

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. 30-025-55662
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: NENE / 470 FNL / 991 FEL / TWSP: 26S / RANGE: 32E / SECTION: 28 / LAT: 32.01957 / LONG: -103.674564 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 1615 FEL / TWSP: 26S / RANGE: 32E / SECTION: 28 / LAT: 32.020588 / LONG: -103.676573 (TVD: 11814 feet, MD: 12188 feet)

BHL: LOT 2 / 50 FSL / 1615 FEL / TWSP: 26S / RANGE: 32E / SECTION: 33 / LAT: 32.000363 / LONG: -103.676607 (TVD: 11814 feet, MD: 19544 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- 55662	Pool Code 98081	Pool Name Zia Hills; Wolfcamp
Property Code 338328	Property Name ZIA HILLS UNIT 2832 WC	Well Number 709H
OGRID No. 217817	Operator Name CONOCOPHILLIPS COMPANY	Ground Level Elevation 3,141'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL A	Section 28	Township 26S	Range 32E	Lot	Ft. from N/S 470' FNL	Ft. from E/W 991' FEL	Latitude 32.019570°	Longitude -103.674564°	County LEA
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Bottom Hole Location

UL LOT 2	Section 33	Township 26S	Range 32E	Lot	Ft. from N/S 50' FSL	Ft. from E/W 1,615' FEL	Latitude 32.000363°	Longitude -103.676607°	County LEA
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Dedicated Acres 898.92	Infill or Defining Well Infill	Defining Well API Pending 802H	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 O	Section 21	Township 26S	Range 32E	Lot	Ft. from N/S 377' FSL	Ft. from E/W 1,523' FEL	Latitude 32.021898°	Longitude -103.676277°	County LEA
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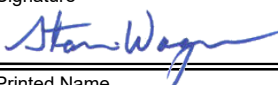
First Take Point (FTP)

UL B	Section 28	Township 26S	Range 32E	Lot	Ft. from N/S 100' FNL	Ft. from E/W 1,615' FEL	Latitude 32.020588°	Longitude -103.676573°	County LEA
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Last Take Point (LTP)

UL LOT 2	Section 33	Township 26S	Range 32E	Lot	Ft. from N/S 100' FSL	Ft. from E/W 1,615' FEL	Latitude 32.000500°	Longitude -103.676607°	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: 3/7/2025	
Signature 	Date 5/12/25	Signature and Seal of Professional Surveyor	
Printed Name Stan Wagner		Certificate Number 12177	Date of Survey 3/7/2025
Email Address			

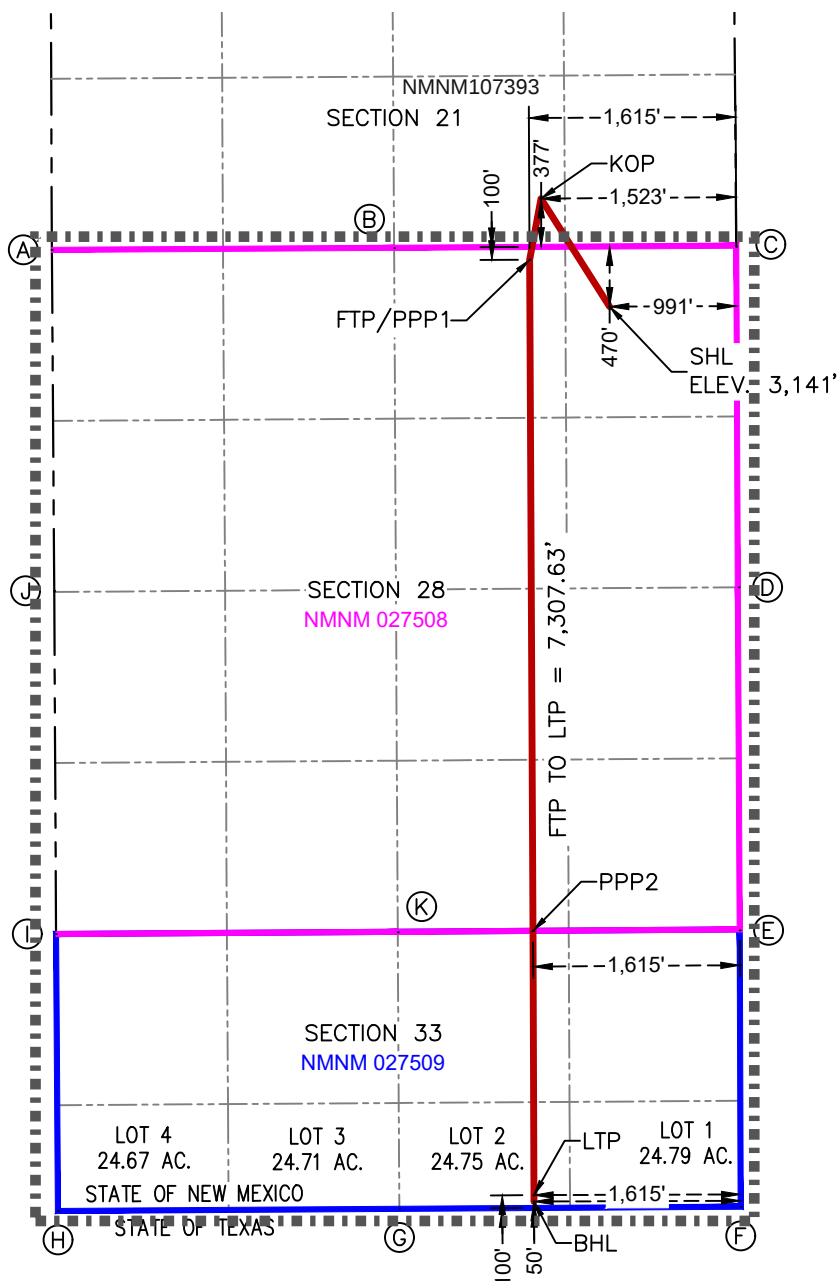
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

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.

ZIA HILLS UNIT 2832 WC 709H



SURFACE HOLE LOCATION
470' FNL & 991' FEL
ELEV.=3,141'

NAD 83 X = 745,506.68'
NAD 83 Y = 371,480.83'
NAD 83 LAT = 32.019570°
NAD 83 LONG = -103.674564°

KICK-OFF POINT
377' FSL & 1,523' FEL
NAD 83 X = 744,970.64'
NAD 83 Y = 372,324.35'
NAD 83 LAT = 32.021898°
NAD 83 LONG = -103.676277°

FIRST TAKE POINT & PENETRATION POINT 1
100' FNL & 1,615' FEL
NAD 83 X = 744,881.75'
NAD 83 Y = 371,847.25'
NAD 83 LAT = 32.020588°
NAD 83 LONG = -103.676573°

PENETRATION POINT 2
0' FSL & 1,615' FEL
NAD 83 X = 744,908.32'
NAD 83 Y = 366,604.27'
NAD 83 LAT = 32.006175°
NAD 83 LONG = -103.676590°

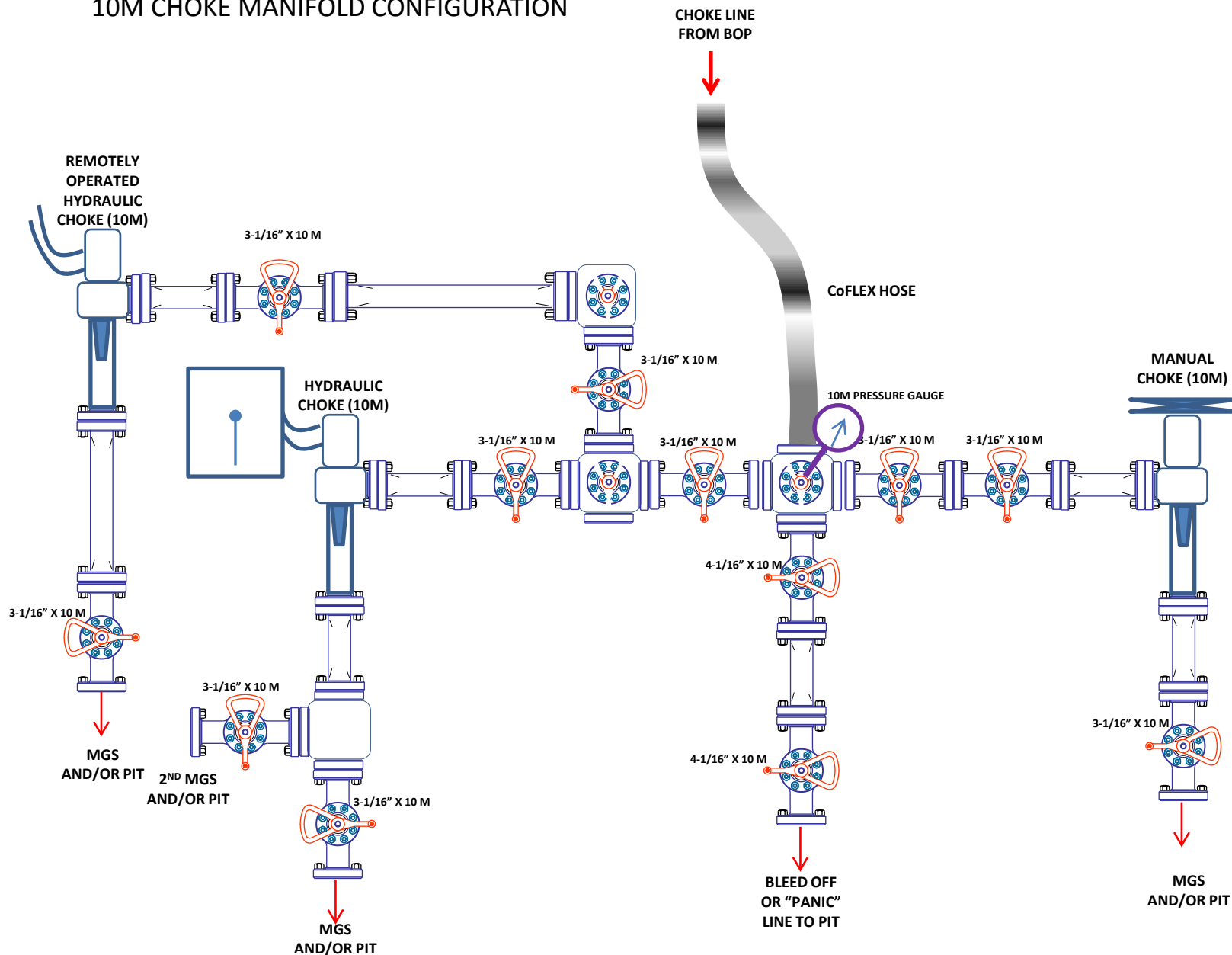
LAST TAKE POINT
100' FSL & 1,615' FEL
NAD 83 X = 744,915.82'
NAD 83 Y = 364,539.69'
NAD 83 LAT = 32.000500°
NAD 83 LONG = -103.676607°

BOTTOM HOLE LOCATION
50' FSL & 1,615' FEL
NAD 83 X = 744,916.01'
NAD 83 Y = 364,489.69'
NAD 83 LAT = 32.000363°
NAD 83 LONG = -103.676607°

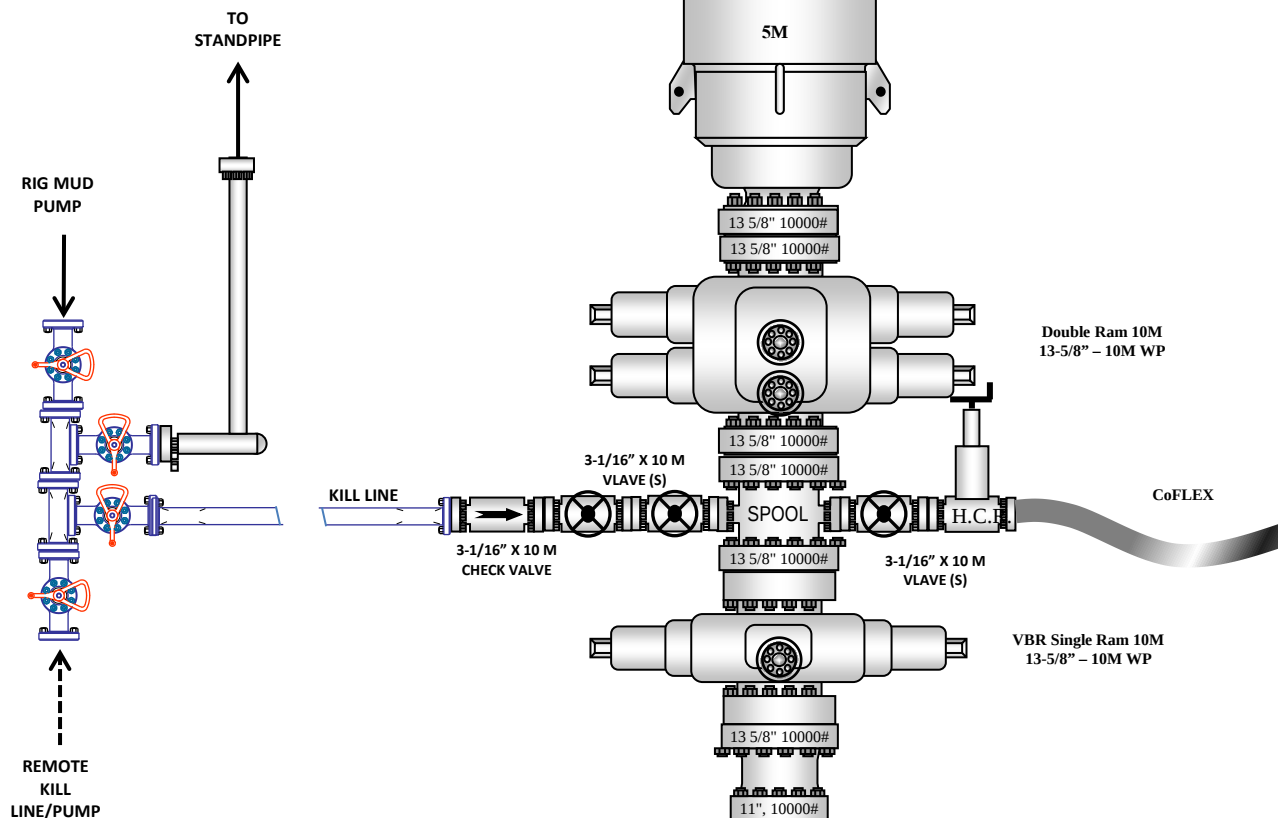
CORNER COORDINATES
NEW MEXICO EAST - NAD 83

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



ConocoPhillips Company - Zia Hills Unit 2832 WC 709H

1. Geologic Formations

TVD of target	11,814' EOL	Pilot hole depth	NA
MD at TD:	19,545'	Deepest expected fresh water:	202'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	691	Water	
Top of Salt	965	Salt	
Base of Salt	4190	Salt	
Lamar	4415	Salt Water	
Bell Canyon	4438	Salt Water	
Cherry Canyon	5354	Oil/Gas	
Brushy Canyon	6814	Oil/Gas	
Bone Spring	8497	Oil/Gas	
1st Bone Spring Sand	9465	Oil/Gas	
2nd Bone Spring Sand	10135	Oil/Gas	
3rd Bone Spring Sand	11251	Oil/Gas	
Wolfcamp	11628	Target	
Wolfcamp A	11835	Not Penetrated	
Wolfcamp B	12169	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	820	13.375"	54.5	J55	BTC	3.01	1.50	19.09	20.34
12.25"	0	4320	9.625"	40	L80-IC	BTC	1.72	1.30	5.30	5.48
8.75"	4120	11300	7.625"	29.7	P110-ICY	W513	1.25	1.56	3.18	1.91
6.75"	0	11100	5.5"	23	P110-CY	BTC	1.87	2.17	2.86	2.86
6.75"	11100	19,545	5.5"	23	P110-CY	W441	1.75	2.04	2.68	2.44
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

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

All casing strings will be tested in accordance with 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 709H

	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 709H

3. Cementing Program

Casing	# Sks	Wt. lb/ gal	Yld ft3/ sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	490	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	810	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	640	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	4,120'	20%
Production	10,800'	20% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Zia Hills Unit 2832 WC 709H

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 709H

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 709H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	8295 psi at 11814' 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

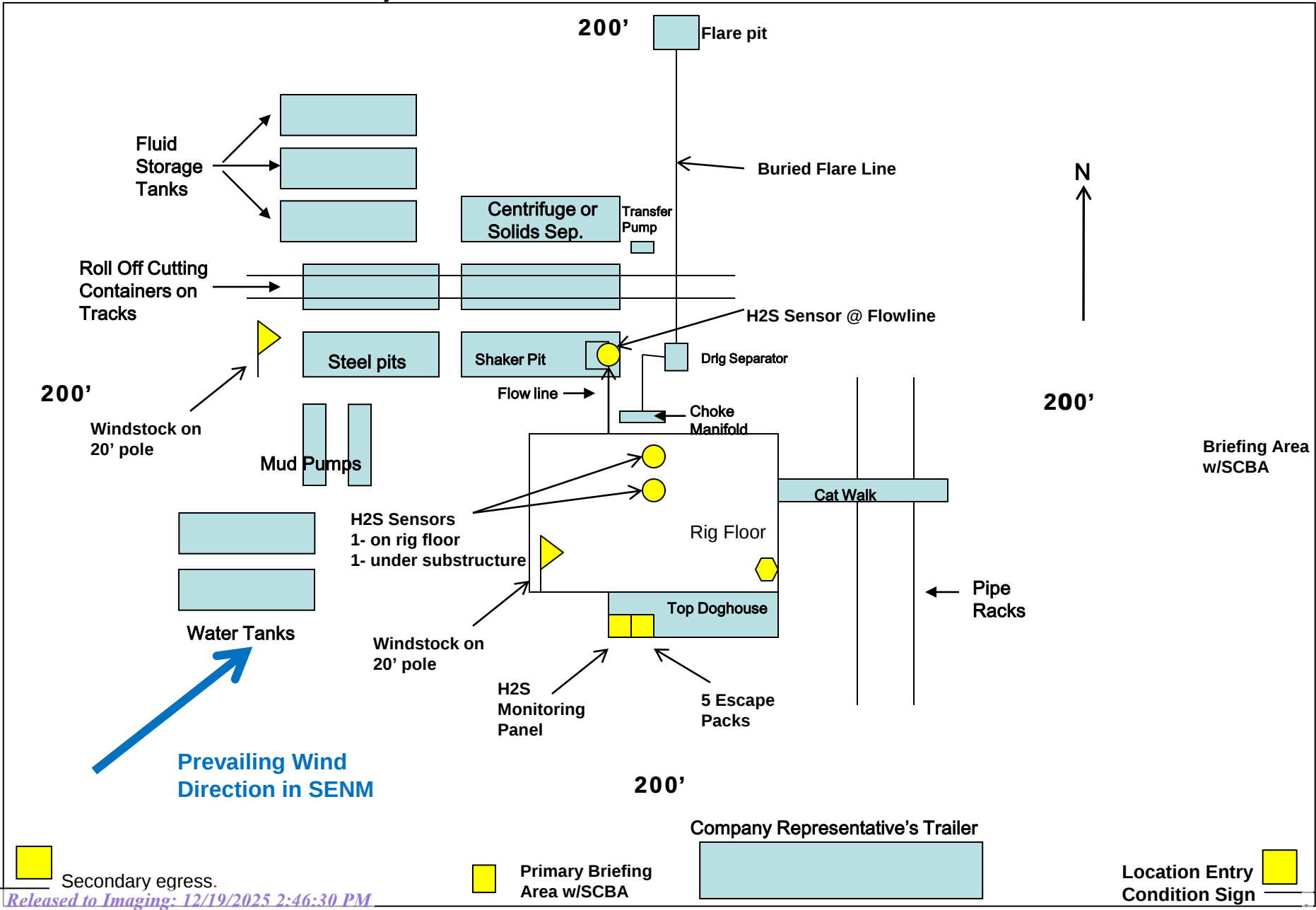
	<u>OFFICE</u>	<u>MOBILE</u>
COG OPERATING LLC OFFICE	575-748-6940	
Dallas Daley	432-818-2329	432-631-6977

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

COG 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 709H

OWB

PWP0

Anticollision Report

26 February, 2025

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Max. Cent. Dist. of 1,000.0usft or Max. Ell. Sep. of 500.0usft	Error Surface:	Combined Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Added to Error Values

Survey Tool Program	Date 2/25/2025	
From (usft)	To (usft)	Survey (Wellbore)
0.0	19,544.4	PWP0 (OWB)
		Tool Name
		r.5 MWD+IFR1
		Description
		OWSG MWD + IFR1 rev.5

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
BATTLE AXE 27 FEDERAL COM 16H - JC						
BATTLE AXE 27 FEDERAL COM 16H - JC - Original Hol						Out of range
BATTLE AXE 27 FEDERAL COM 17H - JC						
BATTLE AXE 27 FEDERAL COM 17H - JC - Original Hol						Out of range
BATTLE AXE 27 FEDERAL COM 18H - JC						
BATTLE AXE 27 FEDERAL COM 18H - JC - Original Hol						Out of range
Mewbourne - Red Hills West 22 Fed Com 001H						
Red Hills West 22 Fed Com 001H - Original Hole - Origin						Out of range
Mewbourne - Red Hills West 22 W0DM Com 004H						
Red Hills West 22 W0DM Com 004H - Original Hole - Or						Out of range
Mewbourne - Red Hills West 22 W1DM Fed Com 004C						
Red Hills West 22 W1DM Fed Com 004C - Original Hole						Out of range

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 703H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2832 WC 704H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2832 WC 705H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2832 WC 706H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2832 WC 707H - OWB - PWP0	2,000.0	1,998.2	39.9	27.0	3.085 CC, ES, SF	
_ZIA HILLS UNIT 2832 WC 708H - OWB - PWP0	1,966.6	1,966.8	19.9	7.1	1.551 Caution - Monitor Closely, CC	
_ZIA HILLS UNIT 2832 WC 708H - OWB - PWP0	2,100.0	2,100.0	20.2	6.9	1.526 Caution - Monitor Closely, ES, SF	
_ZIA HILLS UNIT 2832 WC 710H - OWB - PWP0	2,000.0	1,999.7	20.0	7.1	1.546 Caution - Monitor Closely, CC, ES	
_ZIA HILLS UNIT 2832 WC 710H - OWB - PWP0	2,100.0	2,099.7	20.3	7.1	1.537 Caution - Monitor Closely, SF	
_ZIA HILLS UNIT 2832 WC 711H - OWB - PWP0	2,000.0	1,999.7	40.0	27.8	3.274 CC	
_ZIA HILLS UNIT 2832 WC 711H - OWB - PWP0	2,100.0	2,099.8	40.1	27.6	3.210 ES	
_ZIA HILLS UNIT 2832 WC 711H - OWB - PWP0	2,300.0	2,300.0	41.0	28.0	3.145 SF	
_ZIA HILLS UNIT 2832 WC 712H - OWB - PWP0	1,866.6	1,866.8	60.0	47.4	4.770 CC	
_ZIA HILLS UNIT 2832 WC 712H - OWB - PWP0	2,000.0	2,000.0	60.2	47.3	4.655 ES	
_ZIA HILLS UNIT 2832 WC 712H - OWB - PWP0	2,100.0	2,099.4	61.4	48.2	4.647 SF	
_ZIA HILLS UNIT 2832 WC 801H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2832 WC 802H - OWB - PWP0	1,965.9	1,968.1	60.0	47.1	4.664 CC	
_ZIA HILLS UNIT 2832 WC 802H - OWB - PWP0	2,000.0	2,002.2	60.0	47.0	4.631 ES, SF	
_ZIA HILLS UNIT 2832 WC 803H - OWB - PWP0	2,000.0	1,999.8	80.0	67.1	6.182 CC	
_ZIA HILLS UNIT 2832 WC 803H - OWB - PWP0	2,100.0	2,099.8	80.3	67.1	6.076 ES	
_ZIA HILLS UNIT 2832 WC 803H - OWB - PWP0	2,200.0	2,199.7	81.1	67.7	6.023 SF	
PAYNE FEDERAL 1_PA - OWB - AWP	4,686.5	4,544.0	963.4	800.9	5.928 CC, ES, SF	
RED HILLS WEST '21' FEDERAL COM 1H - OWB - AW	9,451.3	13,708.1	594.7	483.0	5.322 CC, ES, SF	
RED HILLS WEST 21 'BO' FEDERAL COM 1H - OWB -	9,428.2	13,753.4	802.3	684.6	6.815 CC, ES, SF	
RED HILLS WEST 21 FEDERAL COM 2H - OWB - AWP						Out of range
RED HILLS WEST 21 W0AP FEDERAL COM 003H - OW	11,894.2	16,765.3	571.1	440.2	4.362 CC	
RED HILLS WEST 21 W0AP FEDERAL COM 003H - OW	11,900.0	16,770.2	571.1	440.1	4.359 ES	
RED HILLS WEST 21 W0AP FEDERAL COM 003H - OW	11,950.0	16,813.1	572.5	440.7	4.342 SF	
RED HILLS WEST 21 W0BO FEDERAL COM 004H - OW	12,050.0	16,815.0	609.7	480.9	4.734 SF	
RED HILLS WEST 21 W0BO FEDERAL COM 004H - OW	12,075.0	16,815.0	609.1	480.5	4.735 ES	
RED HILLS WEST 21 W0BO FEDERAL COM 004H - OW	12,077.1	16,815.0	609.1	480.5	4.735 CC	
RED HILLS WEST 21 W0CN FEDERAL COM 001H - OW						Out of range
RED HILLS WEST 21 W1AP FEDERAL COM 002H - OW						Out of range
RED HILLS WEST 21 W1BO FEDERAL COM 003H - OW	12,025.0	17,085.0	355.2	260.2	3.740 SF	
RED HILLS WEST 21 W1BO FEDERAL COM 003H - OW	12,050.0	17,085.0	351.1	257.8	3.763 ES	
RED HILLS WEST 21 W1BO FEDERAL COM 003H - OW	12,073.3	17,085.0	349.8	258.5	3.831 CC	
RED HILLS WEST 21 W1CN FEDERAL COM 002H - OW						Out of range
WILDER FEDERAL 28 1H - OWB - AWP	852.7	843.3	198.5	146.8	3.844 CC, ES, SF	
WILDER FEDERAL 28 1H - ST01 - AWP	852.7	843.3	198.5	146.8	3.844 CC, ES, SF	
WILDER FEDERAL 28 2H - OWB - AWP	5,800.0	5,732.7	831.2	808.7	36.957 CC	
WILDER FEDERAL 28 2H - OWB - AWP	5,804.4	5,736.4	831.2	808.7	36.940 ES	
WILDER FEDERAL 28 2H - OWB - AWP	8,600.0	8,488.9	948.0	916.5	30.081 SF	

Offset Design:	ZIA HILLS UNIT 2832 PROJECT - _ZIA HILLS UNIT 2832 WC 707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program:	0-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	3.0 usft
Reference	Vertical	Measured	Vertical	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Rule Assigned:	Offset Site Error:	Offset Well Error:		
Measured	Depth	Depth	Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Between	No-Go	Separation	Warning		
Depth	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	Centres	Distance	Factor			
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)			
0.0	0.0	0.0	1.8	3.0	3.0	-54.12	23.4	-32.4	40.0					

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR												Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
100.0	100.0	98.2	100.0	3.1	3.1	-54.12	23.4	-32.4	39.9	33.3	6.61	6.045	
200.0	200.0	198.2	200.0	3.3	3.3	-54.12	23.4	-32.4	39.9	32.9	7.06	5.660	
300.0	300.0	298.2	300.0	3.5	3.6	-54.12	23.4	-32.4	39.9	32.5	7.48	5.337	
400.0	400.0	398.2	400.0	3.8	3.8	-54.12	23.4	-32.4	39.9	32.1	7.89	5.063	
500.0	500.0	498.2	500.0	4.0	4.0	-54.12	23.4	-32.4	39.9	31.7	8.28	4.826	
600.0	600.0	598.2	600.0	4.1	4.1	-54.12	23.4	-32.4	39.9	31.3	8.65	4.618	
700.0	700.0	698.2	700.0	4.3	4.3	-54.12	23.4	-32.4	39.9	30.9	9.01	4.434	
800.0	800.0	798.2	800.0	4.5	4.5	-54.12	23.4	-32.4	39.9	30.6	9.36	4.269	
900.0	900.0	898.2	900.0	4.7	4.7	-54.12	23.4	-32.4	39.9	30.2	9.69	4.121	
1,000.0	1,000.0	998.2	1,000.0	4.8	4.8	-54.12	23.4	-32.4	39.9	29.9	10.02	3.986	
1,100.0	1,100.0	1,098.2	1,100.0	5.0	5.0	-54.12	23.4	-32.4	39.9	29.6	10.34	3.862	
1,200.0	1,200.0	1,198.2	1,200.0	5.2	5.2	-54.12	23.4	-32.4	39.9	29.3	10.65	3.749	
1,300.0	1,300.0	1,298.2	1,300.0	5.3	5.3	-54.12	23.4	-32.4	39.9	29.0	10.96	3.645	
1,400.0	1,400.0	1,398.2	1,400.0	5.5	5.5	-54.12	23.4	-32.4	39.9	28.7	11.26	3.548	
1,500.0	1,500.0	1,498.2	1,500.0	5.6	5.6	-54.12	23.4	-32.4	39.9	28.4	11.55	3.458	
1,600.0	1,600.0	1,598.2	1,600.0	5.8	5.8	-54.12	23.4	-32.4	39.9	28.1	11.84	3.374	
1,700.0	1,700.0	1,698.2	1,700.0	5.9	5.9	-54.12	23.4	-32.4	39.9	27.8	12.12	3.295	
1,800.0	1,800.0	1,798.2	1,800.0	6.0	6.0	-54.12	23.4	-32.4	39.9	27.5	12.40	3.221	
1,900.0	1,900.0	1,898.2	1,900.0	6.2	6.2	-54.12	23.4	-32.4	39.9	27.3	12.68	3.151	
2,000.0	2,000.0	1,998.2	2,000.0	6.3	6.3	-54.12	23.4	-32.4	39.9	27.0	12.95	3.085 CC, ES, SF	
2,100.0	2,100.0	2,097.2	2,099.0	6.5	6.5	-81.50	23.7	-33.6	40.9	27.7	13.23	3.092	
2,200.0	2,199.9	2,196.0	2,197.7	6.7	6.6	-87.99	24.7	-37.2	44.3	30.8	13.49	3.279	
2,300.0	2,299.7	2,294.3	2,295.8	6.9	6.8	-96.65	26.3	-43.3	50.9	37.2	13.75	3.702	
2,333.3	2,332.9	2,326.9	2,328.3	6.9	6.8	-99.62	27.0	-45.9	54.0	40.2	13.79	3.918	
2,400.0	2,399.3	2,391.8	2,392.9	7.0	6.9	-90.38	28.8	-51.8	60.9	47.0	13.90	4.382	
2,500.0	2,498.8	2,489.0	2,489.3	7.2	7.0	-78.69	33.1	-63.0	71.8	57.6	14.23	5.047	
2,600.0	2,598.1	2,586.0	2,585.2	7.4	7.2	-70.75	39.2	-76.8	83.0	68.5	14.52	5.718	
2,700.0	2,697.0	2,682.8	2,680.3	7.6	7.4	-65.61	47.1	-93.2	94.3	79.6	14.79	6.380	
2,800.0	2,795.4	2,779.5	2,774.6	7.9	7.6	-62.19	56.8	-112.3	105.6	90.5	15.04	7.021	
2,825.7	2,820.6	2,804.3	2,798.6	7.9	7.7	-61.50	59.6	-117.6	108.4	93.4	15.08	7.192	
2,900.0	2,893.5	2,876.0	2,867.8	8.1	7.8	-62.51	68.3	-133.9	117.4	102.2	15.23	7.708	
3,000.0	2,991.5	2,973.2	2,961.1	8.4	7.9	-62.88	81.5	-158.0	131.5	116.0	15.43	8.518	
3,100.0	3,089.5	3,072.1	3,055.8	8.7	8.0	-63.04	95.3	-183.0	145.9	130.3	15.70	9.297	
3,200.0	3,187.5	3,171.1	3,150.5	9.0	8.2	-63.16	109.1	-208.0	160.4	144.4	15.99	10.036	
3,300.0	3,285.5	3,270.0	3,245.3	9.3	8.3	-63.27	122.9	-233.0	174.9	158.6	16.28	10.742	
3,400.0	3,383.6	3,369.0	3,340.0	9.6	8.5	-63.36	136.7	-258.1	189.4	172.8	16.59	11.416	
3,500.0	3,481.6	3,467.9	3,434.7	9.9	8.6	-63.43	150.5	-283.1	203.9	187.0	16.91	12.060	
3,600.0	3,579.6	3,566.9	3,529.5	10.3	8.8	-63.50	164.3	-308.1	218.4	201.1	17.23	12.673	
3,700.0	3,677.6	3,665.8	3,624.2	10.6	9.0	-63.56	178.1	-333.1	232.8	215.3	17.56	13.257	
3,800.0	3,775.6	3,764.8	3,718.9	11.0	9.1	-63.61	191.9	-358.1	247.3	229.4	17.91	13.813	
3,900.0	3,873.6	3,863.7	3,813.7	11.4	9.3	-63.65	205.7	-383.1	261.8	243.6	18.25	14.343	
4,000.0	3,971.6	3,962.6	3,908.4	11.7	9.5	-63.69	219.5	-408.1	276.3	257.7	18.61	14.848	
4,100.0	4,069.7	4,061.6	4,003.1	12.1	9.7	-63.73	233.3	-433.1	290.8	271.8	18.97	15.329	
4,200.0	4,167.7	4,160.5	4,097.9	12.5	9.8	-63.76	247.1	-458.2	305.3	285.9	19.34	15.786	
4,300.0	4,265.7	4,259.5	4,192.6	12.9	10.0	-63.79	260.9	-483.2	319.8	300.0	19.71	16.222	
4,400.0	4,363.7	4,358.4	4,287.3	13.3	10.2	-63.82	274.7	-508.2	334.2	314.1	20.09	16.637	
4,500.0	4,461.7	4,457.4	4,382.1	13.7	10.4	-63.85	288.5	-533.2	348.7	328.2	20.47	17.032	
4,600.0	4,559.7	4,556.3	4,476.8	14.1	10.6	-63.87	302.3	-558.2	363.2	342.3	20.86	17.408	
4,700.0	4,657.8	4,655.3	4,571.5	14.6	10.8	-63.89	316.1	-583.2	377.7	356.4	21.26	17.767	
4,800.0	4,755.8	4,754.2	4,666.3	15.0	11.0	-63.91	329.9	-608.2	392.2	370.5	21.66	18.110	
4,900.0	4,853.8	4,853.1	4,761.0	15.4	11.2	-63.93	343.7	-633.3	406.7	384.6	22.06	18.436	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 707H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR		Offset		Semi Major Axis		Highside Toolface (°)	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)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
5,000.0	4,951.8	4,952.1	4,855.7	15.8	11.4	-63.95	357.5	-658.3	421.2	398.7	22.46	18.748		
5,100.0	5,049.8	5,051.0	4,950.5	16.2	11.6	-63.96	371.3	-683.3	435.6	412.8	22.87	19.045		
5,200.0	5,147.8	5,150.0	5,045.2	16.7	11.8	-63.98	385.1	-708.3	450.1	426.8	23.29	19.329		
5,300.0	5,245.8	5,248.9	5,139.9	17.1	12.0	-63.99	398.9	-733.3	464.6	440.9	23.70	19.601		
5,400.0	5,343.9	5,347.9	5,234.7	17.5	12.2	-64.00	412.7	-758.3	479.1	455.0	24.12	19.861		
5,500.0	5,441.9	5,446.8	5,329.4	18.0	12.4	-64.02	426.5	-783.3	493.6	469.0	24.55	20.109		
5,600.0	5,539.9	5,545.8	5,424.1	18.4	12.6	-64.03	440.2	-808.3	508.1	483.1	24.97	20.346		
5,700.0	5,637.9	5,644.7	5,518.9	18.8	12.8	-64.04	454.0	-833.4	522.5	497.1	25.40	20.574		
5,800.0	5,735.9	5,743.7	5,613.6	19.3	13.0	-64.05	467.8	-858.4	537.0	511.2	25.83	20.792		
5,900.0	5,833.9	5,842.6	5,708.3	19.7	13.2	-64.06	481.6	-883.4	551.5	525.3	26.26	21.000		
6,000.0	5,932.0	5,941.5	5,803.0	20.2	13.5	-64.07	495.4	-908.4	566.0	539.3	26.70	21.201		
6,100.0	6,030.0	6,040.5	5,897.8	20.6	13.7	-64.08	509.2	-933.4	580.5	553.4	27.13	21.393		
6,200.0	6,128.0	6,139.4	5,992.5	21.1	13.9	-64.09	523.0	-958.4	595.0	567.4	27.57	21.577		
6,300.0	6,226.0	6,238.4	6,087.2	21.5	14.1	-64.10	536.8	-983.4	609.5	581.4	28.02	21.754		
6,400.0	6,324.0	6,337.3	6,182.0	21.9	14.3	-64.10	550.6	-1,008.4	623.9	595.5	28.46	21.924		
6,500.0	6,422.0	6,436.3	6,276.7	22.4	14.6	-64.11	564.4	-1,033.5	638.4	609.5	28.90	22.087		
6,600.0	6,520.0	6,535.2	6,371.4	22.8	14.8	-64.12	578.2	-1,058.5	652.9	623.6	29.35	22.245		
6,700.0	6,618.1	6,634.2	6,466.2	23.3	15.0	-64.12	592.0	-1,083.5	667.4	637.6	29.80	22.396		
6,800.0	6,716.1	6,733.1	6,560.9	23.7	15.2	-64.13	605.8	-1,108.5	681.9	651.6	30.25	22.541		
6,900.0	6,814.1	6,832.1	6,655.6	24.2	15.5	-64.14	619.6	-1,133.5	696.4	665.7	30.70	22.682		
6,951.1	6,864.2	6,882.6	6,704.0	24.4	15.6	-64.14	626.6	-1,146.3	703.8	672.9	30.92	22.761		
7,000.0	6,912.1	6,931.0	6,750.4	24.6	15.7	-64.19	633.4	-1,158.5	710.9	679.8	31.13	22.838		
7,100.0	7,010.5	7,029.8	6,845.0	25.1	15.9	-64.21	647.2	-1,183.5	726.2	694.6	31.60	22.983		
7,200.0	7,109.1	7,128.5	6,939.4	25.5	16.1	-64.12	660.9	-1,208.4	742.2	710.1	32.07	23.139		
7,300.0	7,208.0	7,227.0	7,033.7	25.9	16.4	-63.93	674.7	-1,233.3	758.9	726.4	32.57	23.304		
7,400.0	7,307.2	7,325.2	7,127.8	26.4	16.6	-63.64	688.4	-1,258.2	776.5	743.4	33.07	23.479		
7,500.0	7,406.6	7,423.3	7,221.7	26.8	16.8	-63.27	702.0	-1,283.0	794.8	761.3	33.59	23.665		
7,600.0	7,506.1	7,521.0	7,315.3	27.1	17.1	-62.82	715.7	-1,307.7	814.1	780.0	34.11	23.864		
7,700.0	7,605.8	7,627.1	7,416.9	27.5	17.3	-62.25	730.2	-1,334.1	833.8	799.2	34.67	24.052		
7,800.0	7,705.6	7,738.1	7,523.9	27.9	17.5	-61.64	744.6	-1,360.1	853.1	817.8	35.25	24.202		
7,900.0	7,805.5	7,849.8	7,632.1	28.2	17.8	-61.02	758.0	-1,384.4	871.7	835.9	35.81	24.340		
8,000.0	7,905.5	7,962.0	7,741.3	28.5	18.0	-60.39	770.4	-1,406.9	889.7	853.3	36.36	24.471		
8,094.5	8,000.0	8,068.6	7,845.5	28.6	18.2	-94.00	781.3	-1,426.6	906.1	869.3	36.81	24.615		
8,100.0	8,005.5	8,074.8	7,851.6	28.6	18.2	-93.95	781.9	-1,427.7	907.0	870.2	36.83	24.626		
8,200.0	8,105.5	8,188.3	7,963.0	28.7	18.5	-93.21	792.4	-1,446.7	923.2	885.9	37.30	24.751		
8,300.0	8,205.5	8,302.7	8,075.7	28.7	18.7	-92.57	801.8	-1,463.9	937.9	900.2	37.68	24.887		
8,400.0	8,305.5	8,417.9	8,189.5	28.8	18.9	-92.02	810.3	-1,479.2	950.9	912.8	38.03	25.000		
8,500.0	8,405.5	8,533.7	8,304.3	28.8	19.1	-91.55	817.6	-1,492.5	962.2	923.9	38.35	25.088		
8,600.0	8,505.5	8,650.0	8,420.0	28.9	19.3	-91.16	823.9	-1,503.9	971.9	933.3	38.64	25.152		
8,700.0	8,605.5	8,766.9	8,536.3	28.9	19.5	-90.85	829.1	-1,513.3	979.8	940.9	38.90	25.190		
8,800.0	8,705.5	8,884.1	8,653.3	29.0	19.7	-90.61	833.1	-1,520.6	986.0	946.9	39.12	25.204		
8,900.0	8,805.5	9,001.7	8,770.7	29.0	19.9	-90.44	836.0	-1,525.8	990.4	951.1	39.31	25.193		
9,000.0	8,905.5	9,119.4	8,888.3	29.0	20.0	-90.34	837.7	-1,528.9	993.0	953.6	39.47	25.160		
9,100.0	9,005.5	9,236.6	9,005.5	29.1	20.1	-90.30	838.2	-1,529.9	993.9	954.3	39.57	25.116		
9,200.0	9,105.5	9,336.6	9,105.5	29.1	20.2	-90.30	838.2	-1,529.9	993.9	954.2	39.67	25.052		
9,300.0	9,205.5	9,436.6	9,205.5	29.2	20.2	-90.30	838.2	-1,529.9	993.9	954.1	39.78	24.981		
9,400.0	9,305.5	9,536.6	9,305.5	29.2	20.3	-90.30	838.2	-1,529.9	993.9	954.0	39.90	24.911		
9,500.0	9,405.5	9,636.6	9,405.5	29.3	20.4	-90.30	838.2	-1,529.9	993.9	953.9	40.01	24.841		
9,600.0	9,505.5	9,736.6	9,505.5	29.3	20.4	-90.30	838.2	-1,529.9	993.9	953.8	40.12	24.771		
9,700.0	9,605.5	9,836.6	9,605.5	29.3	20.5	-90.30	838.2	-1,529.9	993.9	953.6	40.24	24.702		
9,800.0	9,705.5	9,936.6	9,705.5	29.4	20.5	-90.30	838.2	-1,529.9	993.9	953.5	40.35	24.632		

