

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. 30-025-54995
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 / 1045 FWL / TWSP: 26S / RANGE: 32E / SECTION: 26 / LAT: 32.020209 / LONG: -103.65082 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 100 FNL / 440 FWL / TWSP: 26S / RANGE: 32E / SECTION: 26 / LAT: 32.020622 / LONG: -103.652772 (TVD: 12063 feet, MD: 12150 feet)

PPP: NWSW / 2641 FNL / 440 FWL / TWSP: 26S / RANGE: 32E / SECTION: 26 / LAT: 32.013545 / LONG: -103.652779 (TVD: 12184 feet, MD: 14691 feet)

PPP: NWNW / 1 FNL / 440 FWL / TWSP: 26S / RANGE: 32E / SECTION: 35 / LAT: 32.006193 / LONG: -103.652786 (TVD: 12184 feet, MD: 17331 feet)

BHL: LOT 4 / 50 FSL / 440 FWL / TWSP: 26S / RANGE: 32E / SECTION: 35 / LAT: 32.000368 / LONG: -103.652793 (TVD: 12184 feet, MD: 19416 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- 54995	Pool Code 98081	Pool Name Zia Hills; Wolfcamp
Property Code 337705	Property Name ZIA HILLS UNIT 2632 WC	Well Number 701H
OGRID No. 217817	Operator Name CONOCOPHILLIPS COMPANY	Ground Level Elevation 3,118.17'
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 1,045' FWL	Latitude 32.020209	Longitude -103.650820	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 440' FWL	Latitude 32.000368	Longitude -103.652793	County LEA
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Dedicated Acres 889.64	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 1,045' FWL	Latitude 32.020209	Longitude -103.650820	County LEA
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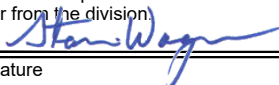
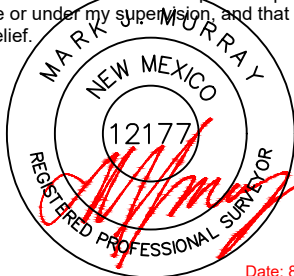
First Take Point (FTP)

UL D	Section 26	Township 26S	Range 32E	Lot	Ft. from N/S 100' FNL	Ft. from E/W 440' FWL	Latitude 32.020622	Longitude -103.652772	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 440' FWL	Latitude 32.000505	Longitude -103.652793	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 Date: 9-11-24		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.  Signature and Seal of Professional Surveyor:  Date: 8/28/2024	
Printed Name		Certificate Number	Date of Survey
Email Address		12177	8/28/2024

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.

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.

SURFACE HOLE LOCATION
& KICK-OFF POINT
250' FNL & 1,045' FWL
ELEV. = 3,118.17'

NAD 83 X = 752,864.31'
NAD 83 Y = 371,758.97'
NAD 83 LAT = 32.020209°
NAD 83 LONG = -103.650820°

FIRST TAKE POINT &
PENETRATION POINT 1
100' FNL & 440' FWL

NAD 83 X = 752,258.50'
NAD 83 Y = 371,905.31'
NAD 83 LAT = 32.020622°
NAD 83 LONG = -103.652772°

PENETRATION POINT 2
2,675' FNL & 440' FWL

NAD 83 X = 752,272.52'
NAD 83 Y = 369,330.79'
NAD 83 LAT = 32.013545°
NAD 83 LONG = -103.652779°

PENETRATION POINT 3
0' FSL & 440' FWL

NAD 83 X = 752,287.08'
NAD 83 Y = 366,656.23'
NAD 83 LAT = 32.006193°
NAD 83 LONG = -103.652786°

PENETRATION POINT 4
832' FSL & 440' FWL

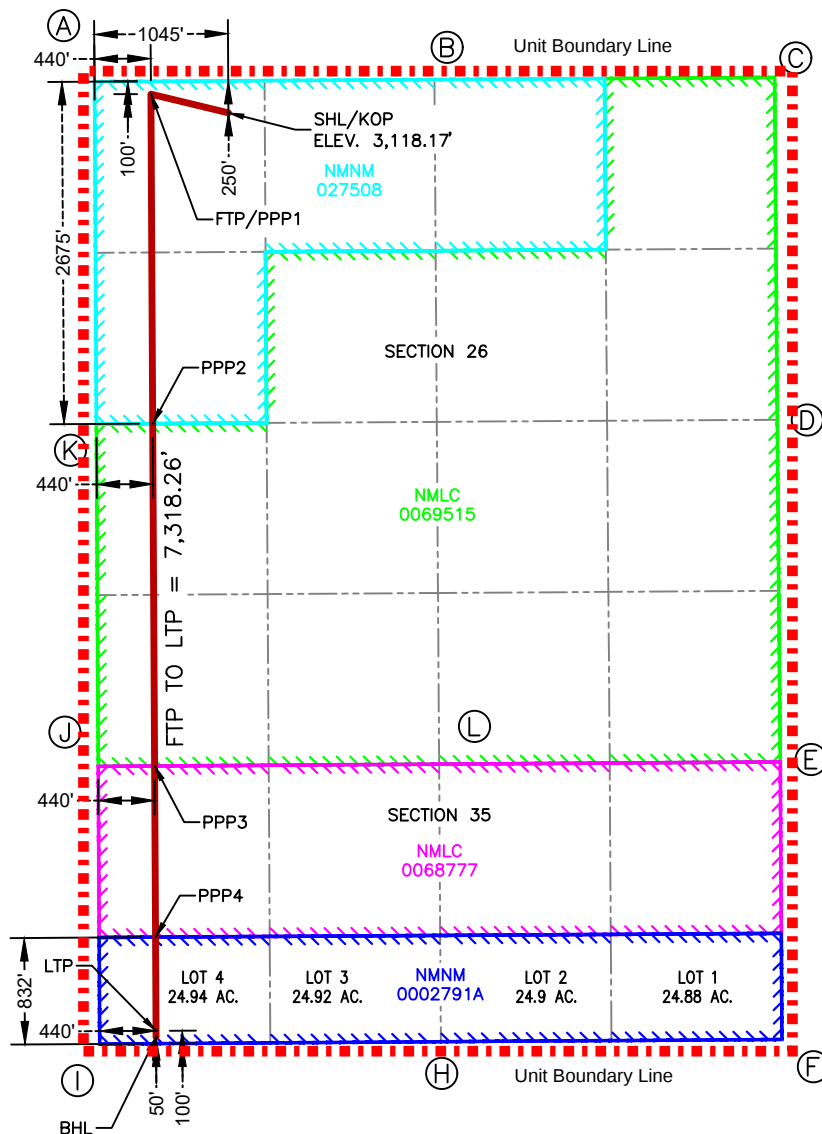
NAD 83 X = 752,294.07'
NAD 83 Y = 365,319.15'
NAD 83 LAT = 32.002517°
NAD 83 LONG = -103.652791°

LAST TAKE POINT
100' FSL & 440' FWL

NAD 83 X = 752,297.89'
NAD 83 Y = 364,587.16'
NAD 83 LAT = 32.000505°
NAD 83 LONG = -103.652793°

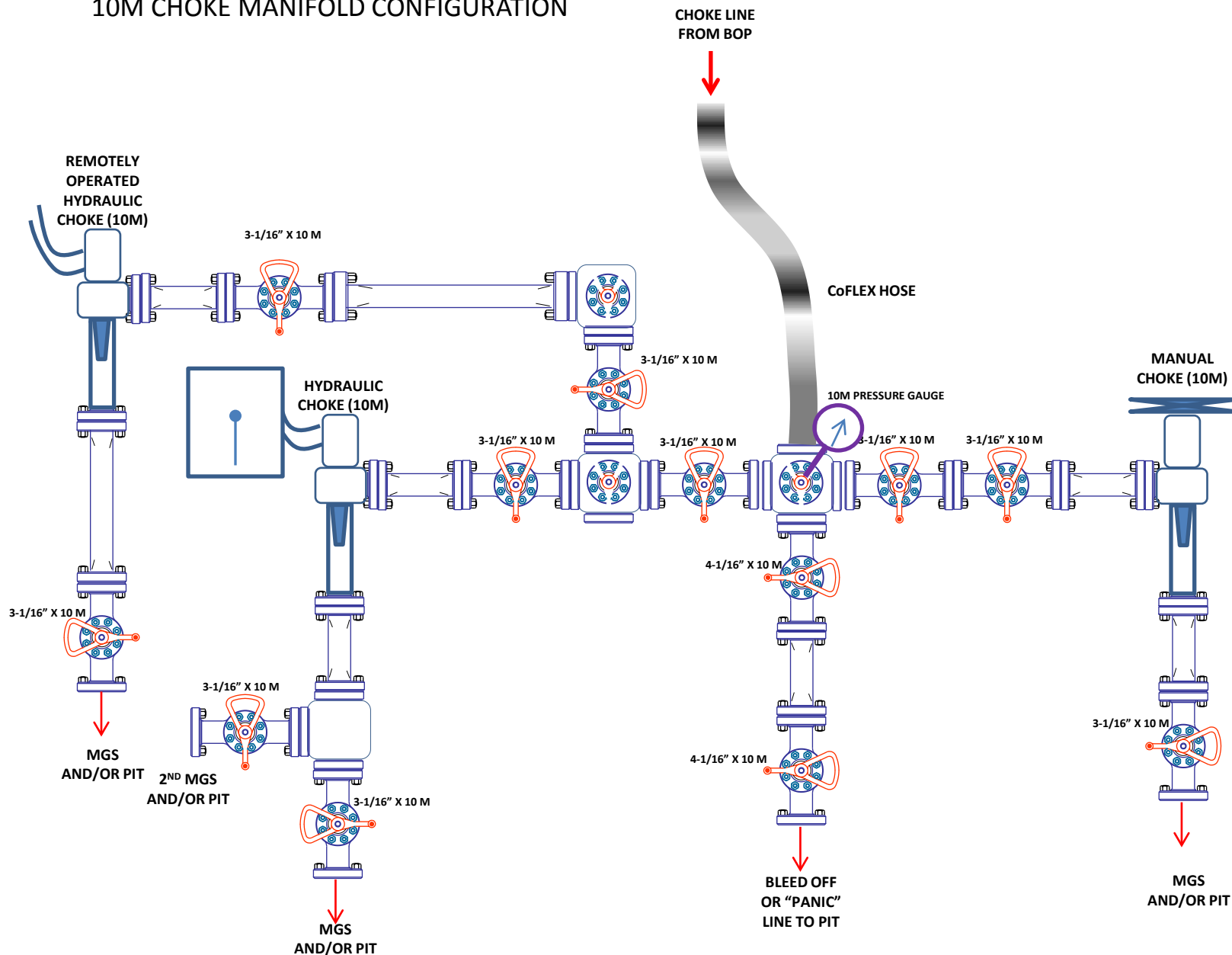
BOTTOM HOLE LOCATION
50' FSL & 440' FWL

NAD 83 X = 752,298.16'
NAD 83 Y = 364,537.16'
NAD 83 LAT = 32.000368°
NAD 83 LONG = -103.652793°

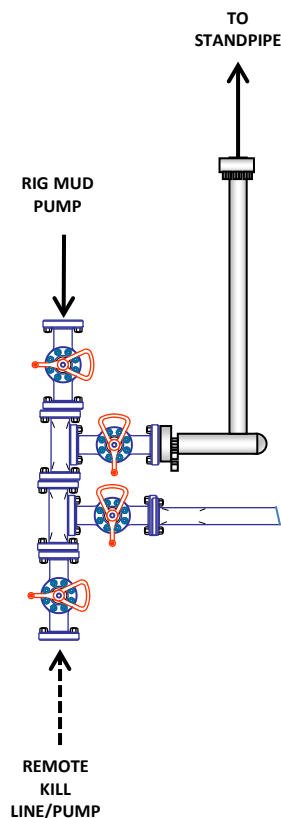


CORNER COORDINATES	
NEW MIDDLE EAST - NAD 83	
A	IRON PIPE W/ BRASS CAP N:372.002.66' E:751.818.12'
B	IRON PIPE W/ BRASS CAP N:372.018.70' E:754.473.10'
C	IRON PIPE W/ BRASS CAP N:372.035.56' E:757.130.94'
D	IRON PIPE W/ BRASS CAP N:369.361.57' E:757.151.04'
E	IRON PIPE W/ BRASS CAP N:366.688.03' E:757.174.54'
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'

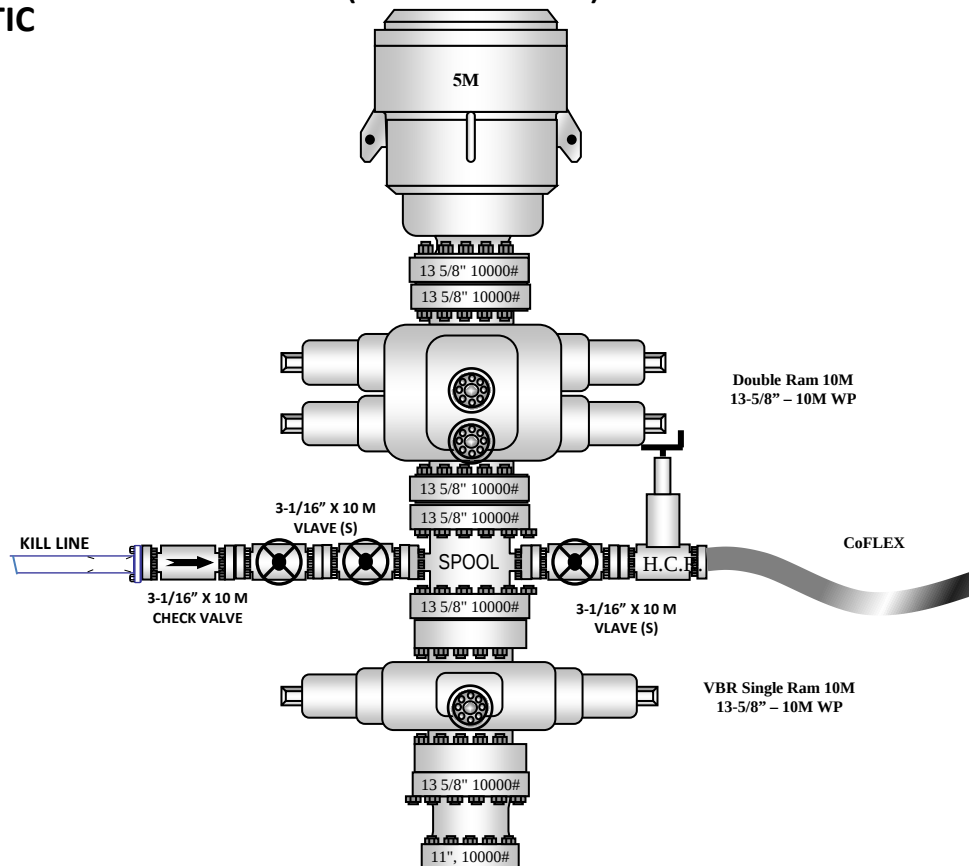
10M CHOKE MANIFOLD CONFIGURATION



10M REMOTE KILL SCHEMATIC



10M BOP Stack (5M Annular)



ConocoPhillips Company - Zia Hills Unit 2632 WC 701H

1. Geologic Formations

TVD of target	12,184' EOL	Pilot hole depth	NA
MD at TD:	19,417'	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	1.00	2.98	3.01
8.750"	8200	11625	7.625"	29.7	P110-ICY	W513	1.22	1.51	3.09	1.86
6.75"	0	11425	5.5"	23	P110-CY	BTC	1.81	1.96	2.77	2.77
6.75"	11425	19,417	5.5"	23	P110-CY	W441	1.70	1.98	2.60	2.36
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	1.26	5.18	5.36
8.75"	4220	11625	7.625"	29.7	P110-ICY	W513	1.22	1.51	3.09	1.86
6.75"	0	11425	5.5"	23	P110-CY	BTC	1.81	2.11	2.77	2.77
6.75"	11425	19,417	5.5"	23	P110-CY	W441	1.70	1.98	2.60	2.36
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 4, 2024

1

ConocoPhillips Company - Zia Hills Unit 2632 WC 701H

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary?	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

ConocoPhillips Company - Zia Hills Unit 2632 WC 701H

3. Cementing Program

Casing	# Skis	Wt. lb/ gal	Yld ft3/ 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	820	10.3	3.3	22	24	Halliburton tuned light
	250	14.8	1.35	6.6	8	Tail: Class H
Prod	720	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	11,125'	20% OH in Lateral (KOP to EOL)

3b. Contingency Cementing Program

Casing	# Skis	Wt. lb/ gal	Yld ft3/ 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)	200	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	11,125'	20% OH in Lateral (KOP to EOL)

ConocoPhillips Company - Zia Hills Unit 2632 WC 701H

4. Pressure Control Equipment

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

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

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

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

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

ConocoPhillips Company - Zia Hills Unit 2632 WC 701H

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
0	Surf. Shoe	FW Gel	8.6 - 8.8	28-34	N/C
Surf csg	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 - 13.5	35-45	<20

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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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 - 13.5	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 701H**7. Drilling Conditions**

Condition	Specify what type and where?
BH Pressure at deepest TVD	8555 psi at 12184' TVD
Abnormal Temperature	NO 175 Deg. F.

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

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

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

8. Other Facets of Operation

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

x	H2S Plan.
x	BOP & Choke Schematics.
x	Directional Plan



API BTC

Coupling	Pipe Body
Grade: L80-ICY	Grade: L80-ICY
Body: Red	1st Band: Red
1st Band: Brown	2nd Band: Brown
2nd Band: Pale Green	3rd Band: Pale Green
3rd Band: -	4th Band: Pale Green

Outside Diameter	7.625 in.	Wall Thickness	0.375 in.	Grade	L80-ICY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	Regular				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	Drift	6.750 in.	SMYS	85,000 psi
Wall Thickness	0.375 in.	Plain End Weight	29.06 lb/ft	Min UTS	95,000 psi
Nominal Weight	29.700 lb/ft	OD Tolerance	API	Body Yield Strength	726 x1000 lb
Nominal ID	6.875 in.			Min. Internal Yield Pressure	7320 psi
				Collapse Pressure	5900 psi
				Max. Allowed Bending	51 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	Joint Strength	733 x1000 lb
Connection OD	8.500 in.	Coupling Face Load	597 x1000 lb
Hand Tight Stand Off	1 in.	Internal Pressure Capacity	7320 psi

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.
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TXP® BTC



Coupling	Pipe Body
Grade: P110-CY	Grade: P110-CY
Body: White	1st Band: White
1st Band: Grey	2nd Band: Grey
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.415 in.	Grade	P110-CY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry		Performance	
Nominal OD	5.500 in.	Wall Thickness	0.415 in.
Nominal Weight	23 lb/ft	Plain End Weight	22.56 lb/ft
Drift	4.545 in.	OD Tolerance	API
Nominal ID	4.670 in.		
		Body Yield Strength	729 x1000 lb
		Min. Internal Yield Pressure	14,530 psi
		SMYS	110,000 psi
		Collapse Pressure	14,540 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	6.200 in.	Tension Efficiency	100 %	Minimum	12,980 ft-lb
Coupling Length	9.450 in.	Joint Yield Strength	729 x1000 lb	Optimum	14,420 ft-lb
Connection ID	4.658 in.	Internal Pressure Capacity	14,530 psi	Maximum	15,860 ft-lb
Make-up Loss	4.204 in.	Compression Efficiency	100 %		
Threads per inch	5	Compression Strength	729 x1000 lb	Operation Limit Torques	
Connection OD Option	Regular	Max. Allowable Bending	92 °/100 ft	Operating Torque	24,200 ft-lb
		External Pressure Capacity	14,540 psi	Yield Torque	26,900 ft-lb

Notes

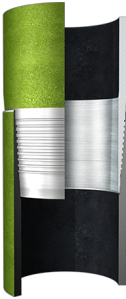
This connection is fully interchangeable with:
TXP® BTC - 5.5 in. - 0.275 / 0.304 / 0.361 / 0.476 in.
Connections with Dopeless® Technology are fully compatible with the same connection in its Standard version
Datasheet is also valid for Special Bevel option when applicable - except for Coupling Face Load, which will be reduced. Please contact a local Tenaris technical sales representative.
Standard coupling design comes with optimized 20° bevel.

For the latest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

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Wedge 513[®]



Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	7.625 in.	Wall Thickness	0.375 in.	Grade	P110-ICY
Min. Wall Thickness	90.00 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	Wall Thickness	0.375 in.	Body Yield Strength	1068 x1000 lb
Nominal Weight	29.70 lb/ft	Plain End Weight	29.06 lb/ft	Min. Internal Yield Pressure	11,070 psi
Drift	6.750 in.	OD Tolerance	API	SMYS	125,000 psi
Nominal ID	6.875 in.			Collapse Pressure	7360 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	Tension Efficiency	60 %	Minimum	9000 ft-lb
Connection ID	6.800 in.	Joint Yield Strength	641 x1000 lb	Optimum	10,800 ft-lb
Make-up Loss	4.420 in.	Internal Pressure Capacity	11,070 psi	Maximum	15,800 ft-lb
Threads per inch	3.29	Compression Efficiency	75.20 %	Operation Limit Torques	
Connection OD Option	Regular	Compression Strength	803 x1000 lb	Operating Torque	53,000 ft-lb
		Max. Allowable Bending	45 °/100 ft	Yield Torque	79,000 ft-lb
		External Pressure Capacity	7360 psi		

Notes

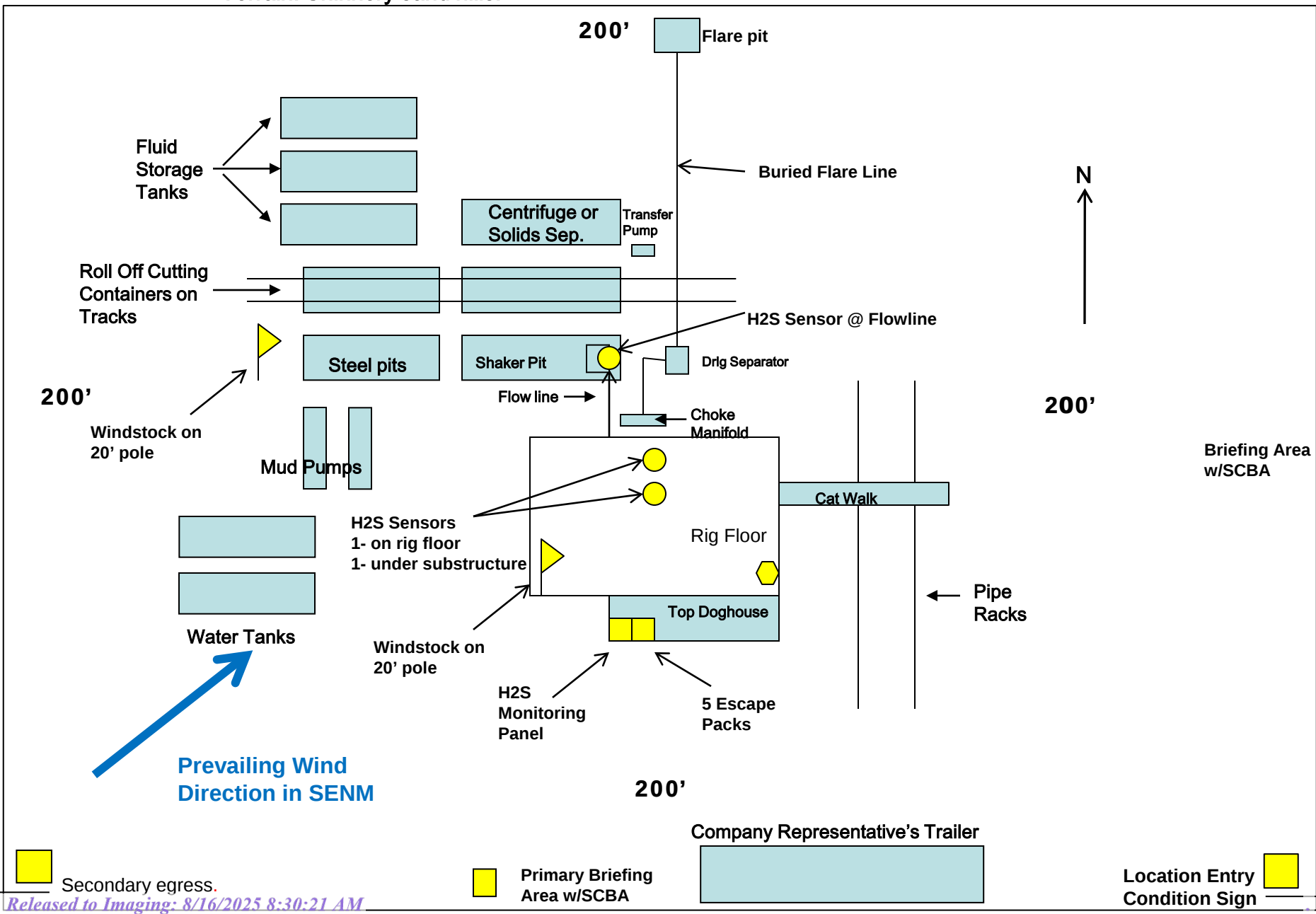
This connection is fully interchangeable with:
Wedge 523[®] - 7.625 in. - 0.375 in.
Connections with Dopeless[®] Technology are fully compatible with the same connection in its Standard version

For the latest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

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

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



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

DELAWARE BASIN EAST

ZIA HILLS UNIT AREA

ZIA HILLS UNIT 2632 PROJECT

**_ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632
WC 701H**

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 701H - Slot ZIA HILLS UNIT2632 WC 701H					
Well Position	+N/-S	0.0 usft	Northing:	371,701.94 usft	Latitude:	32° 1' 12.302 N
	+E/-W	0.0 usft	Easting:	711,677.51 usft	Longitude:	103° 39' 1.257 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	47,253.81674711

