	27.0	-90.88	-1,270.8	476.7	888.1	836.5	51.58	17.219	
13,600.0	11,758.0	13,768.3	11,771.7	28.4	27.5	-90.88	-1,370.8	477.4	888.1	835.3	52.82	16.813	
13,700.0	11,758.0	13,868.3	11,771.7	28.8	28.1	-90.88	-1,470.8	478.0	888.1	834.0	54.11	16.414	
13,800.0	11,758.0	13,968.3	11,771.7	29.4	28.6	-90.88	-1,570.8	478.6	888.1	832.7	55.43	16.023	
13,900.0	11,758.0	14,068.3	11,771.7	29.9	29.2	-90.88	-1,670.8	479.2	888.1	831.3	56.78	15.641	
14,000.0	11,758.0	14,168.3	11,771.7	30.5	29.9	-90.88	-1,770.8	479.9	888.1	829.9	58.17	15.268	
14,100.0	11,758.0	14,268.3	11,771.7	31.1	30.5	-90.88	-1,870.8	480.5	888.1	828.5	59.58	14.906	
14,200.0	11,758.0	14,368.3	11,771.7	31.7	31.2	-90.88	-1,970.8	481.1	888.1	827.1	61.02	14.554	
14,300.0	11,758.0	14,468.3	11,771.7	32.4	31.9	-90.88	-2,070.8	481.7	888.1	825.6	62.48	14.213	
14,400.0	11,758.0	14,568.3	11,771.7	33.0	32.6	-90.88	-2,170.8	482.4	888.1	824.1	63.97	13.883	
14,500.0	11,758.0	14,668.3	11,771.7	33.7	33.4	-90.88	-2,270.8	483.0	888.1	822.6	65.48	13.563	
14,600.0	11,758.0	14,768.3	11,771.7	34.4	34.1	-90.88	-2,370.8	483.6	888.1	821.1	67.01	13.253	
14,700.0	11,758.0	14,868.3	11,771.7	35.1	34.9	-90.88	-2,470.8	484.2	888.1	819.5	68.56	12.954	
14,800.0	11,758.0	14,968.3	11,771.7	35.9	35.6	-90.88	-2,570.8	484.9	888.1	818.0	70.12	12.664	
14,900.0	11,758.0	15,068.3	11,771.7	36.6	36.4	-90.88	-2,670.8	485.5	888.1	816.4	71.71	12.385	
15,000.0	11,758.0	15,168.3	11,771.7	37.4	37.2	-90.88	-2,770.8	486.1	888.1	814.8	73.30	12.115	
15,100.0	11,758.0	15,268.3	11,771.7	38.2	38.0	-90.88	-2,870.8	486.7	888.1	813.2	74.92	11.855	
15,200.0	11,758.0	15,368.3	11,771.7	38.9	38.8	-90.88	-2,970.8	487.3	888.1	811.5	76.54	11.603	
15,300.0	11,758.0	15,468.3	11,771.7	39.7	39.6	-90.88	-3,070.8	488.0	888.1	809.9	78.18	11.360	
15,400.0	11,758.0	15,568.3	11,771.7	40.5	40.5	-90.88	-3,170.8	488.6	888.1	808.3	79.83	11.125	
15,500.0	11,758.0	15,668.3	11,771.7	41.4	41.3	-90.88	-3,270.8	489.2	888.1	806.6	81.49	10.898	
15,600.0	11,758.0	15,768.3	11,771.7	42.2	42.1	-90.88	-3,370.8	489.8	888.1	804.9	83.16	10.680	
15,700.0	11,758.0	15,868.3	11,771.7	43.0	43.0	-90.88	-3,470.8	490.5	888.1	803.2	84.84	10.468	
15,800.0	11,758.0	15,968.3	11,771.7	43.8	43.8	-90.88	-3,570.8	491.1	888.1	801.6	86.53	10.264	
15,900.0	11,758.0	16,068.3	11,771.7	44.7	44.7	-90.88	-3,670.8	491.7	888.1	799.9	88.23	10.066	
16,000.0	11,758.0	16,168.3	11,771.7	45.5	45.5	-90.88	-3,770.8	492.3	888.1	798.2	89.93	9.875	
16,100.0	11,758.0	16,268.3	11,771.7	46.4	46.4	-90.88	-3,870.8	493.0	888.1	796.4	91.65	9.690	
16,200.0	11,758.0	16,368.3	11,771.7	47.2	47.3	-90.88	-3,970.8	493.6	888.1	794.7	93.37	9.512	
16,300.0	11,758.0	16,468.3	11,771.7	48.1	48.1	-90.88	-4,070.8	494.2	888.1	793.0	95.10	9.339	
16,400.0	11,758.0	16,568.3	11,771.7	49.0	49.0	-90.88	-4,170.8	494.8	888.1	791.3	96.83	9.172	
16,500.0	11,758.0	16,668.3	11,771.7	49.8	49.9	-90.88	-4,270.8	495.5	888.1	789.5	98.57	9.010	
16,600.0	11,758.0	16,768.3	11,771.7	50.7	50.8	-90.88	-4,370.8	496.1	888.1	787.8	100.32	8.853	
16,700.0	11,758.0	16,868.3	11,771.7	51.6	51.7	-90.88	-4,470.8	496.7	888.1	786.0	102.07	8.701	
16,800.0	11,758.0	16,968.3	11,771.7	52.5	52.6	-90.88	-4,570.8	497.3	888.1	784.3	103.83	8.553	
16,900.0	11,758.0	17,068.3	11,771.7	53.3	53.5	-90.88	-4,670.8	498.0	888.1	782.5	105.59	8.411	
17,000.0	11,758.0	17,168.3	11,771.7	54.2	54.3	-90.88	-4,770.8	498.6	888.1	780.7	107.36	8.272	
17,100.0	11,758.0	17,268.3	11,771.7	55.1	55.2	-90.88	-4,870.8	499.2	888.1	779.0	109.13	8.138	
17,200.0	11,758.0	17,368.3	11,771.7	56.0	56.1	-90.88	-4,970.8	499.8	888.1	777.2	110.91	8.008	
17,300.0	11,758.0	17,468.3	11,771.7	56.9	57.0	-90.88	-5,070.8	500.5	888.1	775.4	112.69	7.881	
17,400.0	11,758.0	17,568.3	11,771.7	57.8	57.9	-90.88	-5,170.8	501.1	888.1	773.6	114.47	7.758	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 703H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,500.0	11,758.0	17,668.3	11,771.7	58.7	58.9	-90.88	-5,270.8	501.7	888.1	771.8	116.26	7.639	
17,600.0	11,758.0	17,768.3	11,771.7	59.6	59.8	-90.88	-5,370.8	502.3	888.1	770.0	118.05	7.523	
17,700.0	11,758.0	17,868.3	11,771.7	60.5	60.7	-90.88	-5,470.8	503.0	888.1	768.2	119.84	7.410	
17,800.0	11,758.0	17,968.3	11,771.7	61.4	61.6	-90.88	-5,570.8	503.6	888.1	766.4	121.64	7.301	
17,900.0	11,758.0	18,068.3	11,771.7	62.3	62.5	-90.88	-5,670.7	504.2	888.1	764.6	123.44	7.194	
18,000.0	11,758.0	18,168.3	11,771.7	63.2	63.4	-90.88	-5,770.7	504.8	888.1	762.8	125.25	7.091	
18,100.0	11,758.0	18,268.3	11,771.7	64.1	64.3	-90.88	-5,870.7	505.4	888.1	761.0	127.05	6.990	
18,200.0	11,758.0	18,368.3	11,771.7	65.0	65.2	-90.88	-5,970.7	506.1	888.1	759.2	128.86	6.892	
18,300.0	11,758.0	18,468.3	11,771.7	66.0	66.2	-90.88	-6,070.7	506.7	888.1	757.4	130.68	6.796	
18,400.0	11,758.0	18,568.3	11,771.7	66.9	67.1	-90.88	-6,170.7	507.3	888.1	755.6	132.49	6.703	
18,500.0	11,758.0	18,668.3	11,771.7	67.8	68.0	-90.88	-6,270.7	507.9	888.1	753.8	134.31	6.612	
18,600.0	11,758.0	18,768.3	11,771.7	68.7	68.9	-90.88	-6,370.7	508.6	888.1	752.0	136.13	6.524	
18,700.0	11,758.0	18,868.3	11,771.7	69.6	69.8	-90.88	-6,470.7	509.2	888.1	750.1	137.95	6.438	
18,800.0	11,758.0	18,968.3	11,771.7	70.5	70.8	-90.88	-6,570.7	509.8	888.1	748.3	139.77	6.354	
18,900.0	11,758.0	19,068.3	11,771.7	71.5	71.7	-90.88	-6,670.7	510.4	888.1	746.5	141.60	6.272	
19,000.0	11,758.0	19,168.3	11,771.7	72.4	72.6	-90.88	-6,770.7	511.1	888.1	744.7	143.42	6.192	
19,100.0	11,758.0	19,268.3	11,771.7	73.3	73.5	-90.88	-6,870.7	511.7	888.1	742.8	145.25	6.114	
19,200.0	11,758.0	19,368.3	11,771.7	74.2	74.5	-90.88	-6,970.7	512.3	888.1	741.0	147.09	6.038	
19,300.0	11,758.0	19,468.3	11,771.7	75.2	75.4	-90.88	-7,070.7	512.9	888.1	739.2	148.92	5.964	
19,317.5	11,758.0	19,485.8	11,771.7	75.3	75.6	-90.88	-7,088.2	513.0	888.1	738.8	149.24	5.951	
19,318.1	11,758.0	19,486.4	11,771.7	75.3	75.6	-90.88	-7,088.7	513.1	888.1	738.8	149.25	5.950	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 704H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.0	0.0	0.4	0.0	3.0	3.0	89.65	0.4	60.0	60.0				
100.0	100.0	100.4	100.0	3.1	3.1	89.65	0.4	60.0	60.0	53.4	6.62	9.062	
200.0	200.0	200.4	200.0	3.3	3.3	89.65	0.4	60.0	60.0	52.9	7.07	8.484	
300.0	300.0	300.4	300.0	3.6	3.6	89.65	0.4	60.0	60.0	52.5	7.50	8.003	
400.0	400.0	400.4	400.0	3.8	3.8	89.65	0.4	60.0	60.0	52.1	7.90	7.593	
500.0	500.0	500.4	500.0	4.0	4.0	89.65	0.4	60.0	60.0	51.7	8.29	7.239	
600.0	600.0	600.4	600.0	4.1	4.1	89.65	0.4	60.0	60.0	51.3	8.66	6.928	
700.0	700.0	700.4	700.0	4.3	4.3	89.65	0.4	60.0	60.0	51.0	9.02	6.652	
800.0	800.0	800.4	800.0	4.5	4.5	89.65	0.4	60.0	60.0	50.6	9.37	6.406	
900.0	900.0	900.4	900.0	4.7	4.7	89.65	0.4	60.0	60.0	50.3	9.70	6.183	
1,000.0	1,000.0	1,000.4	1,000.0	4.8	4.8	89.65	0.4	60.0	60.0	50.0	10.03	5.981	
1,100.0	1,100.0	1,100.4	1,100.0	5.0	5.0	89.65	0.4	60.0	60.0	49.7	10.35	5.797	
1,200.0	1,200.0	1,200.4	1,200.0	5.2	5.2	89.65	0.4	60.0	60.0	49.3	10.66	5.627	
1,300.0	1,300.0	1,300.4	1,300.0	5.3	5.3	89.65	0.4	60.0	60.0	49.0	10.97	5.471	
1,400.0	1,400.0	1,400.4	1,400.0	5.5	5.5	89.65	0.4	60.0	60.0	48.7	11.27	5.326	
1,500.0	1,500.0	1,500.4	1,500.0	5.6	5.6	89.65	0.4	60.0	60.0	48.4	11.56	5.190	
1,600.0	1,600.0	1,600.4	1,600.0	5.8	5.8	89.65	0.4	60.0	60.0	48.2	11.85	5.064	
1,700.0	1,700.0	1,700.4	1,700.0	5.9	5.9	89.65	0.4	60.0	60.0	47.9	12.13	4.946	
1,800.0	1,800.0	1,800.4	1,800.0	6.0	6.0	89.65	0.4	60.0	60.0	47.6	12.41	4.835	
1,900.0	1,900.0	1,900.4	1,900.0	6.2	6.2	89.65	0.4	60.0	60.0	47.3	12.68	4.731	
2,000.0	2,000.0	2,000.4	2,000.0	6.3	6.3	89.65	0.4	60.0	60.0	47.0	12.95	4.632 CC, ES, SF	
2,100.0	2,100.0	2,099.6	2,099.2	6.5	6.4	125.70	0.4	60.3	61.3	48.2	13.17	4.655	
2,200.0	2,199.8	2,197.7	2,197.3	6.8	6.5	129.14	0.4	62.9	67.1	53.6	13.48	4.976	
2,300.0	2,299.5	2,295.1	2,294.5	7.0	6.7	133.57	0.4	67.9	78.0	64.2	13.82	5.643	
