

Form 3160-3
(June 2015)FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: ☐ DRILL ☐ REENTER 1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other 1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone		5. Lease Serial No. 6. If Indian, Allottee or Tribe Name 7. If Unit or CA Agreement, Name and No. 8. Lease Name and Well No.
2. Name of Operator		9. API Well No. 30-025-54998
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
13. State		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

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

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

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

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

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

(Continued on page 2)

*(Instructions on page 2)



Additional Operator Remarks

Location of Well

0. SHL: NWNW / 250 FNL / 1075 FWL / TWSP: 26S / RANGE: 32E / SECTION: 26 / LAT: 32.020209 / LONG: -103.650723 (TVD: 0 feet, MD: 0 feet)
PPP: NWNW / 100 FNL / 865 FWL / TWSP: 26S / RANGE: 32E / SECTION: 26 / LAT: 32.020622 / LONG: -103.6514 (TVD: 12245 feet, MD: 12311 feet)
PPP: NWSW / 2639 FSL / 865 FWL / TWSP: 26S / RANGE: 32E / SECTION: 26 / LAT: 32.013545 / LONG: -103.651407 (TVD: 12367 feet, MD: 17492 feet)
PPP: NWNW / 1 FNL / 865 FWL / TWSP: 26S / RANGE: 32E / SECTION: 35 / LAT: 32.006193 / LONG: -103.651415 (TVD: 12367 feet, MD: 14852 feet)
BHL: LOT 4 / 50 FSL / 865 FWL / TWSP: 26S / RANGE: 32E / SECTION: 35 / LAT: 32.000368 / LONG: -103.651422 (TVD: 12367 feet, MD: 19582 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- 54998	Pool Code 98081	Pool Name Zia Hills; Wolfcamp
Property Code 337705	Property Name ZIA HILLS UNIT 2632 WC	Well Number 704H
OGRID No. 217817	Operator Name CONOCOPHILLIPS COMPANY	Ground Level Elevation 3,118.42'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL D	Section 26	Township 26S	Range 32E	Lot	Ft. from N/S 250' FNL	Ft. from E/W 1,075' FWL	Latitude 32.020209	Longitude -103.650723	County LEA
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Bottom Hole Location

UL LOT 4	Section 35	Township 26S	Range 32E	Lot	Ft. from N/S 50' FSL	Ft. from E/W 865' FWL	Latitude 32.000368	Longitude -103.651422	County LEA
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Dedicated Acres 899.24	Infill or Defining Well Infill	Defining Well API Pending 703H	Overlapping Spacing Unit (Y/N)	Consolidation Code Unit
Order Numbers.			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL D	Section 26	Township 26S	Range 32E	Lot	Ft. from N/S 250' FNL	Ft. from E/W 1,075' FWL	Latitude 32.020209	Longitude -103.650723	County LEA
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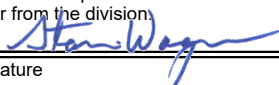
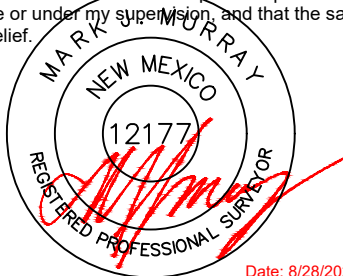
First Take Point (FTP)

UL D	Section 26	Township 26S	Range 32E	Lot	Ft. from N/S 100' FNL	Ft. from E/W 865' FWL	Latitude 32.020622	Longitude -103.651400	County LEA
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Last Take Point (LTP)

UL LOT 4	Section 35	Township 26S	Range 32E	Lot	Ft. from N/S 100' FSL	Ft. from E/W 865' FWL	Latitude 32.000505	Longitude -103.651422	County LEA
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Unitized Area or Area of Uniform Interest Unit	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
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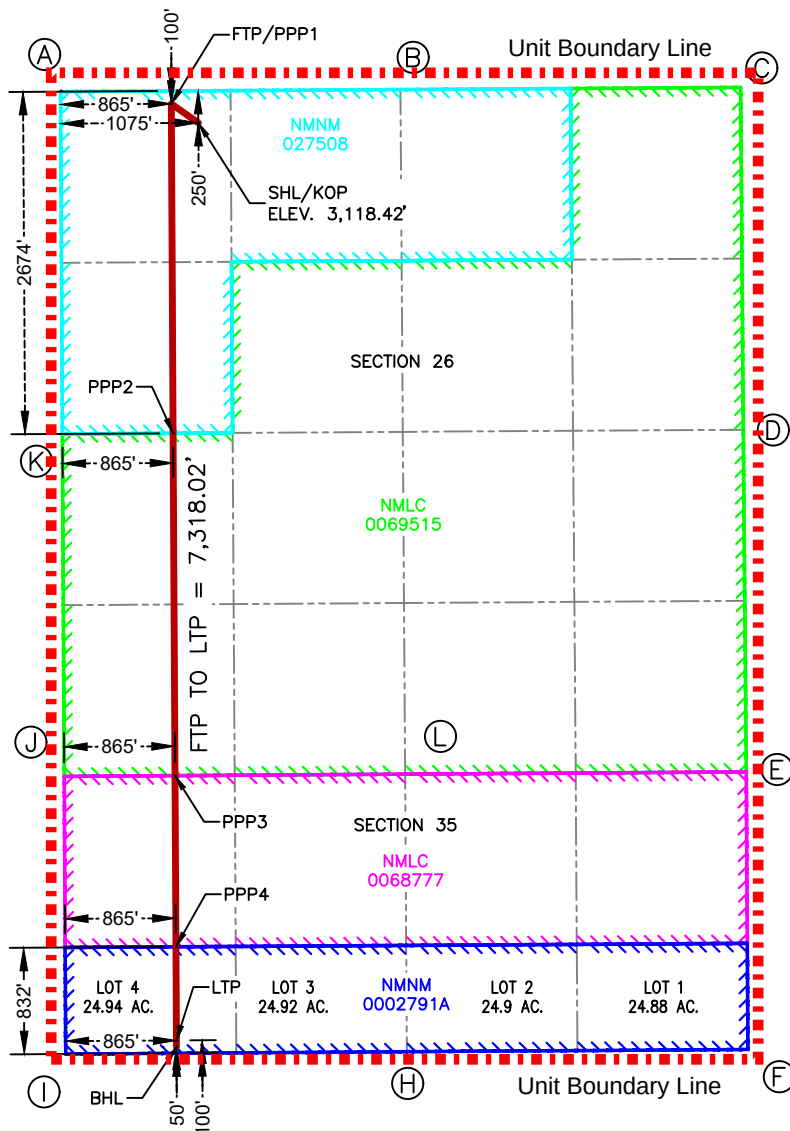
OPERATOR CERTIFICATIONS I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the 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.  Signature Stan Wagner Printed Name Email Address		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: 8/28/2024 Signature and Seal of Professional Surveyor Certificate Number 12177 Date of Survey 8/28/2024	
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Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

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

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



SURFACE HOLE LOCATION
& KICK-OFF POINT
250' FNL & 1,075' FWL
ELEV. = 3,118.42'

NAD 83 X = 752,894.31'
NAD 83 Y = 371,759.15'
NAD 83 LAT = 32.020209°
NAD 83 LONG = -103.650723°

FIRST TAKE POINT &
PENETRATION POINT 1
100' FNL & 865' FWL

NAD 83 X = 752,683.49'
NAD 83 Y = 371,907.88'
NAD 83 LAT = 32.020622°
NAD 83 LONG = -103.651400°

PENETRATION POINT 2
2,674' FNL & 865' FWL

NAD 83 X = 752,697.51'
NAD 83 Y = 369,333.47'
NAD 83 LAT = 32.013545°
NAD 83 LONG = -103.651407°

PENETRATION POINT 3
0' FSL & 865' FWL

NAD 83 X = 752,712.07'
NAD 83 Y = 366,658.99'
NAD 83 LAT = 32.006193°
NAD 83 LONG = -103.651415°

PENETRATION POINT 4
832' FSL & 865' FWL

NAD 83 X = 752,719.06'
NAD 83 Y = 365,321.69'
NAD 83 LAT = 32.002517°
NAD 83 LONG = -103.651420°

LAST TAKE POINT
100' FSL & 865' FWL

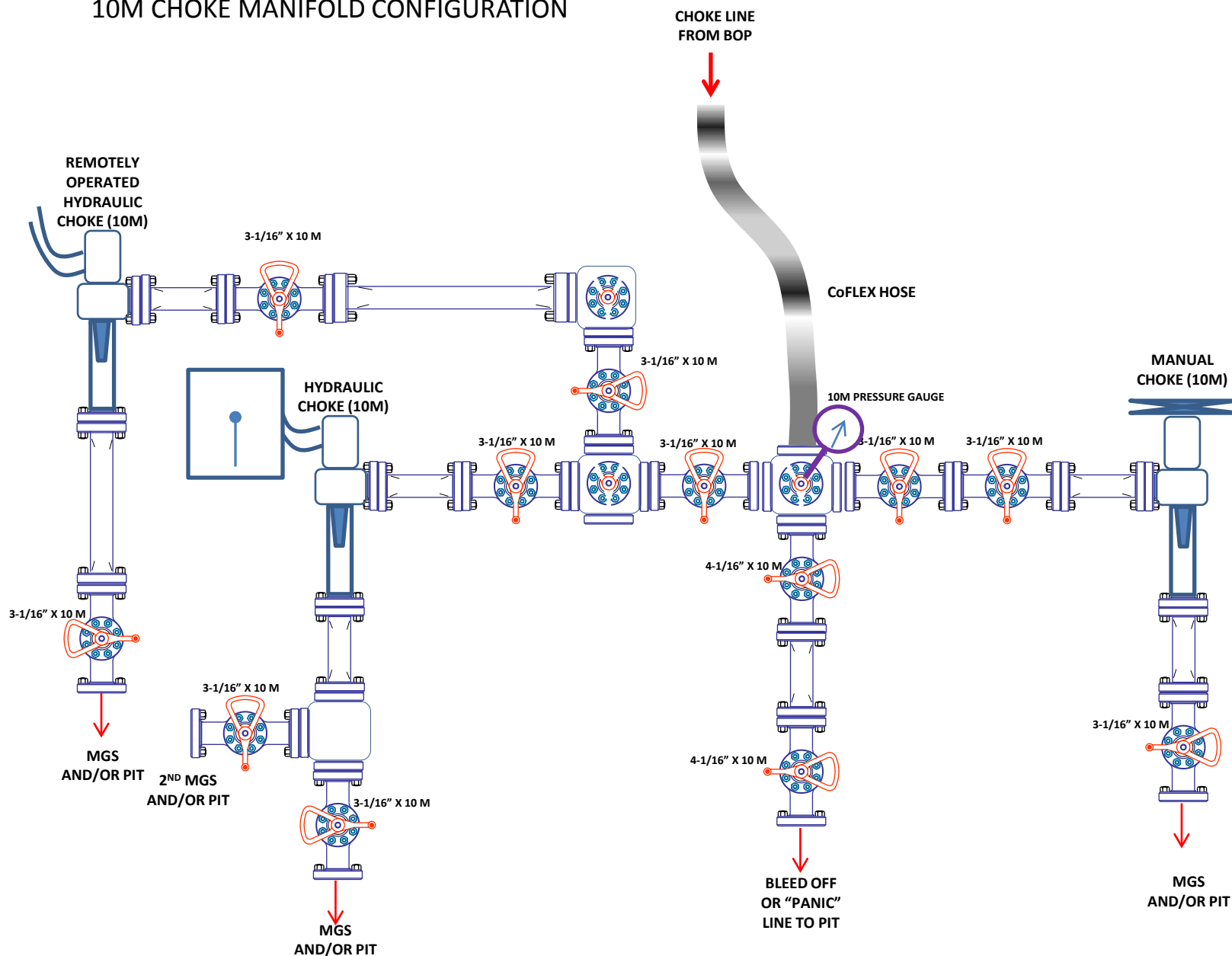
NAD 83 X = 752,722.89'
NAD 83 Y = 364,589.96'
NAD 83 LAT = 32.000505°
NAD 83 LONG = -103.651422°

BOTTOM HOLE LOCATION
50' FSL & 865' FWL

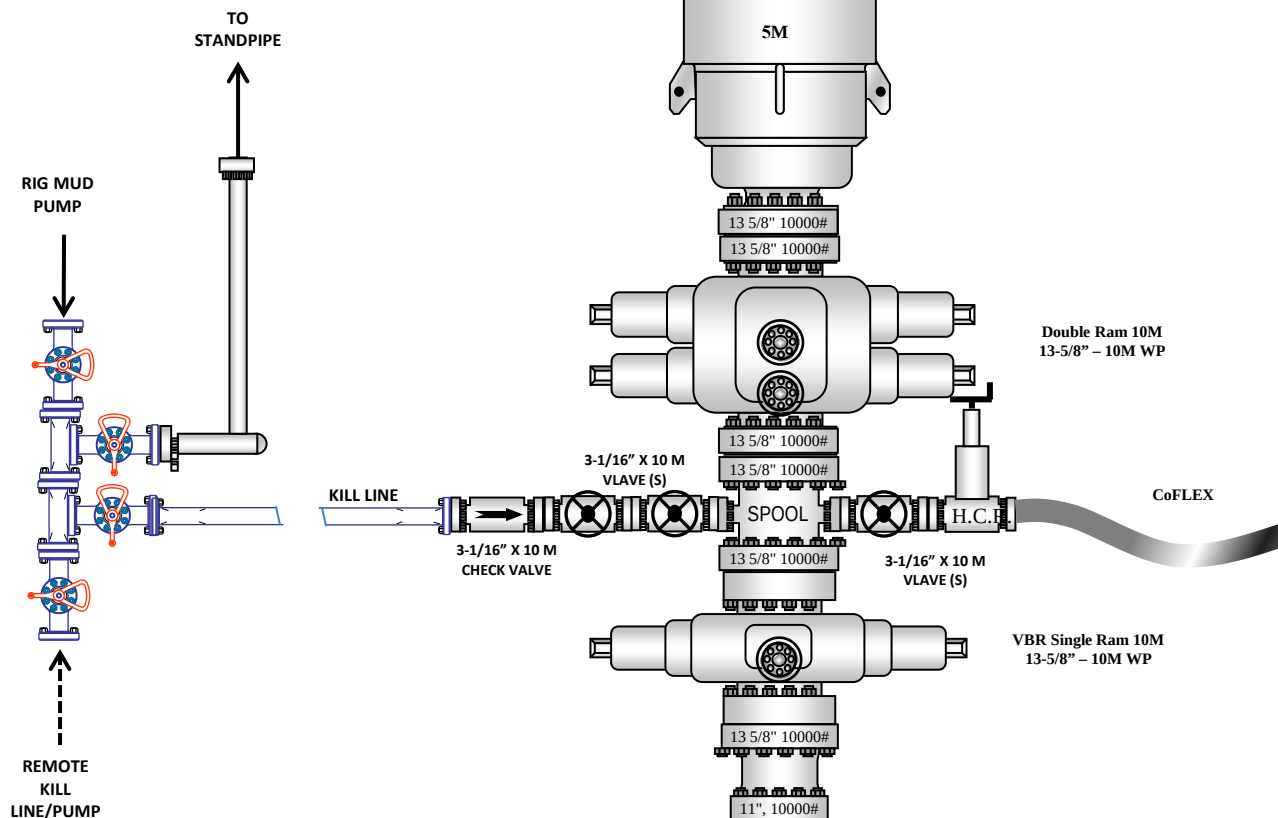
NAD 83 X = 752,723.15'
NAD 83 Y = 364,539.97'
NAD 83 LAT = 32.000368°
NAD 83 LONG = -103.651422°

CORNER COORDINATES NEW MEXICO EAST - NAD 83	
A	IRON PIPE W/ BRASS CAP N:372,002.66' E:751,818.12'
B	IRON PIPE W/ BRASS CAP N:372,018.70' E:754,473.10'
C	IRON PIPE W/ BRASS CAP N:372,035.56' E:757,130.94'
D	IRON PIPE W/ BRASS CAP N:369,361.57' E:757,151.04'
E	IRON PIPE W/ BRASS CAP N:366,688.03' E:757,174.54'
F	IRON PIPE W/ BRASS CAP N:364,519.44' E:757,187.49'
H	IRON PIPE W/ BRASS CAP N:364,501.85' E:754,523.20'
I	IRON PIPE W/ BRASS CAP N:364,483.39' E:751,858.43'
J	IRON PIPE W/ BRASS CAP N:366,653.36' E:751,847.09'
K	IRON PIPE W/ BRASS CAP N:369,328.01' E:751,832.61'
L	IRON PIPE W/ BRASS CAP N:366,670.70' E:754,509.98'

10M CHOKE MANIFOLD CONFIGURATION



10M REMOTE KILL SCHEMATIC



ConocoPhillips Company - Zia Hills Unit 2632 WC 704H

1. Geologic Formations

TVD of target	12,367' EOL	Pilot hole depth	NA
MD at TD:	19,583'	Deepest expected fresh water:	400'

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Quaternary Fill	Surface	Water	
Rustler	1218	Water	
Top of Salt	1332	Salt	
Base of Salt	4247	Salt	
Lamar	4519	Salt Water	
Bell Canyon	4543	Salt Water	
Cherry Canyon	5547	Oil/Gas	
Brushy Canyon	7211	Oil/Gas	
Bone Spring	8602	Oil/Gas	
1st Bone Spring Sand	9680	Oil/Gas	
2nd Bone Spring Sand	10381	Oil/Gas	
3rd Bone Spring Sand	11454	Oil/Gas	
Wolfcamp	11852	Oil/Gas	
Wolfcamp A	12062	Oil/Gas	
Wolfcamp B	12358	Oil/Gas	

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Body	SF Joint
	From	To								
14.75"	0	1190	10.75"	45.5	J55	BTC	3.84	1.04	13.21	14.70
9.875"	0	8200	7.625"	29.7	L80-ICY	BTC	1.38	1.03	2.98	3.01
8.750"	8200	11800	7.625"	29.7	P110-ICY	W513	1.20	1.55	3.05	1.83
6.75"	0	11600	5.5"	23	P110-CY	BTC	1.85	2.02	2.73	2.73
6.75"	11600	19,583	5.5"	23	P110-CY	W441	1.74	2.04	2.56	2.33
BLM Minimum Safety Factor							1.125	1	1.6 Dry 1.8 Wet	1.6 Dry 1.8 Wet

2b. Contingency 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	1190	13.375"	54.5	J55	BTC	2.08	1.47	13.15	14.02
12.25"	0	4420	9.625"	40	L80-IC	BTC	1.68	1.31	5.18	5.36
8.75"	4220	11800	7.625"	29.7	P110-ICY	W513	1.20	1.55	3.05	1.83
6.75"	0	11600	5.5"	23	P110-CY	BTC	1.85	2.17	2.73	2.73
6.75"	11600	19,583	5.5"	23	P110-CY	W441	1.74	2.04	2.56	2.33
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

Contingency program will be run if large water flows are encountered.

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.

October 7, 2024

1

ConocoPhillips Company - Zia Hills Unit 2632 WC 704H

	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 2632 WC 704H

3. Cementing Program

Casing	# Sk	Wt. lb/ gal	Yld ft ³ / sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	570	13.5	1.75	9	12	Lead: Class C + 4% Gel + 1% CaCl ₂
	250	14.8	1.34	6.34	8	Tail: Class C + 2% CaCl ₂
Inter. Stage 1	830	10.3	3.3	22	24	Halliburton tuned light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	730	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	600	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

If losses are encountered in the intermediate section a DV/ECP tool will be run ~50' above the Lamar Lime top, cement will be adjusted accordingly if this contingency is necessary.

Volumes Subject to Observed Hole Conditions and/or Fluid Caliper Results

Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
Production	11,300'	20% OH in Lateral (KOP to EOL)

3b. Contingency Cementing Program

Casing	# Sk	Wt. lb/ gal	Yld ft ³ / sack	H ₂ O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	710	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	650	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)	300	10.5	3.3	22	24	Tuned light
	90	14.8	1.35	6.6	8	Tail: Class H
Prod	830	12.5	1.48	10.7	72	Lead: 50:50:10 H Blend
	600	13.2	1.34	5.7	19	Tail: 50:50:2 Class H Blend

Contingency program will be run if large water flows are encountered.

Casing String	TOC	% Excess
Surface	0'	50%
1 st Intermediate	0'	50%
2 nd Intermediate	4,220'	20%
Production	11,300'	20% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Zia Hills Unit 2632 WC 704H

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 2632 WC 704H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	7-5/8" Int shoe	Brine Diesel Emulsion	8.4 - 10	28-34	N/C
7-5/8" Int shoe	Lateral TD	OBM	9.6 - 13	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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5b. Contingency 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	35-45	<20

6. Logging and Testing Procedures

Logging, Coring and Testing.	
Y	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
Y	No Logs are planned based on well control or offset log information.
N	Drill stem test? If yes, explain.
N	Coring? If yes, explain.

Additional logs planned		Interval
N	Resistivity	Pilot Hole TD to ICP
N	Density	Pilot Hole TD to ICP
Y	CBL	Production casing (If cement not circulated to surface)
Y	Mud log	Intermediate shoe to TD
N	PEX	

ConocoPhillips Company - Zia Hills Unit 2632 WC 704H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	8365 psi at 12367' TVD
Abnormal Temperature	NO 180 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

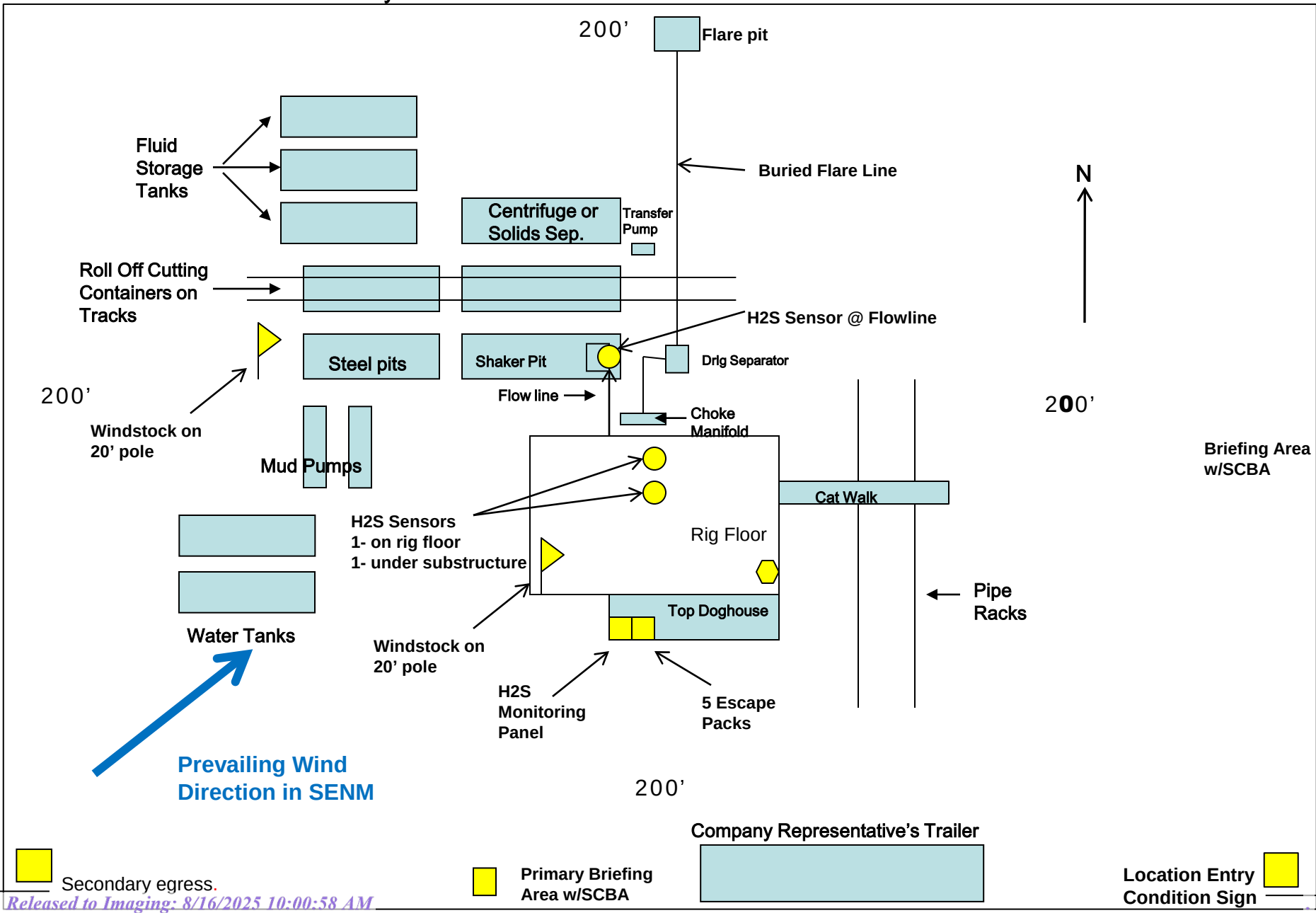
	<u>OFFICE</u>	<u>MOBILE</u>
COG OPERATING LLC OFFICE	575-748-6940	
Dallas Daley	432-818-2329	432-631-6977

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 2632 PROJECT

**_ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632
WC 704H**

OWB

Plan: PWP0

Standard Planning Report

18 July, 2024

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Project:	ZIA HILLS UNIT AREA	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site:	ZIA HILLS UNIT 2632 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Project	ZIA HILLS UNIT AREA		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	ZIA HILLS UNIT 2632 PROJECT		
Site Position:		Northing:	368,207.63 usft
From:	Map	Easting:	713,271.31 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 0' 37.622 N
		Longitude:	103° 38' 43.004 W

Well	_ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H					
Well Position	+N/-S	0.0 usft	Northing:	371,702.13 usft	Latitude:	32° 1' 12.302 N
	+E/-W	0.0 usft	Easting:	711,707.51 usft	Longitude:	103° 39' 0.909 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,125.0 usft
Grid Convergence:		0.36 °				

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2022	12/31/2023	6.31	59.53	47,253.81287892

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	181.34

Plan Survey Tool Program	Date	7/18/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,582.5 PWP0 (OWB)	r.5 MWD+IFR1	
			OWSG MWD + IFR1 rev.5	

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Project:	ZIA HILLS UNIT AREA	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site:	ZIA HILLS UNIT 2632 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,581.3	9.63	311.96	1,579.0	27.0	-30.0	2.00	2.00	0.00	311.96	
2,557.9	9.63	311.96	2,541.9	136.2	-151.4	0.00	0.00	0.00	0.00	
3,520.5	0.00	0.01	3,500.0	190.1	-211.4	1.00	-1.00	0.00	180.00	
11,910.0	0.00	0.01	11,889.5	190.1	-211.4	0.00	0.00	0.00	0.01	
12,660.0	90.00	179.67	12,367.0	-287.4	-208.7	12.00	12.00	23.96	179.67	
19,582.5	90.00	179.67	12,367.0	-7,209.7	-168.7	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