Design	PWP0			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	184.49

Plan Survey Tool Program	Date	7/18/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,416.6 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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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	
1,350.0	5.00	310.00	1,349.7	7.0	-8.4	2.00	2.00	0.00	310.00	
1,528.5	7.53	286.29	1,527.2	15.3	-25.6	2.00	1.42	-13.28	-57.81	
5,787.0	7.53	286.29	5,748.8	171.9	-561.4	0.00	0.00	0.00	0.00	
6,540.3	0.00	0.00	6,500.0	185.8	-608.9	1.00	-1.00	0.00	180.00	
11,746.8	0.00	0.00	11,706.5	185.8	-608.9	0.00	0.00	0.00	0.00	
12,496.8	90.00	179.67	12,184.0	-291.7	-606.2	12.00	12.00	23.96	179.67	
19,416.6	90.00	179.67	12,184.0	-7,211.3	-566.7	0.00	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00	
1,200.0	2.00	310.00	1,200.0	1.1	-1.3	-1.0	2.00	2.00	0.00	
1,300.0	4.00	310.00	1,299.8	4.5	-5.3	-4.1	2.00	2.00	0.00	
1,350.0	5.00	310.00	1,349.7	7.0	-8.4	-6.3	2.00	2.00	0.00	
1,400.0	5.60	301.29	1,399.5	9.7	-12.1	-8.7	2.00	1.19	-17.42	
1,500.0	7.07	288.90	1,498.9	14.2	-22.1	-12.4	2.00	1.47	-12.39	
1,528.5	7.53	286.29	1,527.2	15.3	-25.6	-13.2	2.00	1.63	-9.15	
1,600.0	7.53	286.29	1,598.0	17.9	-34.5	-15.2	0.00	0.00	0.00	
1,700.0	7.53	286.29	1,697.2	21.6	-47.1	-17.8	0.00	0.00	0.00	
1,800.0	7.53	286.29	1,796.3	25.3	-59.7	-20.5	0.00	0.00	0.00	
1,900.0	7.53	286.29	1,895.4	29.0	-72.3	-23.2	0.00	0.00	0.00	
2,000.0	7.53	286.29	1,994.6	32.6	-84.9	-25.9	0.00	0.00	0.00	
2,100.0	7.53	286.29	2,093.7	36.3	-97.5	-28.6	0.00	0.00	0.00	
2,200.0	7.53	286.29	2,192.8	40.0	-110.0	-31.2	0.00	0.00	0.00	
2,300.0	7.53	286.29	2,292.0	43.7	-122.6	-33.9	0.00	0.00	0.00	
2,400.0	7.53	286.29	2,391.1	47.3	-135.2	-36.6	0.00	0.00	0.00	
2,500.0	7.53	286.29	2,490.2	51.0	-147.8	-39.3	0.00	0.00	0.00	
2,600.0	7.53	286.29	2,589.4	54.7	-160.4	-42.0	0.00	0.00	0.00	
2,700.0	7.53	286.29	2,688.5	58.4	-173.0	-44.7	0.00	0.00	0.00	
2,800.0	7.53	286.29	2,787.7	62.1	-185.5	-47.3	0.00	0.00	0.00	
2,900.0	7.53	286.29	2,886.8	65.7	-198.1	-50.0	0.00	0.00	0.00	
3,000.0	7.53	286.29	2,985.9	69.4	-210.7	-52.7	0.00	0.00	0.00	
3,100.0	7.53	286.29	3,085.1	73.1	-223.3	-55.4	0.00	0.00	0.00	
3,200.0	7.53	286.29	3,184.2	76.8	-235.9	-58.1	0.00	0.00	0.00	
3,300.0	7.53	286.29	3,283.3	80.5	-248.5	-60.7	0.00	0.00	0.00	
3,400.0	7.53	286.29	3,382.5	84.1	-261.1	-63.4	0.00	0.00	0.00	
3,500.0	7.53	286.29	3,481.6	87.8	-273.6	-66.1	0.00	0.00	0.00	
3,600.0	7.53	286.29	3,580.8	91.5	-286.2	-68.8	0.00	0.00	0.00	
3,700.0	7.53	286.29	3,679.9	95.2	-298.8	-71.5	0.00	0.00	0.00	
3,800.0	7.53	286.29	3,779.0	98.8	-311.4	-74.1	0.00	0.00	0.00	
3,900.0	7.53	286.29	3,878.2	102.5	-324.0	-76.8	0.00	0.00	0.00	
4,000.0	7.53	286.29	3,977.3	106.2	-336.6	-79.5	0.00	0.00	0.00	
4,100.0	7.53	286.29	4,076.4	109.9	-349.1	-82.2	0.00	0.00	0.00	
4,200.0	7.53	286.29	4,175.6	113.6	-361.7	-84.9	0.00	0.00	0.00	
4,300.0	7.53	286.29	4,274.7	117.2	-374.3	-87.5	0.00	0.00	0.00	
4,400.0	7.53	286.29	4,373.8	120.9	-386.9	-90.2	0.00	0.00	0.00	
4,500.0	7.53	286.29	4,473.0	124.6	-399.5	-92.9	0.00	0.00	0.00	
4,600.0	7.53	286.29	4,572.1	128.3	-412.1	-95.6	0.00	0.00	0.00	
4,700.0	7.53	286.29	4,671.3	131.9	-424.6	-98.3	0.00	0.00	0.00	
4,800.0	7.53	286.29	4,770.4	135.6	-437.2	-101.0	0.00	0.00	0.00	
4,900.0	7.53	286.29	4,869.5	139.3	-449.8	-103.6	0.00	0.00	0.00	
5,000.0	7.53	286.29	4,968.7	143.0	-462.4	-106.3	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,100.0	7.53	286.29	5,067.8	146.7	-475.0	-109.0	0.00	0.00	0.00	
5,200.0	7.53	286.29	5,166.9	150.3	-487.6	-111.7	0.00	0.00	0.00	
5,300.0	7.53	286.29	5,266.1	154.0	-500.1	-114.4	0.00	0.00	0.00	
5,400.0	7.53	286.29	5,365.2	157.7	-512.7	-117.0	0.00	0.00	0.00	
5,500.0	7.53	286.29	5,464.4	161.4	-525.3	-119.7	0.00	0.00	0.00	
5,600.0	7.53	286.29	5,563.5	165.0	-537.9	-122.4	0.00	0.00	0.00	
5,700.0	7.53	286.29	5,662.6	168.7	-550.5	-125.1	0.00	0.00	0.00	
5,787.0	7.53	286.29	5,748.8	171.9	-561.4	-127.4	0.00	0.00	0.00	
5,800.0	7.40	286.29	5,761.8	172.4	-563.1	-127.8	1.00	-1.00	0.00	
5,900.0	6.40	286.29	5,861.0	175.8	-574.6	-130.2	1.00	-1.00	0.00	
6,000.0	5.40	286.29	5,960.5	178.7	-584.5	-132.3	1.00	-1.00	0.00	
6,100.0	4.40	286.29	6,060.1	181.1	-592.7	-134.1	1.00	-1.00	0.00	
6,200.0	3.40	286.29	6,159.9	183.0	-599.2	-135.5	1.00	-1.00	0.00	
6,300.0	2.40	286.29	6,259.8	184.4	-604.1	-136.5	1.00	-1.00	0.00	
6,400.0	1.40	286.29	6,359.7	185.3	-607.2	-137.2	1.00	-1.00	0.00	
6,500.0	0.40	286.29	6,459.7	185.8	-608.8	-137.5	1.00	-1.00	0.00	
6,540.3	0.00	0.00	6,500.0	185.8	-608.9	-137.5	1.00	-1.00	0.00	
6,600.0	0.00	0.00	6,559.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
6,700.0	0.00	0.00	6,659.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,759.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,859.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,959.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,100.0	0.00	0.00	7,059.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,159.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,259.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,359.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,459.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,559.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,659.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,759.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,859.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,959.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,100.0	0.00	0.00	8,059.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,159.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,259.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,359.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,459.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,559.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,659.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,759.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,859.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,959.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,100.0	0.00	0.00	9,059.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,159.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,259.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,359.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,459.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,559.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,659.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,759.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,859.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,959.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,100.0	0.00	0.00	10,059.7	185.8	-608.9	-137.5	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,200.0	0.00	0.00	10,159.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,300.0	0.00	0.00	10,259.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,400.0	0.00	0.00	10,359.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,500.0	0.00	0.00	10,459.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,600.0	0.00	0.00	10,559.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,700.0	0.00	0.00	10,659.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,800.0	0.00	0.00	10,759.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
10,900.0	0.00	0.00	10,859.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,000.0	0.00	0.00	10,959.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,100.0	0.00	0.00	11,059.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,200.0	0.00	0.00	11,159.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,300.0	0.00	0.00	11,259.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,400.0	0.00	0.00	11,359.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,500.0	0.00	0.00	11,459.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,600.0	0.00	0.00	11,559.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,700.0	0.00	0.00	11,659.7	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,746.8	0.00	0.00	11,706.5	185.8	-608.9	-137.5	0.00	0.00	0.00	
11,750.0	0.38	179.67	11,709.7	185.8	-608.9	-137.5	12.00	12.00	0.00	
11,775.0	3.38	179.67	11,734.7	185.0	-608.9	-136.7	12.00	12.00	0.00	
11,800.0	6.38	179.67	11,759.6	182.8	-608.9	-134.6	12.00	12.00	0.00	
11,825.0	9.38	179.67	11,784.4	179.4	-608.9	-131.2	12.00	12.00	0.00	
11,850.0	12.38	179.67	11,808.9	174.7	-608.8	-126.5	12.00	12.00	0.00	
11,875.0	15.38	179.67	11,833.2	168.7	-608.8	-120.5	12.00	12.00	0.00	
11,900.0	18.38	179.67	11,857.1	161.4	-608.8	-113.2	12.00	12.00	0.00	
11,925.0	21.38	179.67	11,880.6	152.9	-608.7	-104.8	12.00	12.00	0.00	
11,950.0	24.38	179.67	11,903.6	143.2	-608.6	-95.1	12.00	12.00	0.00	
11,975.0	27.38	179.67	11,926.1	132.3	-608.6	-84.2	12.00	12.00	0.00	
12,000.0	30.38	179.67	11,948.0	120.2	-608.5	-72.2	12.00	12.00	0.00	
12,025.0	33.38	179.67	11,969.2	107.0	-608.4	-59.0	12.00	12.00	0.00	
12,050.0	36.38	179.67	11,989.7	92.7	-608.4	-44.8	12.00	12.00	0.00	
12,075.0	39.38	179.67	12,009.5	77.4	-608.3	-29.5	12.00	12.00	0.00	
12,100.0	42.38	179.67	12,028.4	61.0	-608.2	-13.2	12.00	12.00	0.00	
12,125.0	45.38	179.67	12,046.4	43.7	-608.1	4.1	12.00	12.00	0.00	
12,150.0	48.38	179.67	12,063.5	25.4	-608.0	22.3	12.00	12.00	0.00	
12,175.0	51.38	179.67	12,079.6	6.3	-607.9	41.3	12.00	12.00	0.00	
12,200.0	54.38	179.67	12,094.7	-13.6	-607.8	61.2	12.00	12.00	0.00	
12,225.0	57.38	179.67	12,108.7	-34.3	-607.6	81.8	12.00	12.00	0.00	
12,250.0	60.38	179.67	12,121.6	-55.7	-607.5	103.1	12.00	12.00	0.00	
12,275.0	63.38	179.67	12,133.4	-77.8	-607.4	125.1	12.00	12.00	0.00	
12,300.0	66.38	179.67	12,144.0	-100.4	-607.3	147.7	12.00	12.00	0.00	
12,325.0	69.38	179.67	12,153.4	-123.5	-607.1	170.7	12.00	12.00	0.00	
12,350.0	72.38	179.67	12,161.6	-147.2	-607.0	194.3	12.00	12.00	0.00	
12,375.0	75.38	179.67	12,168.5	-171.2	-606.9	218.2	12.00	12.00	0.00	
12,400.0	78.38	179.67	12,174.2	-195.5	-606.7	242.5	12.00	12.00	0.00	
12,425.0	81.38	179.67	12,178.6	-220.1	-606.6	267.0	12.00	12.00	0.00	
12,450.0	84.38	179.67	12,181.7	-244.9	-606.4	291.7	12.00	12.00	0.00	
12,475.0	87.38	179.67	12,183.5	-269.9	-606.3	316.5	12.00	12.00	0.00	
12,496.8	90.00	179.67	12,184.0	-291.7	-606.2	338.2	12.00	12.00	0.00	
12,500.0	90.00	179.67	12,184.0	-294.9	-606.2	341.4	0.00	0.00	0.00	
12,600.0	90.00	179.67	12,184.0	-394.9	-605.6	441.1	0.00	0.00	0.00	
12,700.0	90.00	179.67	12,184.0	-494.9	-605.0	540.7	0.00	0.00	0.00	
12,800.0	90.00	179.67	12,184.0	-594.9	-604.4	640.4	0.00	0.00	0.00	
12,900.0	90.00	179.67	12,184.0	-694.9	-603.9	740.0	0.00	0.00	0.00	

ConocoPhillips

Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,000.0	90.00	179.67	12,184.0	-794.9	-603.3	839.7	0.00	0.00	0.00
13,100.0	90.00	179.67	12,184.0	-894.9	-602.7	939.3	0.00	0.00	0.00
13,200.0	90.00	179.67	12,184.0	-994.9	-602.2	1,039.0	0.00	0.00	0.00
13,300.0	90.00	179.67	12,184.0	-1,094.8	-601.6	1,138.6	0.00	0.00	0.00
13,400.0	90.00	179.67	12,184.0	-1,194.8	-601.0	1,238.3	0.00	0.00	0.00
13,500.0	90.00	179.67	12,184.0	-1,294.8	-600.4	1,337.9	0.00	0.00	0.00
13,600.0	90.00	179.67	12,184.0	-1,394.8	-599.9	1,437.6	0.00	0.00	0.00
13,700.0	90.00	179.67	12,184.0	-1,494.8	-599.3	1,537.2	0.00	0.00	0.00
13,800.0	90.00	179.67	12,184.0	-1,594.8	-598.7	1,636.8	0.00	0.00	0.00
13,900.0	90.00	179.67	12,184.0	-1,694.8	-598.2	1,736.5	0.00	0.00	0.00
14,000.0	90.00	179.67	12,184.0	-1,794.8	-597.6	1,836.1	0.00	0.00	0.00
14,100.0	90.00	179.67	12,184.0	-1,894.8	-597.0	1,935.8	0.00	0.00	0.00
14,200.0	90.00	179.67	12,184.0	-1,994.8	-596.5	2,035.4	0.00	0.00	0.00
14,300.0	90.00	179.67	12,184.0	-2,094.8	-595.9	2,135.1	0.00	0.00	0.00
14,400.0	90.00	179.67	12,184.0	-2,194.8	-595.3	2,234.7	0.00	0.00	0.00
14,500.0	90.00	179.67	12,184.0	-2,294.8	-594.7	2,334.4	0.00	0.00	0.00
14,600.0	90.00	179.67	12,184.0	-2,394.8	-594.2	2,434.0	0.00	0.00	0.00
14,700.0	90.00	179.67	12,184.0	-2,494.8	-593.6	2,533.7	0.00	0.00	0.00
14,800.0	90.00	179.67	12,184.0	-2,594.8	-593.0	2,633.3	0.00	0.00	0.00
14,900.0	90.00	179.67	12,184.0	-2,694.8	-592.5	2,733.0	0.00	0.00	0.00
15,000.0	90.00	179.67	12,184.0	-2,794.8	-591.9	2,832.6	0.00	0.00	0.00
15,100.0	90.00	179.67	12,184.0	-2,894.8	-591.3	2,932.2	0.00	0.00	0.00
15,200.0	90.00	179.67	12,184.0	-2,994.8	-590.8	3,031.9	0.00	0.00	0.00
15,300.0	90.00	179.67	12,184.0	-3,094.8	-590.2	3,131.5	0.00	0.00	0.00
15,400.0	90.00	179.67	12,184.0	-3,194.8	-589.6	3,231.2	0.00	0.00	0.00
15,500.0	90.00	179.67	12,184.0	-3,294.8	-589.0	3,330.8	0.00	0.00	0.00
15,600.0	90.00	179.67	12,184.0	-3,394.8	-588.5	3,430.5	0.00	0.00	0.00
15,700.0	90.00	179.67	12,184.0	-3,494.8	-587.9	3,530.1	0.00	0.00	0.00
15,800.0	90.00	179.67	12,184.0	-3,594.8	-587.3	3,629.8	0.00	0.00	0.00
15,900.0	90.00	179.67	12,184.0	-3,694.8	-586.8	3,729.4	0.00	0.00	0.00
16,000.0	90.00	179.67	12,184.0	-3,794.8	-586.2	3,829.1	0.00	0.00	0.00
16,100.0	90.00	179.67	12,184.0	-3,894.8	-585.6	3,928.7	0.00	0.00	0.00
16,200.0	90.00	179.67	12,184.0	-3,994.8	-585.0	4,028.4	0.00	0.00	0.00
16,300.0	90.00	179.67	12,184.0	-4,094.8	-584.5	4,128.0	0.00	0.00	0.00
16,400.0	90.00	179.67	12,184.0	-4,194.8	-583.9	4,227.7	0.00	0.00	0.00
16,500.0	90.00	179.67	12,184.0	-4,294.8	-583.3	4,327.3	0.00	0.00	0.00
16,600.0	90.00	179.67	12,184.0	-4,394.8	-582.8	4,426.9	0.00	0.00	0.00
16,700.0	90.00	179.67	12,184.0	-4,494.8	-582.2	4,526.6	0.00	0.00	0.00
16,800.0	90.00	179.67	12,184.0	-4,594.8	-581.6	4,626.2	0.00	0.00	0.00
16,900.0	90.00	179.67	12,184.0	-4,694.8	-581.1	4,725.9	0.00	0.00	0.00
17,000.0	90.00	179.67	12,184.0	-4,794.8	-580.5	4,825.5	0.00	0.00	0.00
17,100.0	90.00	179.67	12,184.0	-4,894.8	-579.9	4,925.2	0.00	0.00	0.00
17,200.0	90.00	179.67	12,184.0	-4,994.8	-579.3	5,024.8	0.00	0.00	0.00
17,300.0	90.00	179.67	12,184.0	-5,094.8	-578.8	5,124.5	0.00	0.00	0.00
17,400.0	90.00	179.67	12,184.0	-5,194.8	-578.2	5,224.1	0.00	0.00	0.00
17,500.0	90.00	179.67	12,184.0	-5,294.8	-577.6	5,323.8	0.00	0.00	0.00
17,600.0	90.00	179.67	12,184.0	-5,394.8	-577.1	5,423.4	0.00	0.00	0.00
17,700.0	90.00	179.67	12,184.0	-5,494.8	-576.5	5,523.1	0.00	0.00	0.00
17,800.0	90.00	179.67	12,184.0	-5,594.8	-575.9	5,622.7	0.00	0.00	0.00
17,900.0	90.00	179.67	12,184.0	-5,694.8	-575.4	5,722.3	0.00	0.00	0.00
18,000.0	90.00	179.67	12,184.0	-5,794.8	-574.8	5,822.0	0.00	0.00	0.00
18,100.0	90.00	179.67	12,184.0	-5,894.8	-574.2	5,921.6	0.00	0.00	0.00
18,200.0	90.00	179.67	12,184.0	-5,994.8	-573.6	6,021.3	0.00	0.00	0.00

ConocoPhillips
Planning Report

Database:	EDT 17 Permian Prod	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PWP0		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
18,300.0	90.00	179.67	12,184.0	-6,094.8	-573.1	6,120.9	0.00	0.00	0.00	
18,400.0	90.00	179.67	12,184.0	-6,194.8	-572.5	6,220.6	0.00	0.00	0.00	
18,500.0	90.00	179.67	12,184.0	-6,294.8	-571.9	6,320.2	0.00	0.00	0.00	
18,600.0	90.00	179.67	12,184.0	-6,394.8	-571.4	6,419.9	0.00	0.00	0.00	
18,700.0	90.00	179.67	12,184.0	-6,494.8	-570.8	6,519.5	0.00	0.00	0.00	
18,800.0	90.00	179.67	12,184.0	-6,594.8	-570.2	6,619.2	0.00	0.00	0.00	
18,900.0	90.00	179.67	12,184.0	-6,694.8	-569.6	6,718.8	0.00	0.00	0.00	
19,000.0	90.00	179.67	12,184.0	-6,794.8	-569.1	6,818.5	0.00	0.00	0.00	
19,100.0	90.00	179.67	12,184.0	-6,894.8	-568.5	6,918.1	0.00	0.00	0.00	
19,200.0	90.00	179.67	12,184.0	-6,994.8	-567.9	7,017.7	0.00	0.00	0.00	
19,300.0	90.00	179.67	12,184.0	-7,094.8	-567.4	7,117.4	0.00	0.00	0.00	
19,400.0	90.00	179.67	12,184.0	-7,194.7	-566.8	7,217.0	0.00	0.00	0.00	
19,416.6	90.00	179.67	12,184.0	-7,211.3	-566.7	7,233.6	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	
FTP (ZIA HILLS UNIT 2632 WC 701H) - hit/miss target - Shape	0.00	0.00	12,184.0	135.8	-608.9	371,837.70	711,068.61	32° 1' 13.683 N	103° 39' 8.319 W	
- plan misses target center by 163.4usft at 12150.0usft MD (12063.5 TVD, 25.4 N, -608.0 E)										
- Circle (radius 50.0)										
PBHL (ZIA HILLS UNIT 2632 WC 701H) - plan hits target center - Rectangle (sides W100.0 H7,346.9 D0.0)	0.00	359.67	12,184.0	-7,211.3	-566.7	364,490.59	711,110.81	32° 0' 0.973 N	103° 39' 8.367 W	
LTP (ZIA HILLS UNIT 2632 WC 701H) - plan misses target center by 0.1usft at 19366.6usft MD (12184.0 TVD, -7161.3 N, -567.0 E) - Circle (radius 50.0)	90.00	179.67	12,184.0	-7,161.3	-566.9	364,540.59	711,110.59	32° 0' 1.468 N	103° 39' 8.366 W	

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
19,416.6	12,184.0	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 701H

OWB

PWP0

Anticollision Report

18 July, 2024

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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

Reference	PWP0		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Max. Cent. Dist. of 1,000.0usft or Max. SF of 2	Error Surface:	Combined Pedal Curve
Warning Levels Evaluated at:	2.79 Sigma	Casing Method:	Added to Error Values

Survey Tool Program		Date	7/18/2024		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	19,416.6	PWP0 (OWB)	r.5 MWD+IFR1	OWSG MWD + IFR1 rev.5	

Summary						
	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Site Name Offset Well - Wellbore - Design						
RED HILLS WEST						
BATTLE AXE 27 FEDERAL COM 1H - Original Hole (Intr	6,515.8	6,504.3	811.3	770.3	19.778 CC	
BATTLE AXE 27 FEDERAL COM 1H - Original Hole (Intr	16,500.0	16,440.7	869.8	768.1	8.550 ES	
BATTLE AXE 27 FEDERAL COM 1H - Original Hole (Intr	19,200.0	19,105.0	920.0	772.8	6.251 SF	
ZIA HILLS UNIT 2632 PROJECT						
_ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0	1,100.0	1,100.0	29.8	21.3	3.479 CC	
_ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0	1,200.0	1,199.0	30.2	21.1	3.315 ES	
_ZIA HILLS UNIT 2632 WC 702H - OWB - PWP0	1,300.0	1,297.9	31.5	21.8	3.274 SF	
_ZIA HILLS UNIT 2632 WC 703H - OWB - PWP0	1,100.0	1,100.0	59.9	51.3	6.983 CC, ES	
_ZIA HILLS UNIT 2632 WC 703H - OWB - PWP0	19,416.6	19,398.5	856.0	711.0	5.902 SF	
_ZIA HILLS UNIT 2632 WC 704H - OWB - PWP0	1,100.0	1,100.0	30.0	21.4	3.498 CC	
_ZIA HILLS UNIT 2632 WC 704H - OWB - PWP0	1,350.0	1,351.9	30.2	20.4	3.100 ES	
_ZIA HILLS UNIT 2632 WC 704H - OWB - PWP0	1,500.0	1,503.0	31.6	21.3	3.063 SF	
_ZIA HILLS UNIT 2632 WC 705H - OWB - PWP0	1,100.0	1,100.0	119.9	111.3	13.979 CC, ES	
_ZIA HILLS UNIT 2632 WC 705H - OWB - PWP0	1,200.0	1,196.0	122.9	113.7	13.488 SF	
_ZIA HILLS UNIT 2632 WC 706H - OWB - PWP0	1,100.0	1,100.0	89.9	81.3	10.481 CC, ES	
_ZIA HILLS UNIT 2632 WC 706H - OWB - PWP0	1,200.0	1,197.6	92.5	83.4	10.194 SF	
_ZIA HILLS UNIT 2632 WC 707H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2632 WC 708H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2632 WC 709H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2632 WC 710H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2632 WC 711H - OWB - PWP0						Out of range
_ZIA HILLS UNIT 2632 WC 712H - OWB - PWP0						Out of range
BRADLEY-FEDERAL 35 #1 (P&A) - OWB - AWP						Out of range
WILDER 26 #1 - OWB - AWP						Out of range
WILDER-FEDERAL #16 - OWB - AWP						Out of range
WILDER-FEDERAL #17 - OWB - AWP						Out of range
WILDER-FEDERAL #25 (P&A) - OWB - AWP						Out of range
WILDER-FEDERAL #26 (P&A) - OWB - AWP						Out of range