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR												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)			
9,900.0	9,805.5	10,036.6	9,805.5	29.4	20.6	-90.30	838.2	-1,529.9	993.9	953.4	40.46	24.563	
10,000.0	9,905.5	10,136.6	9,905.5	29.5	20.7	-90.30	838.2	-1,529.9	993.9	953.3	40.58	24.494	
10,100.0	10,005.5	10,236.6	10,005.5	29.5	20.7	-90.30	838.2	-1,529.9	993.9	953.2	40.69	24.425	
10,200.0	10,105.5	10,336.6	10,105.5	29.6	20.8	-90.30	838.2	-1,529.9	993.9	953.1	40.81	24.356	
10,300.0	10,205.5	10,436.6	10,205.5	29.6	20.8	-90.30	838.2	-1,529.9	993.9	953.0	40.92	24.288	
10,400.0	10,305.5	10,536.6	10,305.5	29.7	20.9	-90.30	838.2	-1,529.9	993.9	952.8	41.04	24.219	
10,500.0	10,405.5	10,636.6	10,405.5	29.7	20.9	-90.30	838.2	-1,529.9	993.9	952.7	41.15	24.151	
10,600.0	10,505.5	10,736.6	10,505.5	29.8	21.0	-90.30	838.2	-1,529.9	993.9	952.6	41.27	24.084	
10,700.0	10,605.5	10,836.6	10,605.5	29.8	21.1	-90.30	838.2	-1,529.9	993.9	952.5	41.38	24.016	
10,800.0	10,705.5	10,936.6	10,705.5	29.8	21.1	-90.30	838.2	-1,529.9	993.9	952.4	41.50	23.948	
10,900.0	10,805.5	11,036.6	10,805.5	29.9	21.2	-90.30	838.2	-1,529.9	993.9	952.3	41.62	23.881	
11,000.0	10,905.5	11,136.6	10,905.5	29.9	21.2	-90.30	838.2	-1,529.9	993.9	952.1	41.73	23.814	
11,100.0	11,005.5	11,236.6	11,005.5	30.0	21.3	-90.30	838.2	-1,529.9	993.9	952.0	41.85	23.747	
11,200.0	11,105.5	11,336.6	11,105.5	30.0	21.4	-90.30	838.2	-1,529.9	993.9	951.9	41.97	23.681	
11,300.0	11,205.5	11,436.6	11,205.5	30.1	21.4	-90.30	838.2	-1,529.9	993.9	951.8	42.09	23.614	
11,400.0	11,305.5	11,536.6	11,305.5	30.1	21.5	-90.30	838.2	-1,529.9	993.9	951.7	42.20	23.552	
11,431.0	11,336.5	11,567.6	11,336.5	30.1	21.5	-90.34	837.5	-1,529.9	993.9	951.7	42.20	23.551	
11,450.0	11,355.5	11,586.6	11,355.4	30.1	21.5	81.31	836.2	-1,529.8	993.8	951.6	42.19	23.558	
11,475.0	11,380.4	11,611.5	11,380.1	30.1	21.4	81.26	833.2	-1,529.8	993.6	951.4	42.16	23.565	
11,500.0	11,405.3	11,636.3	11,404.6	30.0	21.4	81.23	829.0	-1,529.8	993.1	951.0	42.14	23.570	
11,525.0	11,429.9	11,661.0	11,428.7	29.9	21.4	81.23	823.5	-1,529.8	992.5	950.4	42.11	23.571	
11,550.0	11,454.3	11,685.7	11,452.5	29.8	21.4	81.25	816.9	-1,529.7	991.7	949.6	42.08	23.568	
11,575.0	11,478.3	11,710.3	11,475.8	29.7	21.3	81.30	809.0	-1,529.7	990.7	948.6	42.04	23.562	
11,600.0	11,502.0	11,734.8	11,498.6	29.7	21.3	81.36	800.0	-1,529.6	989.5	947.4	42.01	23.552	
11,625.0	11,525.2	11,759.2	11,520.8	29.6	21.3	81.45	789.8	-1,529.6	988.1	946.1	41.98	23.539	
11,650.0	11,547.9	11,783.6	11,542.4	29.5	21.3	81.56	778.6	-1,529.5	986.5	944.6	41.94	23.521	
11,675.0	11,570.0	11,807.9	11,563.4	29.4	21.3	81.70	766.3	-1,529.4	984.8	942.9	41.91	23.500	
11,700.0	11,591.5	11,832.1	11,583.6	29.3	21.2	81.85	753.0	-1,529.3	982.9	941.0	41.87	23.474	
11,725.0	11,612.3	11,856.3	11,603.1	29.2	21.2	82.03	738.7	-1,529.2	980.8	939.0	41.83	23.444	
11,750.0	11,632.3	11,880.4	11,621.8	29.1	21.2	82.23	723.5	-1,529.1	978.6	936.8	41.80	23.410	
11,775.0	11,651.5	11,904.4	11,639.6	29.1	21.2	82.45	707.4	-1,529.0	976.2	934.4	41.77	23.371	
11,800.0	11,669.9	11,928.3	11,656.6	29.0	21.2	82.69	690.5	-1,528.9	973.6	931.9	41.74	23.327	
11,825.0	11,687.3	11,952.2	11,672.6	28.9	21.2	82.95	672.8	-1,528.8	971.0	929.2	41.71	23.278	
11,850.0	11,703.8	11,976.1	11,687.8	28.8	21.2	83.23	654.4	-1,528.7	968.1	926.5	41.69	23.225	
11,875.0	11,719.2	12,000.0	11,702.0	28.8	21.2	83.53	635.2	-1,528.6	965.2	923.5	41.66	23.168	
11,900.0	11,733.6	12,023.6	11,715.1	28.7	21.2	83.85	615.6	-1,528.5	962.1	920.5	41.65	23.103	
11,925.0	11,747.0	12,047.2	11,727.2	28.7	21.2	84.19	595.3	-1,528.3	959.0	917.4	41.63	23.035	
11,950.0	11,759.2	12,070.9	11,738.3	28.6	21.2	84.54	574.4	-1,528.2	955.7	914.1	41.62	22.962	
11,975.0	11,770.2	12,094.5	11,748.3	28.6	21.2	84.91	553.0	-1,528.1	952.4	910.7	41.62	22.884	
12,000.0	11,780.1	12,118.0	11,757.3	28.5	21.2	85.29	531.2	-1,527.9	948.9	907.3	41.61	22.802	
12,025.0	11,788.7	12,141.6	11,765.1	28.5	21.2	85.68	509.1	-1,527.8	945.4	903.8	41.62	22.716	
12,050.0	11,796.1	12,165.1	11,771.9	28.5	21.2	86.09	486.5	-1,527.7	941.8	900.2	41.63	22.626	
12,075.0	11,802.2	12,188.6	11,777.5	28.5	21.2	86.52	463.7	-1,527.5	938.2	896.5	41.64	22.532	
12,100.0	11,807.1	12,212.0	11,782.0	28.5	21.2	86.95	440.7	-1,527.4	934.5	892.8	41.65	22.435	
12,125.0	11,810.7	12,235.5	11,785.4	28.4	21.3	87.39	417.5	-1,527.2	930.8	889.1	41.67	22.335	
12,150.0	11,813.0	12,259.0	11,787.6	28.5	21.3	87.84	394.1	-1,527.1	927.0	885.3	41.70	22.232	
12,175.0	11,813.9	12,282.5	11,788.7	28.5	21.3	88.30	370.7	-1,526.9	923.2	881.5	41.72	22.128	
12,181.0	11,814.0	12,288.1	11,788.7	28.5	21.3	88.42	365.1	-1,526.9	922.3	880.6	41.73	22.102	
12,200.0	11,814.0	12,306.7	11,788.8	28.5	21.4	88.41	346.5	-1,526.8	919.5	877.8	41.75	22.027	
12,300.0	11,814.0	12,405.8	11,788.8	28.6	21.5	88.40	247.3	-1,526.2	906.9	865.0	41.90	21.642	
12,400.0	11,814.0	12,505.4	11,788.8	28.6	21.7	88.39	147.7	-1,525.5	897.7	855.5	42.14	21.302	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR												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)			
12,500.0	11,814.0	12,605.2	11,788.8	28.7	21.8	88.38	47.9	-1,524.9	892.0	849.5	42.45	21.010	
12,600.0	11,814.0	12,705.2	11,788.8	28.8	22.0	88.38	-52.1	-1,524.3	889.7	846.9	42.85	20.766	
12,613.9	11,814.0	12,719.1	11,788.8	28.9	22.1	88.38	-66.0	-1,524.2	889.7	846.8	42.90	20.738	
12,614.1	11,814.0	12,719.4	11,788.8	28.9	22.1	88.38	-66.2	-1,524.2	889.7	846.8	42.90	20.737	
12,700.0	11,814.0	12,805.2	11,788.8	29.0	22.2	88.38	-152.1	-1,523.7	889.7	846.4	43.28	20.556	
12,800.0	11,814.0	12,905.2	11,788.8	29.1	22.5	88.38	-252.1	-1,523.1	889.7	845.9	43.80	20.316	
12,900.0	11,814.0	13,005.2	11,788.8	29.2	22.7	88.38	-352.1	-1,522.4	889.7	845.4	44.38	20.050	
13,000.0	11,814.0	13,105.2	11,788.8	29.4	23.0	88.38	-452.1	-1,521.8	889.7	844.7	45.02	19.763	
13,100.0	11,814.0	13,205.2	11,788.8	29.6	23.3	88.38	-552.1	-1,521.2	889.8	844.0	45.73	19.457	
13,200.0	11,814.0	13,305.2	11,788.8	29.7	23.6	88.38	-652.1	-1,520.6	889.8	843.3	46.50	19.136	
13,300.0	11,814.0	13,405.2	11,788.8	30.0	23.9	88.38	-752.1	-1,519.9	889.8	842.5	47.32	18.803	
13,400.0	11,814.0	13,505.2	11,788.8	30.2	24.2	88.38	-852.1	-1,519.3	889.8	841.6	48.20	18.461	
13,500.0	11,814.0	13,605.2	11,788.8	30.5	24.6	88.38	-952.1	-1,518.7	889.8	840.7	49.13	18.112	
13,600.0	11,814.0	13,705.2	11,788.8	30.8	25.0	88.38	-1,052.1	-1,518.1	889.8	839.7	50.10	17.759	
13,700.0	11,814.0	13,805.2	11,788.8	31.1	25.4	88.38	-1,152.1	-1,517.4	889.8	838.7	51.12	17.405	
13,800.0	11,814.0	13,905.2	11,788.8	31.4	25.8	88.38	-1,252.0	-1,516.8	889.8	837.6	52.19	17.050	
13,900.0	11,814.0	14,005.2	11,788.8	31.8	26.3	88.38	-1,352.0	-1,516.2	889.8	836.5	53.29	16.697	
14,000.0	11,814.0	14,105.2	11,788.8	32.2	26.7	88.38	-1,452.0	-1,515.6	889.8	835.4	54.43	16.347	
14,100.0	11,814.0	14,205.2	11,788.8	32.7	27.2	88.38	-1,552.0	-1,514.9	889.8	834.2	55.61	16.002	
14,200.0	11,814.0	14,305.2	11,788.8	33.1	27.7	88.38	-1,652.0	-1,514.3	889.9	833.0	56.82	15.661	
14,300.0	11,814.0	14,405.2	11,788.8	33.6	28.2	88.38	-1,752.0	-1,513.7	889.9	831.8	58.06	15.327	
14,400.0	11,814.0	14,505.2	11,788.8	34.2	28.7	88.38	-1,852.0	-1,513.1	889.9	830.5	59.33	14.999	
14,500.0	11,814.0	14,605.2	11,788.8	34.7	29.3	88.38	-1,952.0	-1,512.4	889.9	829.3	60.62	14.679	
14,600.0	11,814.0	14,705.2	11,788.8	35.3	29.8	88.38	-2,052.0	-1,511.8	889.9	827.9	61.95	14.366	
14,700.0	11,814.0	14,805.2	11,788.8	35.9	30.4	88.38	-2,152.0	-1,511.2	889.9	826.6	63.29	14.061	
14,800.0	11,814.0	14,905.2	11,788.8	36.5	31.0	88.38	-2,252.0	-1,510.6	889.9	825.3	64.66	13.763	
14,900.0	11,814.0	15,005.2	11,788.8	37.2	31.6	88.38	-2,352.0	-1,509.9	889.9	823.9	66.05	13.474	
15,000.0	11,814.0	15,105.2	11,788.8	37.8	32.2	88.38	-2,452.0	-1,509.3	889.9	822.5	67.45	13.193	
15,100.0	11,814.0	15,205.2	11,788.8	38.5	32.8	88.38	-2,552.0	-1,508.7	889.9	821.1	68.88	12.920	
15,200.0	11,814.0	15,305.2	11,788.8	39.2	33.5	88.38	-2,652.0	-1,508.1	889.9	819.6	70.32	12.655	
15,300.0	11,814.0	15,405.2	11,788.8	39.9	34.1	88.38	-2,752.0	-1,507.4	890.0	818.2	71.78	12.398	
15,400.0	11,814.0	15,505.2	11,788.8	40.7	34.7	88.38	-2,852.0	-1,506.8	890.0	816.7	73.26	12.148	
15,500.0	11,814.0	15,605.2	11,788.8	41.4	35.4	88.38	-2,952.0	-1,506.2	890.0	815.2	74.75	11.907	
15,600.0	11,814.0	15,705.2	11,788.8	42.2	36.1	88.38	-3,052.0	-1,505.6	890.0	813.7	76.25	11.672	
15,700.0	11,814.0	15,805.2	11,788.8	42.9	36.7	88.38	-3,152.0	-1,504.9	890.0	812.2	77.76	11.445	
15,800.0	11,814.0	15,905.2	11,788.8	43.7	37.4	88.38	-3,252.0	-1,504.3	890.0	810.7	79.29	11.224	
15,900.0	11,814.0	16,005.2	11,788.8	44.5	38.1	88.38	-3,352.0	-1,503.7	890.0	809.2	80.83	11.011	
16,000.0	11,814.0	16,105.2	11,788.8	45.3	38.8	88.38	-3,452.0	-1,503.1	890.0	807.6	82.38	10.804	
16,100.0	11,814.0	16,205.2	11,788.8	46.1	39.5	88.38	-3,552.0	-1,502.4	890.0	806.1	83.94	10.603	
16,200.0	11,814.0	16,305.2	11,788.8	46.9	40.2	88.38	-3,652.0	-1,501.8	890.0	804.5	85.51	10.409	
16,300.0	11,814.0	16,405.2	11,788.8	47.7	41.0	88.38	-3,752.0	-1,501.2	890.0	803.0	87.08	10.221	
16,400.0	11,814.0	16,505.2	11,788.8	48.6	41.7	88.38	-3,852.0	-1,500.6	890.1	801.4	88.67	10.038	
16,500.0	11,814.0	16,605.2	11,788.8	49.4	42.4	88.38	-3,952.0	-1,499.9	890.1	799.8	90.26	9.861	
16,600.0	11,814.0	16,705.2	11,788.8	50.2	43.1	88.38	-4,052.0	-1,499.3	890.1	798.2	91.87	9.689	
16,700.0	11,814.0	16,805.2	11,788.8	51.1	43.9	88.38	-4,152.0	-1,498.7	890.1	796.6	93.48	9.522	
16,800.0	11,814.0	16,905.2	11,788.8	51.9	44.6	88.38	-4,252.0	-1,498.1	890.1	795.0	95.09	9.360	
16,900.0	11,814.0	17,005.2	11,788.8	52.8	45.4	88.38	-4,352.0	-1,497.4	890.1	793.4	96.71	9.204	
17,000.0	11,814.0	17,105.2	11,788.8	53.6	46.1	88.38	-4,452.0	-1,496.8	890.1	791.8	98.34	9.051	
17,100.0	11,814.0	17,205.2	11,788.8	54.5	46.9	88.38	-4,552.0	-1,496.2	890.1	790.1	99.98	8.903	
17,200.0	11,814.0	17,305.2	11,788.8	55.4	47.6	88.38	-4,652.0	-1,495.6	890.1	788.5	101.62	8.760	
17,300.0	11,814.0	17,405.2	11,788.8	56.2	48.4	88.38	-4,752.0	-1,494.9	890.1	786.9	103.26	8.620	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 707H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1+SAG+FDIR												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	11,814.0	17,505.2	11,788.8	57.1	49.1	88.38	-4,852.0	-1,494.3	890.1	785.2	104.91	8.485	
17,500.0	11,814.0	17,605.2	11,788.8	58.0	49.9	88.38	-4,952.0	-1,493.7	890.2	783.6	106.57	8.353	
17,600.0	11,814.0	17,705.2	11,788.8	58.9	50.7	88.38	-5,052.0	-1,493.1	890.2	781.9	108.23	8.225	
17,700.0	11,814.0	17,805.2	11,788.8	59.8	51.4	88.38	-5,152.0	-1,492.5	890.2	780.3	109.89	8.101	
17,800.0	11,814.0	17,905.2	11,788.8	60.7	52.2	88.38	-5,252.0	-1,491.8	890.2	778.6	111.56	7.979	
17,900.0	11,814.0	18,005.2	11,788.8	61.5	53.0	88.38	-5,352.0	-1,491.2	890.2	777.0	113.23	7.862	
18,000.0	11,814.0	18,105.2	11,788.8	62.4	53.8	88.38	-5,452.0	-1,490.6	890.2	775.3	114.91	7.747	
18,100.0	11,814.0	18,205.2	11,788.8	63.3	54.6	88.38	-5,552.0	-1,490.0	890.2	773.6	116.59	7.636	
18,200.0	11,814.0	18,305.2	11,788.8	64.2	55.3	88.38	-5,652.0	-1,489.3	890.2	772.0	118.27	7.527	
18,300.0	11,814.0	18,405.2	11,788.8	65.1	56.1	88.38	-5,752.0	-1,488.7	890.2	770.3	119.96	7.421	
18,400.0	11,814.0	18,505.2	11,788.8	66.0	56.9	88.38	-5,852.0	-1,488.1	890.2	768.6	121.65	7.318	
18,500.0	11,814.0	18,605.2	11,788.8	66.9	57.7	88.38	-5,952.0	-1,487.5	890.2	766.9	123.34	7.218	
18,600.0	11,814.0	18,705.2	11,788.8	67.8	58.5	88.38	-6,052.0	-1,486.8	890.3	765.2	125.04	7.120	
18,700.0	11,814.0	18,805.2	11,788.8	68.7	59.3	88.38	-6,152.0	-1,486.2	890.3	763.5	126.74	7.025	
18,800.0	11,814.0	18,905.2	11,788.8	69.7	60.1	88.38	-6,252.0	-1,485.6	890.3	761.8	128.44	6.932	
18,900.0	11,814.0	19,005.2	11,788.8	70.6	60.9	88.38	-6,352.0	-1,485.0	890.3	760.1	130.14	6.841	
19,000.0	11,814.0	19,105.2	11,788.8	71.5	61.7	88.38	-6,451.9	-1,484.3	890.3	758.4	131.85	6.752	
19,100.0	11,814.0	19,205.2	11,788.8	72.4	62.5	88.38	-6,551.9	-1,483.7	890.3	756.7	133.56	6.666	
19,200.0	11,814.0	19,305.2	11,788.8	73.3	63.3	88.38	-6,651.9	-1,483.1	890.3	755.0	135.27	6.582	
19,300.0	11,814.0	19,405.2	11,788.8	74.2	64.1	88.38	-6,751.9	-1,482.5	890.3	753.3	136.99	6.499	
19,400.0	11,814.0	19,505.2	11,788.8	75.1	64.9	88.38	-6,851.9	-1,481.8	890.3	751.6	138.70	6.419	
19,500.0	11,814.0	19,605.2	11,788.8	76.1	65.7	88.38	-6,951.9	-1,481.2	890.3	749.9	140.41	6.341	
19,544.6	11,814.0	19,649.8	11,788.8	76.5	66.2	88.38	-6,996.5	-1,480.9	890.3	749.3	141.08	6.311	
19,544.9	11,814.0	19,649.9	11,788.8	76.5	66.2	88.38	-6,996.6	-1,480.9	890.3	749.3	141.08	6.311	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 708H - 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		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)			No-Go Distance (usft)		
0.0	0.0	0.2	0.0	3.0	3.0	-54.29	11.6	-16.2	19.9						
100.0	100.0	100.2	100.0	3.1	3.1	-54.29	11.6	-16.2	19.9	13.3	6.60	3.021			
200.0	200.0	200.2	200.0	3.3	3.3	-54.29	11.6	-16.2	19.9	12.9	7.05	2.827 Normal Operations			
300.0	300.0	300.2	300.0	3.5	3.5	-54.29	11.6	-16.2	19.9	12.5	7.48	2.666 Normal Operations			
400.0	400.0	400.2	400.0	3.8	3.8	-54.29	11.6	-16.2	19.9	12.1	7.88	2.529 Normal Operations			
500.0	500.0	500.2	500.0	4.0	4.0	-54.29	11.6	-16.2	19.9	11.7	8.27	2.410 Caution - Monitor Closely			
600.0	600.0	600.2	600.0	4.1	4.1	-54.29	11.6	-16.2	19.9	11.3	8.64	2.307 Caution - Monitor Closely			
700.0	700.0	700.2	700.0	4.3	4.3	-54.29	11.6	-16.2	19.9	10.9	9.00	2.215 Caution - Monitor Closely			
800.0	800.0	800.2	800.0	4.5	4.5	-54.29	11.6	-16.2	19.9	10.6	9.35	2.132 Caution - Monitor Closely			
900.0	900.0	900.2	900.0	4.7	4.7	-54.29	11.6	-16.2	19.9	10.3	9.69	2.058 Caution - Monitor Closely			
1,000.0	1,000.0	1,000.2	1,000.0	4.8	4.8	-54.29	11.6	-16.2	19.9	9.9	10.02	1.991 Caution - Monitor Closely			
1,100.0	1,100.0	1,100.2	1,100.0	5.0	5.0	-54.29	11.6	-16.2	19.9	9.6	10.34	1.929 Caution - Monitor Closely			
1,200.0	1,200.0	1,200.2	1,200.0	5.2	5.2	-54.29	11.6	-16.2	19.9	9.3	10.65	1.872 Caution - Monitor Closely			
1,300.0	1,300.0	1,300.2	1,300.0	5.3	5.3	-54.29	11.6	-16.2	19.9	9.0	10.95	1.820 Caution - Monitor Closely			
1,400.0	1,400.0	1,400.2	1,400.0	5.5	5.5	-54.29	11.6	-16.2	19.9	8.7	11.25	1.772 Caution - Monitor Closely			
1,500.0	1,500.0	1,500.2	1,500.0	5.6	5.6	-54.29	11.6	-16.2	19.9	8.4	11.55	1.727 Caution - Monitor Closely			
1,600.0	1,600.0	1,600.2	1,600.0	5.8	5.8	-54.29	11.6	-16.2	19.9	8.1	11.84	1.685 Caution - Monitor Closely			
1,700.0	1,700.0	1,700.2	1,700.0	5.9	5.9	-54.29	11.6	-16.2	19.9	7.8	12.12	1.645 Caution - Monitor Closely			
1,800.0	1,800.0	1,800.2	1,800.0	6.0	6.0	-54.29	11.6	-16.2	19.9	7.5	12.40	1.608 Caution - Monitor Closely			
1,900.0	1,900.0	1,900.2	1,900.0	6.2	6.2	-54.29	11.6	-16.2	19.9	7.3	12.67	1.574 Caution - Monitor Closely			
1,966.6	1,966.6	1,966.8	1,966.6	6.3	6.3	-54.29	11.6	-16.2	19.9	7.1	12.85	1.551 Caution - Monitor Closely, CC			
2,000.0	2,000.0	2,000.2	2,000.0	6.3	6.3	-54.29	11.6	-16.2	19.9	7.0	12.94	1.541 Caution - Monitor Closely			
2,100.0	2,100.0	2,100.2	2,099.8	6.5	6.5	-79.45	12.9	-15.9	20.2	6.9	13.21	1.526 Caution - Monitor Closely, ES, SF			
2,200.0	2,199.9	2,199.8	2,199.5	6.7	6.7	-79.95	16.7	-14.8	20.8	7.3	13.48	1.545 Caution - Monitor Closely			
2,300.0	2,299.7	2,299.6	2,299.1	6.9	6.9	-80.72	23.0	-13.1	21.9	8.2	13.74	1.596 Caution - Monitor Closely			
2,333.3	2,332.9	2,332.9	2,332.3	6.9	6.9	-81.03	25.6	-12.4	22.4	8.6	13.77	1.626 Caution - Monitor Closely			
2,400.0	2,399.3	2,399.0	2,398.2	7.0	7.0	-67.43	31.5	-11.7	23.3	9.4	13.90	1.680 Caution - Monitor Closely			
2,500.0	2,498.8	2,498.2	2,496.8	7.2	7.2	-52.27	41.2	-13.1	24.7	10.5	14.21	1.739 Caution - Monitor Closely			
2,600.0	2,598.1	2,597.3	2,595.2	7.4	7.4	-43.57	52.2	-17.8	26.0	11.5	14.51	1.795 Caution - Monitor Closely			
2,700.0	2,697.0	2,696.4	2,693.2	7.6	7.6	-39.63	64.3	-25.7	27.5	12.6	14.82	1.853 Caution - Monitor Closely			
2,800.0	2,795.4	2,795.4	2,790.7	7.9	7.9	-38.86	77.6	-36.8	29.0	13.9	15.12	1.920 Caution - Monitor Closely			
2,825.7	2,820.6	2,820.8	2,815.6	7.9	8.0	-39.03	81.2	-40.2	29.5	14.3	15.18	1.942 Caution - Monitor Closely			
2,900.0	2,893.5	2,894.2	2,887.4	8.1	8.2	-42.53	92.0	-51.0	31.8	16.4	15.36	2.070 Caution - Monitor Closely			
3,000.0	2,991.5	2,992.9	2,983.3	8.4	8.5	-45.61	107.5	-68.4	38.0	22.4	15.64	2.430 Caution - Monitor Closely			
3,100.0	3,089.5	3,091.8	3,078.7	8.7	8.7	-47.05	124.0	-88.4	47.2	31.3	15.92	2.965 Normal Operations			
3,200.0	3,187.5	3,191.3	3,174.7	9.0	9.0	-47.94	140.7	-109.0	56.8	40.5	16.31	3.483			
3,300.0	3,285.5	3,290.8	3,270.6	9.3	9.3	-48.57	157.4	-129.5	66.4	49.7	16.73	3.971			
3,400.0	3,383.6	3,390.4	3,366.5	9.6	9.6	-49.04	174.2	-150.1	76.1	58.9	17.17	4.429			
3,500.0	3,481.6	3,489.9	3,462.5	9.9	10.0	-49.41	190.9	-170.6	85.7	68.0	17.64	4.858			
3,600.0	3,579.6	3,589.4	3,558.4	10.3	10.3	-49.70	207.6	-191.2	95.3	77.2	18.12	5.259			
3,700.0	3,677.6	3,689.0	3,654.4	10.6	10.7	-49.94	224.4	-211.7	104.9	86.3	18.63	5.633			
3,800.0	3,775.6	3,788.5	3,750.3	11.0	11.1	-50.14	241.1	-232.3	114.6	95.4	19.15	5.982			
3,900.0	3,873.6	3,888.1	3,846.3	11.4	11.5	-50.31	257.8	-252.8	124.2	104.5	19.69	6.307			
4,000.0	3,971.6	3,987.6	3,942.2	11.7	11.8	-50.45	274.5	-273.4	133.8	113.6	20.25	6.610			
4,100.0	4,069.7	4,087.1	4,038.1	12.1	12.2	-50.57	291.3	-294.0	143.5	122.6	20.82	6.892			
4,200.0	4,167.7	4,186.7	4,134.1	12.5	12.7	-50.68	308.0	-314.5	153.1	131.7	21.40	7.155			
4,300.0	4,265.7	4,286.2	4,230.0	12.9	13.1	-50.78	324.7	-335.1	162.7	140.7	21.99	7.400			
4,400.0	4,363.7	4,385.7	4,326.0	13.3	13.5	-50.86	341.5	-355.6	172.4	149.8	22.59	7.629			
4,500.0	4,461.7	4,485.3	4,421.9	13.7	13.9	-50.94	358.2	-376.2	182.0	158.8	23.21	7.842			
4,600.0	4,559.7	4,584.8	4,517.9	14.1	14.3	-51.01	374.9	-396.7	191.6	167.8	23.83	8.042			
4,700.0	4,657.8	4,684.3	4,613.8	14.6	14.8	-51.07	391.6	-417.3	201.3	176.8	24.46	8.228			