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Project:	ZIA HILLS UNIT AREA	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site:	ZIA HILLS UNIT 2632 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2632 WC 704H	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	2.00	311.96	1,200.0	1.2	-1.3	-1.1	2.00	2.00	0.00	
1,300.0	4.00	311.96	1,299.8	4.7	-5.2	-4.5	2.00	2.00	0.00	
1,400.0	6.00	311.96	1,399.5	10.5	-11.7	-10.2	2.00	2.00	0.00	
1,500.0	8.00	311.96	1,498.7	18.6	-20.7	-18.2	2.00	2.00	0.00	
1,581.3	9.63	311.96	1,579.0	27.0	-30.0	-26.3	2.00	2.00	0.00	
1,600.0	9.63	311.96	1,597.5	29.1	-32.3	-28.3	0.00	0.00	0.00	
1,700.0	9.63	311.96	1,696.1	40.2	-44.8	-39.2	0.00	0.00	0.00	
1,800.0	9.63	311.96	1,794.7	51.4	-57.2	-50.1	0.00	0.00	0.00	
1,900.0	9.63	311.96	1,893.3	62.6	-69.6	-61.0	0.00	0.00	0.00	
2,000.0	9.63	311.96	1,991.8	73.8	-82.1	-71.8	0.00	0.00	0.00	
2,100.0	9.63	311.96	2,090.4	85.0	-94.5	-82.7	0.00	0.00	0.00	
2,200.0	9.63	311.96	2,189.0	96.1	-106.9	-93.6	0.00	0.00	0.00	
2,300.0	9.63	311.96	2,287.6	107.3	-119.4	-104.5	0.00	0.00	0.00	
2,400.0	9.63	311.96	2,386.2	118.5	-131.8	-115.4	0.00	0.00	0.00	
2,500.0	9.63	311.96	2,484.8	129.7	-144.2	-126.3	0.00	0.00	0.00	
2,557.9	9.63	311.96	2,541.9	136.2	-151.4	-132.6	0.00	0.00	0.00	
2,600.0	9.21	311.96	2,583.4	140.8	-156.5	-137.1	1.00	-1.00	0.00	
2,700.0	8.21	311.96	2,682.3	150.9	-167.8	-146.9	1.00	-1.00	0.00	
2,800.0	7.21	311.96	2,781.4	159.8	-177.8	-155.6	1.00	-1.00	0.00	
2,900.0	6.21	311.96	2,880.7	167.7	-186.5	-163.2	1.00	-1.00	0.00	
3,000.0	5.21	311.96	2,980.2	174.3	-193.8	-169.7	1.00	-1.00	0.00	
3,100.0	4.21	311.96	3,079.8	179.8	-199.9	-175.1	1.00	-1.00	0.00	
3,200.0	3.21	311.96	3,179.6	184.1	-204.8	-179.3	1.00	-1.00	0.00	
3,300.0	2.21	311.96	3,279.5	187.3	-208.3	-182.3	1.00	-1.00	0.00	
3,400.0	1.21	311.96	3,379.5	189.3	-210.5	-184.3	1.00	-1.00	0.00	
3,500.0	0.21	311.96	3,479.5	190.1	-211.4	-185.1	1.00	-1.00	0.00	
3,520.5	0.00	0.01	3,500.0	190.1	-211.4	-185.1	1.00	-1.00	0.00	
3,600.0	0.00	0.00	3,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
3,700.0	0.00	0.00	3,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
3,800.0	0.00	0.00	3,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
3,900.0	0.00	0.00	3,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,000.0	0.00	0.00	3,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,100.0	0.00	0.00	4,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,200.0	0.00	0.00	4,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,300.0	0.00	0.00	4,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,400.0	0.00	0.00	4,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,500.0	0.00	0.00	4,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,600.0	0.00	0.00	4,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,700.0	0.00	0.00	4,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,800.0	0.00	0.00	4,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
4,900.0	0.00	0.00	4,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Project:	ZIA HILLS UNIT AREA	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site:	ZIA HILLS UNIT 2632 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2632 WC 704H	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)	
5,000.0	0.00	0.00	4,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,100.0	0.00	0.00	5,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,200.0	0.00	0.00	5,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,300.0	0.00	0.00	5,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,400.0	0.00	0.00	5,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,500.0	0.00	0.00	5,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,600.0	0.00	0.00	5,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,700.0	0.00	0.00	5,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,800.0	0.00	0.00	5,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
5,900.0	0.00	0.00	5,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,000.0	0.00	0.00	5,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,200.0	0.00	0.00	6,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,300.0	0.00	0.00	6,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,400.0	0.00	0.00	6,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,500.0	0.00	0.00	6,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,600.0	0.00	0.00	6,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,100.0	0.00	0.00	7,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,100.0	0.00	0.00	9,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,100.0	0.00	0.00	10,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,200.0	0.00	0.00	10,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	

ConocoPhillips

Planning Report

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Project:	ZIA HILLS UNIT AREA	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site:	ZIA HILLS UNIT 2632 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2632 WC 704H	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)	
10,300.0	0.00	0.00	10,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,400.0	0.00	0.00	10,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,500.0	0.00	0.00	10,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,600.0	0.00	0.00	10,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,700.0	0.00	0.00	10,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,800.0	0.00	0.00	10,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
10,900.0	0.00	0.00	10,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,000.0	0.00	0.00	10,979.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,100.0	0.00	0.00	11,079.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,200.0	0.00	0.00	11,179.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,300.0	0.00	0.00	11,279.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,400.0	0.00	0.00	11,379.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,500.0	0.00	0.00	11,479.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,600.0	0.00	0.00	11,579.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,700.0	0.00	0.00	11,679.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,800.0	0.00	0.00	11,779.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,900.0	0.00	0.00	11,879.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,910.0	0.00	0.01	11,889.5	190.1	-211.4	-185.1	0.00	0.00	0.00	
11,925.0	1.80	179.67	11,904.5	189.9	-211.4	-184.9	12.00	12.00	0.00	
11,950.0	4.80	179.67	11,929.4	188.4	-211.4	-183.4	12.00	12.00	0.00	
11,975.0	7.80	179.67	11,954.3	185.7	-211.4	-180.7	12.00	12.00	0.00	
12,000.0	10.80	179.67	11,978.9	181.6	-211.4	-176.7	12.00	12.00	0.00	
12,025.0	13.80	179.67	12,003.4	176.3	-211.3	-171.3	12.00	12.00	0.00	
12,050.0	16.80	179.67	12,027.5	169.7	-211.3	-164.7	12.00	12.00	0.00	
12,075.0	19.80	179.67	12,051.2	161.9	-211.3	-156.9	12.00	12.00	0.00	
12,100.0	22.80	179.67	12,074.5	152.8	-211.2	-147.8	12.00	12.00	0.00	
12,125.0	25.80	179.67	12,097.3	142.5	-211.1	-137.5	12.00	12.00	0.00	
12,150.0	28.80	179.67	12,119.5	131.1	-211.1	-126.1	12.00	12.00	0.00	
12,175.0	31.80	179.67	12,141.1	118.4	-211.0	-113.5	12.00	12.00	0.00	
12,200.0	34.80	179.67	12,162.0	104.7	-210.9	-99.8	12.00	12.00	0.00	
12,225.0	37.80	179.67	12,182.1	89.9	-210.8	-85.0	12.00	12.00	0.00	
12,250.0	40.80	179.67	12,201.5	74.1	-210.7	-69.1	12.00	12.00	0.00	
12,275.0	43.80	179.67	12,219.9	57.3	-210.6	-52.3	12.00	12.00	0.00	
12,300.0	46.80	179.67	12,237.5	39.5	-210.5	-34.6	12.00	12.00	0.00	
12,325.0	49.80	179.67	12,254.2	20.8	-210.4	-15.9	12.00	12.00	0.00	
12,350.0	52.80	179.67	12,269.8	1.3	-210.3	3.6	12.00	12.00	0.00	
12,375.0	55.80	179.67	12,284.4	-19.0	-210.2	23.9	12.00	12.00	0.00	
12,400.0	58.80	179.67	12,297.9	-40.0	-210.1	44.9	12.00	12.00	0.00	
12,425.0	61.80	179.67	12,310.3	-61.7	-210.0	66.6	12.00	12.00	0.00	
12,450.0	64.80	179.67	12,321.5	-84.0	-209.8	88.9	12.00	12.00	0.00	
12,475.0	67.80	179.67	12,331.6	-106.9	-209.7	111.8	12.00	12.00	0.00	
12,500.0	70.80	179.67	12,340.4	-130.3	-209.6	135.2	12.00	12.00	0.00	
12,525.0	73.80	179.67	12,348.0	-154.1	-209.4	159.0	12.00	12.00	0.00	
12,550.0	76.80	179.67	12,354.3	-178.3	-209.3	183.1	12.00	12.00	0.00	
12,575.0	79.80	179.67	12,359.4	-202.8	-209.1	207.6	12.00	12.00	0.00	
12,600.0	82.80	179.67	12,363.2	-227.5	-209.0	232.3	12.00	12.00	0.00	
12,625.0	85.80	179.67	12,365.7	-252.4	-208.9	257.2	12.00	12.00	0.00	
12,650.0	88.80	179.67	12,366.9	-277.3	-208.7	282.1	12.00	12.00	0.00	
12,660.0	90.00	179.67	12,367.0	-287.4	-208.7	292.2	12.00	12.00	0.00	
12,700.0	90.00	179.67	12,367.0	-327.3	-208.4	332.1	0.00	0.00	0.00	
12,800.0	90.00	179.67	12,367.0	-427.3	-207.9	432.1	0.00	0.00	0.00	
12,900.0	90.00	179.67	12,367.0	-527.3	-207.3	532.0	0.00	0.00	0.00	
13,000.0	90.00	179.67	12,367.0	-627.3	-206.7	632.0	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Project:	ZIA HILLS UNIT AREA	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site:	ZIA HILLS UNIT 2632 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,100.0	90.00	179.67	12,367.0	-727.3	-206.1	731.9	0.00	0.00	0.00
13,200.0	90.00	179.67	12,367.0	-827.3	-205.5	831.9	0.00	0.00	0.00
13,300.0	90.00	179.67	12,367.0	-927.3	-205.0	931.9	0.00	0.00	0.00
13,400.0	90.00	179.67	12,367.0	-1,027.3	-204.4	1,031.8	0.00	0.00	0.00
13,500.0	90.00	179.67	12,367.0	-1,127.3	-203.8	1,131.8	0.00	0.00	0.00
13,600.0	90.00	179.67	12,367.0	-1,227.3	-203.2	1,231.7	0.00	0.00	0.00
13,700.0	90.00	179.67	12,367.0	-1,327.3	-202.7	1,331.7	0.00	0.00	0.00
13,800.0	90.00	179.67	12,367.0	-1,427.3	-202.1	1,431.6	0.00	0.00	0.00
13,900.0	90.00	179.67	12,367.0	-1,527.3	-201.5	1,531.6	0.00	0.00	0.00
14,000.0	90.00	179.67	12,367.0	-1,627.3	-200.9	1,631.6	0.00	0.00	0.00
14,100.0	90.00	179.67	12,367.0	-1,727.3	-200.3	1,731.5	0.00	0.00	0.00
14,200.0	90.00	179.67	12,367.0	-1,827.3	-199.8	1,831.5	0.00	0.00	0.00
14,300.0	90.00	179.67	12,367.0	-1,927.3	-199.2	1,931.4	0.00	0.00	0.00
14,400.0	90.00	179.67	12,367.0	-2,027.3	-198.6	2,031.4	0.00	0.00	0.00
14,500.0	90.00	179.67	12,367.0	-2,127.3	-198.0	2,131.3	0.00	0.00	0.00
14,600.0	90.00	179.67	12,367.0	-2,227.3	-197.5	2,231.3	0.00	0.00	0.00
14,700.0	90.00	179.67	12,367.0	-2,327.3	-196.9	2,331.3	0.00	0.00	0.00
14,800.0	90.00	179.67	12,367.0	-2,427.3	-196.3	2,431.2	0.00	0.00	0.00
14,900.0	90.00	179.67	12,367.0	-2,527.3	-195.7	2,531.2	0.00	0.00	0.00
15,000.0	90.00	179.67	12,367.0	-2,627.3	-195.2	2,631.1	0.00	0.00	0.00
15,100.0	90.00	179.67	12,367.0	-2,727.3	-194.6	2,731.1	0.00	0.00	0.00
15,200.0	90.00	179.67	12,367.0	-2,827.3	-194.0	2,831.0	0.00	0.00	0.00
15,300.0	90.00	179.67	12,367.0	-2,927.3	-193.4	2,931.0	0.00	0.00	0.00
15,400.0	90.00	179.67	12,367.0	-3,027.3	-192.8	3,031.0	0.00	0.00	0.00
15,500.0	90.00	179.67	12,367.0	-3,127.3	-192.3	3,130.9	0.00	0.00	0.00
15,600.0	90.00	179.67	12,367.0	-3,227.3	-191.7	3,230.9	0.00	0.00	0.00
15,700.0	90.00	179.67	12,367.0	-3,327.3	-191.1	3,330.8	0.00	0.00	0.00
15,800.0	90.00	179.67	12,367.0	-3,427.3	-190.5	3,430.8	0.00	0.00	0.00
15,900.0	90.00	179.67	12,367.0	-3,527.3	-190.0	3,530.7	0.00	0.00	0.00
16,000.0	90.00	179.67	12,367.0	-3,627.3	-189.4	3,630.7	0.00	0.00	0.00
16,100.0	90.00	179.67	12,367.0	-3,727.3	-188.8	3,730.7	0.00	0.00	0.00
16,200.0	90.00	179.67	12,367.0	-3,827.3	-188.2	3,830.6	0.00	0.00	0.00
16,300.0	90.00	179.67	12,367.0	-3,927.3	-187.7	3,930.6	0.00	0.00	0.00
16,400.0	90.00	179.67	12,367.0	-4,027.3	-187.1	4,030.5	0.00	0.00	0.00
16,500.0	90.00	179.67	12,367.0	-4,127.3	-186.5	4,130.5	0.00	0.00	0.00
16,600.0	90.00	179.67	12,367.0	-4,227.3	-185.9	4,230.5	0.00	0.00	0.00
16,700.0	90.00	179.67	12,367.0	-4,327.3	-185.3	4,330.4	0.00	0.00	0.00
16,800.0	90.00	179.67	12,367.0	-4,427.3	-184.8	4,430.4	0.00	0.00	0.00
16,900.0	90.00	179.67	12,367.0	-4,527.3	-184.2	4,530.3	0.00	0.00	0.00
17,000.0	90.00	179.67	12,367.0	-4,627.3	-183.6	4,630.3	0.00	0.00	0.00
17,100.0	90.00	179.67	12,367.0	-4,727.2	-183.0	4,730.2	0.00	0.00	0.00
17,200.0	90.00	179.67	12,367.0	-4,827.2	-182.5	4,830.2	0.00	0.00	0.00
17,300.0	90.00	179.67	12,367.0	-4,927.2	-181.9	4,930.2	0.00	0.00	0.00
17,400.0	90.00	179.67	12,367.0	-5,027.2	-181.3	5,030.1	0.00	0.00	0.00
17,500.0	90.00	179.67	12,367.0	-5,127.2	-180.7	5,130.1	0.00	0.00	0.00
17,600.0	90.00	179.67	12,367.0	-5,227.2	-180.1	5,230.0	0.00	0.00	0.00
17,700.0	90.00	179.67	12,367.0	-5,327.2	-179.6	5,330.0	0.00	0.00	0.00
17,800.0	90.00	179.67	12,367.0	-5,427.2	-179.0	5,429.9	0.00	0.00	0.00
17,900.0	90.00	179.67	12,367.0	-5,527.2	-178.4	5,529.9	0.00	0.00	0.00
18,000.0	90.00	179.67	12,367.0	-5,627.2	-177.8	5,629.9	0.00	0.00	0.00
18,100.0	90.00	179.67	12,367.0	-5,727.2	-177.3	5,729.8	0.00	0.00	0.00
18,200.0	90.00	179.67	12,367.0	-5,827.2	-176.7	5,829.8	0.00	0.00	0.00
18,300.0	90.00	179.67	12,367.0	-5,927.2	-176.1	5,929.7	0.00	0.00	0.00

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Company:	DELAWARE BASIN EAST	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Project:	ZIA HILLS UNIT AREA	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site:	ZIA HILLS UNIT 2632 PROJECT	North Reference:	Grid
Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
18,400.0	90.00	179.67	12,367.0	-6,027.2	-175.5	6,029.7	0.00	0.00	0.00	
18,500.0	90.00	179.67	12,367.0	-6,127.2	-175.0	6,129.6	0.00	0.00	0.00	
18,600.0	90.00	179.67	12,367.0	-6,227.2	-174.4	6,229.6	0.00	0.00	0.00	
18,700.0	90.00	179.67	12,367.0	-6,327.2	-173.8	6,329.6	0.00	0.00	0.00	
18,800.0	90.00	179.67	12,367.0	-6,427.2	-173.2	6,429.5	0.00	0.00	0.00	
18,900.0	90.00	179.67	12,367.0	-6,527.2	-172.6	6,529.5	0.00	0.00	0.00	
19,000.0	90.00	179.67	12,367.0	-6,627.2	-172.1	6,629.4	0.00	0.00	0.00	
19,100.0	90.00	179.67	12,367.0	-6,727.2	-171.5	6,729.4	0.00	0.00	0.00	
19,200.0	90.00	179.67	12,367.0	-6,827.2	-170.9	6,829.3	0.00	0.00	0.00	
19,300.0	90.00	179.67	12,367.0	-6,927.2	-170.3	6,929.3	0.00	0.00	0.00	
19,400.0	90.00	179.67	12,367.0	-7,027.2	-169.8	7,029.3	0.00	0.00	0.00	
19,500.0	90.00	179.67	12,367.0	-7,127.2	-169.2	7,129.2	0.00	0.00	0.00	
19,582.5	90.00	179.67	12,367.0	-7,209.7	-168.7	7,211.7	0.00	0.00	0.00	

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL (ZIA HILLS UNIT : - plan hits target center - Rectangle (sides W100.0 H7,346.9 D20.0)	0.00	359.67	12,367.0	-7,209.7	-168.7	364,492.43	711,538.80	32° 0' 0.965 N	103° 39' 3.397 W
LTP (ZIA HILLS UNIT 26 - plan misses target center by 32.5usft at 19500.0usft MD (12367.0 TVD, -7127.2 N, -169.2 E) - Circle (radius 50.0)	90.00	179.67	12,367.0	-7,159.7	-168.9	364,542.43	711,538.59	32° 0' 1.460 N	103° 39' 3.395 W
FTP (ZIA HILLS UNIT 26 - plan misses target center by 163.4usft at 12311.0usft MD (12245.0 TVD, 31.4 N, -210.5 E) - Circle (radius 50.0)	0.00	0.00	12,367.0	140.1	-211.4	371,842.25	711,496.09	32° 1' 13.701 N	103° 39' 3.354 W

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
19,582.5	12,367.0	5-1/2" Production Casing	5-1/2	6	

DELAWARE BASIN EAST

ZIA HILLS UNIT AREA

ZIA HILLS UNIT 2632 PROJECT

_ZIA HILLS UNIT 2632 WC 704H

OWB

PWP0

Anticollision Report

18 July, 2024

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: RED HILLS WEST - SD WE 23 FED P25 #1H - OWB - AWP														Offset Site Error:	0.0 usft
Survey Program: 33-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)					
5,800.0	5,779.5	5,966.9	5,903.9	13.9	26.1	80.08	361.0	765.2	996.6	955.9	40.65	24.516			
5,900.0	5,879.5	6,051.1	5,987.7	14.0	26.4	80.13	358.7	757.5	987.1	946.0	41.10	24.018			
6,000.0	5,979.5	6,128.7	6,065.1	14.0	26.7	80.14	357.5	752.0	979.7	938.3	41.47	23.624			
6,100.0	6,079.5	6,217.4	6,153.6	14.1	27.0	80.12	357.1	747.0	974.1	932.2	41.88	23.259			
6,200.0	6,179.5	6,313.6	6,249.7	14.2	27.3	80.08	356.9	742.2	969.2	926.8	42.33	22.897			
6,300.0	6,279.5	6,406.4	6,342.5	14.3	27.6	80.05	356.6	737.9	964.6	921.9	42.74	22.572			
6,400.0	6,379.5	6,494.2	6,430.1	14.4	27.9	80.06	356.0	735.0	961.3	918.2	43.08	22.311			
6,500.0	6,479.5	6,586.9	6,522.9	14.4	28.1	80.08	355.3	733.0	958.9	915.5	43.46	22.066			
6,600.0	6,579.5	6,684.3	6,620.3	14.5	28.4	80.10	354.6	731.2	957.1	913.2	43.89	21.808			
6,700.0	6,679.5	6,782.0	6,718.0	14.6	28.7	80.13	353.9	729.8	955.4	911.1	44.30	21.565			
6,800.0	6,779.5	6,880.1	6,816.0	14.7	29.0	80.15	353.3	728.4	954.0	909.3	44.72	21.334			
6,900.0	6,879.5	6,978.1	6,914.0	14.7	29.3	80.16	352.9	727.3	952.8	907.7	45.11	21.120			
7,000.0	6,979.5	7,076.2	7,012.1	14.8	29.6	80.17	352.5	726.4	951.8	906.3	45.50	20.916			
7,100.0	7,079.5	7,173.2	7,109.1	14.9	29.8	80.18	352.2	725.7	951.0	905.2	45.85	20.743			
7,200.0	7,179.5	7,270.4	7,206.3	15.0	30.0	80.18	352.2	725.3	950.6	904.4	46.17	20.587			
7,300.0	7,279.5	7,368.7	7,304.6	15.0	30.2	80.18	352.2	725.1	950.4	904.0	46.39	20.486			
7,400.0	7,379.5	7,467.6	7,403.5	15.1	30.3	80.18	352.1	725.0	950.4	903.8	46.59	20.400			
7,500.0	7,479.5	7,568.0	7,503.9	15.2	30.4	80.21	351.7	725.1	950.3	903.6	46.73	20.338			
7,600.0	7,579.5	7,667.9	7,603.8	15.3	30.5	80.25	351.1	725.1	950.3	903.4	46.86	20.277			
7,663.1	7,642.6	7,730.7	7,666.6	15.3	30.5	80.27	350.7	725.2	950.3	903.3	46.95	20.240			
7,700.0	7,679.5	7,767.4	7,703.3	15.4	30.5	80.28	350.5	725.2	950.3	903.3	47.00	20.219			
7,800.0	7,779.5	7,866.9	7,802.8	15.4	30.6	80.31	350.1	725.3	950.3	903.2	47.10	20.175			
7,900.0	7,879.5	7,966.4	7,902.3	15.5	30.6	80.34	349.6	725.5	950.4	903.2	47.20	20.136			
8,000.0	7,979.5	8,068.3	8,004.2	15.6	30.7	80.38	348.9	725.7	950.4	903.1	47.35	20.074			
8,100.0	8,079.5	8,170.2	8,106.1	15.7	30.8	80.43	348.0	725.6	950.3	902.8	47.52	19.997			
8,200.0	8,179.5	8,272.0	8,207.9	15.7	31.0	80.49	347.1	725.4	949.9	902.1	47.78	19.882			
8,300.0	8,279.5	8,374.2	8,310.0	15.8	31.2	80.53	346.2	725.0	949.3	901.3	48.03	19.764			
8,400.0	8,379.5	8,468.5	8,404.3	15.9	31.3	80.53	346.2	724.5	948.9	900.6	48.28	19.653			
8,409.9	8,389.3	8,477.5	8,413.3	15.9	31.4	80.50	346.7	724.4	948.8	900.5	48.31	19.639 CC, ES, SF			
8,500.0	8,479.5	8,545.4	8,480.4	16.0	31.4	79.90	356.6	723.3	949.7	901.5	48.28	19.671			
8,600.0	8,579.5	8,606.0	8,537.6	16.1	31.3	78.73	376.2	722.3	954.4	906.4	48.04	19.866			
8,700.0	8,679.5	8,686.7	8,610.1	16.1	31.3	76.63	411.7	720.9	962.8	915.0	47.80	20.141			
8,800.0	8,779.5	8,740.8	8,657.0	16.2	31.3	75.06	438.6	719.8	974.9	927.5	47.34	20.595			
8,900.0	8,879.5	8,779.8	8,689.4	16.3	31.2	73.82	460.4	719.9	993.1	946.5	46.66	21.283			