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 - BATTLE AXE 27 FEDERAL COM 1H - Original Hole (Intrm2 - Prod) - Original Hole													Offset Site Error:	0.0 usft
Survey Program: 162-MWD+IFR1, 4447-MWD+IFR1													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (")	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
4,700.0	4,671.3	4,704.9	4,692.8	17.1	15.7	-12.95	191.8	-1,417.4	994.6	962.1	32.46	30.640		
4,800.0	4,770.4	4,808.9	4,796.8	17.5	15.7	-13.14	191.7	-1,417.1	981.5	948.6	32.88	29.854		
4,900.0	4,869.5	4,911.0	4,898.9	17.9	15.7	-13.31	191.8	-1,415.9	967.6	934.3	33.30	29.053		
5,000.0	4,968.7	5,006.0	4,993.9	18.3	15.7	-13.47	192.0	-1,415.1	954.0	920.2	33.76	28.256		
5,100.0	5,067.8	5,102.2	5,090.0	18.8	15.8	-13.63	192.3	-1,414.8	941.0	906.7	34.23	27.493		
5,200.0	5,166.9	5,199.4	5,187.3	19.2	15.8	-13.81	192.5	-1,414.7	928.1	893.4	34.70	26.750		
5,300.0	5,266.1	5,298.5	5,286.3	19.6	15.9	-13.98	192.8	-1,414.6	915.3	880.1	35.17	26.025		
5,400.0	5,365.2	5,394.6	5,382.5	20.0	16.0	-14.14	193.4	-1,414.8	902.8	867.1	35.66	25.314		
5,500.0	5,464.4	5,495.0	5,482.9	20.4	16.0	-14.32	193.8	-1,415.0	890.2	854.1	36.15	24.626		
5,600.0	5,563.5	5,591.3	5,579.2	20.9	16.1	-14.52	194.0	-1,415.3	877.9	841.2	36.65	23.951		
5,700.0	5,662.6	5,691.1	5,679.0	21.3	16.2	-14.72	194.3	-1,415.7	865.6	828.5	37.16	23.297		
5,787.0	5,748.8	5,775.7	5,763.6	21.6	16.3	-14.88	194.6	-1,416.2	855.0	817.4	37.60	22.741		
5,800.0	5,761.8	5,788.3	5,776.2	21.7	16.3	-14.91	194.6	-1,416.2	853.5	815.8	37.66	22.661		
5,900.0	5,861.0	5,886.1	5,873.9	22.1	16.4	-15.08	194.8	-1,417.0	842.7	804.5	38.19	22.064		
6,000.0	5,960.5	5,986.5	5,974.4	22.5	16.5	-15.22	195.1	-1,417.8	833.5	794.8	38.69	21.542		
6,100.0	6,060.1	6,087.4	6,075.2	22.9	16.6	-15.33	195.4	-1,418.5	825.9	786.8	39.19	21.077		
6,200.0	6,159.9	6,187.7	6,175.6	23.3	16.7	-15.40	196.0	-1,419.0	819.9	780.2	39.67	20.667		
6,300.0	6,259.8	6,289.6	6,277.5	23.6	16.9	-15.45	196.5	-1,419.5	815.5	775.4	40.14	20.318		
6,400.0	6,359.7	6,389.8	6,377.7	23.9	17.0	-15.48	197.0	-1,419.6	812.5	771.9	40.58	20.021		
6,500.0	6,459.7	6,488.6	6,476.5	24.2	17.1	-15.49	197.1	-1,420.0	811.3	770.3	40.98	19.797		
6,515.8	6,475.5	6,504.3	6,492.1	24.2	17.2	-15.49	197.2	-1,420.0	811.3	770.3	41.02	19.778 CC		
6,540.3	6,500.0	6,528.0	6,515.9	24.2	17.2	-89.19	197.2	-1,420.1	811.3	770.3	41.08	19.750		
6,600.0	6,559.7	6,583.9	6,571.7	24.2	17.3	-89.18	197.3	-1,420.6	811.8	770.6	41.18	19.713		
6,700.0	6,659.7	6,689.4	6,677.2	24.3	17.4	-89.19	197.3	-1,421.5	812.7	771.3	41.34	19.659		
6,800.0	6,759.7	6,787.9	6,775.7	24.3	17.6	-89.20	197.1	-1,421.7	812.9	771.4	41.51	19.583		
6,900.0	6,859.7	6,886.5	6,874.3	24.3	17.7	-89.24	196.6	-1,422.3	813.5	771.8	41.69	19.514		
7,000.0	6,959.7	6,986.1	6,973.9	24.4	17.9	-89.28	196.0	-1,423.0	814.2	772.4	41.87	19.446		
7,100.0	7,059.7	7,084.0	7,071.8	24.4	18.1	-89.34	195.2	-1,423.8	815.0	773.0	42.06	19.378		
7,200.0	7,159.7	7,180.4	7,168.2	24.5	18.3	-89.39	194.5	-1,425.0	816.2	773.9	42.26	19.315		
7,300.0	7,259.7	7,277.9	7,265.7	24.5	18.4	-89.44	193.7	-1,426.5	817.8	775.3	42.46	19.262		
7,400.0	7,359.7	7,377.9	7,365.7	24.5	18.6	-89.48	193.2	-1,428.2	819.5	776.8	42.66	19.210		
7,500.0	7,459.7	7,479.5	7,467.3	24.6	18.8	-89.53	192.6	-1,430.0	821.2	778.3	42.86	19.158		
7,600.0	7,559.7	7,590.4	7,578.1	24.6	19.0	-89.59	191.7	-1,430.8	821.9	778.8	43.06	19.088		
7,700.0	7,659.7	7,691.8	7,679.5	24.7	19.2	-89.65	190.8	-1,430.8	822.0	778.7	43.27	18.996		
7,800.0	7,759.7	7,791.8	7,779.6	24.7	19.4	-89.72	189.9	-1,430.9	822.0	778.5	43.49	18.902		
7,900.0	7,859.7	7,892.4	7,880.1	24.7	19.7	-89.77	189.1	-1,430.9	822.0	778.3	43.71	18.805		
7,968.9	7,928.6	7,960.9	7,948.6	24.8	19.8	-89.81	188.5	-1,430.8	821.9	778.1	43.87	18.737		
8,000.0	7,959.7	7,991.0	7,978.8	24.8	19.9	-89.83	188.2	-1,430.8	822.0	778.0	43.94	18.706		
8,100.0	8,059.7	8,092.0	8,079.7	24.8	20.1	-89.90	187.2	-1,431.0	822.1	777.9	44.17	18.612		
8,171.1	8,130.8	8,163.1	8,150.8	24.8	20.2	-89.96	186.3	-1,430.9	822.1	777.7	44.34	18.541		
8,200.0	8,159.7	8,191.2	8,178.9	24.9	20.3	-89.99	186.0	-1,431.0	822.1	777.7	44.41	18.512		
8,300.0	8,259.7	8,290.2	8,277.9	24.9	20.5	-90.07	184.8	-1,431.2	822.3	777.6	44.65	18.416		
8,400.0	8,359.7	8,389.7	8,377.4	24.9	20.8	-90.14	183.8	-1,431.4	822.5	777.6	44.90	18.321		
8,500.0	8,459.7	8,488.2	8,475.9	25.0	21.0	-90.23	182.5	-1,431.7	822.9	777.7	45.15	18.227		
8,600.0	8,559.7	8,589.2	8,576.9	25.0	21.2	-90.32	181.2	-1,432.2	823.3	777.9	45.40	18.135		
8,700.0	8,659.7	8,687.0	8,674.7	25.1	21.5	-90.38	180.3	-1,432.6	823.8	778.1	45.66	18.040		
8,800.0	8,759.7	8,785.7	8,773.3	25.1	21.7	-90.43	179.7	-1,433.3	824.4	778.5	45.93	17.950		
8,900.0	8,859.7	8,884.0	8,871.7	25.1	21.9	-90.45	179.4	-1,434.2	825.4	779.1	46.20	17.863		
9,000.0	8,959.7	8,992.0	8,979.7	25.2	22.2	-90.39	180.2	-1,434.5	825.7	779.2	46.48	17.763		
9,100.0	9,059.7	9,086.0	9,073.7	25.2	22.4	-90.30	181.4	-1,434.9	826.1	779.3	46.77	17.661		
9,200.0	9,159.7	9,182.4	9,170.0	25.3	22.7	-90.23	182.5	-1,435.8	827.0	780.0	47.07	17.572		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 - BATTLE AXE 27 FEDERAL COM 1H - Original Hole (Intrm2 - Prod) - Original Hole												Offset Site Error:	0.0 usft
Survey Program:	162-MWD+IFR1, 4447-MWD+IFR1												Offset Well Error:	0.0 usft
Reference	Vertical	Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
9,300.0	9,259.7	9,280.3	9,267.9	25.3	22.9	-90.17	183.3	-1,437.1	828.3	781.0	47.36	17.490		
9,400.0	9,359.7	9,380.2	9,367.8	25.4	23.2	-90.12	184.1	-1,438.6	829.8	782.2	47.66	17.412		
9,500.0	9,459.7	9,482.4	9,470.0	25.4	23.5	-90.06	184.9	-1,439.9	831.0	783.1	47.96	17.327		
9,600.0	9,559.7	9,580.4	9,568.0	25.5	23.7	-90.00	185.7	-1,441.1	832.3	784.1	48.27	17.245		
9,700.0	9,659.7	9,680.8	9,668.4	25.5	24.0	-89.97	186.2	-1,442.6	833.8	785.2	48.57	17.165		
9,800.0	9,759.7	9,781.5	9,769.1	25.5	24.3	-89.95	186.5	-1,443.9	835.0	786.1	48.88	17.082		
9,900.0	9,859.7	9,884.5	9,872.1	25.6	24.5	-89.93	186.8	-1,445.1	836.2	787.0	49.20	16.997		
10,000.0	9,959.7	9,980.1	9,967.7	25.6	24.8	-89.95	186.6	-1,446.0	837.2	787.7	49.51	16.909		
10,100.0	10,059.7	10,070.2	10,057.7	25.7	25.1	-89.97	186.2	-1,447.8	839.2	789.4	49.82	16.845		
10,200.0	10,159.7	10,169.7	10,157.2	25.7	25.3	-89.99	186.0	-1,450.7	842.1	792.0	50.14	16.795		
10,300.0	10,259.7	10,267.7	10,255.2	25.8	25.6	-89.97	186.2	-1,453.3	844.7	794.3	50.47	16.739		
10,400.0	10,359.7	10,365.9	10,353.3	25.8	25.9	-89.94	186.7	-1,456.3	847.8	797.0	50.79	16.692		
10,500.0	10,459.7	10,462.5	10,449.9	25.9	26.2	-89.93	186.8	-1,459.5	851.1	800.0	51.12	16.648		
10,600.0	10,559.7	10,565.6	10,552.9	25.9	26.5	-89.97	186.2	-1,463.0	854.5	803.1	51.46	16.607		
10,700.0	10,659.7	10,681.1	10,668.4	25.9	26.8	-90.08	184.7	-1,465.6	858.8	805.0	51.80	16.541		
10,800.0	10,759.7	10,769.0	10,756.2	26.0	27.0	-90.20	182.7	-1,467.4	858.9	806.7	52.11	16.481		
10,900.0	10,859.7	10,864.9	10,852.0	26.0	27.3	-90.34	180.7	-1,470.2	861.7	809.3	52.44	16.433		
11,000.0	10,959.7	10,964.0	10,951.1	26.1	27.6	-90.45	179.1	-1,473.4	865.0	812.2	52.77	16.391		
11,100.0	11,059.7	11,065.9	11,053.0	26.1	27.9	-90.54	177.7	-1,476.6	868.2	815.1	53.12	16.345		
11,200.0	11,159.7	11,164.5	11,151.5	26.2	28.2	-90.59	176.8	-1,479.7	871.3	817.8	53.46	16.298		
11,300.0	11,259.7	11,256.5	11,243.4	26.2	28.5	-90.61	176.4	-1,483.1	875.0	821.2	53.80	16.264		
11,400.0	11,359.7	11,349.5	11,336.4	26.3	28.8	-90.61	176.5	-1,487.3	879.6	825.4	54.14	16.245		
11,500.0	11,459.7	11,447.4	11,434.1	26.3	29.1	-90.61	176.4	-1,492.3	884.7	830.2	54.50	16.233		
11,600.0	11,559.7	11,576.9	11,563.4	26.4	29.4	-90.64	175.9	-1,497.7	889.0	834.1	54.91	16.192		
11,700.0	11,659.7	11,700.5	11,687.0	26.4	29.8	-90.87	172.3	-1,497.8	889.1	833.8	55.27	16.085		
11,746.8	11,706.5	11,747.0	11,733.1	26.4	29.9	-91.26	166.3	-1,497.3	888.6	833.2	55.40	16.040		
11,750.0	11,709.7	11,749.8	11,735.9	26.4	30.0	89.04	165.7	-1,497.3	888.6	833.2	55.41	16.038		
11,775.0	11,734.7	11,768.0	11,753.6	26.4	30.0	88.84	162.0	-1,497.1	888.5	833.1	55.46	16.020		
11,776.1	11,735.8	11,768.8	11,754.4	26.4	30.0	88.83	161.8	-1,497.1	888.5	833.0	55.46	16.019		
11,800.0	11,759.6	11,786.0	11,771.1	26.4	30.1	88.65	157.7	-1,497.1	888.6	833.1	55.52	16.006		
11,825.0	11,784.4	11,801.2	11,785.8	26.4	30.1	88.49	153.7	-1,497.2	888.9	833.3	55.57	15.995		
11,850.0	11,808.9	11,818.0	11,801.9	26.3	30.1	88.31	148.8	-1,497.5	889.4	833.8	55.63	15.987		
11,875.0	11,833.2	11,834.6	11,817.5	26.3	30.2	88.14	143.4	-1,497.9	890.2	834.5	55.70	15.982		
11,900.0	11,857.1	11,853.7	11,835.3	26.2	30.2	87.95	136.6	-1,498.5	891.1	835.3	55.76	15.980		
11,925.0	11,880.6	11,881.1	11,860.5	26.2	30.3	87.73	125.6	-1,499.3	891.9	836.1	55.83	15.977		
11,950.0	11,903.6	11,910.9	11,887.2	26.2	30.4	87.53	112.4	-1,500.0	892.7	836.8	55.89	15.973		
11,975.0	11,926.1	11,937.0	11,909.9	26.1	30.5	87.36	99.7	-1,500.5	893.3	837.3	55.95	15.966		
12,000.0	11,948.0	11,963.1	11,932.2	26.1	30.5	87.23	86.1	-1,500.9	893.8	837.7	56.01	15.956		
12,025.0	11,969.2	11,990.8	11,955.1	26.1	30.6	87.12	70.6	-1,501.2	894.2	838.1	56.07	15.946		
12,050.0	11,989.7	12,022.6	11,980.3	26.0	30.7	87.00	51.2	-1,501.3	894.4	838.2	56.13	15.935		
12,075.0	12,009.5	12,069.6	12,015.4	26.0	30.8	86.83	19.9	-1,500.5	894.2	838.0	56.14	15.926		
12,100.0	12,028.4	12,108.6	12,042.6	26.0	30.9	86.72	-8.0	-1,498.7	893.3	837.1	56.17	15.902		
12,125.0	12,046.4	12,135.3	12,060.3	26.0	30.9	86.71	-28.0	-1,497.3	892.1	835.9	56.23	15.866		
12,150.0	12,063.5	12,158.0	12,074.6	25.9	31.0	86.75	-45.5	-1,496.0	890.9	834.6	56.30	15.825		
12,175.0	12,079.6	12,175.3	12,085.1	25.9	31.0	86.84	-59.2	-1,495.1	889.8	833.4	56.38	15.780		
12,200.0	12,094.7	12,193.5	12,096.0	25.9	31.1	86.94	-73.9	-1,494.3	888.7	832.3	56.47	15.738		
12,225.0	12,108.7	12,211.8	12,106.4	25.9	31.1	87.07	-88.8	-1,493.5	887.9	831.3	56.56	15.698		
12,250.0	12,121.6	12,230.0	12,116.6	25.9	31.2	87.22	-104.0	-1,492.9	887.1	830.5	56.54	15.690		
12,275.0	12,133.4	12,248.3	12,126.4	25.9	31.2	87.38	-119.3	-1,492.4	886.4	829.8	56.63	15.654		
12,300.0	12,144.0	12,264.0	12,134.6	25.9	31.2	87.55	-132.7	-1,492.1	885.9	829.2	56.72	15.619		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 - BATTLE AXE 27 FEDERAL COM 1H - Original Hole (Intrm2 - Prod) - Original Hole													Offset Site Error:	0.0 usft
Survey Program: 162-MWD+IFR1, 4447-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)				
12,325.0	12,153.4	12,283.7	12,144.5	25.9	31.3	87.77	-149.8	-1,491.8	885.6	828.8	56.81	15.589		
12,350.0	12,161.6	12,300.9	12,152.8	25.9	31.3	87.98	-164.8	-1,491.7	885.4	828.5	56.90	15.561		
12,362.2	12,165.1	12,309.2	12,156.7	25.9	31.3	88.08	-172.2	-1,491.7	885.4	828.4	56.94	15.549		
12,375.0	12,168.5	12,317.9	12,160.6	25.9	31.4	88.19	-180.0	-1,491.8	885.4	828.4	56.98	15.537		
12,400.0	12,174.2	12,336.3	12,168.5	25.9	31.4	88.42	-196.5	-1,491.9	885.6	828.5	57.07	15.518		
12,425.0	12,178.6	12,358.0	12,177.3	25.9	31.4	88.72	-216.4	-1,492.2	885.9	828.8	57.14	15.504		
12,450.0	12,181.7	12,377.7	12,184.8	26.0	31.5	89.01	-234.6	-1,492.5	886.3	829.1	57.21	15.492		
12,475.0	12,183.5	12,397.9	12,192.1	26.0	31.5	89.33	-253.4	-1,492.9	886.9	829.6	57.28	15.483		
12,496.8	12,184.0	12,413.8	12,197.4	26.0	31.6	89.58	-268.4	-1,493.3	887.5	830.1	57.34	15.478		
12,500.0	12,184.0	12,416.2	12,198.2	26.0	31.6	89.63	-270.7	-1,493.4	887.6	830.2	57.35	15.477		
12,600.0	12,184.0	12,530.2	12,224.5	26.2	31.8	91.32	-381.3	-1,496.6	891.4	833.8	57.57	15.484		
12,700.0	12,184.0	12,677.9	12,229.8	26.4	32.1	91.66	-528.8	-1,494.6	890.7	832.8	57.84	15.398		
12,800.0	12,184.0	12,845.8	12,225.5	26.6	32.5	91.40	-696.1	-1,482.0	883.7	825.5	58.17	15.191		
12,900.0	12,184.0	12,952.7	12,225.3	26.8	32.8	91.41	-802.1	-1,468.5	871.5	812.8	58.67	14.853		
13,000.0	12,184.0	13,032.5	12,227.4	27.1	33.1	91.57	-881.3	-1,459.4	860.7	801.5	59.28	14.519		
13,100.0	12,184.0	13,114.4	12,230.4	27.4	33.4	91.78	-962.9	-1,452.1	852.5	792.6	59.93	14.226		
13,200.0	12,184.0	13,198.1	12,233.1	27.8	33.7	91.98	-1,046.4	-1,445.8	845.7	785.1	60.61	13.953		
13,300.0	12,184.0	13,271.0	12,234.7	28.2	34.0	92.09	-1,119.1	-1,442.9	842.2	780.9	61.33	13.731		
13,372.9	12,184.0	13,324.4	12,235.3	28.4	34.2	92.13	-1,172.5	-1,442.2	841.7	779.8	61.88	13.602		
13,400.0	12,184.0	13,347.4	12,235.4	28.6	34.3	92.14	-1,195.5	-1,442.2	841.7	779.7	62.08	13.558		
13,500.0	12,184.0	13,436.0	12,236.0	29.0	34.6	92.18	-1,284.1	-1,442.7	843.0	780.1	62.87	13.409		
13,600.0	12,184.0	13,509.9	12,236.7	29.4	34.9	92.22	-1,358.0	-1,444.5	846.1	782.4	63.66	13.292		
13,700.0	12,184.0	13,598.8	12,234.7	29.9	35.3	92.07	-1,446.7	-1,449.9	852.5	787.9	64.52	13.212		
13,800.0	12,184.0	13,718.5	12,233.8	30.4	35.9	91.99	-1,566.3	-1,455.0	857.3	791.8	65.50	13.089		
13,900.0	12,184.0	13,852.6	12,238.3	30.9	36.5	92.29	-1,700.3	-1,456.7	859.2	792.7	66.49	12.922		
13,923.4	12,184.0	13,875.5	12,239.7	31.0	36.6	92.38	-1,723.1	-1,456.5	859.2	792.5	66.71	12.879		
14,000.0	12,184.0	13,948.3	12,244.6	31.4	37.0	92.71	-1,795.8	-1,455.9	859.3	791.9	67.44	12.741		
14,100.0	12,184.0	14,027.0	12,249.6	32.0	37.4	93.04	-1,874.3	-1,456.2	860.6	792.2	68.40	12.582		
14,200.0	12,184.0	14,121.0	12,252.5	32.6	37.9	93.22	-1,968.2	-1,458.3	863.6	794.2	69.43	12.439		
14,300.0	12,184.0	14,215.0	12,251.9	33.2	38.5	93.17	-2,062.1	-1,461.3	867.4	796.9	70.52	12.300		
14,400.0	12,184.0	14,289.7	12,248.3	33.8	38.9	92.92	-2,136.6	-1,465.1	872.9	801.3	71.61	12.190		
14,500.0	12,184.0	14,416.5	12,239.1	34.4	39.6	92.29	-2,262.9	-1,472.8	879.3	806.3	73.03	12.041		
14,600.0	12,184.0	14,524.3	12,233.9	35.0	40.2	91.94	-2,370.5	-1,476.9	883.5	809.2	74.34	11.884		
14,700.0	12,184.0	14,654.7	12,229.1	35.7	41.1	91.63	-2,500.8	-1,477.7	884.5	808.8	75.76	11.675		
14,800.0	12,184.0	14,763.8	12,231.1	36.4	41.8	91.76	-2,609.8	-1,476.4	883.9	806.8	77.05	11.471		
14,900.0	12,184.0	14,867.2	12,233.5	37.0	42.5	91.92	-2,713.2	-1,474.3	882.5	804.2	78.35	11.264		
14,958.4	12,184.0	14,912.3	12,234.1	37.4	42.8	91.96	-2,758.3	-1,473.6	882.0	802.9	79.09	11.151		
15,000.0	12,184.0	14,942.6	12,234.9	37.7	43.0	92.01	-2,788.6	-1,473.6	882.3	802.7	79.60	11.083		
15,100.0	12,184.0	15,026.2	12,238.2	38.4	43.5	92.21	-2,872.0	-1,475.1	884.7	803.9	80.85	10.943		
15,200.0	12,184.0	15,140.5	12,241.8	39.2	44.3	92.44	-2,986.2	-1,477.5	887.6	805.4	82.23	10.795		
15,300.0	12,184.0	15,234.3	12,244.8	39.9	45.0	92.63	-3,080.0	-1,478.3	889.2	805.7	83.55	10.643		
15,400.0	12,184.0	15,350.9	12,246.7	40.6	45.8	92.75	-3,196.6	-1,479.5	890.9	805.9	85.01	10.480		
15,500.0	12,184.0	15,459.5	12,248.6	41.4	46.6	92.87	-3,305.2	-1,478.6	890.8	804.3	86.46	10.303		
15,600.0	12,184.0	15,568.3	12,250.4	42.1	47.4	92.99	-3,414.0	-1,476.7	889.7	801.8	87.93	10.119		
15,700.0	12,184.0	15,672.2	12,252.3	42.9	48.2	93.12	-3,517.8	-1,474.0	887.7	798.3	89.40	9.930		
15,800.0	12,184.0	15,774.5	12,252.8	43.7	48.9	93.16	-3,620.0	-1,471.3	885.7	794.8	90.91	9.743		
15,900.0	12,184.0	15,893.1	12,252.3	44.4	49.9	93.14	-3,738.6	-1,467.0	882.6	790.2	92.48	9.544		
16,000.0	12,184.0	16,000.4	12,253.2	45.2	50.7	93.22	-3,845.7	-1,461.0	877.7	783.6	94.02	9.334		
16,100.0	12,184.0	16,076.1	12,255.2	46.0	51.3	93.36	-3,921.3	-1,457.4	873.7	778.2	95.52	9.147		
16,200.0	12,184.0	16,168.9	12,258.0	46.8	52.1	93.55	-4,014.0	-1,455.2	872.1	775.0	97.02	8.988		
16,300.0	12,184.0	16,261.5	12,259.0	47.6	52.8	93.62	-4,106.6	-1,453.3	870.7	772.1	98.56	8.834		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 - BATTLE AXE 27 FEDERAL COM 1H - Original Hole (Intrm2 - Prod) - Original Hole												Offset Site Error:	0.0 usft
Survey Program: 162-MWD+IFR1, 4447-MWD+IFR1												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
16,400.0	12,184.0	16,364.9	12,256.0	48.4	53.6	93.43	-4,210.0	-1,452.2	870.0	769.8	100.21	8.681	
16,456.7	12,184.0	16,411.5	12,254.5	48.9	54.0	93.33	-4,256.5	-1,451.6	869.5	768.4	101.10	8.600	
16,500.0	12,184.0	16,440.7	12,253.8	49.3	54.3	93.28	-4,285.7	-1,451.7	869.8	768.1	101.73	8.550 ES	
16,600.0	12,184.0	16,532.9	12,253.0	50.1	55.0	93.22	-4,377.8	-1,453.9	872.7	769.4	103.29	8.449	
16,700.0	12,184.0	16,627.2	12,253.9	50.9	55.7	93.27	-4,472.1	-1,455.4	874.9	770.1	104.83	8.346	
16,800.0	12,184.0	16,701.9	12,253.3	51.7	56.3	93.22	-4,546.8	-1,458.3	879.4	773.2	106.23	8.279	
16,900.0	12,184.0	16,764.0	12,252.1	52.6	56.8	93.12	-4,608.7	-1,462.7	887.1	779.7	107.40	8.260	
17,000.0	12,184.0	16,843.9	12,248.6	53.4	57.4	92.87	-4,688.1	-1,471.0	898.0	789.2	108.76	8.256	
17,100.0	12,184.0	16,986.0	12,245.7	54.3	58.5	92.64	-4,829.4	-1,484.5	907.9	797.0	110.96	8.182	
17,200.0	12,184.0	17,087.9	12,245.1	55.1	59.3	92.58	-4,931.1	-1,491.9	915.7	803.1	112.61	8.132	
17,300.0	12,184.0	17,194.9	12,245.5	56.0	60.1	92.58	-5,037.9	-1,498.9	922.8	808.5	114.30	8.074	
17,400.0	12,184.0	17,303.6	12,248.1	56.8	61.0	92.72	-5,146.3	-1,505.0	929.1	813.1	115.99	8.011	
17,500.0	12,184.0	17,438.4	12,253.6	57.7	62.1	93.05	-5,280.9	-1,509.3	933.1	815.2	117.84	7.918	
17,600.0	12,184.0	17,530.2	12,256.8	58.5	62.9	93.24	-5,372.6	-1,510.9	935.6	816.2	119.41	7.835	
17,700.0	12,184.0	17,627.3	12,258.6	59.4	63.7	93.34	-5,469.6	-1,513.3	938.7	817.7	121.04	7.755	
17,800.0	12,184.0	17,733.4	12,259.3	60.3	64.6	93.37	-5,575.8	-1,515.9	941.8	819.1	122.76	7.672	
17,900.0	12,184.0	17,842.6	12,259.9	61.1	65.6	93.39	-5,684.9	-1,517.1	943.5	819.0	124.51	7.577	
18,000.0	12,184.0	17,942.8	12,259.9	62.0	66.4	93.39	-5,785.1	-1,518.5	945.4	819.2	126.22	7.490	
18,100.0	12,184.0	18,063.7	12,254.8	62.9	67.5	93.08	-5,905.9	-1,518.8	946.0	817.8	128.15	7.382	
18,200.0	12,184.0	18,175.7	12,248.4	63.8	68.5	92.70	-6,017.7	-1,517.0	944.7	814.6	130.04	7.264	
18,300.0	12,184.0	18,285.4	12,245.5	64.7	69.4	92.53	-6,127.3	-1,513.9	942.3	810.4	131.86	7.146	
18,400.0	12,184.0	18,385.7	12,244.0	65.5	70.3	92.44	-6,227.5	-1,510.3	939.2	805.6	133.65	7.028	
18,500.0	12,184.0	18,464.0	12,243.4	66.4	71.0	92.41	-6,305.8	-1,508.1	937.1	801.7	135.35	6.923	
18,552.4	12,184.0	18,510.7	12,243.4	66.9	71.5	92.41	-6,352.5	-1,507.5	936.7	800.5	136.24	6.875	
18,600.0	12,184.0	18,558.0	12,243.4	67.3	71.9	92.41	-6,399.8	-1,507.6	937.1	800.0	137.07	6.836	
18,700.0	12,184.0	18,660.5	12,244.7	68.2	72.8	92.49	-6,502.3	-1,507.7	937.8	799.0	138.82	6.756	
18,800.0	12,184.0	18,780.5	12,248.7	69.1	73.9	92.74	-6,622.2	-1,505.0	936.3	795.7	140.59	6.660	
18,900.0	12,184.0	18,897.3	12,250.7	70.0	75.0	92.87	-6,738.9	-1,500.7	933.3	790.9	142.36	6.556	
19,000.0	12,184.0	19,036.3	12,251.7	70.9	76.3	92.96	-6,877.6	-1,491.4	927.2	783.2	144.04	6.437	
19,100.0	12,184.0	19,105.0	12,252.2	71.8	76.9	93.01	-6,946.0	-1,485.4	919.5	773.7	145.88	6.304	
19,146.0	12,184.0	19,105.0	12,252.2	72.2	76.9	93.01	-6,946.0	-1,485.4	918.4	771.7	146.65	6.263	
19,200.0	12,184.0	19,105.0	12,252.2	72.7	76.9	93.01	-6,946.0	-1,485.4	920.0	772.8	147.18	6.251 SF	
19,300.0	12,184.0	19,105.0	12,252.2	73.6	76.9	93.01	-6,946.0	-1,485.4	931.2	784.1	147.13	6.329	
19,400.0	12,184.0	19,105.0	12,252.2	74.5	76.9	93.01	-6,946.0	-1,485.4	952.9	807.0	145.82	6.534	
19,416.6	12,184.0	19,105.0	12,252.2	74.6	76.9	93.01	-6,946.0	-1,485.4	957.4	811.9	145.50	6.580	