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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 708H - 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)			
4,800.0	4,755.8	4,783.9	4,709.7	15.0	15.2	-51.13	408.4	-437.8	210.9	185.8	25.10	8.402	
4,900.0	4,853.8	4,883.4	4,805.7	15.4	15.7	-51.18	425.1	-458.4	220.5	194.8	25.75	8.566	
5,000.0	4,951.8	4,982.9	4,901.6	15.8	16.1	-51.22	441.8	-478.9	230.2	203.8	26.40	8.719	
5,100.0	5,049.8	5,082.5	4,997.6	16.2	16.5	-51.27	458.6	-499.5	239.8	212.8	27.06	8.863	
5,200.0	5,147.8	5,182.0	5,093.5	16.7	17.0	-51.31	475.3	-520.0	249.5	221.7	27.72	8.998	
5,300.0	5,245.8	5,281.5	5,189.4	17.1	17.5	-51.34	492.0	-540.6	259.1	230.7	28.39	9.125	
5,400.0	5,343.9	5,381.1	5,285.4	17.5	17.9	-51.38	508.8	-561.1	268.7	239.7	29.07	9.244	
5,500.0	5,441.9	5,480.6	5,381.3	18.0	18.4	-51.41	525.5	-581.7	278.4	248.6	29.75	9.357	
5,600.0	5,539.9	5,580.1	5,477.3	18.4	18.8	-51.44	542.2	-602.2	288.0	257.6	30.43	9.463	
5,700.0	5,637.9	5,679.7	5,573.2	18.8	19.3	-51.47	558.9	-622.8	297.6	266.5	31.12	9.563	
5,800.0	5,735.9	5,779.2	5,669.2	19.3	19.8	-51.49	575.7	-643.3	307.3	275.5	31.81	9.658	
5,900.0	5,833.9	5,878.7	5,765.1	19.7	20.2	-51.52	592.4	-663.9	316.9	284.4	32.51	9.748	
6,000.0	5,932.0	5,978.3	5,861.0	20.2	20.7	-51.54	609.1	-684.4	326.5	293.3	33.21	9.833	
6,100.0	6,030.0	6,077.8	5,957.0	20.6	21.2	-51.56	625.9	-705.0	336.2	302.3	33.91	9.914	
6,200.0	6,128.0	6,177.3	6,052.9	21.1	21.6	-51.58	642.6	-725.5	345.8	311.2	34.61	9.991	
6,300.0	6,226.0	6,276.9	6,148.9	21.5	22.1	-51.60	659.3	-746.1	355.5	320.1	35.32	10.063	
6,400.0	6,324.0	6,376.4	6,244.8	21.9	22.6	-51.62	676.1	-766.6	365.1	329.1	36.03	10.133	
6,500.0	6,422.0	6,475.9	6,340.7	22.4	23.0	-51.64	692.8	-787.2	374.7	338.0	36.74	10.198	
6,600.0	6,520.0	6,575.5	6,436.7	22.8	23.5	-51.66	709.5	-807.7	384.4	346.9	37.46	10.261	
6,700.0	6,618.1	6,678.6	6,536.2	23.3	24.0	-51.70	726.6	-828.8	393.7	355.5	38.19	10.309	
6,800.0	6,716.1	6,784.2	6,638.6	23.7	24.5	-51.90	743.1	-849.0	401.7	362.8	38.89	10.330	
6,900.0	6,814.1	6,890.1	6,741.6	24.2	25.0	-52.24	758.3	-867.7	408.2	368.7	39.52	10.330	
6,951.1	6,864.2	6,944.2	6,794.4	24.4	25.2	-52.48	765.7	-876.7	411.0	371.2	39.80	10.327	
7,000.0	6,912.1	6,996.0	6,845.1	24.6	25.5	-52.74	772.4	-885.0	413.4	373.3	40.05	10.320	
7,100.0	7,010.5	7,102.0	6,949.2	25.1	26.0	-53.22	785.3	-900.8	418.0	377.4	40.59	10.298	
7,200.0	7,109.1	7,208.1	7,053.6	25.5	26.4	-53.65	797.0	-915.2	422.2	381.1	41.10	10.271	
7,300.0	7,208.0	7,314.2	7,158.5	25.9	26.9	-54.02	807.4	-928.0	425.9	384.3	41.59	10.240	
7,400.0	7,307.2	7,420.4	7,263.7	26.4	27.3	-54.35	816.7	-939.4	429.3	387.2	42.07	10.205	
7,500.0	7,406.6	7,526.7	7,369.1	26.8	27.8	-54.63	824.7	-949.2	432.2	389.7	42.51	10.166	
7,600.0	7,506.1	7,633.0	7,474.9	27.1	28.2	-54.86	831.4	-957.5	434.7	391.7	42.94	10.123	
7,700.0	7,605.8	7,739.3	7,580.8	27.5	28.6	-55.05	837.0	-964.3	436.7	393.3	43.34	10.076	
7,800.0	7,705.6	7,845.6	7,686.9	27.9	29.0	-55.20	841.2	-969.6	438.2	394.5	43.70	10.027	
7,900.0	7,805.5	7,952.0	7,793.2	28.2	29.3	-55.30	844.3	-973.3	439.3	395.3	44.04	9.977	
8,000.0	7,905.5	8,058.3	7,899.5	28.5	29.6	-55.36	846.1	-975.5	440.0	395.7	44.32	9.928	
8,094.5	8,000.0	8,158.8	8,000.0	28.6	29.8	-89.59	846.6	-976.2	440.2	395.7	44.45	9.903	
8,095.9	8,001.4	8,160.3	8,001.5	28.6	29.8	-89.59	846.6	-976.2	440.2	395.7	44.45	9.903	
8,100.0	8,005.5	8,164.3	8,005.5	28.6	29.8	-89.59	846.6	-976.2	440.2	395.7	44.45	9.902	
8,200.0	8,105.5	8,264.3	8,105.5	28.7	29.8	-89.59	846.6	-976.2	440.2	395.6	44.59	9.873	
8,300.0	8,205.5	8,364.3	8,205.5	28.7	29.9	-89.59	846.6	-976.2	440.2	395.5	44.68	9.851	
8,400.0	8,305.5	8,464.3	8,305.5	28.8	29.9	-89.59	846.6	-976.2	440.2	395.4	44.78	9.830	
8,500.0	8,405.5	8,564.3	8,405.5	28.8	30.0	-89.59	846.6	-976.2	440.2	395.3	44.88	9.808	
8,600.0	8,505.5	8,664.3	8,505.5	28.9	30.0	-89.59	846.6	-976.2	440.2	395.2	44.98	9.787	
8,700.0	8,605.5	8,764.3	8,605.5	28.9	30.0	-89.59	846.6	-976.2	440.2	395.1	45.08	9.765	
8,800.0	8,705.5	8,864.3	8,705.5	29.0	30.1	-89.59	846.6	-976.2	440.2	395.0	45.18	9.744	
8,900.0	8,805.5	8,964.3	8,805.5	29.0	30.1	-89.59	846.6	-976.2	440.2	394.9	45.28	9.722	
9,000.0	8,905.5	9,064.3	8,905.5	29.0	30.1	-89.59	846.6	-976.2	440.2	394.8	45.38	9.701	
9,100.0	9,005.5	9,164.3	9,005.5	29.1	30.2	-89.59	846.6	-976.2	440.2	394.7	45.48	9.679	
9,200.0	9,105.5	9,264.3	9,105.5	29.1	30.2	-89.59	846.6	-976.2	440.2	394.6	45.58	9.658	
9,300.0	9,205.5	9,364.3	9,205.5	29.2	30.3	-89.59	846.6	-976.2	440.2	394.5	45.68	9.636	
9,400.0	9,305.5	9,464.3	9,305.5	29.2	30.3	-89.59	846.6	-976.2	440.2	394.4	45.78	9.615	
9,500.0	9,405.5	9,564.3	9,405.5	29.3	30.3	-89.59	846.6	-976.2	440.2	394.3	45.89	9.593	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 708H - 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)			
9,600.0	9,505.5	9,664.3	9,505.5	29.3	30.4	-89.59	846.6	-976.2	440.2	394.2	45.99	9.572	
9,700.0	9,605.5	9,764.3	9,605.5	29.3	30.4	-89.59	846.6	-976.2	440.2	394.1	46.09	9.551	
9,800.0	9,705.5	9,864.3	9,705.5	29.4	30.5	-89.59	846.6	-976.2	440.2	394.0	46.19	9.529	
9,900.0	9,805.5	9,964.3	9,805.5	29.4	30.5	-89.59	846.6	-976.2	440.2	393.9	46.30	9.508	
10,000.0	9,905.5	10,064.3	9,905.5	29.5	30.6	-89.59	846.6	-976.2	440.2	393.8	46.40	9.487	
10,100.0	10,005.5	10,164.3	10,005.5	29.5	30.6	-89.59	846.6	-976.2	440.2	393.7	46.50	9.466	
10,200.0	10,105.5	10,264.3	10,105.5	29.6	30.6	-89.59	846.6	-976.2	440.2	393.6	46.61	9.445	
10,300.0	10,205.5	10,364.3	10,205.5	29.6	30.7	-89.59	846.6	-976.2	440.2	393.5	46.71	9.423	
10,400.0	10,305.5	10,464.3	10,305.5	29.7	30.7	-89.59	846.6	-976.2	440.2	393.4	46.82	9.402	
10,500.0	10,405.5	10,564.3	10,405.5	29.7	30.8	-89.59	846.6	-976.2	440.2	393.3	46.92	9.381	
10,600.0	10,505.5	10,664.3	10,505.5	29.8	30.8	-89.59	846.6	-976.2	440.2	393.2	47.03	9.360	
10,700.0	10,605.5	10,764.3	10,605.5	29.8	30.8	-89.59	846.6	-976.2	440.2	393.1	47.14	9.339	
10,800.0	10,705.5	10,864.3	10,705.5	29.8	30.9	-89.59	846.6	-976.2	440.2	393.0	47.24	9.318	
10,900.0	10,805.5	10,964.3	10,805.5	29.9	30.9	-89.59	846.6	-976.2	440.2	392.9	47.35	9.297	
11,000.0	10,905.5	11,064.3	10,905.5	29.9	31.0	-89.59	846.6	-976.2	440.2	392.7	47.46	9.276	
11,100.0	11,005.5	11,164.3	11,005.5	30.0	31.0	-89.59	846.6	-976.2	440.2	392.6	47.56	9.255	
11,200.0	11,105.5	11,264.3	11,105.5	30.0	31.1	-89.59	846.6	-976.2	440.2	392.5	47.67	9.234	
11,300.0	11,205.5	11,364.3	11,205.5	30.1	31.1	-89.59	846.6	-976.2	440.2	392.4	47.78	9.214	
11,400.0	11,305.5	11,464.3	11,305.5	30.1	31.1	-89.59	846.6	-976.2	440.2	392.3	47.89	9.193	
11,431.0	11,336.5	11,495.3	11,336.5	30.1	31.2	-89.59	846.6	-976.2	440.2	392.3	47.91	9.188	
11,450.0	11,355.5	11,514.3	11,355.5	30.1	31.2	82.16	846.6	-976.2	440.1	392.2	47.94	9.180	
11,475.0	11,380.4	11,539.3	11,380.4	30.1	31.2	82.40	846.6	-976.2	439.9	391.9	48.04	9.157	
11,500.0	11,405.3	11,564.1	11,405.3	30.0	31.2	82.83	846.6	-976.2	439.5	391.3	48.20	9.119	
11,525.0	11,429.9	11,588.7	11,429.9	29.9	31.2	83.43	846.6	-976.2	439.0	390.6	48.43	9.066	
11,550.0	11,454.3	11,613.1	11,454.3	29.8	31.2	84.20	846.6	-976.2	438.4	389.7	48.71	9.000	
11,575.0	11,478.3	11,637.2	11,478.3	29.7	31.2	85.13	846.6	-976.2	437.8	388.7	49.06	8.923	
11,600.0	11,502.0	11,660.8	11,502.0	29.7	31.2	86.20	846.6	-976.2	437.1	387.7	49.46	8.837	
11,625.0	11,525.2	11,684.0	11,525.2	29.6	31.2	87.40	846.6	-976.2	436.6	386.6	49.93	8.744	
11,650.0	11,547.9	11,706.3	11,547.4	29.5	31.2	88.64	846.4	-976.2	436.2	385.8	50.43	8.649	
11,675.0	11,570.0	11,728.5	11,569.6	29.4	31.2	89.88	845.3	-976.4	436.0	385.1	50.92	8.563	
11,676.1	11,571.0	11,729.5	11,570.6	29.4	31.2	89.94	845.2	-976.4	436.0	385.1	50.94	8.559	
11,700.0	11,591.5	11,751.1	11,592.1	29.3	31.1	91.12	843.0	-976.8	436.2	384.8	51.39	8.488	
11,725.0	11,612.3	11,774.2	11,615.0	29.2	31.1	92.37	839.7	-977.3	436.6	384.8	51.82	8.426	
11,750.0	11,632.3	11,797.8	11,638.1	29.1	31.0	93.62	835.1	-978.0	437.3	385.1	52.20	8.376	
11,775.0	11,651.5	11,822.0	11,661.6	29.1	31.0	94.87	829.3	-978.9	438.2	385.7	52.54	8.341	
11,800.0	11,669.9	11,846.7	11,685.2	29.0	30.9	96.12	822.1	-980.0	439.5	386.6	52.81	8.321	
11,825.0	11,687.3	11,872.1	11,709.1	28.9	30.8	97.37	813.5	-981.4	441.0	387.9	53.03	8.316	
11,850.0	11,703.8	11,898.2	11,733.0	28.8	30.8	98.61	803.4	-983.0	442.7	389.6	53.17	8.327	
11,875.0	11,719.2	11,925.0	11,757.0	28.8	30.7	99.84	791.6	-984.8	444.8	391.5	53.24	8.355	
11,900.0	11,733.6	11,952.6	11,781.0	28.7	30.6	101.05	778.2	-986.9	447.0	393.8	53.23	8.398	
11,925.0	11,747.0	11,981.0	11,804.9	28.7	30.6	102.26	762.9	-989.3	449.5	396.4	53.14	8.459	
11,950.0	11,759.2	12,010.4	11,828.5	28.6	30.5	103.45	745.7	-992.0	452.2	399.2	52.98	8.536	
11,975.0	11,770.2	12,040.7	11,851.7	28.6	30.4	104.62	726.4	-995.0	455.0	402.3	52.73	8.629	
12,000.0	11,780.1	12,072.1	11,874.4	28.5	30.3	105.77	705.0	-998.4	458.0	405.6	52.42	8.737	
12,025.0	11,788.7	12,104.5	11,896.3	28.5	30.3	106.88	681.4	-1,002.1	461.0	409.0	52.03	8.861	
12,050.0	11,796.1	12,138.1	11,917.2	28.5	30.2	107.97	655.4	-1,006.1	464.1	412.5	51.58	8.998	
12,075.0	11,802.2	12,172.8	11,936.8	28.5	30.2	109.01	627.1	-1,010.6	467.2	416.2	51.08	9.147	
12,100.0	11,807.1	12,208.7	11,954.9	28.5	30.1	110.00	596.4	-1,015.4	470.3	419.8	50.53	9.307	
12,125.0	11,810.7	12,245.9	11,971.0	28.4	30.1	110.93	563.4	-1,020.5	473.3	423.3	49.95	9.475	
12,150.0	11,813.0	12,284.2	11,984.9	28.5	30.0	111.79	528.1	-1,026.1	476.1	426.8	49.35	9.648	
12,175.0	11,813.9	12,323.8	11,996.2	28.5	30.0	112.58	490.7	-1,031.9	478.8	430.0	48.73	9.825	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 708H - 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)			
12,181.0	11,814.0	12,333.4	11,998.4	28.5	30.0	112.75	481.4	-1,033.4	479.4	430.8	48.58	9.867	
12,200.0	11,814.0	12,364.5	12,004.5	28.5	30.0	113.41	451.3	-1,038.1	481.1	433.0	48.11	9.999	
12,300.0	11,814.0	12,505.9	12,010.8	28.6	30.1	113.94	311.8	-1,059.2	485.2	438.5	46.71	10.388	
12,400.0	11,814.0	12,624.3	12,010.8	28.6	30.3	113.81	194.2	-1,072.5	487.6	441.4	46.18	10.559	
12,500.0	11,814.0	12,742.7	12,010.8	28.7	30.5	113.71	76.0	-1,080.9	489.5	443.7	45.76	10.696	
12,600.0	11,814.0	12,861.3	12,010.8	28.8	30.7	113.64	-42.5	-1,084.4	490.7	445.2	45.47	10.791	
12,614.1	11,814.0	12,878.1	12,010.8	28.9	30.7	113.64	-59.2	-1,084.5	490.8	445.4	45.44	10.802	
12,700.0	11,814.0	12,968.2	12,010.8	29.0	30.8	113.63	-149.4	-1,084.1	490.9	445.4	45.53	10.783	
12,800.0	11,814.0	13,068.2	12,010.8	29.1	31.0	113.63	-249.3	-1,083.5	490.9	445.1	45.82	10.716	
12,900.0	11,814.0	13,168.2	12,010.8	29.2	31.2	113.63	-349.3	-1,082.8	491.0	444.8	46.18	10.632	
13,000.0	11,814.0	13,268.2	12,010.8	29.4	31.5	113.63	-449.3	-1,082.2	491.0	444.3	46.61	10.534	
13,100.0	11,814.0	13,368.2	12,010.8	29.6	31.7	113.63	-549.3	-1,081.6	491.0	443.9	47.11	10.422	
13,200.0	11,814.0	13,468.2	12,010.8	29.7	32.0	113.63	-649.3	-1,080.9	491.0	443.3	47.68	10.298	
13,300.0	11,814.0	13,568.2	12,010.8	30.0	32.3	113.63	-749.3	-1,080.3	491.0	442.7	48.31	10.163	
13,400.0	11,814.0	13,668.2	12,010.8	30.2	32.6	113.63	-849.3	-1,079.7	491.0	442.0	49.00	10.019	
13,500.0	11,814.0	13,768.2	12,010.8	30.5	32.9	113.63	-949.3	-1,079.1	491.0	441.2	49.76	9.867	
13,600.0	11,814.0	13,868.2	12,010.8	30.8	33.3	113.63	-1,049.3	-1,078.4	491.0	440.4	50.57	9.709	
13,700.0	11,814.0	13,968.2	12,010.8	31.1	33.7	113.63	-1,149.3	-1,077.8	491.0	439.5	51.44	9.545	
13,800.0	11,814.0	14,068.2	12,010.8	31.4	34.1	113.63	-1,249.3	-1,077.2	491.0	438.6	52.35	9.378	
13,900.0	11,814.0	14,168.2	12,010.8	31.8	34.5	113.63	-1,349.3	-1,076.5	491.0	437.7	53.32	9.208	
14,000.0	11,814.0	14,268.2	12,010.8	32.2	35.0	113.63	-1,449.3	-1,075.9	491.0	436.7	54.33	9.037	
14,100.0	11,814.0	14,368.2	12,010.8	32.7	35.5	113.63	-1,549.3	-1,075.3	491.0	435.6	55.39	8.864	
14,200.0	11,814.0	14,468.2	12,010.8	33.1	36.0	113.63	-1,649.3	-1,074.6	491.0	434.5	56.49	8.692	
14,300.0	11,814.0	14,568.2	12,010.8	33.6	36.5	113.63	-1,749.3	-1,074.0	491.0	433.4	57.62	8.521	
14,400.0	11,814.0	14,668.2	12,010.8	34.2	37.0	113.63	-1,849.3	-1,073.4	491.0	432.2	58.80	8.351	
14,500.0	11,814.0	14,768.2	12,010.8	34.7	37.6	113.63	-1,949.3	-1,072.7	491.0	431.0	60.00	8.183	
14,600.0	11,814.0	14,868.2	12,010.8	35.3	38.2	113.63	-2,049.3	-1,072.1	491.0	429.8	61.24	8.017	
14,700.0	11,814.0	14,968.2	12,010.8	35.9	38.8	113.63	-2,149.3	-1,071.5	491.0	428.5	62.51	7.854	
14,800.0	11,814.0	15,068.2	12,010.8	36.5	39.4	113.63	-2,249.3	-1,070.9	491.0	427.2	63.81	7.695	
14,900.0	11,814.0	15,168.2	12,010.8	37.2	40.0	113.63	-2,349.3	-1,070.2	491.0	425.9	65.14	7.538	
15,000.0	11,814.0	15,268.2	12,010.8	37.8	40.6	113.63	-2,449.3	-1,069.6	491.0	424.5	66.49	7.385	
15,100.0	11,814.0	15,368.2	12,010.8	38.5	41.3	113.63	-2,549.3	-1,069.0	491.0	423.2	67.86	7.235	
15,200.0	11,814.0	15,468.2	12,010.8	39.2	42.0	113.63	-2,649.3	-1,068.3	491.0	421.8	69.26	7.090	
15,300.0	11,814.0	15,568.2	12,010.8	39.9	42.7	113.63	-2,749.3	-1,067.7	491.0	420.3	70.68	6.947	
15,400.0	11,814.0	15,668.2	12,010.8	40.7	43.4	113.63	-2,849.3	-1,067.1	491.0	418.9	72.11	6.809	
15,500.0	11,814.0	15,768.2	12,010.8	41.4	44.1	113.63	-2,949.3	-1,066.4	491.0	417.5	73.57	6.674	
15,600.0	11,814.0	15,868.2	12,010.8	42.2	44.8	113.63	-3,049.3	-1,065.8	491.0	416.0	75.04	6.543	
15,700.0	11,814.0	15,968.2	12,010.8	42.9	45.5	113.63	-3,149.3	-1,065.2	491.0	414.5	76.53	6.416	
15,800.0	11,814.0	16,068.2	12,010.8	43.7	46.3	113.63	-3,249.3	-1,064.6	491.0	413.0	78.04	6.292	
15,900.0	11,814.0	16,168.2	12,010.8	44.5	47.0	113.63	-3,349.3	-1,063.9	491.0	411.5	79.56	6.172	
16,000.0	11,814.0	16,268.2	12,010.8	45.3	47.8	113.63	-3,449.3	-1,063.3	491.0	409.9	81.09	6.055	
16,100.0	11,814.0	16,368.2	12,010.8	46.1	48.5	113.63	-3,549.3	-1,062.7	491.0	408.4	82.64	5.942	
16,200.0	11,814.0	16,468.2	12,010.8	46.9	49.3	113.63	-3,649.3	-1,062.0	491.0	406.8	84.20	5.832	
16,300.0	11,814.0	16,568.2	12,010.8	47.7	50.1	113.63	-3,749.3	-1,061.4	491.0	405.3	85.77	5.725	
16,400.0	11,814.0	16,668.2	12,010.8	48.6	50.9	113.63	-3,849.3	-1,060.8	491.1	403.7	87.35	5.622	
16,500.0	11,814.0	16,768.2	12,010.8	49.4	51.7	113.63	-3,949.3	-1,060.1	491.1	402.1	88.94	5.521	
16,600.0	11,814.0	16,868.2	12,010.8	50.2	52.5	113.63	-4,049.3	-1,059.5	491.1	400.5	90.55	5.423	
16,700.0	11,814.0	16,968.2	12,010.8	51.1	53.3	113.63	-4,149.3	-1,058.9	491.1	398.9	92.16	5.329	
16,800.0	11,814.0	17,068.2	12,010.8	51.9	54.1	113.63	-4,249.3	-1,058.2	491.1	397.3	93.78	5.236	
16,900.0	11,814.0	17,168.2	12,010.8	52.8	54.9	113.63	-4,349.3	-1,057.6	491.1	395.7	95.41	5.147	
17,000.0	11,814.0	17,268.2	12,010.8	53.6	55.7	113.63	-4,449.3	-1,057.0	491.1	394.0	97.04	5.060	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 - _ZIA HILLS UNIT 2832 WC 708H - OWB - PWPO												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)			
17,100.0	11,814.0	17,368.2	12,010.8	54.5	56.6	113.63	-4,549.3	-1,056.4	491.1	392.4	98.69	4.976	
17,200.0	11,814.0	17,468.2	12,010.8	55.4	57.4	113.63	-4,649.3	-1,055.7	491.1	390.7	100.34	4.894	
17,300.0	11,814.0	17,568.2	12,010.8	56.2	58.2	113.63	-4,749.3	-1,055.1	491.1	389.1	102.00	4.815	
17,400.0	11,814.0	17,668.2	12,010.8	57.1	59.1	113.62	-4,849.3	-1,054.5	491.1	387.4	103.66	4.737	
17,500.0	11,814.0	17,768.2	12,010.8	58.0	59.9	113.62	-4,949.3	-1,053.8	491.1	385.8	105.33	4.662	
17,600.0	11,814.0	17,868.2	12,010.8	58.9	60.8	113.62	-5,049.3	-1,053.2	491.1	384.1	107.01	4.589	
17,700.0	11,814.0	17,968.2	12,010.8	59.8	61.6	113.62	-5,149.3	-1,052.6	491.1	382.4	108.69	4.518	
17,800.0	11,814.0	18,068.2	12,010.8	60.7	62.5	113.62	-5,249.3	-1,051.9	491.1	380.7	110.38	4.449	
17,900.0	11,814.0	18,168.2	12,010.8	61.5	63.4	113.62	-5,349.2	-1,051.3	491.1	379.0	112.07	4.382	
18,000.0	11,814.0	18,268.2	12,010.8	62.4	64.2	113.62	-5,449.2	-1,050.7	491.1	377.3	113.77	4.317	
18,100.0	11,814.0	18,368.2	12,010.8	63.3	65.1	113.62	-5,549.2	-1,050.0	491.1	375.6	115.47	4.253	
18,200.0	11,814.0	18,468.2	12,010.8	64.2	66.0	113.62	-5,649.2	-1,049.4	491.1	373.9	117.18	4.191	
18,300.0	11,814.0	18,568.2	12,010.8	65.1	66.8	113.62	-5,749.2	-1,048.8	491.1	372.2	118.89	4.131	
18,400.0	11,814.0	18,668.2	12,010.8	66.0	67.7	113.62	-5,849.2	-1,048.2	491.1	370.5	120.61	4.072	
18,500.0	11,814.0	18,768.2	12,010.8	66.9	68.6	113.62	-5,949.2	-1,047.5	491.1	368.8	122.33	4.015	
18,600.0	11,814.0	18,868.2	12,010.8	67.8	69.5	113.62	-6,049.2	-1,046.9	491.1	367.1	124.05	3.959	
18,700.0	11,814.0	18,968.2	12,010.8	68.7	70.4	113.62	-6,149.2	-1,046.3	491.1	365.3	125.78	3.905	
18,800.0	11,814.0	19,068.2	12,010.8	69.7	71.3	113.62	-6,249.2	-1,045.6	491.1	363.6	127.51	3.852	
18,900.0	11,814.0	19,168.2	12,010.8	70.6	72.1	113.62	-6,349.2	-1,045.0	491.1	361.9	129.24	3.800	
19,000.0	11,814.0	19,268.2	12,010.8	71.5	73.0	113.62	-6,449.2	-1,044.4	491.1	360.1	130.98	3.750	
19,100.0	11,814.0	19,368.2	12,010.8	72.4	73.9	113.62	-6,549.2	-1,043.7	491.1	358.4	132.72	3.701	
19,200.0	11,814.0	19,468.2	12,010.8	73.3	74.8	113.62	-6,649.2	-1,043.1	491.1	356.7	134.46	3.653	
19,300.0	11,814.0	19,568.2	12,010.8	74.2	75.7	113.62	-6,749.2	-1,042.5	491.1	354.9	136.21	3.606	
19,400.0	11,814.0	19,668.2	12,010.8	75.1	76.6	113.62	-6,849.2	-1,041.9	491.1	353.2	137.96	3.560	
19,500.0	11,814.0	19,768.2	12,010.8	76.1	77.5	113.62	-6,949.2	-1,041.2	491.1	351.4	139.71	3.516	
19,544.6	11,814.0	19,812.8	12,010.8	76.5	77.9	113.62	-6,993.8	-1,040.9	491.1	350.7	140.45	3.497	
19,544.9	11,814.0	19,812.8	12,010.8	76.5	77.9	113.62	-6,993.8	-1,040.9	491.1	350.7	140.45	3.497	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 710H - 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	Offset Wellbore Centre		Distance		No-Go	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor	
0.0	0.0	0.0	0.3	3.0	3.0	125.99	-11.8	16.2	20.0				
100.0	100.0	99.7	100.0	3.1	3.1	125.99	-11.8	16.2	20.0	13.4	6.60	3.032	
200.0	200.0	199.7	200.0	3.3	3.3	125.99	-11.8	16.2	20.0	13.0	7.05	2.838	Normal Operations
300.0	300.0	299.7	300.0	3.5	3.5	125.99	-11.8	16.2	20.0	12.5	7.48	2.676	Normal Operations
400.0	400.0	399.7	400.0	3.8	3.8	125.99	-11.8	16.2	20.0	12.1	7.88	2.538	Normal Operations
500.0	500.0	499.7	500.0	4.0	3.9	125.99	-11.8	16.2	20.0	11.7	8.27	2.419	Caution - Monitor Closely
600.0	600.0	599.7	600.0	4.1	4.1	125.99	-11.8	16.2	20.0	11.4	8.64	2.315	Caution - Monitor Closely
700.0	700.0	699.7	700.0	4.3	4.3	125.99	-11.8	16.2	20.0	11.0	9.00	2.223	Caution - Monitor Closely
800.0	800.0	799.7	800.0	4.5	4.5	125.99	-11.8	16.2	20.0	10.7	9.35	2.140	Caution - Monitor Closely
900.0	900.0	899.7	900.0	4.7	4.7	125.99	-11.8	16.2	20.0	10.3	9.69	2.065	Caution - Monitor Closely
1,000.0	1,000.0	999.7	1,000.0	4.8	4.8	125.99	-11.8	16.2	20.0	10.0	10.02	1.998	Caution - Monitor Closely
1,100.0	1,100.0	1,099.7	1,100.0	5.0	5.0	125.99	-11.8	16.2	20.0	9.7	10.34	1.936	Caution - Monitor Closely
1,200.0	1,200.0	1,199.7	1,200.0	5.2	5.2	125.99	-11.8	16.2	20.0	9.4	10.65	1.879	Caution - Monitor Closely
1,300.0	1,300.0	1,299.7	1,300.0	5.3	5.3	125.99	-11.8	16.2	20.0	9.1	10.95	1.827	Caution - Monitor Closely
1,400.0	1,400.0	1,399.7	1,400.0	5.5	5.5	125.99	-11.8	16.2	20.0	8.8	11.25	1.778	Caution - Monitor Closely
1,500.0	1,500.0	1,499.7	1,500.0	5.6	5.6	125.99	-11.8	16.2	20.0	8.5	11.55	1.733	Caution - Monitor Closely
1,600.0	1,600.0	1,599.7	1,600.0	5.8	5.8	125.99	-11.8	16.2	20.0	8.2	11.84	1.691	Caution - Monitor Closely
1,700.0	1,700.0	1,699.7	1,700.0	5.9	5.9	125.99	-11.8	16.2	20.0	7.9	12.12	1.651	Caution - Monitor Closely
1,800.0	1,800.0	1,799.7	1,800.0	6.0	6.0	125.99	-11.8	16.2	20.0	7.6	12.40	1.614	Caution - Monitor Closely
1,900.0	1,900.0	1,899.7	1,900.0	6.2	6.2	125.99	-11.8	16.2	20.0	7.3	12.67	1.579	Caution - Monitor Closely
2,000.0	2,000.0	1,999.7	2,000.0	6.3	6.3	125.99	-11.8	16.2	20.0	7.1	12.94	1.546	Caution - Monitor Closely, CC, ES
2,100.0	2,100.0	2,099.7	2,100.0	6.5	6.5	104.62	-11.8	16.2	20.3	7.1	13.21	1.537	Caution - Monitor Closely, SF
2,200.0	2,199.9	2,199.6	2,199.9	6.7	6.6	114.71	-11.8	16.2	21.6	8.1	13.48	1.604	Caution - Monitor Closely
2,300.0	2,299.7	2,299.4	2,299.7	6.9	6.7	128.35	-11.8	16.2	25.1	11.3	13.78	1.820	Caution - Monitor Closely
2,333.3	2,332.9	2,332.6	2,332.9	6.9	6.8	132.94	-11.8	16.2	26.9	13.0	13.86	1.940	Caution - Monitor Closely
2,400.0	2,399.3	2,399.0	2,399.3	7.0	6.8	154.34	-11.8	16.2	31.7	17.6	14.04	2.256	Caution - Monitor Closely
2,500.0	2,498.8	2,498.5	2,498.8	7.2	7.0	175.77	-11.8	16.2	41.3	27.0	14.37	2.877	Normal Operations
2,600.0	2,598.1	2,599.0	2,599.3	7.4	7.2	-174.01	-10.4	17.2	52.2	37.5	14.74	3.542	
2,700.0	2,697.0	2,699.5	2,699.6	7.6	7.4	-171.75	-6.1	20.2	63.5	48.4	15.11	4.203	
2,800.0	2,795.4	2,800.1	2,799.9	7.9	7.5	-173.64	1.1	24.7	76.1	60.7	15.39	4.946	
2,825.7	2,820.6	2,826.1	2,825.8	7.9	7.5	-174.23	3.4	25.6	79.5	64.1	15.46	5.144	
2,900.0	2,893.5	2,901.8	2,901.1	8.1	7.7	-178.61	11.0	27.4	88.7	73.0	15.70	5.652	
3,000.0	2,991.5	3,004.4	3,002.9	8.4	7.9	176.93	23.8	27.7	98.6	82.6	16.07	6.139	
3,100.0	3,089.5	3,107.7	3,104.9	8.7	8.1	173.33	39.3	25.5	105.4	89.0	16.46	6.406	
3,200.0	3,187.5	3,210.1	3,205.6	9.0	8.3	170.15	57.4	21.0	109.1	92.3	16.82	6.485	
3,300.0	3,285.5	3,309.9	3,303.6	9.3	8.5	167.23	75.6	16.1	112.2	95.0	17.27	6.498	
3,400.0	3,383.6	3,409.7	3,401.6	9.6	8.8	164.48	93.8	11.1	115.6	97.9	17.71	6.529	
3,500.0	3,481.6	3,509.5	3,499.6	9.9	9.1	161.88	112.0	6.1	119.3	101.1	18.15	6.572	
3,600.0	3,579.6	3,609.3	3,597.6	10.3	9.4	159.45	130.2	1.2	123.1	104.6	18.59	6.625	
3,700.0	3,677.6	3,709.1	3,695.6	10.6	9.7	157.16	148.4	-3.8	127.2	108.2	19.02	6.687	
3,800.0	3,775.6	3,808.9	3,793.6	11.0	10.0	155.02	166.6	-8.7	131.5	112.0	19.46	6.759	
3,900.0	3,873.6	3,908.7	3,891.6	11.4	10.3	153.02	184.8	-13.7	135.9	116.1	19.89	6.837	
4,000.0	3,971.6	4,008.4	3,989.6	11.7	10.6	151.15	203.0	-18.6	140.5	120.2	20.31	6.920	
4,100.0	4,069.7	4,108.2	4,087.6	12.1	11.0	149.39	221.2	-23.6	145.3	124.6	20.73	7.009	
4,200.0	4,167.7	4,208.0	4,185.6	12.5	11.3	147.75	239.4	-28.5	150.2	129.0	21.15	7.101	
4,300.0	4,265.7	4,307.8	4,283.6	12.9	11.7	146.22	257.6	-33.5	155.1	133.6	21.56	7.197	
4,400.0	4,363.7	4,407.6	4,381.6	13.3	12.0	144.78	275.8	-38.5	160.2	138.3	21.97	7.295	
4,500.0	4,461.7	4,507.4	4,479.5	13.7	12.4	143.43	294.0	-43.4	165.4	143.0	22.37	7.395	
4,600.0	4,559.7	4,607.2	4,577.5	14.1	12.8	142.16	312.2	-48.4	170.7	147.9	22.77	7.496	
4,700.0	4,657.8	4,707.0	4,675.5	14.6	13.2	140.97	330.4	-53.3	176.0	152.9	23.17	7.599	
4,800.0	4,755.8	4,806.8	4,773.5	15.0	13.6	139.84	348.6	-58.3	181.5	157.9	23.56	7.701	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 710H - 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	4,853.8	4,906.6	4,871.5	15.4	14.0	138.79	366.8	-63.2	186.9	163.0	23.95	7.804	
5,000.0	4,951.8	5,006.4	4,969.5	15.8	14.4	137.79	385.0	-68.2	192.5	168.1	24.34	7.907	
5,100.0	5,049.8	5,106.2	5,067.5	16.2	14.8	136.85	403.2	-73.1	198.1	173.4	24.73	8.009	
5,200.0	5,147.8	5,205.9	5,165.5	16.7	15.2	135.97	421.4	-78.1	203.7	178.6	25.12	8.111	
5,300.0	5,245.8	5,305.7	5,263.5	17.1	15.6	135.13	439.6	-83.1	209.4	183.9	25.51	8.212	
5,400.0	5,343.9	5,405.5	5,361.5	17.5	16.0	134.33	457.8	-88.0	215.2	189.3	25.89	8.311	
5,500.0	5,441.9	5,505.3	5,459.5	18.0	16.4	133.58	476.1	-93.0	221.0	194.7	26.27	8.410	
5,600.0	5,539.9	5,605.1	5,557.5	18.4	16.8	132.86	494.3	-97.9	226.8	200.1	26.66	8.507	
5,700.0	5,637.9	5,704.9	5,655.5	18.8	17.3	132.18	512.5	-102.9	232.6	205.6	27.04	8.604	
5,800.0	5,735.9	5,804.7	5,753.4	19.3	17.7	131.54	530.7	-107.8	238.5	211.1	27.42	8.698	
5,900.0	5,833.9	5,904.5	5,851.4	19.7	18.1	130.92	548.9	-112.8	244.4	216.6	27.80	8.791	
6,000.0	5,932.0	6,004.3	5,949.4	20.2	18.5	130.34	567.1	-117.7	250.3	222.2	28.18	8.883	
6,100.0	6,030.0	6,104.1	6,047.4	20.6	19.0	129.78	585.3	-122.7	256.3	227.7	28.56	8.974	
6,200.0	6,128.0	6,203.9	6,145.4	21.1	19.4	129.25	603.5	-127.7	262.3	233.3	28.94	9.062	
6,300.0	6,226.0	6,303.7	6,243.4	21.5	19.8	128.74	621.7	-132.6	268.3	239.0	29.32	9.150	
6,400.0	6,324.0	6,403.4	6,341.4	21.9	20.3	128.25	639.9	-137.6	274.3	244.6	29.70	9.235	
6,500.0	6,422.0	6,503.2	6,439.4	22.4	20.7	127.78	658.1	-142.5	280.4	250.3	30.08	9.319	
6,600.0	6,520.0	6,603.0	6,537.4	22.8	21.1	127.34	676.3	-147.5	286.4	256.0	30.46	9.402	
6,700.0	6,618.1	6,702.8	6,635.4	23.3	21.6	126.91	694.5	-152.4	292.5	261.7	30.85	9.483	
6,800.0	6,716.1	6,802.6	6,733.4	23.7	22.0	126.50	712.7	-157.4	298.6	267.4	31.23	9.562	
6,900.0	6,814.1	6,902.4	6,831.4	24.2	22.5	126.10	730.9	-162.3	304.7	273.1	31.61	9.640	
6,951.1	6,864.2	6,953.4	6,881.4	24.4	22.7	125.91	740.2	-164.9	307.8	276.0	31.79	9.684	
7,000.0	6,912.1	7,002.0	6,929.2	24.6	22.9	125.72	749.1	-167.3	310.7	278.8	31.94	9.727	
7,100.0	7,010.5	7,100.0	7,025.6	25.1	23.3	125.34	766.0	-171.9	316.1	283.8	32.31	9.784	
7,200.0	7,109.1	7,198.6	7,122.9	25.5	23.8	125.01	781.3	-176.1	321.1	288.4	32.65	9.834	
7,300.0	7,208.0	7,296.9	7,220.2	25.9	24.2	124.72	795.1	-179.8	325.5	292.5	32.98	9.870	
7,400.0	7,307.2	7,395.3	7,317.8	26.4	24.6	124.47	807.2	-183.1	329.4	296.1	33.30	9.893	
7,500.0	7,406.6	7,493.7	7,415.6	26.8	25.0	124.26	817.7	-186.0	332.8	299.2	33.61	9.903	
7,600.0	7,506.1	7,592.2	7,513.6	27.1	25.3	124.08	826.6	-188.4	335.7	301.8	33.91	9.900	
7,700.0	7,605.8	7,690.6	7,611.7	27.5	25.7	123.94	833.8	-190.3	338.1	303.9	34.20	9.886	
7,800.0	7,705.6	7,789.1	7,710.1	27.9	26.0	123.84	839.4	-191.9	339.9	305.4	34.47	9.860	
7,900.0	7,805.5	7,887.6	7,808.5	28.2	26.4	123.76	843.4	-193.0	341.2	306.5	34.73	9.823	
8,000.0	7,905.5	7,986.1	7,906.9	28.5	26.6	123.71	845.8	-193.6	342.0	307.0	34.97	9.778	
8,094.5	8,000.0	8,079.5	8,000.3	28.6	26.8	89.49	846.5	-193.8	342.2	307.1	35.12	9.743	
8,096.4	8,001.9	8,081.1	8,001.9	28.6	26.8	89.49	846.5	-193.8	342.2	307.1	35.12	9.744	
8,100.0	8,005.5	8,084.7	8,005.5	28.6	26.8	89.49	846.5	-193.8	342.2	307.1	35.12	9.743	
8,200.0	8,105.5	8,184.7	8,105.5	28.7	26.8	89.49	846.5	-193.8	342.2	306.9	35.31	9.693	
8,300.0	8,205.5	8,284.7	8,205.5	28.7	26.9	89.49	846.5	-193.8	342.2	306.8	35.44	9.657	
8,400.0	8,305.5	8,384.7	8,305.5	28.8	26.9	89.49	846.5	-193.8	342.2	306.6	35.56	9.622	
8,500.0	8,405.5	8,484.7	8,405.5	28.8	27.0	89.49	846.5	-193.8	342.2	306.5	35.69	9.588	
8,600.0	8,505.5	8,584.7	8,505.5	28.9	27.0	89.49	846.5	-193.8	342.2	306.4	35.82	9.553	
8,700.0	8,605.5	8,684.7	8,605.5	28.9	27.1	89.49	846.5	-193.8	342.2	306.3	35.95	9.519	
8,800.0	8,705.5	8,784.7	8,705.5	29.0	27.1	89.49	846.5	-193.8	342.2	306.1	36.08	9.485	
8,900.0	8,805.5	8,884.7	8,805.5	29.0	27.2	89.49	846.5	-193.8	342.2	306.0	36.21	9.451	
9,000.0	8,905.5	8,984.7	8,905.5	29.0	27.2	89.49	846.5	-193.8	342.2	305.9	36.34	9.417	
9,100.0	9,005.5	9,084.7	9,005.5	29.1	27.3	89.49	846.5	-193.8	342.2	305.7	36.47	9.383	
9,200.0	9,105.5	9,184.7	9,105.5	29.1	27.3	89.49	846.5	-193.8	342.2	305.6	36.60	9.350	
9,300.0	9,205.5	9,284.7	9,205.5	29.2	27.4	89.49	846.5	-193.8	342.2	305.5	36.73	9.317	
9,400.0	9,305.5	9,384.7	9,305.5	29.2	27.4	89.49	846.5	-193.8	342.2	305.3	36.86	9.283	
9,500.0	9,405.5	9,484.7	9,405.5	29.3	27.5	89.49	846.5	-193.8	342.2	305.2	36.99	9.250	
9,600.0	9,505.5	9,584.7	9,505.5	29.3	27.5	89.49	846.5	-193.8	342.2	305.1	37.12	9.218	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 710H - 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)			
9,700.0	9,605.5	9,684.7	9,605.5	29.3	27.6	89.49	846.5	-193.8	342.2	304.9	37.26	9.185	
9,800.0	9,705.5	9,784.7	9,705.5	29.4	27.6	89.49	846.5	-193.8	342.2	304.8	37.39	9.153	
9,900.0	9,805.5	9,884.7	9,805.5	29.4	27.7	89.49	846.5	-193.8	342.2	304.7	37.52	9.121	
10,000.0	9,905.5	9,984.7	9,905.5	29.5	27.7	89.49	846.5	-193.8	342.2	304.6	37.65	9.088	
10,100.0	10,005.5	10,084.7	10,005.5	29.5	27.7	89.49	846.5	-193.8	342.2	304.4	37.79	9.057	
10,200.0	10,105.5	10,184.7	10,105.5	29.6	27.8	89.49	846.5	-193.8	342.2	304.3	37.92	9.025	
10,300.0	10,205.5	10,284.7	10,205.5	29.6	27.8	89.49	846.5	-193.8	342.2	304.2	38.05	8.993	
10,400.0	10,305.5	10,384.7	10,305.5	29.7	27.9	89.49	846.5	-193.8	342.2	304.0	38.18	8.962	
10,500.0	10,405.5	10,484.7	10,405.5	29.7	27.9	89.49	846.5	-193.8	342.2	303.9	38.32	8.931	
10,600.0	10,505.5	10,584.7	10,505.5	29.8	28.0	89.49	846.5	-193.8	342.2	303.8	38.45	8.900	
10,700.0	10,605.5	10,684.7	10,605.5	29.8	28.0	89.49	846.5	-193.8	342.2	303.6	38.59	8.869	
10,800.0	10,705.5	10,784.7	10,705.5	29.8	28.1	89.49	846.5	-193.8	342.2	303.5	38.72	8.838	
10,900.0	10,805.5	10,884.7	10,805.5	29.9	28.2	89.49	846.5	-193.8	342.2	303.4	38.85	8.808	
11,000.0	10,905.5	10,984.7	10,905.5	29.9	28.2	89.49	846.5	-193.8	342.2	303.2	38.99	8.777	
11,100.0	11,005.5	11,084.7	11,005.5	30.0	28.3	89.49	846.5	-193.8	342.2	303.1	39.12	8.747	
11,200.0	11,105.5	11,184.7	11,105.5	30.0	28.3	89.49	846.5	-193.8	342.2	302.9	39.26	8.717	
11,300.0	11,205.5	11,284.7	11,205.5	30.1	28.4	89.49	846.5	-193.8	342.2	302.8	39.39	8.687	
11,400.0	11,305.5	11,384.7	11,305.5	30.1	28.4	89.49	846.5	-193.8	342.2	302.7	39.53	8.657	
11,431.0	11,336.5	11,415.7	11,336.5	30.1	28.4	89.49	846.5	-193.8	342.2	302.6	39.56	8.650	
11,450.0	11,355.5	11,434.7	11,355.5	30.1	28.4	-98.86	846.5	-193.8	342.3	302.7	39.56	8.652	
11,475.0	11,380.4	11,459.6	11,380.4	30.1	28.4	-99.11	846.5	-193.8	342.5	303.0	39.50	8.672	
11,500.0	11,405.3	11,484.4	11,405.3	30.0	28.5	-99.53	846.5	-193.8	343.0	303.6	39.37	8.712	
11,525.0	11,429.9	11,509.1	11,429.9	29.9	28.5	-100.13	846.5	-193.8	343.7	304.5	39.19	8.771	
11,550.0	11,454.3	11,533.5	11,454.3	29.8	28.5	-100.89	846.5	-193.8	344.8	305.8	38.96	8.849	
11,575.0	11,478.3	11,557.5	11,478.3	29.7	28.5	-101.80	846.5	-193.8	346.2	307.5	38.69	8.948	
11,600.0	11,502.0	11,581.2	11,502.0	29.7	28.5	-102.81	846.5	-193.8	348.0	309.6	38.38	9.067	
11,625.0	11,525.2	11,604.4	11,525.2	29.6	28.5	-103.93	846.5	-193.8	350.3	312.2	38.05	9.205	
11,650.0	11,547.9	11,627.1	11,547.9	29.5	28.5	-105.10	846.5	-193.8	353.1	315.4	37.71	9.365	
11,675.0	11,570.0	11,651.3	11,572.1	29.4	28.5	-106.42	846.3	-193.8	356.6	319.2	37.39	9.538	
11,700.0	11,591.5	11,677.0	11,597.8	29.3	28.4	-107.78	844.7	-193.8	360.6	323.5	37.12	9.714	
11,725.0	11,612.3	11,703.6	11,624.2	29.2	28.3	-109.08	841.6	-193.8	365.1	328.2	36.91	9.890	
11,750.0	11,632.3	11,730.9	11,651.1	29.1	28.3	-110.34	836.9	-193.7	370.0	333.2	36.76	10.065	
11,775.0	11,651.5	11,759.1	11,678.5	29.1	28.1	-111.54	830.5	-193.7	375.3	338.6	36.66	10.236	
11,800.0	11,669.9	11,788.2	11,706.4	29.0	28.0	-112.69	822.2	-193.6	380.9	344.3	36.62	10.401	
11,825.0	11,687.3	11,818.4	11,734.7	28.9	27.9	-113.77	811.8	-193.5	386.8	350.2	36.63	10.560	
11,850.0	11,703.8	11,849.6	11,763.2	28.8	27.8	-114.78	799.1	-193.4	393.0	356.3	36.70	10.709	
11,875.0	11,719.2	11,881.9	11,791.8	28.8	27.6	-115.72	784.1	-193.3	399.4	362.6	36.83	10.844	
11,900.0	11,733.6	11,915.4	11,820.4	28.7	27.5	-116.58	766.5	-193.2	405.9	368.9	37.03	10.963	
11,925.0	11,747.0	11,950.1	11,848.6	28.7	27.4	-117.35	746.2	-193.0	412.5	375.2	37.29	11.060	
11,950.0	11,759.2	11,986.2	11,876.2	28.6	27.2	-118.03	723.1	-192.8	419.1	381.4	37.64	11.133	
11,975.0	11,770.2	12,023.6	11,902.9	28.6	27.1	-118.60	697.0	-192.6	425.6	387.5	38.08	11.176	
12,000.0	11,780.1	12,062.3	11,928.3	28.5	26.9	-119.06	667.8	-192.4	432.0	393.4	38.61	11.188	
12,025.0	11,788.7	12,102.3	11,952.0	28.5	26.8	-119.40	635.6	-192.2	438.2	398.9	39.24	11.166	
12,050.0	11,796.1	12,143.5	11,973.5	28.5	26.7	-119.60	600.4	-191.9	444.2	404.2	39.98	11.111	
12,075.0	11,802.2	12,186.0	11,992.4	28.5	26.6	-119.66	562.4	-191.6	449.8	409.0	40.80	11.025	
12,100.0	11,807.1	12,229.5	12,008.2	28.5	26.5	-119.56	521.9	-191.3	455.1	413.4	41.70	10.914	
12,125.0	11,810.7	12,273.8	12,020.4	28.4	26.5	-119.31	479.2	-190.9	460.0	417.3	42.66	10.783	
12,150.0	11,813.0	12,318.9	12,028.7	28.5	26.4	-118.90	435.0	-190.6	464.4	420.7	43.64	10.641	
12,175.0	11,813.9	12,364.4	12,032.8	28.5	26.4	-118.33	389.7	-190.2	468.3	423.7	44.63	10.494	
12,181.0	11,814.0	12,375.4	12,033.2	28.5	26.4	-118.17	378.7	-190.1	469.2	424.4	44.86	10.460	
12,200.0	11,814.0	12,398.6	12,033.3	28.5	26.4	-117.96	355.5	-190.0	471.7	426.6	45.10	10.461	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 710H - 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	11,814.0	12,497.8	12,033.3	28.6	26.4	-117.14	256.3	-189.2	483.1	437.6	45.48	10.622	
12,400.0	11,814.0	12,597.4	12,033.3	28.6	26.4	-116.57	156.7	-188.4	491.5	445.5	45.99	10.687	
12,500.0	11,814.0	12,697.3	12,033.3	28.7	26.4	-116.22	56.8	-187.7	496.7	450.1	46.61	10.657	
12,600.0	11,814.0	12,797.3	12,033.3	28.8	26.4	-116.08	-43.2	-186.9	498.8	451.5	47.34	10.536	
12,614.1	11,814.0	12,811.5	12,033.3	28.9	26.4	-116.08	-57.4	-186.8	498.9	451.4	47.45	10.513	
12,700.0	11,814.0	12,897.3	12,033.3	29.0	26.5	-116.07	-143.3	-186.2	498.9	450.8	48.15	10.363	
12,800.0	11,814.0	12,997.4	12,033.3	29.1	26.5	-116.07	-243.3	-185.5	499.0	450.0	49.01	10.182	
12,900.0	11,814.0	13,097.5	12,033.3	29.2	26.5	-116.07	-343.4	-184.8	499.1	449.1	49.93	9.995	
13,000.0	11,814.0	13,197.5	12,033.3	29.4	26.6	-116.06	-443.4	-184.1	499.1	448.2	50.90	9.806	
13,100.0	11,814.0	13,297.6	12,033.3	29.6	26.6	-116.06	-543.5	-183.4	499.2	447.3	51.92	9.615	
13,200.0	11,814.0	13,397.6	12,033.3	29.7	26.7	-116.06	-643.5	-182.7	499.2	446.2	52.98	9.423	
13,300.0	11,814.0	13,497.7	12,033.3	30.0	26.8	-116.06	-743.6	-182.0	499.2	445.2	54.08	9.231	
13,400.0	11,814.0	13,597.7	12,033.3	30.2	26.9	-116.06	-843.6	-181.4	499.3	444.0	55.23	9.040	
13,500.0	11,814.0	13,697.8	12,033.3	30.5	27.0	-116.06	-943.7	-180.7	499.3	442.9	56.41	8.851	
13,600.0	11,814.0	13,797.8	12,033.3	30.8	27.1	-116.06	-1,043.7	-180.1	499.3	441.6	57.62	8.665	
13,700.0	11,814.0	13,897.8	12,033.3	31.1	27.3	-116.06	-1,143.7	-179.5	499.3	440.4	58.86	8.482	
13,800.0	11,814.0	13,997.8	12,033.3	31.4	27.6	-116.06	-1,243.7	-178.9	499.3	439.1	60.14	8.302	
13,900.0	11,814.0	14,097.8	12,033.3	31.8	27.9	-116.06	-1,343.7	-178.2	499.3	437.8	61.45	8.125	
14,000.0	11,814.0	14,197.8	12,033.3	32.2	28.2	-116.06	-1,443.7	-177.6	499.3	436.5	62.78	7.953	
14,100.0	11,814.0	14,297.8	12,033.3	32.7	28.7	-116.06	-1,543.7	-177.0	499.2	435.1	64.14	7.784	
14,200.0	11,814.0	14,397.8	12,033.3	33.1	29.2	-116.06	-1,643.7	-176.3	499.2	433.7	65.52	7.620	
14,300.0	11,814.0	14,497.8	12,033.3	33.6	29.8	-116.06	-1,743.7	-175.7	499.2	432.3	66.92	7.460	
14,400.0	11,814.0	14,597.8	12,033.3	34.2	30.5	-116.06	-1,843.7	-175.1	499.2	430.9	68.34	7.305	
14,500.0	11,814.0	14,697.8	12,033.3	34.7	31.2	-116.06	-1,943.7	-174.4	499.2	429.5	69.79	7.154	
14,600.0	11,814.0	14,797.8	12,033.3	35.3	31.9	-116.06	-2,043.7	-173.8	499.2	428.0	71.25	7.007	
14,700.0	11,814.0	14,897.8	12,033.3	35.9	32.6	-116.06	-2,143.6	-173.2	499.2	426.5	72.73	6.864	
14,800.0	11,814.0	14,997.8	12,033.3	36.5	33.4	-116.06	-2,243.6	-172.5	499.2	425.0	74.22	6.726	
14,900.0	11,814.0	15,097.8	12,033.3	37.2	34.2	-116.06	-2,343.6	-171.9	499.2	423.5	75.73	6.592	
15,000.0	11,814.0	15,197.8	12,033.3	37.8	34.9	-116.06	-2,443.6	-171.3	499.2	422.0	77.26	6.462	
15,100.0	11,814.0	15,297.8	12,033.3	38.5	35.8	-116.06	-2,543.6	-170.7	499.2	420.4	78.79	6.336	
15,200.0	11,814.0	15,397.8	12,033.3	39.2	36.6	-116.06	-2,643.6	-170.0	499.2	418.9	80.34	6.213	
15,300.0	11,814.0	15,497.8	12,033.3	39.9	37.4	-116.06	-2,743.6	-169.4	499.2	417.3	81.91	6.095	
15,400.0	11,814.0	15,597.8	12,033.3	40.7	38.2	-116.06	-2,843.6	-168.8	499.2	415.7	83.48	5.980	
15,500.0	11,814.0	15,697.8	12,033.3	41.4	39.1	-116.06	-2,943.6	-168.1	499.2	414.1	85.06	5.869	
15,600.0	11,814.0	15,797.8	12,033.3	42.2	39.9	-116.06	-3,043.6	-167.5	499.2	412.5	86.66	5.761	
15,700.0	11,814.0	15,897.8	12,033.3	42.9	40.8	-116.06	-3,143.6	-166.9	499.2	410.9	88.26	5.656	
15,800.0	11,814.0	15,997.8	12,033.3	43.7	41.6	-116.06	-3,243.6	-166.2	499.2	409.3	89.88	5.554	
15,900.0	11,814.0	16,097.8	12,033.3	44.5	42.5	-116.06	-3,343.6	-165.6	499.2	407.7	91.50	5.456	
16,000.0	11,814.0	16,197.8	12,033.3	45.3	43.4	-116.06	-3,443.6	-165.0	499.2	406.1	93.13	5.360	
16,100.0	11,814.0	16,297.8	12,033.3	46.1	44.2	-116.06	-3,543.6	-164.4	499.2	404.4	94.76	5.268	
16,200.0	11,814.0	16,397.8	12,033.3	46.9	45.1	-116.06	-3,643.6	-163.7	499.2	402.8	96.41	5.178	
16,300.0	11,814.0	16,497.8	12,033.3	47.7	46.0	-116.06	-3,743.6	-163.1	499.2	401.1	98.06	5.091	
16,400.0	11,814.0	16,597.8	12,033.3	48.6	46.9	-116.06	-3,843.6	-162.5	499.2	399.5	99.72	5.006	
16,500.0	11,814.0	16,697.8	12,033.3	49.4	47.8	-116.06	-3,943.6	-161.8	499.2	397.8	101.38	4.924	
16,600.0	11,814.0	16,797.8	12,033.3	50.2	48.7	-116.06	-4,043.6	-161.2	499.2	396.1	103.05	4.844	
16,700.0	11,814.0	16,897.8	12,033.3	51.1	49.5	-116.06	-4,143.6	-160.6	499.2	394.5	104.72	4.767	
16,800.0	11,814.0	16,997.8	12,033.3	51.9	50.4	-116.06	-4,243.6	-159.9	499.2	392.8	106.41	4.691	
16,900.0	11,814.0	17,097.8	12,033.3	52.8	51.3	-116.06	-4,343.6	-159.3	499.2	391.1	108.09	4.618	
17,000.0	11,814.0	17,197.8	12,033.3	53.6	52.2	-116.06	-4,443.6	-158.7	499.2	389.4	109.78	4.547	
17,100.0	11,814.0	17,297.8	12,033.3	54.5	53.2	-116.06	-4,543.6	-158.0	499.2	387.7	111.48	4.478	
17,200.0	11,814.0	17,397.8	12,033.3	55.4	54.1	-116.06	-4,643.6	-157.4	499.2	386.0	113.18	4.410	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 - _ZIA HILLS UNIT 2832 WC 710H - OWB - PWPO												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)			
17,300.0	11,814.0	17,497.8	12,033.3	56.2	55.0	-116.06	-4,743.6	-156.8	499.2	384.3	114.88	4.345	
17,400.0	11,814.0	17,597.8	12,033.3	57.1	55.9	-116.06	-4,843.6	-156.2	499.2	382.6	116.59	4.281	
17,500.0	11,814.0	17,697.8	12,033.3	58.0	56.8	-116.06	-4,943.6	-155.5	499.2	380.9	118.30	4.219	
17,600.0	11,814.0	17,797.8	12,033.3	58.9	57.7	-116.06	-5,043.6	-154.9	499.1	379.1	120.02	4.159	
17,700.0	11,814.0	17,897.8	12,033.3	59.8	58.6	-116.06	-5,143.6	-154.3	499.1	377.4	121.74	4.100	
17,800.0	11,814.0	17,997.8	12,033.3	60.7	59.5	-116.06	-5,243.6	-153.6	499.1	375.7	123.46	4.043	
17,900.0	11,814.0	18,097.8	12,033.3	61.5	60.5	-116.06	-5,343.6	-153.0	499.1	374.0	125.19	3.987	
18,000.0	11,814.0	18,197.8	12,033.3	62.4	61.4	-116.06	-5,443.6	-152.4	499.1	372.2	126.91	3.933	
18,100.0	11,814.0	18,297.8	12,033.3	63.3	62.3	-116.06	-5,543.6	-151.7	499.1	370.5	128.65	3.880	
18,200.0	11,814.0	18,397.8	12,033.3	64.2	63.2	-116.06	-5,643.6	-151.1	499.1	368.8	130.38	3.828	
18,300.0	11,814.0	18,497.8	12,033.3	65.1	64.1	-116.06	-5,743.6	-150.5	499.1	367.0	132.12	3.778	
18,400.0	11,814.0	18,597.8	12,033.3	66.0	65.1	-116.06	-5,843.6	-149.9	499.1	365.3	133.86	3.729	
18,500.0	11,814.0	18,697.8	12,033.3	66.9	66.0	-116.06	-5,943.6	-149.2	499.1	363.5	135.60	3.681	
18,600.0	11,814.0	18,797.8	12,033.3	67.8	66.9	-116.06	-6,043.6	-148.6	499.1	361.8	137.35	3.634	
18,700.0	11,814.0	18,897.8	12,033.3	68.7	67.9	-116.06	-6,143.6	-148.0	499.1	360.0	139.10	3.588	
18,800.0	11,814.0	18,997.8	12,033.3	69.7	68.8	-116.06	-6,243.6	-147.3	499.1	358.3	140.85	3.544	
18,900.0	11,814.0	19,097.8	12,033.3	70.6	69.7	-116.06	-6,343.6	-146.7	499.1	356.5	142.60	3.500	
19,000.0	11,814.0	19,197.8	12,033.3	71.5	70.6	-116.06	-6,443.6	-146.1	499.1	354.8	144.35	3.458	
19,100.0	11,814.0	19,297.8	12,033.3	72.4	71.6	-116.06	-6,543.6	-145.4	499.1	353.0	146.11	3.416	
19,200.0	11,814.0	19,397.8	12,033.3	73.3	72.5	-116.06	-6,643.6	-144.8	499.1	351.2	147.87	3.375	
19,300.0	11,814.0	19,497.8	12,033.3	74.2	73.4	-116.06	-6,743.6	-144.2	499.1	349.5	149.63	3.336	
19,400.0	11,814.0	19,597.8	12,033.3	75.1	74.4	-116.07	-6,843.6	-143.5	499.1	347.7	151.39	3.297	
19,500.0	11,814.0	19,697.8	12,033.3	76.1	75.3	-116.07	-6,943.6	-142.9	499.1	345.9	153.15	3.259	
19,544.6	11,814.0	19,742.4	12,033.3	76.5	75.7	-116.07	-6,988.1	-142.6	499.1	345.2	153.94	3.242	
19,544.6	11,814.0	19,742.4	12,033.3	76.5	75.7	-116.07	-6,988.2	-142.6	499.1	345.2	153.94	3.242	
19,544.9	11,814.0	19,742.4	12,033.3	76.5	75.7	-116.07	-6,988.2	-142.6	499.1	345.2	153.93	3.242	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 711H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1													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)			
0.0	0.0	0.0	0.3	3.0	0.0	125.69	-23.3	32.5	40.0				
100.0	100.0	99.7	100.0	3.1	0.8	125.69	-23.3	32.5	40.0	35.1	4.95	8.089	
200.0	200.0	199.7	200.0	3.3	1.4	125.69	-23.3	32.5	40.0	34.5	5.55	7.212	
300.0	300.0	299.7	300.0	3.5	1.9	125.69	-23.3	32.5	40.0	33.9	6.09	6.570	
400.0	400.0	399.7	400.0	3.8	2.3	125.69	-23.3	32.5	40.0	33.4	6.59	6.073	
500.0	500.0	499.7	500.0	4.0	2.6	125.69	-23.3	32.5	40.0	33.0	7.05	5.673	
600.0	600.0	599.7	600.0	4.1	2.9	125.69	-23.3	32.5	40.0	32.5	7.49	5.341	
700.0	700.0	699.7	700.0	4.3	3.1	125.69	-23.3	32.5	40.0	32.1	7.91	5.061	
800.0	800.0	799.7	800.0	4.5	3.3	125.69	-23.3	32.5	40.0	31.7	8.30	4.819	
900.0	900.0	899.7	900.0	4.7	3.6	125.69	-23.3	32.5	40.0	31.3	8.68	4.608	
1,000.0	1,000.0	999.7	1,000.0	4.8	3.8	125.69	-23.3	32.5	40.0	31.0	9.05	4.421	
1,100.0	1,100.0	1,099.7	1,100.0	5.0	4.0	125.69	-23.3	32.5	40.0	30.6	9.40	4.254	
1,200.0	1,200.0	1,199.7	1,200.0	5.2	4.2	125.69	-23.3	32.5	40.0	30.3	9.75	4.104	
1,300.0	1,300.0	1,299.7	1,300.0	5.3	4.4	125.69	-23.3	32.5	40.0	29.9	10.08	3.968	
1,400.0	1,400.0	1,399.7	1,400.0	5.5	4.6	125.69	-23.3	32.5	40.0	29.6	10.41	3.844	
1,500.0	1,500.0	1,499.7	1,500.0	5.6	4.7	125.69	-23.3	32.5	40.0	29.3	10.73	3.730	
1,600.0	1,600.0	1,599.7	1,600.0	5.8	4.9	125.69	-23.3	32.5	40.0	29.0	11.04	3.625	
1,700.0	1,700.0	1,699.7	1,700.0	5.9	5.1	125.69	-23.3	32.5	40.0	28.7	11.34	3.528	
1,800.0	1,800.0	1,799.7	1,800.0	6.0	5.2	125.69	-23.3	32.5	40.0	28.4	11.64	3.437	
1,900.0	1,900.0	1,899.7	1,900.0	6.2	5.4	125.69	-23.3	32.5	40.0	28.1	11.93	3.353	
2,000.0	2,000.0	1,999.7	2,000.0	6.3	5.6	125.69	-23.3	32.5	40.0	27.8	12.22	3.274 CC	
2,100.0	2,100.0	2,099.8	2,100.1	6.5	5.7	100.68	-22.2	33.1	40.1	27.6	12.50	3.210 ES	
2,200.0	2,199.9	2,199.9	2,200.1	6.7	5.9	100.61	-18.8	35.1	40.5	27.7	12.77	3.167	
2,300.0	2,299.7	2,300.0	2,300.0	6.9	6.2	100.49	-13.1	38.4	41.0	28.0	13.04	3.145 SF	
2,333.3	2,332.9	2,333.4	2,333.3	6.9	6.2	100.44	-10.7	39.8	41.3	28.2	13.08	3.155	
2,400.0	2,399.3	2,400.5	2,400.0	7.0	6.3	113.81	-4.9	42.8	42.2	29.0	13.20	3.193	
2,500.0	2,498.8	2,501.0	2,499.8	7.2	6.6	126.16	6.8	47.6	45.3	31.7	13.51	3.349	
2,600.0	2,598.1	2,601.2	2,598.6	7.4	6.9	130.36	21.8	52.8	51.1	37.3	13.82	3.700	
2,700.0	2,697.0	2,700.7	2,696.3	7.6	7.2	129.92	40.2	58.4	60.6	46.5	14.13	4.288	
2,800.0	2,795.4	2,799.5	2,792.5	7.9	7.6	127.76	61.8	64.3	74.2	59.7	14.47	5.130	
2,825.7	2,820.6	2,824.7	2,816.9	7.9	7.7	127.14	67.8	65.9	78.4	63.9	14.52	5.399	
2,900.0	2,893.5	2,897.5	2,887.2	8.1	7.9	122.46	86.2	70.5	91.2	76.5	14.71	6.203	
3,000.0	2,991.5	2,995.5	2,981.8	8.4	8.2	117.75	111.3	76.7	109.3	94.2	15.07	7.254	
3,100.0	3,089.5	3,093.5	3,076.3	8.7	8.5	114.39	136.4	83.0	127.8	112.4	15.44	8.281	
3,200.0	3,187.5	3,191.6	3,170.9	9.0	8.9	111.88	161.6	89.2	146.7	130.9	15.82	9.272	
3,300.0	3,285.5	3,289.6	3,265.4	9.3	9.2	109.94	186.7	95.5	165.8	149.6	16.22	10.221	
3,400.0	3,383.6	3,387.6	3,359.9	9.6	9.6	108.40	211.8	101.7	185.0	168.4	16.63	11.126	
3,500.0	3,481.6	3,485.6	3,454.5	9.9	10.0	107.16	236.9	108.0	204.4	187.3	17.05	11.985	
3,600.0	3,579.6	3,583.7	3,549.0	10.3	10.4	106.13	262.1	114.2	223.8	206.3	17.48	12.800	
3,700.0	3,677.6	3,681.7	3,643.6	10.6	10.8	105.26	287.2	120.5	243.2	225.3	17.92	13.572	
3,800.0	3,775.6	3,779.7	3,738.1	11.0	11.2	104.52	312.3	126.8	262.7	244.4	18.37	14.303	
3,900.0	3,873.6	3,877.8	3,832.7	11.4	11.6	103.88	337.4	133.0	282.3	263.5	18.83	14.994	
4,000.0	3,971.6	3,975.8	3,927.2	11.7	12.0	103.33	362.6	139.3	301.9	282.6	19.29	15.648	
4,100.0	4,069.7	4,073.8	4,021.8	12.1	12.4	102.84	387.7	145.5	321.5	301.7	19.76	16.266	
4,200.0	4,167.7	4,171.8	4,116.3	12.5	12.9	102.41	412.8	151.8	341.1	320.9	20.24	16.851	
4,300.0	4,265.7	4,269.9	4,210.8	12.9	13.3	102.03	438.0	158.0	360.7	340.0	20.73	17.404	
4,400.0	4,363.7	4,367.9	4,305.4	13.3	13.7	101.68	463.1	164.3	380.4	359.2	21.22	17.928	
4,500.0	4,461.7	4,465.9	4,399.9	13.7	14.2	101.37	488.2	170.5	400.1	378.3	21.71	18.424	
4,600.0	4,559.7	4,563.9	4,494.5	14.1	14.6	101.09	513.3	176.8	419.7	397.5	22.21	18.895	
4,700.0	4,657.8	4,662.0	4,589.0	14.6	15.1	100.84	538.5	183.0	439.4	416.7	22.72	19.340	
4,800.0	4,755.8	4,760.0	4,683.6	15.0	15.5	100.60	563.6	189.3	459.1	435.9	23.23	19.764	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 711H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												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	4,853.8	4,858.0	4,778.1	15.4	16.0	100.39	588.7	195.5	478.8	455.1	23.74	20.165	
5,000.0	4,951.8	4,956.0	4,872.7	15.8	16.4	100.19	613.8	201.8	498.5	474.2	24.26	20.547	
5,100.0	5,049.8	5,054.1	4,967.2	16.2	16.9	100.01	639.0	208.0	518.2	493.4	24.77	20.919	
5,200.0	5,147.8	5,156.8	5,066.4	16.7	17.4	99.88	664.7	214.5	537.6	512.3	25.30	21.245	
5,300.0	5,245.8	5,261.1	5,167.6	17.1	17.8	99.92	689.2	220.5	555.9	530.1	25.84	21.518	
5,400.0	5,343.9	5,365.8	5,269.7	17.5	18.3	100.10	711.9	226.2	573.2	546.8	26.34	21.762	
5,500.0	5,441.9	5,470.8	5,372.5	18.0	18.8	100.43	732.9	231.4	589.3	562.5	26.81	21.979	
5,600.0	5,539.9	5,576.1	5,475.9	18.4	19.3	100.89	752.1	236.2	604.4	577.2	27.26	22.174	
5,700.0	5,637.9	5,681.6	5,579.8	18.8	19.7	101.47	769.4	240.5	618.5	590.8	27.67	22.350	
5,800.0	5,735.9	5,787.1	5,684.2	19.3	20.2	102.17	785.0	244.4	631.6	603.5	28.06	22.508	
5,900.0	5,833.9	5,892.7	5,788.8	19.7	20.6	102.99	798.6	247.8	643.7	615.3	28.42	22.652	
6,000.0	5,932.0	5,998.3	5,893.7	20.2	21.0	103.91	810.4	250.7	654.9	626.2	28.75	22.783	
6,100.0	6,030.0	6,103.8	5,998.6	20.6	21.5	104.94	820.3	253.2	665.3	636.3	29.05	22.904	
6,200.0	6,128.0	6,209.0	6,103.6	21.1	21.8	106.07	828.3	255.2	674.9	645.6	29.33	23.015	
6,300.0	6,226.0	6,314.1	6,208.4	21.5	22.2	107.31	834.4	256.7	683.9	654.3	29.58	23.116	
6,400.0	6,324.0	6,418.8	6,313.0	21.9	22.5	108.65	838.7	257.8	692.2	662.4	29.83	23.208	
6,500.0	6,422.0	6,523.1	6,417.3	22.4	22.8	110.08	841.1	258.3	700.0	670.0	30.05	23.295	
6,600.0	6,520.0	6,625.8	6,520.0	22.8	23.0	111.59	841.7	258.5	707.5	677.2	30.25	23.386	
6,700.0	6,618.1	6,723.8	6,618.1	23.3	23.0	113.04	841.7	258.5	715.1	684.7	30.46	23.479	
6,800.0	6,716.1	6,821.8	6,716.1	23.7	23.1	114.47	841.7	258.5	723.2	692.5	30.71	23.550	
6,900.0	6,814.1	6,919.9	6,814.1	24.2	23.1	115.86	841.7	258.5	731.8	700.8	31.01	23.602	
6,951.1	6,864.2	6,969.9	6,864.2	24.4	23.1	116.55	841.7	258.5	736.4	705.2	31.16	23.631	
7,000.0	6,912.1	7,017.9	6,912.1	24.6	23.2	117.24	841.7	258.5	740.7	709.4	31.31	23.654	
7,100.0	7,010.5	7,116.3	7,010.5	25.1	23.2	118.53	841.7	258.5	749.3	717.6	31.68	23.655	
7,200.0	7,109.1	7,214.9	7,109.1	25.5	23.3	119.68	841.7	258.5	757.4	725.3	32.05	23.628	
7,300.0	7,208.0	7,313.8	7,208.0	25.9	23.3	120.69	841.7	258.5	764.8	732.4	32.44	23.576	
7,400.0	7,307.2	7,413.0	7,307.2	26.4	23.4	121.57	841.7	258.5	771.6	738.7	32.83	23.502	
7,500.0	7,406.6	7,512.3	7,406.6	26.8	23.4	122.33	841.7	258.5	777.5	744.3	33.21	23.410	
7,600.0	7,506.1	7,611.9	7,506.1	27.1	23.5	122.96	841.7	258.5	782.7	749.1	33.59	23.303	
7,700.0	7,605.8	7,711.6	7,605.8	27.5	23.5	123.46	841.7	258.5	786.9	753.0	33.94	23.184	
7,800.0	7,705.6	7,811.4	7,705.6	27.9	23.6	123.85	841.7	258.5	790.2	756.0	34.28	23.054	
7,900.0	7,805.5	7,911.3	7,805.5	28.2	23.6	124.13	841.7	258.5	792.6	758.0	34.59	22.918	
8,000.0	7,905.5	8,011.3	7,905.5	28.5	23.7	124.29	841.7	258.5	794.1	759.2	34.86	22.780	
8,094.5	8,000.0	8,105.8	8,000.0	28.6	23.7	90.13	841.7	258.5	794.5	759.5	35.03	22.677	
8,100.0	8,005.5	8,111.3	8,005.5	28.6	23.7	90.13	841.7	258.5	794.5	759.5	35.04	22.674	
8,200.0	8,105.5	8,211.3	8,105.5	28.7	23.8	90.13	841.7	258.5	794.5	759.3	35.22	22.556	
8,300.0	8,205.5	8,311.3	8,205.5	28.7	23.8	90.13	841.7	258.5	794.5	759.1	35.35	22.474	
8,400.0	8,305.5	8,411.3	8,305.5	28.8	23.9	90.13	841.7	258.5	794.5	759.0	35.48	22.393	
8,500.0	8,405.5	8,511.3	8,405.5	28.8	23.9	90.13	841.7	258.5	794.5	758.9	35.61	22.312	
8,600.0	8,505.5	8,611.3	8,505.5	28.9	24.0	90.13	841.7	258.5	794.5	758.8	35.74	22.231	
8,700.0	8,605.5	8,711.3	8,605.5	28.9	24.0	90.13	841.7	258.5	794.5	758.6	35.87	22.151	
8,800.0	8,705.5	8,811.3	8,705.5	29.0	24.1	90.13	841.7	258.5	794.5	758.5	36.00	22.071	
8,900.0	8,805.5	8,911.3	8,805.5	29.0	24.2	90.13	841.7	258.5	794.5	758.4	36.13	21.992	
9,000.0	8,905.5	9,011.3	8,905.5	29.0	24.2	90.13	841.7	258.5	794.5	758.2	36.26	21.913	
9,100.0	9,005.5	9,111.3	9,005.5	29.1	24.3	90.13	841.7	258.5	794.5	758.1	36.39	21.835	
9,200.0	9,105.5	9,211.3	9,105.5	29.1	24.3	90.13	841.7	258.5	794.5	758.0	36.52	21.757	
9,300.0	9,205.5	9,311.3	9,205.5	29.2	24.4	90.13	841.7	258.5	794.5	757.8	36.65	21.679	
9,400.0	9,305.5	9,411.3	9,305.5	29.2	24.4	90.13	841.7	258.5	794.5	757.7	36.78	21.602	
9,500.0	9,405.5	9,511.3	9,405.5	29.3	24.5	90.13	841.7	258.5	794.5	757.6	36.91	21.525	
9,600.0	9,505.5	9,611.3	9,505.5	29.3	24.5	90.13	841.7	258.5	794.5	757.5	37.04	21.448	
9,700.0	9,605.5	9,711.3	9,605.5	29.3	24.6	90.13	841.7	258.5	794.5	757.3	37.17	21.372	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 711H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												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)			
9,800.0	9,705.5	9,811.3	9,705.5	29.4	24.6	90.13	841.7	258.5	794.5	757.2	37.31	21.297	
9,900.0	9,805.5	9,911.3	9,805.5	29.4	24.7	90.13	841.7	258.5	794.5	757.1	37.44	21.222	
10,000.0	9,905.5	10,011.3	9,905.5	29.5	24.8	90.13	841.7	258.5	794.5	756.9	37.57	21.147	
10,100.0	10,005.5	10,111.3	10,005.5	29.5	24.8	90.13	841.7	258.5	794.5	756.8	37.70	21.072	
10,200.0	10,105.5	10,211.3	10,105.5	29.6	24.9	90.13	841.7	258.5	794.5	756.7	37.84	20.998	
10,300.0	10,205.5	10,311.3	10,205.5	29.6	24.9	90.13	841.7	258.5	794.5	756.5	37.97	20.925	
10,400.0	10,305.5	10,411.3	10,305.5	29.7	25.0	90.13	841.7	258.5	794.5	756.4	38.10	20.851	
10,500.0	10,405.5	10,511.3	10,405.5	29.7	25.0	90.13	841.7	258.5	794.5	756.3	38.24	20.779	
10,600.0	10,505.5	10,611.3	10,505.5	29.8	25.1	90.13	841.7	258.5	794.5	756.1	38.37	20.706	
10,700.0	10,605.5	10,711.3	10,605.5	29.8	25.1	90.13	841.7	258.5	794.5	756.0	38.50	20.634	
10,800.0	10,705.5	10,811.3	10,705.5	29.8	25.2	90.13	841.7	258.5	794.5	755.9	38.64	20.562	
10,900.0	10,805.5	10,911.3	10,805.5	29.9	25.3	90.13	841.7	258.5	794.5	755.7	38.77	20.491	
11,000.0	10,905.5	11,011.3	10,905.5	29.9	25.3	90.13	841.7	258.5	794.5	755.6	38.91	20.420	
11,100.0	11,005.5	11,111.3	11,005.5	30.0	25.4	90.13	841.7	258.5	794.5	755.5	39.04	20.350	
11,200.0	11,105.5	11,211.3	11,105.5	30.0	25.4	90.13	841.7	258.5	794.5	755.3	39.18	20.280	
11,300.0	11,205.5	11,311.3	11,205.5	30.1	25.5	90.13	841.7	258.5	794.5	755.2	39.31	20.210	
11,400.0	11,305.5	11,411.3	11,305.5	30.1	25.5	90.13	841.7	258.5	794.5	755.0	39.45	20.141	
11,431.0	11,336.5	11,442.3	11,336.5	30.1	25.6	90.13	841.7	258.5	794.5	755.0	39.47	20.127	
11,450.0	11,355.5	11,461.3	11,355.5	30.1	25.6	-98.19	841.7	258.5	794.5	755.1	39.48	20.123	
11,475.0	11,380.4	11,486.0	11,380.2	30.1	25.5	-98.24	841.2	258.5	794.8	755.3	39.47	20.135	
11,500.0	11,405.3	11,510.7	11,404.9	30.0	25.5	-98.28	839.5	258.5	795.2	755.8	39.45	20.155	
11,525.0	11,429.9	11,535.5	11,429.5	29.9	25.4	-98.29	836.5	258.5	795.9	756.4	39.43	20.182	
11,550.0	11,454.3	11,560.3	11,454.0	29.8	25.3	-98.28	832.3	258.5	796.7	757.3	39.41	20.214	
11,575.0	11,478.3	11,585.2	11,478.2	29.7	25.2	-98.24	826.7	258.6	797.7	758.3	39.39	20.252	
11,600.0	11,502.0	11,610.2	11,502.2	29.7	25.1	-98.18	819.9	258.6	798.9	759.6	39.36	20.296	
11,625.0	11,525.2	11,635.2	11,525.9	29.6	25.0	-98.10	811.8	258.7	800.3	761.0	39.34	20.345	
11,650.0	11,547.9	11,660.3	11,549.1	29.5	24.9	-98.00	802.5	258.7	801.9	762.6	39.31	20.398	
11,675.0	11,570.0	11,685.4	11,571.9	29.4	24.8	-97.87	792.0	258.8	803.7	764.4	39.29	20.457	
11,700.0	11,591.5	11,710.5	11,594.1	29.3	24.7	-97.72	780.2	258.9	805.6	766.3	39.26	20.520	
11,725.0	11,612.3	11,735.7	11,615.8	29.2	24.6	-97.55	767.3	259.0	807.7	768.5	39.23	20.587	
11,750.0	11,632.3	11,761.0	11,636.7	29.1	24.5	-97.36	753.2	259.0	810.0	770.7	39.21	20.657	
11,775.0	11,651.5	11,786.3	11,656.9	29.1	24.4	-97.14	738.0	259.1	812.4	773.2	39.19	20.731	
11,800.0	11,669.9	11,811.6	11,676.3	29.0	24.3	-96.91	721.7	259.2	814.9	775.8	39.17	20.807	
11,825.0	11,687.3	11,837.0	11,694.9	28.9	24.3	-96.66	704.3	259.3	817.6	778.5	39.15	20.886	
11,850.0	11,703.8	11,862.4	11,712.5	28.8	24.2	-96.39	686.0	259.5	820.5	781.4	39.13	20.967	
11,875.0	11,719.2	11,887.9	11,729.1	28.8	24.1	-96.10	666.8	259.6	823.5	784.3	39.12	21.049	
11,900.0	11,733.6	11,913.4	11,744.8	28.7	24.0	-95.80	646.6	259.7	826.5	787.4	39.11	21.132	
11,925.0	11,747.0	11,938.9	11,759.3	28.7	23.9	-95.48	625.6	259.8	829.7	790.6	39.11	21.215	
11,950.0	11,759.2	11,964.5	11,772.8	28.6	23.9	-95.14	603.9	260.0	833.0	793.9	39.11	21.298	
11,975.0	11,770.2	11,990.1	11,785.0	28.6	23.8	-94.79	581.4	260.1	836.4	797.3	39.12	21.380	
12,000.0	11,780.1	12,015.8	11,796.1	28.5	23.8	-94.43	558.2	260.3	839.9	800.8	39.14	21.462	
12,025.0	11,788.7	12,041.5	11,805.9	28.5	23.7	-94.06	534.5	260.4	843.5	804.3	39.16	21.542	
12,050.0	11,796.1	12,067.2	11,814.4	28.5	23.7	-93.67	510.2	260.6	847.1	807.9	39.18	21.619	
12,075.0	11,802.2	12,093.0	11,821.6	28.5	23.7	-93.28	485.4	260.7	850.7	811.5	39.21	21.695	
12,100.0	11,807.1	12,118.8	11,827.5	28.5	23.6	-92.88	460.3	260.9	854.4	815.2	39.25	21.768	
12,125.0	11,810.7	12,144.7	11,832.0	28.4	23.6	-92.48	434.8	261.0	858.2	818.9	39.30	21.838	
12,150.0	11,813.0	12,170.6	11,835.1	28.5	23.6	-92.06	409.1	261.2	862.0	822.6	39.35	21.905	
12,175.0	11,813.9	12,196.5	11,836.9	28.5	23.6	-91.65	383.3	261.3	865.7	826.3	39.41	21.969	
12,181.0	11,814.0	12,202.7	11,837.1	28.5	23.6	-91.55	377.0	261.4	866.6	827.2	39.42	21.984	
12,200.0	11,814.0	12,222.1	11,837.3	28.5	23.6	-91.55	357.6	261.5	869.4	830.0	39.47	22.029	
12,300.0	11,814.0	12,321.3	11,837.3	28.6	23.6	-91.52	258.4	262.1	882.1	842.3	39.77	22.179	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 711H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	0.0 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	11,814.0	12,420.9	11,837.3	28.6	23.6	-91.50	158.9	262.7	891.3	851.1	40.17	22.188	
12,500.0	11,814.0	12,520.7	11,837.3	28.7	23.7	-91.49	59.0	263.4	897.0	856.3	40.66	22.063	
12,600.0	11,814.0	12,620.7	11,837.3	28.8	23.7	-91.48	-40.9	264.0	899.2	858.0	41.23	21.810	
12,614.1	11,814.0	12,634.8	11,837.3	28.9	23.7	-91.48	-55.1	264.1	899.3	857.9	41.31	21.767	
12,700.0	11,814.0	12,720.7	11,837.3	29.0	23.7	-91.48	-140.9	264.6	899.3	857.4	41.86	21.484	
12,800.0	11,814.0	12,820.7	11,837.3	29.1	23.8	-91.48	-240.9	265.2	899.2	856.7	42.57	21.126	
12,900.0	11,814.0	12,920.7	11,837.3	29.2	23.9	-91.48	-340.9	265.8	899.2	855.9	43.35	20.745	
13,000.0	11,814.0	13,020.7	11,837.3	29.4	24.0	-91.48	-440.9	266.5	899.2	855.0	44.20	20.345	
13,100.0	11,814.0	13,120.7	11,837.3	29.6	24.1	-91.48	-540.9	267.1	899.2	854.1	45.11	19.932	
13,200.0	11,814.0	13,220.7	11,837.3	29.7	24.2	-91.48	-640.9	267.7	899.2	853.1	46.09	19.510	
13,300.0	11,814.0	13,320.7	11,837.3	30.0	24.4	-91.48	-740.9	268.3	899.2	852.1	47.12	19.082	
13,400.0	11,814.0	13,420.7	11,837.3	30.2	24.6	-91.48	-840.9	269.0	899.2	851.0	48.21	18.652	
13,500.0	11,814.0	13,520.7	11,837.3	30.5	24.9	-91.48	-940.9	269.6	899.2	849.8	49.35	18.222	
13,600.0	11,814.0	13,620.7	11,837.3	30.8	25.2	-91.48	-1,040.9	270.2	899.2	848.6	50.53	17.795	
13,700.0	11,814.0	13,720.7	11,837.3	31.1	25.6	-91.48	-1,140.9	270.8	899.1	847.4	51.75	17.373	
13,800.0	11,814.0	13,820.7	11,837.3	31.4	26.1	-91.48	-1,240.9	271.4	899.1	846.1	53.02	16.958	
13,900.0	11,814.0	13,920.7	11,837.3	31.8	26.6	-91.48	-1,340.9	272.1	899.1	844.8	54.32	16.551	
14,000.0	11,814.0	14,020.7	11,837.3	32.2	27.2	-91.49	-1,440.9	272.7	899.1	843.4	55.66	16.153	
14,100.0	11,814.0	14,120.7	11,837.3	32.7	27.8	-91.49	-1,540.9	273.3	899.1	842.1	57.03	15.765	
14,200.0	11,814.0	14,220.7	11,837.3	33.1	28.5	-91.49	-1,640.9	273.9	899.1	840.6	58.43	15.387	
14,300.0	11,814.0	14,320.7	11,837.3	33.6	29.2	-91.49	-1,740.9	274.6	899.1	839.2	59.86	15.019	
14,400.0	11,814.0	14,420.7	11,837.3	34.2	29.9	-91.49	-1,840.9	275.2	899.1	837.7	61.31	14.663	
14,500.0	11,814.0	14,520.7	11,837.3	34.7	30.6	-91.49	-1,940.9	275.8	899.0	836.3	62.79	14.318	
14,600.0	11,814.0	14,620.7	11,837.3	35.3	31.4	-91.49	-2,040.9	276.4	899.0	834.7	64.29	13.983	
14,700.0	11,814.0	14,720.7	11,837.3	35.9	32.1	-91.49	-2,140.9	277.0	899.0	833.2	65.81	13.660	
14,800.0	11,814.0	14,820.7	11,837.3	36.5	32.9	-91.49	-2,240.9	277.7	899.0	831.7	67.36	13.347	
14,900.0	11,814.0	14,920.7	11,837.3	37.2	33.7	-91.49	-2,340.9	278.3	899.0	830.1	68.91	13.045	
15,000.0	11,814.0	15,020.7	11,837.3	37.8	34.5	-91.49	-2,440.9	278.9	899.0	828.5	70.49	12.753	
15,100.0	11,814.0	15,120.7	11,837.3	38.5	35.3	-91.49	-2,540.9	279.5	899.0	826.9	72.08	12.472	
15,200.0	11,814.0	15,220.7	11,837.3	39.2	36.2	-91.49	-2,640.9	280.2	899.0	825.3	73.69	12.200	
15,300.0	11,814.0	15,320.7	11,837.3	39.9	37.0	-91.49	-2,740.9	280.8	899.0	823.6	75.31	11.937	
15,400.0	11,814.0	15,420.7	11,837.3	40.7	37.8	-91.49	-2,840.9	281.4	898.9	822.0	76.94	11.684	
15,500.0	11,814.0	15,520.7	11,837.3	41.4	38.7	-91.49	-2,940.9	282.0	898.9	820.3	78.59	11.439	
15,600.0	11,814.0	15,620.7	11,837.3	42.2	39.5	-91.49	-3,040.9	282.6	898.9	818.7	80.24	11.203	
15,700.0	11,814.0	15,720.7	11,837.3	42.9	40.4	-91.49	-3,140.9	283.3	898.9	817.0	81.91	10.974	
15,800.0	11,814.0	15,820.7	11,837.3	43.7	41.3	-91.49	-3,240.9	283.9	898.9	815.3	83.59	10.754	
15,900.0	11,814.0	15,920.7	11,837.3	44.5	42.1	-91.49	-3,340.9	284.5	898.9	813.6	85.27	10.541	
16,000.0	11,814.0	16,020.7	11,837.3	45.3	43.0	-91.49	-3,440.9	285.1	898.9	811.9	86.97	10.336	
16,100.0	11,814.0	16,120.7	11,837.3	46.1	43.9	-91.49	-3,540.9	285.8	898.9	810.2	88.67	10.137	
16,200.0	11,814.0	16,220.7	11,837.3	46.9	44.8	-91.49	-3,640.9	286.4	898.9	808.5	90.38	9.945	
16,300.0	11,814.0	16,320.7	11,837.3	47.7	45.6	-91.49	-3,740.9	287.0	898.8	806.7	92.10	9.759	
16,400.0	11,814.0	16,420.7	11,837.3	48.6	46.5	-91.49	-3,840.9	287.6	898.8	805.0	93.83	9.579	
16,500.0	11,814.0	16,520.7	11,837.3	49.4	47.4	-91.49	-3,940.8	288.2	898.8	803.3	95.56	9.405	
16,600.0	11,814.0	16,620.7	11,837.3	50.2	48.3	-91.49	-4,040.8	288.9	898.8	801.5	97.30	9.237	
16,700.0	11,814.0	16,720.7	11,837.3	51.1	49.2	-91.49	-4,140.8	289.5	898.8	799.7	99.05	9.074	
16,800.0	11,814.0	16,820.7	11,837.3	51.9	50.1	-91.49	-4,240.8	290.1	898.8	798.0	100.80	8.917	
16,900.0	11,814.0	16,920.7	11,837.3	52.8	51.0	-91.49	-4,340.8	290.7	898.8	796.2	102.55	8.764	
17,000.0	11,814.0	17,020.7	11,837.3	53.6	51.9	-91.49	-4,440.8	291.4	898.8	794.4	104.32	8.616	
17,100.0	11,814.0	17,120.7	11,837.3	54.5	52.8	-91.49	-4,540.8	292.0	898.7	792.7	106.08	8.472	
17,200.0	11,814.0	17,220.7	11,837.3	55.4	53.7	-91.49	-4,640.8	292.6	898.7	790.9	107.85	8.333	
17,300.0	11,814.0	17,320.7	11,837.3	56.2	54.6	-91.49	-4,740.8	293.2	898.7	789.1	109.63	8.198	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 711H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												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)			
17,400.0	11,814.0	17,420.7	11,837.3	57.1	55.5	-91.49	-4,840.8	293.8	898.7	787.3	111.41	8.067	
17,500.0	11,814.0	17,520.7	11,837.3	58.0	56.5	-91.49	-4,940.8	294.5	898.7	785.5	113.19	7.940	
17,600.0	11,814.0	17,620.7	11,837.3	58.9	57.4	-91.49	-5,040.8	295.1	898.7	783.7	114.98	7.816	
17,700.0	11,814.0	17,720.7	11,837.3	59.8	58.3	-91.49	-5,140.8	295.7	898.7	781.9	116.77	7.696	
17,800.0	11,814.0	17,820.7	11,837.3	60.7	59.2	-91.49	-5,240.8	296.3	898.7	780.1	118.56	7.580	
17,900.0	11,814.0	17,920.7	11,837.3	61.5	60.1	-91.49	-5,340.8	297.0	898.7	778.3	120.36	7.466	
18,000.0	11,814.0	18,020.7	11,837.3	62.4	61.1	-91.49	-5,440.8	297.6	898.6	776.5	122.16	7.356	
18,100.0	11,814.0	18,120.7	11,837.3	63.3	62.0	-91.49	-5,540.8	298.2	898.6	774.7	123.96	7.249	
18,200.0	11,814.0	18,220.7	11,837.3	64.2	62.9	-91.49	-5,640.8	298.8	898.6	772.9	125.77	7.145	
18,300.0	11,814.0	18,320.7	11,837.3	65.1	63.8	-91.49	-5,740.8	299.4	898.6	771.0	127.58	7.044	
18,400.0	11,814.0	18,420.7	11,837.3	66.0	64.8	-91.49	-5,840.8	300.1	898.6	769.2	129.39	6.945	
18,500.0	11,814.0	18,520.7	11,837.3	66.9	65.7	-91.49	-5,940.8	300.7	898.6	767.4	131.21	6.849	
18,600.0	11,814.0	18,620.7	11,837.3	67.8	66.6	-91.49	-6,040.8	301.3	898.6	765.6	133.02	6.755	
18,700.0	11,814.0	18,720.7	11,837.3	68.7	67.5	-91.49	-6,140.8	301.9	898.6	763.7	134.84	6.664	
18,800.0	11,814.0	18,820.7	11,837.3	69.7	68.5	-91.49	-6,240.8	302.6	898.6	761.9	136.66	6.575	
18,900.0	11,814.0	18,920.7	11,837.3	70.6	69.4	-91.49	-6,340.8	303.2	898.5	760.1	138.49	6.488	
19,000.0	11,814.0	19,020.7	11,837.3	71.5	70.3	-91.49	-6,440.8	303.8	898.5	758.2	140.31	6.404	
19,100.0	11,814.0	19,120.7	11,837.3	72.4	71.3	-91.49	-6,540.8	304.4	898.5	756.4	142.14	6.321	
19,200.0	11,814.0	19,220.7	11,837.3	73.3	72.2	-91.49	-6,640.8	305.0	898.5	754.5	143.97	6.241	
19,300.0	11,814.0	19,320.7	11,837.3	74.2	73.1	-91.49	-6,740.8	305.7	898.5	752.7	145.80	6.163	
19,400.0	11,814.0	19,420.7	11,837.3	75.1	74.1	-91.49	-6,840.8	306.3	898.5	750.9	147.63	6.086	
19,500.0	11,814.0	19,520.7	11,837.3	76.1	75.0	-91.49	-6,940.8	306.9	898.5	749.0	149.47	6.011	
19,543.7	11,814.0	19,564.4	11,837.3	76.5	75.4	-91.49	-6,984.5	307.2	898.5	748.2	150.27	5.979	
19,544.6	11,814.0	19,565.2	11,837.3	76.5	75.4	-91.49	-6,985.3	307.2	898.5	748.2	150.28	5.979	
19,544.9	11,814.0	19,565.2	11,837.3	76.5	75.4	-91.49	-6,985.3	307.2	898.5	748.2	150.28	5.979	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 712H - OWB - PWP0													Offset Site Error: 0.0 usft
Survey Program: 0-r.5 MWD+IFR1+MS													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	0.2	0.0	3.0	3.0	125.68	-35.0	48.7	60.0				
100.0	100.0	100.2	100.0	3.1	3.1	125.68	-35.0	48.7	60.0	53.4	6.60	9.091	
200.0	200.0	200.2	200.0	3.3	3.3	125.68	-35.0	48.7	60.0	53.0	7.05	8.508	
300.0	300.0	300.2	300.0	3.5	3.5	125.68	-35.0	48.7	60.0	52.5	7.48	8.023	
400.0	400.0	400.2	400.0	3.8	3.8	125.68	-35.0	48.7	60.0	52.1	7.88	7.610	
500.0	500.0	500.2	500.0	4.0	4.0	125.68	-35.0	48.7	60.0	51.7	8.27	7.254	
600.0	600.0	600.2	600.0	4.1	4.1	125.68	-35.0	48.7	60.0	51.4	8.64	6.941	
700.0	700.0	700.2	700.0	4.3	4.3	125.68	-35.0	48.7	60.0	51.0	9.00	6.664	
800.0	800.0	800.2	800.0	4.5	4.5	125.68	-35.0	48.7	60.0	50.7	9.35	6.416	
900.0	900.0	900.2	900.0	4.7	4.7	125.68	-35.0	48.7	60.0	50.3	9.69	6.193	
1,000.0	1,000.0	1,000.2	1,000.0	4.8	4.8	125.68	-35.0	48.7	60.0	50.0	10.02	5.990	
1,100.0	1,100.0	1,100.2	1,100.0	5.0	5.0	125.68	-35.0	48.7	60.0	49.7	10.34	5.805	
1,200.0	1,200.0	1,200.2	1,200.0	5.2	5.2	125.68	-35.0	48.7	60.0	49.4	10.65	5.635	
1,300.0	1,300.0	1,300.2	1,300.0	5.3	5.3	125.68	-35.0	48.7	60.0	49.1	10.95	5.477	
1,400.0	1,400.0	1,400.2	1,400.0	5.5	5.5	125.68	-35.0	48.7	60.0	48.8	11.25	5.332	
1,500.0	1,500.0	1,500.2	1,500.0	5.6	5.6	125.68	-35.0	48.7	60.0	48.5	11.55	5.196	
1,600.0	1,600.0	1,600.2	1,600.0	5.8	5.8	125.68	-35.0	48.7	60.0	48.2	11.84	5.070	
1,700.0	1,700.0	1,700.2	1,700.0	5.9	5.9	125.68	-35.0	48.7	60.0	47.9	12.12	4.951	
1,800.0	1,800.0	1,800.2	1,800.0	6.0	6.0	125.68	-35.0	48.7	60.0	47.6	12.40	4.840	
1,866.6	1,866.6	1,866.8	1,866.6	6.1	6.1	125.68	-35.0	48.7	60.0	47.4	12.58	4.770 CC	
1,900.0	1,900.0	1,900.2	1,900.0	6.2	6.2	125.68	-35.0	48.7	60.0	47.3	12.67	4.735	
2,000.0	2,000.0	2,000.0	1,999.8	6.3	6.4	124.03	-33.7	49.9	60.2	47.3	12.94	4.655 ES	
2,100.0	2,100.0	2,099.4	2,099.1	6.5	6.6	95.42	-29.9	53.4	61.4	48.2	13.21	4.647 SF	
2,200.0	2,199.9	2,198.8	2,198.0	6.7	6.8	91.29	-23.6	59.3	63.7	50.3	13.47	4.733	
2,300.0	2,299.7	2,297.9	2,296.4	6.9	7.1	86.92	-14.7	67.5	67.5	53.8	13.74	4.914	
2,333.3	2,332.9	2,330.8	2,329.0	6.9	7.2	85.46	-11.2	70.7	69.1	55.3	13.81	5.005	
2,400.0	2,399.3	2,396.6	2,393.9	7.0	7.4	96.81	-3.5	77.9	73.6	59.6	13.98	5.263	
2,500.0	2,498.8	2,494.4	2,489.9	7.2	7.7	109.12	10.1	90.4	84.9	70.5	14.35	5.916	
2,600.0	2,598.1	2,591.4	2,584.6	7.4	7.9	116.33	25.9	105.0	101.7	87.1	14.65	6.943	
2,700.0	2,697.0	2,689.0	2,679.6	7.6	8.1	121.25	42.5	120.3	122.7	107.7	15.00	8.178	
2,800.0	2,795.4	2,786.0	2,773.9	7.9	8.4	125.17	58.9	135.4	146.9	131.5	15.35	9.566	
2,825.7	2,820.6	2,810.8	2,798.0	7.9	8.5	126.06	63.1	139.3	153.6	138.2	15.43	9.956	
2,900.0	2,893.5	2,882.4	2,867.7	8.1	8.7	125.63	75.2	150.5	173.3	157.6	15.66	11.064	
3,000.0	2,991.5	2,978.9	2,961.6	8.4	9.0	125.18	91.6	165.6	199.8	183.8	16.02	12.472	
3,100.0	3,089.5	3,075.3	3,055.4	8.7	9.3	124.84	107.9	180.7	226.3	209.9	16.39	13.806	
3,200.0	3,187.5	3,171.7	3,149.2	9.0	9.7	124.57	124.2	195.7	252.9	236.1	16.79	15.065	
3,300.0	3,285.5	3,268.1	3,243.0	9.3	10.0	124.35	140.6	210.8	279.4	262.2	17.19	16.253	
3,400.0	3,383.6	3,364.5	3,336.8	9.6	10.4	124.17	156.9	225.9	306.0	288.3	17.61	17.373	
3,500.0	3,481.6	3,460.9	3,430.6	9.9	10.7	124.02	173.2	241.0	332.5	314.5	18.04	18.427	
3,600.0	3,579.6	3,557.3	3,524.4	10.3	11.1	123.89	189.5	256.1	359.0	340.6	18.49	19.419	
3,700.0	3,677.6	3,653.7	3,618.2	10.6	11.5	123.78	205.9	271.1	385.6	366.6	18.95	20.353	
3,800.0	3,775.6	3,750.1	3,712.0	11.0	11.9	123.68	222.2	286.2	412.1	392.7	19.41	21.231	
3,900.0	3,873.6	3,846.5	3,805.9	11.4	12.3	123.59	238.5	301.3	438.7	418.8	19.89	22.057	
4,000.0	3,971.6	3,942.9	3,899.7	11.7	12.7	123.52	254.9	316.4	465.2	444.9	20.37	22.835	
4,100.0	4,069.7	4,039.4	3,993.5	12.1	13.1	123.45	271.2	331.4	491.8	470.9	20.87	23.566	
4,200.0	4,167.7	4,135.8	4,087.3	12.5	13.5	123.39	287.5	346.5	518.4	497.0	21.37	24.255	
4,300.0	4,265.7	4,232.2	4,181.1	12.9	13.9	123.33	303.9	361.6	544.9	523.0	21.88	24.905	
4,400.0	4,363.7	4,328.6	4,274.9	13.3	14.3	123.28	320.2	376.7	571.5	549.1	22.40	25.516	
4,500.0	4,461.7	4,425.0	4,368.7	13.7	14.7	123.24	336.5	391.7	598.0	575.1	22.92	26.093	
4,600.0	4,559.7	4,521.4	4,462.5	14.1	15.1	123.20	352.9	406.8	624.6	601.1	23.45	26.638	
4,700.0	4,657.8	4,617.8	4,556.4	14.6	15.5	123.16	369.2	421.9	651.1	627.1	23.98	27.152	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 712H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program:		0-r.5 MWD+IFR1+MS		Rule Assigned:								Offset Well Error:	3.0 usft
Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Distance					
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	+N/-S	+E/-W	Between Centres	Between Ellipses	No-Go Distance	Separation Factor	Warning
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
4,800.0	4,755.8	4,714.2	4,650.2	15.0	16.0	123.12	385.5	437.0	677.7	653.2	24.52	27.638	
4,900.0	4,853.8	4,810.6	4,744.0	15.4	16.4	123.09	401.9	452.1	704.2	679.2	25.06	28.098	
5,000.0	4,951.8	4,907.0	4,837.8	15.8	16.8	123.06	418.2	467.1	730.8	705.2	25.61	28.534	
5,100.0	5,049.8	5,003.4	4,931.6	16.2	17.3	123.03	434.5	482.2	757.3	731.2	26.16	28.946	
5,200.0	5,147.8	5,099.9	5,025.4	16.7	17.7	123.01	450.9	497.3	783.9	757.2	26.72	29.337	
5,300.0	5,245.8	5,196.3	5,119.2	17.1	18.1	122.98	467.2	512.4	810.5	783.2	27.28	29.707	
5,400.0	5,343.9	5,292.7	5,213.0	17.5	18.6	122.96	483.5	527.4	837.0	809.2	27.85	30.059	
5,500.0	5,441.9	5,389.1	5,306.8	18.0	19.0	122.94	499.8	542.5	863.6	835.2	28.41	30.394	
5,600.0	5,539.9	5,485.5	5,400.7	18.4	19.4	122.92	516.2	557.6	890.1	861.1	28.98	30.712	
5,700.0	5,637.9	5,581.9	5,494.5	18.8	19.9	122.90	532.5	572.7	916.7	887.1	29.56	31.015	
5,800.0	5,735.9	5,678.3	5,588.3	19.3	20.3	122.88	548.8	587.8	943.2	913.1	30.13	31.303	
5,900.0	5,833.9	5,774.7	5,682.1	19.7	20.8	122.87	565.2	602.8	969.8	939.1	30.71	31.578	
6,000.0	5,932.0	5,871.1	5,775.9	20.2	21.2	122.85	581.5	617.9	996.3	965.1	31.29	31.840	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 802H - 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 (usft)	Reference Vertical Depth (usft)	Measured Depth (usft)	Offset Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.0	0.0	2.2	0.0	3.0	3.0	-54.31	35.0	-48.7	60.0					
100.0	100.0	102.2	100.0	3.1	3.1	-54.31	35.0	-48.7	60.0	53.3	6.60	9.078		
200.0	200.0	202.2	200.0	3.3	3.3	-54.31	35.0	-48.7	60.0	52.9	7.06	8.496		
300.0	300.0	302.2	300.0	3.5	3.6	-54.31	35.0	-48.7	60.0	52.5	7.48	8.012		
400.0	400.0	402.2	400.0	3.8	3.8	-54.31	35.0	-48.7	60.0	52.1	7.89	7.600		
500.0	500.0	502.2	500.0	4.0	4.0	-54.31	35.0	-48.7	60.0	51.7	8.28	7.244		
600.0	600.0	602.2	600.0	4.1	4.1	-54.31	35.0	-48.7	60.0	51.3	8.65	6.932		
700.0	700.0	702.2	700.0	4.3	4.3	-54.31	35.0	-48.7	60.0	50.9	9.01	6.656		
800.0	800.0	802.2	800.0	4.5	4.5	-54.31	35.0	-48.7	60.0	50.6	9.36	6.409		
900.0	900.0	902.2	900.0	4.7	4.7	-54.31	35.0	-48.7	60.0	50.3	9.69	6.186		
1,000.0	1,000.0	1,002.2	1,000.0	4.8	4.8	-54.31	35.0	-48.7	60.0	49.9	10.02	5.983		
1,100.0	1,100.0	1,102.2	1,100.0	5.0	5.0	-54.31	35.0	-48.7	60.0	49.6	10.34	5.798		
1,200.0	1,200.0	1,202.2	1,200.0	5.2	5.2	-54.31	35.0	-48.7	60.0	49.3	10.65	5.628		
1,300.0	1,300.0	1,302.2	1,300.0	5.3	5.3	-54.31	35.0	-48.7	60.0	49.0	10.96	5.471		
1,400.0	1,400.0	1,402.2	1,400.0	5.5	5.5	-54.31	35.0	-48.7	60.0	48.7	11.26	5.326		
1,500.0	1,500.0	1,502.2	1,500.0	5.6	5.6	-54.31	35.0	-48.7	60.0	48.4	11.55	5.191		
1,600.0	1,600.0	1,602.2	1,600.0	5.8	5.8	-54.31	35.0	-48.7	60.0	48.1	11.84	5.064		
1,700.0	1,700.0	1,702.2	1,700.0	5.9	5.9	-54.31	35.0	-48.7	60.0	47.8	12.12	4.946		
1,800.0	1,800.0	1,802.2	1,800.0	6.0	6.0	-54.31	35.0	-48.7	60.0	47.6	12.40	4.835		
1,900.0	1,900.0	1,902.2	1,900.0	6.2	6.2	-54.31	35.0	-48.7	60.0	47.3	12.67	4.730		
1,965.9	1,965.9	1,968.1	1,965.9	6.3	6.3	-54.31	35.0	-48.7	60.0	47.1	12.85	4.664 CC		
2,000.0	2,000.0	2,002.2	2,000.0	6.3	6.3	-54.31	35.0	-48.7	60.0	47.0	12.95	4.631 ES, SF		
2,100.0	2,100.0	2,100.0	2,097.8	6.5	6.5	-80.51	35.9	-50.1	61.5	48.2	13.28	4.633		
2,200.0	2,199.9	2,197.7	2,195.4	6.7	6.7	-83.78	38.8	-54.4	66.2	52.6	13.59	4.868		
2,300.0	2,299.7	2,294.8	2,292.1	6.9	7.0	-88.27	43.4	-61.3	74.3	60.4	13.91	5.343		
2,333.3	2,332.9	2,327.1	2,324.2	6.9	7.0	-89.87	45.3	-64.2	77.8	63.9	13.99	5.566		
2,400.0	2,399.3	2,391.4	2,387.9	7.0	7.2	-78.36	49.8	-70.9	85.4	71.3	14.18	6.026		
2,500.0	2,498.8	2,487.5	2,483.0	7.2	7.4	-64.37	57.9	-83.1	97.1	82.5	14.54	6.674		
2,600.0	2,598.1	2,583.4	2,577.2	7.4	7.7	-54.98	67.8	-98.0	108.8	93.9	14.89	7.304		
2,700.0	2,697.0	2,679.1	2,670.5	7.6	8.0	-48.90	79.4	-115.3	120.5	105.2	15.25	7.901		
2,800.0	2,795.4	2,775.1	2,763.5	7.9	8.3	-44.86	92.8	-135.4	132.0	116.5	15.56	8.486		
2,825.7	2,820.6	2,800.6	2,788.1	7.9	8.3	-44.10	96.5	-140.9	134.7	119.1	15.62	8.623		
2,900.0	2,893.5	2,874.5	2,859.5	8.1	8.5	-45.25	107.2	-157.0	142.3	126.4	15.91	8.945		
3,000.0	2,991.5	2,973.9	2,955.4	8.4	8.8	-46.62	121.6	-178.6	152.6	136.2	16.34	9.339		
3,100.0	3,089.5	3,073.3	3,051.4	8.7	9.1	-47.82	136.0	-200.2	162.9	146.1	16.79	9.705		
3,200.0	3,187.5	3,172.7	3,147.3	9.0	9.5	-48.88	150.4	-221.8	173.3	156.1	17.25	10.046		
3,300.0	3,285.5	3,272.2	3,243.3	9.3	9.8	-49.81	164.8	-243.5	183.8	166.1	17.74	10.362		
3,400.0	3,383.6	3,371.6	3,339.2	9.6	10.2	-50.65	179.2	-265.1	194.3	176.1	18.24	10.655		
3,500.0	3,481.6	3,471.0	3,435.2	9.9	10.5	-51.39	193.7	-286.7	204.9	186.1	18.75	10.926		
3,600.0	3,579.6	3,570.4	3,531.1	10.3	10.9	-52.07	208.1	-308.3	215.4	196.2	19.27	11.178		
3,700.0	3,677.6	3,669.8	3,627.1	10.6	11.3	-52.68	222.5	-330.0	226.0	206.2	19.81	11.412		
3,800.0	3,775.6	3,769.2	3,723.0	11.0	11.7	-53.24	236.9	-351.6	236.7	216.3	20.35	11.629		
3,900.0	3,873.6	3,868.6	3,819.0	11.4	12.1	-53.75	251.3	-373.2	247.3	226.4	20.90	11.830		
4,000.0	3,971.6	3,968.0	3,914.9	11.7	12.5	-54.21	265.7	-394.8	258.0	236.5	21.47	12.018		
4,100.0	4,069.7	4,067.4	4,010.9	12.1	12.9	-54.64	280.1	-416.4	268.7	246.6	22.04	12.192		
4,200.0	4,167.7	4,166.8	4,106.8	12.5	13.4	-55.04	294.6	-438.1	279.3	256.7	22.61	12.354		
4,300.0	4,265.7	4,266.2	4,202.8	12.9	13.8	-55.41	309.0	-459.7	290.1	266.9	23.19	12.506		
4,400.0	4,363.7	4,365.6	4,298.7	13.3	14.2	-55.75	323.4	-481.3	300.8	277.0	23.78	12.647		
4,500.0	4,461.7	4,465.1	4,394.7	13.7	14.6	-56.07	337.8	-502.9	311.5	287.1	24.38	12.779		
4,600.0	4,559.7	4,564.5	4,490.6	14.1	15.1	-56.37	352.2	-524.5	322.2	297.3	24.97	12.903		
4,700.0	4,657.8	4,663.9	4,586.6	14.6	15.5	-56.64	366.6	-546.2	333.0	307.4	25.58	13.019		