2,400.0	2,398.7	2,391.5	2,390.7	7.2	6.8	137.89	0.4	75.3	94.2	80.1	14.14	6.662	
2,494.7	2,492.2	2,483.3	2,482.0	7.5	7.0	140.74	1.9	84.1	113.7	99.2	14.53	7.826	
2,500.0	2,497.5	2,488.4	2,487.1	7.5	7.0	140.87	2.1	84.6	114.9	100.4	14.55	7.898	
2,600.0	2,596.0	2,585.1	2,583.0	7.8	7.3	142.14	6.7	95.4	137.6	122.5	15.06	9.136	
2,700.0	2,694.5	2,681.5	2,678.4	8.1	7.5	141.88	14.1	107.6	160.8	145.4	15.43	10.421	
2,800.0	2,793.0	2,777.5	2,772.9	8.3	7.8	140.66	24.4	121.3	184.6	168.8	15.80	11.682	
2,900.0	2,891.5	2,873.0	2,866.2	8.6	8.0	138.85	37.3	136.3	209.2	193.0	16.17	12.938	
3,000.0	2,990.0	2,969.1	2,959.9	8.9	8.3	136.87	52.3	152.3	234.4	217.8	16.58	14.135	
3,100.0	3,088.5	3,065.6	3,053.8	9.2	8.6	135.27	67.4	168.5	259.9	242.9	17.01	15.283	
3,200.0	3,187.1	3,162.1	3,147.7	9.5	8.9	133.94	82.4	184.6	285.5	268.1	17.42	16.386	
3,300.0	3,285.6	3,258.5	3,241.6	9.8	9.2	132.84	97.5	200.7	311.3	293.4	17.86	17.428	
3,400.0	3,384.1	3,355.0	3,335.5	10.2	9.5	131.90	112.6	216.9	337.1	318.8	18.31	18.411	
3,500.0	3,482.6	3,451.5	3,429.4	10.5	9.9	131.10	127.6	233.0	363.0	344.3	18.77	19.337	
3,600.0	3,581.1	3,547.9	3,523.3	10.9	10.2	130.40	142.7	249.1	389.0	369.8	19.25	20.208	
3,700.0	3,679.6	3,644.4	3,617.2	11.2	10.6	129.80	157.7	265.3	415.0	395.3	19.74	21.027	
3,800.0	3,778.1	3,740.9	3,711.1	11.6	10.9	129.26	172.8	281.4	441.1	420.9	20.24	21.797	
3,900.0	3,876.6	3,837.3	3,805.0	12.0	11.3	128.78	187.9	297.5	467.2	446.4	20.74	22.522	
4,000.0	3,975.2	3,933.8	3,898.9	12.3	11.7	128.36	202.9	313.7	493.3	472.0	21.26	23.203	
4,100.0	4,073.7	4,030.3	3,992.9	12.7	12.0	127.97	218.0	329.8	519.4	497.7	21.79	23.844	
4,200.0	4,172.2	4,126.7	4,086.8	13.1	12.4	127.62	233.1	345.9	545.6	523.3	22.32	24.447	
4,300.0	4,270.7	4,223.2	4,180.7	13.5	12.8	127.31	248.1	362.1	571.8	548.9	22.86	25.016	
4,400.0	4,369.2	4,319.7	4,274.6	13.9	13.2	127.02	263.2	378.2	598.0	574.6	23.40	25.551	
4,500.0	4,467.7	4,416.1	4,368.5	14.3	13.6	126.76	278.2	394.3	624.2	600.2	23.95	26.057	
4,600.0	4,566.2	4,512.6	4,462.4	14.7	14.0	126.51	293.3	410.5	650.4	625.9	24.51	26.533	
4,700.0	4,664.8	4,609.1	4,556.3	15.1	14.4	126.29	308.4	426.6	676.6	651.5	25.08	26.984	
4,800.0	4,763.3	4,705.5	4,650.2	15.5	14.9	126.08	323.4	442.7	702.9	677.2	25.64	27.409	
4,900.0	4,861.8	4,802.0	4,744.1	15.9	15.3	125.89	338.5	458.9	729.1	702.9	26.22	27.812	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 704H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: 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)	No-Go Distance (usft)			
5,000.0	4,960.3	4,898.5	4,838.0	16.3	15.7	125.71	353.5	475.0	755.4	728.6	26.79	28.193		
5,100.0	5,058.8	4,995.0	4,931.9	16.8	16.1	125.55	368.6	491.1	781.6	754.2	27.37	28.554		
5,200.0	5,157.3	5,091.4	5,025.8	17.2	16.5	125.39	383.7	507.3	807.9	779.9	27.96	28.896		
5,300.0	5,255.8	5,187.9	5,119.8	17.6	17.0	125.25	398.7	523.4	834.1	805.6	28.55	29.221		
5,400.0	5,354.3	5,284.4	5,213.7	18.0	17.4	125.11	413.8	539.5	860.4	831.3	29.14	29.530		
5,500.0	5,452.9	5,380.8	5,307.6	18.4	17.8	124.98	428.8	555.7	886.7	857.0	29.73	29.823		
5,600.0	5,551.4	5,477.3	5,401.5	18.9	18.3	124.86	443.9	571.8	913.0	882.6	30.33	30.102		
5,700.0	5,649.9	5,573.8	5,495.4	19.3	18.7	124.74	459.0	587.9	939.3	908.3	30.93	30.368		
5,800.0	5,748.4	5,670.2	5,589.3	19.7	19.1	124.63	474.0	604.0	965.5	934.0	31.53	30.621		
5,900.0	5,846.9	5,766.7	5,683.2	20.1	19.6	124.53	489.1	620.2	991.8	959.7	32.14	30.862		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 705H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR													Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Rule Assigned:				Warning						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
0.0	0.0	0.8	0.0	3.0	3.0	89.65	0.5	80.0	80.0					
100.0	100.0	100.8	100.0	3.1	3.1	89.65	0.5	80.0	80.0	73.4	6.56	12.193		
200.0	200.0	200.8	200.0	3.3	3.2	89.65	0.5	80.0	80.0	73.1	6.91	11.581		
300.0	300.0	300.8	300.0	3.6	3.3	89.65	0.5	80.0	80.0	72.8	7.24	11.051		
400.0	400.0	400.8	400.0	3.8	3.4	89.65	0.5	80.0	80.0	72.4	7.56	10.587		
500.0	500.0	500.8	500.0	4.0	3.6	89.65	0.5	80.0	80.0	72.1	7.86	10.175		
600.0	600.0	600.8	600.0	4.1	3.7	89.65	0.5	80.0	80.0	71.8	8.16	9.807		
700.0	700.0	700.8	700.0	4.3	3.8	89.65	0.5	80.0	80.0	71.6	8.44	9.475		
800.0	800.0	800.8	800.0	4.5	3.9	89.65	0.5	80.0	80.0	71.3	8.72	9.174		
900.0	900.0	900.8	900.0	4.7	4.0	89.65	0.5	80.0	80.0	71.0	8.99	8.898		
1,000.0	1,000.0	1,000.8	1,000.0	4.8	4.2	89.65	0.5	80.0	80.0	70.7	9.25	8.645		
1,100.0	1,100.0	1,100.8	1,100.0	5.0	4.3	89.65	0.5	80.0	80.0	70.5	9.51	8.412		
1,200.0	1,200.0	1,200.8	1,200.0	5.2	4.4	89.65	0.5	80.0	80.0	70.2	9.76	8.195		
1,300.0	1,300.0	1,300.8	1,300.0	5.3	4.5	89.65	0.5	80.0	80.0	70.0	10.01	7.994		
1,400.0	1,400.0	1,400.8	1,400.0	5.5	4.6	89.65	0.5	80.0	80.0	69.8	10.25	7.806		
1,500.0	1,500.0	1,500.8	1,500.0	5.6	4.8	89.65	0.5	80.0	80.0	69.5	10.49	7.630		
1,600.0	1,600.0	1,600.8	1,600.0	5.8	4.9	89.65	0.5	80.0	80.0	69.3	10.72	7.464		
1,700.0	1,700.0	1,700.8	1,700.0	5.9	5.0	89.65	0.5	80.0	80.0	69.1	10.95	7.309		
1,800.0	1,800.0	1,800.8	1,800.0	6.0	5.1	89.65	0.5	80.0	80.0	68.8	11.17	7.162		
1,900.0	1,900.0	1,900.8	1,900.0	6.2	5.2	89.65	0.5	80.0	80.0	68.6	11.39	7.023		
1,966.4	1,966.4	1,967.2	1,966.4	6.3	5.3	89.65	0.5	80.0	80.0	68.5	11.54	6.934 CC		
2,000.0	2,000.0	2,000.8	2,000.0	6.3	5.3	89.65	0.5	80.0	80.0	68.4	11.61	6.891 ES		
2,100.0	2,100.0	2,100.8	2,099.2	6.5	5.5	124.48	1.8	80.3	81.3	69.5	11.85	6.864 SF		
2,200.0	2,199.8	2,199.6	2,198.7	6.8	5.6	124.77	5.5	81.3	85.3	73.2	12.15	7.022		
2,300.0	2,299.5	2,298.0	2,296.9	7.0	5.7	125.24	11.6	83.1	92.1	79.7	12.39	7.435		
2,400.0	2,398.7	2,394.2	2,392.7	7.2	5.9	126.32	18.9	87.4	103.6	90.8	12.72	8.138		
2,494.7	2,492.2	2,484.2	2,482.2	7.5	6.0	127.75	26.5	94.2	119.2	106.2	13.03	9.148		
2,500.0	2,497.5	2,489.3	2,487.2	7.5	6.0	127.85	27.0	94.7	120.2	107.2	13.05	9.216		
2,600.0	2,596.0	2,583.1	2,580.0	7.8	6.2	129.19	35.8	104.8	141.0	127.5	13.50	10.444		
2,700.0	2,694.5	2,675.6	2,671.2	8.1	6.4	129.76	45.4	117.6	164.7	150.9	13.81	11.931		
2,800.0	2,793.0	2,766.8	2,760.4	8.3	6.5	129.82	55.7	133.0	191.3	177.2	14.11	13.559		
2,900.0	2,891.5	2,856.5	2,847.6	8.6	6.7	129.57	66.6	150.8	220.7	206.3	14.41	15.312		
3,000.0	2,990.0	2,947.8	2,935.8	8.9	6.9	129.14	78.4	171.3	252.5	237.8	14.73	17.148		
3,100.0	3,088.5	3,042.4	3,027.1	9.2	7.0	128.76	90.7	192.9	284.8	269.7	15.06	18.911		
3,200.0	3,187.1	3,137.1	3,118.5	9.5	7.1	128.46	103.0	214.5	317.0	301.6	15.40	20.582		
3,300.0	3,285.6	3,231.7	3,209.8	9.8	7.3	128.21	115.3	236.1	349.2	333.5	15.75	22.168		
3,400.0	3,384.1	3,326.4	3,301.1	10.2	7.4	128.01	127.6	257.8	381.5	365.4	16.12	23.672		
3,500.0	3,482.6	3,421.0	3,392.4	10.5	7.6	127.83	139.9	279.4	413.7	397.2	16.48	25.098		
3,600.0	3,581.1	3,515.7	3,483.8	10.9	7.8	127.69	152.2	301.0	446.0	429.1	16.86	26.450		
3,700.0	3,679.6	3,610.3	3,575.1	11.2	7.9	127.56	164.5	322.6	478.2	461.0	17.24	27.733		
3,800.0	3,778.1	3,705.0	3,666.4	11.6	8.1	127.45	176.8	344.2	510.5	492.8	17.63	28.950		
3,900.0	3,876.6	3,799.6	3,757.7	12.0	8.3	127.35	189.1	365.8	542.7	524.7	18.03	30.105		
4,000.0	3,975.2	3,894.3	3,849.0	12.3	8.4	127.26	201.4	387.4	575.0	556.6	18.43	31.200		
4,100.0	4,073.7	3,988.9	3,940.4	12.7	8.6	127.18	213.8	409.1	607.3	588.4	18.84	32.240		
4,200.0	4,172.2	4,083.6	4,031.7	13.1	8.8	127.11	226.1	430.7	639.5	620.3	19.25	33.229		
4,300.0	4,270.7	4,178.2	4,123.0	13.5	9.0	127.05	238.4	452.3	671.8	652.1	19.66	34.168		
4,400.0	4,369.2	4,272.9	4,214.3	13.9	9.1	126.99	250.7	473.9	704.0	684.0	20.08	35.060		
4,500.0	4,467.7	4,367.5	4,305.7	14.3	9.3	126.94	263.0	495.5	736.3	715.8	20.50	35.910		
4,600.0	4,566.2	4,462.2	4,397.0	14.7	9.5	126.89	275.3	517.1	768.6	747.6	20.93	36.718		
4,700.0	4,664.8	4,556.8	4,488.3	15.1	9.7	126.84	287.6	538.7	800.8	779.5	21.36	37.488		
4,800.0	4,763.3	4,651.5	4,579.6	15.5	9.9	126.80	299.9	560.4	833.1	811.3	21.80	38.222		