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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)	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)				
0.0	0.0	0.0	0.0	0.0	0.0	-89.98	0.0	-29.8	29.8	29.4	0.48	62.231		
100.0	100.0	100.0	100.0	1.2	1.2	-89.98	0.0	-29.8	29.8	27.0	2.87	10.407		
200.0	200.0	200.0	200.0	1.7	1.7	-89.98	0.0	-29.8	29.8	26.0	3.86	7.723		
300.0	300.0	300.0	300.0	2.1	2.1	-89.98	0.0	-29.8	29.8	25.2	4.63	6.439		
400.0	400.0	400.0	400.0	2.4	2.4	-89.98	0.0	-29.8	29.8	24.5	5.29	5.643		
500.0	500.0	500.0	500.0	2.7	2.7	-89.98	0.0	-29.8	29.8	24.0	5.87	5.086		
600.0	600.0	600.0	600.0	3.0	3.0	-89.98	0.0	-29.8	29.8	23.4	6.39	4.666		
700.0	700.0	700.0	700.0	3.2	3.2	-89.98	0.0	-29.8	29.8	23.0	6.88	4.336		
800.0	800.0	800.0	800.0	3.5	3.5	-89.98	0.0	-29.8	29.8	22.5	7.34	4.065		
900.0	900.0	900.0	900.0	3.7	3.7	-89.98	0.0	-29.8	29.8	22.1	7.77	3.839		
1,000.0	1,000.0	1,000.0	1,000.0	3.9	3.9	-89.98	0.0	-29.8	29.8	21.7	8.18	3.646		
1,100.0	1,100.0	1,100.0	1,100.0	4.1	4.1	-89.98	0.0	-29.8	29.8	21.3	8.58	3.479 CC		
1,200.0	1,200.0	1,199.0	1,199.0	4.4	4.4	-41.51	0.3	-31.5	30.2	21.1	9.11	3.315 ES		
1,300.0	1,299.8	1,297.9	1,297.8	4.7	4.7	-45.85	1.2	-36.6	31.5	21.8	9.61	3.274 SF		
1,350.0	1,349.7	1,347.3	1,347.0	4.8	4.9	-48.88	1.9	-40.3	32.5	22.7	9.78	3.324		
1,400.0	1,399.5	1,396.8	1,396.2	4.9	5.0	-43.00	2.7	-45.0	33.7	23.8	9.94	3.392		
1,500.0	1,498.9	1,495.6	1,494.4	5.1	5.3	-33.77	4.8	-56.7	36.1	25.7	10.43	3.463		
1,528.5	1,527.2	1,523.8	1,522.3	5.2	5.4	-31.51	5.5	-60.6	36.7	26.2	10.54	3.487		
1,600.0	1,598.0	1,594.4	1,592.0	5.3	5.7	-31.50	7.5	-71.7	39.1	28.2	10.86	3.597		
1,700.0	1,697.2	1,694.0	1,690.0	5.6	5.9	-30.43	10.7	-89.2	44.1	32.7	11.37	3.876		
1,800.0	1,796.3	1,793.9	1,788.2	5.9	6.2	-29.53	13.8	-106.8	49.1	37.2	11.93	4.119		
1,900.0	1,895.4	1,893.7	1,886.5	6.2	6.5	-28.80	17.0	-124.4	54.2	41.7	12.52	4.331		
2,000.0	1,994.6	1,993.6	1,984.7	6.5	6.9	-28.20	20.2	-142.0	59.3	46.2	13.14	4.515		
2,100.0	2,093.7	2,093.5	2,083.0	6.9	7.2	-27.69	23.3	-159.6	64.4	50.6	13.78	4.674		
2,200.0	2,192.8	2,193.3	2,181.2	7.2	7.6	-27.25	26.5	-177.3	69.5	55.1	14.45	4.813		
2,300.0	2,292.0	2,293.2	2,279.5	7.6	7.9	-26.88	29.7	-194.9	74.6	59.5	15.13	4.934		
2,400.0	2,391.1	2,393.1	2,377.7	7.9	8.3	-26.55	32.8	-212.5	79.7	63.9	15.82	5.040		
2,500.0	2,490.2	2,493.0	2,476.0	8.3	8.7	-26.27	36.0	-230.1	84.9	68.3	16.53	5.132		
2,600.0	2,589.4	2,592.8	2,574.2	8.7	9.1	-26.01	39.2	-247.7	90.0	72.7	17.26	5.214		
2,700.0	2,688.5	2,692.7	2,672.5	9.0	9.5	-25.78	42.3	-265.3	95.1	77.1	17.99	5.286		
2,800.0	2,787.7	2,792.6	2,770.7	9.4	9.9	-25.58	45.5	-282.9	100.2	81.5	18.73	5.349		
2,900.0	2,886.8	2,892.4	2,869.0	9.8	10.3	-25.40	48.7	-300.5	105.3	85.8	19.48	5.406		
3,000.0	2,985.9	2,992.3	2,967.2	10.2	10.7	-25.23	51.8	-318.1	110.4	90.2	20.24	5.457		
3,100.0	3,085.1	3,092.2	3,065.5	10.6	11.1	-25.08	55.0	-335.8	115.6	94.6	21.01	5.502		
3,200.0	3,184.2	3,192.0	3,163.7	11.0	11.6	-24.94	58.2	-353.4	120.7	98.9	21.78	5.543		
3,300.0	3,283.3	3,291.9	3,262.0	11.4	12.0	-24.81	61.3	-371.0	125.8	103.3	22.55	5.579		
3,400.0	3,382.5	3,391.8	3,360.3	11.8	12.4	-24.69	64.5	-388.6	130.9	107.6	23.33	5.612		
3,500.0	3,481.6	3,491.6	3,458.5	12.2	12.8	-24.58	67.7	-406.2	136.1	111.9	24.11	5.642		
3,600.0	3,580.8	3,591.5	3,556.8	12.6	13.3	-24.48	70.8	-423.8	141.2	116.3	24.90	5.669		
3,700.0	3,679.9	3,691.4	3,655.0	13.0	13.7	-24.39	74.0	-441.4	146.3	120.6	25.69	5.694		
3,800.0	3,779.0	3,791.2	3,753.3	13.4	14.1	-24.30	77.2	-459.0	151.4	124.9	26.49	5.717		
3,900.0	3,878.2	3,891.1	3,851.5	13.8	14.6	-24.22	80.3	-476.6	156.6	129.3	27.29	5.738		
4,000.0	3,977.3	3,991.0	3,949.8	14.2	15.0	-24.14	83.5	-494.2	161.7	133.6	28.09	5.757		
4,100.0	4,076.4	4,090.8	4,048.0	14.6	15.4	-24.07	86.7	-511.9	166.8	137.9	28.89	5.774		
4,200.0	4,175.6	4,190.7	4,146.3	15.0	15.9	-24.00	89.8	-529.5	171.9	142.2	29.69	5.790		
4,300.0	4,274.7	4,290.6	4,244.5	15.4	16.3	-23.94	93.0	-547.1	177.1	146.6	30.50	5.805		
4,400.0	4,373.8	4,390.5	4,342.8	15.9	16.7	-23.88	96.2	-564.7	182.2	150.9	31.31	5.819		
4,500.0	4,473.0	4,490.3	4,441.0	16.3	17.2	-23.82	99.3	-582.3	187.3	155.2	32.12	5.832		
4,600.0	4,572.1	4,590.2	4,539.3	16.7	17.6	-23.77	102.5	-599.9	192.4	159.5	32.93	5.844		
4,700.0	4,671.3	4,690.1	4,637.5	17.1	18.1	-23.71	105.7	-617.5	197.6	163.8	33.74	5.855		
4,800.0	4,770.4	4,789.9	4,735.8	17.5	18.5	-23.67	108.8	-635.1	202.7	168.1	34.56	5.865		

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

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
4,900.0	4,869.5	4,889.8	4,834.0	17.9	19.0	-23.62	112.0	-652.7	207.8	172.4	35.37	5.875		
5,000.0	4,968.7	4,989.7	4,932.3	18.3	19.4	-23.58	115.1	-670.4	212.9	176.8	36.19	5.884		
5,100.0	5,067.8	5,089.5	5,030.5	18.8	19.9	-23.53	118.3	-688.0	218.1	181.1	37.01	5.893		
5,200.0	5,166.9	5,189.4	5,128.8	19.2	20.3	-23.49	121.5	-705.6	223.2	185.4	37.83	5.900		
5,300.0	5,266.1	5,289.3	5,227.0	19.6	20.7	-23.46	124.6	-723.2	228.3	189.7	38.65	5.908		
5,400.0	5,365.2	5,389.1	5,325.3	20.0	21.2	-23.42	127.8	-740.8	233.5	194.0	39.47	5.915		
5,500.0	5,464.4	5,489.0	5,423.6	20.4	21.6	-23.38	131.0	-758.4	238.6	198.3	40.29	5.922		
5,600.0	5,563.5	5,588.9	5,521.8	20.9	22.1	-23.35	134.1	-776.0	243.7	202.6	41.11	5.928		
5,700.0	5,662.6	5,688.7	5,620.1	21.3	22.5	-23.32	137.3	-793.6	248.8	206.9	41.94	5.934		
5,787.0	5,748.8	5,775.6	5,705.5	21.6	22.9	-23.29	140.1	-808.9	253.3	210.6	42.65	5.939		
5,800.0	5,761.8	5,788.6	5,718.3	21.7	23.0	-23.29	140.5	-811.2	254.0	211.2	42.75	5.941		
5,900.0	5,861.0	5,888.4	5,816.5	22.1	23.4	-23.19	143.6	-828.8	260.1	216.5	43.60	5.966		
6,000.0	5,960.5	5,988.1	5,914.6	22.5	23.9	-22.95	146.8	-846.4	267.9	223.4	44.46	6.025		
6,100.0	6,060.1	6,087.7	6,012.5	22.9	24.3	-22.60	150.0	-864.0	277.2	231.9	45.32	6.117		
6,200.0	6,159.9	6,187.0	6,110.3	23.3	24.8	-22.14	153.1	-881.5	288.2	242.0	46.19	6.239		
6,300.0	6,259.8	6,286.2	6,207.8	23.6	25.2	-21.61	156.2	-899.0	300.8	253.7	47.06	6.392		
6,400.0	6,359.7	6,385.1	6,305.1	23.9	25.7	-21.01	159.4	-916.4	315.0	267.1	47.91	6.575		
6,500.0	6,459.7	6,483.7	6,402.2	24.2	26.1	-20.36	162.5	-933.8	330.9	282.2	48.73	6.791		
6,540.3	6,500.0	6,523.4	6,441.2	24.2	26.3	-93.80	163.8	-940.8	337.8	288.8	49.01	6.893		
6,600.0	6,559.7	6,583.8	6,500.6	24.2	26.6	-93.36	165.7	-951.4	348.1	298.8	49.38	7.051		
6,700.0	6,659.7	6,688.8	6,604.2	24.3	27.0	-92.72	168.7	-968.5	364.3	314.2	50.02	7.282		
6,800.0	6,759.7	6,794.4	6,708.6	24.3	27.5	-92.19	171.5	-983.8	378.6	328.0	50.62	7.480		
6,900.0	6,859.7	6,900.5	6,813.9	24.3	27.9	-91.75	173.9	-997.3	391.2	340.1	51.18	7.644		
7,000.0	6,959.7	7,007.1	6,919.8	24.4	28.4	-91.40	176.0	-1,008.8	402.1	350.4	51.70	7.777		
7,100.0	7,059.7	7,114.1	7,026.4	24.4	28.8	-91.13	177.7	-1,018.5	411.1	358.9	52.17	7.879		
7,200.0	7,159.7	7,221.5	7,133.4	24.5	29.2	-90.92	179.1	-1,026.3	418.3	365.7	52.60	7.951		
7,300.0	7,259.7	7,329.1	7,240.9	24.5	29.6	-90.76	180.2	-1,032.1	423.6	370.6	52.98	7.996		
7,400.0	7,359.7	7,436.9	7,348.6	24.5	29.9	-90.66	180.9	-1,035.9	427.1	373.8	53.30	8.014		
7,500.0	7,459.7	7,544.8	7,456.5	24.6	30.2	-90.62	181.2	-1,037.7	428.8	375.3	53.50	8.016		
7,600.0	7,559.7	7,648.0	7,559.7	24.6	30.2	-90.61	181.2	-1,037.8	429.0	375.4	53.58	8.007		
7,700.0	7,659.7	7,748.0	7,659.7	24.7	30.3	-90.61	181.2	-1,037.8	429.0	375.3	53.65	7.996		
7,800.0	7,759.7	7,848.0	7,759.7	24.7	30.3	-90.61	181.2	-1,037.8	429.0	375.2	53.72	7.985		
7,900.0	7,859.7	7,948.0	7,859.7	24.7	30.3	-90.61	181.2	-1,037.8	429.0	375.2	53.79	7.975		
8,000.0	7,959.7	8,048.0	7,959.7	24.8	30.4	-90.61	181.2	-1,037.8	429.0	375.1	53.86	7.965		
8,100.0	8,059.7	8,148.0	8,059.7	24.8	30.4	-90.61	181.2	-1,037.8	429.0	375.0	53.93	7.954		
8,200.0	8,159.7	8,248.0	8,159.7	24.9	30.4	-90.61	181.2	-1,037.8	429.0	375.0	54.00	7.944		
8,300.0	8,259.7	8,348.0	8,259.7	24.9	30.5	-90.61	181.2	-1,037.8	429.0	374.9	54.07	7.933		
8,400.0	8,359.7	8,448.0	8,359.7	24.9	30.5	-90.61	181.2	-1,037.8	429.0	374.8	54.14	7.923		
8,500.0	8,459.7	8,548.0	8,459.7	25.0	30.5	-90.61	181.2	-1,037.8	429.0	374.8	54.21	7.913		
8,600.0	8,559.7	8,648.0	8,559.7	25.0	30.5	-90.61	181.2	-1,037.8	429.0	374.7	54.29	7.902		
8,700.0	8,659.7	8,748.0	8,659.7	25.1	30.6	-90.61	181.2	-1,037.8	429.0	374.6	54.36	7.891		
8,800.0	8,759.7	8,848.0	8,759.7	25.1	30.6	-90.61	181.2	-1,037.8	429.0	374.5	54.43	7.881		
8,900.0	8,859.7	8,948.0	8,859.7	25.1	30.6	-90.61	181.2	-1,037.8	429.0	374.5	54.50	7.870		
9,000.0	8,959.7	9,048.0	8,959.7	25.2	30.7	-90.61	181.2	-1,037.8	429.0	374.4	54.58	7.860		
9,100.0	9,059.7	9,148.0	9,059.7	25.2	30.7	-90.61	181.2	-1,037.8	429.0	374.3	54.65	7.849		
9,200.0	9,159.7	9,248.0	9,159.7	25.3	30.7	-90.61	181.2	-1,037.8	429.0	374.2	54.73	7.838		
9,300.0	9,259.7	9,348.0	9,259.7	25.3	30.8	-90.61	181.2	-1,037.8	429.0	374.2	54.80	7.828		
9,400.0	9,359.7	9,448.0	9,359.7	25.4	30.8	-90.61	181.2	-1,037.8	429.0	374.1	54.88	7.817		
9,500.0	9,459.7	9,548.0	9,459.7	25.4	30.8	-90.61	181.2	-1,037.8	429.0	374.0	54.95	7.806		
9,600.0	9,559.7	9,648.0	9,559.7	25.5	30.9	-90.61	181.2	-1,037.8	429.0	373.9	55.03	7.796		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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)				
9,700.0	9,659.7	9,748.0	9,659.7	25.5	30.9	-90.61	181.2	-1,037.8	429.0	373.9	55.10	7.785		
9,800.0	9,759.7	9,848.0	9,759.7	25.5	30.9	-90.61	181.2	-1,037.8	429.0	373.8	55.18	7.774		
9,900.0	9,859.7	9,948.0	9,859.7	25.6	31.0	-90.61	181.2	-1,037.8	429.0	373.7	55.26	7.763		
10,000.0	9,959.7	10,048.0	9,959.7	25.6	31.0	-90.61	181.2	-1,037.8	429.0	373.6	55.33	7.752		
10,100.0	10,059.7	10,148.0	10,059.7	25.7	31.0	-90.61	181.2	-1,037.8	429.0	373.6	55.41	7.741		
10,200.0	10,159.7	10,248.0	10,159.7	25.7	31.1	-90.61	181.2	-1,037.8	429.0	373.5	55.49	7.731		
10,300.0	10,259.7	10,348.0	10,259.7	25.8	31.1	-90.61	181.2	-1,037.8	429.0	373.4	55.57	7.720		
10,400.0	10,359.7	10,448.0	10,359.7	25.8	31.1	-90.61	181.2	-1,037.8	429.0	373.3	55.65	7.709		
10,500.0	10,459.7	10,548.0	10,459.7	25.9	31.2	-90.61	181.2	-1,037.8	429.0	373.2	55.73	7.698		
10,600.0	10,559.7	10,648.0	10,559.7	25.9	31.2	-90.61	181.2	-1,037.8	429.0	373.2	55.81	7.687		
10,700.0	10,659.7	10,748.0	10,659.7	25.9	31.2	-90.61	181.2	-1,037.8	429.0	373.1	55.89	7.676		
10,800.0	10,759.7	10,848.0	10,759.7	26.0	31.3	-90.61	181.2	-1,037.8	429.0	373.0	55.97	7.665		
10,900.0	10,859.7	10,948.0	10,859.7	26.0	31.3	-90.61	181.2	-1,037.8	429.0	372.9	56.05	7.654		
11,000.0	10,959.7	11,048.0	10,959.7	26.1	31.3	-90.61	181.2	-1,037.8	429.0	372.8	56.13	7.643		
11,100.0	11,059.7	11,148.0	11,059.7	26.1	31.4	-90.61	181.2	-1,037.8	429.0	372.8	56.21	7.632		
11,200.0	11,159.7	11,248.0	11,159.7	26.2	31.4	-90.61	181.2	-1,037.8	429.0	372.7	56.29	7.621		
11,300.0	11,259.7	11,348.0	11,259.7	26.2	31.5	-90.61	181.2	-1,037.8	429.0	372.6	56.37	7.610		
11,400.0	11,359.7	11,448.0	11,359.7	26.3	31.5	-90.61	181.2	-1,037.8	429.0	372.5	56.45	7.599		
11,500.0	11,459.7	11,548.0	11,459.7	26.3	31.5	-90.61	181.2	-1,037.8	429.0	372.4	56.54	7.587		
11,600.0	11,559.7	11,648.0	11,559.7	26.4	31.6	-90.61	181.2	-1,037.8	429.0	372.3	56.62	7.576		
11,700.0	11,659.7	11,748.0	11,659.7	26.4	31.6	-90.61	181.2	-1,037.8	429.0	372.3	56.70	7.565		
11,746.8	11,706.5	11,794.8	11,706.5	26.4	31.6	-90.61	181.2	-1,037.8	429.0	372.2	56.73	7.561		
11,750.0	11,709.7	11,798.0	11,709.7	26.4	31.6	89.72	181.2	-1,037.8	429.0	372.2	56.74	7.561		
11,775.0	11,734.7	11,823.0	11,734.7	26.4	31.6	89.83	181.2	-1,037.8	429.0	372.2	56.76	7.557		
11,792.1	11,751.7	11,840.0	11,751.7	26.4	31.6	90.00	181.2	-1,037.8	429.0	372.2	56.80	7.553		
11,800.0	11,759.6	11,847.9	11,759.6	26.4	31.6	90.11	181.2	-1,037.8	429.0	372.2	56.81	7.550		
11,825.0	11,784.4	11,872.7	11,784.4	26.4	31.6	90.56	181.2	-1,037.8	429.0	372.1	56.89	7.541		
11,850.0	11,808.9	11,897.2	11,808.9	26.3	31.7	91.17	181.2	-1,037.8	429.1	372.1	56.98	7.530		
11,875.0	11,833.2	11,921.5	11,833.2	26.3	31.7	91.93	181.2	-1,037.8	429.2	372.1	57.09	7.519		
11,900.0	11,857.1	11,945.4	11,857.1	26.2	31.7	92.81	181.2	-1,037.8	429.5	372.3	57.20	7.509		
11,925.0	11,880.6	11,968.9	11,880.6	26.2	31.7	93.82	181.2	-1,037.8	430.1	372.7	57.32	7.503		
11,950.0	11,903.6	11,993.2	11,904.9	26.2	31.7	94.95	181.0	-1,037.8	430.8	373.4	57.41	7.504		
11,975.0	11,926.1	12,018.7	11,930.4	26.1	31.7	96.12	179.5	-1,037.8	431.8	374.4	57.45	7.517		
12,000.0	11,948.0	12,044.8	11,956.3	26.1	31.6	97.29	176.5	-1,037.8	433.0	375.6	57.44	7.539		
12,025.0	11,969.2	12,071.6	11,982.7	26.1	31.6	98.45	172.0	-1,037.8	434.4	377.1	57.38	7.571		
12,050.0	11,989.7	12,099.0	12,009.4	26.0	31.6	99.60	165.9	-1,037.7	436.0	378.7	57.29	7.611		
12,075.0	12,009.5	12,127.1	12,036.4	26.0	31.6	100.73	158.1	-1,037.7	437.8	380.6	57.15	7.660		
12,100.0	12,028.4	12,155.9	12,063.5	26.0	31.5	101.85	148.4	-1,037.6	439.7	382.7	56.97	7.718		
12,125.0	12,046.4	12,185.6	12,090.8	26.0	31.5	102.95	136.7	-1,037.6	441.7	384.9	56.76	7.782		
12,150.0	12,063.5	12,216.1	12,118.0	25.9	31.5	104.03	123.0	-1,037.5	443.8	387.3	56.52	7.853		
12,175.0	12,079.6	12,247.4	12,145.0	25.9	31.5	105.08	107.1	-1,037.4	446.0	389.8	56.25	7.929		
12,200.0	12,094.7	12,279.6	12,171.6	25.9	31.4	106.09	89.0	-1,037.3	448.3	392.3	55.97	8.009		
12,225.0	12,108.7	12,312.7	12,197.6	25.9	31.4	107.06	68.5	-1,037.2	450.5	394.9	55.68	8.092		
12,250.0	12,121.6	12,346.8	12,222.8	25.9	31.4	107.99	45.6	-1,037.0	452.8	397.4	55.38	8.176		
12,275.0	12,133.4	12,381.7	12,246.9	25.9	31.4	108.86	20.3	-1,036.9	455.0	399.9	55.08	8.260		
12,300.0	12,144.0	12,417.6	12,269.7	25.9	31.4	109.68	-7.4	-1,036.7	457.1	402.3	54.79	8.342		
12,325.0	12,153.4	12,454.3	12,290.7	25.9	31.4	110.43	-37.5	-1,036.6	459.0	404.5	54.50	8.422		
12,350.0	12,161.6	12,491.8	12,309.8	25.9	31.4	111.10	-69.8	-1,036.4	460.8	406.6	54.23	8.497		
12,375.0	12,168.5	12,530.2	12,326.6	25.9	31.4	111.68	-104.2	-1,036.2	462.4	408.4	53.98	8.567		
12,400.0	12,174.2	12,569.2	12,340.9	25.9	31.4	112.18	-140.5	-1,036.0	463.7	410.0	53.73	8.631		
12,425.0	12,178.6	12,608.7	12,352.2	25.9	31.4	112.57	-178.4	-1,035.7	464.8	411.3	53.50	8.688		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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)		No-Go Distance (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
12,450.0	12,181.7	12,648.8	12,360.4	26.0	31.4	112.86	-217.6	-1,035.5	465.6	412.4	53.28	8.739	
12,475.0	12,183.5	12,689.1	12,365.4	26.0	31.4	113.04	-257.6	-1,035.3	466.1	413.1	53.07	8.783	
12,496.8	12,184.0	12,724.4	12,367.0	26.0	31.5	113.11	-292.9	-1,035.1	466.3	413.4	52.90	8.816	
12,500.0	12,184.0	12,728.9	12,367.0	26.0	31.5	113.11	-297.4	-1,035.0	466.3	413.4	52.88	8.819	
12,600.0	12,184.0	12,828.9	12,367.0	26.2	31.6	113.11	-397.4	-1,034.5	466.3	413.6	52.72	8.846	
12,700.0	12,184.0	12,928.9	12,367.0	26.4	31.8	113.11	-497.4	-1,033.9	466.3	413.7	52.62	8.862	
12,800.0	12,184.0	13,028.9	12,367.0	26.6	32.0	113.11	-597.4	-1,033.3	466.3	413.7	52.59	8.867	
12,900.0	12,184.0	13,128.9	12,367.0	26.8	32.2	113.11	-697.4	-1,032.7	466.3	413.6	52.62	8.861	
13,000.0	12,184.0	13,228.9	12,367.0	27.1	32.4	113.11	-797.4	-1,032.1	466.3	413.5	52.72	8.844	
13,100.0	12,184.0	13,328.9	12,367.0	27.4	32.7	113.11	-897.4	-1,031.5	466.2	413.4	52.88	8.816	
13,200.0	12,184.0	13,428.9	12,367.0	27.8	33.0	113.11	-997.4	-1,031.0	466.2	413.1	53.11	8.778	
13,300.0	12,184.0	13,528.9	12,367.0	28.2	33.3	113.11	-1,097.3	-1,030.4	466.2	412.8	53.41	8.730	
13,400.0	12,184.0	13,628.9	12,367.0	28.6	33.7	113.11	-1,197.3	-1,029.8	466.2	412.4	53.76	8.672	
13,500.0	12,184.0	13,728.9	12,367.0	29.0	34.0	113.11	-1,297.3	-1,029.2	466.2	412.0	54.18	8.605	
13,600.0	12,184.0	13,828.9	12,367.0	29.4	34.4	113.11	-1,397.3	-1,028.6	466.2	411.5	54.66	8.529	
13,700.0	12,184.0	13,928.9	12,367.0	29.9	34.8	113.11	-1,497.3	-1,028.0	466.2	411.0	55.19	8.446	
13,800.0	12,184.0	14,028.9	12,367.0	30.4	35.3	113.11	-1,597.3	-1,027.5	466.2	410.4	55.78	8.357	
13,900.0	12,184.0	14,128.9	12,367.0	30.9	35.7	113.12	-1,697.3	-1,026.9	466.1	409.7	56.43	8.261	
14,000.0	12,184.0	14,228.9	12,367.0	31.4	36.2	113.12	-1,797.3	-1,026.3	466.1	409.0	57.13	8.159	
14,100.0	12,184.0	14,328.9	12,367.0	32.0	36.7	113.12	-1,897.3	-1,025.7	466.1	408.2	57.88	8.053	
14,200.0	12,184.0	14,428.9	12,367.0	32.6	37.2	113.12	-1,997.3	-1,025.1	466.1	407.4	58.68	7.943	
14,300.0	12,184.0	14,528.9	12,367.0	33.2	37.7	113.12	-2,097.3	-1,024.5	466.1	406.6	59.53	7.830	
14,400.0	12,184.0	14,628.9	12,367.0	33.8	38.3	113.12	-2,197.3	-1,024.0	466.1	405.7	60.42	7.714	
14,500.0	12,184.0	14,728.9	12,367.0	34.4	38.9	113.12	-2,297.3	-1,023.4	466.1	404.7	61.36	7.596	
14,600.0	12,184.0	14,828.9	12,367.0	35.0	39.4	113.12	-2,397.3	-1,022.8	466.1	403.7	62.34	7.477	
14,700.0	12,184.0	14,928.9	12,367.0	35.7	40.0	113.12	-2,497.3	-1,022.2	466.0	402.7	63.35	7.356	
14,800.0	12,184.0	15,028.9	12,367.0	36.4	40.6	113.12	-2,597.3	-1,021.6	466.0	401.6	64.41	7.236	
14,900.0	12,184.0	15,128.9	12,367.0	37.0	41.2	113.12	-2,697.3	-1,021.0	466.0	400.5	65.50	7.115	
15,000.0	12,184.0	15,228.9	12,367.0	37.7	41.9	113.12	-2,797.3	-1,020.5	466.0	399.4	66.62	6.995	
15,100.0	12,184.0	15,328.9	12,367.0	38.4	42.5	113.12	-2,897.3	-1,019.9	466.0	398.2	67.77	6.876	
15,200.0	12,184.0	15,428.9	12,367.0	39.2	43.2	113.12	-2,997.3	-1,019.3	466.0	397.0	68.96	6.757	
15,300.0	12,184.0	15,528.9	12,367.0	39.9	43.8	113.12	-3,097.3	-1,018.7	466.0	395.8	70.17	6.640	
15,400.0	12,184.0	15,628.9	12,367.0	40.6	44.5	113.12	-3,197.3	-1,018.1	466.0	394.5	71.42	6.525	
15,500.0	12,184.0	15,728.9	12,367.0	41.4	45.2	113.13	-3,297.3	-1,017.5	466.0	393.3	72.68	6.411	
15,600.0	12,184.0	15,828.9	12,367.0	42.1	45.9	113.13	-3,397.3	-1,017.0	465.9	392.0	73.98	6.298	
15,700.0	12,184.0	15,928.9	12,367.0	42.9	46.6	113.13	-3,497.3	-1,016.4	465.9	390.6	75.29	6.188	
15,800.0	12,184.0	16,028.9	12,367.0	43.7	47.3	113.13	-3,597.3	-1,015.8	465.9	389.3	76.63	6.080	
15,900.0	12,184.0	16,128.9	12,367.0	44.4	48.0	113.13	-3,697.3	-1,015.2	465.9	387.9	77.99	5.974	
16,000.0	12,184.0	16,228.9	12,367.0	45.2	48.8	113.13	-3,797.3	-1,014.6	465.9	386.5	79.37	5.870	
16,100.0	12,184.0	16,328.9	12,367.0	46.0	49.5	113.13	-3,897.3	-1,014.0	465.9	385.1	80.77	5.768	
16,200.0	12,184.0	16,428.9	12,367.0	46.8	50.3	113.13	-3,997.3	-1,013.5	465.9	383.7	82.19	5.668	
16,300.0	12,184.0	16,528.9	12,367.0	47.6	51.0	113.13	-4,097.3	-1,012.9	465.9	382.2	83.62	5.571	
16,400.0	12,184.0	16,628.9	12,367.0	48.4	51.8	113.13	-4,197.3	-1,012.3	465.8	380.8	85.07	5.476	
16,500.0	12,184.0	16,728.9	12,367.0	49.3	52.5	113.13	-4,297.3	-1,011.7	465.8	379.3	86.54	5.383	
16,600.0	12,184.0	16,828.9	12,367.0	50.1	53.3	113.13	-4,397.3	-1,011.1	465.8	377.8	88.02	5.292	
16,700.0	12,184.0	16,928.9	12,367.0	50.9	54.1	113.13	-4,497.3	-1,010.5	465.8	376.3	89.51	5.204	
16,800.0	12,184.0	17,028.9	12,367.0	51.7	54.9	113.13	-4,597.3	-1,010.0	465.8	374.8	91.02	5.118	
16,900.0	12,184.0	17,128.9	12,367.0	52.6	55.7	113.13	-4,697.3	-1,009.4	465.8	373.2	92.53	5.034	
17,000.0	12,184.0	17,228.9	12,367.0	53.4	56.5	113.13	-4,797.3	-1,008.8	465.8	371.7	94.07	4.952	
17,100.0	12,184.0	17,328.9	12,367.0	54.3	57.3	113.14	-4,897.3	-1,008.2	465.8	370.2	95.61	4.872	