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:	STATE LINE OFFSETS - APOLLO 7 #11H - OWB - AWP											Offset Site Error:	0.0 usft
Survey Program:	25-r.5 MWD											Offset Well Error:	3.0 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
19,582.5	12,367.0	12,082.0	11,947.1	72.1	36.5	-64.63	-7,509.3	684.8	990.7	889.3	101.41	9.769 CC, ES, SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 701H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		No-Go Distance (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
0.0	0.0	0.0	0.0	0.0	0.0	-90.35	-0.2	-30.0	30.0	29.5	0.48	62.573	
100.0	100.0	100.0	100.0	1.2	1.2	-90.35	-0.2	-30.0	30.0	27.1	2.87	10.465	
200.0	200.0	200.0	200.0	1.7	1.7	-90.35	-0.2	-30.0	30.0	26.1	3.86	7.765	
300.0	300.0	300.0	300.0	2.1	2.1	-90.35	-0.2	-30.0	30.0	25.4	4.63	6.475	
400.0	400.0	400.0	400.0	2.4	2.4	-90.35	-0.2	-30.0	30.0	24.7	5.29	5.674	
500.0	500.0	500.0	500.0	2.7	2.7	-90.35	-0.2	-30.0	30.0	24.1	5.87	5.114	
600.0	600.0	600.0	600.0	3.0	3.0	-90.35	-0.2	-30.0	30.0	23.6	6.39	4.692	
700.0	700.0	700.0	700.0	3.2	3.2	-90.35	-0.2	-30.0	30.0	23.1	6.88	4.359	
800.0	800.0	800.0	800.0	3.5	3.5	-90.35	-0.2	-30.0	30.0	22.7	7.34	4.088	
900.0	900.0	900.0	900.0	3.7	3.7	-90.35	-0.2	-30.0	30.0	22.2	7.77	3.860	
1,000.0	1,000.0	1,000.0	1,000.0	3.9	3.9	-90.35	-0.2	-30.0	30.0	21.8	8.18	3.666	
1,100.0	1,100.0	1,100.0	1,100.0	4.1	4.1	-90.35	-0.2	-30.0	30.0	21.4	8.58	3.498 CC	
1,200.0	1,200.0	1,199.2	1,199.2	4.4	4.4	-42.42	0.9	-31.3	30.0	21.0	9.07	3.309	
1,300.0	1,299.8	1,298.4	1,298.3	4.7	4.7	-42.72	4.2	-35.3	30.1	20.6	9.56	3.151	
1,400.0	1,399.5	1,397.5	1,397.0	5.0	4.8	-43.92	9.4	-41.9	30.3	20.5	9.89	3.068 ES	
1,500.0	1,498.7	1,496.4	1,495.3	5.4	5.1	-50.33	13.9	-51.7	31.5	21.2	10.28	3.064 SF	
1,581.3	1,579.0	1,577.2	1,575.4	5.6	5.3	-59.05	16.9	-61.7	33.4	23.0	10.41	3.213	
1,600.0	1,597.5	1,595.8	1,593.9	5.6	5.3	-61.30	17.6	-64.0	33.9	23.5	10.42	3.254	
1,700.0	1,696.1	1,695.5	1,692.7	5.9	5.6	-72.20	21.3	-76.6	37.2	26.5	10.68	3.483	
1,800.0	1,794.7	1,795.3	1,791.6	6.2	5.9	-81.07	24.9	-89.1	41.6	30.7	10.95	3.801	
1,900.0	1,893.3	1,895.0	1,890.4	6.6	6.2	-88.12	28.6	-101.7	46.8	35.6	11.24	4.164	
2,000.0	1,991.8	1,994.7	1,989.3	6.9	6.5	-93.69	32.3	-114.2	52.6	41.0	11.57	4.545	
2,100.0	2,090.4	2,094.4	2,088.2	7.2	6.8	-98.13	35.9	-126.8	58.7	46.8	11.92	4.928	
2,200.0	2,189.0	2,194.1	2,187.0	7.6	7.2	-101.71	39.6	-139.3	65.2	52.9	12.29	5.305	
2,300.0	2,287.6	2,293.8	2,285.9	8.0	7.5	-104.64	43.3	-151.9	71.9	59.2	12.68	5.669	
2,400.0	2,386.2	2,393.6	2,384.7	8.3	7.9	-107.06	46.9	-164.4	78.7	65.6	13.07	6.017	
2,500.0	2,484.8	2,493.3	2,483.6	8.7	8.3	-109.10	50.6	-177.0	85.6	72.1	13.48	6.348	
2,557.9	2,541.9	2,551.1	2,540.9	8.9	8.5	-110.13	52.7	-184.2	89.7	76.0	13.69	6.547	
2,600.0	2,583.4	2,593.0	2,582.4	9.1	8.6	-110.77	54.3	-189.5	92.6	78.7	13.84	6.689	
2,700.0	2,682.3	2,692.8	2,681.4	9.5	9.0	-111.46	57.9	-202.1	99.1	84.8	14.23	6.964	
2,800.0	2,781.4	2,792.6	2,780.3	9.8	9.4	-111.18	61.6	-214.6	104.9	90.4	14.57	7.202	
2,900.0	2,880.7	2,892.4	2,879.3	10.2	9.8	-110.09	65.3	-227.2	110.2	95.3	14.87	7.410	
3,000.0	2,980.2	2,992.3	2,978.3	10.6	10.2	-108.27	68.9	-239.7	114.9	99.8	15.14	7.593	
3,100.0	3,079.8	3,092.0	3,077.2	10.9	10.6	-105.79	72.6	-252.3	119.3	103.9	15.38	7.757	
3,200.0	3,179.6	3,191.7	3,176.0	11.3	10.9	-102.72	76.3	-264.8	123.5	107.9	15.63	7.900	
3,300.0	3,279.5	3,291.3	3,274.7	11.6	11.3	-99.09	79.9	-277.4	127.7	111.8	15.93	8.019	
3,400.0	3,379.5	3,390.8	3,373.3	11.9	11.7	-94.97	83.6	-289.9	132.3	116.0	16.32	8.109	
3,500.0	3,479.5	3,490.0	3,471.7	12.2	12.1	-90.44	87.3	-302.4	137.5	120.7	16.84	8.165	
3,520.5	3,500.0	3,510.4	3,491.9	12.2	12.2	-137.51	88.0	-304.9	138.7	121.7	16.96	8.179	
3,600.0	3,579.5	3,589.2	3,570.0	12.2	12.5	-133.80	90.9	-314.9	143.6	126.1	17.50	8.208	
3,700.0	3,679.5	3,688.3	3,668.3	12.3	12.9	-129.50	94.5	-327.3	150.6	132.4	18.28	8.240	
3,800.0	3,779.5	3,787.4	3,766.6	12.4	13.3	-125.60	98.2	-339.8	158.4	139.3	19.12	8.285	
3,900.0	3,879.5	3,886.6	3,864.9	12.5	13.7	-122.07	101.8	-352.3	166.9	146.9	19.99	8.349	
4,000.0	3,979.5	3,985.7	3,963.1	12.5	14.2	-118.89	105.5	-364.8	175.9	155.0	20.86	8.432	
4,100.0	4,079.5	4,084.9	4,061.4	12.6	14.6	-116.03	109.1	-377.2	185.4	163.7	21.72	8.535	
4,200.0	4,179.5	4,184.0	4,159.7	12.7	15.0	-113.44	112.8	-389.7	195.3	172.8	22.57	8.653	
4,300.0	4,279.5	4,283.1	4,258.0	12.8	15.4	-111.12	116.4	-402.2	205.6	182.2	23.40	8.786	
4,400.0	4,379.5	4,382.3	4,356.3	12.8	15.8	-109.01	120.1	-414.7	216.2	192.0	24.21	8.929	
4,500.0	4,479.5	4,481.4	4,454.5	12.9	16.2	-107.10	123.7	-427.1	227.1	202.1	25.00	9.081	
4,600.0	4,579.5	4,580.5	4,552.8	13.0	16.6	-105.37	127.4	-439.6	238.2	212.4	25.77	9.240	
4,700.0	4,679.5	4,679.7	4,651.1	13.1	17.0	-103.79	131.0	-452.1	249.4	222.9	26.53	9.403	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 701H - 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		Offset Wellbore Centre		Rule Assigned:		Warning						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
4,800.0	4,779.5	4,778.8	4,749.4	13.1	17.4	-102.35	134.7	-464.6	260.9	233.6	27.26	9.570		
4,900.0	4,879.5	4,878.0	4,847.7	13.2	17.8	-101.03	138.3	-477.0	272.5	244.5	27.98	9.738		
5,000.0	4,979.5	4,977.1	4,946.0	13.3	18.2	-99.82	142.0	-489.5	284.2	255.5	28.69	9.906		
5,100.0	5,079.5	5,076.2	5,044.2	13.4	18.7	-98.71	145.6	-502.0	296.1	266.7	29.39	10.075		
5,200.0	5,179.5	5,175.4	5,142.5	13.4	19.1	-97.68	149.2	-514.5	308.0	277.9	30.07	10.243		
5,300.0	5,279.5	5,274.5	5,240.8	13.5	19.5	-96.73	152.9	-526.9	320.1	289.3	30.75	10.409		
5,400.0	5,379.5	5,373.6	5,339.1	13.6	19.9	-95.84	156.5	-539.4	332.2	300.8	31.41	10.574		
5,500.0	5,479.5	5,472.8	5,437.4	13.7	20.3	-95.02	160.2	-551.9	344.4	312.3	32.07	10.736		
5,600.0	5,579.5	5,571.9	5,535.6	13.7	20.7	-94.26	163.8	-564.4	356.6	323.9	32.73	10.896		
5,700.0	5,679.5	5,671.0	5,633.9	13.8	21.2	-93.54	167.5	-576.8	368.9	335.6	33.38	11.054		
5,800.0	5,779.5	5,770.2	5,732.2	13.9	21.6	-92.87	171.1	-589.3	381.3	347.3	34.01	11.210		
5,900.0	5,879.5	5,875.1	5,836.3	14.0	22.0	-92.25	174.8	-601.9	393.1	358.5	34.68	11.337		
6,000.0	5,979.5	5,981.5	5,942.1	14.0	22.4	-91.73	178.0	-612.8	403.3	368.0	35.30	11.423		
6,100.0	6,079.5	6,088.4	6,048.5	14.1	22.8	-91.32	180.6	-621.8	411.7	375.8	35.88	11.472		
6,200.0	6,179.5	6,195.5	6,155.4	14.2	23.2	-91.01	182.7	-628.9	418.3	381.9	36.42	11.486		
6,300.0	6,279.5	6,302.9	6,262.7	14.3	23.6	-90.79	184.2	-634.2	423.1	386.2	36.90	11.468		
6,400.0	6,379.5	6,410.5	6,370.2	14.4	23.9	-90.66	185.2	-637.5	426.2	388.9	37.31	11.423		
6,500.0	6,479.5	6,518.2	6,477.9	14.4	24.2	-90.60	185.6	-638.9	427.5	389.8	37.62	11.364		
6,600.0	6,579.5	6,619.8	6,579.5	14.5	24.2	-90.60	185.6	-638.9	427.5	389.8	37.72	11.334		
6,700.0	6,679.5	6,719.8	6,679.5	14.6	24.3	-90.60	185.6	-638.9	427.5	389.7	37.82	11.303		
6,800.0	6,779.5	6,819.8	6,779.5	14.7	24.3	-90.60	185.6	-638.9	427.5	389.6	37.93	11.271		
6,900.0	6,879.5	6,919.8	6,879.5	14.7	24.3	-90.60	185.6	-638.9	427.5	389.5	38.04	11.239		
7,000.0	6,979.5	7,019.8	6,979.5	14.8	24.4	-90.60	185.6	-638.9	427.5	389.4	38.14	11.208		
7,100.0	7,079.5	7,119.8	7,079.5	14.9	24.4	-90.60	185.6	-638.9	427.5	389.2	38.25	11.177		
7,200.0	7,179.5	7,219.8	7,179.5	15.0	24.5	-90.60	185.6	-638.9	427.5	389.1	38.36	11.145		
7,300.0	7,279.5	7,319.8	7,279.5	15.0	24.5	-90.60	185.6	-638.9	427.5	389.0	38.46	11.114		
7,400.0	7,379.5	7,419.8	7,379.5	15.1	24.5	-90.60	185.6	-638.9	427.5	388.9	38.57	11.083		
7,500.0	7,479.5	7,519.8	7,479.5	15.2	24.6	-90.60	185.6	-638.9	427.5	388.8	38.68	11.052		
7,600.0	7,579.5	7,619.8	7,579.5	15.3	24.6	-90.60	185.6	-638.9	427.5	388.7	38.79	11.021		
7,700.0	7,679.5	7,719.8	7,679.5	15.4	24.7	-90.60	185.6	-638.9	427.5	388.6	38.90	10.990		
7,800.0	7,779.5	7,819.8	7,779.5	15.4	24.7	-90.60	185.6	-638.9	427.5	388.5	39.01	10.959		
7,900.0	7,879.5	7,919.8	7,879.5	15.5	24.7	-90.60	185.6	-638.9	427.5	388.4	39.12	10.928		
8,000.0	7,979.5	8,019.8	7,979.5	15.6	24.8	-90.60	185.6	-638.9	427.5	388.3	39.23	10.897		
8,100.0	8,079.5	8,119.8	8,079.5	15.7	24.8	-90.60	185.6	-638.9	427.5	388.2	39.34	10.866		
8,200.0	8,179.5	8,219.8	8,179.5	15.7	24.9	-90.60	185.6	-638.9	427.5	388.0	39.45	10.836		
8,300.0	8,279.5	8,319.8	8,279.5	15.8	24.9	-90.60	185.6	-638.9	427.5	387.9	39.56	10.805		
8,400.0	8,379.5	8,419.8	8,379.5	15.9	24.9	-90.60	185.6	-638.9	427.5	387.8	39.68	10.775		
8,500.0	8,479.5	8,519.8	8,479.5	16.0	25.0	-90.60	185.6	-638.9	427.5	387.7	39.79	10.744		
8,600.0	8,579.5	8,619.8	8,579.5	16.1	25.0	-90.60	185.6	-638.9	427.5	387.6	39.90	10.714		
8,700.0	8,679.5	8,719.8	8,679.5	16.1	25.1	-90.60	185.6	-638.9	427.5	387.5	40.01	10.684		
8,800.0	8,779.5	8,819.8	8,779.5	16.2	25.1	-90.60	185.6	-638.9	427.5	387.4	40.13	10.654		
8,900.0	8,879.5	8,919.8	8,879.5	16.3	25.2	-90.60	185.6	-638.9	427.5	387.3	40.24	10.624		
9,000.0	8,979.5	9,019.8	8,979.5	16.4	25.2	-90.60	185.6	-638.9	427.5	387.1	40.35	10.594		
9,100.0	9,079.5	9,119.8	9,079.5	16.4	25.2	-90.60	185.6	-638.9	427.5	387.0	40.47	10.564		
9,200.0	9,179.5	9,219.8	9,179.5	16.5	25.3	-90.60	185.6	-638.9	427.5	386.9	40.58	10.534		
9,300.0	9,279.5	9,319.8	9,279.5	16.6	25.3	-90.60	185.6	-638.9	427.5	386.8	40.70	10.504		
9,400.0	9,379.5	9,419.8	9,379.5	16.7	25.4	-90.60	185.6	-638.9	427.5	386.7	40.81	10.475		
9,500.0	9,479.5	9,519.8	9,479.5	16.8	25.4	-90.60	185.6	-638.9	427.5	386.6	40.93	10.445		
9,600.0	9,579.5	9,619.8	9,579.5	16.8	25.5	-90.60	185.6	-638.9	427.5	386.5	41.04	10.416		
9,700.0	9,679.5	9,719.8	9,679.5	16.9	25.5	-90.60	185.6	-638.9	427.5	386.3	41.16	10.386		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 701H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
9,800.0	9,779.5	9,819.8	9,779.5	17.0	25.5	-90.60	185.6	-638.9	427.5	386.2	41.28	10.357		
9,900.0	9,879.5	9,919.8	9,879.5	17.1	25.6	-90.60	185.6	-638.9	427.5	386.1	41.39	10.328		
10,000.0	9,979.5	10,019.8	9,979.5	17.1	25.6	-90.60	185.6	-638.9	427.5	386.0	41.51	10.299		
10,100.0	10,079.5	10,119.8	10,079.5	17.2	25.7	-90.60	185.6	-638.9	427.5	385.9	41.63	10.270		
10,200.0	10,179.5	10,219.8	10,179.5	17.3	25.7	-90.60	185.6	-638.9	427.5	385.8	41.75	10.241		
10,300.0	10,279.5	10,319.8	10,279.5	17.4	25.8	-90.60	185.6	-638.9	427.5	385.6	41.86	10.212		
10,400.0	10,379.5	10,419.8	10,379.5	17.5	25.8	-90.60	185.6	-638.9	427.5	385.5	41.98	10.183		
10,500.0	10,479.5	10,519.8	10,479.5	17.5	25.9	-90.60	185.6	-638.9	427.5	385.4	42.10	10.154		
10,600.0	10,579.5	10,619.8	10,579.5	17.6	25.9	-90.60	185.6	-638.9	427.5	385.3	42.22	10.126		
10,700.0	10,679.5	10,719.8	10,679.5	17.7	26.0	-90.60	185.6	-638.9	427.5	385.2	42.34	10.097		
10,800.0	10,779.5	10,819.8	10,779.5	17.8	26.0	-90.60	185.6	-638.9	427.5	385.0	42.46	10.069		
10,900.0	10,879.5	10,919.8	10,879.5	17.9	26.0	-90.60	185.6	-638.9	427.5	384.9	42.58	10.041		
11,000.0	10,979.5	11,019.8	10,979.5	17.9	26.1	-90.60	185.6	-638.9	427.5	384.8	42.70	10.013		
11,100.0	11,079.5	11,119.8	11,079.5	18.0	26.1	-90.60	185.6	-638.9	427.5	384.7	42.82	9.985		
11,200.0	11,179.5	11,219.8	11,179.5	18.1	26.2	-90.60	185.6	-638.9	427.5	384.6	42.94	9.957		
11,300.0	11,279.5	11,319.8	11,279.5	18.2	26.2	-90.60	185.6	-638.9	427.5	384.4	43.06	9.929		
11,400.0	11,379.5	11,419.8	11,379.5	18.2	26.3	-90.60	185.6	-638.9	427.5	384.3	43.18	9.901		
11,500.0	11,479.5	11,519.8	11,479.5	18.3	26.3	-90.60	185.6	-638.9	427.5	384.2	43.30	9.873		
11,600.0	11,579.5	11,619.8	11,579.5	18.4	26.4	-90.60	185.6	-638.9	427.5	384.1	43.42	9.846		
11,700.0	11,679.5	11,719.8	11,679.5	18.5	26.4	-90.60	185.6	-638.9	427.5	384.0	43.54	9.819		
11,710.0	11,689.5	11,729.8	11,689.5	18.5	26.4	-90.60	185.6	-638.9	427.5	384.0	43.55	9.817		
11,800.0	11,779.5	11,818.9	11,778.3	18.6	26.4	-91.33	180.2	-638.9	427.6	384.0	43.51	9.826		
11,900.0	11,879.5	11,912.1	11,868.5	18.6	26.2	-94.39	157.3	-638.7	428.7	385.5	43.19	9.925		
11,910.0	11,889.5	11,920.9	11,876.7	18.6	26.2	-94.80	154.2	-638.7	429.0	385.8	43.15	9.942		
11,925.0	11,904.5	11,933.8	11,888.8	18.6	26.2	84.86	149.5	-638.7	429.5	386.4	43.08	9.968		
11,950.0	11,929.4	11,955.2	11,908.4	18.6	26.2	83.76	140.8	-638.6	430.4	387.4	42.98	10.014		
11,975.0	11,954.3	11,975.0	11,926.1	18.6	26.1	82.74	132.1	-638.6	431.5	388.5	42.91	10.054		
12,000.0	11,978.9	11,997.2	11,945.5	18.5	26.1	81.62	121.5	-638.5	432.7	389.8	42.83	10.102		
12,025.0	12,003.4	12,017.7	11,963.1	18.5	26.1	80.59	110.8	-638.5	434.0	391.2	42.79	10.143		
12,050.0	12,027.5	12,038.1	11,980.1	18.4	26.1	79.58	99.5	-638.4	435.4	392.7	42.77	10.180		
12,075.0	12,051.2	12,058.2	11,996.3	18.4	26.0	78.60	87.6	-638.3	437.0	394.2	42.78	10.213		
12,100.0	12,074.5	12,078.2	12,011.9	18.3	26.0	77.66	75.2	-638.3	438.6	395.7	42.82	10.241		
12,125.0	12,097.3	12,100.0	12,028.4	18.3	26.0	76.67	60.8	-638.2	440.2	397.4	42.84	10.276		
12,150.0	12,119.5	12,117.5	12,041.1	18.2	26.0	75.86	48.8	-638.1	441.9	398.9	42.98	10.282		
12,175.0	12,141.1	12,136.9	12,054.7	18.2	26.0	75.01	34.9	-638.0	443.6	400.5	43.09	10.294		
12,200.0	12,162.0	12,156.2	12,067.6	18.2	25.9	74.20	20.6	-637.9	445.4	402.1	43.24	10.301		
12,225.0	12,182.1	12,175.0	12,079.6	18.1	25.9	73.44	6.1	-637.9	447.1	403.7	43.41	10.300		
12,250.0	12,201.5	12,194.3	12,091.3	18.1	25.9	72.70	-9.2	-637.8	448.8	405.2	43.59	10.297		
12,275.0	12,219.9	12,213.2	12,102.2	18.0	25.9	72.01	-24.7	-637.7	450.5	406.7	43.79	10.287		
12,300.0	12,237.5	12,232.0	12,112.4	18.0	25.9	71.36	-40.4	-637.6	452.1	408.1	44.02	10.272		
12,325.0	12,254.2	12,250.0	12,121.6	18.0	25.9	70.76	-55.9	-637.5	453.7	409.4	44.27	10.248		
12,350.0	12,269.8	12,269.3	12,130.8	17.9	25.9	70.18	-72.9	-637.4	455.2	410.7	44.51	10.228		
12,375.0	12,284.4	12,287.8	12,138.9	17.9	25.9	69.65	-89.5	-637.3	456.7	411.9	44.77	10.201		
12,400.0	12,297.9	12,306.2	12,146.4	17.9	25.9	69.17	-106.3	-637.2	458.0	413.0	45.04	10.170		
12,425.0	12,310.3	12,325.0	12,153.4	17.9	25.9	68.73	-123.7	-637.1	459.3	414.0	45.30	10.139		
12,450.0	12,321.5	12,342.9	12,159.4	17.9	25.9	68.35	-140.6	-637.0	460.4	414.8	45.58	10.101		
12,475.0	12,331.6	12,361.2	12,164.8	17.9	25.9	68.00	-158.0	-636.9	461.4	415.6	45.86	10.063		
12,500.0	12,340.4	12,379.4	12,169.6	17.9	25.9	67.70	-175.6	-636.8	462.4	416.2	46.13	10.023		
12,525.0	12,348.0	12,400.0	12,174.2	17.9	25.9	67.42	-195.7	-636.7	463.2	416.8	46.36	9.991		
12,550.0	12,354.3	12,415.7	12,177.1	17.9	25.9	67.22	-211.1	-636.6	463.8	417.1	46.66	9.940		
12,575.0	12,359.4	12,433.8	12,179.8	17.9	26.0	67.06	-229.0	-636.5	464.3	417.4	46.91	9.898		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 701H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
12,600.0	12,363.2	12,450.0	12,181.7	17.9	26.0	66.94	-245.1	-636.4	464.7	417.5	47.18	9.851		
12,625.0	12,365.7	12,470.0	12,183.2	17.9	26.0	66.86	-265.0	-636.3	464.9	417.6	47.38	9.813		
12,650.0	12,366.9	12,488.1	12,183.9	18.0	26.0	66.83	-283.1	-636.2	465.0	417.5	47.60	9.771		
12,660.0	12,367.0	12,496.8	12,184.0	18.0	26.0	66.83	-291.8	-636.2	465.1	417.4	47.66	9.757		
12,662.0	12,367.0	12,496.8	12,184.0	18.0	26.0	66.83	-291.8	-636.2	465.0	417.4	47.69	9.751		
12,700.0	12,367.0	12,534.7	12,184.0	18.0	26.1	66.83	-329.8	-636.0	465.0	417.1	47.92	9.705		
12,800.0	12,367.0	12,634.7	12,184.0	18.2	26.2	66.83	-429.8	-635.4	465.1	416.5	48.56	9.577		
12,900.0	12,367.0	12,734.7	12,184.0	18.5	26.4	66.83	-529.8	-634.8	465.1	415.8	49.26	9.441		
13,000.0	12,367.0	12,834.7	12,184.0	18.7	26.7	66.83	-629.8	-634.2	465.1	415.0	50.02	9.298		
13,100.0	12,367.0	12,934.7	12,184.0	19.1	26.9	66.83	-729.8	-633.7	465.1	414.2	50.84	9.149		
13,200.0	12,367.0	13,034.7	12,184.0	19.4	27.2	66.83	-829.8	-633.1	465.1	413.4	51.71	8.995		
13,300.0	12,367.0	13,134.7	12,184.0	19.8	27.6	66.83	-929.8	-632.5	465.1	412.5	52.63	8.837		
13,400.0	12,367.0	13,234.7	12,184.0	20.3	27.9	66.83	-1,029.8	-632.0	465.1	411.5	53.60	8.678		
13,500.0	12,367.0	13,334.7	12,184.0	20.8	28.3	66.83	-1,129.7	-631.4	465.1	410.5	54.61	8.516		
13,600.0	12,367.0	13,434.7	12,184.0	21.3	28.7	66.83	-1,229.7	-630.8	465.1	409.4	55.67	8.355		
13,700.0	12,367.0	13,534.7	12,184.0	21.9	29.1	66.83	-1,329.7	-630.2	465.1	408.3	56.77	8.193		
13,800.0	12,367.0	13,634.7	12,184.0	22.5	29.6	66.83	-1,429.7	-629.7	465.1	407.2	57.91	8.032		
13,900.0	12,367.0	13,734.7	12,184.0	23.1	30.1	66.83	-1,529.7	-629.1	465.1	406.0	59.08	7.872		
14,000.0	12,367.0	13,834.7	12,184.0	23.7	30.6	66.83	-1,629.7	-628.5	465.1	404.8	60.29	7.715		
14,100.0	12,367.0	13,934.7	12,184.0	24.4	31.1	66.83	-1,729.7	-628.0	465.1	403.6	61.53	7.559		
14,200.0	12,367.0	14,034.7	12,184.0	25.1	31.6	66.83	-1,829.7	-627.4	465.1	402.3	62.80	7.407		
14,300.0	12,367.0	14,134.7	12,184.0	25.8	32.2	66.83	-1,929.7	-626.8	465.1	401.0	64.10	7.257		
14,400.0	12,367.0	14,234.7	12,184.0	26.5	32.8	66.83	-2,029.7	-626.3	465.2	399.7	65.43	7.110		
14,500.0	12,367.0	14,334.7	12,184.0	27.2	33.4	66.83	-2,129.7	-625.7	465.2	398.4	66.78	6.966		
14,600.0	12,367.0	14,434.7	12,184.0	28.0	34.0	66.83	-2,229.7	-625.1	465.2	397.0	68.15	6.826		
14,700.0	12,367.0	14,534.7	12,184.0	28.7	34.6	66.83	-2,329.7	-624.5	465.2	395.6	69.55	6.689		
14,800.0	12,367.0	14,634.7	12,184.0	29.5	35.3	66.83	-2,429.7	-624.0	465.2	394.2	70.96	6.555		
14,900.0	12,367.0	14,734.7	12,184.0	30.3	35.9	66.83	-2,529.7	-623.4	465.2	392.8	72.40	6.425		
15,000.0	12,367.0	14,834.7	12,184.0	31.1	36.6	66.83	-2,629.7	-622.8	465.2	391.3	73.85	6.299		
15,100.0	12,367.0	14,934.7	12,184.0	31.9	37.3	66.84	-2,729.7	-622.3	465.2	389.9	75.33	6.176		
15,200.0	12,367.0	15,034.7	12,184.0	32.7	38.0	66.84	-2,829.7	-621.7	465.2	388.4	76.82	6.056		
15,300.0	12,367.0	15,134.7	12,184.0	33.5	38.7	66.84	-2,929.7	-621.1	465.2	386.9	78.32	5.940		
15,400.0	12,367.0	15,234.7	12,184.0	34.4	39.4	66.84	-3,029.7	-620.6	465.2	385.4	79.84	5.827		
15,500.0	12,367.0	15,334.7	12,184.0	35.2	40.1	66.84	-3,129.7	-620.0	465.2	383.9	81.37	5.717		
15,600.0	12,367.0	15,434.7	12,184.0	36.0	40.9	66.84	-3,229.7	-619.4	465.2	382.3	82.92	5.611		
15,700.0	12,367.0	15,534.7	12,184.0	36.9	41.6	66.84	-3,329.7	-618.8	465.2	380.8	84.47	5.507		
15,800.0	12,367.0	15,634.7	12,184.0	37.7	42.4	66.84	-3,429.7	-618.3	465.2	379.2	86.04	5.407		
15,900.0	12,367.0	15,734.7	12,184.0	38.6	43.2	66.84	-3,529.7	-617.7	465.2	377.6	87.62	5.310		
16,000.0	12,367.0	15,834.7	12,184.0	39.5	43.9	66.84	-3,629.7	-617.1	465.3	376.0	89.21	5.215		
16,100.0	12,367.0	15,934.7	12,184.0	40.3	44.7	66.84	-3,729.7	-616.6	465.3	374.4	90.81	5.123		
16,200.0	12,367.0	16,034.7	12,184.0	41.2	45.5	66.84	-3,829.7	-616.0	465.3	372.8	92.42	5.034		
16,300.0	12,367.0	16,134.7	12,184.0	42.1	46.3	66.84	-3,929.7	-615.4	465.3	371.2	94.04	4.948		
16,400.0	12,367.0	16,234.7	12,184.0	42.9	47.1	66.84	-4,029.7	-614.8	465.3	369.6	95.67	4.863		
16,500.0	12,367.0	16,334.7	12,184.0	43.8	47.9	66.84	-4,129.7	-614.3	465.3	368.0	97.30	4.782		
16,600.0	12,367.0	16,434.7	12,184.0	44.7	48.7	66.84	-4,229.7	-613.7	465.3	366.3	98.95	4.702		
16,700.0	12,367.0	16,534.7	12,184.0	45.6	49.5	66.84	-4,329.7	-613.1	465.3	364.7	100.60	4.625		
16,800.0	12,367.0	16,634.7	12,184.0	46.5	50.4	66.84	-4,429.7	-612.6	465.3	363.1	102.25	4.551		
16,900.0	12,367.0	16,734.7	12,184.0	47.4	51.2	66.84	-4,529.7	-612.0	465.3	361.4	103.92	4.478		
17,000.0	12,367.0	16,834.7	12,184.0	48.3	52.0	66.84	-4,629.7	-611.4	465.3	359.7	105.58	4.407		
17,100.0	12,367.0	16,934.7	12,184.0	49.2	52.9	66.84	-4,729.7	-610.9	465.3	358.1	107.26	4.338		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot
Project:	ZIA HILLS UNIT AREA	TVD Reference:	ZIA HILLS UNIT2632 WC 704H
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Grid
Well Error:	0.0 usft	Output errors are at	Minimum Curvature
Reference Wellbore	OWB	Database:	2.00 sigma
Reference Design:	PWP0	Offset TVD Reference:	EDT 17 Permian Prod
			Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 701H - 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		Rule Assigned:		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,200.0	12,367.0	17,034.7	12,184.0	50.1	53.7	66.84	-4,829.7	-610.3	465.3	356.4	108.94	4.271	
17,300.0	12,367.0	17,134.7	12,184.0	51.0	54.5	66.84	-4,929.7	-609.7	465.3	354.7	110.63	4.206	
17,400.0	12,367.0	17,234.7	12,184.0	51.9	55.4	66.84	-5,029.7	-609.1	465.3	353.0	112.32	4.143	
17,500.0	12,367.0	17,334.7	12,184.0	52.8	56.3	66.84	-5,129.7	-608.6	465.4	351.3	114.01	4.082	
17,600.0	12,367.0	17,434.7	12,184.0	53.7	57.1	66.84	-5,229.7	-608.0	465.4	349.6	115.71	4.022	
17,700.0	12,367.0	17,534.7	12,184.0	54.6	58.0	66.84	-5,329.7	-607.4	465.4	347.9	117.42	3.963	
17,800.0	12,367.0	17,634.7	12,184.0	55.6	58.8	66.84	-5,429.7	-606.9	465.4	346.2	119.13	3.906	
17,900.0	12,367.0	17,734.7	12,184.0	56.5	59.7	66.84	-5,529.7	-606.3	465.4	344.5	120.84	3.851	
18,000.0	12,367.0	17,834.7	12,184.0	57.4	60.6	66.84	-5,629.7	-605.7	465.4	342.8	122.56	3.797	
18,100.0	12,367.0	17,934.7	12,184.0	58.3	61.4	66.84	-5,729.7	-605.2	465.4	341.1	124.28	3.745	
18,200.0	12,367.0	18,034.7	12,184.0	59.2	62.3	66.85	-5,829.7	-604.6	465.4	339.4	126.01	3.693	
18,300.0	12,367.0	18,134.7	12,184.0	60.1	63.2	66.85	-5,929.7	-604.0	465.4	337.7	127.74	3.643	
18,400.0	12,367.0	18,234.7	12,184.0	61.1	64.1	66.85	-6,029.7	-603.4	465.4	335.9	129.47	3.595	
18,500.0	12,367.0	18,334.7	12,184.0	62.0	65.0	66.85	-6,129.7	-602.9	465.4	334.2	131.20	3.547	
18,600.0	12,367.0	18,434.7	12,184.0	62.9	65.8	66.85	-6,229.7	-602.3	465.4	332.5	132.94	3.501	
18,700.0	12,367.0	18,534.7	12,184.0	63.8	66.7	66.85	-6,329.7	-601.7	465.4	330.7	134.68	3.456	
18,800.0	12,367.0	18,634.7	12,184.0	64.8	67.6	66.85	-6,429.7	-601.2	465.4	329.0	136.43	3.412	
18,900.0	12,367.0	18,734.7	12,184.0	65.7	68.5	66.85	-6,529.7	-600.6	465.4	327.3	138.17	3.369	
19,000.0	12,367.0	18,834.7	12,184.0	66.6	69.4	66.85	-6,629.7	-600.0	465.4	325.5	139.92	3.326	
19,100.0	12,367.0	18,934.7	12,184.0	67.6	70.3	66.85	-6,729.7	-599.4	465.5	323.8	141.67	3.285	
19,200.0	12,367.0	19,034.7	12,184.0	68.5	71.2	66.85	-6,829.7	-598.9	465.5	322.0	143.43	3.245	
19,300.0	12,367.0	19,134.7	12,184.0	69.4	72.1	66.85	-6,929.7	-598.3	465.5	320.3	145.18	3.206	
19,400.0	12,367.0	19,234.7	12,184.0	70.4	73.0	66.85	-7,029.7	-597.7	465.5	318.5	146.94	3.168	
19,500.0	12,367.0	19,334.7	12,184.0	71.3	73.9	66.85	-7,129.7	-597.2	465.5	316.8	148.70	3.130	
19,506.9	12,367.0	19,341.6	12,184.0	71.4	74.0	66.85	-7,136.6	-597.1	465.5	316.7	148.83	3.128	
19,582.5	12,367.0	19,416.6	12,184.0	72.1	74.6	66.85	-7,211.5	-596.7	465.5	315.3	150.16	3.100	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.0	0.0	0.0	0.0	0.0	0.0	-90.17	-0.2	-59.8	59.8	59.4	0.48	124.802		
100.0	100.0	100.0	100.0	1.2	1.2	-90.17	-0.2	-59.8	59.8	57.0	2.87	20.872		
200.0	200.0	200.0	200.0	1.7	1.7	-90.17	-0.2	-59.8	59.8	56.0	3.86	15.488		
300.0	300.0	300.0	300.0	2.1	2.1	-90.17	-0.2	-59.8	59.8	55.2	4.63	12.914		
400.0	400.0	400.0	400.0	2.4	2.4	-90.17	-0.2	-59.8	59.8	54.5	5.29	11.318		
500.0	500.0	500.0	500.0	2.7	2.7	-90.17	-0.2	-59.8	59.8	54.0	5.87	10.200		
600.0	600.0	600.0	600.0	3.0	3.0	-90.17	-0.2	-59.8	59.8	53.4	6.39	9.359		
700.0	700.0	700.0	700.0	3.2	3.2	-90.17	-0.2	-59.8	59.8	53.0	6.88	8.695		
800.0	800.0	800.0	800.0	3.5	3.5	-90.17	-0.2	-59.8	59.8	52.5	7.34	8.153		
900.0	900.0	900.0	900.0	3.7	3.7	-90.17	-0.2	-59.8	59.8	52.1	7.77	7.700		
1,000.0	1,000.0	1,000.0	1,000.0	3.9	3.9	-90.17	-0.2	-59.8	59.8	51.7	8.18	7.313		
1,100.0	1,100.0	1,100.0	1,100.0	4.1	4.1	-90.17	-0.2	-59.8	59.8	51.3	8.58	6.977 CC		
1,200.0	1,200.0	1,198.0	1,198.0	4.4	4.4	-42.93	0.1	-61.5	60.2	51.1	9.11	6.612 ES		
1,300.0	1,299.8	1,295.9	1,295.8	4.7	4.7	-45.26	1.0	-66.4	61.5	51.9	9.61	6.397		
1,400.0	1,399.5	1,393.7	1,393.2	5.0	5.0	-48.92	2.5	-74.6	63.8	53.7	10.09	6.320		
1,500.0	1,498.7	1,491.4	1,490.2	5.4	5.3	-53.57	4.5	-86.1	67.4	56.9	10.54	6.395		
1,581.3	1,579.0	1,570.7	1,568.6	5.6	5.6	-57.80	6.6	-97.8	71.6	60.7	10.84	6.600		
1,600.0	1,597.5	1,588.9	1,586.5	5.6	5.6	-58.78	7.2	-100.8	72.7	61.8	10.89	6.676		
1,700.0	1,696.1	1,687.8	1,683.9	5.9	5.9	-63.16	10.3	-118.1	80.2	68.9	11.26	7.118		
1,800.0	1,794.7	1,787.4	1,781.8	6.2	6.2	-66.76	13.5	-135.7	88.1	76.5	11.64	7.573		
1,900.0	1,893.3	1,886.9	1,879.7	6.6	6.5	-69.75	16.6	-153.2	96.4	84.4	12.02	8.020		
2,000.0	1,991.8	1,986.5	1,977.7	6.9	6.9	-72.27	19.8	-170.8	104.8	92.4	12.40	8.453		
2,100.0	2,090.4	2,086.0	2,075.6	7.2	7.2	-74.41	22.9	-188.3	113.5	100.7	12.79	8.870		
2,200.0	2,189.0	2,185.5	2,173.5	7.6	7.6	-76.25	26.1	-205.9	122.2	109.1	13.18	9.271		
2,300.0	2,287.6	2,285.1	2,271.5	8.0	7.9	-77.83	29.2	-223.4	131.1	117.5	13.58	9.655		
2,400.0	2,386.2	2,384.6	2,369.4	8.3	8.3	-79.22	32.4	-241.0	140.1	126.1	13.98	10.022		
2,500.0	2,484.8	2,484.2	2,467.3	8.7	8.7	-80.44	35.5	-258.5	149.1	134.7	14.38	10.372		
2,557.9	2,541.9	2,541.9	2,524.1	8.9	8.9	-81.08	37.4	-268.7	154.4	139.8	14.58	10.589		
2,600.0	2,583.4	2,583.7	2,565.3	9.1	9.1	-81.50	38.7	-276.1	158.2	143.5	14.72	10.747		
2,700.0	2,682.3	2,683.3	2,663.2	9.5	9.5	-82.01	41.9	-293.7	167.6	152.4	15.16	11.057		
2,800.0	2,781.4	2,782.8	2,761.1	9.8	9.9	-81.92	45.0	-311.2	177.2	161.6	15.62	11.342		
2,900.0	2,880.7	2,882.3	2,859.0	10.2	10.3	-81.32	48.2	-328.7	187.1	170.9	16.13	11.598		
3,000.0	2,980.2	2,981.7	2,956.8	10.6	10.7	-80.29	51.3	-346.3	197.2	180.6	16.68	11.828		
3,100.0	3,079.8	3,081.0	3,054.5	10.9	11.1	-78.90	54.5	-363.8	207.8	190.6	17.27	12.034		
3,200.0	3,179.6	3,180.2	3,152.1	11.3	11.5	-77.21	57.6	-381.3	218.9	201.0	17.91	12.220		
3,300.0	3,279.5	3,279.2	3,249.5	11.6	11.9	-75.29	60.7	-398.7	230.6	212.0	18.61	12.393		
3,400.0	3,379.5	3,377.9	3,346.7	11.9	12.3	-73.17	63.9	-416.1	243.1	223.7	19.35	12.560		
3,500.0	3,479.5	3,476.5	3,443.6	12.2	12.8	-70.92	67.0	-433.5	256.5	236.3	20.14	12.733		
3,520.5	3,500.0	3,496.7	3,463.5	12.2	12.8	-118.49	67.6	-437.1	259.3	239.0	20.30	12.778		
3,600.0	3,579.5	3,574.9	3,540.4	12.2	13.2	-116.61	70.1	-450.9	270.7	249.8	20.92	12.941		
3,700.0	3,679.5	3,673.3	3,637.2	12.3	13.6	-114.47	73.2	-468.2	285.3	263.6	21.70	13.150		
3,800.0	3,779.5	3,771.7	3,734.0	12.4	14.0	-112.53	76.4	-485.6	300.3	277.8	22.46	13.369		
3,900.0	3,879.5	3,870.0	3,830.8	12.5	14.5	-110.78	79.5	-502.9	315.6	292.4	23.21	13.594		
4,000.0	3,979.5	3,968.4	3,927.6	12.5	14.9	-109.19	82.6	-520.3	331.1	307.2	23.95	13.823		
4,100.0	4,079.5	4,066.8	4,024.4	12.6	15.3	-107.75	85.7	-537.6	346.9	322.2	24.68	14.054		
4,200.0	4,179.5	4,165.2	4,121.2	12.7	15.8	-106.42	88.8	-555.0	362.9	337.5	25.40	14.286		
4,300.0	4,279.5	4,263.6	4,217.9	12.8	16.2	-105.21	91.9	-572.3	379.0	352.9	26.11	14.517		
4,400.0	4,379.5	4,361.9	4,314.7	12.8	16.6	-104.10	95.1	-589.7	395.3	368.5	26.81	14.747		
4,500.0	4,479.5	4,460.3	4,411.5	12.9	17.1	-103.08	98.2	-607.0	411.8	384.3	27.50	14.973		
4,600.0	4,579.5	4,558.7	4,508.3	13.0	17.5	-102.14	101.3	-624.4	428.3	400.1	28.19	15.196		
4,700.0	4,679.5	4,657.1	4,605.1	13.1	17.9	-101.26	104.4	-641.7	445.0	416.1	28.87	15.416		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
4,800.0	4,779.5	4,755.5	4,701.9	13.1	18.4	-100.45	107.5	-659.1	461.8	432.2	29.54	15.631		
4,900.0	4,879.5	4,853.9	4,798.7	13.2	18.8	-99.69	110.7	-676.4	478.6	448.4	30.21	15.842		
5,000.0	4,979.5	4,952.2	4,895.5	13.3	19.2	-98.99	113.8	-693.8	495.5	464.6	30.88	16.048		
5,100.0	5,079.5	5,050.6	4,992.3	13.4	19.7	-98.33	116.9	-711.1	512.5	481.0	31.54	16.249		
5,200.0	5,179.5	5,149.0	5,089.1	13.4	20.1	-97.72	120.0	-728.5	529.5	497.3	32.20	16.446		
5,300.0	5,279.5	5,247.4	5,185.8	13.5	20.6	-97.14	123.1	-745.8	546.6	513.8	32.86	16.637		
5,400.0	5,379.5	5,345.8	5,282.6	13.6	21.0	-96.60	126.3	-763.1	563.8	530.3	33.51	16.824		
5,500.0	5,479.5	5,444.2	5,379.4	13.7	21.4	-96.09	129.4	-780.5	581.0	546.8	34.16	17.006		
5,600.0	5,579.5	5,542.5	5,476.2	13.7	21.9	-95.61	132.5	-797.8	598.2	563.4	34.82	17.183		
5,700.0	5,679.5	5,640.9	5,573.0	13.8	22.3	-95.16	135.6	-815.2	615.5	580.0	35.46	17.356		
5,800.0	5,779.5	5,739.3	5,669.8	13.9	22.8	-94.73	138.7	-832.5	632.8	596.7	36.11	17.524		
5,900.0	5,879.5	5,837.7	5,766.6	14.0	23.2	-94.32	141.8	-849.9	650.2	613.4	36.76	17.687		
6,000.0	5,979.5	5,936.1	5,863.4	14.0	23.7	-93.94	145.0	-867.2	667.5	630.1	37.41	17.846		
6,100.0	6,079.5	6,034.4	5,960.2	14.1	24.1	-93.57	148.1	-884.6	685.0	646.9	38.05	18.001		
6,200.0	6,179.5	6,132.8	6,057.0	14.2	24.5	-93.22	151.2	-901.9	702.4	663.7	38.70	18.152		
6,300.0	6,279.5	6,231.2	6,153.7	14.3	25.0	-92.89	154.3	-919.3	719.8	680.5	39.34	18.298		
6,400.0	6,379.5	6,329.6	6,250.5	14.4	25.4	-92.58	157.4	-936.6	737.3	697.3	39.98	18.441		
6,500.0	6,479.5	6,428.0	6,347.3	14.4	25.9	-92.28	160.6	-954.0	754.8	714.2	40.63	18.580		
6,600.0	6,579.5	6,526.4	6,444.1	14.5	26.3	-91.99	163.7	-971.3	772.3	731.1	41.26	18.717		
6,700.0	6,679.5	6,635.4	6,551.5	14.6	26.8	-91.70	167.0	-990.0	789.4	747.4	41.95	18.819		
6,800.0	6,779.5	6,749.8	6,664.5	14.7	27.3	-91.43	170.2	-1,007.6	804.6	762.0	42.65	18.868		
6,900.0	6,879.5	6,864.8	6,778.5	14.7	27.8	-91.21	173.0	-1,022.9	818.0	774.7	43.31	18.886		
7,000.0	6,979.5	6,980.5	6,893.3	14.8	28.3	-91.03	175.3	-1,036.1	829.3	785.4	43.94	18.874		
7,100.0	7,079.5	7,096.6	7,008.9	14.9	28.7	-90.88	177.3	-1,047.1	838.7	794.2	44.53	18.835		
7,200.0	7,179.5	7,213.1	7,125.1	15.0	29.2	-90.76	178.9	-1,055.8	846.2	801.1	45.07	18.774		
7,300.0	7,279.5	7,330.0	7,241.8	15.0	29.6	-90.68	180.0	-1,062.1	851.6	806.0	45.56	18.692		
7,400.0	7,379.5	7,447.0	7,358.8	15.1	29.9	-90.63	180.7	-1,066.1	855.0	809.0	45.97	18.597		
7,500.0	7,479.5	7,564.2	7,475.9	15.2	30.2	-90.61	181.0	-1,067.8	856.4	810.2	46.22	18.527		
7,600.0	7,579.5	7,667.8	7,579.5	15.3	30.2	-90.61	181.0	-1,067.8	856.5	810.1	46.33	18.486		
7,700.0	7,679.5	7,767.8	7,679.5	15.4	30.3	-90.61	181.0	-1,067.8	856.5	810.0	46.42	18.449		
7,800.0	7,779.5	7,867.8	7,779.5	15.4	30.3	-90.61	181.0	-1,067.8	856.5	810.0	46.51	18.414		
7,900.0	7,879.5	7,967.8	7,879.5	15.5	30.3	-90.61	181.0	-1,067.8	856.5	809.9	46.60	18.379		
8,000.0	7,979.5	8,067.8	7,979.5	15.6	30.4	-90.61	181.0	-1,067.8	856.5	809.8	46.69	18.344		
8,100.0	8,079.5	8,167.8	8,079.5	15.7	30.4	-90.61	181.0	-1,067.8	856.5	809.7	46.78	18.309		
8,200.0	8,179.5	8,267.8	8,179.5	15.7	30.4	-90.61	181.0	-1,067.8	856.5	809.6	46.87	18.274		
8,300.0	8,279.5	8,367.8	8,279.5	15.8	30.5	-90.61	181.0	-1,067.8	856.5	809.5	46.96	18.239		
8,400.0	8,379.5	8,467.8	8,379.5	15.9	30.5	-90.61	181.0	-1,067.8	856.5	809.4	47.05	18.204		
8,500.0	8,479.5	8,567.8	8,479.5	16.0	30.5	-90.61	181.0	-1,067.8	856.5	809.3	47.14	18.169		
8,600.0	8,579.5	8,667.8	8,579.5	16.1	30.6	-90.61	181.0	-1,067.8	856.5	809.2	47.23	18.134		
8,700.0	8,679.5	8,767.8	8,679.5	16.1	30.6	-90.61	181.0	-1,067.8	856.5	809.1	47.32	18.099		
8,800.0	8,779.5	8,867.8	8,779.5	16.2	30.6	-90.61	181.0	-1,067.8	856.5	809.1	47.41	18.064		
8,900.0	8,879.5	8,967.8	8,879.5	16.3	30.6	-90.61	181.0	-1,067.8	856.5	809.0	47.50	18.029		
9,000.0	8,979.5	9,067.8	8,979.5	16.4	30.7	-90.61	181.0	-1,067.8	856.5	808.9	47.60	17.994		
9,100.0	9,079.5	9,167.8	9,079.5	16.4	30.7	-90.61	181.0	-1,067.8	856.5	808.8	47.69	17.959		
9,200.0	9,179.5	9,267.8	9,179.5	16.5	30.7	-90.61	181.0	-1,067.8	856.5	808.7	47.78	17.924		
9,300.0	9,279.5	9,367.8	9,279.5	16.6	30.8	-90.61	181.0	-1,067.8	856.5	808.6	47.88	17.889		
9,400.0	9,379.5	9,467.8	9,379.5	16.7	30.8	-90.61	181.0	-1,067.8	856.5	808.5	47.97	17.854		
9,500.0	9,479.5	9,567.8	9,479.5	16.8	30.8	-90.61	181.0	-1,067.8	856.5	808.4	48.06	17.819		
9,600.0	9,579.5	9,667.8	9,579.5	16.8	30.9	-90.61	181.0	-1,067.8	856.5	808.3	48.16	17.784		