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 802H - 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)			
4,800.0	4,755.8	4,763.3	4,682.5	15.0	16.0	-56.90	381.0	-567.8	343.7	317.5	26.18	13.127		
4,900.0	4,853.8	4,862.7	4,778.5	15.4	16.4	-57.15	395.5	-589.4	354.5	327.7	26.79	13.230		
5,000.0	4,951.8	4,962.1	4,874.5	15.8	16.9	-57.38	409.9	-611.0	365.2	337.8	27.41	13.326		
5,100.0	5,049.8	5,061.5	4,970.4	16.2	17.3	-57.60	424.3	-632.6	376.0	348.0	28.03	13.416		
5,200.0	5,147.8	5,160.9	5,066.4	16.7	17.8	-57.80	438.7	-654.3	386.8	358.1	28.65	13.501		
5,300.0	5,245.8	5,260.3	5,162.3	17.1	18.2	-57.99	453.1	-675.9	397.6	368.3	29.27	13.581		
5,400.0	5,343.9	5,359.7	5,258.3	17.5	18.7	-58.18	467.5	-697.5	408.4	378.5	29.90	13.657		
5,500.0	5,441.9	5,459.1	5,354.2	18.0	19.2	-58.35	481.9	-719.1	419.1	388.6	30.53	13.729		
5,600.0	5,539.9	5,558.6	5,450.2	18.4	19.6	-58.52	496.4	-740.8	429.9	398.8	31.16	13.797		
5,700.0	5,637.9	5,658.0	5,546.1	18.8	20.1	-58.67	510.8	-762.4	440.7	408.9	31.80	13.861		
5,800.0	5,735.9	5,757.4	5,642.1	19.3	20.6	-58.82	525.2	-784.0	451.5	419.1	32.43	13.922		
5,900.0	5,833.9	5,856.8	5,738.0	19.7	21.0	-58.97	539.6	-805.6	462.3	429.2	33.07	13.980		
6,000.0	5,932.0	5,956.2	5,834.0	20.2	21.5	-59.10	554.0	-827.2	473.1	439.4	33.71	14.035		
6,100.0	6,030.0	6,055.6	5,929.9	20.6	22.0	-59.23	568.4	-848.9	483.9	449.6	34.35	14.087		
6,200.0	6,128.0	6,155.0	6,025.9	21.1	22.4	-59.36	582.8	-870.5	494.7	459.7	35.00	14.136		
6,300.0	6,226.0	6,254.4	6,121.8	21.5	22.9	-59.48	597.3	-892.1	505.5	469.9	35.64	14.184		
6,400.0	6,324.0	6,353.8	6,217.8	21.9	23.4	-59.59	611.7	-913.7	516.4	480.1	36.29	14.229		
6,500.0	6,422.0	6,453.2	6,313.7	22.4	23.9	-59.70	626.1	-935.3	527.2	490.2	36.94	14.272		
6,600.0	6,520.0	6,552.6	6,409.7	22.8	24.3	-59.81	640.5	-957.0	538.0	500.4	37.59	14.313		
6,700.0	6,618.1	6,652.0	6,505.6	23.3	24.8	-59.91	654.9	-978.6	548.8	510.6	38.24	14.352		
6,800.0	6,716.1	6,751.5	6,601.6	23.7	25.3	-60.00	669.3	-1,000.2	559.6	520.7	38.89	14.390		
6,900.0	6,814.1	6,850.9	6,697.5	24.2	25.8	-60.10	683.7	-1,021.8	570.4	530.9	39.54	14.426		
6,951.1	6,864.2	6,901.6	6,746.6	24.4	26.0	-60.14	691.1	-1,032.9	576.0	536.1	39.87	14.447		
7,000.0	6,912.1	6,950.3	6,793.5	24.6	26.3	-60.22	698.2	-1,043.4	581.4	541.2	40.18	14.468		
7,100.0	7,010.5	7,049.6	6,889.3	25.1	26.7	-60.26	712.6	-1,065.0	593.0	552.2	40.88	14.507		
7,200.0	7,109.1	7,148.8	6,985.1	25.5	27.2	-60.17	726.9	-1,086.6	605.6	564.0	41.62	14.551		
7,300.0	7,208.0	7,247.8	7,080.7	25.9	27.7	-59.95	741.3	-1,108.2	619.0	576.6	42.40	14.600		
7,400.0	7,307.2	7,346.6	7,176.1	26.4	28.2	-59.62	755.6	-1,129.7	633.3	590.1	43.22	14.653		
7,500.0	7,406.6	7,445.3	7,271.3	26.8	28.7	-59.18	769.9	-1,151.1	648.5	604.4	44.08	14.713		
7,600.0	7,506.1	7,543.7	7,366.3	27.1	29.1	-58.65	784.2	-1,172.5	664.7	619.7	44.98	14.779		
7,700.0	7,605.8	7,641.8	7,460.9	27.5	29.6	-58.04	798.4	-1,193.8	681.9	636.0	45.91	14.853		
7,800.0	7,705.6	7,739.6	7,555.4	27.9	30.1	-57.35	812.6	-1,215.1	700.1	653.3	46.87	14.937		
7,900.0	7,805.5	7,837.0	7,649.4	28.2	30.6	-56.59	826.7	-1,236.3	719.5	671.6	47.86	15.032		
8,000.0	7,905.5	7,934.1	7,743.2	28.5	31.0	-55.78	840.8	-1,257.4	739.9	691.0	48.87	15.142		
8,094.5	8,000.0	8,025.5	7,831.4	28.6	31.5	-89.18	854.1	-1,277.3	760.3	710.5	49.79	15.270		
8,100.0	8,005.5	8,030.8	7,836.5	28.6	31.5	-89.13	854.8	-1,278.5	761.5	711.7	49.84	15.279		
8,200.0	8,105.5	8,127.4	7,929.7	28.7	32.0	-88.10	868.8	-1,299.5	783.9	733.0	50.82	15.424		
8,300.0	8,205.5	8,223.9	8,022.8	28.7	32.5	-87.13	882.8	-1,320.5	806.4	754.7	51.74	15.585		
8,400.0	8,305.5	8,320.4	8,116.0	28.8	32.9	-86.21	896.8	-1,341.5	829.2	776.5	52.65	15.749		
8,500.0	8,405.5	8,416.9	8,209.2	28.8	33.4	-85.34	910.8	-1,362.4	852.1	798.6	53.54	15.916		
8,600.0	8,505.5	8,513.8	8,302.7	28.9	33.9	-84.52	924.9	-1,383.5	875.2	820.8	54.41	16.086		
8,700.0	8,605.5	8,626.1	8,411.3	28.9	34.4	-83.64	940.5	-1,407.0	897.6	842.3	55.36	16.216		
8,800.0	8,705.5	8,739.5	8,521.6	29.0	35.0	-82.87	955.1	-1,428.9	918.5	862.2	56.24	16.331		
8,900.0	8,805.5	8,853.9	8,633.4	29.0	35.5	-82.20	968.7	-1,449.2	937.7	880.6	57.07	16.429		
9,000.0	8,905.5	8,969.2	8,746.6	29.0	36.0	-81.60	981.0	-1,467.8	955.2	897.3	57.85	16.510		
9,100.0	9,005.5	9,085.5	8,861.0	29.1	36.6	-81.09	992.2	-1,484.5	970.9	912.4	58.58	16.575		
9,200.0	9,105.5	9,202.5	8,976.7	29.1	37.1	-80.65	1,002.2	-1,499.5	984.9	925.7	59.25	16.624		
9,300.0	9,205.5	9,320.2	9,093.3	29.2	37.6	-80.27	1,010.9	-1,512.5	997.1	937.2	59.86	16.657		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 803H - 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	0.0	0.2	3.0	3.0	125.75	-46.7	64.9	80.0				
100.0	100.0	99.8	100.0	3.1	3.1	125.75	-46.7	64.9	80.0	73.4	6.60	12.122	
200.0	200.0	199.8	200.0	3.3	3.3	125.75	-46.7	64.9	80.0	73.0	7.05	11.346	
300.0	300.0	299.8	300.0	3.5	3.5	125.75	-46.7	64.9	80.0	72.5	7.48	10.699	
400.0	400.0	399.8	400.0	3.8	3.8	125.75	-46.7	64.9	80.0	72.1	7.88	10.148	
500.0	500.0	499.8	500.0	4.0	3.9	125.75	-46.7	64.9	80.0	71.7	8.27	9.673	
600.0	600.0	599.8	600.0	4.1	4.1	125.75	-46.7	64.9	80.0	71.4	8.64	9.256	
700.0	700.0	699.8	700.0	4.3	4.3	125.75	-46.7	64.9	80.0	71.0	9.00	8.887	
800.0	800.0	799.8	800.0	4.5	4.5	125.75	-46.7	64.9	80.0	70.7	9.35	8.556	
900.0	900.0	899.8	900.0	4.7	4.7	125.75	-46.7	64.9	80.0	70.3	9.69	8.258	
1,000.0	1,000.0	999.8	1,000.0	4.8	4.8	125.75	-46.7	64.9	80.0	70.0	10.02	7.988	
1,100.0	1,100.0	1,099.8	1,100.0	5.0	5.0	125.75	-46.7	64.9	80.0	69.7	10.34	7.741	
1,200.0	1,200.0	1,199.8	1,200.0	5.2	5.2	125.75	-46.7	64.9	80.0	69.4	10.65	7.513	
1,300.0	1,300.0	1,299.8	1,300.0	5.3	5.3	125.75	-46.7	64.9	80.0	69.1	10.95	7.304	
1,400.0	1,400.0	1,399.8	1,400.0	5.5	5.5	125.75	-46.7	64.9	80.0	68.8	11.25	7.110	
1,500.0	1,500.0	1,499.8	1,500.0	5.6	5.6	125.75	-46.7	64.9	80.0	68.5	11.55	6.929	
1,600.0	1,600.0	1,599.8	1,600.0	5.8	5.8	125.75	-46.7	64.9	80.0	68.2	11.84	6.760	
1,700.0	1,700.0	1,699.8	1,700.0	5.9	5.9	125.75	-46.7	64.9	80.0	67.9	12.12	6.602	
1,800.0	1,800.0	1,799.8	1,800.0	6.0	6.0	125.75	-46.7	64.9	80.0	67.6	12.40	6.454	
1,900.0	1,900.0	1,899.8	1,900.0	6.2	6.2	125.75	-46.7	64.9	80.0	67.3	12.67	6.314	
2,000.0	2,000.0	1,999.8	2,000.0	6.3	6.3	125.75	-46.7	64.9	80.0	67.1	12.94	6.182 CC	
2,100.0	2,100.0	2,099.8	2,100.0	6.5	6.5	101.67	-46.7	64.9	80.3	67.1	13.21	6.076 ES	
2,200.0	2,199.9	2,199.7	2,199.9	6.7	6.6	104.37	-46.7	64.9	81.1	67.7	13.47	6.023 SF	
2,300.0	2,299.7	2,299.5	2,299.7	6.9	6.7	108.71	-46.7	64.9	83.0	69.3	13.74	6.042	
2,333.3	2,332.9	2,332.7	2,332.9	6.9	6.8	110.48	-46.7	64.9	83.9	70.1	13.80	6.082	
2,400.0	2,399.3	2,399.1	2,399.3	7.0	6.8	128.44	-46.7	64.9	86.9	72.9	13.97	6.221	
2,500.0	2,498.8	2,498.6	2,498.8	7.2	7.0	149.98	-46.7	64.9	94.5	80.2	14.28	6.620	
2,600.0	2,598.1	2,597.9	2,598.1	7.4	7.1	164.65	-46.7	64.9	105.7	91.1	14.61	7.232	
2,700.0	2,697.0	2,696.8	2,697.0	7.6	7.2	174.17	-46.7	64.9	120.1	105.1	14.98	8.015	
2,800.0	2,795.4	2,795.2	2,795.4	7.9	7.3	-179.72	-46.7	64.9	137.6	122.2	15.38	8.947	
2,825.7	2,820.6	2,820.4	2,820.6	7.9	7.4	-178.54	-46.7	64.9	142.6	127.1	15.46	9.225	
2,900.0	2,893.5	2,893.3	2,893.5	8.1	7.5	-178.68	-46.7	64.9	157.3	141.6	15.71	10.011	
3,000.0	2,991.5	2,991.3	2,991.5	8.4	7.6	-178.83	-46.7	64.9	177.1	161.0	16.10	11.001	
3,100.0	3,089.5	3,089.3	3,089.5	8.7	7.7	-178.95	-46.7	64.9	197.0	180.4	16.51	11.931	
3,200.0	3,187.5	3,187.3	3,187.5	9.0	7.8	-179.04	-46.7	64.9	216.8	199.8	16.93	12.804	
3,300.0	3,285.5	3,285.3	3,285.5	9.3	7.9	-179.12	-46.7	64.9	236.6	219.2	17.37	13.621	
3,400.0	3,383.6	3,383.4	3,383.6	9.6	8.1	-179.19	-46.7	64.9	256.4	238.6	17.82	14.387	
3,500.0	3,481.6	3,481.4	3,481.6	9.9	8.2	-179.25	-46.7	64.9	276.2	258.0	18.29	15.104	
3,600.0	3,579.6	3,579.4	3,579.6	10.3	8.3	-179.30	-46.7	64.9	296.1	277.3	18.77	15.775	
3,700.0	3,677.6	3,677.4	3,677.6	10.6	8.4	-179.34	-46.7	64.9	315.9	296.6	19.26	16.403	
3,800.0	3,775.6	3,775.4	3,775.6	11.0	8.5	-179.38	-46.7	64.9	335.7	316.0	19.76	16.991	
3,900.0	3,873.6	3,873.4	3,873.6	11.4	8.6	-179.42	-46.7	64.9	355.5	335.3	20.27	17.541	
4,000.0	3,971.6	3,971.4	3,971.6	11.7	8.7	-179.45	-46.7	64.9	375.4	354.6	20.79	18.057	
4,100.0	4,069.7	4,070.6	4,070.8	12.1	8.9	-179.38	-47.0	64.3	395.1	373.8	21.31	18.539	
4,200.0	4,167.7	4,170.2	4,170.3	12.5	9.0	-178.97	-48.4	61.5	414.5	392.6	21.83	18.983	
4,300.0	4,265.7	4,269.7	4,269.7	12.9	9.1	-178.26	-50.8	56.3	433.5	411.1	22.36	19.383	
4,400.0	4,363.7	4,372.0	4,371.7	13.3	9.2	-177.29	-54.1	48.8	452.2	429.3	22.90	19.750	
4,500.0	4,461.7	4,480.3	4,479.7	13.7	9.3	-176.62	-54.9	41.7	469.3	445.8	23.49	19.979	
4,600.0	4,559.7	4,589.6	4,588.8	14.1	9.5	-176.39	-51.9	36.2	484.2	460.1	24.10	20.095	
4,700.0	4,657.8	4,699.5	4,698.5	14.6	9.6	-176.58	-45.1	32.4	497.0	472.3	24.72	20.102	
4,800.0	4,755.8	4,809.8	4,808.2	15.0	9.8	-177.15	-34.3	30.4	507.6	482.2	25.38	20.004	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 803H - 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	4,853.8	4,920.2	4,917.6	15.4	9.9	-178.09	-19.8	30.1	516.1	490.1	26.02	19.834	
5,000.0	4,951.8	5,030.3	5,026.1	15.8	10.0	-179.38	-1.5	31.6	522.7	496.1	26.67	19.600	
5,100.0	5,049.8	5,139.7	5,133.3	16.2	10.3	178.98	20.5	34.8	527.6	500.3	27.30	19.322	
5,200.0	5,147.8	5,248.2	5,238.7	16.7	10.5	177.01	45.9	39.7	531.0	503.1	27.90	19.030	
5,300.0	5,245.8	5,347.9	5,334.8	17.1	10.7	175.00	71.4	45.2	533.8	505.3	28.47	18.751	
5,400.0	5,343.9	5,446.0	5,429.6	17.5	10.9	173.03	96.5	50.6	537.2	508.2	29.03	18.505	
5,500.0	5,441.9	5,544.2	5,524.3	18.0	11.1	171.09	121.7	56.0	541.3	511.8	29.58	18.300	
5,600.0	5,539.9	5,642.4	5,619.1	18.4	11.4	169.18	146.8	61.4	546.1	516.0	30.11	18.136	
5,700.0	5,637.9	5,740.6	5,713.8	18.8	11.7	167.30	171.9	66.9	551.4	520.8	30.62	18.010	
5,800.0	5,735.9	5,838.7	5,808.6	19.3	11.9	165.47	197.0	72.3	557.4	526.3	31.11	17.919	
5,900.0	5,833.9	5,936.9	5,903.3	19.7	12.2	163.67	222.2	77.7	563.9	532.3	31.57	17.861	
6,000.0	5,932.0	6,035.1	5,998.1	20.2	12.5	161.91	247.3	83.1	571.0	539.0	32.02	17.835	
6,100.0	6,030.0	6,133.3	6,092.8	20.6	12.8	160.19	272.4	88.5	578.6	546.2	32.44	17.837	
6,200.0	6,128.0	6,231.5	6,187.6	21.1	13.2	158.53	297.6	94.0	586.7	553.9	32.84	17.866	
6,300.0	6,226.0	6,329.6	6,282.3	21.5	13.5	156.90	322.7	99.4	595.4	562.1	33.23	17.919	
6,400.0	6,324.0	6,427.8	6,377.1	21.9	13.9	155.32	347.8	104.8	604.5	570.9	33.59	17.994	
6,500.0	6,422.0	6,526.0	6,471.8	22.4	14.2	153.79	373.0	110.2	614.0	580.1	33.94	18.090	
6,600.0	6,520.0	6,624.2	6,566.6	22.8	14.6	152.31	398.1	115.6	624.0	589.8	34.28	18.205	
6,700.0	6,618.1	6,722.3	6,661.3	23.3	14.9	150.87	423.2	121.1	634.5	599.9	34.60	18.336	
6,800.0	6,716.1	6,820.5	6,756.1	23.7	15.3	149.48	448.4	126.5	645.3	610.3	34.91	18.482	
6,900.0	6,814.1	6,918.7	6,850.8	24.2	15.7	148.13	473.5	131.9	656.4	621.2	35.21	18.643	
6,951.1	6,864.2	6,968.8	6,899.2	24.4	15.9	147.46	486.3	134.7	662.3	626.9	35.35	18.735	
7,000.0	6,912.1	7,016.9	6,945.6	24.6	16.1	146.85	498.6	137.3	667.8	632.3	35.47	18.824	
7,100.0	7,010.5	7,115.1	7,040.4	25.1	16.5	145.57	523.8	142.7	678.2	642.5	35.73	18.985	
7,200.0	7,109.1	7,213.2	7,135.1	25.5	16.9	144.25	548.9	148.2	687.6	651.7	35.94	19.134	
7,300.0	7,208.0	7,311.3	7,229.8	25.9	17.3	142.88	574.0	153.6	696.1	659.9	36.10	19.279	
7,400.0	7,307.2	7,409.4	7,324.4	26.4	17.7	141.45	599.1	159.0	703.5	667.3	36.22	19.423	
7,500.0	7,406.6	7,507.3	7,418.9	26.8	18.1	139.97	624.2	164.4	710.2	673.9	36.29	19.567	
7,600.0	7,506.1	7,605.1	7,513.3	27.1	18.5	138.42	649.2	169.8	716.0	679.7	36.31	19.716	
7,700.0	7,605.8	7,702.7	7,607.5	27.5	18.9	136.81	674.2	175.2	721.1	684.8	36.28	19.874	
7,800.0	7,705.6	7,800.1	7,701.5	27.9	19.3	135.13	699.1	180.6	725.6	689.4	36.20	20.044	
7,900.0	7,805.5	7,897.3	7,795.3	28.2	19.7	133.38	724.0	185.9	729.5	693.5	36.06	20.230	
8,000.0	7,905.5	7,994.3	7,888.9	28.5	20.2	131.56	748.8	191.3	733.1	697.2	35.87	20.436	
8,094.5	8,000.0	8,085.6	7,977.0	28.6	20.6	95.56	772.2	196.3	736.1	700.5	35.59	20.683	
8,100.0	8,005.5	8,090.9	7,982.2	28.6	20.6	95.45	773.5	196.6	736.3	700.7	35.57	20.701	
8,200.0	8,105.5	8,187.4	8,075.3	28.7	21.0	93.51	798.3	201.9	739.9	704.7	35.28	20.972	
8,300.0	8,205.5	8,283.9	8,168.4	28.7	21.4	91.58	823.0	207.3	744.5	709.5	34.99	21.279	
8,400.0	8,305.5	8,380.4	8,261.6	28.8	21.9	89.68	847.7	212.6	749.9	715.2	34.74	21.584	
8,500.0	8,405.5	8,478.9	8,356.7	28.8	22.3	87.79	872.6	218.0	756.1	721.6	34.55	21.881	
8,600.0	8,505.5	8,579.5	8,454.3	28.9	22.8	86.00	896.5	223.1	762.7	728.2	34.46	22.136	
8,700.0	8,605.5	8,681.0	8,553.1	28.9	23.2	84.36	919.0	228.0	769.5	735.0	34.43	22.348	
8,800.0	8,705.5	8,783.3	8,653.2	29.0	23.6	82.85	939.9	232.5	776.3	741.8	34.47	22.519	
8,900.0	8,805.5	8,886.3	8,754.3	29.0	24.1	81.49	959.1	236.6	782.9	748.4	34.57	22.650	
9,000.0	8,905.5	8,990.0	8,856.4	29.0	24.5	80.26	976.7	240.4	789.3	754.6	34.71	22.743	
9,100.0	9,005.5	9,094.4	8,959.5	29.1	25.0	79.17	992.6	243.9	795.3	760.4	34.88	22.801	
9,200.0	9,105.5	9,199.3	9,063.4	29.1	25.4	78.22	1,006.7	246.9	800.8	765.8	35.08	22.827	
9,300.0	9,205.5	9,304.7	9,168.1	29.2	25.8	77.40	1,019.1	249.6	805.8	770.5	35.30	22.826	
9,400.0	9,305.5	9,410.6	9,273.4	29.2	26.2	76.71	1,029.5	251.8	810.1	774.6	35.53	22.800	
9,500.0	9,405.5	9,516.8	9,379.2	29.3	26.6	76.16	1,038.1	253.7	813.7	778.0	35.76	22.752	
9,600.0	9,505.5	9,623.3	9,485.5	29.3	27.0	75.72	1,044.8	255.1	816.6	780.6	35.99	22.686	
9,700.0	9,605.5	9,730.0	9,592.1	29.3	27.3	75.42	1,049.6	256.1	818.6	782.4	36.22	22.603	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 803H - 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		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	9,705.5	9,836.9	9,698.9	29.4	27.6	75.24	1,052.4	256.7	819.8	783.4	36.42	22.509		
9,900.0	9,805.5	9,943.4	9,805.5	29.4	27.8	75.18	1,053.2	256.9	820.2	783.6	36.59	22.418		
10,000.0	9,905.5	10,043.4	9,905.5	29.5	27.8	75.18	1,053.2	256.9	820.2	783.5	36.71	22.343		
10,100.0	10,005.5	10,143.4	10,005.5	29.5	27.9	75.18	1,053.2	256.9	820.2	783.4	36.84	22.262		
10,200.0	10,105.5	10,243.4	10,105.5	29.6	27.9	75.18	1,053.2	256.9	820.2	783.2	36.98	22.182		
10,300.0	10,205.5	10,343.4	10,205.5	29.6	28.0	75.18	1,053.2	256.9	820.2	783.1	37.11	22.102		
10,400.0	10,305.5	10,443.4	10,305.5	29.7	28.0	75.18	1,053.2	256.9	820.2	783.0	37.24	22.022		
10,500.0	10,405.5	10,543.4	10,405.5	29.7	28.1	75.18	1,053.2	256.9	820.2	782.8	37.38	21.943		
10,600.0	10,505.5	10,643.4	10,505.5	29.8	28.1	75.18	1,053.2	256.9	820.2	782.7	37.51	21.864		
10,700.0	10,605.5	10,743.4	10,605.5	29.8	28.2	75.18	1,053.2	256.9	820.2	782.6	37.65	21.786		
10,800.0	10,705.5	10,843.4	10,705.5	29.8	28.2	75.18	1,053.2	256.9	820.2	782.4	37.78	21.708		
10,900.0	10,805.5	10,943.4	10,805.5	29.9	28.3	75.18	1,053.2	256.9	820.2	782.3	37.92	21.631		
11,000.0	10,905.5	11,043.4	10,905.5	29.9	28.3	75.18	1,053.2	256.9	820.2	782.1	38.05	21.554		
11,100.0	11,005.5	11,143.4	11,005.5	30.0	28.4	75.18	1,053.2	256.9	820.2	782.0	38.19	21.477		
11,200.0	11,105.5	11,243.4	11,105.5	30.0	28.4	75.18	1,053.2	256.9	820.2	781.9	38.32	21.401		
11,300.0	11,205.5	11,343.4	11,205.5	30.1	28.5	75.18	1,053.2	256.9	820.2	781.7	38.46	21.326		
11,400.0	11,305.5	11,443.4	11,305.5	30.1	28.5	75.18	1,053.2	256.9	820.2	781.6	38.60	21.251		
11,431.0	11,336.5	11,474.4	11,336.5	30.1	28.5	75.18	1,053.2	256.9	820.2	781.6	38.63	21.232		
11,450.0	11,355.5	11,493.4	11,355.5	30.1	28.5	-113.12	1,053.2	256.9	820.4	781.7	38.65	21.226		
11,475.0	11,380.4	11,518.4	11,380.4	30.1	28.6	-113.16	1,053.2	256.9	821.0	782.3	38.67	21.229		
11,500.0	11,405.3	11,543.2	11,405.3	30.0	28.6	-113.22	1,053.2	256.9	822.2	783.5	38.70	21.245		
11,525.0	11,429.9	11,567.8	11,429.9	29.9	28.6	-113.30	1,053.2	256.9	823.9	785.1	38.73	21.273		
11,550.0	11,454.3	11,592.2	11,454.3	29.8	28.6	-113.40	1,053.2	256.9	826.1	787.3	38.76	21.314		
11,575.0	11,478.3	11,616.3	11,478.3	29.7	28.6	-113.50	1,053.2	256.9	828.9	790.1	38.79	21.367		
11,600.0	11,502.0	11,639.9	11,502.0	29.7	28.6	-113.62	1,053.2	256.9	832.3	793.4	38.83	21.432		
11,625.0	11,525.2	11,663.1	11,525.2	29.6	28.6	-113.72	1,053.2	256.9	836.2	797.4	38.88	21.509		
11,650.0	11,547.9	11,685.8	11,547.9	29.5	28.6	-113.82	1,053.2	256.9	840.8	801.9	38.93	21.599		
11,675.0	11,570.0	11,708.0	11,570.0	29.4	28.6	-113.89	1,053.2	256.9	846.0	807.0	38.99	21.700		
11,700.0	11,591.5	11,729.4	11,591.5	29.3	28.7	-113.92	1,053.2	256.9	851.9	812.8	39.06	21.812		
11,725.0	11,612.3	11,750.2	11,612.3	29.2	28.7	-113.91	1,053.2	256.9	858.4	819.3	39.13	21.936		
11,750.0	11,632.3	11,770.2	11,632.3	29.1	28.7	-113.84	1,053.2	256.9	865.7	826.5	39.22	22.071		
11,775.0	11,651.5	11,789.4	11,651.5	29.1	28.7	-113.70	1,053.2	256.9	873.6	834.3	39.32	22.218		
11,800.0	11,669.9	11,807.8	11,669.9	29.0	28.7	-113.48	1,053.2	256.9	882.3	842.9	39.43	22.375		
11,825.0	11,687.3	11,825.2	11,687.3	28.9	28.7	-113.16	1,053.2	256.9	891.7	852.2	39.56	22.543		
11,850.0	11,703.8	11,841.7	11,703.8	28.8	28.7	-112.72	1,053.2	256.9	901.9	862.2	39.69	22.721		
11,875.0	11,719.2	11,857.2	11,719.2	28.8	28.7	-112.17	1,053.2	256.9	912.8	873.0	39.84	22.911		
11,900.0	11,733.6	11,871.6	11,733.6	28.7	28.7	-111.47	1,053.2	256.9	924.5	884.5	40.00	23.111		
11,925.0	11,747.0	11,884.9	11,747.0	28.7	28.7	-110.62	1,053.2	256.9	936.9	896.7	40.17	23.321		
11,950.0	11,759.2	11,897.1	11,759.2	28.6	28.7	-109.60	1,053.2	256.9	950.0	909.6	40.35	23.542		
11,975.0	11,770.2	11,908.1	11,770.2	28.6	28.7	-108.39	1,053.2	256.9	963.8	923.2	40.54	23.773		
12,000.0	11,780.1	11,918.0	11,780.1	28.5	28.8	-106.99	1,053.2	256.9	978.2	937.5	40.73	24.014		
12,025.0	11,788.7	11,926.6	11,788.7	28.5	28.8	-105.37	1,053.2	256.9	993.3	952.4	40.94	24.265		