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,200.0	12,184.0	17,428.9	12,367.0	55.1	58.1	113.14	-4,997.3	-1,007.6	465.7	368.6	97.16	4.794	
17,300.0	12,184.0	17,528.9	12,367.0	56.0	58.9	113.14	-5,097.3	-1,007.0	465.7	367.0	98.72	4.717	
17,400.0	12,184.0	17,628.9	12,367.0	56.8	59.7	113.14	-5,197.3	-1,006.5	465.7	365.4	100.30	4.643	
17,500.0	12,184.0	17,728.9	12,367.0	57.7	60.5	113.14	-5,297.3	-1,005.9	465.7	363.8	101.88	4.571	
17,600.0	12,184.0	17,828.9	12,367.0	58.5	61.4	113.14	-5,397.3	-1,005.3	465.7	362.2	103.47	4.501	
17,700.0	12,184.0	17,928.9	12,367.0	59.4	62.2	113.14	-5,497.3	-1,004.7	465.7	360.6	105.07	4.432	
17,800.0	12,184.0	18,028.9	12,367.0	60.3	63.0	113.14	-5,597.3	-1,004.1	465.7	359.0	106.68	4.365	
17,900.0	12,184.0	18,128.9	12,367.0	61.1	63.9	113.14	-5,697.3	-1,003.5	465.7	357.4	108.30	4.300	
18,000.0	12,184.0	18,228.9	12,367.0	62.0	64.7	113.14	-5,797.3	-1,003.0	465.7	355.7	109.92	4.236	
18,100.0	12,184.0	18,328.9	12,367.0	62.9	65.5	113.14	-5,897.3	-1,002.4	465.6	354.1	111.55	4.174	
18,200.0	12,184.0	18,428.9	12,367.0	63.8	66.4	113.14	-5,997.3	-1,001.8	465.6	352.4	113.19	4.114	
18,300.0	12,184.0	18,528.9	12,367.0	64.7	67.2	113.14	-6,097.3	-1,001.2	465.6	350.8	114.83	4.055	
18,400.0	12,184.0	18,628.9	12,367.0	65.5	68.1	113.14	-6,197.3	-1,000.6	465.6	349.1	116.48	3.997	
18,500.0	12,184.0	18,728.9	12,367.0	66.4	68.9	113.14	-6,297.3	-1,000.0	465.6	347.5	118.14	3.941	
18,600.0	12,184.0	18,828.9	12,367.0	67.3	69.8	113.14	-6,397.3	-999.5	465.6	345.8	119.80	3.886	
18,700.0	12,184.0	18,928.9	12,367.0	68.2	70.7	113.15	-6,497.3	-998.9	465.6	344.1	121.47	3.833	
18,800.0	12,184.0	19,028.9	12,367.0	69.1	71.5	113.15	-6,597.3	-998.3	465.6	342.4	123.14	3.781	
18,900.0	12,184.0	19,128.9	12,367.0	70.0	72.4	113.15	-6,697.3	-997.7	465.5	340.7	124.82	3.730	
19,000.0	12,184.0	19,228.9	12,367.0	70.9	73.3	113.15	-6,797.3	-997.1	465.5	339.0	126.50	3.680	
19,100.0	12,184.0	19,328.9	12,367.0	71.8	74.1	113.15	-6,897.3	-996.5	465.5	337.3	128.18	3.632	
19,200.0	12,184.0	19,428.9	12,367.0	72.7	75.0	113.15	-6,997.2	-996.0	465.5	335.6	129.88	3.584	
19,300.0	12,184.0	19,528.9	12,367.0	73.6	75.9	113.15	-7,097.2	-995.4	465.5	333.9	131.57	3.538	
19,400.0	12,184.0	19,628.9	12,367.0	74.5	76.8	113.15	-7,197.2	-994.8	465.5	332.2	133.27	3.493	
19,415.7	12,184.0	19,644.6	12,367.0	74.6	76.9	113.15	-7,212.9	-994.7	465.5	331.9	133.54	3.486	
19,416.6	12,184.0	19,644.8	12,367.0	74.6	76.9	113.15	-7,213.2	-994.7	465.5	331.9	133.55	3.486	

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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)		No-Go Distance (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)		Between Ellipses (usft)			
0.0	0.0	0.0	0.0	0.0	0.0	89.47	0.5	59.9	59.9	59.4	0.48	124.903	
100.0	100.0	100.0	100.0	1.2	1.2	89.47	0.5	59.9	59.9	57.0	2.87	20.889	
200.0	200.0	200.0	200.0	1.7	1.7	89.47	0.5	59.9	59.9	56.0	3.86	15.500	
300.0	300.0	300.0	300.0	2.1	2.1	89.47	0.5	59.9	59.9	55.3	4.63	12.924	
400.0	400.0	400.0	400.0	2.4	2.4	89.47	0.5	59.9	59.9	54.6	5.29	11.327	
500.0	500.0	500.0	500.0	2.7	2.7	89.47	0.5	59.9	59.9	54.0	5.87	10.208	
600.0	600.0	600.0	600.0	3.0	3.0	89.47	0.5	59.9	59.9	53.5	6.39	9.366	
700.0	700.0	700.0	700.0	3.2	3.2	89.47	0.5	59.9	59.9	53.0	6.88	8.702	
800.0	800.0	800.0	800.0	3.5	3.5	89.47	0.5	59.9	59.9	52.5	7.34	8.160	
900.0	900.0	900.0	900.0	3.7	3.7	89.47	0.5	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	89.47	0.5	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	89.47	0.5	59.9	59.9	51.3	8.58	6.983 CC, ES	
1,200.0	1,200.0	1,198.5	1,198.5	4.4	4.4	139.35	1.8	61.1	62.4	53.3	9.07	6.883	
1,300.0	1,299.8	1,296.6	1,296.5	4.7	4.7	139.04	5.4	64.5	70.0	60.4	9.55	7.332	
1,350.0	1,349.7	1,345.4	1,345.1	4.8	4.9	138.84	8.1	67.2	75.6	65.9	9.72	7.786	
1,400.0	1,399.5	1,394.0	1,393.5	4.9	5.0	147.14	11.4	70.3	82.6	72.8	9.89	8.357	
1,500.0	1,498.9	1,490.0	1,488.8	5.1	5.3	157.54	19.7	78.2	101.0	90.6	10.38	9.729	
1,528.5	1,527.2	1,517.1	1,515.6	5.2	5.4	159.42	22.4	80.9	107.3	96.8	10.46	10.254	
1,600.0	1,598.0	1,585.8	1,583.5	5.3	5.5	157.59	30.0	88.1	124.0	113.3	10.70	11.598	
1,700.0	1,697.2	1,682.9	1,679.4	5.6	5.8	155.68	40.7	98.3	147.8	136.6	11.17	13.231	
1,800.0	1,796.3	1,779.9	1,775.4	5.9	6.1	154.29	51.4	108.6	171.6	159.9	11.68	14.697	
1,900.0	1,895.4	1,876.9	1,871.3	6.2	6.4	153.25	62.1	118.9	195.5	183.3	12.21	16.016	
2,000.0	1,994.6	1,974.0	1,967.2	6.5	6.7	152.43	72.8	129.1	219.5	206.7	12.76	17.202	
2,100.0	2,093.7	2,071.0	2,063.1	6.9	7.0	151.77	83.5	139.4	243.5	230.1	13.33	18.267	
2,200.0	2,192.8	2,168.1	2,159.0	7.2	7.4	151.23	94.3	149.7	267.5	253.6	13.91	19.226	
2,300.0	2,292.0	2,265.1	2,254.9	7.6	7.7	150.78	105.0	159.9	291.5	277.0	14.51	20.089	
2,400.0	2,391.1	2,362.2	2,350.8	7.9	8.1	150.40	115.7	170.2	315.6	300.4	15.12	20.868	
2,500.0	2,490.2	2,459.2	2,446.7	8.3	8.5	150.08	126.4	180.5	339.6	323.9	15.74	21.574	
2,600.0	2,589.4	2,556.3	2,542.6	8.7	8.8	149.79	137.1	190.7	363.7	347.3	16.37	22.213	
2,700.0	2,688.5	2,654.2	2,639.4	9.0	9.2	149.54	147.9	201.1	387.7	370.8	16.99	22.824	
2,800.0	2,787.7	2,757.6	2,741.7	9.4	9.6	149.40	158.5	211.2	410.9	393.2	17.66	23.270	
2,900.0	2,886.8	2,861.7	2,845.0	9.8	10.0	149.41	167.7	220.1	432.5	414.1	18.34	23.580	
3,000.0	2,985.9	2,966.5	2,949.2	10.2	10.4	149.55	175.7	227.7	452.6	433.6	19.02	23.795	
3,100.0	3,085.1	3,071.9	3,054.2	10.6	10.7	149.81	182.3	234.0	471.2	451.5	19.69	23.927	
3,200.0	3,184.2	3,177.8	3,159.9	11.0	11.1	150.18	187.6	239.1	488.3	468.0	20.35	23.990	
3,300.0	3,283.3	3,284.2	3,266.2	11.4	11.5	150.64	191.4	242.8	503.9	482.9	21.00	23.995	
3,400.0	3,382.5	3,391.0	3,373.0	11.8	11.8	151.20	193.8	245.1	518.0	496.4	21.62	23.956	
3,500.0	3,481.6	3,498.2	3,480.1	12.2	12.0	151.85	194.8	246.0	530.6	508.4	22.20	23.899	
3,600.0	3,580.8	3,598.9	3,580.8	12.6	12.1	152.51	194.8	246.1	542.2	519.6	22.64	23.947	
3,700.0	3,679.9	3,698.0	3,679.9	13.0	12.2	153.14	194.8	246.1	553.9	530.8	23.09	23.985	
3,800.0	3,779.0	3,797.1	3,779.0	13.4	12.3	153.74	194.8	246.1	565.7	542.1	23.56	24.014	
3,900.0	3,878.2	3,896.3	3,878.2	13.8	12.4	154.31	194.8	246.1	577.5	553.4	24.03	24.035	
4,000.0	3,977.3	3,995.4	3,977.3	14.2	12.4	154.86	194.8	246.1	589.3	564.8	24.50	24.050	
4,100.0	4,076.4	4,094.5	4,076.4	14.6	12.5	155.39	194.8	246.1	601.2	576.2	24.99	24.059	
4,200.0	4,175.6	4,193.7	4,175.6	15.0	12.6	155.90	194.8	246.1	613.2	587.7	25.48	24.063	
4,300.0	4,274.7	4,292.8	4,274.7	15.4	12.7	156.39	194.8	246.1	625.2	599.2	25.98	24.062	
4,400.0	4,373.8	4,391.9	4,373.8	15.9	12.7	156.87	194.8	246.1	637.3	610.8	26.49	24.057	
4,500.0	4,473.0	4,491.1	4,473.0	16.3	12.8	157.32	194.8	246.1	649.3	622.3	27.00	24.049	
4,600.0	4,572.1	4,590.2	4,572.1	16.7	12.9	157.76	194.8	246.1	661.5	634.0	27.52	24.038	
4,700.0	4,671.3	4,689.4	4,671.3	17.1	13.0	158.18	194.8	246.1	673.6	645.6	28.04	24.024	
4,800.0	4,770.4	4,788.5	4,770.4	17.5	13.0	158.58	194.8	246.1	685.8	657.3	28.57	24.008	

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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		No-Go		Separation		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Distance (usft)	Factor		
4,900.0	4,869.5	4,887.6	4,869.5	17.9	13.1	158.98	194.8	246.1	698.1	669.0	29.10	23.989		
5,000.0	4,968.7	4,986.8	4,968.7	18.3	13.2	159.36	194.8	246.1	710.4	680.7	29.64	23.970		
5,100.0	5,067.8	5,085.9	5,067.8	18.8	13.3	159.72	194.8	246.1	722.6	692.5	30.18	23.948		
5,200.0	5,166.9	5,185.0	5,166.9	19.2	13.3	160.08	194.8	246.1	735.0	704.3	30.72	23.926		
5,300.0	5,266.1	5,284.2	5,266.1	19.6	13.4	160.42	194.8	246.1	747.3	716.1	31.27	23.902		
5,400.0	5,365.2	5,383.3	5,365.2	20.0	13.5	160.75	194.8	246.1	759.7	727.9	31.82	23.878		
5,500.0	5,464.4	5,482.5	5,464.4	20.4	13.6	161.07	194.8	246.1	772.1	739.7	32.37	23.853		
5,600.0	5,563.5	5,581.6	5,563.5	20.9	13.7	161.38	194.8	246.1	784.5	751.6	32.92	23.828		
5,700.0	5,662.6	5,680.7	5,662.6	21.3	13.7	161.68	194.8	246.1	797.0	763.5	33.48	23.802		
5,787.0	5,748.8	5,766.9	5,748.8	21.6	13.8	161.93	194.8	246.1	807.8	773.8	33.96	23.784		
5,800.0	5,761.8	5,779.9	5,761.8	21.7	13.8	161.98	194.8	246.1	809.4	775.4	34.03	23.784		
5,900.0	5,861.0	5,879.1	5,861.0	22.1	13.9	162.27	194.8	246.1	820.9	786.3	34.60	23.723		
6,000.0	5,960.5	5,978.6	5,960.5	22.5	14.0	162.52	194.8	246.1	830.7	795.5	35.14	23.640		
6,100.0	6,060.1	6,078.2	6,060.1	22.9	14.0	162.72	194.8	246.1	838.8	803.2	35.65	23.527		
6,200.0	6,159.9	6,178.0	6,159.9	23.3	14.1	162.87	194.8	246.1	845.3	809.2	36.15	23.385		
6,300.0	6,259.8	6,277.9	6,259.8	23.6	14.2	162.99	194.8	246.1	850.2	813.6	36.61	23.221		
6,400.0	6,359.7	6,377.8	6,359.7	23.9	14.3	163.06	194.8	246.1	853.4	816.3	37.04	23.039		
6,500.0	6,459.7	6,477.8	6,459.7	24.2	14.3	163.10	194.8	246.1	854.9	817.5	37.40	22.855		
6,540.3	6,500.0	6,518.1	6,500.0	24.2	14.4	89.39	194.8	246.1	855.0	817.5	37.48	22.812		
6,600.0	6,559.7	6,577.8	6,559.7	24.2	14.4	89.39	194.8	246.1	855.0	817.5	37.53	22.780		
6,700.0	6,659.7	6,677.8	6,659.7	24.3	14.5	89.39	194.8	246.1	855.0	817.4	37.64	22.716		
6,800.0	6,759.7	6,777.8	6,759.7	24.3	14.6	89.39	194.8	246.1	855.0	817.3	37.74	22.652		
6,900.0	6,859.7	6,877.8	6,859.7	24.3	14.7	89.39	194.8	246.1	855.0	817.1	37.85	22.588		
7,000.0	6,959.7	6,977.8	6,959.7	24.4	14.7	89.39	194.8	246.1	855.0	817.0	37.96	22.524		
7,100.0	7,059.7	7,077.8	7,059.7	24.4	14.8	89.39	194.8	246.1	855.0	816.9	38.07	22.460		
7,200.0	7,159.7	7,177.8	7,159.7	24.5	14.9	89.39	194.8	246.1	855.0	816.8	38.18	22.397		
7,300.0	7,259.7	7,277.8	7,259.7	24.5	15.0	89.39	194.8	246.1	855.0	816.7	38.28	22.333		
7,400.0	7,359.7	7,377.8	7,359.7	24.5	15.0	89.39	194.8	246.1	855.0	816.6	38.39	22.270		
7,500.0	7,459.7	7,477.8	7,459.7	24.6	15.1	89.39	194.8	246.1	855.0	816.5	38.50	22.207		
7,600.0	7,559.7	7,577.8	7,559.7	24.6	15.2	89.39	194.8	246.1	855.0	816.4	38.61	22.144		
7,700.0	7,659.7	7,677.8	7,659.7	24.7	15.3	89.39	194.8	246.1	855.0	816.3	38.72	22.081		
7,800.0	7,759.7	7,777.8	7,759.7	24.7	15.4	89.39	194.8	246.1	855.0	816.2	38.83	22.018		
7,900.0	7,859.7	7,877.8	7,859.7	24.7	15.4	89.39	194.8	246.1	855.0	816.1	38.94	21.956		
8,000.0	7,959.7	7,977.8	7,959.7	24.8	15.5	89.39	194.8	246.1	855.0	815.9	39.05	21.893		
8,100.0	8,059.7	8,077.8	8,059.7	24.8	15.6	89.39	194.8	246.1	855.0	815.8	39.16	21.831		
8,200.0	8,159.7	8,177.8	8,159.7	24.9	15.7	89.39	194.8	246.1	855.0	815.7	39.28	21.769		
8,300.0	8,259.7	8,277.8	8,259.7	24.9	15.8	89.39	194.8	246.1	855.0	815.6	39.39	21.707		
8,400.0	8,359.7	8,377.8	8,359.7	24.9	15.8	89.39	194.8	246.1	855.0	815.5	39.50	21.645		
8,500.0	8,459.7	8,477.8	8,459.7	25.0	15.9	89.39	194.8	246.1	855.0	815.4	39.61	21.584		
8,600.0	8,559.7	8,577.8	8,559.7	25.0	16.0	89.39	194.8	246.1	855.0	815.3	39.73	21.522		
8,700.0	8,659.7	8,677.8	8,659.7	25.1	16.1	89.39	194.8	246.1	855.0	815.2	39.84	21.461		
8,800.0	8,759.7	8,777.8	8,759.7	25.1	16.1	89.39	194.8	246.1	855.0	815.0	39.95	21.400		
8,900.0	8,859.7	8,877.8	8,859.7	25.1	16.2	89.39	194.8	246.1	855.0	814.9	40.07	21.339		
9,000.0	8,959.7	8,977.8	8,959.7	25.2	16.3	89.39	194.8	246.1	855.0	814.8	40.18	21.278		
9,100.0	9,059.7	9,077.8	9,059.7	25.2	16.4	89.39	194.8	246.1	855.0	814.7	40.30	21.217		
9,200.0	9,159.7	9,177.8	9,159.7	25.3	16.5	89.39	194.8	246.1	855.0	814.6	40.41	21.157		
9,300.0	9,259.7	9,277.8	9,259.7	25.3	16.5	89.39	194.8	246.1	855.0	814.5	40.53	21.097		
9,400.0	9,359.7	9,377.8	9,359.7	25.4	16.6	89.39	194.8	246.1	855.0	814.4	40.64	21.037		
9,500.0	9,459.7	9,477.8	9,459.7	25.4	16.7	89.39	194.8	246.1	855.0	814.2	40.76	20.977		
9,600.0	9,559.7	9,577.8	9,559.7	25.5	16.8	89.39	194.8	246.1	855.0	814.1	40.88	20.917		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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	9,659.7	9,677.8	9,659.7	25.5	16.9	89.39	194.8	246.1	855.0	814.0	40.99	20.858		
9,800.0	9,759.7	9,777.8	9,759.7	25.5	16.9	89.39	194.8	246.1	855.0	813.9	41.11	20.798		
9,900.0	9,859.7	9,877.8	9,859.7	25.6	17.0	89.39	194.8	246.1	855.0	813.8	41.23	20.739		
10,000.0	9,959.7	9,977.8	9,959.7	25.6	17.1	89.39	194.8	246.1	855.0	813.7	41.34	20.680		
10,100.0	10,059.7	10,077.8	10,059.7	25.7	17.2	89.39	194.8	246.1	855.0	813.5	41.46	20.622		
10,200.0	10,159.7	10,177.8	10,159.7	25.7	17.2	89.39	194.8	246.1	855.0	813.4	41.58	20.563		
10,300.0	10,259.7	10,277.8	10,259.7	25.8	17.3	89.39	194.8	246.1	855.0	813.3	41.70	20.505		
10,400.0	10,359.7	10,377.8	10,359.7	25.8	17.4	89.39	194.8	246.1	855.0	813.2	41.82	20.446		
10,500.0	10,459.7	10,477.8	10,459.7	25.9	17.5	89.39	194.8	246.1	855.0	813.1	41.94	20.388		
10,600.0	10,559.7	10,577.8	10,559.7	25.9	17.6	89.39	194.8	246.1	855.0	812.9	42.05	20.331		
10,700.0	10,659.7	10,677.8	10,659.7	25.9	17.6	89.39	194.8	246.1	855.0	812.8	42.17	20.273		
10,800.0	10,759.7	10,777.8	10,759.7	26.0	17.7	89.39	194.8	246.1	855.0	812.7	42.29	20.216		
10,900.0	10,859.7	10,877.8	10,859.7	26.0	17.8	89.39	194.8	246.1	855.0	812.6	42.41	20.158		
11,000.0	10,959.7	10,977.8	10,959.7	26.1	17.9	89.39	194.8	246.1	855.0	812.5	42.53	20.101		
11,100.0	11,059.7	11,077.8	11,059.7	26.1	18.0	89.39	194.8	246.1	855.0	812.3	42.66	20.045		
11,200.0	11,159.7	11,177.8	11,159.7	26.2	18.0	89.39	194.8	246.1	855.0	812.2	42.78	19.988		
11,300.0	11,259.7	11,277.8	11,259.7	26.2	18.1	89.39	194.8	246.1	855.0	812.1	42.90	19.931		
11,400.0	11,359.7	11,377.8	11,359.7	26.3	18.2	89.39	194.8	246.1	855.0	812.0	43.02	19.875		
11,500.0	11,459.7	11,477.8	11,459.7	26.3	18.3	89.39	194.8	246.1	855.0	811.9	43.14	19.819		
11,600.0	11,559.7	11,577.8	11,559.7	26.4	18.4	89.39	194.8	246.1	855.0	811.7	43.26	19.763		
11,700.0	11,659.7	11,677.8	11,659.7	26.4	18.4	89.39	194.8	246.1	855.0	811.6	43.38	19.708		
11,746.8	11,706.5	11,724.6	11,706.5	26.4	18.5	89.39	194.8	246.1	855.0	811.6	43.43	19.689		
11,750.0	11,709.7	11,727.8	11,709.7	26.4	18.5	-90.28	194.8	246.1	855.0	811.6	43.43	19.689		
11,775.0	11,734.7	11,753.0	11,734.9	26.4	18.4	-90.28	194.0	246.1	855.0	811.6	43.43	19.688		
11,800.0	11,759.6	11,778.3	11,760.0	26.4	18.4	-90.28	191.8	246.1	855.0	811.6	43.41	19.694		
11,825.0	11,784.4	11,803.5	11,785.0	26.4	18.4	-90.28	188.3	246.1	855.0	811.6	43.40	19.700		
11,850.0	11,808.9	11,828.7	11,809.8	26.3	18.3	-90.27	183.5	246.1	855.0	811.6	43.39	19.707		
11,875.0	11,833.2	11,853.9	11,834.2	26.3	18.3	-90.27	177.5	246.2	855.0	811.6	43.37	19.715		
11,900.0	11,857.1	11,879.1	11,858.3	26.2	18.2	-90.27	170.1	246.2	855.0	811.7	43.35	19.723		
11,925.0	11,880.6	11,904.3	11,882.0	26.2	18.2	-90.26	161.4	246.3	855.0	811.7	43.33	19.731		
11,950.0	11,903.6	11,929.5	11,905.2	26.2	18.1	-90.25	151.6	246.3	855.0	811.7	43.31	19.740		
11,975.0	11,926.1	11,954.7	11,927.8	26.1	18.1	-90.25	140.5	246.4	855.0	811.7	43.30	19.748		
12,000.0	11,948.0	11,979.9	11,949.8	26.1	18.0	-90.24	128.2	246.4	855.0	811.7	43.28	19.757		
12,025.0	11,969.2	12,005.1	11,971.1	26.1	18.0	-90.23	114.8	246.5	855.0	811.7	43.26	19.765		
12,050.0	11,989.7	12,030.2	11,991.7	26.0	17.9	-90.22	100.3	246.6	855.0	811.8	43.24	19.772		
12,075.0	12,009.5	12,055.4	12,011.5	26.0	17.9	-90.22	84.8	246.7	855.0	811.8	43.23	19.779		
12,100.0	12,028.4	12,080.6	12,030.4	26.0	17.9	-90.21	68.2	246.8	855.0	811.8	43.21	19.785		
12,125.0	12,046.4	12,105.7	12,048.4	26.0	17.8	-90.20	50.7	246.9	855.0	811.8	43.20	19.790		
12,150.0	12,063.5	12,130.9	12,065.5	25.9	17.8	-90.19	32.2	247.0	855.0	811.8	43.20	19.794		
12,175.0	12,079.6	12,156.0	12,081.5	25.9	17.8	-90.17	12.9	247.1	855.0	811.8	43.19	19.796		
12,200.0	12,094.7	12,181.1	12,096.6	25.9	17.7	-90.16	-7.3	247.2	855.0	811.8	43.19	19.796		
12,225.0	12,108.7	12,206.2	12,110.5	25.9	17.7	-90.15	-28.2	247.4	855.0	811.8	43.19	19.795		
12,250.0	12,121.6	12,231.3	12,123.3	25.9	17.7	-90.14	-49.7	247.5	855.0	811.8	43.20	19.791		
12,275.0	12,133.4	12,256.4	12,135.0	25.9	17.7	-90.12	-72.0	247.6	855.0	811.8	43.22	19.785		
12,300.0	12,144.0	12,281.5	12,145.5	25.9	17.7	-90.11	-94.8	247.8	855.0	811.8	43.23	19.776		
12,325.0	12,153.4	12,306.6	12,154.7	25.9	17.7	-90.10	-118.1	247.9	855.0	811.8	43.26	19.766		
12,350.0	12,161.6	12,331.7	12,162.7	25.9	17.7	-90.08	-141.8	248.0	855.0	811.7	43.29	19.752		
12,375.0	12,168.5	12,356.7	12,169.5	25.9	17.7	-90.07	-165.9	248.2	855.0	811.7	43.32	19.736		
12,400.0	12,174.2	12,381.8	12,175.0	25.9	17.7	-90.06	-190.4	248.3	855.0	811.7	43.37	19.717		
12,425.0	12,178.6	12,406.8	12,179.2	25.9	17.7	-90.04	-215.1	248.5	855.0	811.6	43.41	19.696		
12,450.0	12,181.7	12,431.8	12,182.1	26.0	17.7	-90.03	-239.9	248.6	855.0	811.6	43.47	19.672		