9,700.0	9,679.5	9,767.8	9,679.5	16.9	30.9	-90.61	181.0	-1,067.8	856.5	808.2	48.25	17.749		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		0-r.5 MWD+IFR1 Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error: 0.0 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
9,800.0	9,779.5	9,867.8	9,779.5	17.0	30.9	-90.61	181.0	-1,067.8	856.5	808.1	48.35	17.714		
9,900.0	9,879.5	9,967.8	9,879.5	17.1	31.0	-90.61	181.0	-1,067.8	856.5	808.0	48.44	17.679		
10,000.0	9,979.5	10,067.8	9,979.5	17.1	31.0	-90.61	181.0	-1,067.8	856.5	807.9	48.54	17.644		
10,100.0	10,079.5	10,167.8	10,079.5	17.2	31.0	-90.61	181.0	-1,067.8	856.5	807.8	48.64	17.609		
10,200.0	10,179.5	10,267.8	10,179.5	17.3	31.1	-90.61	181.0	-1,067.8	856.5	807.7	48.73	17.575		
10,300.0	10,279.5	10,367.8	10,279.5	17.4	31.1	-90.61	181.0	-1,067.8	856.5	807.6	48.83	17.540		
10,400.0	10,379.5	10,467.8	10,379.5	17.5	31.1	-90.61	181.0	-1,067.8	856.5	807.5	48.93	17.505		
10,500.0	10,479.5	10,567.8	10,479.5	17.5	31.2	-90.61	181.0	-1,067.8	856.5	807.4	49.03	17.470		
10,600.0	10,579.5	10,667.8	10,579.5	17.6	31.2	-90.61	181.0	-1,067.8	856.5	807.3	49.12	17.435		
10,700.0	10,679.5	10,767.8	10,679.5	17.7	31.2	-90.61	181.0	-1,067.8	856.5	807.2	49.22	17.400		
10,800.0	10,779.5	10,867.8	10,779.5	17.8	31.3	-90.61	181.0	-1,067.8	856.5	807.1	49.32	17.365		
10,900.0	10,879.5	10,967.8	10,879.5	17.9	31.3	-90.61	181.0	-1,067.8	856.5	807.0	49.42	17.330		
11,000.0	10,979.5	11,067.8	10,979.5	17.9	31.4	-90.61	181.0	-1,067.8	856.5	806.9	49.52	17.296		
11,100.0	11,079.5	11,167.8	11,079.5	18.0	31.4	-90.61	181.0	-1,067.8	856.5	806.8	49.62	17.261		
11,200.0	11,179.5	11,267.8	11,179.5	18.1	31.4	-90.61	181.0	-1,067.8	856.5	806.7	49.72	17.226		
11,300.0	11,279.5	11,367.8	11,279.5	18.2	31.5	-90.61	181.0	-1,067.8	856.5	806.6	49.82	17.191		
11,400.0	11,379.5	11,467.8	11,379.5	18.2	31.5	-90.61	181.0	-1,067.8	856.5	806.5	49.92	17.157		
11,500.0	11,479.5	11,567.8	11,479.5	18.3	31.5	-90.61	181.0	-1,067.8	856.5	806.4	50.02	17.122		
11,600.0	11,579.5	11,667.8	11,579.5	18.4	31.6	-90.61	181.0	-1,067.8	856.5	806.3	50.12	17.088		
11,700.0	11,679.5	11,767.8	11,679.5	18.5	31.6	-90.61	181.0	-1,067.8	856.5	806.2	50.22	17.053		
11,800.0	11,779.5	11,867.8	11,779.5	18.6	31.6	-90.61	181.0	-1,067.8	856.5	806.1	50.33	17.018		
11,900.0	11,879.5	11,967.8	11,879.5	18.6	31.7	-90.61	181.0	-1,067.8	856.5	806.0	50.42	16.986		
11,910.0	11,889.5	11,977.8	11,889.5	18.6	31.7	-90.61	181.0	-1,067.8	856.5	806.0	50.43	16.984		
11,925.0	11,904.5	11,992.6	11,904.3	18.6	31.7	89.72	180.8	-1,067.8	856.5	806.0	50.43	16.983		
11,950.0	11,929.4	12,017.4	11,929.1	18.6	31.7	89.72	179.4	-1,067.8	856.5	806.0	50.43	16.985		
11,975.0	11,954.3	12,042.2	11,953.7	18.6	31.6	89.73	176.7	-1,067.8	856.5	806.1	50.42	16.988		
12,000.0	11,978.9	12,067.0	11,978.2	18.5	31.6	89.73	172.7	-1,067.8	856.5	806.1	50.41	16.991		
12,025.0	12,003.4	12,091.8	12,002.4	18.5	31.6	89.73	167.5	-1,067.8	856.5	806.1	50.39	16.995		
12,050.0	12,027.5	12,116.6	12,026.4	18.4	31.6	89.74	161.0	-1,067.7	856.5	806.1	50.38	17.000		
12,075.0	12,051.2	12,141.4	12,049.9	18.4	31.6	89.74	153.3	-1,067.7	856.5	806.1	50.37	17.004		
12,100.0	12,074.5	12,166.2	12,073.0	18.3	31.5	89.74	144.3	-1,067.6	856.5	806.1	50.36	17.008		
12,125.0	12,097.3	12,191.0	12,095.7	18.3	31.5	89.75	134.2	-1,067.6	856.5	806.1	50.34	17.013		
12,150.0	12,119.5	12,215.8	12,117.8	18.2	31.5	89.76	122.9	-1,067.5	856.5	806.1	50.33	17.018		
12,175.0	12,141.1	12,240.6	12,139.3	18.2	31.5	89.76	110.5	-1,067.4	856.5	806.1	50.31	17.022		
12,200.0	12,162.0	12,265.4	12,160.1	18.2	31.4	89.77	97.0	-1,067.3	856.5	806.2	50.30	17.026		
12,225.0	12,182.1	12,290.3	12,180.1	18.1	31.4	89.78	82.4	-1,067.3	856.5	806.2	50.29	17.030		
12,250.0	12,201.5	12,315.1	12,199.5	18.1	31.4	89.79	66.7	-1,067.2	856.5	806.2	50.28	17.034		
12,275.0	12,219.9	12,340.0	12,217.9	18.0	31.4	89.80	50.1	-1,067.1	856.5	806.2	50.27	17.036		
12,300.0	12,237.5	12,364.8	12,235.5	18.0	31.4	89.81	32.6	-1,067.0	856.5	806.2	50.27	17.038		
12,325.0	12,254.2	12,389.7	12,252.2	18.0	31.4	89.82	14.1	-1,066.9	856.5	806.2	50.26	17.039		
12,350.0	12,269.8	12,414.5	12,267.8	17.9	31.4	89.83	-5.2	-1,066.7	856.5	806.2	50.26	17.040		
12,375.0	12,284.4	12,439.4	12,282.5	17.9	31.4	89.84	-25.3	-1,066.6	856.4	806.2	50.26	17.039		
12,400.0	12,297.9	12,464.3	12,296.1	17.9	31.4	89.86	-46.1	-1,066.5	856.4	806.2	50.27	17.037		
12,425.0	12,310.3	12,489.2	12,308.6	17.9	31.4	89.87	-67.6	-1,066.4	856.4	806.2	50.28	17.033		
12,450.0	12,321.5	12,514.1	12,319.9	17.9	31.4	89.88	-89.8	-1,066.3	856.4	806.1	50.30	17.028		
12,475.0	12,331.6	12,539.0	12,330.1	17.9	31.4	89.89	-112.5	-1,066.1	856.4	806.1	50.31	17.022		
12,500.0	12,340.4	12,563.9	12,339.1	17.9	31.4	89.91	-135.8	-1,066.0	856.4	806.1	50.34	17.014		
12,525.0	12,348.0	12,588.9	12,346.9	17.9	31.4	89.92	-159.4	-1,065.8	856.4	806.1	50.37	17.004		
12,550.0	12,354.3	12,613.8	12,353.4	17.9	31.4	89.94	-183.5	-1,065.7	856.4	806.0	50.40	16.993		
12,575.0	12,359.4	12,638.8	12,358.7	17.9	31.4	89.95	-207.9	-1,065.6	856.4	806.0	50.44	16.981		
12,600.0	12,363.2	12,663.7	12,362.7	17.9	31.4	89.96	-232.5	-1,065.4	856.4	806.0	50.48	16.966		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
12,625.0	12,365.7	12,688.7	12,365.4	17.9	31.4	89.98	-257.4	-1,065.3	856.4	805.9	50.53	16.950		
12,650.0	12,366.9	12,713.7	12,366.8	18.0	31.5	89.99	-282.3	-1,065.1	856.4	805.9	50.58	16.933		
12,660.0	12,367.0	12,723.7	12,366.9	18.0	31.5	90.00	-292.4	-1,065.1	856.4	805.8	50.60	16.925		
12,700.0	12,367.0	12,763.7	12,367.0	18.0	31.5	90.00	-332.3	-1,064.8	856.4	805.7	50.70	16.891		
12,800.0	12,367.0	12,863.7	12,367.0	18.2	31.7	90.00	-432.3	-1,064.3	856.4	805.4	51.02	16.785		
12,900.0	12,367.0	12,963.7	12,367.0	18.5	31.8	90.00	-532.3	-1,063.7	856.4	805.0	51.41	16.658		
13,000.0	12,367.0	13,063.7	12,367.0	18.7	32.0	90.00	-632.3	-1,063.1	856.4	804.5	51.87	16.512		
13,100.0	12,367.0	13,163.7	12,367.0	19.1	32.3	90.00	-732.3	-1,062.5	856.4	804.0	52.39	16.348		
13,200.0	12,367.0	13,263.7	12,367.0	19.4	32.5	90.00	-832.3	-1,061.9	856.4	803.4	52.97	16.167		
13,300.0	12,367.0	13,363.7	12,367.0	19.8	32.8	90.00	-932.3	-1,061.3	856.4	802.8	53.62	15.972		
13,400.0	12,367.0	13,463.7	12,367.0	20.3	33.1	90.00	-1,032.3	-1,060.8	856.4	802.1	54.32	15.765		
13,500.0	12,367.0	13,563.7	12,367.0	20.8	33.4	90.00	-1,132.3	-1,060.2	856.4	801.3	55.09	15.546		
13,600.0	12,367.0	13,663.7	12,367.0	21.3	33.8	90.00	-1,232.3	-1,059.6	856.4	800.5	55.90	15.319		
13,700.0	12,367.0	13,763.7	12,367.0	21.9	34.2	90.00	-1,332.3	-1,059.0	856.4	799.6	56.77	15.084		
13,800.0	12,367.0	13,863.7	12,367.0	22.5	34.6	90.00	-1,432.3	-1,058.4	856.4	798.7	57.69	14.844		
13,900.0	12,367.0	13,963.7	12,367.0	23.1	35.0	90.00	-1,532.3	-1,057.8	856.4	797.7	58.66	14.599		
14,000.0	12,367.0	14,063.7	12,367.0	23.7	35.4	90.00	-1,632.3	-1,057.3	856.3	796.7	59.67	14.351		
14,100.0	12,367.0	14,163.7	12,367.0	24.4	35.9	90.00	-1,732.3	-1,056.7	856.3	795.6	60.72	14.102		
14,200.0	12,367.0	14,263.7	12,367.0	25.1	36.4	90.00	-1,832.3	-1,056.1	856.3	794.5	61.82	13.852		
14,300.0	12,367.0	14,363.7	12,367.0	25.8	36.9	90.00	-1,932.3	-1,055.5	856.3	793.4	62.95	13.602		
14,400.0	12,367.0	14,463.7	12,367.0	26.5	37.4	90.00	-2,032.3	-1,054.9	856.3	792.2	64.12	13.354		
14,500.0	12,367.0	14,563.7	12,367.0	27.2	37.9	90.00	-2,132.3	-1,054.3	856.3	791.0	65.33	13.108		
14,600.0	12,367.0	14,663.7	12,367.0	28.0	38.5	90.00	-2,232.3	-1,053.8	856.3	789.7	66.57	12.864		
14,700.0	12,367.0	14,763.7	12,367.0	28.7	39.0	90.00	-2,332.3	-1,053.2	856.3	788.5	67.84	12.623		
14,800.0	12,367.0	14,863.7	12,367.0	29.5	39.6	90.00	-2,432.3	-1,052.6	856.3	787.2	69.13	12.386		
14,900.0	12,367.0	14,963.7	12,367.0	30.3	40.2	90.00	-2,532.3	-1,052.0	856.3	785.8	70.46	12.153		
15,000.0	12,367.0	15,063.7	12,367.0	31.1	40.8	90.00	-2,632.3	-1,051.4	856.3	784.5	71.81	11.924		
15,100.0	12,367.0	15,163.7	12,367.0	31.9	41.5	90.00	-2,732.3	-1,050.8	856.3	783.1	73.18	11.700		
15,200.0	12,367.0	15,263.7	12,367.0	32.7	42.1	90.00	-2,832.3	-1,050.3	856.3	781.7	74.58	11.481		
15,300.0	12,367.0	15,363.7	12,367.0	33.5	42.7	90.00	-2,932.3	-1,049.7	856.3	780.3	76.00	11.266		
15,400.0	12,367.0	15,463.7	12,367.0	34.4	43.4	90.00	-3,032.3	-1,049.1	856.3	778.8	77.45	11.056		
15,500.0	12,367.0	15,563.7	12,367.0	35.2	44.1	90.00	-3,132.3	-1,048.5	856.3	777.3	78.91	10.851		
15,600.0	12,367.0	15,663.7	12,367.0	36.0	44.8	90.00	-3,232.3	-1,047.9	856.2	775.9	80.39	10.652		
15,700.0	12,367.0	15,763.7	12,367.0	36.9	45.4	90.00	-3,332.3	-1,047.3	856.2	774.4	81.88	10.457		
15,800.0	12,367.0	15,863.7	12,367.0	37.7	46.1	90.00	-3,432.3	-1,046.8	856.2	772.8	83.40	10.267		
15,900.0	12,367.0	15,963.7	12,367.0	38.6	46.9	90.00	-3,532.3	-1,046.2	856.2	771.3	84.92	10.082		
16,000.0	12,367.0	16,063.7	12,367.0	39.5	47.6	90.00	-3,632.3	-1,045.6	856.2	769.8	86.47	9.902		
16,100.0	12,367.0	16,163.7	12,367.0	40.3	48.3	90.00	-3,732.3	-1,045.0	856.2	768.2	88.03	9.727		
16,200.0	12,367.0	16,263.7	12,367.0	41.2	49.0	90.00	-3,832.3	-1,044.4	856.2	766.6	89.60	9.556		
16,300.0	12,367.0	16,363.7	12,367.0	42.1	49.8	90.00	-3,932.3	-1,043.8	856.2	765.0	91.18	9.390		
16,400.0	12,367.0	16,463.7	12,367.0	42.9	50.5	90.00	-4,032.3	-1,043.3	856.2	763.4	92.78	9.229		
16,500.0	12,367.0	16,563.7	12,367.0	43.8	51.3	90.00	-4,132.3	-1,042.7	856.2	761.8	94.38	9.072		
16,600.0	12,367.0	16,663.7	12,367.0	44.7	52.0	90.00	-4,232.3	-1,042.1	856.2	760.2	96.00	8.919		
16,700.0	12,367.0	16,763.7	12,367.0	45.6	52.8	90.00	-4,332.3	-1,041.5	856.2	758.6	97.63	8.770		
16,800.0	12,367.0	16,863.7	12,367.0	46.5	53.6	90.00	-4,432.2	-1,040.9	856.2	756.9	99.26	8.625		
16,900.0	12,367.0	16,963.7	12,367.0	47.4	54.4	90.00	-4,532.2	-1,040.3	856.2	755.3	100.91	8.484		
17,000.0	12,367.0	17,063.7	12,367.0	48.3	55.2	90.00	-4,632.2	-1,039.8	856.2	753.6	102.57	8.347		
17,100.0	12,367.0	17,163.7	12,367.0	49.2	56.0	90.00	-4,732.2	-1,039.2	856.2	751.9	104.23	8.214		
17,200.0	12,367.0	17,263.7	12,367.0	50.1	56.8	90.00	-4,832.2	-1,038.6	856.1	750.2	105.90	8.084		
17,300.0	12,367.0	17,363.7	12,367.0	51.0	57.6	90.00	-4,932.2	-1,038.0	856.1	748.6	107.58	7.958		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	0.0 usft
Rule Assigned:													
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Reference (usft)	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)			
17,400.0	12,367.0	17,463.7	12,367.0	51.9	58.4	90.00	-5,032.2	-1,037.4	856.1	746.9	109.27	7.835	
17,500.0	12,367.0	17,563.7	12,367.0	52.8	59.2	90.00	-5,132.2	-1,036.8	856.1	745.2	110.96	7.716	
17,600.0	12,367.0	17,663.7	12,367.0	53.7	60.0	90.00	-5,232.2	-1,036.3	856.1	743.5	112.66	7.599	
17,700.0	12,367.0	17,763.7	12,367.0	54.6	60.8	90.00	-5,332.2	-1,035.7	856.1	741.7	114.37	7.486	
17,800.0	12,367.0	17,863.7	12,367.0	55.6	61.6	90.00	-5,432.2	-1,035.1	856.1	740.0	116.08	7.375	
17,900.0	12,367.0	17,963.7	12,367.0	56.5	62.5	90.00	-5,532.2	-1,034.5	856.1	738.3	117.80	7.268	
18,000.0	12,367.0	18,063.7	12,367.0	57.4	63.3	90.00	-5,632.2	-1,033.9	856.1	736.6	119.52	7.163	
18,100.0	12,367.0	18,163.7	12,367.0	58.3	64.1	90.00	-5,732.2	-1,033.3	856.1	734.8	121.25	7.061	
18,200.0	12,367.0	18,263.7	12,367.0	59.2	65.0	90.00	-5,832.2	-1,032.8	856.1	733.1	122.98	6.961	
18,300.0	12,367.0	18,363.7	12,367.0	60.1	65.8	90.00	-5,932.2	-1,032.2	856.1	731.4	124.72	6.864	
18,400.0	12,367.0	18,463.7	12,367.0	61.1	66.7	90.00	-6,032.2	-1,031.6	856.1	729.6	126.47	6.769	
18,500.0	12,367.0	18,563.7	12,367.0	62.0	67.5	90.00	-6,132.2	-1,031.0	856.1	727.9	128.21	6.677	
18,600.0	12,367.0	18,663.7	12,367.0	62.9	68.4	90.00	-6,232.2	-1,030.4	856.1	726.1	129.97	6.587	
18,700.0	12,367.0	18,763.7	12,367.0	63.8	69.2	90.00	-6,332.2	-1,029.8	856.1	724.3	131.72	6.499	
18,800.0	12,367.0	18,863.7	12,367.0	64.8	70.1	90.00	-6,432.2	-1,029.3	856.0	722.6	133.48	6.413	
18,900.0	12,367.0	18,963.7	12,367.0	65.7	71.0	90.00	-6,532.2	-1,028.7	856.0	720.8	135.25	6.329	
19,000.0	12,367.0	19,063.7	12,367.0	66.6	71.8	90.00	-6,632.2	-1,028.1	856.0	719.0	137.01	6.248	
19,100.0	12,367.0	19,163.7	12,367.0	67.6	72.7	90.00	-6,732.2	-1,027.5	856.0	717.2	138.79	6.168	
19,200.0	12,367.0	19,263.7	12,367.0	68.5	73.6	90.00	-6,832.2	-1,026.9	856.0	715.5	140.56	6.090	
19,300.0	12,367.0	19,363.7	12,367.0	69.4	74.4	90.00	-6,932.2	-1,026.3	856.0	713.7	142.34	6.014	
19,400.0	12,367.0	19,463.7	12,367.0	70.4	75.3	90.00	-7,032.2	-1,025.8	856.0	711.9	144.12	5.940	
19,500.0	12,367.0	19,563.7	12,367.0	71.3	76.2	90.00	-7,132.2	-1,025.2	856.0	710.1	145.90	5.867	
19,581.2	12,367.0	19,644.8	12,367.0	72.1	76.9	90.00	-7,213.4	-1,024.7	856.0	708.6	147.35	5.809	
19,582.5	12,367.0	19,644.8	12,367.0	72.1	76.9	90.00	-7,213.4	-1,024.7	856.0	708.6	147.37	5.809 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 703H - 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		Offset Wellbore Centre		Distance		Rule Assigned:		Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.30	0.4	29.9	29.9	29.4	0.48	62.331		
100.0	100.0	100.0	100.0	1.2	1.2	89.30	0.4	29.9	29.9	27.0	2.87	10.424		
200.0	200.0	200.0	200.0	1.7	1.7	89.30	0.4	29.9	29.9	26.0	3.86	7.735		
300.0	300.0	300.0	300.0	2.1	2.1	89.30	0.4	29.9	29.9	25.3	4.63	6.450		
400.0	400.0	400.0	400.0	2.4	2.4	89.30	0.4	29.9	29.9	24.6	5.29	5.653		
500.0	500.0	500.0	500.0	2.7	2.7	89.30	0.4	29.9	29.9	24.0	5.87	5.094		
600.0	600.0	600.0	600.0	3.0	3.0	89.30	0.4	29.9	29.9	23.5	6.39	4.674		
700.0	700.0	700.0	700.0	3.2	3.2	89.30	0.4	29.9	29.9	23.0	6.88	4.343		
800.0	800.0	800.0	800.0	3.5	3.5	89.30	0.4	29.9	29.9	22.5	7.34	4.072		
900.0	900.0	900.0	900.0	3.7	3.7	89.30	0.4	29.9	29.9	22.1	7.77	3.846		
1,000.0	1,000.0	1,000.0	1,000.0	3.9	3.9	89.30	0.4	29.9	29.9	21.7	8.18	3.652		
1,100.0	1,100.0	1,100.0	1,100.0	4.1	4.1	89.30	0.4	29.9	29.9	21.3	8.58	3.485 CC, ES		
1,200.0	1,200.0	1,199.2	1,199.2	4.4	4.4	137.21	1.6	31.1	32.4	23.3	9.07	3.572		
1,300.0	1,299.8	1,298.1	1,297.9	4.7	4.7	136.92	5.3	34.6	39.9	30.3	9.54	4.178		
1,400.0	1,399.5	1,396.2	1,395.6	5.0	5.0	136.57	11.4	40.5	52.3	42.3	10.02	5.219		
1,500.0	1,498.7	1,493.2	1,492.0	5.4	5.3	136.25	19.8	48.5	69.6	59.1	10.50	6.627		
1,581.3	1,579.0	1,571.7	1,569.6	5.6	5.5	136.08	28.2	56.6	87.1	76.3	10.77	8.083		
1,600.0	1,597.5	1,589.9	1,587.6	5.6	5.5	136.17	30.2	58.5	91.4	80.5	10.82	8.440		
1,700.0	1,696.1	1,687.3	1,683.8	5.9	5.8	136.55	41.0	68.8	114.2	102.9	11.29	10.117		
1,800.0	1,794.7	1,784.6	1,780.0	6.2	6.1	136.80	51.7	79.1	137.1	125.3	11.75	11.661		
1,900.0	1,893.3	1,882.0	1,876.2	6.6	6.4	136.98	62.5	89.4	159.9	147.7	12.24	13.069		
2,000.0	1,991.8	1,979.3	1,972.4	6.9	6.7	137.11	73.2	99.7	182.8	170.0	12.74	14.351		
2,100.0	2,090.4	2,076.7	2,068.7	7.2	7.1	137.21	84.0	110.0	205.6	192.4	13.25	15.521		
2,200.0	2,189.0	2,174.0	2,164.9	7.6	7.4	137.30	94.7	120.3	228.5	214.7	13.78	16.588		
2,300.0	2,287.6	2,271.4	2,261.1	8.0	7.8	137.36	105.5	130.6	251.4	237.1	14.31	17.563		
2,400.0	2,386.2	2,368.7	2,357.3	8.3	8.1	137.42	116.2	140.9	274.2	259.4	14.86	18.455		
2,500.0	2,484.8	2,466.1	2,453.5	8.7	8.5	137.47	127.0	151.2	297.1	281.7	15.42	19.273		
2,557.9	2,541.9	2,522.5	2,509.2	8.9	8.7	137.49	133.2	157.2	310.3	294.6	15.71	19.748		
2,600.0	2,583.4	2,563.5	2,549.7	9.1	8.9	137.56	137.7	161.5	319.8	303.9	15.93	20.080		
2,700.0	2,682.3	2,662.1	2,647.1	9.5	9.2	137.56	148.6	171.9	341.5	325.1	16.47	20.738		
2,800.0	2,781.4	2,764.5	2,748.5	9.8	9.6	137.51	158.9	181.8	361.1	344.0	17.05	21.184		
2,900.0	2,880.7	2,867.6	2,850.9	10.2	10.0	137.48	168.0	190.5	378.2	360.5	17.63	21.450		
3,000.0	2,980.2	2,971.4	2,954.1	10.6	10.4	137.46	175.8	198.0	392.7	374.5	18.20	21.575		
3,100.0	3,079.8	3,075.7	3,058.1	10.9	10.8	137.45	182.3	204.3	404.8	386.0	18.76	21.576		
3,200.0	3,179.6	3,180.5	3,162.6	11.3	11.1	137.44	187.5	209.2	414.3	395.0	19.30	21.471		
3,300.0	3,279.5	3,285.6	3,267.6	11.6	11.5	137.43	191.3	212.8	421.2	401.4	19.80	21.272		
3,400.0	3,379.5	3,391.0	3,372.9	11.9	11.8	137.43	193.6	215.1	425.6	405.4	20.27	20.999		
3,500.0	3,479.5	3,496.4	3,478.3	12.2	12.0	137.43	194.6	216.0	427.4	406.8	20.66	20.685		
3,520.5	3,500.0	3,518.1	3,500.0	12.2	12.1	89.39	194.7	216.1	427.5	406.8	20.70	20.654		
3,547.0	3,526.5	3,544.6	3,526.5	12.2	12.1	89.39	194.7	216.1	427.5	406.8	20.74	20.612		
3,600.0	3,579.5	3,597.6	3,579.5	12.2	12.1	89.39	194.7	216.1	427.5	406.7	20.82	20.529		
3,700.0	3,679.5	3,697.6	3,679.5	12.3	12.2	89.39	194.7	216.1	427.5	406.5	21.00	20.360		
3,800.0	3,779.5	3,797.6	3,779.5	12.4	12.3	89.39	194.7	216.1	427.5	406.3	21.17	20.194		
3,900.0	3,879.5	3,897.6	3,879.5	12.5	12.4	89.39	194.7	216.1	427.5	406.2	21.34	20.030		
4,000.0	3,979.5	3,997.6	3,979.5	12.5	12.4	89.39	194.7	216.1	427.5	406.0	21.52	19.870		
4,100.0	4,079.5	4,097.6	4,079.5	12.6	12.5	89.39	194.7	216.1	427.5	405.8	21.69	19.712		
4,200.0	4,179.5	4,197.6	4,179.5	12.7	12.6	89.39	194.7	216.1	427.5	405.6	21.86	19.557		
4,300.0	4,279.5	4,297.6	4,279.5	12.8	12.7	89.39	194.7	216.1	427.5	405.5	22.03	19.404		
4,400.0	4,379.5	4,397.6	4,379.5	12.8	12.7	89.39	194.7	216.1	427.5	405.3	22.20	19.254		
4,500.0	4,479.5	4,497.6	4,479.5	12.9	12.8	89.39	194.7	216.1	427.5	405.1	22.37	19.106		
4,600.0	4,579.5	4,597.6	4,579.5	13.0	12.9	89.39	194.7	216.1	427.5	405.0	22.55	18.961		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 703H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
4,700.0	4,679.5	4,697.6	4,679.5	13.1	13.0	89.39	194.7	216.1	427.5	404.8	22.72	18.818		
4,800.0	4,779.5	4,797.6	4,779.5	13.1	13.0	89.39	194.7	216.1	427.5	404.6	22.89	18.678		
4,900.0	4,879.5	4,897.6	4,879.5	13.2	13.1	89.39	194.7	216.1	427.5	404.4	23.06	18.539		
5,000.0	4,979.5	4,997.6	4,979.5	13.3	13.2	89.39	194.7	216.1	427.5	404.3	23.23	18.403		
5,100.0	5,079.5	5,097.6	5,079.5	13.4	13.3	89.39	194.7	216.1	427.5	404.1	23.40	18.269		
5,200.0	5,179.5	5,197.6	5,179.5	13.4	13.4	89.39	194.7	216.1	427.5	403.9	23.57	18.136		
5,300.0	5,279.5	5,297.6	5,279.5	13.5	13.4	89.39	194.7	216.1	427.5	403.8	23.74	18.006		
5,400.0	5,379.5	5,397.6	5,379.5	13.6	13.5	89.39	194.7	216.1	427.5	403.6	23.91	17.878		
5,500.0	5,479.5	5,497.6	5,479.5	13.7	13.6	89.39	194.7	216.1	427.5	403.4	24.08	17.752		
5,600.0	5,579.5	5,597.6	5,579.5	13.7	13.7	89.39	194.7	216.1	427.5	403.2	24.25	17.627		
5,700.0	5,679.5	5,697.6	5,679.5	13.8	13.7	89.39	194.7	216.1	427.5	403.1	24.42	17.505		
5,800.0	5,779.5	5,797.6	5,779.5	13.9	13.8	89.39	194.7	216.1	427.5	402.9	24.59	17.384		
5,900.0	5,879.5	5,897.6	5,879.5	14.0	13.9	89.39	194.7	216.1	427.5	402.7	24.76	17.265		
6,000.0	5,979.5	5,997.6	5,979.5	14.0	14.0	89.39	194.7	216.1	427.5	402.6	24.93	17.147		
6,100.0	6,079.5	6,097.6	6,079.5	14.1	14.1	89.39	194.7	216.1	427.5	402.4	25.10	17.032		
6,200.0	6,179.5	6,197.6	6,179.5	14.2	14.1	89.39	194.7	216.1	427.5	402.2	25.27	16.918		
6,300.0	6,279.5	6,297.6	6,279.5	14.3	14.2	89.39	194.7	216.1	427.5	402.1	25.44	16.805		
6,400.0	6,379.5	6,397.6	6,379.5	14.4	14.3	89.39	194.7	216.1	427.5	401.9	25.61	16.694		
6,500.0	6,479.5	6,497.6	6,479.5	14.4	14.4	89.39	194.7	216.1	427.5	401.7	25.78	16.585		
6,600.0	6,579.5	6,597.6	6,579.5	14.5	14.4	89.39	194.7	216.1	427.5	401.6	25.95	16.477		
6,700.0	6,679.5	6,697.6	6,679.5	14.6	14.5	89.39	194.7	216.1	427.5	401.4	26.11	16.370		
6,800.0	6,779.5	6,797.6	6,779.5	14.7	14.6	89.39	194.7	216.1	427.5	401.2	26.28	16.265		
6,900.0	6,879.5	6,897.6	6,879.5	14.7	14.7	89.39	194.7	216.1	427.5	401.0	26.45	16.162		
7,000.0	6,979.5	6,997.6	6,979.5	14.8	14.8	89.39	194.7	216.1	427.5	400.9	26.62	16.059		
7,100.0	7,079.5	7,097.6	7,079.5	14.9	14.8	89.39	194.7	216.1	427.5	400.7	26.79	15.958		
7,200.0	7,179.5	7,197.6	7,179.5	15.0	14.9	89.39	194.7	216.1	427.5	400.5	26.96	15.859		
7,300.0	7,279.5	7,297.6	7,279.5	15.0	15.0	89.39	194.7	216.1	427.5	400.4	27.12	15.761		
7,400.0	7,379.5	7,397.6	7,379.5	15.1	15.1	89.39	194.7	216.1	427.5	400.2	27.29	15.663		
7,500.0	7,479.5	7,497.6	7,479.5	15.2	15.1	89.39	194.7	216.1	427.5	400.0	27.46	15.568		
7,600.0	7,579.5	7,597.6	7,579.5	15.3	15.2	89.39	194.7	216.1	427.5	399.9	27.63	15.473		
7,700.0	7,679.5	7,697.6	7,679.5	15.4	15.3	89.39	194.7	216.1	427.5	399.7	27.80	15.380		
7,800.0	7,779.5	7,797.6	7,779.5	15.4	15.4	89.39	194.7	216.1	427.5	399.5	27.96	15.287		
7,900.0	7,879.5	7,897.6	7,879.5	15.5	15.5	89.39	194.7	216.1	427.5	399.4	28.13	15.196		
8,000.0	7,979.5	7,997.6	7,979.5	15.6	15.5	89.39	194.7	216.1	427.5	399.2	28.30	15.106		
8,100.0	8,079.5	8,097.6	8,079.5	15.7	15.6	89.39	194.7	216.1	427.5	399.0	28.47	15.017		
8,200.0	8,179.5	8,197.6	8,179.5	15.7	15.7	89.39	194.7	216.1	427.5	398.9	28.63	14.930		
8,300.0	8,279.5	8,297.6	8,279.5	15.8	15.8	89.39	194.7	216.1	427.5	398.7	28.80	14.843		
8,400.0	8,379.5	8,397.6	8,379.5	15.9	15.8	89.39	194.7	216.1	427.5	398.5	28.97	14.757		
8,500.0	8,479.5	8,497.6	8,479.5	16.0	15.9	89.39	194.7	216.1	427.5	398.4	29.14	14.672		
8,600.0	8,579.5	8,597.6	8,579.5	16.1	16.0	89.39	194.7	216.1	427.5	398.2	29.30	14.589		
8,700.0	8,679.5	8,697.6	8,679.5	16.1	16.1	89.39	194.7	216.1	427.5	398.0	29.47	14.506		
8,800.0	8,779.5	8,797.6	8,779.5	16.2	16.2	89.39	194.7	216.1	427.5	397.9	29.64	14.424		
8,900.0	8,879.5	8,897.6	8,879.5	16.3	16.2	89.39	194.7	216.1	427.5	397.7	29.80	14.343		
9,000.0	8,979.5	8,997.6	8,979.5	16.4	16.3	89.39	194.7	216.1	427.5	397.5	29.97	14.264		
9,100.0	9,079.5	9,097.6	9,079.5	16.4	16.4	89.39	194.7	216.1	427.5	397.4	30.14	14.185		
9,200.0	9,179.5	9,197.6	9,179.5	16.5	16.5	89.39	194.7	216.1	427.5	397.2	30.30	14.107		
9,300.0	9,279.5	9,297.6	9,279.5	16.6	16.6	89.39	194.7	216.1	427.5	397.0	30.47	14.029		
9,400.0	9,379.5	9,397.6	9,379.5	16.7	16.6	89.39	194.7	216.1	427.5	396.9	30.64	13.953		
9,500.0	9,479.5	9,497.6	9,479.5	16.8	16.7	89.39	194.7	216.1	427.5	396.7	30.80	13.878		
9,600.0	9,579.5	9,597.6	9,579.5	16.8	16.8	89.39	194.7	216.1	427.5	396.5	30.97	13.803		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 703H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
9,700.0	9,679.5	9,697.6	9,679.5	16.9	16.9	89.39	194.7	216.1	427.5	396.4	31.14	13.729		
9,800.0	9,779.5	9,797.6	9,779.5	17.0	16.9	89.39	194.7	216.1	427.5	396.2	31.30	13.656		
9,900.0	9,879.5	9,897.6	9,879.5	17.1	17.0	89.39	194.7	216.1	427.5	396.0	31.47	13.584		
10,000.0	9,979.5	9,997.6	9,979.5	17.1	17.1	89.39	194.7	216.1	427.5	395.9	31.64	13.513		
10,100.0	10,079.5	10,097.6	10,079.5	17.2	17.2	89.39	194.7	216.1	427.5	395.7	31.80	13.442		
10,200.0	10,179.5	10,197.6	10,179.5	17.3	17.3	89.39	194.7	216.1	427.5	395.5	31.97	13.372		
10,300.0	10,279.5	10,297.6	10,279.5	17.4	17.3	89.39	194.7	216.1	427.5	395.4	32.14	13.303		
10,400.0	10,379.5	10,397.6	10,379.5	17.5	17.4	89.39	194.7	216.1	427.5	395.2	32.30	13.235		
10,500.0	10,479.5	10,497.6	10,479.5	17.5	17.5	89.39	194.7	216.1	427.5	395.0	32.47	13.167		
10,600.0	10,579.5	10,597.6	10,579.5	17.6	17.6	89.39	194.7	216.1	427.5	394.9	32.63	13.100		
10,700.0	10,679.5	10,697.6	10,679.5	17.7	17.7	89.39	194.7	216.1	427.5	394.7	32.80	13.034		
10,800.0	10,779.5	10,797.6	10,779.5	17.8	17.7	89.39	194.7	216.1	427.5	394.5	32.96	12.968		
10,900.0	10,879.5	10,897.6	10,879.5	17.9	17.8	89.39	194.7	216.1	427.5	394.4	33.13	12.904		
11,000.0	10,979.5	10,997.6	10,979.5	17.9	17.9	89.39	194.7	216.1	427.5	394.2	33.30	12.839		
11,100.0	11,079.5	11,097.6	11,079.5	18.0	18.0	89.39	194.7	216.1	427.5	394.0	33.46	12.776		
11,200.0	11,179.5	11,197.6	11,179.5	18.1	18.1	89.39	194.7	216.1	427.5	393.9	33.63	12.713		
11,300.0	11,279.5	11,297.6	11,279.5	18.2	18.1	89.39	194.7	216.1	427.5	393.7	33.79	12.650		
11,400.0	11,379.5	11,397.6	11,379.5	18.2	18.2	89.39	194.7	216.1	427.5	393.5	33.96	12.589		
11,500.0	11,479.5	11,497.6	11,479.5	18.3	18.3	89.39	194.7	216.1	427.5	393.4	34.12	12.528		
11,600.0	11,579.5	11,597.6	11,579.5	18.4	18.4	89.39	194.7	216.1	427.5	393.2	34.29	12.467		
11,700.0	11,679.5	11,697.6	11,679.5	18.5	18.4	89.39	194.7	216.1	427.5	393.0	34.46	12.407		
11,771.4	11,750.9	11,769.0	11,750.9	18.5	18.4	89.67	192.6	216.1	427.5	393.0	34.52	12.383		
11,800.0	11,779.5	11,797.3	11,778.9	18.6	18.4	90.13	189.1	216.1	427.5	393.0	34.54	12.379		
11,900.0	11,879.5	11,891.2	11,869.7	18.6	18.2	93.24	165.9	216.2	428.4	393.8	34.59	12.385		
11,910.0	11,889.5	11,900.0	11,878.0	18.6	18.2	93.65	162.8	216.2	428.7	394.1	34.60	12.390		
11,925.0	11,904.5	11,913.1	11,890.1	18.6	18.2	-85.34	157.9	216.3	429.1	394.5	34.61	12.400		
11,950.0	11,929.4	11,934.6	11,909.8	18.6	18.1	-84.23	149.2	216.3	430.0	395.4	34.61	12.424		
11,975.0	11,954.3	11,955.8	11,928.8	18.6	18.1	-83.14	139.8	216.4	431.0	396.4	34.62	12.450		
12,000.0	11,978.9	11,976.8	11,947.1	18.5	18.0	-82.08	129.6	216.4	432.1	397.5	34.63	12.477		
12,025.0	12,003.4	11,997.5	11,964.8	18.5	18.0	-81.03	118.8	216.5	433.4	398.8	34.66	12.504		
12,050.0	12,027.5	12,017.9	11,981.7	18.4	18.0	-80.01	107.4	216.6	434.8	400.1	34.70	12.530		
12,075.0	12,051.2	12,038.2	11,998.0	18.4	17.9	-79.02	95.4	216.6	436.3	401.5	34.76	12.553		
12,100.0	12,074.5	12,058.2	12,013.6	18.3	17.9	-78.06	82.8	216.7	437.9	403.0	34.82	12.574		
12,125.0	12,097.3	12,078.0	12,028.5	18.3	17.9	-77.13	69.7	216.8	439.5	404.6	34.91	12.591		
12,150.0	12,119.5	12,097.7	12,042.7	18.2	17.8	-76.23	56.2	216.9	441.2	406.2	35.00	12.604		
12,175.0	12,141.1	12,117.2	12,056.3	18.2	17.8	-75.37	42.2	217.0	442.9	407.8	35.12	12.612		
12,200.0	12,162.0	12,136.5	12,069.2	18.2	17.8	-74.55	27.8	217.0	444.6	409.4	35.24	12.615		
12,225.0	12,182.1	12,155.7	12,081.4	18.1	17.8	-73.76	12.9	217.1	446.4	411.0	35.39	12.614		
12,250.0	12,201.5	12,175.0	12,093.0	18.1	17.7	-73.00	-2.5	217.2	448.1	412.5	35.54	12.609		
12,275.0	12,219.9	12,193.7	12,103.7	18.0	17.7	-72.30	-17.8	217.3	449.8	414.1	35.71	12.596		
12,300.0	12,237.5	12,212.5	12,113.8	18.0	17.7	-71.63	-33.7	217.4	451.4	415.6	35.88	12.581		
12,325.0	12,254.2	12,231.2	12,123.3	18.0	17.7	-71.00	-49.8	217.5	453.0	417.0	36.07	12.562		
12,350.0	12,269.8	12,250.0	12,132.1	17.9	17.7	-70.41	-66.4	217.6	454.6	418.3	36.25	12.540		
12,375.0	12,284.4	12,268.4	12,140.1	17.9	17.7	-69.87	-82.9	217.7	456.1	419.6	36.45	12.513		
12,400.0	12,297.9	12,286.9	12,147.5	17.9	17.7	-69.38	-99.9	217.8	457.5	420.8	36.64	12.484		
12,425.0	12,310.3	12,305.3	12,154.2	17.9	17.7	-68.92	-117.0	217.9	458.7	421.9	36.84	12.453		
12,450.0	12,321.5	12,325.0	12,160.7	17.9	17.7	-68.49	-135.6	218.0	459.9	422.9	37.01	12.427		
12,475.0	12,331.6	12,341.9	12,165.6	17.9	17.7	-68.14	-151.8	218.1	461.0	423.8	37.22	12.387		
12,500.0	12,340.4	12,360.1	12,170.3	17.9	17.7	-67.82	-169.4	218.2	462.0	424.6	37.40	12.353		
12,525.0	12,348.0	12,375.0	12,173.6	17.9	17.7	-67.57	-183.9	218.3	462.8	425.2	37.60	12.309		
12,550.0	12,354.3	12,396.4	12,177.6	17.9	17.7	-67.31	-205.0	218.4	463.5	425.8	37.73	12.284		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 703H - OWB - PWP0													Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning
12,575.0	12,359.4	12,414.6	12,180.2	17.9	17.7	-67.12	-222.9	218.5	464.1	426.2	37.89	12.250		
12,600.0	12,363.2	12,432.7	12,182.1	17.9	17.7	-66.98	-240.9	218.6	464.6	426.5	38.02	12.217		
12,625.0	12,365.7	12,450.0	12,183.3	17.9	17.8	-66.89	-258.2	218.7	464.9	426.7	38.15	12.184		
12,650.0	12,366.9	12,468.8	12,183.9	18.0	17.8	-66.83	-277.0	218.8	465.0	426.8	38.26	12.155		
12,660.0	12,367.0	12,476.7	12,184.0	18.0	17.8	-66.83	-284.9	218.9	465.0	426.8	38.30	12.144		
12,700.0	12,367.0	12,516.6	12,184.0	18.0	17.8	-66.83	-324.8	219.1	465.0	426.6	38.43	12.102		
12,800.0	12,367.0	12,616.6	12,184.0	18.2	18.0	-66.83	-424.8	219.7	465.1	426.2	38.84	11.974		
12,900.0	12,367.0	12,716.6	12,184.0	18.5	18.2	-66.83	-524.8	220.3	465.1	425.7	39.33	11.825		
13,000.0	12,367.0	12,816.6	12,184.0	18.7	18.5	-66.83	-624.8	220.8	465.1	425.2	39.90	11.655		
13,100.0	12,367.0	12,916.6	12,184.0	19.1	18.8	-66.83	-724.8	221.4	465.1	424.5	40.55	11.468		
13,200.0	12,367.0	13,016.6	12,184.0	19.4	19.2	-66.83	-824.8	222.0	465.1	423.8	41.28	11.267		
13,300.0	12,367.0	13,116.6	12,184.0	19.8	19.6	-66.83	-924.8	222.6	465.1	423.0	42.07	11.055		
13,400.0	12,367.0	13,216.6	12,184.0	20.3	20.0	-66.83	-1,024.8	223.2	465.1	422.2	42.93	10.834		
13,500.0	12,367.0	13,316.6	12,184.0	20.8	20.5	-66.83	-1,124.8	223.8	465.1	421.2	43.85	10.606		
13,600.0	12,367.0	13,416.6	12,184.0	21.3	21.1	-66.83	-1,224.8	224.4	465.1	420.3	44.83	10.375		
13,700.0	12,367.0	13,516.6	12,184.0	21.9	21.6	-66.83	-1,324.8	224.9	465.1	419.2	45.87	10.141		
13,800.0	12,367.0	13,616.6	12,184.0	22.5	22.2	-66.83	-1,424.8	225.5	465.1	418.2	46.95	9.907		
13,900.0	12,367.0	13,716.6	12,184.0	23.1	22.8	-66.83	-1,524.8	226.1	465.1	417.0	48.08	9.674		
14,000.0	12,367.0	13,816.6	12,184.0	23.7	23.5	-66.83	-1,624.8	226.7	465.1	415.9	49.26	9.443		
14,100.0	12,367.0	13,916.6	12,184.0	24.4	24.2	-66.83	-1,724.8	227.3	465.1	414.7	50.47	9.215		
14,200.0	12,367.0	14,016.6	12,184.0	25.1	24.8	-66.83	-1,824.8	227.9	465.1	413.4	51.73	8.992		
14,300.0	12,367.0	14,116.6	12,184.0	25.8	25.5	-66.83	-1,924.8	228.4	465.1	412.1	53.02	8.773		
14,400.0	12,367.0	14,216.6	12,184.0	26.5	26.3	-66.83	-2,024.8	229.0	465.2	410.8	54.34	8.560		
14,500.0	12,367.0	14,316.6	12,184.0	27.2	27.0	-66.83	-2,124.8	229.6	465.2	409.5	55.70	8.352		
14,600.0	12,367.0	14,416.6	12,184.0	28.0	27.8	-66.83	-2,224.8	230.2	465.2	408.1	57.08	8.150		
14,700.0	12,367.0	14,516.6	12,184.0	28.7	28.5	-66.83	-2,324.8	230.8	465.2	406.7	58.48	7.954		
14,800.0	12,367.0	14,616.6	12,184.0	29.5	29.3	-66.83	-2,424.8	231.4	465.2	405.3	59.92	7.764		
14,900.0	12,367.0	14,716.6	12,184.0	30.3	30.1	-66.83	-2,524.8	231.9	465.2	403.8	61.37	7.580		
15,000.0	12,367.0	14,816.6	12,184.0	31.1	30.9	-66.83	-2,624.8	232.5	465.2	402.3	62.84	7.402		
15,100.0	12,367.0	14,916.6	12,184.0	31.9	31.7	-66.84	-2,724.8	233.1	465.2	400.9	64.34	7.230		
15,200.0	12,367.0	15,016.6	12,184.0	32.7	32.5	-66.84	-2,824.8	233.7	465.2	399.4	65.85	7.064		
15,300.0	12,367.0	15,116.6	12,184.0	33.5	33.3	-66.84	-2,924.8	234.3	465.2	397.8	67.38	6.904		
15,400.0	12,367.0	15,216.6	12,184.0	34.4	34.2	-66.84	-3,024.8	234.9	465.2	396.3	68.93	6.749		
15,500.0	12,367.0	15,316.6	12,184.0	35.2	35.0	-66.84	-3,124.8	235.4	465.2	394.7	70.49	6.600		
15,600.0	12,367.0	15,416.6	12,184.0	36.0	35.9	-66.84	-3,224.8	236.0	465.2	393.2	72.06	6.456		
15,700.0	12,367.0	15,516.6	12,184.0	36.9	36.7	-66.84	-3,324.8	236.6	465.2	391.6	73.65	6.317		
15,800.0	12,367.0	15,616.6	12,184.0	37.7	37.6	-66.84	-3,424.8	237.2	465.2	390.0	75.25	6.183		
15,900.0	12,367.0	15,716.6	12,184.0	38.6	38.4	-66.84	-3,524.8	237.8	465.3	388.4	76.86	6.053		
16,000.0	12,367.0	15,816.6	12,184.0	39.5	39.3	-66.84	-3,624.8	238.4	465.3	386.8	78.48	5.928		
16,100.0	12,367.0	15,916.6	12,184.0	40.3	40.2	-66.84	-3,724.8	239.0	465.3	385.2	80.11	5.808		
16,200.0	12,367.0	16,016.6	12,184.0	41.2	41.0	-66.84	-3,824.8	239.5	465.3	383.5	81.75	5.691		
16,300.0	12,367.0	16,116.6	12,184.0	42.1	41.9	-66.84	-3,924.8	240.1	465.3	381.9	83.40	5.579		
16,400.0	12,367.0	16,216.6	12,184.0	42.9	42.8	-66.84	-4,024.8	240.7	465.3	380.2	85.06	5.470		
16,500.0	12,367.0	16,316.6	12,184.0	43.8	43.7	-66.84	-4,124.8	241.3	465.3	378.6	86.73	5.365		
16,600.0	12,367.0	16,416.6	12,184.0	44.7	44.6	-66.84	-4,224.8	241.9	465.3	376.9	88.40	5.264		
16,700.0	12,367.0	16,516.6	12,184.0	45.6	45.5	-66.84	-4,324.8	242.5	465.3	375.2	90.08	5.165		
16,800.0	12,367.0	16,616.6	12,184.0	46.5	46.4	-66.84	-4,424.8	243.0	465.3	373.5	91.77	5.071		
16,900.0	12,367.0	16,716.6	12,184.0	47.4	47.3	-66.84	-4,524.8	243.6	465.3	371.9	93.46	4.979		
17,000.0	12,367.0	16,816.6	12,184.0	48.3	48.2	-66.84	-4,624.8	244.2	465.3	370.2	95.16	4.890		
17,100.0	12,367.0	16,916.6	12,184.0	49.2	49.1	-66.84	-4,724.8	244.8	465.3	368.5	96.86	4.804		