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 705H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 SDI_KPR_WL_NS-CT, 2000-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
4,900.0	4,861.8	4,746.1	4,671.0	15.9	10.1	126.77	312.2	582.0	865.4	843.1	22.23	38.922	
5,000.0	4,960.3	4,840.8	4,762.3	16.3	10.2	126.73	324.5	603.6	897.6	874.9	22.67	39.590	
5,100.0	5,058.8	4,935.4	4,853.6	16.8	10.4	126.70	336.8	625.2	929.9	906.8	23.12	40.227	
5,200.0	5,157.3	5,030.1	4,944.9	17.2	10.6	126.67	349.2	646.8	962.1	938.6	23.56	40.836	
5,300.0	5,255.8	5,124.7	5,036.3	17.6	10.8	126.64	361.5	668.4	994.4	970.4	24.01	41.418	

ConocoPhillips

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Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 706H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error: 3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.0	0.0	1.4	0.0	3.0	3.0	89.64	0.6	100.0	100.0				
100.0	100.0	101.4	100.0	3.1	3.1	89.64	0.6	100.0	100.0	93.4	6.62	15.099	
200.0	200.0	201.4	200.0	3.3	3.3	89.64	0.6	100.0	100.0	92.9	7.07	14.136	
300.0	300.0	301.4	300.0	3.6	3.6	89.64	0.6	100.0	100.0	92.5	7.50	13.335	
400.0	400.0	401.4	400.0	3.8	3.8	89.64	0.6	100.0	100.0	92.1	7.90	12.652	
500.0	500.0	501.4	500.0	4.0	4.0	89.64	0.6	100.0	100.0	91.7	8.29	12.062	
600.0	600.0	601.4	600.0	4.1	4.1	89.64	0.6	100.0	100.0	91.3	8.66	11.544	
700.0	700.0	701.4	700.0	4.3	4.3	89.64	0.6	100.0	100.0	91.0	9.02	11.085	
800.0	800.0	801.4	800.0	4.5	4.5	89.64	0.6	100.0	100.0	90.6	9.37	10.674	
900.0	900.0	901.4	900.0	4.7	4.7	89.64	0.6	100.0	100.0	90.3	9.71	10.304	
1,000.0	1,000.0	1,001.4	1,000.0	4.8	4.8	89.64	0.6	100.0	100.0	90.0	10.03	9.967	
1,100.0	1,100.0	1,101.4	1,100.0	5.0	5.0	89.64	0.6	100.0	100.0	89.6	10.35	9.660	
1,200.0	1,200.0	1,201.4	1,200.0	5.2	5.2	89.64	0.6	100.0	100.0	89.3	10.66	9.377	
1,300.0	1,300.0	1,301.4	1,300.0	5.3	5.3	89.64	0.6	100.0	100.0	89.0	10.97	9.116	
1,400.0	1,400.0	1,401.4	1,400.0	5.5	5.5	89.64	0.6	100.0	100.0	88.7	11.27	8.875	
1,500.0	1,500.0	1,501.4	1,500.0	5.6	5.6	89.64	0.6	100.0	100.0	88.4	11.56	8.650	
1,600.0	1,600.0	1,601.4	1,600.0	5.8	5.8	89.64	0.6	100.0	100.0	88.2	11.85	8.439	
1,700.0	1,700.0	1,701.4	1,700.0	5.9	5.9	89.64	0.6	100.0	100.0	87.9	12.13	8.243	
1,800.0	1,800.0	1,801.4	1,800.0	6.0	6.0	89.64	0.6	100.0	100.0	87.6	12.41	8.058	
1,900.0	1,900.0	1,901.4	1,900.0	6.2	6.2	89.64	0.6	100.0	100.0	87.3	12.69	7.883	
1,966.2	1,966.2	1,967.6	1,966.2	6.3	6.3	89.64	0.6	100.0	100.0	87.1	12.86	7.774 CC	
2,000.0	2,000.0	2,001.4	2,000.0	6.3	6.3	89.64	0.6	100.0	100.0	87.0	12.96	7.719 ES	
2,100.0	2,100.0	2,100.9	2,099.5	6.5	6.5	125.92	-0.7	100.2	101.2	88.0	13.23	7.655 SF	
2,200.0	2,199.8	2,200.0	2,198.5	6.8	6.6	130.22	-4.5	100.9	105.4	91.9	13.49	7.813	
2,300.0	2,299.5	2,297.8	2,296.1	7.0	6.8	136.52	-10.8	102.0	113.5	99.7	13.79	8.232	
2,400.0	2,398.7	2,394.0	2,392.0	7.2	6.8	143.28	-18.5	103.9	126.9	112.9	14.08	9.014	
2,494.7	2,492.2	2,484.2	2,481.9	7.5	7.0	148.07	-24.1	107.8	145.1	130.6	14.44	10.046	
2,500.0	2,497.5	2,489.2	2,486.9	7.5	7.0	148.30	-24.3	108.1	146.2	131.8	14.46	10.115	
2,600.0	2,596.0	2,584.2	2,581.6	7.8	7.2	151.55	-28.1	114.6	169.0	154.0	14.96	11.296	
2,700.0	2,694.5	2,678.9	2,675.9	8.1	7.4	153.14	-29.7	123.5	193.2	177.8	15.36	12.575	
2,800.0	2,793.0	2,773.4	2,769.7	8.3	7.5	153.57	-29.4	134.7	218.6	202.8	15.79	13.846	
2,900.0	2,891.5	2,867.2	2,862.5	8.6	7.7	153.20	-27.0	148.2	245.0	228.8	16.21	15.115	
3,000.0	2,990.0	2,960.4	2,954.2	8.9	7.8	152.28	-22.6	163.7	272.6	256.0	16.64	16.386	
3,100.0	3,088.5	3,052.5	3,044.5	9.2	8.1	150.98	-16.3	181.4	301.4	284.3	17.06	17.665	
3,200.0	3,187.1	3,143.6	3,133.0	9.5	8.3	149.43	-8.2	200.9	331.5	314.0	17.46	18.985	
3,300.0	3,285.6	3,237.2	3,223.6	9.8	8.5	147.78	1.4	222.5	362.7	344.8	17.87	20.292	
3,400.0	3,384.1	3,331.7	3,315.1	10.2	8.7	146.37	11.2	244.3	394.1	375.8	18.34	21.490	
3,500.0	3,482.6	3,426.2	3,406.5	10.5	9.0	145.17	21.0	266.1	425.8	406.9	18.83	22.615	
3,600.0	3,581.1	3,520.8	3,497.9	10.9	9.3	144.13	30.8	287.9	457.6	438.2	19.33	23.671	
3,700.0	3,679.6	3,615.3	3,589.4	11.2	9.6	143.23	40.6	309.7	489.5	469.6	19.85	24.664	
3,800.0	3,778.1	3,709.8	3,680.8	11.6	9.9	142.44	50.3	331.5	521.5	501.1	20.38	25.582	
3,900.0	3,876.6	3,804.3	3,772.2	12.0	10.2	141.74	60.1	353.4	553.5	532.6	20.93	26.448	
4,000.0	3,975.2	3,898.8	3,863.7	12.3	10.6	141.11	69.9	375.2	585.7	564.2	21.49	27.256	
4,100.0	4,073.7	3,993.3	3,955.1	12.7	10.9	140.55	79.7	397.0	617.9	595.8	22.06	28.011	
4,200.0	4,172.2	4,087.8	4,046.6	13.1	11.2	140.05	89.5	418.8	650.1	627.5	22.64	28.718	
4,300.0	4,270.7	4,182.3	4,138.0	13.5	11.6	139.59	99.3	440.6	682.4	659.2	23.23	29.379	
4,400.0	4,369.2	4,276.8	4,229.4	13.9	12.0	139.17	109.1	462.5	714.7	690.9	23.83	29.997	
4,500.0	4,467.7	4,371.3	4,320.9	14.3	12.3	138.79	118.8	484.3	747.1	722.7	24.43	30.577	
4,600.0	4,566.2	4,465.8	4,412.3	14.7	12.7	138.44	128.6	506.1	779.5	754.4	25.05	31.120	
4,700.0	4,664.8	4,560.4	4,503.7	15.1	13.1	138.12	138.4	527.9	811.9	786.2	25.67	31.630	
4,800.0	4,763.3	4,654.9	4,595.2	15.5	13.5	137.83	148.2	549.7	844.3	818.0	26.30	32.108	

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

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Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 706H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												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)	No-Go Distance (usft)	Separation Factor	
4,900.0	4,861.8	4,749.4	4,686.6	15.9	13.9	137.55	158.0	571.5	876.8	849.8	26.93	32.558	
5,000.0	4,960.3	4,843.9	4,778.0	16.3	14.3	137.30	167.8	593.4	909.2	881.7	27.57	32.981	
5,100.0	5,058.8	4,938.4	4,869.5	16.8	14.7	137.06	177.5	615.2	941.7	913.5	28.21	33.379	
5,200.0	5,157.3	5,032.9	4,960.9	17.2	15.1	136.84	187.3	637.0	974.2	945.3	28.86	33.754	