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

ConocoPhillips

Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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		
12,475.0	12,183.5	12,456.9	12,183.6	26.0	17.8	-90.01	-264.9	248.7	855.1	811.5	43.52	19.645		
12,496.8	12,184.0	12,478.7	12,184.0	26.0	17.8	-90.00	-286.7	248.9	855.1	811.5	43.58	19.620		
12,500.0	12,184.0	12,481.9	12,184.0	26.0	17.8	-90.00	-289.9	248.9	855.1	811.5	43.59	19.616		
12,600.0	12,184.0	12,581.9	12,184.0	26.2	17.9	-90.00	-389.9	249.5	855.1	811.1	43.93	19.465		
12,700.0	12,184.0	12,681.9	12,184.0	26.4	18.1	-90.00	-489.9	250.1	855.1	810.7	44.35	19.282		
12,800.0	12,184.0	12,781.9	12,184.0	26.6	18.4	-90.00	-589.9	250.6	855.1	810.3	44.84	19.069		
12,900.0	12,184.0	12,881.9	12,184.0	26.8	18.7	-90.00	-689.9	251.2	855.1	809.7	45.41	18.830		
13,000.0	12,184.0	12,981.9	12,184.0	27.1	19.0	-90.00	-789.9	251.8	855.1	809.1	46.06	18.567		
13,100.0	12,184.0	13,081.9	12,184.0	27.4	19.4	-90.00	-889.9	252.4	855.1	808.4	46.77	18.285		
13,200.0	12,184.0	13,181.9	12,184.0	27.8	19.9	-90.00	-989.9	253.0	855.2	807.6	47.54	17.986		
13,300.0	12,184.0	13,281.9	12,184.0	28.2	20.4	-90.00	-1,089.9	253.6	855.2	806.8	48.39	17.674		
13,400.0	12,184.0	13,381.9	12,184.0	28.6	20.9	-90.00	-1,189.9	254.1	855.2	805.9	49.29	17.352		
13,500.0	12,184.0	13,481.9	12,184.0	29.0	21.4	-90.00	-1,289.9	254.7	855.2	805.0	50.24	17.022		
13,600.0	12,184.0	13,581.9	12,184.0	29.4	22.0	-90.00	-1,389.8	255.3	855.2	804.0	51.25	16.687		
13,700.0	12,184.0	13,681.9	12,184.0	29.9	22.6	-90.00	-1,489.8	255.9	855.2	802.9	52.31	16.349		
13,800.0	12,184.0	13,781.9	12,184.0	30.4	23.3	-90.00	-1,589.8	256.5	855.2	801.8	53.42	16.011		
13,900.0	12,184.0	13,881.9	12,184.0	30.9	23.9	-90.00	-1,689.8	257.1	855.2	800.7	54.57	15.673		
14,000.0	12,184.0	13,981.9	12,184.0	31.4	24.6	-90.00	-1,789.8	257.7	855.3	799.5	55.76	15.339		
14,100.0	12,184.0	14,081.9	12,184.0	32.0	25.3	-90.00	-1,889.8	258.2	855.3	798.3	56.99	15.008		
14,200.0	12,184.0	14,181.9	12,184.0	32.6	26.0	-90.00	-1,989.8	258.8	855.3	797.0	58.26	14.682		
14,300.0	12,184.0	14,281.9	12,184.0	33.2	26.8	-90.00	-2,089.8	259.4	855.3	795.7	59.56	14.361		
14,400.0	12,184.0	14,381.9	12,184.0	33.8	27.5	-90.00	-2,189.8	260.0	855.3	794.4	60.89	14.047		
14,500.0	12,184.0	14,481.9	12,184.0	34.4	28.3	-90.00	-2,289.8	260.6	855.3	793.1	62.25	13.740		
14,600.0	12,184.0	14,581.9	12,184.0	35.0	29.0	-90.00	-2,389.8	261.2	855.3	791.7	63.64	13.440		
14,700.0	12,184.0	14,681.9	12,184.0	35.7	29.8	-90.00	-2,489.8	261.7	855.4	790.3	65.06	13.148		
14,800.0	12,184.0	14,781.9	12,184.0	36.4	30.6	-90.00	-2,589.8	262.3	855.4	788.9	66.50	12.864		
14,900.0	12,184.0	14,881.9	12,184.0	37.0	31.4	-90.00	-2,689.8	262.9	855.4	787.4	67.96	12.587		
15,000.0	12,184.0	14,981.9	12,184.0	37.7	32.2	-90.00	-2,789.8	263.5	855.4	786.0	69.44	12.318		
15,100.0	12,184.0	15,081.9	12,184.0	38.4	33.1	-90.00	-2,889.8	264.1	855.4	784.5	70.95	12.057		
15,200.0	12,184.0	15,181.9	12,184.0	39.2	33.9	-90.00	-2,989.8	264.7	855.4	783.0	72.47	11.804		
15,300.0	12,184.0	15,281.9	12,184.0	39.9	34.7	-90.00	-3,089.8	265.2	855.4	781.4	74.01	11.558		
15,400.0	12,184.0	15,381.9	12,184.0	40.6	35.6	-90.00	-3,189.8	265.8	855.5	779.9	75.57	11.321		
15,500.0	12,184.0	15,481.9	12,184.0	41.4	36.4	-90.00	-3,289.8	266.4	855.5	778.3	77.14	11.090		
15,600.0	12,184.0	15,581.9	12,184.0	42.1	37.3	-90.00	-3,389.8	267.0	855.5	776.8	78.73	10.867		
15,700.0	12,184.0	15,681.9	12,184.0	42.9	38.1	-90.00	-3,489.8	267.6	855.5	775.2	80.33	10.650		
15,800.0	12,184.0	15,781.9	12,184.0	43.7	39.0	-90.00	-3,589.8	268.2	855.5	773.6	81.94	10.441		
15,900.0	12,184.0	15,881.9	12,184.0	44.4	39.9	-90.00	-3,689.8	268.7	855.5	772.0	83.56	10.238		
16,000.0	12,184.0	15,981.9	12,184.0	45.2	40.7	-90.00	-3,789.8	269.3	855.5	770.3	85.20	10.041		
16,100.0	12,184.0	16,081.9	12,184.0	46.0	41.6	-90.00	-3,889.8	269.9	855.5	768.7	86.85	9.851		
16,200.0	12,184.0	16,181.9	12,184.0	46.8	42.5	-90.00	-3,989.8	270.5	855.6	767.1	88.51	9.667		
16,300.0	12,184.0	16,281.9	12,184.0	47.6	43.4	-90.00	-4,089.8	271.1	855.6	765.4	90.17	9.488		
16,400.0	12,184.0	16,381.9	12,184.0	48.4	44.3	-90.00	-4,189.8	271.7	855.6	763.7	91.85	9.315		
16,500.0	12,184.0	16,481.9	12,184.0	49.3	45.2	-90.00	-4,289.8	272.3	855.6	762.1	93.53	9.147		
16,600.0	12,184.0	16,581.9	12,184.0	50.1	46.1	-90.00	-4,389.8	272.8	855.6	760.4	95.23	8.985		
16,700.0	12,184.0	16,681.9	12,184.0	50.9	46.9	-90.00	-4,489.8	273.4	855.6	758.7	96.93	8.827		
16,800.0	12,184.0	16,781.9	12,184.0	51.7	47.8	-90.00	-4,589.8	274.0	855.6	757.0	98.64	8.675		
16,900.0	12,184.0	16,881.9	12,184.0	52.6	48.7	-90.00	-4,689.8	274.6	855.7	755.3	100.35	8.527		
17,000.0	12,184.0	16,981.9	12,184.0	53.4	49.7	-90.00	-4,789.8	275.2	855.7	753.6	102.07	8.383		
17,100.0	12,184.0	17,081.9	12,184.0	54.3	50.6	-90.00	-4,889.8	275.8	855.7	751.9	103.80	8.244		
17,200.0	12,184.0	17,181.9	12,184.0	55.1	51.5	-90.00	-4,989.8	276.3	855.7	750.2	105.53	8.108		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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)			
17,300.0	12,184.0	17,281.9	12,184.0	56.0	52.4	-90.00	-5,089.8	276.9	855.7	748.4	107.27	7.977	
17,400.0	12,184.0	17,381.9	12,184.0	56.8	53.3	-90.00	-5,189.8	277.5	855.7	746.7	109.02	7.849	
17,500.0	12,184.0	17,481.9	12,184.0	57.7	54.2	-90.00	-5,289.8	278.1	855.7	745.0	110.77	7.726	
17,600.0	12,184.0	17,581.9	12,184.0	58.5	55.1	-90.00	-5,389.8	278.7	855.8	743.2	112.52	7.605	
17,700.0	12,184.0	17,681.9	12,184.0	59.4	56.0	-90.00	-5,489.8	279.3	855.8	741.5	114.28	7.488	
17,800.0	12,184.0	17,781.9	12,184.0	60.3	57.0	-90.00	-5,589.8	279.8	855.8	739.7	116.04	7.375	
17,900.0	12,184.0	17,881.9	12,184.0	61.1	57.9	-90.00	-5,689.8	280.4	855.8	738.0	117.81	7.264	
18,000.0	12,184.0	17,981.9	12,184.0	62.0	58.8	-90.00	-5,789.8	281.0	855.8	736.2	119.58	7.156	
18,100.0	12,184.0	18,081.9	12,184.0	62.9	59.7	-90.00	-5,889.8	281.6	855.8	734.5	121.36	7.052	
18,200.0	12,184.0	18,181.9	12,184.0	63.8	60.6	-90.00	-5,989.8	282.2	855.8	732.7	123.14	6.950	
18,300.0	12,184.0	18,281.9	12,184.0	64.7	61.6	-90.00	-6,089.8	282.8	855.8	730.9	124.92	6.851	
18,400.0	12,184.0	18,381.9	12,184.0	65.5	62.5	-90.00	-6,189.8	283.3	855.9	729.2	126.71	6.755	
18,500.0	12,184.0	18,481.9	12,184.0	66.4	63.4	-90.00	-6,289.8	283.9	855.9	727.4	128.50	6.661	
18,600.0	12,184.0	18,581.9	12,184.0	67.3	64.4	-90.00	-6,389.8	284.5	855.9	725.6	130.29	6.569	
18,700.0	12,184.0	18,681.9	12,184.0	68.2	65.3	-90.00	-6,489.8	285.1	855.9	723.8	132.09	6.480	
18,800.0	12,184.0	18,781.9	12,184.0	69.1	66.2	-90.00	-6,589.8	285.7	855.9	722.0	133.89	6.393	
18,900.0	12,184.0	18,881.9	12,184.0	70.0	67.1	-90.00	-6,689.8	286.3	855.9	720.2	135.69	6.308	
19,000.0	12,184.0	18,981.9	12,184.0	70.9	68.1	-90.00	-6,789.8	286.9	855.9	718.4	137.49	6.225	
19,100.0	12,184.0	19,081.9	12,184.0	71.8	69.0	-90.00	-6,889.8	287.4	856.0	716.7	139.30	6.145	
19,200.0	12,184.0	19,181.9	12,184.0	72.7	69.9	-90.00	-6,989.8	288.0	856.0	714.9	141.11	6.066	
19,300.0	12,184.0	19,281.9	12,184.0	73.6	70.9	-90.00	-7,089.8	288.6	856.0	713.1	142.92	5.989	
19,400.0	12,184.0	19,381.9	12,184.0	74.5	71.8	-90.00	-7,189.8	289.2	856.0	711.3	144.73	5.914	
19,416.6	12,184.0	19,398.5	12,184.0	74.6	72.0	-90.00	-7,206.3	289.3	856.0	711.0	145.03	5.902 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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 704H - 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	89.65	0.2	30.0	30.0	29.5	0.48	62.573	
100.0	100.0	100.0	100.0	1.2	1.2	89.65	0.2	30.0	30.0	27.1	2.87	10.465	
200.0	200.0	200.0	200.0	1.7	1.7	89.65	0.2	30.0	30.0	26.1	3.86	7.765	
300.0	300.0	300.0	300.0	2.1	2.1	89.65	0.2	30.0	30.0	25.4	4.63	6.475	
400.0	400.0	400.0	400.0	2.4	2.4	89.65	0.2	30.0	30.0	24.7	5.29	5.674	
500.0	500.0	500.0	500.0	2.7	2.7	89.65	0.2	30.0	30.0	24.1	5.87	5.114	
600.0	600.0	600.0	600.0	3.0	3.0	89.65	0.2	30.0	30.0	23.6	6.39	4.692	
700.0	700.0	700.0	700.0	3.2	3.2	89.65	0.2	30.0	30.0	23.1	6.88	4.359	
800.0	800.0	800.0	800.0	3.5	3.5	89.65	0.2	30.0	30.0	22.7	7.34	4.088	
900.0	900.0	900.0	900.0	3.7	3.7	89.65	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	89.65	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	89.65	0.2	30.0	30.0	21.4	8.58	3.498 CC	
1,200.0	1,200.0	1,200.8	1,200.8	4.4	4.4	139.54	1.4	28.7	30.0	21.0	9.08	3.308	
1,300.0	1,299.8	1,301.6	1,301.4	4.7	4.7	139.23	4.9	24.7	30.1	20.6	9.56	3.149	
1,350.0	1,349.7	1,351.9	1,351.6	4.8	4.9	139.00	7.6	21.8	30.2	20.4	9.74	3.100 ES	
1,400.0	1,399.5	1,402.3	1,401.8	4.9	5.0	146.61	10.8	18.1	30.4	20.5	9.90	3.066	
1,500.0	1,498.9	1,503.0	1,501.7	5.1	5.4	152.23	19.1	9.0	31.6	21.3	10.30	3.063 SF	
1,528.5	1,527.2	1,531.7	1,530.1	5.2	5.5	151.96	21.9	5.9	32.2	21.9	10.34	3.115	
1,600.0	1,598.0	1,603.3	1,600.7	5.3	5.6	143.65	29.6	-2.7	34.0	23.6	10.44	3.256	
1,700.0	1,697.2	1,703.0	1,699.0	5.6	5.9	132.83	40.8	-15.1	37.3	26.6	10.71	3.487	
1,800.0	1,796.3	1,802.7	1,797.3	5.9	6.2	124.03	51.9	-27.5	41.8	30.8	10.97	3.808	
1,900.0	1,895.4	1,902.4	1,895.6	6.2	6.6	117.05	63.1	-39.9	47.0	35.8	11.27	4.173	
2,000.0	1,994.6	2,002.1	1,994.0	6.5	6.9	111.52	74.2	-52.3	52.8	41.2	11.59	4.556	
2,100.0	2,093.7	2,101.9	2,092.3	6.9	7.2	107.12	85.4	-64.7	59.0	47.0	11.94	4.941	
2,200.0	2,192.8	2,201.6	2,190.6	7.2	7.6	103.57	96.5	-77.1	65.4	53.1	12.31	5.318	
2,300.0	2,292.0	2,301.3	2,288.9	7.6	8.0	100.66	107.7	-89.5	72.1	59.4	12.69	5.683	
2,400.0	2,391.1	2,401.0	2,387.2	7.9	8.3	98.25	118.8	-101.9	78.9	65.8	13.09	6.032	
2,500.0	2,490.2	2,500.7	2,485.5	8.3	8.7	96.23	129.9	-114.3	85.9	72.4	13.49	6.364	
2,600.0	2,589.4	2,600.7	2,584.1	8.7	9.1	94.59	141.0	-126.6	92.8	79.0	13.85	6.703	
2,700.0	2,688.5	2,701.1	2,683.3	9.0	9.5	93.97	151.2	-137.9	99.3	85.1	14.24	6.975	
2,800.0	2,787.7	2,801.6	2,782.9	9.4	9.8	94.32	160.2	-147.9	105.2	90.6	14.59	7.211	
2,900.0	2,886.8	2,902.1	2,882.7	9.8	10.2	95.48	168.0	-156.6	110.4	95.5	14.89	7.417	
3,000.0	2,985.9	3,002.5	2,982.7	10.2	10.6	97.37	174.6	-164.0	115.2	100.0	15.16	7.599	
3,100.0	3,085.1	3,102.9	3,082.7	10.6	11.0	99.91	180.1	-170.1	119.5	104.1	15.40	7.761	
3,200.0	3,184.2	3,203.1	3,182.7	11.0	11.3	103.05	184.4	-174.9	123.7	108.1	15.66	7.903	
3,300.0	3,283.3	3,303.1	3,282.6	11.4	11.6	106.75	187.5	-178.3	128.0	112.0	15.96	8.022	
3,400.0	3,382.5	3,402.8	3,382.3	11.8	11.9	110.93	189.5	-180.5	132.6	116.3	16.35	8.111	
3,500.0	3,481.6	3,502.1	3,481.6	12.2	12.2	115.51	190.3	-181.4	137.9	121.0	16.88	8.168	
3,600.0	3,580.8	3,601.3	3,580.8	12.6	12.2	120.18	190.3	-181.4	144.0	126.5	17.54	8.213	
3,700.0	3,679.9	3,700.4	3,679.9	13.0	12.3	124.46	190.3	-181.4	151.1	132.8	18.31	8.250	
3,800.0	3,779.0	3,799.6	3,779.0	13.4	12.4	128.34	190.3	-181.4	158.9	139.8	19.15	8.300	
3,900.0	3,878.2	3,898.7	3,878.2	13.8	12.5	131.84	190.3	-181.4	167.4	147.4	20.01	8.367	
4,000.0	3,977.3	3,997.8	3,977.3	14.2	12.5	135.00	190.3	-181.4	176.5	155.6	20.87	8.455	
4,100.0	4,076.4	4,097.0	4,076.4	14.6	12.6	137.85	190.3	-181.4	186.0	164.3	21.73	8.560	
4,200.0	4,175.6	4,196.1	4,175.6	15.0	12.7	140.41	190.3	-181.4	196.0	173.4	22.57	8.681	
4,300.0	4,274.7	4,295.2	4,274.7	15.4	12.8	142.73	190.3	-181.4	206.3	182.9	23.40	8.816	
4,400.0	4,373.8	4,394.4	4,373.8	15.9	12.8	144.82	190.3	-181.4	216.9	192.7	24.20	8.961	
4,500.0	4,473.0	4,493.5	4,473.0	16.3	12.9	146.71	190.3	-181.4	227.7	202.8	24.99	9.115	
4,600.0	4,572.1	4,592.7	4,572.1	16.7	13.0	148.44	190.3	-181.4	238.8	213.1	25.75	9.275	
4,700.0	4,671.3	4,691.8	4,671.3	17.1	13.1	150.00	190.3	-181.4	250.1	223.6	26.50	9.439	
4,800.0	4,770.4	4,790.9	4,770.4	17.5	13.1	151.44	190.3	-181.4	261.6	234.4	27.23	9.606	

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 704H - 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
4,900.0	4,869.5	4,890.1	4,869.5	17.9	13.2	152.75	190.3	-181.4	273.2	245.2	27.95	9.774		
5,000.0	4,968.7	4,989.2	4,968.7	18.3	13.3	153.95	190.3	-181.4	284.9	256.3	28.65	9.944		
5,100.0	5,067.8	5,088.3	5,067.8	18.8	13.4	155.06	190.3	-181.4	296.8	267.4	29.35	10.113		
5,200.0	5,166.9	5,187.5	5,166.9	19.2	13.4	156.09	190.3	-181.4	308.7	278.7	30.03	10.281		
5,300.0	5,266.1	5,286.6	5,266.1	19.6	13.5	157.04	190.3	-181.4	320.8	290.1	30.71	10.447		
5,400.0	5,365.2	5,385.7	5,365.2	20.0	13.6	157.92	190.3	-181.4	332.9	301.5	31.37	10.612		
5,500.0	5,464.4	5,484.9	5,464.4	20.4	13.7	158.73	190.3	-181.4	345.1	313.1	32.03	10.774		
5,600.0	5,563.5	5,584.0	5,563.5	20.9	13.7	159.50	190.3	-181.4	357.4	324.7	32.68	10.934		
5,700.0	5,662.6	5,683.2	5,662.6	21.3	13.8	160.21	190.3	-181.4	369.7	336.4	33.33	11.092		
5,787.0	5,748.8	5,769.4	5,748.8	21.6	13.9	160.79	190.3	-181.4	380.5	346.6	33.88	11.228		
5,800.0	5,761.8	5,782.3	5,761.8	21.7	13.9	160.88	190.3	-181.4	382.1	348.1	33.96	11.250		
5,900.0	5,861.0	5,881.6	5,861.0	22.1	14.0	161.49	190.3	-181.4	393.4	358.8	34.60	11.371		
6,000.0	5,960.5	5,981.0	5,960.5	22.5	14.0	161.98	190.3	-181.4	403.2	368.0	35.19	11.458		
6,100.0	6,060.1	6,080.7	6,060.1	22.9	14.1	162.37	190.3	-181.4	411.3	375.6	35.75	11.507		
6,200.0	6,159.9	6,180.4	6,159.9	23.3	14.2	162.67	190.3	-181.4	417.8	381.6	36.27	11.520		
6,300.0	6,259.8	6,280.3	6,259.8	23.6	14.3	162.89	190.3	-181.4	422.7	385.9	36.76	11.499		
6,400.0	6,359.7	6,380.3	6,359.7	23.9	14.3	163.03	190.3	-181.4	425.9	388.7	37.20	11.448		
6,500.0	6,459.7	6,480.2	6,459.7	24.2	14.4	163.10	190.3	-181.4	427.4	389.8	37.57	11.376		
6,540.3	6,500.0	6,520.5	6,500.0	24.2	14.4	89.40	190.3	-181.4	427.5	389.9	37.65	11.356		
6,600.0	6,559.7	6,580.2	6,559.7	24.2	14.5	89.40	190.3	-181.4	427.5	389.8	37.70	11.341		
6,700.0	6,659.7	6,680.2	6,659.7	24.3	14.6	89.40	190.3	-181.4	427.5	389.7	37.80	11.309		
6,800.0	6,759.7	6,780.2	6,759.7	24.3	14.6	89.40	190.3	-181.4	427.5	389.6	37.91	11.277		
6,900.0	6,859.7	6,880.2	6,859.7	24.3	14.7	89.40	190.3	-181.4	427.5	389.5	38.01	11.246		
7,000.0	6,959.7	6,980.2	6,959.7	24.4	14.8	89.40	190.3	-181.4	427.5	389.4	38.12	11.214		
7,100.0	7,059.7	7,080.2	7,059.7	24.4	14.9	89.40	190.3	-181.4	427.5	389.3	38.23	11.183		
7,200.0	7,159.7	7,180.2	7,159.7	24.5	15.0	89.40	190.3	-181.4	427.5	389.2	38.34	11.151		
7,300.0	7,259.7	7,280.2	7,259.7	24.5	15.0	89.40	190.3	-181.4	427.5	389.1	38.44	11.120		
7,400.0	7,359.7	7,380.2	7,359.7	24.5	15.1	89.40	190.3	-181.4	427.5	388.9	38.55	11.089		
7,500.0	7,459.7	7,480.2	7,459.7	24.6	15.2	89.40	190.3	-181.4	427.5	388.8	38.66	11.058		
7,600.0	7,559.7	7,580.2	7,559.7	24.6	15.3	89.40	190.3	-181.4	427.5	388.7	38.77	11.027		
7,700.0	7,659.7	7,680.2	7,659.7	24.7	15.3	89.40	190.3	-181.4	427.5	388.6	38.88	10.996		
7,800.0	7,759.7	7,780.2	7,759.7	24.7	15.4	89.40	190.3	-181.4	427.5	388.5	38.99	10.965		
7,900.0	7,859.7	7,880.2	7,859.7	24.7	15.5	89.40	190.3	-181.4	427.5	388.4	39.10	10.934		
8,000.0	7,959.7	7,980.2	7,959.7	24.8	15.6	89.40	190.3	-181.4	427.5	388.3	39.21	10.903		
8,100.0	8,059.7	8,080.2	8,059.7	24.8	15.7	89.40	190.3	-181.4	427.5	388.2	39.32	10.872		
8,200.0	8,159.7	8,180.2	8,159.7	24.9	15.7	89.40	190.3	-181.4	427.5	388.1	39.43	10.842		
8,300.0	8,259.7	8,280.2	8,259.7	24.9	15.8	89.40	190.3	-181.4	427.5	388.0	39.54	10.811		
8,400.0	8,359.7	8,380.2	8,359.7	24.9	15.9	89.40	190.3	-181.4	427.5	387.8	39.65	10.781		
8,500.0	8,459.7	8,480.2	8,459.7	25.0	16.0	89.40	190.3	-181.4	427.5	387.7	39.77	10.750		
8,600.0	8,559.7	8,580.2	8,559.7	25.0	16.0	89.40	190.3	-181.4	427.5	387.6	39.88	10.720		
8,700.0	8,659.7	8,680.2	8,659.7	25.1	16.1	89.40	190.3	-181.4	427.5	387.5	39.99	10.690		
8,800.0	8,759.7	8,780.2	8,759.7	25.1	16.2	89.40	190.3	-181.4	427.5	387.4	40.10	10.660		
8,900.0	8,859.7	8,880.2	8,859.7	25.1	16.3	89.40	190.3	-181.4	427.5	387.3	40.22	10.630		
9,000.0	8,959.7	8,980.2	8,959.7	25.2	16.4	89.40	190.3	-181.4	427.5	387.2	40.33	10.600		
9,100.0	9,059.7	9,080.2	9,059.7	25.2	16.4	89.40	190.3	-181.4	427.5	387.1	40.45	10.570		
9,200.0	9,159.7	9,180.2	9,159.7	25.3	16.5	89.40	190.3	-181.4	427.5	386.9	40.56	10.540		
9,300.0	9,259.7	9,280.2	9,259.7	25.3	16.6	89.40	190.3	-181.4	427.5	386.8	40.67	10.510		
9,400.0	9,359.7	9,380.2	9,359.7	25.4	16.7	89.40	190.3	-181.4	427.5	386.7	40.79	10.480		
9,500.0	9,459.7	9,480.2	9,459.7	25.4	16.7	89.40	190.3	-181.4	427.5	386.6	40.91	10.451		
9,600.0	9,559.7	9,580.2	9,559.7	25.5	16.8	89.40	190.3	-181.4	427.5	386.5	41.02	10.421		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 704H - 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)					
9,700.0	9,659.7	9,680.2	9,659.7	25.5	16.9	89.40	190.3	-181.4	427.5	386.4	41.14	10.392	
9,800.0	9,759.7	9,780.2	9,759.7	25.5	17.0	89.40	190.3	-181.4	427.5	386.2	41.25	10.363	
9,900.0	9,859.7	9,880.2	9,859.7	25.6	17.1	89.40	190.3	-181.4	427.5	386.1	41.37	10.334	
10,000.0	9,959.7	9,980.2	9,959.7	25.6	17.1	89.40	190.3	-181.4	427.5	386.0	41.49	10.304	
10,100.0	10,059.7	10,080.2	10,059.7	25.7	17.2	89.40	190.3	-181.4	427.5	385.9	41.60	10.275	
10,200.0	10,159.7	10,180.2	10,159.7	25.7	17.3	89.40	190.3	-181.4	427.5	385.8	41.72	10.246	
10,300.0	10,259.7	10,280.2	10,259.7	25.8	17.4	89.40	190.3	-181.4	427.5	385.7	41.84	10.218	
10,400.0	10,359.7	10,380.2	10,359.7	25.8	17.4	89.40	190.3	-181.4	427.5	385.5	41.96	10.189	
10,500.0	10,459.7	10,480.2	10,459.7	25.9	17.5	89.40	190.3	-181.4	427.5	385.4	42.08	10.160	
10,600.0	10,559.7	10,580.2	10,559.7	25.9	17.6	89.40	190.3	-181.4	427.5	385.3	42.19	10.132	
10,700.0	10,659.7	10,680.2	10,659.7	25.9	17.7	89.40	190.3	-181.4	427.5	385.2	42.31	10.103	
10,800.0	10,759.7	10,780.2	10,759.7	26.0	17.8	89.40	190.3	-181.4	427.5	385.1	42.43	10.075	
10,900.0	10,859.7	10,880.2	10,859.7	26.0	17.8	89.40	190.3	-181.4	427.5	384.9	42.55	10.046	
11,000.0	10,959.7	10,980.2	10,959.7	26.1	17.9	89.40	190.3	-181.4	427.5	384.8	42.67	10.018	
11,100.0	11,059.7	11,080.2	11,059.7	26.1	18.0	89.40	190.3	-181.4	427.5	384.7	42.79	9.990	
11,200.0	11,159.7	11,180.2	11,159.7	26.2	18.1	89.40	190.3	-181.4	427.5	384.6	42.91	9.962	
11,300.0	11,259.7	11,280.2	11,259.7	26.2	18.2	89.40	190.3	-181.4	427.5	384.5	43.03	9.934	
11,400.0	11,359.7	11,380.2	11,359.7	26.3	18.2	89.40	190.3	-181.4	427.5	384.3	43.15	9.906	
11,500.0	11,459.7	11,480.2	11,459.7	26.3	18.3	89.40	190.3	-181.4	427.5	384.2	43.28	9.879	
11,600.0	11,559.7	11,580.2	11,559.7	26.4	18.4	89.40	190.3	-181.4	427.5	384.1	43.40	9.851	
11,700.0	11,659.7	11,680.2	11,659.7	26.4	18.5	89.40	190.3	-181.4	427.5	384.0	43.52	9.823	
11,746.8	11,706.5	11,727.0	11,706.5	26.4	18.5	89.40	190.3	-181.4	427.5	383.9	43.57	9.813	
11,750.0	11,709.7	11,730.2	11,709.7	26.4	18.5	-90.28	190.3	-181.4	427.5	383.9	43.57	9.812	
11,775.0	11,734.7	11,755.2	11,734.7	26.4	18.5	-90.39	190.3	-181.4	427.5	383.9	43.57	9.812	
11,800.0	11,759.6	11,780.1	11,759.6	26.4	18.5	-90.67	190.3	-181.4	427.5	384.0	43.54	9.819	
11,825.0	11,784.4	11,804.9	11,784.4	26.4	18.6	-91.12	190.3	-181.4	427.6	384.1	43.49	9.831	
11,850.0	11,808.9	11,829.4	11,808.9	26.3	18.6	-91.72	190.3	-181.4	427.7	384.3	43.42	9.851	
11,875.0	11,833.2	11,853.7	11,833.2	26.3	18.6	-92.47	190.3	-181.4	427.9	384.6	43.32	9.879	
11,900.0	11,857.1	11,877.6	11,857.1	26.2	18.6	-93.36	190.3	-181.4	428.3	385.1	43.19	9.916	
11,925.0	11,880.6	11,901.1	11,880.6	26.2	18.6	-94.35	190.3	-181.4	428.9	385.9	43.05	9.964	
11,950.0	11,903.6	11,925.6	11,905.1	26.2	18.6	-95.48	190.0	-181.4	429.8	386.9	42.87	10.025	
11,975.0	11,926.1	11,951.4	11,930.8	26.1	18.6	-96.66	188.5	-181.4	430.9	388.2	42.70	10.090	
12,000.0	11,948.0	11,977.7	11,957.0	26.1	18.6	-97.82	185.5	-181.4	432.2	389.6	42.55	10.158	
12,025.0	11,969.2	12,004.7	11,983.6	26.1	18.5	-98.98	180.9	-181.4	433.7	391.3	42.41	10.225	
12,050.0	11,989.7	12,032.4	12,010.6	26.0	18.5	-100.13	174.7	-181.3	435.3	393.0	42.30	10.291	
12,075.0	12,009.5	12,060.9	12,037.8	26.0	18.4	-101.26	166.7	-181.3	437.2	394.9	42.22	10.354	
12,100.0	12,028.4	12,090.1	12,065.3	26.0	18.4	-102.38	156.7	-181.2	439.1	396.9	42.18	10.410	
12,125.0	12,046.4	12,120.1	12,092.8	26.0	18.3	-103.47	144.8	-181.2	441.2	399.0	42.19	10.457	
12,150.0	12,063.5	12,150.9	12,120.3	25.9	18.2	-104.54	130.8	-181.1	443.4	401.1	42.25	10.494	
12,175.0	12,079.6	12,182.6	12,147.5	25.9	18.2	-105.57	114.6	-181.0	445.6	403.2	42.37	10.517	
12,200.0	12,094.7	12,215.2	12,174.3	25.9	18.1	-106.57	96.0	-180.9	447.9	405.3	42.55	10.526	
12,225.0	12,108.7	12,248.7	12,200.5	25.9	18.1	-107.53	75.1	-180.8	450.2	407.4	42.80	10.519	
12,250.0	12,121.6	12,283.1	12,225.8	25.9	18.0	-108.43	51.8	-180.6	452.4	409.3	43.11	10.495	
12,275.0	12,133.4	12,318.5	12,249.9	25.9	18.0	-109.29	26.0	-180.5	454.5	411.1	43.48	10.455	
12,300.0	12,144.0	12,354.7	12,272.6	25.9	17.9	-110.07	-2.2	-180.3	456.6	412.7	43.90	10.400	
12,325.0	12,153.4	12,391.8	12,293.6	25.9	17.9	-110.79	-32.8	-180.1	458.5	414.1	44.38	10.332	
12,350.0	12,161.6	12,429.7	12,312.5	25.9	17.9	-111.42	-65.7	-179.9	460.2	415.3	44.88	10.253	
12,375.0	12,168.5	12,468.3	12,329.0	25.9	17.9	-111.97	-100.6	-179.7	461.7	416.3	45.41	10.168	
12,400.0	12,174.2	12,507.6	12,342.8	25.9	17.9	-112.42	-137.3	-179.5	463.0	417.0	45.94	10.078	
12,425.0	12,178.6	12,547.4	12,353.7	25.9	17.9	-112.78	-175.6	-179.3	463.9	417.5	46.45	9.988	
12,450.0	12,181.7	12,587.5	12,361.5	26.0	17.9	-113.02	-215.0	-179.1	464.6	417.7	46.94	9.899	