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 703H - 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		Rule Assigned:		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,200.0	12,367.0	17,016.6	12,184.0	50.1	50.0	-66.84	-4,824.7	245.4	465.3	366.8	98.57	4.721	
17,300.0	12,367.0	17,116.6	12,184.0	51.0	50.9	-66.84	-4,924.7	246.0	465.3	365.1	100.29	4.640	
17,400.0	12,367.0	17,216.6	12,184.0	51.9	51.8	-66.84	-5,024.7	246.5	465.3	363.3	102.01	4.562	
17,500.0	12,367.0	17,316.6	12,184.0	52.8	52.7	-66.84	-5,124.7	247.1	465.4	361.6	103.73	4.486	
17,600.0	12,367.0	17,416.6	12,184.0	53.7	53.6	-66.84	-5,224.7	247.7	465.4	359.9	105.46	4.413	
17,700.0	12,367.0	17,516.6	12,184.0	54.6	54.5	-66.84	-5,324.7	248.3	465.4	358.2	107.19	4.341	
17,800.0	12,367.0	17,616.6	12,184.0	55.6	55.4	-66.84	-5,424.7	248.9	465.4	356.4	108.93	4.272	
17,900.0	12,367.0	17,716.6	12,184.0	56.5	56.4	-66.84	-5,524.7	249.5	465.4	354.7	110.67	4.205	
18,000.0	12,367.0	17,816.6	12,184.0	57.4	57.3	-66.84	-5,624.7	250.0	465.4	353.0	112.41	4.140	
18,100.0	12,367.0	17,916.6	12,184.0	58.3	58.2	-66.84	-5,724.7	250.6	465.4	351.2	114.16	4.077	
18,200.0	12,367.0	18,016.6	12,184.0	59.2	59.1	-66.85	-5,824.7	251.2	465.4	349.5	115.91	4.015	
18,300.0	12,367.0	18,116.6	12,184.0	60.1	60.0	-66.85	-5,924.7	251.8	465.4	347.7	117.66	3.955	
18,400.0	12,367.0	18,216.6	12,184.0	61.1	61.0	-66.85	-6,024.7	252.4	465.4	346.0	119.42	3.897	
18,500.0	12,367.0	18,316.6	12,184.0	62.0	61.9	-66.85	-6,124.7	253.0	465.4	344.2	121.18	3.841	
18,600.0	12,367.0	18,416.6	12,184.0	62.9	62.8	-66.85	-6,224.7	253.6	465.4	342.5	122.94	3.786	
18,700.0	12,367.0	18,516.6	12,184.0	63.8	63.7	-66.85	-6,324.7	254.1	465.4	340.7	124.70	3.732	
18,800.0	12,367.0	18,616.6	12,184.0	64.8	64.7	-66.85	-6,424.7	254.7	465.4	339.0	126.47	3.680	
18,900.0	12,367.0	18,716.6	12,184.0	65.7	65.6	-66.85	-6,524.7	255.3	465.4	337.2	128.24	3.629	
19,000.0	12,367.0	18,816.6	12,184.0	66.6	66.5	-66.85	-6,624.7	255.9	465.4	335.4	130.01	3.580	
19,100.0	12,367.0	18,916.6	12,184.0	67.6	67.5	-66.85	-6,724.7	256.5	465.5	333.7	131.78	3.532	
19,200.0	12,367.0	19,016.6	12,184.0	68.5	68.4	-66.85	-6,824.7	257.1	465.5	331.9	133.56	3.485	
19,300.0	12,367.0	19,116.6	12,184.0	69.4	69.3	-66.85	-6,924.7	257.6	465.5	330.1	135.34	3.439	
19,400.0	12,367.0	19,216.6	12,184.0	70.4	70.3	-66.85	-7,024.7	258.2	465.5	328.4	137.12	3.395	
19,500.0	12,367.0	19,316.6	12,184.0	71.3	71.2	-66.85	-7,124.7	258.8	465.5	326.6	138.90	3.351	
19,582.5	12,367.0	19,399.1	12,184.0	72.1	72.0	-66.85	-7,207.2	259.3	465.5	325.1	140.37	3.316 SF	