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Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 801H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-r.5 MWD+IFR1		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error: 3.0 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
0.0	0.0	1.6	0.0	3.0	3.0	89.65	0.7	120.0	120.0					
100.0	100.0	101.6	100.0	3.1	3.1	89.65	0.7	120.0	120.0	113.4	6.62	18.118		
200.0	200.0	201.6	200.0	3.3	3.3	89.65	0.7	120.0	120.0	112.9	7.07	16.963		
300.0	300.0	301.6	300.0	3.6	3.6	89.65	0.7	120.0	120.0	112.5	7.50	16.001		
400.0	400.0	401.6	400.0	3.8	3.8	89.65	0.7	120.0	120.0	112.1	7.90	15.182		
500.0	500.0	501.6	500.0	4.0	4.0	89.65	0.7	120.0	120.0	111.7	8.29	14.474		
600.0	600.0	601.6	600.0	4.1	4.1	89.65	0.7	120.0	120.0	111.3	8.66	13.852		
700.0	700.0	701.6	700.0	4.3	4.3	89.65	0.7	120.0	120.0	111.0	9.02	13.302		
800.0	800.0	801.6	800.0	4.5	4.5	89.65	0.7	120.0	120.0	110.6	9.37	12.809		
900.0	900.0	901.6	900.0	4.7	4.7	89.65	0.7	120.0	120.0	110.3	9.71	12.365		
1,000.0	1,000.0	1,001.6	1,000.0	4.8	4.8	89.65	0.7	120.0	120.0	110.0	10.03	11.961		
1,100.0	1,100.0	1,101.6	1,100.0	5.0	5.0	89.65	0.7	120.0	120.0	109.6	10.35	11.592		
1,200.0	1,200.0	1,201.6	1,200.0	5.2	5.2	89.65	0.7	120.0	120.0	109.3	10.66	11.253		
1,300.0	1,300.0	1,301.6	1,300.0	5.3	5.3	89.65	0.7	120.0	120.0	109.0	10.97	10.940		
1,400.0	1,400.0	1,401.6	1,400.0	5.5	5.5	89.65	0.7	120.0	120.0	108.7	11.27	10.649		
1,500.0	1,500.0	1,501.6	1,500.0	5.6	5.6	89.65	0.7	120.0	120.0	108.4	11.56	10.379		
1,600.0	1,600.0	1,601.6	1,600.0	5.8	5.8	89.65	0.7	120.0	120.0	108.2	11.85	10.127		
1,700.0	1,700.0	1,701.6	1,700.0	5.9	5.9	89.65	0.7	120.0	120.0	107.9	12.13	9.891		
1,800.0	1,800.0	1,801.6	1,800.0	6.0	6.0	89.65	0.7	120.0	120.0	107.6	12.41	9.669		
1,900.0	1,900.0	1,901.6	1,900.0	6.2	6.2	89.65	0.7	120.0	120.0	107.3	12.69	9.460		
1,966.1	1,966.1	1,967.7	1,966.1	6.3	6.3	89.65	0.7	120.0	120.0	107.1	12.86	9.329 CC		
2,000.0	2,000.0	2,001.6	2,000.0	6.3	6.3	89.65	0.7	120.0	120.0	107.0	12.96	9.263 ES		
2,100.0	2,100.0	2,100.0	2,098.4	6.5	6.5	124.27	2.3	120.7	121.7	108.4	13.25	9.182 SF		
2,200.0	2,199.8	2,198.1	2,196.3	6.8	6.8	123.99	7.0	122.7	126.7	113.2	13.54	9.354		
2,300.0	2,299.5	2,295.9	2,293.8	7.0	7.0	123.57	14.8	126.0	135.0	121.2	13.84	9.758		
2,400.0	2,398.7	2,393.3	2,390.5	7.2	7.2	123.07	25.6	130.5	146.6	132.5	14.13	10.376		
2,494.7	2,492.2	2,484.9	2,481.0	7.5	7.5	122.53	38.4	136.0	160.7	146.2	14.42	11.140		
2,500.0	2,497.5	2,490.1	2,486.1	7.5	7.5	122.52	39.2	136.3	161.5	147.1	14.43	11.191		
2,600.0	2,596.0	2,588.2	2,582.7	7.8	7.7	122.03	55.1	143.0	178.2	163.3	14.85	11.999		
2,700.0	2,694.5	2,686.8	2,679.8	8.1	8.0	121.62	71.1	149.8	194.8	179.7	15.15	12.861		
2,800.0	2,793.0	2,785.4	2,776.8	8.3	8.2	121.27	87.1	156.6	211.5	196.1	15.46	13.679		
2,900.0	2,891.5	2,884.0	2,873.9	8.6	8.5	120.97	103.1	163.3	228.2	212.4	15.79	14.455		
3,000.0	2,990.0	2,982.6	2,970.9	8.9	8.8	120.71	119.1	170.1	244.9	228.8	16.12	15.189		
3,100.0	3,088.5	3,081.2	3,068.0	9.2	9.1	120.48	135.0	176.8	261.6	245.1	16.47	15.885		
3,200.0	3,187.1	3,179.8	3,165.0	9.5	9.4	120.29	151.0	183.6	278.3	261.5	16.82	16.544		
3,300.0	3,285.6	3,278.4	3,262.1	9.8	9.7	120.11	167.0	190.4	295.0	277.8	17.18	17.167		
3,400.0	3,384.1	3,377.0	3,359.1	10.2	10.1	119.95	183.0	197.1	311.7	294.2	17.56	17.756		
3,500.0	3,482.6	3,475.6	3,456.2	10.5	10.4	119.81	199.0	203.9	328.4	310.5	17.93	18.314		
3,600.0	3,581.1	3,574.2	3,553.2	10.9	10.8	119.68	215.0	210.7	345.1	326.8	18.32	18.841		
3,700.0	3,679.6	3,672.8	3,650.3	11.2	11.1	119.57	231.0	217.4	361.8	343.1	18.71	19.340		
3,800.0	3,778.1	3,771.3	3,747.3	11.6	11.5	119.46	246.9	224.2	378.6	359.4	19.11	19.813		
3,900.0	3,876.6	3,869.9	3,844.4	12.0	11.8	119.37	262.9	231.0	395.3	375.8	19.51	20.260		
4,000.0	3,975.2	3,968.5	3,941.5	12.3	12.2	119.28	278.9	237.7	412.0	392.1	19.92	20.683		
4,100.0	4,073.7	4,067.1	4,038.5	12.7	12.6	119.20	294.9	244.5	428.7	408.4	20.33	21.084		
4,200.0	4,172.2	4,165.7	4,135.6	13.1	13.0	119.12	310.9	251.3	445.4	424.7	20.75	21.465		
4,300.0	4,270.7	4,264.3	4,232.6	13.5	13.4	119.05	326.9	258.0	462.1	441.0	21.17	21.826		
4,400.0	4,369.2	4,362.9	4,329.7	13.9	13.8	118.99	342.8	264.8	478.8	457.2	21.60	22.168		
4,500.0	4,467.7	4,461.5	4,426.7	14.3	14.2	118.92	358.8	271.6	495.6	473.5	22.03	22.493		
4,600.0	4,566.2	4,560.1	4,523.8	14.7	14.6	118.87	374.8	278.3	512.3	489.8	22.47	22.802		
4,700.0	4,664.8	4,658.7	4,620.8	15.1	15.0	118.81	390.8	285.1	529.0	506.1	22.91	23.095		
4,800.0	4,763.3	4,757.3	4,717.9	15.5	15.4	118.76	406.8	291.9	545.7	522.4	23.35	23.374		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 801H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-r.5 MWD+IFR1				Rule Assigned:									Offset Well Error: 3.0 usft	
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
4,900.0	4,861.8	4,855.8	4,814.9	15.9	15.8	118.72	422.8	298.6	562.4	538.7	23.79	23.640		
5,000.0	4,960.3	4,954.4	4,912.0	16.3	16.2	118.67	438.8	305.4	579.2	554.9	24.24	23.893		
5,100.0	5,058.8	5,053.0	5,009.0	16.8	16.6	118.63	454.7	312.2	595.9	571.2	24.69	24.134		
5,200.0	5,157.3	5,151.6	5,106.1	17.2	17.0	118.59	470.7	318.9	612.6	587.5	25.14	24.364		
5,300.0	5,255.8	5,250.2	5,203.1	17.6	17.4	118.55	486.7	325.7	629.3	603.7	25.60	24.584		
5,400.0	5,354.3	5,348.8	5,300.2	18.0	17.8	118.52	502.7	332.5	646.0	620.0	26.06	24.793		
5,500.0	5,452.9	5,447.4	5,397.2	18.4	18.3	118.48	518.7	339.2	662.8	636.3	26.52	24.994		
5,600.0	5,551.4	5,546.0	5,494.3	18.9	18.7	118.45	534.7	346.0	679.5	652.5	26.98	25.185		
5,700.0	5,649.9	5,644.6	5,591.3	19.3	19.1	118.42	550.7	352.8	696.2	668.8	27.44	25.368		
5,800.0	5,748.4	5,743.2	5,688.4	19.7	19.5	118.39	566.6	359.5	712.9	685.0	27.91	25.543		
5,900.0	5,846.9	5,841.8	5,785.4	20.1	20.0	118.37	582.6	366.3	729.7	701.3	28.38	25.711		
6,000.0	5,945.4	5,940.4	5,882.5	20.6	20.4	118.34	598.6	373.1	746.4	717.5	28.85	25.872		
6,071.2	6,015.6	6,010.6	5,951.6	20.9	20.7	118.32	610.0	377.9	758.3	729.1	29.17	25.993		
6,100.0	6,043.9	6,038.9	5,979.5	21.0	20.8	118.35	614.6	379.8	763.1	733.8	29.30	26.045		
6,200.0	6,142.7	6,137.6	6,076.7	21.4	21.2	118.38	630.6	386.6	779.1	749.4	29.77	26.175		
6,300.0	6,241.7	6,236.4	6,173.9	21.8	21.7	118.29	646.6	393.4	794.4	764.2	30.23	26.280		
6,400.0	6,340.9	6,335.3	6,271.2	22.2	22.1	118.10	662.6	400.2	808.9	778.2	30.69	26.359		
6,500.0	6,440.3	6,434.1	6,368.6	22.6	22.5	117.80	678.7	407.0	822.6	791.4	31.14	26.415		
6,600.0	6,539.9	6,533.0	6,465.9	23.0	23.0	117.40	694.7	413.7	835.5	803.9	31.59	26.449		
6,700.0	6,639.7	6,631.9	6,563.2	23.4	23.4	116.91	710.7	420.5	847.7	815.7	32.03	26.463		
6,800.0	6,739.5	6,730.7	6,660.5	23.7	23.8	116.33	726.7	427.3	859.3	826.8	32.48	26.456		
6,900.0	6,839.5	6,829.4	6,757.6	24.0	24.3	115.66	742.8	434.1	870.2	837.3	32.92	26.432		
7,000.0	6,939.5	6,928.0	6,854.7	24.3	24.7	114.90	758.7	440.8	880.5	847.1	33.36	26.391		
7,060.6	7,000.0	6,987.6	6,913.4	24.4	25.0	79.66	768.4	444.9	886.5	852.9	33.61	26.378		
7,100.0	7,039.4	7,026.5	6,951.6	24.4	25.1	79.29	774.7	447.6	890.4	856.6	33.76	26.375		
7,200.0	7,139.4	7,124.9	7,048.5	24.4	25.6	78.36	790.7	454.4	900.4	866.2	34.19	26.337		
7,300.0	7,239.4	7,223.3	7,145.4	24.5	26.0	77.46	806.6	461.1	910.6	875.9	34.64	26.290		
7,400.0	7,339.4	7,321.8	7,242.3	24.5	26.5	76.58	822.6	467.9	921.0	885.9	35.10	26.236		
7,500.0	7,439.4	7,420.2	7,339.2	24.6	26.9	75.72	838.5	474.6	931.7	896.1	35.59	26.176		
7,600.0	7,539.4	7,518.7	7,436.1	24.6	27.3	74.87	854.5	481.4	942.5	906.4	36.10	26.111		
7,700.0	7,639.4	7,622.3	7,538.2	24.7	27.8	74.01	871.1	488.4	953.5	916.8	36.62	26.034		
7,800.0	7,739.4	7,732.8	7,647.3	24.7	28.3	73.20	887.2	495.2	963.6	926.4	37.19	25.912		
7,900.0	7,839.4	7,844.0	7,757.5	24.8	28.7	72.50	901.4	501.2	972.6	934.8	37.73	25.777		
8,000.0	7,939.4	7,955.8	7,868.4	24.8	29.2	71.90	913.7	506.5	980.4	942.2	38.25	25.633		
8,100.0	8,039.4	8,068.1	7,980.1	24.9	29.6	71.41	924.1	510.8	987.0	948.3	38.74	25.480		
8,200.0	8,139.4	8,180.7	8,092.4	24.9	30.1	71.02	932.5	514.4	992.4	953.2	39.19	25.322		
8,300.0	8,239.4	8,293.7	8,205.2	24.9	30.5	70.72	938.8	517.1	996.5	956.9	39.60	25.162		
8,400.0	8,339.4	8,406.9	8,318.2	25.0	30.8	70.52	943.1	518.9	999.3	959.3	39.97	25.003		

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design:		ZIA HILLS UNIT 2832 PROJECT - RED HILLS WEST '21' DM FEDERAL COM 1H - OWB - AWP											Offset Site Error:		0.0 usft	
Survey Program:		100-r.5 MWD											Offset Well Error:		3.0 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (")	Offset Wellbore Centre		Rule Assigned:			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)	No-Go Distance (usft)					
8,400.0	8,339.4	13,730.0	9,286.2	25.0	82.9	67.97	698.7	-203.8	975.8	913.2	62.68	15.569				
8,500.0	8,439.4	13,730.0	9,286.2	25.0	82.9	67.97	698.7	-203.8	879.2	815.8	63.40	13.866				
8,600.0	8,539.4	13,730.0	9,286.2	25.1	82.9	67.97	698.7	-203.8	783.3	718.9	64.39	12.165				
8,700.0	8,639.4	13,730.0	9,286.2	25.1	82.9	67.97	698.7	-203.8	688.6	622.8	65.79	10.467				
8,800.0	8,739.4	13,730.0	9,286.2	25.2	82.9	67.97	698.7	-203.8	595.7	527.9	67.85	8.780				
8,900.0	8,839.4	13,730.0	9,286.2	25.2	82.9	67.97	698.7	-203.8	505.5	434.5	71.01	7.119				
9,000.0	8,939.4	13,730.0	9,286.2	25.3	82.9	67.97	698.7	-203.8	419.7	343.7	75.98	5.524				
9,100.0	9,039.4	13,730.0	9,286.2	25.3	82.9	67.97	698.7	-203.8	341.8	257.9	83.84	4.077				
9,200.0	9,139.4	13,730.0	9,286.2	25.4	82.9	67.97	698.7	-203.8	278.3	183.2	95.13	2.926	Normal Operations			
9,300.0	9,239.4	13,730.0	9,286.2	25.4	82.9	67.97	698.7	-203.8	241.1	134.6	106.43	2.265	Caution - Monitor Closely			
9,346.8	9,286.2	13,730.0	9,286.2	25.5	82.9	67.97	698.7	-203.8	236.5	127.4	109.05	2.168	Caution - Monitor Closely, CC, ES, SF			
9,400.0	9,339.4	13,730.0	9,286.2	25.5	82.9	67.97	698.7	-203.8	242.4	133.7	108.67	2.231	Caution - Monitor Closely			
9,500.0	9,439.4	13,730.0	9,286.2	25.5	82.9	67.97	698.7	-203.8	281.8	180.8	100.94	2.792	Normal Operations			
9,600.0	9,539.4	13,730.0	9,286.2	25.6	82.9	67.97	698.7	-203.8	346.5	255.0	91.50	3.787				
9,700.0	9,639.4	13,730.0	9,286.2	25.6	82.9	67.97	698.7	-203.8	425.1	340.8	84.26	5.045				
9,800.0	9,739.4	13,730.0	9,286.2	25.7	82.9	67.97	698.7	-203.8	511.2	431.9	79.31	6.446				
9,900.0	9,839.4	13,730.0	9,286.2	25.7	82.9	67.97	698.7	-203.8	601.7	525.7	75.98	7.918				
10,000.0	9,939.4	13,730.0	9,286.2	25.8	82.9	67.97	698.7	-203.8	694.7	621.0	73.71	9.426				
10,100.0	10,039.4	13,730.0	9,286.2	25.9	82.9	67.97	698.7	-203.8	789.5	717.4	72.12	10.947				
10,200.0	10,139.4	13,730.0	9,286.2	25.9	82.9	67.97	698.7	-203.8	885.4	814.4	70.99	12.472				
10,300.0	10,239.4	13,730.0	9,286.2	26.0	82.9	67.97	698.7	-203.8	982.1	912.0	70.18	13.994				