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 - PAYNE FEDERAL 1_PA - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program: 200-r.5 INC-ONLY													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		
4,300.0	4,265.7	4,237.4	4,265.7	12.9	108.2	64.48	1,175.2	316.6	991.7	839.6	152.12	6.519		
4,400.0	4,363.7	4,341.5	4,369.8	13.3	110.8	65.55	1,175.9	316.6	983.8	828.1	155.79	6.315		
4,500.0	4,461.7	4,433.5	4,461.7	13.7	113.1	66.55	1,175.2	316.6	975.0	816.0	159.04	6.131		
4,600.0	4,559.7	4,531.5	4,559.7	14.1	115.6	67.61	1,175.2	316.6	967.2	804.7	162.49	5.952		
4,686.5	4,644.6	4,544.0	4,572.2	14.5	115.9	67.74	1,175.2	316.6	963.4	800.9	162.50	5.928 CC, ES, SF		
4,700.0	4,657.8	4,544.0	4,572.2	14.6	115.9	67.74	1,175.2	316.6	963.5	801.1	162.33	5.935		
4,800.0	4,755.8	4,544.0	4,572.2	15.0	115.9	67.74	1,175.2	316.6	970.0	809.9	160.11	6.058		
4,900.0	4,853.8	4,544.0	4,572.2	15.4	115.9	67.74	1,175.2	316.6	986.7	830.3	156.40	6.309		