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 704H - 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		
12,475.0	12,183.5	12,628.0	12,365.9	26.0	17.9	-113.15	-255.1	-178.8	465.0	417.6	47.37	9.815		
12,496.8	12,184.0	12,662.0	12,367.0	26.0	18.0	-113.17	-289.2	-178.6	465.0	417.4	47.69	9.751		
12,500.0	12,184.0	12,665.3	12,367.0	26.0	18.0	-113.17	-292.4	-178.6	465.0	417.3	47.71	9.747		
12,600.0	12,184.0	12,765.3	12,367.0	26.2	18.2	-113.17	-392.4	-178.1	465.1	416.7	48.33	9.623		
12,700.0	12,184.0	12,865.3	12,367.0	26.4	18.4	-113.17	-492.4	-177.5	465.1	416.1	49.01	9.489		
12,800.0	12,184.0	12,965.3	12,367.0	26.6	18.6	-113.17	-592.4	-176.9	465.1	415.3	49.75	9.348		
12,900.0	12,184.0	13,065.3	12,367.0	26.8	18.9	-113.17	-692.4	-176.3	465.1	414.5	50.55	9.201		
13,000.0	12,184.0	13,165.3	12,367.0	27.1	19.3	-113.17	-792.4	-175.7	465.1	413.7	51.40	9.049		
13,100.0	12,184.0	13,265.3	12,367.0	27.4	19.7	-113.17	-892.4	-175.2	465.1	412.8	52.30	8.892		
13,200.0	12,184.0	13,365.3	12,367.0	27.8	20.1	-113.17	-992.4	-174.6	465.1	411.8	53.25	8.733		
13,300.0	12,184.0	13,465.3	12,367.0	28.2	20.6	-113.17	-1,092.4	-174.0	465.1	410.8	54.25	8.573		
13,400.0	12,184.0	13,565.3	12,367.0	28.6	21.1	-113.17	-1,192.4	-173.4	465.1	409.8	55.30	8.411		
13,500.0	12,184.0	13,665.3	12,367.0	29.0	21.7	-113.17	-1,292.4	-172.9	465.1	408.7	56.38	8.249		
13,600.0	12,184.0	13,765.3	12,367.0	29.4	22.3	-113.17	-1,392.4	-172.3	465.1	407.6	57.51	8.088		
13,700.0	12,184.0	13,865.3	12,367.0	29.9	22.9	-113.17	-1,492.4	-171.7	465.1	406.5	58.67	7.928		
13,800.0	12,184.0	13,965.3	12,367.0	30.4	23.5	-113.17	-1,592.4	-171.1	465.1	405.3	59.87	7.769		
13,900.0	12,184.0	14,065.3	12,367.0	30.9	24.2	-113.17	-1,692.4	-170.5	465.1	404.0	61.10	7.613		
14,000.0	12,184.0	14,165.3	12,367.0	31.4	24.8	-113.17	-1,792.4	-170.0	465.1	402.8	62.36	7.459		
14,100.0	12,184.0	14,265.3	12,367.0	32.0	25.5	-113.17	-1,892.4	-169.4	465.1	401.5	63.65	7.308		
14,200.0	12,184.0	14,365.3	12,367.0	32.6	26.2	-113.17	-1,992.4	-168.8	465.2	400.2	64.96	7.160		
14,300.0	12,184.0	14,465.3	12,367.0	33.2	27.0	-113.17	-2,092.4	-168.2	465.2	398.9	66.30	7.016		
14,400.0	12,184.0	14,565.3	12,367.0	33.8	27.7	-113.17	-2,192.4	-167.7	465.2	397.5	67.67	6.874		
14,500.0	12,184.0	14,665.3	12,367.0	34.4	28.5	-113.17	-2,292.4	-167.1	465.2	396.1	69.06	6.736		
14,600.0	12,184.0	14,765.3	12,367.0	35.0	29.2	-113.17	-2,392.4	-166.5	465.2	394.7	70.47	6.601		
14,700.0	12,184.0	14,865.3	12,367.0	35.7	30.0	-113.17	-2,492.4	-165.9	465.2	393.3	71.90	6.470		
14,800.0	12,184.0	14,965.3	12,367.0	36.4	30.8	-113.17	-2,592.4	-165.4	465.2	391.8	73.35	6.342		
14,900.0	12,184.0	15,065.3	12,367.0	37.0	31.6	-113.17	-2,692.4	-164.8	465.2	390.4	74.81	6.218		
15,000.0	12,184.0	15,165.3	12,367.0	37.7	32.4	-113.16	-2,792.4	-164.2	465.2	388.9	76.30	6.097		
15,100.0	12,184.0	15,265.3	12,367.0	38.4	33.2	-113.16	-2,892.4	-163.6	465.2	387.4	77.79	5.980		
15,200.0	12,184.0	15,365.3	12,367.0	39.2	34.1	-113.16	-2,992.3	-163.0	465.2	385.9	79.31	5.866		
15,300.0	12,184.0	15,465.3	12,367.0	39.9	34.9	-113.16	-3,092.3	-162.5	465.2	384.4	80.84	5.755		
15,400.0	12,184.0	15,565.3	12,367.0	40.6	35.7	-113.16	-3,192.3	-161.9	465.2	382.9	82.38	5.648		
15,500.0	12,184.0	15,665.3	12,367.0	41.4	36.6	-113.16	-3,292.3	-161.3	465.2	381.3	83.93	5.543		
15,600.0	12,184.0	15,765.3	12,367.0	42.1	37.4	-113.16	-3,392.3	-160.7	465.2	379.7	85.50	5.442		
15,700.0	12,184.0	15,865.3	12,367.0	42.9	38.3	-113.16	-3,492.3	-160.2	465.2	378.2	87.07	5.343		
15,800.0	12,184.0	15,965.3	12,367.0	43.7	39.2	-113.16	-3,592.3	-159.6	465.3	376.6	88.66	5.248		
15,900.0	12,184.0	16,065.3	12,367.0	44.4	40.0	-113.16	-3,692.3	-159.0	465.3	375.0	90.26	5.155		
16,000.0	12,184.0	16,165.3	12,367.0	45.2	40.9	-113.16	-3,792.3	-158.4	465.3	373.4	91.86	5.065		
16,100.0	12,184.0	16,265.3	12,367.0	46.0	41.8	-113.16	-3,892.3	-157.9	465.3	371.8	93.48	4.977		
16,200.0	12,184.0	16,365.3	12,367.0	46.8	42.6	-113.16	-3,992.3	-157.3	465.3	370.2	95.10	4.892		
16,300.0	12,184.0	16,465.3	12,367.0	47.6	43.5	-113.16	-4,092.3	-156.7	465.3	368.6	96.73	4.810		
16,400.0	12,184.0	16,565.3	12,367.0	48.4	44.4	-113.16	-4,192.3	-156.1	465.3	366.9	98.37	4.730		
16,500.0	12,184.0	16,665.3	12,367.0	49.3	45.3	-113.16	-4,292.3	-155.5	465.3	365.3	100.02	4.652		
16,600.0	12,184.0	16,765.3	12,367.0	50.1	46.2	-113.16	-4,392.3	-155.0	465.3	363.6	101.68	4.576		
16,700.0	12,184.0	16,865.3	12,367.0	50.9	47.1	-113.16	-4,492.3	-154.4	465.3	362.0	103.34	4.503		
16,800.0	12,184.0	16,965.3	12,367.0	51.7	48.0	-113.16	-4,592.3	-153.8	465.3	360.3	105.00	4.431		
16,900.0	12,184.0	17,065.3	12,367.0	52.6	48.9	-113.16	-4,692.3	-153.2	465.3	358.6	106.68	4.362		
17,000.0	12,184.0	17,165.3	12,367.0	53.4	49.8	-113.16	-4,792.3	-152.7	465.3	357.0	108.36	4.294		
17,100.0	12,184.0	17,265.3	12,367.0	54.3	50.7	-113.16	-4,892.3	-152.1	465.3	355.3	110.04	4.229		
17,200.0	12,184.0	17,365.3	12,367.0	55.1	51.6	-113.16	-4,992.3	-151.5	465.3	353.6	111.73	4.165		

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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 704H - OWB - PWP0												Offset Site Error:	0.0 usft
Survey Program: 0-r.5 MWD+IFR1												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		No-Go Distance (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,300.0	12,184.0	17,465.3	12,367.0	56.0	52.5	-113.16	-5,092.3	-150.9	465.3	351.9	113.42	4.103	
17,400.0	12,184.0	17,565.3	12,367.0	56.8	53.4	-113.16	-5,192.3	-150.3	465.4	350.2	115.12	4.042	
17,500.0	12,184.0	17,665.3	12,367.0	57.7	54.3	-113.16	-5,292.3	-149.8	465.4	348.5	116.83	3.983	
17,600.0	12,184.0	17,765.3	12,367.0	58.5	55.2	-113.16	-5,392.3	-149.2	465.4	346.8	118.53	3.926	
17,700.0	12,184.0	17,865.3	12,367.0	59.4	56.2	-113.16	-5,492.3	-148.6	465.4	345.1	120.25	3.870	
17,800.0	12,184.0	17,965.3	12,367.0	60.3	57.1	-113.16	-5,592.3	-148.0	465.4	343.4	121.96	3.816	
17,900.0	12,184.0	18,065.3	12,367.0	61.1	58.0	-113.16	-5,692.3	-147.5	465.4	341.7	123.68	3.763	
18,000.0	12,184.0	18,165.3	12,367.0	62.0	58.9	-113.15	-5,792.3	-146.9	465.4	340.0	125.41	3.711	
18,100.0	12,184.0	18,265.3	12,367.0	62.9	59.8	-113.15	-5,892.3	-146.3	465.4	338.3	127.13	3.661	
18,200.0	12,184.0	18,365.3	12,367.0	63.8	60.8	-113.15	-5,992.3	-145.7	465.4	336.5	128.86	3.612	
18,300.0	12,184.0	18,465.3	12,367.0	64.7	61.7	-113.15	-6,092.3	-145.2	465.4	334.8	130.60	3.564	
18,400.0	12,184.0	18,565.3	12,367.0	65.5	62.6	-113.15	-6,192.3	-144.6	465.4	333.1	132.34	3.517	
18,500.0	12,184.0	18,665.3	12,367.0	66.4	63.5	-113.15	-6,292.3	-144.0	465.4	331.3	134.08	3.471	
18,600.0	12,184.0	18,765.3	12,367.0	67.3	64.5	-113.15	-6,392.3	-143.4	465.4	329.6	135.82	3.427	
18,700.0	12,184.0	18,865.3	12,367.0	68.2	65.4	-113.15	-6,492.3	-142.8	465.4	327.9	137.56	3.383	
18,800.0	12,184.0	18,965.3	12,367.0	69.1	66.3	-113.15	-6,592.3	-142.3	465.4	326.1	139.31	3.341	
18,900.0	12,184.0	19,065.3	12,367.0	70.0	67.2	-113.15	-6,692.3	-141.7	465.4	324.4	141.06	3.300	
19,000.0	12,184.0	19,165.3	12,367.0	70.9	68.2	-113.15	-6,792.3	-141.1	465.5	322.6	142.82	3.259	
19,100.0	12,184.0	19,265.3	12,367.0	71.8	69.1	-113.15	-6,892.3	-140.5	465.5	320.9	144.57	3.220	
19,200.0	12,184.0	19,365.3	12,367.0	72.7	70.0	-113.15	-6,992.3	-140.0	465.5	319.1	146.33	3.181	
19,300.0	12,184.0	19,465.3	12,367.0	73.6	71.0	-113.15	-7,092.3	-139.4	465.5	317.4	148.09	3.143	
19,400.0	12,184.0	19,565.3	12,367.0	74.5	71.9	-113.15	-7,192.3	-138.8	465.5	315.6	149.85	3.106	
19,416.6	12,184.0	19,581.9	12,367.0	74.6	72.1	-113.15	-7,208.9	-138.7	465.5	315.3	150.14	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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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	Highside	Offset Wellbore Centre	Distance	Between	Between	No-Go	Separation	Warning		
Measured	Vertical	Measured	Vertical	Reference	Offset	Toolface	+N/-S	+E/-W	Centres	Ellipses	Distance	Factor	
Depth	Depth	Depth	Depth	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
0.0	0.0	0.0	0.0	0.0	0.0	89.56	0.9	119.9	119.9	119.4	0.48	250.047	
100.0	100.0	100.0	100.0	1.2	1.2	89.56	0.9	119.9	119.9	117.0	2.87	41.818	
200.0	200.0	200.0	200.0	1.7	1.7	89.56	0.9	119.9	119.9	116.0	3.86	31.030	
300.0	300.0	300.0	300.0	2.1	2.1	89.56	0.9	119.9	119.9	115.3	4.63	25.874	
400.0	400.0	400.0	400.0	2.4	2.4	89.56	0.9	119.9	119.9	114.6	5.29	22.676	
500.0	500.0	500.0	500.0	2.7	2.7	89.56	0.9	119.9	119.9	114.0	5.87	20.436	
600.0	600.0	600.0	600.0	3.0	3.0	89.56	0.9	119.9	119.9	113.5	6.39	18.750	
700.0	700.0	700.0	700.0	3.2	3.2	89.56	0.9	119.9	119.9	113.0	6.88	17.421	
800.0	800.0	800.0	800.0	3.5	3.5	89.56	0.9	119.9	119.9	112.5	7.34	16.335	
900.0	900.0	900.0	900.0	3.7	3.7	89.56	0.9	119.9	119.9	112.1	7.77	15.427	
1,000.0	1,000.0	1,000.0	1,000.0	3.9	3.9	89.56	0.9	119.9	119.9	111.7	8.18	14.652	
1,100.0	1,100.0	1,100.0	1,100.0	4.1	4.1	89.56	0.9	119.9	119.9	111.3	8.58	13.979 CC, ES	
1,200.0	1,200.0	1,196.0	1,195.9	4.4	4.4	139.88	1.2	121.5	122.9	113.7	9.11	13.488 SF	
1,300.0	1,299.8	1,291.4	1,291.3	4.7	4.7	140.76	2.2	126.1	131.8	122.2	9.63	13.689	
1,350.0	1,349.7	1,338.7	1,338.5	4.8	4.8	141.33	2.9	129.6	138.5	128.7	9.82	14.101	
1,400.0	1,399.5	1,385.8	1,385.3	4.9	5.0	150.63	3.8	133.8	146.7	136.7	10.02	14.650	
1,500.0	1,498.9	1,478.5	1,477.4	5.1	5.3	163.55	6.0	144.3	168.0	157.5	10.54	15.939	
1,528.5	1,527.2	1,504.6	1,503.3	5.2	5.4	166.19	6.7	147.8	175.2	164.6	10.66	16.440	
1,600.0	1,598.0	1,569.3	1,567.2	5.3	5.6	166.06	8.7	157.4	194.7	183.7	10.99	17.708	
1,700.0	1,697.2	1,658.5	1,655.0	5.6	5.9	165.76	11.9	173.0	224.4	212.8	11.52	19.477	
1,800.0	1,796.3	1,746.7	1,741.2	5.9	6.2	165.37	15.6	191.0	256.9	244.9	11.99	21.419	
1,900.0	1,895.4	1,840.8	1,833.1	6.2	6.4	165.00	19.8	211.4	290.6	278.0	12.54	23.173	
2,000.0	1,994.6	1,935.0	1,924.9	6.5	6.7	164.70	24.0	231.7	324.3	311.1	13.14	24.673	
2,100.0	2,093.7	2,029.1	2,016.7	6.9	7.1	164.46	28.2	252.0	358.0	344.2	13.77	25.995	
2,200.0	2,192.8	2,123.3	2,108.5	7.2	7.4	164.26	32.4	272.4	391.7	377.2	14.42	27.159	
2,300.0	2,292.0	2,217.4	2,200.4	7.6	7.8	164.09	36.6	292.7	425.3	410.3	15.09	28.188	
2,400.0	2,391.1	2,311.6	2,292.2	7.9	8.1	163.95	40.8	313.0	459.0	443.3	15.78	29.099	
2,500.0	2,490.2	2,405.7	2,384.0	8.3	8.5	163.83	45.0	333.3	492.8	476.3	16.48	29.908	
2,600.0	2,589.4	2,499.9	2,475.8	8.7	8.9	163.72	49.2	353.7	526.5	509.3	17.19	30.629	
2,700.0	2,688.5	2,594.0	2,567.7	9.0	9.3	163.62	53.4	374.0	560.2	542.2	17.91	31.272	
2,800.0	2,787.7	2,688.1	2,659.5	9.4	9.6	163.54	57.6	394.3	593.9	575.2	18.65	31.848	
2,900.0	2,886.8	2,782.3	2,751.3	9.8	10.0	163.47	61.8	414.6	627.6	608.2	19.39	32.367	
3,000.0	2,985.9	2,876.4	2,843.2	10.2	10.4	163.40	66.0	435.0	661.3	641.1	20.14	32.835	
3,100.0	3,085.1	2,970.6	2,935.0	10.6	10.8	163.34	70.2	455.3	695.0	674.1	20.90	33.258	
3,200.0	3,184.2	3,064.7	3,026.8	11.0	11.3	163.28	74.4	475.6	728.7	707.0	21.66	33.643	
3,300.0	3,283.3	3,158.9	3,118.6	11.4	11.7	163.23	78.6	495.9	762.4	740.0	22.43	33.992	
3,400.0	3,382.5	3,253.0	3,210.5	11.8	12.1	163.19	82.8	516.3	796.1	772.9	23.20	34.312	
3,500.0	3,481.6	3,347.2	3,302.3	12.2	12.5	163.14	87.0	536.6	829.8	805.9	23.98	34.604	
3,600.0	3,580.8	3,441.3	3,394.1	12.6	12.9	163.10	91.2	556.9	863.6	838.8	24.76	34.873	
3,700.0	3,679.9	3,535.4	3,486.0	13.0	13.3	163.07	95.4	577.3	897.3	871.7	25.55	35.120	
3,800.0	3,779.0	3,629.6	3,577.8	13.4	13.8	163.03	99.6	597.6	931.0	904.6	26.34	35.347	
3,900.0	3,878.2	3,723.7	3,669.6	13.8	14.2	163.00	103.8	617.9	964.7	937.6	27.13	35.558	
4,000.0	3,977.3	3,817.9	3,761.4	14.2	14.6	162.97	108.0	638.2	998.4	970.5	27.93	35.753	

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 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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		Rule Assigned:		Distance		No-Go		Separation		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)	Distance (usft)	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.52	0.8	89.9	89.9	89.4	0.48	187.475		
100.0	100.0	100.0	100.0	1.2	1.2	89.52	0.8	89.9	89.9	87.0	2.87	31.353		
200.0	200.0	200.0	200.0	1.7	1.7	89.52	0.8	89.9	89.9	86.0	3.86	23.265		
300.0	300.0	300.0	300.0	2.1	2.1	89.52	0.8	89.9	89.9	85.3	4.63	19.399		
400.0	400.0	400.0	400.0	2.4	2.4	89.52	0.8	89.9	89.9	84.6	5.29	17.001		
500.0	500.0	500.0	500.0	2.7	2.7	89.52	0.8	89.9	89.9	84.0	5.87	15.322		
600.0	600.0	600.0	600.0	3.0	3.0	89.52	0.8	89.9	89.9	83.5	6.39	14.058		
700.0	700.0	700.0	700.0	3.2	3.2	89.52	0.8	89.9	89.9	83.0	6.88	13.061		
800.0	800.0	800.0	800.0	3.5	3.5	89.52	0.8	89.9	89.9	82.5	7.34	12.248		
900.0	900.0	900.0	900.0	3.7	3.7	89.52	0.8	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	89.52	0.8	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	89.52	0.8	89.9	89.9	81.3	8.58	10.481 CC, ES		
1,200.0	1,200.0	1,197.6	1,197.6	4.4	4.4	139.52	1.8	91.2	92.5	83.4	9.08	10.194 SF		
1,300.0	1,299.8	1,294.7	1,294.6	4.7	4.7	139.50	5.0	94.9	100.4	90.9	9.56	10.503		
1,350.0	1,349.7	1,343.0	1,342.7	4.8	4.8	139.48	7.4	97.8	106.4	96.7	9.68	10.992		
1,400.0	1,399.5	1,390.7	1,390.2	4.9	4.8	148.17	10.0	101.2	113.7	103.9	9.78	11.624		
1,500.0	1,498.9	1,484.7	1,483.6	5.1	5.1	160.27	15.2	110.4	133.3	123.1	10.26	12.995		
1,528.5	1,527.2	1,511.2	1,509.9	5.2	5.2	162.77	16.6	113.5	140.1	129.8	10.37	13.512		
1,600.0	1,598.0	1,576.8	1,574.8	5.3	5.4	162.46	20.0	122.3	158.6	147.9	10.69	14.833		
1,700.0	1,697.2	1,670.7	1,667.4	5.6	5.7	162.18	24.9	136.9	186.5	175.3	11.18	16.671		
1,800.0	1,796.3	1,766.7	1,762.1	5.9	6.0	161.97	29.8	152.1	214.6	202.9	11.73	18.297		
1,900.0	1,895.4	1,862.6	1,856.7	6.2	6.3	161.81	34.7	167.3	242.8	230.5	12.30	19.739		
2,000.0	1,994.6	1,958.6	1,951.3	6.5	6.6	161.68	39.6	182.5	270.9	258.0	12.89	21.010		
2,100.0	2,093.7	2,054.5	2,045.9	6.9	6.9	161.57	44.6	197.6	299.1	285.6	13.51	22.132		
2,200.0	2,192.8	2,150.5	2,140.5	7.2	7.2	161.49	49.5	212.8	327.2	313.1	14.15	23.124		
2,300.0	2,292.0	2,246.4	2,235.1	7.6	7.6	161.41	54.4	228.0	355.4	340.6	14.81	24.002		
2,400.0	2,391.1	2,342.4	2,329.8	7.9	7.9	161.35	59.3	243.2	383.5	368.1	15.48	24.782		
2,500.0	2,490.2	2,438.3	2,424.4	8.3	8.3	161.30	64.3	258.4	411.7	395.5	16.16	25.476		
2,600.0	2,589.4	2,534.3	2,519.0	8.7	8.7	161.25	69.2	273.6	439.9	423.0	16.85	26.097		
2,700.0	2,688.5	2,630.2	2,613.6	9.0	9.1	161.21	74.1	288.7	468.0	450.4	17.56	26.653		
2,800.0	2,787.7	2,726.2	2,708.2	9.4	9.4	161.17	79.1	303.9	496.2	477.9	18.27	27.154		
2,900.0	2,886.8	2,822.2	2,802.8	9.8	9.8	161.14	84.0	319.1	524.3	505.3	18.99	27.605		
3,000.0	2,985.9	2,918.1	2,897.5	10.2	10.2	161.11	88.9	334.3	552.5	532.8	19.72	28.014		
3,100.0	3,085.1	3,014.1	2,992.1	10.6	10.6	161.09	93.8	349.5	580.6	560.2	20.46	28.385		
3,200.0	3,184.2	3,110.0	3,086.7	11.0	11.0	161.06	98.8	364.7	608.8	587.6	21.20	28.723		
3,300.0	3,283.3	3,206.0	3,181.3	11.4	11.4	161.04	103.7	379.8	637.0	615.0	21.94	29.032		
3,400.0	3,382.5	3,301.9	3,275.9	11.8	11.8	161.02	108.6	395.0	665.1	642.4	22.69	29.314		
3,500.0	3,481.6	3,397.9	3,370.5	12.2	12.2	161.00	113.5	410.2	693.3	669.8	23.44	29.573		
3,600.0	3,580.8	3,493.8	3,465.2	12.6	12.6	160.98	118.5	425.4	721.4	697.2	24.20	29.812		
3,700.0	3,679.9	3,589.8	3,559.8	13.0	13.0	160.97	123.4	440.6	749.6	724.6	24.96	30.032		
3,800.0	3,779.0	3,685.7	3,654.4	13.4	13.4	160.95	128.3	455.7	777.7	752.0	25.72	30.236		
3,900.0	3,878.2	3,781.7	3,749.0	13.8	13.8	160.94	133.3	470.9	805.9	779.4	26.49	30.424		
4,000.0	3,977.3	3,877.6	3,843.6	14.2	14.2	160.93	138.2	486.1	834.1	806.8	27.26	30.600		
4,100.0	4,076.4	3,973.6	3,938.2	14.6	14.6	160.92	143.1	501.3	862.2	834.2	28.03	30.763		
4,200.0	4,175.6	4,069.5	4,032.9	15.0	15.1	160.91	148.0	516.5	890.4	861.6	28.80	30.915		
4,300.0	4,274.7	4,165.5	4,127.5	15.4	15.5	160.90	153.0	531.7	918.5	889.0	29.58	31.057		
4,400.0	4,373.8	4,261.5	4,222.1	15.9	15.9	160.89	157.9	546.8	946.7	916.3	30.35	31.190		
4,500.0	4,473.0	4,357.4	4,316.7	16.3	16.3	160.88	162.8	562.0	974.9	943.7	31.13	31.314		