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - RED HILLS WEST 21 W1DM FEDERAL COM 002H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 100-r.5 MWD												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:			Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	
11,475.0	11,412.7	16,830.0	12,063.6	26.1	86.4	-110.95	706.8	325.2	998.3	902.5	95.86	10.415	
11,500.0	11,436.5	16,830.0	12,063.6	26.1	86.4	-112.93	706.8	325.2	983.8	887.1	96.76	10.168	
11,525.0	11,459.9	16,830.0	12,063.6	26.0	86.4	-114.71	706.8	325.2	970.2	872.5	97.65	9.936	
11,550.0	11,482.8	16,830.0	12,063.6	25.9	86.4	-116.31	706.8	325.2	957.5	859.0	98.52	9.719	
11,575.0	11,505.2	16,830.0	12,063.6	25.8	86.4	-117.73	706.8	325.2	945.8	846.4	99.35	9.520	
11,600.0	11,526.9	16,830.0	12,063.6	25.7	86.4	-118.97	706.8	325.2	935.1	835.0	100.14	9.338	
11,625.0	11,548.0	16,830.0	12,063.6	25.6	86.4	-120.04	706.8	325.2	925.7	824.8	100.88	9.176	
11,650.0	11,568.3	16,830.0	12,063.6	25.5	86.4	-120.95	706.8	325.2	917.4	815.8	101.56	9.033	
11,675.0	11,587.9	16,830.0	12,063.6	25.5	86.4	-121.70	706.8	325.2	910.3	808.2	102.15	8.912	
11,700.0	11,606.6	16,830.0	12,063.6	25.4	86.4	-122.30	706.8	325.2	904.6	802.0	102.66	8.811	
11,725.0	11,624.4	16,830.0	12,063.6	25.3	86.4	-122.75	706.8	325.2	900.2	797.2	103.08	8.734	
11,750.0	11,641.3	16,830.0	12,063.6	25.2	86.4	-123.05	706.8	325.2	897.2	793.9	103.38	8.679	
11,775.0	11,657.1	16,830.0	12,063.6	25.2	86.4	-123.22	706.8	325.2	895.6	792.1	103.58	8.647	
11,790.8	11,666.6	16,830.0	12,063.6	25.1	86.4	-123.24	706.8	325.2	895.4	791.7	103.64	8.639 CC, ES	
11,800.0	11,672.0	16,830.0	12,063.6	25.1	86.4	-123.23	706.8	325.2	895.4	791.8	103.65	8.639 SF	
11,825.0	11,685.7	16,830.0	12,063.6	25.1	86.4	-123.11	706.8	325.2	896.7	793.1	103.61	8.654	
11,850.0	11,698.4	16,830.0	12,063.6	25.0	86.4	-122.84	706.8	325.2	899.3	795.9	103.44	8.694	
11,875.0	11,709.9	16,830.0	12,063.6	25.0	86.4	-122.43	706.8	325.2	903.3	800.2	103.15	8.757	
11,900.0	11,720.2	16,830.0	12,063.6	24.9	86.4	-121.87	706.8	325.2	908.7	806.0	102.74	8.844	
11,925.0	11,729.4	16,830.0	12,063.6	24.9	86.4	-121.16	706.8	325.2	915.4	813.2	102.22	8.955	
11,950.0	11,737.3	16,830.0	12,063.6	24.9	86.4	-120.30	706.8	325.2	923.4	821.8	101.59	9.089	
11,975.0	11,743.9	16,830.0	12,063.6	24.8	86.4	-119.27	706.8	325.2	932.5	831.7	100.87	9.245	
12,000.0	11,749.3	16,830.0	12,063.6	24.8	86.4	-118.07	706.8	325.2	942.9	842.8	100.05	9.424	
12,025.0	11,753.4	16,830.0	12,063.6	24.8	86.4	-116.70	706.8	325.2	954.3	855.1	99.15	9.624	
12,050.0	11,756.2	16,830.0	12,063.6	24.8	86.4	-115.15	706.8	325.2	966.7	868.6	98.19	9.846	
12,075.0	11,757.7	16,830.0	12,063.6	24.8	86.4	-113.42	706.8	325.2	980.1	883.0	97.16	10.087	
12,091.0	11,758.0	16,830.0	12,063.6	24.8	86.4	-112.20	706.8	325.2	989.2	892.7	96.48	10.253	
12,100.0	11,758.0	16,830.0	12,063.6	24.8	86.4	-112.20	706.8	325.2	994.4	898.3	96.09	10.348	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - RED HILLS WEST 21 W1DM FEDERAL COM 003H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 134-r.5 MWD												Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
10,900.0	10,839.4	16,570.0	11,755.5	26.3	82.2	62.24	700.0	-252.0	936.2	860.9	75.38	12.420	
11,000.0	10,939.4	16,570.0	11,755.5	26.3	82.2	62.24	700.0	-252.0	838.7	762.7	75.98	11.038	
11,100.0	11,039.4	16,570.0	11,755.5	26.4	82.2	62.24	700.0	-252.0	741.7	665.0	76.73	9.666	
11,200.0	11,139.4	16,570.0	11,755.5	26.4	82.2	62.24	700.0	-252.0	645.7	568.0	77.72	8.308	
11,300.0	11,239.4	16,570.0	11,755.5	26.5	82.2	62.24	700.0	-252.0	551.1	472.0	79.10	6.967	
11,341.1	11,280.5	16,570.0	11,755.5	26.5	82.2	62.24	700.0	-252.0	512.8	433.0	79.83	6.424	
11,350.0	11,289.4	16,570.0	11,755.5	26.5	82.2	-119.67	700.0	-252.0	504.6	424.6	80.01	6.307	
11,375.0	11,314.4	16,570.0	11,755.5	26.4	82.2	-125.25	700.0	-252.0	481.8	401.3	80.47	5.987	
11,400.0	11,339.3	16,570.0	11,755.5	26.4	82.2	-129.83	700.0	-252.0	459.6	378.7	80.91	5.681	
11,425.0	11,364.0	16,570.0	11,755.5	26.3	82.2	-133.58	700.0	-252.0	438.2	356.9	81.29	5.390	
11,450.0	11,388.5	16,570.0	11,755.5	26.2	82.2	-136.64	700.0	-252.0	417.6	336.0	81.61	5.117	
11,475.0	11,412.7	16,570.0	11,755.5	26.1	82.2	-139.13	700.0	-252.0	398.2	316.4	81.83	4.866	
11,500.0	11,436.5	16,570.0	11,755.5	26.1	82.2	-141.16	700.0	-252.0	380.1	298.2	81.91	4.640	
11,525.0	11,459.9	16,570.0	11,755.5	26.0	82.2	-142.79	700.0	-252.0	363.6	281.8	81.82	4.444	
11,550.0	11,482.8	16,570.0	11,755.5	25.9	82.2	-144.08	700.0	-252.0	348.9	267.4	81.49	4.282	
11,575.0	11,505.2	16,570.0	11,755.5	25.8	82.2	-145.09	700.0	-252.0	336.4	255.5	80.87	4.160	
11,600.0	11,526.9	16,570.0	11,755.5	25.7	82.2	-145.84	700.0	-252.0	326.3	246.4	79.92	4.084	
11,625.0	11,548.0	16,570.0	11,755.5	25.6	82.2	-146.36	700.0	-252.0	319.0	240.4	78.59	4.058 SF	
11,650.0	11,568.3	16,570.0	11,755.5	25.5	82.2	-146.66	700.0	-252.0	314.5	237.6	76.90	4.089 ES	
11,674.3	11,587.3	16,570.0	11,755.5	25.5	82.2	-146.75	700.0	-252.0	313.0	238.1	74.93	4.177 CC	
11,675.0	11,587.9	16,570.0	11,755.5	25.5	82.2	-146.75	700.0	-252.0	313.0	238.1	74.87	4.181	
11,700.0	11,606.6	16,570.0	11,755.5	25.4	82.2	-146.65	700.0	-252.0	314.6	242.1	72.57	4.336	
11,725.0	11,624.4	16,570.0	11,755.5	25.3	82.2	-146.33	700.0	-252.0	319.3	249.2	70.11	4.554	
11,750.0	11,641.3	16,570.0	11,755.5	25.2	82.2	-145.80	700.0	-252.0	326.9	259.3	67.61	4.835	
11,775.0	11,657.1	16,570.0	11,755.5	25.2	82.2	-145.03	700.0	-252.0	337.1	271.9	65.16	5.173	
11,800.0	11,672.0	16,570.0	11,755.5	25.1	82.2	-144.01	700.0	-252.0	349.7	286.9	62.84	5.565	
11,825.0	11,685.7	16,570.0	11,755.5	25.1	82.2	-142.70	700.0	-252.0	364.5	303.8	60.72	6.003	
11,850.0	11,698.4	16,570.0	11,755.5	25.0	82.2	-141.05	700.0	-252.0	381.1	322.3	58.80	6.481	
11,875.0	11,709.9	16,570.0	11,755.5	25.0	82.2	-139.00	700.0	-252.0	399.3	342.2	57.10	6.993	
11,900.0	11,720.2	16,570.0	11,755.5	24.9	82.2	-136.48	700.0	-252.0	418.8	363.2	55.60	7.533	
11,925.0	11,729.4	16,570.0	11,755.5	24.9	82.2	-133.38	700.0	-252.0	439.4	385.2	54.28	8.096	
11,950.0	11,737.3	16,570.0	11,755.5	24.9	82.2	-129.59	700.0	-252.0	460.9	407.8	53.11	8.680	
11,975.0	11,743.9	16,570.0	11,755.5	24.8	82.2	-124.95	700.0	-252.0	483.2	431.1	52.06	9.281	
12,000.0	11,749.3	16,570.0	11,755.5	24.8	82.2	-119.30	700.0	-252.0	506.0	454.8	51.12	9.898	
12,025.0	11,753.4	16,570.0	11,755.5	24.8	82.2	-112.51	700.0	-252.0	529.2	478.9	50.25	10.530	
12,050.0	11,756.2	16,570.0	11,755.5	24.8	82.2	-104.52	700.0	-252.0	552.7	503.3	49.46	11.175	
12,075.0	11,757.7	16,570.0	11,755.5	24.8	82.2	-95.44	700.0	-252.0	576.5	527.8	48.72	11.834	
12,091.0	11,758.0	16,570.0	11,755.5	24.8	82.2	-89.19	700.0	-252.0	591.8	543.6	48.26	12.263	
12,100.0	11,758.0	16,570.0	11,755.5	24.8	82.2	-89.19	700.0	-252.0	600.4	552.4	48.02	12.504	
12,200.0	11,758.0	16,570.0	11,755.5	24.9	82.2	-89.19	700.0	-252.0	696.8	651.0	45.87	15.193	
12,300.0	11,758.0	16,570.0	11,755.5	25.0	82.2	-89.19	700.0	-252.0	794.1	749.7	44.46	17.860	
12,400.0	11,758.0	16,570.0	11,755.5	25.1	82.2	-89.19	700.0	-252.0	892.0	848.5	43.52	20.496	
12,500.0	11,758.0	16,570.0	11,755.5	25.2	82.2	-89.19	700.0	-252.0	990.4	947.5	42.88	23.098	

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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWPO	Offset TVD Reference:	Reference Datum