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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' 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		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)			
8,700.0	8,605.5	13,726.9	9,356.3	28.9	77.7	88.17	862.5	58.7	958.0	872.6	85.43	11.213	
8,800.0	8,705.5	13,724.5	9,356.4	29.0	77.7	87.93	865.0	58.6	881.8	792.8	89.04	9.904	
8,900.0	8,805.5	13,722.0	9,356.4	29.0	77.6	87.70	867.4	58.4	810.8	717.7	93.11	8.708	
9,000.0	8,905.5	13,719.6	9,356.5	29.0	77.6	87.46	869.9	58.2	746.5	648.9	97.57	7.651	
9,100.0	9,005.5	13,717.0	9,356.5	29.1	77.5	87.22	872.4	58.1	690.7	588.5	102.18	6.759	
9,200.0	9,105.5	13,714.5	9,356.6	29.1	77.5	86.97	874.9	57.9	645.6	539.1	106.51	6.062	
9,300.0	9,205.5	13,712.0	9,356.7	29.2	77.5	86.73	877.4	57.8	613.6	503.7	109.90	5.584	
9,400.0	9,305.5	13,709.4	9,356.7	29.2	77.4	86.49	879.9	57.6	596.9	485.3	111.65	5.346	
9,451.3	9,356.8	13,708.1	9,356.8	29.2	77.4	86.36	881.2	57.5	594.7	483.0	111.74	5.322 CC, ES, SF	
9,500.0	9,405.5	13,706.9	9,356.8	29.3	77.4	86.24	882.5	57.4	596.7	485.4	111.29	5.362	
9,600.0	9,505.5	13,704.4	9,356.9	29.3	77.3	86.00	885.0	57.3	613.0	504.2	108.87	5.631	
9,700.0	9,605.5	13,701.9	9,356.9	29.3	77.3	85.76	887.5	57.1	644.6	539.7	104.92	6.144	
9,800.0	9,705.5	13,699.3	9,357.0	29.4	77.2	85.51	890.0	57.0	689.4	589.2	100.21	6.879	
9,900.0	9,805.5	13,696.8	9,357.0	29.4	77.2	85.27	892.6	56.8	744.9	649.6	95.39	7.810	
10,000.0	9,905.5	13,694.3	9,357.1	29.5	77.2	85.03	895.1	56.6	809.1	718.2	90.87	8.903	
10,100.0	10,005.5	13,691.7	9,357.2	29.5	77.1	84.78	897.6	56.5	879.9	793.1	86.88	10.129	
10,200.0	10,105.5	13,689.2	9,357.2	29.6	77.1	84.54	900.1	56.3	956.0	872.6	83.45	11.456	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 `BO` 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		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)			
8,900.0	8,805.5	13,760.0	9,333.5	29.0	81.8	-92.87	803.3	-1,337.4	960.5	858.5	101.99	9.417	
9,000.0	8,905.5	13,760.0	9,333.5	29.0	81.8	-92.87	803.3	-1,337.4	909.4	803.3	106.11	8.570	
9,100.0	9,005.5	13,760.0	9,333.5	29.1	81.8	-92.87	803.3	-1,337.4	866.8	756.8	110.05	7.877	
9,200.0	9,105.5	13,759.8	9,333.5	29.1	81.8	-92.85	803.5	-1,337.4	834.1	720.6	113.50	7.349	
9,300.0	9,205.5	13,757.0	9,333.6	29.2	81.7	-92.66	806.3	-1,337.5	812.5	696.4	116.08	6.999	
9,400.0	9,305.5	13,754.2	9,333.6	29.2	81.7	-92.46	809.1	-1,337.6	802.8	685.3	117.55	6.830	
9,428.2	9,333.7	13,753.4	9,333.7	29.2	81.7	-92.40	809.9	-1,337.6	802.3	684.6	117.73	6.815 CC, ES, SF	
9,500.0	9,405.5	13,751.4	9,333.7	29.3	81.6	-92.26	811.9	-1,337.7	805.5	687.8	117.72	6.843	
9,600.0	9,505.5	13,748.6	9,333.8	29.3	81.6	-92.06	814.7	-1,337.8	820.5	703.9	116.62	7.036	
9,700.0	9,605.5	13,745.8	9,333.9	29.3	81.6	-91.86	817.5	-1,338.0	847.1	732.7	114.45	7.401	
9,800.0	9,705.5	13,743.0	9,334.0	29.4	81.5	-91.66	820.3	-1,338.1	884.3	772.7	111.52	7.929	
9,900.0	9,805.5	13,740.2	9,334.0	29.4	81.5	-91.46	823.1	-1,338.2	930.7	822.6	108.13	8.607	
10,000.0	9,905.5	13,737.4	9,334.1	29.5	81.4	-91.26	825.8	-1,338.3	985.1	880.6	104.58	9.420	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 W0AP FEDERAL COM 003H - OWB - AWP													Offset Site Error: 0.0 usft	
Survey Program: 99-r.5 MWD													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)			
11,100.0	11,005.5	16,571.4	11,835.5	30.0	87.1	92.24	822.7	-3.8	986.2	885.2	101.02	9.762		
11,200.0	11,105.5	16,568.9	11,835.6	30.0	87.1	91.98	825.1	-3.8	903.6	799.4	104.26	8.668		
11,300.0	11,205.5	16,566.6	11,835.6	30.1	87.1	91.73	827.4	-3.7	825.0	717.0	107.94	7.643		
11,400.0	11,305.5	16,564.5	11,835.6	30.1	87.0	91.50	829.5	-3.7	751.4	639.3	112.06	6.705		
11,431.0	11,336.5	16,563.9	11,835.6	30.1	87.0	91.43	830.2	-3.7	729.8	616.4	113.40	6.436		
11,450.0	11,355.5	16,563.9	11,835.6	30.1	87.0	-98.92	830.1	-3.7	717.0	602.8	114.25	6.276		
11,475.0	11,380.4	16,562.8	11,835.7	30.1	87.0	-101.58	831.2	-3.7	700.7	585.4	115.31	6.077		
11,500.0	11,405.3	16,565.2	11,835.6	30.0	87.0	-103.66	828.8	-3.7	685.1	568.7	116.48	5.882		
11,525.0	11,429.9	16,568.9	11,835.6	29.9	87.1	-105.42	825.2	-3.7	670.4	552.7	117.66	5.697		
11,550.0	11,454.3	16,573.7	11,835.5	29.8	87.2	-106.86	820.4	-3.8	656.5	537.6	118.85	5.524		
11,575.0	11,478.3	16,579.7	11,835.5	29.7	87.3	-108.00	814.4	-3.8	643.5	523.5	120.03	5.362		
11,600.0	11,502.0	16,586.8	11,835.4	29.7	87.4	-108.86	807.2	-3.9	631.6	510.4	121.19	5.212		
11,625.0	11,525.2	16,595.2	11,835.3	29.6	87.5	-109.45	798.9	-3.9	620.7	498.4	122.31	5.075		
11,650.0	11,547.9	16,604.6	11,835.2	29.5	87.6	-109.80	789.4	-4.0	610.9	487.6	123.39	4.951		
11,675.0	11,570.0	16,615.2	11,835.1	29.4	87.8	-109.91	778.8	-4.0	602.3	477.9	124.42	4.841		
11,700.0	11,591.5	16,626.9	11,834.9	29.3	88.0	-109.80	767.2	-4.0	594.8	469.4	125.38	4.744		
11,725.0	11,612.3	16,639.6	11,834.8	29.2	88.2	-109.49	754.5	-4.0	588.3	462.1	126.26	4.660		
11,750.0	11,632.3	16,653.7	11,834.7	29.1	88.4	-108.98	740.4	-4.0	583.1	456.0	127.09	4.588		
11,775.0	11,651.5	16,669.4	11,834.6	29.1	88.6	-108.26	724.7	-4.0	578.8	451.0	127.86	4.527		
11,800.0	11,669.9	16,686.2	11,834.6	29.0	88.9	-107.39	707.9	-4.1	575.6	447.0	128.56	4.477		
11,825.0	11,687.3	16,704.0	11,834.6	28.9	89.1	-106.40	690.0	-4.1	573.3	444.1	129.19	4.438		
11,850.0	11,703.8	16,722.9	11,834.7	28.8	89.4	-105.31	671.2	-4.2	571.9	442.1	129.76	4.407		
11,875.0	11,719.2	16,742.7	11,834.8	28.8	89.7	-104.15	651.3	-4.3	571.2	441.0	130.28	4.385		
11,894.2	11,730.4	16,765.3	11,835.1	28.7	90.1	-102.84	628.7	-4.7	571.1	440.2	130.92	4.362 CC		
11,900.0	11,733.6	16,770.2	11,835.2	28.7	90.1	-102.57	623.9	-4.7	571.1	440.1	131.02	4.359 ES		
11,925.0	11,747.0	16,791.3	11,835.4	28.7	90.5	-101.39	602.7	-5.2	571.5	440.1	131.45	4.348		
11,950.0	11,759.2	16,813.1	11,835.7	28.6	90.8	-100.21	580.9	-5.6	572.5	440.7	131.85	4.342 SF		
11,975.0	11,770.2	16,820.0	11,835.8	28.6	90.9	-99.69	574.1	-5.7	574.2	442.6	131.61	4.363		
12,000.0	11,780.1	16,820.0	11,835.8	28.5	90.9	-99.35	574.1	-5.7	577.1	446.2	130.93	4.408		
12,025.0	11,788.7	16,820.0	11,835.8	28.5	90.9	-98.84	574.1	-5.7	581.3	451.2	130.08	4.469		
12,050.0	11,796.1	16,820.0	11,835.8	28.5	90.9	-98.18	574.1	-5.7	586.7	457.7	129.05	4.546		
12,075.0	11,802.2	16,820.0	11,835.8	28.5	90.9	-97.37	574.1	-5.7	593.3	465.4	127.88	4.640		
12,100.0	11,807.1	16,820.0	11,835.8	28.5	90.9	-96.40	574.1	-5.7	601.1	474.5	126.59	4.748		
12,125.0	11,810.7	16,820.0	11,835.8	28.4	90.9	-95.28	574.1	-5.7	609.9	484.7	125.18	4.872		
12,150.0	11,813.0	16,820.0	11,835.8	28.5	90.9	-94.00	574.1	-5.7	619.7	496.0	123.69	5.010		
12,175.0	11,813.9	16,820.0	11,835.8	28.5	90.9	-92.58	574.1	-5.7	630.4	508.2	122.13	5.162		
12,181.0	11,814.0	16,820.0	11,835.8	28.5	90.9	-92.22	574.1	-5.7	633.1	511.3	121.75	5.200		
12,200.0	11,814.0	16,820.0	11,835.8	28.5	90.9	-92.21	574.1	-5.7	641.9	521.3	120.51	5.326		
12,300.0	11,814.0	16,820.0	11,835.8	28.6	90.9	-92.17	574.1	-5.7	693.2	579.6	113.60	6.102		
12,400.0	11,814.0	16,820.0	11,835.8	28.6	90.9	-92.11	574.1	-5.7	751.7	645.2	106.44	7.062		
12,500.0	11,814.0	16,820.0	11,835.8	28.7	90.9	-92.05	574.1	-5.7	815.7	716.2	99.48	8.200		
12,600.0	11,814.0	16,820.0	11,835.8	28.8	90.9	-91.99	574.1	-5.7	884.0	791.1	92.96	9.510		
12,614.1	11,814.0	16,820.0	11,835.8	28.9	90.9	-91.98	574.1	-5.7	894.0	801.9	92.07	9.710		
12,700.0	11,814.0	16,820.0	11,835.8	29.0	90.9	-91.98	574.1	-5.7	956.5	869.5	87.04	10.989		

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 W0BO FEDERAL COM 004H - OWB - AWP											Offset Site Error:	0.0 usft
Survey Program: 829-r.5 MWD											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor
11,200.0	11,105.5	16,534.5	11,814.0	30.0	85.4	-89.96	843.9	-1,185.7	961.3	869.1	92.17	10.430
11,300.0	11,205.5	16,533.6	11,814.0	30.1	85.4	-89.88	844.8	-1,185.7	890.2	794.0	96.16	9.257
11,400.0	11,305.5	16,532.7	11,814.0	30.1	85.4	-89.80	845.7	-1,185.7	825.0	724.3	100.74	8.190
11,431.0	11,336.5	16,532.4	11,814.0	30.1	85.3	-89.78	846.0	-1,185.7	806.3	704.0	102.26	7.885
11,450.0	11,355.5	16,532.6	11,814.0	30.1	85.4	83.54	845.8	-1,185.7	795.1	691.9	103.21	7.704
11,475.0	11,380.4	16,534.0	11,814.0	30.1	85.4	85.51	844.5	-1,185.7	780.8	676.3	104.51	7.472
11,500.0	11,405.3	16,536.6	11,814.0	30.0	85.4	87.27	841.9	-1,185.7	767.0	661.2	105.83	7.247
11,525.0	11,429.9	16,540.4	11,813.9	29.9	85.5	88.83	838.0	-1,185.8	753.6	646.5	107.18	7.032
11,550.0	11,454.3	16,545.5	11,813.9	29.8	85.5	90.18	832.9	-1,185.8	740.8	632.3	108.54	6.825
11,575.0	11,478.3	16,549.0	11,813.9	29.7	85.6	91.55	829.4	-1,185.9	728.6	618.8	109.88	6.631
11,600.0	11,502.0	16,558.5	11,813.8	29.7	85.8	92.32	819.9	-1,186.0	717.1	605.8	111.29	6.443
11,625.0	11,525.2	16,566.5	11,813.7	29.6	85.9	93.12	811.9	-1,186.1	706.1	593.5	112.65	6.268
11,650.0	11,547.9	16,575.6	11,813.6	29.5	86.0	93.73	802.8	-1,186.3	695.9	581.9	113.99	6.105
11,675.0	11,570.0	16,585.8	11,813.5	29.4	86.2	94.18	792.6	-1,186.4	686.3	571.0	115.32	5.952
11,700.0	11,591.5	16,597.0	11,813.3	29.3	86.3	94.46	781.5	-1,186.7	677.5	560.8	116.60	5.810
11,725.0	11,612.3	16,609.1	11,813.2	29.2	86.5	94.60	769.3	-1,186.9	669.3	551.4	117.86	5.679
11,750.0	11,632.3	16,622.2	11,813.0	29.1	86.7	94.61	756.2	-1,187.3	661.8	542.7	119.06	5.558
11,775.0	11,651.5	16,636.3	11,812.9	29.1	86.9	94.50	742.2	-1,187.6	654.9	534.7	120.22	5.447
11,800.0	11,669.9	16,652.1	11,812.7	29.0	87.2	94.23	726.4	-1,188.1	648.7	527.3	121.34	5.346
11,825.0	11,687.3	16,669.7	11,812.6	28.9	87.5	93.83	708.8	-1,188.6	643.0	520.6	122.42	5.252
11,850.0	11,703.8	16,688.3	11,812.5	28.8	87.8	93.36	690.1	-1,189.1	637.8	514.4	123.45	5.167
11,875.0	11,719.2	16,708.0	11,812.6	28.8	88.1	92.84	670.5	-1,189.6	633.1	508.7	124.42	5.088
11,900.0	11,733.6	16,728.6	11,812.8	28.7	88.4	92.31	649.9	-1,190.2	628.7	503.4	125.33	5.016
11,925.0	11,747.0	16,749.6	11,813.2	28.7	88.7	91.81	628.9	-1,190.7	624.7	498.5	126.19	4.950
11,950.0	11,759.2	16,771.2	11,813.7	28.6	89.0	91.34	607.3	-1,191.2	621.0	494.0	127.00	4.889
11,975.0	11,770.2	16,793.7	11,814.3	28.6	89.4	90.90	584.8	-1,191.8	617.4	489.7	127.78	4.832
12,000.0	11,780.1	16,815.0	11,814.8	28.5	89.7	90.57	563.5	-1,192.3	614.1	485.6	128.48	4.780
12,025.0	11,788.7	16,815.0	11,814.8	28.5	89.7	90.89	563.5	-1,192.3	611.4	482.7	128.74	4.749
12,050.0	11,796.1	16,815.0	11,814.8	28.5	89.7	91.09	563.5	-1,192.3	609.7	480.9	128.80	4.734 SF
12,075.0	11,802.2	16,815.0	11,814.8	28.5	89.7	91.17	563.5	-1,192.3	609.1	480.5	128.65	4.735 ES
12,077.1	11,802.7	16,815.0	11,814.8	28.5	89.7	91.17	563.5	-1,192.3	609.1	480.5	128.63	4.735 CC
12,100.0	11,807.1	16,815.0	11,814.8	28.5	89.7	91.11	563.5	-1,192.3	609.6	481.3	128.29	4.751
12,125.0	11,810.7	16,815.0	11,814.8	28.4	89.7	90.94	563.5	-1,192.3	611.0	483.3	127.72	4.784
12,150.0	11,813.0	16,815.0	11,814.8	28.5	89.7	90.63	563.5	-1,192.3	613.6	486.6	126.95	4.833
12,175.0	11,813.9	16,815.0	11,814.8	28.5	89.7	90.20	563.5	-1,192.3	617.1	491.1	125.99	4.898
12,181.0	11,814.0	16,815.0	11,814.8	28.5	89.7	90.08	563.5	-1,192.3	618.1	492.4	125.73	4.916
12,200.0	11,814.0	16,815.0	11,814.8	28.5	89.7	90.08	563.5	-1,192.3	621.7	496.8	124.85	4.979
12,300.0	11,814.0	16,815.0	11,814.8	28.6	89.7	90.08	563.5	-1,192.3	651.4	532.3	119.14	5.468
12,400.0	11,814.0	16,815.0	11,814.8	28.6	89.7	90.08	563.5	-1,192.3	697.4	585.0	112.40	6.205
12,500.0	11,814.0	16,815.0	11,814.8	28.7	89.7	90.09	563.5	-1,192.3	756.7	651.1	105.64	7.163
12,600.0	11,814.0	16,815.0	11,814.8	28.8	89.7	90.09	563.5	-1,192.3	826.3	726.8	99.47	8.307
12,614.1	11,814.0	16,815.0	11,814.8	28.9	89.7	90.09	563.5	-1,192.3	836.9	738.2	98.67	8.482
12,700.0	11,814.0	16,815.0	11,814.8	29.0	89.7	90.09	563.5	-1,192.3	903.0	809.0	94.09	9.598
12,800.0	11,814.0	16,815.0	11,814.8	29.1	89.7	90.09	563.5	-1,192.3	984.0	894.6	89.40	11.006