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 705H - 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		Rule Assigned:		Distance		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	0.0	0.0	0.0	89.53	0.7	89.9	89.9	89.4	0.48	187.475	
100.0	100.0	100.0	100.0	1.2	1.2	89.53	0.7	89.9	89.9	87.0	2.87	31.353	
200.0	200.0	200.0	200.0	1.7	1.7	89.53	0.7	89.9	89.9	86.0	3.86	23.265	
300.0	300.0	300.0	300.0	2.1	2.1	89.53	0.7	89.9	89.9	85.3	4.63	19.399	
400.0	400.0	400.0	400.0	2.4	2.4	89.53	0.7	89.9	89.9	84.6	5.29	17.001	
500.0	500.0	500.0	500.0	2.7	2.7	89.53	0.7	89.9	89.9	84.0	5.87	15.322	
600.0	600.0	600.0	600.0	3.0	3.0	89.53	0.7	89.9	89.9	83.5	6.39	14.058	
700.0	700.0	700.0	700.0	3.2	3.2	89.53	0.7	89.9	89.9	83.0	6.88	13.061	
800.0	800.0	800.0	800.0	3.5	3.5	89.53	0.7	89.9	89.9	82.5	7.34	12.247	
900.0	900.0	900.0	900.0	3.7	3.7	89.53	0.7	89.9	89.9	82.1	7.77	11.566	
1,000.0	1,000.0	1,000.0	1,000.0	3.9	3.9	89.53	0.7	89.9	89.9	81.7	8.18	10.985	
1,100.0	1,100.0	1,100.0	1,100.0	4.1	4.1	89.53	0.7	89.9	89.9	81.3	8.58	10.481 CC, ES	
1,200.0	1,200.0	1,196.9	1,196.9	4.4	4.4	138.04	1.1	91.5	92.8	83.7	9.11	10.193 SF	
1,300.0	1,299.8	1,293.3	1,293.2	4.7	4.7	139.27	2.1	96.3	101.7	92.1	9.63	10.566	
1,400.0	1,399.5	1,388.6	1,388.1	5.0	5.0	140.89	3.7	104.1	116.5	106.4	10.15	11.476	
1,500.0	1,498.7	1,482.4	1,481.2	5.4	5.3	142.52	5.9	114.8	137.3	126.6	10.69	12.837	
1,581.3	1,579.0	1,557.1	1,555.1	5.6	5.5	143.70	8.1	125.5	158.5	147.4	11.10	14.279	
1,600.0	1,597.5	1,574.1	1,571.9	5.6	5.6	144.00	8.7	128.2	163.8	152.6	11.17	14.660	
1,700.0	1,696.1	1,664.0	1,660.3	5.9	5.9	145.16	11.9	144.1	194.2	182.5	11.70	16.597	
1,800.0	1,794.7	1,753.3	1,747.7	6.2	6.2	145.75	15.7	162.5	227.4	215.3	12.15	18.716	
1,900.0	1,893.3	1,847.3	1,839.3	6.6	6.4	146.13	19.9	182.8	261.6	248.9	12.67	20.640	
2,000.0	1,991.8	1,941.3	1,931.0	6.9	6.8	146.43	24.1	203.1	295.7	282.5	13.25	22.327	
2,100.0	2,090.4	2,035.2	2,022.7	7.2	7.1	146.66	28.3	223.3	329.9	316.0	13.84	23.834	
2,200.0	2,189.0	2,129.2	2,114.3	7.6	7.4	146.85	32.5	243.6	364.0	349.6	14.46	25.181	
2,300.0	2,287.6	2,223.2	2,206.0	8.0	7.8	147.01	36.7	263.9	398.2	383.1	15.09	26.387	
2,400.0	2,386.2	2,317.2	2,297.7	8.3	8.1	147.15	40.9	284.2	432.4	416.6	15.74	27.469	
2,500.0	2,484.8	2,411.2	2,389.3	8.7	8.5	147.26	45.1	304.5	466.5	450.1	16.40	28.441	
2,557.9	2,541.9	2,465.6	2,442.5	8.9	8.7	147.32	47.5	316.3	486.3	469.5	16.77	28.997	
2,600.0	2,583.4	2,505.2	2,481.1	9.1	8.9	147.43	49.3	324.8	500.6	483.5	17.03	29.385	
2,700.0	2,682.3	2,599.6	2,573.2	9.5	9.3	147.60	53.5	345.2	533.4	515.7	17.72	30.108	
2,800.0	2,781.4	2,694.5	2,665.7	9.8	9.7	147.67	57.7	365.7	564.9	546.5	18.40	30.695	
2,900.0	2,880.7	2,789.9	2,758.7	10.2	10.1	147.65	62.0	386.3	595.0	575.9	19.09	31.162	
3,000.0	2,980.2	2,885.6	2,852.1	10.6	10.5	147.54	66.2	407.0	623.7	603.9	19.79	31.525	
3,100.0	3,079.8	2,981.8	2,945.9	10.9	10.9	147.37	70.5	427.7	651.0	630.5	20.47	31.799	
3,200.0	3,179.6	3,078.3	3,040.0	11.3	11.3	147.13	74.8	448.5	676.9	655.8	21.16	31.997	
3,300.0	3,279.5	3,175.1	3,134.5	11.6	11.7	146.83	79.2	469.4	701.4	679.6	21.83	32.133	
3,400.0	3,379.5	3,272.2	3,229.2	11.9	12.2	146.47	83.5	490.4	724.6	702.1	22.49	32.220	
3,500.0	3,479.5	3,369.5	3,324.1	12.2	12.6	146.07	87.8	511.4	746.4	723.2	23.12	32.287	
3,520.5	3,500.0	3,389.6	3,343.7	12.2	12.7	97.94	88.7	515.8	750.7	727.4	23.22	32.326	
3,600.0	3,579.5	3,467.1	3,419.3	12.2	13.0	97.50	92.2	532.5	767.2	743.6	23.63	32.466	
3,700.0	3,679.5	3,564.6	3,514.4	12.3	13.5	96.97	96.5	553.6	788.1	764.0	24.17	32.614	
3,800.0	3,779.5	3,662.2	3,609.6	12.4	13.9	96.48	100.9	574.6	809.1	784.4	24.71	32.745	
3,900.0	3,879.5	3,759.7	3,704.7	12.5	14.3	96.00	105.2	595.7	830.1	804.9	25.26	32.862	
4,000.0	3,979.5	3,857.2	3,799.8	12.5	14.8	95.55	109.6	616.7	851.2	825.4	25.82	32.966	
4,100.0	4,079.5	3,954.8	3,895.0	12.6	15.2	95.12	113.9	637.8	872.3	846.0	26.39	33.059	
4,200.0	4,179.5	4,052.3	3,990.1	12.7	15.7	94.72	118.3	658.9	893.5	866.6	26.96	33.141	
4,300.0	4,279.5	4,149.9	4,085.3	12.8	16.1	94.33	122.6	679.9	914.7	887.2	27.54	33.213	
4,400.0	4,379.5	4,247.4	4,180.4	12.8	16.6	93.96	127.0	701.0	936.0	907.9	28.13	33.277	
4,500.0	4,479.5	4,344.9	4,275.5	12.9	17.0	93.60	131.3	722.0	957.3	928.6	28.72	33.334	
4,600.0	4,579.5	4,442.5	4,370.7	13.0	17.5	93.26	135.7	743.1	978.6	949.3	29.31	33.384	
4,700.0	4,679.5	4,540.0	4,465.8	13.1	17.9	92.94	140.0	764.1	999.9	970.0	29.91	33.427	