Offset Design: ZIA HILLS UNIT 2832 PROJECT - WILDER FEDERAL AC COM 28 3H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program:		100-GYD-CT-CMS, 891-r.5 MWD						Rule Assigned:				Offset Well Error:	0.0 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)	No-Go Distance (usft)	Separation Factor		
0.0	0.0	7.5	0.5	3.0	0.0	81.11	148.0	946.6	958.1					
100.0	100.0	114.1	107.1	3.1	0.1	81.06	148.9	946.0	957.7	952.5	5.15	185.810		
200.0	200.0	219.7	212.7	3.3	0.4	80.94	150.6	944.6	956.6	951.1	5.50	173.791		
300.0	300.0	320.9	313.8	3.6	0.7	80.84	152.1	942.8	955.1	949.3	5.86	163.005		
400.0	400.0	412.4	405.3	3.8	0.9	80.71	154.1	941.6	954.1	947.9	6.21	153.644		
445.4	445.4	452.5	445.4	3.8	1.0	80.63	155.3	941.2	954.0	947.6	6.36	149.948 CC		
500.0	500.0	500.0	492.9	4.0	1.1	80.53	156.9	941.1	954.2	947.6	6.55	145.620 ES		
600.0	600.0	597.4	590.1	4.1	1.4	80.28	161.2	941.2	955.0	948.1	6.90	138.379		
700.0	700.0	687.4	680.0	4.3	1.6	79.98	166.4	941.8	956.5	949.3	7.24	132.076		
800.0	800.0	780.2	772.6	4.5	1.8	79.61	172.9	942.9	959.0	951.5	7.59	126.422		
900.0	900.0	866.8	858.9	4.7	2.1	79.22	179.9	944.7	962.5	954.8	7.77	123.913		
1,000.0	1,000.0	960.9	952.6	4.8	2.4	78.74	188.7	947.5	967.3	959.1	8.14	118.757		
1,100.0	1,100.0	1,061.3	1,052.4	5.0	2.7	78.24	197.9	950.7	972.2	963.7	8.54	113.793		
1,200.0	1,200.0	1,160.0	1,150.8	5.2	3.1	77.80	206.3	953.9	977.1	968.2	8.94	109.336		
1,300.0	1,300.0	1,252.5	1,242.9	5.3	3.4	77.42	213.6	957.3	982.5	973.2	9.32	105.474		
1,400.0	1,400.0	1,348.6	1,338.6	5.5	3.8	77.05	221.0	961.6	988.6	978.9	9.71	101.833		
1,500.0	1,500.0	1,464.4	1,454.1	5.6	4.3	76.69	228.6	966.4	994.2	984.0	10.19	97.536		
1,600.0	1,600.0	1,569.9	1,559.4	5.8	4.7	76.50	232.9	970.1	998.5	987.9	10.61	94.147 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 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 3186.0usft

Offset Depths are relative to Offset Datum

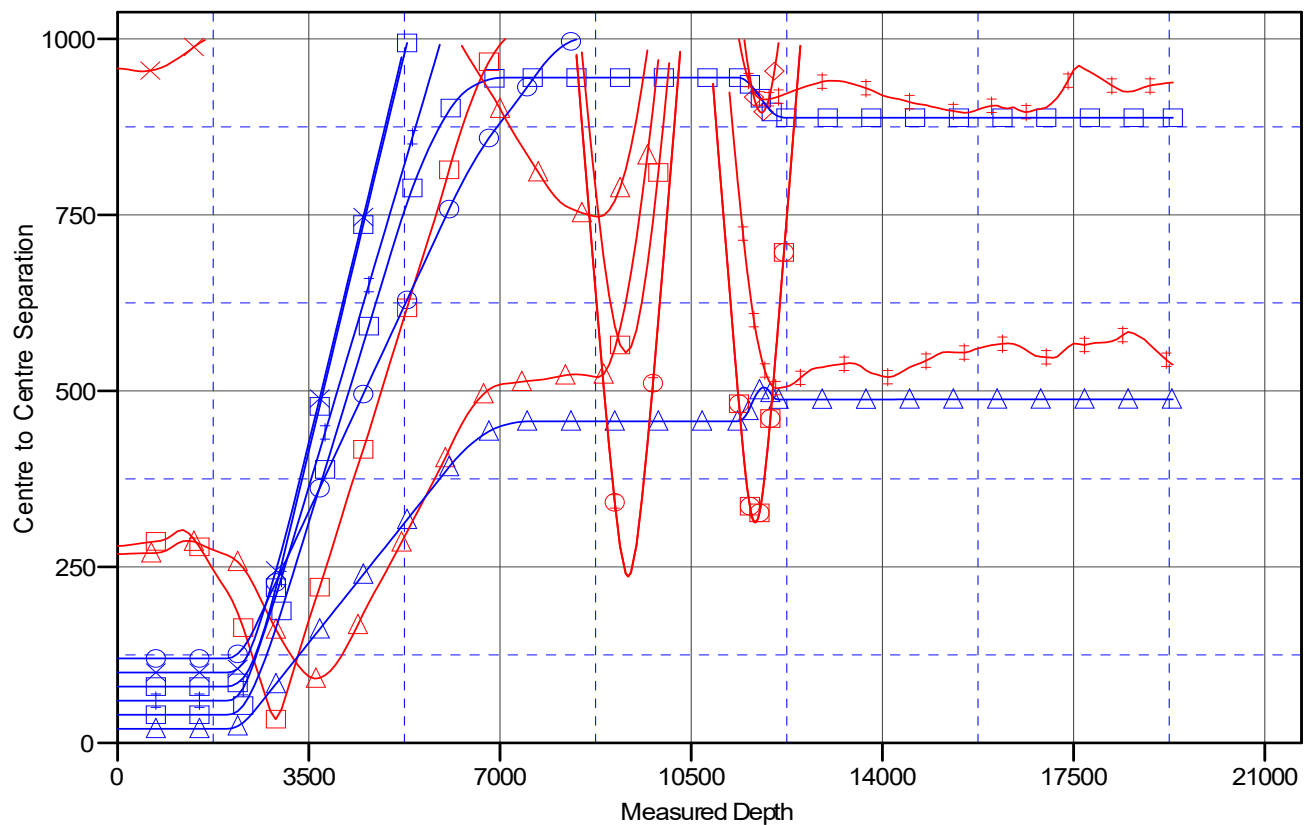
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _ZIA HILLS UNIT 2832 WC 701H

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

Grid Convergence at Surface is: 0.34°

Ladder Plot



LEGEND

RED HILLS WEST 21 DM FEDERAL COM #1H, OWB, AWP V0
WILDER 28 AC FEDERAL COM #6H, OWB, AWP V0
WILDER 28 AC FEDERAL COM #4H, OWB, AWP V0
RED HILLS WEST 21 WDM FEDERAL COM #3H, OWB, AWP V0
WILDER FEDERAL AC COM 2 3H, OWB, AWP V0
RED HILLS WEST 21 WDM FEDERAL COM 002H, OWB, AWP V0

_ZIA HILLS UNIT 2832 WC 704H OWB, PWP0 V0
_ZIA HILLS UNIT 2832 WC 702H OWB, PWP0 V0
_ZIA HILLS UNIT 2832 WC 803H OWB, PWP0 V0
_ZIA HILLS UNIT 2832 WC 703H OWB, PWP0 V0
RED HILLS WEST 21 WDM FEDERAL COM 003H, OWB, AWP V0
RED HILLS WEST 21 DM FEDERAL COM 1H, OWB, AWP V0

_ZIA HILLS UNIT 2832 WC 706H OWB, PWP0 V0
_ZIA HILLS UNIT 2832 WC 705H OWB, PWP0 V0
_ZIA HILLS 20 FEDERAL COM #14H, OWB, AWP V0
WILDER 29 FEDERAL #5H, OWB, AWP V0
ZIA HILLS 20 FEDERAL COM #15H, OWB, AWP V0
BUCK 20 FEDERAL #1H, OWB, AWP V0

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 701H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3186.0usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3186.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 701H	Survey Calculation Method:	Minimum Curvature
Well Error:	3.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Reference Datum

Reference Depths are relative to KB @ 3186.0usft

Offset Depths are relative to Offset Datum

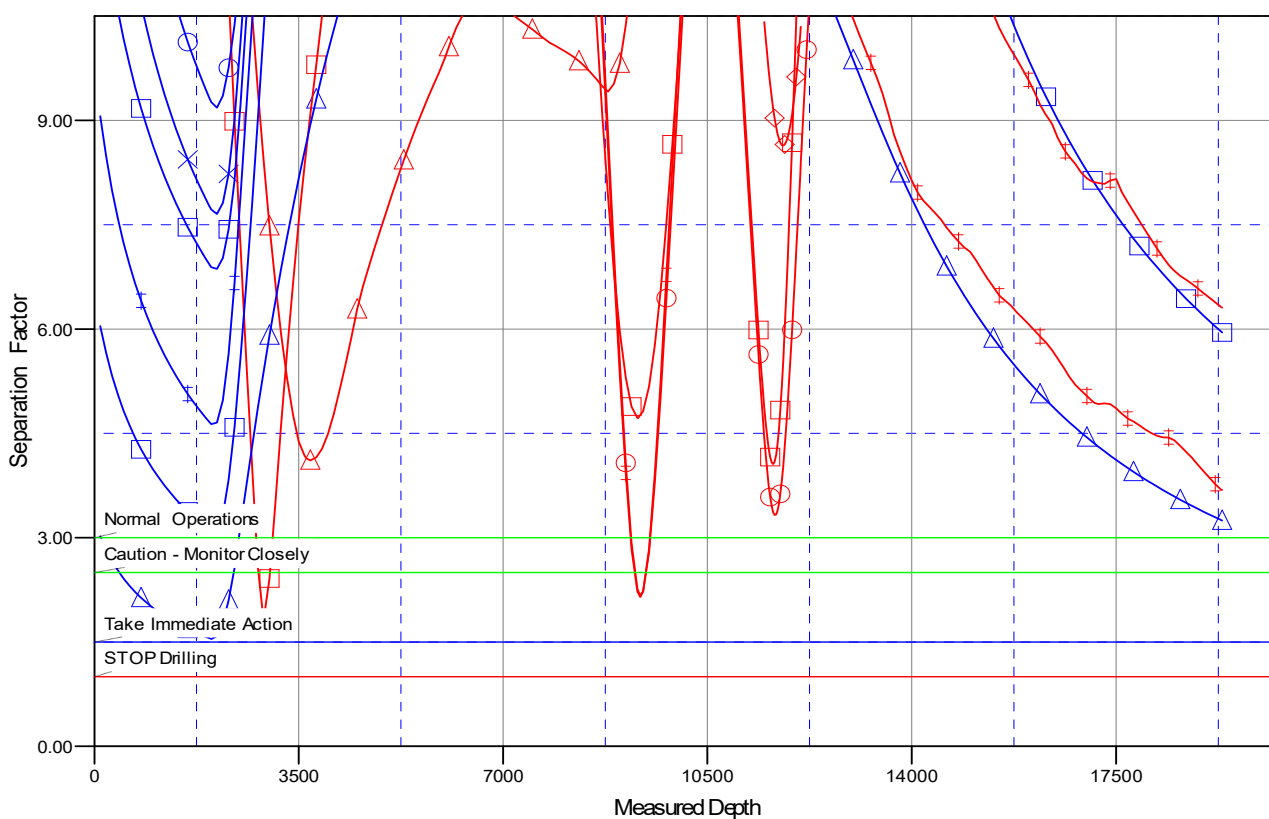
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _ZIA HILLS UNIT 2832 WC 701H

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

Grid Convergence at Surface is: 0.34°

Separation Factor Plot



LEGEND

RED HILLS WEST 21 DM FEDERAL COM #1H, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 704H OWB, PWP0 V0	_ZIA HILLS UNIT 2832 WC 706H OWB, PWP0 V0
WILDER 28 AC FEDERAL COM #8H, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 702H OWB, PWP0 V0	_ZIA HILLS UNIT 2832 WC 705H OWB, PWP0 V0
WILDER 28 AC FEDERAL COM #8H, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 801H OWB, PWP0 V0	_ZIA HILLS 20 FEDERAL COM #14H, OWB, AWP V0
RED HILLS WEST 21 WDM FEDERAL COM #3H, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 703H OWB, PWP0 V0	WILDER 29 FEDERAL #5H, OWB, AWP V0
WILDER FEDERAL AC COM #3H, OWB, AWP V0	RED HILLS WEST 21 WDM FEDERAL COM 003H, OWB, AWP V0	ZIA HILLS 20 FEDERAL COM #15H, OWB, AWP V0
RED HILLS WEST 21 WDM FEDERAL COM 002H, OWB, AWP V0	RED HILLS WEST 21 DM FEDERAL COM 1H, OWB, AWP V0	BUCK 20 FEDERAL #1H, OWB, AWP V0