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 W1BO FEDERAL COM 003H - 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		Distance		No-Go	Separation	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)	Distance (usft)	Factor	
11,300.0	11,205.5	16,769.6	12,091.0	30.1	84.1	-78.59	884.0	-736.4	908.8	828.7	80.13	11.342	
11,400.0	11,305.5	16,773.2	12,091.2	30.1	84.2	-79.58	880.4	-736.6	811.7	730.3	81.39	9.973	
11,431.0	11,336.5	16,774.3	12,091.2	30.1	84.2	-79.89	879.3	-736.6	781.7	699.9	81.84	9.552	
11,450.0	11,355.5	16,775.3	12,091.2	30.1	84.2	99.76	878.2	-736.6	763.4	681.3	82.14	9.294	
11,475.0	11,380.4	16,777.9	12,091.3	30.1	84.3	109.08	875.7	-736.7	739.4	656.9	82.56	8.956	
11,500.0	11,405.3	16,781.7	12,091.5	30.0	84.3	116.89	871.9	-736.9	715.6	632.6	83.00	8.621	
11,525.0	11,429.9	16,786.8	12,091.7	29.9	84.4	123.25	866.8	-737.1	692.0	608.5	83.48	8.290	
11,550.0	11,454.3	16,793.1	12,091.9	29.8	84.5	128.38	860.5	-737.3	668.8	584.8	83.98	7.963	
11,575.0	11,478.3	16,800.7	12,092.2	29.7	84.6	132.51	852.8	-737.5	645.9	561.4	84.52	7.642	
11,600.0	11,502.0	16,809.6	12,092.6	29.7	84.8	135.83	844.0	-737.8	623.5	538.4	85.08	7.328	
11,625.0	11,525.2	16,819.7	12,093.0	29.6	84.9	138.52	833.9	-738.0	601.5	515.8	85.67	7.021	
11,650.0	11,547.9	16,831.0	12,093.5	29.5	85.1	140.72	822.6	-738.3	580.1	493.8	86.29	6.723	
11,675.0	11,570.0	16,843.9	12,094.0	29.4	85.3	142.50	809.8	-738.6	559.3	472.4	86.94	6.434	
11,700.0	11,591.5	16,857.9	12,094.6	29.3	85.5	143.96	795.8	-738.9	539.2	451.6	87.62	6.154	
11,725.0	11,612.3	16,872.9	12,095.2	29.2	85.7	145.15	780.8	-739.3	519.8	431.5	88.32	5.885	
11,750.0	11,632.3	16,888.9	12,095.8	29.1	86.0	146.14	764.8	-739.7	501.1	412.0	89.05	5.627	
11,775.0	11,651.5	16,905.8	12,096.5	29.1	86.2	146.95	747.9	-740.3	483.2	393.4	89.79	5.381	
11,800.0	11,669.9	16,923.7	12,097.1	29.0	86.5	147.62	730.0	-740.8	466.1	375.6	90.55	5.148	
11,825.0	11,687.3	16,943.5	12,097.7	28.9	86.8	148.12	710.3	-741.6	449.9	358.5	91.37	4.924	
11,850.0	11,703.8	16,964.3	12,098.2	28.8	87.1	148.50	689.4	-742.4	434.5	342.3	92.23	4.712	
11,875.0	11,719.2	16,985.8	12,098.6	28.8	87.5	148.80	668.0	-743.5	420.0	327.0	93.09	4.512	
11,900.0	11,733.6	17,008.0	12,098.8	28.7	87.8	149.02	645.9	-744.7	406.4	312.5	93.97	4.325	
11,925.0	11,747.0	17,029.9	12,098.9	28.7	88.1	149.20	623.9	-746.0	393.8	299.0	94.80	4.153	
11,950.0	11,759.2	17,051.6	12,099.0	28.6	88.5	149.38	602.3	-747.3	382.1	286.6	95.55	3.999	
11,975.0	11,770.2	17,073.9	12,099.0	28.6	88.8	149.54	580.0	-748.6	371.5	275.2	96.27	3.859	
12,000.0	11,780.1	17,085.0	12,099.1	28.5	89.0	149.91	569.0	-749.2	362.1	266.0	96.17	3.766	
12,025.0	11,788.7	17,085.0	12,099.1	28.5	89.0	150.34	569.0	-749.2	355.2	260.2	94.96	3.740 SF	
12,050.0	11,796.1	17,085.0	12,099.1	28.5	89.0	150.59	569.0	-749.2	351.1	257.8	93.29	3.763 ES	
12,073.3	11,801.9	17,085.0	12,099.1	28.5	89.0	150.66	569.0	-749.2	349.8	258.5	91.32	3.831 CC	
12,075.0	11,802.2	17,085.0	12,099.1	28.5	89.0	150.66	569.0	-749.2	349.8	258.7	91.16	3.837	
12,100.0	11,807.1	17,085.0	12,099.1	28.5	89.0	150.56	569.0	-749.2	351.5	262.9	88.62	3.966	
12,125.0	11,810.7	17,085.0	12,099.1	28.4	89.0	150.29	569.0	-749.2	356.0	270.2	85.77	4.151	
12,150.0	11,813.0	17,085.0	12,099.1	28.5	89.0	149.83	569.0	-749.2	363.3	280.6	82.73	4.391	
12,175.0	11,813.9	17,085.0	12,099.1	28.5	89.0	149.18	569.0	-749.2	373.2	293.5	79.62	4.687	
12,181.0	11,814.0	17,085.0	12,099.1	28.5	89.0	148.99	569.0	-749.2	375.9	297.0	78.88	4.766	
12,200.0	11,814.0	17,085.0	12,099.1	28.5	89.0	149.17	569.0	-749.2	385.1	308.6	76.56	5.031	
12,300.0	11,814.0	17,085.0	12,099.1	28.6	89.0	150.47	569.0	-749.2	444.9	378.9	66.04	6.737	
12,400.0	11,814.0	17,085.0	12,099.1	28.6	89.0	152.38	569.0	-749.2	518.4	459.5	58.83	8.812	
12,500.0	11,814.0	17,085.0	12,099.1	28.7	89.0	154.97	569.0	-749.2	600.4	546.0	54.37	11.044	
12,600.0	11,814.0	17,085.0	12,099.1	28.8	89.0	158.30	569.0	-749.2	687.9	636.1	51.77	13.289	
12,614.1	11,814.0	17,085.0	12,099.1	28.9	89.0	158.84	569.0	-749.2	700.6	649.1	51.50	13.603	
12,700.0	11,814.0	17,085.0	12,099.1	29.0	89.0	158.84	569.0	-749.2	778.7	728.5	50.25	15.498	
12,800.0	11,814.0	17,085.0	12,099.1	29.1	89.0	158.84	569.0	-749.2	871.6	822.3	49.29	17.682	
12,900.0	11,814.0	17,085.0	12,099.1	29.2	89.0	158.84	569.0	-749.2	965.9	917.2	48.70	19.834	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 28 1H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program: 797-r.5 MWD													Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis			Distance		Rule Assigned:			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
0.0	0.0	0.0	9.8	3.0	0.0	131.53	-139.1	157.1	210.0					
100.0	100.0	90.9	100.7	3.1	4.1	131.47	-138.8	157.1	209.6	201.6	8.02	26.152		
200.0	200.0	191.6	201.4	3.3	8.7	131.27	-138.0	157.2	209.1	195.3	13.82	15.130		
300.0	300.0	292.4	302.2	3.5	13.3	130.94	-136.5	157.3	208.3	188.3	20.01	10.411		
400.0	400.0	393.1	402.8	3.8	17.9	130.46	-134.4	157.5	207.1	180.8	26.29	7.876		
500.0	500.0	493.8	503.5	4.0	22.5	129.83	-131.6	157.8	205.5	172.9	32.62	6.302		
600.0	600.0	594.4	604.1	4.1	27.0	129.05	-128.3	158.2	203.7	164.7	38.96	5.228		
700.0	700.0	695.0	704.6	4.3	31.6	128.11	-124.3	158.6	201.5	156.2	45.32	4.448		
800.0	800.0	795.6	805.0	4.5	36.2	126.99	-119.8	159.0	199.1	147.6	51.52	3.865		
852.7	852.7	843.3	852.7	4.6	36.3	126.44	-117.9	159.7	198.5	146.8	51.63	3.844 CC, ES, SF		
900.0	900.0	888.0	897.4	4.7	36.3	125.97	-116.9	161.1	199.0	147.4	51.65	3.853		
1,000.0	1,000.0	984.2	993.5	4.8	36.3	125.22	-116.3	164.8	201.8	150.2	51.66	3.907		
1,100.0	1,100.0	1,084.5	1,093.8	5.0	36.3	124.69	-116.6	168.5	205.0	153.2	51.72	3.963		
1,200.0	1,200.0	1,185.3	1,194.5	5.2	36.3	124.38	-117.3	171.5	207.8	156.0	51.79	4.013		
1,300.0	1,300.0	1,286.0	1,295.1	5.3	36.4	124.24	-118.3	173.8	210.3	158.4	51.85	4.056		
1,400.0	1,400.0	1,386.8	1,396.0	5.5	36.4	124.26	-119.5	175.5	212.4	160.4	51.93	4.089		
1,500.0	1,500.0	1,487.3	1,496.4	5.6	36.4	124.40	-121.0	176.7	214.2	162.2	52.00	4.119		
1,600.0	1,600.0	1,588.2	1,597.4	5.8	36.4	124.61	-122.5	177.4	215.6	163.5	52.07	4.141		
1,700.0	1,700.0	1,689.5	1,698.6	5.9	36.5	124.92	-124.0	177.6	216.6	164.5	52.14	4.154		
1,800.0	1,800.0	1,791.1	1,800.2	6.0	36.5	125.35	-125.5	176.9	216.9	164.7	52.21	4.154		
1,900.0	1,900.0	1,892.0	1,901.1	6.2	36.5	125.97	-127.2	175.3	216.6	164.3	52.27	4.143		
2,000.0	2,000.0	1,992.7	2,001.7	6.3	36.5	126.76	-129.2	173.0	215.9	163.6	52.33	4.126		
2,100.0	2,100.0	2,092.6	2,101.6	6.5	36.5	102.85	-130.9	170.6	215.3	163.0	52.38	4.111		
2,120.4	2,120.4	2,112.9	2,121.9	6.5	36.5	103.15	-131.3	170.1	215.3	162.9	52.39	4.110		
2,200.0	2,199.9	2,193.0	2,201.9	6.7	36.5	104.56	-132.4	168.4	215.5	163.0	52.43	4.110		
2,300.0	2,299.7	2,293.2	2,302.1	6.9	36.5	106.81	-133.4	166.1	216.2	163.7	52.49	4.119		
2,333.3	2,332.9	2,326.5	2,335.5	6.9	36.5	107.69	-133.7	165.4	216.6	164.1	52.50	4.126		
2,400.0	2,399.3	2,393.1	2,402.0	7.0	36.6	124.01	-134.3	163.7	218.4	165.9	52.54	4.158		
2,500.0	2,498.8	2,492.9	2,501.7	7.2	36.6	144.02	-135.3	160.9	224.2	171.6	52.61	4.262		
2,600.0	2,598.1	2,591.5	2,600.3	7.4	36.6	158.16	-136.2	158.1	233.7	181.0	52.68	4.435		
2,700.0	2,697.0	2,689.8	2,698.5	7.6	36.6	167.93	-137.3	155.7	246.9	194.2	52.76	4.680		
2,800.0	2,795.4	2,788.0	2,796.7	7.9	36.6	174.74	-138.2	153.5	263.7	210.8	52.86	4.988		
2,825.7	2,820.6	2,813.1	2,821.8	7.9	36.6	176.14	-138.5	153.0	268.5	215.6	52.88	5.078		
2,900.0	2,893.5	2,884.7	2,893.4	8.1	36.6	176.59	-139.1	152.0	283.1	230.1	52.95	5.347		
3,000.0	2,991.5	2,979.8	2,988.6	8.4	36.7	176.91	-139.8	151.8	303.3	250.3	53.03	5.720		
3,100.0	3,089.5	3,073.6	3,082.3	8.7	36.7	176.90	-140.4	153.6	324.7	271.6	53.12	6.113		
3,200.0	3,187.5	3,172.6	3,181.2	9.0	36.7	176.56	-140.1	157.2	346.5	293.3	53.25	6.507		
3,300.0	3,285.5	3,272.3	3,280.8	9.3	36.7	176.06	-138.7	161.6	367.8	314.4	53.39	6.889		
3,400.0	3,383.6	3,371.2	3,379.6	9.6	36.7	175.51	-136.5	166.3	388.7	335.2	53.53	7.262		
3,500.0	3,481.6	3,471.3	3,479.6	9.9	36.8	175.08	-134.2	170.3	409.2	355.5	53.69	7.622		
3,600.0	3,579.6	3,570.8	3,579.1	10.3	36.8	174.91	-132.6	172.8	429.3	375.5	53.85	7.973		
3,700.0	3,677.6	3,668.6	3,676.8	10.6	36.8	174.88	-131.4	174.2	449.0	395.0	54.00	8.314		
3,800.0	3,775.6	3,758.9	3,767.0	11.0	36.8	174.86	-131.0	176.2	469.8	415.6	54.13	8.679		
3,900.0	3,873.6	3,851.7	3,859.9	11.4	36.9	174.80	-131.4	179.2	491.8	437.6	54.28	9.061		
4,000.0	3,971.6	3,947.5	3,955.5	11.7	36.9	174.77	-132.2	182.5	514.4	459.9	54.46	9.445		
4,100.0	4,069.7	4,037.1	4,045.1	12.1	36.9	174.75	-133.7	186.1	537.9	483.3	54.60	9.852		
4,200.0	4,167.7	4,129.3	4,137.1	12.5	37.0	174.74	-136.2	190.4	562.5	507.8	54.78	10.270		
4,300.0	4,265.7	4,230.5	4,238.3	12.9	37.0	174.95	-140.3	193.5	587.3	532.2	55.04	10.669		
4,400.0	4,363.7	4,338.5	4,346.2	13.3	37.0	175.04	-142.9	196.8	610.7	555.3	55.35	11.034		
4,500.0	4,461.7	4,443.2	4,450.8	13.7	37.1	175.17	-144.3	198.5	632.5	576.9	55.63	11.369		
4,600.0	4,559.7	4,541.7	4,549.3	14.1	37.1	175.31	-145.6	199.6	653.9	598.0	55.89	11.700		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 - WILDER FEDERAL 28 1H - OWB - AWP												Offset Site Error:	0.0 usft
Survey Program: 797-r.5 MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		No-Go Distance (usft)	Warning
4,700.0	4,657.8	4,641.3	4,648.9	14.6	37.2	175.47	-146.9	200.3	675.1	618.9	56.16	12.020	
4,800.0	4,755.8	4,739.8	4,747.3	15.0	37.2	175.61	-147.9	201.0	696.1	639.6	56.44	12.334	
4,900.0	4,853.8	4,836.4	4,844.0	15.4	37.3	175.74	-148.9	201.6	717.1	660.3	56.71	12.645	
5,000.0	4,951.8	4,934.0	4,941.5	15.8	37.3	175.86	-150.1	202.5	738.3	681.3	56.99	12.954	
5,100.0	5,049.8	5,031.7	5,039.3	16.2	37.4	175.98	-151.2	203.1	759.3	702.0	57.29	13.255	
5,200.0	5,147.8	5,128.9	5,136.4	16.7	37.4	176.09	-152.4	203.9	780.6	723.0	57.59	13.555	
5,300.0	5,245.8	5,228.9	5,236.4	17.1	37.5	176.18	-153.4	204.8	801.7	743.8	57.91	13.844	
5,400.0	5,343.9	5,326.2	5,333.7	17.5	37.5	176.29	-154.4	205.4	822.5	764.3	58.22	14.128	
5,500.0	5,441.9	5,423.8	5,431.3	18.0	37.6	176.39	-155.5	205.9	843.6	785.1	58.54	14.410	
5,600.0	5,539.9	5,521.0	5,528.5	18.4	37.6	176.49	-156.6	206.5	864.6	805.7	58.87	14.686	
5,700.0	5,637.9	5,621.5	5,629.0	18.8	37.7	176.58	-157.7	207.1	885.6	826.4	59.23	14.953	
5,800.0	5,735.9	5,718.3	5,725.8	19.3	37.7	176.67	-158.6	207.5	906.4	846.8	59.56	15.216	
5,900.0	5,833.9	5,815.2	5,822.6	19.7	37.8	176.74	-159.5	208.3	927.3	867.4	59.91	15.478	
6,000.0	5,932.0	5,917.2	5,924.7	20.2	37.8	176.82	-160.4	208.8	948.1	887.8	60.29	15.726	
6,100.0	6,030.0	6,015.8	6,023.2	20.6	37.9	176.89	-161.0	209.2	968.6	908.0	60.66	15.969	
6,200.0	6,128.0	6,108.2	6,115.6	21.1	37.9	176.95	-161.8	209.6	989.3	928.3	61.00	16.218	

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 28 1H - ST01 - AWP													Offset Site Error: 0.0 usft
Survey Program: 797-r.5 MWD, 8616-r.5 MWD													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)			
0.0	0.0	0.0	9.8	3.0	0.0	131.53	-139.1	157.1	210.0				
100.0	100.0	90.9	100.7	3.1	4.1	131.47	-138.8	157.1	209.6	201.6	8.02	26.152	
200.0	200.0	191.6	201.4	3.3	8.7	131.27	-138.0	157.2	209.1	195.3	13.82	15.130	
300.0	300.0	292.4	302.2	3.5	13.3	130.94	-136.5	157.3	208.3	188.3	20.01	10.411	
400.0	400.0	393.1	402.8	3.8	17.9	130.46	-134.4	157.5	207.1	180.8	26.29	7.876	
500.0	500.0	493.8	503.5	4.0	22.5	129.83	-131.6	157.8	205.5	172.9	32.62	6.302	
600.0	600.0	594.4	604.1	4.1	27.0	129.05	-128.3	158.2	203.7	164.7	38.96	5.228	
700.0	700.0	695.0	704.6	4.3	31.6	128.11	-124.3	158.6	201.5	156.2	45.32	4.448	
800.0	800.0	795.6	805.0	4.5	36.2	126.99	-119.8	159.0	199.1	147.6	51.52	3.865	
852.7	852.7	843.3	852.7	4.6	36.3	126.44	-117.9	159.7	198.5	146.8	51.63	3.844 CC, ES, SF	
900.0	900.0	888.0	897.4	4.7	36.3	125.97	-116.9	161.1	199.0	147.4	51.65	3.853	
1,000.0	1,000.0	984.2	993.5	4.8	36.3	125.22	-116.3	164.8	201.8	150.2	51.66	3.907	
1,100.0	1,100.0	1,084.5	1,093.8	5.0	36.3	124.69	-116.6	168.5	205.0	153.2	51.72	3.963	
1,200.0	1,200.0	1,185.3	1,194.5	5.2	36.3	124.38	-117.3	171.5	207.8	156.0	51.79	4.013	
1,300.0	1,300.0	1,286.0	1,295.1	5.3	36.4	124.24	-118.3	173.8	210.3	158.4	51.85	4.056	
1,400.0	1,400.0	1,386.8	1,396.0	5.5	36.4	124.26	-119.5	175.5	212.4	160.4	51.93	4.089	
1,500.0	1,500.0	1,487.3	1,496.4	5.6	36.4	124.40	-121.0	176.7	214.2	162.2	52.00	4.119	
1,600.0	1,600.0	1,588.2	1,597.4	5.8	36.4	124.61	-122.5	177.4	215.6	163.5	52.07	4.141	
1,700.0	1,700.0	1,689.5	1,698.6	5.9	36.5	124.92	-124.0	177.6	216.6	164.5	52.14	4.154	
1,800.0	1,800.0	1,791.1	1,800.2	6.0	36.5	125.35	-125.5	176.9	216.9	164.7	52.21	4.154	
1,900.0	1,900.0	1,892.0	1,901.1	6.2	36.5	125.97	-127.2	175.3	216.6	164.3	52.27	4.143	
2,000.0	2,000.0	1,992.7	2,001.7	6.3	36.5	126.76	-129.2	173.0	215.9	163.6	52.33	4.126	
2,100.0	2,100.0	2,092.6	2,101.6	6.5	36.5	102.85	-130.9	170.6	215.3	163.0	52.38	4.111	
2,120.4	2,120.4	2,112.9	2,121.9	6.5	36.5	103.15	-131.3	170.1	215.3	162.9	52.39	4.110	
2,200.0	2,199.9	2,193.0	2,201.9	6.7	36.5	104.56	-132.4	168.4	215.5	163.0	52.43	4.110	
2,300.0	2,299.7	2,293.2	2,302.1	6.9	36.5	106.81	-133.4	166.1	216.2	163.7	52.49	4.119	
2,333.3	2,332.9	2,326.5	2,335.5	6.9	36.5	107.69	-133.7	165.4	216.6	164.1	52.50	4.126	
2,400.0	2,399.3	2,393.1	2,402.0	7.0	36.6	124.01	-134.3	163.7	218.4	165.9	52.54	4.158	
2,500.0	2,498.8	2,492.9	2,501.7	7.2	36.6	144.02	-135.3	160.9	224.2	171.6	52.61	4.262	
2,600.0	2,598.1	2,591.5	2,600.3	7.4	36.6	158.16	-136.2	158.1	233.7	181.0	52.68	4.435	
2,700.0	2,697.0	2,689.8	2,698.5	7.6	36.6	167.93	-137.3	155.7	246.9	194.2	52.76	4.680	
2,800.0	2,795.4	2,788.0	2,796.7	7.9	36.6	174.74	-138.2	153.5	263.7	210.8	52.86	4.988	
2,825.7	2,820.6	2,813.1	2,821.8	7.9	36.6	176.14	-138.5	153.0	268.5	215.6	52.88	5.078	
2,900.0	2,893.5	2,884.7	2,893.4	8.1	36.6	176.59	-139.1	152.0	283.1	230.1	52.95	5.347	
3,000.0	2,991.5	2,979.8	2,988.6	8.4	36.7	176.91	-139.8	151.8	303.3	250.3	53.03	5.720	
3,100.0	3,089.5	3,073.6	3,082.3	8.7	36.7	176.90	-140.4	153.6	324.7	271.6	53.12	6.113	
3,200.0	3,187.5	3,172.6	3,181.2	9.0	36.7	176.56	-140.1	157.2	346.5	293.3	53.25	6.507	
3,300.0	3,285.5	3,272.3	3,280.8	9.3	36.7	176.06	-138.7	161.6	367.8	314.4	53.39	6.889	
3,400.0	3,383.6	3,371.2	3,379.6	9.6	36.7	175.51	-136.5	166.3	388.7	335.2	53.53	7.262	
3,500.0	3,481.6	3,471.3	3,479.6	9.9	36.8	175.08	-134.2	170.3	409.2	355.5	53.69	7.622	
3,600.0	3,579.6	3,570.8	3,579.1	10.3	36.8	174.91	-132.6	172.8	429.3	375.5	53.85	7.973	
3,700.0	3,677.6	3,668.6	3,676.8	10.6	36.8	174.88	-131.4	174.2	449.0	395.0	54.00	8.314	
3,800.0	3,775.6	3,758.9	3,767.0	11.0	36.8	174.86	-131.0	176.2	469.8	415.6	54.13	8.679	
3,900.0	3,873.6	3,851.7	3,859.9	11.4	36.9	174.80	-131.4	179.2	491.8	437.6	54.28	9.061	
4,000.0	3,971.6	3,947.5	3,955.5	11.7	36.9	174.77	-132.2	182.5	514.4	459.9	54.46	9.445	
4,100.0	4,069.7	4,037.1	4,045.1	12.1	36.9	174.75	-133.7	186.1	537.9	483.3	54.60	9.852	
4,200.0	4,167.7	4,129.3	4,137.1	12.5	37.0	174.74	-136.2	190.4	562.5	507.8	54.78	10.270	
4,300.0	4,265.7	4,230.5	4,238.3	12.9	37.0	174.95	-140.3	193.5	587.3	532.2	55.04	10.669	
4,400.0	4,363.7	4,338.5	4,346.2	13.3	37.0	175.04	-142.9	196.8	610.7	555.3	55.35	11.034	
4,500.0	4,461.7	4,443.2	4,450.8	13.7	37.1	175.17	-144.3	198.5	632.5	577.0	55.52	11.391	
4,600.0	4,559.7	4,541.7	4,549.3	14.1	37.1	175.31	-145.6	199.6	653.9	598.1	55.78	11.723	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 - WILDER FEDERAL 28 1H - ST01 - AWP												Offset Site Error:	0.0 usft
Survey Program: 797-r.5 MWD, 8616-r.5 MWD												Offset Well Error:	0.0 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
4,700.0	4,657.8	4,641.3	4,648.9	14.6	37.2	175.47	-146.9	200.3	675.1	619.0		56.05	12.044
4,800.0	4,755.8	4,739.8	4,747.3	15.0	37.2	175.61	-147.9	201.0	696.1	639.7		56.33	12.358
4,900.0	4,853.8	4,836.4	4,844.0	15.4	37.3	175.74	-148.9	201.6	717.1	660.5		56.60	12.669
5,000.0	4,951.8	4,934.0	4,941.5	15.8	37.3	175.86	-150.1	202.5	738.3	681.4		56.88	12.979
5,100.0	5,049.8	5,031.7	5,039.3	16.2	37.4	175.98	-151.2	203.1	759.3	702.1		57.18	13.280
5,200.0	5,147.8	5,128.9	5,136.4	16.7	37.4	176.09	-152.4	203.9	780.6	723.1		57.48	13.581
5,300.0	5,245.8	5,228.9	5,236.4	17.1	37.5	176.18	-153.4	204.8	801.7	743.9		57.80	13.870
5,400.0	5,343.9	5,326.2	5,333.7	17.5	37.5	176.29	-154.4	205.4	822.5	764.4		58.11	14.154
5,500.0	5,441.9	5,423.8	5,431.3	18.0	37.6	176.39	-155.5	205.9	843.6	785.2		58.43	14.437
5,600.0	5,539.9	5,521.0	5,528.5	18.4	37.6	176.49	-156.6	206.5	864.6	805.8		58.76	14.713
5,700.0	5,637.9	5,621.5	5,629.0	18.8	37.7	176.58	-157.7	207.1	885.6	826.5		59.12	14.981
5,800.0	5,735.9	5,718.3	5,725.8	19.3	37.7	176.67	-158.6	207.5	906.4	846.9		59.46	15.244
5,900.0	5,833.9	5,815.2	5,822.6	19.7	37.8	176.74	-159.5	208.3	927.3	867.5		59.80	15.506
6,000.0	5,932.0	5,917.2	5,924.7	20.2	37.8	176.82	-160.4	208.8	948.1	888.0		60.18	15.754
6,100.0	6,030.0	6,015.8	6,023.2	20.6	37.9	176.89	-161.0	209.2	968.6	908.1		60.55	15.998
6,200.0	6,128.0	6,108.2	6,115.6	21.1	37.9	176.95	-161.8	209.6	989.3	928.4		60.89	16.248

CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 28 2H - OWB - AWP													Offset Site Error: 0.0 usft
Survey Program: 100-GYD-CT-CMS, 4372-r.5 MWD													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)			
3,600.0	3,579.6	3,623.6	3,614.2	10.3	7.3	-59.61	148.9	-1,087.2	990.5	974.2	16.33	60.657	
3,700.0	3,677.6	3,726.9	3,717.3	10.6	7.5	-60.56	150.7	-1,083.5	976.8	960.0	16.73	58.391	
3,800.0	3,775.6	3,831.2	3,821.6	11.0	7.8	-61.62	151.4	-1,078.7	962.4	945.2	17.13	56.170	
3,900.0	3,873.6	3,924.2	3,914.5	11.4	8.0	-62.63	151.4	-1,074.5	948.4	930.9	17.52	54.128	
4,000.0	3,971.6	4,022.4	4,012.6	11.7	8.3	-63.77	150.7	-1,070.1	935.0	917.1	17.91	52.190	
4,100.0	4,069.7	4,124.5	4,114.5	12.1	8.5	-65.08	148.5	-1,065.1	921.6	903.3	18.31	50.346	
4,200.0	4,167.7	4,220.2	4,210.0	12.5	8.8	-66.38	146.0	-1,059.9	908.3	889.6	18.71	48.552	
4,300.0	4,265.7	4,309.3	4,299.1	12.9	9.0	-67.60	144.0	-1,055.7	896.2	877.1	19.13	46.856	
4,400.0	4,363.7	4,399.6	4,389.3	13.3	9.3	-68.81	142.4	-1,052.4	885.4	866.1	19.32	45.837	
4,500.0	4,461.7	4,488.6	4,478.2	13.7	9.3	-70.02	141.0	-1,049.8	875.8	856.2	19.55	44.802	
4,600.0	4,559.7	4,571.5	4,561.1	14.1	9.4	-71.08	140.5	-1,048.8	868.1	848.3	19.80	43.853	
4,700.0	4,657.8	4,668.7	4,658.3	14.6	9.5	-72.25	141.3	-1,048.9	861.6	841.6	20.03	43.021	
4,800.0	4,755.8	4,764.4	4,754.0	15.0	9.6	-73.37	142.5	-1,049.4	855.8	835.5	20.24	42.283	
4,900.0	4,853.8	4,863.7	4,853.2	15.4	9.6	-74.54	144.0	-1,050.0	850.3	829.9	20.45	41.573	
5,000.0	4,951.8	4,959.2	4,948.7	15.8	9.7	-75.66	145.6	-1,050.7	845.2	824.5	20.67	40.897	
5,100.0	5,049.8	5,049.7	5,039.2	16.2	9.8	-76.72	147.1	-1,052.1	841.3	820.5	20.88	40.301	
5,200.0	5,147.8	5,149.8	5,139.3	16.7	9.8	-77.88	148.9	-1,054.0	838.0	816.9	21.09	39.729	
5,300.0	5,245.8	5,242.3	5,231.7	17.1	9.9	-78.94	150.9	-1,056.1	835.2	813.9	21.31	39.196	
5,400.0	5,343.9	5,330.4	5,319.8	17.5	10.0	-80.01	151.5	-1,058.6	833.9	812.3	21.52	38.748	
5,434.0	5,377.2	5,360.2	5,349.6	17.7	10.0	-80.39	151.4	-1,059.5	833.8	812.2	21.59	38.613	
5,500.0	5,441.9	5,422.6	5,412.0	18.0	10.1	-81.21	150.7	-1,061.8	834.1	812.4	21.74	38.369	
5,600.0	5,539.9	5,540.3	5,529.7	18.4	10.2	-82.69	151.0	-1,064.6	833.3	811.3	22.00	37.885	
5,700.0	5,637.9	5,640.8	5,630.1	18.8	10.3	-83.92	152.2	-1,066.5	832.1	809.9	22.24	37.409	
5,800.0	5,735.9	5,732.7	5,722.0	19.3	10.4	-85.04	153.5	-1,068.2	831.2	808.7	22.49	36.957 CC	
5,804.4	5,740.3	5,736.4	5,725.7	19.3	10.4	-85.08	153.5	-1,068.3	831.2	808.7	22.50	36.940 ES	
5,900.0	5,833.9	5,818.4	5,807.7	19.7	10.5	-86.15	153.1	-1,070.6	832.2	809.5	22.74	36.596	
6,000.0	5,932.0	5,912.3	5,901.5	20.2	10.6	-87.41	151.7	-1,073.5	834.7	811.6	23.02	36.261	
6,100.0	6,030.0	6,010.4	5,999.5	20.6	10.7	-88.72	150.0	-1,076.7	837.7	814.4	23.32	35.923	
6,200.0	6,128.0	6,109.7	6,098.7	21.1	10.8	-90.03	148.4	-1,079.9	841.2	817.5	23.64	35.580	
6,300.0	6,226.0	6,209.3	6,198.3	21.5	10.9	-91.35	146.9	-1,082.9	844.8	820.8	23.98	35.225	
6,400.0	6,324.0	6,306.0	6,295.0	21.9	11.0	-92.61	145.4	-1,085.8	848.9	824.6	24.34	34.879	
6,500.0	6,422.0	6,404.8	6,393.7	22.4	11.1	-93.87	144.0	-1,089.0	853.6	828.8	24.72	34.535	
6,600.0	6,520.0	6,503.6	6,492.4	22.8	11.3	-95.12	142.7	-1,092.1	858.4	833.3	25.11	34.183	
6,700.0	6,618.1	6,599.4	6,588.2	23.3	11.4	-96.34	141.1	-1,094.9	863.8	838.3	25.52	33.845	
6,800.0	6,716.1	6,698.7	6,687.4	23.7	11.5	-97.58	139.4	-1,098.0	869.8	843.8	25.96	33.502	
6,900.0	6,814.1	6,796.7	6,785.3	24.2	11.7	-98.77	138.1	-1,101.1	876.0	849.5	26.41	33.161	
6,951.1	6,864.2	6,849.7	6,838.3	24.4	11.8	-99.40	137.5	-1,102.9	879.3	852.6	26.65	32.998	
7,000.0	6,912.1	6,905.5	6,894.0	24.6	11.9	-100.02	137.7	-1,105.0	882.1	855.3	26.88	32.816	
7,100.0	7,010.5	7,004.3	6,992.7	25.1	12.1	-100.96	139.2	-1,109.2	887.4	860.2	27.30	32.511	
7,200.0	7,109.1	7,104.3	7,092.7	25.5	12.3	-101.78	140.7	-1,113.5	892.7	865.0	27.70	32.232	
7,300.0	7,208.0	7,201.0	7,189.3	25.9	12.4	-102.48	141.8	-1,117.6	897.8	869.7	28.07	31.985	
7,400.0	7,307.2	7,296.5	7,284.7	26.4	12.6	-103.08	142.6	-1,121.7	903.0	874.6	28.43	31.765	
7,500.0	7,406.6	7,395.0	7,383.1	26.8	12.8	-103.59	143.1	-1,125.9	908.2	879.4	28.78	31.557	
7,600.0	7,506.1	7,495.5	7,483.5	27.1	13.1	-104.01	143.4	-1,130.1	913.0	883.9	29.12	31.355	
7,700.0	7,605.8	7,594.7	7,582.7	27.5	13.3	-104.33	143.6	-1,134.1	917.4	888.0	29.43	31.173	
7,800.0	7,705.6	7,694.3	7,682.1	27.9	13.5	-104.54	143.7	-1,137.9	921.4	891.7	29.72	31.004	
7,900.0	7,805.5	7,793.7	7,781.4	28.2	13.7	-104.66	143.6	-1,141.7	925.1	895.1	29.99	30.851	
8,000.0	7,905.5	7,891.8	7,879.5	28.5	13.9	-104.70	143.1	-1,145.1	928.4	898.1	30.23	30.712	
8,094.5	8,000.0	7,982.1	7,969.8	28.6	14.1	-138.86	142.3	-1,148.5	931.5	901.1	30.41	30.631	
8,100.0	8,005.5	7,987.7	7,975.4	28.6	14.1	-138.85	142.3	-1,148.7	931.7	901.3	30.42	30.628	
8,200.0	8,105.5	8,088.1	8,075.7	28.7	14.4	-138.72	141.4	-1,152.5	934.9	904.2	30.68	30.473	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 - WILDER FEDERAL 28 2H - OWB - AWP													Offset Site Error:	0.0 usft
Survey Program: 100-GYD-CT-CMS, 4372-r.5 MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
8,300.0	8,205.5	8,185.7	8,173.2	28.7	14.6	-138.58	140.4	-1,156.3	938.2	907.3	30.87	30.392		
8,400.0	8,305.5	8,286.2	8,273.6	28.8	14.8	-138.47	139.0	-1,160.0	941.7	910.6	31.08	30.296		
8,500.0	8,405.5	8,388.2	8,375.5	28.8	15.0	-138.34	137.9	-1,163.7	944.9	913.6	31.30	30.185		
8,600.0	8,505.5	8,488.9	8,476.2	28.9	15.3	-138.23	136.8	-1,167.2	948.0	916.5	31.52	30.081 SF		
8,700.0	8,605.5	8,559.5	8,546.7	28.9	15.4	-138.17	135.4	-1,169.8	952.1	920.5	31.63	30.103		
8,800.0	8,705.5	8,611.0	8,598.0	29.0	15.5	-138.18	131.8	-1,172.8	961.1	929.4	31.69	30.327		
8,900.0	8,805.5	8,655.3	8,641.8	29.0	15.6	-138.25	126.3	-1,176.2	975.2	943.5	31.74	30.724		
9,000.0	8,905.5	8,704.0	8,689.5	29.0	15.7	-138.38	117.6	-1,180.9	994.8	962.9	31.84	31.243		

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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 @ 3170.8usft

Offset Depths are relative to Offset Datum

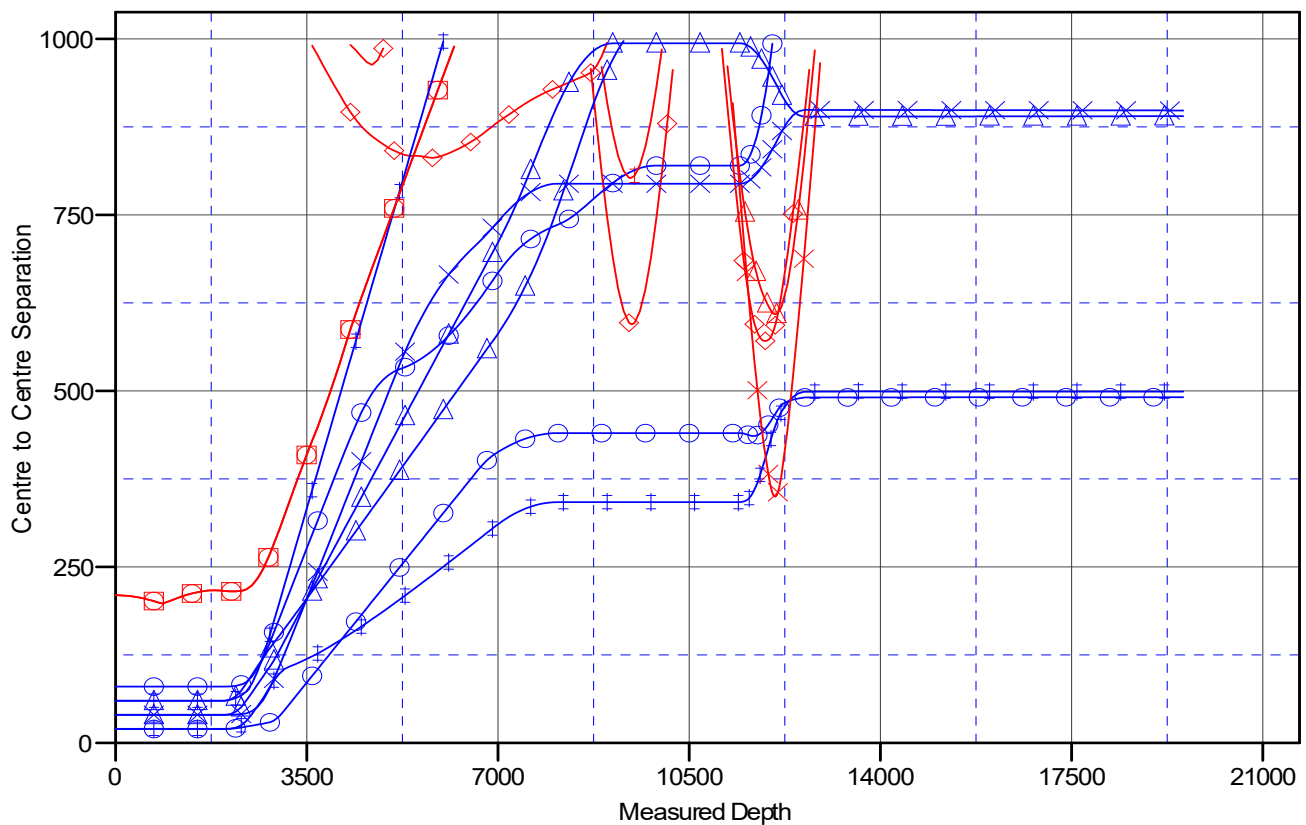
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _ZIA HILLS UNIT 2832 WC 709H