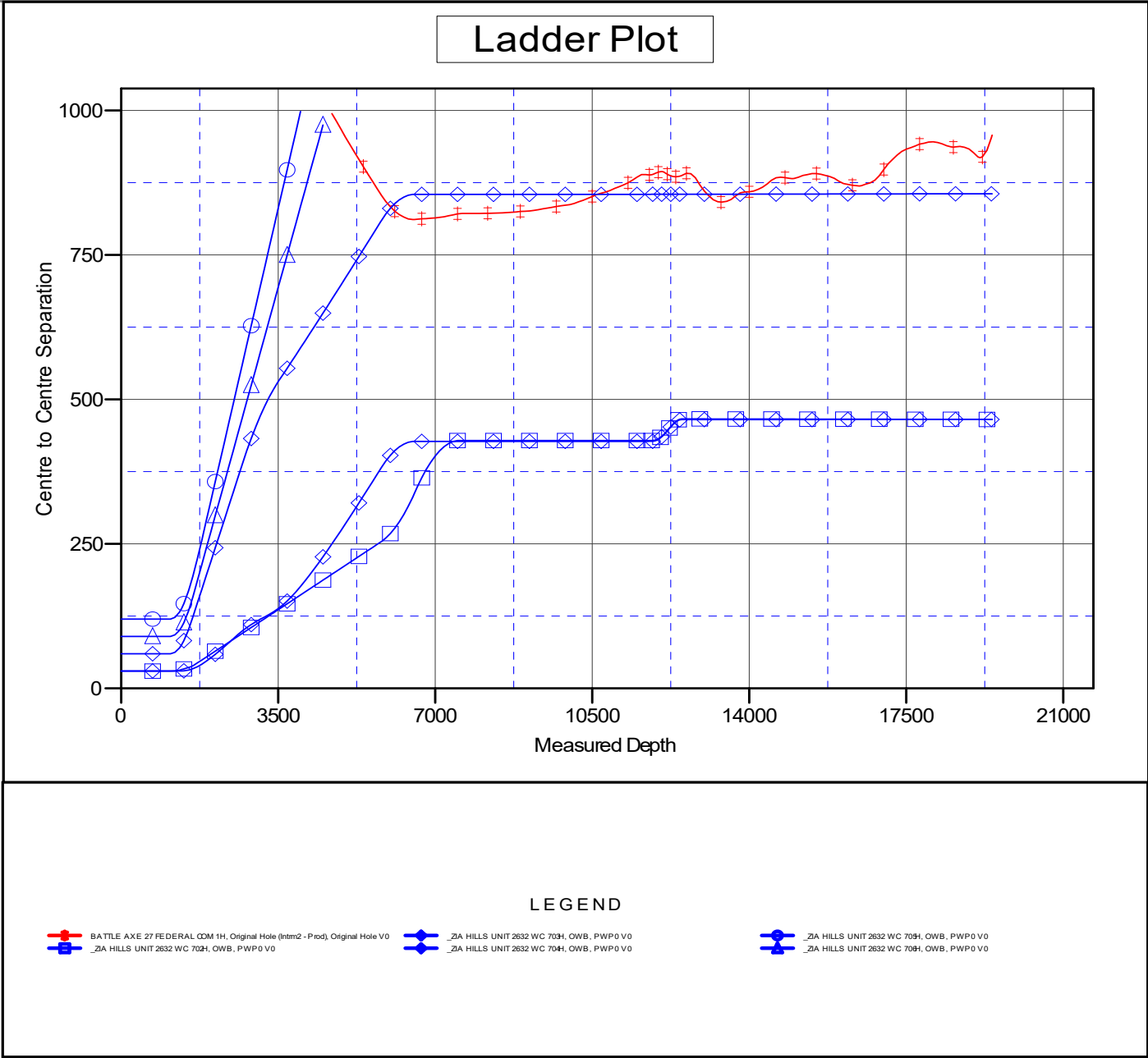
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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 701H	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

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 701H - Slot ZIA HILLS UN
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°

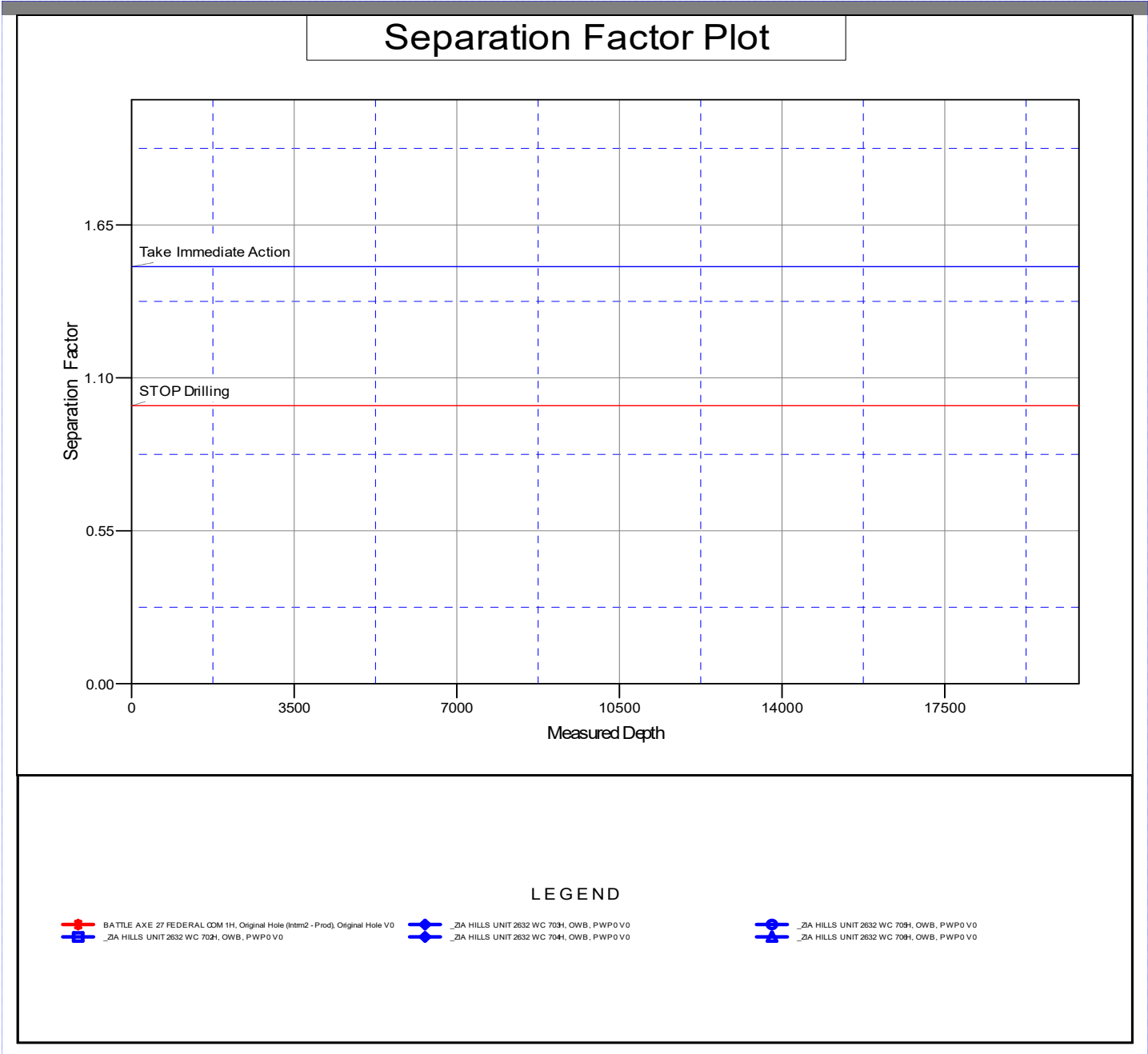


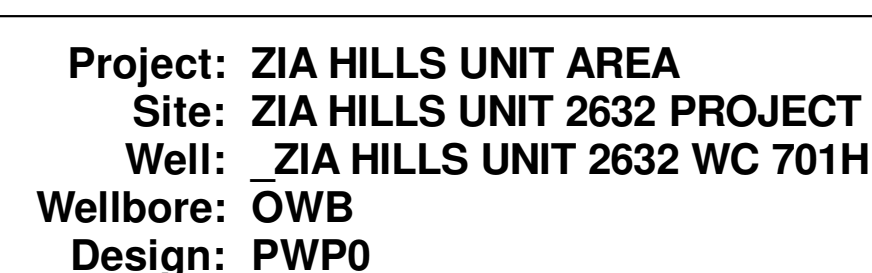
ConocoPhillips
Anticollision Report

Company:	DELAWARE BASIN EAST	Local Co-ordinate Reference:	Well _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UNIT2632 WC 701H
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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 701H	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

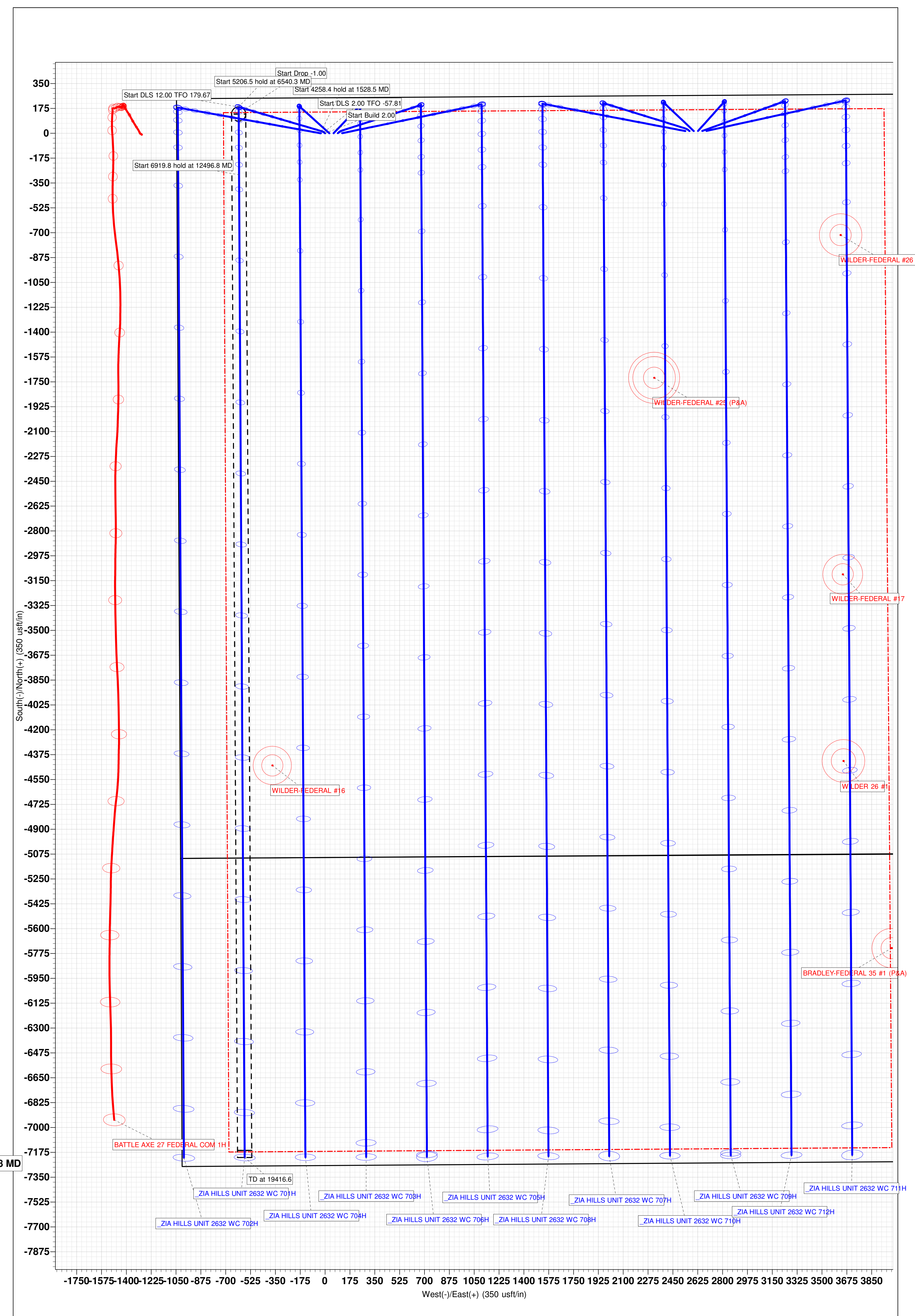
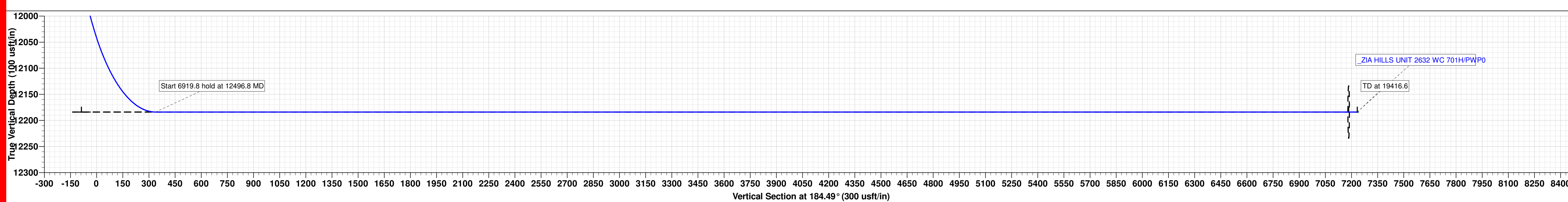
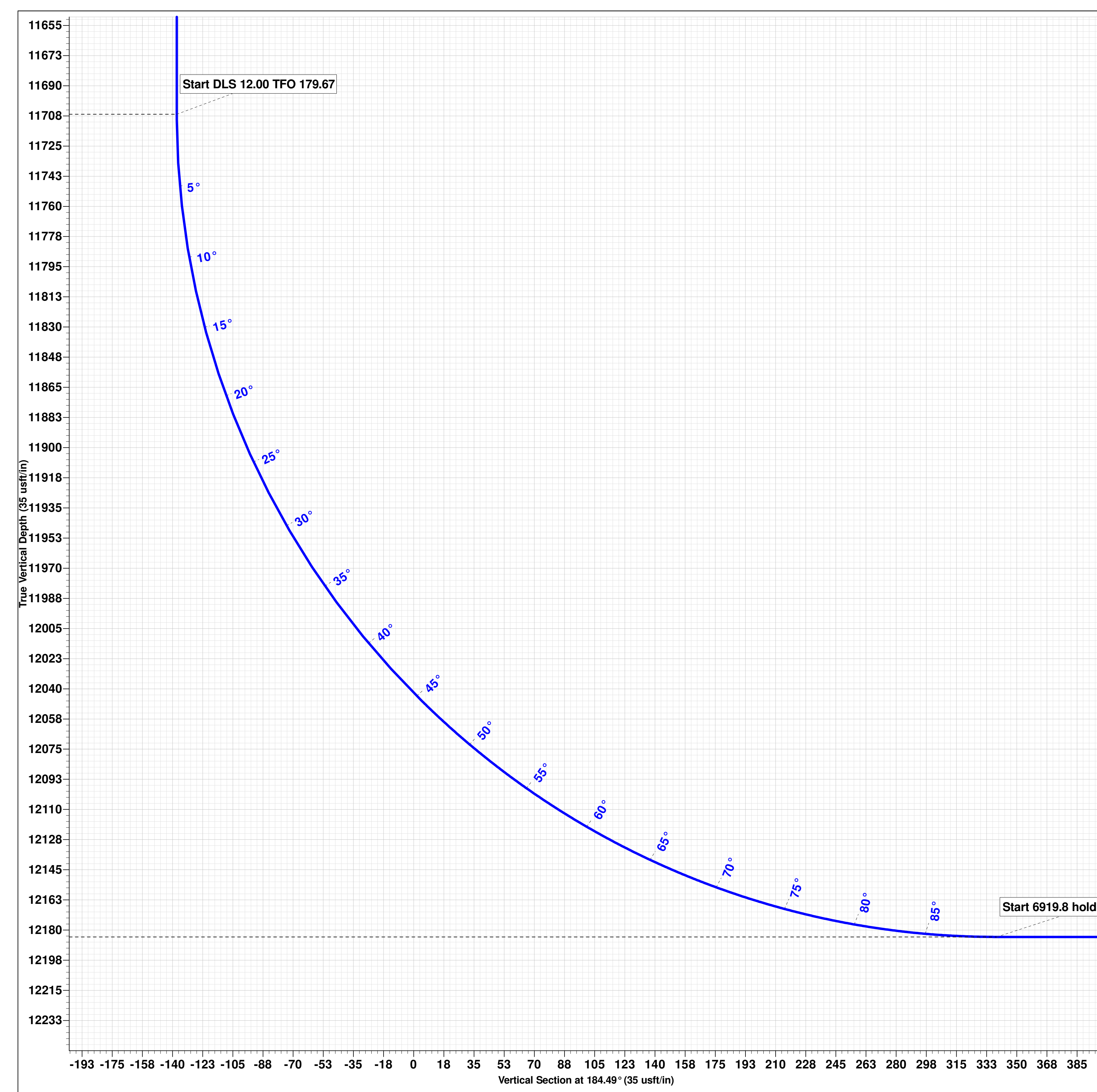
Reference Depths are relative to WELL @ 3125.0usft (Original Well Ele
Offset Depths are relative to Offset Datum
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: _ZIA HILLS UNIT 2632 WC 701H - Slot ZIA HILLS UN
Coordinate System is US State Plane 1927 (Exact solution), New Mexico East 30
Grid Convergence at Surface is: 0.36°





SECTION DETAILS									
	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0
	1100.0	0.00	0.00	0.0	0.0	0.0	100.00	0.00	0.0
	1350.0	5.00	310.00	1349.7	7.0	-8.4	2.00	310.00	-6.3
	1528.5	7.53	286.29	1527.2	15.3	-25.6	2.00	-57.81	-13.2
	5787.0	7.53	286.29	5748.8	171.9	-561.4	0.00	0.00	-127.4
	6540.3	0.00	0.00	6500.0	185.8	-608.9	1.00	180.00	-137.5
	11745.8	0.00	0.00	11705.5	185.8	-608.9	0.00	0.00	-137.5
	12496.8	90.00	179.67	12184.0	-291.7	-606.2	12.00	179.67	338.2
	19416.6	90.00	179.67	12184.0	-7211.3	-566.7	0.00	0.00	7233.6



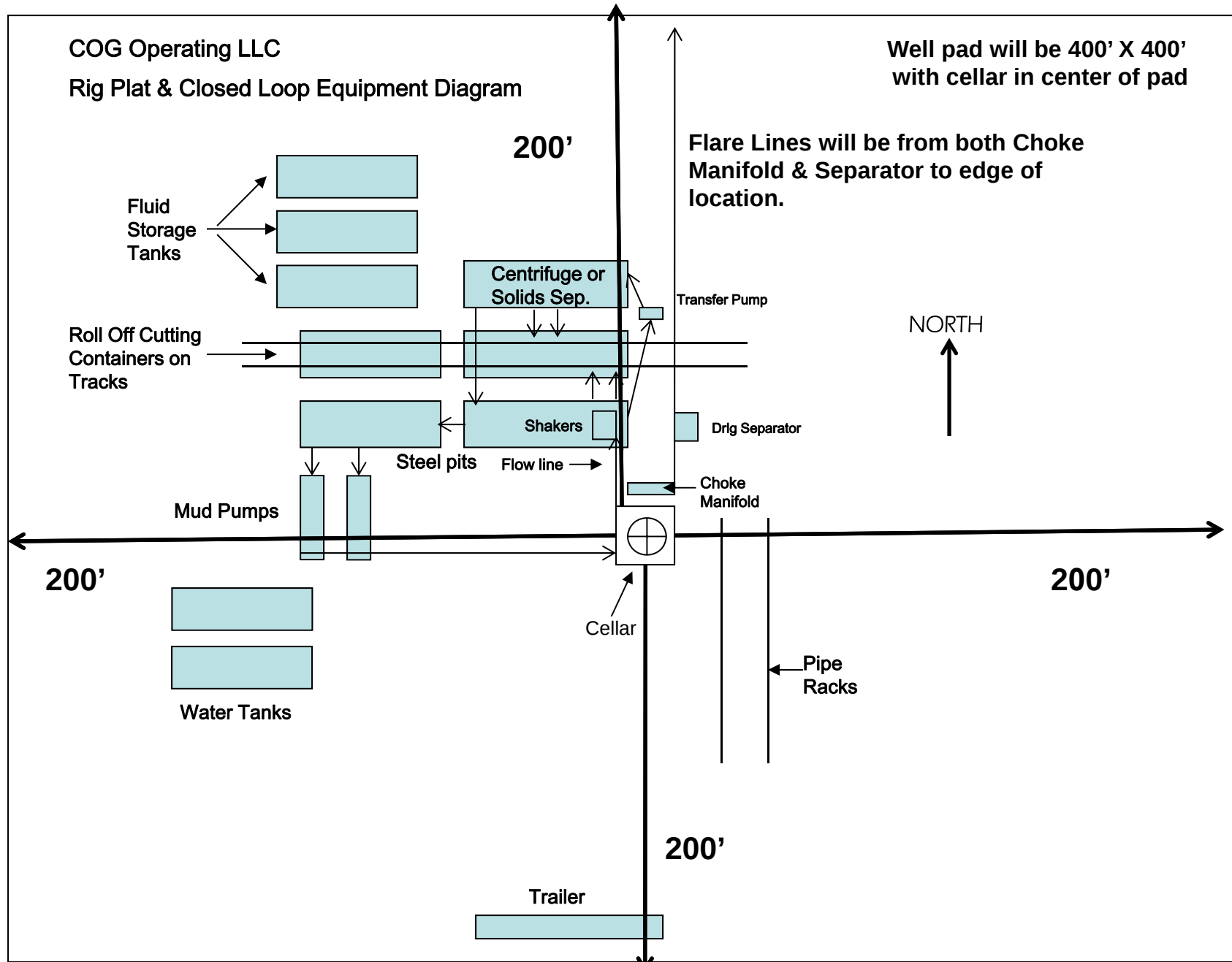


Exhibit 1

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

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

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: ConocoPhillips Company

OGRID: 217817

Date: 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

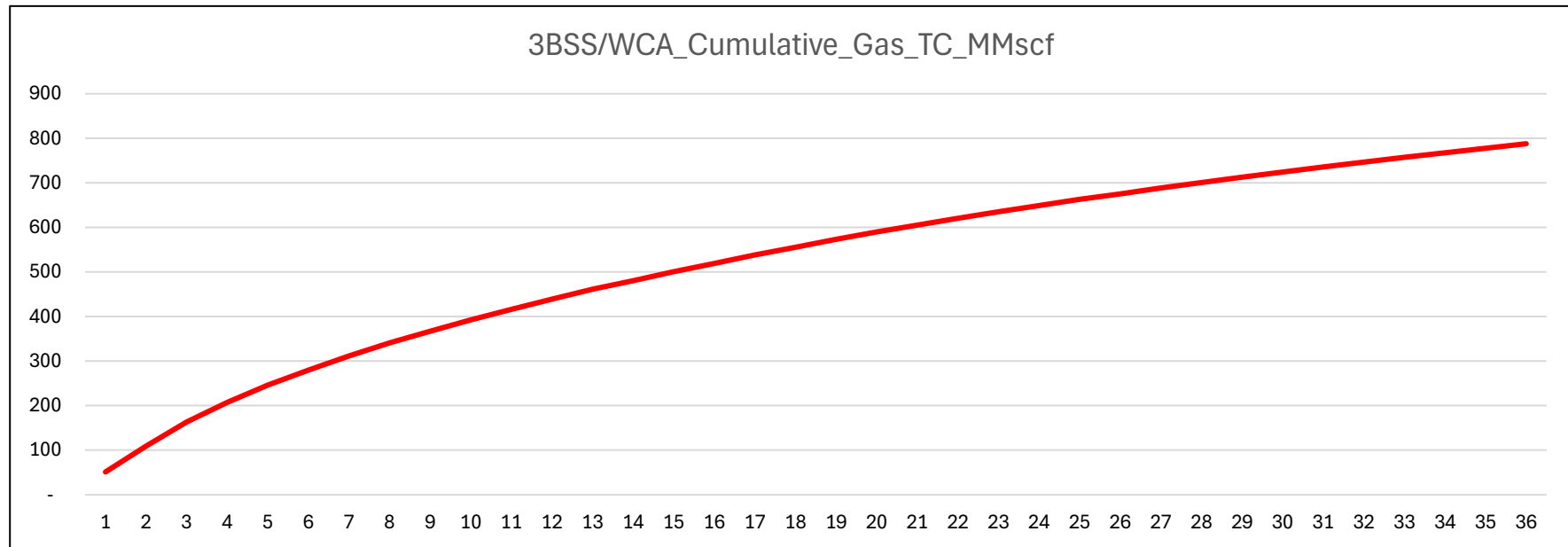
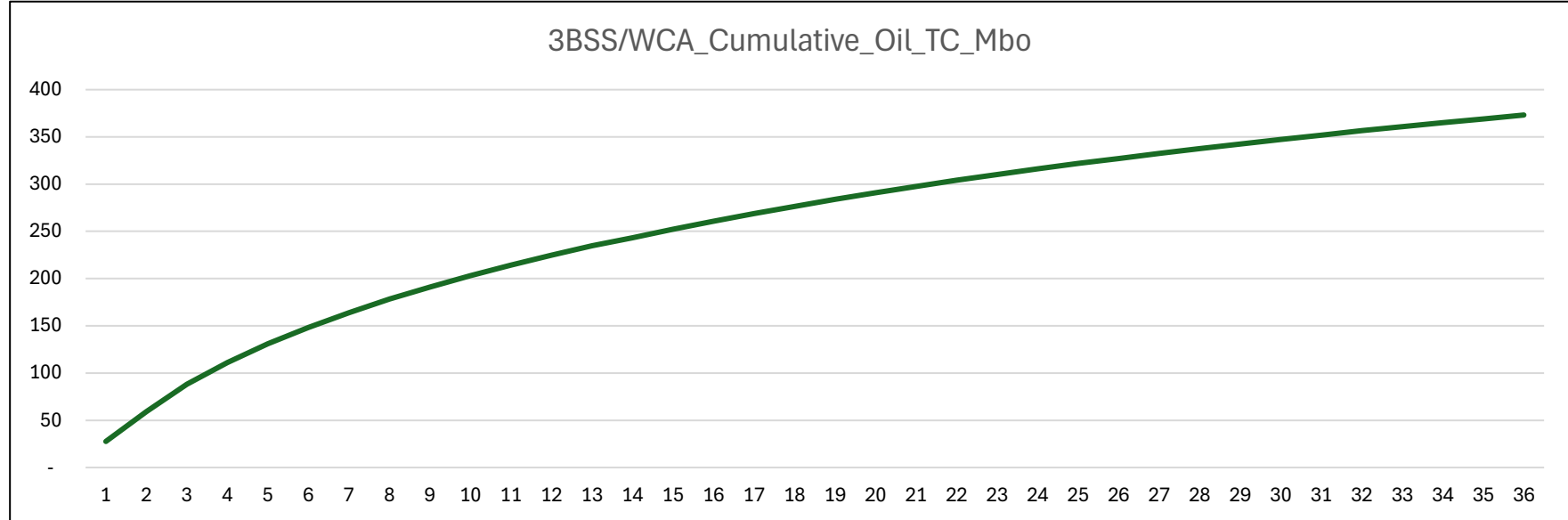
- Operator will curtail or shut in production, within reasonable limits, during upset conditions to minimize venting and flaring.
- When feasible, Operator will use equipment to capture gas that would otherwise be vented or flared.
- During completions and production operations Operator will minimize 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 701H
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/ocd/contact-us>

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

ACKNOWLEDGMENTS

Action 470412

ACKNOWLEDGMENTS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 470412
	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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Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

CONDITIONS

Action 470412

CONDITIONS

Operator: CONOCOPHILLIPS COMPANY 600 W. Illinois Avenue Midland, TX 79701	OGRID: 217817
	Action Number: 470412
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
stanwagner	Cement is required to circulate on both surface and intermediate1 strings of casing.	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