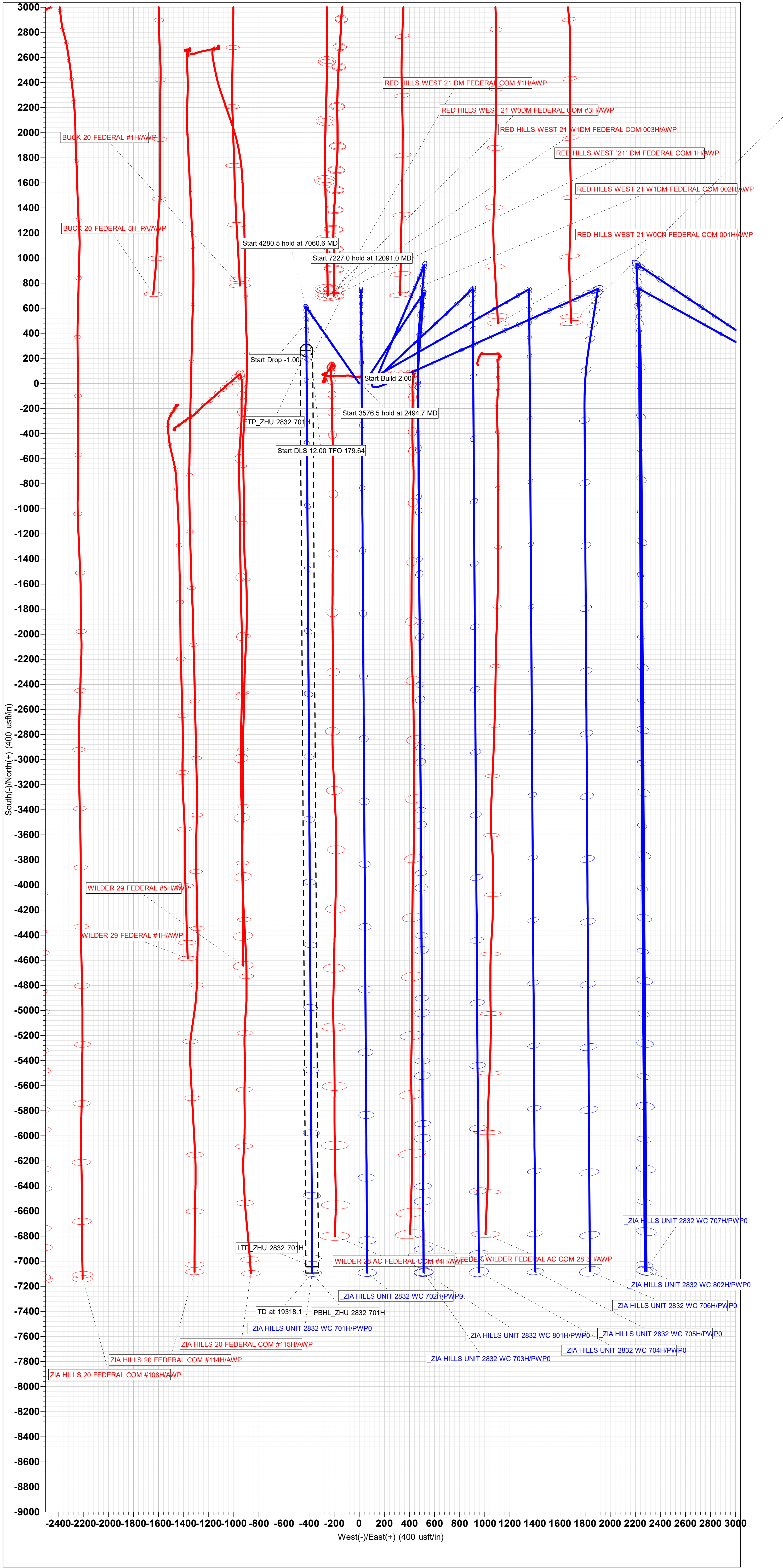
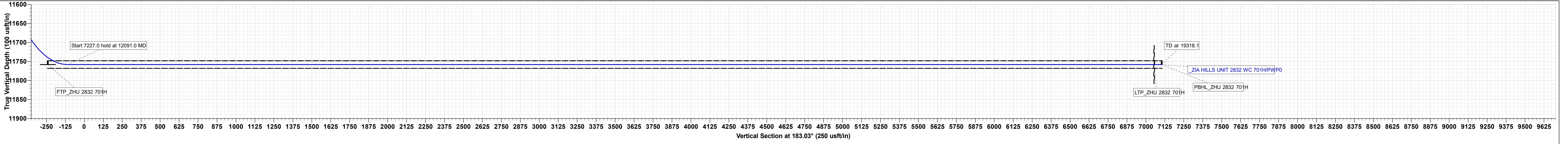
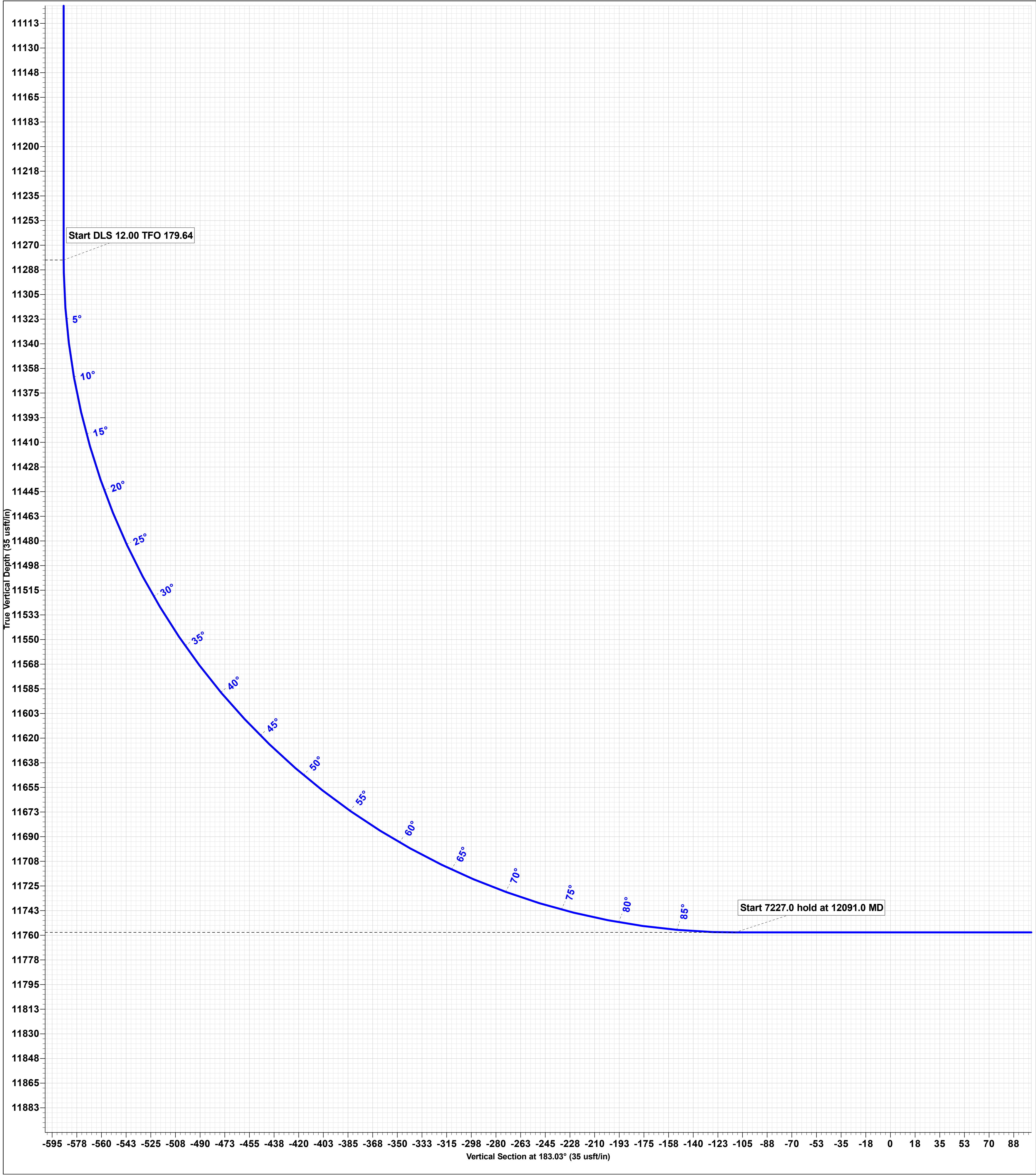
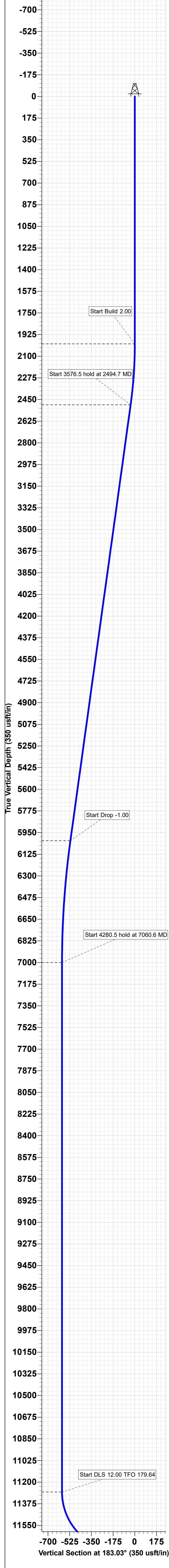
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Project: ZIA HILLS UNIT AREA
Site: ZIA HILLS UNIT 2832 PROJECT
Well: ZIA HILLS UNIT 2832 WC 701H
Wellbore: OWB
Design: PWP0

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0
2494.7	9.89	325.26	2492.2	35.0	-24.3	2.00	325.26	-33.7
6071.2	9.89	325.26	6015.6	540.0	-374.4	0.00	0.00	-519.5
7060.6	0.00	0.00	7000.0	610.0	-423.0	1.00	180.00	-586.8
11341.1	0.00	0.00	11280.5	610.0	-423.0	0.00	0.00	-586.8
12091.0	90.00	179.64	11758.0	132.5	-420.0	12.00	179.64	-110.2
19318.1	90.00	179.64	11758.0	-7094.3	-374.9	0.00	0.00	7104.2



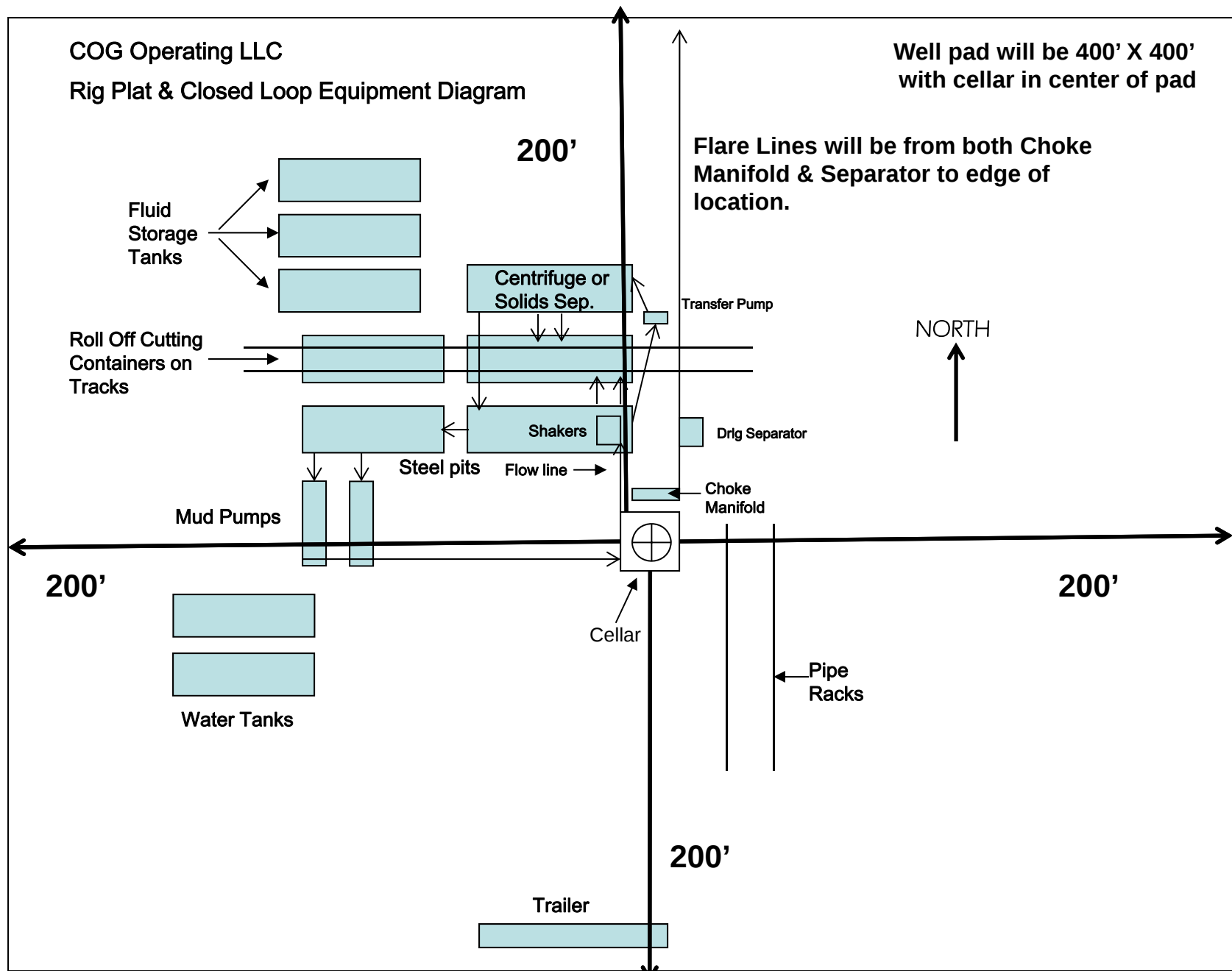


Exhibit 1

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

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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: ConocoPhillips Company