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design:	ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 705H - 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		Offset Wellbore Centre		Rule Assigned:		Distance		Warning			
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside		Between	Between	No-Go	Separation		
Depth	Depth	Depth	Depth			Toolface		Centres	Ellipses	Distance	Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)		

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 706H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.0	0.0	0.0	0.0	0.0	0.0	89.46	0.6	59.9	59.9	59.4	0.48	124.903	
100.0	100.0	100.0	100.0	1.2	1.2	89.46	0.6	59.9	59.9	57.0	2.87	20.889	
200.0	200.0	200.0	200.0	1.7	1.7	89.46	0.6	59.9	59.9	56.0	3.86	15.500	
300.0	300.0	300.0	300.0	2.1	2.1	89.46	0.6	59.9	59.9	55.3	4.63	12.924	
400.0	400.0	400.0	400.0	2.4	2.4	89.46	0.6	59.9	59.9	54.6	5.29	11.327	
500.0	500.0	500.0	500.0	2.7	2.7	89.46	0.6	59.9	59.9	54.0	5.87	10.208	
600.0	600.0	600.0	600.0	3.0	3.0	89.46	0.6	59.9	59.9	53.5	6.39	9.366	
700.0	700.0	700.0	700.0	3.2	3.2	89.46	0.6	59.9	59.9	53.0	6.88	8.702	
800.0	800.0	800.0	800.0	3.5	3.5	89.46	0.6	59.9	59.9	52.5	7.34	8.160	
900.0	900.0	900.0	900.0	3.7	3.7	89.46	0.6	59.9	59.9	52.1	7.77	7.706	
1,000.0	1,000.0	1,000.0	1,000.0	3.9	3.9	89.46	0.6	59.9	59.9	51.7	8.18	7.319	
1,100.0	1,100.0	1,100.0	1,100.0	4.1	4.1	89.46	0.6	59.9	59.9	51.3	8.58	6.983 CC, ES	
1,200.0	1,200.0	1,198.3	1,198.3	4.4	4.4	137.54	1.7	61.2	62.5	53.4	9.07	6.887	
1,300.0	1,299.8	1,296.3	1,296.1	4.7	4.7	137.65	4.9	65.0	70.3	60.8	9.56	7.356	
1,400.0	1,399.5	1,393.2	1,392.7	5.0	4.8	137.91	10.0	71.4	83.4	73.5	9.91	8.412	
1,500.0	1,498.7	1,488.3	1,487.1	5.4	5.1	139.13	15.2	80.8	102.2	91.8	10.40	9.828	
1,581.3	1,579.0	1,564.1	1,562.3	5.6	5.4	140.49	19.2	90.5	121.9	111.1	10.78	11.306	
1,600.0	1,597.5	1,581.4	1,579.3	5.6	5.4	140.87	20.1	93.0	126.9	116.1	10.85	11.693	
1,700.0	1,696.1	1,675.7	1,672.4	5.9	5.7	142.48	24.9	107.7	155.1	143.7	11.35	13.662	
1,800.0	1,794.7	1,771.6	1,766.9	6.2	6.0	143.61	29.8	122.9	183.5	171.6	11.86	15.466	
1,900.0	1,893.3	1,867.4	1,861.4	6.6	6.3	144.44	34.8	138.0	211.9	199.5	12.40	17.095	
2,000.0	1,991.8	1,963.2	1,955.9	6.9	6.6	145.07	39.7	153.2	240.4	227.5	12.95	18.558	
2,100.0	2,090.4	2,059.0	2,050.4	7.2	6.9	145.57	44.6	168.4	268.9	255.4	13.53	19.872	
2,200.0	2,189.0	2,154.9	2,144.9	7.6	7.3	145.97	49.5	183.5	297.5	283.3	14.13	21.053	
2,300.0	2,287.6	2,250.7	2,239.3	8.0	7.6	146.30	54.5	198.7	326.0	311.3	14.74	22.115	
2,400.0	2,386.2	2,346.5	2,333.8	8.3	8.0	146.58	59.4	213.8	354.6	339.2	15.37	23.072	
2,500.0	2,484.8	2,442.3	2,428.3	8.7	8.3	146.82	64.3	229.0	383.1	367.1	16.01	23.936	
2,557.9	2,541.9	2,497.9	2,483.1	8.9	8.5	146.94	67.1	237.8	399.7	383.3	16.36	24.435	
2,600.0	2,583.4	2,538.2	2,522.8	9.1	8.7	147.08	69.2	244.2	411.5	394.9	16.61	24.780	
2,700.0	2,682.3	2,634.4	2,617.7	9.5	9.1	147.29	74.2	259.4	438.8	421.5	17.26	25.419	
2,800.0	2,781.4	2,731.0	2,713.0	9.8	9.5	147.37	79.1	274.7	464.7	446.7	17.92	25.929	
2,900.0	2,880.7	2,828.0	2,808.6	10.2	9.8	147.33	84.1	290.0	489.1	470.5	18.58	26.326	
3,000.0	2,980.2	2,925.3	2,904.5	10.6	10.2	147.20	89.1	305.4	512.1	492.9	19.24	26.623	
3,100.0	3,079.8	3,022.8	3,000.7	10.9	10.6	146.97	94.1	320.9	533.7	513.8	19.89	26.835	
3,200.0	3,179.6	3,120.7	3,097.2	11.3	11.0	146.66	99.1	336.3	553.9	533.4	20.53	26.974	
3,300.0	3,279.5	3,218.8	3,194.0	11.6	11.4	146.27	104.2	351.9	572.7	551.5	21.17	27.053	
3,400.0	3,379.5	3,317.1	3,290.9	11.9	11.9	145.82	109.2	367.4	590.1	568.3	21.79	27.083	
3,500.0	3,479.5	3,415.6	3,388.0	12.2	12.3	145.29	114.3	383.0	606.1	583.8	22.37	27.091	
3,520.5	3,500.0	3,435.9	3,408.0	12.2	12.4	97.13	115.3	386.2	609.3	586.8	22.47	27.115	
3,600.0	3,579.5	3,514.2	3,485.3	12.2	12.7	96.62	119.3	398.6	621.3	598.5	22.84	27.200	
3,700.0	3,679.5	3,612.8	3,582.5	12.3	13.1	96.00	124.4	414.2	636.5	613.2	23.33	27.283	
3,800.0	3,779.5	3,711.4	3,679.7	12.4	13.5	95.40	129.5	429.8	651.8	627.9	23.83	27.354	
3,900.0	3,879.5	3,810.0	3,777.0	12.5	13.9	94.84	134.5	445.4	667.1	642.8	24.33	27.415	
4,000.0	3,979.5	3,908.6	3,874.2	12.5	14.4	94.30	139.6	461.0	682.5	657.6	24.85	27.467	
4,100.0	4,079.5	4,007.3	3,971.4	12.6	14.8	93.78	144.7	476.6	697.9	672.6	25.37	27.510	
4,200.0	4,179.5	4,105.9	4,068.7	12.7	15.2	93.28	149.7	492.2	713.4	687.5	25.90	27.545	
4,300.0	4,279.5	4,204.5	4,165.9	12.8	15.6	92.81	154.8	507.8	729.0	702.6	26.44	27.574	
4,400.0	4,379.5	4,303.1	4,263.1	12.8	16.1	92.36	159.8	523.4	744.6	717.6	26.98	27.597	
4,500.0	4,479.5	4,401.7	4,360.4	12.9	16.5	91.92	164.9	539.0	760.2	732.7	27.53	27.615	
4,600.0	4,579.5	4,500.3	4,457.6	13.0	16.9	91.51	170.0	554.6	775.9	747.8	28.08	27.629	
4,700.0	4,679.5	4,600.1	4,556.0	13.1	17.4	91.10	175.1	570.4	791.7	763.0	28.64	27.639	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 706H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		No-Go Distance (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,800.0	4,779.5	4,713.9	4,668.5	13.1	17.9	90.69	180.5	587.2	806.3	777.0	29.33	27.489	
4,900.0	4,879.5	4,828.4	4,781.9	13.2	18.4	90.34	185.3	601.9	819.2	789.2	29.97	27.336	
5,000.0	4,979.5	4,943.5	4,896.2	13.3	18.8	90.05	189.4	614.5	830.1	799.6	30.58	27.149	
5,100.0	5,079.5	5,059.1	5,011.3	13.4	19.3	89.81	192.8	625.0	839.2	808.1	31.16	26.934	
5,200.0	5,179.5	5,175.1	5,126.9	13.4	19.7	89.63	195.5	633.3	846.4	814.7	31.71	26.694	
5,300.0	5,279.5	5,291.3	5,243.0	13.5	20.1	89.50	197.5	639.4	851.6	819.4	32.21	26.438	
5,400.0	5,379.5	5,407.8	5,359.5	13.6	20.5	89.42	198.7	643.2	854.9	822.3	32.66	26.176	
5,500.0	5,479.5	5,524.4	5,476.1	13.7	20.7	89.39	199.3	644.8	856.3	823.3	33.00	25.952	
5,600.0	5,579.5	5,627.9	5,579.5	13.7	20.8	89.39	199.3	644.9	856.3	823.2	33.11	25.864	
5,700.0	5,679.5	5,727.9	5,679.5	13.8	20.8	89.39	199.3	644.9	856.3	823.1	33.23	25.774	
5,800.0	5,779.5	5,827.9	5,779.5	13.9	20.9	89.39	199.3	644.9	856.3	823.0	33.34	25.684	
5,900.0	5,879.5	5,927.9	5,879.5	14.0	20.9	89.39	199.3	644.9	856.3	822.9	33.46	25.595	
6,000.0	5,979.5	6,027.9	5,979.5	14.0	21.0	89.39	199.3	644.9	856.3	822.8	33.57	25.506	
6,100.0	6,079.5	6,127.9	6,079.5	14.1	21.0	89.39	199.3	644.9	856.3	822.7	33.69	25.417	
6,200.0	6,179.5	6,227.9	6,179.5	14.2	21.1	89.39	199.3	644.9	856.3	822.5	33.81	25.329	
6,300.0	6,279.5	6,327.9	6,279.5	14.3	21.1	89.39	199.3	644.9	856.3	822.4	33.93	25.241	
6,400.0	6,379.5	6,427.9	6,379.5	14.4	21.2	89.39	199.3	644.9	856.3	822.3	34.04	25.153	
6,500.0	6,479.5	6,527.9	6,479.5	14.4	21.2	89.39	199.3	644.9	856.3	822.2	34.16	25.066	
6,600.0	6,579.5	6,627.9	6,579.5	14.5	21.2	89.39	199.3	644.9	856.3	822.1	34.28	24.979	
6,700.0	6,679.5	6,727.9	6,679.5	14.6	21.3	89.39	199.3	644.9	856.3	821.9	34.40	24.893	
6,800.0	6,779.5	6,827.9	6,779.5	14.7	21.3	89.39	199.3	644.9	856.3	821.8	34.52	24.806	
6,900.0	6,879.5	6,927.9	6,879.5	14.7	21.4	89.39	199.3	644.9	856.3	821.7	34.64	24.721	
7,000.0	6,979.5	7,027.9	6,979.5	14.8	21.4	89.39	199.3	644.9	856.3	821.6	34.76	24.635	
7,100.0	7,079.5	7,127.9	7,079.5	14.9	21.5	89.39	199.3	644.9	856.3	821.5	34.88	24.550	
7,200.0	7,179.5	7,227.9	7,179.5	15.0	21.5	89.39	199.3	644.9	856.3	821.3	35.00	24.465	
7,300.0	7,279.5	7,327.9	7,279.5	15.0	21.6	89.39	199.3	644.9	856.3	821.2	35.12	24.381	
7,400.0	7,379.5	7,427.9	7,379.5	15.1	21.6	89.39	199.3	644.9	856.3	821.1	35.25	24.297	
7,500.0	7,479.5	7,527.9	7,479.5	15.2	21.7	89.39	199.3	644.9	856.3	821.0	35.37	24.213	
7,600.0	7,579.5	7,627.9	7,579.5	15.3	21.7	89.39	199.3	644.9	856.3	820.9	35.49	24.130	
7,700.0	7,679.5	7,727.9	7,679.5	15.4	21.8	89.39	199.3	644.9	856.3	820.7	35.61	24.047	
7,800.0	7,779.5	7,827.9	7,779.5	15.4	21.8	89.39	199.3	644.9	856.3	820.6	35.73	23.964	
7,900.0	7,879.5	7,927.9	7,879.5	15.5	21.9	89.39	199.3	644.9	856.3	820.5	35.86	23.882	
8,000.0	7,979.5	8,027.9	7,979.5	15.6	21.9	89.39	199.3	644.9	856.3	820.4	35.98	23.800	
8,100.0	8,079.5	8,127.9	8,079.5	15.7	22.0	89.39	199.3	644.9	856.3	820.2	36.11	23.718	
8,200.0	8,179.5	8,227.9	8,179.5	15.7	22.0	89.39	199.3	644.9	856.3	820.1	36.23	23.637	
8,300.0	8,279.5	8,327.9	8,279.5	15.8	22.1	89.39	199.3	644.9	856.3	820.0	36.35	23.556	
8,400.0	8,379.5	8,427.9	8,379.5	15.9	22.1	89.39	199.3	644.9	856.3	819.9	36.48	23.476	
8,500.0	8,479.5	8,527.9	8,479.5	16.0	22.2	89.39	199.3	644.9	856.3	819.7	36.60	23.396	
8,600.0	8,579.5	8,627.9	8,579.5	16.1	22.2	89.39	199.3	644.9	856.3	819.6	36.73	23.316	
8,700.0	8,679.5	8,727.9	8,679.5	16.1	22.3	89.39	199.3	644.9	856.3	819.5	36.85	23.236	
8,800.0	8,779.5	8,827.9	8,779.5	16.2	22.3	89.39	199.3	644.9	856.3	819.4	36.98	23.157	
8,900.0	8,879.5	8,927.9	8,879.5	16.3	22.4	89.39	199.3	644.9	856.3	819.2	37.11	23.079	
9,000.0	8,979.5	9,027.9	8,979.5	16.4	22.4	89.39	199.3	644.9	856.3	819.1	37.23	23.001	
9,100.0	9,079.5	9,127.9	9,079.5	16.4	22.5	89.39	199.3	644.9	856.3	819.0	37.36	22.923	
9,200.0	9,179.5	9,227.9	9,179.5	16.5	22.5	89.39	199.3	644.9	856.3	818.9	37.48	22.845	
9,300.0	9,279.5	9,327.9	9,279.5	16.6	22.6	89.39	199.3	644.9	856.3	818.7	37.61	22.768	
9,400.0	9,379.5	9,427.9	9,379.5	16.7	22.6	89.39	199.3	644.9	856.3	818.6	37.74	22.691	
9,500.0	9,479.5	9,527.9	9,479.5	16.8	22.7	89.39	199.3	644.9	856.3	818.5	37.87	22.615	
9,600.0	9,579.5	9,627.9	9,579.5	16.8	22.7	89.39	199.3	644.9	856.3	818.4	37.99	22.539	
9,700.0	9,679.5	9,727.9	9,679.5	16.9	22.8	89.39	199.3	644.9	856.3	818.2	38.12	22.463	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 706H - OWB - PWP0													Offset Site Error: 0.0 usft	
Survey Program: Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error: 0.0 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	No-Go Distance (usft)	Separation Factor	Warning	
9,800.0	9,779.5	9,827.9	9,779.5	17.0	22.8	89.39	199.3	644.9	856.3	818.1	38.25	22.387		
9,900.0	9,879.5	9,927.9	9,879.5	17.1	22.9	89.39	199.3	644.9	856.3	818.0	38.38	22.312		
10,000.0	9,979.5	10,027.9	9,979.5	17.1	22.9	89.39	199.3	644.9	856.3	817.8	38.51	22.238		
10,100.0	10,079.5	10,127.9	10,079.5	17.2	23.0	89.39	199.3	644.9	856.3	817.7	38.64	22.163		
10,200.0	10,179.5	10,227.9	10,179.5	17.3	23.0	89.39	199.3	644.9	856.3	817.6	38.77	22.089		
10,300.0	10,279.5	10,327.9	10,279.5	17.4	23.1	89.39	199.3	644.9	856.3	817.4	38.90	22.016		
10,400.0	10,379.5	10,427.9	10,379.5	17.5	23.1	89.39	199.3	644.9	856.3	817.3	39.03	21.943		
10,500.0	10,479.5	10,527.9	10,479.5	17.5	23.2	89.39	199.3	644.9	856.3	817.2	39.16	21.870		
10,600.0	10,579.5	10,627.9	10,579.5	17.6	23.2	89.39	199.3	644.9	856.3	817.1	39.29	21.797		
10,700.0	10,679.5	10,727.9	10,679.5	17.7	23.3	89.39	199.3	644.9	856.3	816.9	39.42	21.725		
10,800.0	10,779.5	10,827.9	10,779.5	17.8	23.3	89.39	199.3	644.9	856.3	816.8	39.55	21.653		
10,900.0	10,879.5	10,927.9	10,879.5	17.9	23.4	89.39	199.3	644.9	856.3	816.7	39.68	21.582		
11,000.0	10,979.5	11,027.9	10,979.5	17.9	23.5	89.39	199.3	644.9	856.3	816.5	39.81	21.511		
11,100.0	11,079.5	11,127.9	11,079.5	18.0	23.5	89.39	199.3	644.9	856.3	816.4	39.94	21.440		
11,200.0	11,179.5	11,227.9	11,179.5	18.1	23.6	89.39	199.3	644.9	856.3	816.3	40.07	21.370		
11,300.0	11,279.5	11,327.9	11,279.5	18.2	23.6	89.39	199.3	644.9	856.3	816.1	40.21	21.299		
11,400.0	11,379.5	11,427.9	11,379.5	18.2	23.7	89.39	199.3	644.9	856.3	816.0	40.34	21.230		
11,500.0	11,479.5	11,527.9	11,479.5	18.3	23.7	89.39	199.3	644.9	856.3	815.9	40.47	21.160		
11,600.0	11,579.5	11,627.9	11,579.5	18.4	23.8	89.39	199.3	644.9	856.3	815.7	40.60	21.091		
11,700.0	11,679.5	11,727.9	11,679.5	18.5	23.8	89.39	199.3	644.9	856.3	815.6	40.73	21.023		
11,800.0	11,779.5	11,827.9	11,779.5	18.6	23.9	89.39	199.3	644.9	856.3	815.5	40.87	20.954		
11,900.0	11,879.5	11,927.9	11,879.5	18.6	23.9	89.39	199.3	644.9	856.3	815.4	40.99	20.890		
11,910.0	11,889.5	11,937.9	11,889.5	18.6	23.9	89.39	199.3	644.9	856.3	815.3	41.00	20.886		
11,925.0	11,904.5	11,953.0	11,904.6	18.6	23.9	-90.28	199.0	644.9	856.3	815.3	41.00	20.885		
11,950.0	11,929.4	11,978.2	11,929.8	18.6	23.9	-90.28	197.6	644.9	856.3	815.4	40.99	20.892		
11,975.0	11,954.3	12,003.4	11,954.8	18.6	23.9	-90.28	194.8	644.9	856.3	815.4	40.97	20.900		
12,000.0	11,978.9	12,028.7	11,979.7	18.5	23.8	-90.28	190.7	644.9	856.3	815.4	40.95	20.910		
12,025.0	12,003.4	12,053.9	12,004.4	18.5	23.8	-90.27	185.2	645.0	856.3	815.4	40.93	20.920		
12,050.0	12,027.5	12,079.1	12,028.7	18.4	23.8	-90.27	178.5	645.0	856.3	815.4	40.91	20.931		
12,075.0	12,051.2	12,104.3	12,052.6	18.4	23.7	-90.27	170.6	645.0	856.3	815.5	40.89	20.942		
12,100.0	12,074.5	12,129.5	12,076.0	18.3	23.7	-90.26	161.3	645.1	856.3	815.5	40.87	20.954		
12,125.0	12,097.3	12,154.7	12,099.0	18.3	23.7	-90.25	150.9	645.2	856.3	815.5	40.84	20.966		
12,150.0	12,119.5	12,179.9	12,121.3	18.2	23.6	-90.25	139.2	645.2	856.3	815.5	40.82	20.978		
12,175.0	12,141.1	12,205.1	12,143.0	18.2	23.6	-90.24	126.4	645.3	856.3	815.5	40.80	20.990		
12,200.0	12,162.0	12,230.3	12,164.0	18.2	23.6	-90.23	112.5	645.4	856.3	815.6	40.78	21.001		
12,225.0	12,182.1	12,255.5	12,184.2	18.1	23.5	-90.22	97.5	645.5	856.3	815.6	40.75	21.012		
12,250.0	12,201.5	12,280.7	12,203.6	18.1	23.5	-90.21	81.4	645.6	856.3	815.6	40.74	21.021		
12,275.0	12,219.9	12,305.8	12,222.1	18.0	23.5	-90.20	64.4	645.7	856.3	815.6	40.72	21.030		
12,300.0	12,237.5	12,331.0	12,239.7	18.0	23.5	-90.19	46.4	645.8	856.3	815.6	40.71	21.036		
12,325.0	12,254.2	12,356.1	12,256.3	18.0	23.4	-90.18	27.5	645.9	856.3	815.6	40.70	21.041		
12,350.0	12,269.8	12,381.3	12,271.8	17.9	23.4	-90.17	7.8	646.0	856.3	815.6	40.69	21.044		
12,375.0	12,284.4	12,406.4	12,286.4	17.9	23.4	-90.16	-12.7	646.1	856.3	815.6	40.69	21.045		
12,400.0	12,297.9	12,431.5	12,299.8	17.9	23.4	-90.15	-34.0	646.2	856.3	815.6	40.69	21.043		
12,425.0	12,310.3	12,456.6	12,312.0	17.9	23.4	-90.13	-55.9	646.3	856.3	815.6	40.70	21.038		
12,450.0	12,321.5	12,481.7	12,323.1	17.9	23.4	-90.12	-78.4	646.5	856.3	815.6	40.72	21.031		
12,475.0	12,331.6	12,506.8	12,333.0	17.9	23.4	-90.11	-101.4	646.6	856.3	815.6	40.74	21.020		
12,500.0	12,340.4	12,531.9	12,341.7	17.9	23.4	-90.09	-125.0	646.7	856.3	815.6	40.77	21.006		
12,525.0	12,348.0	12,557.0	12,349.1	17.9	23.4	-90.08	-148.9	646.9	856.3	815.5	40.80	20.989		
12,550.0	12,354.3	12,582.0	12,355.3	17.9	23.4	-90.06	-173.2	647.0	856.3	815.5	40.84	20.968		
12,575.0	12,359.4	12,607.1	12,360.1	17.9	23.4	-90.05	-197.7	647.2	856.3	815.4	40.88	20.945		
12,600.0	12,363.2	12,632.1	12,363.7	17.9	23.5	-90.03	-222.5	647.3	856.3	815.4	40.94	20.918		

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 706H - 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)				
12,625.0	12,365.7	12,657.1	12,366.0	17.9	23.5	-90.02	-247.4	647.4	856.3	815.3	41.00	20.888		
12,650.0	12,366.9	12,682.1	12,366.9	18.0	23.5	-90.00	-272.4	647.6	856.3	815.3	41.06	20.855		
12,660.0	12,367.0	12,692.2	12,367.0	18.0	23.5	-90.00	-282.5	647.6	856.3	815.2	41.09	20.841		
12,700.0	12,367.0	12,732.1	12,367.0	18.0	23.6	-90.00	-322.4	647.9	856.3	815.1	41.22	20.776		
12,800.0	12,367.0	12,832.1	12,367.0	18.2	23.8	-90.00	-422.4	648.4	856.3	814.7	41.60	20.584		
12,900.0	12,367.0	12,932.1	12,367.0	18.5	24.0	-90.00	-522.4	649.0	856.3	814.2	42.07	20.355		
13,000.0	12,367.0	13,032.1	12,367.0	18.7	24.3	-90.00	-622.4	649.6	856.3	813.7	42.62	20.093		
13,100.0	12,367.0	13,132.1	12,367.0	19.1	24.5	-90.00	-722.4	650.2	856.3	813.1	43.24	19.802		
13,200.0	12,367.0	13,232.1	12,367.0	19.4	24.9	-90.00	-822.4	650.7	856.3	812.3	43.94	19.487		
13,300.0	12,367.0	13,332.1	12,367.0	19.8	25.2	-90.00	-922.4	651.3	856.3	811.6	44.71	19.151		
13,400.0	12,367.0	13,432.1	12,367.0	20.3	25.6	-90.00	-1,022.4	651.9	856.3	810.7	45.55	18.799		
13,500.0	12,367.0	13,532.1	12,367.0	20.8	26.0	-90.00	-1,122.4	652.4	856.3	809.8	46.45	18.435		
13,600.0	12,367.0	13,632.1	12,367.0	21.3	26.4	-90.00	-1,222.4	653.0	856.3	808.9	47.41	18.061		
13,700.0	12,367.0	13,732.1	12,367.0	21.9	26.9	-90.00	-1,322.4	653.6	856.3	807.8	48.43	17.682		
13,800.0	12,367.0	13,832.1	12,367.0	22.5	27.4	-90.00	-1,422.4	654.2	856.3	806.8	49.49	17.300		
13,900.0	12,367.0	13,932.1	12,367.0	23.1	27.9	-90.00	-1,522.4	654.7	856.3	805.6	50.61	16.918		
14,000.0	12,367.0	14,032.1	12,367.0	23.7	28.4	-90.00	-1,622.4	655.3	856.3	804.5	51.78	16.538		
14,100.0	12,367.0	14,132.1	12,367.0	24.4	29.0	-90.00	-1,722.4	655.9	856.2	803.3	52.98	16.161		
14,200.0	12,367.0	14,232.1	12,367.0	25.1	29.6	-90.00	-1,822.4	656.5	856.2	802.0	54.23	15.789		
14,300.0	12,367.0	14,332.1	12,367.0	25.8	30.2	-90.00	-1,922.4	657.0	856.2	800.7	55.51	15.424		
14,400.0	12,367.0	14,432.1	12,367.0	26.5	30.8	-90.00	-2,022.4	657.6	856.2	799.4	56.83	15.066		
14,500.0	12,367.0	14,532.1	12,367.0	27.2	31.4	-90.00	-2,122.4	658.2	856.2	798.0	58.18	14.716		
14,600.0	12,367.0	14,632.1	12,367.0	28.0	32.1	-90.00	-2,222.4	658.7	856.2	796.7	59.56	14.375		
14,700.0	12,367.0	14,732.1	12,367.0	28.7	32.7	-90.00	-2,322.4	659.3	856.2	795.2	60.97	14.042		
14,800.0	12,367.0	14,832.1	12,367.0	29.5	33.4	-90.00	-2,422.4	659.9	856.2	793.8	62.41	13.719		
14,900.0	12,367.0	14,932.1	12,367.0	30.3	34.1	-90.00	-2,522.4	660.5	856.2	792.3	63.87	13.406		
15,000.0	12,367.0	15,032.1	12,367.0	31.1	34.8	-90.00	-2,622.4	661.0	856.2	790.9	65.35	13.101		
15,100.0	12,367.0	15,132.1	12,367.0	31.9	35.5	-90.00	-2,722.4	661.6	856.2	789.3	66.86	12.807		
15,200.0	12,367.0	15,232.1	12,367.0	32.7	36.3	-90.00	-2,822.4	662.2	856.2	787.8	68.38	12.521		
15,300.0	12,367.0	15,332.1	12,367.0	33.5	37.0	-90.00	-2,922.4	662.8	856.2	786.3	69.92	12.245		
15,400.0	12,367.0	15,432.1	12,367.0	34.4	37.8	-90.00	-3,022.4	663.3	856.2	784.7	71.48	11.978		
15,500.0	12,367.0	15,532.1	12,367.0	35.2	38.5	-90.00	-3,122.4	663.9	856.2	783.1	73.06	11.719		
15,600.0	12,367.0	15,632.1	12,367.0	36.0	39.3	-90.00	-3,222.4	664.5	856.2	781.5	74.65	11.469		
15,700.0	12,367.0	15,732.1	12,367.0	36.9	40.1	-90.00	-3,322.4	665.0	856.2	779.9	76.26	11.228		
15,800.0	12,367.0	15,832.1	12,367.0	37.7	40.8	-90.00	-3,422.4	665.6	856.2	778.3	77.87	10.994		
15,900.0	12,367.0	15,932.1	12,367.0	38.6	41.6	-90.00	-3,522.4	666.2	856.2	776.7	79.51	10.769		
16,000.0	12,367.0	16,032.1	12,367.0	39.5	42.4	-90.00	-3,622.4	666.8	856.2	775.0	81.15	10.551		
16,100.0	12,367.0	16,132.1	12,367.0	40.3	43.2	-90.00	-3,722.4	667.3	856.2	773.4	82.80	10.340		
16,200.0	12,367.0	16,232.1	12,367.0	41.2	44.1	-90.00	-3,822.4	667.9	856.2	771.7	84.47	10.136		
16,300.0	12,367.0	16,332.1	12,367.0	42.1	44.9	-90.00	-3,922.4	668.5	856.1	770.0	86.14	9.939		
16,400.0	12,367.0	16,432.1	12,367.0	42.9	45.7	-90.00	-4,022.4	669.1	856.1	768.3	87.82	9.748		
16,500.0	12,367.0	16,532.1	12,367.0	43.8	46.5	-90.00	-4,122.4	669.6	856.1	766.6	89.52	9.564		
16,600.0	12,367.0	16,632.1	12,367.0	44.7	47.4	-90.00	-4,222.4	670.2	856.1	764.9	91.22	9.386		
16,700.0	12,367.0	16,732.1	12,367.0	45.6	48.2	-90.00	-4,322.4	670.8	856.1	763.2	92.92	9.213		
16,800.0	12,367.0	16,832.1	12,367.0	46.5	49.1	-90.00	-4,422.4	671.3	856.1	761.5	94.64	9.046		
16,900.0	12,367.0	16,932.1	12,367.0	47.4	49.9	-90.00	-4,522.4	671.9	856.1	759.8	96.36	8.884		
17,000.0	12,367.0	17,032.1	12,367.0	48.3	50.8	-90.00	-4,622.3	672.5	856.1	758.0	98.09	8.728		
17,100.0	12,367.0	17,132.1	12,367.0	49.2	51.6	-90.00	-4,722.3	673.1	856.1	756.3	99.83	8.576		
17,200.0	12,367.0	17,232.1	12,367.0	50.1	52.5	-90.00	-4,822.3	673.6	856.1	754.5	101.57	8.429		
17,300.0	12,367.0	17,332.1	12,367.0	51.0	53.3	-90.00	-4,922.3	674.2	856.1	752.8	103.31	8.287		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
Reference Site:	ZIA HILLS UNIT 2632 PROJECT	MD Reference:	WELL @ 3125.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	_ZIA HILLS UNIT 2632 WC 704H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Offset Design: ZIA HILLS UNIT 2632 PROJECT - _ZIA HILLS UNIT 2632 WC 706H - 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		Rule Assigned:		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,400.0	12,367.0	17,432.1	12,367.0	51.9	54.2	-90.00	-5,022.3	674.8	856.1	751.0	105.06	8.148	
17,500.0	12,367.0	17,532.1	12,367.0	52.8	55.1	-90.00	-5,122.3	675.4	856.1	749.3	106.82	8.014	
17,600.0	12,367.0	17,632.1	12,367.0	53.7	55.9	-90.00	-5,222.3	675.9	856.1	747.5	108.58	7.884	
17,700.0	12,367.0	17,732.1	12,367.0	54.6	56.8	-90.00	-5,322.3	676.5	856.1	745.7	110.35	7.758	
17,800.0	12,367.0	17,832.1	12,367.0	55.6	57.7	-90.00	-5,422.3	677.1	856.1	744.0	112.12	7.635	
17,900.0	12,367.0	17,932.1	12,367.0	56.5	58.6	-90.00	-5,522.3	677.6	856.1	742.2	113.90	7.516	
18,000.0	12,367.0	18,032.1	12,367.0	57.4	59.5	-90.00	-5,622.3	678.2	856.1	740.4	115.67	7.401	
18,100.0	12,367.0	18,132.1	12,367.0	58.3	60.4	-90.00	-5,722.3	678.8	856.1	738.6	117.46	7.288	
18,200.0	12,367.0	18,232.1	12,367.0	59.2	61.2	-90.00	-5,822.3	679.4	856.1	736.8	119.24	7.179	
18,300.0	12,367.0	18,332.1	12,367.0	60.1	62.1	-90.00	-5,922.3	679.9	856.1	735.0	121.03	7.073	
18,400.0	12,367.0	18,432.1	12,367.0	61.1	63.0	-90.00	-6,022.3	680.5	856.1	733.2	122.83	6.970	
18,500.0	12,367.0	18,532.1	12,367.0	62.0	63.9	-90.00	-6,122.3	681.1	856.0	731.4	124.62	6.869	
18,600.0	12,367.0	18,632.1	12,367.0	62.9	64.8	-90.00	-6,222.3	681.7	856.0	729.6	126.42	6.771	
18,700.0	12,367.0	18,732.1	12,367.0	63.8	65.7	-90.00	-6,322.3	682.2	856.0	727.8	128.22	6.676	
18,800.0	12,367.0	18,832.1	12,367.0	64.8	66.6	-90.00	-6,422.3	682.8	856.0	726.0	130.03	6.583	
18,900.0	12,367.0	18,932.1	12,367.0	65.7	67.5	-90.00	-6,522.3	683.4	856.0	724.2	131.84	6.493	
19,000.0	12,367.0	19,032.1	12,367.0	66.6	68.4	-90.00	-6,622.3	683.9	856.0	722.4	133.65	6.405	
19,100.0	12,367.0	19,132.1	12,367.0	67.6	69.3	-90.00	-6,722.3	684.5	856.0	720.6	135.46	6.319	
19,200.0	12,367.0	19,232.1	12,367.0	68.5	70.2	-90.00	-6,822.3	685.1	856.0	718.7	137.27	6.236	
19,300.0	12,367.0	19,332.1	12,367.0	69.4	71.2	-90.00	-6,922.3	685.7	856.0	716.9	139.09	6.154	
19,400.0	12,367.0	19,432.1	12,367.0	70.4	72.1	-90.00	-7,022.3	686.2	856.0	715.1	140.91	6.075	
19,500.0	12,367.0	19,532.1	12,367.0	71.3	73.0	-90.00	-7,122.3	686.8	856.0	713.3	142.73	5.997	
19,582.5	12,367.0	19,614.6	12,367.0	72.1	73.7	-90.00	-7,204.8	687.3	856.0	711.8	144.19	5.937 SF	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
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Site Error:	0.0 usft	North Reference:	Grid
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Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDT 17 Permian Prod
Reference Design:	PWP0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 3125.0usft (Original Well Ele