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

Grid Convergence at Surface is: 0.35°

Ladder Plot



LEGEND

_ZIA HILLS UNIT 2832 WC 710H OWB, PWP0 V0 _ZIA HILLS UNIT 2832 WC 708H OWB, PWP0 V0 - RED HILLS WEST 21 FEDERAL COM 1H, OWB, AWP V0 _ZIA HILLS UNIT 2832 WC 803H OWB, PWP0 V0 - WILDER FEDERAL 28 2H, OWB, AWP V0 - RED HILLS WEST 21 W1BO FEDERAL COM 003H, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 707H OWB, PWP0 V0 - PAYNE FEDERAL 1 PA, OWB, AWP V0 _ZIA HILLS UNIT 2832 WC 712H OWB, PWP0 V0 - RED HILLS WEST 21 W0BO FEDERAL COM 004H, OWB, AWP V0 - WILDER FEDERAL 28 1H, OWB, AWP V0 - WILDER FEDERAL 28 1H, STD, AWP V0	- RED HILLS WEST 21 'BO' FEDERAL COM 1H, OWB, AWP V0 _ZIA HILLS UNIT 2832 WC 802H OWB, PWP0 V0 - RED HILLS WEST 21 W0AP FEDERAL COM 003H, OWB, AWP V0 _ZIA HILLS UNIT 2832 WC 711H OWB, PWP0 V0
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CC - Min centre to center distance or convergent 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 709H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	KB @ 3170.8usft
Reference Site:	ZIA HILLS UNIT 2832 PROJECT	MD Reference:	KB @ 3170.8usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2832 WC 709H	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 @ 3170.8usft

Offset Depths are relative to Offset Datum

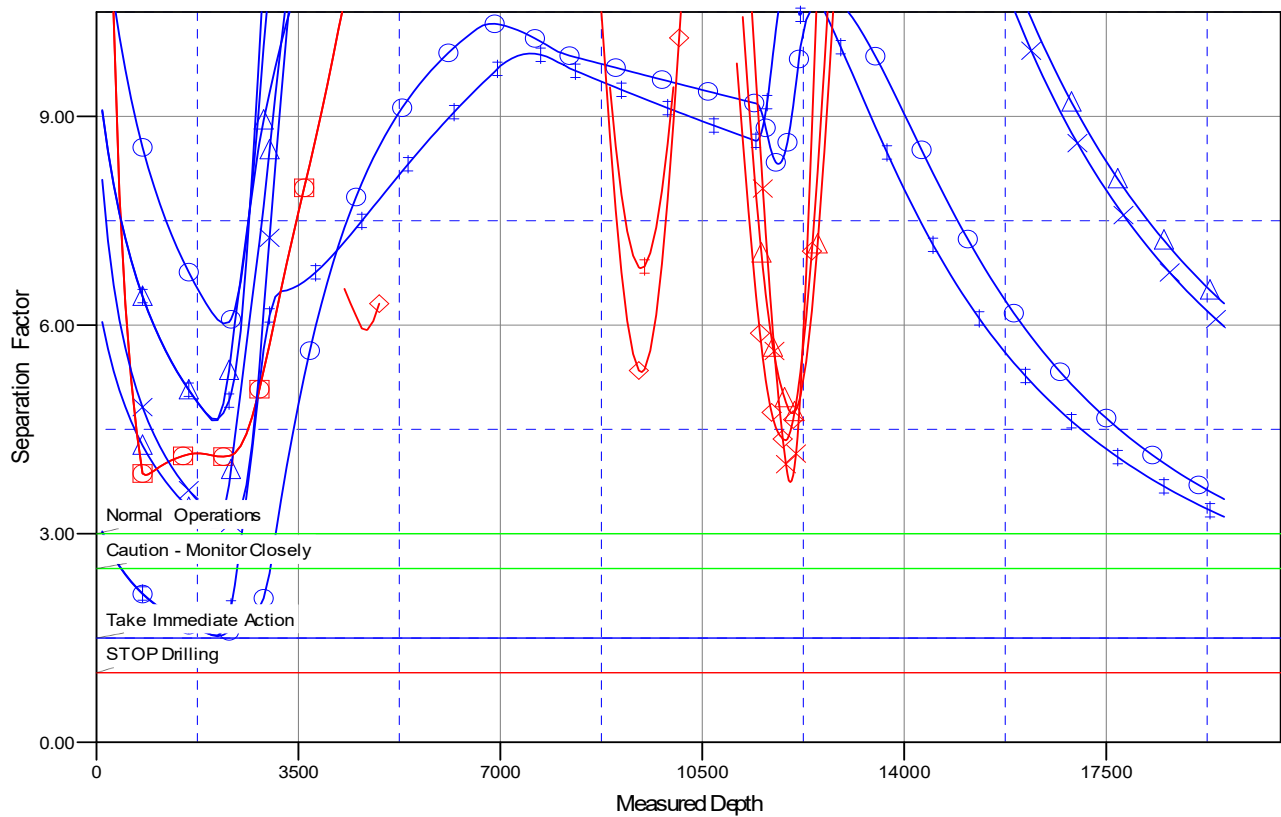
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _ZIA HILLS UNIT 2832 WC 709H

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

Grid Convergence at Surface is: 0.35°

Separation Factor Plot



LEGEND

_ZIA HILLS UNIT 2832 WC 710H OWB, PWP0 V0	_ZIA HILLS UNIT 2832 WC 709H OWB, PWP0 V0	RED HILLS WEST 21 'B0' FEDERAL COM 1H, OWB, AWP V0
_ZIA HILLS UNIT 2832 WC 708H OWB, PWP0 V0	PAYNE FEDERAL 1 PA, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 802H OWB, PWP0 V0
RED HILLS WEST 21 FEDERAL COM 1H, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 712H OWB, PWP0 V0	RED HILLS WEST 21 W0AP FEDERAL COM 003H, OWB, AWP V0
_ZIA HILLS UNIT 2832 WC 803H OWB, PWP0 V0	RED HILLS WEST 21 W0BO FEDERAL COM 004H, OWB, AWP V0	_ZIA HILLS UNIT 2832 WC 711H OWB, PWP0 V0
WILDER FEDERAL 28 2H, OWB, AWP V0	WILDER FEDERAL 28 1H, OWB, AWP V0	
RED HILLS WEST 21 W1BO FEDERAL COM 003H, OWB, AWP V0	WILDER FEDERAL 28 1H, STD, AWP V0	

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

DELAWARE BASIN EAST

ZIA HILLS UNIT AREA

ZIA HILLS UNIT 2832 PROJECT

_ZIA HILLS UNIT 2832 WC 709H

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 709H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3170.8usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3170.8usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 709H	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	6.26	59.51	47,132.20374305

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	184.83

Plan Survey Tool Program		Date	2/25/2025		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,544.4 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	
2,333.3	5.00	25.00	2,332.9	13.2	6.1	1.50	1.50	0.00	25.00	
2,825.7	11.43	325.79	2,820.6	73.1	-12.3	2.00	1.31	-12.03	-84.74	
6,951.1	11.43	325.79	6,864.2	749.5	-472.1	0.00	0.00	0.00	0.00	
8,094.5	0.00	0.00	8,000.0	843.5	-536.0	1.00	-1.00	0.00	180.00	
11,431.0	0.00	0.00	11,336.5	843.5	-536.0	0.00	0.00	0.00	0.00	
12,181.0	90.00	188.30	11,814.0	371.0	-604.9	12.00	12.00	0.00	188.30	
12,614.1	90.00	179.64	11,814.0	-60.7	-634.9	2.00	0.00	-2.00	-90.00	
19,544.6	90.00	179.64	11,814.0	-6,991.0	-591.0	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 709H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3170.8usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3170.8usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 709H	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	1.50	25.00	2,100.0	1.2	0.6	-1.2	1.50	1.50	0.00
2,200.0	3.00	25.00	2,199.9	4.7	2.2	-4.9	1.50	1.50	0.00
2,300.0	4.50	25.00	2,299.7	10.7	5.0	-11.1	1.50	1.50	0.00
2,333.3	5.00	25.00	2,332.9	13.2	6.1	-13.6	1.50	1.50	0.00
2,400.0	5.29	10.45	2,399.3	18.8	7.9	-19.4	2.00	0.44	-21.83
2,500.0	6.26	352.90	2,498.8	28.8	8.1	-29.4	2.00	0.96	-17.54
2,600.0	7.63	340.82	2,598.1	40.5	5.2	-40.7	2.00	1.38	-12.08
2,700.0	9.24	332.66	2,697.0	53.9	-0.6	-53.6	2.00	1.61	-8.17
2,800.0	10.97	326.97	2,795.4	69.0	-9.5	-67.9	2.00	1.74	-5.69
2,825.7	11.43	325.79	2,820.6	73.1	-12.3	-71.8	2.00	1.79	-4.60
2,900.0	11.43	325.79	2,893.5	85.3	-20.6	-83.3	0.00	0.00	0.00
3,000.0	11.43	325.79	2,991.5	101.7	-31.7	-98.7	0.00	0.00	0.00
3,100.0	11.43	325.79	3,089.5	118.1	-42.8	-114.1	0.00	0.00	0.00
3,200.0	11.43	325.79	3,187.5	134.5	-54.0	-129.5	0.00	0.00	0.00
3,300.0	11.43	325.79	3,285.5	150.9	-65.1	-144.9	0.00	0.00	0.00
3,400.0	11.43	325.79	3,383.6	167.3	-76.3	-160.3	0.00	0.00	0.00
3,500.0	11.43	325.79	3,481.6	183.7	-87.4	-175.7	0.00	0.00	0.00
3,600.0	11.43	325.79	3,579.6	200.1	-98.6	-191.1	0.00	0.00	0.00
3,700.0	11.43	325.79	3,677.6	216.5	-109.7	-206.5	0.00	0.00	0.00
3,800.0	11.43	325.79	3,775.6	232.9	-120.9	-221.9	0.00	0.00	0.00
3,900.0	11.43	325.79	3,873.6	249.3	-132.0	-237.2	0.00	0.00	0.00
4,000.0	11.43	325.79	3,971.6	265.6	-143.2	-252.6	0.00	0.00	0.00
4,100.0	11.43	325.79	4,069.7	282.0	-154.3	-268.0	0.00	0.00	0.00
4,200.0	11.43	325.79	4,167.7	298.4	-165.4	-283.4	0.00	0.00	0.00
4,300.0	11.43	325.79	4,265.7	314.8	-176.6	-298.8	0.00	0.00	0.00
4,400.0	11.43	325.79	4,363.7	331.2	-187.7	-314.2	0.00	0.00	0.00
4,500.0	11.43	325.79	4,461.7	347.6	-198.9	-329.6	0.00	0.00	0.00
4,600.0	11.43	325.79	4,559.7	364.0	-210.0	-345.0	0.00	0.00	0.00
4,700.0	11.43	325.79	4,657.8	380.4	-221.2	-360.4	0.00	0.00	0.00
4,800.0	11.43	325.79	4,755.8	396.8	-232.3	-375.8	0.00	0.00	0.00
4,900.0	11.43	325.79	4,853.8	413.2	-243.5	-391.2	0.00	0.00	0.00
5,000.0	11.43	325.79	4,951.8	429.6	-254.6	-406.6	0.00	0.00	0.00
5,100.0	11.43	325.79	5,049.8	446.0	-265.8	-422.0	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3170.8usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3170.8usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 709H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,200.0	11.43	325.79	5,147.8	462.4	-276.9	-437.4	0.00	0.00	0.00
5,300.0	11.43	325.79	5,245.8	478.8	-288.0	-452.8	0.00	0.00	0.00
5,400.0	11.43	325.79	5,343.9	495.2	-299.2	-468.2	0.00	0.00	0.00
5,500.0	11.43	325.79	5,441.9	511.6	-310.3	-483.6	0.00	0.00	0.00
5,600.0	11.43	325.79	5,539.9	528.0	-321.5	-499.0	0.00	0.00	0.00
5,700.0	11.43	325.79	5,637.9	544.4	-332.6	-514.4	0.00	0.00	0.00
5,800.0	11.43	325.79	5,735.9	560.7	-343.8	-529.8	0.00	0.00	0.00
5,900.0	11.43	325.79	5,833.9	577.1	-354.9	-545.2	0.00	0.00	0.00
6,000.0	11.43	325.79	5,932.0	593.5	-366.1	-560.6	0.00	0.00	0.00
6,100.0	11.43	325.79	6,030.0	609.9	-377.2	-576.0	0.00	0.00	0.00
6,200.0	11.43	325.79	6,128.0	626.3	-388.4	-591.4	0.00	0.00	0.00
6,300.0	11.43	325.79	6,226.0	642.7	-399.5	-606.8	0.00	0.00	0.00
6,400.0	11.43	325.79	6,324.0	659.1	-410.6	-622.2	0.00	0.00	0.00
6,500.0	11.43	325.79	6,422.0	675.5	-421.8	-637.6	0.00	0.00	0.00
6,600.0	11.43	325.79	6,520.0	691.9	-432.9	-653.0	0.00	0.00	0.00
6,700.0	11.43	325.79	6,618.1	708.3	-444.1	-668.4	0.00	0.00	0.00
6,800.0	11.43	325.79	6,716.1	724.7	-455.2	-683.8	0.00	0.00	0.00
6,900.0	11.43	325.79	6,814.1	741.1	-466.4	-699.2	0.00	0.00	0.00
6,951.1	11.43	325.79	6,864.2	749.5	-472.1	-707.0	0.00	0.00	0.00
7,000.0	10.94	325.79	6,912.1	757.3	-477.4	-714.4	1.00	-1.00	0.00
7,100.0	9.94	325.79	7,010.5	772.3	-487.6	-728.5	1.00	-1.00	0.00
7,200.0	8.94	325.79	7,109.1	785.9	-496.8	-741.2	1.00	-1.00	0.00
7,300.0	7.94	325.79	7,208.0	798.0	-505.1	-752.6	1.00	-1.00	0.00
7,400.0	6.94	325.79	7,307.2	808.7	-512.4	-762.7	1.00	-1.00	0.00
7,500.0	5.94	325.79	7,406.6	818.0	-518.7	-771.4	1.00	-1.00	0.00
7,600.0	4.94	325.79	7,506.1	825.9	-524.0	-778.8	1.00	-1.00	0.00
7,700.0	3.94	325.79	7,605.8	832.3	-528.4	-784.8	1.00	-1.00	0.00
7,800.0	2.94	325.79	7,705.6	837.2	-531.7	-789.5	1.00	-1.00	0.00
7,900.0	1.94	325.79	7,805.5	840.8	-534.1	-792.8	1.00	-1.00	0.00
8,000.0	0.94	325.79	7,905.5	842.9	-535.6	-794.8	1.00	-1.00	0.00
8,094.5	0.00	0.00	8,000.0	843.5	-536.0	-795.4	1.00	-1.00	0.00
8,100.0	0.00	0.00	8,005.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,200.0	0.00	0.00	8,105.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,300.0	0.00	0.00	8,205.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,400.0	0.00	0.00	8,305.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,500.0	0.00	0.00	8,405.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,600.0	0.00	0.00	8,505.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,700.0	0.00	0.00	8,605.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,800.0	0.00	0.00	8,705.5	843.5	-536.0	-795.4	0.00	0.00	0.00
8,900.0	0.00	0.00	8,805.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,000.0	0.00	0.00	8,905.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,100.0	0.00	0.00	9,005.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,200.0	0.00	0.00	9,105.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,300.0	0.00	0.00	9,205.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,400.0	0.00	0.00	9,305.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,500.0	0.00	0.00	9,405.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,600.0	0.00	0.00	9,505.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,700.0	0.00	0.00	9,605.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,800.0	0.00	0.00	9,705.5	843.5	-536.0	-795.4	0.00	0.00	0.00
9,900.0	0.00	0.00	9,805.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,000.0	0.00	0.00	9,905.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,100.0	0.00	0.00	10,005.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,200.0	0.00	0.00	10,105.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,300.0	0.00	0.00	10,205.5	843.5	-536.0	-795.4	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3170.8usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3170.8usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 709H	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)
10,400.0	0.00	0.00	10,305.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,500.0	0.00	0.00	10,405.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,600.0	0.00	0.00	10,505.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,700.0	0.00	0.00	10,605.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,800.0	0.00	0.00	10,705.5	843.5	-536.0	-795.4	0.00	0.00	0.00
10,900.0	0.00	0.00	10,805.5	843.5	-536.0	-795.4	0.00	0.00	0.00
11,000.0	0.00	0.00	10,905.5	843.5	-536.0	-795.4	0.00	0.00	0.00
11,100.0	0.00	0.00	11,005.5	843.5	-536.0	-795.4	0.00	0.00	0.00
11,200.0	0.00	0.00	11,105.5	843.5	-536.0	-795.4	0.00	0.00	0.00
11,300.0	0.00	0.00	11,205.5	843.5	-536.0	-795.4	0.00	0.00	0.00
11,400.0	0.00	0.00	11,305.5	843.5	-536.0	-795.4	0.00	0.00	0.00
11,431.0	0.00	0.00	11,336.5	843.5	-536.0	-795.4	0.00	0.00	0.00
11,500.0	8.28	188.30	11,405.3	838.6	-536.7	-790.4	12.00	12.00	0.00
11,600.0	20.28	188.30	11,502.0	814.2	-540.3	-765.8	12.00	12.00	0.00
11,700.0	32.28	188.30	11,591.5	770.5	-546.7	-721.7	12.00	12.00	0.00
11,800.0	44.28	188.30	11,669.9	709.3	-555.6	-660.0	12.00	12.00	0.00
11,900.0	56.28	188.30	11,733.6	633.3	-566.7	-583.3	12.00	12.00	0.00
12,000.0	68.28	188.30	11,780.1	545.9	-579.4	-495.1	12.00	12.00	0.00
12,100.0	80.28	188.30	11,807.1	450.8	-593.3	-399.2	12.00	12.00	0.00
12,181.0	90.00	188.30	11,814.0	371.0	-604.9	-318.8	12.00	12.00	0.00
12,200.0	90.00	187.92	11,814.0	352.2	-607.6	-299.8	2.00	0.00	-2.00
12,300.0	90.00	185.92	11,814.0	253.0	-619.7	-199.9	2.00	0.00	-2.00
12,400.0	90.00	183.92	11,814.0	153.3	-628.2	-99.9	2.00	0.00	-2.00
12,500.0	90.00	181.92	11,814.0	53.5	-633.3	0.1	2.00	0.00	-2.00
12,600.0	90.00	179.92	11,814.0	-46.5	-634.9	99.8	2.00	0.00	-2.00
12,614.1	90.00	179.64	11,814.0	-60.7	-634.9	113.9	2.00	0.00	-2.00
12,700.0	90.00	179.64	11,814.0	-146.5	-634.3	199.4	0.00	0.00	0.00
12,800.0	90.00	179.64	11,814.0	-246.5	-633.7	299.0	0.00	0.00	0.00
12,900.0	90.00	179.64	11,814.0	-346.5	-633.1	398.6	0.00	0.00	0.00
13,000.0	90.00	179.64	11,814.0	-446.5	-632.4	498.2	0.00	0.00	0.00
13,100.0	90.00	179.64	11,814.0	-546.5	-631.8	597.8	0.00	0.00	0.00
13,200.0	90.00	179.64	11,814.0	-646.5	-631.2	697.4	0.00	0.00	0.00
13,300.0	90.00	179.64	11,814.0	-746.5	-630.5	797.0	0.00	0.00	0.00
13,400.0	90.00	179.64	11,814.0	-846.5	-629.9	896.5	0.00	0.00	0.00
13,500.0	90.00	179.64	11,814.0	-946.5	-629.3	996.1	0.00	0.00	0.00
13,600.0	90.00	179.64	11,814.0	-1,046.5	-628.6	1,095.7	0.00	0.00	0.00
13,700.0	90.00	179.64	11,814.0	-1,146.5	-628.0	1,195.3	0.00	0.00	0.00
13,800.0	90.00	179.64	11,814.0	-1,246.5	-627.4	1,294.9	0.00	0.00	0.00
13,900.0	90.00	179.64	11,814.0	-1,346.5	-626.7	1,394.5	0.00	0.00	0.00
14,000.0	90.00	179.64	11,814.0	-1,446.5	-626.1	1,494.1	0.00	0.00	0.00
14,100.0	90.00	179.64	11,814.0	-1,546.5	-625.5	1,593.7	0.00	0.00	0.00
14,200.0	90.00	179.64	11,814.0	-1,646.5	-624.8	1,693.3	0.00	0.00	0.00
14,300.0	90.00	179.64	11,814.0	-1,746.5	-624.2	1,792.9	0.00	0.00	0.00
14,400.0	90.00	179.64	11,814.0	-1,846.5	-623.6	1,892.4	0.00	0.00	0.00
14,500.0	90.00	179.64	11,814.0	-1,946.5	-622.9	1,992.0	0.00	0.00	0.00
14,600.0	90.00	179.64	11,814.0	-2,046.5	-622.3	2,091.6	0.00	0.00	0.00
14,700.0	90.00	179.64	11,814.0	-2,146.5	-621.7	2,191.2	0.00	0.00	0.00
14,800.0	90.00	179.64	11,814.0	-2,246.5	-621.0	2,290.8	0.00	0.00	0.00
14,900.0	90.00	179.64	11,814.0	-2,346.5	-620.4	2,390.4	0.00	0.00	0.00
15,000.0	90.00	179.64	11,814.0	-2,446.5	-619.8	2,490.0	0.00	0.00	0.00
15,100.0	90.00	179.64	11,814.0	-2,546.5	-619.1	2,589.6	0.00	0.00	0.00
15,200.0	90.00	179.64	11,814.0	-2,646.5	-618.5	2,689.2	0.00	0.00	0.00
15,300.0	90.00	179.64	11,814.0	-2,746.5	-617.9	2,788.7	0.00	0.00	0.00
15,400.0	90.00	179.64	11,814.0	-2,846.5	-617.2	2,888.3	0.00	0.00	0.00

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3170.8usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3170.8usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 709H	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)	
15,500.0	90.00	179.64	11,814.0	-2,946.5	-616.6	2,987.9	0.00	0.00	0.00	
15,600.0	90.00	179.64	11,814.0	-3,046.5	-616.0	3,087.5	0.00	0.00	0.00	
15,700.0	90.00	179.64	11,814.0	-3,146.5	-615.3	3,187.1	0.00	0.00	0.00	
15,800.0	90.00	179.64	11,814.0	-3,246.5	-614.7	3,286.7	0.00	0.00	0.00	
15,900.0	90.00	179.64	11,814.0	-3,346.5	-614.1	3,386.3	0.00	0.00	0.00	
16,000.0	90.00	179.64	11,814.0	-3,446.5	-613.4	3,485.9	0.00	0.00	0.00	
16,100.0	90.00	179.64	11,814.0	-3,546.4	-612.8	3,585.5	0.00	0.00	0.00	
16,200.0	90.00	179.64	11,814.0	-3,646.4	-612.2	3,685.0	0.00	0.00	0.00	
16,300.0	90.00	179.64	11,814.0	-3,746.4	-611.5	3,784.6	0.00	0.00	0.00	
16,400.0	90.00	179.64	11,814.0	-3,846.4	-610.9	3,884.2	0.00	0.00	0.00	
16,500.0	90.00	179.64	11,814.0	-3,946.4	-610.3	3,983.8	0.00	0.00	0.00	
16,600.0	90.00	179.64	11,814.0	-4,046.4	-609.6	4,083.4	0.00	0.00	0.00	
16,700.0	90.00	179.64	11,814.0	-4,146.4	-609.0	4,183.0	0.00	0.00	0.00	
16,800.0	90.00	179.64	11,814.0	-4,246.4	-608.4	4,282.6	0.00	0.00	0.00	
16,900.0	90.00	179.64	11,814.0	-4,346.4	-607.7	4,382.2	0.00	0.00	0.00	
17,000.0	90.00	179.64	11,814.0	-4,446.4	-607.1	4,481.8	0.00	0.00	0.00	
17,100.0	90.00	179.64	11,814.0	-4,546.4	-606.4	4,581.4	0.00	0.00	0.00	
17,200.0	90.00	179.64	11,814.0	-4,646.4	-605.8	4,680.9	0.00	0.00	0.00	
17,300.0	90.00	179.64	11,814.0	-4,746.4	-605.2	4,780.5	0.00	0.00	0.00	
17,400.0	90.00	179.64	11,814.0	-4,846.4	-604.5	4,880.1	0.00	0.00	0.00	
17,500.0	90.00	179.64	11,814.0	-4,946.4	-603.9	4,979.7	0.00	0.00	0.00	
17,600.0	90.00	179.64	11,814.0	-5,046.4	-603.3	5,079.3	0.00	0.00	0.00	
17,700.0	90.00	179.64	11,814.0	-5,146.4	-602.6	5,178.9	0.00	0.00	0.00	
17,800.0	90.00	179.64	11,814.0	-5,246.4	-602.0	5,278.5	0.00	0.00	0.00	
17,900.0	90.00	179.64	11,814.0	-5,346.4	-601.4	5,378.1	0.00	0.00	0.00	
18,000.0	90.00	179.64	11,814.0	-5,446.4	-600.7	5,477.7	0.00	0.00	0.00	
18,100.0	90.00	179.64	11,814.0	-5,546.4	-600.1	5,577.2	0.00	0.00	0.00	
18,200.0	90.00	179.64	11,814.0	-5,646.4	-599.5	5,676.8	0.00	0.00	0.00	
18,300.0	90.00	179.64	11,814.0	-5,746.4	-598.8	5,776.4	0.00	0.00	0.00	
18,400.0	90.00	179.64	11,814.0	-5,846.4	-598.2	5,876.0	0.00	0.00	0.00	
18,500.0	90.00	179.64	11,814.0	-5,946.4	-597.6	5,975.6	0.00	0.00	0.00	
18,600.0	90.00	179.64	11,814.0	-6,046.4	-596.9	6,075.2	0.00	0.00	0.00	
18,700.0	90.00	179.64	11,814.0	-6,146.4	-596.3	6,174.8	0.00	0.00	0.00	
18,800.0	90.00	179.64	11,814.0	-6,246.4	-595.7	6,274.4	0.00	0.00	0.00	
18,900.0	90.00	179.64	11,814.0	-6,346.4	-595.0	6,374.0	0.00	0.00	0.00	
19,000.0	90.00	179.64	11,814.0	-6,446.4	-594.4	6,473.5	0.00	0.00	0.00	
19,100.0	90.00	179.64	11,814.0	-6,546.4	-593.8	6,573.1	0.00	0.00	0.00	
19,200.0	90.00	179.64	11,814.0	-6,646.4	-593.1	6,672.7	0.00	0.00	0.00	
19,300.0	90.00	179.64	11,814.0	-6,746.4	-592.5	6,772.3	0.00	0.00	0.00	
19,400.0	90.00	179.64	11,814.0	-6,846.4	-591.9	6,871.9	0.00	0.00	0.00	
19,500.0	90.00	179.64	11,814.0	-6,946.4	-591.2	6,971.5	0.00	0.00	0.00	
19,544.6	90.00	179.64	11,814.0	-6,991.0	-591.0	7,015.9	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2832 WC 709H
Company:	DELAWARE BASIN EAST	TVD Reference:	KB @ 3170.8usft
Project:	ZIA HILLS UNIT AREA	MD Reference:	KB @ 3170.8usft
Site:	ZIA HILLS UNIT 2832 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2832 WC 709H	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)		
FTP_ZHU 2832 709H	0.00	0.00	11,814.0	366.4	-624.9	371,790.18	703,694.43	32° 1' 13.665 N	103° 40' 33.973 W
- plan misses target center by 19.1usft at 12188.4usft MD (11814.0 TVD, 363.7 N, -606.0 E)									
- Circle (radius 50.0)									
PBHL_ZHU 2832 709H	0.00	359.64	11,814.0	-6,991.0	-591.0	364,432.80	703,728.38	32° 0' 0.854 N	103° 40' 34.098 W
- plan hits target center									
- Rectangle (sides W100.0 H7,357.7 D20.0)									
LTP_ZHU 2832 709H	90.00	0.00	11,814.0	-6,941.0	-591.1	364,482.80	703,728.20	32° 0' 1.348 N	103° 40' 34.097 W
- plan misses target center by 0.1usft at 19494.6usft MD (11814.0 TVD, -6941.0 N, -591.3 E)									
- Circle (radius 50.0)									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(usft)	(usft)	Name	(")	(")
	19,545.0	11,814.0	5-1/2" Production Casing	5-1/2	6

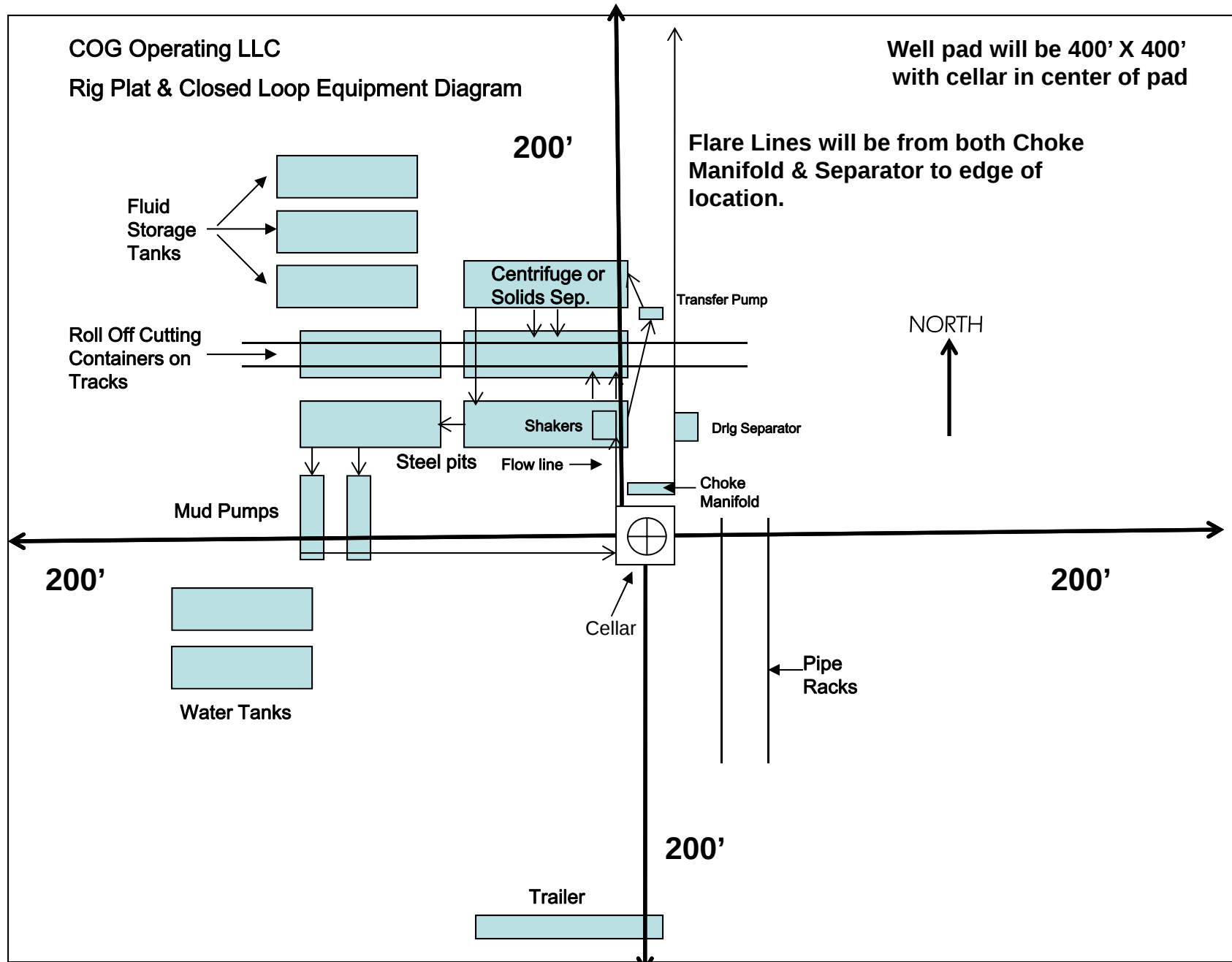


Exhibit 1

"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 707H	30-025-	A-28-26S-32E	447 FNL & 1024 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 708H	30-025-	A-28-26S-32E	458 FNL & 1008 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 709H	30-025-	A-28-26S-32E	470 FNL & 991 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 710H	30-025-	A-28-26S-32E	482 FNL & 975 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 711H	30-025-	A-28-26S-32E	494 FNL & 959 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 712H	30-025-	A-28-26S-32E	505 FNL & 943 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 802H	30-025-	A-28-26S-32E	435 FNL & 1040 FEL	± 742	± 1956	± 1707
Zia Hills Unit 2832 WC 803H	30-025-	A-28-26S-32E	517 FNL & 927 FEL	± 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
707H, 708H, 709H, 710H, 711H, 712H, 802H, 803H						

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

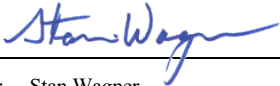
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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: 01/30/2025
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

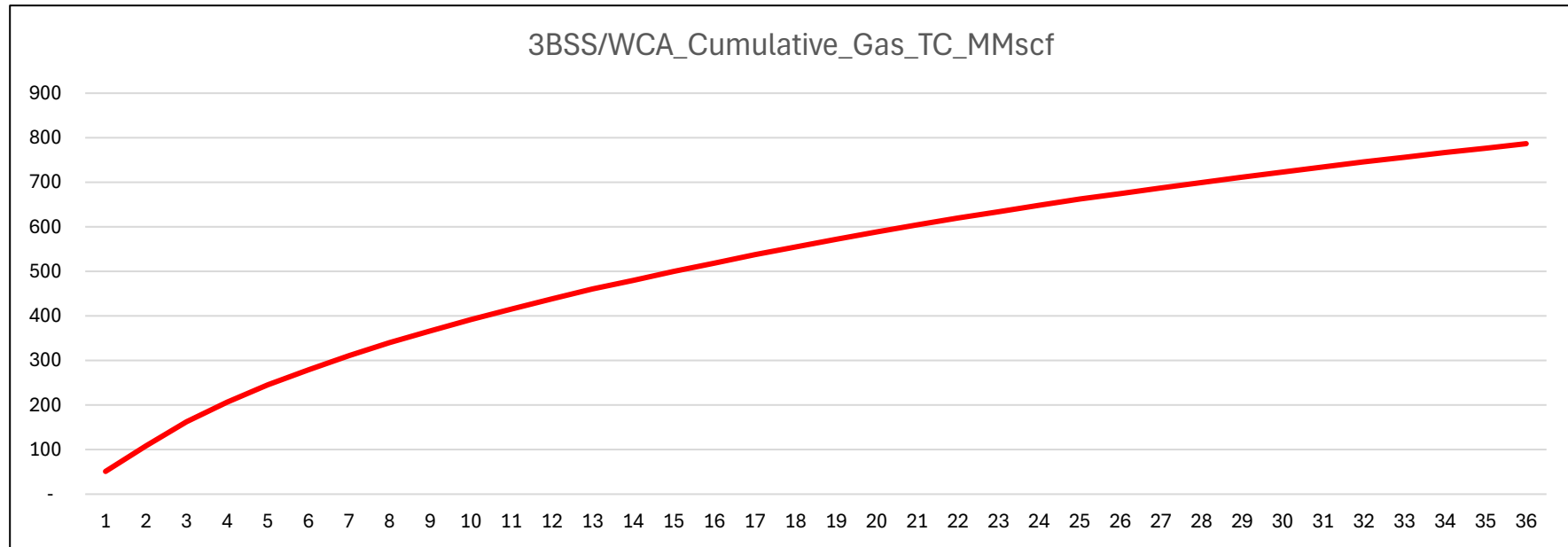
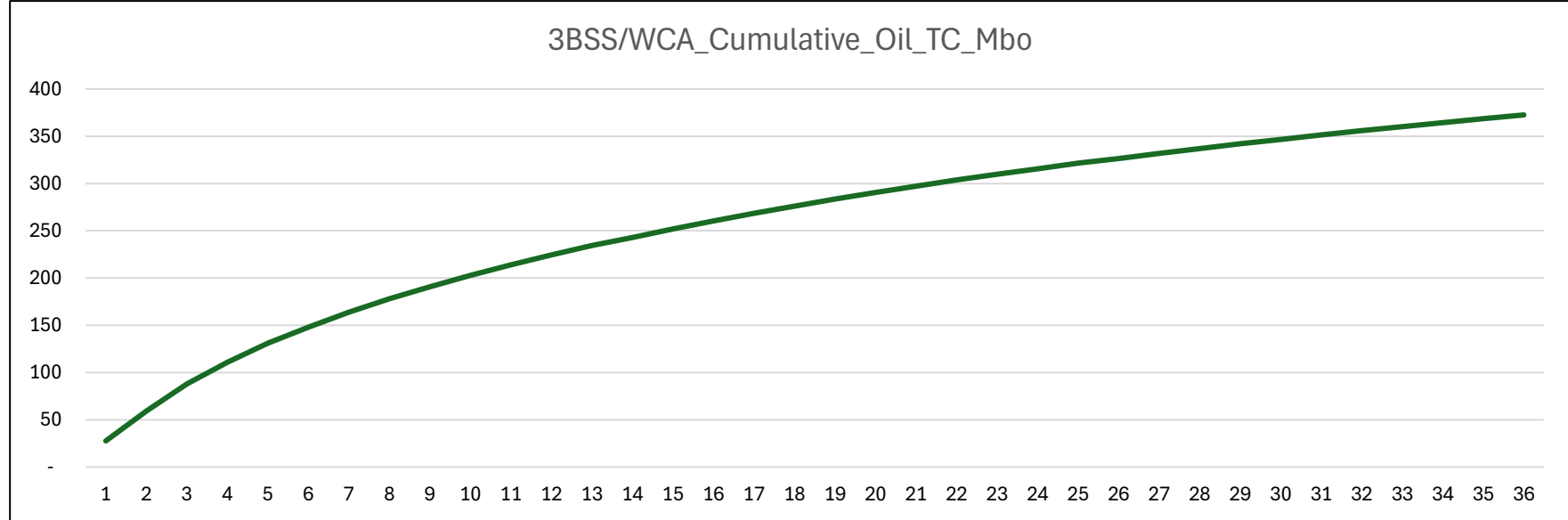
- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize 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 709H
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 **820 feet** (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 **4418 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 7/1/2025

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/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 520266

ACKNOWLEDGMENTS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 520266
	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.
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CONDITIONS

Action 520266

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 520266
	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	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	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
jeffrey.harrison	Administrative order required for non-standard spacing unit prior to production.	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