OGRID: 217817

Date: 01/28/2025

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 2832 WC 701H	30-025-	D-28-26S-32E	366 FNL & 596 FWL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 702H	30-025-	D-28-26S-32E	366 FNL & 616 FWL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 703H	30-025-	D-28-26S-32E	366 FNL & 636 FWL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 704H	30-025-	D-28-26S-32E	366 FNL & 656 FWL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 705H	30-025-	D-28-26S-32E	366 FNL & 676 FWL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 706H	30-025-	D-28-26S-32E	366 FNL & 696 FWL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 801H	30-025-	D-28-26S-32E	366 FNL & 716 FWL	± 742	± 1956	± 1707

IV. Central Delivery Point Name: Zia Hills Unit CF2 Facility NESW 24-26S-31E [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Zia Hills Unit 2832 WC	Pending	± 2/1/2026	± 25 days from spud	TBD	TBD	TBD
701H, 702H, 703H, 704H, 705H, 706H, 801H						

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

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

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

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

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

Section 4 - Notices

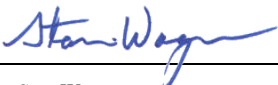
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

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

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

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

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

Signature: 
Printed Name: Stan Wagner
Title: Regulatory Advisor
E-mail Address: stan.s.wagner@conocophillips.com
Date: 04/30/2025
Phone: 432-253-9685
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment

How Operator will size separation equipment to optimize gas capture:

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

VII. Operational Practices

Actions Operator will take to comply with the requirements below:

B. Drilling Operations

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

C. Completion Operations

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

D. Venting and flaring during production operations

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

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

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

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

F. Measurement of vented and flared natural gas.

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

VIII. Best Management Practices

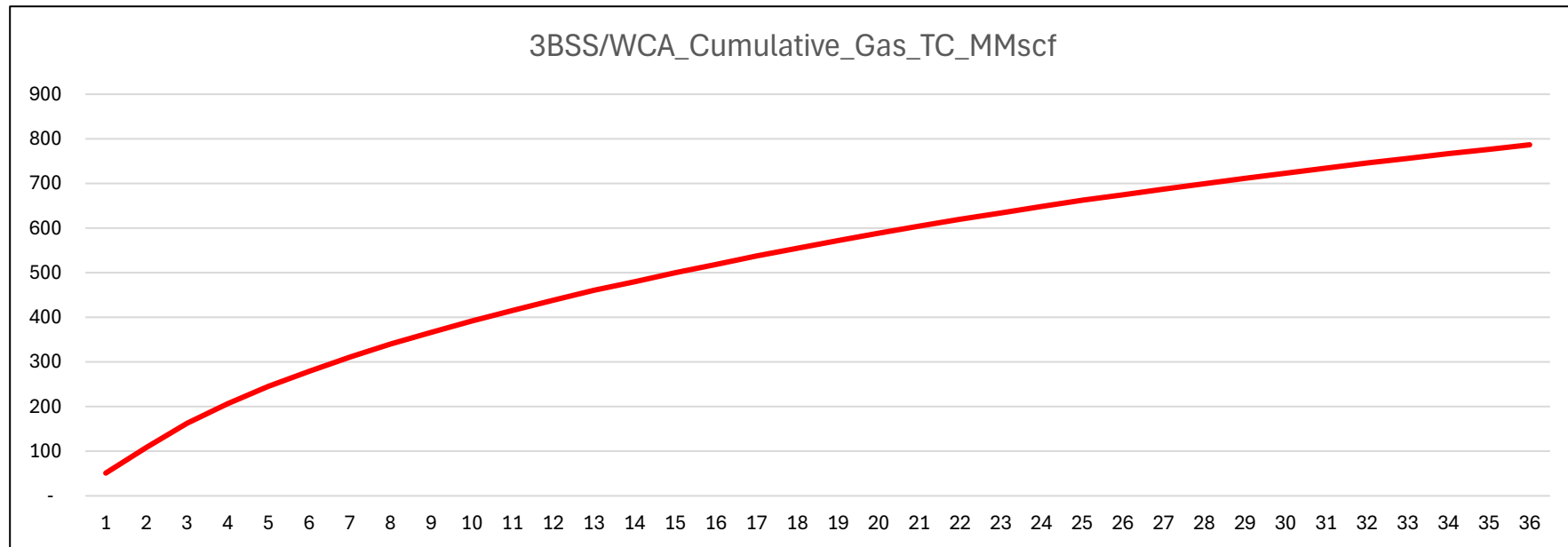
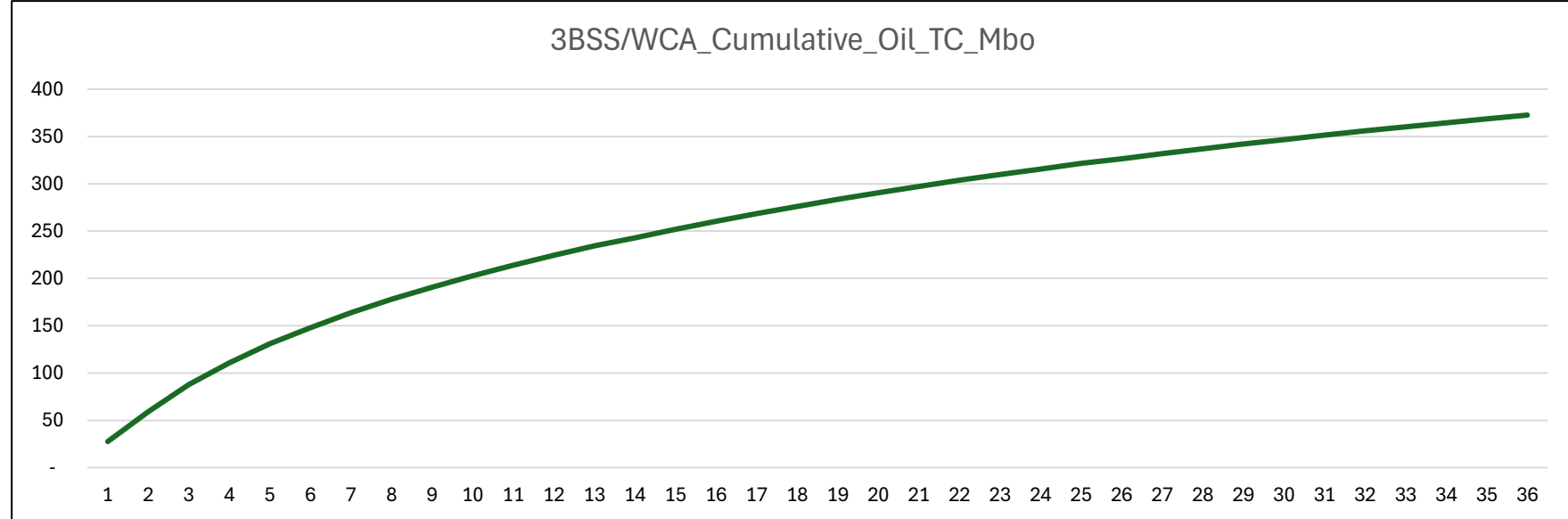
- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize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

Waste Minimization Plan

Per § 3162.3-1 Drilling applications and plans. Part J:

- (1) The anticipated initial oil production rate from the oil well and the anticipated production decline over the first 3 years of production.
 - a. See attached Anticipated Production & Decline Curve
- (2) The anticipated initial oil-well gas production rate from the oil well and the anticipated production decline over the first 3 years of production.
 - a. See attached Anticipated Production & Decline Curve
- (3) Certification that the operator has a valid, executed gas sales contract to sell to a purchaser 100 percent of the produced oil-well gas, less gas anticipated for use on-lease pursuant to 43 CFR subpart 3178.
 - a. See attached NMOCD – Natural Gas Management Plan
- (4) Any other information demonstrating the operator's plans to avoid the waste of gas production from any source, including, as appropriate, from pneumatic equipment, storage tanks, and leaks.
 - a. This location will comply with NSPS OOOOb which will include reduced associated gas flaring, non-emitting pneumatic equipment, storage tanks that are controlled and a rigorous leak detection and repair program. In addition, this facility complies with 20.2.50 NMAC (Ozone Precursor Pollutants) which also imposes standards on pneumatic equipment, tank controls, and leak detection and repair. Finally, this facility must comply with 19.15.27 NMAC (Venting and Flaring of Natural Gas) which significantly reduces instances of flaring.

Anticipated Production Decline Curve



PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CONOCOPHILLIPS COMPANY
WELL NAME & NO.:	ZIA HILLS UNIT 2832 WC 701H
LOCATION:	Section 28, T.26 S., R.32 E., NMP
COUNTY:	Lea County, New Mexico

COA

H2S	☒ Yes	☐ No	
Potash	☒ None	☐ Secretary	☐ R-111-P
Cave/Karst Potential	☐ Low	☒ Medium	☐ High
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☒ Flex Hose	☐ Other
Wellhead	☐ Conventional	☒ Multibowl	☐ Both
Wellhead Variance	☐ Diverter		
Other	☐ 4 String	☐ Capitan Reef	☐ WIPP
Other	☒ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency Cement Squeeze	☐ EchoMeter	☐ Primary Cement Squeeze
Special Requirements	☐ Water Disposal	☐ COM	☒ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements Variance	☒ Break Testing	☐ Offline Cementing	☒ Casing Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Primary Casing Design:

1. The 13-3/8 inch surface casing shall be set at approximately **1064 feet Per BLM Geologist** (a minimum of 25 feet (Lea 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 **9-5/8** inch intermediate casing shall be set at approximately **4365 feet per BLM Geologist. Keep casing full during run for collapse safety factor.** The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.
 - ❖ 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. **Keep casing full during run for collapse safety factor.** The minimum required fill of cement behind the **7-5/8** inch intermediate liner is:
 - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
 - **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

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 **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (70% Working Pressure) 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 OOGO2.III.A.2.i 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)

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

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.

- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Casing Clearance:

- The W441 connection should tie back 500'+ into the W513 intermediate casing for clearance overlap.

Operator shall clean up cycles until wellbore is clear of cuttings and any large debris, ensure cutting sizes are adequate "coffee ground or less" before cementing.

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
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. 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.
 - iii. BOP/BOPE test to be conducted per **43 CFR 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

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 of both lead and tail cement, 2) until cement has been in place at least 8 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-Q 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 3172**.
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:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. 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.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. 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.
 - i. 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).
 - ii. 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.)

- iii. 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 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 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.

JS 7/2/2025

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

General Information
Phone: (505) 629-6116

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

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

ACKNOWLEDGMENTS

Action 520239

ACKNOWLEDGMENTS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 520239
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

ACKNOWLEDGMENTS

☒	I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
-------------------------------------	--

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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 520239

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 520239
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
stanwagner	Cement is required to circulate on both surface and intermediate1 strings of casing.	10/27/2025
stanwagner	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	10/27/2025
jeffrey.harrison	Administrative order required for non-standard spacing unit prior to production.	12/19/2025
jeffrey.harrison	Prior to production of this well a change to the well name/number is required to comply with the OCD well naming convention.	12/19/2025
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	12/19/2025
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	12/19/2025
jeffrey.harrison	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.	12/19/2025
jeffrey.harrison	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.	12/19/2025
jeffrey.harrison	Any string of casing or liner that is not circulated to surface must have a minimum of 200' of cement tie-back into the previous string of casing.	12/19/2025