Offset Depths are relative to Offset Datum

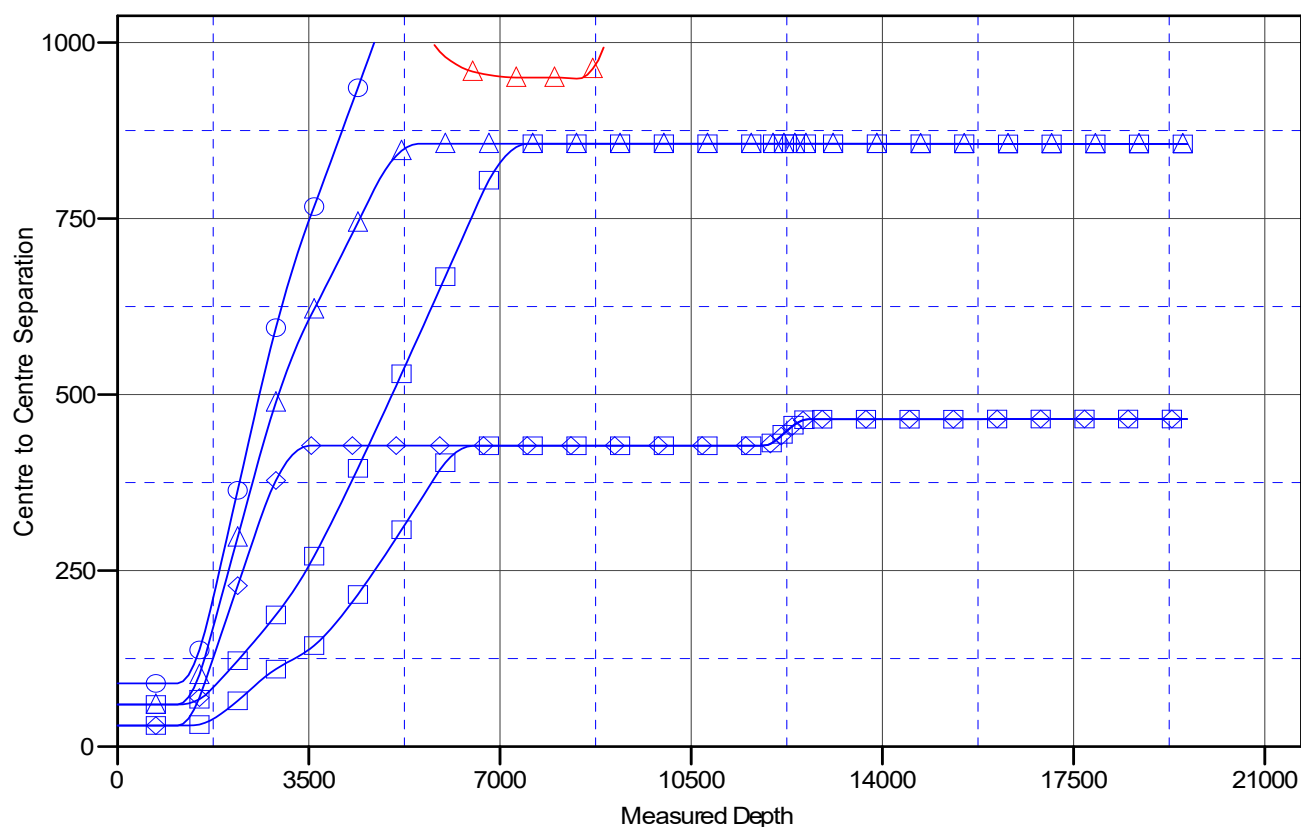
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UN

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

Grid Convergence at Surface is: 0.36°

Ladder Plot



LEGEND



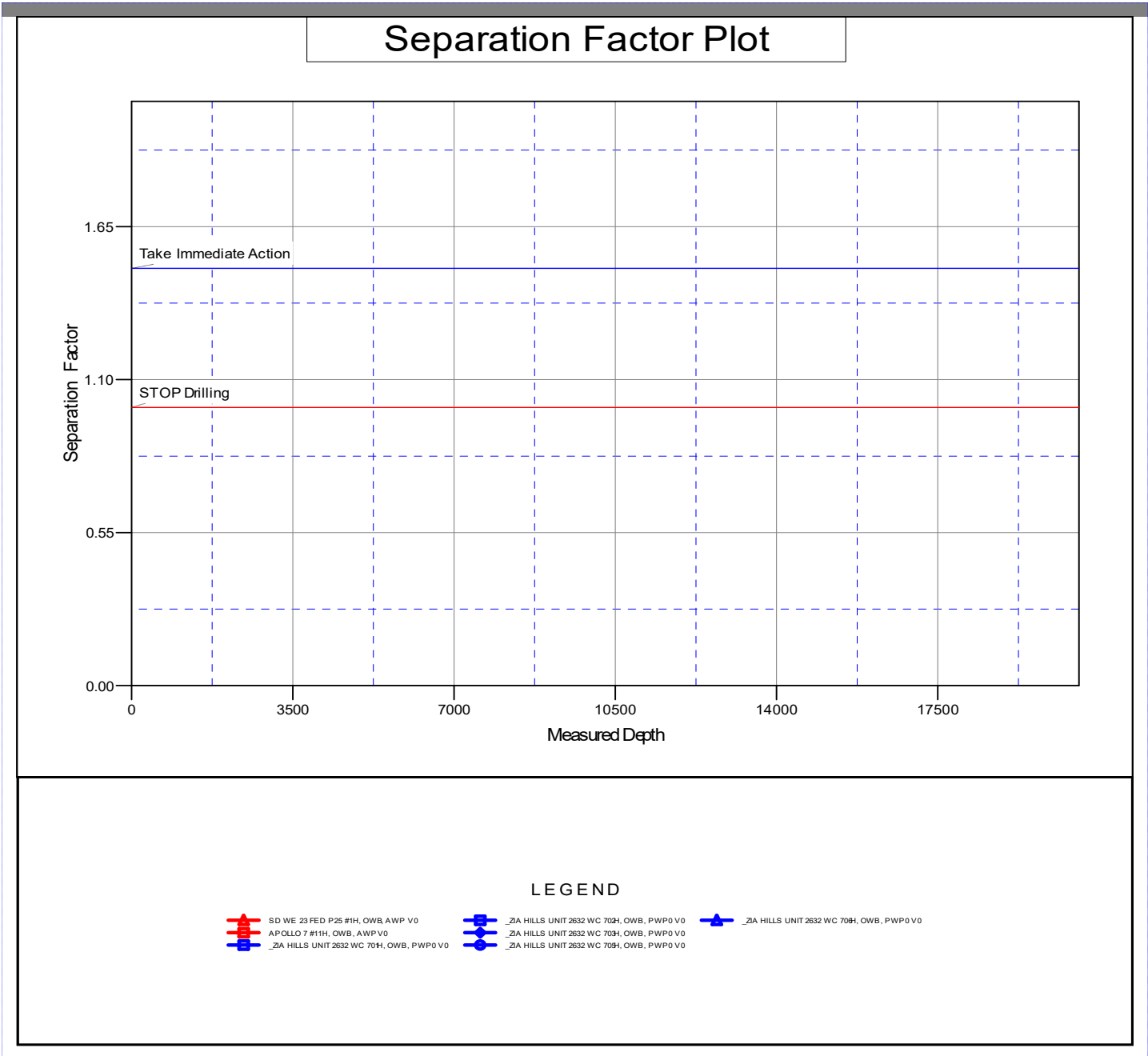
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

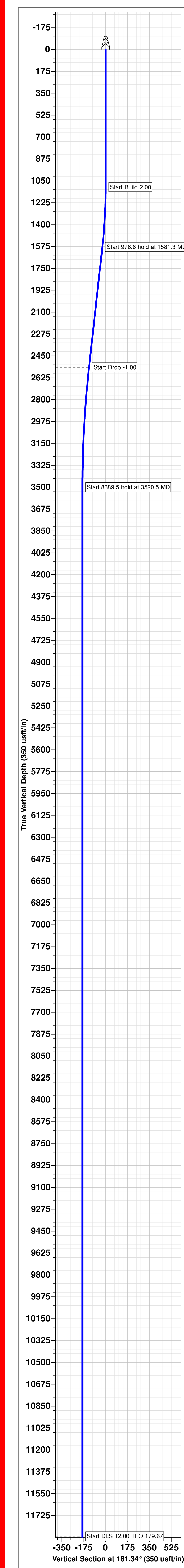
ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UNIT2632 WC 704H
Project:	ZIA HILLS UNIT AREA	TVD Reference:	WELL @ 3125.0usft (Original Well Elev)
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Reference Depths are relative to WELL @ 3125.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

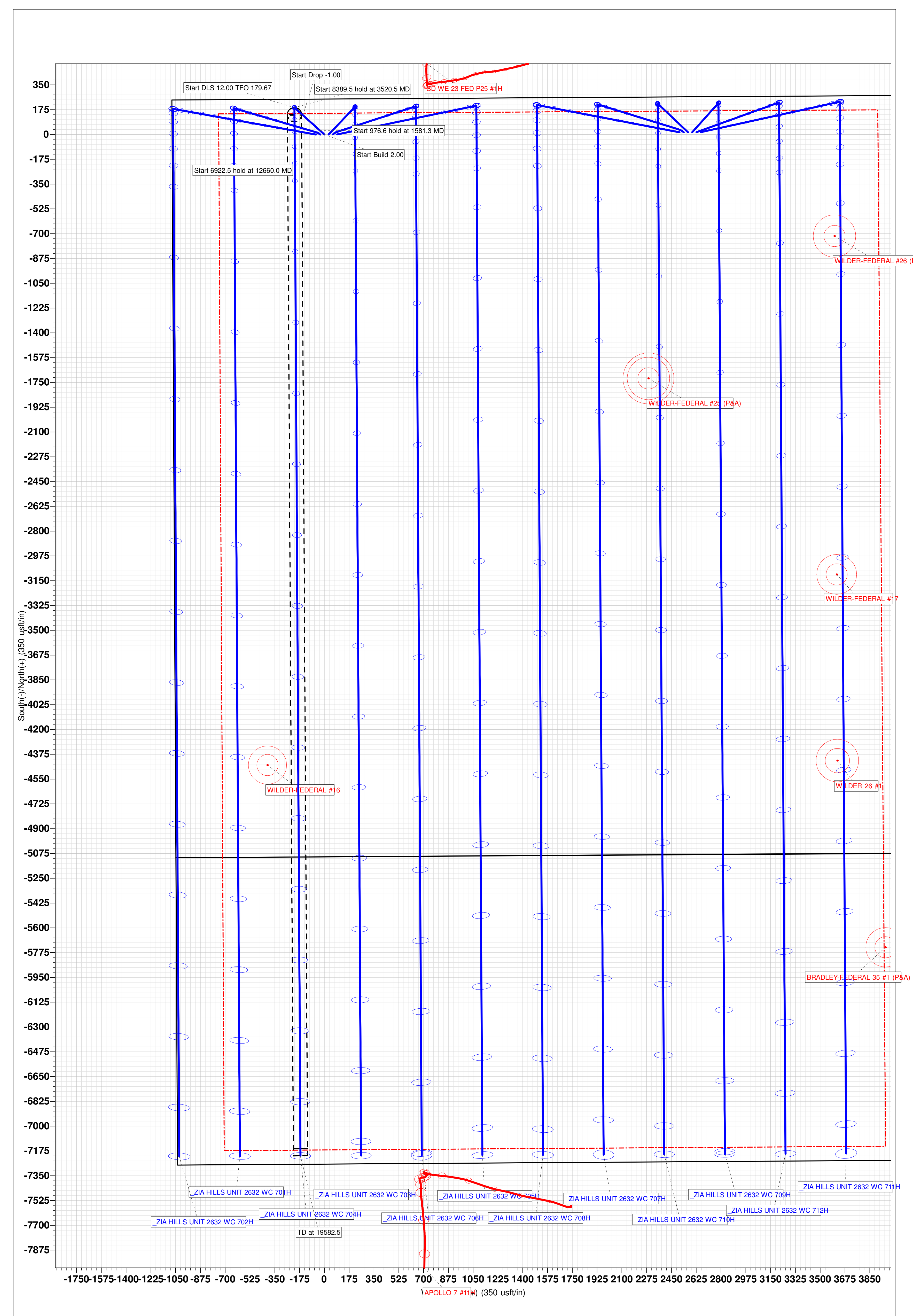
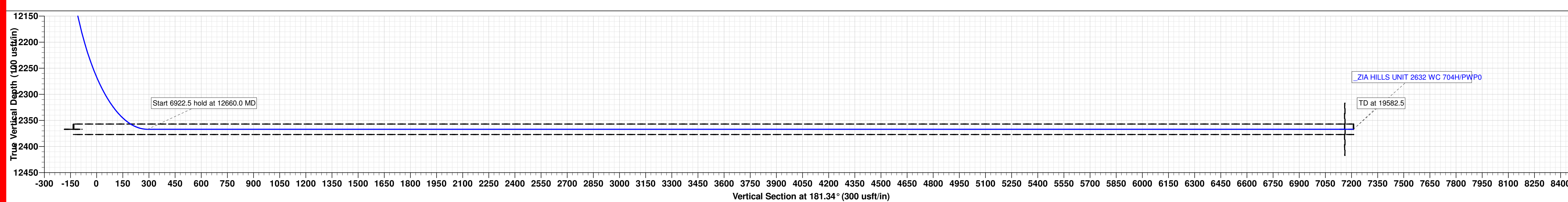
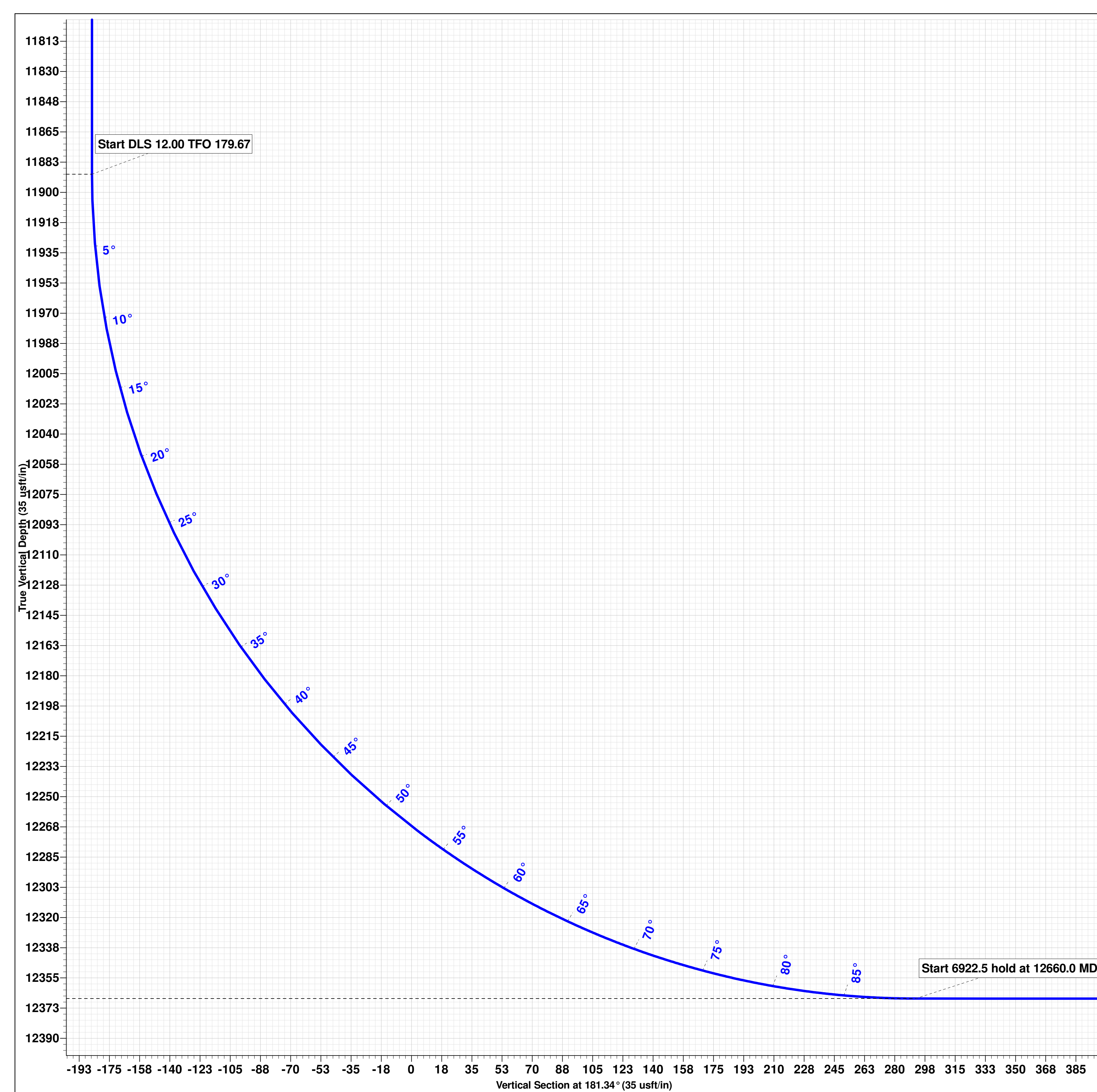
Coordinates are relative to: _ZIA HILLS UNIT 2632 WC 704H - Slot ZIA HILLS UN
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°





Project: ZIA HILLS UNIT AREA
Site: ZIA HILLS UNIT 2632 PROJECT
Well: ZIA HILLS UNIT 2632 WC 704H
Wellbore: OWB
Design: PWP0

SECTION DETAILS								
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
1100.0	0.00	0.00	1100.0	0.0	0.0	0.00	0.00	0.0
1581.3	9.63	311.96	1579.0	27.0	-30.0	2.00	311.96	-26.3
2557.9	9.63	311.96	2541.9	136.2	-151.4	0.00	0.00	-132.6
3520.5	0.00	0.00	3500.4	89.1	-211.4	1.00	180.00	-185.1
11910.0	0.00	0.00	11889.5	190.1	-211.4	0.00	0.00	-185.1
12660.0	90.00	179.67	12367.0	-287.4	-208.7	12.00	179.67	292.2
19582.5	90.00	179.67	12367.0	-7209.7	-168.7	0.00	0.00	7211.7



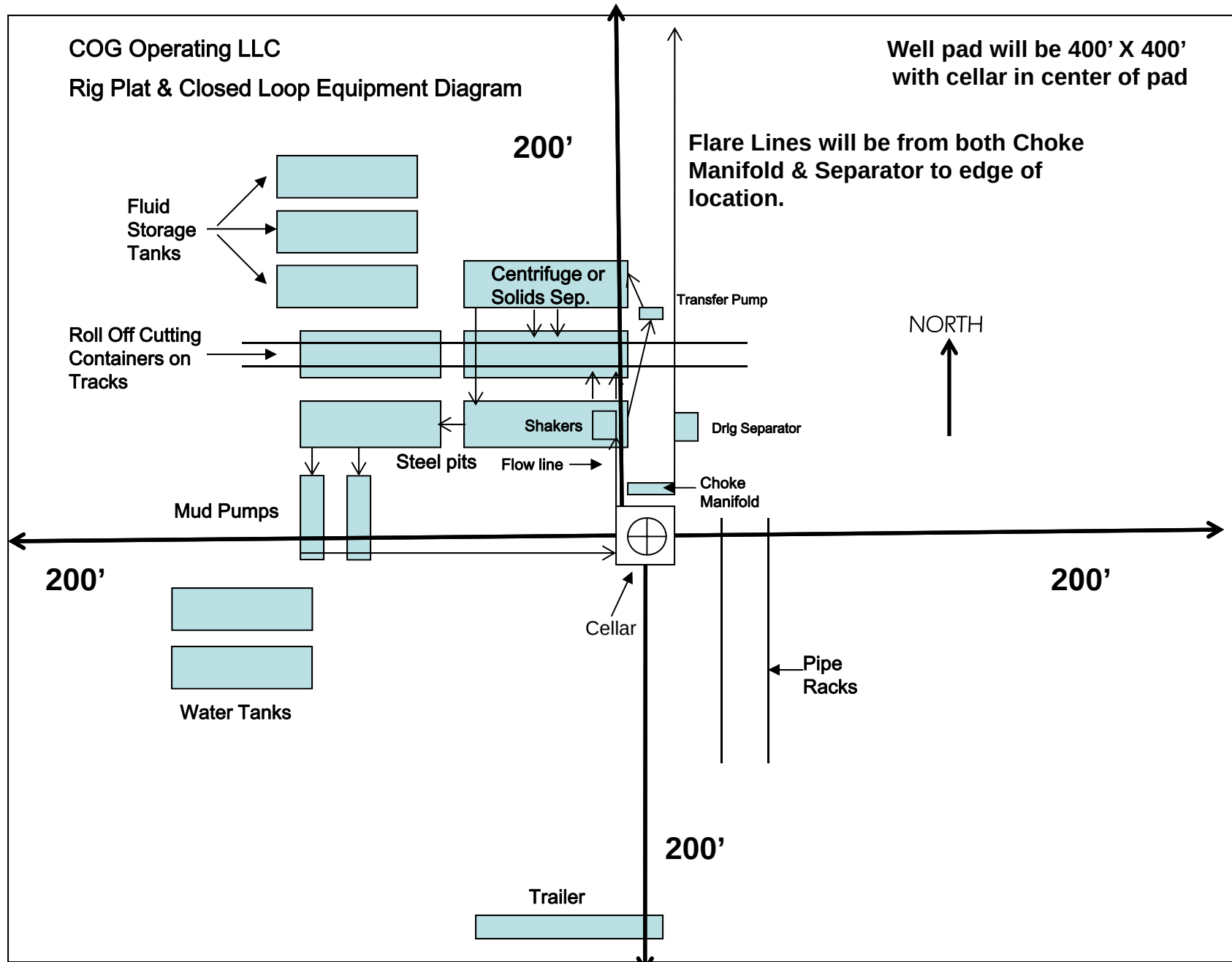


Exhibit 1

"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: 09/10/2024

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 2632 WC 701H	30-025-	D-26-26S-32E	250 FNL & 1045 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2632 WC 702H	30-025-	D-26-26S-32E	250 FNL & 1015 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2632 WC 703H	30-025-	D-26-26S-32E	250 FNL & 1105 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2632 WC 704H	30-025-	D-26-26S-32E	250 FNL & 1075 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2632 WC 705H	30-025-	D-26-26S-32E	250 FNL & 1165 FWL	± 818	± 3209	± 1907
Zia Hills Unit 2632 WC 706H	30-025-	D-26-26S-32E	250 FNL & 1135 FWL	± 818	± 3209	± 1907

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 2632 WC	Pending	± 2/1/2026	± 25 days from spud	TBD	TBD	TBD
701H, 702H, 703H, 704H, 705H, 706H						

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: 09/10/2024
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

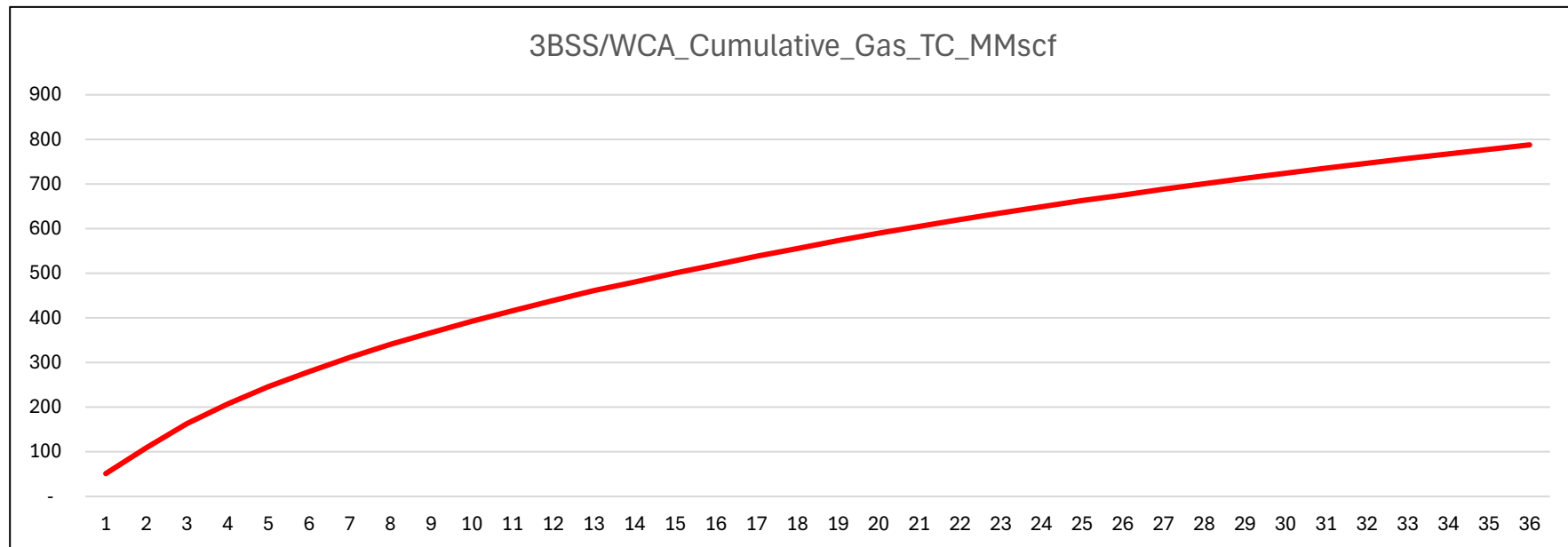
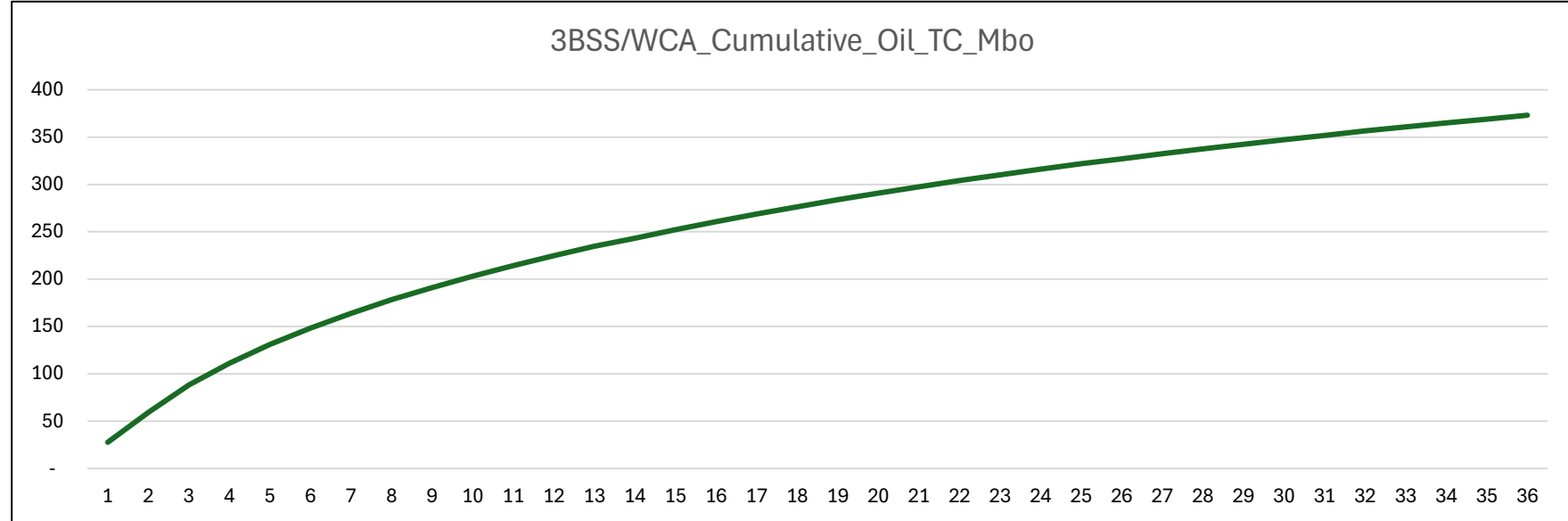
- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize 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 2632 WC 704H
LOCATION:	Section 26, 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 **10-3/4** inch surface casing shall be set at approximately **1190 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. **Keep casing full during run for collapse safety factor.** The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst 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. 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.**

Contingency Casing Design:

4. The 13-3/8 inch surface casing shall be set at approximately **1190 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.
 - e. 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.
 - f. 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)
- g. 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.
 - h. If cement falls back, remedial cementing will be done prior to drilling out that string.
5. **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.
6. **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.
7. 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 10-3/4 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 2/12/2025

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oecd/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 470418

ACKNOWLEDGMENTS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 470418
	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 470418

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CONDITIONS

Created By	Condition	Condition Date
stanwagner	Cement is required to circulate on both surface and intermediate1 strings of casing.	6/3/2025
stanwagner	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	6/3/2025
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.	8/16/2025
jeffrey.harrison	Out of compliance with Rule 19.15.5.9 Inactive Well List. Well cannot be produced until the operator is back in compliance.	8/16/2025
jeffrey.harrison	NSP required if not already covered by an existing order or if not an infill to an appropriate defining well in the same pool and spacing unit.	8/16/2025
jeffrey.harrison	Any string of casing that is not circulated to surface have a minimum of 200' of cement tie-back into the previous string of casing.	8/16/2025
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.	8/16/2025
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.	8/16/2025
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.	8/16/2025
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.	8/16/2025
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.	8/16/2025